

ELECTRONIC INDUSTRIES

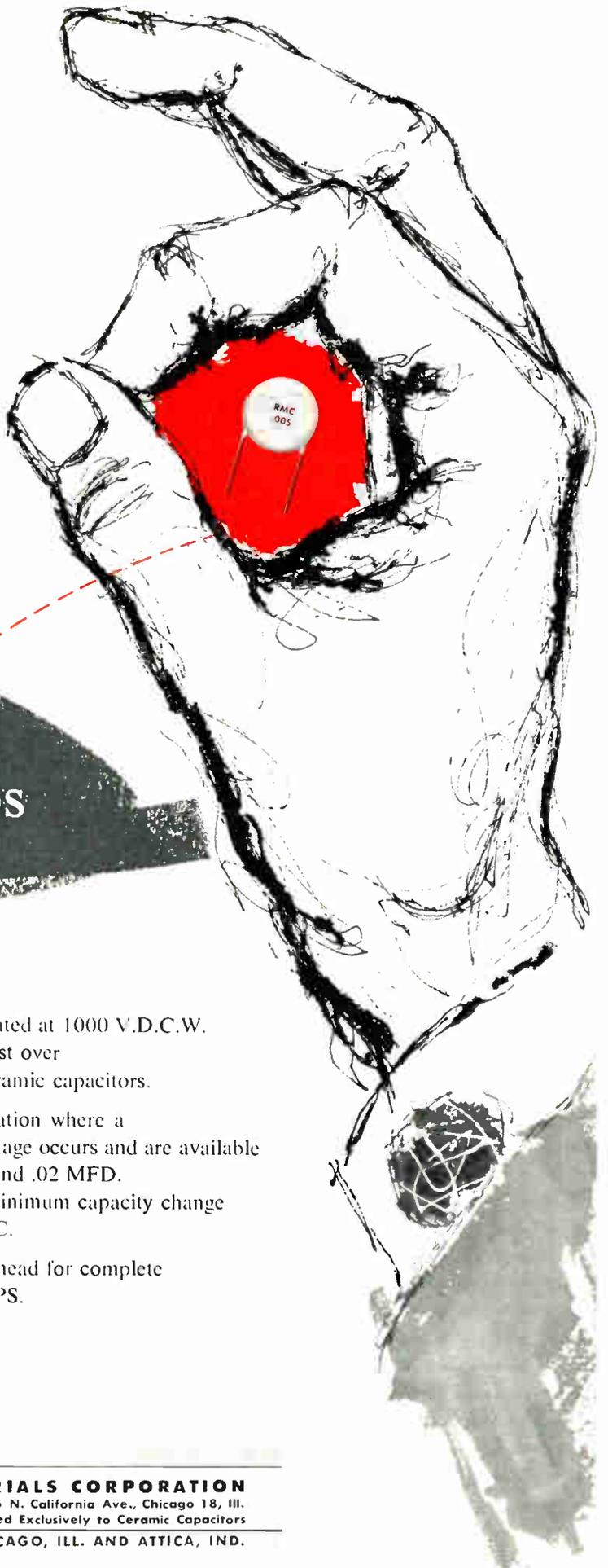
& TELE-TECH

1957
ELECTRONIC INDUSTRIES
DIRECTORY ISSUE
(Fifteenth Edition)

June • 1957

A Chilton Publication

the complete job
with heavy-duty
discaps...at
no added cost!



RMC Type B Discaps

RMC Type B DISCAPS are rated at 1000 V.D.C.W. and are offered at no extra cost over lighter constructed by-pass ceramic capacitors.

They are ideal for any application where a steady or intermittent high voltage occurs and are available in capacities between .00015 and .02 MFD. Type B DISCAPS exhibit a minimum capacity change between +10° C and +65° C.

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CERAMIC
CAPACITORS

RMC

RADIO MATERIALS CORPORATION
GENERAL OFFICE: 3325 N. California Ave., Chicago 18, Ill.
Two RMC Plants Devoted Exclusively to Ceramic Capacitors
FACTORIES AT CHICAGO, ILL. AND ATTICA, IND.

ELECTRONIC INDUSTRIES & TELE-TECH

Vol. 16, No. 6

June 1957

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NEW ELECTRONIC EQUIPMENT

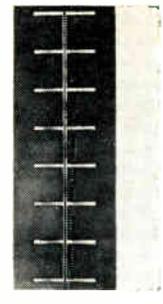
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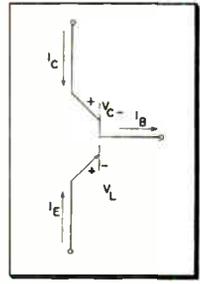


Printed Antennas! 98



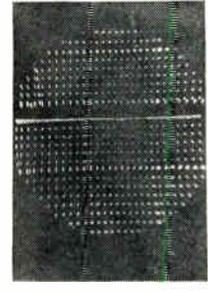
Through etching techniques many microwave antennas—end fire arrays, in particular—for the first time become practical. One broadcast array is also promising.

The Real Transistor 101



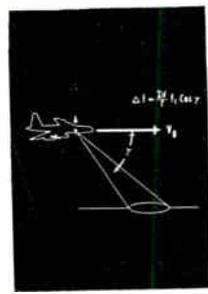
"Flow Line Analysis" in the EI April issue was widely hailed by transistor experts. Here the author extends the technique to analyze the avalanche action.

"Pepperpot" Tube 106



New wide angle picture tubes have focussed attention on yoke design. The "Pepperpot" tube, a CRT modified to produce split pencil rays, quickly spots distortions.

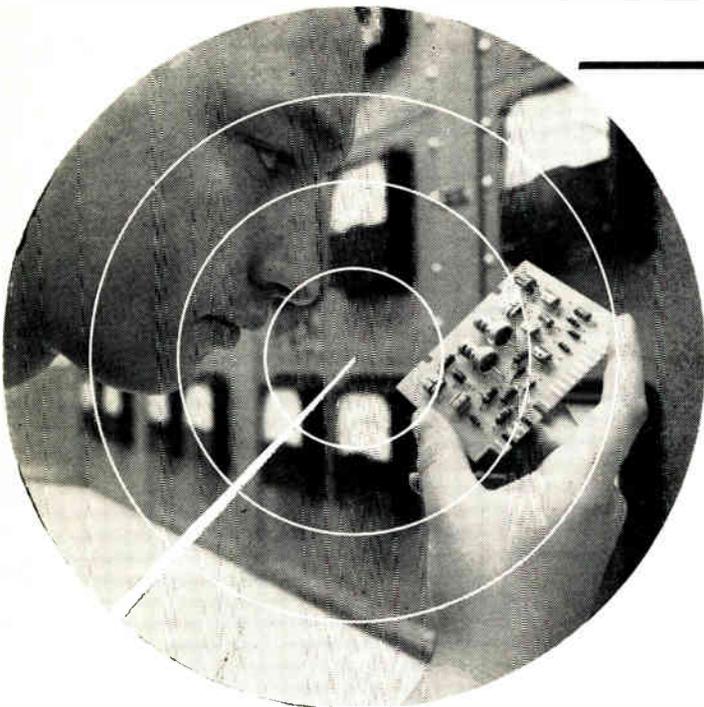
The Doppler Story 120



The Doppler principle has found increasing usage in the past few years. Here is a brief history of its development and the future seen for it in flight applications.

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RADARSCOPE



BRUSHLESS GENERATORS

Transistorized panel boards such as this one replace brushes, relays, and other moving parts, in the power supply and control system designed by Westinghouse for the Boeing 707 jet airliner.

AIRCRAFT AND GUIDED MISSILES account for more than two-thirds of all the dollars obligated by the Defense Dept. during the four fiscal years ending June 30, 1958. Over the eight years beginning with the start of the Korean War in June, 1950, these two categories total \$71,843,077,000. The aircraft and guided missiles share of defense spending has shown a steady increase over the past eight years.

ELECTRONIC INDUSTRY in New England showed a \$30-million sales rise during 1953-1955, to a record high of \$612-million.

MORE ENGINEERING STUDENTS were in engineering schools this year than at any time since 1947. A total of nearly 243,000 were enrolled last fall, accounting for 12.5% of all the men attending colleges. Electrical engineering is the most popular field, with 20% of the undergraduates working toward E. E. degrees.

NEW COMPUTER SWITCH technique has been reported by National Cash Register Co. Unlike mechanical or electronic switches, the new technique uses tiny drops of light-sensitive fluid which show changes under different colors of light. With these materials three different colors of light may be used for storage, non-destructive readout, and erasing of information. Possibilities for lower cost computer circuits are seen in the new technique.

NEW APPROACH IN TV SCREENS developed by the Naval Research Laboratory uses thin transparent film of phosphor on face of TV tube in place of the present opaque white powders. Films are more rugged, do not burn out so readily, can be made brighter and present a much sharper image. High contrast can be maintained in daylight, because transparent phosphor films do not reflect light—incident light is lost in the darkened interior of the tube, even in direct sunlight. The new technique can be used with present color TV methods, but there is a more exciting possibility—depositing films one atop another and lighting them separately by controlling the speed or direction of the electrons in the tube.

TELLURIUM SEMICONDUCTORS show great promise. Tellurium compounds have applications as rectifiers, solar batteries, etc. One startling phenomenon is refrigeration obtained by passing electric current through elements of bismuth telluride. The theoretical cooling capacity is great enough to liquefy air directly without mechanical devices.

TELEPRINTERS will soon eliminate manual preparation of air waybills on Riddle Airlines' Atlanta-Miami route. Western Union-Airline plans include eventual linking of all major cities on regular routes and electronic control of deliveries, air waybills, operations, inventory, and space reservations. The system saves hundreds of man-hours, improves customer service, cuts freight-handling costs.

CABIN TESTS

Environmental tests will be conducted on this full scale cabin section of the new Convair 880 jet transport. Tests will include high and low temperatures to check air conditioning, and synthetic noise equivalent to that produced by the 880's four turbojet engines.



Analyzing current developments and trends throughout the electronic

industries that will shape tomorrow's research, manufacturing and operation

RADIO BROADCAST STATIONS will increase 30% within the next ten years. An important factor will be compact new broadcast equipment designed for increased reliability and ease of operation.

ELECTRONIC INDUSTRIES are very much in favor with investors, although many investors are dubious of TV set manufacturing during the next year. Know-how, research potential, and commercial and military electronics business are determining factors studied by investors.

SEMICONDUCTOR SURVEY by BDSA is in the offing. Manufacturers are complaining of 48 weeks delivery on tantalum sheet and long delays on molybdenum sheet—essential to production of power silicon diodes. The situation is further complicated by growing demand for semiconductors. One expert estimates a future need for 70 million power diodes for the automotive industry alone.

AIRFRAME PRODUCTION machine tools with electronic controls will reduce lead time in aircraft and missile production. The technique replaces jigs and patterns with punched tape. The tape controls a three-dimension milling machine or any other large-scale machine tool. An important feature is that duplicate tapes can be turned out in hours to control similar machines in case of emergency mobilization. The first such airframe production automation system will get a tryout producing the Mator missile and the Seamaster four-jet seaplane.

COMPLETELY TRANSISTORIZED TV sets are nearer, as a result of recent developments in high frequency transistors. TV set designers now predict the development of fully transistorized TV receivers will be technically practical by 1959. Many TV receiver sections can be transistorized now, with commercially available transistors. High frequency and high voltage transistors for the remaining sections are now being developed and can be expected on the market within the next two years. Next question, how soon can we produce a battery-powered, transistorized TV set?

TRANSFORMER TEST EQUIPMENT would have to be furnished by the government in case of full mobilization, warns the Business and Defense Services Administration. At current prices and limited procurements most manufacturers cannot meet the cost of the complete test facilities needed to produce electronic transformers to the increasingly rigid military specifications. The present practice of relying on private testing facilities for qualification testing, aside from increasing costs and delaying deliveries, would be impractical under mobilization conditions. A BDSA Task Group will determine military requirements for mobilization and then

survey the capacity of the electronic transformer industry.

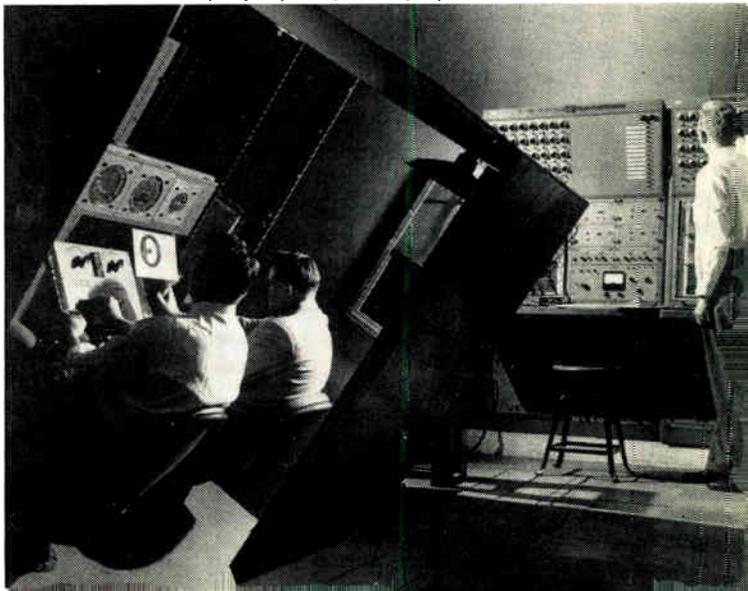
MILITARY AIRBORNE EQUIPMENT will be made smaller and more efficient through the new "Fused-Film Wire" process announced last month by Adam Consolidated Industries Inc. The process converts Teflon tape into a thin, concentric filmed insulation .002 inch thick. Despite its reduced size, the insulation, according to the mfr., has dielectric strength and scrape resistance 200% greater than comparable insulation. The first application is expected to be in magnet wire for high performance equipment, where failures are often due to insulation breakdown.

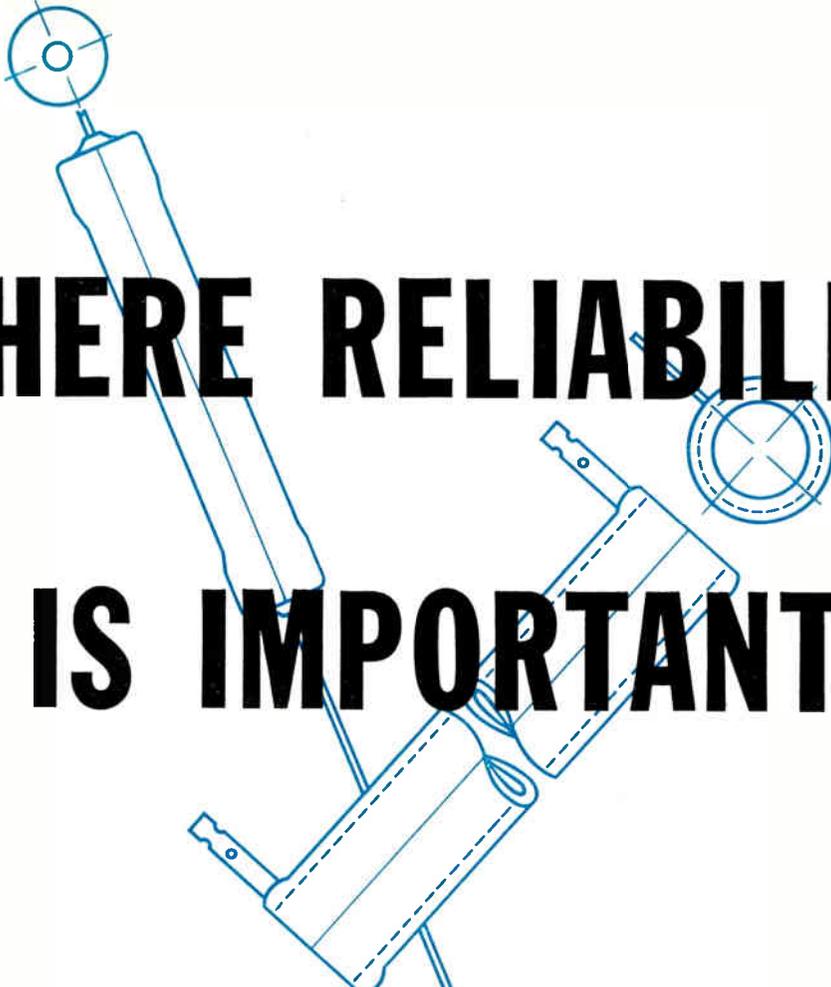
COMPUTERS DIAL DIRECT with the new data subset being developed at Bell Labs. Experimental models, about the size of a typewriter, send 1,000 words a minute—sixteen times the speed of conventional teletypewriter systems. A wide variety of data can be handled, including printed matter and computer data. Information is placed on magnetic tape at the normal output speed of the typist, computer, or business machine. The tape is then inserted into the data subset, which is connected to a standard office phone. After another phone is dialed in the ordinary manner, the transmitting and receiving subsets are switched on and the high speed data transmission accomplished. Engineers predict that computers and automatic business machines will dial each other direct to exchange the information necessary for their programmed deliberations—probably at night, during off-peak hours.

NEXT MONTH—Don't miss EI's analysis of new **BATTERY** developments, including an up-to-date round-up of the new types introduced during the past year.

SUBMARINE SIMULATOR

Instrumentation data for diving, submerged running, and surfacing is obtained in this "submarine simulator" at the landlocked marine research center of Sperry Gyroscope Company.





WHERE RELIABILITY

IS IMPORTANT

Blue Jacket[®]

WIRE - WOUND RESISTORS

Vitreous-enamel power wirewound resistors have been proven to be extremely reliable units by both the military services and the communications industry. Sprague Blue Jacket resistors are among the most outstanding resistors of this type. They can be counted on to withstand the most severe duty cycles!

In the manufacture of Blue Jacket resistors, selected resistance alloys are wound on special steatite cores. The expansion coefficient of the vitreous-enamel coating is closely matched to that of the steatite base in order to ensure positive protection of the resistance winding. The terminal bands are

made of an alloy which also closely matches the steatite base in expansion characteristics.

Sprague furnishes a wide range of sizes and power ratings in these reliable resistors, both in axial-lead and tab-terminal designs. For complete details on commercial types, write for Engineering Bulletin 111B. Military styles are shown in Sprague Catalog 101.

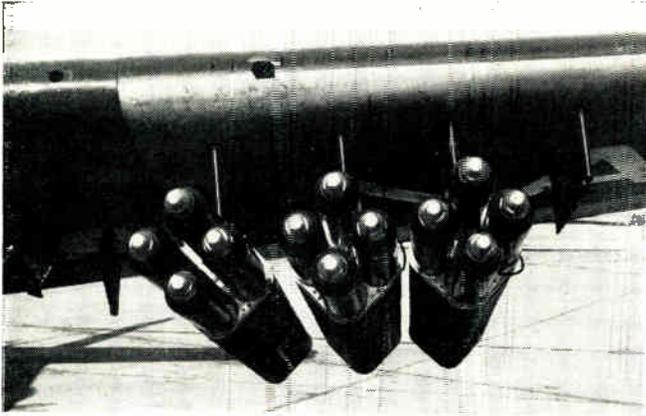
Sprague deliveries are prompt! Prices are right! Send your next power resistor order to:

Sprague Electric Co.
233 Marshall Street
North Adams,
Massachusetts.

SPRAGUE[®]
the trademark of reliability

RESISTORS • CAPACITORS • MAGNETIC COMPONENTS • TRANSISTORS • INTERFERENCE FILTERS • HIGH TEMPERATURE MAGNET WIRE • PULSE NETWORKS • PRINTED CIRCUITS

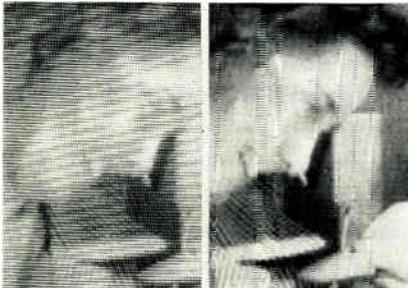
As We Go To Press...



New Zuni 5-inch rocket has folding fins which permit mounting four rockets in combination launcher-transporter.

TV Picture Tube Eliminates Dark Lines

A major step toward larger-size TV screens in the home has been made at Westinghouse Research Labs., Pittsburgh, Pa. A simple but basic change in picture tube construction—splitting one of the



"Wobble-beam" tube at right decreases line structure and increases picture detail.

cylindrical metal focussing grids—makes it possible to impart a 15 MC "wobble" to the electron beam, thus causing a controllable widening of the trace. Result—no dark lines.

Air-To-Air Rocket "Zuni" Joins Fleet

A new five-inch high velocity rocket, named "Zuni" after a Pueblo Indian tribe, has been approved for operational use in the U. S. Fleet. It will replace the World War II HVAR rocket in new high-performance aircraft. Zuni is a folding fin, solid-propellant rocket, designed for use on fighter and attack aircraft and for both air-to-ground and air-to-air attack. It will be highly effective against tanks, pillboxes, gun emplacements, trains, ammunition and fuel dumps, and small ships. As an air-to-air weapon, its high velocity and short time to target promise a high kill potential against aircraft.

New Name

RCA has changed the name of its Tube Division to the RCA Electron Tube Division.

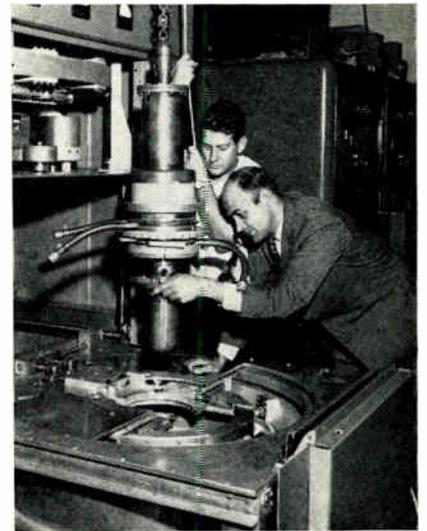
NEW ARIZONA ELECTRONICS PLANT



Motorola's new \$3,000,000 Military Electronics Facility at 8201 East McDowell Rd., Phoenix, Ariz. has 192,000 sq. ft. of space.

Pentagon To Use 300,000 Watt SSB

A powerful new short wave transmitter which can beam vital defense messages to any spot on earth, even through severe interference, will be installed for Pentagon use. Named the "World Spanner," the powerful SSB transmitter was designed for use as part of the Army's world-wide communication network by the U. S. Army Signal Engineering Laboratories at Fort Monmouth, N. J., and by Conti-



Signal Corps engineer Ralph Johnson inspects fittings as William Mitchel, of Continental Electronics, Inc. lowers a 150-pound tube into its socket in Pentagon's new transmitter

mental Electronics, Inc., of Dallas, Texas.

Nominal power of the new equipment is 300,000 watts, but SSB refinements and a new beam antenna are expected to boost effective power to 24 million watts. Final is built around a 150-lb vacuum tube made by Radio Corporation of America—with 18,000 volts on the plate.

The multi-band transmitter can go on the air at any one of ten previously set frequencies in the 4 to 30 MC range by the turning of a single switch. The transmitter can send 64 teletypewriter messages or four separate voices at the same time.

More News on Page 10

BURROUGHS RESEARCH CENTER NEEDS *Good* ENGINEERS

**ALL THINGS
ARE BORN
IN THE MIND
OF MAN**

*... it is the responsibility
of the engineer to develop
these thoughts for practical,
profitable use.*

All ideas are but a result of what has gone before and man's ability to adapt his vast store of acquired fact to reason. His mind, when used efficiently, is the most prolific of all computers — it can think, remember, reason and store information better than any man-made machine. This deep reservoir of conscious and unconscious knowledge residing within the thinking individual is a scarcely tapped source of a whole torrent of ideas.

As these new ideas unfold, it will be the responsibility of the engineer and scientist to apply his practical experience and trained reasoning to these new concepts . . . to develop them for the most practical and beneficial use.

That is *just* what we are doing at the Burroughs Research Center. If you want to be a part of these exciting discoveries in the field of electronic computing, why not look into the Burroughs story today?

*Inquiries are invited
from those qualified as*

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- ELECTROMECHANICAL ENGINEERS
- PHYSICISTS • MATHEMATICIANS
- MECHANICAL DESIGN ENGINEERS
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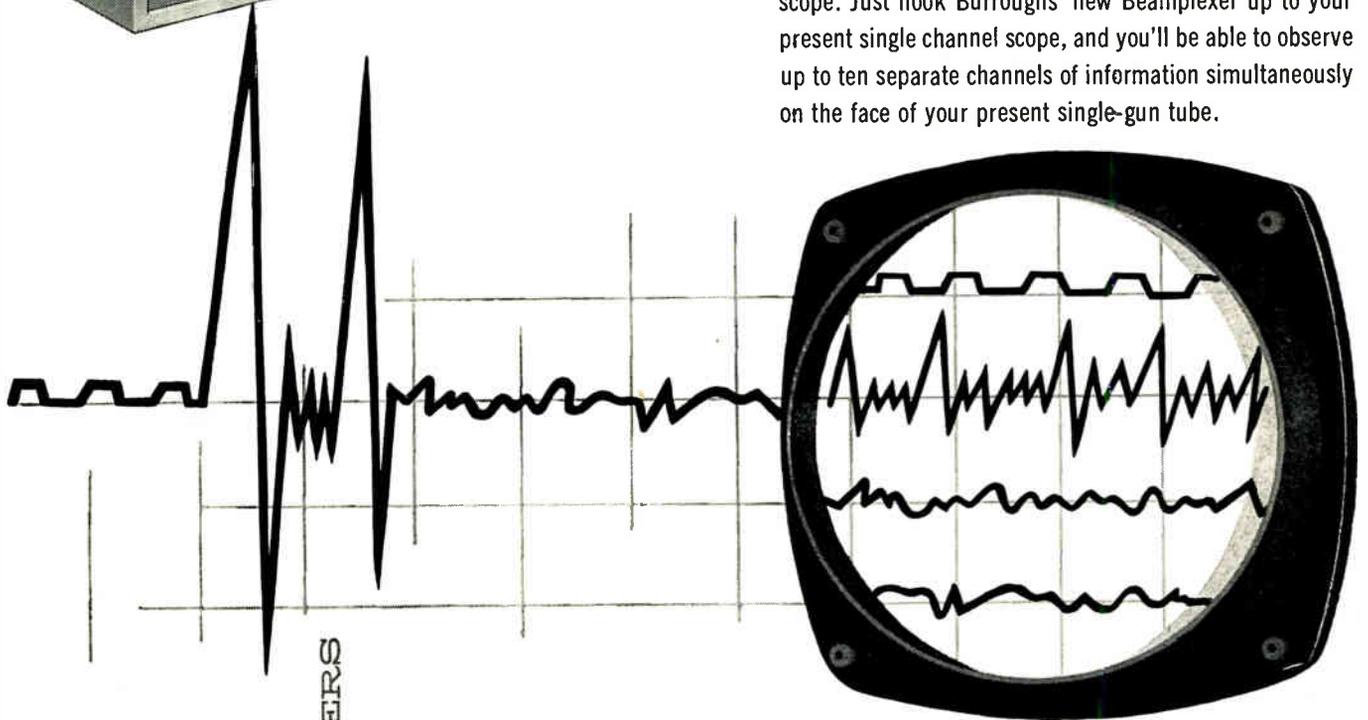
make your scope multi-channel



NEW BURROUGHS BEAMPLEXER

displays up to 10 separate signals on a single-channel scope simultaneously

Now you can have the advantages of multi-channel oscillography at a fraction of the cost of a multi-channel oscilloscope. Just hook Burroughs' new Beamplexer up to your present single channel scope, and you'll be able to observe up to ten separate channels of information simultaneously on the face of your present single-gun tube.



TOOLS FOR ENGINEERS

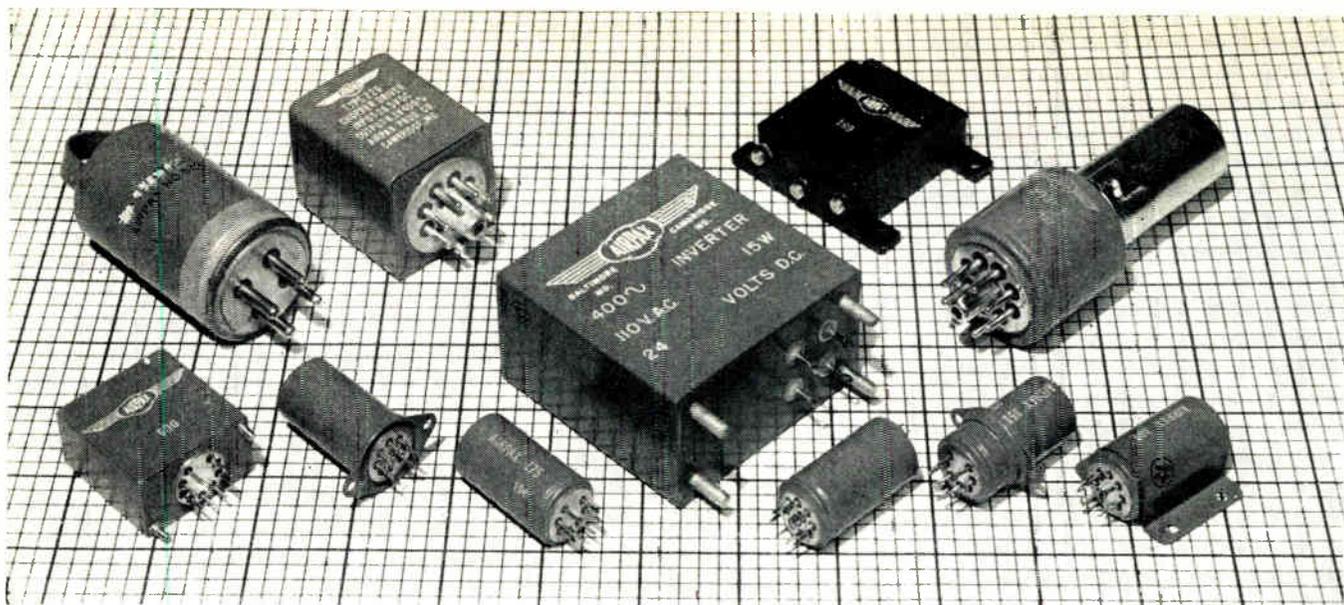


BURROUGHS CORP. • ELECTRONIC INSTRUMENTS DIVISION
Department D • 1209 Vine Street • Philadelphia 7, Penna.

The Beamplexer is actually a fast electronic switch. Its heart is the Burroughs Beam Switching Tube which acts as a gate, picking the ten parallel input signals off in sequence, at adjustable speeds ranging from push button to 100 kc, and putting them out on one line. Each signal can be located on the scope as desired, and even superimposed on one another through individual positioning pedestal controls for each channel. Other controls include separate amplification for each channel.

Power consumption is 120 volts a-c, 60 cps, single phase, 0.73 amps, with the entire unit self-contained for cabinet or standard relay rack mounting.

Full details on how the Beamplexer can make your scope more useful . . . make your time more efficient . . . are given in Technical Bulletin 346 available for the asking. Write for your copy.



These accurately made components represent products available to you that meet rigid industrial or military requirements.

Choppers—A variety of Airpax choppers enables you to select the appropriate type for each application. They are manufactured on precision machines to assure you of uniformly high quality. These choppers are used in instruments and automatic control. Contacts are rated for 0 to 2 milliamperes at up to 100 volts. Drive is 6.3 RMS volts.

Typical Signal Choppers

Frequency (CPS)	7-Pin Base Type	Octal Base Type	Miniature Solder Lug Type
Standard Environment			
60	175, 176	170, 586	178, 179, 800*
400	300, 400	520, 580	302 thru 304, 600*
High Temperature			
400	150, 310, 320	100	311 thru 314
High Vibration			
400	350		351 thru 354

*Double-pole double-throw, split reed

400-CPS Chopper Drivers—Chopper drivers enable you to use 400-CPS choppers even if 400-CPS drive power is not otherwise available. There are two types: Series 202 is for use in 60-CPS powered equipment with conventional heater and plate voltages. Series 220 is for use in battery powered equipment.

Vibrators—Airpax pioneered high-frequency power vibrators because of reduced size and weight of associated transformers and chokes.

Type 500 vibrator is a 400-CPS interrupter unit for use with moderate continuous or heavy intermittent loads. It is hermetically sealed, operates in any position. This vibrator and variations are used in airborne transceivers, guidance equipments, and portable sets.

Type 505 is a center-pivoted vibrator rated for 28 DC volts input and output at 250 CPS. It is designed to withstand vibrations of 10 G from 10 to 1,000 CPS; time efficiency is 46%.

Inverters—Using 400-CPS vibrators, Airpax custom designs and manufactures compact low-power inverters. By way of example, Type 512 is hermetically sealed, weighs 14 ounces, occupies 7.5 cubic inches, withstands accelerations of more than 50 G, and has an efficiency of 75%. Its output is essentially a square wave, 15 watts at 110 RMS volts, 400 CPS. Input is 6, 12 or 24 DC volts.

Pulse Transformers—For preferred blocking oscillator circuits, use Airpax Pulsite transformers. These compact, hermetically sealed units are available as a kit covering many requirements of pulse circuits.

Characteristics of Pulsite Transformers

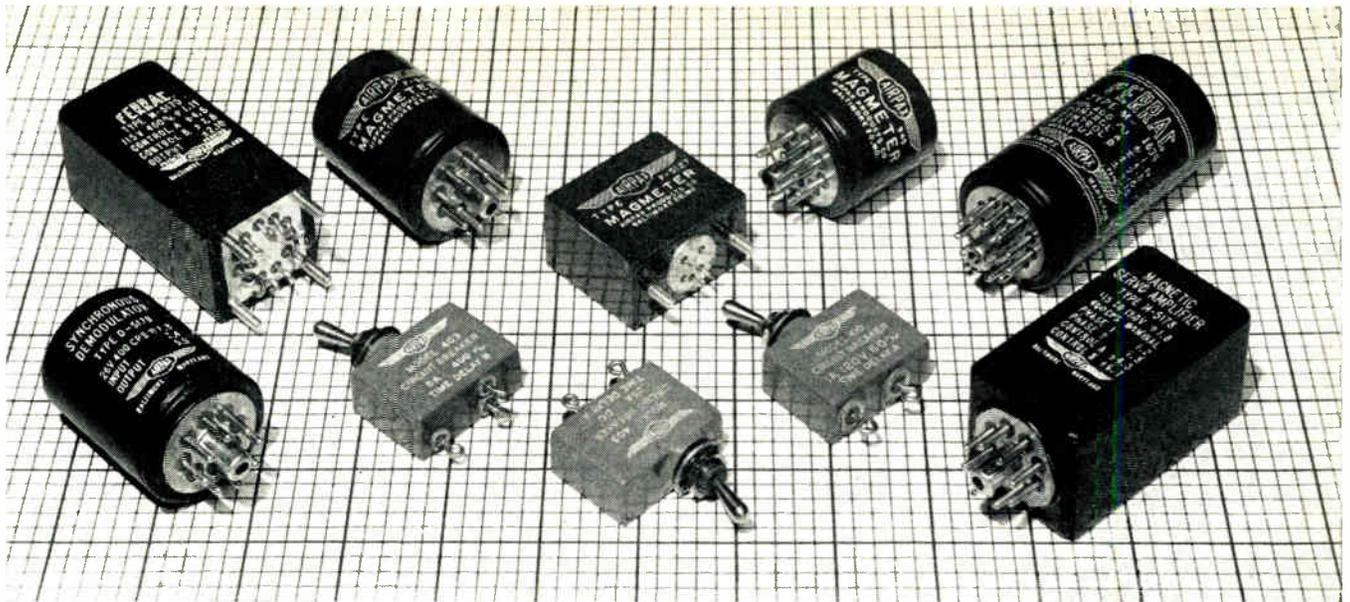
Pulse Width (usec)	Loc (mh)	Ll (uh)	Cd (uuf)	Type
0.1	0.08	6	7	PT-1081
0.2	0.13	14	7	PT-1082
0.3	0.30	25	8	PT-1083
0.5	0.80	30	8	PT-1084
1.0	2.4	35	9	PT-1085
2.0	7.8	125	10	PT-1086
5.0	28	400	10	PT-1087
10.0	153	1,000	12	PT-1088

Custom Transformers—Airpax designs and manufactures custom transformers. The largest Fosterite facility in the country is at Airpax; units 3 x 3 x 4 feet can be baked and vacuum impregnated, or large batches of small units can be processed quickly. In addition to vacuum impregnated and molded units for airborne equipment, Airpax manufactures hermetically sealed MIL-T-27A units. Airpax has supplied transformers in quantity for operation in ambients to 175 C.

Sheet Metal Facilities—A complete machine and sheet metal shop complements the transformer production. The shop has sufficient capacity to fabricate custom metal parts, such as chassis and cases.



MIDDLE RIVER • BALTIMORE 20, MD.



Thorough testing and inspection assure you that these Airpax components meet critical requirements for control and guidance.

Magnetic Amplifiers—Ferrac magnetic amplifiers are highly stable and linear DC amplifiers. You can use them in analog computer portions of guidance and control equipment. Several types are available to meet usual applications. Each amplifier has two input windings; output is electrically isolated from input and power supply. At stand-by, amplifier draws about 1.5 watts; with full signal, 2.5 watts at 115 RMS volts, 400 CPS.

Instrument Magnetic Amplifiers

Application	Plug-In Type	Bolt-Down Type
General Purpose	M-943	M-5174
Integrator	M-1039	M-5175
Thermocouple	M-1040	M-5176
High Gain	M-1057	M-5177

Synchronous Demodulators—So that 400-CPS synchros can be used with DC control circuits, Airpax developed highly accurate ring rectifiers. Two types are:

Type D-5170 has a highly accurate null for use in zero-seeking equipments. A null accuracy (exclusive of the synchro) of 9 minutes can be obtained with it.

Type D-5171 has a wider linear range for proportional control equipments. It presents about 20,000 ohms to the control transformer.

Servo Amplifiers—Airpax magnetic power amplifiers control current to both phases of 400-CPS instrument servo motors. As a result, they draw little stand-by power. This characteristic results in up to 60% saving in stand-by power, compared with some other servo amplifiers. Standard units deliver 3.5, 6, or 10 watts per phase.

Typical Ratings, Type M-5178

- Input**—Two identical control windings of about 125 DC ohms each
- Sensitivity**—7.5 DC milliamperes into either control winding produces 6 watts output to each phase
- Power**—115 to 150 RMS volts at 400 CPS, approximately 21 watts at maximum output, only 3 watts during stand-by
- Connections**—Octal plug-in base, hermetically sealed
- Dimensions (Max.)**—1 1/2" square base, 3" seated height
- Weight**—Approximately 14 ounces

Frequency Detectors—Magmeter frequency detectors convert AC signals to DC outputs. The output is linearly

proportional to input frequency. These detectors are relatively insensitive to changes in signal amplitude and wave shape. They are used in telemetering, tachometers, and for pulse-rate measurement. Standard Magmeter detectors require about 1 watt of signal input. They can be driven directly from 120-volt power lines, from vacuum-tubes or transistors. Plug-in units fit octal sockets; bolt-down units have solder lugs.

Magmeter Frequency Detector

Frequency (CPS)	Line or Tube Drive Plug-In	Tube Drive Bolt-Down	Transistor Drive Plug-In
0-50	F-945	F-5121	F-5156
0-100	F-979	F-5122	F-5157
0-200	(F-979)	F-5123	F-5158
375-425	F-992	F-5133	
0-500	F-5146	F-5124	F-5159
0-1000	F-980	F-5125	F-5160
0-2000	F-981	F-5126	F-5161
0-5000	F-947	F-5127	F-5162

Circuit Breakers—Electronic circuits can be protected by Airpax miniature magnetic time delay circuit breakers. Trip level is unaffected by temperature. Units are rated up to 50 DC volts or up to 120 RMS volts; the latter either for 60 or for 400 CPS. Trip sensitivities are as low as 50 milliamperes; current ratings are available up to 10 amperes. There are two standard time delays: Rapid response A for protecting conventional electronic equipments, and slow response B for equipments that draw substantial starting surges.

Miniature Circuit Breakers

Rating	Series Type	Shunt Type	Relay Type
50 DC volts	401-	402-	403-
120 RMS volts at 60 CPS	410-	411-	412-
120 RMS volts at 400 CPS	420-	421-	422-

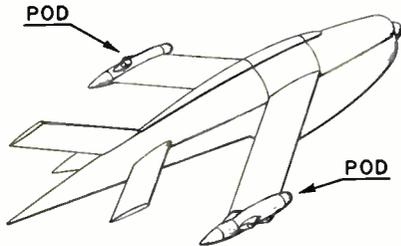


MIDDLE RIVER • BALTIMORE 20, MD.

As We Go To Press . . .

Camera Pods

In future tests of air-attack missiles, hits or near misses will be recorded by camera pods developed by Bell & Howell Co., Chicago, Ill. Two pods, each with four high-speed cameras, and mounted on the



Drone target aircraft mounts pods containing recording cameras. Full spherical coverage of missile's approach is obtained.

drone target, give full spherical coverage of the missile's flight as it nears the moving target. The system is in production and is available to companies working on missile-scoring or rocket-scoring systems.

P-C Developments

Vast reductions in time and tooling for printed circuit buffing are claimed with a new process of Maplewood Companies, Livingston, N. J. Production rates exceeding 60 square feet per minute are attained. Another new development is a chemical process for depositing pure metallic copper on plastics and other non-conductive surfaces. The three solution system is a development of Atkinson Laboratory, Inc., Hollywood, California.

New RETMA Standards

These important new RETMA standards are now available: RS-159, "Chassis Pickup of Vehicular Receivers," 25¢; RS-177, "Vibrator Power Transformers," 30¢; "Solderability Test Standard," 25¢; and RS-179 "Classification of Tube Testers," 25¢. Copies may be obtained through RETMA Engineering Dept., 11 West 42nd St., New York 36, N. Y.

MORE NEWS ON PAGE 13

ELECTRONIC SHORTS

▶ Grant of \$16,500 was awarded Case Institute of Technology by the Ford Foundation Fund for the Advancement of Education extending support for experimental two-way closed-circuit television as a teaching aid.

▶ A 5-yr. program of the Dept. of Commerce, an expansion of one announced a year ago, calls for the purchase and installation of modern control systems at air terminals. The \$800-million program will prepare the nation's airports for the advent of the jet age, only 2 yrs. off.

▶ The U. S. and Great Britain may be relying too much on an early development of ballistic missiles. Thomas G. Lanphier, Jr., Vice-President of the Convair Div., General Dynamics Corp., declares unmanned weapon systems will not become available until several years after this nation's conventional defense structure is scheduled to crumble.

▶ The USAF's jet-powered vertical takeoff and landing research airplane, the Ryan X-13 Vertijet, made its first complete flight sequence from vertical takeoff to horizontal flight to vertical landing. The flights, at Edwards AFB, culminated an 18-month flight test program.

▶ Datics Corp., Fort Worth, Texas, data processing, computing, and data reduction firm, opened a Dallas District office in the Texas Bank Bldg., and signed a contract with IBM Corp. for a \$2¼-million 705 Electronic Data Processing Machine.

▶ Less than 3 yrs. after ElectroData delivered its first Datatron, the production rate has been increased to one system every 5 days. Shipment of 6 Datatron electronic data processing systems in 1 month set a new record for the ElectroData Div. of Burroughs Corp. ElectroData has installed 147 computers nationwide.

▶ Members of the Electronic Transformers Industry Advisory Committee advised that certain Government-furnished test equipment is needed in the plants of electronic transformer manufacturers to assure required military production under full mobilization. Most manufacturers cannot afford the test facilities needed to produce components meeting the increasingly rigid military specifications.

▶ A new line of electronic test instruments, in kit form, has been launched by the Paco Electronics Co., Inc., a newly formed division of the Precision Apparatus Co. The kits are expected to find a wide application in electronic hobbies, amateur radio science education, and technical schools, as well as industrial testing and quality control.

▶ Flushed etched circuits for the printed wiring industry developed by The Mica Corp., Culver City, Calif., are resistant to shock, vibration, and abrasion and exhibit excellent heat resistance under conditions encountered in dip, roll, and hand soldering.

▶ State Department approval has been granted for the RAF to purchase the LABS systems—a low altitude bombing system that enables low flying jets to deliver atomic bombs—from the Aeronautical Div. of Minneapolis-Honeywell Regulator Co. The hit-and-run bombing system enables jets to skim in toward prime targets at tree-top levels, pull into a tight acrobatic Immelmann-turn maneuver miles from the target, "lob" a conventional or nuclear bomb high into the air, and then escape the blast area before the bomb arches down to the target. The system can be used also in over-the-shoulder bombing when the fighter bomber must pass over the target and toss the bomb back toward it as the plane streaks to safety.

▶ The results of preliminary design study of a vehicle which will permit the recovery of nuclear emulsions which could thus be exposed for a considerable period of time to the primary cosmic radiation were presented at a meeting of leading scientists at the Martin Co., Baltimore, Md. The study concerns the feasibility of recovering the scientific payload of rocket research vehicles which have spent a considerable amount of time out of the atmosphere.



it's our eighth!

We are proud to further expand our facilities in the West with the opening of our eighth office in Tucson, Arizona. Neely Enterprises' growing family of offices offer the finest and most complete service to answer the increasing need for instrumentation in the electronics industry.

Each of the eight offices are strategically located and staffed by fully qualified engineers with broad electronic instrumentation background. This on-the-spot representation by a Neely engineer can save you and your organization valuable engineering time.

Call a Neely engineer from one of the *eight* offices conveniently located near you.



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electronic manufacturer's representatives

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San Carlos
Phone: LY 1-2626

SACRAMENTO OFFICE
1317 Fifteenth Street
Phone: GI 2-8901

SAN DIEGO OFFICE
1055 Shafter Street
Phone: AC 3-8106

ALBUQUERQUE OFFICE
107 Washington Street, S.E.
Phone: 5-5586

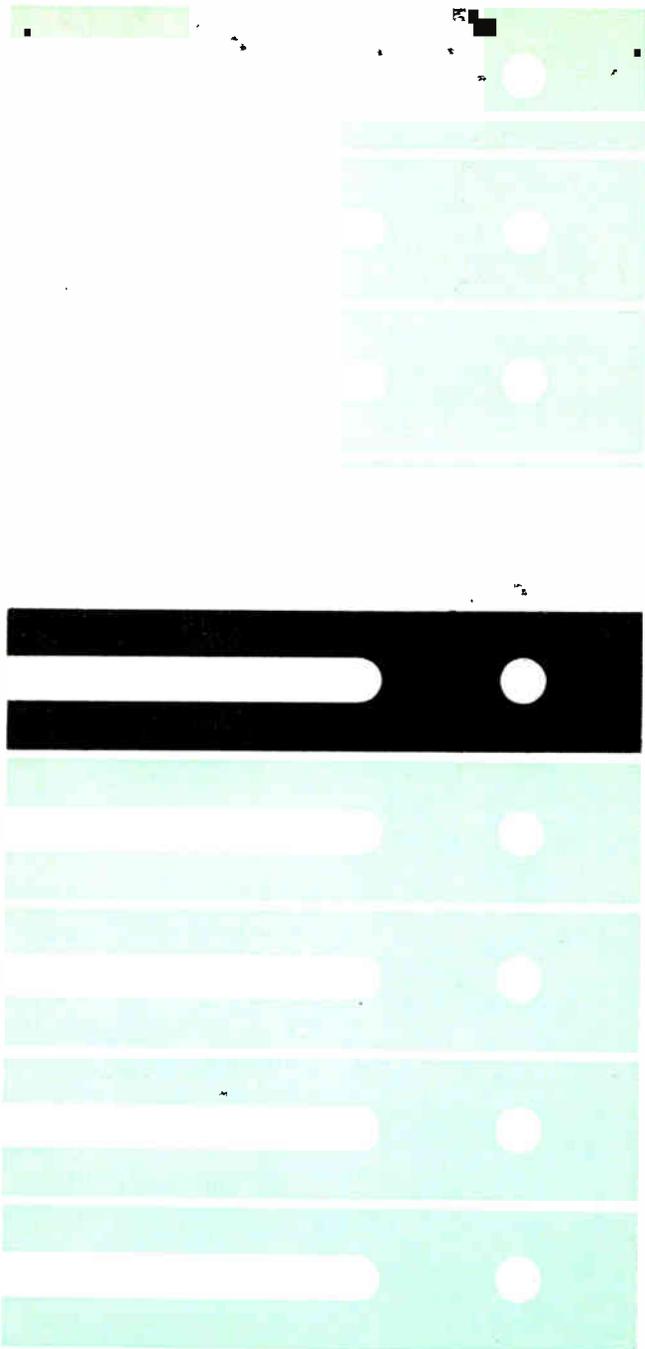
LAS CRUCES OFFICE
126 S. Water Street
Phone: JACKson 6-2486

PHOENIX OFFICE
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Phone: CR 4-5431

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Tuning Fork Controlled



Tuning Fork Resonators, the ultimate in precision audio frequency control.

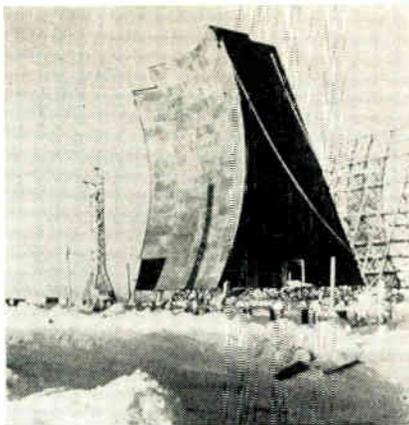
PHONE OR WRITE

for complete information regarding component type Tuning Fork Resonators, and variously packaged Frequency Standards, Oscillators, Drivers, and Frequency Dividers.

PHILAMON LABORATORIES INC.

90 Hopper Street, Westbury, Long Island, N. Y. EDgewood 3-1700

WHITE ALICE



White Alice, Alaska's new tropospheric scatter communications system, uses 60-foot antennas such as this. White Alice is a project of Radio Engineering Laboratories.

Important IGY Role For NBS Boulder Labs

The ionosphere branch of one of the three world-data centers for collecting, analyzing, and disseminating information on IGY studies will be located at the Boulder Laboratories of the National Bureau of Standards, in Boulder, Colorado.

During the forthcoming International Geophysical Year, ionosondes located at 180 strategic points over the entire earth will send radio pulses of various frequencies up toward the ionosphere. The return time of the reflected signal will be noted and the height and density of the reflecting layers determined.

Scientists at Boulder Labs will plot all this information on graphs and maps in an attempt to gain a global picture of the ionosphere and its peculiarities. Coordination of these observations with determinations of sunspot activity and other measurements may add further to our knowledge of the Ionosphere and causes of its variations.

IGY scientists hope to gather enough information about the ionosphere so that improved predictions can be made as to when direct radio communications can be made. Other coordinated studies may provide information concerning the effects of sun and moon gravitational forces, strong winds, and bombardment of the ionosphere by meteors.

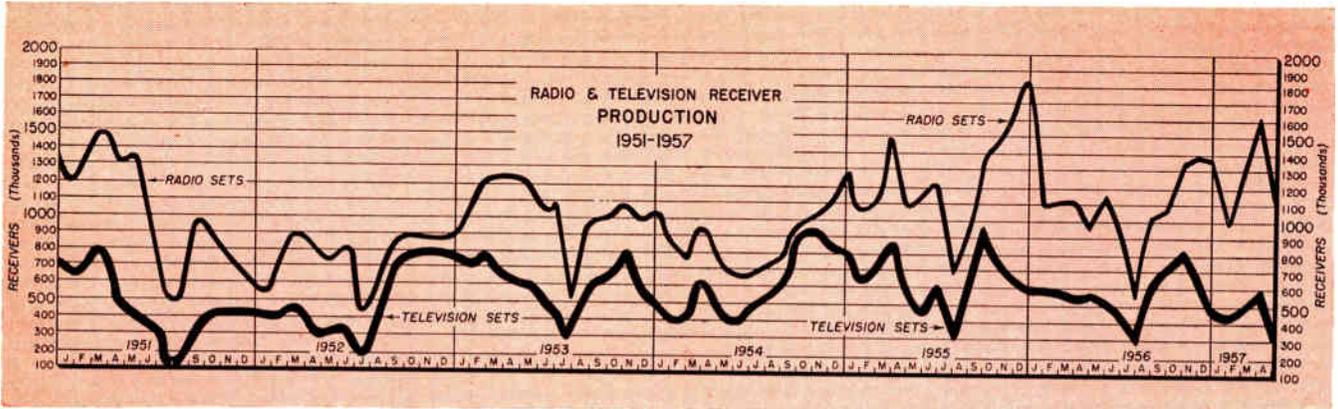
Coming Events

A listing of meetings, conferences, shows, etc., occurring during the period June to December that are of special interest to electronic engineers

- June 3-7: 27th Norelco X-ray Diffraction School, by Philips Electronics, Inc.; at the Hotel Morrison, Chicago.
- June 4-6: 6th Annual Convention & Trade Show, sponsored by the National Community TV Assoc., Inc.; in Pittsburgh, Pa.
- June 4, 11, 18: Industrial Writing Institute, by Western Technical Writing Institute; at Statler Hotel, Los Angeles.
- June 6-7: 1st Annual Conf. of Production Techniques, sponsored by the IRE; at the Willard Hotel, Washington, D. C.
- June 6-8: Annual Meeting, sponsored by the National Society of Professional Engineers; at the Statler Hotel, Dallas, Tex.
- June 10-11: 2nd Symposium on Applied Reliability, sponsored by RETMA; at the Hotel Syracuse, Syracuse, N. Y.
- June 14: Conference on Plastics for Electronics, sponsored by the Society of Plastics Engineers; at the Lowell Inst. of Tech., Lowell, Mass.
- June 16-21: Annual Meeting, sponsored by the American Society for Testing Materials; at Chalfonte-Haddon Hall, Atlantic City, N. J.
- June 17-19: 1st National Meeting, sponsored by IRE Military Electronics Group; at the Sheraton-Park Hotel, Washington, D. C.
- June 17-20: Summer Annual Meeting, sponsored by IAS; in Los Angeles.
- June 19-21: 12th National Meeting, sponsored by The Association for Computing Machinery, Inc.; at the University of Houston, Houston, Tex.
- June 24-28 Summer General Meeting, sponsored by the AIEE; in Montreal, Quebec, Canada.
- June 27-July 1: Electronics in Automation, sponsored by the British IRE; at the Univ. of Cambridge, London, England.
- July 15-18: Music Industry Trade Show & Conv., sponsored by National Assoc. of Music Merchants; at Palmer House, Chicago.
- July 20-23: National Audio-Visual Conv., by National Audio-Visual Assoc.; at Morrison Hotel, Chicago.
- August 12-16: Analog-Digital Conversion Techniques, by Mass. Inst. of Tech.; at M.I.T., Cambridge 39.
- Aug. 19-30: Management Sciences and Computer Tech. Courses, by Univ. of Mich.; at Ann Arbor, Mich.
- Aug. 20-23: Western Electronic Show & Conv. (WESCON), sponsored by IRE and WCEMA; at Cow Palace, San Francisco.
- Aug. 23-25: Annual Conv. & Seminar, sponsored by National Alliance of TV & Service Assn's.; at Sheraton Hotel, Chicago.
- Aug. 30-Sept. 1: ARRL National Conv., sponsored by American Radio Relay League; at the Palmer House, Chicago.
- Sept. 4-6: Conference on Magnetic Amplifiers, sponsored by IRE & AIEE, at Penn Sheraton Hotel; Pittsburgh, Pa.
- Oct. 4-9: 82nd Semi-annual Conv., by SMPTE; at Sheraton Hotel, Philadelphia.
- Oct. 7-9: National Electronics Conf., sponsored by IRE, AIEE, RETMA & SMPTE; at the Hotel Sherman, Chicago.
- Oct. 24-25: Computer Applications Symp., by Armour Research Found., at the Sherman Hotel, Chicago.
- Oct. 27-29: East Coast Conf. on Aeronautical and Navigational Electronics, by IRE; at Lord Baltimore Hotel & 7th Reg. Armory, Baltimore, Md.
- Oct. 27-29: Radio Fall Meeting, by IRE; at Sheraton Hotel, Rochester, N. Y.
- Oct. 31-Nov. 1: Electron Devices Meeting, by IRE; at Shoreham Hotel, Washington, D. C.
- Nov. 15-16: New England Radio-Electronics Meeting, by IRE; at Mechanics Hall, Boston, Mass.
- Nov. 25-26: IAS International Meeting, by IAS; at Canadian Aeronautical Inst., Canada.
- Dec. 8-11: Eastern Joint Computer Conf., by IRE, ACM, and AIEE; at Park Sheraton Hotel, Washington, D. C.

Abbreviations:

- ACM: Association for Computing Machinery
- AIEE: American Inst. of Electrical Engrs.
- IAS: Inst. of Aeronautical Sciences
- IRE: Institute of Radio Engineers
- ISA: Instrument Society of America
- NEDA: National Electronic Distributors Association
- RETMA: Radio-Electronic-Television Manufacturers Assoc.
- SAMA: Scientific Apparatus Makers Assoc.
- SMPTE: Society of Motion Picture & TV Engineers
- WCEMA: West Coast Electronic Manufacturers Assoc.



WEST COAST PICTURE

Annual billings in California increased from \$25 million per year in 1942 to more than \$400 million in 1945.

During 1950-54 the W.C. electronic industry has doubled in volume of each year.

The 11 Western states have 641 of the nation's approximately 4200 electronics firms. Last year they grossed \$1,690,000,000 of the total \$9,700,000,000 national electronics product. Western electronics now accounts for 15% of the number of companies, 16% of sales, and 18% of employment in the industry nationally.

In Southern California, and in the San Francisco Bay Area, the ratio of engineers to total population is the highest of any locale in the country. In Southern California electronics is second only to airframe manufacturing in employment and manufacturing significance. Approximately 12% of all persons employed in manufacturing plants in the area are in some phase of electronics work.

Ninety percent of the growth of Western electronics has been built on the military dollar.

Our market analysis people tell us that we will have a \$15 billion electronics industry nationally by 1965. If they are correct, and our Western segment of the industry faces its future realistically, its rate of growth should continue to be higher than the rest of the country. By 1965 the West's percentage of output should increase from 16% to 20% and its dollar volume increase by more than one-third. On this basis we can look forward to a \$3 billion Western electronics industry within eight years.

From an article by H. Leslie Hoffmann, pres. of Hoffmann Electronics Corp., Los Angeles, in "Signal" magazine.

Box Score of Electronic Industry Statistics on the West Coast 1956

San Diego County:	1. No. of Electronics firms..	26
	2. Employment	2,300
	3. Sales	\$ 30,000,000
Phoenix-Tucson Areas:	1. No. of Electronic firms..	13
	2. Employment	6,000
	3. Sales	\$ 55,000,000
Portland-Seattle (does not include Boeing activity)	1. No. of Electronic firms..	12
	2. Employment	6,000
	3. Sales	\$ 12,750,000
Los Angeles & Orange Counties:	1. No. of Electronic firms..	470
	2. Employment	73,000
	3. Sales	\$1,000,000,000
San Francisco-Oakland & Peninsula	1. No. of Electronic firms..	75
	2. Employment	20,000
	3. Sales	\$ 260,000,000
	4. Annual Payroll	\$ 80,000,000
Balance 11 Western States	1. No. of Electronic firms..	45
	2. Employment	9,500
	3. Sales	\$ 192,000,000
TOTAL—Electronics Industry —11 Western States, 1956	1. No. of Electronic firms..	641
	2. Employment	112,000
	3. Sales	\$1,690,000,000
TOTAL—Electronics Industry —USA, 1956	1. No. of Electronic firms..	4,200
	2. Employment	610,000
	3. Sales	\$9,700,000,000

11 WESTERN STATES AS A PERCENT OF NATIONAL ELECTRONICS INDUSTRY
1. 15% of electronic firms 2. 18% of employment 3. 16% of sales

Principal Growth Areas

SAN FRANCISCO-PENINSULA AREA

Expect the value of their electronic facilities to expand roughly 30%.	
Value Electronics Facilities — 1956	\$89,000,000
New Facilities — 1957	\$32,000,000
Sales — 1956	\$260,000,000
Projected — 1957	\$321,000,000
Sq. Feet of Plant Facilities — 1956	3,500,000
Projected — 1957	1,700,000 (an increase of 49%)

LOS ANGELES AND ORANGE COUNTIES

	New No. Units	Capital Investment	Expanded No. Units	Capital Investment	Total No. Units	Capital Investment
1956	24	\$7,500,000	35	\$31,200,000	59	\$39,000,000
1955	20	8,796,000	51	24,469,000	71	33,265,000

Total capital investment for one year (1956) was roughly 40% of San Francisco area's total value of electronic facilities in 1956.

FROM START TO FINISH...WITH COMPLETE OR PARTIAL AUTOMATION

KÄHLE

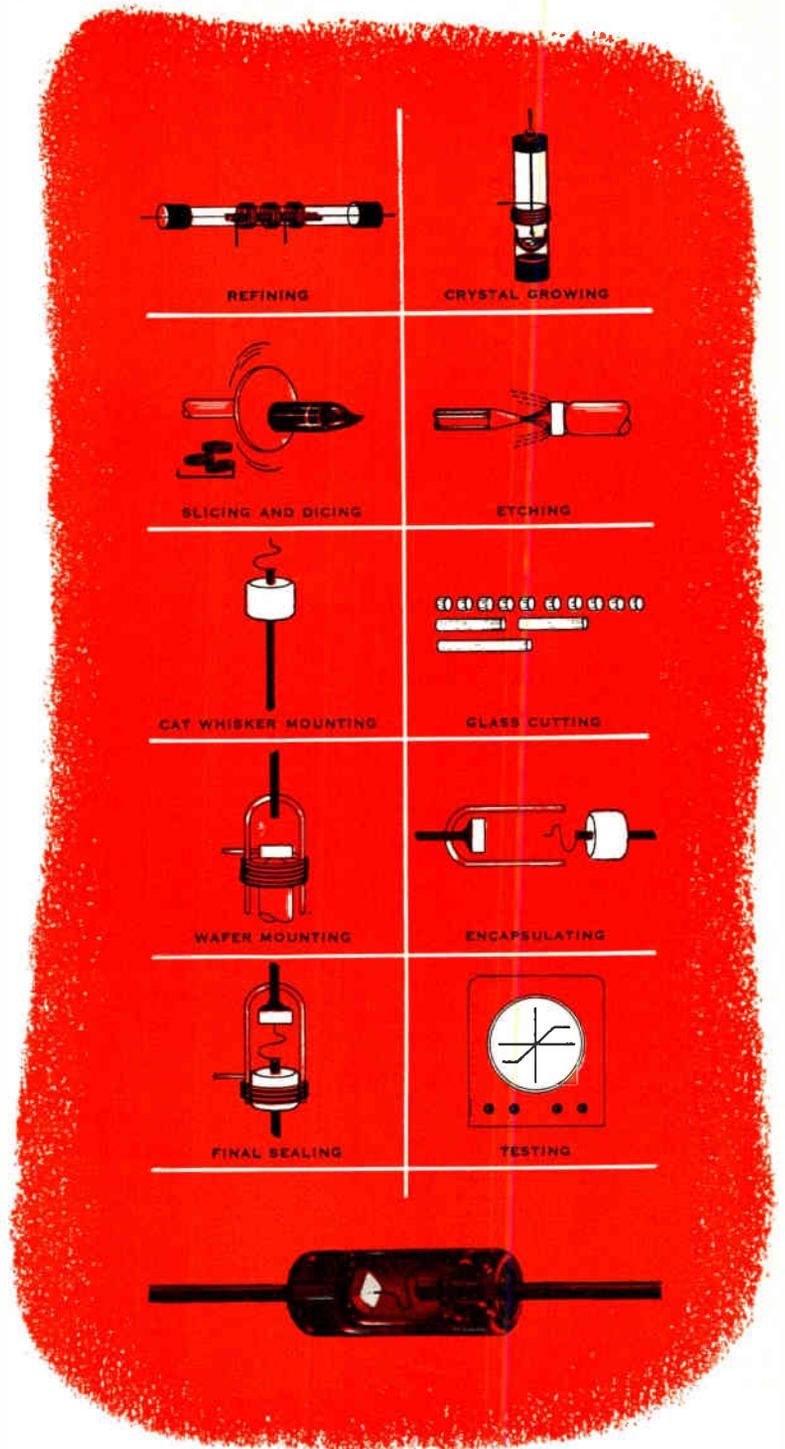
MACHINES

FOR EVERY STEP OF DIODE MANUFACTURING

Manufacturers know there are no short cuts to diode quality. Each production phase is a vital one . . . because of this, Kahle designs these machines to account for and accurately control every possible factor . . . from the initial cutting of the glass tubing, to the growing of the Germanium or Silicon crystal, to the final sealing and testing of the diode.

Illustrated are a few of the intricate operations that can be accomplished with high speed Kahle Automatic Machines . . . because manufacturing needs vary so widely, Kahle's skilled engineers will develop individually "customized" machines or completely "automated" production lines to meet your specific requirements. 25 years' experience can help with your production problems.

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PLANTS:
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HUDSON AVE., UNION CITY, N. J.

Electronic Industries' News Briefs

Capsule summaries of important happenings in affairs of equipment and component manufacturers

EAST

LENKURT ELECTRIC CO. has opened Sales and Engineering offices in Washington, D. C., to provide increased service to military and civil federal agencies, industrial firms, and other customers in the eastern U. S. Joseph R. Sherman, newly appointed Manager of the eastern area commercial relations, will manage the Washington office.

GE'S TECHNICAL PRODUCTS DEPT. has announced receipt of a contract from the U. S. Army's Signal Supply Agency for a closed-circuit color TV system for use at the Missile Test Center at Cape Canaveral, Fla. The system will be used by Army observers for close up viewing of missile launching and for tracking the high speed missiles up to a possible altitude of 100,000 ft.

NARDA CORP. has completed preliminary plans with the Kama Instrument Corp., Mineola, N. Y., manufacturers of fine wire wound components under the Government NIKE program, to become a wholly-owned subsidiary.

WESTINGHOUSE RESEARCH LABORATORIES has formed a physics projects laboratory to expedite the development of electronic and related devices. Among the projects assigned to the new group is continued development of the image multiplier tube—a new type of electronic tube recently announced by the laboratories.

BENDIX RADIO DIV. has announced that its Aviation Electronics Products Dept. will supply extensive airborne electronic equipment installations for the new Bristol Britannia Transport that Northeast Airlines has ordered for its Boston-New York-Miami run.

CANNON ELECTRIC CO. will move all its manufacturing and service facilities from East Haven, Conn., to its new Salem plant located at Salem, Mass.

ELECTRICAL INDUSTRIES, formerly located in Newark have announced completion of a new plant situated in Murray Hill, N. J. New production equipment, improved manufacturing processes, and new test equipment make it possible to expand customer service on both standard terminals and custom glass-to-metal seals.

GENERAL INSTRUMENT CORP. has acquired Radio Receptor Co., Inc., of Brooklyn, N. Y. This is the third acquisition by GI in 12 months.

GENERAL TRANSISTOR CORP. has purchased a 20,000 sq. ft. building and the adjoining 20,000 sq. ft. of ground at 91-27 138th Place, Jamaica, N. Y. The acquisition brings to a total of 3 the number of General Transistor plants.

SEL-REX CORP. has acquired a 40,000 sq. ft. 2-story building in Nutley, N. J., to house offices, manufacturing departments, and laboratories.

SYLVANIA ELECTRIC PRODUCTS, INC., has started construction on a new facility at the Waltham Laboratories for expanded research and development in missile systems.

UNIVERSAL PRODUCTS CO., INC., Wilmington, Del., has acquired C. P. Clare & Co., Chicago relay mfr.

UNIVERSAL TRANSISTOR PRODUCTS CORP. is the new name for Universal Atomics Corp., 50 Bond St., Westbury, N. Y.

GE'S HEAVY MILITARY ELECTRONIC EQUIPMENT DEPT. has been awarded an \$83-million definitive contract for work in connection with guidance of the Atlas intercontinental ballistic missile.

WALTER KIDDE NUCLEAR LABORATORIES, INC., Garden City, N. Y., has been awarded a contract by the U. S. Maritime Administration for design of the first atomic-powered surface ship, along with George G. Sharp, Inc., New York marine design firm.

MID-WEST

BENDIX AVIATION CORP. has established a midwestern regional office for its Computer Div. in the Palmolive Bldg., 919 N. Michigan Ave., Chicago.

RADIO CORP. OF AMERICA'S Bizmac System has been demonstrated by the Army Ordnance Corps at its Tank-Automotive Command headquarters in Detroit. The system opens the way for a sharp cut in world wide stocks of spare parts in the next two years. It will reduce months of paper work to minutes of push-button operation.

BURROUGHS CORP.'S Tiremen Ave. plant in Detroit will more than double its size when construction of a second manufacturing building is completed. This will bring their total manufacturing space to 220,000 sq. ft.

HEATH CO., Benton Harbor, Mich., has broken ground for the construction of a new 142,000 sq. ft. plant. The modern 1-story building will house all of Heath's operations.

BARBER-COLMAN CO. has established a Wheelco Instruments Division, Sub-branch office at 20 Leland Avenue, Columbus 14, Ohio, under H. J. Hoffman.

BRUSH ELECTRONICS CO. opened a factory branch office at 1960 S. LaCienega Blvd., Los Angeles.

COMMUNICATION ACCESSORIES CO. has moved its facilities from Hickman Mills, Mo., to Highway 71 By-Pass and those on U. S. 50 to Lee's Summit, Mo.

FOREIGN

RADIO CORP. OF AMERICA and **MINNEAPOLIS-HONEYWELL REGULATOR CO.** have announced the appointment of three Canadian companies as sub-contractors for engineering services relating to an electronic weapons system for the new RCAF AVRO CF-105 jet combat plane.

HYCON-PAGE, Cambridge, Mass., has signed a contract with the International Cooperation Administration to provide engineering services for the proposed development of a modern telecommunications system in Thailand, Vietnam, and Laos.

AVIATION ELECTRONIC PRODUCTS, BENDIX RADIO, announces that a direct sales and licensee agreement has been concluded with Computing Devices of Canada, Ltd.

MARCONI'S WIRELESS TELEGRAPH CO., LTD., Chelmsford, Essex, England, has supplied over 600 automatic direction finders to Vickers Armstrongs, Ltd., for use on the Vickers Viscount airliner.

WEST

NUCLEAR INSTRUMENTATION DIV., a new division of Gulton Industries, will be located in Albuquerque, N. M., and will produce monitoring instruments for geophysical equipment, high frequency telemetering systems, and nuclear reactor control and monitoring circuits.

PACKARD-BELL ELECTRONICS CORP. has become affiliated with Federal Electronics Corp., holder of TACAN rights to the Sigalert emergency warning system. Principal objectives of the affiliation are to provide Sigalert with the mass production facilities of Packard-Bell, new styling for the product, and a plan for marketing the warning system nationwide.

COHU ELECTRONICS, INC., newly formed, will provide financial and business management for electronics manufacturing and development companies. Lamott T. Cohu, President of Kintel, was elected head of the newly formed organization.

AMPEX CORP. has formed a new Professional Products Div., devoted exclusively to the production and sales of equipment for the professional recording and broadcasting industry.

CONSOLIDATED ELECTRODYNAMICS CORP. has acquired William Miller Instruments, Inc., Pasadena, pioneer custom manufacturer of dynamic recording and data-processing equipment. Two subsidiaries, Transformer Engineers and Pacific Transformer, were not included in the transaction.

HOFFMAN LABORATORIES, INC., doubled the size of the original plans for its new electronic research and development center now being constructed.

HUGHES AIRCRAFT CO. has formed a new dept. of Nuclear Products, to study the effects of nuclear radiation on electronic equipment. The department is headed by Dr. John W. Clark.

INTERNATIONAL BUSINESS MACHINES CORP. announced that the American National Insurance Co. of Galveston has contracted to make the largest purchase, so far, by private industry of a large-scale IBM computer.

SPECTROL ELECTRONICS DIV., CARRIER CORP., has just completed a new 2-story building which doubles the previous floor space. A completely tooled prototype development center is included in the modern facilities.

APPLIED RADIATION CORP., Walnut Creek, Calif., began manufacture of high-power electron linear accelerators for processing foods, drugs and chemicals for nuclear research.

VARO MANUFACTURING CO., INC., Garland, Tex., has established a Transformer Div. to provide an integrated engineering and manufacturing facility for magnetic components.

MERCAST MANUFACTURING CORP., La Verne, Calif., producers of precision castings for the aircraft electronics and missile industries has purchased the First Street Corp., owners of the land and buildings occupied by Mercast.

AMERICAN ELECTRONICS, INC., Fullerton, Calif., will construct an 11,000 sq. ft. plant on a 20-acre site. The building will be

Electron Tube News

— from SYLVANIA

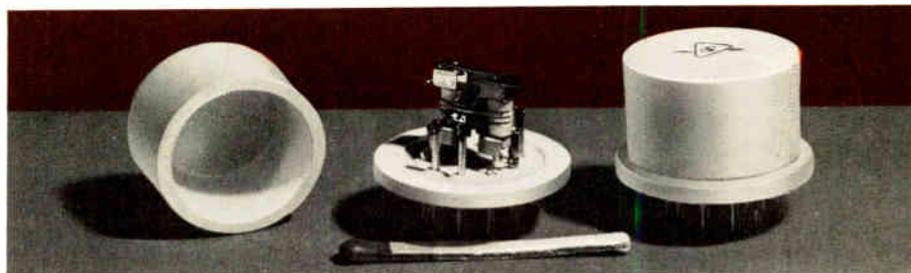
Meeting industry's basic needs—everywhere in electronics

— IN STACKED TUBES

**Sylvania and Industry
team up to evaluate
"Tubes of the Future"**

Handmade samples of Sylvania stacked tubes are being made available to interested military equipment manufacturers. These potential users are conducting experiments which provide them with basic experience in the application of these radically new vacuum "tubes of the future."

In turn they are supplying Sylvania with analyses of their findings on the potential advantages of stacked tubes, their resistance to heat, shock, vibration, altitude and humidity. This teamwork, the interchange of data and ideas, will benefit the entire electronics industry. It will speed the full-scale avail-



ability of stacked tubes and make possible refinements in design which will take full advantage of the inherent potentials of the stacked tube.

Presently, experimental sampling includes single cathode double triodes and an audio power pentode. Development is underway to include double cathode dual section tubes and RF and audio pentodes in the basic complements planned for military application.

Internal view and completely assembled ceramic stacked tube.



Exploded view of stacked tube demonstrates its rugged planar mount construction utilizing ceramic element spacers assembled on a ceramic stem. Note that element spacings are independent of the tube envelope.

— IN TELEVISION

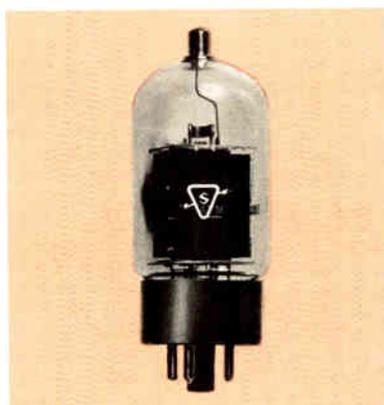


Type 6CZ5
for 110° vertical deflection

The Sylvania Type 6CZ5 is a beam pentode intended primarily for use as a vertical amplifier or audio amplifier and has controlled heater warm-up for series string operation.

**Vertical Deflection Ratings
(pentode connection)**

Plate V	315 V max.
Peak Positive Plate V	2200 V absolute max.
Plate Dissipation	10 Watts max.
Grid No. 2 V	285 V max.
Grid No. 2 Dissipation	2 Watts max.



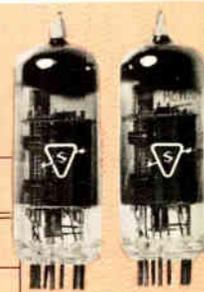
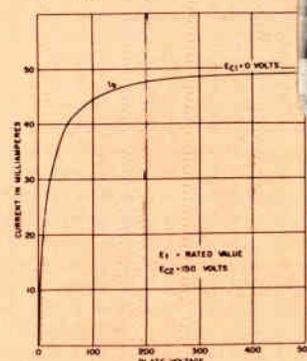
Type 6DQ6A
for 110° horizontal deflection

The type 6DQ6A has been upgraded for higher screen dissipation to meet the need for a horizontal deflection tube in 110° circuits. For series string circuits the type 12DQ6A features controlled heater warm-up time and 600 ma heater current.

Design Center Ratings

Peak Positive Plate V	6000 volts abs. max.
Plate Dissipation	15 W max.
Grid No. 2 Dissipation	3 W max.
Zero bias plate current	300 ma

**New improved
video amplifier
tubes**



**ZERO BIAS
PLATE
CHARACTERISTIC
CURVE**

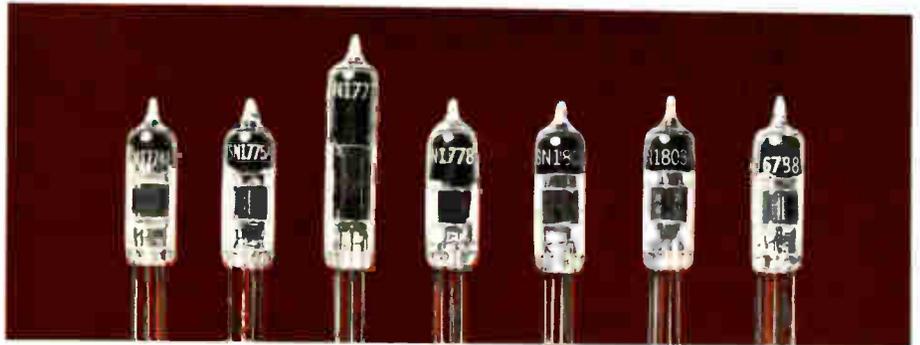
The sharp-cutoff pentode sections of the types 6AW8A and 6BA8A have been redesigned to exhibit a lower knee characteristic as shown in the graph. This permits a wider range of B+ supply voltages. In addition, pentode plates have been redesigned to increase dissipation from 3.0 to 3.25 watts.

Meeting industry's basic needs

— IN GUIDED MISSILES

New Guided Missile Line "giant step" in the evolution of tube reliability

Sylvania offers the first line of tubes specifically designed and tested for guided missile application to meet the industry's need for greater reliability where severe conditions of environmental temperature and vibration exist.



This line of tubes and the new levels of reliability it achieves represent the newest step in Sylvania's continuing program of tube reliability.

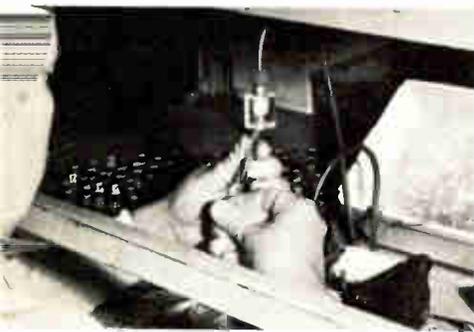
The Guided Missile Tube Line, developed under a Buship contract, is the result of thorough investigation of the missile field and emphasis in design has been placed on those tube parameters most critical to missile requirements.

Features of the line include new reliability tests such as "white noise," more severe flicker short tests, and more stringent fatigue test.

Of equal significance is the manufacturability of the Guided Missile Tube Line. It is capable of being mass produced on present facilities to meet military requirements in time of need.

7 types meet the basic requirements for Guided Missile applications

Sylvania exp. type	Description	Nearest Prototype
SN1774A	Sharp cutoff RF pentode	6205
SN1775A	Semi-remote cutoff RF pentode	6206
SN1776A (6788)	Pentode audio voltage amplifier	—
SN1777A	Audio beam power pentode	5902
SN1778A	Medium mu single triode	5977
SN1802A	Double, medium mu triode	6021
SN1803A	Double, high mu triode	6112



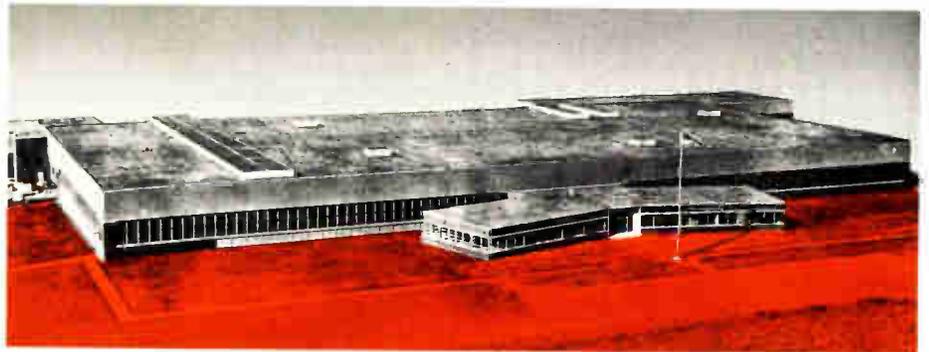
Visual inspection—visual inspection criteria as outlined in MIL-E-1C is applied to Guided Missile Tube production. This highly stringent and definitive spec helps to insure optimum reliability.

— IN FACILITIES

Subminiature plant combines "area cleaning" with "point cleaning" to help achieve greater tube reliability.

Sylvania's plant at Burlington, Iowa, is the most modern plant ever designed, built, and equipped for the exclusive production of "Gold Brand" premium subminiature tubes.

The recent installation of complete air conditioning and air purification adds a new measure of control in the manufacture of the world's most reliable tubes.



"area cleaning"—new installation of complete air conditioning and air filtering keeps areas, such as mounting department, relatively free from dirt and dust.



"point cleaning"—immediate work areas are kept spotlessly clean as in mount assembly. Air currents under hooded tables isolate the mounting area from outside air.



temperature control—plays an important factor in manufacturing processes, such as heater preparation. Makes it possible to control the manufacture of small diameter 26.5 volt heaters for maximum uniformity and dependability.

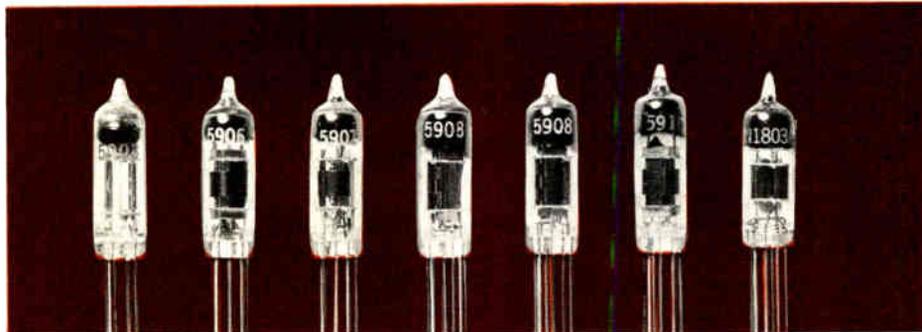
everywhere in electronics

— IN COMMUNICATIONS

New Subminiature Types for 26.5 Volt Systems

Sylvania now offers the designer a line of subminiature tubes designed with 26.5 volt heaters for systems operating from 26.5 volt power supplies. Mechanical and electrical design are combined with a proved quality control program to assure a high degree of reliability. "Burn-in" period before test improves the life expectancy rated at 5000 hours under life test conditions.

In addition to types rated for 26.5 volts on all elements, other types are provided for higher plate voltage operation. Thus the designer will find greater circuit design flexibility through appropriate selection of types to meet his equipment needs.



Type	Description	Heater Voltage	Plate Voltage
5903	Double diode with separate cathodes	26.5 V	Detector
5904	Medium Mu Triode	26.5 V	26.5 V
5905	Sharp cutoff RF pentode	26.5 V	26.5 V
5906	Sharp cutoff RF pentode	26.5 V	100 V
5907	Remote cutoff RF pentode	26.5 V	26.5 V
5908	Pentode mixer	26.5 V	26.5 V
5916	Pentode mixer	26.5 V	100 V

— IN CATHODE-RAY TUBES

Lightweight 17", 90° tube is TV's newest picture tube development

Following closely on the heels of the 110° picture tube, Sylvania announces a 17" tube with 90° deflection and standard neck diameter for portable TV application. The new 17" tube is three pounds lighter than the currently popular 17", 90° types.

Types are offered with either a 450 ma or 600 ma heater, for use with or without ion-trap. This new development makes it possible to design lighter portables while using readily available deflection yokes and existing circuitry.



see next page →

New Flying Spot Scanner Tube

The new Sylvania Type 5BNP16 flying spot scanner tube is a typical development in Sylvania's rapidly expanding special purpose cathode-ray tube program.

It is an inexpensive tube with shorter overall length (10 $\frac{5}{8}$ "). It employs low voltage electrostatic focus, an aluminized screen, and operates without ion-trap for simplified installation.



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— IN TUNER AND IF TYPES



6BN4

Medium mu triode designed for amplifier use in VHF tuners. Characteristics are similar to one section of the 6BZ7. 3BN4 and 2BN4 are series string versions with controlled heater warm-up.

6CY5

Sharp cutoff tetrode designed particularly for amplifier service in VHF tuners. Types 4CY5, 3CY5, and 2CY5 offer controlled heater warm-up for series string circuits.

6DK6

7-pin miniature sharp cutoff pentode. High transconductance at low plate and screen potentials make them especially useful as TV IF-amplifiers. Types 3DK6 and 4DK6 are series string versions.

— IN RECTIFIERS



Type 12DF5

The 12DF5 is a T6½ full wave rectifier with separate cathode connections and center tapped heater. Its ratings are comparable to the type 12BW4. Unique construction adds flexibility in rectifier or doubler use and permits operation from 6- or 12-volt heater supply.

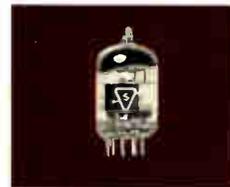
— IN COMMUNICATIONS

Type 407A

Type 408A

Type 407A is a T6½ double triode with separate cathodes and a center-tapped heater for 20- or 40-volt operation. Its useful range extends to VHF for use as an amplifier, oscillator, multi-vibrator, or clamper.

Type 408A is a 7-pin, T5½ pentode for 20-volt heater operation. High Gm makes it desirable for amplifier service from audio through VHF ranges.



New Series String reference chart



Here is a chart designed to fit your notebook or hang conveniently on the wall. It is a complete listing of all 600 ma and 450 ma tube types designed for series string operation.



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Shell Tower Bldg., Montreal

Please send additional information on the items checked below.

- | | |
|--|---|
| <input type="checkbox"/> 110° Deflection | <input type="checkbox"/> 90° Lightweight 17" Picture Tube |
| <input type="checkbox"/> 6AW8A—6BA8A | <input type="checkbox"/> 5BNP16 |
| <input type="checkbox"/> Guided Missile Line | <input type="checkbox"/> Tuner Types |
| <input type="checkbox"/> 26.5 volt line | <input type="checkbox"/> 6DK6 |
| | <input type="checkbox"/> 12DF5 |
| | <input type="checkbox"/> Series String Chart |
| | <input type="checkbox"/> 407A—408A |

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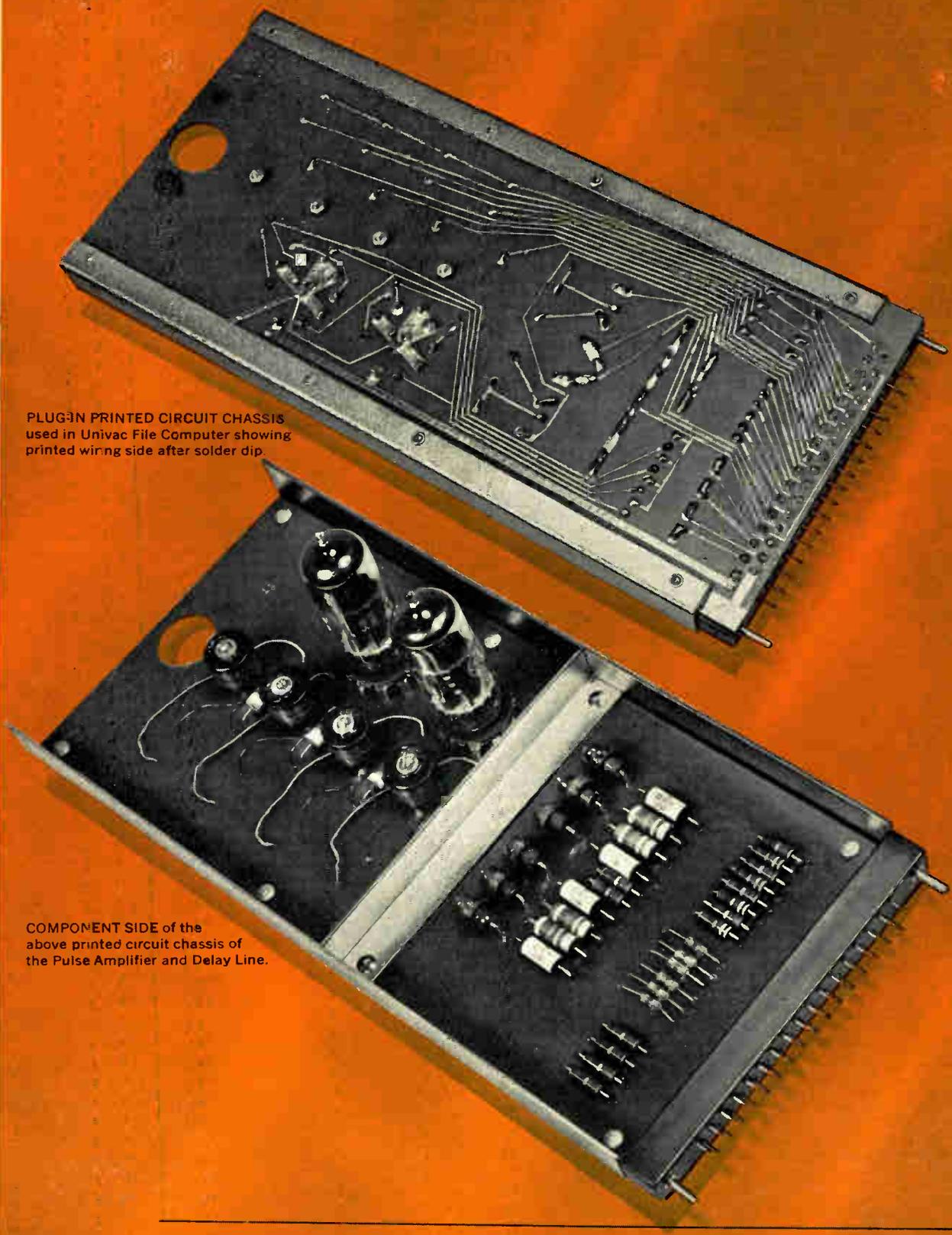
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PLUG-IN PRINTED CIRCUIT CHASSIS
used in Univac File Computer showing
printed wiring side after solder dip.

COMPONENT SIDE of the
above printed circuit chassis of
the Pulse Amplifier and Delay Line.

says *Remington Rand Univac**

of the
REVERE
ROLLED COPPER
used in its Printed Circuits

A leader in the manufacture of digital computing systems, Remington Rand Univac utilizes the latest manufacturing techniques because computing systems require printed circuit boards completely free of defects.

In examining copper-clad laminated boards made with Revere rolled copper Remington Rand Univac said, "We found even the finest lines were freer from pits, pinholes and other imperfections. In addition, there were no detectable lead inclusions. Also, the rolled copper thickness is uniform. We get what we specify."

Designed and developed by Remington Rand Univac, digital computers use hundreds of printed circuits. Each one must operate according to specifications at all times. There can be no sacrifice of conductivity. Because of more uniform etching qualities Revere Rolled Copper is capable of producing better edge definition, allowing closer spacing of lines. A uniform solder coat under normal or automatic soldering operations is possible because the copper is free from surface defects. Fluxes wet readily because of this clean surface. These factors combine to make Revere Rolled Copper the ideal medium for these printed circuit boards.

And they are the very reasons why you should insist that Revere Rolled Copper be specified by you when ordering blanks from your laminator.

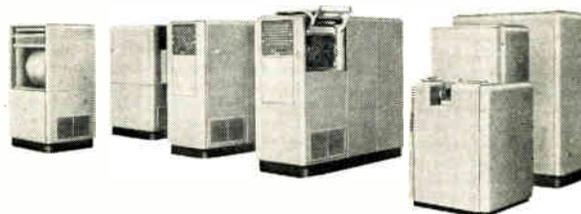
It is available in unlimited quantities in standard coils of 350 lbs. in widths up to 38" and in .0014, .0028, and .0042

gauges, weighing approximately 1 oz., 2 oz. and 3 oz. per square foot; or heavier if required. Many users have found that because of its unique characteristics 1 oz. Revere Rolled Copper can be used instead of the 2 oz. required when other kinds of copper are used, thus effecting still greater savings in material cost. Revere Rolled Copper exceeds requirements of standard specifications and meets ASTM B5 specifications for purity with 99.9% minimum.

Consult your laminator regarding the use of Revere Rolled Copper for your printed circuits, or contact the Revere Representative nearest you through the yellow pages of your local telephone directory.

Revere does no laminating of printed circuit boards, making only rolled copper. Revere Rolled Copper can also be furnished rolled down to .0006 for coil winding applications.

*Reg. U. S. Pat. Office



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Magnetics, Inc. makes the performance-guaranteed

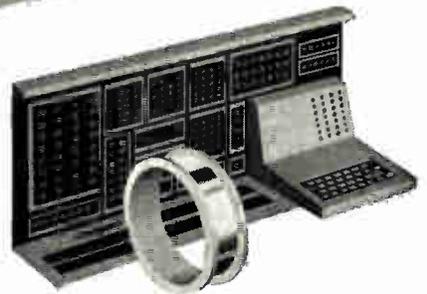
tape wound core



Core quality is no longer your worry—it's ours, for we guarantee performance of our tape wound and bobbin cores to mutually agreed upon specifications. What's more, you can specify a host of extra Magnetics, Inc. exclusive features. These include the Aluminum Core Box*, to withstand the rigors of temperatures to at least 450°F., vacuum impregnation, heavy winding stresses and vibration—and the color-coded bobbin core, for error-free handling in storage and assembly.

Why not write today for your copy of Catalog TWC 100-A? And if you have an application problem, our sales engineers are ready to provide you with expert assistance. *Magnetics, Inc., Dept. TT-30, Butler, Pennsylvania.*

*Patent Pending



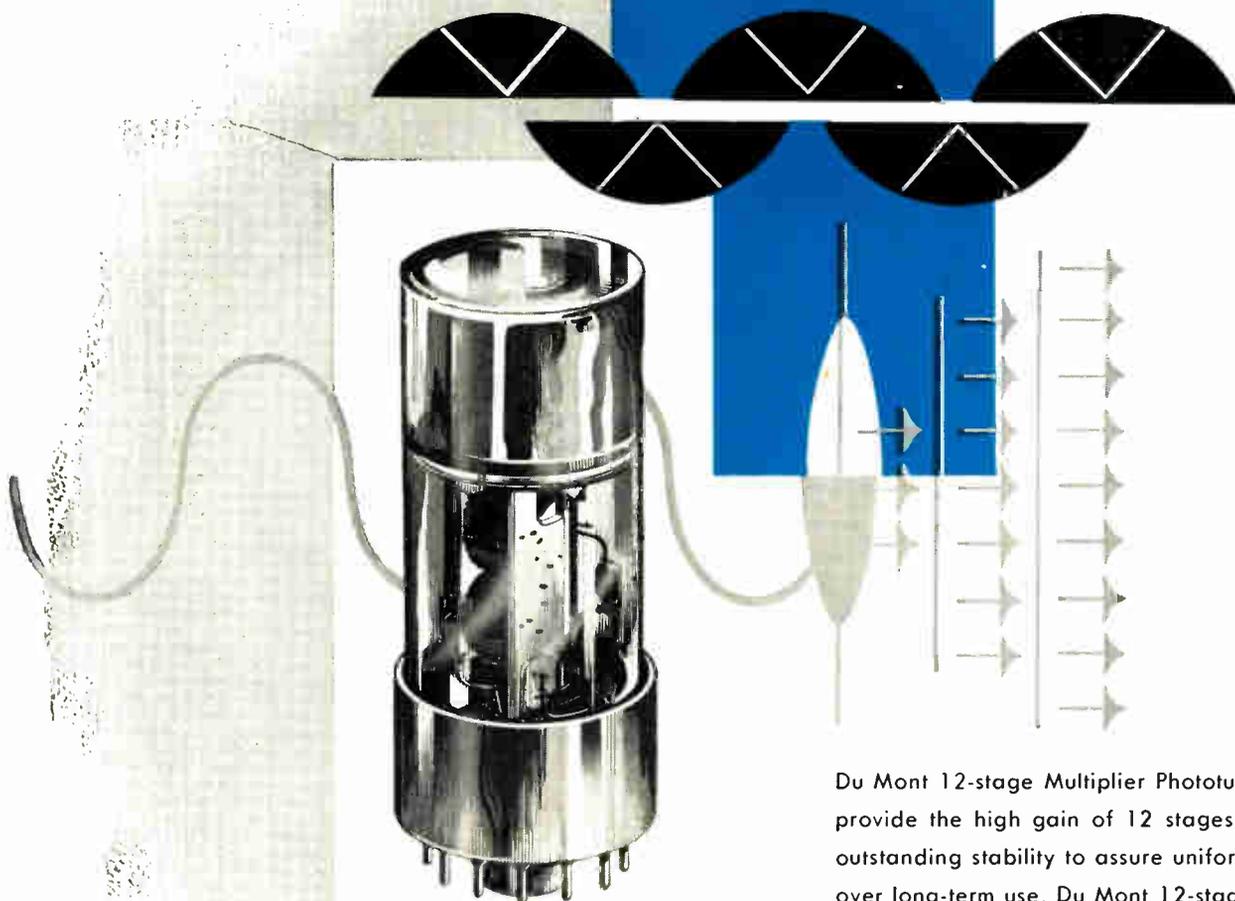
Magnetics' bobbin cores, too,
are performance-guaranteed!

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Du Mont 12-stage Multiplier Phototubes provide the high gain of 12 stages *plus* outstanding stability to assure uniform results over long-term use. Du Mont 12-stage Multiplier Phototubes are available in 2", 3", 5", 12" and 16" sizes.

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BOMAC... FIRST IN MICROWAVE

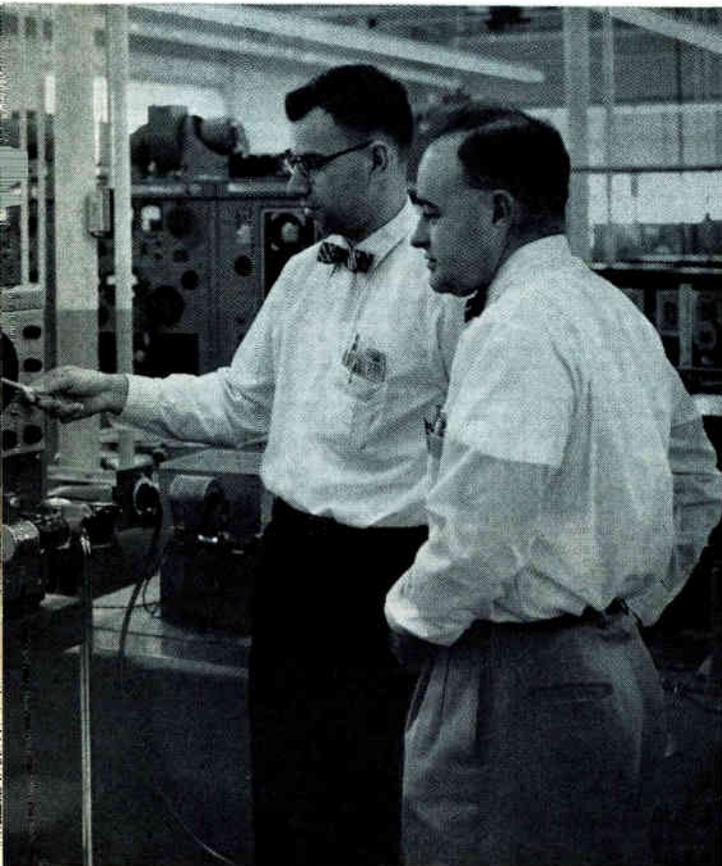
What do you need — a single tube — or 50,000? A modification? A completely new component? Bomac is capable of meeting your needs.

Buyers know Bomac as one of the nation's largest designers and manufacturers in the highly specialized field of microwave tubes and components.

They also know these 3 important facts about Bomac reliability:

1 Every tube, every component is 100% tested for peak performance and maximum uniformity before shipment.

2 Bomac's engineering and development service is complete in every detail.



Excellent reasons why you can count on Bomac to meet your

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TUBES AND COMPONENTS

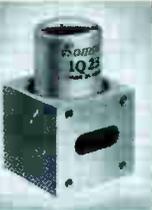
B

3 Bomac offers a complete line —
over 750 different tubes and components.



TR... A type for every known application — all bands — fixed-tuned or tunable — special types: shorted, dual and triple.

ATR... All standard types. Many more developed in our laboratories. Fixed-tuned — highly specialized as required: low Q, or high Q, miniaturized, special shapes and mounts.



REFERENCE CAVITIES... Dent with multiple frequencies and dual mode with fixed frequency. Temperature compensated to ± 0.3 MC from 0°C to 100°C.

SILICON DIODES
The most sensitive, uniform and stable diodes (1N23D). Also available in matched pairs for X-band and S-band. Also supplied as mixer diodes with either normal or reverse polarity.

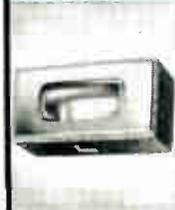


KLYSTRONS... Bomac offers a line of reflex klystrons. They offer maximum performance at high altitudes without pressurization.

PRESSURIZING WINDOWS... for all wave guide sizes, broad band characteristics with low insertion loss, temperature range —55°C to 100°C and 30 lb./sq. in. gage pressure in either direction.



HIGH FREQUENCY TRIODE OSCILLATOR... This triode, for oscillator use at high frequencies, is extremely reliable and will withstand high shock and vibration.



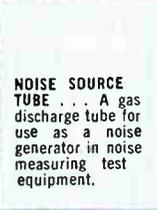
SHUTTERS... Bomac was first to develop shutter tubes and integral TR combinations for continuous crystal protection. All waveguide sizes available.



MAGNETRONS... High frequency, tunable and fixed-tuned magnetrons are a Bomac specialty. Frequencies from X band to classified millimeter bands. Special types designed to meet your requirements.



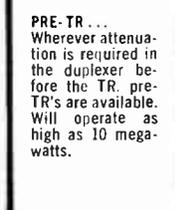
DUPLEXERS... Bomac will design, develop, and produce complete duplexers to customer specifications.



NOISE SOURCE TUBE... A gas discharge tube for use as a noise generator in noise measuring test equipment.



SURGE PROTECTORS... Bomac surge protectors are hold-off diode tubes. In a wide range of breakdown voltages: from 100 to 33000. Consult our engineering department for your applications.



PRE-TR... Wherever attenuation is required in the duplexer before the TR, pre-TR's are available. Will operate as high as 10 megawatts.



HYDROGEN THYATRONS... Bomac thytrons provide the following advantages: precise triggering — high repetition rates — high power levels — zero bias operation — electrical stability.



most exacting requirements

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GENERAL TRANSISTOR

MAXIMUM RATINGS AT 25°C

TYPICAL CHARACTERISTICS AT 25°C

General Transistor	Polarity	Transistor Dissipation (MW)	Collector to Base Voltage (Emitter Open) (Volts)	DC Collector Current (ma)	Peak Collector Current (ma)	Storage Temperature (°C)	AC Current Gain (Common Emitter) (B)	DC Current Gain (B)		Power Gain (DB)	Noise Figure (DB)	Collector Cutoff Current		Alpha Cutoff Frequency (mc)	Collector Voltage (Volts)	Emitter Current (ma)	Applications
								Conditions	Gain			Conditions	(I_{c1})				
14	PNP	125	25	100		85	28			36	16	VCB=10V	6	4.5	1	Audio, Gen. purpose	
20	PNP	125	25	100		85	42			40	16	VCB=10V	6	4.5	1	Audio, Gen. purpose	
34	PNP	125	25	100		85	15			32	16	VCB=10V	6	4.5	1	Audio, Gen. purpose	
74	PNP	125	25	100		85	75			42	<12	VCB=10V	6	4.5	1	Audio, Gen. purpose	
75	PNP	125	25	100		85	150			44	<12	VCB=10V	6	4.5	1	Audio, Gen. purpose	
81	PNP	125	25	100		85	75			42	16	VCB=10V	6	4.5	1	Audio, Gen. purpose	
81 HS*	PNP	150	25	200		85	120			44	16	VCB=10V	6	4.5	1	Audio, Gen. purpose	
82	PNP	125	25	100		85	150			46	16	VCB=10V	6	4.5	1	Audio, Gen. purpose	
109	PNP	125	25	100		85	120			44	16	VCB=10V	6	4.5	1	Audio, matched pair	
222	PNP	125	12	100		85	20			30	30	VCB=10V	6	4.5	1	Audio, Gen. purpose	
14 H	PNP	90	12	50		75	28			36	12	VCB=10V	6	4.5	1	Hearing Aid	
20 H	PNP	90	12	50		75	42			40	12	VCB=10V	6	4.5	1	Hearing Aid	
81 H	PNP	90	12	50		75	80			42	12	VCB=10V	6	4.5	1	Hearing Aid	
210 H	PNP	90	12	50		75	15-250			>34	>29	VCB=10V	<25	4.5	1	Hearing Aid	
769 R	PNP	90	12	100		75	25			24 ϕ			6	2.5	4.5	1	R.F. & I.F.
760 R	PNP	90	10	100		75	40			28 ϕ			6	5	4.5	1	R.F. & I.F.
761 R	PNP	90	10	100		75	70			32 ϕ			6	11	4.5	1	R.F. & I.F.
762 R	PNP	90	6	100		75	120			34 ϕ			6	17	4.5	1	R.F. & I.F.
83+	PNP	125	25	200	500	85	35-49			40	16		10	<.7	4.5	1	Low Speed Computer
87	PNP	125	25	200	500	85	38			36	16		10	.5	4.5	1	Low Speed Computer
88	PNP	125	25	200	500	85	80			42	16		10				Low Speed Computer
122	PNP	125	25	200	500	85	80			42	16		10	1.5	4.5	1	Low Speed Computer
111+	PNP	100	15	†		-55 to +85		IC=10ma VCE=5V	25-75			VCB=15V	<60				Low Speed Computer
758+	PNP	100	>20	200	500	-55 to +85	15			20 ϕ	16	VCB=15V	<5	<.5	4.5	1	Low Speed Computer
123+	PNP	100	>20	200	500	-55 to +85	30-150					VCB=20V	<6	>5	4.5	1	High Speed Computer
153+	PNP	100	>30	200	500	-55 to +85	>20					VCB=20V	<5				High Speed Computer
269+	PNP	100	25	200	500	-55 to +85						VCB=12V	<4	>4	4.5	1	High Speed Computer
759+	PNP	100	>20	200	500	-55 to +85	20			24 ϕ	16	VCB=15V	<5	.5 to 3	4.5	1	High Speed Computer
760	PNP	100	15	50		-55 to +85	40			28 ϕ	16		1	5	4.5	1	High Speed Computer
761	PNP	100	15	50		-55 to +85	75			32 ϕ	16		1	10	4.5	1	High Speed Computer
762	PNP	100	6	50		-55 to +85	100			34 ϕ	16		1	20	4.5	1	High Speed Computer
763	PNP	100	6	50		-55 to +85	120			35 ϕ	16		1	30	4.5	1	High Speed Computer
764+	PNP	100	>20	200	500	-55 to +85	200			16	VCB=15V	<5	>25	4.5	1	High Speed Computer	
3A	PNP	150	45	50		-55 to +85	32-65			>12	<20	VCB=45V	10	>4	5	1	Military-Type
4	PNP	150	45	50		-55 to +85	16-32			34-43	<33	VCB=45V	15	>4	5	1	Military-Type
15	PNP	100	20	200	500	-55 to +85		IC=100ma VCE=.25V	20			VCB=5V	1	5	5	1	Switching computer
16	PNP	100	20	200	500	-55 to +85		IC=200ma VCE=.2V	30			VCB=5V	1	12	5	1	Switching computer
17	PNP	100	20	200	500	-55 to +85		IC=400ma VCE=.2V	30			VCB=5V	1	20	5	1	Switching computer
56	NPN	100	>30	200	500	-55 to +85		IC=100ma VCE=.25V	30			VCB=5V	<5	3	5	1	Switching computer
57	NPN	100	>30	200	500	-55 to +85		IC=200ma VCE=.25V	30			VCB=5V	<5	6	5	1	Switching computer
58	NPN	100	>30	200	500	-55 to +85		IC=300ma VCE=.25V	30			VCB=5V	<5	9	5	1	Switching computer
18/(GT-66)	PNP	50	12	20		85	100			42	20		10	4.5	1	Phototransistor	
4HV	PNP	150	50	†		85	10			32	16		10	4.5	1	High Voltage	
4N†	PNP	125	100	200	500	85	18					VCB=100V	<450	4.5	1	Neon light	
4S+	PNP	125	40	200	500	-55 to +85	15			32	24	VCB=15V	15	4.5	1	Bi-directional	
5/(2n35)†	NPN	100	25	100	200	-40 to +75	40			40	16	VCB=12V	12	5	1	Audio, Gen. purpose	
29+	NPN	100	>10	200	500	-55 to +85	>10				30	VCB=10V	<10	5	1	Experimental Amateur	
67+	NPN	100	25	200	500	85	>25					VCB=15V	<10	>5	5	1	High speed switching computer
12+	NPN	100	15	†		-55 to +85		IC=10ma VCE=5V	25-75			VCB=15V	<60				High medium speed switching computer
92+	NPN	100	20	100	200	-55 to +85		IC=5ma VCE=5V	37-160			VCB=5V	6	4.8	5	3	Switching computer
03+	NPN	100	20	200	500	-55 to +85		IB=1ma VCE=.2V	35-70			VCB=20V	<25				High & med. speed switching computer
04+	NPN	100	20	200	500	-40 to +75		IB=1ma VCE=.2V	>30			VCB=20V	<25	>4	5	1	High speed switching computer
05+	NPN	100	20	200	500	-55 to +85		IB=1ma VCE=.2V	20-40			VCB=20V	<25				High & med. speed switching computer
47+	NPN	100	15	200	500	-55 to +85		IB=1ma VCE=.2V	>40			VCB=10V	<25				High & med. speed switching computer
48+	NPN	100	20	200	500	-55 to +85		IB=1ma VCE=3.5V	>30			VCB=20V	<20	>4	5	3	High & med. speed switching computer
49+	NPN	100	30	200	500	-55 to +85		IB=1ma VCE=3.5V	>30			VCB=30V	<25	>.7	5	3	High & med. speed switching computer

plied with Heat Sink †Limited only by Collector Dissipation ϕ Frequency = 455KC ‡Preliminary Specifications — Subject to Revision at any Time by General Transistor Corp.
More Complete Information on any of the Above Types, Write for Particular Specification Sheet

GERMANIUM ALLOYED JUNCTION TRANSISTORS

for Computer
Audio
Hearing Aids
R.F. and I.F. applications

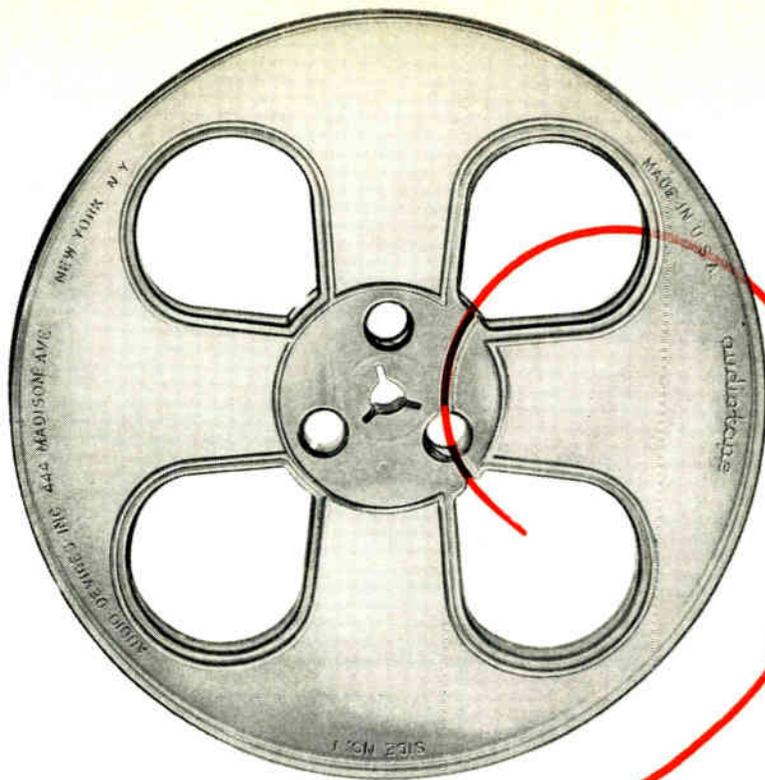
General Transistor, the fastest growing name in transistors, offers you a complete line of high quality semiconductors. For superior electrical performance, reliability and service buy and specify General Transistor.



GENERAL
TRANSISTOR
CORPORATION

91-27 138th PLACE, JAMAICA 35, NEW YORK

now



audiotape TRADE MARK gives you **C-SLOT THREADING**

... the fastest, easiest-threading reel ever developed!

This revolutionary new improvement in tape reel design is now standard for all 7" reels of Audiotape — an extra-value feature at no extra cost!

With the C-slot reel, threading becomes virtually automatic. No more fumbling with tiny loops or sticking your finger in little holes. What's more, the new reel is actually heavier and stronger than ever before. All five types of Audiotape now come on this great new reel.

Only C-SLOT threading gives you these advantages:

- No kinks or loops in tape*
- No "pigtailed" to stick up and break off or cause reel to wobble when turned over*
- No need to turn reel by hand to anchor tape*

PLUS these improved construction features:

- Smooth, unbroken rim — no slit to warp or bind*
- Perfectly smooth inner surface — no sharp edges to catch or roughen tape*
- Strong, non-warping construction — the ultimate in reel ruggedness*

Ask your dealer for a demonstration
of the Audiotape C-slot reel.

HERE'S ALL YOU HAVE TO DO:

1. Insert tape through flange opening at top of C-slot.



2. Drop tape into slot, leaving about 1 inch projecting beyond the hub with tape slack on both sides of recording head.



THEN PRESS THE "START" BUTTON!

Tape will grip and hold firmly . . .
no need to turn reel by hand to anchor free end.

audiotape

it speaks for itself

AUDIO DEVICES, INC., 444 Madison Ave., New York 22, N.Y.

In Hollywood: 840 N. Fairfax Ave.
In Chicago: 5428 Milwaukee Ave.
Export Dept.: 13 East 40th St., N.Y. 16, N.Y.
Cables "ARLAB"

Tele-Tips

(Continued from page 26)

POKER-FACED, TOO! The Data-tron computer made by Burroughs Corp. has been programmed to play blackjack, including electronically "shuffling" a non-existent pack of cards, cutting on selection of a number from 1 to 52 by a player, then dealing the hands—typing the hands on electric typewriters. After the second round, Datatron conceals its hole card unless it has made blackjack—a total of 21 points—with two cards. No orders are reported yet from Las Vegas.

MULTIPLE JOBHOLDING is increasing, says the Census Bureau. Better than five per cent of the employed population held more than one job during the week of the census.

GOBBLEDYGOOK'S BROTHER, corporate Mumbo-Jumbo, has reached such a stage that one sympathetic corporation has included a glossary of business and engineering terms in its annual report. Fairchild Camera and Instrument Corp. has presented stockholders with a glossary of business and engineering terms used in the 1956 annual report.

INDIAN FAKIRS are being investigated this summer by two American medical researchers. Using a compact 78-lb. transistorized set the researchers will investigate physiological changes, if any, when the Indian fakirs withdraw themselves from known manifestations of consciousness.

TV made news, thirty years ago, with the first intercity live telecast—starring Herbert Hoover.

WHAT NEXT? Automatic gavel, brainchild of Minneapolis-Honeywell's Dave Choate, sounds-off at the push of a button. Built-in "mood selector" allows speaker to select Tired, Normal, Mad, Drop-Dead, or Apoplectic gavel raps—this last includes an angry buzzer.



PHENOLIC TUBING

SPECIFY... **CLEVELITE** *
BECAUSE

It has high insulation advantages, uniformity and inherent ability to hold close tolerances which give you dependability.

CLEVELITE dependability is the answer for product performance at its best.

Also, ensure over-all economy by adding Clevelite reliability to your product.

Write for folder showing the various grades in which Clevelite is produced. Your inquiry will receive prompt attention.

* Reg. U. S. Pat. Off.

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Cleveland Container Canada, Ltd., Prescott and Toronto, Ont.

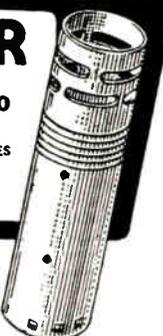
Representatives:

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**It's Florida for the kind of missile work
only RCA can offer electronic technicians**



RCA careers are beginning for electronic technicians every day at the Missile Test Project at Patrick Air Force Base on Florida's central east coast. Each offers a unique opportunity to work on testing of all types of missiles now under development or planned. What's more, you can contribute to the Vanguard Satellite launching and tracking.

There's a broad range of RCA opportunity for technicians on all levels. A basic knowledge of electronics qualifies you for many of these openings. Complete facilities include latest electronic and optical data acquisition and transmission systems. Liberal RCA benefit program . . . relocation assistance, too. You'll live well in Florida.

Make *your* future in one of these field or shop assignments:

**RADAR—RADIO—TELEMETRY
TIMING—INSTRUCTING
ELECTRONIC TEST EQUIPMENT**

Mail the coupon for booklet which describes our Florida missile program and its advantages.



RCA SERVICE COMPANY, INC.

Mr. H. N. Ashby, Employment Mgr., Dept. N-13F
RCA Service Co., Inc., Missile Test Project
P. O. Box 1226, Melbourne, Fla.

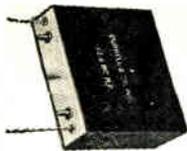
Please send me brochure with the information on RCA employment advantages in Florida.

Name _____ Age _____ Married Yes No

Address _____ U.S. Citizen Yes No

Electronics Experience (Include Mil. Service & Tech. Schools) _____

Earliest Date Available _____



SUBMINIATURE FILTERS

- for I.F. amplifiers, printed circuit use
- temperature compensated to .15% from -55°C to $+85^{\circ}\text{C}$
- for operations above 1 mc
- dimensions: $13/16'' \times 2-1/2'' \times 2''$ high



ENCAPSULATED TOROIDS

- hermetically sealed
- high Q
- center-mounting permits stacking
- complete range of sizes and types
- dimensions: $21/32'' \times 3/8''$



TOM THUMB TELEMETERING FILTERS

- miniaturized for guided missiles
- high temperature stability
- designed to withstand shock and vibration
- hermetically sealed —wt. 1.5 oz.
- dimensions: $45/64'' \times 45/64'' \times 2''$ high



SUBMINIATURE ADJUSTORIODS

- precise continuous adjustment of inductance over a 10% range
- no external control current needed
- hermetically sealed
- low cost—wt. .83 oz.
- dimensions: $45/64'' \times 45/64'' \times 3/4''$ high



you're all set to roll..

...with a toroid, filter or related network by Burnell.

For Burnell *specializes* in these components; in manufacturing them *and* in delivering them on schedule — at competitive prices.

Today Burnell makes toroids, and the filters of which they are the basic components, small enough to meet a multitude of new purposes . . . in aircraft and guided missiles . . . in receivers, carrier and telemetering systems.

Very likely we already have the answer to your network needs among our extensive files. If not, we can swiftly find that answer for you. Try us and see.

Burnell & Co., Inc.



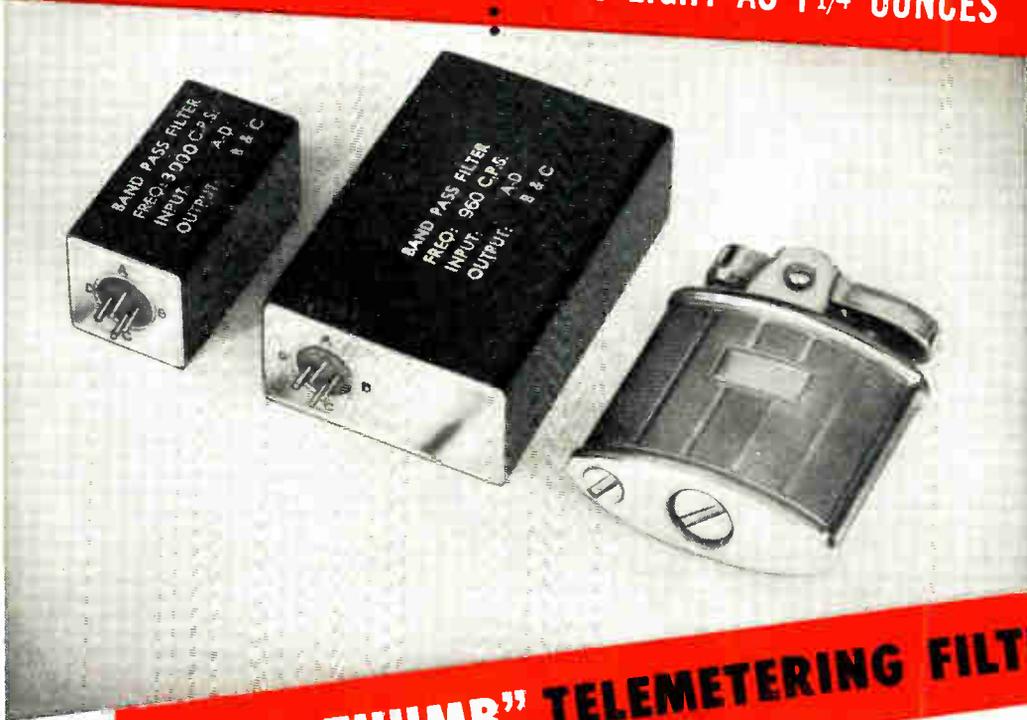
first in toroids, filters and related networks

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PACIFIC DIVISION. . . 720 MISSION STREET, SOUTH PASADENA, CALIFORNIA. . . TELETYPE: PASADENA 7578

Burnell SUBMINIATURE FILTERS

AS SMALL AS 3/4" x 3/4" x 13/8"
AS LIGHT AS 1 1/4 OUNCES



"TOM THUMB" TELEMETERING FILTERS

Designed and tested to specification #MIL-T 26985

Supplied in two principal case sizes:

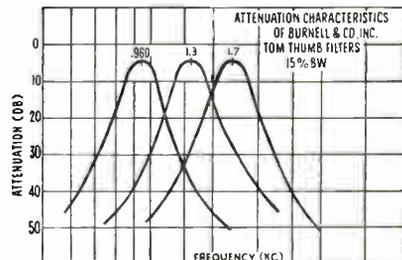
1. For RDB channels 1 through 6, case size is 3/4 x 1 1/2 x 2 1/4 inches high; weight: 4 ounces.
2. For channels 7 and up, case size is 3/4 inches square and 1 3/8 inches high; weight: 1 1/4 ounces.

These cases are generally equipped with a 4-pin plug to match the small Winchester socket.

ATTENUATION CHARACTERISTICS

- Impedance: 100 K ohms in and out.
- Insertion loss: less than 6 db.
- At $\pm 7.5\%$ band width is less than 3 db.
- At $\pm 25\%$ band width is greater than 15 db.
- At 1.75 f attenuation is 40 db or more.
- At .57 f attenuation is 40 db or more.

CHAN. #	FREQ.	IMP. 100K P/N	B. W.	SIZE	WT.
1	400 cps.	S-60001	$\pm 7\frac{1}{2}\%$	3/4 x 1 1/2 x 2 1/4 H	4 oz.
2	560 cps.	S-60002	$\pm 7\frac{1}{2}\%$	3/4 x 1 1/2 x 2 1/4 H	4 oz.
3	730 cps.	S-60003	$\pm 7\frac{1}{2}\%$	3/4 x 1 1/2 x 2 1/4 H	4 oz.
4	960 cps.	S-60004	$\pm 7\frac{1}{2}\%$	3/4 x 1 1/2 x 2 1/4 H	4 oz.
5	1300 cps.	S-60005	$\pm 7\frac{1}{2}\%$	3/4 x 1 1/2 x 2 1/4 H	4 oz.
6	1700 cps.	S-60006	$\pm 7\frac{1}{2}\%$	3/4 x 1 1/2 x 2 1/4 H	4 oz.
7	2300 cps.	S-60007	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
8	3 KC	S-60008	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
9	3.9 KC	S-60009	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
10	5.4 KC	S-60010	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
11	7.35 KC	S-60011	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
12	10.5 KC	S-60012	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
13	14.5 KC	S-60013	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
14	22 KC	S-60014	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
15	30 KC	S-60015	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
16	40 KC	S-60016	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
17	52.5 KC	S-60017	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
18	70 KC	S-60018	$\pm 7\frac{1}{2}\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
A	22 KC	S-60019	$\pm 15\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
B	30 KC	S-60020	$\pm 15\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
C	40 KC	S-60021	$\pm 15\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
D	52.5 KC	S-60022	$\pm 15\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.
E	70 KC	S-60023	$\pm 15\%$	3/4 x 3/4 x 1 3/8 H	1 1/4 oz.



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Letters

to the Editor

ARINC & Single-Sideband

Editor, ELECTRONIC INDUSTRIES:

On page 82 of the April "Electronic Industries and Tele-Tech" Roland Davies has presented an accurate report of the ARINC SSB-DSB Symposium conclusions as expressed by the ARINC staff.

On page 3 of the same issue, there is a further mention of the symposium; however, the statements purported to have been made by ARINC and the conclusions drawn at the symposium by the ARINC staff as reported in this article are incorrect.

We believe we understand how this error in reporting has occurred. In all discussions of SSB implementation, the importance of *compatibility* of SSB with AM during a transition period has been continually emphasized as a means of speeding and easing the implementation. "Compatibility," in this case, means simply that during the transition period a full carrier will be transmitted along with the single sideband modulation so that the transmission may be received either on a single sideband receiver or on a conventional AM receiver. Almost all single sideband airborne

equipment presently under development has this capability for "bi-mode" operation, that is, the carrier can either be transmitted or suppressed and this provides the "compatibility" which is necessary during the transition period.

Leonard Kahn has applied the name "compatible SSB" (abbreviated CSSB) to his particular technique and circuitry for generating a full carrier SSB signal and it is therefore understandable that the several uses of the terms "compatible" and "compatibility" have been confused by some who have not followed the recent developments too closely. The desire for single sideband "compatibility" is almost universal on the part of systems planners for both civil and military implementation of SSB. However, this certainly should not imply an endorsement by those planners of a particular technique, such as the Kahn System, which is just one of many capable of providing this compatibility.

Wm. T. Carnes, Jr., Chairman
Airlines Electronic Engineering
Committee, Aeronautical Radio,
Inc.

Transistor Chart

Editors, ELECTRONIC INDUSTRIES:

This is written to inquire if you have reprints available of the Tran-

sistor Specifications List published on pages 53, 54, 57, and 58 of the December, 1956 issue. I have shown this list to quite a few engineers and jobbers in my territory. They all have expressed a desire to have a copy.

This is the only comprehensive list I have found. I hope you plan to keep it up-to-date by publishing a revised list from time to time. This is a real service to the industry for which you deserve a hearty vote of thanks.

Norbert F. Derr
Manufacturers' Representative
937 South Ashburton Rd.
Columbus 13, Ohio

Editors, ELECTRONIC INDUSTRIES:

We have just seen in your October 1956 issue of ELECTRONIC INDUSTRIES an information entitled "Radar Camera Fixes Ship Crash Blame."

We believe you would be interested to know that a device similar to the "Mirar" was developed in our department four years ago. We join to our letter a copy of a paper describing the said device, published in the "Annales des Télécommunications" in January 1953. The apparatus described is being currently used in France for the training of radar crews.

Y. L. Delbord
Chief Engineer
Infrared & TV Dept.
C.N.E.T.
Palaiseau, France

For long life under extreme conditions

of shock, vibration, corrosion,
humidity and temperature

Bendix **W** TYPE

HEAVY-DUTY

**ELECTRICAL
CONNECTOR**



Intended for use with jacketed cable and not requiring ground return through mating surfaces, this connector incorporates sealing gaskets at all mating joints.

W-Type Bendix* Connectors also incorporate standard Scinflex resilient inserts

in established AN contact arrangements. Shell components are thick sectioned high-grade aluminum for maximum strength. All aluminum surfaces are grey anodized for protection against corrosion.

It will pay you to remember that for

the really tough jobs, where ordinary electrical connectors just won't do, be sure to specify the W-Type Connector.

Complete specifications and details on request.

* TRADE-MARK

Bendix

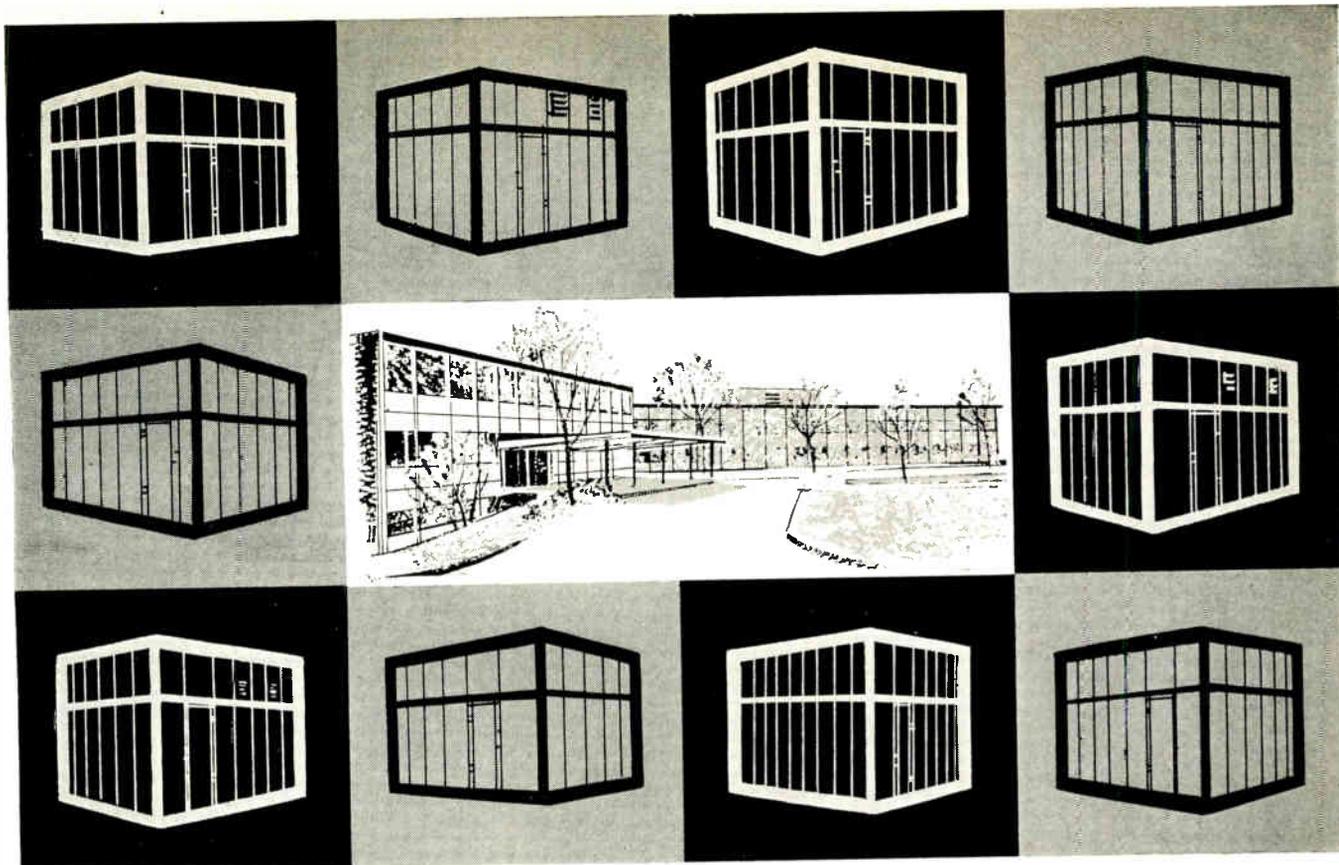
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RCA Cherry Hill center studies TV interference in **35** ACE shielded enclosures

FCC regulations governing receiver radiation specifically state that r-f interference in the frequency range of 450 kc to 25 mc cannot exceed 100 microvolts as measured on the power line connected to the TV receiver. RCA thoroughly tests the prototype of every TV set it manufactures, both color and black and white, against these FCC regulations. And it's all done with great accuracy in one of the thirty-five Ace enclosures at RCA's modern Television Engineering Laboratories at the Cherry Hill Center, Camden, N. J. Actually the largest number of shielded enclosures ever installed at one site, these represent an important part of one of the best equipped engineering laboratories in the world.

Here, thorough shielding is a must, for numerous engineering tests involving interference are often under way at the same time. Other receiver studies carried out in these rooms include tests for gain, selectivity, sensitivity, and general circuit design.

Each of the Ace RFI-Design* rooms is constructed of prefabricated galvanized steel panels and frames with special r-f leak-proof doors of the same material. They provide over 100 db attenuation at all frequencies from 14 kc to 1000 mc. All are ventilated from a central air conditioning source.

An interesting collateral function of these enclosures is their use as

*Lindsay Structure

partitions to section off areas of the engineering department. Should the occasion arise, two adjacent rooms may be combined into a large one merely by removing adjoining walls and bolting the remaining structure together. Similarly, dimensions can be easily changed by adding or removing interchangeable panels.

The Cherry Hill installation is a stimulating illustration of the way standard Ace enclosures are solving today's shielding needs. They can be equally effective in your own plant. An Ace Sales Engineer would be glad to discuss it with you. Or, write for further information—a free catalog on standard Ace enclosures is yours for the asking.



First and Finest In Shielded Enclosures

ACE ENGINEERING & MACHINE CO., INC. • 3644 N. Lawrence St., Phila. 40, Pa.

Industry News

Orville M. Dunning has been elected Vice-President of Airborne Instruments Laboratory, Mineola, New York. Prior to joining Airborne in 1955, Mr. Dunning was the Vice-President in Charge of Engineering of Hazeltine Electronics Corp.

Stanley J. Koch is now General Manager of the A. B. Du Mont Laboratories, Tube Division. He had been Director of the Tube Research Div., prior to his new appointment.

R. C. Lanphier, Jr., has returned to the Sangamo Electric Co. as Vice-President and Director of Sales. For the past 3 yrs., Mr. Lanphier has been on leave of absence while serving as Deputy Assistant Secretary of Defense for Supply and Logistics.



R. C. Lanphier, Jr.



H. C. Smith

Haywood C. Smith has been appointed Technical Manager in the Research and Development Dept., office of the Vice-President in charge of Engineering, of the American Machine & Foundry Co. Mr. Smith was formerly Manager of AMF's Raleigh Laboratory.

Arthur R. Tice will now serve as Manager, Field Engineering for the Western Region, for G-V Controls, Inc.

Michael Balog to the post of General Manufacturing Manager of the Semiconductor Division of Sylvania Electric Products, Inc.

M. Ross Yeiter is now serving as Sales Manager for the Special Tube Operations of Sylvania Electric Products, Inc.

Clifford Tuttle joins Vitramon, Inc. at its plant in Long Hill, Conn. as Sales Manager to promote sales of "Vitramon" capacitors in the United States and Canada.

Edward W. Allen, Jr., is now Manager of Public Relations at A. B. Du Mont Laboratories.

Edward D. Gray has been elected Vice-President of Potter Instrument Co., Inc.

(Continued on page 44)



INSULATED HIGH TEMPERATURE HOOK UP and LEAD WIRE

For MILITARY and COMMERCIAL
END USE EQUIPMENT and
ELECTRONIC COMPONENTS

Conforming to MIL-W-16878B

Lenz High Temperature Hook-Up and Lead Wires contain thermo-plastic insulation that will retain its high dielectric characteristics over a temperature range from -55°C to $+105^{\circ}\text{C}$.

Type B	.....	600 Volts r.m.s.
Type C	.....	1000 Volts r.m.s.
Type D	.....	3000 Volts r.m.s.

This wire can be furnished in various jackets or shielding, and can be incorporated in multiple conductor cables. Available in solid colors or striping and built to Lenz unsurpassed standards.

Conforming to MIL-W-76A

General purpose Hook-Up and Lead Wires for internal wiring of electric and electronic equipment, with thermo-plastic insulation for use at temperatures to 80°C .

Type LW	.....	300 Volts r.m.s.
Type MW	.....	1000 Volts r.m.s.
Type HW	.....	3000 Volts r.m.s.

Can be furnished with nylon jackets, glass braid, lacquered, and shielding. Can be incorporated into multiple jacketed cables to suit your specifications. Available in solid colors or striping to meet your code requirements.

CONSULT LENZ FOR ALL YOUR ELECTRONIC WIRE AND CABLE NEEDS

In Lenz, you will find a dependable, experienced organization that will cooperate with you in the production of wires and cables to your requirements. Its high quality standards, intimate knowledge of the industry's needs and extensive facilities for wire insulating and cabling make Lenz an ideal source for all your wires and cables.



CABLES

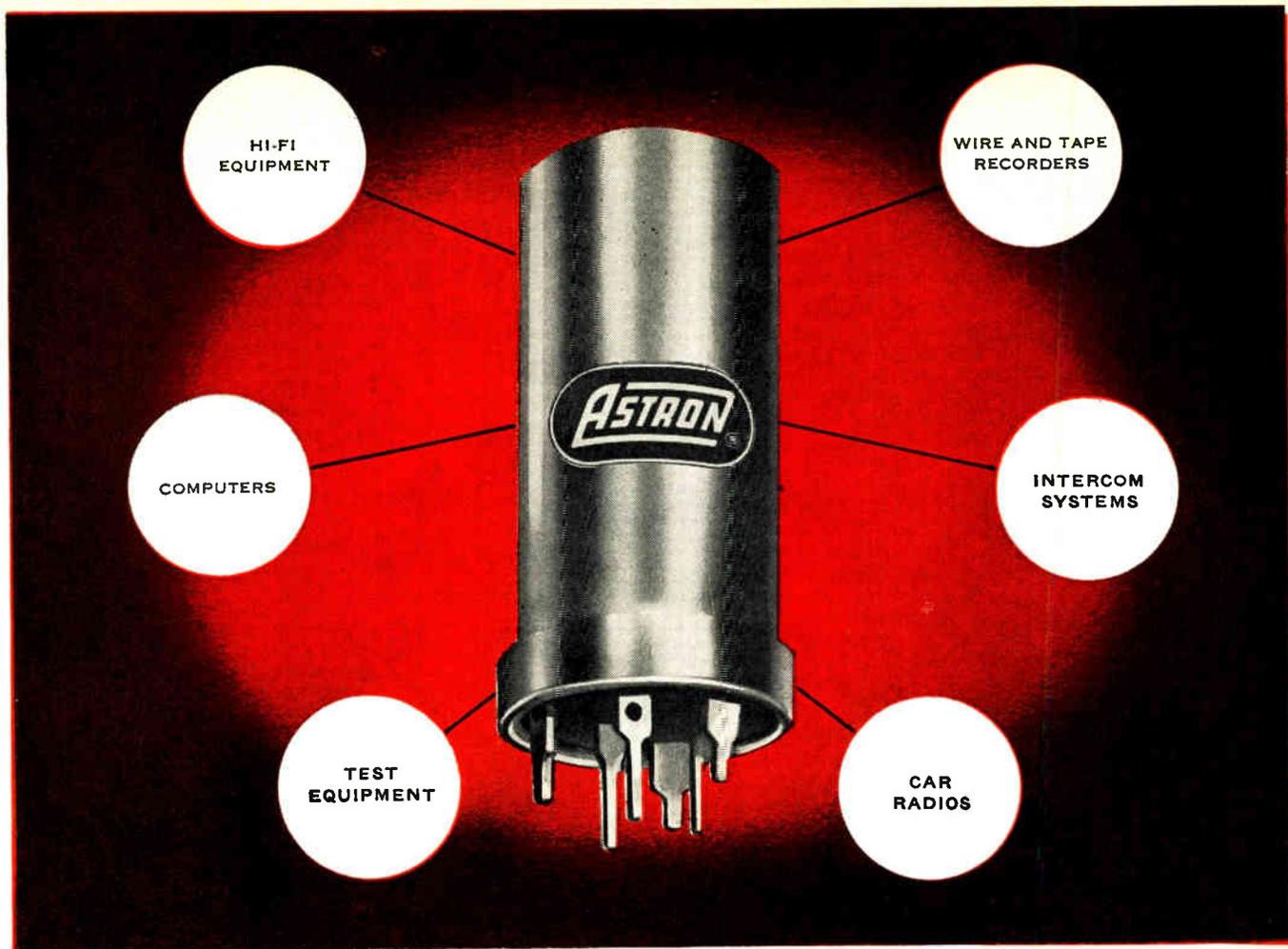
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WIRES

LENZ ELECTRIC MANUFACTURING CO.

1751 North Western Avenue

Chicago 47, Illinois



ASTRON 'SAFETY MARGIN' *

ELECTROLYTIC CAPACITORS

for transistorized and printed circuits

**IMPORTANT DESIGN ADVANTAGES OF
ASTRON EZ AND EX ELECTROLYTICS**

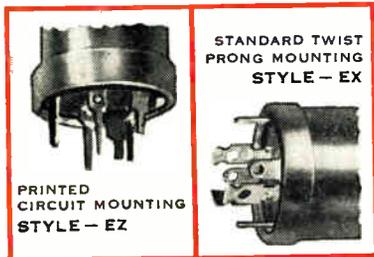
- MINIATURIZED SIZE—LIGHT IN WEIGHT
- DESIGNED FOR MINIMUM LOSSES —
LOW DRAIN
- LONG "SHELF" AND OPERATING LIFE
- HERMETICALLY SEALED
- RUGGEDLY CONSTRUCTED

Today's low-voltage transistorized and printed circuits demand capacitors with absolute minimum leakage and impedance. To meet these exacting needs, Astron Engineers developed new miniaturized EZ and EX Electrolytics for ambient operation up to 85° C.

99.99% pure aluminum foil is specially anodized by an exclusive process . . . power drain is cut to a minimum. They are constructed to withstand extreme temperature changes and give reliable operation after periods of "long idleness."

Each electrolyte formula is scientifically compounded of special chemicals, selected for their high purity. Assembly steps are kept meticulously clean . . . the result: Safety Margin Construction, famous for its ability to withstand ripple currents, vibration, shock and wide temperature fluctuations. These hermetically sealed units are available in a broad selection of capacitance and voltage ratings.

Send today for further technical information . . . please describe your application; it helps us offer proper assistance to you . . . when special conditions require, we will design a prototype to meet your specifications.



*Trade-Mark

WEST COAST WAREHOUSE: 5041 WEST PICO BLVD., LOS ANGELES -EXPORT DIVISION: ROCKE INTERNATIONAL CORP., 13 EAST 40TH ST., N. Y., N. Y. -IN CANADA: CHARLES W. POINTON, 6 ALCINA AVE., TORONTO, ONTARIO

ASTRON
CORPORATION
255 GRANT AVENUE EAST NEWARK, N. J.



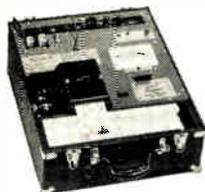
• A Wholly-owned subsidiary
of ASTRON CORPORATION
PECKVILLE, PENNSYLVANIA

HICKOK

ELECTRONIC Test Instruments

HICKOK

9 TUBE TESTERS FILL ALL REQUIREMENTS



MODEL 123A

CARDMATIC TUBE TESTER

Automatic Tube Testing Machine

Model 123A: An automatic tube test to laboratory accuracy that instantly selects any tube to meet the exact requirements of your specific circuit application. Ideal for production line use by factory personnel, or for TV service companies.



MODEL 539B

PORTABLE TUBE TESTER

Most Accurate

Model 539B: Features simplicity of operation in providing a complete and accurate evaluation of electron tubes. Has Mutual Conductance circuits, 6 micromho ranges, 4 AC Signal voltages, metered line voltage, metered grid voltage and other important features.

7 OSCILLOSCOPES MEET SPECIALIZED REQUIREMENTS

LABORATORY CATHODE RAY OSCILLOSCOPE

Wide Range . . . Versatile



MODEL 770

Model 770: Provides unusually wide range of DC to 5 MC. 10 M.V. RMS per inch sensitivity. Built-in calibrating voltages. New flat-faced tube. Illuminated calibrated screen. Mu-metal shield. Shock mounted. This highly stable 'Scope is laboratory quality throughout.



MODEL 685

INDUSTRIALS' 5-INCH PORTABLE

Model 685: DC amplifiers and DC to 750KC response. Sensitivity is 20 MV RMS per inch. Shock mounted amplifiers and good circuit design provide excellent stability for use in all phases of electronic work. The illuminated calibrated screen and ideal design features will please many an industrial who would expect to pay much more for this quality and completeness.



MODEL 385

SMALLER SIZE LABORATORY OSCILLOSCOPE

3-Inch Portable

Model 385: DC to 4 MC, within 3 db, 0.75 RMS volts per inch sensitivity. Sweep circuit oscillator; 3 cycles to 50 KC. Input impedance: vertical and horizontal amplifiers; 2.2 megohms—25 mmf. Features replaceable circuit sections. High quality throughout. Also available in portable, moisture-proof, weather-proof aluminum carrying case as preferred by field engineers.

INDUSTRIAL LABORATORY OSCILLOSCOPE

3-Inch Rack Mount



MODEL 387R

Model 387R: Popular rack-mount style in an accurate 3-inch oscilloscope. Features identical vertical and horizontal amplifiers. DC to 500 KC response. 10 MV RMS sensitivity. Designed to permit versatile use in all phases of electronic work.

11 GENERATORS WITH SPECIALIZED FUNCTIONS



MODEL 710

SINE-SQUARE WAVE GENERATOR

For Laboratory & Industrial Use

Model 710: Provides an accurately calibrated source of sine wave and square wave functions over a wide frequency range. Sine wave total harmonic distortion below 1%. Hum level better than 90 db down. Square wave rise time less than .1 Micro- in five ranges on both sine and square waves.



MODEL 295X

MICROVOLT SIGNAL GENERATOR

125 KC to 175 MC on Fundamentals

Model 295X: Ideal for mobile radio and other communication equipment design and maintenance. Output 0.1 microvolt to 100,000 microvolts. 125 KC to 175 MC continuous on fundamentals. 400 cycle modulation—approximately 30%. Attenuation down to 0.1 microvolt—no external attenuator pad required. Vernier Control permits hairline settings. Silverplated copper cage shielding. Test leads are furnished.

5 VTVM and VOM INSTRUMENTS



MODEL 209A

TRUE VACUUM TUBE

Laboratory Size and Accuracy

Model 209A: Contains large 9" meter with zero-center scale. Highly accurate for servicing industrial electronic equipment. DC Volts: 0-1200 in 6 ranges. AC Peak-to-Peak Voltage: 0-1200 V. in 6 ranges. Capacitance 0.1 to 10,000 MMF in 2 ranges, 0-1000 MF in 5 ranges. 50 MH to 100 henries. 0.1 ohm to 10,000 megohms in 7 ranges.



MODEL 455

NEW VOLT-OHM-MILLIAMMETER

You Can't Burn It Out!

Model 455: New design portable VOM. Includes all practical ranges. Features patented protection system which protects both the meter and associated circuits from damage due to accidental overload. Quality designed for utility and attractiveness. Neoprene carrying case available.

HIGHLY ACCURATE DC and AC PORTABLE INSTRUMENTS



MODEL 14

Accuracy to 0.2%. Also available is a complete line of pocket portables.

METERS

The many special movements developed by HICKOK are: electro-dynamometers, self-contained frequency meters, galvanometers, true logarithmic deflections, special curves for special purposes and ruggedized designs for highest shock tests. Full technical information on the complete line of HICKOK instruments and test equipment is available on request. Kindly list details of your requirements and ask for Catalogs No. 32 and 33.

THE HICKOK ELECTRICAL INSTRUMENT COMPANY

10514 DUPONT AVENUE

CLEVELAND 8, OHIO

HIGHEST QUALITY ELECTRICAL AND ELECTRONIC TEST INSTRUMENTS

PAT. 1,934,232

$$I = \frac{E}{\sqrt{R^2 + (WL - \frac{1}{Wc})^2}}$$

FORMULA for LONG LIFE

THE KEY COMPONENT

$$Z = \sqrt{R^2 + (WL - \frac{1}{Wc})^2}$$

$$f = \frac{1}{2\pi\sqrt{LC}}$$

ACTUAL SIZE

El-Menco Dur-Mica CAPACITORS

Rugged Endurance up to 18 years!

A series of the toughest trials prove El-Menco Dur-Mica DM15, DM20 and DM30 capacitors outlast all others under accelerated conditions of 1 1/2 times rated voltage at ambient temperature of 125° centigrade. Can be used at higher operating temperatures with slight voltage derating. Longer life and greater stability made possible by specially treated phenolic casing.



7/16 Thick — 1-7/8 Long 29/32 H.

DM 43
Up to 44,000 volt at 300 WVDC
Up to 44,000 volt at 300 WVDC

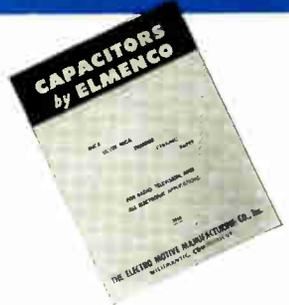


El-Menco Dur-Mica Capacitors meet all humidity, temperature and electronic requirements, including military specifications.

WITH NEW CRIMPED LEADS.



Improved parallel leads for greater rigidity and faster assembly. These parallel leads simplify use on miniature printed circuit boards in television, guided missiles, hearing aids, electronic brains, air conditioning and other government and civilian applications.



Write for FREE samples and catalog on your firm's letterhead.

El-Menco Dur-Mica DM15, DM20, DM30, DM40 and DM42 Capacitors Provide:

- 1. LONGER LIFE
- 2. POTENT POWER
- 3. SMALLER SIZE
- 4. EXCELLENT STABILITY — SILVERED MICA
- 5. PEAK PERFORMANCE

Take Your Own Word For It by making your own test of El-Menco Capacitors. Write for Free Samples and Catalog.



THE ELECTRO MOTIVE MFG. CO., INC.

Manufacturers of El-Menco Capacitors

- WILLIMANTIC
- CONNECTICUT
- molded mica
- mica trimmer
- tubular paper
- ceramic
- silvered mica films.

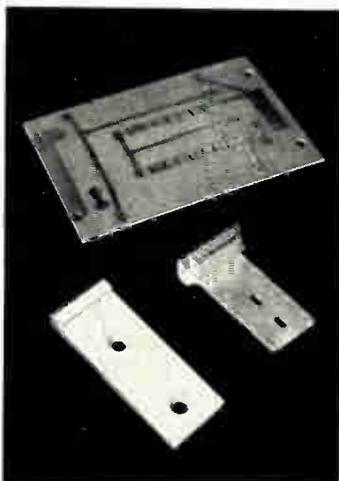
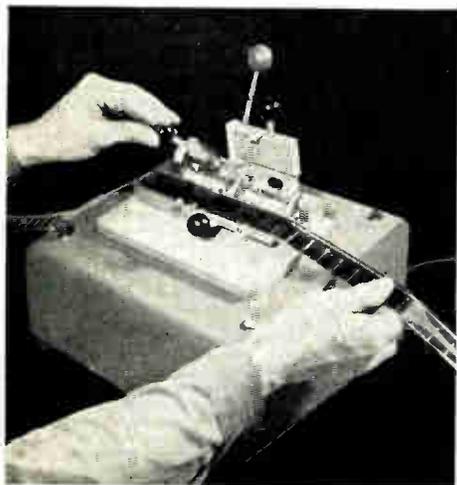
Arco Electronics, Inc., 64 White St., New York 13, N. Y.
Exclusive Supplier To Jabbers and Distributors in the U.S. and Canada

THE NATIONAL SCENE



"YOU FRAMED ME, NICK, AND I TOLD YOU I'D GET SQUARE. NOW . . ." And then the film broke! Film breakage—cause of movie audience irritation in the "old days"—is a minor problem today. Tomorrow

it will be a rarity. *Reasons:* Newly developed, polyester base motion picture film of unusual strength and durability (duPont "Cronar," for example) and better film splicers like that shown here.



NATIONAL HELPS NEW SPLICER BOND FILM INSTANTLY—without disturbing original molecular orientation. Non-acetate film cannot be spliced satisfactorily by conventional methods. So the new device, developed by Shepard Laboratories, Inc., Summit, N. J. uses intense high-frequency heat to fuse the film instantly—without "burning" or affecting grain, high strength or durability. Side result: a superior splicer for all types of film.

IMPROVES PERFORMANCE—KEEPS COSTS DOWN. PHENOLITE®, used in electrode supporting blocks, offers complete resistance to carbonizing. Copper-clad PHENOLITE for printed circuits cuts costs and improves circuitry. Shepard tells us: "PHENOLITE passed our tests . . . Reasonable price holds our costs down."

NATIONAL CAN HELP YOU

reduce unit product cost or improve product performance at no added cost. Here's why: You can select the "one best material" from over 100 grades of PHENOLITE®, Vulcanized Fibre and National Nylon—without compromise in properties or cost. You can simplify production and purchasing with the timed delivery of 100% usable parts—from a single, reliable source. You gain competitively with National's new materials and grades—the direct results of programmed materials research. You benefit by calling National first. Check Sweet's PD File 2b.Na, the Telephone Directory Yellow Pages, or write Wilmington 99, Delaware, Dept. F.

NATIONAL
VULCANIZED FIBRE CO.

WILMINGTON 99, DELAWARE

In Canada:

NATIONAL FIBRE CO. OF CANADA, LTD., Toronto 3, Ont.

DEPENDABILITY...you can design around



RCA ELECTRONIC COMPONENTS



BATTERIES (for transistorized equipment)

RCA Batteries—a comprehensive quality line specifically designed for use in transistorized equipment. Single-voltage types (1.4, 4, 8 and 9 volts). Multiple-voltage types (3, 6, 9 volts and 9, 13.5 volts). Plus a complete line of quality produced RCA Batteries for industrial, consumer and general use. *Design around RCA dependability!*

SPEAKERS



RCA Speakers for high-fidelity, radio, TV, theatre and public address; military blast-proof types. Also space saving types available in quantity production for miniaturized equipment and transistorized portable radios. Line includes RCA 239S1, one of the smallest speakers ever produced—only 2 1/4" dia., 3/4" depth. *Design around RCA dependability!*

FERRITES



RCA Ferrite Cores—0.081-inch dia. high-speed, high-drive ferrite cores... 0.080-inch dia. medium-speed, low-drive ferrite cores. Both types are characterized by hysteresis loops which provide reversal of magnetic flux polarity when the correct current combination from two associated magnetized windings are coincidentally energized.

TRANSFLUXORS—originated by RCA—for switching and storing devices utilizing a ferrite core. Controls transmission of ac power according to level set by a single pulse and furnishes an output determined by the stored pulse for an indefinite length of time. *Design around RCA dependability!*

DEFLECTION COMPONENTS



RCA Electronic Components are produced from select raw materials, manufactured under rigid standards of quality control. Include deflection yokes, horizontal output and high-voltage transformers and other accessory items for black and white and color TV (direct view and projection); cameras, image Orthicon and Vidicon, and special types for radar. *Design around RCA dependability!*

RELAYS



RCA's hermetically sealed, miniaturized relays for guided missile and other airborne applications requiring high reliability under conditions of extreme shock, vibration, humidity, heat and altitude. Type 203W2 85° C., 6 pdt, exceeding Military Standard 24115. Type 204W1 125° C., 6 pdt, exceeding Tentative Military Standard 24139 (USAF). Type 206W1 125° C., 2 pdt, exceeding Military Standards 5757 and 25018. Also special purpose relays. *Design around RCA dependability!*

TEST EQUIPMENT



RCA Test Equipment—versatile, accurate industrial tools for lab, production-line, general service, TV, radar, pulse and other applications in fields of biology, nucleonics, chemistry, electromechanics, etc. Comprehensive line includes WV-98A Senior VoltOhmyst®, WV-87B Master VoltOhmyst®, RCA WV-84A Ultra-Sensitive DC Microammeter, RCA WT-100A Electron-Tube MicroMhoMeter, RCA WO-78B 5" Oscilloscope. *Design around RCA dependability!*

For technical specifications and sales information on any of the RCA products shown above, contact your nearest RCA District Office, or write:

RCA DISTRICT OFFICES

EAST: Humboldt 5-3900
744 Broad Street
Newark 2, N.J.

MIDWEST: Whitehall 4-2900
Suite 1181
Merchandise Mart Plaza
Chicago 54, Ill.

WEST: Raymond 3-8361
6355 East Washington Blvd.
Los Angeles 22, Calif.



RADIO CORPORATION of AMERICA

COMPONENTS DIVISION

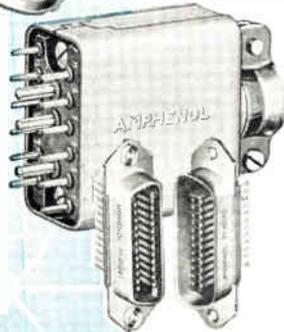
Camden, N.J.

assured reliability
BEGINS WITH

AMPHENOL Quality



AN and MINIATURE
 AN-type CONNECTORS



STANDARD and MINIATURE
 RACK & PANEL CONNECTORS



HERMETIC SEAL
 COMPONENTS



SOCKETS, PLUGS, AUDIO CONNECTORS



STANDARD & SUBMINAX COAXIAL CABLE



STANDARD & SUBMINAX
 RF CONNECTORS



PRINTED CIRCUIT CONNECTORS

and CUSTOM ENGINEERED COMPONENTS



AMPHENOL ELECTRONICS CORPORATION
 chicago 50, illinois

AMPHENOL CANADA LIMITED toronto 9, ontario

Industry News

(Continued from page 38)

Paul J. Weber is the recently appointed Marketing Manager for the Instrumentation Div. of Ampex Corp.

John T. Lee has been named a Sales Engineer for Magnetics, Inc., Butler, Pa.

James Conto is now Sales Manager, Semiconductor Div., Federal Telephone and Radio Co.

George Q. Herrick has been named Vice-President for Research and Development at the Production Research Corp., Thornwood, N. Y. A pioneer in the field of electronics, Mr. Herrick was formerly Manager of the Industrial Products Research Div. of General Precision Laboratory.

John K. Gossland, engineering executive with Hoffman Laboratories for the past 6 yrs., has been appointed Executive Vice-President and General Manager.



J. K. Gossland



N. Altman

Norman Altman has been named Product Sales Supervisor at the Control Div. of Magnetics, Inc. Mr. Altman will supervise the sale of reactors and magnetic amplifiers for industrial control.

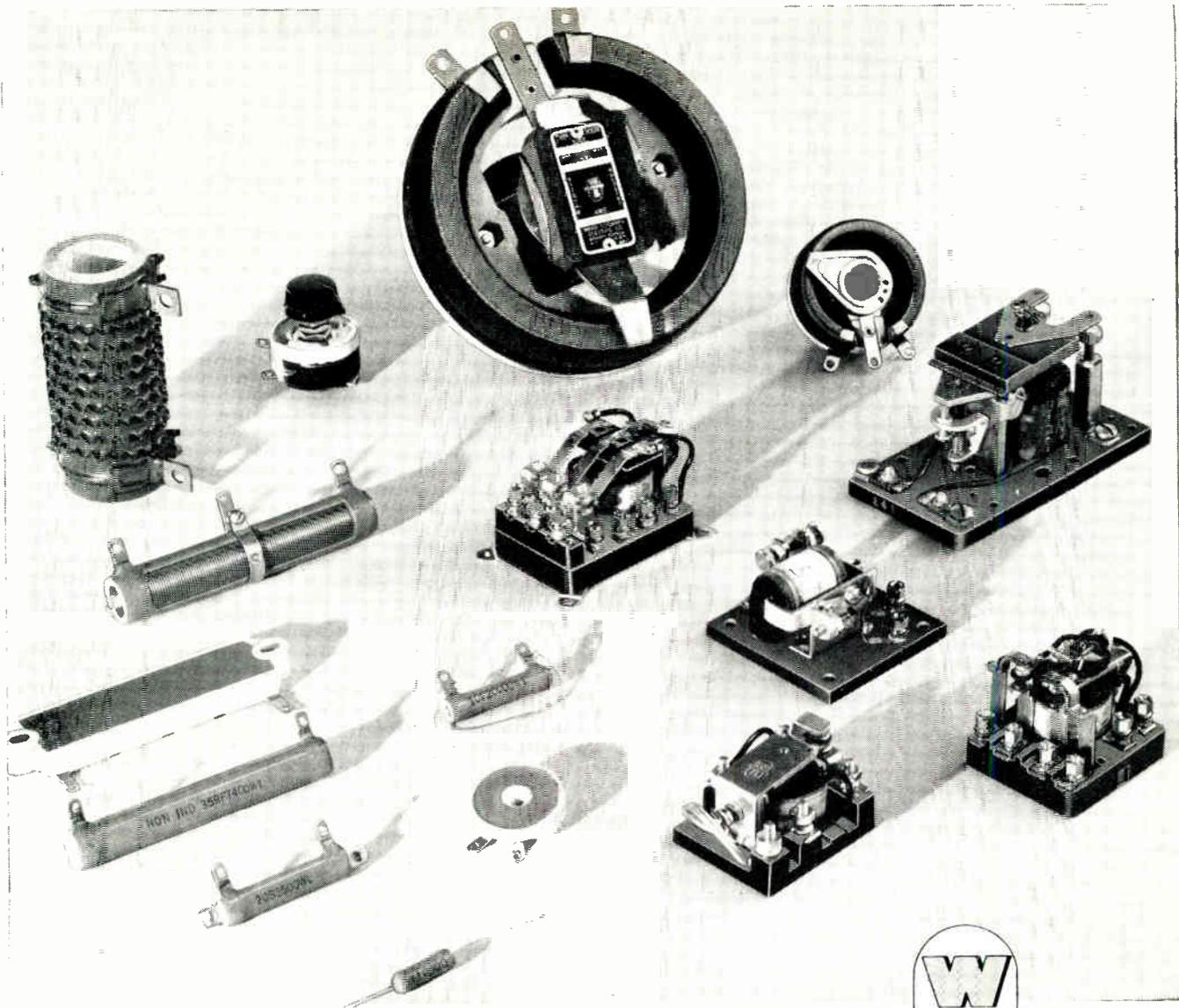
John D. Saint-Amour has been elected President of Assembly Products, Inc.

Charles J. Simon has been appointed to the position of Manager of Sales for Industrial Television in the General Electric Co.'s Technical Products Dept.

Thomas A. Callaghan, Jr., has been named Eastern Representative of the Ford Motor Company subsidiary, Aeronutronic Systems, Inc. (ASI). His office will be in the Wyatt Bldg. in Washington, D. C.

William R. Martin is now Chief Engineer and Product Manager of the RF Systems and Components Div. of the Electronic Specialty Co., Los Angeles, Mr. Martin comes from

(Continued on page 50)



Design made easy with reliable RESISTORS, RELAYS, RHEOSTATS

Want to know how? These data-packed bulletins and catalogs will show you.

RESISTORS—you'll find the widest selection of stock power resistors ever offered by any manufacturer in Ward Leonard Catalog 15.

RELAYS—long, trouble-free life under the most adverse conditions is the big plus the system designer gets with the a-c and d-c relays described in Ward Leonard's relay catalog.

RHEOSTATS—complete application data on smooth-acting 25- to 300-watt Vitrohm ring rheostats is contained in Ward Leonard bulletins 1105-16.

Write today for this helpful literature. You'll find plenty of design tips. And, you'll find Ward Leonard offers a wider selection of stock items, quicker service on made-to-order controls, and more performance per dollar than anyone else. Ward Leonard Electric Company, 94 South Street, Mount Vernon, N. Y. (In Canada: Ward Leonard of Canada, Ltd.—Toronto.)



**WARD LEONARD
ELECTRIC COMPANY**
MOUNT VERNON, NEW YORK



RESISTORS



RHEOSTATS



RELAYS



CONTROLS



DIMMERS

Result-Engineered Controls Since 1892

FREQUENCY STANDARDS

PRECISION FORK UNIT TYPE 50



Size 1" dia. x 3 3/4" H. Wght., 4 oz.*
 Frequencies: 240 to 1000 cycles
 Accuracies:—
 Type 50 ($\pm 0.02\%$ at -65° to 85°C)
 Type R50 ($\pm 0.002\%$ at 15° to 35°C)
 Double triode and 5 pigtail parts required
 Input, Tube heater voltage and B voltage
 Output, approx. 5V into 200,000 ohms

*3 1/2" high
 400 - 1000 cy.

FREQUENCY STANDARD TYPE 50L



Size 3 3/4" x 4 1/2" x 5 1/2" High
Weight, 2 lbs.
 Frequencies: 50, 60, 75 or 100 cycles
 Accuracies:—
 Type 50L ($\pm 0.02\%$ at -65° to 85°C)
 Type R50L ($\pm 0.002\%$ at 15° to 35°C)
 Output, 3V into 200,000 ohms
 Input, 150 to 300V, B (6V at .6 amps.)

PRECISION FORK UNIT TYPE 2003



Size 1 1/2" dia. x 4 1/2" H. Wght. 8 oz.*
 Frequencies: 200 to 4000 cycles
 Accuracies:—
 Type 2003 ($\pm 0.02\%$ at -65° to 85°C)
 Type R2003 ($\pm 0.002\%$ at 15° to 35°C)
 Type W2003 ($\pm 0.005\%$ at -65° to 85°C)
 Double triode and 5 pigtail parts required
 Input and output same as Type 50, above

*3 1/2" high
 400 to 500 cy.
 optional

FREQUENCY STANDARD TYPE 2005



Size, 8" x 8" x 7 1/4" High
Weight, 1 1/4 lbs.
 Frequencies: 50 to 400 cycles
 (Specify)
 Accuracy: $\pm 0.001\%$ from 20° to 30°C
 Output, 10 Watts at 115 Volts
 Input, 115V. (50 to 400 cycles)

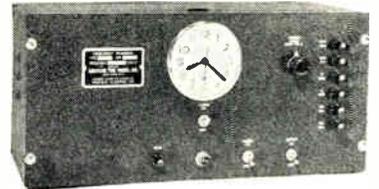
FREQUENCY STANDARD TYPE 2007T TRANSISTORIZED



Size 1 1/2" dia. x 4 1/2" H. Wght. 7 ozs.*
 Frequencies: 240 to 1000 cycles
 Accuracies:—Same as 2003, above
 Type 2007S—Silicon type
 Input, 28V.
 Output, Multitap, 75 to 100,000 ohms

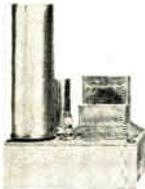
*3 1/2" in 2007S, 400 to 800 cycles.

FREQUENCY STANDARD TYPE 2121A



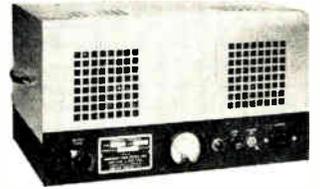
Size
8 3/4" x 19" panel
Weight, 25 lbs.
 Output: 115V
 60 cycles, 10 Watt
 Accuracy:
 $\pm 0.001\%$ from 20° to 30°C
 Input, 115V (50 to 400 cycles)

FREQUENCY STANDARD TYPE 2001-2



Size 3 3/4" x 4 1/2" x 6" H., Wght. 26 oz.
 Frequencies: 200 to 3000 cycles
 Accuracy: $\pm 0.001\%$ at 20° to 30°C
 Output: 5V. at 250,000 ohms
 Input: Heater voltage, 6.3 - 12 - 28
 B voltage, 100 to 300 V., at 5 to 10 ma.

FREQUENCY STANDARD TYPE 2111C



Size, with cover
10" x 17" x 9" H.
Panel model
10" x 19" x 8 3/4" H.
Weight, 25 lbs.
 Frequencies: 50 to 1000 cycles
 Accuracy: ($\pm 0.002\%$ at 15° to 35°C)
 Output: 115V, 75W. Input: 115V, 50 to 75 cycles.

ACCESSORY UNITS for TYPE 2001-2



- L—For low frequencies multi-vibrator type, 40-200 cy.
- D—For low frequencies counter type, 40-200 cy.
- H—For high freqs, up to 20 KC.
- M—Power Amplifier, 2W output.
- P—Power supply.

This organization makes frequency standards within a range of 30 to 30,000 cycles. They are used extensively by aviation, industry, government departments, armed forces—where maximum accuracy and durability are required.

WHEN REQUESTING INFORMATION
 PLEASE SPECIFY TYPE NUMBER

American Time Products, Inc.

580 FIFTH AVENUE, NEW YORK 36, N. Y.

NEW! *Mincom's* *Magnetic Tape System*

112,000 DATA BITS
PER INCH ON ½ INCH



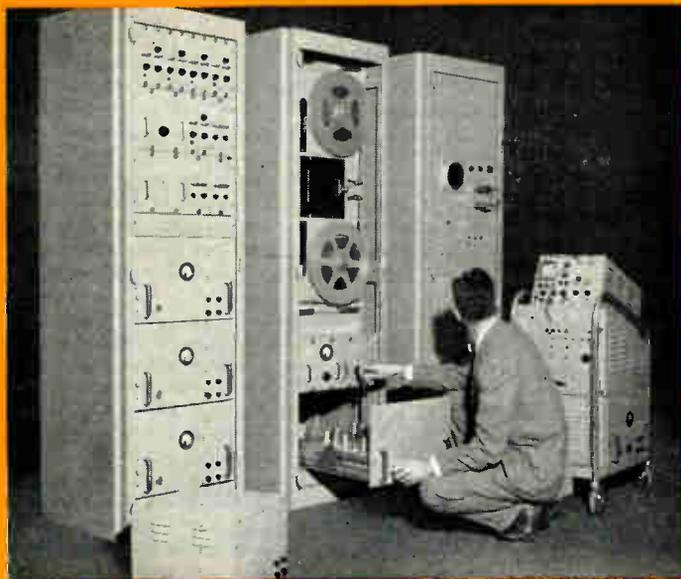
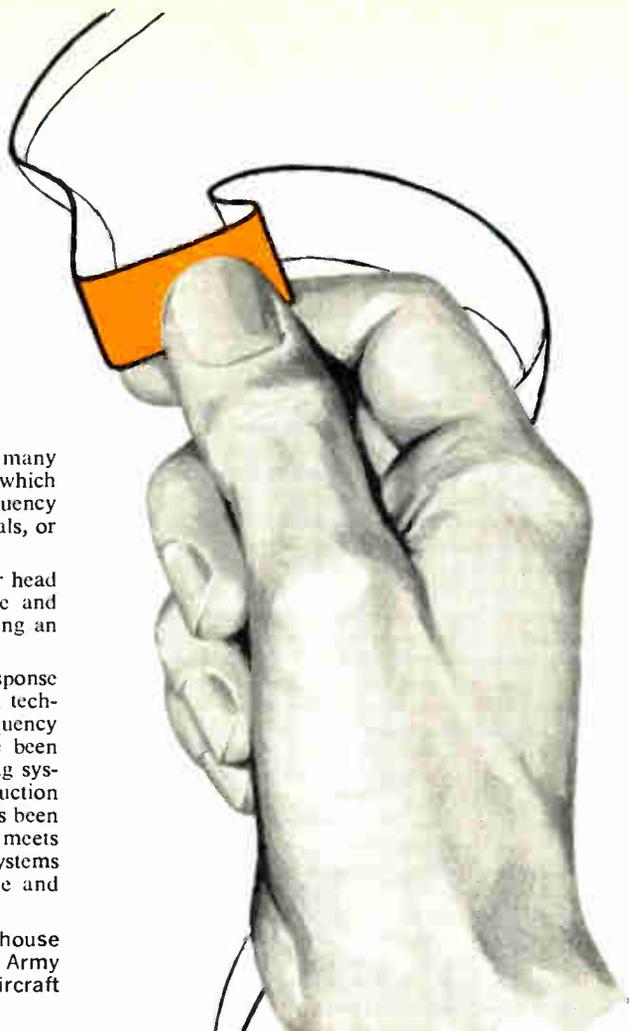
MAGNETIC TAPE

Mincom's laboratories have developed multi-channel (as many as 7 channels on half-inch tape) magnetic systems, in which each channel is capable of directly recording the full frequency response of radar video, t-v video, high speed data signals, or other similar types of data information.

Mincom's ten years of research have resulted in greater head definition, higher signal-to-noise ratios, uniform phase and frequency response—especially for organizations desiring an up-to-date system suitable for problems of the future.

Mincom's direct frequency recording is utilized for response from 200 cycles to 2.5 megacycles, and in addition, FM techniques can be used on each channel for extension of frequency response down to DC. Many special techniques have been developed to provide practically an error-free recording system, i.e., wow and flutter compensation, drop-out reduction devices, high accuracy speed control, etc. Equipment has been developed for both airborne and ground-base use which meets military requirements for ruggedness. A number of systems are in use and have proved to excel in performance and reliability.

Complete systems have been delivered to: Westinghouse Electric and Manufacturing Company • United States Army Signal Corps • United States Air Force • Temco Aircraft Corporation.



**"This reel contains 13 billion data bits
of stored information."*

Write for complete specifications



Mincom

DIVISION

MINNESOTA MINING &
MANUFACTURING COMPANY

2049 South Barrington Avenue, Los Angeles 25, California

Formerly Electronics Division, Bing Crosby Enterprises, Inc.

Performance Facts

from hidden features grow...

The performance facts are that Mallory FP capacitors do last longer—hold their rated capacity longer even under severe temperature and ripple conditions. Their high standards of uniformity and quality are in keeping with the equipment now on your design boards and production lines.

Among the hidden features behind these facts...

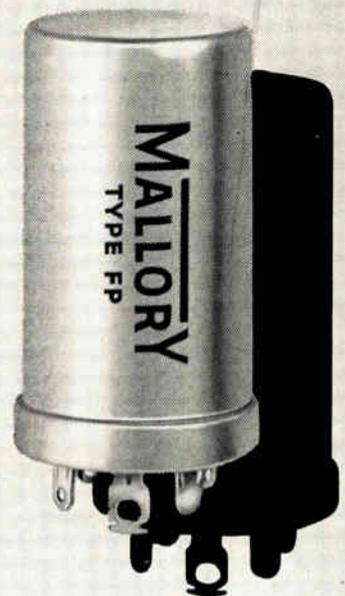
Etched Cathodes...

standard for years in FP capacitors, at no cost premium.

When ordinary capacitors are exposed to high ripple current or to repeating charge and discharge, an oxide film on the cathode develops rapidly during the reverse peak of each cycle. This reduces cathodic capacitance and, because it is in series with that of the anode, reduces the resultant net capacitance.

An etched cathode has so much higher capacitance per unit area that the buildup of oxide film does not reduce the series net capacitance enough to become troublesome.

In terms of field performance for you, Mallory FP capacitors mean longer and more reliable life for the filter components . . . more dependable service by your equipment to your customer.



Another hidden feature of Mallory FP capacitors . . . 85° C construction. Here is built-in longer life under severe temperature conditions and the elimination of voltage derating of capacitors for circuits designed for this service.

Write, or ask the Mallory representative for your copy of the new Bulletin 4-11A. It contains a comprehensive study of the Mallory type FP capacitor, its application, and complete electrical and mechanical specifications.

Serving Industry with These Products:

Electromechanical—Resistors • Switches • Tuning Devices • Vibrators

Electrochemical—Capacitors • Mercury and Zinc-Carbon Batteries

Metallurgical—Contacts • Special Metals • Welding Materials

Parts distributors in all major cities stock Mallory standard components for your convenience.

Expect more . . . get more from



For your
convenience . . .

SUPER SERVICE

- on

E-I HERMETIC SEALS*

Complete "on the Spot" Engineering Service
Coast-to-Coast, in Canada and Overseas

Large Strategically-Located Staff Provides
Engineering Service When You Need It!

Fast, Economical, Experience-Proven
Solutions to Your Sealing Problems!



Hundreds of Standard Types Available -

These service-proven, extra rugged E-I hermetic seals are the answer to the grueling environments encountered in today's military and commercial seal applications. Practically indestructible, E-I compression seals provide maximum immunity to shock, vibration and variations in temperature.

*Canadian Pat. 523,390;
British Pat. 734,583;
U. S. Patent Pending -
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MURRAY HILL, NEW JERSEY

Circle 36 on Inquiry Card, page 201

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4 Green Village Road
(Also New York City)

California, Los Angeles 18
E. V. ROBERTS
& ASSOCIATES
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New York, Binghamton
JAMES F. NEWLON
94 Henry Street

California, Redwood City
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New York, Buffalo 21
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DANIEL WORMMAN
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New York, New York 22
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P. O. Box 10203

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& CO.
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E. A. DICKINSON
& ASSOC.
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ROCKE INTERNATIONAL
CORP.
13 East 40th St.

CONTACT
YOUR NEAREST
E-I SALES
ENGINEER

UNION

Here's the "HOTTEST" AC Relay on the market—



New High-Temperature UNION AC Relay rated from -65°C . to 125°C ., 115 Volt, 60 to 400 cycles. Suitable for airborne circuits, including jet planes and missiles.

Miniature relay applications are getting hotter all the time—and many of them call for self-contained AC relays.

To meet these needs, UNION has developed AC relays incorporating silicon rectifier assemblies. They'll withstand temperatures from -65°C . to 125°C .. The size is the same as the 85°C . UNION AC Relay.

New Hi-Lo Contacts, too! These contacts permit switching loads of two amperes or dry-circuitry level in the one relay. Or, you can get gold alloy contacts for dry-circuitry use.

OTHER ADVANTAGES

Vibration resistance up to 1,000 cycles at 15 G's and shock in excess of 50 G's.

Life expectancy. Tested through 1,000,000 operations.

Coil resistance. 3,700 ohms.

Small size, lightweight. Measures only $\frac{1}{2}$ " higher than our DC relays and weighs about 5 oz. All other construction features are the same as the DC relay.

Types and Mountings. Available in 6 PDT or 4 PDT models, plug-in or solder-lug connections and all the usual mountings.

Meets or exceeds all requirements of MIL-R-5757-C, MIL-R-25018, and MIL-R-6106B.

Write for complete information. Ask for Bulletin 1012.

GENERAL APPARATUS SALES

UNION SWITCH & SIGNAL

DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY

PITTSBURGH 18, PENNSYLVANIA

Industry News

(Continued from page 44)

Lockheed Aircraft Corp., where from 1950, he had been in charge of the complete Radiation Systems Group.

Neal K. McNaughten will now serve as Manager of the Professional Products Div., Ampex Corp.

Roy M. Skeirik has assumed the duties of Manager of the Production Dept.'s Mechanical Assembly Section of Electrodata Div. of Burroughs Corp.



A. A. Segal



D. V. Cropsey

Dale V. Cropsey assumes the new title of Director of Marketing at Potter and Brumfield, Inc.

Comdr. Edmund B. Redington USCG (Ret.) has joined RETMA as a Staff Engineer and Liaison Member of the Engineering Dept. assigned to the Military Products Div.

Warren Knapp will now serve as Manager, New York Financial Operations, RCA Defense Electronic Products.

Andrew H. Bergeson, Vice-President in Charge of Engineering at Stromberg-Carlson, has returned to Washington, D. C. in charge of the firm's Capitol City office.

Ernest H. Ulm has assumed the duties of General Sales Manager for the Semiconductor Div. of Sylvania Electric Products, Inc.

Robert L. Wells has been named Manager of the Westinghouse Electric Corp.'s Atomic Power Dept. in Pittsburgh, Pa.

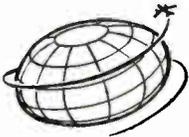
George W. Baughman, Vice-President, Union Switch and Signal-Div. of Westinghouse Air Brake Co., has been named a Fellow in the American Institute of Electrical Engineers. The Fellowship was accorded Mr. Baughman for "his contributions to the design and application of railway signaling control systems."

Now! Simplify pulse-forming circuits with new Westinghouse **WL-6954**

Designed for:



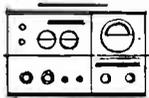
Guided Missiles



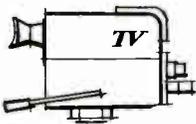
Airborne Communications



Radar

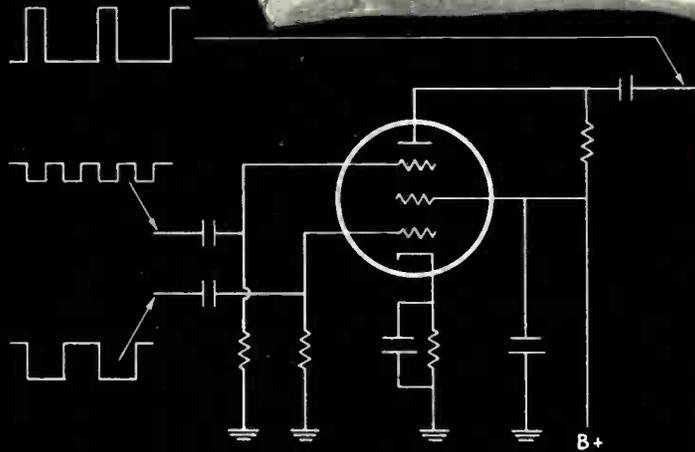


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Closed Circuit TV

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NEW SHARP CUT-OFF DUAL-CONTROL PENTODE OFFERS EXCEPTIONALLY HIGH TRANSCONDUCTANCE

The new Westinghouse WL-6954 is a 7-pin miniature pentode designed for application in Military and Industrial equipment as a gating, coincidence, mixing or delay tube.

Built to high standards of reliability, it meets MIL-E-1C vibration test specifications. It permits simplification of pulse-forming circuits and has the advantage of high transconductance from Grid 3 to Plate.

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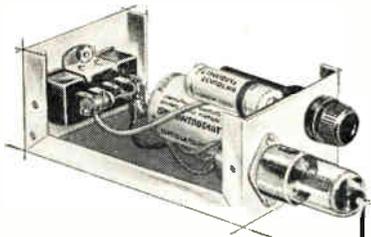
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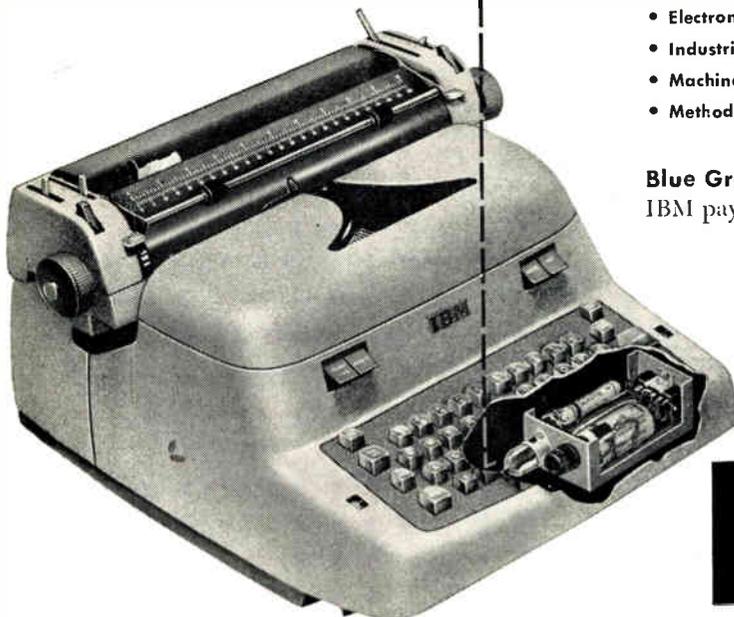
ED-5-1

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Building “electronic intelligence” into electric typewriters means exciting new career opportunities at IBM, Lexington, Ky., in the Blue Grass Country.

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- Product cost estimators
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Blue Grass Region: You’ll find living conditions ideal! IBM pays moving and travel expenses.

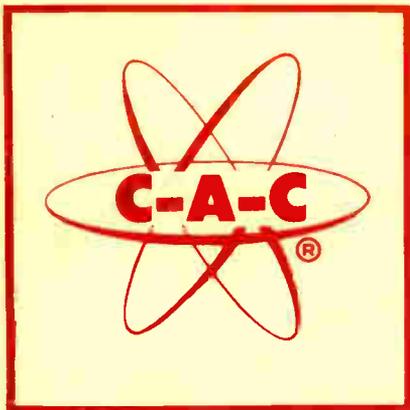
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Manager of Engineering Recruitment
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IBM

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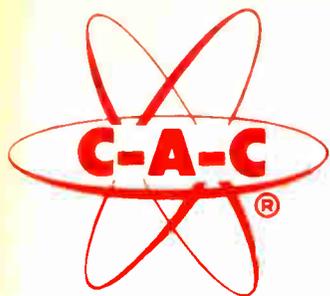
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D. Thompson, Boeing Field, Rm. 105,
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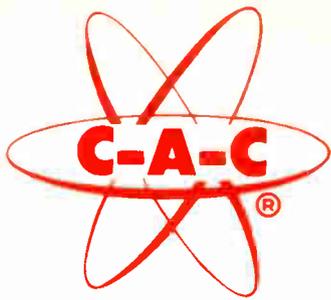


Communication Accessories Company

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L-C AND MECHANICAL FILTERS

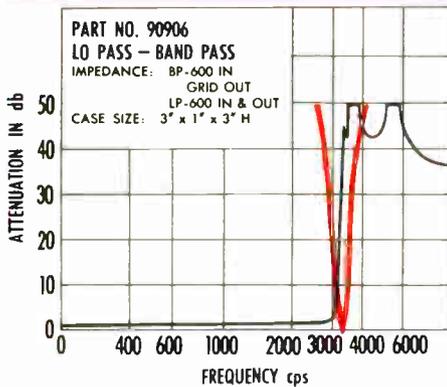


L-C FILTERS

L-C filters utilizing high Q toroidal inductors and high quality capacitors are the heart of these frequency selective components. Recent developments of magnetic materials and highly stable capacitors have extended the useful frequency and temperature range of electrical wave filters. Use of impedance transformations, near unity coupling, and other applications of advanced network theory result in high performance units in small volume packages.

Low pass, high pass, band pass and band stop filters can be designed covering sub audio to over 500kc range. Line, interstage or other impedances can be specified. Filters can be designed for direct paralleling where required. High permeability cases and the closed toroidal form assure low hum pickup. Temperature stabilization on the order of 0.1% frequency can be attained through use of negative TC compensation to offset slightly positive coil and capacitor characteristics.

Depicted response curve is for an integrally packaged low pass—band pass filter employing the latest design and production procedures. This unit uses less chassis area and is an excellent example of subminiature coil usage, impedance transformations, and printed circuitry. Hermetically sealed to meet the military specifications.

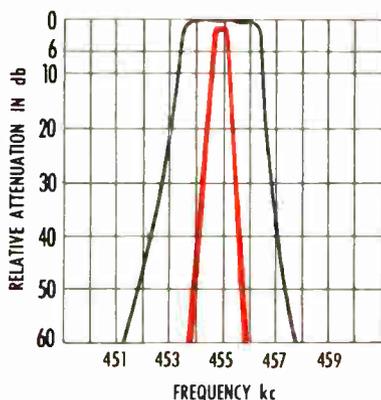


MECHANICAL FILTERS *(Developed and mfd. by Collins Radio Co.)*

The Mechanical Filter provides far better bandpass selectivity in one small sealed unit than a series of bulky conventional IF transformers. Excellent characteristics allow closer spacing of information channels, lower adjacent-channel interference and improved signal to noise ratios. These Filters have been proven in thousands of military and commercial receivers, transmitters and microwave multiplex systems.

Units are designed for center frequencies of 60 to 600kc and various 6db bandwidths from 300cps to 16kc. In general, bandwidth is limited to 10% of the center frequency. In many types, the 60db bandwidth is only twice the 6db bandwidth. Filters have a frequency shift with temperature of $\pm 10\text{ppm}/^\circ\text{C}$. Normal insertion loss for the filters is 6 to 8db. Most types comply with Mil-E-5400 on shock and vibration.

In receiver IF amplifier design the Mechanical Filter replaces one of the usual IF transformers and is fixed tuned. Preceding or following stages may be coupled with subminiature toroidal transformers using fixed tuning. Variable selectivity is obtained by using two or more Filters and switching connections.



Catalogs on Individual Components are Available on Request.



MAGNETIC AMPLIFIERS AND TRANSFORMERS

MAGNETIC AMPLIFIERS

Custom computer amplifiers with high stability and linearity can be designed having single or multiple inputs to your specific needs. Servo drives and relay actuators are also available. Frequency selective networks can be integrally designed to provide additional useful control functions. Proven packaging techniques insure minimum size—proven toroidal construction assures highest performance.

Typical Temperatures..... -60°C. to +150°C.
Typical Line Frequencies..... 60cps to 6000cps

MISSILE POWER TRANSFORMERS

Recommended for supply frequencies above 400 cps and where size performance and reliability are factors. Thin nickel alloy toroidal cores reduce core losses. Toroid structure cures stray field problems.

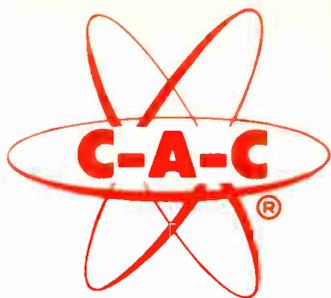
SEALED MISSILE POWER SUPPLIES combining toroidal power transformers, toroidal filter chokes, hi temp capacitors and silicon rectifiers. These units offer multiple outputs and low ripple. Low stray field of toroidal elements obviate usual internal shielding. Mag regulation where required.

LAMINATED TRANSFORMERS AND INDUCTORS

A complete line of laminated constructed units are now available through CAC. Our highly qualified engineering staff, a well complimented laboratory, humidity controlled production facility with modern manufacturing equipment guarantees conformance with any specifications. Both power and audio transformers employing advanced techniques can be supplied either hermetically sealed or encapsulated to 150° C. ambients. Catalogues, supplied upon request, cover a wide range of standardized designs including omni-range and ILS Filters.

PRECISION RATIO COMPUTER TRANSFORMERS

Toroidal form of construction is ideal for designing precision ratio transformers since the turns of wire are applied to and adjusted on the core. Normal production procedure of zero turn accuracy, high permeability cores, low phase shift, and near unity coupling will yield laboratory quality on any production run. Advanced design and newest packaging methods provide optimum performance with minimum size and rugged construction.

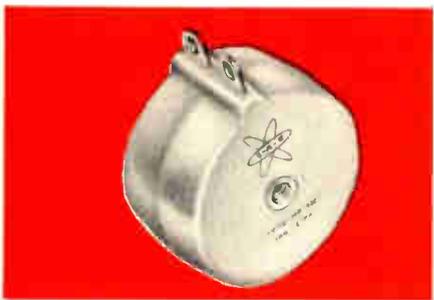


TOROIDAL INDUCTORS



UNCASED TOROIDS

Basic inductor component. Plain, wax or plastic dipped with flex-leads. Hi Q values 10cps to 10mc. Complete range of sizes: subminiature, wedding ring and up to 12" OD. Standard inductances stocked for immediate delivery. Mass production utilizing CAC-designed winding equipment enables swift completion of large orders.



PLASTIC CASED TOROIDS

CAC compression molded toroids per Mil specs have become the standard of the industry. Most compact design—may be stacked—mounted by center bushing which absorbs mounting pressures—sturdy, tinned terminals—arrangements available up to 6 terminal connections. Standard inductance values shipped from stock—special inductances and configurations supplied promptly on request.



HERMETICALLY SEALED CASED TOROIDS

CAC "HS" series provides metal encased, hermetically sealed units complying with MIL specifications. Mounting area minimized—extremely low hum pickup—terminals of proven design using Teflon assure permanent seal at temperature extremes. Rugged construction—convenient mounting facilities. To insure stability, cores are thermo-cycled prior to encasement. Standard inductances in stock.



SUBMINIATURE TOROIDS

Uncased, plastic molded and hermetically sealed in three standard core types (others available). Designs for all requirements—for chassis mount or printed circuits.

For the engineer whose design considerations dictate the utmost in electrical performance versus size, CAC's subminiature toroids present the answer.



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Mechanically stable—sealed against atmospheric changes—temperature and voltage compensated. Available as complete packages for incorporation into your equipment. Superior accuracy, stability and linear dial calibration for your transmitters, receivers, test equipment or frequency standards.



AUTOTUNES *(Mfd. by Collins Radio Co.)*

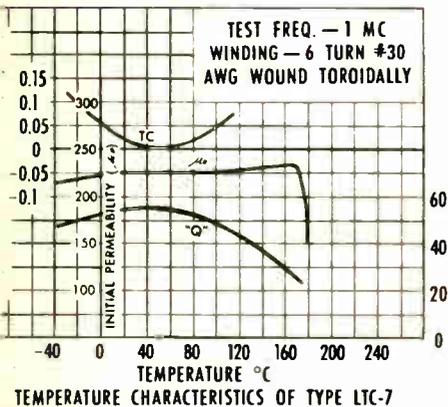
Electro-mechanical position systems. Ideally suited for components requiring rotary or linear motion. Positioning accuracies of 0.05 angular degrees with reset accuracy to 0.0001 inch relative to 1/4 inch shaft size. Designed for the lifetime of any equipment. Fast—versatile—high torque—accurate—dependable.



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FERRITE CORES *(Mfd. by Collins Radio Co.)*

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ACTUAL SIZE

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2N207 general purpose micro-miniature low level transistor, typical beta of 100, 15 db maximum noise figure

2N207A 10 db maximum noise figure version of 2N207

2N207B 5 db maximum noise figure version of 2N207

T0031 50 volt version of 2N207

Special versions of the 2N207 to selected beta ranges are available.

HIGH FREQUENCY, HIGH GAIN (MICRO ALLOY) TRANSISTOR

T1166 combines high frequency response with high gain for general purpose high frequency applications and switching circuits, typical f_{max} 60 mc

HIGH FREQUENCY SILICON TRANSISTORS (150 mw)

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T1159 high speed silicon switch for speeds up to 5 mc characterized by extremely low switch resistance

HIGH FREQUENCY SURFACE BARRIER TRANSISTORS

SB100 general purpose, minimum $f_{max} = 30$ mc, beta over 10.5

2N344/SB101 general purpose, good beta control (11-33)

2N345/SB102 general purpose, higher beta (25-110)

2N346/SB103 general purpose, higher minimum f_{max} (60 mc)

2N128 general purpose, with military specifications, beta 19-66, minimum f_{max} 45 mc

2N129 general purpose, with military specifications, beta over 11.5

2N240 switching transistor, $f_{\alpha b} > 30$ mc

2N299 for tuned amplifiers, military specifications, 20 db minimum power gain at 10 mc, minimum f_{max} 90 mc

2N300 for video amplifiers, 50 mc minimum current gain bandwidth product, f_{max} over 85 mc

T1050 high frequency transistor for 50 mc oscillator mixers and 10-15 mc bandpass amplifiers, 22 db typical power gain at 10 mc

Other types with special parameter controls are available.

MEDIUM POWER ALLOY JUNCTION AUDIO TRANSISTORS (100 mw)

2N223 39-120 beta driver transistor

T1000 45-85 beta version of 2N223

T1001 70-120 beta version of 2N223

2N224 high gain output transistor, 2N225 is a matched pair

2N226 medium gain version of 2N224, 2N227 is a matched pair

Versions of the 2N224 with various beta ranges and higher betas are available singly or in matched pairs.

AUDIO POWER TRANSISTORS

T1040 40 volt, 7 watt power transistor, thermal drop 3°C/w maximum

T1041 40 volt, 10 watt power transistor, thermal drop 2.5°C/w maximum

T1167 60 volt, 12.5 watt power transistor

T1168 80 volt, 12.5 watt power transistor



ACTUAL SIZE



ACTUAL SIZE



Proven performance of Philco Hermetically Sealed Transistors has made them the basis for design in commercial and military applications where reliability is the major consideration. Philco transistors range from the world's smallest germanium transistors now in production to silicon transistors with excellent performance at temperatures from -60°C to $+150^{\circ}\text{C}$.

Philco produces a wide range of transistors designed for special applications in accordance with customer requirements. The Philco Micro-Alloy Transistor is in production. Specifications and design quantities are available. New and exciting transistor types, such as the Philco Micro-Alloy Graded Base Transistor, are now in development. In keeping with our policy, specifications will be made available as soon as these units reach pilot production and are available in design quantities.

Make Philco your prime source for complete transistor application information... write to Lansdale Tube Company, Dept. 1-2, Lansdale, Penna.

Regional offices—Merchandise Mart Plaza, Chicago 54, Ill.—10589 Santa Monica Blvd., Los Angeles 25, Calif.

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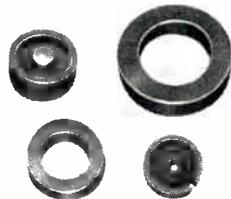
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Also available in metal base type.

Sold through leading electronic parts distributors by Erie Resistor Corp.

Fluorocarbon Products Inc.

Books

Television Receiving Equipment

By W. T. Cocking, M.I.E.E. Published 1957 by Philosophical Library, Inc., 15 E. 40th St., New York 16. 454 pages, ix pages. Price \$15.00.

Development in television continues at so rapid a pace that the preparation of this fourth edition has necessitated the complete rewriting of $\frac{3}{4}$ of it. This new edition thus amounts almost to a new book.

Band III reception is thoroughly treated as well as the increasing problems of attaining freedom from interference combined with high definition. Magnetic deflection has been expanded to five chapters and synchronizing methods are fully discussed, including flywheel sync. Automatic gain control systems are explained in detail.

The book assumes that the readers will have a fair knowledge of ordinary sound-radio technique, since this is a necessary preliminary to an understanding of television. The treatment is largely non-mathematical, but formulas useful to the designer have been collected in appendices.

American as well as British and other standards are included and indications are given of how they affect receiver design.

Quality Control for Plastics Engineers

Edited by Lawrence M. Debing. Published 1957 by Reinhold Publishing Corp., 430 Park Ave., New York 22. 142 pages, viii pages. Price \$4.95.

This work introduces the subject of statistical quality control to plastics engineers, the molders and fabricators of plastics products and the manufacturers of plastic materials. It refers specifically to examples of application currently used in the plastics industry. Assuming the reader has no previous knowledge of statistical quality control, the subject is developed simply and clearly to enable those responsible for production of plastics products to use the basic statistical procedures in order to achieve the highest possible standards of performance.

An Introduction to Junction Transistor Theory

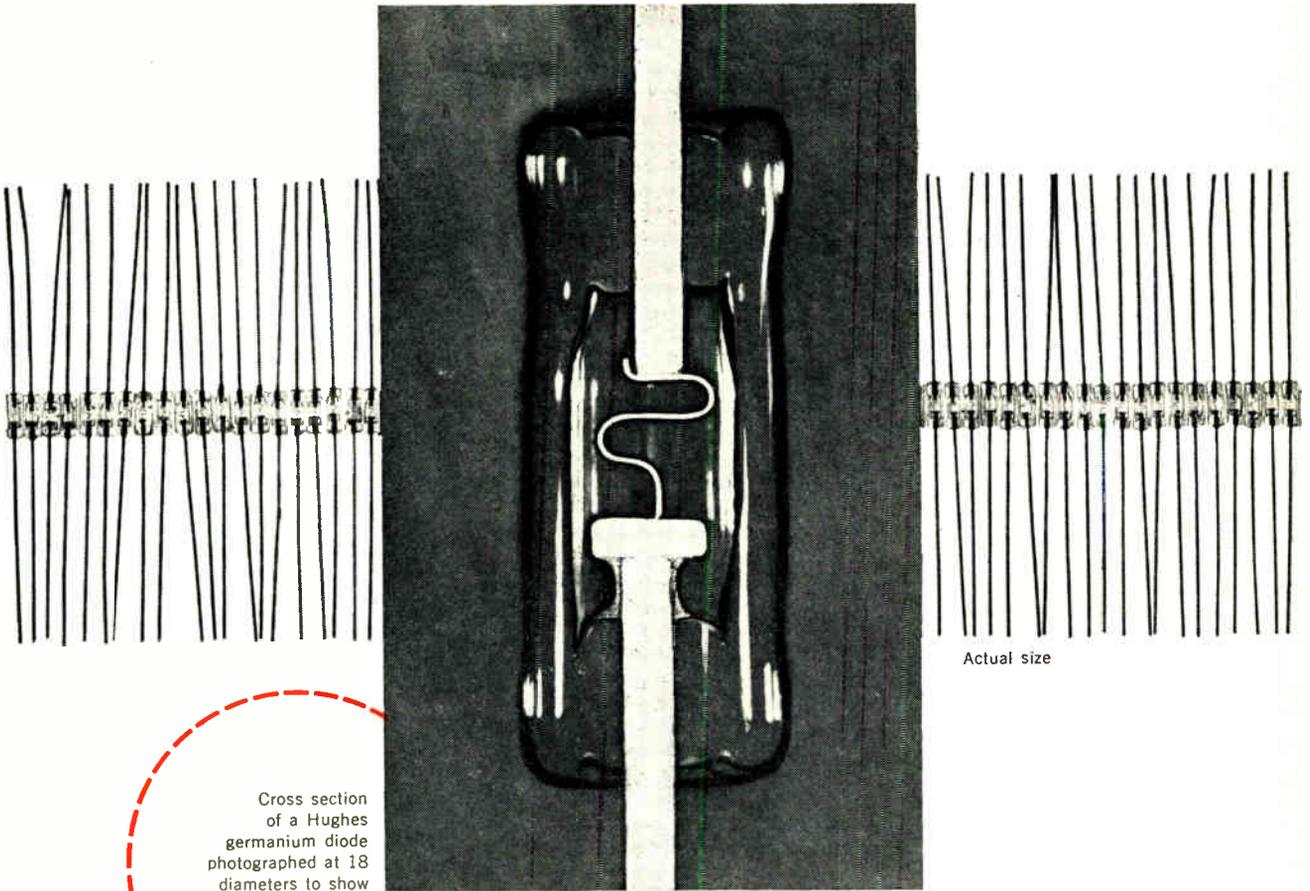
By R. D. Middlebrook. Published 1957 by John Wiley & Sons, Inc., 440 Fourth Ave., New York 16. 296 pages, xxiv pages. Price \$8.50.

This study serves as a connecting link for the electronic engineer between the physical processes in semiconductors and the circuit properties of a junction transistor. In this area, it forms a bridge between the domain of the physicist and that of the engineer.

The major purpose of the book is to provide a continuous development

(Continued on page 68)

Close-up of a diode



Cross section of a Hughes germanium diode photographed at 18 diameters to show structural detail.

Actual size

Inside, where it counts, a Hughes germanium diode is rigid, sturdy—well able to stand up under conditions of severe shock and vibration. With a microscope, you can see why clearly... the germanium crystal permanently bonded to one lead... the whisker firmly welded to the second lead... the point of the whisker welded to the crystal... the fusion-sealed glass envelope. Such positive mechanical stability (basic to every Hughes diode type) is vital to the achievement of electrical stability—and reliability. Hughes diodes are manufactured, first of all, for reliability. So specify Hughes, and be *sure* of successful application to your electronics and communications equipment.

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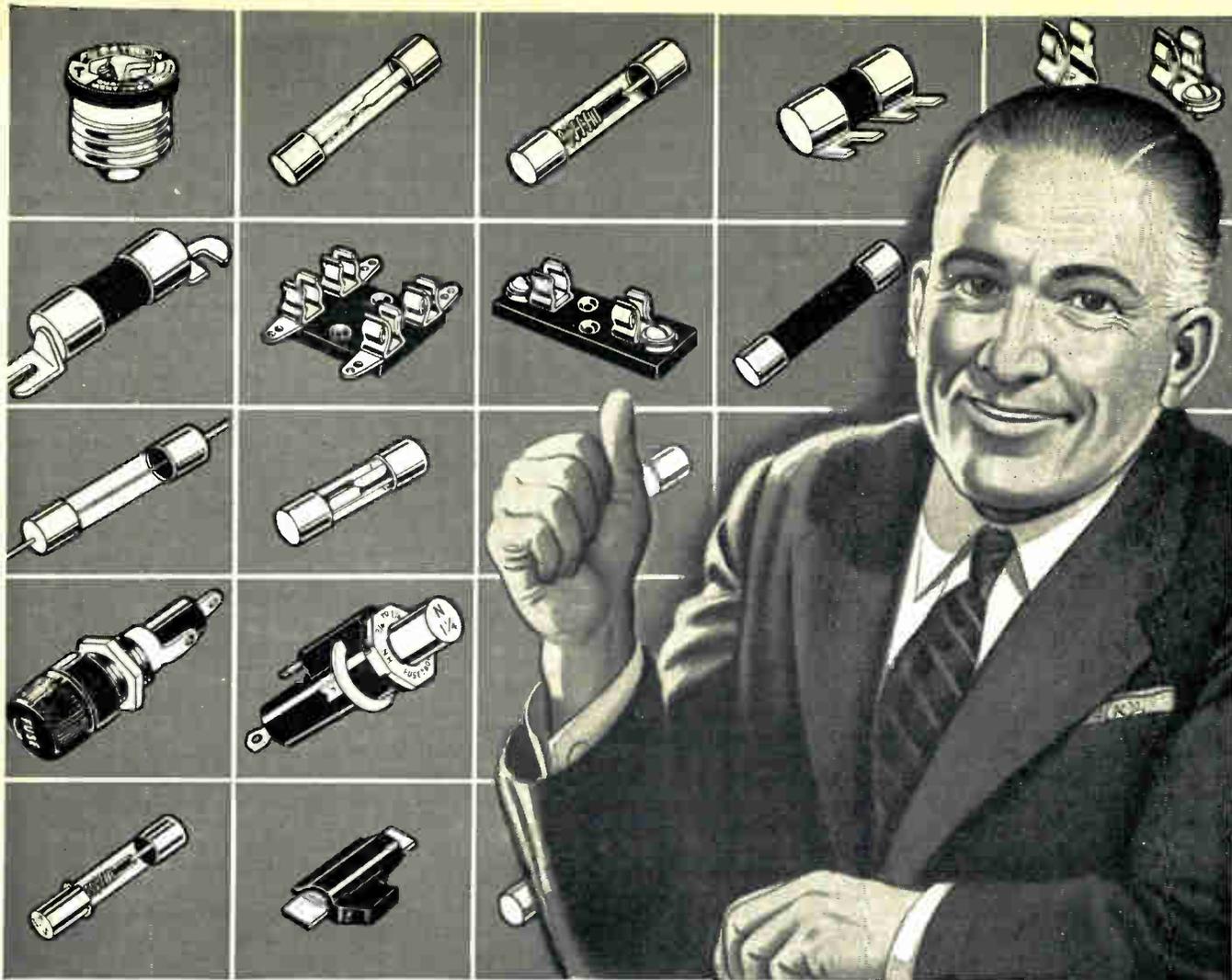
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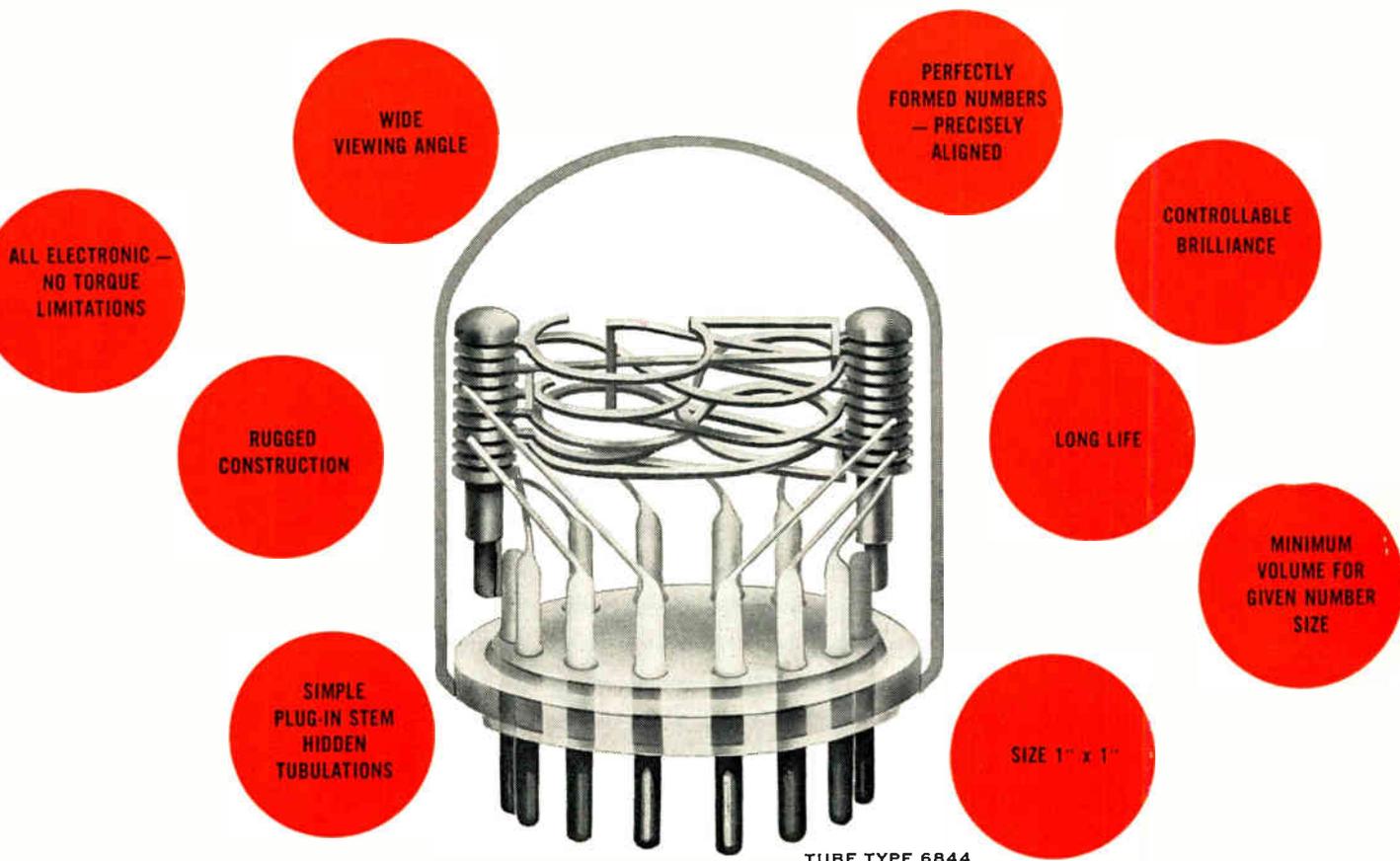
For more information on BUSS and FUSE-TRON Small Dimension fuses and fuseholders . . . Write for bulletin TT. Bussmann Mfg. Co. (Div. of McGraw-Edison Co.), University at Jefferson, St. Louis 7, Mo.

BUSS fuses are made to protect—not to blow, needlessly



Makers of a complete line of fuses for home, farm, commercial, electronic, automotive and industrial use.

SEEING IS BELIEVING



SOME TYPICAL NIXIE APPLICATIONS

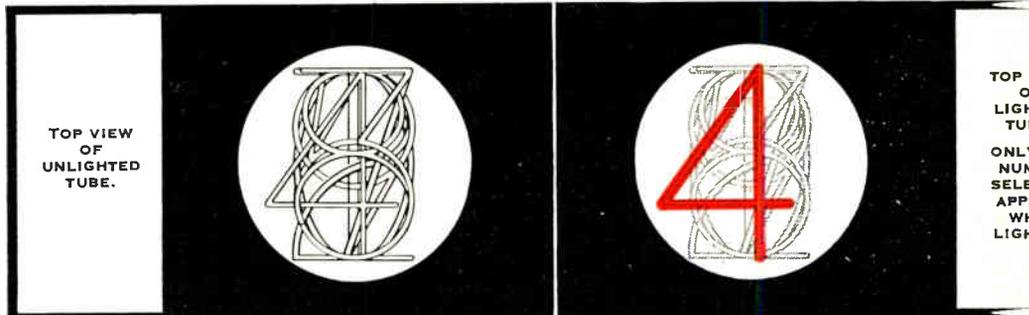
1. INDUSTRIAL CONTROL
2. INSTRUMENTATION
3. COUNTERS
4. COMPUTERS
5. MILITARY ELECTRONIC INDICATORS
6. CHANNEL INDICATOR
7. INDICATOR BOARDS
8. DIGITAL VOLTMETERS
9. PAGING SYSTEMS
10. ELEVATORS
11. RADAR

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NIXIE is a gas-filled, cold cathode tube which contains all the numerical digits 0 to 9, any individual number can be simply selected and displayed in a common viewing area, the ideal method for converting electro-mechanical or electronic signals directly to readable characters.

NIXIE Design Advantages include: Unlimited Rate of Change. Lowest cost in-line Indicator. Lowest Power in-line Indicator. Operation Unaffected by Temperature Changes. Multiple Remote Indications From One Driving Circuit. Production Uniformity From Tube to Tube and Number to Number. Human Engineered for Performance, Appearance, and Reliability.



Electronic Tube Division



BURROUGHS CORPORATION

Plainfield, New Jersey

Motor - Gear - Trains

3:1 to 150,000:1 Ratio Range • Up to 18 Foot Pounds Torque

- Motors available: DC, 60 or 400 cycle, PM, split series, series, shunt, single phase and 2-phase. All are reversible.
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- Designed to meet MIL-E-5272A.
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- Can be furnished up to 125°C.
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Oster®



Other products include servos, synchros, AC drive motors, DC motors, servo mechanism assemblies, synchro indicators, servo torque units, reference and tachometer generators, actuators, motor driven blower and fan assemblies and fast response resolvers.

MOTOR GEAR TRAIN										Size	Overall Length Inches-Max.	Motor Type	Mounting	Oster Type
Gear Ratio	No-Load Speed	Nominal Voltage D.C.	Voltage Range D.C.	No-Load Current	Normal Speed	Normal Load O.Z. IN.	Normal Current	Operating Temp. Range						
5.68:1	1800	28	24-32	0.4	1800	5.0	1.0	-55° To +85°C	13	3.777	P.M. GOVERNOR	FACE	13R-9102-08	
17.9:1	600	28	24-32	0.4	600	12.0	1.0	-55° To +85°C	13	3.930	P.M. GOVERNOR	FACE	13R-9102-06	
32.3:1	300	28	24-32	0.4	300	12.0	1.0	-55° To +85°C	13	3.935	P.M. GOVERNOR	FACE	13R-9102-02	
67:1	150	28	24-32	0.4	150	12.0	0.6	-55° To +85°C	13	4.092	P.M. GOVERNOR	FACE	13R-9102-05	
85:1	150	27.5	-	.25	130	50.0	0.7	-55° To +85°C	13	4.095	P.M.	FACE	13R-9101-11	
109:1	100	28	24-32	0.4	100	32	0.6	-55° To +85°C	13	4.094	P.M. GOVERNOR	SYNCHRO	13R-9102-12	
109:1	180	27.5	-	0.4	175	30	0.5	-55° To +100°C	13	2.843	P.M.	FLANGE	13R-9104-01	
125:1	75-90	28	-	.25	70-85	20	0.3	-55° To +71°C	13	3.920	P.M.	FACE	13R-9101-13	
157:1	60	28	24-32	0.4	60	12.0	0.6	-55° To +85°C	13	4.095	P.M. GOVERNOR	FACE	13R-9102-03	
285:1	48	35	-	.25	40	160	0.6	-55° To +85°C	13	4.038	P.M.	FACE	13R-9103-01	
333:1	30	28	24-32	0.4	30	12.0	0.6	-55° To +85°C	13	4.317	P.M. GOVERNOR	FACE	13R-9102-04	
410:1	15	27	25-29	0.3	15	8.0	0.3	-55° To +85°C	13	4.400	P.M. GOVERNOR	FACE	13R-9102-11	
1043.8:1	5-10	27	24-30	0.15	7	30	0.2	-55° To +71°C	13	4.450	P.M. BRAKE	FACE	13R-9105-01	
1044:1	5-10	27	24-30	0.15	7	30	0.2	-55° To +71°C	13	3.910	P.M.	FACE	13R-9101-12	
2214:1	3-4	6	-	1.2	3.4	30	1.2	-55° To +71°C	13	4.454	P.M.	FACE	13R-9101-04	
3241:1	5.5	35	-	.35	5.5	18	0.4	-55° To +71°C	13	4.454	P.M.	FACE	13R-9101-03	
5933:1	1.3	30	-	.13	1.3	30	0.15	-55° To +71°C	13	4.816	P.M.	FACE	13R-9101-10	
21,707:1	2-3	120	-	.25	2-3	12	0.25	-55° To +71°C	13	3.475	P.M.	FLANGE	13R-9101-16	
322:1	80	110	-	0.2	30	240	0.3	-55° To +71°C	15	3.815	SPLIT SERIES	FLANGE	15R-9201-01	
407:1	22	27	-	0.2	20	8	0.2	-20° To +50°C	15	3.989	SPLIT SERIES	SYNCHRO	15R-9201-03	
433:1	30	26	-	0.6	25	260	1.2	-50° To +80°C	15	3.110	SHUNT	FACE	15R-9201-02	
955:1	33	27	-	0.6	12-18	420	1.0	-55° To +50° C	15	4.419	SPLIT SERIES	FLANGE	15R-9201-08	
26:1	240	27.5	24-29	0.65	240	40	1.3	-18° To +71°C	17	5.315	SHUNT GOVERNOR	SYNCHRO	17R-9251-01	
4.26:1	1800	28	-	0.6	1800	12	1.85	-30° To +55°C	24	4.640	SHUNT GOVERNOR	FACE	24R-9451-01	

Speed tolerance on governed motors is $\pm 2\%$ over voltage and an ambient temperature range. Closer speed tolerance units can be designed to fit the particular application.

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industry since its earliest days.

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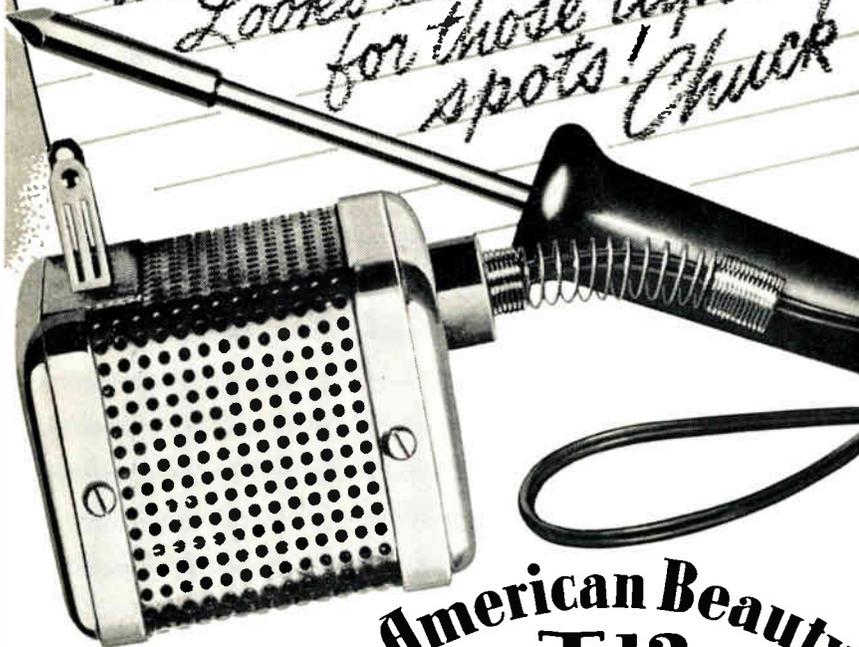


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Books

(Continued from page 62)

of basic junction transistor theory starting from fundamental physical principles and closing with practical circuit representations. It presents a new practical equivalent circuit which represents the small-signal behavior of a junction transistor over its useful frequency range as an amplifier.

Much of the material offered here can be found nowhere else in book form.

The Oscilloscope At Work

By A. Haas and R. W. Hallows. Published 1956 by Philosophical Library, Inc., 15 E. 40th St., New York 16. 171 pages. Price \$10.00.

This book, originally published in France, is a practical guide to the CRT's many applications, though having a special reference to radio and TV receivers

An important feature is the wealth of oscillograms which help to make the book of such practical value. Numerous circuit drawings and other diagrams have also been provided to clarify the text.

Although, as its title implies, the book deals mainly with the uses of the instrument and correct interpretation of the oscillograms produced, it also contains much valuable information on oscilloscope circuits, construction and adjustment, while one chapter is devoted to explaining how it can be made to diagnose its own troubles when faults develop.

Books Received

Essential Characteristics

Published 1957 by General Electric Co., Electron Tube Div., Schenectady, N. Y. 228 pages. Price \$7.50.

A revised and enlarged seventh edition of the popular tube handbook.

Patent Notes For Engineers, 7th Edition

By C. D. Tuska. Published 1956 by McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York 36. 192 pages. Price \$4.00.

National Standards in a Modern Economy

Edited by Dickson Reck. Published 1956 by Harper & Bros., New York. 372 pages. Price \$5.00. Copies available from Dept. P-1, American Standards Assn., 70 E. 45th St., New York.

Transistor Techniques

Published 1956 by Gernsback Library, Inc., 154 W. 14th St., New York 11. 96 pages, paper bound. Price \$1.50.

The Cook Technical Review, Vol. 3, No. 1.

Published 1956 by Cook Research Laboratories, 2700 N. Southport Ave., Chicago 14. 28 pages. Price \$1.00.

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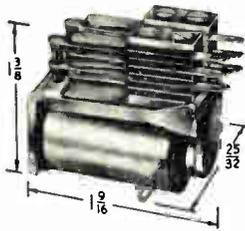
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MH Series telephone type relays are small, versatile and available in contact arrangements up to 18 springs (9 per stack) DC and a variety of contact materials. Silver contacts ($\frac{1}{8}$ ") are rated 5 amp, 115 V, 60 cycles resistive load. High temperature models operate from -65°C to $+125^{\circ}\text{C}$.



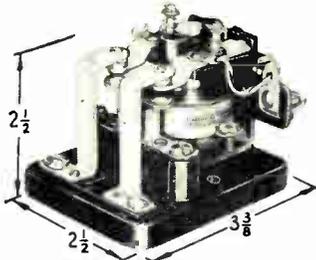
missiles and jets

BD "Star Series" relays are used in applications demanding maximum reliability. These 26.5 V, DC relays were designed to surpass shock test II per MIL-R-5757C, 50 G and vibration Grade III per MIL-R-25018; 5-2000 cps at 15 G. This 6 pole, double throw relay is operative in ambients of -65°C to $+125^{\circ}\text{C}$.



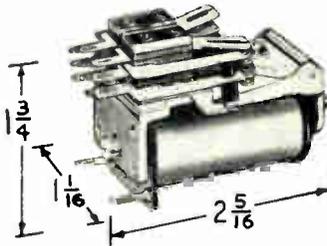
air frame

AG Series relays are designed for air-frame controls and other applications calling for good mechanical shock resistance. Relays are enclosed in dust proof cover; phenolic base meets U/L spacing and creepage distances. Double pole double throw contact arrangement in AC and DC models.



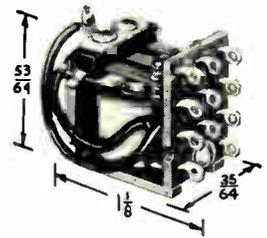
machine tools

PR Series relays are rugged, fast acting . . . designed for high current or high voltage switching. Floating movable contact carrier assures ample wipe and contact pressure. AC or DC models available with contact arrangements up to double pole double throw. Supplied open or with dust cover.



instrumentation

LS Series relays—Medium coil, telephone type—have special hinge construction resulting in a mechanical life in excess of 100 million operations. Contact arrangements go to 20 springs (10 per stack). Power required: 100 mw per movable arm. DC only to 200 V. Open or hermetically sealed models.



business machines

KM Series relays meet the demand for miniaturization and multiplicity of action within a single relay. Contact arrangements available from single pole single throw to three pole double throw. May be ordered in coil voltages up to 48 V. DC in open or sealed models. Weight, open, 7/8 oz. Sealed, 1-1/4 oz.

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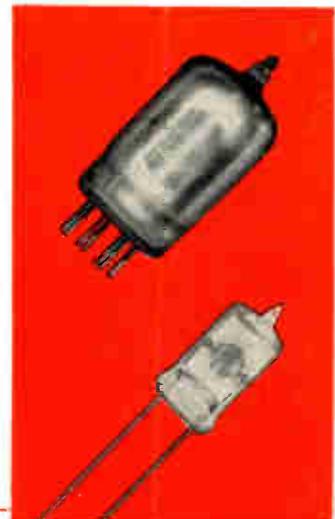


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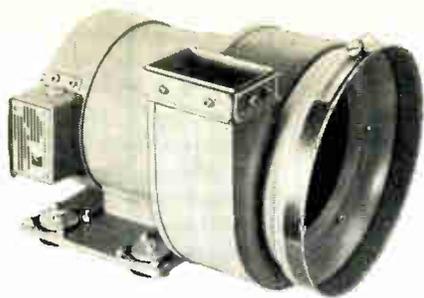


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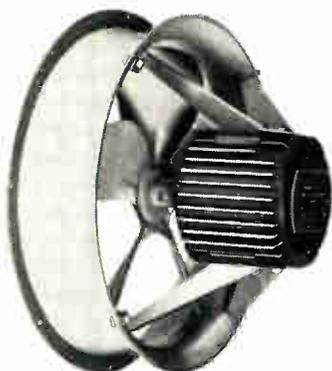
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Engineered to $\frac{N\sqrt{Q}}{\Delta P^{0.75}} = L_s$

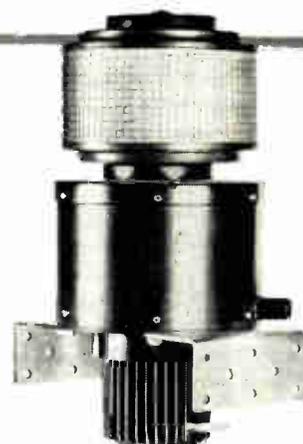
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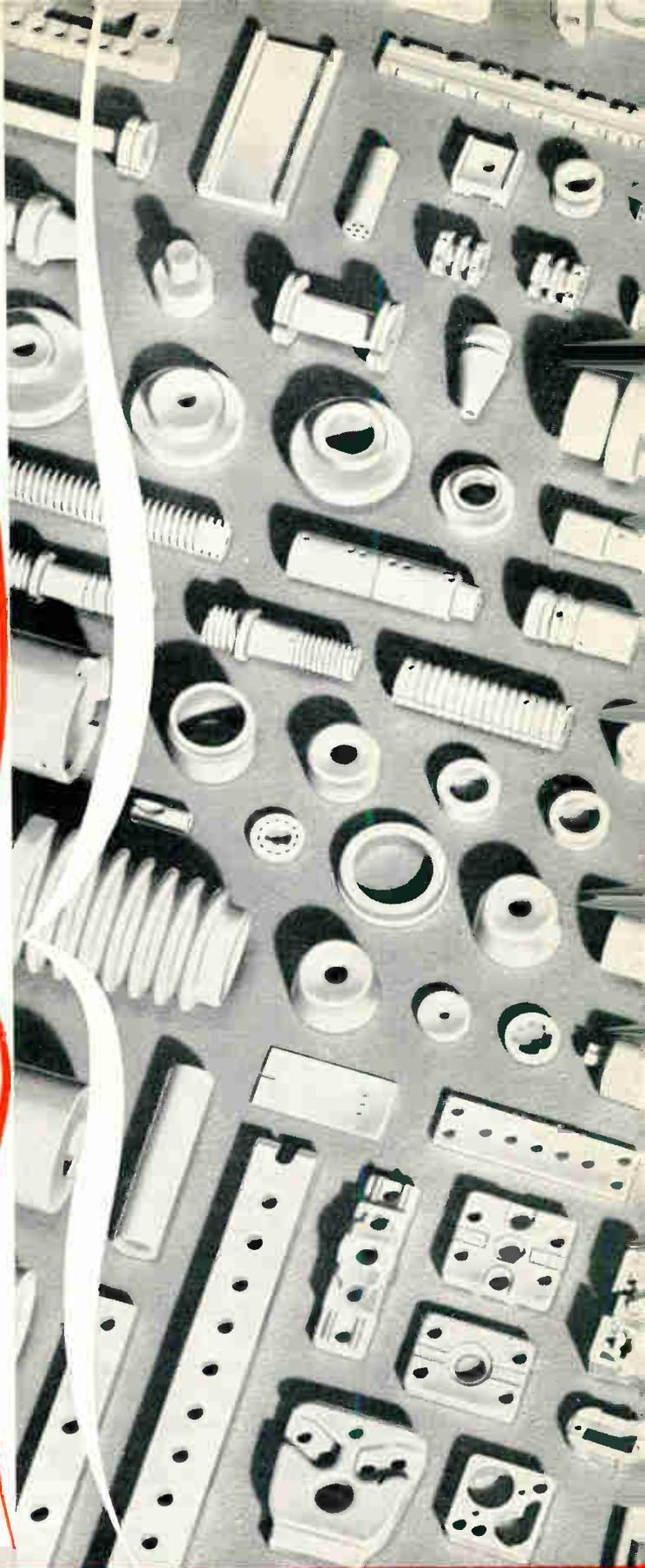
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Personals

Gerald R. Saur has been appointed project engineer of "Sage" for the Radio Corporation of America at Topsham, Maine. He will direct all operations at this site.

Dr. Andre Gobat has been appointed Associate Laboratory Director at Federal Telecommunication Laboratories, a div. of IT&T, Nutley, N. J.

Martin Braude has been appointed Vice Pres. in charge of Engineering for General Transistor Western Corp., Los Angeles, Calif. He has been engaged in the electronics field for 12 years.



M. Braude



Dr. R. Weller

Dr. Royal Weller, Chief Scientist, Naval Air Missile Test Center, Point Mugu, Calif. will join Stromberg-Carlson, a div. of General Dynamics Corp. as Vice Pres. in charge of engineering. He will operate in a general staff capacity as coordinator consultant to all engineering groups.

Will Allen Finley has joined the Guided Missile Research Div. and John P. Malbrain has joined the Electronic Instrument Div. of the Ramo-Wooldridge Corp., Los Angeles 45.

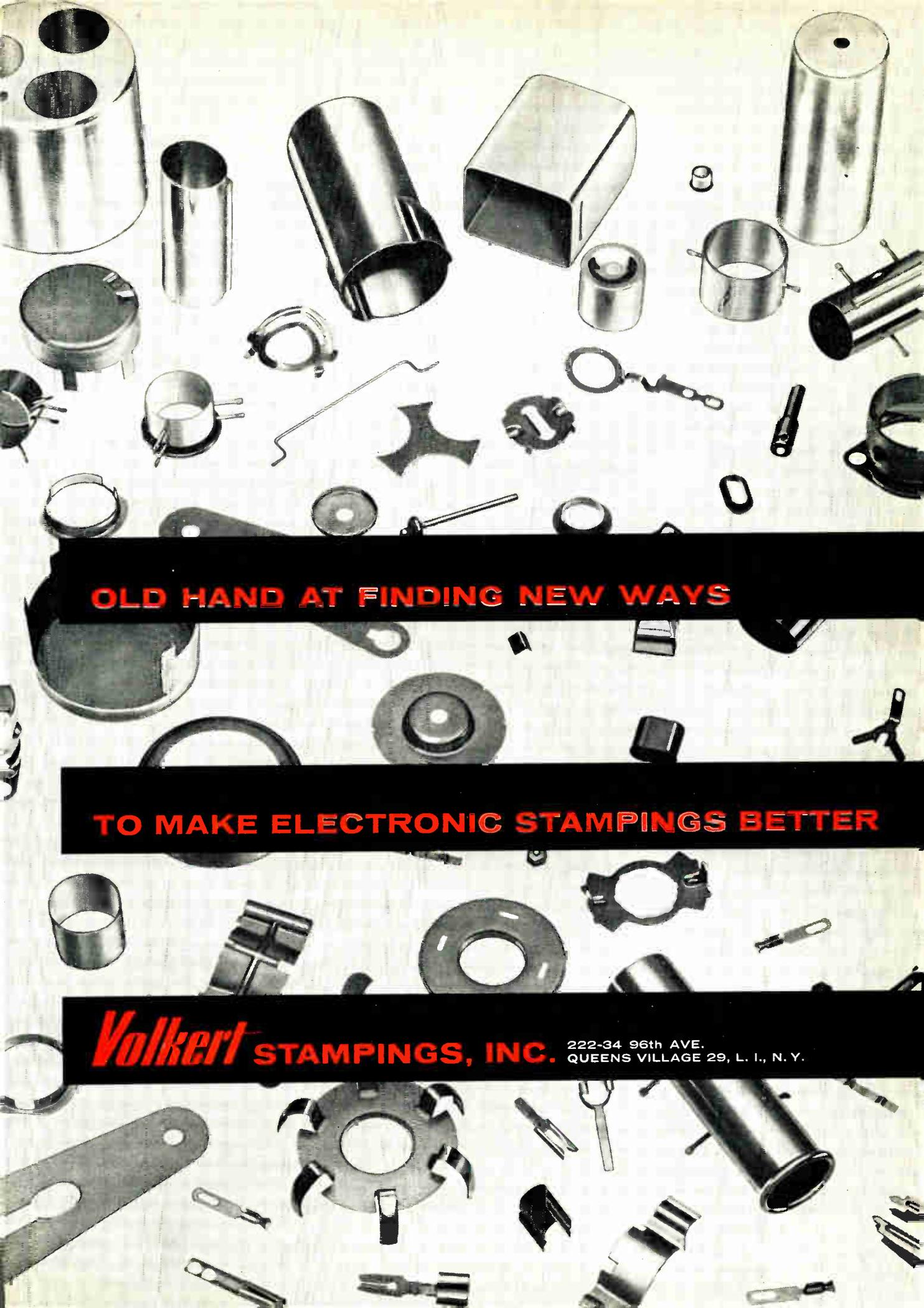
Benjamin P. Baker, Advisory Engineer has just received another patent award for \$5,000. This brings his award totals to more than \$18,000. He is with the Power Circuit Breaker Dept. of Westinghouse Electric Corp., Pittsburgh 30, Pa.

Sheldon Plotkin, has been recently appointed a Senior Project Engineer for Levinthal Electronic Products, Inc., Palo Alto, Calif.

David Taylor has joined The Systems Div. at Daystrom, Inc., as a staff engineer specializing in instrumentation.

W. Earl Stewart has been named Chief Engineer for The Standard Register Co., Dayton, Ohio.

W. W. Lampkin, Director of Manufacturing for the Aircraft Div. of Hughes Tool Co., has been elected National Chairman of the Aircraft Industries Association's Manufacturing Committee.



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Type C
Type D
Type E Teflon Insulation
MIL-W-76A Hook-up Wire
Type LW
Type MW
Type HW
Type MW Glass Braid
Type MW Nylon Jacket
Type MW Shielded
Antenna Wire
RG-Coaxial Cable
Rubber Sheathed Service Cord
Cord Sets
Tinned Copper Shielding & Bonding
Bus-Bar
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glass Tubing per Spec.
MIL-I-3190, NEMA-VS1,
ASTM-D372
TFN-250 Teflon Tubing
SRF-200 Silicone Rubber Coated
Fiberglass Tubing
SFS-400 Silicone Impregnated
Fiberglass Sleeveing
HTF-1200 High Temperature
Fiberglass Sleeveing
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Tubing
PLE-70 Polyethylene Tubing
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ALPHA WIRE CORP., 200 Varick St., New York 14, N. Y.

In Canada: ALPHA ARACON RADIO, 29 Adelaide St. W., Toronto 1, Ontario.

having your ups and downs?



... if they involve WIRE WOUND RESISTORS ←

DALOHM has the answer

You can depend on



All Dalohm products are carefully designed and skillfully made to assure you of supreme quality and dependability, plus the widest versatility of application. Here are outstanding examples of the Dalohm line:

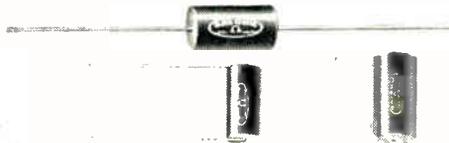
WIRE WOUND ENCAPSULATED PRECISION RESISTORS

Surpass MIL-R-93R

Completely impervious to penetrating effects of salt ions, humidity, moisture and corrosive gases and vapors, Dalohm's new encapsulating material has very high di-electric strength. Its coefficient of expansion matches that of the resistor wire itself, eliminating the possibility of distorted wiring and shorted turns. All are non-inductive, pi-wound.



NEW SUB-MINIATURE SIZES



- Resistance range 10 ohm to 1 megohm
- Tolerances 0.05%, 0.1%, 0.25%, 0.5%, 1%, 3%
- Powered at 0.1 watt to 0.8 watt
- Temperature coefficient 0.00002/Deg. C
- Maximum operating temperature 125° C.

SIZES

Length Dia.

WWA 13	3/8"	1/8"
WWA and WWP 22	1/4"	1/4"
WWL and WWR 23	3/8"	1/4"
WWA, WWL, WWR, WWP 24	1/2"	1/4"
WWA 26	3/4"	1/4"
WWA, WWL, WWR, WWP 34	1/2"	3/8"
WWA, WWL, WWR, WWP 36	3/4"	3/8"
WWA, WWL, WWR, WWP 38	1"	3/8"

TERMINALS

WWL—lugs;
 WWA—axial leads;
 WWR—radial leads;
 WWP—parallel leads.

STANDARD SIZES



WWA

WWL

- Resistance range 0.1 ohm to 5 megohms
- Tolerances 0.05%, 0.1%, 0.25%, 0.5%, 1%, 3%
- Powered at 0.5 watt to 2 watts
- Temperature coefficient 0.00002/Deg. C
- Maximum operating temperature 125° C.

SIZES

Length Dia.

WWA and WWL 44	1/2"	1/2"
WWA and WWL 45	5/8"	1/2"
WWA and WWL 48	1"	1/2"
WWA and WWL 4-12	1 1/2"	1/2"
WWA and WWL 4-16	2"	1/2"

TERMINALS

WWA—axial leads; WWL—lugs.

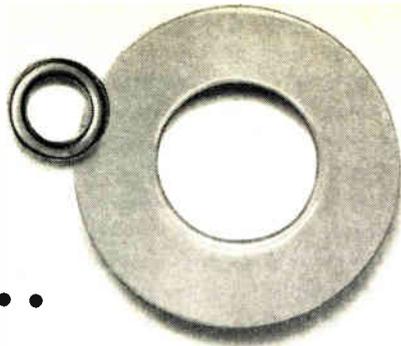
Also available in MIL Types RB-09, RB-15, RB-16, RB-17, RB-18, RB-19

JUST ASK US:

You are invited to write for the complete catalog of Dalohm precision resistors, potentiometers and collet-fitting knobs. If none of our standard line fills your need, our staff of able engineers and skilled craftsmen equipped with the most modern equipment, is ready to help solve your problem in the realm of development, engineering, design and production. Just outline your specific situation.

DALE PRODUCTS, INC.

1304 28th Avenue
 Columbus, Nebr., U.S.A.
 EXPORT DEPT: Pen-Mar Corp.
 1270 Broadway
 New York 1, N.Y.



New Hipermag* cores...

now up magnetic amplifier yields 35%

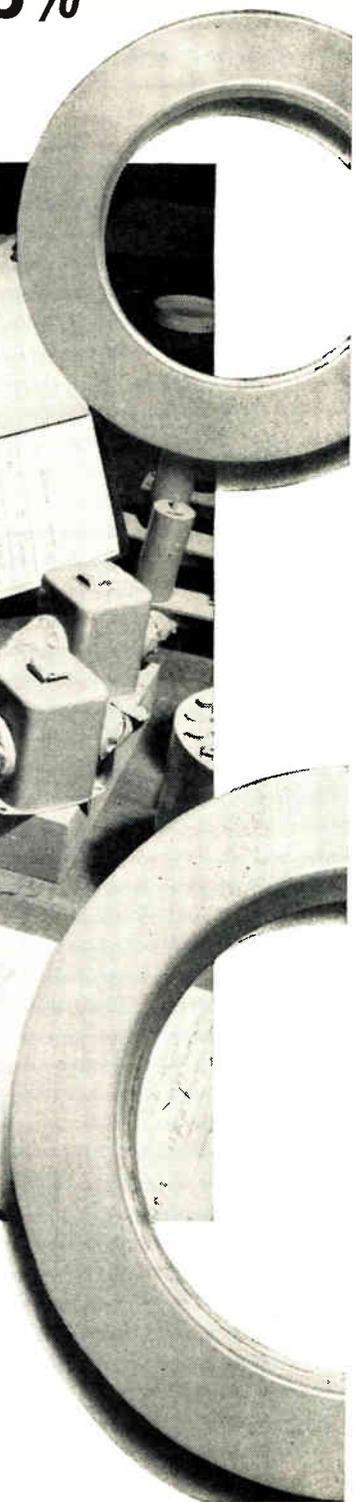
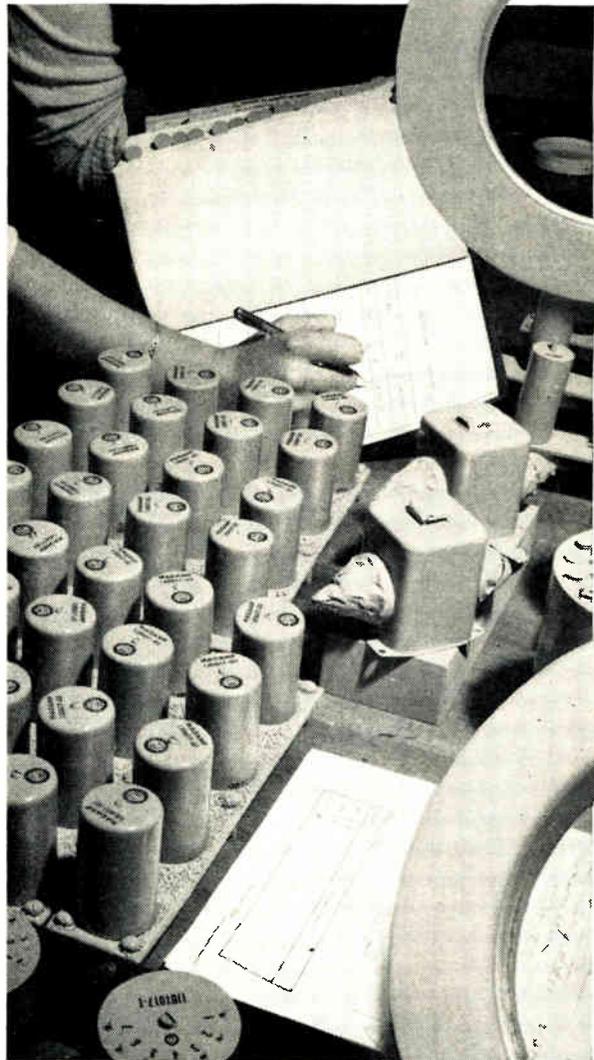
All core sizes in stock, delivery immediate

A large eastern manufacturer reports Westinghouse Roberts-tested Hipermag cores have increased Magamp* yields from 70% to 95%. Here are just three of the many reasons why.

- All the quality in Hipermag cores is proved out with the exclusive Westinghouse Roberts dynamic tester. This test provides four values actually measuring magnetic properties of cores under simulated amplifier conditions. Test values are equivalent to final core performance in your finished reactor.
- Westinghouse Hipermag toroidal cores are wound with Hipernik® V. Hipernik V is a highly oriented iron nickel alloy of exceptional temperature stability, high remanence and low coercive force, making these cores ideally suited to high-quality saturable reactors.
- For especially high shock resistance, cores can be hermetically-sealed, and their rugged nylon or aluminum cases filled with a Westinghouse-developed silicone oil. Prevents core damage. Minimizes magnetic change due to strains, pressure, shock or vibration. Provides foolproof protection when reactors are vacuum impregnated, encapsulated or resin treated.

A Westinghouse Hipermag specification will give you perfectly matched, quality cores in abundance—all sizes are in stock for delivery today! Also available in a full range are Hipersil® and Hiperthin* cores. Call Westinghouse Electric Corporation, or write Specialty Transformer Department, P. O. Box 231, Greenville, Pa.

*Trade-Mark J-70797



YOU CAN BE SURE...IF IT'S
Westinghouse





Engineered by Tinnerman...

4 SPEED NUTS® eliminate 8 parts in resistor assembly, cut costs 50%!

Tremendous assembly savings are often possible when Tinnerman SPEED NUTS are "designed into" new products. This is an example: Corning Glass Works, Corning, New York, adopted 4 special SPEED NUT brand fasteners and cut assembly costs on new power-type glass resistors by 50%!

Assembling power resistors is normally a slow and complex operation. Yet a pair of one-piece, spring-steel SPEED NUT angle brackets eliminated 4 of the 9 parts required by another fastening method and cut assembly time to a few seconds!

These corrosion-resistant, vibration-proof fasteners hold the resistor under live spring tension to avoid mechanical shock. Locating washers, lock washers and nuts are eliminated. Also, one-piece SPEED CLAMPS® that double as terminal bands eliminate 2 lock washers and 2 nuts.

SPEED NUTS permit maximum assembly savings on new products, but you can probably make worthwhile savings *right now* on current products.

Over 8000 types available. See your Tinnerman representative or write for Bulletin 333-1.

TINNERMAN PRODUCTS, INC.
BOX 6688 • DEPT. 12 • CLEVELAND 1, OHIO

TINNERMAN

Speed Nuts®



FASTEST THING IN FASTENINGS®

CANADA: Dominion Fasteners Ltd., Hamilton, Ontario. GREAT BRITAIN: Simmonds Aerocessories Ltd., Treforest, Wales. FRANCE: Simmonds S. A., 3 rue Salomon de Rothschild, Suresnes (Seine). GERMANY: Mecano-Bunty GmbH, Heidelberg.

REPS WANTED

Leading manufacturer of electro-mechanical equipment, such as vibration calibrators, frequency invertors and voltage regulators, seeks representation in the Texas and Florida area. This is an established electronic manufacturer with a new line of precision instruments. (Ask for R6-1)

Prominent manufacturer of molded epoxy cases, connectors and other epoxy products seeks reps for all areas of the U. S except Upstate New York. Firm is well known in their field. (Ask for R6-2.)

Mid-lantic Chapter of The Representatives elected the following officers: Donald G. Brown, Pres.; John T. Stinson, V.P.; L. Parker Naudain, Sec.; and James P. Faries, Treas.

Harold Stone has joined the Industrial Sales Dept. of the Logan Sales Co., Northern California reps.

Jack Simons has joined the Jack Fields Sales Co., 5 Howard St., Verona, N. J. as a partner.

Henry Lavin Associates of Meriden, Conn. have received a Reps of the Year award from the Elco Corp.

Hi-Quality Distributors, Inc. have been named distributors for Du Mont TV Receivers in the Western Section of Pennsylvania, five counties of West Virginia and four counties in Ohio. They are located at 6609 Woodwell St. in Pittsburgh, Pa.

T. Lewis Snitzer Co. are now established in their new building at 5354 W. Pico Blvd., Los Angeles 19, Calif.

William J. Noonan has been appointed sr. special representative, chain and wholesale dept., for International Business Machines Corp. Eastern Region.

Ray Sturgill and Associates, Charlotte, N. C. have been appointed sales service reps of Burgess-Manning, Penn Instrument Div. in Western North Carolina and Eastern Tenn.

Gene French Co., Albuquerque, New Mexico has been appointed sales and technical service reps in New Mexico, Arizona, Colorado and Utah for the Narda Corp.

Shalway Corp. of Palo Alto, Calif. and Crawley England has been named to promote the sale of Southern Electronics products in 58 countries outside the U. S. and Canada.

P. Gordon Lea, Walter Rathja and Richard Riedell have been named reps for the Industrial Division of the Dobeckman Co.

(Continued on page 86)

REMEMBER!

SPECIFY

ERIE

TUBULAR CERAMICONS®

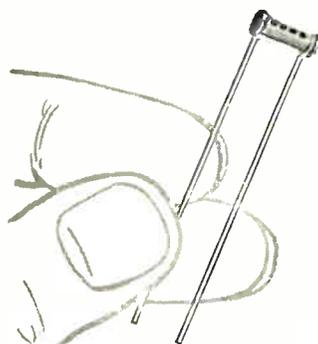
for

PRINTED WIRING APPLICATIONS



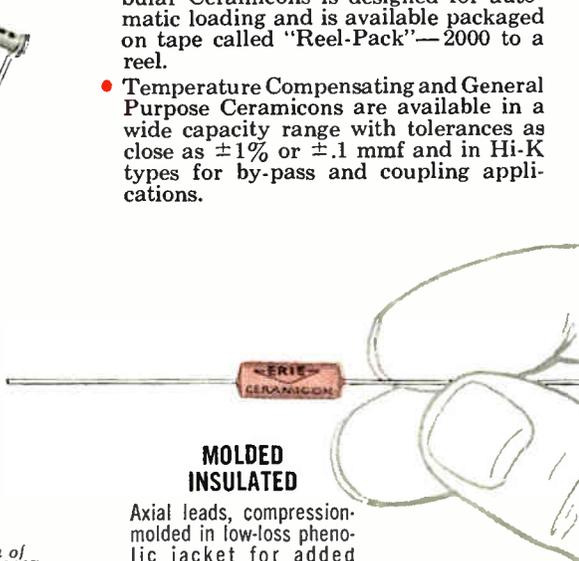
DIPPED PHENOLIC INSULATED

These Radial lead units are dipped in low-loss phenolic material which is baked and vacuum wax impregnated.



NON-INSULATED

Radial leads soldered to silver electrodes and sealed with moisture impervious coating to withstand humidity.



MOLDED INSULATED

Axial leads, compression-molded in low-loss phenolic jacket for added strength and protection against humidity.

- Leads are tin coated with a minimum of .001" heavy coating of solder to insure ease of solderability and to prolong shelf-life.
- ERIE TUBULAR CERAMICONS offer convenient form design, including 1/4" and 3/8" lead spacing, for printed wiring board applications where space is at a premium.
- Rugged construction of ERIE TUBULAR CERAMICONS features inherently strong dielectric design with leads wrapped around the dielectric and soldered to withstand stress and strain.
- Uniform case size of ERIE Molded Tubular Ceramicons is designed for automatic loading and is available packaged on tape called "Reel-Pack"—2000 to a reel.
- Temperature Compensating and General Purpose Ceramicons are available in a wide capacity range with tolerances as close as $\pm 1\%$ or $\pm .1$ mmf and in Hi-K types for by-pass and coupling applications.

Write for 16 page Bulletin 313-2 for description of ERIE TUBULAR CERAMICONS. Also ask for our new 8 page Feed-Thru Ceramicon Bulletin 323.

ERIE ELECTRONICS DIVISION

ERIE RESISTOR CORPORATION

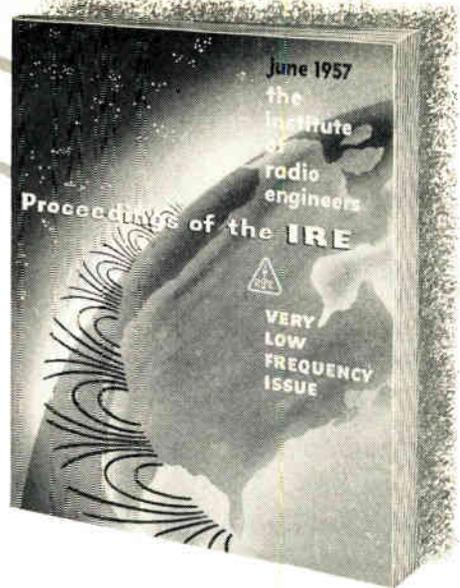
Main Offices and Factories: ERIE, PA.

Manufacturing Subsidiaries

HOLLY SPRINGS, MISSISSIPPI • LONDON, ENGLAND • TRENTON, ONTARIO



NEWS



ABOUT VERY LOW FREQUENCY PROPAGATION!

Smaller antennas, lower transmitter power, and relative freedom from atmospheric noise are reasons behind our communication services' gradual migration to the upper end of the frequency spectrum. Lying fallow and awaiting rediscovery has been the very low frequency band below 30 kc.

Now, because VLF offers a reliable means of communicating over vast global distances, there is a marked revival of interest. It is now known that VLF has highly stable propagation characteristics which make it possible to transmit data to distant

points with unusual fidelity and precision. Where greater accuracy is required, such as very long range radio navigation systems and international transmission of frequency standards, VLF promises to open doors to many new and important uses.

June Proceedings of the IRE gives you the facts about VLF

This year, the Boulder Laboratories of the National Bureau of Standards and the IRE Professional Group on Antennas and Propagation co-sponsored a Symposium at Boulder, Colorado, on the propagation of very low frequency radio waves. From the papers given at this important meeting the editors of *Proceedings* have chosen those of broadest interest for publication in the June, 1957, issue.

Typical of the service offered members of IRE is this VLF report — to be used now and referred to for years to come. If you are not a member of *The Institute of Radio Engineers* be sure to reserve a copy of the *June Proceedings of the IRE*, today!

Partial Contents of this VLF issue:

- "A Technique for the Rapid Analysis of Whistlers," by J. K. Grierson, Defense Reserve Board, Ottawa, Ontario, Canada.
- "VLF Radiation from Lightning Strokes," by E. L. Hill, School of Physics, University of Minnesota.
- "Some Recent Measurements of Atmospheric Noise in Canada," by C. A. McKerrrow, Defense Reserve Board, Ottawa, Ontario, Canada.
- "Intercontinental Frequency Comparison by Very Low Frequency Radio Transmission," by J. A. Pierce, Croft Laboratory, Harvard.
- "The Mode Theory of VLF Ionospheric Propagation for Finite Ground Conductivity," by James R. Wait, National Bureau of Standards, Boulder, Colorado.
- "The Geometrical Optics of VLF Sky Wave Propagation," by J. R. Wait & A. Murphy, National Bureau of Standards, Boulder, Colorado.
- "Characteristics of Atmospheric Noise from 1 to 100 Kc/s," by A. D. Watt & E. L. Maxwell, National Bureau of Standards, Boulder, Colorado.
- "The Present State of Knowledge Concerning the Lower Ionosphere," by A. H. Waynick, The Pennsylvania State University.
- "Noise Investigation at VLF by the National Bureau of Standards," by W. Q. Crichlow, National Bureau of Standards, Boulder, Colorado.
- "Reflection at a Shapely-Bounded Ionosphere," by I. W. Yebroff, Stanford University.
- "The Attenuation Versus Frequency Characteristics of VLF Radio Waves," by J. R. Wait, National Bureau of Standards, Boulder, Colorado.
- "The Waveguide Mode Theory of the Propagation of VLF Radio Waves," by K. G. Budden, University of Cambridge, England.

PROCEEDINGS OF THE IRE

1 East 79th Street, New York 21, New York

- Enclosed is \$3.00
- Enclosed is company purchase order for the June, 1957, issue on VERY LOW FREQUENCY.

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Company

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City & State.....

All IRE members will receive this June issue as usual. Extra copies to members, \$1.25 each (only one to a member).



The Institute of Radio Engineers
1 East 79th Street New York 21, New York

BIRD COAXIAL LINE INSTRUMENTS

"ThruLine" DIRECTIONAL RF WATTMETERS

MODEL 43



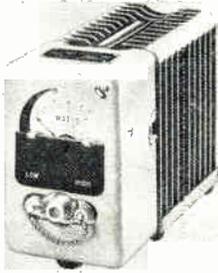
Direct Reading

25-1000 megacycles . . . 10W — 100KW . . . "thru" type . . . for power measurement in complete systems under operating conditions . . . insert between transmitter and antenna or load to provide an accurate and simple means of measuring direct or reflected power . . . plug-in elements determine full scale power range and frequency range. Get Bulletins W-400 for detailed specifications.

Model	Line	Impedance	Frequency Range	Full Scale Power	Connector
43	RG-8/U etc.	50 ohms	25-60; 50-125 100-250; 250-500; 400-1000 mc	10; 25; 50; 100; 250; 500 W	N; C; HN; UHF
4712	1 1/8"	50 ohms	200-500 400-1000 mc	.5; 1.0; 1.5; 2.5; 5.0 KW	Rima Std.
460	3/8"	50 ohms	200-500 mc	1; 2.5; 5; 10	Flange
480	3/8"	51.5 ohms	400-1000 mc	25; 50 KW	Sleeve
490	6/8"	51.5 ohms	200-500 mc	25; 50 and 100 KW	Bullet

"Termaline" RF ABSORPTION WATTMETERS

MODEL 611



Accurate

30-500 megacycles . . . 1/2 watt-5 KW . . . "load" type . . . portable . . . direct reading wattmeter . . . accuracy $\pm 5\%$ of full scale . . . non-radiating load for power measurement. For complete specification on all available models, write for Bulletins TW-600.

Model	Freq. Range	Max. Power	Power Range Scales	Input Connector
611	30-500 mc	60W	0-15; 0-60	Female N
612	30-500 mc	80W	0-20; 0-80	
67	30-500 mc	500W	0-25; 0-100; 0-500	Coplanar with adapter to UG-21/U; (optional) RG-17 & RG-19 cable assemblies: adapters to rigid lines
67C*	30-500 mc	2500W	0-100; 0-500; 0-2500	
824*	30-220 mc	5000W	0-5000	

*Water cooled (other available models described in specification sheets)

"Termaline" RF LOAD RESISTORS

MODEL 888



Reflection-Free

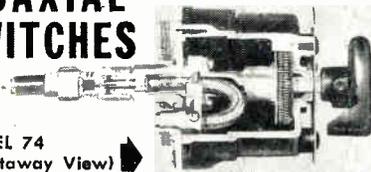
Designed to terminate 50 ohm coaxial line with minimum reflection . . . low VSWR . . . non-radiating . . . water cooled ratings 2500 W to 50 KW . . . air cooled ratings to 1500 W . . . ratings can be increased by forced air externally applied. For detailed specifications get Bulletins R-800.

Model	Max. Power	Freq. Range	Max.* VSWR	Connector
80	5W	0-1KMC	1.1	"N", "C", "BNC"
80A	20W	0-500MC	1.1	N Female
81	50W	0-1KMC	1.1	
818	80W	0-1KMC	1.1	
82A	500W	0-1KMC	1.1	
883	1.2KW	0-1KMC	1.1	LC
888	1.5KW	0-1KMC	1.1	3/8" Flanged

*Other VSWR requirements can usually be met by special selection.

COAXIAL SWITCHES

MODEL 74
(Cutaway View)



Dependable

Small compact design permits the "Coaxswitch" Selector to be incorporated into many electronic units where repeated channel switching is required. Finger-tip operation — pull knob, rotate and push in to make contact. Bulletin CS-6 contains full specifications.

Model	74	718	72R	72-2
Positions	Six	Eight	Reversing Switch	Two
Coaxial Circuits	One	One	Two	Two
Connector	Type N female connectors are standard on all models to receive UG-21/U series plug. Use adapters with other cables and connectors.			

COAXIAL RF FILTERS



Rugged

High pass . . . low pass . . . band pass . . . band elimination . . . designs utilize both distributed and lumped constant . . . feature low insertion loss and high stop band attenuation . . . many designs available . . . "know-how" and physical facilities for quantity production . . . Get Bulletin CF-6.

	Low Pass	Low Pass	Low Pass	Low Pass	High Pass	Band Pass
Model*	S310	S311	S22	819-1200	S30	S131
Cut Off	90 mc	160 mc	400 mc	1200 mc	420 mc	45 mc & 105 mc
Stop Band	100- 180 mc	180- 320 mc	500- 2000 mc	1900- 4000 mc	100- 390 mc	33.7- 39.7 mc 120- 1000 mc
Max. Power	100W	100W	150W	100W	50W	25W
VSWR in p.b.	1.5	1.5	1.35	2 to 1	2.5	1.6
Connec- tors	Female N		Male-Female N		Female BNC	

*Other model specs on request.

NEW BIRD CATALOG

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copy now!



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BIRD ELECTRONIC CORPORATION

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another example of exciting work at los alamos...

FAST PHOTOGRAPHY

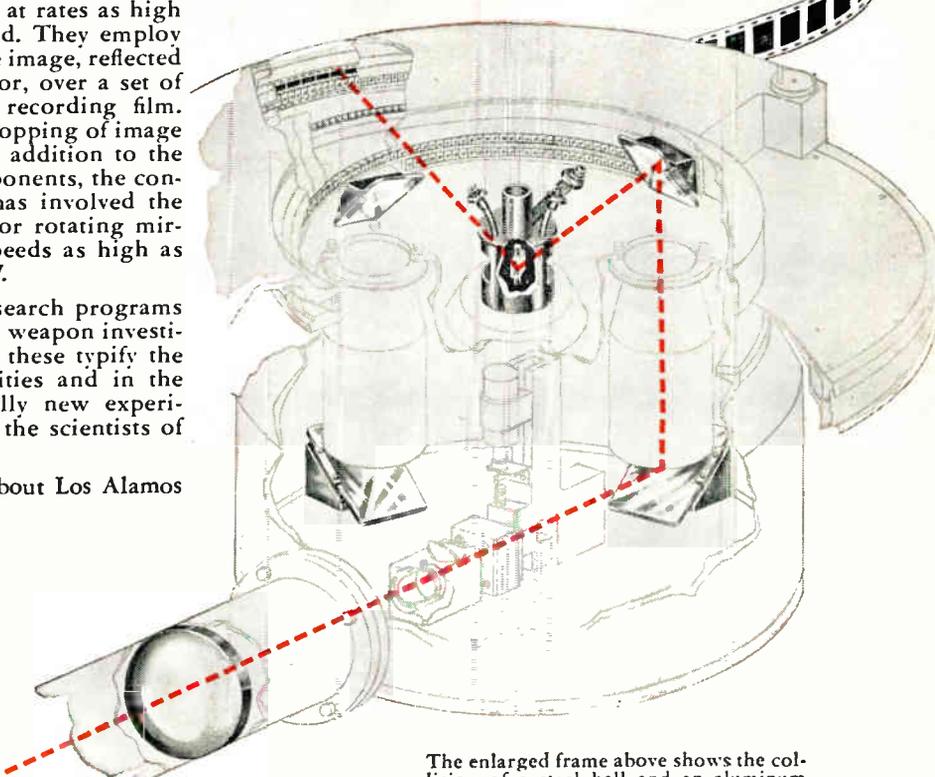
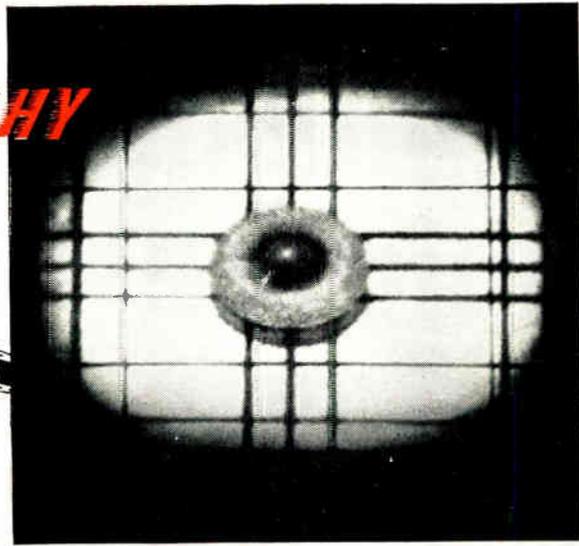
15,000,000 PICTURES/SECOND

Here at Los Alamos, the development of high speed photography has produced framing cameras of unprecedented framing rates and exposure times. These cameras are capable of taking as many as 90 frames at rates as high as 15 million frames a second. They employ the technique of sweeping the image, reflected from a rapidly rotating mirror, over a set of correcting lenses onto the recording film. This results in the effective stopping of image motion within the frame. In addition to the creation of new optical components, the construction of these cameras has involved the development of techniques for rotating mirrors of substantial size at speeds as high as 22,000 revolutions per second.

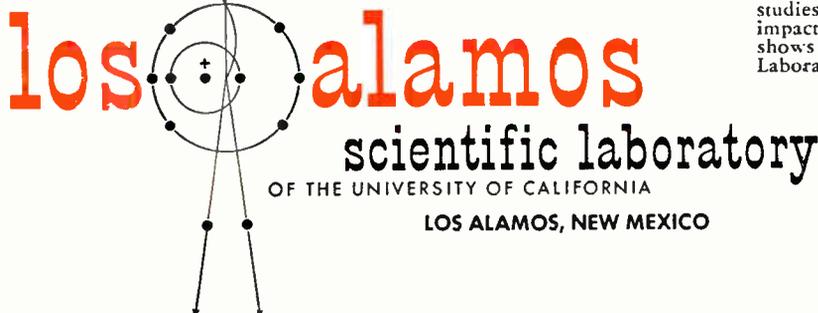
Used in a wide variety of research programs as well as in the Laboratory's weapon investigations, instruments such as these typify the excellent resources, in facilities and in the capability for creating wholly new experimental methods, enjoyed by the scientists of Los Alamos.

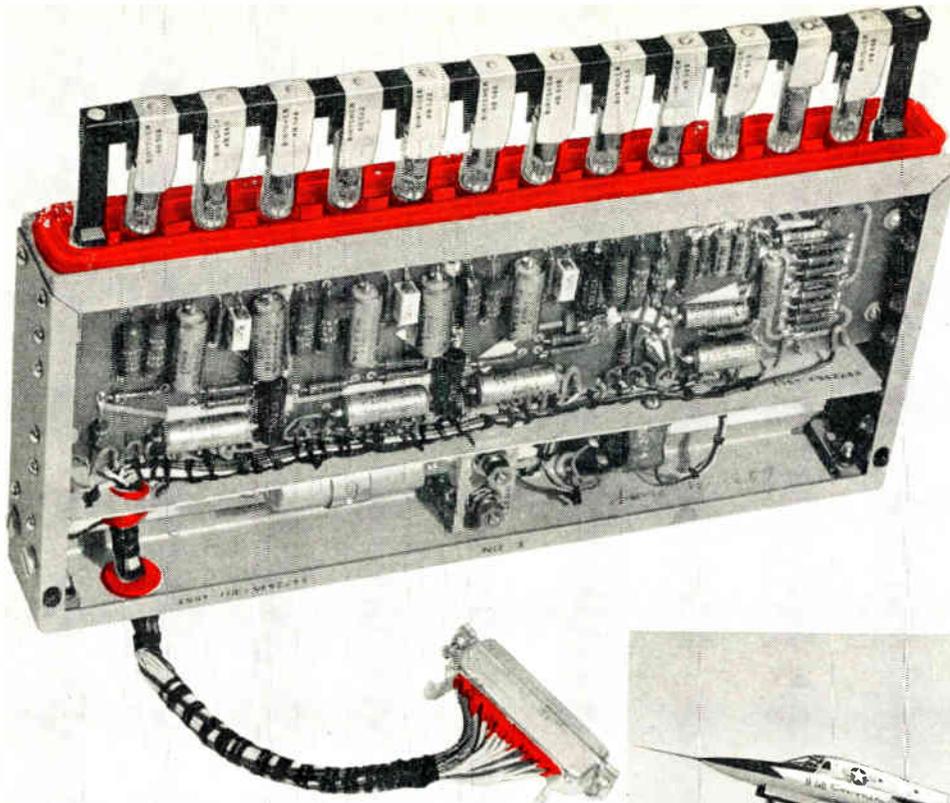
For an illustrated brochure about Los Alamos write to:

Director of Personnel
Division 1805



The enlarged frame above shows the collision of a steel ball and an aluminum plate at an approximate velocity of 4 millimeters/microsecond, illustrative of studies of interaction of metals at high impact velocity. The cutaway drawing shows some of the features of one of the Laboratory's high speed framing cameras.





Silastic parts are used in many of the fire control electronic "packages" on Convair's new B-58 Hustler because they remain resilient at both high and low temperatures. Some of the parts touch miniature tubes that operate at 350 F. Others are subjected to oven-hot "cooling" air. All must withstand severe vibration at temperatures as low as -65 F when the equipment is not in use during high altitude fight. Designer and producer . . . Emerson Electric Manufacturing Company, St. Louis.



SILASTIC

SILICONE RUBBER

protects electronic packages on B-58

SILASTIC,* Dow Corning's silicone rubber, can be used in many different ways to improve the protection and performance of delicate electrical and electronic equipment. Whether used in the form of seals, cable clamps, grommets, encapsulating or potting compounds, plugs, gaskets, feed throughs, or wire and cable insulation, SILASTIC offers amazing thermal stability, excellent dielectric strength and superior resistance to moisture, ozone, corona, corrosive atmospheres. Write for complete data or contact your rubber supplier.

Get latest data on Silastic
Mail coupon today

Dow Corning Corporation, Dept. 1618
Midland, Michigan .
Please send me latest data on Silastic

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Typical Properties of Silastic for Electrical Use

- Temperature range, °F -130 to 500
- Tensile strength, psi 600 to 900
- Elongation, % 150 to 300
- Insulation Resistance, megohms/1000 ft. 1000 to 3000
- Dielectric strength, volts/mil. 300 to 500
- Dielectric Constant, 10⁶ cycles per second, nominal 3.2

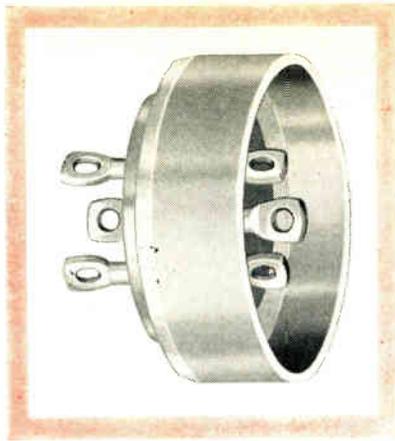
* T.M. REG. U.S. PAT. OFF.

If you consider ALL the properties of a silicone rubber, you'll specify SILASTIC.

first in silicones



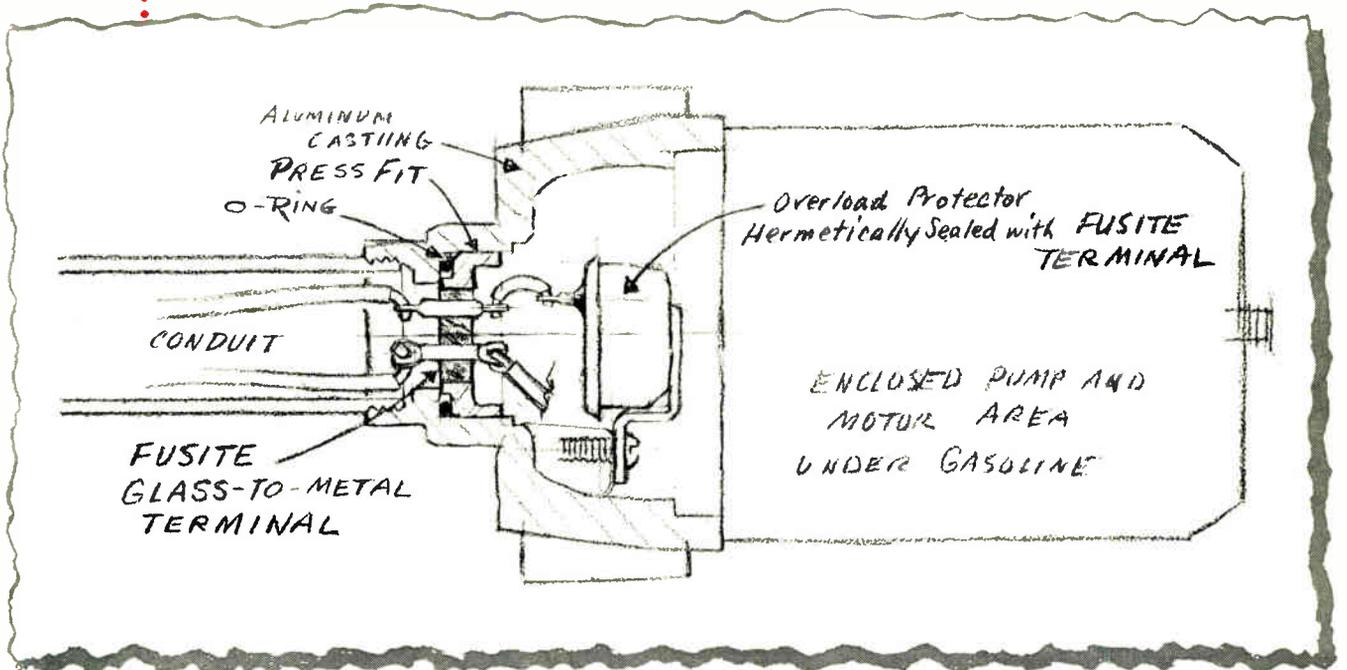
DOW CORNING CORPORATION • MIDLAND, MICHIGAN



An Engineer "Doodled" and Solved an Explosive Problem with

FUSITE TERMINALS

The problem was literally explosive. It was a pump and motor to operate safely submerged in gasoline. The electrical connections had to be made through a vapor-proof seal. Two simple and inexpensive Fusite glass-to-metal terminals did the job like this "doodle" shows.



This can't be called a "typical" Fusite case history. In our long list of successful new applications, we have helped engineer, there are none we could call "typical".

So just keep Fusite Terminals in your

"noodle" the next time you "doodle" and pass your problems on to us.

We make hundreds of stock terminals of both multiple bead and solid glass types. We're prepared to design and make special terminals to your needs.



Write today for catalog — Dep't. U-3

THE **FUSITE** CORPORATION

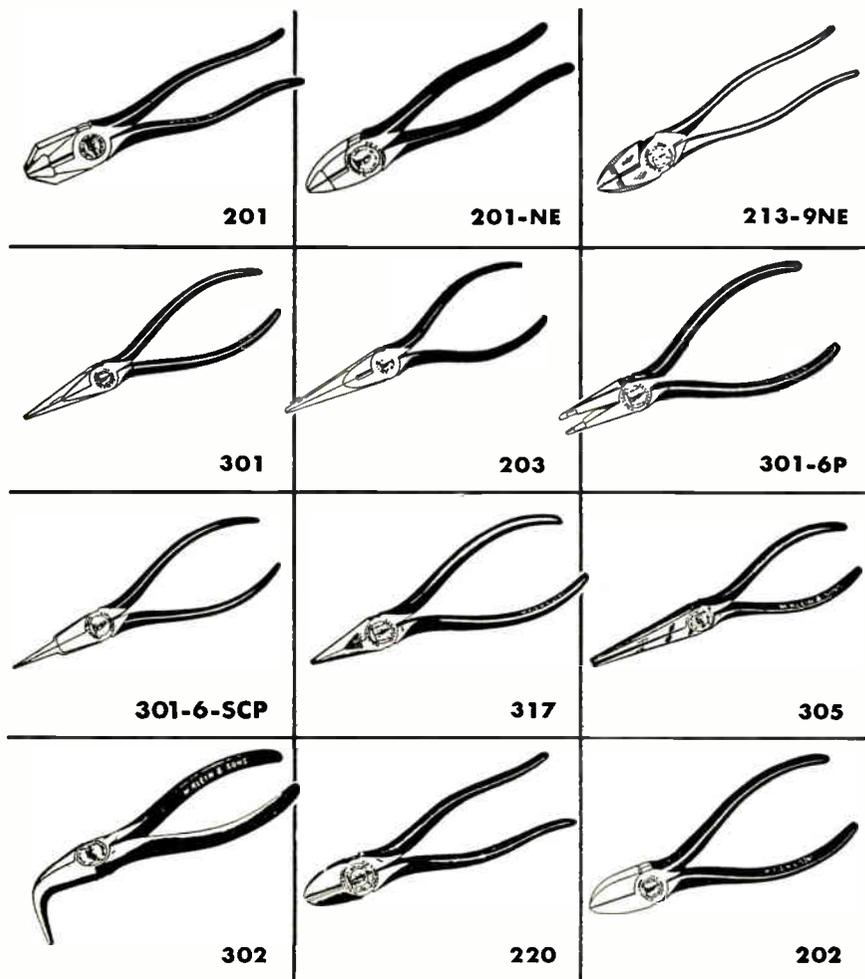
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KLEINS

For Every Electrical Need

By using the plier exactly suited to the job, work improves and time is saved. There is a style and size of Klein Plier made to meet every need of linemen, electricians, good workmen everywhere.

The name Klein has stood for the finest pliers for a century... that's why Klein is the standard of comparison by which other pliers are judged. Be sure your order for pliers specifies Kleins.



100 years of service to linemen, electricians and industry is back of this new Pocket Tool Guide No. 100. A copy will be sent to you upon request, without obligation.

NEW COIL SPRING PLIERS

Many Klein Pliers are available with a coil spring set close to the hinge. The spring is guaranteed for the life of the plier. It always keeps the jaws in open position and frees the inside of the handles of any obstruction.



Ask your supplier

Foreign Distributor: International Standard Electric Corp., New York

Mathias KLEIN & Sons
 Established 1857 **KLEIN** Chicago, Ill., U.S.A.
 7200 McCORMICK ROAD • CHICAGO 45, ILLINOIS



News of Reps

(Continued from page 80)

Neely Enterprises, 3939 Lankershim Blvd., North Hollywood, Calif. electronic manufacturers reps has announced the opening of their eighth office located in Tuscon, Arizona.

R. W. Farris Co., Inc. has been named manufacturers reps for Filtrons, Inc. They are located at 406 West 34th St., Kansas City 11, Mo. and will cover Missouri, Kansas, Iowa and Nebraska.

Land-C-Air Sales Co. are now reps in the New York, Northern New Jersey area for Dynamics Research Associates.

Instruments for Measurement, Glendale, California are reps for Autron Engineering, Inc. in Southern California.

Gregg and Spohn, Cincinnati, Ohio, J. F. Wulfetange, Jr., Dewitt, New York and the Robert F. Lamb Co., Buffalo, New York have been named reps for "Control" a Div. of Magnetics, Incorporated.

Cartwright and Bean, Memphis, Tenn. are now sales representatives for General Transistor's germanium transistors, in Alabama, Georgia, Tennessee, North Carolina, South Carolina and part of Virginia.

Gene French Co., Albuquerque, New Mexico will now serve as reps in New Mexico, Arizona, Colorado and Utah for the Narda Corp.

Jim Ferris has been appointed a District Manager for the Morris F. Taylor Co. of Silver Springs, Md.

Sherherne and Associates, 3040 Overland Ave., Los Angeles 34, Calif. are now representing Cardinal Instrumentation Corp.

C. W. Reed has been formed and offer sales and service representation on the West Coast for various technical equipment manufacturers.

Bill Kolans and Co. of San Francisco and H. H. Seay Co. of Columbus, Ohio have been named reps for the Fairchild Recording Co.

Murphy and Cota, 2110 Peach Tree Rd., N.W. Atlanta, Ga. have been named reps for the WYCO Products Co. in the southeastern part of the United States.

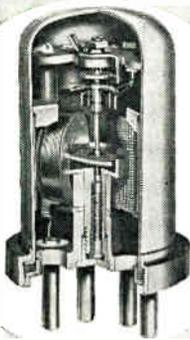
O. F. Masin Co., Pelham, N. Y. has been selected to represent, in the Metropolitan New York area, the San Fernando Electric Manufacturing Co.

Bob Himmel and Ken Davis, reps for Texas Instruments, Inc., have moved into new offices at Room 701, Wilson Bldg., Broadway and Cooper Sts., Camden 2, N. J.

EDISON RELAYS FOR AIRBORNE AND OTHER ELECTRONIC CONTROL EQUIPMENT

One of the oldest names in relays continues to improve the state of the art. For your specific design problems there is an Edison relay you can rely on for maximum performance and durability. The millions of Edison relays in use today are your assurance of reliability.

SENSITIVE MAGNETIC RELAY



Polarized operating characteristic of this magnetic d-c Relay makes it ideal for use as a null detector in ordinary bridge circuits. It can operate directly from a thermocouple or photocell. Both coils brought out to separate pins in base make it easy to calibrate and overhaul and versatile to apply. Hundreds of thousands of these relays are now in use in airborne control equipment.

SPECIFICATIONS

Contacts: SPST or SPDT normally open or closed. Rated for 1/2 ampere at 28 volts d-c.

Hermetically sealed: Model 220

Gasket sealed: Model 219

Vibration and shock resistant: relay unenergized will withstand shock of 50 g's in all planes without damage or change in calibration

Closing current: contacts close on input currents from 30 microamperes d-c to 12.5 milliamperes d-c. Lower closing currents available in special circumstances.

Coils: Formvar-coated copper. Resistances from 0.5 ohm to 23,600 ohms. Normal closing power may be increased 10,000 times without adverse effects.

Weight: .15 lb. max.

Seated height: 2 3/8" max.

Base: plug-in, printed circuit or solder hook

For more information, write for Bulletin #3037

NEW EDISON MINIATURE TIME DELAY RELAY MODEL #250



Specially designed for missile and jet aircraft applications, this vibration resistant unit incorporates the following design features:

- 1) virtual elimination of contact chatter up to 1500 cps at 10 g's.
- 2) no resonance to 500 cps.
- 3) ambient compensation between -65° C and +85° C . . . operation at higher temperatures when necessary.
- 4) contacts rated for 1 ampere at 27.5 VDC or 3 amperes at 115 volts AC.
- 5) extra-rigid construction for exceptionally high contact pressure.
- 6) can be mounted in any position without affecting operating characteristics. 7-pin plug-in or solder hook base.
- 7) hermetically sealed.

For more information, write for Bulletin #250.

STANDARD OCTAL TIME DELAY RELAY MODEL #501



10 years of Edison research and engineering have produced a widely-accepted line of hermetically sealed Thermal Relays . . . more than one-half million have already been manufactured for use in cathode protection circuits, autopilots, gyro stabilizers and other electronic equipment.

SPECIFICATIONS

Time delays: 2 seconds to 300 seconds

Heater voltages: 6.3, 26.5, and 117 (intermediate voltages available in special circumstances)

Heater input: 5 Watts nominal (continuous excitation)

Contacts: SPST normally open or closed.

Rated for 6 amperes max. at 450 volts a-c or d-c.

Ambient: compensated for -60° C to +85° C

Shock: resists impact of 50g's

Vibration: resists 1/4" overall amplitude at 55 cps

Tolerances: heater voltage: positive contact operation with variation of ±10%.

Operating time at 25° C: ±15% max.

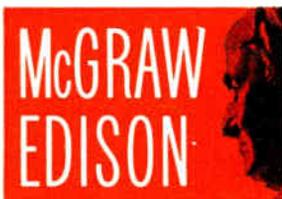
Weight: 1 1/4 to 2 1/4 oz.

Seated height: 3 1/4"

Diameter: 1.275" max.

Base: intermediate octal

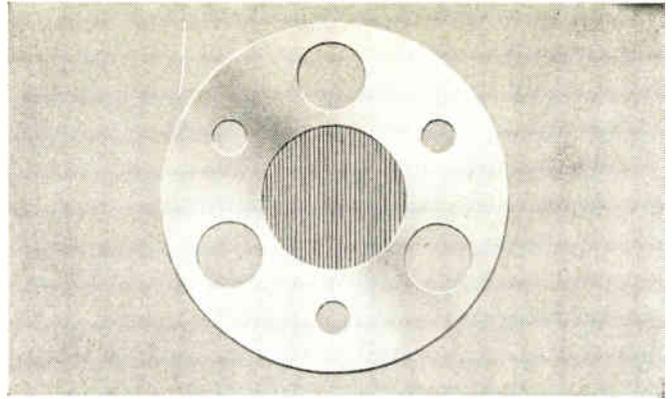
For more information, write for Bulletin #3007.



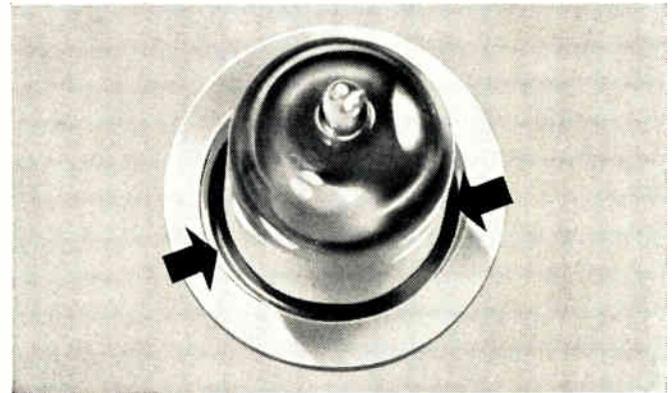
**Thomas A. Edison
INDUSTRIES**

INSTRUMENT DIVISION WEST ORANGE, N. J.

Sylvania Planar-Triode Rocket® Tubes



Stretched-grid construction—assures low-noise, uniform, efficient operation. Unique parallel wire construction is characteristic of Sylvania planar triodes and a principal factor in their stable performance.



Disc Seal—Exclusive sealing process used in Sylvania planar triodes provides important feature of low lead inductance.

—for maximum efficiency in UHF¹
and microwave frequencies

For communications, radar, and any equipment operating in the range between UHF and microwave frequencies Sylvania offers a line of planar triodes for efficient CW and pulse operation.

All Sylvania planar triodes feature the stretched, parallel-wire grid and disc seal—developments typical of Sylvania's leadership in these highly specialized tubes. Both single- and double-ended types are offered.

Concentric design lends itself to a variety of simplified cavity designs. Mounted in cavities, planar tubes deliver stable output over a broad tunable frequency band.

Sylvania planar triodes include single-ended and double-ended types designed for both cw and pulse operation.

TYPE	DESCRIPTION
2C36	pulse-modulated oscillator for concentric-line-cavity operation. Maximum operating frequency—5000 mc.
6503	CW oscillator for frequencies up to 3300 mc—Ruggedized anode design for shock and vibration.
2C37	CW oscillator to 3300 mc, amplifier and frequency multiplier.
6481	general-purpose medium mu triode—CW oscillator at frequencies up to 3300 mc.
5768	high mu double-ended type designed for grounded grid CW amplifier. Used with tuned or untuned input—tuned coaxial line output.
6BA4	double-ended UHF amplifier, suitable for TV UHF frequencies.
5765	CW oscillator with internal feedback. Broad frequency range up to 2900 mc.
5764	pulse-modulated oscillator at frequencies up to 3300 mc.

Write for complete data. Address Dept. F40R

 **SYLVANIA**

SYLVANIA ELECTRIC PRODUCTS INC.
1740 Broadway, New York 19, N. Y.
In Canada: Sylvania Electric (Canada) Ltd.
Shell Tower Bldg., Montreal

Engineering Beyond the Expected...



DESIGN beyond the expected

The DOVAP prototype (above) is one half the size called for in specifications.

PACKAGING beyond the expected

Shielding of critical areas and equalizing of heat enabled DOVAP to operate at higher temperatures than specified...without benefit of cooling by either conduction or convection.

PERFORMANCE beyond the expected

Where momentary loss of signal means the end of usefulness, DOVAP functioned unfailingly...under environmental conditions of shock and vibration more severe than specified.

ASSIGNMENT MISSILE

Withstanding torture is a specialty of Packard Bell's Doppler Velocity and Position indicator (DOVAP), designed and developed for an inter-continental missile (classified). In prototype environmental tests, this high powered Doppler Transponder was subjected to temperature, shock and vibration beyond the extremes expected in flight...beyond the extremes called for in specifications.

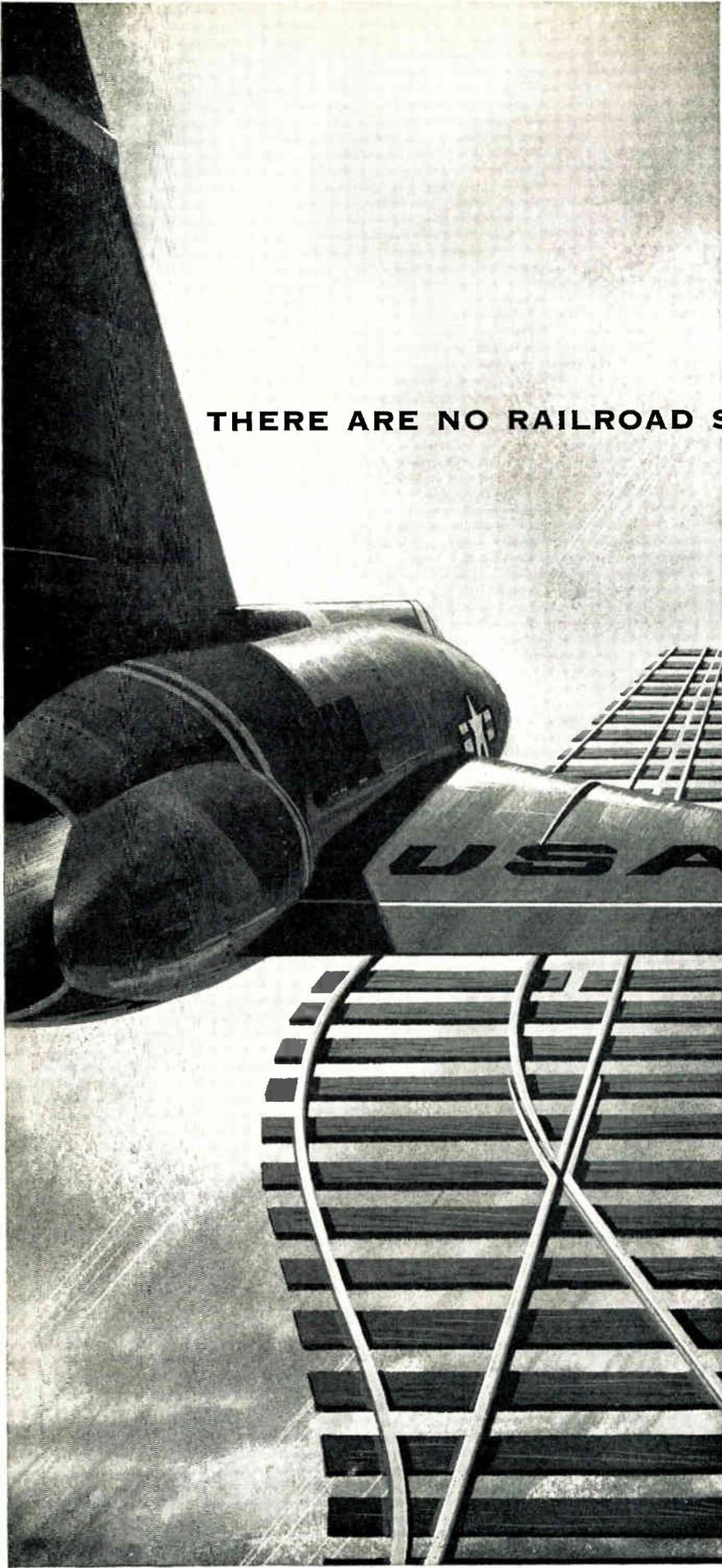
RESULT: Reliable signal and continuous transmission for an incredible life span.

Write for new Packard Bell Electronics facility brochure...just off the press.



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When railroad traffic gets too heavy or complex, a train will be switched onto a siding until the tracks are clear. However, high-speed aircraft in busy traffic patterns over metropolitan areas cannot wait . . .

THERE ARE NO RAILROAD SIDINGS IN THE SKY

Hughes, a leader in the development of highly advanced data processing techniques, is doing research on air traffic control systems which can continuously monitor a high volume of air traffic and precisely control each individual airplane. With this system the time delays, inefficiency and inaccuracies present in manual control are practically eliminated.

Air traffic control represents only one of many projects underway. Confidential new projects . . . many infinitely more complex . . . promise an unlimited future to scientists and engineers in the Hughes Ground Systems Division.

If your experience is in electronic circuit design, logical design, electronic packaging, and radar systems, we invite you to investigate these outstanding opportunities.

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Hughes Aircraft Co., Culver City, California

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SOUTHERN CALIFORNIA?
YOU ARE INVITED
TO VISIT HUGHES.



Dr. Leslie W. Ball

Dr. Ball is a leading scientist devoted to reliability efforts and programs, and is a prominent consultant to top management in aircraft and missile industries. His independent evaluation of the "HELPR" Program follows:

In 1940 Winston Churchill stirred the conscience of American industry by his confident plea . . . "Give us the tools and we will finish the job." Our industry did respond magnificently and gave the Allied Armed Forces the tools with which the immediate job of destroying the dictatorships was finished.

But we know only too well that neither in peaceful competition nor in military defence can industry rest upon past achievements. New tasks of staggering magnitude always will arise to challenge the imagination and guts of our industrial management and to challenge the thinking and action abilities of our design, production, test, and quality control engineers.

Today, a new challenge to managers and engineers is stark in its clarity, and voracious in its demand for action. Clearly, the marriage between the science of electronics and the science of systems engineering has been, and will continue to be prolific in the procreation of complex equipments that increase the productivity of peace-time industry and radically improve the potential effectiveness of our military defence. It is evident further that many top managements have seized upon these opportunities.

In those industries that are adopting automation, and throughout our defence program, decisions have been taken to entrust the future to the abilities of complex requirements. In the case of some equipments it is merely the financial future of a single company that has been committed. In the case of military equip-

The State of the Art:

NEW TOOLS ARE HERE TO UPGRADE RELIABILITY NOW!

Dr. Leslie W. Ball

ment, our future in the world has been committed to the belief that complex weapon systems based on electronic equipment can be made to perform adequately in all respects.

DRAMATIC PERFORMANCE

In the first flush of excitement over the potentialities of radically new equipments, the abilities and energies of both managers and engineers usually have been concentrated on obtaining dramatic performance. In multitudes of offices and laboratories throughout the nation, equipment performance abilities worked out on the drawing board or predicted by electronic computers have been received with enthusiasm and adopted as target. As time has brought the conversion of calculations and predictions into actual hardware, it has become painfully evident that the ominous forebodings of a small band of pioneers, now known as "Reliability Engineers," were not without substance.

Much has been written about the fundamental relationships between unreliability and complexity in electronic equipments and about the incompatibility of extracting the last ounce of high performance out of equipments that must be reliable under conditions of high environmental stress and limited maintenance skill. So, today, the managers, upon whose shoulders rests the heavy responsibility for having taken decisions to commit their companies or their defence programs to complex high performance systems, must undertake an agonizing reappraisal of their electronic equipments within these systems.

BLUNT QUESTION

The blunt question that faces them is, "Must we retreat to simpler, lower performance devices, or is there an immediate line of reliability upgrading action whose cost is within reason and whose effectiveness is beyond question?"

The answer to this vital question is not to be found in academic discussions of the abstractions of reliability nor in the ivory towers of higher mathematics. It is to be found in the testing and analytical laboratories where countless analyses have been made of equipments that have failed in service or in which failure has been produced by simulation in the laboratory of service stresses.

The answer to the question "Must we retreat?" is a confident "No, we need not retreat. There is a path to electronic equipment reliability whose cost is within reason and whose effectiveness can be assured."

To define the path to reliability specifically and clearly, we must first express the underlying causes of equipment unreliability in engineering management terms.

Both technological advances and management action have provided the systems engineers with the tools that they need to work out complex system performance, and to generate sound preliminary designs. Unfortunately, in the electronic industry the detail designer, the production engineer, the test engineer, and the quality control engineer have not been provided with all the tools that they need to follow through from a preliminary system

State of the Art: NEW TOOLS ARE

design to delivery of a completely reliable finished product.

A FUNDAMENTAL CAUSE OF ELECTRONIC UNRELIABILITY IN TODAY'S ELECTRONIC EQUIPMENT IS THAT DESIGNERS ARE REQUIRED TO DESIGN CIRCUITS, QUALITY CONTROL ENGINEERS ARE REQUIRED TO CONTROL CONFORMANCE, AND TEST ENGINEERS ARE REQUIRED TO PLAN EVALUATION PROGRAMS WITHOUT MUCH OF THE BASIC HANDBOOK TYPE OF DATA ON WHICH THE RELIABILITY OF ALL OTHER TYPES OF ENGINEERING EQUIPMENT DEPENDS.

To illustrate this deficiency, suppose that the management of an aircraft company had made excellent provision to obtain systems engineering and a preliminary design for a new super performance complex rocket-powered plane and then assigned the task of detail design, quality control and test planning to their staff. But, with the provision that they would be denied anything approaching complete knowledge of the strength, endurance and failure characteristics of the materials and components of which the system was to be built.

The opinion of their customer and of other managers would be that this was a preposterous way to manage an engineering project, and unreliability in the product would be a foregone conclusion. *And yet, inadequacy in the organized knowledge of strength, endurance and failure of component parts is characteristic of almost all military and industrial electronic equipment projects.*

Management thinking about the provisions that they must make for providing their staffs with adequate knowledge of electronic component parts can be helped greatly by the following definition: "Any equipment component or part is inherently unreliable until every mode of failure is known, understood, measured and controlled."*

Throughout the mechanical engineering industries the truth and significance of this definition is accepted as self evident. Moreover, large quantities of organized knowledge on understanding, measurement and control of every mode of failure of mechanical parts are contained in engineering handbooks. For example, in the case of reciprocating machinery unreliability caused by the phenomena of fatigue is no longer tolerated because an understanding of the design and manufacturing factors that can per-

mit fatigue to occur, together with tables and curves showing the relationship between stress level and number of cycles to failure and established quality control procedures, are all available in the form of handbook data.

URGENT NEED

The problem of the component part failures that cause unreliability in electronic equipment is analogous to fatigue failure in metal parts, but there are at least two important differences, each of which makes the need for handbook data more urgent.

First, the stresses imposed upon the part are more diverse. That is, the effects of placing an electronic component part in a complex circuit require rather more analysis and more types of data than required for the determination of the stresses on a part in a mechanical structure.

Second, the number of modes of failure resulting from variety in the materials and methods of construction of electronic parts are much greater than for purely structural parts that can fail only by such well known phenomena as tensile fracture.

Third, whereas mechanical parts are characterized by long service and laboratory testing histories that have resulted in well organized and widely published handbook data, electronic parts have either not existed long enough or have not been studied intensively enough for such handbook data to be available.

The contrast between disciplines in electronic and mechanical engineering is obvious. In the electronic industry, management and engineers must undertake immediate and imaginative action to generate and distribute handbook type data. This would embrace the understanding, measurement and control of all types of electronic component parts whose failure contributes to unreliability.

We may assume that this statement is beyond question, and the real issue for management and engineers to decide is "WHAT IS THE FASTEST, MOST ECONOMICAL AND MOST EFFECTIVE METHOD TO GENERATE HANDBOOK DATA?" The possibility of each company being dependent only on its own component part testing programs must be ruled out, because the cost is prohibitive and the time taken to get the job done on limited testing facilities would be hopelessly excessive.

IMPORTANT PECULIARITY

In this regard a very important peculiarity of electronic component parts must be recognized. This peculiarity may be called "the existence of minority groups

in the manufactured population." For example, consider a population of one thousand capacitors produced by a particular manufacturer. From the point of view of performance, all these capacitors will belong to a single homogeneous population, but, from the point of view of reliability, the population is by no means homogeneous.

If the thousand capacitors were subjected to circuit stresses and to external environmental stresses, some of them would become "early failures" and others would become "random failures." Suppose that out of the thousand, ten are potentially early failures and another forty are potentially random failures. If a test sample of, say, six capacitors were chosen from among the nine hundred and fifty that will fail by wear out, the results of this test program would be completely useless and dangerously misleading because they would tell nothing of the unreliability that would be caused by the ten early and the forty random failures.

It follows that it is vitally important to subject the whole population of one thousand capacitors to an ambitious test program that includes statistical design of experiments, detailed analysis of failures, and statistical interpretation of results.

Even in equipments where a high failure rate of, say, one part in a thousand can be tolerated, the test sample size should consist of several hundred parts. In equipments where failure rates of only one in a hundred thousand can be tolerated, the sample size and consequently, the cost of the test program must be increased correspondingly.

IT IS THEREFORE APPARENT THAT EVEN LARGE ELECTRONIC EQUIPMENT COMPANIES CANNOT AFFORD TO UNDERTAKE TEST PROGRAMS TO GENERATE ALL THE KNOWLEDGE OF ELECTRONIC COMPONENT PARTS THAT THEY REQUIRE, AND THAT THEY MUST SUPPLEMENT THEIR OWN WORK BY PARTICIPATION IN A PROGRAM SUBSCRIBED TO BY A LARGE GROUP OF COMPANIES.

A second cost aspect is that the recording of test data by technicians reading indicating instruments is incompatible with the enormous number of readings that must be made to generate the amount and accuracy of data required for handbook purposes. Consequently, the principle of automation must be applied to the recording of data during component part testing programs.

Both the above cost considerations lead to the conclusion that electronic equipment manufacturers can reduce the cost of reliability programs radically by sub-

*"Management Use of Laboratory Testing to Achieve Reliability." A Paper presented to the University of California at Los Angeles Engineering Management Symposium in January 1955 by Leslie W. Ball.

HERE TO UPGRADE RELIABILITY NOW!

scription to testing programs performed in a competent laboratory, where sample sizes of thousands can be handled and where data can be recorded automatically.

STEADY FLOW

The general relationship between such a laboratory and the subscriber to such a program must go far beyond the mere provision of testing facilities and automation instrumentation. The laboratory must provide the subscriber with a *steady flow* of organized knowledge that makes it possible for the subscriber to diffuse throughout his whole organization "knowledge, understanding, measurement and control" of all the modes of failure of the electronic component parts used in the company's products.

While the above statement summarizes the service that must be rendered and leaves no doubt that the benefits to be gained by subscription to this laboratory program will far exceed the cost to the subscriber, and while the brochure offered by the "HELPR" program provides detailed information to the individual engineer, it is to be expected that the subscriber's management will want a more specific summary of what will come out of the testing program, and of the identity of the departments within his organization that will use the output, and of the ways in which they will use it.

On the basis of work already done in similar, but much more restricted testing programs, the following five specific types of output and six specific types of application by subscriber's personnel may be identified.

FAILURE RATE CURVE — CIRCUIT STRESS

For each type of component part it is generally recognised that some particular circuit stress is of primary importance in regard to failure rate and reliability. For example, in the case of capacitors, the voltage across the capacitor is accepted as the primary circuit stress. Test programs for each type of part will result in a family of curves in which failure rate is the ordinate, time is the abscissa, and one curve is plotted for each value of the primary circuit stress.

In general, the curves will have a characteristic shape which in many cases will be the familiar three part curve showing early, random and wearout failures. The corresponding time intervals may be called the "infant mortality screening period," "service period" and "over-age period." Quite apart from numerical values of the failure rates, knowledge of the shape of these curves and of the duration of the infant mortality screening, service and over-age periods are vital to intelligent decisions on quality control and preventative maintenance requirements.

RELIABILITY INDICES

For those component parts that show a "random" failure rate in the service period, a single value for failure rate index may be established. In other cases an average value in the service range may be selected as characteristic of the part. All these values could be prepared in summary tabulated form suitable for use as reliability indices during the precalculation of the reliability to be expected from any new type of electronic equipment.

FAILURE RATE CURVES — ENVIRONMENTAL STRESS

It is well known that the failure rate produced by a primary circuit stress can be greatly modified by the environment in which the part operates. For example, in the case of capacitors the ambient temperature will have a major effect upon the failure rates produced at any given voltage.

It is recognized further that, when environmental stress becomes severe, entirely new modes of failure not directly related to the circuit stress are produced and that these new modes of failure will have their own characteristic failure rates. The test program should produce curves showing both the modification of circuit stress failure rates with environments, such as temperature of vibration intensity, and other curves showing failure rates produced by the environment in the absence of circuit stress.

MODE OF FAILURE ANALYSES

If the laboratory's service to the subscriber finished with the production and mathematical analysis of failures, the most constructive and universally applicable reliability upgrading information would be lost. The laboratory service should include detailed disassembly and analysis of the physical, chemical and mechanical modes of failure of each type of component part. The results and interpretation of these analyses will be available to the subscriber and to the manufacturer of the part.

CORRELATION OF FAILURE RATES WITH DESK ANALYSES

Obviously, test programs must be performed upon component parts bought from particular vendors, and, consequently, test results presented under the above four categories would be specific to each vendor. However, it would be chronically wasteful to limit the output of the test program simply to the products of the vendor supplying test items.

By careful analysis of the design characteristics of the parts, combined with knowledge of the manufacturing processes and quality controls used by the vendor, it is possible to establish extreme-

ly valuable correlations between failure rates and design and manufacturing factors. These correlations are universally applicable to the products of all vendors. The laboratory should seek to establish such correlations and will present the results in the form of technical reports to the subscribers.

USE OF TEST RESULTS BY SUBSCRIBER'S PURCHASING DEPARTMENT

The results of the test programs will be of direct benefit to the purchasing departments in the selection of component part vendors. Even when a particular vendor's parts have not been included in the program, the subscriber's purchasing department would be able to make use of the test results in evaluating the materials and process controls used by the supplier.

BY SUBSCRIBER'S PRELIMINARY DESIGN DEPARTMENT

Whenever a new system or equipment is offered in a preliminary design proposal, it is a good management practice to require a precalculation of the expected reliability of the equipment if it is to be built from state of the art component parts. Although at this time the exact number of parts and the circuit stresses that will be imposed upon them are unknown, certain assumptions can be made based on similarities between previous equipment and proposed equipment. By combining these assumptions with reliability indices for the component parts, a precalculation can be made.

BY SUBSCRIBER'S DESIGNERS

During the design phase, decisions must be made on the general degree of part derating and on the amount of money, space and weight that will be allowed for reduction of environmental stresses. The test program would provide specific numerical values to guide both the amount of action needed and to indicate which changes will be most effective.

BY SUBSCRIBER'S PARTS APPLICATION ENGINEERS

It is well known that the failure rate for a given part depends greatly on the circuit stresses imposed upon it and that, in some cases, circuit stresses that are of little importance to the performance of the equipment are of major importance to its reliability. The test program should provide specific data for identifying the nature and magnitude of circuit stresses that must be considered by the part application engineer in determining the suitability of a particular part for a particular application.

BY SUBSCRIBER'S TEST ENGINEERS

Each electronic equipment manufacturer must make use of a great deal of testing in his own plant for both design and quality control purposes. For example, in the case of custom parts, such as special potentiometers, the subscriber must write his own specification and specify his own test methods. The results of the "HELPR" laboratory program would be valuable in indicating which tests are likely to be most effective for a particular type of component, and to give some significance to them when the size of the test sample has to be very small.

BY SUBSCRIBER'S QUALITY CONTROL ENGINEERS

It is generally true that the reliability of electronic equipment can be greatly improved by much more widespread use of non-destructive testing methods on the manufacturer's receiving inspection line and by cautious use of what is now called production environmental testing. The "HELPR" laboratory program would pro-

vide clear indications of which types of non-destructive testing can be most effective and information that should be sought by non-destructive methods.

In the case of production environmental testing, if this is done without the guidance of comprehensive knowledge of the shape of the failure rate curves and the duration of the infant mortality period, there is a very real danger that the environments will increase rather than decrease the unreliability of the equipment. However, with the type of information that the central laboratory program would provide, major improvements in reliability from carefully selected and controlled production environmental tests can be confidently expected.

* * *

The net result of all the above outputs from a central laboratory program and the application of these results by the subscribers could be momentous. Whereas, without a major program for generating handbook data on component parts, the electronic industry may have to retreat from the degree of performance and sophistication in designs now going into

production. *With the proposed program, the horizons for the electronic industry become unlimited.*

Certainly in the case of industrial automation, the difference between a record of unreliability and a record of reliability will not only be a major factor in the success or failure of individual companies, but it will be the difference between a vast new surge of growth for the electronic industry as a whole, and a rapid saturation and ensuing stagnation if the market is limited to only those applications that can tolerate unreliability.

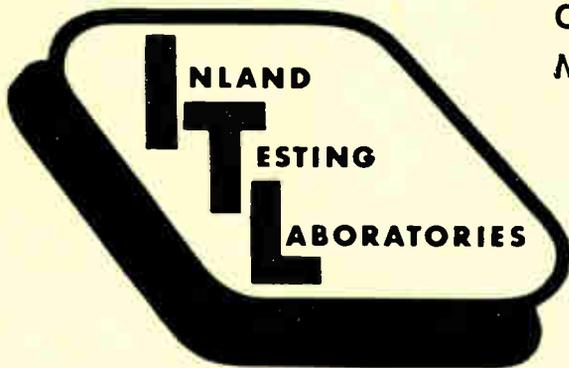
In summary, the new branch of the engineering profession that we call reliability engineers have done an outstanding job in recognizing the nature of the problem, in analyzing its causes, and in delineating the path that must be taken to overcome the problem.

It is now up to the managers and the responsible engineers throughout the electronic industry to decide whether the American Electronic Industry will advance rapidly and lead the world in producing successful complex equipment, or whether we will hesitate and fall upon the burden of unreliability.

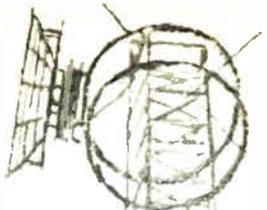
The "HELPR" PROGRAM

WIRE OR WRITE TODAY for the 52-page book, "The Handbook of Electronic Parts Reliability Program"—A Detailed, Systematic Approach. There is no obligation, just ask for the "HELPR" Book. Address:

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NEW!

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Here is a new 10 page Bulletin prepared especially to provide answers to your specific questions on—

- “What type tower do I need?”
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Describes design features you should look for in selecting a tower.
 Contains pictorial description of best tower fabrication methods and procedures leading to simplified erection.

Gives you time saving, step-by-step procedure for obtaining the tower designed to best suit your specific requirements.

Call or write today for Bulletin 2538.



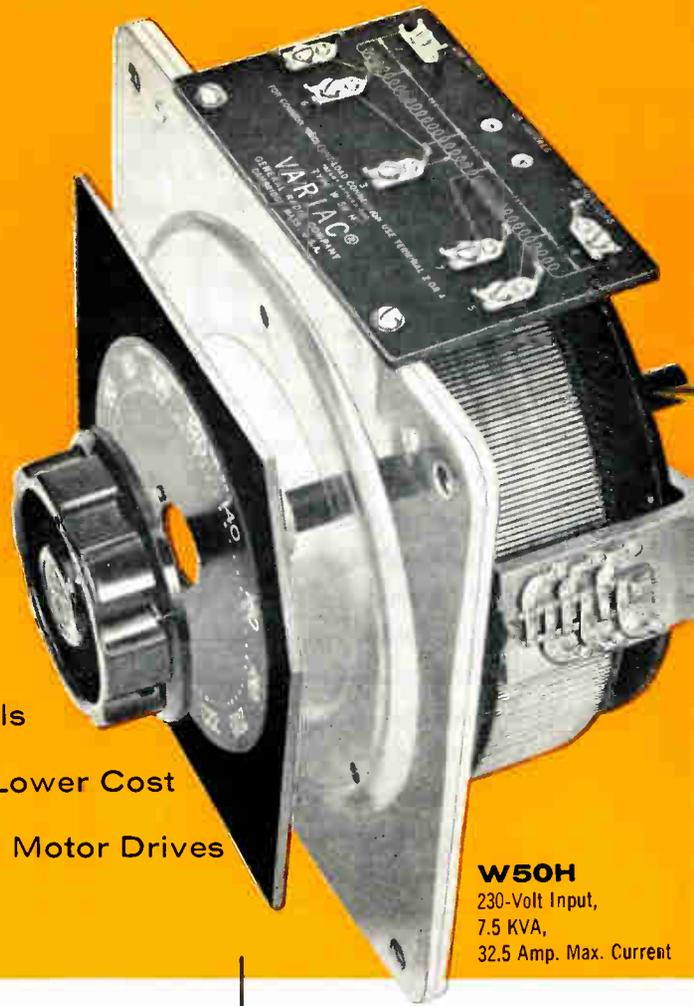
BLAW-KNOX COMPANY
Blaw-Knox Equipment Division
Pittsburgh 38, Pennsylvania

MICROWAVE TOWERS
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- New Designs • Ratings up 25%
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- UL Approved • Optional Ball Bearings and Motor Drives
- 5 KVA to 26 KVA Ratings



W50H
230-Volt Input,
7.5 KVA,
32.5 Amp. Max. Current

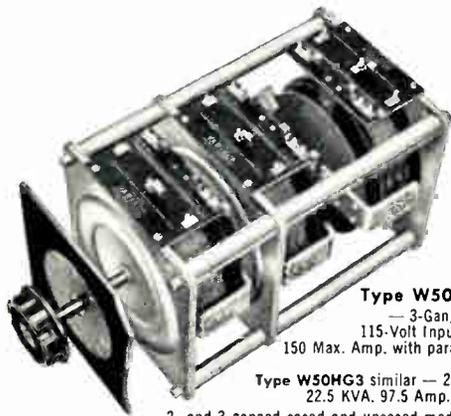
The newly designed Types W50 and W50H VARIAC Series replaces the popular Types 50A and 50B with many electrical and mechanical improvements.

Current ratings for the new 115-volt and 230-volt models are 50 and 25 amperes, against 40 and 20 for the older types. A built-in protector prevents damage from *sustained* overloads exceeding 160% of rating. This extra safety feature is available when the normal load fusing or breaker is inoperative.

Type W50 similar except for number of terminals and dial. 115-Volt Input, 5.75 KVA, 50 Amp. Max. Current.

Type 50H VARIACs are equipped with 7 combination screw-solder terminals. Can be used on either 230- or 115-volt lines. Type W50's have 5 terminals. Also available in CASED models Types W50HM and W50H.

For Complete Data write for Supplement to Variac Bulletin "O"



Type W50G3

— 3-Gang Type W50's,
115-Volt Input, 17.25 KVA,
150 Max. Amp. with parallel windings

Type W50HG3 similar — 230-Volt Input,
22.5 KVA, 97.5 Amp. Max. Current

2- and 3-ganged cased and uncased models are available for parallel and series winding connections and for single and multiple phase operation. Input voltages from 115 to 460 volts.

TYPE W50 VARIACS

	50 Amperes 115-Volt Models		32.5 Amperes 230-Volt Models	
	W50 Uncased	W50M Cased	W50H Uncased	W50HM Cased
Input Voltage	115	115	230*	230*
Load Rating (kva)	5.75	5.2	7.5	7.1
Output Voltage	0-135	0-135	0-270	0-270
Rated Current (amp)	50	40	25	20
Maximum Current (amp)	50	45	32.5	31
No-Load Loss at 60 c. (w)	50	50	50	50
Dial Calibrations ^c	0-115 0-135	0-115 0-135	0-230 0-270	0-230 0-270
Angle of Rotation (deg.)	320	320	320	320
No. Turns on Winding	190	190	298	298
D-C Resistance of Winding (Ω)	.075	.075	.3	.3
Driving Torque (oz.-in.)	200-400	200-400	200-400	200-400
Replacement Brushes	\$5.00 per set	\$5.00 per set	\$5.00 per set	\$5.00 per set
Net Weight (lbs.)	50	57	53	60
Code Word	GATAL	GATER	NITAL	NITER
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ELECTRONIC INDUSTRIES & TELE-TECH

ROBERT E. McKENNA, Publisher

• BERNARD F. OSBAHR, Editor

Computer "Bread-boards"

Laboratory "bread-boards" date back to the days of the one-tube radio receiver. They are in use today in countless electronic laboratories to test and prove circuit operating characteristics which cannot be obtained in any other manner. Now, however, Bell Telephone Laboratories tell us of a short-cut.

In their important research in compressing TV and speech signals, so that more programs can be transmitted over communication circuits, a vast number of circuits and coding combinations had to be examined in order to select the most efficient. Ordinarily this would have meant building a large number of circuit "bread-boards." Instead of setting up this costly and time-consuming mass of experimental equipment, BTL went to an electronic computer for aid. Various experimental systems were reduced to the IBM-type of punched card and were evaluated by actually examining electrically the synthesized output of the IBM computer when different variables were introduced.

To illustrate this laboratory short-cut, Dr. Axel Jensen, of BTL, speaking before the NARTB Engineering Conference in Chicago on coding and decoding speech messages, made an interesting demonstration. He let his listeners hear simple sentences which had been recorded on magnetic tape. These were then coded into IBM digital tape and then transformed by an IBM 620 into cards. These cards, in turn, were fed to an IBM 704, into tape, into a translator and finally placed on a magnetic tape which, when played, could be compared with the original speech. This comparison was made by Dr. Jensen's Chicago audience.

Consider this amazing string of conversions—starting with ordinary speech, changing it into an 18-in. high stack of punched cards, then reconstructing it to get reproduced speech of good quality! It's an important step ahead that will open new avenues to electronic researchers!

S.I.C. Now?

Next month we expect the Bureau of the Budget to issue a new Standard Industrial Classification manual. This will be the first complete revision of the manual since it was issued in November 1946. The SIC manual represents an effort on the part of government to catalog all American manufacturing industry on the basis of four digit numerical codes.

Unfortunately for the Electronic Industries this new SIC listing will not be particularly helpful although it may be somewhat better than the 1946 listings. The committees involved have clung to an outmoded view that electronic equipment is essentially electrical equipment. They have thus sought to combine two immense industries under the single code group number 36. This results in a great deal of ambiguity in using SIC numbers because it turns out that many industries can be logically considered as falling into two or more classifications.

These SIC codes are particularly important because they have a major bearing on government statistics, which in turn, are frequently referred to as an aid in market research for industry. They are also a factor in budget considerations for military expenditures and other government activities.

Our interest in SIC coding was aroused when we found reference to it in the electronic publishing field. We believe the SIC coding system to be a good idea, but to be effective it must also portray the true conditions of the industry. This it did not do in the 1946 listings and the indications are that in 1957 it will again fall far short of the mark.

We believe all manufacturers would do well to make SIC an important part of their business and take immediate steps organizing a formulating group to bring the SIC listings into a truer industry focus.

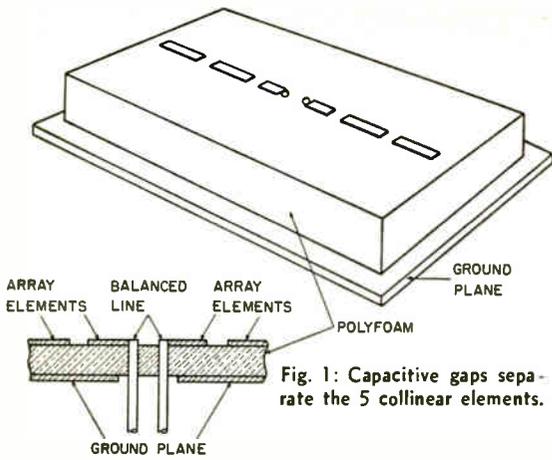


Fig. 1: Capacitive gaps separate the 5 collinear elements.

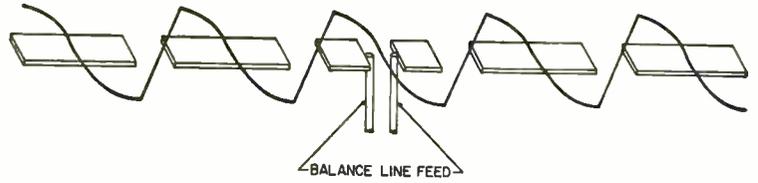


Fig. 2: Voltage distribution for the collinear array shown in Fig. 1.

Manufacturing problems of tolerance and complex operating problems of energizing numerous radiating elements become materially reduced by using etching techniques. The process will make possible flush-mounted microwave aircraft antennas.

Etching Simplifies Antenna Design

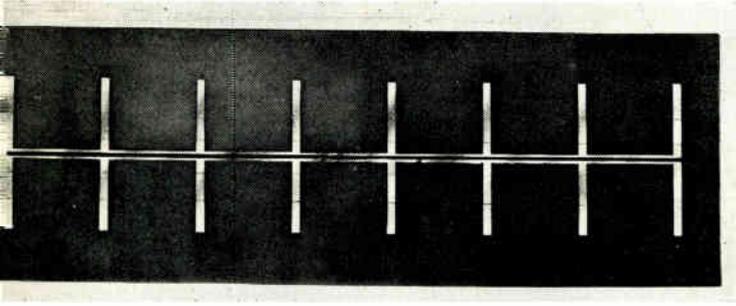


Fig. 3: A forty-element capacitively coupled collinear stripline.

By **JAMES A. McDONOUGH,**
ROBERT G. MALECK,
and **JOHN KOWALSKY**

J. A. McDonough



R. G. Maleck



J. Kowalsky



THE use of etching techniques has made possible the construction of antennas at microwave frequencies that were not previously practical to fabricate because of the complexity of energizing a large number of radiating elements and the problem of maintaining the required tolerances.

Recent work in printed-antennas has been with end-fire arrays and a new type of broadside array that appears practical for use at microwave frequencies.

The broadside array recently developed is the capacitively coupled collinear array. This consists of a series of collinear electrical half-wave elements, separated by capacitive gaps (Fig. 1). This type of radiating structure has the strip elements bonded to, or printed on, a dielectric sheet that is supported by a low-dielectric-constant foam over a ground plane.

The strip elements are energized by a center feed consisting of a parallel 2-wire balanced transmission line and a balanced-to-unbalanced transformer.

By adjusting the coupling (spacing) between the elements and element length, a phase reversal in the voltage distribution along the antenna at each gap is obtained (Fig. 2). A complete phase reversal at each gap makes each element act as a half-wave radiator with a current distribution in phase with the other elements. The array of elements would then have a broadside radiation pattern.

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Pattern Improvement

To improve patterns, illumination of the elements along the array was tapered. This was done by probing with a current loop and adjusting the gap size to provide the desired coupling.

Fig. 5 shows the relative magnitude of the current distribution at 2900 MC and the E-plane radiation pattern. The peaks at the gaps indicate a phase reversal. When the array was adjusted so a peak did not occur across a gap, serious radiation-pattern deterioration resulted.

To construct a large printed broadside array, a 40-element capacitively coupled array was designed and fabricated at S-band (Fig. 3). The array was 21 1/4 in. by 4 5/8 in. It was printed on epoxy bonded Fiberglass FF-91, which was 1/16 in. thick.

Each column of collinear elements was fed in phase from the parallel 2-wire transmission line. The array was spaced 3/4 in. over a ground plane, and radiation patterns were taken.

The results are summarized in Fig. 4.

Note that the physical length of each element is close to 1/4 wavelength, although electrically each is a half-wavelength.

Rhombic Antennas

The investigation of end-fire arrays started with a design for a printed rhombic antenna. In a typical configuration (Fig. 6), the antenna was printed on a sheet of teflon glass and mounted above a ground plane.

The rhombic was energized at the left end with a parallel 2-wire feed. A resistance-card load was placed at the right end. Each leg was approx. 7 in. long. It was tested at S-band. The standard design formulas were found to be directly applicable to their printed counterparts. The beamwidths, beam pointing, and side lobes also were essentially the same as those obtained from regular rhombic antennas.

The only compensation necessary was to change the element length to correct for the slower propagation velocity.

Other configurations consisted of rhombic antennas

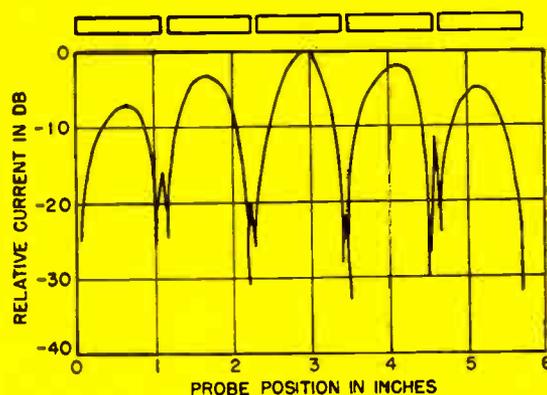
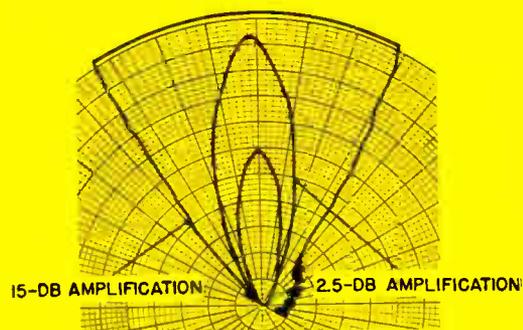
Fig. 4: Radiation characteristics of capacitively coupled collinear array.

FREQUENCY (MC)	HALF-POWER BEAMWIDTH (DEGREES)		SIDE-LOBE LEVEL (DB)	
	E- PLANE	H- PLANE	E- PLANE	H- PLANE
2500	50	13	-15*	-13.0
2550	-	13	-	-19.0
2600	48	13	-15*	-19.0
2650	-	13	-	-18.7
2700	46	12	-15*	-14.5

* SMALLER THAN

DIMENSIONS OF ARRAY :

ELEMENT LENGTH: 0.906 INCH
 GAP SPACING: 0.016 INCH
 ELEMENT WIDTH: 0.228 INCH
 SPACING ABOVE GROUND PLANE: 3/4 INCH
 SPACING BETWEEN COLUMNS: 3.0 INCHES



FREQUENCY = 2900 MC

Fig. 5 (above) : E-plane radiation pattern & current distribution for Fig. 1.

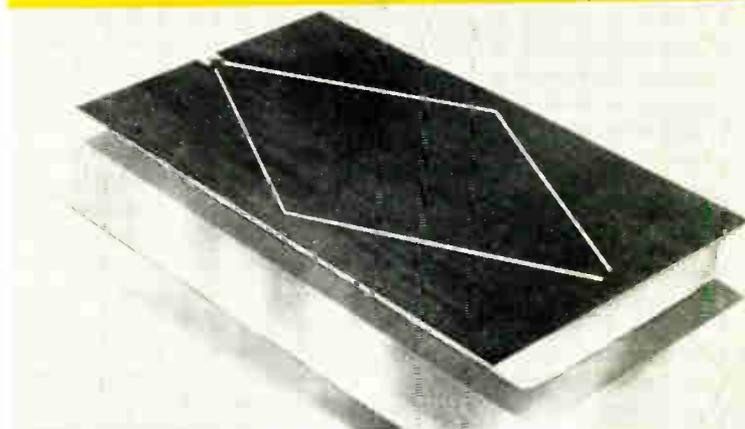


Fig. 6 (above) : Rhombic, printed on teflon, is used for end-fire arrays.

arrayed end to end. Instead of a load, a second rhombic was connected, and the load placed at the end of the second.

An array of 3 end to end antennas was also tried. The results are summarized in Fig. 10. The data indicate that this type of arraying should not include more than 2 antennas since the azimuth plane-half-power beamwidth was essentially the same for the 2-element and 3-element arrays.

Another configuration consisted of 2 coplanar rhombics (Fig. 8). The outer antenna was energized, but the inner was a parasitic element having an adjustable length of shorted 2-wire transmission line.

If the current distribution along the rhombic elements could be controlled or modified, improved characteristics might be obtained. By moving the adjustable short, some modification was obtained.

The elevation pointing of the beam was changed

Antenna Design (Continued)

from 23° to 26°, and the elevation-plane half power beamwidth was changed from 24° to 22°.

The side-lobe level could be varied about 2 db. By printing a second parasitic rhombic outside the energized antenna, or by energizing more than one at a time, a greater variation may be obtained.

Yagi Antennas

Another end-fire array was the printed Yagi. Practically any existing Yagi design can be scaled to the proper frequency. By shortening the elements and spacings by a factor corresponding to the slower velocity of propagation, results are obtained that are essentially the same as those obtained from the original design.

The velocity factor for Teflon glass GB-112T laminate (0.020 in. thick) is about 0.9 at S-band. The feeding dipole element or even a folded dipole can be printed on the same dielectric sheet that contains the parasitic elements.

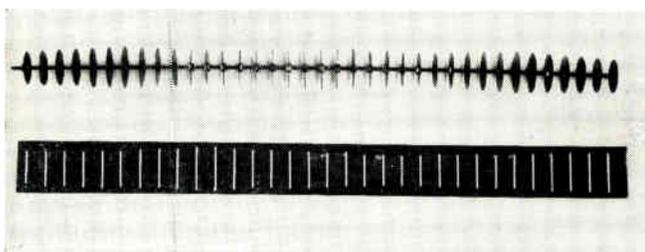


Fig. 7: Cigar and ladder antennas, 8 wavelengths at S-band design.

Ladder Antenna

The ladder antenna is similar in appearance to an extended Yagi. The design has been developed from the theory proposed by Simon and Weill: by a periodic variation or modulation of the characteristics of a surface wave-transmission line, it is possible to construct end-fire antennas that are many wavelengths long and that have higher gain than the usual upper limit of about 16 db obtained with conventional Yagi, rhombic, and dielectric-rod antennas.

Surface-wave antennas consist essentially of a transmission line with a phase velocity less than the velocity of light. If the characteristics of this line are varied, there is a transfer of energy from the surface-wave mode to the radiation mode.

In the Simon-Weill antenna or "cigar antenna," a metal rod loaded with metal disks is used as the radiating structure (Fig. 7, top). The diameters of the disks were modulated as a function of position along the rod, thus modulating the phase velocity along the array.

The printed counterpart of this antenna consists of a series of metal strips etched on a dielectric sheet (Fig. 7, bottom).

In general, the elements have a length between 0.3 and 0.4 wavelength, and the spacings are about 0.2 to 0.3 wavelength. Spacings as close as 0.05 wavelength have been used for the first few elements, and lengths as short as 0.15 wavelength on end tapers with good results.

These arrays were energized with a dipole-and-re-

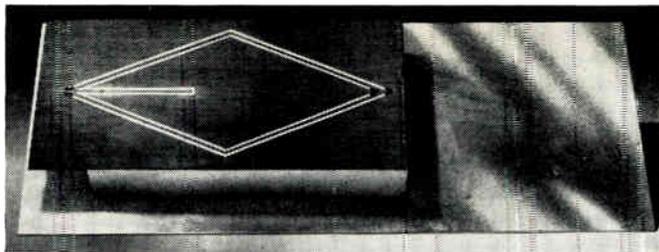


Fig. 8: Coplanar rhombics—outer is energized, inner is parasitic.

flector assembly and were found to be usable over a band of at least 20%. The performance of a 16-wavelength ladder antenna consisting of 88 elements is summarized in Fig. 9.

This investigation indicates the usefulness of etching techniques in adapting lower-frequency antennas for use in the microwave region and in constructing new types of arrays and configurations that were not previously practical to fabricate.

FREQUENCY (MC)	HALF-POWER BEAMWIDTH (DEGREES)		SIDE-LOBE LEVEL (DB)		INPUT SWR
2000	23	22	8	9	2.3
2100	22	21	10	8	3.0
2200	18	22	10.5	9	3.9
2300	19	22	11.5	12	2.2
2400	18	20	14	17	1.7
2500	19	17	15.5	19	1.8
2600	18	18	16	19	2.3
2700	17	21	21	20	2.3
2800	18	18	22.5	19	1.8
2900	18	22	19	15	2.2
2950	19	24	15	6.5	2.6
	E- PLANE	H- PLANE	E- PLANE	H- PLANE	

Fig. 9 (above): Performance of 16-wavelength ladder antenna. Dipole is spaced 1 in. from the first element.

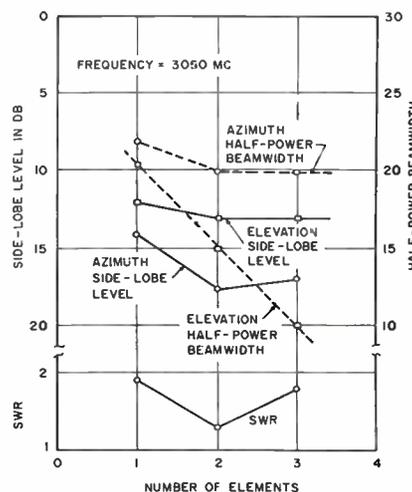


Fig. 10 (left): The performance of 3 end to end rhombics.

Only a small portion of this field has been investigated, but the applicability of these concepts to flush-mounted aircraft antennas and low-cost lightweight arrays indicates that more effort will be directed along these lines.

Acknowledgments

The work described in this article has been sponsored by the U. S. Army Signal Corps Laboratories, Ft. Monmouth, N. J.; a special note of thanks is due to Mr. Leonard Hatkin of that organization for his contributions to this study. The contributions of Dr. Eugene Fubini and Mr. Winfield Fromm and the laboratory assistance of Mr. Edward Shields are gratefully acknowledged.

References

1. E. G. Fubini, J. A. McDonough and R. G. Malech, "Strip-line Radiators," 1955 I.R.E. Convention Record, Part 1, page 51.

Avalanche Flow Line Analysis

The author extends his "Flow Line Analysis"² technique to include avalanche. Here is a significant new analytical tool for the engineer.



By RICHARD B. HURLEY
Senior Research Engineer
Convair, Pomona, Calif.

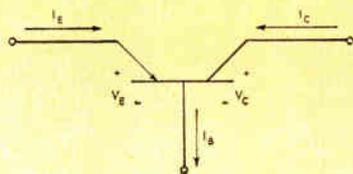


Fig. 1: PNP schematic—symmetrical current and voltage polarities.

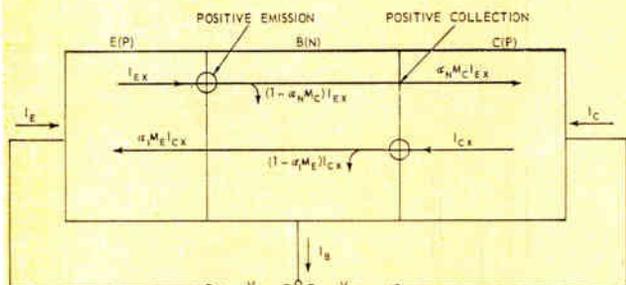


Fig. 2: Triode Flow Lines (PNP model).

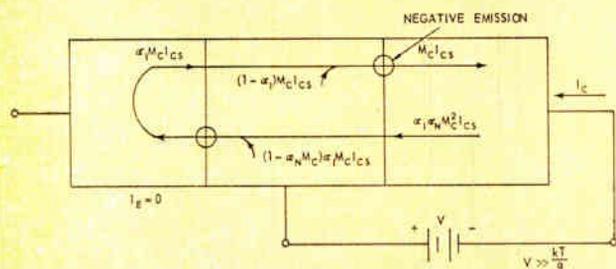


Fig. 3: Case I Flow Lines.

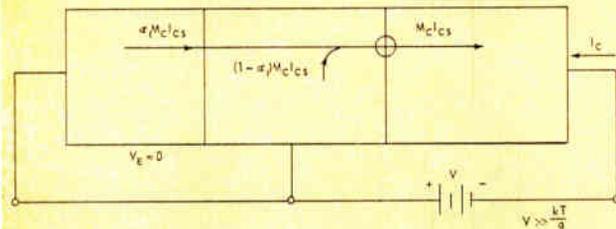


Fig. 4: Case II Flow Lines.

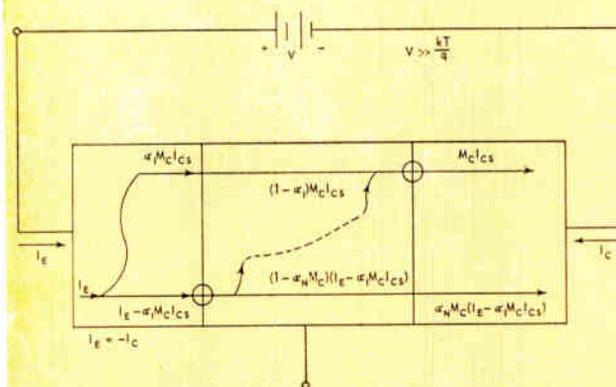


Fig. 5: Case III Flow Lines.

A TECHNIQUE of analyzing junction transistors for "large" signals (assuming constant alphas) has been established through the work of Ebers and Moll.¹ A particular method of "visualizing," the Ebers and Moll equations through "flow line analysis" has also been developed.² As originally presented, these equations and concepts, however, do not explicitly incorporate the effects of avalanche multiplication at collecting junctions.

Avalanche

Papers on avalanche multiplication in junction transistors are available in the literature.^{3, 4} In these introductory articles, it is shown how the transistor alphas are effectively multiplied by the avalanche effects under high junction voltages. Our purpose here is to indicate how avalanche multiplication can be included, formally, in the equations of Ebers and Moll and, in turn, to show how "flow line" diagrams may be extended in scope to cover avalanche. Avalanche exists in many currently available junction transistors, and in the future, certain transistors designed to emphasize avalanche multiplication may be of commercial importance.^{3, 4}

Flow Analysis (continued)

Equations

Ebers and Moll's equations, for symmetrically defined voltages and currents (Fig. 1), can be written in two equivalent forms. The "current" forms are:

$$I_E = I_{EO} (\epsilon^{qV_E/kT} - 1) - \alpha_I I_C, \quad (1)$$

and

$$I_C = I_{CO} (\epsilon^{qV_C/kT} - 1) - \alpha_N I_E, \quad (2)$$

where the symbols used are conventional. The equivalent "voltage" forms are

$$I_E = I_{ES} (\epsilon^{qV_E/kT} - 1) - \alpha_I I_{CS} (\epsilon^{qV_C/kT} - 1), \quad (3)$$

and

$$I_C = I_{CS} (\epsilon^{qV_C/kT} - 1) - \alpha_N I_{ES} (\epsilon^{qV_E/kT} - 1), \quad (4)$$

where

$$I_{ES} = \frac{I_{EO}}{1 - \alpha_I \alpha_N}, \text{ and } I_{CS} = \frac{I_{CO}}{1 - \alpha_I \alpha_N}.$$

Basically, I_{CO} is measured, approximately, with the emitter terminal open, and I_{CS} with the emitter terminal shorted to the base. In both cases, a reverse voltage, large enough to yield saturation, but not so large as to cause avalanche, is applied to the collector-base diode.

In general, avalanche multiplication can occur at either or both junctions of a transistor. Thus two avalanche multiplication factors can be defined, patterned after earlier definitions.^{3, 4}

$$M_E = \frac{1}{1 - \left(\frac{V_{ED}}{V_{EA}}\right)^\eta}, \quad (5)$$

and

$$M_C = \frac{1}{1 - \left(\frac{V_{CD}}{V_{CA}}\right)^\eta}, \quad (6)$$

where

M_E = multiplication factor at emitter junction,

M_C = multiplication factor at collector junction,

V_{EA} = avalanche breakdown voltage at emitter junction,

V_{CA} = avalanche breakdown voltage at collector junction,

$V_{ED} = V_{ET} - V_E$ = total internal emitter depletion layer voltage,

$V_{CD} = V_{CT} - V_C$ = total internal collector depletion layer voltage,

V_{ET} = thermally-produced emitter barrier potential,

V_{CT} = thermally-produced collector barrier potential,

and η = a constant of the material, generally dependent on base resistivity and type (polarity) of base doping. ($\eta \cong 3$ for N-type base and $4.5 < \eta < 6.5$ for P-type in a germanium unit.)^{3, 4}

In the expansion of the transistor equations to include avalanche, the alphas will be restricted to constant values. Thus, variations in current gains with current and voltage magnitudes are not to be included in this study except for the one voltage effect of avalanche. Furthermore, the avalanche effect will be left "outside" of the alphas. The more convenient forms for introducing the multiplication factors is the "current" equations, (1) and (2). Here the problem is readily appreciated on an intuitive basis where one simply notes that it is the collected currents that are multiplied. Therefore equations (1) and (2) become—

$$I_E = I_{EO} (\epsilon^{qV_E/kT} - M_E) - \alpha_I M_E I_C, \quad (7)$$

and

$$I_C = I_{CO} (\epsilon^{qV_C/kT} - M_C) - \alpha_N M_C I_E, \quad (8)$$

where, like the alphas, I_{EO} and I_{CO} , are still defined as low-voltage constants, the "M's" being kept "outside".

If the "current" forms are converted to the "voltage" forms, one obtains the expressions—

$$I_E = I_{ES} (\epsilon^{qV_E/kT} - M_E) - \alpha_I M_E I_{CS} (\epsilon^{qV_C/kT} - M_C), \quad (9)$$

and

$$I_C = I_{CS} (\epsilon^{qV_C/kT} - M_C) - \alpha_N M_C I_{ES} (\epsilon^{qV_E/kT} - M_E), \quad (10)$$

where I_{ES} and I_{CS} are now redefined to non-constant values, for notation convenience.

$$I_{ES} = \frac{I_{EO}}{1 - \alpha_I M_E \alpha_N M_C}, \text{ and } I_{CS} = \frac{I_{CO}}{1 - \alpha_I M_E \alpha_N M_E}.$$

Hence, by the choice of definitions made, a useful relationship is retained. (See Reference 1.)

$$\alpha_I I_{CO} = \alpha_N I_{EO}, \quad (11)$$

and, therefore,

$$\alpha_I I_{CS} = \alpha_N I_{ES}. \quad (12)$$

Flow lines

Flow line analysis has been developed using the "voltage" form of the basic equations,² the philosophy being to treat the first terms as emission terms and the second as collection terms. Therefore, "emission" can be positive, zero, or negative as can be "collection." Thus equations (9) and (10) are thought of in the following manner.

$$I_E = \overbrace{\frac{I_{EX}}{\text{(emitter "emission")}}} - \overbrace{\frac{\alpha_I M_E I_{CX}}{\text{(emitter "collection")}}}, \quad (9a)$$

and

$$I_C = \overbrace{\frac{I_{CX}}{\text{(collector "emission")}}} - \overbrace{\frac{\alpha_N M_C I_{EX}}{\text{(collector "collection")}}}, \quad (10a)$$

and the general flow diagram is as indicated in Fig. 2. Here the previous rules, wherein the sequence of events goes with the arrowheads (current directions) for positive emission and against the arrowheads for negative emission in a PNP transistor, are retained.²

Breakdown Voltages

In a transistor, if all "breakdown" voltages are governed by avalanche, there are three types of "breakdown" of especial interest. That is, if other types of "breakdown" such as surface non-linearity and punch-through do not precede all the various avalanche effects, then avalanche types of "breakdown" will occur for emitter open, emitter tied to base, and base open. These three types are not exhaustive, but they are particular ones of general interest.

The flow line diagrams for the three cases of inter-

(Continued on page 437)

Insulate With Vacuum

You can design a vacuum relay to interrupt 600 amperes at 15 kilovolts—with a contact separation of only 5/32 inch—if you give careful consideration of molecular mean free paths, solid vapor pressures, diffusion of gas through solids, and adsorption of gas by solid surfaces.

By H. C. ROSS

A unique advantage of vacuum relays is complete enclosure and freedom from surface contamination of the contacts. A further advantage comes from vacuum dielectric breakdown strength up to 30 times that of air or other gases at atmospheric pressure. The growing use of vacuum relays, further stimulated by the availability of fused aluminum oxide ceramic which may be brazed to make high temperature units, lends greater importance to theories of vacuum as insulation.

Electrical Breakdown

Probably the most well known and consistently inconsistent theory of electrical breakdown for pressure variations is Paschen's Law. This shows that sparkover voltage is an inverse exponential function

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of the product of pressure and contact spacing.

$$E \text{ sparkover} = 360 \left[\frac{Pd/5}{1 + \log_e \frac{Pd}{5}} \right]$$

where P is pressure in mm Hg and d is sparkover distance in mm for uniform potential gradient.

This would indicate that the minimum sparkover potential for any uniform voltage field at any pressure-distance combination is about 360 v. This point holds reasonably well. For many other points, however, calculated values and test measurements disagree.

Figure 5 shows the approximate measured breakdown voltages for 1/32 in. (0.8mm) spacing of 3/8 in. dia. tungsten rod gaps has been prepared showing this minimum point and the actual breakdown voltages measured both for extremely low pressures and for high pressures. The curve departs from

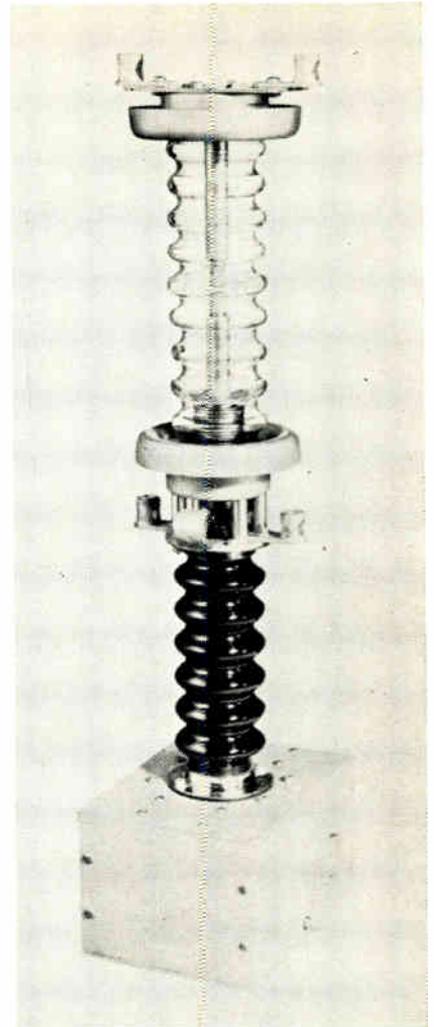


Fig. 1: Relay contacts are easily checked

normal at higher and at extremely low pressures.

Mean Free Path

Voltage breakdown in gases is normally dependent on the mean free path of the molecule or electron between differences in potentials. Ideally the longer the mean free path, as the vacuum gets better below 1 mm Hg, the less ionization may occur. For practical purposes there is a satisfactory maximum free path which generally need not be exceeded.

There are several useful formulas for determining mean free path. Two of these are:

$$1. L_m = \frac{1}{\sqrt{2} N d^2}$$

The Clausius Formula

Where N = No. of molecules/cc
d = effective dia. of molecule in centimeters

Vacuum Relays

(continued)

$$2. \text{ Also } I_m = 8.59 \frac{n}{P} \sqrt{\frac{T}{M}}$$

P = pressure in mm

T = absolute temperature

M = molecular wt.

n = gas viscosity in Poises and is also temperature dependent

For the electron, the mean free path is about 5.7 times the mean free path of the molecule.

3. Molecular collision frequency

$$W = \frac{V_a}{L}$$

V_a = avg. velocity of molecule in cm/sec

L = free path in cm

One formula is a check on another. Disagreement may be as much as a factor of 3 in either direction but the resultant is close enough for general use. Various values of interest pertaining to the most prominent molecules are listed in Table 1, which gives values at 25°C.

Some interesting things can be seen. For instance, according to the general average, nitrogen—which is lighter and has a smaller atomic number and, therefore, fewer electrons—seems to have a larger diameter molecule but a lower collision frequency than oxygen. Hydrogen, which is lightest, also shows a discrepancy with

Fig 3: The large and small of vacuum relays

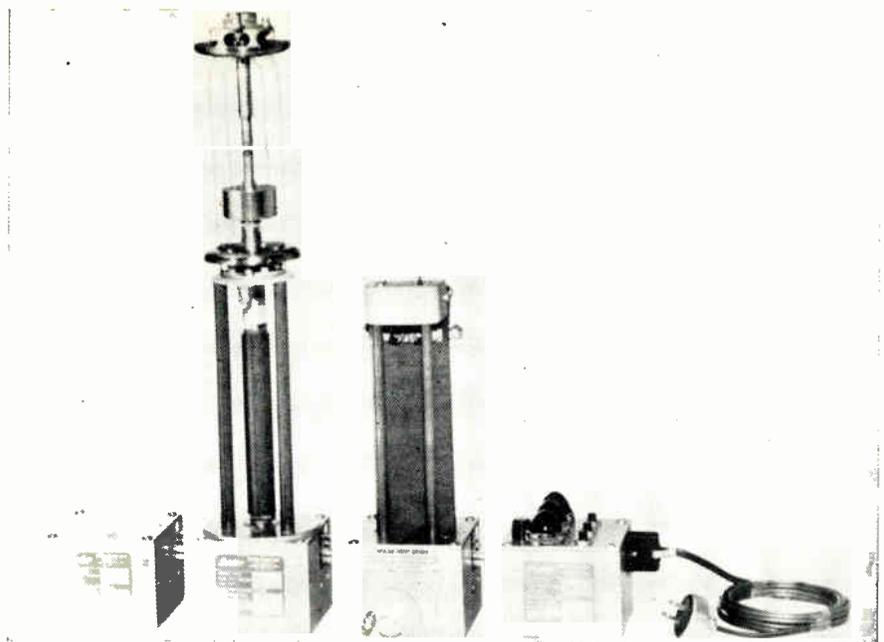
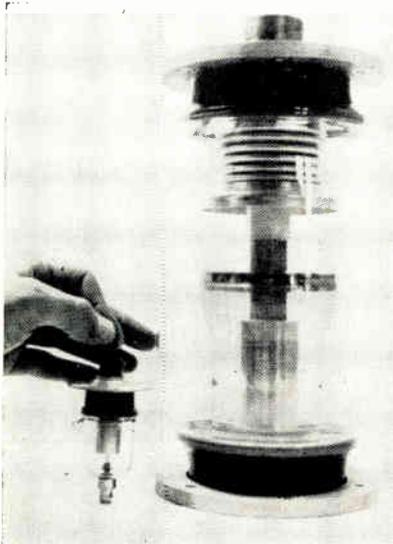


Fig. 2: Complete overload circuit breaker for use at 12 to 15 kv

respect to helium in diameter. Another point of interest is the electron diameter, which according to these values may be approximately 1×10^{-8} cm. However, the electron diameter and weight is very dependent on speed and, therefore, on the accelerating potential between electrodes.

The results of this study show that the mean free path for the average air molecule at 10^{-6} mm Hg pressure is over 5000 cm and for the electron it is probably over 30,000 cm. Therefore, for 1/32 in. (0.08 cm) spacing of contacts at this pressure there are going to be very few molecular or electron collisions to cause ionization, even with considerable accelerating potentials.

At 10^{-6} mm and a volume of 10 cc (a cylinder 1 in. long x .8 in. dia.) there are about 3×10^{11} molecules remaining. Now we are down in the region where we can begin to count molecules. 300 billion molecules is really not very many since the average diameter is only 3×10^{-8} cm. If they were to cover a surface one molecular layer deep and side by side they would cover an area of less than 3 millionths of a square cm.

It can be seen that if the surfaces are relatively free of adsorbed gas molecules and can adsorb more, even leaks of the order of 300 billion molecules per hour may still permit holding at 10^{-6} mm Hg since these surfaces will act as the unit's

own vacuum pump. In fact, much better vacuums are often attained after sealoff by the simple gettering action of clean surfaces in the sealed unit.

Vapor Pressures

What is vapor pressure in solids? Solid carbon dioxide is a very familiar material that exhibits the property of evaporating (called sublimation) from solid to vapor without necessarily passing through the melting stage. All solids have this same characteristic. It becomes very prominent, in fact a limiting factor, in attaining proper purity of vacuum units at low pressures.

Diffusion

Diffusion will take place through the walls of solid materials where a pressure differential exists. Glass, ceramic, copper and copper alloys, and steel alloys are probably the materials with which we are most concerned for high vacuum enclosures. We know by practical experience that these are usually satisfactory under normal conditions of use.

The formula for the rate of diffusion through some non-metallic materials is given by:

$$p = \frac{KP}{d}$$

where p is volume of gas diffusing in cc/sq. cm of surface/second

P is pressure difference in mm

d is wall thickness in mm

K is permeability constant and is dependent on temperature

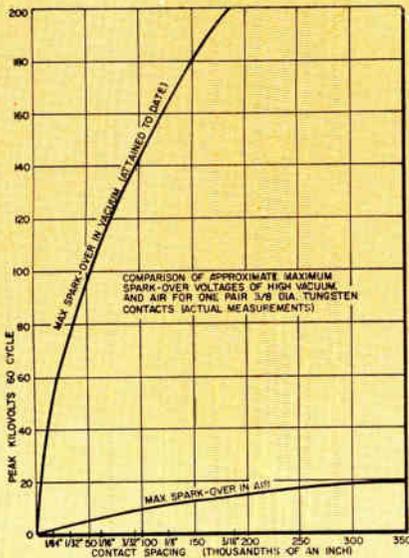


Fig. 4: Sparkover characteristics

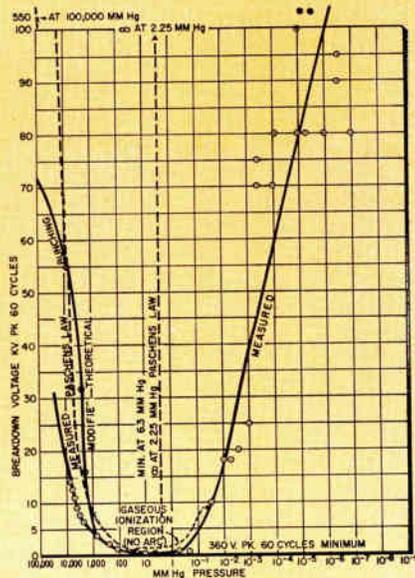


Fig. 5: Sparkover voltage vs air pressure

Diffusion rate is more customarily stated as micron liters (μl) per hour per square centimeter per millimeter of thickness.

Some work has been done on the diffusion rate of helium through the typical vacuum tube type of borosilicate glass and through porcelain. At about 300°C approximately $0.1\ \mu\text{l}$ of helium will flow through a surface of borosilicate glass $1\ \text{sq cm}$ in area and $1\ \text{mm}$ thick. For porcelain, over 1400°C must be attained before the same volume may pass, according to one group of experiments. In comparison, for quartz at 900°C , over $7\ \mu\text{l}$ of helium, $1.3\ \mu\text{l}$ of hydrogen, or $0.2\ \mu\text{l}$ of nitrogen may flow through $1\ \text{sq cm}$ $1\ \text{mm}$ thick. For quartz at 300°C the rate drops down to possibly $0.4\ \mu\text{l}$ of helium.

In the metals group, diffusion relationships are somewhat different and follow the formula:

$$= \frac{K}{d} \left[\sqrt{P_1} - \sqrt{P_2} \right]$$

(Note: Diffusion appears to be only partially proportional to the square root of the pressure at very low pressures.)

The rate of diffusion of hydrogen through copper may be $0.1\ \mu\text{l}$ somewhere between 540°C and 730°C and possibly $1.0\ \mu\text{l}$ between 775°C and 1040°C . The rate of diffusion in the iron or iron nickel group shows that $0.1\ \mu\text{l}$ or more of hydrogen may flow between the temperature range of 200°C to 350°C , $1\ \mu\text{l}$ for 360°C to 480°C and $10\ \mu\text{l}$ for 610°C to 740°C . For nitrogen diffusion through iron, $0.1\ \mu\text{l}$ may flow at about 820°C ; $1\ \mu\text{l}$ may flow at 1120°C . One more interesting diffusion rate is that for molybdenum. Hydrogen will diffuse through molybdenum at a $0.1\ \mu\text{l}$ rate at about 600°C , while nitrogen will diffuse at the same rate at about 1360°C .

In analyzing a typical unit consisting of borosilicate glass and copper the probable average diffusion rate of all air molecules may be no more than $0.1\ \mu\text{l}$ at the elevated temperature of 450°C .

This would mean about 10^{-7} liter or about 1×10^{15} molecules per hr per sq cm area per mm thickness. A moderate sized unit may have a volume of $100\ \text{CC}$ (.1 liter) and an area of $100\ \text{sq cm}$ of average wall

(Continued on page 156)

Table 1

	Molecule dia. cm	L_m , cm 760 mm Hg	Density gm/cc	Collision Frequency	L_m , cm 1 mm Hg	L_m , cm 10^{-6} mm Hg
Air Avg.	3.7×10^{-8}	6.7×10^{-6}	1.2×10^{-3}	7×10^9	5.1×10^{-3}	5100
Oxygen	3.8×10^{-8}	7.1×10^{-6}	1.3×10^{-3}	6.3×10^9	5.4×10^{-3}	5400
Nitrogen	3.75×10^{-8}	6.4×10^{-6}	1.15×10^{-3}	5×10^9	4.8×10^{-3}	4800
Helium	2.2×10^{-8}	19.4×10^{-6}	$.16 \times 10^{-3}$	7.2×10^9	14.7×10^{-3}	14700
Hydrogen	2.75×10^{-8}	12.3×10^{-6}	$.08 \times 10^{-3}$	14×10^9	9.3×10^{-3}	9300
Water Vapor	4.7×10^{-8}$	.....	.7 \times 10^{-3}$	10×10^9	3.4×10^{-3}	3400

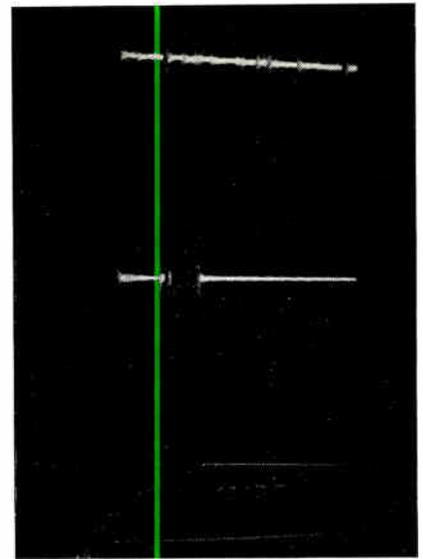


Fig. 6: The radial diffusion effect

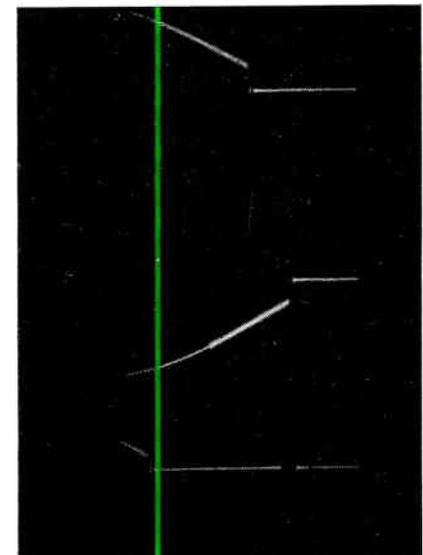


Fig. 7: Variations due to phase of contact opening

Fig. 8: Ideal interruption of 50 amp., 6000 v RMS

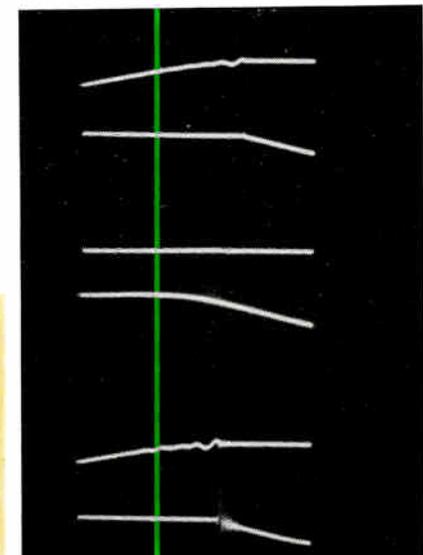
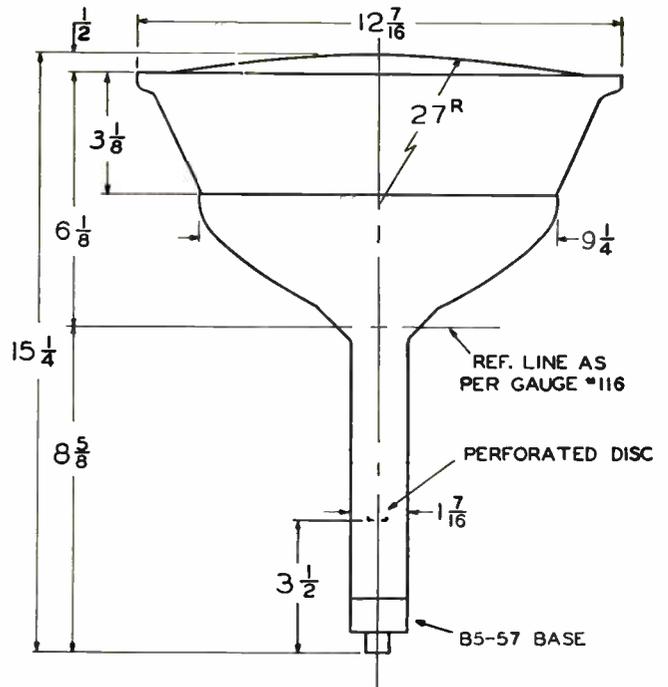


Fig. 2: Dimensions for the pepperpot tube, a CRT with modifications to produce pencil rays.

A conventional CRT, modified to produce split pencil rays, readily interprets distortion errors. For production control, the tube permits the use of a standardized, simple, and fast test method.

Pepperpot Tube

Checks Yoke Linearity

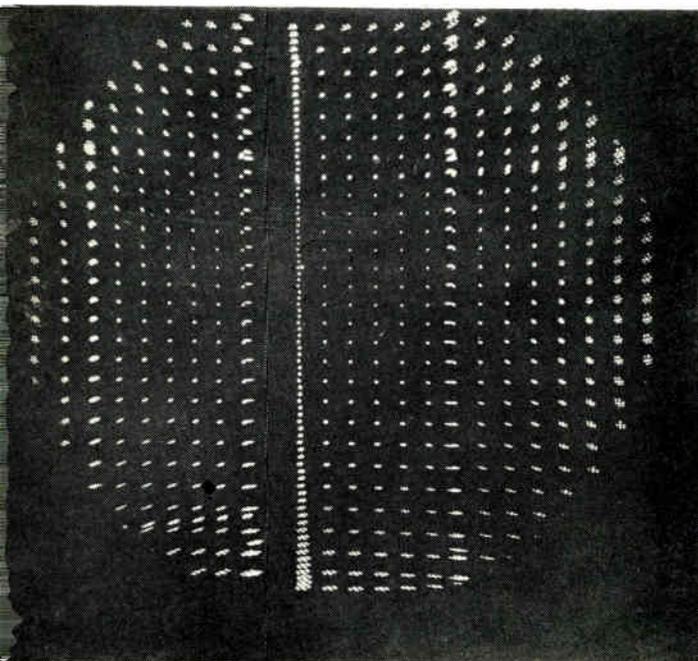


W. F. Niklas



H. O. Marcy

Fig. 1: Dot-raster with the magnetic focusing lens adjusted for the circle of smallest confusion of the pepperpot image in screen center.



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A MAJORITY of cathode-ray tubes for TV reproduction, radar, and information storage utilize magnetic deflection of the electron beam. The deflecting magnetic fields are generated by the yoke, which is located at the funnel end of the tube neck.

The dissimilar fringe fields and distortions of the main part of the deflection fields generally cause deflection errors. Standard test methods permit a partial performance evaluation of deflection yokes but are rather tedious and time consuming.

A pepperpot tube makes easy the use of the pencil ray method for the investigation of deflection fields. The application of this tube greatly reduces the costs for the production and development testing of yokes.

Deflection Errors

The deflection errors can be divided into raster distortions and spot distortions. Raster distortions can be displayed quite readily utilizing a line raster on the face of the tube, which may show barrel, or pin-cushion, distortion.

The spot distortions may be subdivided into 3 groups:

a) Curvature Distortion

Distortions due to the difference in the curvature of the image plane (position of the beam crossover on the screen area) and the faceplate. Generally, the center of curvature of the faceplate is not located in the deflection center but further back towards the cathode. Thus, the beam crosses over before impinging on the screen in the side areas leading to defocusing.* This defect is essentially a geometrical error.

b) True deflection distortions

True deflection distortions are errors due to the horizontal or vertical deflection fields. Besides these first order effects, new deflection errors occur due to the combined influences of the 2 fields. Theories of the deflection errors have been developed by Wendt,¹ Hutter,² et al. The visual result is an unsharp defocused spot in the side areas, which may display astigmatism, coma, and "apparent image rotation." Most of these effects can be traced back to an im-

ence. "Field plotting" has also been applied for this purpose.³ Since integration over the path of the beam is required, this method is rather cumbersome.

More readily interpretable results are obtained by the dc deflection method. The unfocused beam appears in the screen center as a luminescent circle with a diameter of $\frac{1}{2}$ - $\frac{3}{4}$ in. (provided no aberrations are present in the gun). DC deflection of the beam may result in an elliptical distortion and variations of the size which indicates the effects of the yoke. The practical application of this method, however, requires the accurate determination of the lengths of the main axis and their ratios and is rather tedious.*

The need for a rapid and accurate test method is great. To solve this problem, the use of pencil rays for the investigation of the deflecting magnetic fields seemed promising.

Pepperpot Tube

The pepperpot tube, which is, in essence, a conventional CRT modified to produce pencil rays, is shown

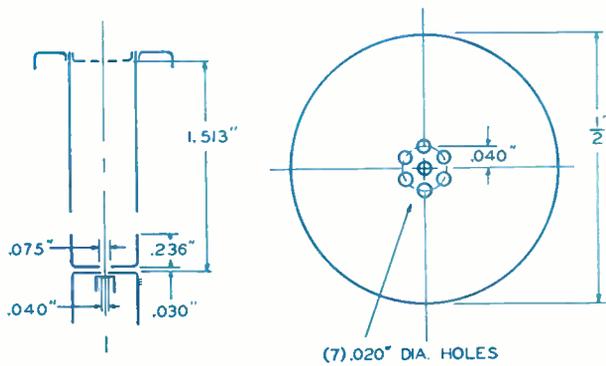
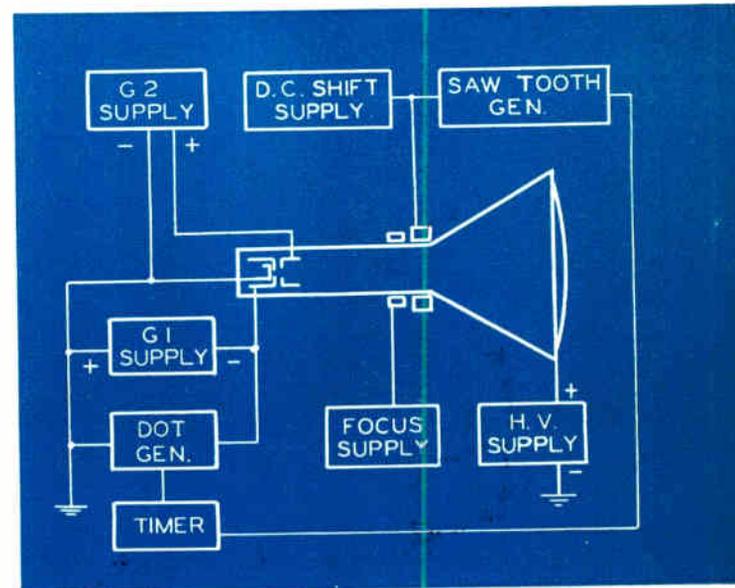


Fig. 3 (above): The straight electron gun (left), a tetrode, requires an external magnetic lens for focusing. The built-in pepperpot diaphragm (right) splits the electron beam into seven axial pencil rays.

Fig. 4: (right) Set-up for pencil ray testing using the pepperpot tube.



perfect deflection yoke design, over-exaggerated fringe fields, or magnetic coupling with focusing or centering units.

c) Cosine distortion

Due to (a), the electron beam does not impinge on the screen under 90°. The screen of the tube sees, therefore, a projected cross section of the beam. The axis of the spot along which scanning occurs is elongated by the reciprocal value of the cosine of the angle between the axis of the beam and the screen normal. This relatively minor effect amounting to roughly 10-15% elongation of the spot can be neglected.

Test Methods

The conventional test methods for deflection yokes consist of field pattern investigations and observing the deformation of a dc deflected, unfocused, electron beam on the face of the tube.

Direct field investigations may be carried out either by probe measurements or by utilizing iron filings, especially ferro-magnetic powders, with high reman-

ence. It has a 12 in. dia. with a metal cone for light weight and sturdiness. The faceplate is spherical with an inside radius of 27 in. The uniform thickness of the faceplate, which could be used due to the metal cone, decreases optical distortions. The distance from the reference line to the inside of the faceplate is $6\frac{1}{8}$ in. The present version possesses a standard neck (OD 1-7/16 in.) with a full deflection angle of 90°. However, neck diameter, deflection angle, and shape of the flair are not fundamental limitations.

The screen of the tube (standard P-4 phosphor) is aluminized, thus a straight gun, Fig. 3, may be used. Aluminizing also eliminates distortions due to static charges. The gun is of the tetrode type, requiring an external magnetic lens for focusing. The diameter of the second grid aperture is chosen somewhat larger than usual to permit a better flooding of the limiting aperture in the third grid.

This aperture possesses a built-in pepperpot diaphragm, which is shown in Fig. 3. When fully flooded the apertures split the electron beam into 7 axially
(Continued on page 438)

What's New . . .

Daylight Radar Scope Uses Transparent Phosphor

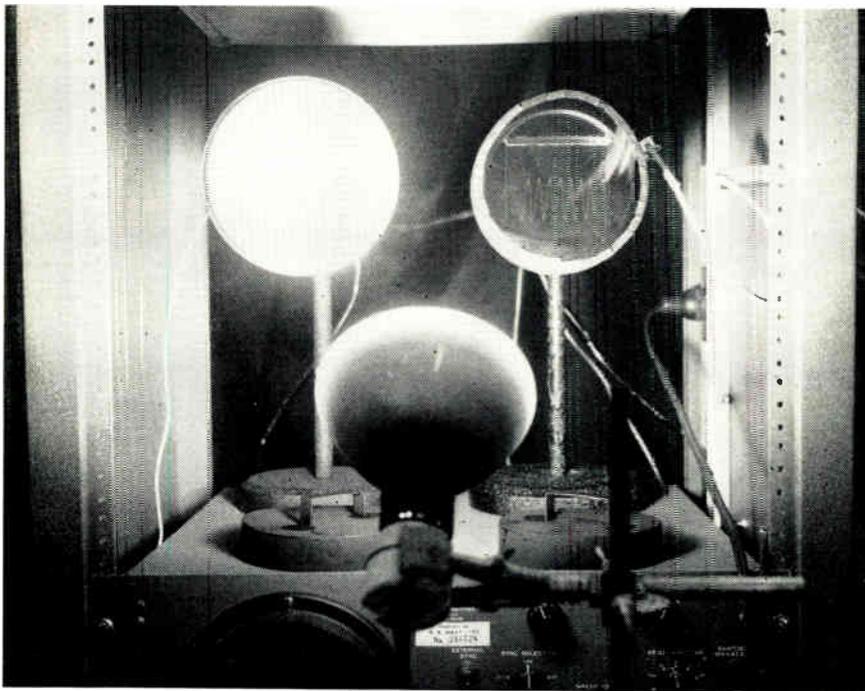


Fig. 1: Reflected light completely masks trace on conventional tube; new tube shows clear trace.

THE Naval Research Laboratory has announced a revolutionary new television screen. The new screen will permit viewing of television in bright daylight with little loss of contrast. The new screen also provides a new simplified approach to color television, and is expected to lead to the development of three-dimensional viewing.

The basis for the new screen is a process for depositing phosphor on the face of the tube in the form of thin transparent films in place of opaque white powders now used. The films are more rugged than the powdered screens, can be made brighter because they do not burn out as easily, and present a much sharper image.

The improved daylight viewing of black and white television comes about because of the naturally improved contrast obtained

with transparent films. The powdered surface in present tubes is a good reflector, and in strong sunlight the reflection is brighter than the picture. With the transparent film, sunlight goes through the film and is lost in the darkened interior of the tube so that contrast is maintained even with bright daylight shining directly on the tube.

The second advantage of the films is the sharpness of the picture. The conventional powdered screens have a grainy texture that scatters part of the light that is formed and results in an image with hazy borders. The films show no visible grains and scatter none of the light that is formed so that the image is as sharp as the electron beam in the tube.

Both of these advantages can be applied to the present form of color television but the transparent films also provide the basis

for a completely new approach to the problem. Films that create different colors can be deposited one atop another and lighted separately or mixed by controlling the speed or the direction of the electrons in the tube. By using one film of each of the three primary colors the complete color spectrum can be obtained by proper mixing. Tubes with several combinations of two primary colors and blends of these two colors are in successful operation
(Continued on page 148)

Add New Life To Orthicons

AT the fall symposium of the Professional Group on Broadcast Transmitting Systems, Mr. John Wilner of WBAL presented a paper entitled "A Method to Prevent Image Orthicon Burn-in." He described a system to oscillate the turret of an image orthicon camera slowly about its axis through a small angle. This causes the image on the photocathode to be constantly in motion even though the subject matter and the camera are stationary, and so minimizes burn-in.

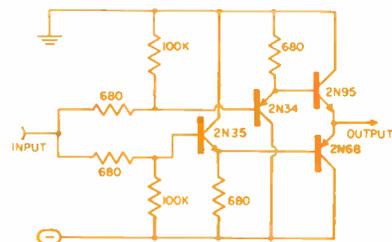


Fig. 1: Orbital compensation amplifier.

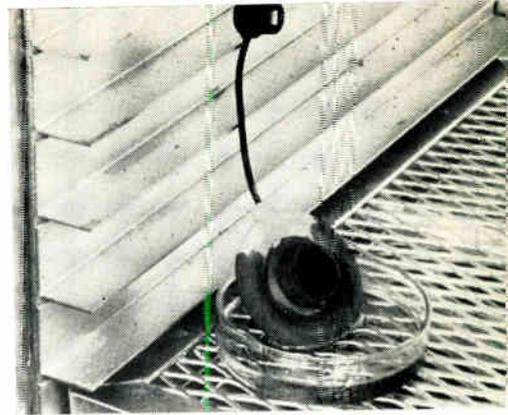
Original test results at WBAL were extremely good. Visual Electronics Corp. has designed a commercial version which includes ver-

No-Mix Resin Casting

A NEW approach to resin insulation of electronic components has been developed by Minnesota Mining and Manufacturing Co., St. Paul, Minnesota. The new method eliminates the mixing of resin and catalyzer, at least in the ordinary sense. Instead, the inert filler is treated with materials which make it bondable, and which also will catalyze the cure of a liquid resin. The catalytic filler is blown, pressed, or molded around the part to be insulated,

then bonded by heat. The final step is accomplished merely by touching the coated part to liquid resin, allowing capillary action to wet the entire part. No mixing is required.

According to Robert Herr and J. S. Casement of 3M's Electrical Products Laboratory, the system is applicable to many classes of resin-hardener systems, and to many different applications of impregnation, molding, or encapsulating.



Bonded inert filler surrounding coil soaks up liquid resin and provides catalytic action, eliminating need for mixing catalyst with resin. System provides higher filler content and improved thermal conductivity. Simplified encapsulation for experimental quantities and production runs results from this technique.

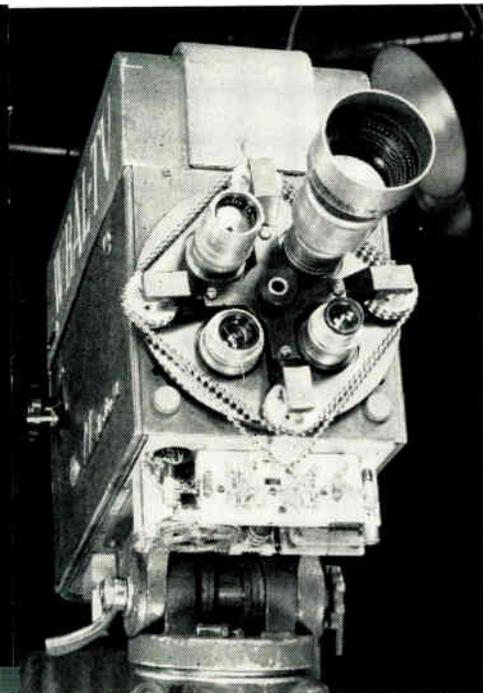


Fig. 2: TV camera with orbiting lens.

tical as well as horizontal motion and correction.

The operation of the device is relatively simple. It consists of a mechanism to move the lenses of a television camera in a small circular orbit. Thus the image on the orthicon photocathode moves in the same circular orbit. The orbit is only 9/64-in. in diameter, and the rate of the motion is approximately two times around per minute. This slight motion of the image on the photocathode of the tube has

(Continued on page 182)

New HELPR For Electronic Industries

A NEW approach to reliability testing of electronic components is proposed by Inland Testing Laboratories, Cook Technological Center, Morton Grove, Illinois. This group would run extensive reliability tests on electronic components and distribute the test results to subscribing manufacturers. The most obvious benefits would be elimination of costly duplication of tests by individual companies; more complete and extensive tests; and lowered test costs through use of automation,

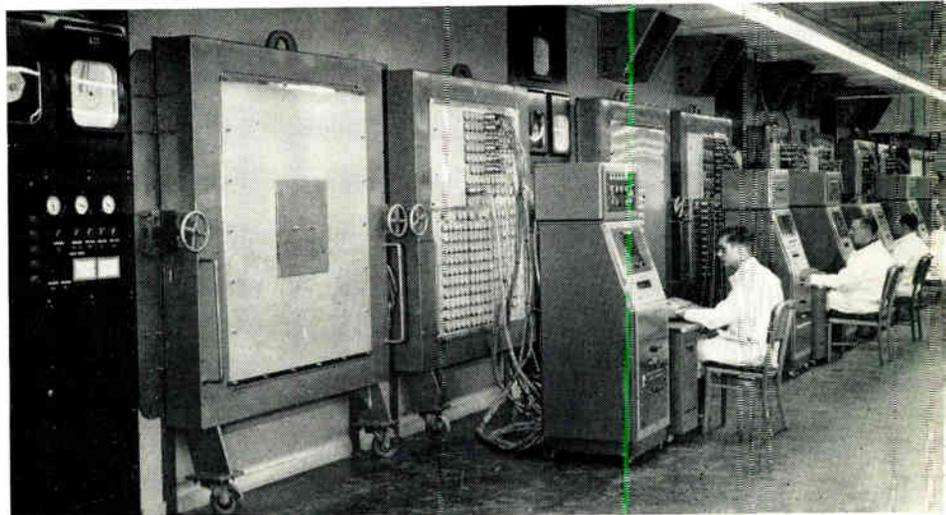
computers, and maximum use of test facilities.

"HELPR"

Subscribers would receive results of tests in the form of loose-leaf notebook sheets with results of tests to date—superseded by later data sheets and curves as each component testing program matured. From this Handbook of Electronic Parts Reliability Program comes the provocative name of the program, "HELPR."

(Continued on page 136)

Fig. 1: Operators monitor control consoles during reliability tests at Inland Testing Laboratories.



What's New . . .

Sunspots Aid Radio Circuits

RESULTS of a ten-year study by John H. Nelson, of RCA Communications, Inc., refute the popular belief that all sunspots are bad for overseas radio communications. Actually, records prove that transmitting conditions on international radio circuits get better as the number of sunspots increases.

Mr. Nelson is RCA's propagation analyst. He has been studying the sun from a skyscraper observatory in downtown Manhattan since 1946, and his findings have become a major factor in establishing the reliability of RCA's overseas radio communications.

The average monthly sunspot count has been rising continually during the past three years. Despite this situation, conditions on world-wide radio circuits have been well above normal for the entire period. Moreover, radio-weather has steadily improved as the sunspot count climbed higher.

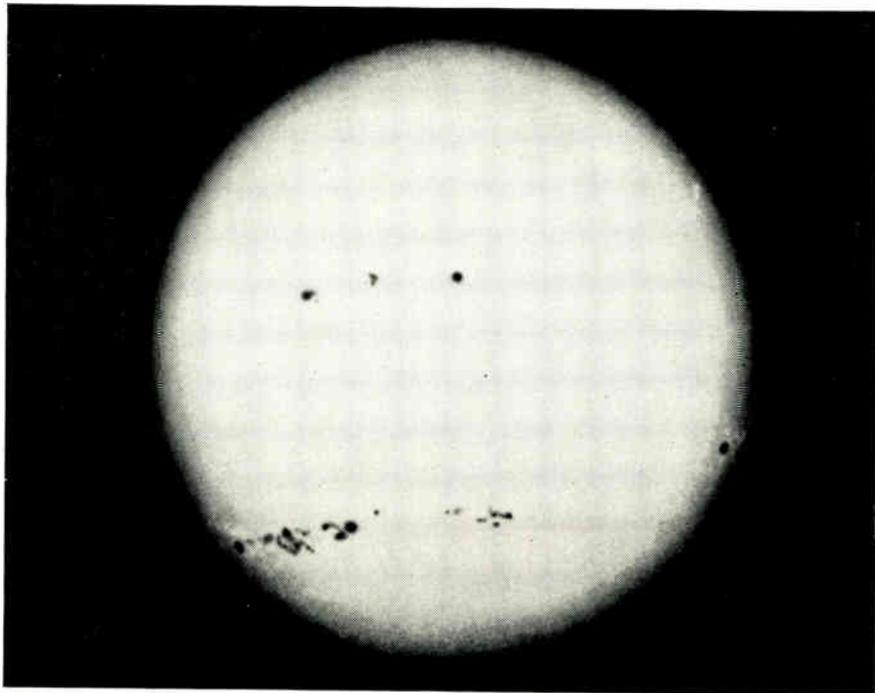


FIG. 2: Sunspot outburst of Feb. 1956 shows in this Navy photo.

Although there is such a thing as a "bad" sunspot, fortunately for international radio communications there is an oversupply of "good" sunspots—more than enough to counteract the effects of the occasional bad ones. Through his studies, Mr. Nelson has devised a method of identifying sunspots as being either "good" or "bad."

Good sunspots are rich in ultra-violet light, which has a strength-

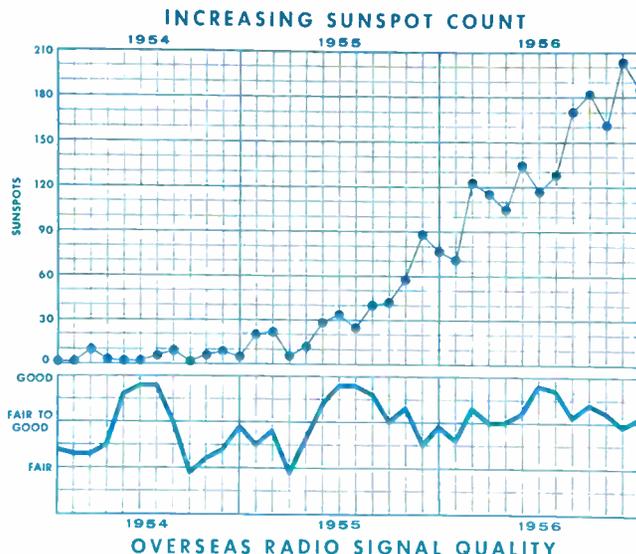
ening affect on the ionosphere. The strength of the ionosphere, from which radio waves are reflected back to earth, is the basic factor in determining radio weather conditions. The occasional appearance of a bad sunspot—one with weak ultra-violet radiation—tends to reduce the ionosphere's ability to reflect radio waves.

When seen through a telescope,
(Continued on page 148)



Fig. 1 (l.): Sun chart in hand, RCA expert John H. Nelson studies sunspot activity at his Manhattan observatory.

Fig. 3 (right): Sunspot count and radio signal quality over the past three years show positive correlation in this chart.



Industry Sets New Transistor Standards

What are the new IRE symbols for transistor parameters? What is the "system" used to form the new symbols? Here is a thorough explanation of the new symbols, and useful additional symbols

		SYMBOLS	
		I, V, P	I, V, P
SUBSCRIPTS	e d c j	INSTANTANEOUS VARYING COMPONENT VALUE	RMS OR EFFECTIVE VARYING COMPONENT VALUE
	E B C J	INSTANTANEOUS TOTAL VALUE	AVERAGE (dc) VALUE

Fig. 1: Basic subscript system for IRE symbols.

**By L. F. LEINWEBER
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MANY authors do not understand the importance of good terminology in effectively communicating their ideas. The authors of scientific papers, who take great care with their experimental and theoretical work, too often do a mediocre job of writing up the results. We can improve this situation by all pressing for better writing in our field. A good symbology is the best start toward clear writing.

IRE Standard Symbols

Symbols are a shorthand notation. It is obvious that they save time and space in writing notes on experiments. But recent studies, by psychologists interested in "information theory," have demonstrated that we have much more to gain, than this. A symbol gives us information in a convenient "idea block." This means more information content per unit of thought effort. This is a tremendous gain—we can actually think more quickly, and with less effort, because we need less storage space mentally for the same thought content.

Why Have Symbols

The IRE symbol system is simple and easy to remember. This is important when attempting to get thousands of people to throw aside their pet symbols to adopt new ones. The basic subscript notation for current, voltage and power is shown in Fig. 1. Lower case symbols represent instantaneous values. Upper case symbols indicate RMS, effective and average (dc) values. The choice of subscripts—lower case for varying component values, and upper case for total and average or dc—completes the precise description of the measurement.

Fig. 2: Common small-signal parameters.

COMM. BASE	PARAMETER	COMM. EMITTER
h_{ob}	OUTPUT ADMITTANCE	h_{oe}
h_{ib}	INPUT IMPEDANCE	h_{ie}
h_{rb}	REVERSE VOLTAGE TRANSFER RATIO	h_{re}
h_{fb}	FORWARD CURRENT TRANSFER RATIO	h_{fe}
f_{ab}	CUT-OFF FREQUENCY (ALPHA CUT-OFF)	$f_{\alpha e}$
C_{ob}	OUTPUT CAPACITANCE	C_{oe}

Transistor Symbology (Continued)

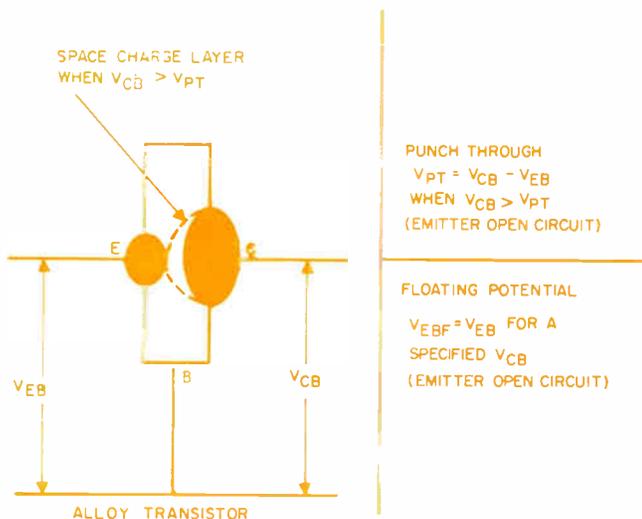


Fig. 3: Punch-through needs a distinct symbol.

A simple dc circuit illustrating some of these rules is given in Fig. 4. We see dc bias currents I_B , I_C and I_E . The dc voltages across the transistor, V_{BE} and V_{CE} are logical and illustrate a convenient rule—the first subscript represents the electrode at which something is being measured. The second subscript shows the reference electrode. Thus, V_{BE} indicates that we are measuring the dc voltage between the base and the emitter.

Supply voltages are indicated by repeating the electrode subscript. You may add the reference electrode as a third subscript, as in V_{BBE} for the base supply. Notice R_B . External circuit resistance is indicated by capitalizing both the symbol and the electrode subscript. You may show internal parameters by using a lower case symbol with the appropriate subscripts.

Now let's look at some common small-signal parameters in Fig. 2. Look at the first four symbols—the "h" parameters. Notice the first subscripts "o" for output "i" for input, "r" for reverse transfer, and "f" for forward transfer. The same subscripts are used for "y" and "z" parameters. The second subscript indicates the circuit configuration i.e., common base, emitter or collector.

These are small signal measurements. DC measurements may be indicated by the use of capital subscripts. For example, if you want to indicate the dc forward current transfer ratio, you simply change h_{fb} to h_{FB} or h_{fe} to h_{FE} . This conciseness of notation is very useful.

It should be pointed out that some people may prefer to use numeric subscripts, for ease in matrix manipulation. Those who so desire, certainly may do so. "o" can be equated to "22," "i" to "11," "r" to "12," and "f" to "21." We feel that the letter subscripts are shorter and neater for regular use. In particular, they seem easy to most newcomers to the field. Those who do extensive reading in the field should not be confused by matrix vs. letter notation. Both are recognized in the IRE standard.

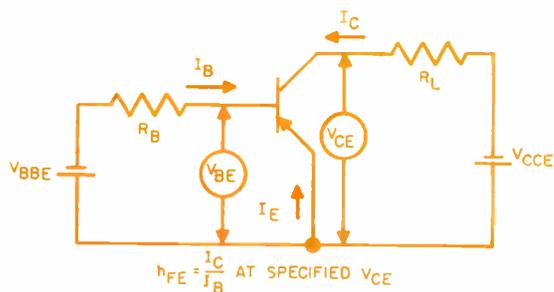
The designation for cut-off frequency shows the strong influence of "a" in our early work. f_{ab} , f_{ae} and

f_{ac} preserve "a." Thus our h_{fb} cut-off frequency is f_{ab} . C_{ob} and C_{oe} follow easily as output capacity. Figure 5 shows several common dc measurements. The behavior of a diode is characterized by its voltage and current characteristics. Let's examine the collector-base diode. For a specified reverse voltage below breakdown, we can measure a current I_{CBO} (frequently called I_{CO}). The "o" as a third subscript shows that the other electrodes are open circuited. A similar measurement on the emitter-base diode is I_{EBO} .

A "B" before a voltage symbol indicates that the measurement is made in the breakdown region. The non-specific term PIV is thus replaced by exact terms— BV_{CBO} for collector breakdown and BV_{EBO} for emitter breakdown.

Now look at the second circuit. It illustrates two things—a common emitter configuration, and the idea of an additional third subscript to represent the termination of the other electrodes. We have already seen the "o" in use to represent an open circuit condition. Look at BV_{CES} . The "S" indicates that the base is shorted to the emitter in the triode shown in the diagram on the right. Our middle symbol, BV_{CER} , uses the IRE provision for additional third subscripts for other terminations besides "O" and "S." We have chosen "R" to represent a resistance between base and emitter in this circuit. These are very useful measurements in terms of common emitter operation, since they are a function of h_{fb} , and "m" the charge carrier multiplication factor referred to by McKay and others. It is a limitation on the practical maximum operating collector-emitter voltage.

Fig. 4: Simple circuit illustrates IRE rules



We have one more type of voltage limitation on the practical use of a transistor. Let's look at Fig. 3. The IRE standard terminology does not provide directly a symbol for Punch-through. We believe it is a very important phenomenon and disagree with those who are satisfied with the corresponding floating potential measurement.

Let us explain our view. Punch-through is a distinct, unusual phenomenon. It is not a voltage breakdown in the sense of BV_{CBO} , a diode avalanche. It is not related to charge carrier multiplication and h_{fb} , as is the BV_{CEO} , BV_{CER} , BV_{CES} family. Rather, it is a space charge layer widening problem. Examine the left half of Fig. 3. This shows an alloy transistor. As the potential V_{CB} is increased, from a low value toward a high value, the collector-base space charge layer spreads or widens. The spread into the base region results in a narrower effective base width. Provided

the diode does not avalanche before the space charge layer spreads across to the emitter region, we encounter a new problem—punch-through. In effect, the base region “disappears” as the collector-base space charge layer contacts the emitter, and transistor action stops. There is no voltage breakdown. The transistor action will resume if the voltage is lowered to any value below punch-through. But, in the punch-through condition we no longer have a normal transistor; and if the current flow is not limited by external resistance, the high current that can flow will overheat the transistor causing permanent damage.

For measurement purposes, we can use a VTVM between emitter and base to give essentially an open circuit, and then $V_{PT} = V_{BC} - V_{EB}$ for values where V_{CB} is greater than V_{PT} .

The floating potential concept tells us only that for a specified V_{CB} , our floating emitter potential is less than a specified value—say one volt. It gives us no insight into why or at what voltage our transistor will

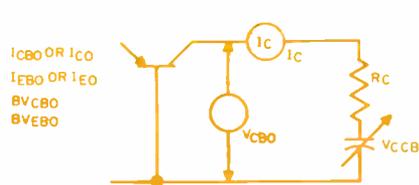


Fig. 5a: Collector-base diode;

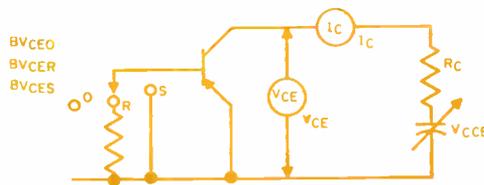


Fig. 5b: Common-emitter circuit;

t_d	OHMIC DELAY TIME
t_r	RISE TIME
t_s	STORAGE TIME
t_f	FALL TIME
h_{FE}	DC CURRENT AMPLIFICATION

Fig. 5c: Common switching measurements.

be out of operation. Hence, we strongly urge the addition and use of V_{PT} for punch-through.

Fig. 5c shows some common switching measurements. “ t_d ” represents ohmic delay time. It is mainly dependent upon input pulse current. It represents a delay between the time a signal is applied to the transistor and the time a response is observed at the collector terminal.

“ t_r ” is rise time. In many cases, t_d and t_r have been grouped together and called “ t_o ” or “turn on” time. The turn off characteristic of the transistor is described in terms of the delay between an attempt to turn the transistor off and the time the collector actually begins to respond, plus the actual fall time. This delay, or storage time, is called “ t_s ,” and represents the time to clear out stored minority carriers. “ t_f ” is the fall time. h_{FE} , the dc current transfer ratio, has been included because of its close connection with switching performance. h_{FE} is a more convenient term than “DC beta” once you start to use this terminology.

In addition to the normal characteristics of a transistor, we are sometimes interested in the inverted amplification of the transistor, i.e., the amplification with the collector and emitter electrodes interchanged. An example of a symbol for this is shown in Fig. 6.

In the IRE Symbol System, “ α_F ” and “ α_R ” are provided as separate possible symbols to represent forward and reverse current transfer ratio. Since we prefer to use the “h” parameter notation provided in the system, we feel that a simple notation “(INV),” after any symbol, will adequately indicate that it is

the inverted parameter. This is a particularly useful notation when describing symmetrical switching transistors, and we offer it to you as an easy way to convey the inverted parameter concept while using the standard normal parameter symbols.

“ $V_{CE}(\text{SAT})$ ” is a similar problem. V_{CE} is the IRE symbol which indicates any dc voltage between collector and emitter. By adding “(SAT)” we show that this is the special case where the transistor is being driven hard and has bottomed in the collector saturation region. These voltages, of course, may be millivolts.

The next two symbols, Power Gain “ G_e ” and Noise Figure “NF,” follow the general IRE terminology standard written for vacuum tubes. The power gain symbol is most useful to us when we add a subscript “e” or “b” to indicate the configuration used for the measurement. The last symbol on the chart is “ r'_b ,” base spreading resistance. No symbol was provided for this in the standard. It is a parameter in a spe-

cific high frequency circuit representation of a transistor. Symbols like this have a use, but are not general in the sense of the standard. So for these, use your own symbol if needed, but, if you add a symbol, be sure it harmonizes with the IRE terminology.

Conclusion

We have tried to show you why these symbols are needed and how they will help our industry. We have examined many of the common symbols and discussed what they are. A few additional symbols that have been found useful in the Semiconductor Products Department of GE have been indicated.

Fig. 6: Some useful additional symbols.

$h_{FE}(\text{INV})$	INVERSE h_{FE} (EMITTER AND COLLECTOR LEADS SWITCHED)
$V_{CE}(\text{SAT})$	COLLECTOR SATURATION VOLTAGE (SPECIFY I_C AND I_B)
G_e	POWER GAIN (COMMON EMITTER)
NF	NOISE FIGURE
r'_b	BASE SPREADING RESISTANCE

A number of companies, and many individuals, are already using these symbols. Many transistor specification sheets have been revised using the symbols illustrated. These symbols are logical and easy to use. Get thoroughly acquainted with them. Persuade your associates to use them. Do your part to accelerate industry wide use of the IRE Standard symbols.

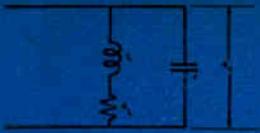


Fig. 1: Series loaded parallel resonant circuit

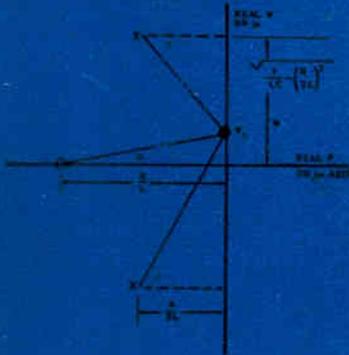


Fig. 2: O denotes Zero, X denotes Pole

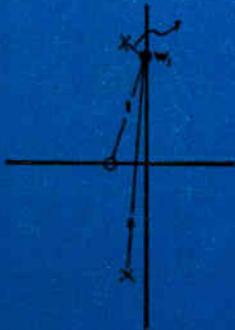


Fig. 3a: Graphical construction of the simple parallel resonance curve — high Q

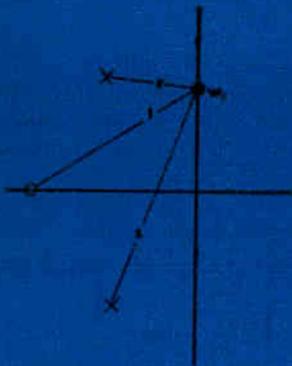


Fig. 3b: Graphical construction of low Q resonance curve

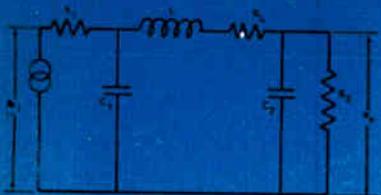


Fig. 4: Low pass filter with finite Q inductor

Circuit engineers can predict effects of component variations in complex circuits. Pole and Zero analysis tells which components require tight tolerances, and which can be cheaper, high-tolerance components

Poles and Zeros Speed Circuit Analysis



By W. A. SCISM

Frequently, the transfer functions of multi-mesh circuits contain the values of the original circuit components in such complicated form that it is virtually impossible for the designer to predict changes in the network frequency response for small changes in component values. Thus, a point-by-point frequency response plot is an analysis procedure which is valuable for determining the behavior of a network that is already designed, but its value for network synthesis is extremely limited.

The pole and zero method of circuit analysis offers a rapid insight into the behavior of many circuits and variations in behavior with changes of components. This article will concern itself with the pole and zero distribution of various networks and the use of this distribution to predict the network performance with variations in components.

A pole is a frequency (real, imaginary or complex) at which the transfer function goes to infinity, and a zero is a frequency at which the transfer function goes to zero. This is similar in concept to

lossless parallel and series resonant circuits, respectively. In the following examples, the variable p will be substituted for $j\omega$.

For the first example, consider the case of a series loaded parallel resonant circuit as shown in Fig. 1. The transfer impedance of this network is:

$$\frac{e_o}{i} = \frac{p + \frac{R}{L}}{C \left[p^2 + p \frac{R}{L} + \frac{1}{LC} \right]}$$

Notice that the numerator goes to zero when $p = -\frac{R}{L}$; this is the zero of the transfer impedance. The denominator of the expression goes to zero when $p^2 + p \frac{R}{L} + \frac{1}{LC} = 0$. The two roots become zeroes of the denominator and poles of the transfer impedance.

$$p = -\frac{R}{2L} \pm \sqrt{\left(\frac{R}{2L}\right)^2 - \frac{1}{LC}}$$

$$p = -\frac{R}{2L} \pm j \sqrt{\frac{1}{LC} - \left(\frac{R}{2L}\right)^2}$$

W. A. SCISM, Senior Electronics Engineer, Convair-Astronautics, San Diego, Calif. A Division of General Dynamics Corp.

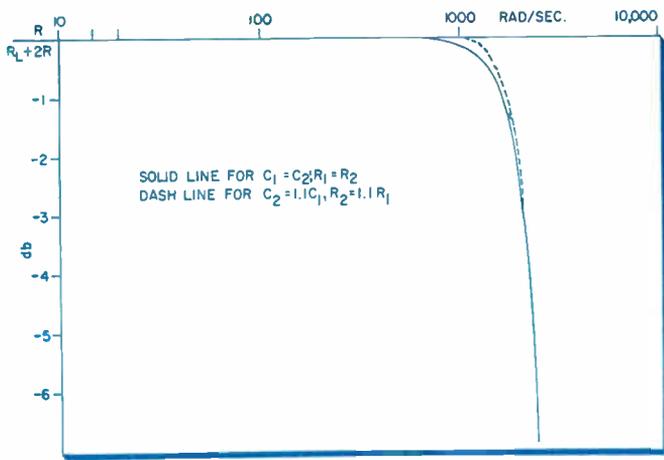


Fig. 5: Normalized plot of Pole and Zero representation in Fig. 6

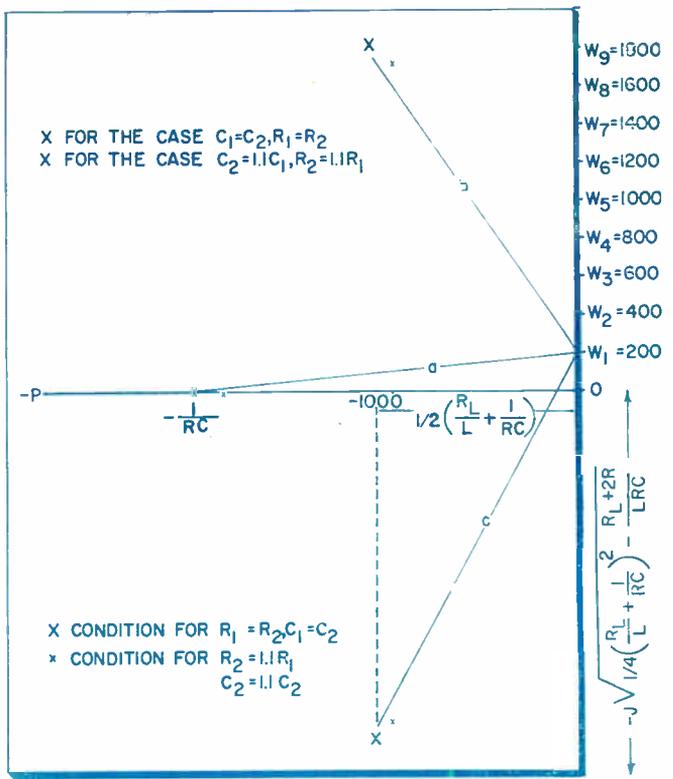


Fig. 6: Pole and Zero analysis of low pass filter with finite Q inductor (Fig. 4)

The placement of these roots on the 'p' plane is shown in Fig. 2, letting O denote zeroes and X denote poles.

Several bits of information are immediately apparent from inspection of this plot; a vector drawn from the origin to the pole has a magnitude $\sqrt{\frac{1}{LC}}$ and is the normal resonant frequency of the coil and condenser. The distance $\frac{R}{2L}$ is inversely proportional to the Q of the circuit. As R approaches zero, the Q approaches infinity and the pole and zero combination shifts in such a manner that the zero moves to the origin and the complex poles move onto the real or jp axis at $\omega = \frac{1}{LC}$ and become purely imaginary. The phase angle is $\alpha - \beta - \gamma$. Note that γ is negative for the condition in Fig. 2.

The transfer impedance at any real frequency ω_1 is the product of the distances from a point ω_1 on the p plane to the zeros of the network divided by the product of the distances from the same point to the poles. Hence $Z_T(\omega_1) = \frac{tk}{rs}$, where K is a normalizing constant. A few points will yield a graphical construction of the simple parallel resonance curve.

Comparing the high Q (Fig. 3A) and the low Q (Fig. 3B) cases, it can be seen by inspection that in the high Q case near resonance the lines s and t are of almost constant length, whereas line r has a large rate of change with jp or ω . Hence r is the determining factor in Z_T near resonance and the resonance curve shows a symmetry that is practically arithmetic. In the low

Q case, however, it can be seen that the rate of change of r with ω is no longer vastly greater than that of s and t, and the resonance curve shows pronounced geometric symmetry.

The pole and zero method is of particular importance to the designer in cases where the variations in performance with limit components is desired. A proper evaluation of circuit performance in this manner leads to correct specification of components as to tolerances and avoids costly precision when it is unnecessary. Consider the low pass filter with a finite Q inductor as in Fig. 4.

Assume $C_1 = C_2$ and $R_1 = R_2$

$$e_o/e_i = \frac{1}{2CRL \left(p + \frac{1}{RC} \right) \cdot \left[p^2 + p \left(\frac{R_L}{L} + \frac{1}{RC} \right) + \frac{R_L + 2R}{LRC} \right]}$$

In this case there are 3 poles

$$p_1 = -\frac{1}{RC}, p_2 = -\frac{1}{2} \left(\frac{R_L}{L} + \frac{1}{RC} \right) \pm \sqrt{\left(\frac{R_L}{L} + \frac{1}{RC} \right)^2 - 4 \frac{R_L + 2R}{LRC}}$$

and no zeroes. Let ω_c , the design center cut off frequency be 1000 radians per second and $R=1000 \Omega$.

$$L = \frac{2R}{C} = 1 \text{ Henry} \quad C = \frac{1}{2\omega R} = .5 \mu\text{fd.}^*$$

Assume a coil Q of 10 at ω_c , then $R_L = 100 \Omega$.

The poles become $p = -2000$ and $p = -1050 \pm j 1755$ and are shown placed on the p plane in Fig. 6. Plotting the normalized curve in db with respect to the response at $\omega = 0$

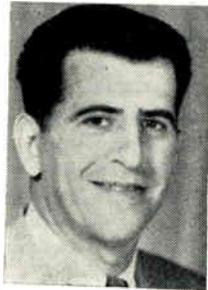
$$\frac{e_o}{e_i} = \frac{R}{R_L + 2R} \times \frac{a \cdot b \cdot c \cdot o}{abc}$$

where a, b, and c are in any convenient units of length for scaling values from the p plane. The response is shown in Fig. 5 (solid line). It should be noted that an inductor having a Q of infinity would move the complex poles from $-1050 \pm j 1750$ to $-1000 + j 1730$ which constitutes a minor improvement in response. The effects of the inductor manufacturing tolerances can be shown by substituting limit values of L on the p plane and replotting the response. To take differential variations in the two capacitors and resistors into account, the original assumption that they are equal must be abandoned and C_1, C_2, R_1 and R_2 used in the mesh equations. Since the transfer functions sometimes become unwieldy when substitutions such as this are

(Continued on page 441)

The Boolean Approach to Computer Switching

Developing the elements of Boolean algebra and its applications to the synthesis and analysis of combinatorial circuits, this article presents the basics for logical design.



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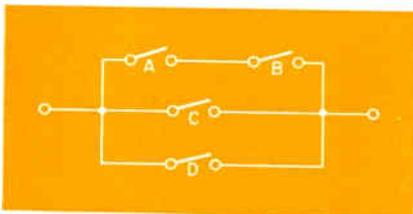


Fig. 1: A relay circuit which exemplifies the condition of a simple Boolean function.

BOOLEAN ALGEBRA attempts to describe a physical situation compactly and in such a manner that operations on the variables will enable a clearer insight into the nature of the physical analog. The variables are limited to the values of 1 or 0 representing logical truth or falsity, respectively.¹ These states are mutually exclusive.

The extension of representation, identifying the 1 or 0 with the on-off of a relay, the conduction or non-conduction of an electronic gate or the 2 states of any bistable element, is apparent.

Statements about systems composed of bistable elements correspond directly to statements about logical nets. In Boolean algebra there are 3 fundamental opera-

tions on the 2 valued variables; conjunction, disjunction and negation. These operations are defined in Table 1.

Terminology

Unfortunately, the terminology given in Table 1 is not standardized. In this article the conjunctive ("and") operation symbols are those used in ordinary algebraic multiplication; the disjunctive ("or") operation by (+); and, negation ("not") by a prime (').

Boolean algebra has been applied extensively to telephone switching circuits employing relays as the basic bistable element. In this application, the closed state of a relay is represented by a binary variable x and its open, or negated, state by x' . The conjunctive condition applies to relays in series and the disjunctive condition to relays in parallel.

A Boolean function is an algebraic expression relating a number of variables. The function

$$f(ABCD) = AB + C + D \quad (1)$$

when related to relay circuits

states that the complete circuit consisting of relays A, B, C and D is closed when either relays A and B are closed or relay C is closed or relay D is closed. The circuit for this function is shown in Fig. 1.

From the basic postulates given in Table 1, a set of theorems may be derived. These are given in Table 2.

Theorem Validity

The validity of the theorems of

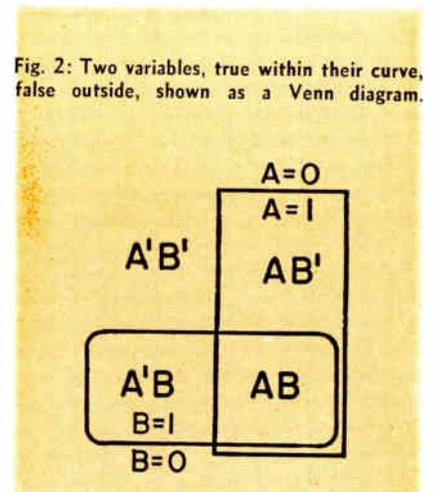


Fig. 2: Two variables, true within their curve, false outside, shown as a Venn diagram.

Table 2 may be established by means of a truth table. A truth table is a table which lists all the combinations of the variables and the corresponding value of the function. The validity of a Boolean equality is established when both sides of the equality are

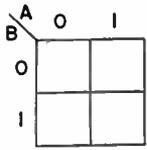


Fig. 3: A 2 variable Karnaugh Chart.

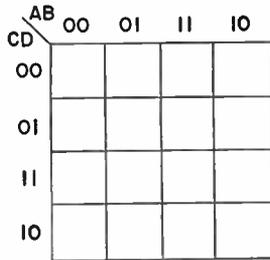


Fig. 4: This Karnaugh Chart represents four variables.

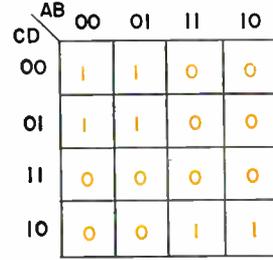


Fig. 5: Functional representation, in orange, of Eq. 2.

equivalent for all combinations of the variables. Theorem (15)

$$X + X'Y = X + Y$$

has 2 variables. Table 3 is the truth table establishing its validity.

The first 2 columns contain all combinations of the variables X and Y while the equivalence of the last 2 columns establishes the truth of the theorem.

Karnaugh Chart

The theorems of Table 2 are the basic relationships used in the simplification of Boolean functions. In general, algebraic simplification by minimization of the number of variables does not necessarily translate into the circuit of least complexity.

The Karnaugh Chart² is a topological device for generating a variety of near minimal algebraic form with rapidity, giving the designer latitude in the choice of a final design. The Karnaugh Chart has its foundation in the Venn diagram, a topological interpretation of Boolean Algebra.

In the Venn diagram, a Boolean variable is true in the area within a closed curve and false external to the curve. The conjunctive operation translates to the overlap of areas of the variables. Fig. 2 is the Venn diagram for 2 variables.

The area inside the vertical rectangle represents A and all the external area, A'. The areas within and without the horizontal rectangle are B and B', respectively.

Table 1

Boolean Variable		Conjunction	Disjunction	Negation	
x	y	xy	$x+y$	x'	y'
0	0	0	0	1	1
0	1	0	1	1	0
1	0	0	1	0	1
1	1	1	1	0	0

The area of overlap is AB with other areas defined as shown. The derivation of the 2 variable Karnaugh Chart, Fig. 3, from the Venn diagram is evident.

The Karnaugh Chart for 4 variables is shown in Fig. 4.

The Karnaugh Chart can be used for representation of Boolean functions. Given a function

$$f(ABCD) = A'B'C'D' + A'BC'D' + A'B'C'D + A'BC'D + ABCD' + AB'CD' \quad (2)$$

its representation in the Karnaugh Chart is shown in Fig. 5.

The main use of this chart is in the reduction of Boolean algebraic functions. The rules for finding minimal form for the charted function are:

- Choose a rectangular or square set of charted 1's (1, 2, 4 or 8 internal squares).
 - Every 1 must be chosen at least once.
 - Find the variables which remain unchanged throughout the
- (Continued on page 182)

Table 2

- $X+1 = 1$
 - $X+0 = X$
 - $X+X = X$
 - $X+X+X \dots +X = X$
 - $X+X' = 1$
 - $X+Y = Y+X$
 - $XY = YX$
 - $X+Y+Z = (X+Y)+Z = X+(Y+Z)$
 - $XYZ = (XY)Z = X(YZ)$
 - $XY+XZ = X(Y+Z)$
 - $(X+Y)(X+Z) = X(Y+Z)$
 - $X+XY = X$
 - $X(X+Y) = X$
 - $X(X'+Y) = XY$
 - $X+X'Y = X+Y$
 - $(X+Y+Z)' = X'Y'Z'$
 - $(XYZ)' = X'+Y'+Z'$
- Commutative Law (3, 4, 5)
Associative Law (8)
Distributive Law (10, 11)
DeMorgans Theorem (16, 17)

Table 3

X	Y	X'	X'Y	X+X'Y	X+Y
0	0	1	0	0	0
0	1	1	1	1	1
1	0	0	0	1	1
1	1	0	0	1	1

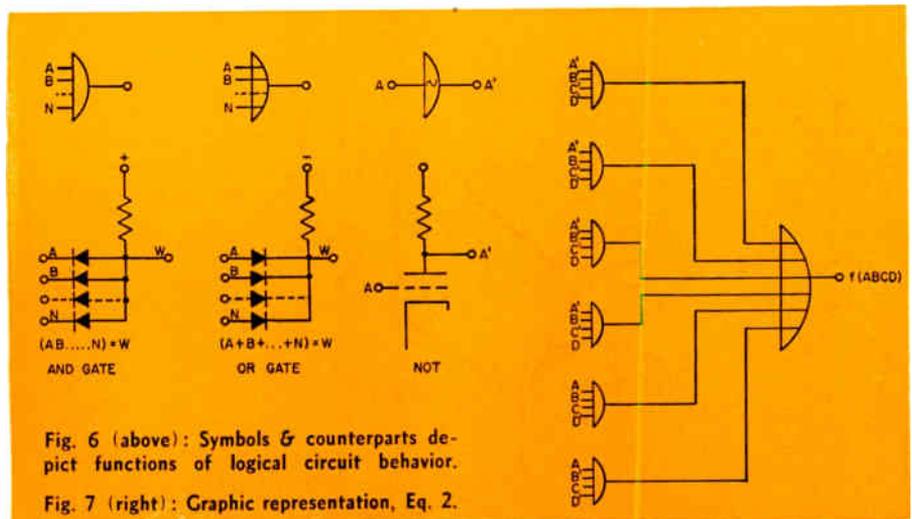


Fig. 6 (above): Symbols & counterparts depict functions of logical circuit behavior.

Fig. 7 (right): Graphic representation, Eq. 2.

Calculating R-C Amplifier Supply Voltages

The trial and error method is eliminated by assuming that the tube "constants" are actually constants and that the input signal always swings the tube from cutoff to zero grid-to-cathode voltage

By **SID DEUTSCH**

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Part Two of Two Parts

Pentode Amplifier

The characteristic curves of an idealized pentode are shown in Fig. 5b. Operation will be restricted to the linear region, i.e., the plate-to-cathode voltage must never be less than m times the screen-to-cathode voltage. In the linear region, the plate current is always k times the screen current. The screen current itself obeys the equation for the idealized triode, Eq. 1:

$$i_s r_s = E_{sk} + \mu_s E_{gk} \quad (19)$$

The constants m , k , r_s , and μ_s can be calculated from tube manual data. As an example, for the 6AU6 tube:

m : With $E_{sk} = 100$ v., the characteristic curves depart from linearity at $E_{pk} = 30$ v., so that $m = 0.3$.

k : Under typical operating conditions, $i_p = 5.2$ ma while $i_s = 2.0$ ma, so that $k = 2.6$.

r_s : From the characteristic curves, $i_s = 4.2$ ma when $E_{sk} = E_{pk} = 100$ v. and $E_{gk} = 0$. Substituting into Eq. 19,
 $4.2 r_s = 100$,

or $r_s = 23.8K \Omega$.

μ_s : Under typical operating conditions,

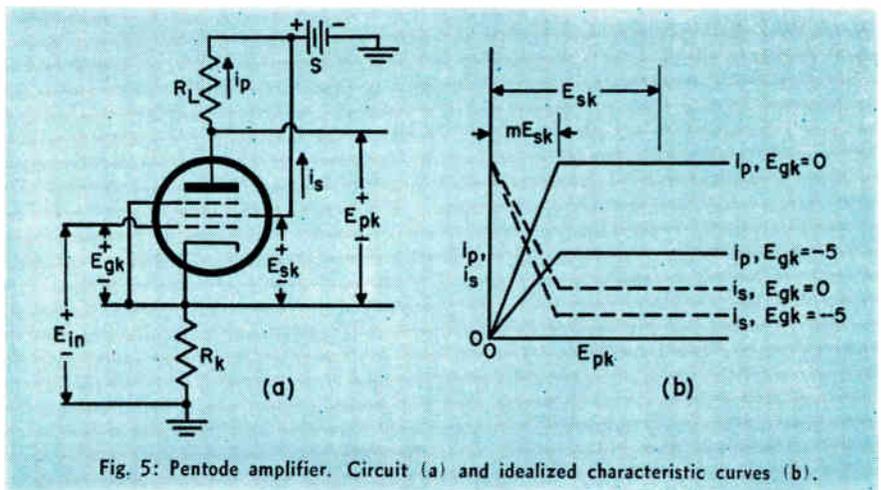


Fig. 5: Pentode amplifier. Circuit (a) and idealized characteristic curves (b).

$i_s = 2.0$ ma when $E_{sk} = E_{pk} = 100$ v. and $E_{gk} = -1$ v. Substituting into Eq. 19,

$$2.0 \times 23.8 = 100 - \mu_s,$$

or $\mu_s = 52.4$.

For the circuit of Fig. 5a,

$$E_{gk} = E_{in} - i_s R_k (1 + k) \quad (20)$$

and

$$S = E_{sk} + i_s R_k (1 + k) \quad (21)$$

Eq. 19 to 21 then yield

$$i_s = \frac{S + \mu_s E_{in}}{r_s + R_k (1 + k) (1 + \mu_s)} \quad (22)$$

The grid-to-plate gain is the derivative of the voltage across R_L with respect to

E_{in} . The current through R_L is $k i_s$. If R_L and R_k are replaced by the impedances Z_L and Z_k , one obtains

$$G_p = \frac{\mu_s Z_L k}{r_s + Z_k (1 + k) (1 + \mu_s)} \quad (23)$$

Similarly,

$$G_k = \frac{\mu_s Z_k (1 + k)}{r_s + Z_k (1 + k) (1 + \mu_s)} \quad (24)$$

Fig. 7a shows the equivalent circuit of the pentode amplifier as seen by a plate load impedance, while Fig. 7b is the equivalent circuit for a cathode load impedance. Because of the idealizing assumptions, Eq. 23 indicates that G_p is proportional

to Z_L . This is reasonably accurate if $Z_L \leq 0.1r_p$. However, even if $Z_L > 0.1r_p$, Eq. 23 is valid when employed, as in this article to calculate the supply voltages.

The generalized pentode amplifier is shown in Fig. 6. Calculation of the fixed bias voltage identically follows Eqs. 7 to 14, yielding

$$A = G_k \left(E_{gpp} + E_{gn} \frac{R_k}{R_o} \right) - E_{gp} \quad (25)$$

At cut-off, the screen-to-cathode voltage is μ_s times the cathode-to-grid voltage. This yields

$$E_{skn} = \mu_s E_{gpp} (1 - G_k) \quad (26)$$

The screen supply voltage is given by $E_{skn} + E_{Rkn}$, or

$$S = \mu_s E_{gpp} (1 - G_k) + E_{gn} G_k \frac{R_k}{R_o} \quad (27)$$

The plate supply voltage is computed on the basis that E_{pk} must equal mE_{sk} at the zero-grid condition. For this purpose, $E_{skp} = S - E_{Rkp}$, or

$$E_{skp} = E_{gpp} (\mu_s - \mu_s G_k - G_k) \quad (28)$$

so that

$$E_{pkp} = m E_{gpp} (\mu_s - \mu_s G_k - G_k) \quad (29)$$

From analogy with Eq. 13,

$$E_{RLp} = G_p \left(E_{gpp} + E_{gn} \frac{R_L}{R_g} \right) \quad (30)$$

Finally, the plate supply voltage is given

while the peak value of screen current is given by

$$i_{sp} = i_{so} \frac{E_{gpp}}{E_{gn}} \quad (33)$$

The average and peak values of plate current are k times the corresponding screen current values.

As an example of the application of the above equations, suppose that

- $m = 0.2$
- $k = 4$
- $\mu_s = 20$
- $r_s = 10K \Omega$
- $R_k = 2K \Omega$
- $R_o = 1K \Omega$
- $R_L = 20K \Omega$
- $R_g = 5K \Omega$
- $E_{gn} = 10 \text{ v.}$
- $E_{gp} = 6 \text{ v.}$

For this example, various calculated values and their associated equations are listed in Table 2.

For the 9 additional circuits of Fig. 4, the expressions appear as follows (in each case, assume that the tube is a pentode with the screen grid connected to S volts):

Circuit 2—Dual output, $R_g \gg R_L$:

$$G_k = \frac{\mu_s R_k (1 + k)}{r_s + R_k (1 + k) (1 + \mu_s)}$$

$$A = E_{gpp} G_k - E_{gp}$$

$$S = \mu_s E_{gpp} (1 - G_k)$$

$$B = E_{gpp} (G_k + G_p) \left(E_{gpp} + E_{gn} \frac{R_L}{R_g} \right) + m E_{gpp} (\mu_s - \mu_s G_k - G_k)$$

Circuit 4—Dual output, $R_g \gg R_L$ and $R_o \gg R_k$:

$$G_p = \frac{i_{so} R_L k}{r_s + R_k (1 + k) (1 + \mu_s)}$$

$$G_k = \frac{\mu_s R_k (1 + k)}{r_s + R_k (1 + k) (1 + \mu_s)}$$

$$A = E_{gpp} G_k - E_{gp}$$

$$S = \mu_s E_{gpp} (1 - G_k)$$

$$B = E_{gpp} (G_p + G_k) + m E_{gpp} (\mu_s - \mu_s G_k - G_k)$$

Circuit 5—Grounded cathode:

$$G_p = \frac{\mu_s Z_L k}{r_s}$$

$$G_k = 0$$

$$A = -E_{gp}$$

$$S = \mu_s E_{gpp}$$

$$B = G_p \left(E_{gpp} + E_{gn} \frac{R_L}{R_g} \right) + m \mu_s E_{gpp}$$

Circuit 6—Grounded cathode, $R_g \gg R_L$:

$$G_p = \frac{\mu_s R_L k}{r_s}$$

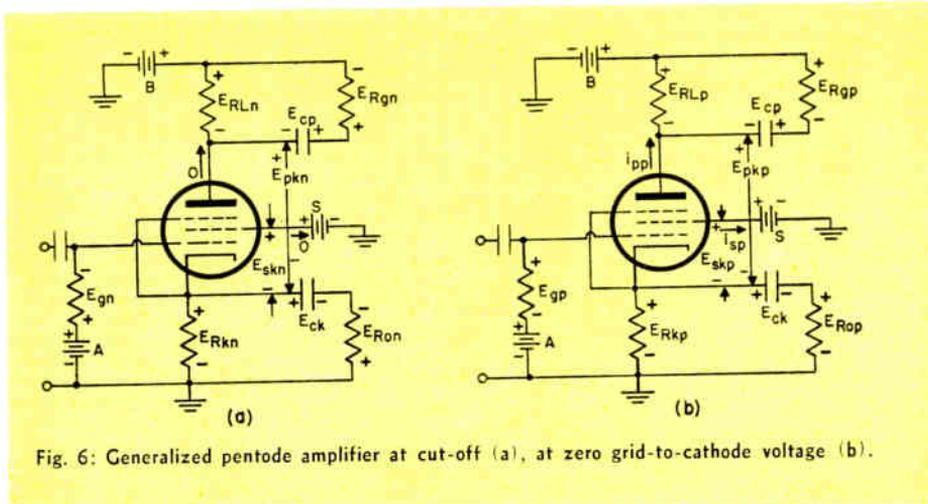


Fig. 6: Generalized pentode amplifier at cut-off (a), at zero grid-to-cathode voltage (b).

by $E_{RLp} + E_{pkp} + E_{Rkp}$, or

$$B = G_p \left(E_{gpp} + E_{gn} \frac{R_L}{R_g} \right) + G_k \left(E_{gpp} + E_{gn} \frac{R_k}{R_o} \right) + m E_{gpp} (\mu_s - \mu_s G_k - G_k) \quad (31)$$

Thus, A, S, and B are given as functions of the tube constants, the resistors, and the peak signal voltages.

For the average value of screen current, the substitution of A for E_{in} in Eq. 22 yields

$$i_{so} = \frac{S + \mu_s A}{r_s + R_k (1 + k) (1 + \mu_s)} \quad (32)$$

$$G_p = \frac{\mu_s R_L k}{r_s + Z_k (1 + k) (1 + \mu_s)}$$

$$G_k = \frac{\mu_s Z_k (1 + k)}{r_s + Z_k (1 + k) (1 + \mu_s)}$$

$$A = G_k \left(E_{gpp} + E_{gn} \frac{R_k}{R_o} \right) - E_{gp}$$

$$S = \mu_s E_{gpp} (1 - G_k) + E_{gn} G_k \frac{R_k}{R_o}$$

$$B = G_p E_{gpp} + G_k \left(E_{gpp} + E_{gn} \frac{R_k}{R_o} \right) + m E_{gpp} (\mu_s - \mu_s G_k - G_k)$$

Circuit 3—Dual output, $R_o \gg R_k$:

$$G_p = \frac{\mu_s Z_L k}{r_s + R_k (1 + k) (1 + \mu_s)}$$

$$G_k = 0$$

$$A = -E_{gp}$$

$$S = \mu_s E_{gpp}$$

$$B = E_{gpp} (G_p + m \mu_s)$$

Circuit 7—Cathode follower:

$$G_p = 0$$

$$G_k = \frac{\mu_s Z_k (1 + k)}{r_s + Z_k (1 + k) (1 + \mu_s)}$$

$$A = G_k \left(E_{gpp} + E_{gn} \frac{R_k}{R_o} \right) - E_{gp}$$

$$S = \mu_s E_{gpp} (1 - G_k) + E_{gn} G_k \frac{R_k}{R_o}$$

(Continued on page 130)

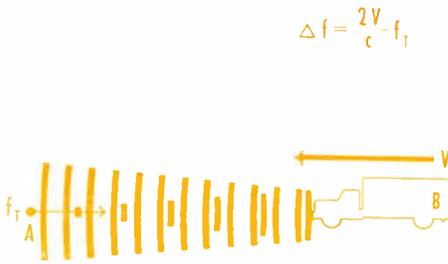


Fig. 1: Velocity of the moving truck shifts the frequency of the reflected signal.

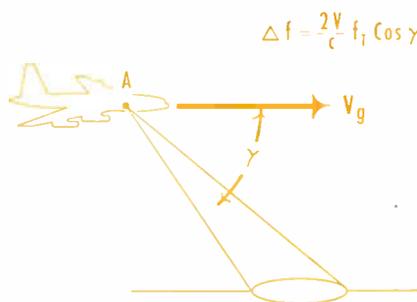


Fig. 2: When reflection and motion are not radial, the deviation must be considered.

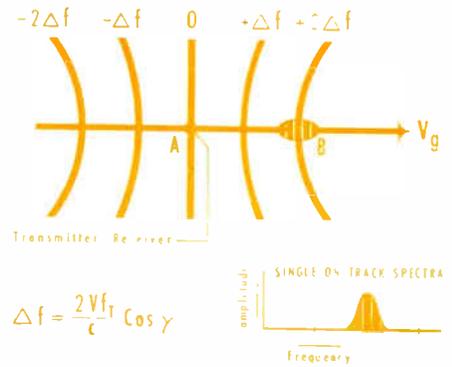


Fig. 3: Contours of equal frequency shift and spectral power density plot, $\gamma < 90^\circ$.

Prelude to Push-Button Flight

Doppler Navigation Holds the Course

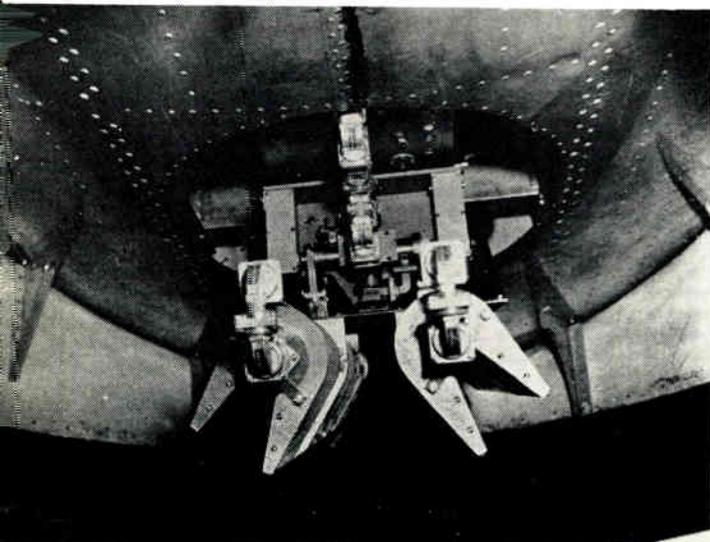
Without terrestrial aid, Doppler equipment determines ground speed and drift angle. Coupled with a dead-reckoning computer and auto-pilot, aircraft automatically flies great circle route to destination while present location is presented digitally.

By **WILLIAM J. TULL**

*Vice-President & Director Avionic Sales Div.,
General Precision Laboratory Inc.,
63 Bedford Rd., Pleasantville, N. Y.*



Fig. 7: First antenna to automatically measure speed and drift.



SINCE December 17, 1903, when man first flew, those who have been actively associated with aviation have at one time or another been concerned with the problem of how to determine ground speed and drift angle of an aircraft without aid from the ground. Through the years a number of devices have been proposed; most of them, however, have fallen by the wayside as time progressed. The optical drift sight has, of course, been widely used for the determination of drift angle. In addition, by double drift techniques it has been possible to determine ground speed with a drift sight.

Other self-contained means of obtaining ground speed and/or drift angle have been:

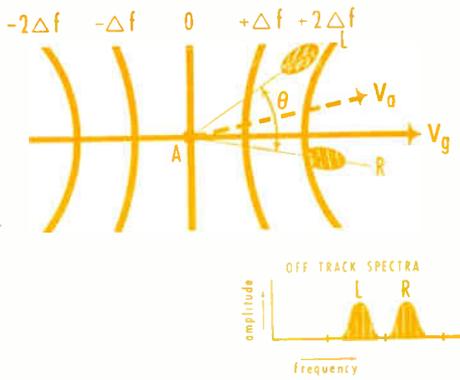


Fig. 4: Graphic presentation of 2 beams transmitted in 2 different directions.

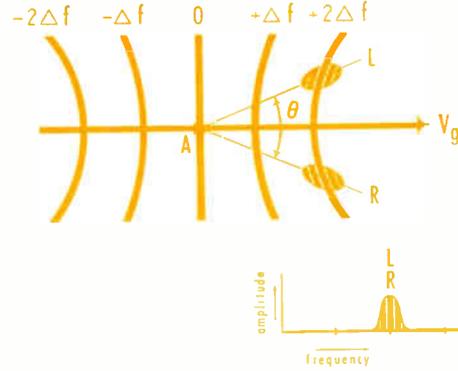


Fig. 5: Plan view and spectral power density of 2 beams with equal γ & equal θ .

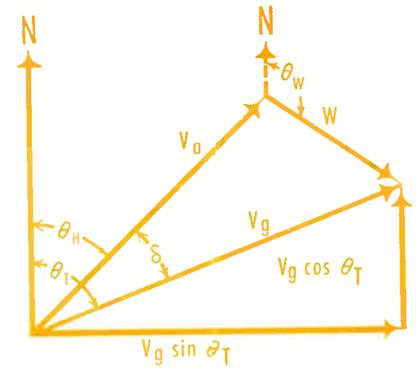


Fig. 6: Vector presentation of continuous dead reckoning provided by radar system.

- a. Norden bombsight
- b. Radar bombsights
- c. Bellamy drift techniques
- d. Pilotage, etc.

The principal shortcomings of these devices or techniques have been that they required clear weather to see the ground, they were inoperable over water, or they lacked sufficient accuracy. Of course, many of them also call for a great deal of skill and a large amount of equipment. The Bellamy drift technique has been one of the better recent contributions to this field of navigation.

History

A new technique, which makes possible the sensing and measurement of ground speed and drift angle, utilizes what is commonly referred to as the "Doppler effect." The equipment which utilizes this phenomenon at microwave frequencies and which comprises the necessary instrumentation for its measurement is commonly referred to as Doppler radar equipment.

At the end of the war, the Air Corps undertook an active program with General Precision Laboratory (GPL) with the objective of securing a completely automatic, self-contained navigation system. As a result of this program, GPL became the first group to fly navigation equipment capable of measuring both

ground speed and drift angle automatically and accurately.

The first such flight occurred in April, 1948. We feel extremely fortunate that we were able to participate in this historic achievement.

Since that date there has been considerable progress in the evolution of Doppler equipment. This progress can perhaps best be illustrated by photographs showing the chronological development of equipment. The following figures are indicative of the advances made in the past few years.

The antenna system of original GPL system number 3, which was the first system to ever measure ground speed and drift angle automatically and accurately, is shown in Fig. 1.

Fig. 2 shows the APN-81 equipment, currently in high quantity production for the USAF, which weighs 380 lbs and takes 16 cu ft of space.

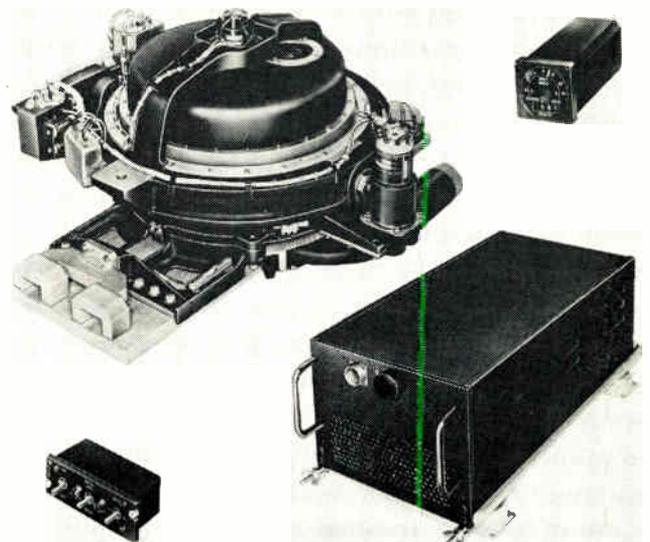
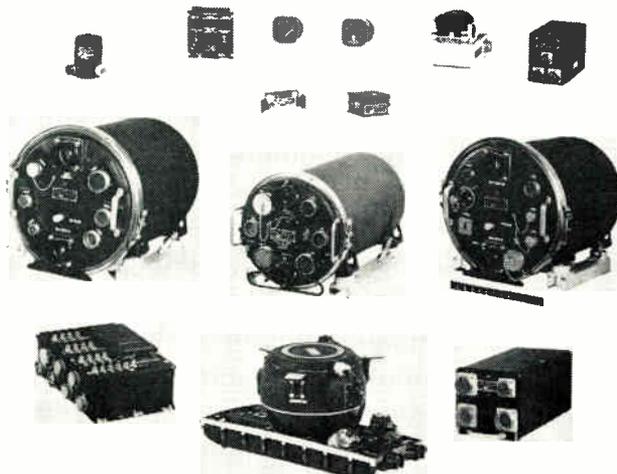
The GPL commercial RADAN model PC-201, Fig. 3, weighs 85 lbs and taking 4.4 cu ft of space. The RADAN system is currently in low quantity production. From the illustrations it is obvious that Doppler Radar equipment is now available as a practical and producible device for use on board all types of aircraft.

Operation

On the left in Fig. 4, we have a stationary transmitter-receiver A. The transmitter is emitting a sig-

Fig. 8 (below): The APN-81 weighs 380 lbs. and displaces 16 cu. ft.

Fig. 9 (right): RADAN weighs 85 lbs. and occupies 4.4 cu. ft.



Doppler Navigation (Continued)

nal at a frequency f_t . The signal is reflected from the truck B back to the receiver A. Since the truck is moving with a velocity v , there will be a Doppler shift in the frequency of the reflected signal. The equation relating the several quantities involved is shown in the upper right hand side of the figure. This equation is an expression for the difference in frequency between the signal transmitted and the signal received at location A. This difference frequency Δf is:

$$\Delta f = \frac{v}{c} f_t$$

The quantity c is the velocity of propagation of the electromagnetic signal.

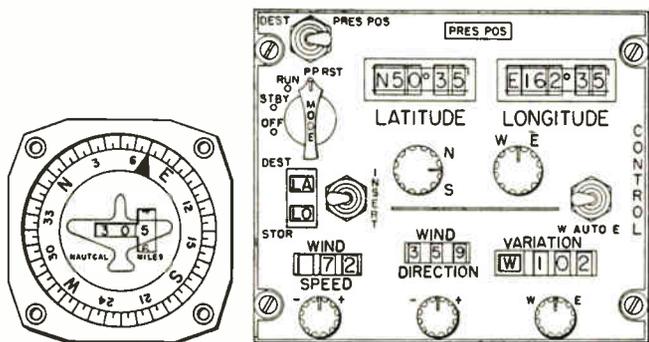


Fig. 10: The ASN-7 provides present position, course to destinations.

In Fig. 5, the transmitter-receiver A is now located in an aircraft flying over the ground. The transmitter is sending out a beam of energy from the aircraft to the ground. The beam is transmitted at an angle γ from the direction of the aircraft velocity vector, v . The equation relating the several quantities in this illustration is shown in the upper right hand side of the figure. The equation for the difference frequency Δf is in this case:

$$\Delta f = 2 \frac{v}{c} f_t \cos. \gamma$$

It is evident from this equation that Δf is a measure of the velocity v , since the other quantities occurring in the right hand member of the equation are known.

It should be noticed that in this equation all energy reflected or back scattered from the ground at the angle γ undergoes the same Doppler frequency shift, Δf . Now let us draw the intersections with the ground of families of beams having constant γ angles. These intersections are hyperbolas, assuming a plane earth. These hyperbolas are conveniently thought of as contours of equal Doppler frequency shift.

Now let us consider Fig. 6. Here we are observers looking straight down from above on the airborne transmitter A. The transmitter is traveling in the direction indicated by the velocity vector, v_g . In the center we see the constant frequency contour for a γ angle of 90° . This is a zero Doppler frequency contour because in this case there is no relative velocity between the transmitter A and the ground. That is, for

$\gamma = 90^\circ$, the frequency shift is $\Delta f = 0$. The other contour lines on the illustration are for values of γ of magnitude less than 90° . The lines ahead of the transmitter represent the loci of echo sources having an increased frequency over those transmitted; a closing velocity between the transmitter and the ground ahead.

The contours behind the transmitter correspond to echo sources having decreased frequency from those transmitted. The transmitter has a velocity of recession from all elements of the ground behind the aircraft. Obviously the smaller the angle γ , the further ahead (or behind) the beam intersects the ground. Correspondingly, the smaller the value of γ , the greater the value of Δf , the Doppler frequency shift.

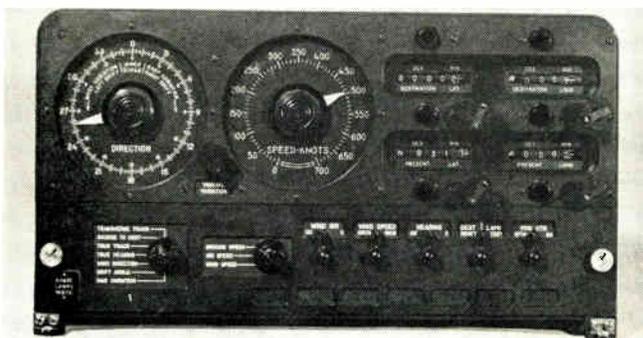
Now let us project a small pencil beam from the transmitter at A to the ground at B. The energy is essentially confined inside the ellipse at B. It is evident that the signals within the beam B scattered from the ground nearest the transmitter are characterized by a larger γ angle and a lower Doppler frequency shift than those further out. This is illustrated in the spectral power density plot in the lower right hand corner of the figure.

Two-Beam Operation

You will see in Fig. 7 that we once again have plotted the same constant frequency hyperbolas. However, in this case we have transmitted 2 beams of energy in 2 different directions. It can be seen that if one beam of energy is confined to the region L, that the corresponding return signal has a spectrum as shown in the diagram at the bottom of the illustration. Similarly, one can picture the spectrum corresponding to the energy from region R. Let us now maintain the angle θ between the L and R regions constant, while the whole beam forming assembly is rotated about a vertical axis. The frequencies associated with the beams L and R will change accordingly. In Fig. 8, we see what the situation would be when the beam assembly has been rotated until the frequencies from L and R are equal. In this situation it is obvious that the bi-sector on the angle θ lies in the direction of the velocity vector v_g .

In brief then, by the measurement of the frequency Δf , we can determine the ground speed of an aircraft—and by servoing a 2-beam antenna system until equal Doppler frequencies are received from each, we can measure drift angle. It is also possible to determine drift angle. It is also possible to determine drift angle. It is also possible to determine drift angle. (Continued on page 437)

Fig. 11: The AN/APA-95 computer makes easy navigator training.





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DB-25S

CANNON CONNECTORS

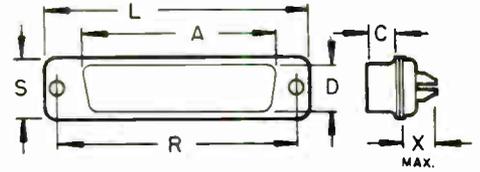
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DB-25P

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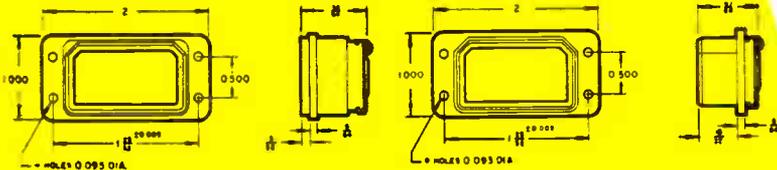
DPA 32-34P



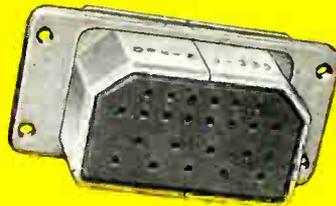
DPA 32-33S

DPA CONNECTORS:

Shell with retaining plate. Pin and Socket Inserts.



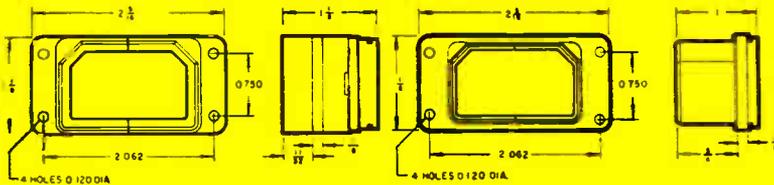
DPX 23-34P



DPX 23-33S

DPX CONNECTORS:

Split shell. Pin and Socket Inserts.



size	A	C	D	L	R	S	X	weight
DA-15P	1 1/4	1 3/4	2 3/4	1 1/2	1.312	3 1/4	3/16	.013
DA-15S	1 3/2	1 3/4	3/16	1 1/2	1.312	3 1/4	3/16	.014
DB-25P	1 1/16	1 3/4	2 3/4	2 3/4	1.852	3 1/4	3/16	.023
DB-25S	1 3/32	1 3/4	3/16	2 3/4	1.852	3 1/4	3/16	.031
DC-37P	2 13/64	1 3/4	2 3/4	2 23/32	2.500	3 1/4	3/16	.035
DC-37S	2 11/64	1 3/4	3/16	2 23/32	2.500	3 1/4	3/16	.035
DD-50P	2 7/8	1 3/4	1 1/2	2 3/8	2.406	3 3/4	3/16	.035
DD-50S	2 3/4	1 3/4	2 7/8	2 3/8	2.406	3 3/4	3/16	.040
DE-9P	4 1/4	1 3/4	2 3/4	1 13/64	.984	3 1/4	3/16	.011
DE-9S	4 1/4	1 3/4	3/16	1 13/64	.984	3 1/4	3/16	.012

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WASHINGTON

News Letter

MICROWAVE HEARING—More than 130 witnesses, representing 59 organizations, will appear at the FCC hearings on future allocations and usage of frequencies above 890 MC. Sessions before the en banc Commission commenced May 20, and are running three days a week. The first group of organizations, which testified during the week of May 20th, included the Operational Fixed Microwave Council, and the utilities and forest radio committees. During the week of May 27th, police and state highway departments' radio spokesmen presented their views. During June and July the Bell System, Western Union, Raytheon, General Electric, Collins, Westinghouse, and Motorola will present their views to help the FCC blueprint future spectrum pattern and usage policies for the all-important microwave communications services.

INTERPRETATION OF ACT—The Justice Department's antitrust division has taken a hand in the microwave deliberations. A letter from Assistant Attorney General Hansen, in charge of the antitrust division, presented a Justice Department interpretation of section 314 of the Communications Act—the section dealing with preservation of competition. Relating this section to the controversy between common carriers and private operators of microwave systems, the Justice Department letter asserted, "... we are of the opinion that by preferring common carrier (telephone and telegraph) operation of such systems competition would be distinctly lessened and monopoly encouraged in the manufacture, sale and use of communications facilities adapted to this area of service."

LONG-RANGE STUDY—General areas of inquiry have been spelled out by the FCC for its fact-finding inquiry into the present and potential uses of the 25-890 MC portion of the spectrum. Responses to various issues and problems set forth by the Commission in its order for the long-range allocations study are called for by July 1, and after they are received and analyzed a date for hearings will be fixed. Areas of inquiry cited by the FCC include sharing of ISM frequencies (industrial, scientific and medical) with communications services; evaluation of long-term requirements by all present ser-

vices; feasibility of applying new and potential techniques; potentialities of a broad band carrier system; and evaluation of impact of new techniques in spectrum conservation and equipment amortization on existing users.

WARTIME POWERS—In what is believed to be the first delegation of his wartime powers in advance of an emergency, President Eisenhower recently signed an executive order delegating wartime emergency powers over communications, radio (communications and broadcasting), and television to the Director of the Office of Defense Mobilization. The order climaxes extensive mobilization planning by government agencies, and the establishment of standby priority plans for telephone and telegraph services. ODM "will continue to work in close touch with the radio, television, telephone and telegraph industries in formulating defense emergency plans," the President's order stated.

DELAY FEE-TV ACTION—The FCC has been aided in its own desired approach to the troublesome problem of subscription television by the action of two leading members of Congress, both chairmen of House Committees which are highly influential in regard to questions like fee-TV. They have urged the Commission to hold off any subscription-TV decision until Congress considers the entire issue. The two Congressmen—Representative Celler (D-N. Y.) who heads the House Judiciary Committee and Representative Harris (D-Ark.) who is chairman of the House Interstate and Foreign Commerce Committee which handles FCC matters—wrote the FCC to withhold action on subscription-TV tests until Congress has studied the proposed service. Rep. Harris indicated his view that the FCC does not have the power to order tests. Meanwhile, a most potent sector of public opinion—the labor unions—are opposed to subscription television. AFL-CIO President George Meany has notified the FCC that the labor organization's executive committee has adopted a resolution opposing the service.

*National Press Building
Washington 4*

*ROLAND C. DAVIES
Washington Editor*

COMPUTER TRIODE

A medium-mu twin triode (RCA-6350) of the 9-pin miniature type, designed for use in a wide variety of applications in electronic computers of the high-speed digital type, and

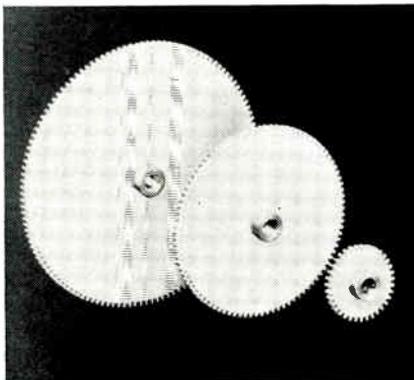


other "on-off" control equipment is available. The 6350 maintains its emission capabilities even after long periods of operation under cut-off conditions. Balance of cut-off bias between the two units of the tube is closely controlled during manufacture. It has separate terminals for each cathode and a mid-tapped heater for a 6.3-volt or 12.6-volt supply. R.C.A., Harrison, N. J.

Circle 77 on Inquiry Card, page 201

PRECISION GEARS

Precision gears especially suitable for servomechanism use are now available. Spur, spring and clutch gears, and bevel and miter gears are among the types available. In stock for immediate delivery are 48 and 64 pitch spur gears, in tooth multiples of 8 and 10. Made-to-order spur gears are available in 32, 48, 64 and 96 pitches. Gears with pitch diameter

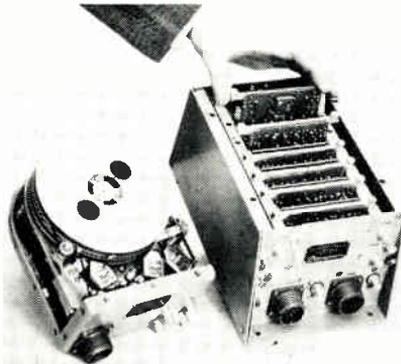


of 1 in. or less are stainless steel, over 1 in. are aluminum with stainless steel insert hubs. All gears are made to AGMA Precision Class 2 standards. Beckman/Helipot Corp., Newport Beach, Calif.

Circle 78 on Inquiry Card, page 201

MIDGET TAPE RECORDER

A complete automatic miniature recorder-playback system for data acquisition during missile flight has been introduced. Model 600 automatically records 2 tracks of IRIG

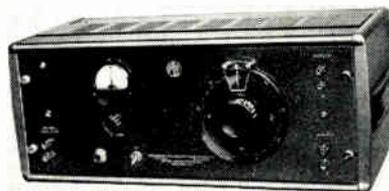


FM/FM subcarrier signals from 200 to 100,000 cps for a preset period ranging up to 250 sec. Application of a second signal causes it to play all recorded data backwards and then stop. A successive signal repeats the cycle, erasing all previous data before recording. System weighs 21½ lb., and is small enough for mounting in the missile. Minneapolis-Honeywell, Davies Labs. Div., Beltsville, Md.

Circle 79 on Inquiry Card, page 201

PHASE STANDARD

Designed for calibrating phase meters and other phase measuring instruments, it can also be used with an oscilloscope to measure the phase shift in electronic circuits or to calibrate precision phase shifters. It converts externally supplied signal (20 cps to 20 KC) into 2 sinusoidal signals whose phase relationship can be varied from 0° to 360° in 4 revolutions

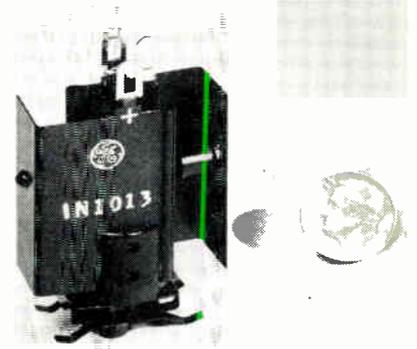


of a single control. Phase angle accuracy is ±1° from 20 CPS to 10 KC; ±3° from 10 to 20 KC. The output varies less than ±2% with phase shift. Has self-contained power supply. Acton Labs., Inc., Acton, Mass.

Circle 80 on Inquiry Card, page 201

GERMANIUM RECTIFIERS

The 4 rectifiers comprising the new germanium line are RETMA type 1N1005, 1N1007, 1N1008 and 1N1013. The 1N1005, 1N1007, and 1N1008 are half wave rectifiers capable of 250,

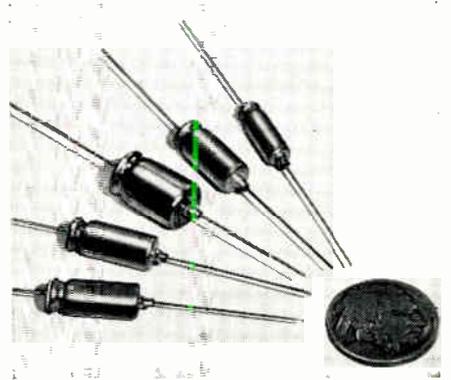


350, and 400 ma. dc output respectively. Type 1N1013 is 2 rectifiers connected as a voltage doubler and has a dc output rating of 250 ma. Peak inverse voltage rating for the 4 rectifiers is 380 v. All are designed to be used with a 4 Ω series surge resistor. Ambient operating temperature rating is 55°C. Operating fin temperature of 65°C. General Electric Co., Syracuse, N. Y.

Circle 81 on Inquiry Card, page 201

MINIATURE ELECTROLYTICS

A new line of low-cost subminiature aluminum cased electrolytic capacitors, known as the TT line. These tiny capacitors are ideal for new circuit designs requiring dependable components and miniaturization. The line is available in over 30 capacity and voltage ratings from 1 to 110 mfd. and from 1 to 50 v. The smallest unit is 3/16 in. dia., ½ in. long.

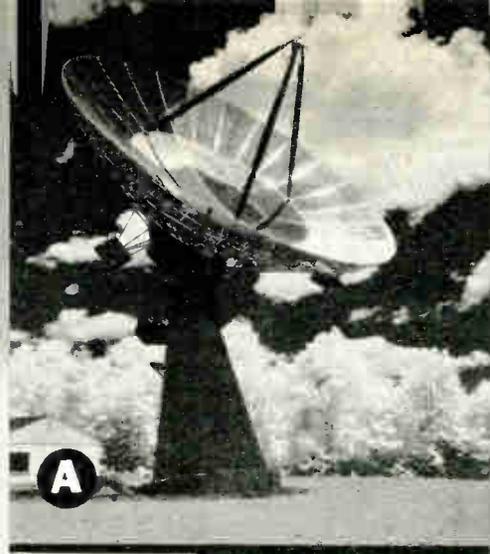


The case uses silicone rubber hermetic seals. The leads are 1¾ in. long, and available with insulating sleeves. They have an operating temperature range of -20 to 65°C. P. R. Mallory & Co., Inc., Indianapolis, Ind.

Circle 82 on Inquiry Card, page 201

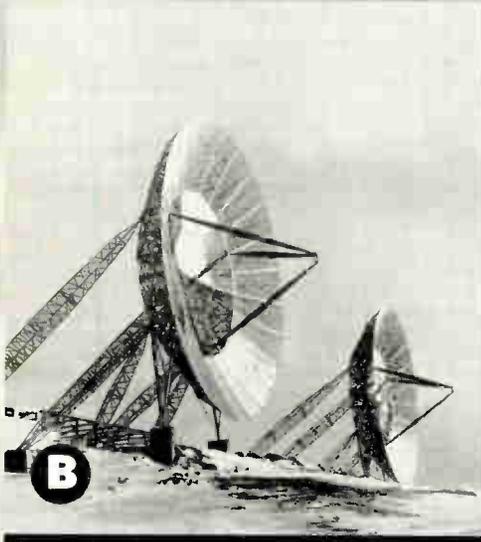
ANTENNA PROBLEMS?

Ask Kennedy!



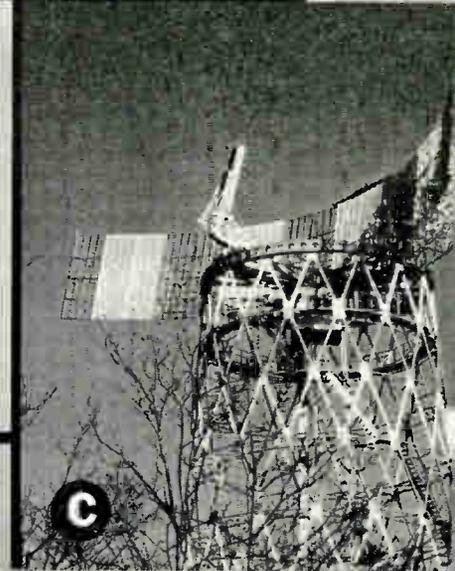
A

A 60' Radio Telescope
Harvard University



B

B 60' Trans-horizon Antennas
Northern Europe

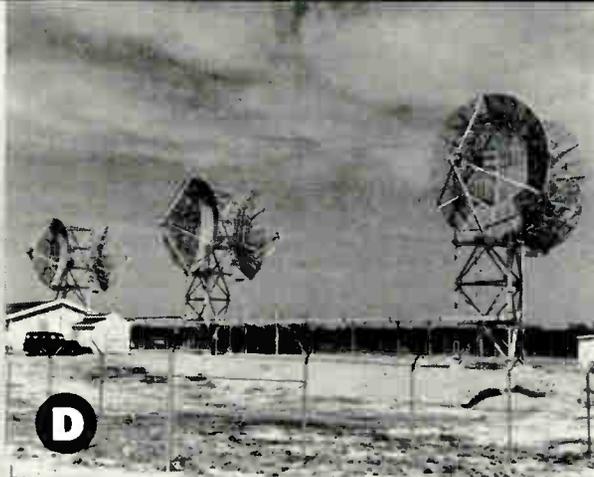


C

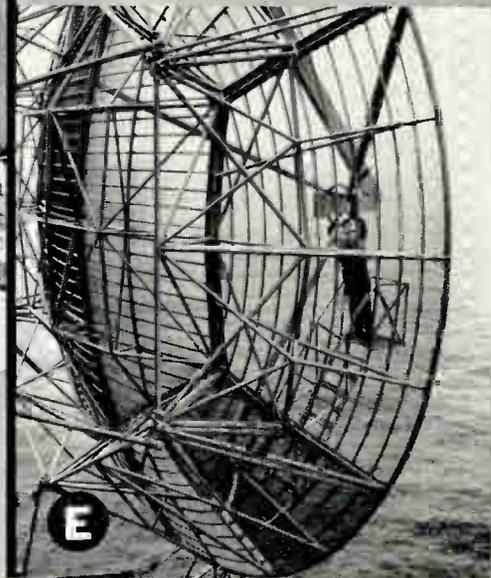
C 120' Radar Antenna
Maine

D 28' Trans-horizon Antennas
Cape Cod

E 28' Trans-horizon Antenna
Texas Tower



D



E

The solution to antenna problems begins when someone says: "Let's ask Kennedy!"

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Kennedy engineers are available to supervise installations anywhere in the world. It's a part of the complete, integrated service that is still another reason why more and more people in communications are "asking Kennedy" about antenna problems.

Circle 83 on Inquiry Card, page 201

ANTENNA EQUIPMENT

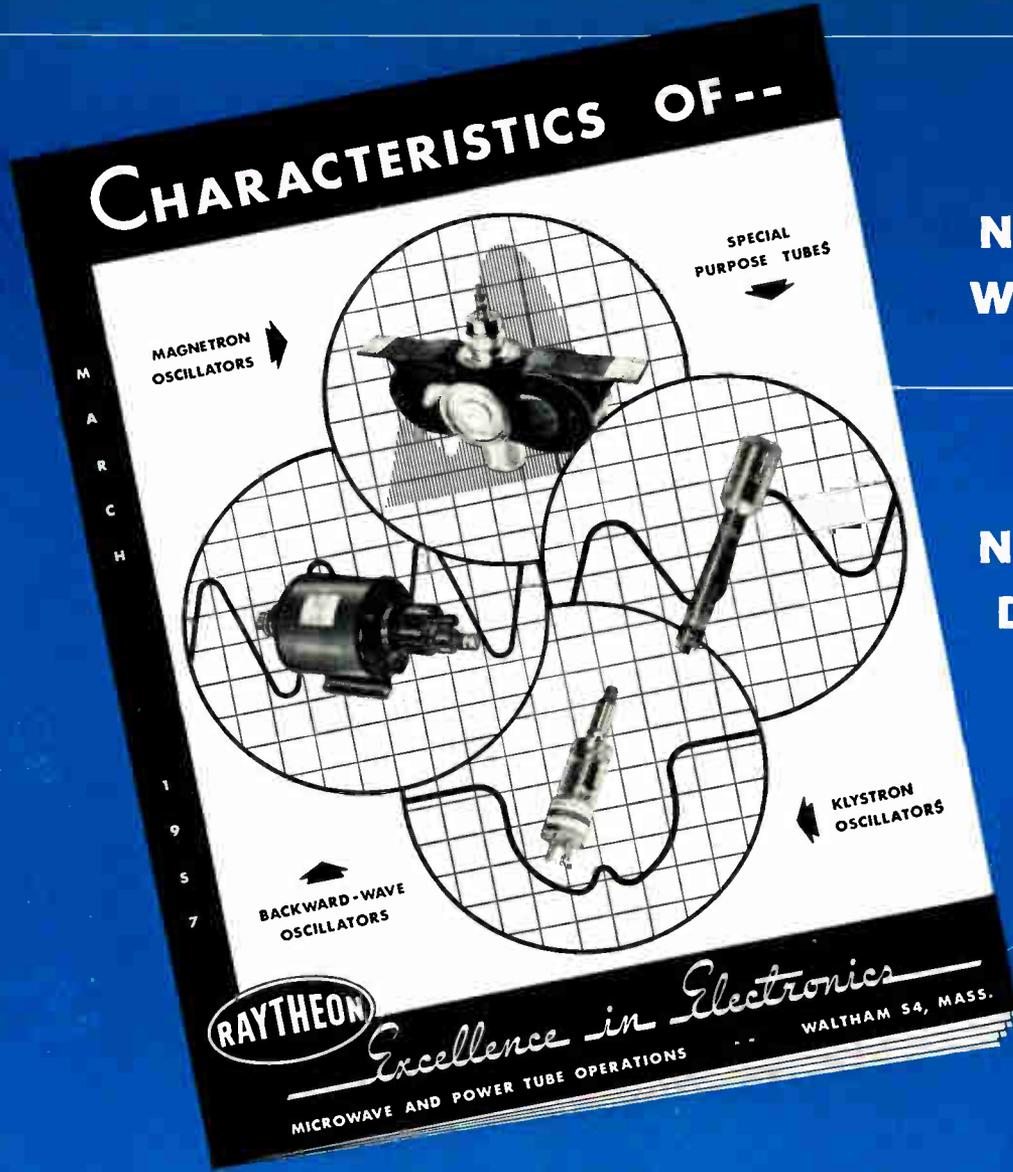
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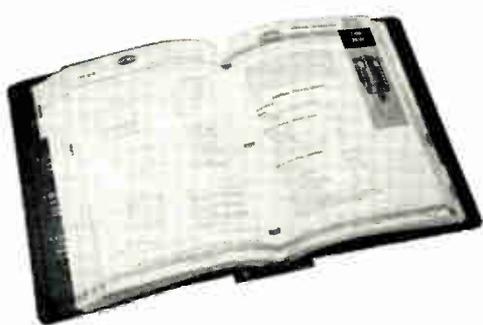
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*Left to right:
Dr. S. B. Batdorf, Electronics Division Head,
discusses trends in the application of electronics to
missile systems with Dr. R. J. Burke, telemetering.*

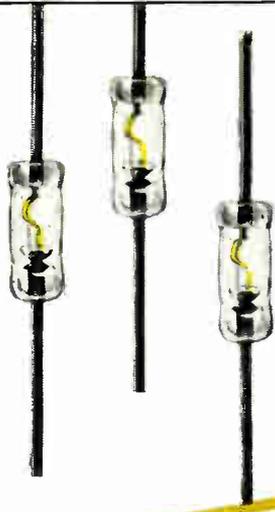
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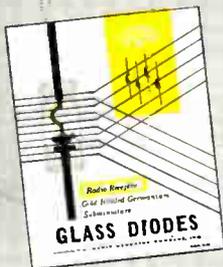
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Company.....

Address.....

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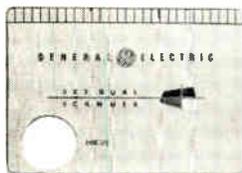
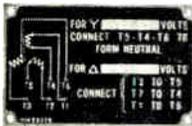
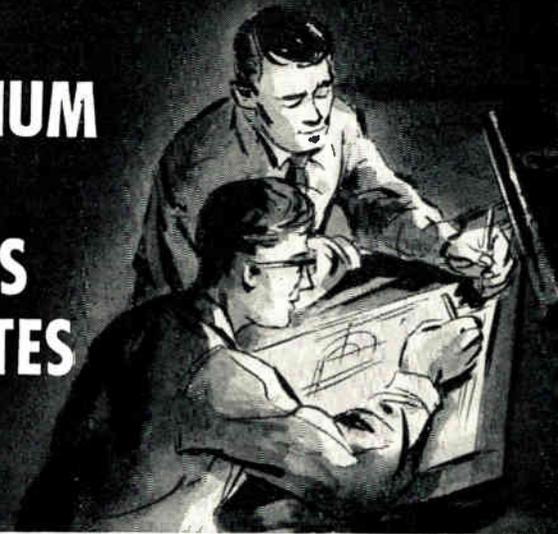
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EUROPE: United States Radium Corporation (Europe)
36 Avenue Krieg, Geneva, Switzerland.

Supply Voltages

(Continued from page 119)

$$B = G_k \left(E_{gpp} + E_{gn} \frac{R_k}{R_o} \right) + m E_{gpp} (\mu_s - \mu_s G_k - G_k)$$

Circuit 8—Cathode follower, $R_o \gg R_k$:

R_k :

$$G_p = 0$$

$$G_k = \frac{\mu_s R_k (1 + k)}{r_s + R_k (1 + k) (1 + \mu_s)}$$

$$A = E_{gpp} G_k - E_{gp}$$

$$S = \mu_s E_{gpp} (1 - G_k)$$

$$\frac{\mu_s k}{r_s + Z_k (1 + k) (1 + \mu_s)} E_{in}$$

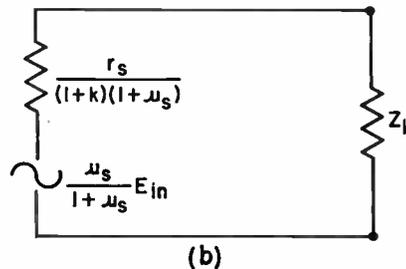
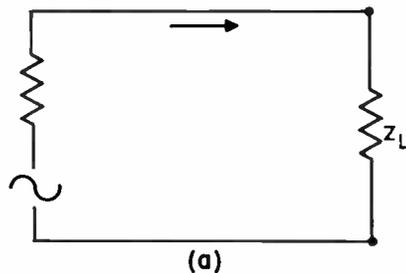


Fig. 7: Equivalent circuits for plate load (a) and cathode load (b) impedances

$$B = E_{gpp} G_k + m E_{gpp} (\mu_s - \mu_s G_k - G_k)$$

Circuit 9—"Grounded" cathode, cathode resistor bias:

$$G_p = \frac{\mu_s Z_L k}{r_s}$$

$$G_k = 0$$

$$A = 0$$

$$R_k = \frac{E_{gp} r_s}{E_{gn} \mu_s (1 + k)}$$

$$S = E_{gp} + \mu_s E_{gpp}$$

$$B = E_{gp} + m \mu_s E_{gpp} + G_p \left(E_{gpp} + E_{gn} \frac{R_L}{R_g} \right)$$

Circuit 10—"Grounded" cathode, cathode resistor bias, $R_g \gg R_L$:

$$G_p = \frac{\mu_s R_L k}{r_s}$$

$$G_k = 0$$

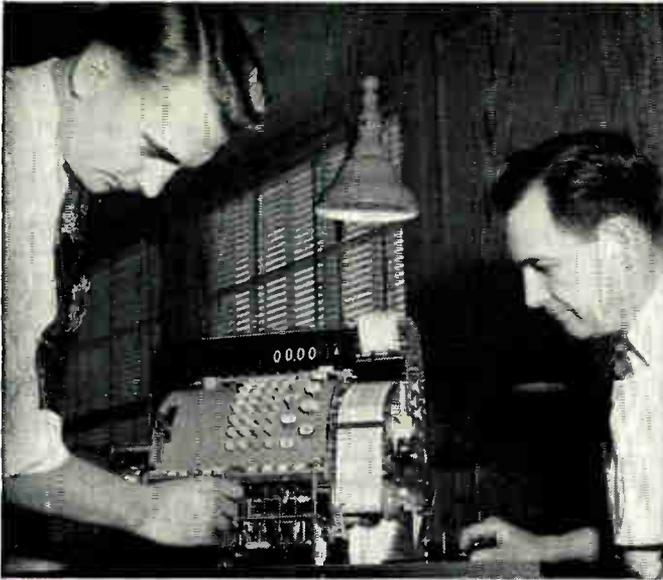
$$A = 0$$

$$R_k = \frac{E_{gp} r_s}{E_{gn} \mu_s (1 + k)}$$

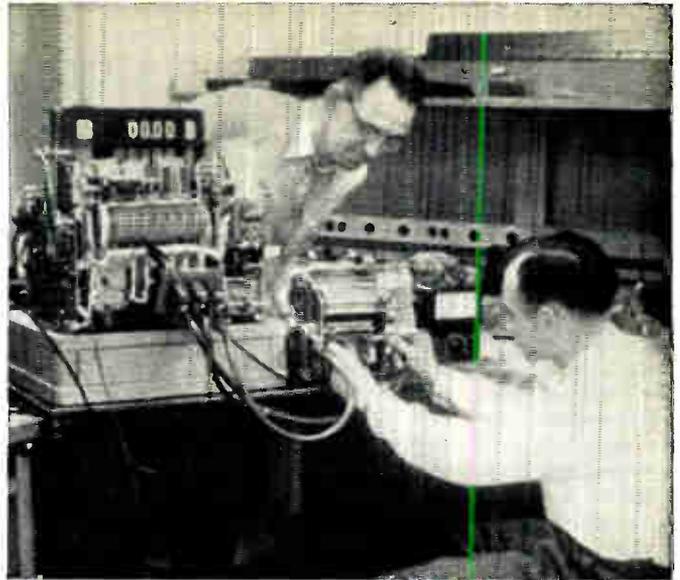
$$S = E_{gp} + \mu_s E_{gpp}$$

$$B = E_{gp} + E_{gpp} (G_p + m \mu_s)$$

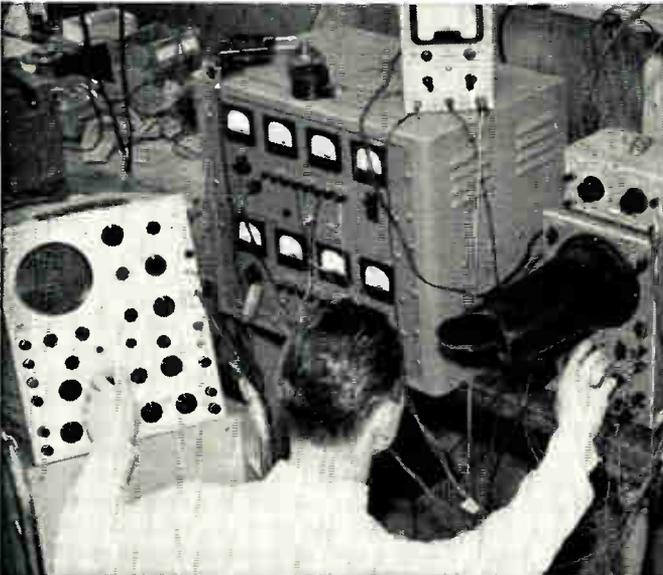
★ ★ ★



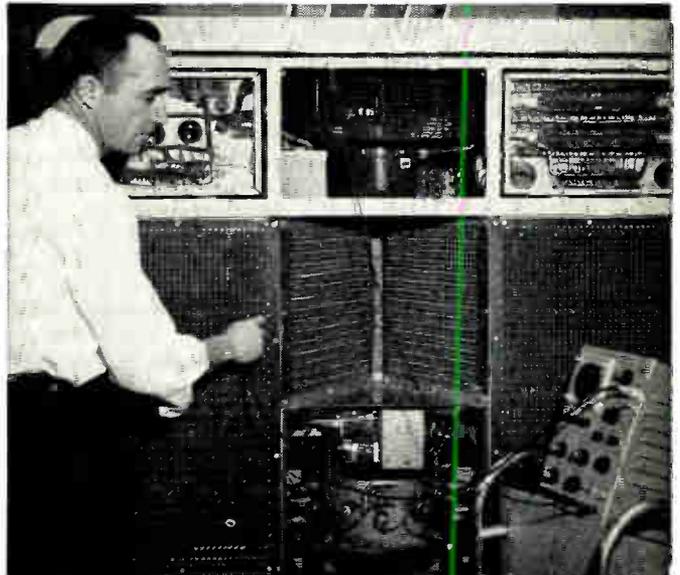
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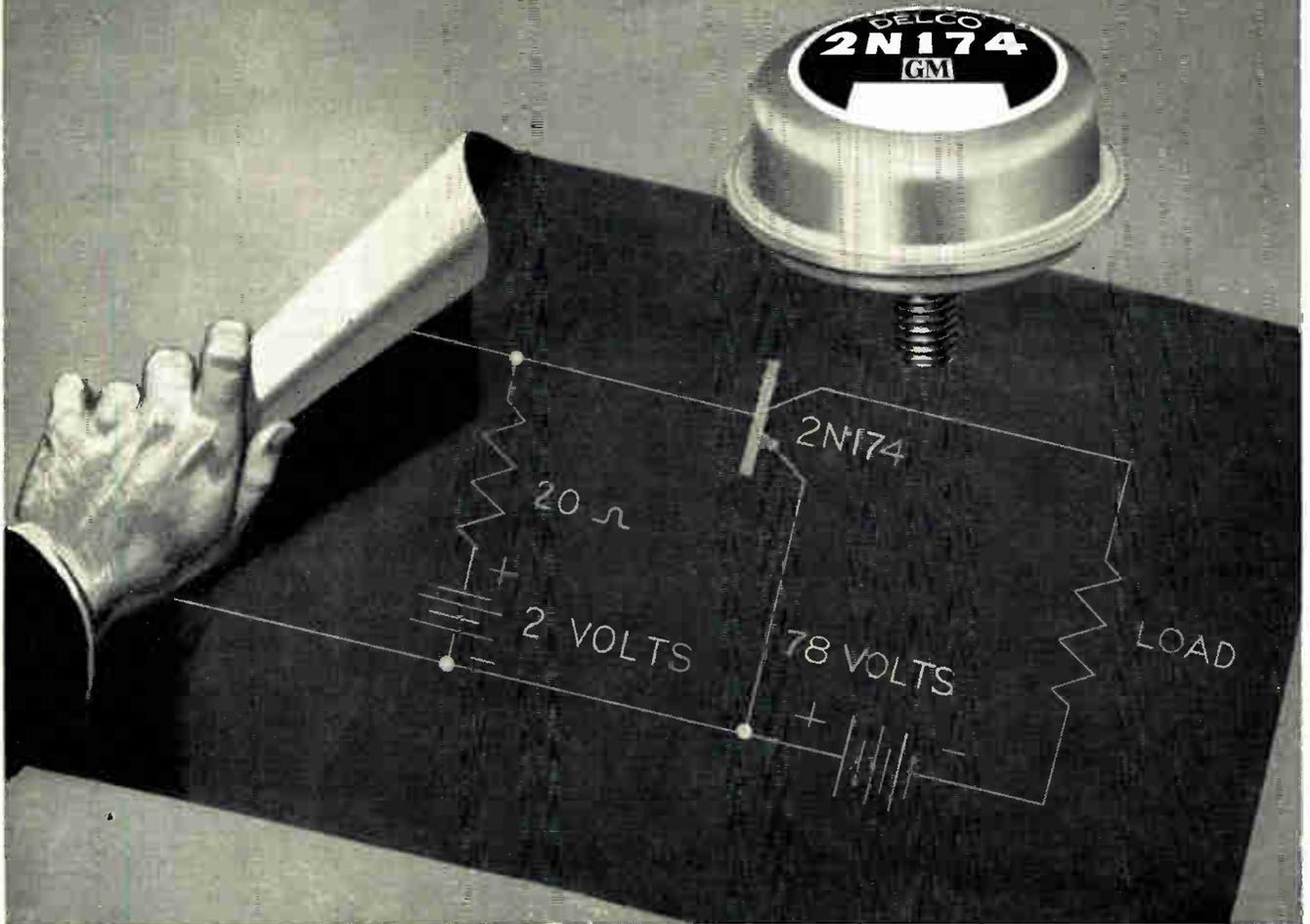
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Industry's Highest Power Transistor

Eliminate arcing at switch points. Stop switch deterioration while increasing the efficiency and reliability of all electronic control equipment!

A single Delco 2N174 transistor can switch 1 kw with one watt of control power.

Because transistor switching eliminates arcing, switch life is longer and more reliable.

This switching performance is possible because of the excellent electrical characteristics of the 2N174; in particular, the high collector breakdown voltage, extremely high maximum collector current, and very low input impedance.

You may employ Delco 2N174 high-power transistors with confidence in their reliability and uniformity. These transistors, normalized to retain better performance characteristics

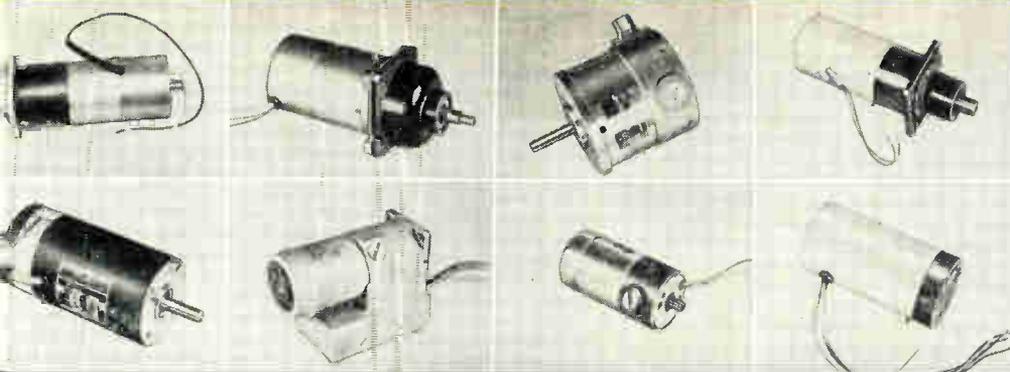
regardless of age, are currently being produced by the thousands every day. Write for engineering data.

Power Switching Characteristics	
Switching Power	1000 watts
Current in "on" position	13 amperes
Input Control Power	1 watt
Power Gain	30 db
Dissipation in "on" position	8 watts
Switching time	60 microseconds

DELCO RADIO

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Western Gear's extensive miniature motor line ranges from 1/500th to 4 H.P., 50 to 400 cycles, any voltage required, designed and built to meet military specifications. Our engineers will gladly work with you in solving your rotary electrical problems without obligation.

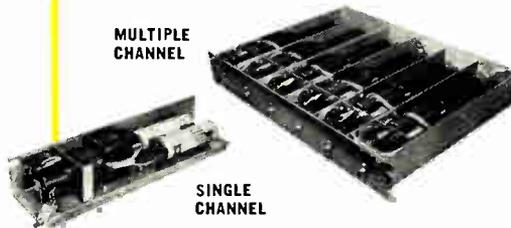
special power supply units, too!

Transistorized D.C. voltage regulator employing series power transistor and temperature compensated Zener diode reference voltage. Input voltage is 27.5 V.D.C. plus or minus 15%. Model 7VR09 output is 20 V.D.C. at 50 to 250 MA; Model 7VR08 20 V.D.C. at 10 to 150 MA. Regulation less than plus or minus .1% for combined variations of input voltage, load current, temperature, drift and vibration. Shunt loss is less than 25 MA. Temperature range from 32°F. to 150°F. Measures 2" x 2" x 2".

Model 7P01 single or multiple channel strain gage power supply, 115 V., 60 cycle input, 10 V.D.C. output, adjustable from 9-11 V.D.C. with a 10-turn potentiometer. Output voltage changes less than plus or minus .05% due to temperature change from 0 to 45°C.; output voltage changes less than .1% due to 2% change in load current. Output ripple is less than 300 microvolts RMS, isolated from ground as follows: insulation resistance to ground, 10,000 megohms; AC pickup voltage to ground, 5 microvolts peak.

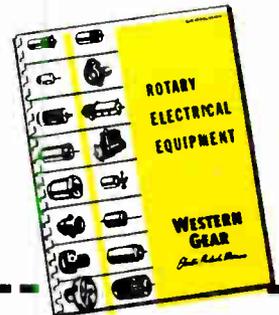


MODEL
7VR08-9



MULTIPLE
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572

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SEATTLE AND HOUSTON—REPRESENTATIVES IN PRINCIPAL CITIES

Power Supplies

A new brochure illustrating and describing 3 power supplies in the laboratory instrument line has just been published by the Burroughs Corp., 1209 Vine St., Phila. 7, Pa. The 4-page brochure contains photographs and complete specifications. Supplies 8 standard voltage outputs, both positive and negative, from +400 dc to -400 dc and a current range from 2 ma. to 6 a. Regulation is better than $\pm 5\%$.

Circle 118 on Inquiry Card, page 201

Mercury-Lamp Transformers

Four pages give application, price and dimension data, wiring diagrams, as well as new catalog numbers on mercury lamp transformers and reactors for 120 to 480 v. operations, 60 cycles, high and low power factor and a variety of construction types. General Electric Co., Schenectady 5, N. Y.

Circle 119 on Inquiry Card, page 201

Thermistor

A new 10-page bulletin on Glenite thermistors is announced by the Thermistor Div., Gulton Industries, Inc., Metuchen, New Jersey. Listing typical applications in circuitry, the new catalog gives specifications and characteristics of wafer, rod and bead thermistors. Each type is illustrated with diagrams and charts indicating models and the corresponding characteristics and size. Included is a table showing the resistance ratio vs. temperature to compute thermistor resistance at specified temperatures.

Circle 120 on Inquiry Card, page 207

Electronic Relays

Electronic relays, open and hermetically sealed, are described in a new 8-page engineering bulletin published by the RBM Div., Essex Wire Corp., Logansport, Ind. Complete information on application, construction and engineering, specifications is presented in concise outline form.

Circle 121 on Inquiry Card, page 201

Shielding Enclosures

A new 6-page brochure discussing universal shielding enclosures has been issued by Shielding, Inc., River-ton, N. J. Many photographs, charts and graphs illustrate the features and characteristics of the universal enclosure for suppressing r-f interference. Catalog gives typical enclosure sizes, performance data and discusses shielding materials available. Also listed are typical applications and available accessories.

Circle 122 on Inquiry Card, page 201

Klystron

Varian Associates, 611 Hansen Way, Palo Alto, Calif., have just issued a 16-page booklet describing their complete line of klystrons. This booklet is complete with photographs, specifications, applications, charts and a complete listing of klystrons.

Circle 123 on Inquiry Card, page 201

Special Glass

A new brochure, "New Developments in Corning Fotoform Glass," is now available. Fully illustrated, the brochure gives detailed information of the 4 types of Fotoform glass: how they are made, how they differ, their specific and potential uses and design and production data on each one. Latest mechanical and electrical applications of the glass in the electronics and allied industries are reviewed. Electrical Products Div., Corning Glass Works, Corning, N. Y.

Circle 124 on Inquiry Card, page 201

Tape Wound Cores

A 28-page booklet describes in great detail, the advantages and construction of performance guaranteed tape wound cores. Brochure is complete with tables, graphs, photographs and design engineering information. Magnetics, Inc., Butler, Pa.

Circle 125 on Inquiry Card, page 201

Instrument Transformers

New Instrument Transformer 1957 Buyer's Guide contains price and product information on a complete instrument transformer line. Booklet contains photographs and all required specifications. Specific types of transformers are quite readily located in this booklet which is issued by the General Electric Co., Schenectady 5, N. Y.

Circle 126 on Inquiry Card, page 201

Wire Wound Resistors

A 12-page booklet, issued by the International Resistance Co., 401 N. Broad Street, Phila. 8, Pa., gives comprehensive data on construction characteristics, coating, winding insulation identification, mechanical strength, terminals and brackets for tubular and flat power wire wound resistors.

Circle 127 on Inquiry Card, page 201

Electromechanical Parts

Catalog No. 575, issued by Beckman/Helipot Corp., Newport Beach, Calif., is a 24-page booklet that describes their line of "breadboard" electromechanical experimental parts. Booklet is complete with photographs, drawings, prices and easy-to-understand descriptions.

Circle 128 on Inquiry Card, page 201

Printed Circuit Laminates

A new booklet entitled "Westinghouse Copper-Clad Micarata Plastic Laminate For Printed Circuits" is available. The booklet, illustrated with photographs and diagrams, discusses what printed circuits are, the advantages to be gained and their use, the construction and properties of the laminate. A complete data sheet for all the copper-clad laminate types is included. Westinghouse Electric Corp., P. O. Box 2099, Pittsburgh 30, Pa.

Circle 129 on Inquiry Card, page 201

Reliability Handbook

Inland Testing Laboratories, Cook Technological Center, Morton Grove, Ill., has issued a 52-page book entitled "The Handbook of Electronic Parts Reliability Program—A Detailed Systematic Approach." The book gives a detailed presentation discussing test procedures, sampling plans, data analysis, and program financing for parts reliability.

Circle 130 on Inquiry Card, page 201

Navigational Computer

A 24-page, 2-color booklet describes the ASN-7 self-contained navigational computer. This brochure is planned to acquaint the reader with what it is, how it operates and its advantages not only to the pilot, but to management and design groups of aircraft manufacturers, ground control centers and the armed services. Computer was designed under the direction of Wright Air Development Center, Ford Instrument Co., Div. of Sperry Rand Corp., 31-10 Thomson Ave., Long Island City 1, N. Y.

Circle 131 on Inquiry Card, page 201

Automatic Programming

The Ampex Corp., 934 Charter St., Redwood City, Calif., has issued a 2-page bulletin describing their model 355 integrator for automatic programming systems. This system may be used for AM, FM or TV broadcasting. It can be set to cover any block of time completely and automatically.

Circle 132 on Inquiry Card, page 201

Metal Chassis

The California Chassis Co., 5445 E. Century Blvd., Lynwood, Calif., has issued a 20-page 2-color catalog describing a complete rack line, including cabinet, desk, multi-racks, chassis items such as aluminum and steel types, including removable types and various accessory such as louvers, covers, roller trucks, truck casters, support angles, mounting brackets, flanges, carry cases and many others.

Circle 133 on Inquiry Card, page 201

(Continued on Page 178)

you can't match **TRIPLETT** model 630 VOM



**SPEED
ACCURACY
DURABILITY
CONVENIENCE!**

heavy molded case
—1/4" thick for high impact.
Fully insulated.

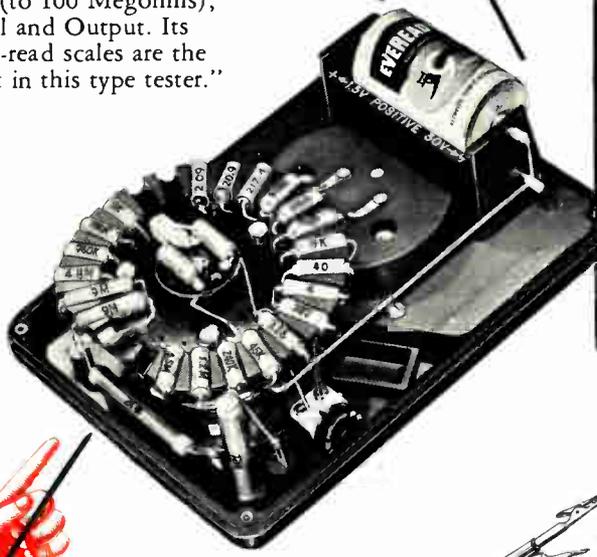
sure grip battery contacts
Balanced double-spring tension grip assures permanent contact.

"this wide-range model
tests AC-DC Volts (DC at 20,000 O/V); DC Microamperes, Milliamperes, and Amperes; Ohms (to 100 Megohms); Decibel and Output. Its easy-to-read scales are the longest in this type tester."

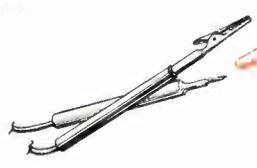


streamlined design
No protruding knobs on switch or ohms control—both are flush with the panel.

king size recessed knob
—Only one switch; (fully enclosed) selects both circuit and range. Just turn the switch and make your reading.



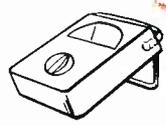
BURTON BROWNE ADVERTISING



for quick positive connections
—Banana jacks and plugs on test leads are best. Alligator clips are provided to slip on test prods for extra convenience.

for most efficient meter use
—With every Model 630 you receive complete, simplified instructions on how to use and maintain most efficiently.

advanced engineering
—Molded mounting for resistors and shunts allow direct connections without cabling. No chance for shorts. Longer life and easy-to-replace resistors in their marked positions.



for convenience in reading
—Available as an extra (only 50c), this special stand tilts meter at best angle for easy reading

no slip feature
Four rubber feet furnished as standard equipment fit in back of the case to prevent slipping on smooth surfaces.

TRIPLETT ELECTRICAL INSTRUMENT CO.
Bluffton, Ohio

MODEL 630 | \$44⁵⁰



631
Construction V.O.M.—V.T.M.



630-NA
For Best Testing Around The Job. Resistor in a Bench.



630
The Popular All Purpose V.O.M.



630-A
A Good Look and Another Line V.O.M.



310
The Smallest Complete V.O.M. With 3000.



630-T
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630-HH
Medium Size For Field Testing.

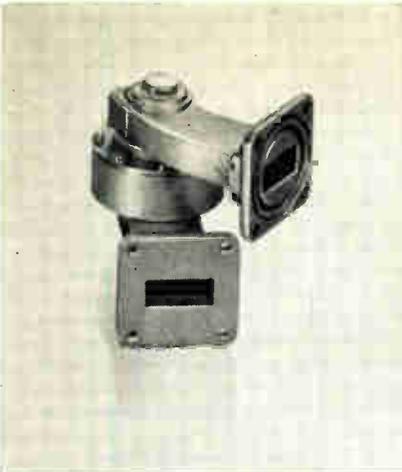


630-NA
The First V.O.M. With 10,000 Ohm Volt AC.



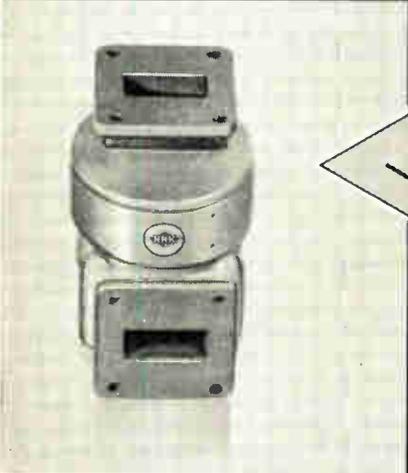
630-B
Medium Size With 250 Ohm AC.

THE MIGHTY NINE VOM LINE



ROTARY JOINTS

These are just a few of the hundreds of rotating joints that have established NRK as the No. 1 source for such assemblies. Whatever your need for radar or microwave components, you will find at NRK complete facilities and matchless experience for designing and manufacture.



Microwave Assemblies, Radar Components and Precision Instruments . . . manufactured and designed to your specifications.

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2232 W. 11th St., Los Angeles 6, Cal.



"HELPR"

(Continued from page 109)

Need

Need for such a program has long been felt by manufacturers of electronic equipment, and recent demands for increased reliability of missiles and aircraft have intensified the need. The military are putting more and more responsibility for systems on prime contractors, who must use great care in testing and selecting components. MIL specs originally intended to guide designers have become outmoded by recent developments. New extremes of environment are being met as our military and industrial technology races ahead.

Electronic industries are now spending an estimated \$50 million annually for component qualification testing—and a large portion of this is duplicated effort. The HELPR program would eliminate much of this waste effort and free company facilities for special tests. A tremendous saving of time, money, and manpower could result.

Typical Test

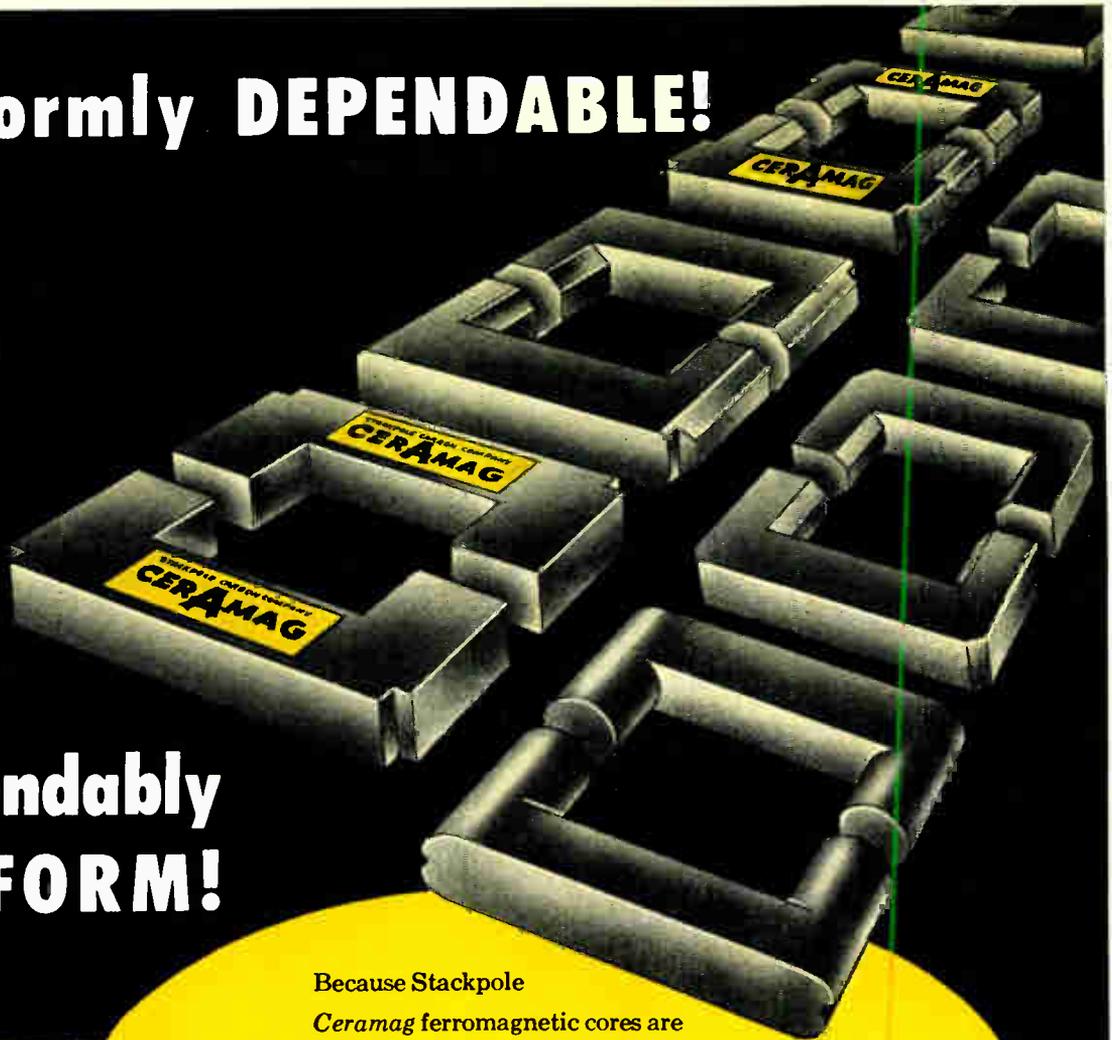
The magnitude of the proposed test program is indicated by a study of one typical test. Tests of 1/2 watt, fixed composition resistors, style RC20, from Specification MIL-R-11B, would start with a screening evaluation of 360 specimens from each component manufacturer (three times the number required by MIL-R-11B).

The screening tests would serve two purposes. They would eliminate all but the most reliable components for further reliability testing, and they would help determine what tests would be most valuable in the succeeding reliability testing program.

The reliability tests themselves, requiring up to 60 weeks to complete, would involve a total of 5100 samples from each qualified manufacturer. Tests would include thermal, mechanical, and electrical evaluations, and each set of test data would be measured by digital meters and recorded automatically on punch cards. The combination of automation and computer techniques would reduce time and elim-

(Continued on page 138)

Uniformly **DEPENDABLE!**



Dependably **UNIFORM!**

Because Stackpole
Ceramag ferromagnetic cores
are so dependably uniform, they help assure maximum
operating uniformity for the equipment in which they
are used. *Ceramag* samples match your specifications . . .
and each production unit matches the sample.

Write for Bulletin RC-9A giving details
on latest available grades.

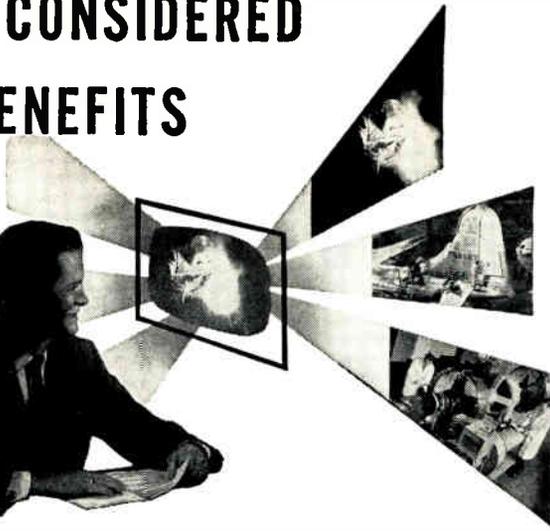


STACKPOLE *Ceramag*[®] **FERROMAGNETIC CORES**

ELECTRONIC COMPONENTS DIV.

STACKPOLE CARBON COMPANY • ST. MARYS, PA.

HAVE YOU CONSIDERED THE BENEFITS



OF LOW COST **B-T LABS** CLOSED CIRCUIT TV FOR YOUR ORGANIZATION?

Lower production costs, improved quality control and inspection, smoother traffic flow, less labor waste, better safety conditions are just a few of the benefits offered by B-T industrial TV products.

The B-T Observer TV camera offers effective closed circuit television at low cost. Now, with the exclusive B-T AUTOMATIC LIGHT COMPENSATOR, the camera operation is rendered completely automatic further broadening its scope in industrial applications.

The Automatic Light Compensator automatically handles light variations as great as 150 times, i.e., 5 to 750 foot candles or vice versa. Despite wide and frequent changes in light intensity at the subject, it is now possible to observe a constantly clear, well-defined image on the viewing screen. This eliminates the need for manual or remote adjustment of lens iris or camera controls.

B-T industrial TV extends the range of your vision beyond your office, or lab to remote, hazardous or inaccessible locations. Here are some industrial TV systems, now in operation, using the B-T Observer:

- A textile manufacturer links the design and embroidery machine department located on different floors for quality and process control.
- A Pennsylvania steel mill watches furnace and rolling operations. Exclusive B-T Automatic Light Compensator overcame problem of sharp changes in light intensity at the subject.
- A midwestern cement manufacturer checks composition and flow of slurry into a kiln, preventing costly damage due to congestion. Saves \$36.00 a day in manpower and material.
- A lumber company prevents log jam damage, also identifies wood types (proof of the clarity of the TV picture) by observing the bark structure.
- A Los Angeles utility has a multi-camera setup for flame control.

A complete industrial TV system — B-T Observer TV camera, with f1.9 lens, B-T Automatic Light Compensator, one monitor (receiver), and cable — can be installed, ready to operate for under \$2,500.

There's a qualified B-T distributor in your area with complete engineering facilities to serve your specific needs. For further information write to Dept. TT-6.

BLONDER-TONGUE LABORATORIES, INC.

9-25 Alling Street Newark 2, N.J.

The largest manufacturer of TV Signal Amplifiers, UHF Converters and Master TV Systems



(Continued from page 136)

inate human variables, and also make it possible to send subscribers a summary of test results each thirty days, instead of waiting for final results on completion of the tests. Data would include failure rate and a correlation of failure rates under different operating conditions; drift, and a correlation of drifts under different operating conditions; and an analysis of failed components to determine the modes and causes of failure.

The HELPR program was introduced at the Third National Symposium on Reliability and Quality Control in Washington, D. C. It was proposed as a supplement to the individual test capability of subscribing companies — it would provide a fund of basic data as a starting point, enabling each individual company to concentrate its own test facilities on additional data for its specific applications.

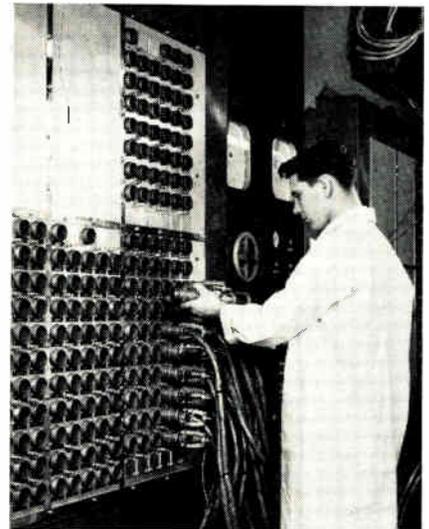


Fig. 2: Quick-connect panels speed tests.

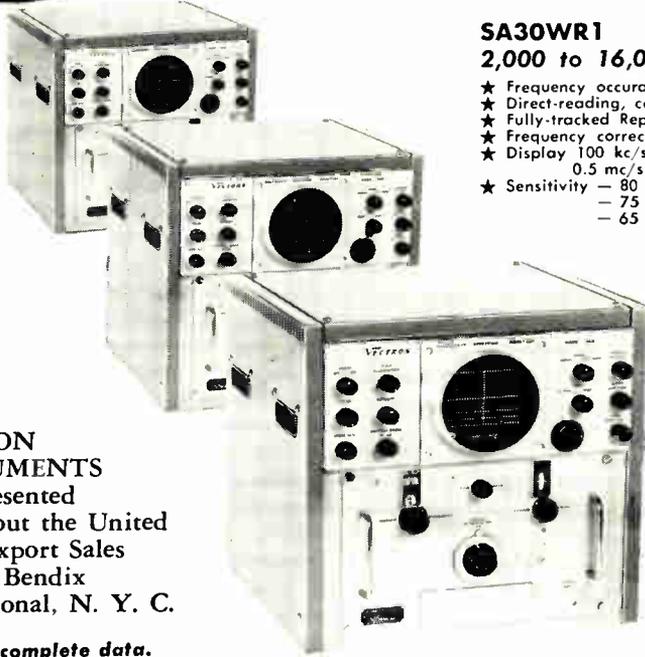
Subscriptions

Charter subscribers are being recruited at present. The program can begin with approximately 40 one-year subscriptions at \$25,000 each. A complete description of the program and the test facilities at Inland Testing Laboratories is contained in "The Handbook of Electronic Parts Reliability Program, A Detailed Systematic Approach." Manufacturers interested in the program can obtain the information from Inland Testing Laboratories, Cook Technological Center, 6401 W. Oakton St., Morton Grove, Illinois.

3 NEW

VECTRON MICROWAVE SPECTRUM ANALYZERS

To determine power and frequency distribution of pulsed and CW microwave signals.



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SA30WR1 2,000 to 16,000 mc/s

- ★ Frequency accuracy 0.5% or better
- ★ Direct-reading, calibrated Tuning Dial
- ★ Fully-tracked Repeller Voltage Control
- ★ Frequency corrected 50-db Input Attenuator
- ★ Display 100 kc/s to 10 mc/s per inch at 2,000 mc/s
0.5 mc/s to 40 mc/s per inch at 16,000 mc/s
- ★ Sensitivity — 80 dbm at 2,000-4,000 kc/s
— 75 dbm at 4,000-8,000 kc/s
— 65 dbm at 8,000-16,000 kc/s

SA30X5 8,500 mc/s to 9,660 mc/s

- ★ Frequency accuracy 0.05% or better
- ★ Direct Signal-Frequency-Reading Wavemeter
- ★ Fully-tracked Repeller Voltage Control
- ★ Precision 80 db RF Input Attenuator
- ★ Displays 100 kc/s to 10 mc/s per inch
- ★ Sensitivity — 80 dbm for usable signal

SA30 with interchangeable RF heads 800 mc/s to 75 kmc/s

- NEW — Dual unit for standard rack mounting or portable 80-pound bench top package
- NEW — Simplified Control Panel with necessary operating controls conveniently available
- NEW — Frequency Difference Control for direct incremental measurements of 100 kc/s to 5 mc/s
- NEW — Direct Frequency Calibration without confusion with new Image Check feature
- NEW — Separate Brightness and Intensity Controls for displayed signal and baseline
- NEW — All aluminum construction for lighter weight and easier transport

CONTRACT MANUFACTURING



GROUND POSITION INDICATOR COMPUTER

Custom designed and manufactured by Vectron to solve navigational vector problems. Input information includes air m.p.h., compass heading, deviation, wind direction and velocity. Output is read directly as N-S and E-W components. Additional electro-mechanical circuits permit establishment of secondary flight pattern over target.

Vectron's precision manufacturing facilities are available to meet your needs for dependable contract, sub-contract or custom manufacture, with or without design engineering. Send us your next quotation request or ask for a copy of our contract manufacturing facilities brochure.

PRODUCT DEVELOPMENT

Vectron's team of mechanical, electro-mechanical and electronic engineers will work from your prints or basic research, to develop and prototype your product.

DESIGN FOR PRODUCTION

Vectron's engineering and production specialists can make necessary design improvements and modifications to assure efficient production, consistent with sound engineering and quality control.

PRODUCTION

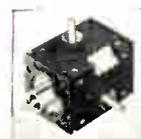
Vectron's complete facilities, skilled personnel, precision machine tools, careful production planning and thorough quality control with proper testing equipment assure the highest standards of fabrication and assembly.



VECTRON, inc.
Electronic and Electro-Mechanical Equipment

1611 TRAPELO ROAD
WALTHAM 54, MASS.

MINIATURIZED SPHERE RESOLVER



requires less than 5 in/oz input for 1 to 2 in/oz from the sine and cosine output shafts. It is 1 1/2" square with a body block only 2 1/8" long.

Write for complete data.

If it's "MICROWAVE" DOUGLAS has it !!

- ADAPTERS
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- ATTENUATOR - Waveguide
- ATTENUATOR - Coaxial
- BENDS
- CAVITIES
- CRYSTAL DETECTOR MOUNTS
- DIRECTIONAL COUPLER - Coaxial
- DIRECTIONAL COUPLER - Waveguide
- FILTER
- LINE STRETCHER
- LOADS - Coaxial - Low Power
- LOADS - Waveguide - Low Power
- LOADS - Coaxial - High Power
- LOADS - Waveguide - High Power

- MIXER - Crystal - Coaxial
- MIXER - Crystal - Waveguide
- POWER DIVIDER - Coaxial
- MULTIPLIERS - Frequency
- PROBE
- ROTARY JOINT - Coaxial
- ROTARY JOINT - Waveguide
- SHIFTER (Phase) Waveguide
- SHORT - Movable
- SLOTTED LINE
- SQUEEZE SECTION - Waveguide
- STAND
- SWITCH - Coaxial

- SWITCH - Waveguide
- TEE - Coaxial
- TEE - Waveguide
- TEE - Hybrid
- TRANSITIONS - Coaxial
- TRANSITIONS - Waveguide
- TUBE MOUNT - KLYSTRON
- TUNER - Coaxial
- TUNER - W.G.
- TWISTS
- WAVEMETERS

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Your inquiry is invited for design, development and production of MICRO WAVE-RADAR component parts and test equipment in the frequency range of 100-90,000 megacycles.



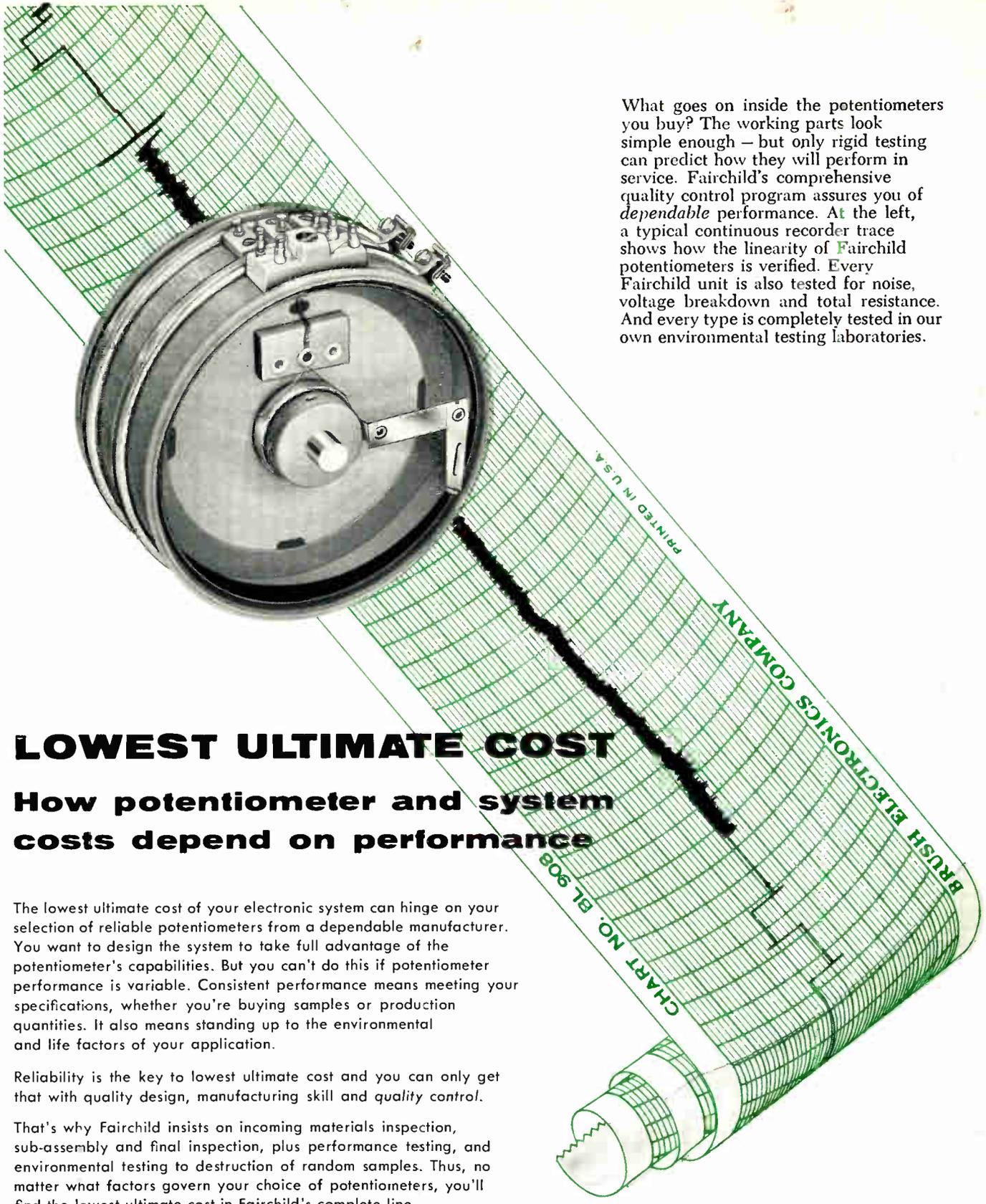
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DOUGLAS

MICROWAVE CO., Inc.

252 East Third St., Mt. Vernon, N. Y.

MOunt Vernon 8-6900



What goes on inside the potentiometers you buy? The working parts look simple enough – but only rigid testing can predict how they will perform in service. Fairchild's comprehensive quality control program assures you of *dependable* performance. At the left, a typical continuous recorder trace shows how the linearity of Fairchild potentiometers is verified. Every Fairchild unit is also tested for noise, voltage breakdown and total resistance. And every type is completely tested in our own environmental testing laboratories.

LOWEST ULTIMATE COST

How potentiometer and system costs depend on performance

The lowest ultimate cost of your electronic system can hinge on your selection of reliable potentiometers from a dependable manufacturer. You want to design the system to take full advantage of the potentiometer's capabilities. But you can't do this if potentiometer performance is variable. Consistent performance means meeting your specifications, whether you're buying samples or production quantities. It also means standing up to the environmental and life factors of your application.

Reliability is the key to lowest ultimate cost and you can only get that with quality design, manufacturing skill and quality control.

That's why Fairchild insists on incoming materials inspection, sub-assembly and final inspection, plus performance testing, and environmental testing to destruction of random samples. Thus, no matter what factors govern your choice of potentiometers, you'll find the lowest ultimate cost in Fairchild's complete line.

Write for catalog to Dept. 140-84E, Fairchild Controls Corporation, Components Division:

EAST COAST
225 Park Avenue
Hicksville, L. I., N. Y.

WEST COAST
6111 E. Washington Blvd.
Los Angeles, Calif.

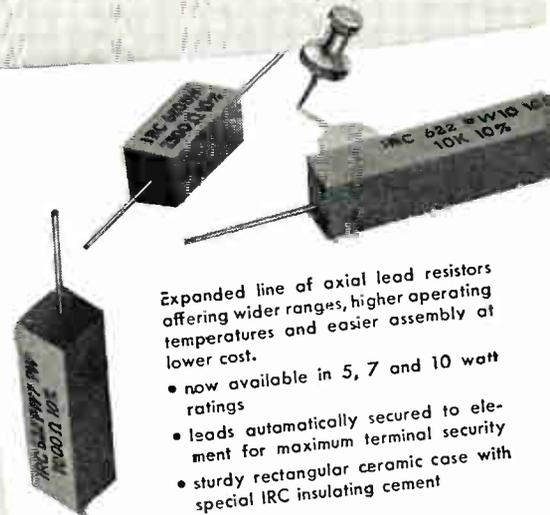


6 NEW ANSWERS TO TODAY'S

New IRC Dual Diodes

New answer to the bulk, higher cost, and assembly problems of vacuum tube diodes in low current applications.

- featuring balanced miniature selenium cells with low shunt capacitance and high back resistance to 25 volts
- excellent stability and reliability over wide temperature range and environmental conditions
- long life
- economical



Expanded line of axial lead resistors offering wider ranges, higher operating temperatures and easier assembly at lower cost.

- now available in 5, 7 and 10 watt ratings
- leads automatically secured to element for maximum terminal security
- sturdy rectangular ceramic case with special IRC insulating cement

Power Resistor Line

New IRC Distributed Parameter Delay Lines

A compact, more uniform product for time delays of less than 1.0 microsecond at impedance levels of 4000 ohms or less.

- designed for mass production in a continuous process
- featuring high stability and uniform characteristics
- economical



New IRC Hermetic Sealing Terminals



Superior hermetic sealing and insulating performance in miniature units meeting a wide variety of space, electrical, and termination requirements.

- four body designs and six lead types
- excellent resistance to thermal shock, zero water absorption, physically tough, will not crack or craze.
- special fluorocarbon plastic body with superior electrical and mechanical characteristics

DESIGN AND COST PROBLEMS

Deposited Carbon Resistors

New molded resistor line providing a means of obtaining long-term stability up to 100 megohms with savings in cost and bulk.

- $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1 and 2 watt ratings
- excellent load life characteristics and resistance to aging
- conservatively rated at 70° C. ambient

Low Range BW Wire Wound Resistors

Now mass produced at low cost for transistor applications where the low value and stability of a wire wound resistor is an important factor. Ruggedized unit to withstand rigors of modern installation techniques.

- fully insulated
- values from 0.24 ohm to 10 ohms



Insulated Composition Resistors • Deposited Carbon Resistors • Attenuators • Power Resistors • Voltmeter Multipliers • Ultra HF and Hi-Voltage Resistors

Wherever the Circuit Says

Low Wattage Wire Wounds • Resistance Strips and Discs • Selenium Rectifiers and Diodes • Hermetic Sealing Terminals • Insulated Chokes • Precision Wire Wounds • Potentiometers



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Hycor Division, Sylmar, California
Circuit Instruments Inc., St. Petersburg, Fla. (subsidiary)
Hycor Company, Inc., Vega Baja, P.R. (subsidiary)

INTERNATIONAL RESISTANCE COMPANY

Dept. 582, 401 N. Broad St., Philadelphia 8, Pa.

In Canada: International Resistance Co., Ltd., Toronto, Licensee

Send complete information on Selenium Dual Diodes, Delay Lines, Hermetic Sealing Terminals, Power Resistors, Molded Deposited Carbon Resistors, BW Wire Wound Resistors

Name _____

Company _____

Address _____

City _____ State _____

Circle 142 on Inquiry Card, page 201

NEW
hot-molded composition

Variable Resistors

for high temperature applications

The new Type K Allen-Bradley variable resistor was developed primarily for use in high operating temperatures—so common in military applications. For the *first* time, a variable resistor is available with a conservative rating of 2 watts, operating in 100°C ambient temperatures, as the graph below shows. However, the new Type K control performs reliably at a temperature of 150°C—under “no load” conditions . . . while at temperatures of 70°C, it is *ultraconservatively* rated at 3 watts.

The new Type K control has *all* the features of the old reliable workhorse—the Type J Bradleyometer. With the *hot-molded* resistance type element, control is smooth and without abrupt resistance changes, and “noise” characteristics are extremely low, even after long use. Send for Bulletin 5200A.

Allen-Bradley Co.
1342 S. Second St., Milwaukee 4, Wis.
In Canada—Allen-Bradley Canada Ltd.
Galt, Ont.



TYPE K
available in
resistance values
up to 5 megohms.



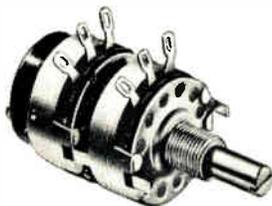
Type K single unit with short shaft and lack-type bushing.



Type K triple unit control with plain short shaft.



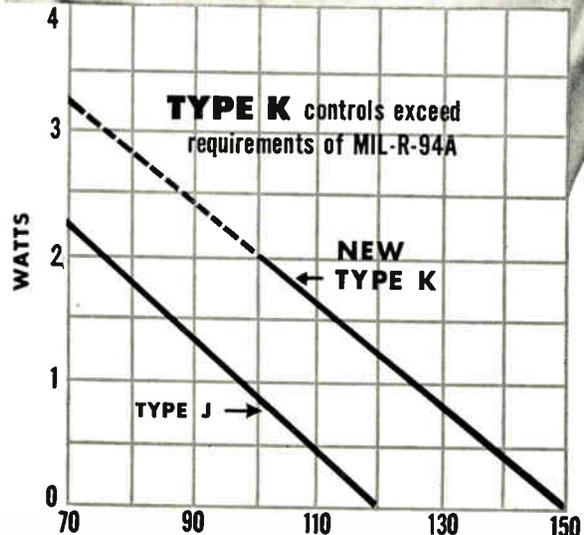
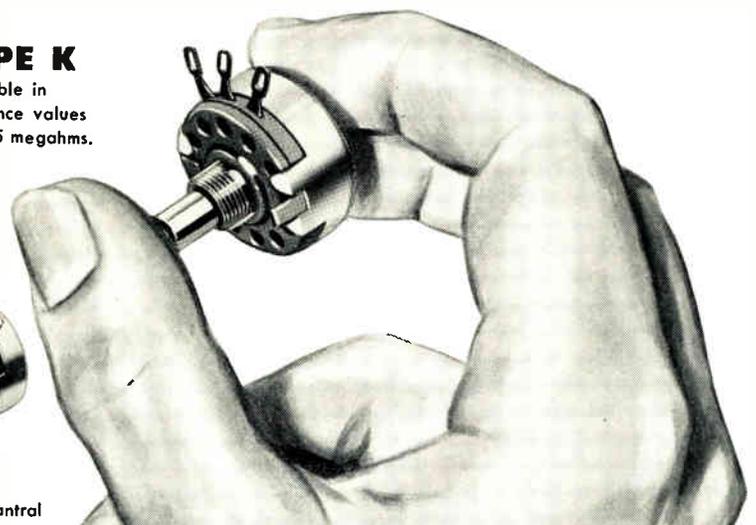
Type K dual element control with concentric shafts.



Type K dual element control with 125 v line switch.



Type K single unit variable resistor with long shaft.

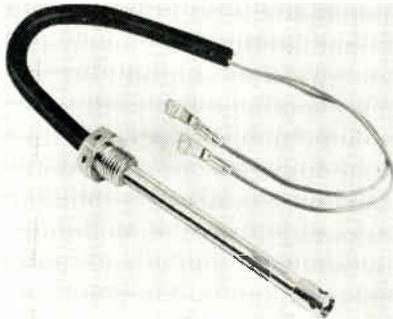


ALLEN-BRADLEY
ELECTRONIC COMPONENTS
QUALITY

New Products

POWER RESISTOR

Dalohm RSE type resistors now include 5 wattage ratings from 2 to 10 w. in 7 various sizes, with resistance range of .5 ohm to 175 K ohm, depending on size and tolerance. Pre-

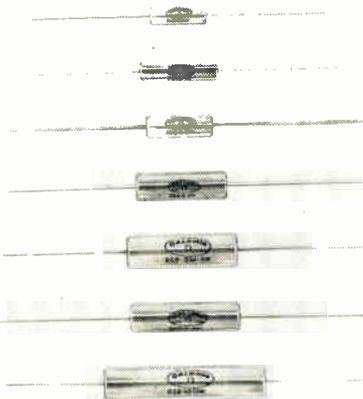


cision tolerances are 0.05%, 0.1%, 0.25%, 0.5%, 1% and 3%. Resistor is wire wound. The resistor element is surrounded by a resilient material and inserted into the protective brass tubing. Shock absorbing material completely protects the element. Applicable types conform to MIL SPEC MIL-R-26-C. Maximum operating temperature is 275°C. Dale Products, Inc., Columbus, Neb.

Circle 219 on Inquiry Card, page 201

TEMPERATURE PROBES

A new series of temperature probes have been designed to measure temperature for diverse applications. The S-100 series probes incorporate thermistors mounted in probes which can be used with temperature bridge or recorder. Model S-101 is a wafer type thermistor used for liquid oxygen. Model S-102 is designed for measurement of air with a range of -20°C



to +100°C. The S-105 thermistor probe is designed to determine temperature changes of electronic components in guided missiles. Gulston Industries, 212 Durham Avenue, Metuchen, N. J.

Circle 220 on Inquiry Card, page 201

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there is no substitute for
RELIABILITY...!

AT PHOTOCIRCUITS CORPORATION
WE ARE GEARED TO THE FIXED IDEA THAT

PROPER DESIGN + PRECISE CONTROL
PLUS

(We give you assistance FREE)

(Our quality control system invites your inspection)

MEANS **RELIABILITY**

(This we guarantee!)

SOME OF THE AREAS in which exacting control and in-process inspection are applied follow:

- 1) **Master Drawing through printing:**
 - (a) Best camera and photo composing equipment available to the industry.
 - (b) Extensive use of plate glass photographic masters instead of film to avoid dimensional change caused by temperature and humidity changes.
 - (c) Temperature and humidity controlled printing areas.
 - (d) All printing operations checked with glass masters for maximum accuracy.
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 - (a) Control laboratory checks solutions daily.
 - (b) Ease of solderability assured by maintaining chemical cleanliness and plating purity.
 - (c) Daily humidity chamber testing to insure against contamination of base materials—both electrical and chemical inspections are performed.
 - (d) Plated holes are sectioned and photo-micrographed to insure adequate plating thickness and continuity.



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COMPLETE FACILITIES FOR TV STATIONS, MANUFACTURERS & LABORATORIES

Special color film chains, colorplexing, transmitting, analyzing, monitoring, testing equipment.



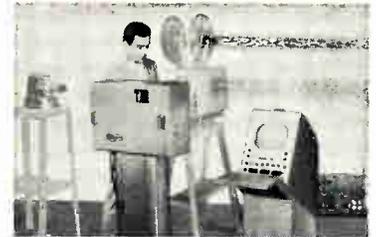
617-BR AUTOMATIC BALANCE CONTROL FOR ALL COLORPLEXERS
(Regardless of Manufacture)

An ingenious circuit locks the entire encoding equipment in balance within 20 seconds after being turned on. Thereafter balance is held under even the most difficult operating conditions.



1003-A VIDEO TRANSMISSION TEST SIGNAL GENERATOR
Portable

Completely self-contained, portable. Produces multi-frequency burst, staircase, modulated staircase, white window, composite synch. Regulated power supply. 12 1/4" standard rack mounting or in carrying case.



700-A 3V COLOR FILM CHAIN

Finest in quality, lowest in price. 3V provides greatest latitude in selection of color films. Designed specifically for broadcast application, requires little space. Multiplexes 35 or 16mm film, slides, apaches.



1073-A SINE-SQUARED SQUARE WAVE GENERATOR

Newest test unit produces new type of wave form for testing any part or all of a TV or pulse system for amplitude and phase characteristics. "Go-No-Go" indicator for simplicity.



1601-AR CHROMASCOPE

Signal Certification Equipment. Accurately measures the performance alignment, and phase errors of color TV equipment. Presents on a cathode ray screen a continuous polar plot of the phase and amplitudes of all colors in a composite color video signal. Capable of a .005" accuracy with 1604-AR phase magnifier.

New secondary phase standard for accurate reading to .01"



1604-AR PHASE MAGNIFIER

Expanded phase indicator of a signal for measurements of differential phase to 2" or better accuracy at chroma frequencies.

TELEMETERING TRANSMITTERS • High Power in Small Packages

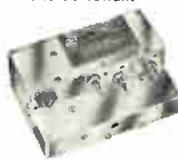
Direct FM Transmitters Crystal controlled 215-235 megacycles. 125kc deviation.



Model 1462
6" x 4 1/4" x 3 3/4"
50 to 80 Watts



Model 1463
5 1/2" x 3 1/2" x 4"
15 to 30 Watts



Model 1472
4" x 1.5" x 2.7"
2 Watts



Model 1460
5" x 4 3/4" x 3 1/2"
RF Amplifier
15 to 30 Watts



Model 800—4.5" x 1.3" x 1.4"

SUB-CARRIER OSCILLATOR. Deviation stability $\pm 1\%$ of band width. Deviation linearity less than 1% of band width under all conditions measured from a straight line drawn between end points.



636-B CHROMALYZER

Portable Precision Color Bar Generator for checking color broadcast studio and transmission facilities, receivers and monitors. Can be tied into a system. Provides complete composite color signals at 100 or 75% chroma.



1600-AR PHASE SLOPE (ENVELOPE DELAY) CURVE TRACER

Performance slope on exact reading of the envelope delay and amplitude characteristics of any network, video amplifier, or system. Precision spring, non-oscillate transmitter and receiver units which allow one way or loop measurements.

DELIVERY 30 DAYS

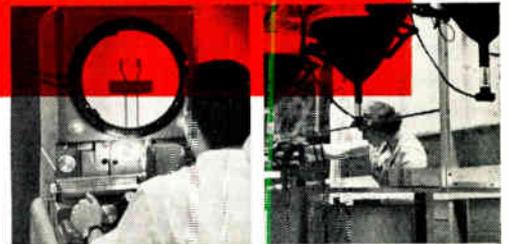
Literature on these and more than 100 additional instruments for color TV by TELECHROME are available on request.



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Miniature Lamps



Sealed Beam Headlamps



Signal Flashers



Radio And TV Tubes



Aluminized Picture Tubes



Special Purpose Tubes



Semiconductor Products

Here's the fastest way to produce finished wire leads!



Allen-Bradley Co., producers of motor controls, use several Artos CS-6 automatic wire cutting and stripping machines in their Milwaukee plant.

high speed ARTOS AUTOMATIC MODEL CS-6

3000 STRIPPED WIRE LEADS in one hour ...each precision-cut with both ends perfectly stripped. That's the speedy pace set by the Artos CS-6 in producing wire leads up to 15 inches in length! Production rates vary in proportion to the length cut.

Highly accurate machine operation reduces work spoilage to an absolute minimum. Errors due to the human element are eliminated. *There is no cutting of strands or nicking of solid wire.*

PROVED PERFORMANCE

Time-consuming hand stripping jobs which once were a bottleneck in many plants are gone forever. As a result, Artos automatic wire strippers are paying their way in the mass production of television and radio sets, electrical appliances, motor controls and instruments of all kinds.

Plan now to cut wire stripping costs in your plant... with the high speed, automatic Artos CS-6.

CS-6 CAPACITY

Finished Wire Leads Per Hour:
lengths to 15", 3000; 64"-97" lengths, 500.
Stripping Length: 1½" max. both ends.
Cutting Length: max., 97"; min., 2"; special, ⅞".

WRITE FOR BULLETIN

Descriptive technical sheet tells how the Artos CS-6 can save you money, manpower and time.



**MEASURES,
CUTS and
STRIPS
wire, cord
and cable
at speeds up to
3000
pieces per hour**

2-Conductor Twisted Wire

Single Conductor Solid Wire

2-Conductor Parallel Stranded Wire

300 Ohm Television Wire

SJ Cord

Heater Cord

Braided Cord With Rubber Jacket

Sun Spots

(Continued from page 110)

sunspots appear to be just dark holes in the sun's flaming atmosphere. No one knows what causes the spots, but Mr. Nelson has developed a theory that may explain their existence. His theory holds that as the planets in our solar system circle the sun, the collective action of their gravitational fields produces a varying effect on the sun's atmosphere—an effect which may create sunspots.

From years of observation, Mr. Nelson has learned which arrangement of the planets has the greatest effect on the sun. Thus, Mr. Nelson is able to forecast today radio weather that will occur two or three years from now.

Transparent TV

(Continued from page 108)

and tubes with all colors are in the experimental stage.

This work was started as part of an Office of Naval Research program for simplifying aircraft instruments. The goal is to simplify the operation of jet fighter



Fig. 2: NRL's Dr. Feldman shows new tube.

planes to reduce the training time of pilots and to help them get the maximum performance from their planes. Part of this aircraft development involves eventual replacement of the present windshield with a thin transparent display medium. The pilot then gets visual and electronic information at the same time and in the same spot. An interim program will involve installation of a flat trans-

(Continued on page 156)

ARTOS ENGINEERING CO.

Automatic Wire Cutting and Stripping

2753 South 28th Street • Milwaukee 46, Wisconsin



Your open door to the West's booming electronic industries

ELECTRONIC INDUSTRIES' WESCON issue blankets this important market.

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A TELE-TECH

The CHILTON CO. INC., 56th and Chestnut Streets, Philadelphia 39, Pa.

THE THERMOELEMENT

*Simply
plugs-in*

No need returning the Model 622 for thermoelement replacement; nor wiring a new one in. A spare element, or one immediately available for the individual instrument, can be instantly *plugged in*. Replacement units are furnished with correction curves to maintain the guaranteed high accuracy with original scale calibration. This is just one of several exclusive design features which make Model 622 more convenient, more flexible in use. And coupled with its *proved* high accuracy and stability, it remains the outstanding favorite for all high frequency problems. Available as thermo milliammeters and thermo voltmeters; and thermo ammeters, (external thermoelement type). Also as d-c voltmeters, millivoltmeters, milliammeters, microammeters, electrolysis volt-millivoltmeters, and as high accuracy rectifier type a-c instruments. Write for bulletin A20. Weston Electrical Instrument Corp., Newark 12, N.J.

WESTON

MODEL 622

portable

THERMO
INSTRUMENTS





Who produces more
custom-built delay lines
than any other
company in America?



1st in sales!

1st company devoted exclusively to the
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of custom-built delay lines!

Exceptional employment opportunities for engineers experienced in pulse techniques.



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562 BERGEN BOULEVARD • PALISADES PARK • NEW JERSEY

Trans

SILICON DIODES

FEATURES

- Recovery times under .15 μ sec
- High voltage ratings
- Operation up to 200°C
- High Inverse Resistance
- Subminiature size

MILITARY AND HIGH CONDUCTANCE TYPES

RATINGS AT 150°C AMBIENT			
Type	Maximum Inverse Operating Voltage (volts)	Maximum Average Forward Current (ma)	Maximum Inverse Current (μ a) @ V
IN457*	60	25	5 @ 60
IN458*	125	25	5 @ 125
IN459*	175	25	5 @ 175
IN486A	225	50	25 @ 225
IN488A	380	50	25 @ 380

*JAN Types

HIGH FREQUENCY AND FAST SWITCHING TYPES

RATINGS AT 25°C			
Type	Maximum Inverse Operating Voltage (volts)	Maximum Average Forward Current (ma)	Inverse Recovery Time (μ sec)
IN251*	30	75	.15
IN252	20	100	.15
SG213	200	30	.3
SG223	200	55	.5
SG228	200	80	1

*JAN Types

Write for Bulletin TE1350

GERMANIUM DIODES

FEATURES

- Complete Reliability
- Superior Forward Conductance
- Higher Inverse Resistance
- More Uniform Characteristics
- Greater Ruggedness

SPECIFICATIONS AND RATINGS AT 25°C

Type	Forward Current at +1V (ma)	Inverse Current at Specified Voltage (μ a @ V)	Max. Oper. Voltage (volts)	Description
IN270	200	100 @ -50	80	
IN277	100	250 @ -50 75 @ -10 @ 75°C	100	
IN276	40	100 @ -50	70	JAN TYPES
IN281	40	500 @ -50 30 @ -10	60	
IN126	5	500 @ -50 30 @ -10	60	
IN127	5	300 @ -50 25 @ -10	100	
IN198	5	250 @ -50 75 @ -10 @ 75°C	50	
IN283	200	20 @ -10	20	COMPUTER TYPES
TI6G	40	100 @ -50 20 @ -10	60	
IN278	20	125 @ -50 @ 75°C	50	HI-TEMPERATURE TYPES
T22G	40	20 @ -10 @ 75°C	15	
T9G	100	20 @ -50 2 @ -10	60	HI-RESISTANCE TYPES
IN67A	5	50 @ -50 5 @ -5	80	

Other JAN types: IN38A, IN69, IN70, IN81, IN128
Write for Bulletin TE1300 & TE1319

SILICON Power

FEATURES

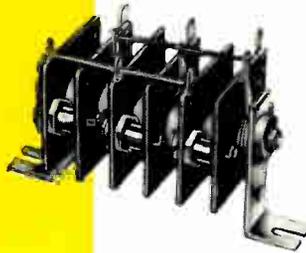
- Reliability at High Temperature
- High Power Handling Ability
- High Efficiency
- Rugged Construction
- Hermetically Sealed

MINIATURE TYPES

RATINGS AT 150°C AMBIENT			
Type	Peak Recurrent Inverse Voltage (volts)	Maximum Average Forward Current (ma)	Maximum Inverse Current (ma)
TJ10A	100	200	.5
TJ25A	250	200	.5
TJ40A	400	200	.5

SILICON RECTIFIER STACKS

Circuit	DC Output		Stack Designation
	Voltage (volts)	Current (amps)	
6 ϕ Star	150	30	TL6S1A1/TR352
3 ϕ Bridge	325	18	TL6F1A1/TR352
3 ϕ Halfwave	1120	1.2	TD12Y681A4
1 ϕ Bridge	748	1.2	TD12B4C1A3
1 ϕ Center Tap	250	3.0	TD12C4C3A2



SILICON VOLTAGE REGULATORS and REFERENCES

FEATURES

- Excellent long-term stability
- High current handling ability
- Operation to 150°C
- Extended operating current range
- Small size, easy mounting
- Hermetically sealed

Reference assemblies are available with temperature coefficients to .002%. They are also available with voltage tolerances to 1% from 10 to over 100 volts. The assemblies are encapsulated in a miniature axial lead package.

"Leadership in semiconductors"



SILICON TRANSISTORS

HIGH FREQUENCY TYPES

FEATURES

- Low I_{cor} typically under .02 μa
- Operation to 175°C
- Power Ratings of 200 mw
- High Frequency Operation
- Welded Hermetic Seal



Type	Minimum Common Emitter Current Gain B	Maximum Collector Voltage V _{ce} Peak (volts)	Typical Cut-off Frequency (mc)	Maximum Collector Cut-off Current @ 25°C @ V _{ce} Max. (μa)
ST12	40	15	16	.5
ST32	40	30	16	.5
ST11	20	15	13	.5
ST31	20	30	13	.5
ST10	10	15	9	.5
ST30	10	30	9	.5

Write for Bulletin TE1353

GERMANIUM Power TRANSISTOR

FEATURES

- Operation to 85°C
- Linearity at High Currents
- Up to 10 watts Dissipation
- Low Thermal Resistance
- Small Size
- Hermetically Sealed



SPECIFICATIONS AND RATINGS AT 25°C				
TYPE	Minimum DC Common Emitter Current Gain (B @ I _c)	Maximum Collector Voltage V _{ce} Peak (volts)	Maximum Collector Current (amps)	Maximum Power Dissipation (watts)
2N83A	8 @ 1.0A	60	3	10
2N83	8 @ .5A	60	2	10
2N84A	12 @ 1.0A	45	3	10
2N84	12 @ .5A	45	2	10

Write for Bulletin TE1320

RECTIFIERS

RATINGS AT 150°C CASE TEMPERATURE			
Type	Peak Recurrent Inverse Voltage (volts)	Maximum Average Forward Current (ma)	Maximum Inverse Current (ma)
MILITARY TYPES			
IN253	95	1000	.1
IN254	190	400	.1
IN255	380	400	.15
IN256	570	200	.25
STUD MOUNTED TYPES			
TM47	400	3000	.5
TM64	600	1000	.5
MEDIUM POWER TYPES (amps)			
IN250A	200	20	5
TR301	300	10	5
TR402	400	20	5
HIGH POWER TYPES (amps)			
IN412A	100	35	5
TH402	400	35	5

Write for Bulletin TE1342 & TE1351



Type	Voltage Range (volts)	Maximum Dynamic Resistance (ohms)	Maximum Current @ 25°C (ma)	Maximum Current @ 125°C (ma)
Subminiature				
SV-5	4.3- 5.4	55	50	10
SV-7	6.2- 8	8	30	6
SV-11	9.0-12.0	50	20	4
SV-15	13.5-18	120	14	3
SV-24	20 -27	300	10	2
Miniature				
SV-804	4.3- 5.4	55	150	30
SV-806	6.2- 8	8	90	18
SV-810	9 -12	50	60	12
SV-815	13.5-18	120	40	8
SV-824	20 -27	300	27	5
Power				
			55°C (amps)*	(ma)*
SV-904	4.3- 5.4	.5	2.0	500
SV-906	6.2- 8	.8	1.2	300
SV-910	9 -12	1.5	.8	200
SV-915	13.5-18.0	3	.6	150
SV-924	20 -27	8	.4	100

Write for Bulletin TE-1352
*Case temperature ratings

Transitron

electronic corporation

wakefield, massachusetts

CRystal 9-4500



Celco Constantine Engineering Laboratories Co.



Design, Development

DEFLECTION YOKES TRANSFORMERS

For... Military and Commercial Avionics

Leading system manufacturers now depend on CELCO for their difficult and critical applications on many of these components.

Our design development, production and quality control experience — combined with CELCO's highly skilled operators, production foremen and engineers — comprises a team that has proven their outstanding performance for quality components.

Apply the CELCO "know-how" to your production requirements!



We specialize in the design and manufacture of **PRECISION DEFLECTION YOKES** for military and commercial applications. CELCO can give you immediate engineering evaluation on your critical display problems.

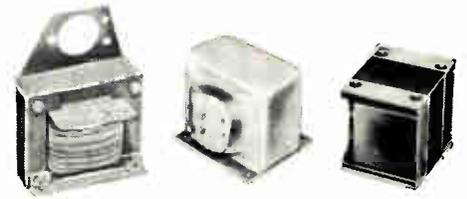


COILS FOR TRAVELING WAVE TUBES — precision wound for minimum wave transverse magnetic fields. High temperature windings are a CELCO engineering development —

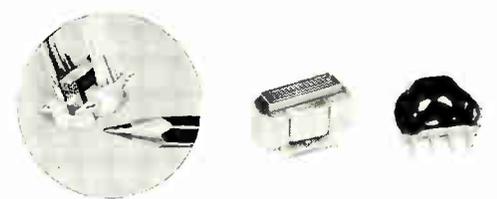
Unit illustrated is 12" long.



HIGH TEMPERATURE TRANSFORMERS — high temperature windings and impregnations on CELCO TRANSFORMERS permit high operating temperature with reduced size and weight.

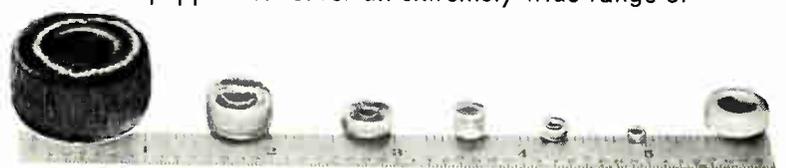


MINIATURE TRANSFORMERS & SATURABLE REACTORS — specially produced for the Transistor and Plug-in type amplifier assembly. CELCO designs these units wherever reduction in size and weight must be made.



TOROIDAL COILS — CELCO is equipped to cover an extremely wide range of toroidal windings.

No. 50 wire on a .062" ID Toroid
No. 15 wire on 9" OD Toroid



Constantine Engineering Laboratories Co.

ISLAND AVE. PHONE DAVIS 7-1123 MAHWAH, N. J.

and Production of:

MAGNETIC AMPLIFIERS AIRCRAFT MOTOR COMPONENTS

...Nuclear and Computer Industries

Celco

MAGNETIC AMPLIFIERS—encapsulated with epoxy resins or silicone rubber. CELCO experience with proper treatment of Toroidal Coils assures designed performance.



Celco

TOROIDAL COMPONENTS — for use in system assemblies. Sub-assemblies of chokes, Transformers and Saturable Reactors are manufactured at CELCO for packaging into a single unit.



Celco

PRECISION TRANSFORMERS — CELCO develops Precision Transformers for such applications as Computer Components with high accuracy of turns ratio and output voltages.



Celco

HERMETICALLY SEALED MAGNETIC AMPLIFIERS & TRANSFORMERS — with various types of terminations, evacuation and inert gas pressurization give CELCO components minimum weight with high-breakdown voltage resistance.



Celco

R.F. CHOKES, TRANSFORMERS—specialized universal winding types of coils and assemblies. These CELCO windings are used when minimum distributed capacitance is required and space does not permit use of mechanical supports.



Celco

MOTOR COMPONENTS—Centrifugally cast squirrel cage rotors for low inertia motors, armatures, stators, field coils and special type rotor coils — are a CELCO production specialty.



Call DAVIS 7-1123 — for immediate engineering evaluation price and delivery quotations on any of these component requirements.

Your plant is only hours away by the Celco Air Fleet



Celco

Constantine Engineering Laboratories Co.

Celco

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ISLAND LAKE PHONE DAVIS 7-1123 MAHWAH, N. J.

To the forward-looking engineer...



STICK-FORCE REVERSAL problems at sonic speeds are solved by this sensitive, accurate AiResearch air data system incorporating transducer, computer and actuator

▶ Garrett Corporation engineers are constantly called upon to provide solutions for seemingly insurmountable problems. The high degree of respect in which the Garrett engineer is held by his profession is a tribute to the accomplishments of our team.

If you qualify to join us, stimulating assignments in the work you like best are only part of what we offer. We pay a premium for ability. You'll work with the finest research and laboratory facilities at your disposal...live in the most desirable areas in America — California, Arizona, the East Coast.

All modern U.S. and many foreign aircraft are Garrett equipped. We have pioneered such fields as refrigeration systems, pneumatic valves and controls, temperature controls, cabin air compressors, turbine motors, gas turbine engines, cabin pressure controls, heat transfer equipment, electro-mechanical equipment, electronic computers and controls.

We are seeking engineers in all categories to help us advance our knowledge in these and other fields. Send resume of education and experience today to: Mr. G. D. Bradley



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9851 S. SEPULVEDA BLVD., LOS ANGELES 45, CALIFORNIA

(Continued from page 148)
parent television tube mounted just inside the wind screen.

The advantages of transparent screens have been recognized for several years but previous efforts have resulted in limited colors and dim pictures. The process developed by Dr. Charles Feldman of the Naval Research Laboratory has been successful in a full range of colors which generate bright sharp pictures. Several television companies have indicated that development in their laboratories will start immediately.

Vacuum Insulation

(Continued from page 105)

thickness of 1 mm. At an original vacuum of 10^{-6} mm Hg at room temperature there would be about 3.5×10^{12} molecules remaining. If the diffusion rate for the area of 100 sq cm is now applied, it would indicate an actual diffusion of 1×10^{17} molecules per hour (10 μ l/hr). This would indicate that the vacuum would fall from 10^{-6} mm Hg to the 10^{-1} mm Hg range in an hour or less. However, gettering action of clean internal surfaces would be able to maintain the original vacuum for many hours even at this diffusion rate. Since this temperature of 450° C is the usual degassing temperature for many tube pumping processes it is probable that much of the pump volume is being used merely to recirculate air diffusing through the heated glass tube walls.

At somewhat lower temperatures, clean surface gettering rate is so far ahead of diffusion rate that even for very large thin glass surfaces the original vacuum is maintained indefinitely. Good examples of this are thousands, perhaps millions of vacuum switches and vacuum tubes over 25 years old, and very high voltage rectifier tubes and x-ray tubes over 30 years old which have as good or better vacuum and higher dielectric breakdown strength now than when they were first sealed off.

Thousands of high voltage vacuum capacitors and vacuum switches, many of which have been in service up to 15 years, have been found on retesting to show dielec-

(Continued on page 170)



“TRIGGER FINGER” FOR SAC

Reliable protection is a *must* for Boeing's giant B-52, operational weapon of the Strategic Air Command. An Avco-Crosley-manufactured MD-9 fire control system—with dual radar and multi-weapon turret—provides deadly and almost completely automatic protection for the B-52.

This newest “stinger” is one of a long list of modern bomber defense systems produced by Crosley. And, looking to the future, Crosley scientists are constantly developing still finer protection for the aircraft of tomorrow.

Crosley offers complete facilities for research, development, and production of:

Air Weapons Systems	Missile Systems
Ground Radar Systems	Aircraft Structures
Air Traffic Control Systems	Communications Systems
Ordnance Systems	Industrial Electronics

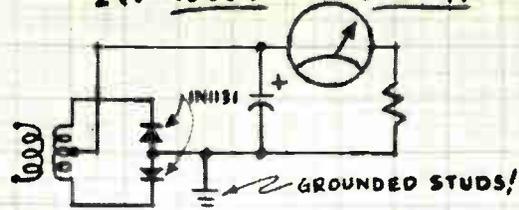
*Avco Manufacturing Corporation,
Crosley Division, Dept. WS,
1329 Arlington Street, Cincinnati 25, Ohio.*

avco | **Crosley**
defense and industrial products

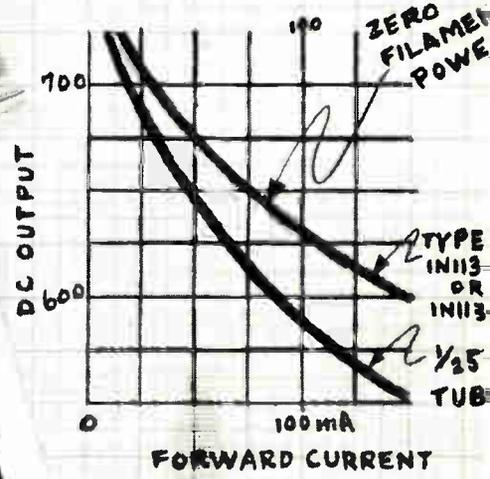
ENGINEERS WANTED: For top-flight men, Crosley offers unusual opportunities to explore new scientific frontiers that lead to outstanding and rewarding careers. Write to Vice President of Engineering at Avco-Crosley.

T/I
progress report on
SILICON
single junction
RECTIFIERS

PIV=1500V I₀=600mA



TYPICAL POWER SUPPLY CIRCUIT

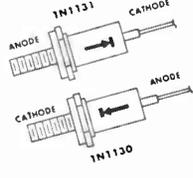
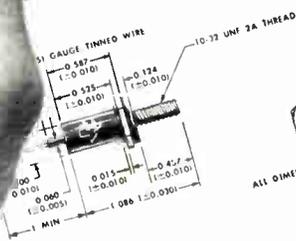


TYPES 1N130 AND 1N131 GROWN SINGLE JUNCTION SILICON RECTIFIERS

Types 1N130 and 1N131 grown single junction silicon rectifiers are suitable for operation at high ambient temperatures (to 150°C) with high in-circuit voltage (1500 V minimum). Ideal for applications where they are stud mounted for maximum heat dissipation and are stud mounted for maximum heat dissipation. The units differ only in polarity. High voltage insulation between units and chassis may be eliminated by the proper choice of either the 1N130 or 1N131.

To assure maximum reliability, stability, and long life, all units are of welded construction and are heat cycled from -55°C to +150°C for four cycles. All units are thoroughly tested for rigid adherence to design characteristics.

with glass-to-metal hermetic seal between case and lead. Approximate weight is



ALL DIMENSIONS IN INCHES

absolute maximum ratings*

- Recurrent Peak Inverse Voltage
 - 65°C
 - +25°C
 - +100°C
 - +150°C
- Average Rectified Forward Current at Maximum PIV†
 - 65°C
 - +25°C
 - +100°C
 - +150°C
- Recurrent Peak Current (-65°C to +150°C)
- Stud Temperature
- Altitude at Maximum Ratings
- Surge Current, 1 Second, D.C.

- 1500 V ✓
- 1500 V ✓
- 1250 V ✓
- 1000 V ✓
- 300 mA ✓
- 300 mA ✓
- 230 mA ✓
- 150 mA ✓
- 500 mA ✓
- 165°C ✓
- 70,000 ft ✓
- 2 A ✓

Specifications
 * 25°C - Leakage at -1500 V D.C.
 † Drop at 150 mA

new design freedom for your miniature high voltage power supplies with...

NEW TI 1500 V, 300 mA RECTIFIERS

You can replace 5R4 and 5U4 rectifiers with TI's new single junction rectifiers in many applications. In a fraction of the space, you will get instant operation at high temperatures with zero filament power. Here are some significant ratings of these new Texas Instruments Types 1N1130 and 1N1131 (differing only in polarity):

VALUE	AMBIENT TEMPERATURE	
	25°C	150°C
PIV	1500 V	1000 V
I _f (at max. PIV with heat sink)	300 mA	150 mA

Designed to meet stringent military requirements, these TI rectifiers give you the ultimate in hermetic seal protection. The standard RETMA stud is of copper for optimum performance and the hex base assures high-torque chassis mounting. High volt-

age insulation between stud and chassis can be eliminated by proper choice of either 1N1130 or 1N1131.



400 V, 750 mA TI TYPE 1N540 ECONOMICAL diffused RECTIFIER lower FORWARD VOLTAGE DROP

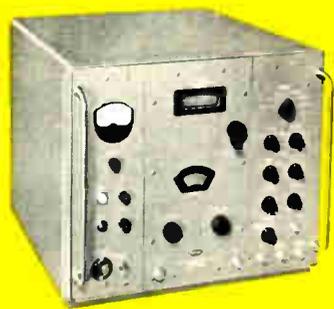
Reliability of your power supplies is assured by this rectifier... giving you cooler operation. Typically, at 150°C, they give you 0.64 V voltage drop at 250 mA and 0.20 mA reverse current at 250 V.

TEXAS INSTRUMENTS INCORPORATED
 6000 LEMMON AVENUE DALLAS 9, TEXAS



MICROWAVE · ELECTRONICS

SIGNAL GENERATION EQUIPMENT



MICROWAVE SIGNAL GENERATOR
Model MSG-34
4,200 to 11,000 mc

MICROWAVE SIGNAL GENERATORS
Models MSG-1, 2, 3, 4, 4A
950 to 11,500 mc



Model No.	Frequency Range
MSG-1	950 - 2400 mc
MSG-2	2150 - 4600 mc
MSG-3	4450 - 8000 mc
MSG-4	6950 - 10,800 mc
MSG-4A	6950 - 11,500 mc

MICROWAVE SIGNAL SOURCES
650 to 11,500 mc

MAXIMUM POWER AVAILABLE FROM POLARAD SIGNAL SOURCES IN THE RANGE OF 650 TO 10,750

FREQUENCY RANGE	MODEL SSR 650-1300MC	MODEL SSL 1050-2250MC	MODEL SSS 2140-4600MC	MODEL SSM 4450-8000MC	MODEL SSX 7850-10,750MC	MODEL SSXA 7850-11,500MC
AVAILABLE POWER RANGE (mw)	100 to 700	80 to 400	40 to 250	15 to 50	14 to 40	Available on Special Order



EHF SOURCE



EHF GENERATOR

EHF MICROWAVE GENERATORS AND SOURCES
9 plug-in units cover 18,000 to 50,000 mc



CODE MODULATED MULTIPLE-PULSE MICROWAVE SIGNAL GENERATOR
Model B
950 to 10,750 mc

4 Interchangeable Tuning Units

Frequency Range:
BL-1 — 950 to 2400 mc
BS-1 — 2150 to 4600 mc
BC-1 — 4450 to 8000 mc
BX-1 — 7850 to 10,750 mc

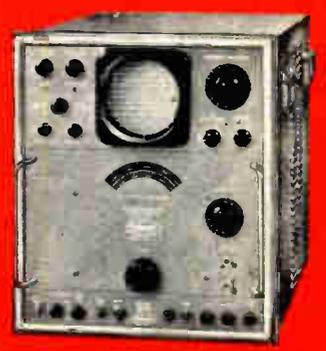
MICROWAVE SWEEP GENERATOR
Model ESG

1,000 to 15,000 mc 7 Interchangeable Tuning Units



Basic Unit: Model E-B		
MODEL	FREQUENCY RANGE	POWER OUTPUT
Model E-L1	1000 to 2,000 mc	70 to 900 mw
Model E-L2	1600 to 3,200 mc	70 to 900 mw
Model E-S1	2000 to 4,000 mc	70 to 750 mw
Model E-C1	3600 to 7,200 mc	20 to 350 mw
Model E-C2	4800 to 9,600 mc	15 to 125 mw
Model E-X1	6500 to 11,000 mc	15 to 80 mw
Model E-X2	7500 to 15,000 mc	10 to 35 mw

SPECTRUM ANALYZERS



DIRECT READING SPECTRUM ANALYZER
Model TSA
Broadband 1G to 44,000 mc
5 Interchangeable Tuning Units

Model No.	Equipment
Model ST	Spectrum Display and Power Unit
Model ST-1	RF Tuning Unit 10-1,000 mc
Model ST-2A	RF Tuning Unit 950-4,500 mc
Model ST-2B	RF Tuning Unit 4,370-22,000 mc
Model ST-3	RF Tuning Unit 21,000-53,000 mc
Model ST-4	RF Tuning Unit 33,000-44,000 mc



MULTI-PULSE SPECTRUM SELECTOR
Model SD-1

Permits spectrum analysis of individual microwave pulses in a pulse group



POLARAD ELECTRONICS CORPORATION

43-20 34th Street
Long Island City 1, N. Y.
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MICROWAVE • ELECTRONICS • COLOR TV

MICROWAVE RECEIVERS



EXTENDED RANGE MICROWAVE RECEIVER

Model R
400 to 22,000 mc

7 Interchangeable Tuning Units

Basic Receiver: Model R-B
Tuning Unit Frequency Ranges:

*Model RR-T	400- 1,000 mc
*Model RL-T	950- 2,040 mc
*Model RS-T	1,900- 4,340 mc
*Model RM-T	4,200- 7,740 mc
*Model RX-T	7,300-11,260 mc
*Model RKS-T	9,500-15,600 mc
*Model RKU-T	14,700-22,000 mc

*U.S. Patent No. 2,774,243

CALIBRATED MICROWAVE FIELD INTENSITY RECEIVER SYSTEM

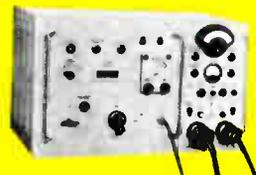
Model FIM
1,000 to 10,000 mc

Frequency Range: Tuning Unit	1,000 to 10,000 mc Frequency Range
*FIM-L	1,000 to 2,240 mc
*FIM-S	2,140 to 4,340 mc
*FIM-M	4,190 to 7,740 mc
*FIM-X	7,360 to 10,000 mc

*U.S. Patent No. 2,774,243



POWER SUPPLY



MONITOR UNIT



ANTENNAS

GENERAL LABORATORY EQUIPMENT

MICROWAVE TUBE TESTER

Model K-200

Tests all microwave tubes as easily as ordinary vacuum tubes.



PULSE JITTER TESTER

Model PJ-1

Measures

- (a) Pulse-to-pulse jitter
- (b) Pulse width jitter
- (c) Repetition rate jitter

Displays

- (a) Jitter magnitude
- (b) Jitter waveform



WIDE BAND VIDEO AMPLIFIER

Model VT

10 cps to 20 mc



5 PULSE CODED MULTI-PULSE GENERATOR

Model MP-1A

Generates 5 separate pulses each with independently variable width and delay for missiles, beacons, and other systems.



MICROWAVE ACCESSORIES



MICROWAVE ATTENUATOR

Model SIJ

Covering
4,000 to 12,400 mc

... continuously variable, stub-tuned waveguide beyond cut off attenuator. For use in making microwave measurements.



SUB-MINIATURE S-BAND CAVITIES

Plate and Grid Pulse

Models Each Covering

2,750 to 3,000 mc

... only 3" long and 1" diameter. Useful where miniaturization and high power are essential. Frequency can be varied by simple tool adjustment.



MICROWAVE TEST ANTENNAS

Six models covering
1,000 to 26,000 mc

... rugged, portable. For field measurements, leakage measurements and other laboratory uses.



ALL CERAMIC KLYSTRON TUBE

Model ZV1009

VELOCITRON
1,600 to 6,500 mc

Reliable maintenance Service for life available throughout the country is an important part of every Polarad instrument.



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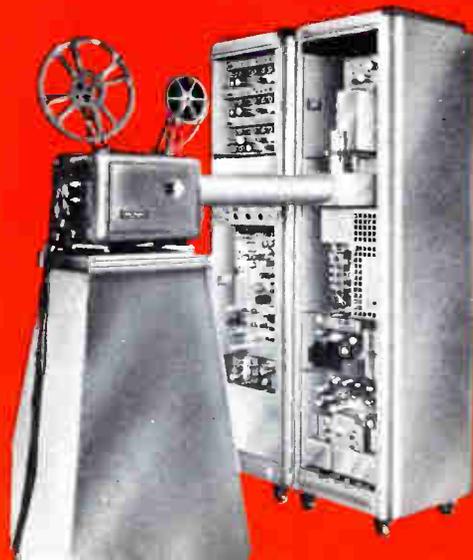
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FILM AND SLIDE SCANNER SYSTEM

Model CC-1 and Model PT-210

For telecasting 16mm color film and 35mm color slide transparencies



ELECTRONIC SOURCES

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ANTENNAS, PROPAGATION

Etching Simplifies Antenna Design, by J. A. McDonough, R. G. Maleck, and J. Kowalsky. "El. Ind." June 1957. 3 pp. Manufacturing problems of tolerance and operating problems of energizing numerous radiating elements are reduced by using etching techniques. Flush-mounted microwave aircraft antennas become possible.

Long-Range Tropospheric Propagation of UHF Waves, by B. A. Vvedensky and A. G. Arenberg. "Radiotek." Feb. 1957. 12 pp. The paper examines incoherent scattering, coherent scattering, refraction and diffraction of UHF waves which are propagated over large distances. The paper contains a thorough and up-to-date analysis of this problem, including some fresh approaches.

The Measurement of the Efficiency of Short Unsymmetrical Meter-Wave Antennas, by M. Lohr. "Nach. Z." March 1957. 6 pp. A simple method for testing the antenna efficiency, accurate to approximately 2%, is explained. Examples are included.

The Effect of a Dielectric Layer Upon the Reflection Properties of a Reflector with Apertures, by V. G. Iampolsky. "Radiotek." Feb. 1957. 6 pp. The paper examines the problem involving the passage of an electromagnetic field through a reflector with apertures which is covered with a dielectric layer. It is shown that covering the reflector with a dielectric layer usually leads to a deterioration of the reflective properties of the reflector.

Noise in Communications Antennas, by M. W. Scheldorf. "Wire & Radio Comm." April 1957. 3 pp. Results of a survey are presented, and different sources of noise in communications antennas discussed.

Microwave Helical Aerials, by T. G. Hame. "El. Eng." April 1957. 3 pp. Some of the problems involved in the design of this type aerial are considered with particular reference to the dielectric enclosed helix.



AUDIO

Simplified Coincident Motion Picture Sound Using A Tape Recorder. "El. Des." April 15, 1957. 3 pp. A recorded line-frequency tone is amplified and used to drive the projector synchronous motor, thus giving synchronized sound.

A Loudspeaker Installation for High-Fidelity Reproduction in the Home, by G. J. Bleeksma and J. J. Schurink. "Phil. Tech." March 23, 1957. 12 pp. Theory and practical design details of a four-speaker system are discussed.



CIRCUITS

A Review of Modulators and Their Requirements, by M. H. Zinn. "El. Des." April 15, 1957. 3 pp. Hard-tube modulators, line-type modulators, and passive-element modulators are discussed.

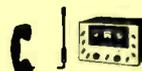
Four-Terminal Network with Complex Transfer Constant, by H. Edelmann. "Freq." Feb. 1957. 6 pp. It is shown how networks with complex transfer constant and involving no losses are represented by a voltage and a current amplifier. Certain difficulties in the component representation of three-phase networks are overcome. The complex four-terminal networks studied have a complex voltage ratio and a reciprocal, conjugated current ratio.

A Linear-Logarithmic Amplifier for Ultra-Short Pulses, by H. Kihn and W. E. Barnette. "RCA." March 1957. This is a description of a compact five-stage logarithmic-linear amplifier having an over-all bandwidth of 180 mc centered at 180 mc and a total dynamic range of 67 db. usefulness is seen in airborne millimicrosecond pulse radar, multiple channel TV, and nuclear pulse amplification.

Preferred Circuits—II. "El. Mfg." March 1957. 6 pp. A cathode follower for fast rise time pulse applications and a phantatron delay circuit are included.

Analysis and Synthesis of Transitional Butterworth-Thomson Filters and Bandpass Amplifiers, by Y. Peless and T. Murakami. "RCA." March 1957. 35 pp. The authors introduce a new family of networks having steady-state and transient characteristics which vary smoothly from the Butterworth characteristic (maximally flat amplitude) to that for the Thomson characteristics (maximally flat envelope delay).

Survey of the Computations Covering Filters with Losses According to the Operational Parameter Theory, with a Particular View to Band-Pass Filters in Crossed Connection, by C. Kurth. "Freq." Feb. 1957. 11 pp. This is the third continuation of an article and is directed to the consideration of the losses, computation of component values, and reduction of required coils and capacitors.



COMMUNICATIONS

High-Speed Data Transmission, by W. A. Malthaner. "Bell Rec." April 1957. 5 pp. A data subset is described which can be used over telephone lines to transmit digital data at a speed of 1,000 words per minute. Data is pre-recorded on magnetic tape; the receiver records on a similar tape.

REGULARLY REVIEWED

AEG Prog. AEG Progress
 Aero. Eng. Rev. Aeronautical Engineering Review
 Ann. de Radio. Annales de Radioelectricite
 Arc. El. Uber. Archiv der elektrischen Uebertragung
 ASTM Bul. ASTM Bulletin
 Auto. Con. Automatic Control
 Auto. El. The Automatic Electric Technical Journal
 Avto. i Tel. Avtomatika i Telemekhanika
 AWA Tech. Rev. AWA Technical Review
 BBC Mono. BBC Engineering Monographs
 Bell Rec. Bell Laboratories Record
 Bell J. Bell System Technical Journal
 Bul. Fr. El. Bulletin de la Societe Francaise des Electriciens
 Cab. & Trans. Cables & Transmission
 Comp. Rend. Comptes Rendus Hebdomadaires des Seances
 Comp. Computers and Automation
 Con. Eng. Control Engineering
 E. & R. Eng. Electronic & Radio Engineer
 Elek. Elektrichestvo
 El. Electronics
 El. & Comm. Electronics and Communications
 El. Des. Electronic Design
 El. Energy. Electrical Energy
 El. Eng. Electronic Engineering
 El. Eq. Electronic Equipment
 El. Ind. ELECTRONIC INDUSTRIES & Tele-Tech
 El. Mfg. Electrical Manufacturing
 El. Rund. Elektronische Rundschau
 Eric. Rev. Ericsson Review
 Fern. Z. Fernmeldetechnische Zeitschrift
 Freq. Frequenz
 GE Rev. General Electric Review
 Hochfreq. Hochfrequenz-technik und Elektroakustik
 IBM J. IBM Journal
 Insul. Insulation
 IRE Trans. IRE Transactions of Prof. Groups
 Iz. Akad. Izvestia Akademii Nauk SSSR
 J. BIRE. Journal of the British Institution of Radio Engineers
 J. ITE. Journal of The Institution of Telecommunication Engineers
 J. IT&T. Electrical Communication.
 J. UIT. Journal of the International Telecommunication Union
 Nach. Z. Nachrichtentechnische Zeitschrift
 NBS Bull. NBS Technical News Bulletin
 NBS J. Journal of Research of the NBS
 Onde. L'Onde Electrique
 Phil. Tech. Philips Technical Review
 Proc. AIRE. Proceedings of the Institution of Radio Engineers
 Proc. BIEE. Proceedings of the Institution of Electrical Engineers
 Proc. IRE. Proceedings of the Institute of Radio Engineers
 Radiotek. Radiotekhnika
 Radio Rev. La Radio Revue
 RCA. RCA Review
 Rev. Sci. Review of Scientific Instruments
 Rev. Tech. Revue Technique
 Syl. Tech. The Sylvania Technologist
 Tech. Haus. Technische Hausmittelungen
 Tech. Rev. Western Union Technical Review
 Telonde. Telonde
 Toute R. Toute la Radio
 Vak. Tech. Vakuum-Technik
 Vide. Le Vide
 Vestnik. Vestnik Svyazy
 Wire. Wid. Wireless World

For more information, contact the respective publishers directly. Names and addresses of publishers may be obtained upon request by writing to "Electronic Sources" Editors, ELECTRONIC INDUSTRIES & Tele-Tech, Chestnut & 56th Sts., Philadelphia 39.

International ELECTRONIC SOURCES

Sunspots Aid Radio Circuits. "El. Ind." June 1957. 1 p. Results of a ten-year study show positive correlation between sunspot activity and radio signal quality.

Canadian-Design Mobile System for 150 MC. by W. Ornstein and G. M. Koch. "El. Ind. Op. Sect." June 1957. 3 pp. Requirements for equipment for the VHF land mobile service are discussed, and typical Canadian-developed equipment design described.

Microwave Links According to the 8th Conference of the CCIR at Warsaw, by G. Bruehl. "Nach. Z." March 1957. 6 pp. The recommendations accepted by the CCIR conference in 1956 at Warsaw are set forth.

Probability of the Reception of a Signal by a Receiver Which Has a Finite Restoration Time, by A. M. Vasilev. "Radiotek." Feb. 1957. 11 pp. An equation is derived which determines the probability density of receiving a signal at an instant of time in a receiver with a finite restoration time. It is assumed that the probability density of the appearance of the signal at the receiver input is given. The general solution is found for the equation, as well as simpler solutions for cases which are of practical interest.

The Effect of Fluctuations Upon a Phase Detector, by V. I. Tikhonov and I. N. Amiantov. "Radiotek." Feb. 1957. 12 pp. The paper examines the problem of the errors which appear in a phase detector due to fluctuating interference. Approximate formulas are derived for the mean value of the voltage and the correlation function of the fluctuations across the detector load.

Measurement of Sensitivity on AM Communication Receivers, by J. F. G. "El. & Comm." Feb. 1957. 4 pp.

Two-Way Radio System Reduces Costs in Standard Oil Refinery, by L. F. Stanley and E. C. Williams. "Wire and Radio Comm." April 1957. 2 pp.

Damped-Oscillation Signals Simplify Telemetering and Relaying, by Kenneth A. Stone. "El. Eq." April 1957. 2 pp. By use of a newly-patented "Interceptor Transformer," an impressed a-c supply frequency is converted to a high-frequency carrier modulated by a damped-oscillation at twice the input frequency. Important to telemetering applications is the fact that a telephone line sees the low frequency damped-wave component rather than the high frequency component, which may be above the normal transmission spectrum of the line.

A Method for Raising the Interference Rejection of Autocorrelational Pulse Signals Reception, by M. I. Karnovsky and V. I. Chaikovskiy. "Radiotek." Feb. 1957. 6 pp. The paper examines the interference rejection of a complex autocorrelational receiving system. It is shown that the proposed system has an increased interference rejection in comparison to an ordinary autocorrelational receiving system. A thorough mathematical and graphical analysis is provided.



COMPONENTS

Purchase Specifications for Pulse-Forming Networks. "El. Des." April 15, 1957. 3 pp. Pulse-forming networks for radar modulators are discussed.

Selenium Rectifiers in High-Voltage Power Supplies, by V. Wouk. "El. Mfg." March 1957. 5 pp. A comparison of the characteristics and application advantages of selenium rectifiers and vacuum tubes in high-voltage power supplies.

The Condition Governing Maximum Precision for Ferroresonant Voltage Regulators, by B. Z. Zilberman. "Radiotek." Feb. 1957. 1 p. On the basis of analyzing the fundamental harmonic of the non-sinusoidal quantities the condition for the maximum stabilization precision is given in the form of a relationship involving dimensionless parameters.

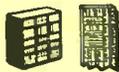
Piezoelectric Crystals, by H. O. Koch. "Freq." Feb. 1957. 5 pp. This article is concerned with the detection of natural defects in several types of crystals. A correlation between the aging of crystals, oscillator plates, and defects in the crystal is investigated and an effort is made to cure the defects in finished quartz pieces.

Considerations in the Design of Aluminum Foil Coils, by H. O. Rost. "El. Mfg." March 1957. 3 pp.

A Wire-Spring Multicontact Relay, by R. Stearns. "Bell Rec." April 1957. 4 pp. A new design permitting direct replacement of flat-spring multicontact relays with improved wire-spring relays. Assembly and operation characteristics are improved in the new relay.

The Quality Control of Printed Circuit Board Manufacturing, by F. H. Edwards. "El. & Comm." Feb. 1957. 4 pp.

What's Wrong with Plug-In Relays, by I. S. Mayer. "El. Mfg." April 1957. 4 pp. Deficiencies are listed in the areas of volume, weight, cost, reliability, interchangeability, and seals.



COMPUTERS

The Boolean Approach to Computer Switching, by I. J. Gabelman. "El. Ind." June 1957. 3 pp. Developing the elements of Boolean algebra and its application to the synthesis and analysis of combinatorial circuits, this article presents the basics for logical design.

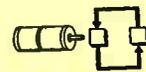
Cooling Robot Brains, by N. E. Sheldon, C. A. Nolph, and G. A. Fleischer. "El. Ind." June 1957. 2 pp. Electronic computer cooling requirements are reviewed.

A Method for Synthesizing Computer and Controller Switching Circuits, by G. N. Povarov. "Auto. i Tel." Feb. 1957. 18 pp. The paper develops a method for synthesizing switching circuits designed for computer and controller systems. These circuits have k outputs with one input or k inputs with one output, while any arbitrary conductivity conditions may exist between the inputs and outputs. The method permits the design of a circuit by means of a single-valued regular process utilizing bridge connections and the combination of circuits involving different pairs of poles. The method offers a quick way of synthesizing a relatively economical (in terms of the number of contacts) circuit. Six examples are given. The supplement discusses the extension of the method to include contactless switching circuits.

Are Digital "Brains" Best for Missiles, by J. Holahan. "Aviation Age." April 1957. 4 pp. Advantages and disadvantages of digital and analog computers for missile applications are discussed.

Counting Thousands of Samples in 12 Hours—Automatically, by K. E. Relf. "Nucleonics." April 1957. 4 pp. Neutron-distribution plots are derived from data from 2,000 foils—corrected for background, decay, and interchannel normalization. 80 man-hours computation time is reduced to less than two hours of card preparation and computation with automatic computing equipment.

Deriving Information from Magnetic Memories without Deletion, by A. Darré. "Freq." Feb. 1957. 5 pp. This is a continuation of an article discussing the "transfluxor."



CONTROLS

Electronics in Traffic Control, by S. J. McMurray, III. "Rice Engineer." Feb. 1957. A study of the factors involved in traffic flow and control on the highway.

Feedback, Servomechanisms, and the Nyquist Diagram, by H. M. Wilkinson. "El. & Comm." Feb. 1957. 4 pp. A fundamental review of the subject—includes a discussion of the physical meaning of the Nyquist diagram.

Predicting Temperature Rise in Servo Motors, by R. M. Gitlin and S. A. Davis. "El. Mfg." April 1957. 13 pp. The author describes the general logic and specific calculation methods needed for the design and application of heat evolving components such as servo motors.

Correction of Pulse Control Systems, by Ia. Z. Tsyppkin. "Avto. i Tel." Feb. 1957. 15 pp. The paper examines continuous- and pulse-correction methods for pulse systems. A method is given for computing the corrective elements. An analysis is given of the possibilities of applying digital computers in the capacity of a corrective element.

Signal Pickoffs for Control Systems—II, by D. A. Davies. "El. Mfg." March 1957. 7 pp. Included are electrical signal pickoffs of the inductive and photoelectric types.

Design of a Propeller Synchrophaser for Commercial Aircraft, by C. B. Brahm. "El. Eq." April 1957. 3 pp. A new electronic propeller synchrophasing system is described.

Digital Positioning Control for Precision Jig Borer, by E. E. Kirkham. "El. Mfg." March 1957. 8 pp. Sensing, computing, and control techniques for control of precision machine tools are discussed.

The Operational Stability of a Two-Phase Servomotor with Negative Velocity Feedback, by E. I. Slepushkin. "Avto. i Tel." Feb. 1957. 11 pp. The paper examines the stability conditions governing the operation of a two-phase servomotor which has negative velocity feedback. The problem is analyzed for the general asymmetrical case when the machine has any arbitrary parameters and the supply system is also arbitrary. The stability criteria are established for the operation of the motor. The feedback parameters are determined according to the parameters of the mechanical characteristic at the "start" point. The design equations are expressed in terms of so-called generalized parameters: the computed critical slips for the equivalent circuits of the motor windings and the impedance ratios of the primary and secondary circuits. The theoretical conclusions are experimentally verified.

Electronic Controls for Timed Acceleration of D-C Motors, by P. A. Herrmann. "El. Mfg." March 1957. 9 pp.

Decreasing the Lag of Magnetic Amplifiers by Introducing Derivative Feedback, by O. I. Aven. "Avto. i Tel." Feb. 1957. 8 pp. The paper examines various methods for decreasing the lag in magnetic amplifiers by introducing derivative feedback. A simplified method is proposed for determining the feedback parameters. The effect of accelerating circuits upon the magnitude of the gain of the magnetic amplifier is evaluated. Experimental results are cited.

Two-Channel Automatic Control Systems with Antisymmetrical Coupling, by A. A. Krisovsky. "Avto. i Tel." Feb. 1957. 10 pp. An analysis is made of linear systems consisting of two identical channels and having antisymmetrical cross-coupling. Transfer functions with complex coefficients are introduced. The paper analyzes the possibilities of using various kinds of antisymmetrical coupling with regard to raising the stability and critical gain of the system. It is also demonstrated that a wider choice is available in the synthesis of corrective networks for two-channel systems (as compared to single-channel systems); the introduction of cross-coupling can assure a considerable extension of the regions of stability.

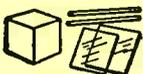


INDUSTRIAL ELECTRONICS

New HELPER For Electronic Industries. "El. Ind." June 1957. 1 p. A new approach to reliability testing for manufacturers of electronic equipment is proposed. A central laboratory capable of extensive tests of large samples of components would be set up with automatic testing and data handling equipment. Support, and distribution of reports, would be on a subscription basis.

Speed Regulation of a Three-phase Induction Motor by Means of a Bridge Detector, by V. S. Kulebakin, S. M. Domanitsky. "Avto. i Tel." Feb. 1957. 8 pp. The paper examines a speed regulation system designed for low-power three-phase induction motors. The system employs a bridge detector. A theoretical analysis of the proposed circuit is given with regard to motors having the usual short-circuited and phase rotors, as well as with regard to a motor with a solid Shenfer rotor.

Colour and Colour Rendering of Tubular Fluorescent Lamps, by A. A. Kruithof and J. L. Ouwertjes. "Phil. Tech." Feb. 10, 1957. 12 pp. By using a mixture of various phosphors in a tubular fluorescent lamp, the color point of the lamp in the chromaticity diagram can be varied within wide limits. Theory and practical development are discussed. Characteristics of several lamps of varying color temperature are presented.



MATERIALS

No-Mix Resin Casting. "El. Ind." June 1957. 1 p. The new casting technique eliminates the mixing of resin and catalizer—using instead, a bonded catalytic filler molded in place. The resin soaks into this porous molded filler. (Reprints of the complete original paper are available.)

Evaluation of Dip-Soldered Joints, by E. S. Miller and A. A. Johns, Jr. "El. Mfg." March 1957. 6 pp. Results of a test program revealing factors influencing dip-soldered joint characteristics are reported.

Characteristics of Metal-Clad Laminates, by D. S. Hoynes. "El. Mfg." April 1957. 7 pp. Results of a study of metal-insulator laminates for printed-circuit work are reported. Data on current-carrying capacity, electrical resistance of coated laminates, and dielectric properties are presented.

High-Temperature Solventless Encapsulating Resins, by D. W. Lewis. "El. Mfg." March 1957. 4 pp. The author reviews a class of solventless resins which combine the established thermal dielectric properties of the silicones with advantages of compounds that can cure without release of volatiles.

Developments in Polyethylene Insulation, by A. E. Javitz. "El. Mfg." March 1957. 10 pp. A review of characteristics and typical applications of polyethylene insulation.

Certain Properties of Ferrites, by J. K. Galt. "Bell Rec." April 1957. 5 pp. A basic review of ferrites.

High Temperature Inorganic Insulation, by L. W. Spooner. "El. Mfg." April 1957. 3 pp. A compound of asbestos bonded with 100 per cent inorganic aluminum phosphate is suggested as electrical insulation up to 250° C.

Ferroxcube Material for Piezomagnetic Vibrators, by C. M. van der Burgt. "Phil. Tech." March 23, 1957. 14 pp. Various types of ferroxcube may be used as magnetostrictive transducer cores in place of metals and alloys. Absence of eddy current and minimized friction losses result in higher electroacoustic efficiency at ultrasonic frequencies.

Ultrasonic Metal Joining, by J. B. Jones and E. E. Weismantel. "El. Mfg." April 1957. 6 pp. Ultrasonic soldering, brazing, and welding techniques and equipment are discussed. Application to electronic circuits is described.

Background on Epoxy Foams, by L. Bolstad and A. Stenerson. "El. Des." April 1, 1957. 2 pp. Factors in formulating Epoxy foams are discussed.

Applying High Permeability Laminations. "El. Mfg." March 1957. 6 pp. A review of basic design factors for high-nickel-alloy magnetic laminations.



MEASURING & TESTING

Distortion-Free Reproduction of Waveforms with a Large Bandwidth by Means of Display Units with a Small Bandwidth, by H. Riedle. "Nach. Z." March 1957. 7 pp. Frequency compression is used to display periodic wave containing a spectrum up to 200 mc by a simple commercial oscilloscope. The frequency compressor reduces the spectrum to approximately 20 kc. Details are given.

Automatic Testing Techniques. "El. Mfg." April 1957. 5 pp. An automatic encapsulated unit test set, a test stand for fire control computers, a broad-range function tester, and a precision potentiometer checker are described.

Poor Design Ups Test-Equipment Repair Costs, by R. Bilinski. "El. Eq." April 1957. 2 pp.

Measurement of the Electric Field Intensity of Cavity Resonators by the Method Involving the Displacement of the Resonant Frequency by Means of a Dielectric Probe, G. N. Rapoport. "Radiotek." Feb. 1957. 8 pp. The paper derives a theorem for the displacement of the resonant frequency of a cavity resonator when the separation boundary between different dielectrics inside the cavity is deformed. This theorem is the basis for the method involving the measurement of the relative electric field intensity according to the displacement of the resonant frequency of the cavity resonator which occurs when a small dielectric probe is introduced into the cavity.

A New Method to Investigate Tube Microphonics, by I. P. Valkó, A. Kemény, and L. Szécsi. "Hochfreq." Jan. 1957. 8 pp. In this continuation of the previous article the requirements for the noise generator, amplifier, vibrator and instrument are discussed and the arrangement selected is described. A series of measurements with the new method is compared with previous methods; the new method is held superior.



RADAR, NAVIGATION

Doppler Navigation Holds the Course, by W. J. Tull. "El. Ind." June 1957. 3 pp. Development work on Doppler ground speed and drift angle measuring equipment is described. Dead-reckoning navigational computers and advantages of the system are explored.

Daylight Radar Scope Uses Transparent Phosphor. "El. Ind." June 1957. 1 p. A transparent deposited phosphor film allows incident light to pass through the face of the cathode ray tube and be absorbed by the darkened interior. Displays can be viewed even in the presence of intense incident light.

One Year of Tests with Radar Equipment for Marine Traffic Control at Bremerhaven, by G. Wiedemann, H. Schellhoss and H. Bruckmann. "Nach. Z." March 1957. 11 pp. The results of tests on radar traffic control on the rivers Weser and Elbe, and the Kiel Canal are reported. Local conditions and traffic are set forth and their effect on the required number of radar stations, the station equipment, and the accessory equipment are considered.

Satellite Tracking Based on Phase Comparison, by J. T. Mengel. "Aviation Age." March 1957. 3 pp. A review of Minitrack techniques and equipment.

Infrared for Missile Guidance, Fire Control, Thermal Mapping, by J. Holahan. "Aviation Age." March 1957. 4 pp. A survey of present techniques and applications of infrared devices.



SEMICONDUCTORS

Design Procedures for Semiconductor Regulated Power Supplies, by S. Sherr, P. Levy, and T. Kwap. "El. Des." April 15, 1957. 4 pp. The authors discuss regulation factors, regulator design, and heat sink considerations.

Industry Sets First Transistor Standards, by L. F. Leinweber and C. D. Todd. "El. Ind." June 1957. 3 pp. A thorough explanation of the symbols and the system used in the new IRE standard for transistor symbols.

Avalanche Flow Line Analysis, by R. B. Hurley. "El. Ind." June 1957. 2 pp. The author extends the visual analysis presented in Electronic Industries, April 1957 to include avalanche considerations. The Flow Line Analysis is a significant new analytical tool.

Design, Construction, and High-Frequency Performance of Drift Transistors, by A. L. Kestenbaum and N. H. Ditrick. "RCA." March 1957. 12 pp. A combination of solid-phase diffusion with alloy-junction techniques is described.

Effect of Radiation on Semiconductors, by J. C. Pigg and C. C. Robinson. "El. Mfg." April 1957. 9 pp. Changes in characteristics of typical semiconductor components when subjected to various radiation levels are described.

Transistors Can Be Reliable, by C. H. Zierdt, Jr. "El. Des." April 1, 1957. 4 pp. Improvements in transistor reliability and life are reported.

Waveform Generator Design Uses All Transistors, by E. M. Rosenthal. "El. Eq." April 1957. 2 pp.

International ELECTRONIC SOURCES

Designing Transistor Circuits—D-C Regulators, by R. B. Hurley. "El. Eq." April 1957. 3 pp.



TELEVISION

Pepperpot Tube Checks Yoke Linearity, by Dr. W. F. Niklas. "El. Ind." June 1957. 3 pp. A conventional CRT, modified to produce split pencil rays, readily interprets distortion errors. The tube permits the use of a standardized, simple, and fast test method for production control.

New Life For Orthicons. "El. Ind." June 1957. 1 p. Orbiting lenses slowly move the image on an image orthicon tube to prevent "burn-in." The transmitted picture is maintained steady by a synchronized function generator and amplifier which corrects for lens orbital movement.

Planning an Overwater Microwave Link, by E. F. Wilson. "El. Ind. Op. Sect." 2 pp. Choppy seas, cursed for sea return, aid rather than hinder microwave TV. TV is a one-way signal and the cancelling signal due to reflection is attenuated by the irregular surface.

Distortion in FM Systems, by A. Ditl. "Hochfreq." Feb. 1957. 13 pp. The concept of an instantaneous frequency is used in the derivation of a formula which permits the computation of the output signal of an FM system for any input signal. TV signals are given special attention and methods for minimum distortion are studied.

Television Raster Nomograph, by C. W. Young. "El. Eq." April 1957. 2 pp. A design tool for ITV circuits is presented.

Distortions Due to Transient Response in the Single Side-Band Transmission of TV Signals and Their Suppression, by F. Kirschstein. "Hochfreq." Jan. 1957. 8 pp. The effect of frequency dispersion on TV reception is explained. Predistortion of the phase, as suggested by Kell and Fredendall, RCA-Review, March 1949, and the similar system introduced in the Hannover TV transmitter are considered.

$$\Delta G = \Delta G / \epsilon \eta \mu \rho \delta$$

THEORY

Insulate With Vacuum, by H. C. Ross. "El. Ind." June 1957. Practical design considerations are discussed for vacuum relays and switches. Included are such matters as molecular mean free paths, solid vapor pressures, diffusion of gas through solids, and adsorption of gas by solid surfaces.

Circuit Analysis By "Poles and Zeros," by W. A. Scism. "El. Ind." June 1957. 3 pp. Engineers gain rapid insight into the behavior of circuits and variations in behavior with changes of components—by using "pole and zero" analysis.

Calculating R-C Amplifier Supply Voltages—II, by S. Deutsch. "El. Ind." June 1957. 3 pp. The trial and error method can be eliminated by assuming that the tube "constants" are actually constants and that the input signal always swings the tube from cutoff to zero grid-to-cathode voltage. Last of two parts.

Validity of Traveling-Wave-Tube Noise Theory, by R. C. Knechtli and W. R. Beam. "RCA." March 1957. 15 pp. Good agreement is found between first-order theory and experiment. Zero correlation was found between beam current and electron velocity fluctuations at the potential minimum in front of the cathode.

Periodic Solutions for Systems with a Sectionally-Linear Characteristic That is Composed of Segments Which Are Parallel to Two Given Straight Lines (Part I), by M. A. Aizerman, F. R. Gantmakher. "Avto. i Tel." Feb. 1957. 14 pp. The paper examines the problem of determining periodic regimes for systems having a nonlinear characteristic which is composed of segments of two straight lines. Periodic solutions for the corresponding differential equations are sought in the form of complete Fourier series. The solution of the problem includes the composition of equations for the periods and the solution of these equations. This method does not require the solution of linear systems of equations which describe the process over individual sectors.

Equivalent Two-Terminal Networks with All Three Impedance Types, R, C, and L, by K. H. R. Weber. "Hochfreq." Jan. 1957. 4 pp. The equivalence of specific configurations of two-terminal networks, each involving all three types of impedance is investigated. A theorem is derived which permits the establishment of such equivalence on the basis of the network structure only.

Space-Charge Limitation on the Focus of Electron Beams, by J. W. Schwartz. "RCA." March 1957. 9 pp. The motion of electrons within a homocentric uniform-density beam in the presence of space-charge forces is examined.

Traveling Wave Tube Gain Fluctuations With Frequency, by S. A. Cohen. "IRE Trans. PGED." Jan. 1957. 9 pp.

The Problem Of The Mechanism Of Electronic Emission From Thin Dielectric Layers Due To The Effects Of A Strong Electric Field (The Malter Effect), by M. I. Elinson and D. V. Zernov. "Radiotekhnika i Elektronika," Jan. 1957. 10 pp.

The paper analyzes the existing concepts of the mechanism governing the Malter effect. It is shown that these concepts cannot explain the sum total of the experimental facts which are known at the present time. A new point of view is proposed and analyzed; this point of view is based upon postulating that the potential distribution within the dielectric film is substantially inhomogeneous.

An Amplifier With Distributed Constants When Treated As A System Of Multi-Pole Networks, by Yu. N. Prozorovsky. "Radiotekhnika i Elektronika," Jan. 1957. 8 pp.

A method of analysis is developed for an amplifier with distributed constants. The amplifier is considered to be a system consisting of a finite number of multi-pole networks. Matrices are obtained which correlate the input and output voltages and currents of a stage of a distributed amplifier consisting of sections which are of the same type or of different types. The transfer coefficient of the amplifier is determined. The procedure for transforming the complete circuit of a UHF pentode to a multi-pole network is given, and the corresponding matrices are derived.

Mutual Synchronization Of Self-Excited Oscillators At Multiple Frequencies, by G. M. Utkin. "Radiotekhnika i Elektronika," Jan. 1957. 13 pp.

The paper examines a system consisting of two mutually coupled self-excited oscillators at approximately multiple frequencies. In such a system it is true that mutual synchronization of the oscillations takes place in a certain detuning range of the oscillator tank circuits (the synchronism zone). The dependence of the operating mode and the frequency of oscillation, as well as the width of the synchronism zone, upon the frequency multiple and the oscillator parameters is derived. Certain features of the "beat" mode which arises outside of the synchronism zone are examined.

Small-Signal Wave Affects in the Double-Base Diode, by J. J. Suran. "IRE Trans. PGED." Jan. 1957. 10 pp.

The Character of Waveguide Mode in Gyromagnetic Media, by H. Seidel. "Bell J." March 1957. 18 pp. The effect of birefringences is studied in rectangular and circular waveguides with special attention paid to propagation characteristics in guides of arbitrarily small cross-section.

Analysis of A Non-Reciprocal Effect in an N-Wire Ferrite Loaded Transmission Line, by H. Boyet and H. Seidel. "Proc. IRE." April 1957. 5 pp. The N-Wire rotational symmetric line surrounding a thin ferrite rod is analyzed here with the aim of determining the feasibility of this low-frequency, non-reciprocal device.

Thermionic Current in a Parallel-Plane Diode, by L. J. Giacometto. "IRE Trans. PGED." Jan. 1957. 2 pp. An approximate formula is developed for the current of a parallel plane diode including the effects of initial velocities of emission.

Variation of Cable Loss with Standing Wave Ratio, by E. G. Hamer. "J. BIRE." Feb. 1957. 4 pp. Effects of Power losses in mismatched transmission lines are considered, and formulae and nomograms are derived for the increased effect of attenuation and power loss in the cable. Consideration is also given to the reduction of the standing wave ratio between the receiving and sending end, and a nomogram is derived.

The Connection between Time and Spectral Functions, by U. Kirschner. "E. Rund." March 1957. 6 pp.

A mathematical investigation results in formulas applicable in picture transmission engineering, pulse technique and television engineering whenever the circuit design calls for a knowledge of the relationship between the time function and the spectral function.

The Variational Method Of Computing Waveguides With Periodic Inhomogeneities, Part I, by Sh. E. Tsimiring. "Radiotekhnika i Elektronika," Jan. 1957. 12 pp.

The paper examines the propagation of electromagnetic waves in a periodically corrugated waveguide whose walls are considered to be ideally conducting and whose internal medium is considered to be loss-free.

The Transformation Of Fluctuations In The Amplitude And Phase Of Oscillations By Means of Resonant Systems, by G. S. Gorelik and G. A. Elkin. "Radiotekhnika i Elektronika," Jan. 1957. 6 pp.

A theoretical investigation is made of how a signal whose phase and amplitude vary in a random manner passes through systems consisting of a linear (resonant) member and a nonlinear member (detector). Formulas are derived which make it possible to determine the statistical phase and amplitude characteristics at the output of the resonant system on the basis of the specified characteristics of the phase and amplitude fluctuations at the input of the system.



TRANSMISSION LINES

Miniature Strip Transmission Line and Components—Part I, by E. N. Torgow and J. W. E. Griemsmann. "El. Des." April 1, 1957. 3 pp. Low cost, miniaturized microwave transmission line is described and characteristics discussed.

Miniature Strip Transmission Line and Components—II, by E. N. Torgow and J. Griemsmann. "El. Des." April 15, 1957. 2 pp. This second section discusses various strip line components for use with miniaturized transmission line.



TUBES

Gaseous-Discharge Counter Tubes, by I. Ia. Breido and G. M. Iankin. "Radiotek." Feb. 1957. 6 pp. A survey is made of the widely used counter tubes whose operation is based upon the phenomenon of a directional transfer of the gaseous-discharge zone. The tubes which are chiefly examined are those which are used for decimal counting—the so-called "decatrons."

Dynamic Properties of Tungsten Cathodes, by W. Kuppel and H. Seifert. "Nach. Z." March 1957. 6 pp. Filament diameter and operating temperature are related to slope, time constant and life time of directly heated cathodes. The theoretical curves compare satisfactorily with measured values.

The Design of Periodic Permanent Magnets for Focusing of Electron Beams, by F. Sterzer and W. W. Siekanowicz. "RCA." March 1957. 21 pp. Design charts for minimum-weight structures are given, and the design of a periodic focusing structure for a specific traveling-wave power amplifier tube is considered in detail.

Barkhausen's Electron Oscillations as Basis of the Transit-Time Tubes, by H. E. Hollmann. "Hochfreq." Jan. 1957. 8 pp. This article presents a historical survey of the development of this type of tubes. Barkhausen's findings, made more than 35 years ago are presented, Gill-Morrell oscillations (1922) are discussed, and finally the theory of a reflex Klystron is explained.

Protection of Tubes from Shock and Vibration, by A. A. Benderly. "El. Eq." April 1957. 4 pp. Various potting compounds and methods of shock-protecting tubes within the potting compound are compared. Fiberglass, copper mesh, glass beads, or clay spheres were tried as additional tube protection.

Temperature Dependence of Photomultiplier Gain, by F. E. Kinard. "Nucleonics." April 1957. 2 pp.

Electron-Gun Design Permits Low E_{kz} , by J. M. Sheeche. "El. Eq." April 1957. 4 pp. A new electron gun for TV picture tubes permits operation of grid number two at about 110 volts.

How a Helix Backward Wave Oscillator Works, by P. D. Laey. "Aviation Age." March 1957. 2 pp.

Rectangular Cathode-Ray Tubes of High Aspect Ratio, by F. G. Blackler. "Phil. Tech." March 23, 1957. 3 pp. Special manufacturing problems encountered in the production of rectangular CRT are discussed.

Problems in the Construction of Small Radio Valves, by B. A. Cant. "Phil. Tech." Feb. 4, 1957. 6 pp.

Shutter Image Converter Tubes, by B. R. Linden and P. A. Snell. "Proc. RE." April 1957. 11 pp. The tubes discussed in this paper employ a mesh spaced close to the cathode which can be used to control the passage of photo-electrons from cathode to phosphor layer. The electron-optical theory is presented for both types of tubes and their static characteristics are discussed.

Backward-Wave Oscillator Experiments at 100 to 200 Kilomegacycles, by A. Karp. "Proc. IRE." April 1957. 8 pp. The electronically tunable oscillations were obtained at wave lengths between 3 and 1.5 mm in a demountable backward-wave oscillators whose circuit structure was a ridged waveguide with transverse slots in the broad wall.

Linear Beam Tube Theory, by C. C. Wang. "IRE Trans. PGED." Jan. 1957. 15 pp. Basic theories underlying the principles of operation of linear beam tubes are presented.

An Analysis Of The Energy Exchange Between An Electron Stream And An Electromagnetic Wave, by V. N. Shevchik. "Radio-tekhnika i Elektronika," Jan. 1957. 7 pp.

The paper examines certain problems involved in the interaction between an electron stream and a traveling electromagnetic wave when the kinematic approximation method is used. The process of electron bunching in the traveling wave is analyzed; this process is identical to the bunching process in a klystron. The maximum value of the first-harmonic current is determined in the traveling wave. The electronic efficiency of the interacting between the stream and the traveling wave is found. The synchronization concept is refined. The computations are extended to apply to a traveling-wave tube, and the optimum operating modes are found for a backward-wave oscillator at small amplitudes.

CRT Deflection Circuit Has High Efficiency, by W. V. Guggi. "El." April 1, 1957. 4 pp.

The chief significance of the high efficiency deflection circuits described in this article is that a single power transistor operating as a switch can be used by CRT deflection with plus or minus 2% or better linearity. The basic principle is one of circulating energy among various reactive elements and replacing lost energy during the early part of the sweep cycle.

A New Kind of Tuning Indicator Tube, by H. te Gude and E. Schaaff. "Phil. Tech." Feb. 4, 1957. 3 pp.

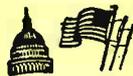
In the tube described in this article, an electron beam of rectangular section produces a rectangular spot on a fluorescent screen. The tube will operate at as low as 100 volts anode potential.

Considerations on the Dimensioning of Traveling-Wave Tube Output Stages in Radio, by M. Mueller. "Nach. Z." Jan. 1957. 4 pp.

A Links attempt is made to standardise travelling-wave tube design and to establish optimum design features for various applications. Starting from desired performance and available supply data, a series of tubes is arrived at.

Corona Discharge VR Tubes, by N. G. Anton and M. Youdin. "El. Des." March 15, 1957. 2 pp.

Design and performance characteristics of corona discharge VR tubes are reviewed; characteristic curves and a discussion of dynamic resistance are included.



U. S. GOVERNMENT

Research reports designated (LC) after the price are available from the Library of Congress. They are photostat (pho) or microfilm (mic), as indicated by the notation preceding the price. Prepayment is required. Use complete title and PB number of each report ordered. Make check or money order payable to "Chief, Photoduplication Service, Library of Congress," and address to Library of Congress, Photoduplication Service, Publications Board Service, Washington 25, D. C.

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When an agency other than LC or OTS is the source, use the full address included in the abstract of the report. Make check or money order payable to that agency.

Narrow-Band Lock-in Analyzer for Detailed Spectrum Analysis, by A. Z. Robinson. U. S. Nav. Ord. Lab. Mar. 1952. 61 pp. photos, diags., graph. Mi \$3.90, ph \$10.80. (LC) (PB 122439). A new type of narrow-band wave analyzer is described. This analyzer is different from the conventional analyzers in that the signal frequencies are heterodyned down to a zero beat and passed through low-pass filters rather than being heterodyned to some fixed pass-band which is higher in the frequency spectrum than the components being analyzed. The general theory of the instrument is described in detail and some of the analyses made with it are presented.

Result of Tests on the Interferometer or "Buck Gauge" Used for the Measurement of Shock Wave Parameters in Air, by E. M. Fisher. U. S. Nav. Ord. Lab. Oct. 1950. 18 pp. diagr., graphs, table. Mi \$2.40, ph \$3.30. (LC) (PB 122429). Three interferometer gauges were mounted at three distances from an 8 lb. spherical TNT charge. The gauges were mounted flush with the ground. The data yielded peak pressures and positive impulses which are compared to like data obtained from tourmaline piezoelectric gauges.

Study of Properties of Single Crystals for use as Detectors and Crystal Counters, by S. J. Czyzak, W. M. Baker, R. C. Crane, H. Payne and J. R. Ignatowski. Detroit University. Oct. 1955. 42 pp. photos, drawings, graphs, tables. (OTS) \$1.25. (OTS) (PB 121537).

Single crystals of CdS and ZnS with and without controlled impurity additions (In, Mn, Pb, and O) were grown. The crystals were examined for index of refraction, absorption coefficient, dielectric constant, resistivity, photoconductivity, rectification and photovoltaic effects. Also, preliminary experiments on the radiation effects from high energy electrons were made.

Investigation of Mixing in Traveling-Wave Tube Amplifiers, by G. A. Gray. California University. Microwave Tube Group, Berkeley, Calif. Nov. 1955. 48f. drawing, diags., graphs. Mi \$3.30, enl pr \$7.80. (LC) (PB 123917).

This report is a preliminary study to evaluate the mixing of two signals on an electron beam by means of backward-wave interaction. The method employs two-helix type backward-wave structures in tandem, one of which acts as a voltage-tunable oscillator while the other furnishes a means of introducing the signal onto the beam. This study has indicated that conversion efficiencies of the order of those obtainable from crystal mixers should be possible with this type of tube.

Ultrasonic Soldering of Aluminum. J. B. Jones and J. G. Thomas, Reroprojects Inc. for Frankford Arsenal, U. S. Army. Feb. 1955. 68 pages. \$1.75. (PB 121551) (OTS)

Aluminum joints were prepared with 21 tin-base and cadmium-base low-melting solders and evaluated by exposure to a corrosion environment of low conductivity, aerated, distilled water at 95°C. Ultrasonic techniques proved effective in fluxless timing with all the solder alloys. The report includes an examination of factors significant to ultrasonic soldering, particularly the ultrasonic exposure time and soldering temperature relationships. Also studied are the effects of joint configuration and filler metal thickness on joint strength.

Development of Subminiature High Temperature Capacitors, Balco Research Laboratories for Wright Air Development Center, Mar. 1955. 79 pages. \$2. (PB 111729) (OTS)

Teflon met or exceeded all requirements for replacement of mica capacitors (specification MIL-C-5A) under temperatures from minus 60° to 200°C. The single exception was r-f current rating, which could not be applied to metal-cased units because of overheating. At the conclusion of the research, only two obstacles remained before Teflon capacitors could replace mica units in almost any application. The problems, neither serious, were stabilization of capacitor elements and encasement for radio-frequency operation.

International ELECTRONIC SOURCES

A Study of Environmental Temperature and Pressure Effects on the Plate Dissipation Rating of Receiving Tubes: Part 2. B. M. Schmidt, University of Dayton for Wright Air Development Center. Dec. 1955. 40 pages. \$1. (PB 121780) (OTS) This report supplements Part 1 with information on plate dissipation rating extrapolation curves for certain subminiature tube types; general curves showing constant plate temperature contours; evidence showing that internal tube temperatures are not directly affected by environmental conditions; an empirical method for determination of the maximum bulb temperature; and confidence limits on maximum bulb temperature and plate temperature showing variation by manufacturer.

Test Apparatus for Ferroelectric Memory Condensers. C. F. Pulvari, The Catholic University of America for Wright Air Development Center. Dec. 1955. 29 pages. 75 cents. (PB 121204) (OTS) Design and construction data are described for a test apparatus for ferroelectric memory condensers which enables quick determination of optimum operating conditions and selection of condensers with identical properties for a particular application. The apparatus was designed for use in development of improved bistable storage condensers.

Phosphorescent and Fluorescent Material. L. H. Dawson, Naval Research Laboratory, Dec. 1956. 50 pages. \$1.25. (PB 121541) (OTS) This is a survey report of the properties and military uses of phosphorescent and fluorescent materials. Vision at low values of illumination is discussed, along with methods of photometry and colorimetry as applied to measurement of luminosity and color of luminous material. Characteristics of commercially-obtainable material are shown, and some possible uses are suggested.

Development of Ferroelectric Ceramics. J. D. Wallace and M. F. Pressler, U. S. Naval Air Development Center. Feb. 1953. 59 pages. \$1.50. (PB 121418) (OTS) Facilities and methods devised by the Navy for the ceramic forming of transducers of barium titanate are described. Test pieces of 94 percent barium titanate, 4 percent lead titanate and 2 percent barium stannate were formed which showed considerable promise for use as transducer elements in hydrophones. Laboratory facilities are described by text and photographs in the report, along with methods of evaluating the transducers.

Research consisting of Spectrographic Analysis of Samples and Development of Spectrographic Methods for the Determination of Impurities in Pure Silicon. Third Quarterly Report. J. M. Morris, Metal Hydrides Inc. for Air Force Cambridge Research Center. Mar. 1956. 6 pages. 50 cents. (PB 121539) (OTS) A procedure for preparation and excitation of samples of silicon tetraiodide compounds for spectrochemical analysis is outlined. The work was part of a program to improve methods of analysis of high purity silicon.

Packaging and Integrating Printed Circuit Electronic Assemblies. E. D. Alfred, L. G. Brodrick, C. W. Everhart, and M. E. Hinebaugh, of the P. R. Mallory and Company, Inc., for Signal Corps, U. S. Army. Part I. Sept. 1954. 52 pages. \$1.50. (PB 121163) (OTS). Part II. Sept. 1954. 144 pages. \$3.75. (PB 111714) (OTS). Four systems of packaging and integrating Auto-Sembled card-type printed circuit assemblies are analyzed in Part I. The systems, devised for use with RF, IF, and AF amplifiers, include plug-in, stacked mechanical, distributed connector, and mechanically cascaded packages. Part II contains a design guide for packaging and integrating the four successful Auto-Sembled assemblies. A five-step procedure is described which allows pre-fabrication evaluation of a proposed design to assure adequacy of circuitry, ruggedization, climatic protection, thermal adequacy, size and weight, maintenance, and integration.

Effect of Air Exposure on Various Cathodes for Demounting Vacuum Systems, by G. A. Haas and J. T. Jensen, Jr. NRL. Nov. 1956. 10 pp. photos, graphs. 50 cents. (OTS) (PB 121563). Various nickel matrix and tungsten matrix cathodes have been investigated for applications in demountable vacuum systems. The two W matrix cathodes (Philips BP-1B and C-P-2B) displayed true diffusion properties which allowed the emission level to recover after each air exposure. However, both of these cathodes have the disadvantage of lengthy activation time and show a strong susceptibility to self-poisoning if the tube parts cannot be cleaned or baked after each air exposure.

Magnetic-Amplifier Potentiometer Servo System with Vacuum-Tube or Transistor Preamplifier, by D. D. Wright and W. H. Raskin. U. S. Nav. Ord. Lab. Aug. 1955. Mi \$2.40, ph \$3.30. (LC) (PB 120822). The use of magnetic amplifiers in a potentiometer-type computer servo is described. Both vacuum tubes and transistors are considered for input stages, to obtain the necessary high input impedance. Magnetic amplifiers are used in the latter stages to take advantage of their ruggedness and ease of compensation. No complex circuitry is required to couple the vacuum tubes or the transistors to the magnetic amplifier.

Effect of Transverse Compressional Stress on Magnetic Properties, by R. E. Fischell, U. S. Nav. Ord. Lab. Dec. 1954. 36 pp. photos, drawing, graphs, table. Mi \$3, ph \$6.30. (LC) (PB 122056). Toroidal, laminated cores of several important magnetic materials were tested for their magnetic properties at compressional stresses ranging from 0 to 500 pounds per square inch. The compressional stress was applied in a direction perpendicular to the plane of the laminations and perpendicular to the direction of the magnetic field. The materials tested were 3.5% and 6.4% silicon-iron, 81% and 90% nickel-iron, and both hydrogen- and air-annealed samples of AEM 4750, 12 Alfenol and 16 Alfenol. Tests were run at frequencies of zero, 60, and 400 cycles per second. The experimental results indicate that magnetic effects of transverse compressional stress are dependent on the magnitude and independent of the sign of the magnetostriction.

The Study of Properties of Single Crystals for Use as Detectors and Crystal Counters. S. J. Czyzak and others, University of Detroit for Office of Naval Research. Oct. 1955. 42 pages. \$1.25. (PB 121537) (OTS) Single crystals of cadmium sulfide and zinc sulfide were grown and their optical, electrical and structural properties studied during this investigation of potential use of the crystals as infra-red detectors and crystal counters. A procedure is given for growing single synthetic crystals with and without controlled impurity additions such as indium, magnesium, lead and oxygen. The crystals were examined by index of refraction absorption coefficient, dielectric constant, resistivity, photoconductivity, rectification and photovoltaic effects. Preliminary experiments also were made on the radiation effects from high energy electrons.

PATENTS

Complete copies of the selected patents described below may be obtained for \$25 each from the Commissioner of Patents, Washington 25, D. C.

Pulse Communication Systems, #2,786,100. Inv. Chas. W. Earp. Assigned International Standard Electric Corp. Issued March 19, 1957. Two indices are derived from each sample of a signal wave, each index being representative of the sample in terms of a scale, the two indices being different but related so that the sample may be reconstructed from the two indices.

Television Pick-Up Tubes, #2,786,157. Inv. R. Theile. Assigned Pye Ltd. Issued March 19, 1957. A secondary electron multiplier, comprising at least one dynode and a collector electrode, is arranged in an enclosed hollow structure surrounding the scanning beam in a charge-storage type pick-up tube. A potential is applied to the multiplier and to an electron-permeable electrode between the multiplier and the target for producing a field-penetration ratio of the adjacent dynode through the electron-permeable electrode to the target which is less than 10%.

Servo-Regulated Microwave Energy Source, #2,786,180. Inv. S. B. Cohn. Assigned Sperry Rand Corp. Issued March 19, 1957. The reflection coefficient of a test load is measured as a function of frequency by detecting the modulation component in the reflected wave, amplifying the fundamental harmonic thereof and relying on its amplitude. The modulation component of the generator output is independently amplified and the pulse timeduration of the output of the pulse modulator is controlled by a signal derived therefrom.

Antenna, #2,786,200. Inv. L. Gant. Issued March 19, 1957. Horizontal, parallel, oppositely directed conductors, offset in the same horizontal plane are connected by a reversely-curved intermediate portion coplanar therewith. A straight, second coplanar conductor is arranged parallel to the first conductor at one side and in relatively close spacing to the adjacent conductor section on the other side. Leads are connected to the two ends of the reversely-curved intermediate portion.

Television Range Finder, #2,786,096. Inv. R. C. Palmer. Assigned Allen B. Du Pont Laboratories, Inc. Issued March 19, 1957. Two television signals corresponding to two adjacent views of an object field are independently displayed on a monitoring viewing screen. The proportion of the two signals in a combined signal voltage, representing a single complete view of the object field, is adjustable as well as the relative positions of the two images on the monitoring screen.

Tuning Unit, #2,755,448. Inv. W. A. Fuller. Assigned Sarks Tarzian, Inc. Iss. July 17, 1956. A tuner for the ultra-high frequency television band consists of a conducting cavity and a variable capacitor inside thereof, the rotor being conductively connected to one casing wall and the stator to the opposing casing wall. Oppositely disposed coupling loops extend into the casing; the extent of projection of at least one loop varies with rotation of the capacitor rotor.

Antenna Combined with Magnetic Coupling Core, #2,755,468. Inv. G. Mountjoy. Iss. July 17, 1956. A wide-frequency directional antenna comprises a plurality of rotatable magnetic cores, each having end portions for signal pick-up located at opposite ends and extending at an angle to a central portion. A stationary output coil is wound coaxially around and spaced from each central portion for free unitary rotation of all cores with their end portions and central portions in uniplanar relationship.

Ringed Circuit, #2,759,179. Inv. R. J. Kircher. Assigned Bell Tel. Labs., Inc. Issued August 14, 1956. Two transistor oscillator circuits feed their outputs to the coil of the same electro-acoustical transducer. By alternatively operating the two transducers, an uninterrupted dual tone is provided.

Frequency Separating Apparatus, #2,760,011. Inv. C. E. Berry. Assigned Consolidated Electrodynamics Corp. Issued August 21, 1956. A wide-band amplifier comprises separate amplifying channels for low and high frequency components, their outputs being combined. A high-pass filter precedes the high-frequency amplifying channel, while the low-frequency amplifier is connected to the input and further receives the phase-inverted output of the high-pass filter.

International ELECTRONIC SOURCES

Temperature Control, #2,782,246. Inv. A. D. Evans. Assigned Texas Instruments, Inc. Issued Feb. 19, 1957.

Each phase of a three-phase power supply for the R. F. generator of an electric furnace is controlled by a gas tube. A voltage depending on the difference of the actual furnace temperature and a reference temperature controls the period of conduction of these tubes, whereby the power supply to the furnace is controlled.

Cathode Follower Type Pulse Amplifier, #2,783,316. Inv. G. L. Clapper. Assigned International Business Machines Corp. Issued Feb. 26, 1957.

A capacitor and resistor are dimensioned and connected into the cathode-grid circuit of a capacitively-loaded cathode-follower tube to provide regenerative feedback in response to a change in tube conduction of sufficient amplitude to raise the grid potential level above the potential level of the positive input pulse, thereby providing a cathode-follower circuit having an amplification factor greater than unity.

High-Frequency Heating Applicators, #2,783,346. Inv. H. R. Warren. Assigned National Cylinder Gas Co. Issued Feb. 26, 1957.

A reentrant resonator contains a metallic fin structure to provide inductance and terminating in an electrode adapted to form a capacitance with an opposing wall. A coupling loop surrounds the fin structure; the mutual inductance of the loop and the resonator can be modified.

Radio Transmitting and Receiving Signal System, #2,783,369. Inv. E. H. Weber. Assigned one-half to B. K. Olsson. Issued Feb. 26, 1957.

Each locomotive carries a constant-frequency carrier wave generator, and modulating signals, the frequency of which is linearly controlled by a driving linkage having a high ratio of reduction physically responsive to travel of the locomotive.

Automatic Gain Control System, #2,783,371. Inv. R. L. Frank. Assigned Sperry Rand Corp. Issued Feb. 26, 1957.

The carrier and the side-band are each separately rectified in two receivers of a diversity system. The four rectified voltages are combined and the resultant voltage is used as an automatic gain control voltage for both receivers.

Stereoscopic Television Means, #2,783,406. Inv. J. J. Vanderhoof. Issued Feb. 26, 1957.

A mask having alternate bars and slots is placed between two cathode-ray guns and the screen of a TV tube to produce thereon a representation of interlaced signals from the left and right guns, respectively. A lenticulated lens in front of the screen separately transmits the interlaced left and right presentations to the respective eye.

Electrode Structure for Transmit-Receive Switching Devices, #2,783,414. Inv. H. J. McCarthy. Assigned Bomac Laboratories Inc. Issued Feb. 26, 1957.

The ignitor electrode in a resonant-cavity, discharge gap, transmit-receive switch comprises a metal core surrounded by a sheath of insulating material leaving only the tip area uncovered. A spherical layer of non-emissive high resistance material, i.e., of oxides of the core and sheath material exclusively, surrounds the exposed tip area.

Precision Motor Drive Device, #2,783,426. Inv. R. R. Pittman. Assigned Southwestern Industrial Electronics Co. Issued Feb. 26, 1957.

The motor to be controlled drives a record. A recording head records a tuning-fork, constant-frequency signal on the record, which signal is picked up a predetermined distance from the recording head. A phase comparison of the tuning fork output and the picked-up signal results in an error signal which regulates the frequency of a variable-frequency oscillator which in turn regulates the motor speed.

Phase Error Correction Apparatus for Color Television Indexing System, #2,782,252. Inv. G. A. Fedde. Assigned Philco Corp. Issued Feb. 19, 1957.

A control signal is derived from parallel stripes of the screen having a carrier frequency equal to the applied scanning frequency and side-components representative of the actual scanning rate. The side-bands and the applied scanning frequency are combined to produce a signal having a nominal frequency equal to the nominal rate of scanning the screen and having phase variations indicative of the deviation of the actual from the applied scanning rate.

Film Recording from Cathode Ray Tube During Flyback by Infra-Red Release of Image Energy, #2,784,250. Inv. P. Schagen. Assigned Hartford National Bank and Trust Co. Issued March 5, 1957.

The screen of a television receiving tube contains luminescent material which renders a latent image visible when activated with infra-red light. Each latent image frame is activated during the flyback period to be visible and the visible image is projected onto a motion picture film. The optical projection path is blocked during the scanning interval.

Apparatus for Translating into Legible Form Characters Represented by Signals, #2,784,251. Inv. E. A. Young, A. D. Baker and R. H. Canaday. Issued March 5, 1957.

A first cathode-ray tube comprises a mosaic of symbol-containing areas energized in response to input signals and is adapted to produce derived signals representative of a symbol selected in accordance with the input signal which determines the region of the mosaic to be scanned. The derived signals are used to modulate the electron beam in a cathode-ray tube synchronized with the first tube to sequentially display the symbols.

Keyed Frequency-Modulated Carrier Wave System, #2,784,255. Inv. C. W. Earp. Assigned International Standard Electric Corp. Issued March 5, 1957. A train of time-modulated, constant-amplitude multi-channel pulses is produced. This train is converted into a wave having steps, each step corresponding to one pulse and the steps corresponding to certain pulses going in a specified direction, the steps corresponding to certain other pulses going in the opposite direction. A carrier is frequency-modulated with these stepped waves.

Transistor Amplifier, #2,784,262. Inv. R. P. Crow. Assigned Motorola Inc. Issued March 5, 1957. Two transistors are operated in push-pull. Two windings of a single-ended output circuit are so connected that signals from both transistors are applied to both windings.

Electron Discharge Devices of the Growing Wave Type, #2,784,339. Inv. N. E. Lindenblad. Assigned Radio Corporation of America. Issued March 5, 1957. Reactive impedances are coupled to the helical conductor at a plurality of points to by-pass high-frequency currents at frequencies higher than the highest operating frequency.

Color Television Receiver, #2,785,221. Inv. Ch. P. Carpenter. Assigned Westinghouse Electric Corp. Issued March 12, 1957. One series of the phosphor strips in a color television tube screen emits not only light of a specific color but also invisible light of short decay time when excited. The electron beam source is biased at a low level to excite this series of phosphor strips to emit invisible light energizing a device responsive thereto without substantial emission of visible light.

Binaural Sound Reproduction, #2,785,226. Inv. Emory G. Cook. Issued March 12, 1957. The two output signals of a two-sound-channel system are each fed to a loudspeaker over a transformer. The two transformers are wound, respectively, on the end legs of a common core structure. Interfering signals introduced in each channel from the other channel through the core structure are suppressed.

Calling Subscriber Identifier Using Transistor Oscillator in Subsets, #2,782,259. Inv. T. L. Dimond. Assigned Bell Telephone Laboratories, Inc. Issued Feb. 19, 1957.

A transistor oscillator tuned to a different frequency is incorporated into each substation connected to one party line. Each oscillator can be interconnected with the common line by a manually-operated switch to be energized by the line and to transmit a signal of its specific frequency over the line.

Thermionic Valve Amplifying Circuits, #2,782,264. Inv. G. A. Dodd and J. Boura. Assigned British Telecommunications Research Ltd. Issued Feb. 19, 1957.

Two tubes are connected in identical parallel circuits. The input signal is applied to each grid over a rectifier. The plates have separate loads and a common output circuit.

Push-Pull Transistor Amplifier, #2,782,267. Inv. J. W. Beck. Assigned North American Aviation, Inc. Issued Feb. 19, 1957.

An N-P-N transistor and a P-N-P transistor are similarly connected to a single-ended ac input circuit, their output electrodes being capacitively coupled to the same output terminal. Each transistor has its own complete and separate direct current bias path but contributes alternating output to the common output terminal.

Magnetostrictive Relay, #2,782,280. Inv. L. R. Bickford. Assigned International Business Machines Corp. Issued Feb. 19, 1957.

A strip of material having a positive magnetostrictive coefficient and a strip of the same material oriented to have a negative magnetostrictive coefficient are bonded together and clamped at one end. A magnetic polarizing circuit is arranged to drive the free end of the bonded strips.

Spatal Harmonics in Electron Beams, by Rudolf Mueller. "Arc. El. Uber." Dec. 1956. 6 pp. (See featured abstract, first page of this Electronic Sources section.)

1957. The target of an electron camera tube includes a material which is normally insulating. However, this material becomes conductive when bombarded with electrons.

Radiation Powered Transistor Circuit, #2,777,057. Inv. J. I. Pankove. Assigned Radio Corporation of America. Issued Jan. 8, 1957. The series combination of a rectifier and an energy storage circuit is connected in parallel to the coil connected to the receiving antenna for deriving biasing voltages from the received carrier-wave energy. A transistor is supplied with the biasing voltages as well as with signal voltages.

Blanking Circuit for Electron Multiplier, #2,777,948. Inv. J. A. Henderson. Assigned Farnsworth Research Corp. Issued Jan. 15, 1957. The input signal is applied to an electron multiplier, the secondary emissive electrodes of which are normally biased to successively greater positive potential. The blanking pulse is applied to one of the secondary emissive electrodes in positive polarity only and simultaneously to succeeding secondary emissive electrodes in negative polarity only, whereby the input signal is blocked for the duration of the blanking pulse.

Delay-Line Trigger Circuit, #2,755,381. Inv. E. L. Woodcock. Assigned Sperry Rand Corp. Iss. July 17, 1956. A plurality of blocking oscillators are connected in shunt across a delay line, the plates of the oscillators being capacitively coupled to spaced points on the line. The blocking oscillators have a recovery time substantially longer than the delay time intervals between the spaced points on the line, whereby the blocking oscillators feed energy pulses back to the line which regenerate the input pulse so that a sharp output pulse can be obtained at any desired time interval after an initiating input pulse.

International ELECTRONIC SOURCES

Magnetic and a Photoelectric System for Replacing Metallic Make-and-Break Contacts in Automobile Ignition Systems, #2,787,649. Inv. J. W. Ballard and M. M. Moorhead. Assigned The Commonwealth Engineering Co. of Ohio. Issued April 2, 1957. The grid of a normally non-conductive grid-controlled gas tube is connected to an induction coil which is positioned in a rotating magnetic field, the rotation being synchronous with that of the distributor. The plate circuit of the tube closes the ignition current circuit; this circuit includes a transformer. The gas tube current is quenched after a predetermined interval.

Television Multiplex System and Apparatus, #2,787,660. Inv. K. Teer. Assigned North American Philips Company. Issued April 2, 1957. Two carriers, the upper sideband of one carrier at least partially overlapping the lower sideband of the other carrier, are phased for compensation of the overlapping interference. The sum plus a constant signal and the difference plus a constant signal of two TV signals are transmitted over the two carriers, respectively. The receiver comprises two demodulators and circuitry to add and subtract the two demodulated TV signals.

Push-Pull Series Amplifier, #2,787,672. Inv. E. L. Crosby. Assigned Bendix Aviation Corp. Issued April 2, 1957. An inductor couples the output signals of the driving stage to the grids of the driven stage, both stages being push-pull connected. Serial flow of space current through the driven and driving stages is established by a resistor connecting both cathodes of the driven stage to a junction on the inductor; the two sections of the inductor on opposite sides of the junction are inductively coupled.

Radio Wave Tuners, #2,788,447. Inv. S. A. Johnson. Assigned Polytechnic Research & Development Co., Inc. Issued April 9, 1957. One plate of a tuning capacitor is periodically and continuously moved to produce a frequency output varying about a mean frequency. A further motion may be imparted to either capacitor plate decreasing the mean capacity of the capacitor with an increase in the resonant frequency of the circuit.

Traveling Wave Electron Discharge Device, #2,788,464. Inv. R. H. Geiger. Assigned International Telephone and Telegraph Corp. Issued April 9, 1957. A gaseous discharge device is positioned near the helix of a traveling wave tube to absorb some of the r-f energy, the energy absorption being effected by ionization of the gas. Thus attenuation of the electromagnetic wave propagated along the helix is accomplished.

Active Transducer, #2,788,496. Inv. J. G. Linvill. Assigned Bell Telephone Laboratories, Inc. Issued April 9, 1957. A negative impedance converter is connected in series between two passive networks. The ratio of the driving point impedances of these networks at the terminals facing the converter is a numerical factor equal to the impedance conversion ratio of the converter.

Instantaneous Automatic Gain Control for Pulse Circuits, #2,787,673. Inv. C. C. Cutler. Assigned Bell Telephone Laboratories. Issued April 2, 1957. The output of a traveling-wave amplifier is fed to a pair of rectifiers having characteristics which coincide only at a particular signal level. The rectifiers outputs are differentially combined to control the traveling-wave tube gain for the successive pulse.

Receiver for Two Radio Frequency Bands, #2,787,703. Inv. G. J. Lubben. Assigned North American Philips Co., Inc. Issued April 2, 1957. The superheterodyne receiver comprises a local oscillator adapted to produce two harmonically related local oscillations. A suitable arrangement of mixing and amplifying stages are simultaneously switched for alternative reception of a relatively high or a relatively low ultra-high frequency wave.

Transducer Tube, #2,786,955. Inv. J. K. Troian. Assigned Research Corp. Issued March 26, 1957. A field emission cathode having an electron emitting portion of radius of curvature not exceeding about 10^{-3} centimeters, a collector electrode and an auxiliary electrode transparent to electrons and adjacent the emitting portion of the cathode are mounted in an evacuated envelope. Relative motion of an electrode of this assembly will alter the field strength at the electron emitting portion of the cathode and thus be transformed into an electrical signal.

Printed Circuit Shield, #2,786,984. Inv. M. W. Slate. Assigned Allen B. Du Mont Laboratories, Inc. Issued March 26, 1957. Two inductance coils are provided at the bottom and the top surfaces, respectively of a printed circuit base plate; the two coils are planarly offset. Two grounded Faraday electrostatic shield members are provided, each overlapping one of the coils.

Signal Translating Device, #2,786,880. Inv. K. G. McKay. Assigned Bell Telephone Laboratories, Inc. Issued March 26, 1957. In an electric discharge tube, an impurity-type semiconductor is positioned between a collector electrode and a base electrode. The collector electrode comprises a metal film through which electrons are bombarded into the semiconductor to a depth of penetration not substantially beyond the inner boundary of the barrier layer adjacent to the metal film. A reverse bias is applied to the barrier layer.

Color Television Receiver, #2,786,886. Inv. A. M. Levine. Assigned International Telephone and Telegraph Corp. Issued March 26, 1957. The television signal contains high frequency components representative of a change of color in elemental areas of the image. These components are filtered out and generate blanking signals which are applied to an electrode of the viewing tube to emphasize lines of demarcation between differently colored areas of the image.

Stereophonic Sound and Rerecording System, #2,786,894. Inv. O. B. Gunby. Assigned Radio Corporation of America. Issued March 26, 1957. The reproducer of a sound track feeds three channels, each channel including a variable attenuation pad and a switch alternatively connecting each channel to a recorder or to a loudspeaker, the three loudspeakers being at different suitable positions with respect to a picture screen.

Subscription Television System, #2,788,387. Inv. W. S. Druz. Assigned Zenith Radio Corp. Issued April 9, 1957. A charging signal is transmitted simultaneously with the coded television signal. The charging signal is used to record a marking representing the charging information and indicating intervals of utilization of the television signal by the subscriber.

Phase Converter Circuit, #2,788,398. Inv. A. Harle. Assigned Radio Corporation of America. Issued April 9, 1957. A balanced input signal is applied between the grid and the junction of a serially-connected, capacitively by-passed bias resistor and a grounded high impedance cathode signal resistor. A high-impedance grid-signal resistor is connected between the grid and ground. A suitable balanced signal input circuit and a grid return resistor are provided. The single-ended signal is derived from the plate.

Oscillator, #2,788,446. Inv. W. J. Cerveny and D. S. Wise. Assigned Cleveland Patents. Issued April 9, 1957. The frequency-determining tuning circuit of a tube oscillator comprises a parallel conductor transmission line. The line is terminated in an element of variable electrical characteristic to adjust its effective electrical length. A continuous variation of the electrical characteristic of this terminating element results in a frequency-modulated wave.

Diversity Receiving System, #2,786,133. Inv. E. Dyke. Assigned Motorola, Inc. Issued March 19, 1957. A dielectric phase shifter is included in a wave-guide positioned between the two antennas in a diversity system for a microwave receiver. When the power in the receiver decreases below a first predetermined value, the dielectric phase shifter is moved in one direction, when the power reaches a second predetermined value lower than the first predetermined value, the dielectric phase shifter is moved in the opposite direction.

Superheterodyne Receiver with Common Variable Saturating Means Having Tracking Provision for Tuning Inductances, #2,786,940. Inv. G. B. Crofts. Assigned National Union Electric Corp. Issued March 26, 1957. The two inductors for tuning the local heterodyne oscillator and the r-f amplifier, respectively, are mounted in a steady magnetizing field common to both. A high frequency winding of each inductor is enclosed in a casing of high frequency iron, the intensity of the field and thus the permeability of the casings is adjustable simultaneously. A movable magnetic member is provided which is adjustable with respect to one inductor for tracking.

Electrostrictive Time-Delay Signal-Translating Device, #2,754,481. Inv. C. J. Hirsch. Assigned Hazeltine Research Inc. Issued July 10, 1956. An electrical signal is applied to an input transducer transforming it into longitudinal compression waves effective to cause transverse motion of an adjacent medium adapted to propagate elongated stress waves. An output transducer comprises an electrostrictive element abutting the medium and disposed parallel to the direction of wave propagation therein, the transverse motion of the medium generating a corresponding electrical signal in the output transducer.

Wave-Guide Direction Changer, #2,754,488. Inv. J. F. Zaleski. Assigned General Precision Laboratory, Inc. Issued July 10, 1956. The second rectangular wave-guide section is joined at right angles to the first rectangular wave-guide section near its conductive termination; both sections are for the $TE_{1,0}$ mode. The longer transverse direction of the second wave-guide extends parallel to the longitudinal direction of the first wave-guide, and the shorter transverse direction of the first wave-guide extends parallel to the longitudinal direction of the second wave-guide. An elongated conductive member projects in a specified direction into the first wave-guide from the junction.

High Frequency Oscillator, #2,787,711. Inv. M. S. Glass. Assigned Bell Telephone Laboratories, Inc. Issued April 2, 1957. An iris filter is positioned transversely in a wave guide coupled to a generator which is capable of oscillating in more than one mode. The iris filter is resonant at the frequency of the desired mode and positioned from the generator a predetermined, distinct electric distance so as to load a spurious mode of oscillations.

Signal Stage Amplifier-Detector-Amplifier, #2,785,299. Inv. J. G. Spracklen. Assigned Zenith Radio Corp. Issued March 12, 1957. An amplitude-modulated signal is applied to the control grid of a cathode-grid-accelerating electrode section of a multi-grid tube. A resonant two-terminal load-circuit is connected between a second control-grid and the cathode adapted to develop an amplified signal. The second control grid is also connected to operate as a demodulator and amplifier for the signal.

Indicator for Television Images, #2,784,247. Inv. W. L. Hurford. Assigned General Electric Co. Issued March 5, 1957.

A series of pulses synchronized with the line-by-line and field-by-field scanning rhythm of a television image is combined with the television image signal. A definite pattern, not present in the image, is thus produced.



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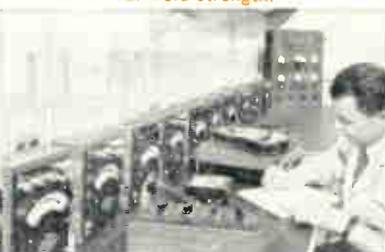
Hermetic terminals on microscope check.



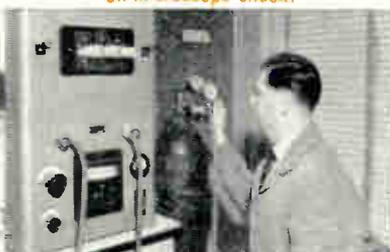
Chemical section analyzing new materials.



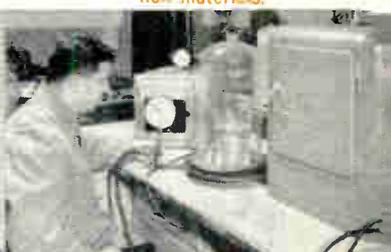
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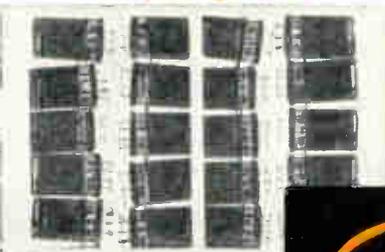
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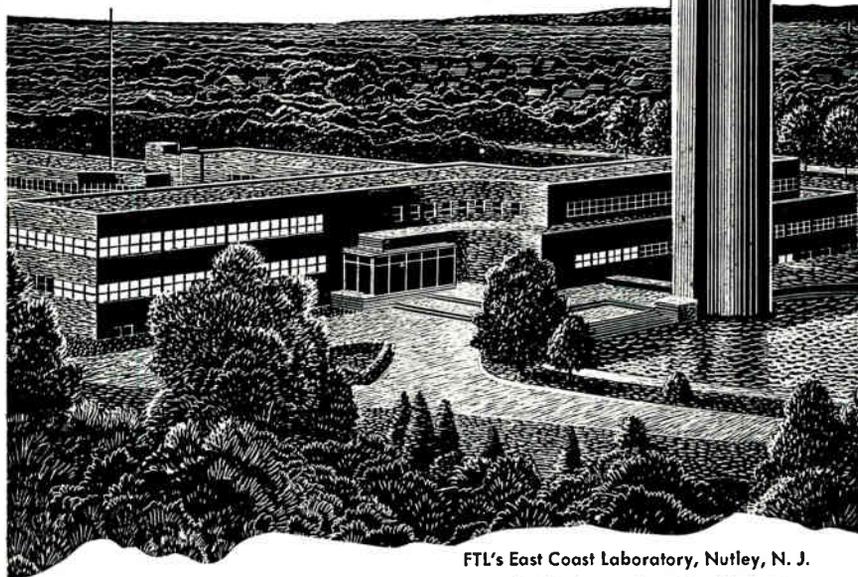
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(Continued from page 156)
tric breakdown strength increases
of at least 20% on most, and some-
times as much as 100%. In very
few cases has the breakdown
strength decreased during normal
operation, probably due to slight
leaks or gas pockets.

Current Interruption

For vacuum capacitors and tubes,
theories of diffusion, vapor pres-
sure, mean free path of molecules,
and dielectric breakdown are most
important. For vacuum relays yet
another basic set of theories is
needed—that covering the prop-
erties of current interruption in
high vacuum.

Probably the best theory of the
action during arc interruption is
that the rapid radial diffusion of
current carrying particles allows a
very rapid build up of dielectric
strength to a point where current
flow, due to continual field emission
and breakdown, is suddenly no
longer possible.

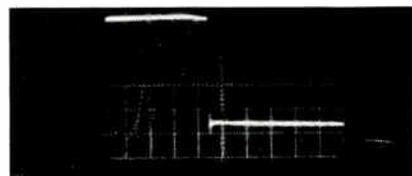


Fig. 9: Oscillograph—2 amp., 20 v/cm.

Other basic factors all help to
bring this about. An exceptionally
low voltage drop across the arc
while current is flowing allows high
current interruption with a very
little arc energy or heat resulting
and with very little contact mate-
rial vaporized. This voltage (for
tungsten) is in the order of 1½ v.
for currents in the order of 1 a.
and approaching 2 v. for 50 to
100 a. The higher the current and
the higher the impressed voltage
the longer the arc time, although
the arc voltage remains fairly con-
stant. This is approximately 10%
of mercury vapor arc voltage.

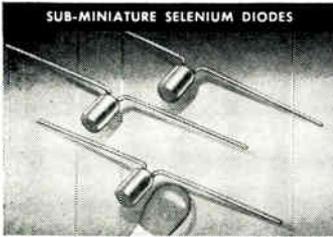
Oscillographs showing the low
arc drop and the arc time as well
as the dielectric recovery speed are
shown in Figs. 9 and 10. Taken
at an oscilloscope sweep speed of
50µsec/cm (not to scale on photo-
graph) Fig. 9 is for 2 amp. dc at
20 v/cm showing a dielectric re-
covery rate of less than 10 µsec.
Figure 10 shows a typical shot of

(Continued on page 174)

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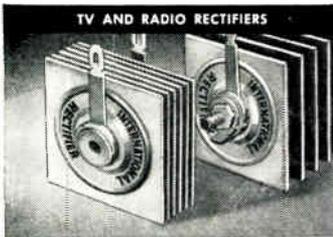
SELENIUM



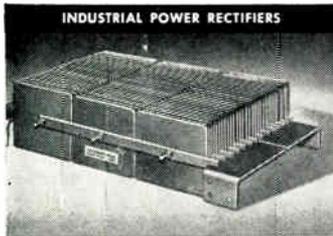
Developed for use in limited space at ambient temperatures ranging from -50°C to $+100^{\circ}\text{C}$. Encapsulated to resist adverse environmental conditions. Output voltages from 20 to 160 volts; output currents of 100 microamperes to 11 MA. Bulletin SR-18



Designed for long life and reliability in Half-Wave, Voltage Doubler, Bridge, Center-Tap Circuits, and 3-Phase Circuit Types. Phenolic Cartridge and Hermetically Sealed types available. Operating temperature range: -65°C to $+100^{\circ}\text{C}$. Specify Bulletin H-2

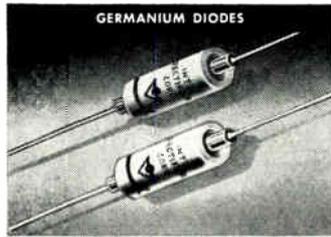


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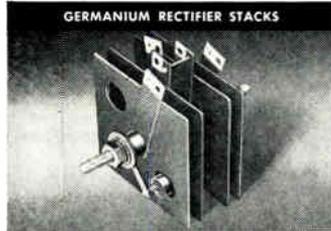


For all DC power needs from microwatts to kilowatts. Features: long life; compact, light weight and low initial cost. Ratings: to 250 KW, 50 ma to 2,300 amperes and up. 6 volts to 30,000 volts and up. Efficiency to 87%. Power factor to 95%. Bulletin C-349

GERMANIUM



This series of general purpose, high quality point contact diodes provide excellent rectification efficiency for very high frequency applications. Special "RED DOT" series available for ambient temperatures from -55°C to $+100^{\circ}\text{C}$. Bulletin SR-140.



Extremely low reverse leakage values make this series ideal for magnetic amplifier applications. These units utilize 10 amp junctions—26 to 66 AC input volts rms—are available in a wide range of circuit types and DC current ratings. Bulletin SR-148.

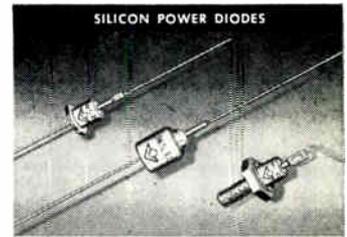


Engineered for heavy power applications, these highly efficient forced air cooled units feature moisture and corrosion resistant housings. A complete series in each of 3 current ratings: 150, 330 and 500 Amperes @ 26 to 66 volts rms. Request Bulletin GPR-2.



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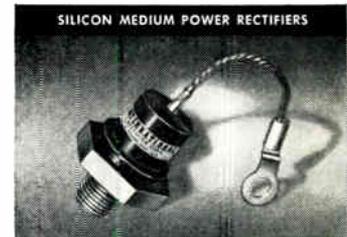
SILICON



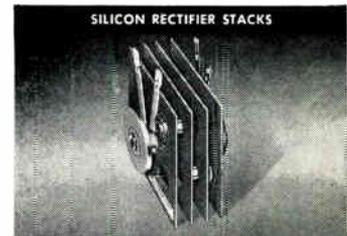
Hundreds of types in three basic styles, for operating temperatures from -55°C to $+150^{\circ}\text{C}$. Up to 800ma DC output current per junction over a voltage range of 50 to 1,000 PIV. Hermetically sealed. For complete information on all types. Bulletin SR-A.



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These units consist of hermetically sealed junction diodes mounted on copper cooling fins, stacked to include the interconnections required for specific circuits. Junction ratings: 1.25 amps. DC output; 70 to 350 AC input volts rms. Request Bulletin SR-137A.



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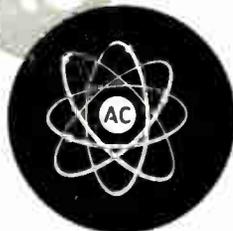
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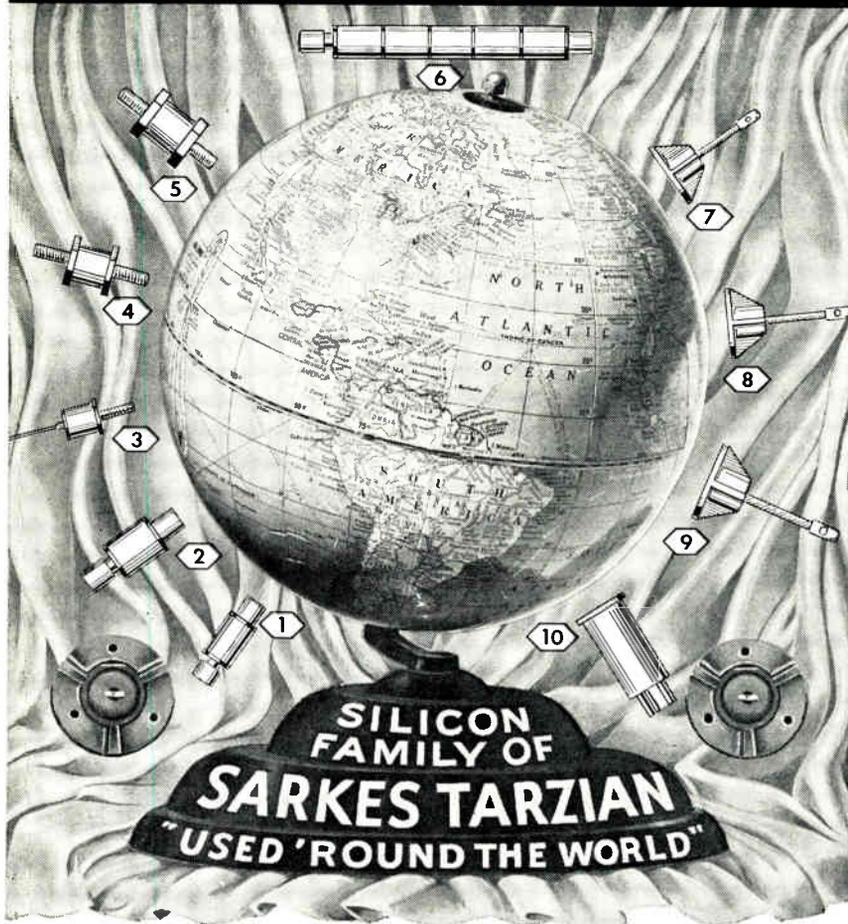
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- ⑧ S series - 50 Volt to 200 Volt PIV - 35 Amps. DC
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(Continued from page 170)

the amplified dc arc voltage at 20 a. at 5 v/cm. The 1/2 in. diameter contacts were being opened at a rate of about 5 ft/sec.

The oscillographs in Fig. 6 show the radial diffusion effect of current interruption at 60 a. RMS, 6000 v. RMS, 60 cycle capacitive load. The wave shapes shown are at a sweep speed of approximately 4 μsec/cm showing that field emission and diffusion frequencies of over 1 MC are definitely present.

The oscillographs in Fig. 7 show interruptions at 50 a. RMS, 6000 v. RMS, 60 cps, with tungsten contacts at very high speed and forcing current zero. The contacts opened about 1/8 cycle before current zero on the first 2 shots and about 0.02 cycle before current zero on the third. This also shows the very high frequencies which are present on interruption.

The oscillograph in Fig. 8 at a sweep speed of 100 μsec/cm shows an interruption at 50 a., 6000 v. RMS with a different type of contact and proper opening speed.

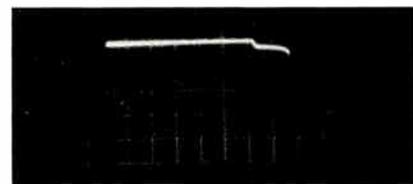


Fig. 10: Arc voltages—20 amp., 5 v/cm.

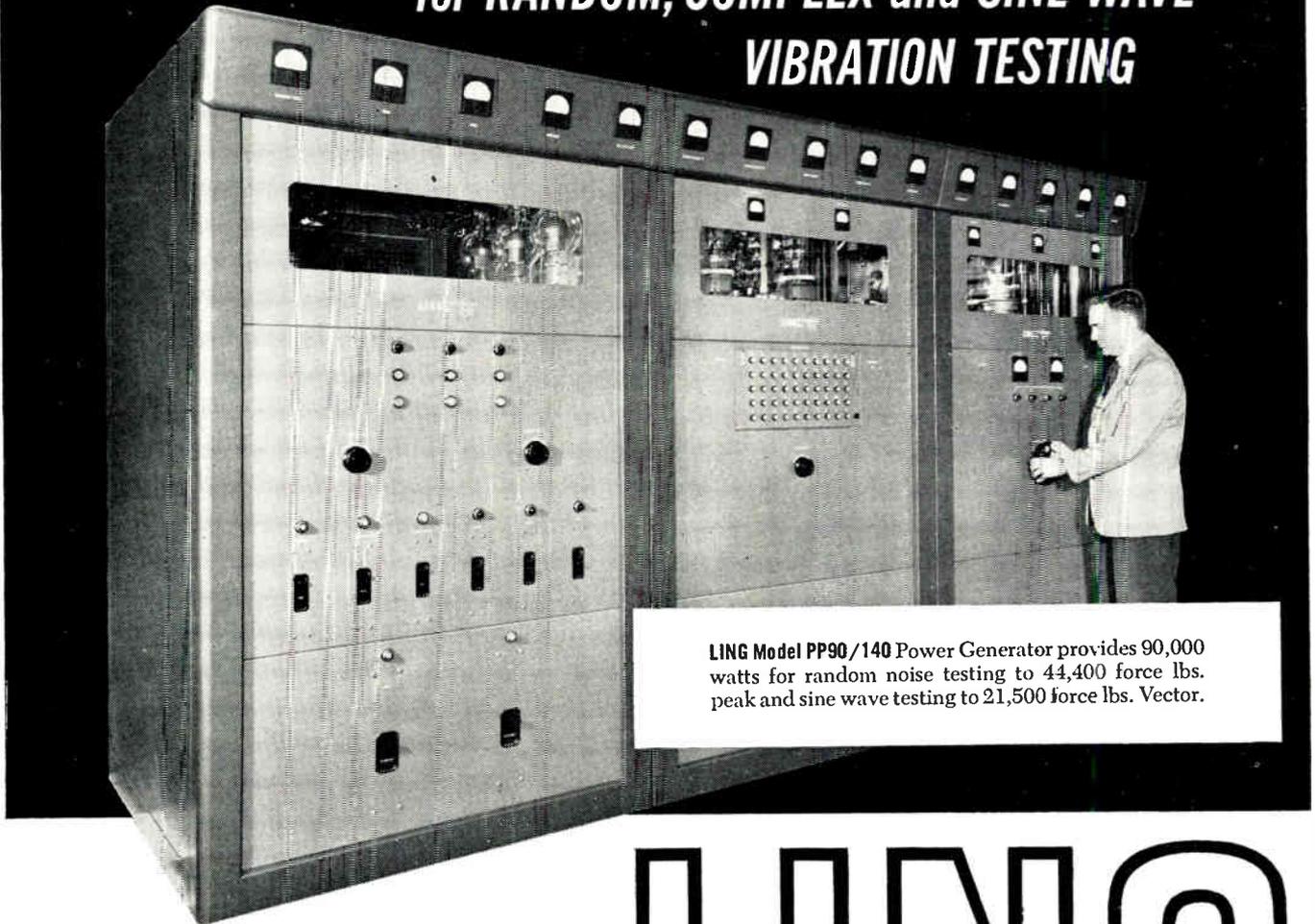
Notice how smooth the interruption is even with extreme amplification with no appreciable current chopping. This is an ideal type of interruption, one which will be consistently possible for a vacuum switch using proper contacts and proper mechanical motion.

For the higher current interruption and insulation necessary for higher voltages the mechanical movement of contacts is attained through the sealed metallic bellows.

Fig. 3 shows a size comparison of one of the smaller vacuum switches and one of the larger, bellows actuated vacuum switches. The smaller unit is 2 in. in dia. by 3 in. long and is a 50 a. 20 kv peak test unit with 1/8 in. dia. tungsten contacts for use in electronic equipment. The larger unit which is 6 in. in dia. and 14 in. long is used on 1200 a. 18 kv 60 cycle power sys-

(Continued on page 176)

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				FORCE-LBS. RMS.	FORCE LBS. PEAK	
PA-250-B	250 watts	500 watts	70	—	—	—
PA-500-B	500 watts	800 watts	100	—	—	—
PP-1/2-A	1,000 watts	2,000 watts	200	—	—	AP-5-A
PP-3.5/4-A	3,500 watts	4,000 watts	800	500	1,500	AP-5-A
PP-7/8-A	7,000 watts	8,000 watts	1,200	840	2,520	AP-10-A
PP-20/20-C	22,000 watts	22,000 watts	3,500	2,500	7,500	AP-20-A
PP-40/40-B	44,000 watts	44,000 watts	5,000	3,500	10,500	AP-40-A
PP-60/80-A	60,000 watts	80,000 watts	7,000	5,000	15,000	AP-60-A
PP-90/140-A	90,000 watts	140,000 watts	12,500	8,800	26,400	AP-60-A
PP-90/140-A	90,000 watts	140,000 watts	21,500	14,800	44,400	AP-60-A

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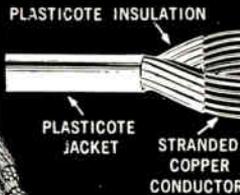
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(Continued from page 174)

tems. It can be used for 230 kv power line switching by actuating several units simultaneously in series. It has 1 in. dia. solid tungsten contacts, and can interrupt sizable amounts of power including high voltage short circuit currents. Due to their capability of always interrupting at the first current zero on power frequencies, with no restrikes, vacuum switches are being widely used for switching large banks of high voltage capacitors and long transmission lines.

Two other new vacuum switches are shown in Figs. 1 and 2. Fig. 1 is a complete overload circuit breaker for use at 12 to 15 kv class 60 cycle and dc power. This instantaneous tripping unit has ranges of 50 ma to 600 a. in 5 to 1 steps in either dc, single phase ac, or 3 phase simultaneous trip free, fail safe, operation. Since the contacts must open only a distance of 5/32 in. this makes possible a trip time of less than 4 to 10 msec, (approximately 1/2 cycle mechanical trip time or less), much faster than any other type of power circuit breaker now in use. The maximum continuous operating current for this unit is 200 a. with a tentative maximum interrupting rating of 1500 to 2000 a. RMS. Fig. 1 is an 18 kv class unit latching contactor for 400 a. continuous duty.

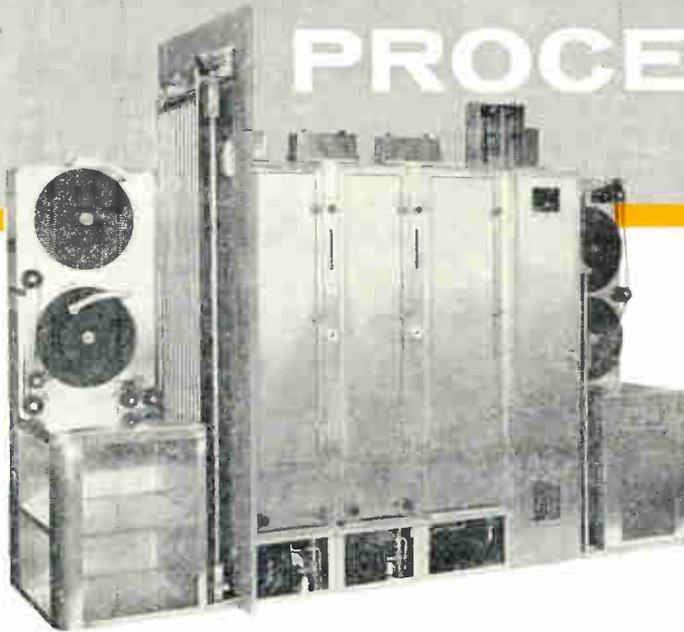
With the proper timing mechanism set to open up contacts just before current zero, there are tremendous possibilities for interrupting very high ac short circuit currents at high voltage with these types of switches.

For dc power interruption one solution for high current high voltage interruption shows very good results. The use of a reasonable sized capacitor in parallel with the vacuum relay contacts allows satisfactory operating at high voltage just as it has done in the past for lower voltages.

REFERENCES

- New Developments in Vacuum Relays, Hugh C. Ross, Jan. 1956, *Electronic Industries & Tele-Tech*, page 58.
- Handbook of Chemistry & Physics*, 37th edition, 1955-56, Chemical Rubber Publishers Co., Cleveland, Ohio.
- Rare Metals Handbook*, C. A. Hampel, 1954, Reinhold Publishing Corp., New York, N. Y.
- Scientific Foundations of Vacuum Technique*, Saul Dushman, 1949, John Wiley & Sons, New York, N. Y.
- Materials Technology for Electron Tubes*, Walter H. Kohl, 1951, Reinhold Publishing Corp., New York, N. Y.

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Dry To Dry Cycle—Less than 5 Minutes!

Most Compact Unit Available—10' 4" Long!

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- All stainless steel construction, highly corrosion resistant.
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New Houston Fearless Rapid Spray Processor Catalog

Name _____
Company _____ Position _____
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(Continued from Page 134)

Silicone Rectifiers

Price list No. 8 contains complete information and prices on silicone rectifiers. Includes a series of blueprint type drawings giving both physical and electrical specifications for various types. Sarkes Tarzian, Inc., Bloomington, Ind.

Circle 167 on Inquiry Card, page 201

Manipulator

Brochure describes the model 101-A manipulator, an ultrasonic inspection search tube positioner manufactured by Tepco, 936 E. Arques St., Sunnyvale, Calif. Bulletin is complete with specifications and photographs.

Circle 168 on Inquiry Card, page 201

"Rocket" Switch

Data sheet 120 gives complete mechanical and electrical specifications and photographs of a switch that was designed specifically for use in aircraft rockets. Switch unit is environment proved and will resist corrosive propulsion gases. Microswitch, div. of Minneapolis-Honeywell Regulator Co., Freeport, Ill.

Circle 169 on Inquiry Card, page 201

Transistorized Instruments

Kay Electric Co., 14 Maple Ave., Pinebrook, N. J., has issued a 4-page bulletin describing a new line of transistorized test equipment, including beat frequency audio oscillator and multi-crystal controlled transistor oscillator, a wide band transistorized audio amplifier and an audio video voltmeter. Bulletin is complete with photographs, specifications and descriptions.

Circle 170 on Inquiry Card, page 201

Meter-Relays

A 40-page catalog supplies complete information on meter-relays for original equipment or in self-contained controlled packages. Circuits for providing different types of control action are discussed. Included in the catalog are API panel meters and auxiliary control components complete specifications, photographs, price lists and various circuit diagrams. Assembly Products, Inc., Chesterland, Ohio.

Circle 171 on Inquiry Card, page 201

Magnetic Amplifiers

Four hundred and 60 cycle magnetic amplifier data and specifications are provided in the 16-page product catalog from Litton Industries, 4910 Calvert Rd., College Park, Md.

Circle 172 on Inquiry Card, page 201

Epoxy Shells

Complete catalog information on the new molded epoxy "N-Case" shells is available from Epoxy Products, Inc., 137 Coit St., Irvington, N. J. Shells make it possible to insert a component directly into the shell, pour epoxy casting compound in after it, and end up with a completely encapsulated component.

Circle 173 on Inquiry Card, page 201

Electron Tubes

A 24-page booklet issued by State Labs, Inc., 649 Broadway, New York 12, provides physical and electrical specs on L. M. Erickson's line of ruggedized-long life, 10,000-hour electron tubes.

Circle 174 on Inquiry Card, page 201

Oscillographs

An 8-page folder, illustrating and describing 5 models of its multi-channel rack mounting oscillographs has just been published by the Brush Electronics Co., div. of Clevite Corp., Cleveland, O. Complete with photographs, specifications, engineering features, operating information and accessories.

Circle 175 on Inquiry Card, page 201

Extension Sleeves

Bulletin 257, from Pacific Automation Products, Inc., 100 Airway, Glendale, Calif., describes a line of extension sleeves for AN connectors that increases the space available on the back shell area. Adapter sleeves have designed "Step up" or "Step down" feature. In addition, a scientific method of specifying or ordering exact extension and adapter sleeves required is given in a chart form.

Circle 176 on Inquiry Card, page 201

Metal Stampings

Bulletin No. 80, issued by Johnson & Hoffman Mfg. Corp., 31 E. 2nd St., Mineola, N. Y., describes and illustrates typical parts made by precision metal stamping and deep drawing.

Circle 177 on Inquiry Card, page 201

Transformers & Coils

A 34-page booklet has been issued by United Transformer Co., 150 Varick St., New York 13, that describes their latest line of transformers, reactors and filters. The brochure is complete with photographs, tables, graphs, complete specifications and prices.

Circle 178 on Inquiry Card, page 201

Communications Equip.

This 2-color 98-page booklet describes in detail, with illustrations, a full line of equipment for airborne communications, navigation, control, instrumentation, amateur communications, broadcast, microwave relay, communication control, SSB H-F communications, ground navigation, HF VHF ground communication and many other systems components and accessories. Collins Radio Co., Cedar Rapids, Iowa.

Circle 179 on Inquiry Card, page 201

Transformers

New 4-page brochure describes a line of military and special commercial transformers manufactured by Laboratory for Electronics, Inc., 75 Pitt St., Boston 14, Mass. Components are manufactured to customer specifications and include high power pulse, hermetic military and open type military, sub-miniature binary and toroids.

Circle 180 on Inquiry Card, page 201

Precision Gears

Illustrated brochure, "Precision Fine Pitch Gears," from Fairchild Camera and Instrument Corp., Robbins Lane, Syosset, L. I., N. Y., discusses precision gears as compared with commercial gears and the equipment employed in producing high quality precision gears. Quality control measures required for accuracy in close tolerances are also discussed.

Circle 181 on Inquiry Card, page 201

Resistor & Rheostats

A 20-page, multi-colored catalog lists: resistor selection data; complete information on fixed enameled resistors, adjustable enameled resistors, oval resistors, vitreous axial resistors, plus complete data on caged resistors and new printed circular resistors. Illustrations and complete specifications are included. Tru-Ohm Products, 2800 N. Milwaukee Ave., Chicago 18, Ill.

Circle 182 on Inquiry Card, page 201

Coil Winders

A 62-page catalog, No. 57, illustrates and describes 48 coil winding machines of which 18 are newly developed models. The various machines described will wind virtually all types of coils. In addition, several pages of accessories and optional equipment are described. A page of helpful winding formulas is included. Geo. Stevens Mfg. Co., Inc., Pulaski Rd. at Peterson, Chicago 30.

Circle 183 on Inquiry Card, page 201

improved BORG MICRODIALS
EASIER TO READ...EASIER TO USE
EASIER TO INSTALL...MORE ATTRACTIVE

DIGITAL DIAL MODELS

Designed for forced, fast reading. Now offered in 3, 4 and 5 digit models. Direct reading . . . numerals are viewed through a single window for easy instantaneous reading. Knobs have positive grip for easier rotation. • Five digit models are accurate to within one part in 100,000. Others have proportionate accuracy. Finger tip brake on 3 digit model. For any rotating device from one turn to 1000 turns. Hand or servo-operated. No backlash. Panel space required, 1 3/4" diameter for 3 digit Microdials; 2" diameter for 4 and 5 digit Microdials.



MODEL 1304

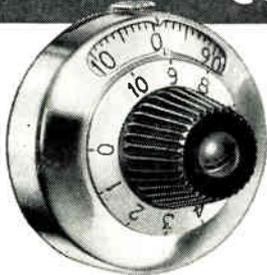


MODEL 1305



MODEL 1307

CONCENTRIC DIAL MODELS



MODEL 1320
Bright Chrome Cover
Satin Chrome Dials



MODEL 1322
Satin Chrome Cover
Satin Chrome Dials



MODEL 1324
Gloss Black Cover
Satin Chrome Dials



MODEL 1326
Dull Black Cover
Satin Chrome Dials



MODEL 1321
Bright Chrome Cover
Gloss Black Dials



MODEL 1323
Satin Chrome Cover
Gloss Black Dials



MODEL 1325
Gloss Black Cover
Gloss Black Dials



MODEL 1327
Dull Black Cover
Dull Black Dials

New finger tip brake (optional) prevents accidental change of setting. Available in 8 attractive, easy-to-read dial and cover combinations. Black Bakelite knobs on all models. 1 3/4" in diameter. • Easy to read. Turn counting dial clearly distinguishes be-

tween tenth turn and zero point. Large increment dial affords maximum separation of graduations for precise reading. Rotation is continuous in either direction. No backlash. Easily installed. Indicates position to an indexed accuracy of 1 part in 1000.

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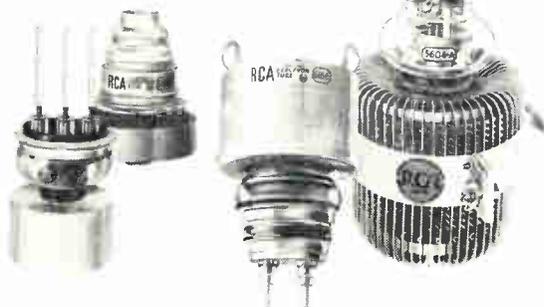
DATA FOR

RCA Power Tubes Open New Horizons for Electronically Controlled Power



RCA-6949*
Super-Power
Type... capable
of generating use-
ful continuous rf
power in the order of 500 kw
at high efficiency and with ex-
ceptionally low driving power.
Bulletin in preparation.

RCA-6181*, RCA-6166, RCA-5762, RCA-5604-A—**Large-Power Tubes**... feature reliability and long life in communication and industrial services.



*Features ceramic-metal construction.



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RCA-6146, RCA-6883, RCA-6417,
RCA-5763—**Small-Power Tubes**... for
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RCA "Premium" Tubes and "Special Red" Tubes are specially processed, rigidly monitored by 100% *microscopic inspection* of 24 or more categories of workmanship—to weed out early-hour failures, assure dependable performance. RCA "Premium" Tubes and "Special Red" Tubes are quality-controlled for reliability under tough conditions of vibration, impact, humidity, and wide temperature variations. For complete listing of RCA's comprehensive line of "Premium" Tubes and "Special Red" Types contact the RCA District Office nearest you, or write RCA, Commercial Engineering, Harrison, N. J.



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District 7-1260

415 South 5th St.
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For technical bulletins presently available on the products shown here, write RCA Commercial Engineering, Section F50R, Harrison, N. J.

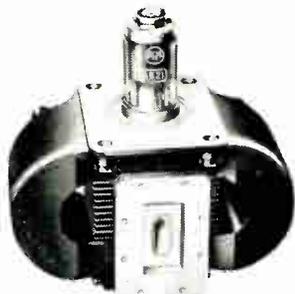
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RCA Magnetrons and Traveling-Wave Tubes Spur New Advances in Microwave Designs

RCA-6521—Weather-Radar Magnetron...for reliable service in airborne electronic equipment. 2000-hours warranted life.

RCA-6865-A—Tunable-Type Magnetron...for pulsed-oscillator service. Provides essentially uniform peak power output over the tuning range 8750 Mc to 9600 Mc. Limited to government end use. For further information, contact the RCA District office nearest you.

RCA-6861—Low-Noise Traveling-Wave Tube...extraordinarily low noise figure of 6.5 db in the 2600 Mc to 3500 Mc range.



RCA Storage and Display Tubes Extend the Design Boundaries of Electronic Data-Processing Devices

RCA-6499—Radechon...a charge storage tube of the barrier-grid type intended for use in a wide variety of information processing systems.

RCA-6896/1855—Graphechon...a charge storage tube for use in data-processing applications where signal information must be transformed continuously from one time-base to another. Bulletin in preparation.

RCA-6866—Display Storage Tube...with average display brightness of 2750 foot-lamberts for use in applications where it is desired to have a non-flickering display of stored information for about 60 seconds after writing has ceased.



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Superior-Quality Transistors for Designs Where Performance-Reliability is of Prime Importance



RCA-Type No.	Application
2N77*	Class A AF Amplifier Type.
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2N175, 2N220*	Extremely Low-Noise Types for Preamplifiers or Input Stages of Audio Amplifiers.
2N206*	Class A AF Amplifier Type (Tested for temperature cycling and moisture resistance). Meets MIL-T 25380/4 USAF specification.
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2N270*	For Large-Signal Class A or B, AF Amplifiers. Power Output: one 2N270 in class A, 60 milliwatts; two 2N270's in class B, Push Pull, 500 milliwatts.
2N301	High-Power Type for Class A or B, AF Amplifiers. Power Output: one 2N301 in class A, 2.7 watts; two 2N301's in class B, Push Pull, 12 watts.
2N301A	Like 2N301 but operates at peak collector voltages as high as 60 volts.

* Flexible-lead type



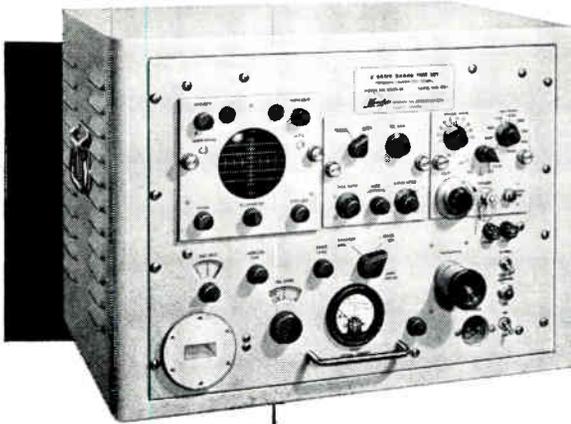
RADIO CORPORATION of AMERICA

Electron Tube Division, Harrison, N. J.
Semiconductor Division, Somerville, N. J.

Here is why Radar Producers and users prefer

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Test Sets for
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A complete testing unit in one compact portable case

All functions necessary for production testing, trouble-shooting and maintaining Radar Equipment available in one unit—controlled by a master switch. Saves bench space, testing time, can be moved to the job.

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Checks transmitter power, AFC lock-on, Frequency, Band width, spectrum shape, Receiver sensitivity, IF Band pass, TR recovery time, PPI Scope response and many other important tests.

Saves time, cost, and space

Kearfott Radar Test Sets occupy less space, are economical to buy, save valuable testing time compared with individual components such as power supplies, modulators, microwave plumbing and spectrum analyzers.

1957 Model incorporates new features

Write for Bulletin W-104 to obtain all the latest information on these Kearfott Test Sets.

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A SUBSIDIARY OF 

Orthicon

(Continued from page 109)

been found sufficient to prevent "burn-in" of the image, even when using an old, sticky tube.

The transmitted picture is held stationary by introducing suitable correcting signals to the centering circuits of the TV camera. The correcting signals are sine and cosine functions obtained from a sine-cosine potentiometer. Each function is amplified by a small transistor amplifier and applied to the correct deflection circuit.

Computer Switching

(Continued from page 117)

chosen set. The product of these variables gives a term of the Boolean function.

d. The sum of all products, obtained from consideration of all sets, is the desired simplified Boolean function.

In Fig. 5 the rectangular set of 4 in the upper left corner has the variables A'C' unchanged. The rectangular set of 2 in the lower right corner has the variables ACD' unchanged. The simplified Boolean expression is

$$f(ABCD) = A'C' + ACD' \quad (3)$$

This reduction may also be effected algebraically by rewriting Eq. (2):

$$\begin{aligned} f(ABCD) &= A'B'C'D' + A'BC'D' + \\ & \quad A'B'C'D + A'BC'D + \\ & \quad ABCD' + AB'CD' \\ &= A'C'(B'D' + BD' + \\ & \quad B'D + BD) + ACD'(B + B') \\ &= A'C'[B'(D + D') + \\ & \quad B(D' + D)] + ACD'(B + B') \end{aligned}$$

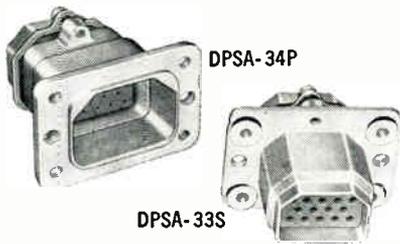
Using Theorem 5, $X + X' = 1$

$$\begin{aligned} &= A'C'(B' + B) + ACD'(B + B') \\ &= A'C' + ACD' \end{aligned}$$

The Karnaugh Chart requires expression of the Boolean function in disjunctive normal form. The Boolean disjunctive normal form consists of a sum of terms, wherein each term is a product of all the variables. A conjunctive normal form consists of a product of terms wherein each term is the sum of all the variables. Eq. 2 is an example of a disjunctive normal form. Eq. 5, below, is an example of the conjunctive normal form.

(Continued on page 190)

New!
**DPS Connectors for
 High Altitudes-Vibration**



These rack/panel pressurized connectors are designed for high altitude and vibration applications. When the DPS connector is mated, it is sealed about the insert faces by means of a specially designed rubber seal, that allows an axial tolerance of up to 1/8" while still effecting a seal. This seal is encased in the #34 shell so that the step down design of the mating #33 shell seats into and against it. In addition, the #34 or pin insert shell encloses a monobloc silicone insert designed so that the tightening of the junction shell effects a compression seal around the wires that have been inserted. The #33 or socket insert shell has a plastic front insulator, to insure alignment of contacts, and is backed up by a silicone rear insulator that is also tapered to permit the corresponding taper of the junction shell to compress it around the wires as the junction shell is tightened. Contacts for DPS connectors must be ordered separately, and installed at time of wiring. Co-axial contacts, and thermocouple contacts are available. Also, air lines. DPS connectors are available in 4 different sizes with several insert arrangements for each size.
Write for Bulletin DP-101 TODAY!

WHAT'S NEW FOR YOU

New!
**Coaxial Connector
 Screw Type Coupling**



Latest RF Connector Series — The TNC. The TNC is a screw type coupling version of the improved BNC series for small coaxial connectors. This TNC series, made by the Eastern Division of Cannon Electric, is available in two types: low voltage and high voltage. Both types are ideal where minimum noise is desired. They are lightweight, waterproof, sealed connectors which will operate at any altitude.

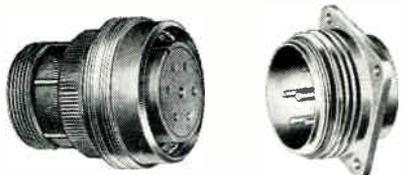
TNC Coaxial
 Receptacle SA-445

The high voltage TNC is recommended for AC rating up to 5,000 volts. Low voltage rating is to 500 volts. The TNC series is also available with collet cable clamp.

Write for RF Coaxial Bulletin DC-1 TODAY!

IN CANNON PLUGS

New!
**Quick-Disconnect
 Accessories for AN-Plugs**



CA06BQ Plug

CA02AQ Receptacle

An accessory that consists of coupler and an adapter has been recently perfected by Cannon to provide quick connect and quick disconnect characteristics to AN connectors.

The adapter is designed to screw over the coupling threads of a standard AN receptacle, and contains an external locking groove which receives the formed ends of the coupler latch when fully engaged. The entry of the coupler latch into this groove permits a compression spring to move the coupler sleeve forward, locking the parts securely. A simple straight pull back on the sleeve releases the latch and permits disconnection.

The coupler consists of a special spring latch assembly, and is designed to replace the coupling nuts on Cannon AN3106A and AN3106B plugs.

**Write for Bulletin
 PR-QD TODAY!**



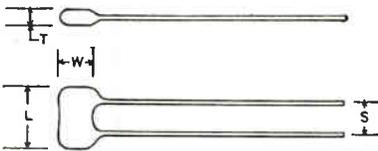
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CANNON ELECTRIC CO., 3208 Humboldt St., Los Angeles 31, California. Factories in Los Angeles, Salem, Mass., Toronto, London, Melbourne. Manufacturing licensees in Paris, Tokyo. Representatives and distributors in all principal cities.

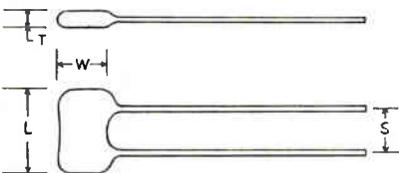
SIGNIFICANTLY SMALLER!



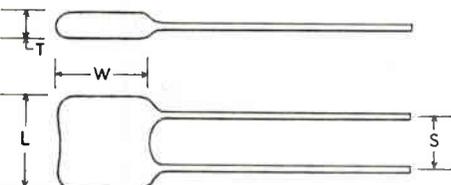
Dimensional Diagrams



TYPE D-15	L.	W.	T.	S.
Up to 150 mmf.	$1\frac{15}{32}$	$\frac{1}{4}$	$\frac{5}{32}$	$1\frac{15}{64}$
Over 151 mmf.	$1\frac{15}{32}$	$\frac{5}{16}$	$1\frac{1}{64}$	$1\frac{15}{64}$



TYPE D-20	L.	W.	T.	S.
Up to 1000 mmf.	$\frac{5}{8}$	$\frac{3}{8}$	$\frac{5}{32}$	$1\frac{1}{32}$
Over 1001 mmf.	$1\frac{1}{16}$	$\frac{7}{16}$	$\frac{3}{16}$	$1\frac{1}{32}$



TYPE D-30	L.	W.	T.	S.
Up to 4000 mmf.	$1\frac{1}{16}$	$2\frac{3}{32}$	$\frac{3}{16}$	$\frac{7}{16}$
Over 4100 mmf.	$\frac{3}{4}$	$2\frac{9}{32}$	$\frac{7}{32}$	$\frac{7}{16}$

SC57-5

NEW...SANGAMO "RESIN-KOTE" MICA CAPACITORS

- PHYSICALLY SMALLER
- RADIAL LEADS FOR PRINTED CIRCUIT BOARDS
- EXCELLENT ELECTRICAL CHARACTERISTICS
- EXCELLENT FOR AUTOMATIC ASSEMBLY METHODS
- EXCEED APPLICABLE RETMA SPECIFICATION RS-153
- FABRICATED FROM THE FINEST INDIA RUBY MICA

Available In Capacitance Values From 5 to 20,000 MMFD
In Standard $\pm 10\%$ Tolerance. Closer Tolerances Can be Supplied.

Write For NEW Engineering Bulletin TSC-118.

SANGAMO ELECTRIC COMPANY

Electronic Components Division

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MILLIONS OF VARIABLE RESISTORS

for every commercial and military need

• A world-wide reputation . . . for economical uniform high quality assembly . . . on a precision mass production basis . . . by 1500 skilled, trained-on-the-job specialists . . . to your exact individual specification.

• 315,000 sq. ft. of plant area devoted to variable resistors.
 • Exceptionally good delivery cycle . . . on both commercial and military orders.
 • Write for complete 62 page catalog today.

Typical Bushing Mounted Controls



Miniaturized 3/4" diameter composition



15/16" diameter composition



15/16" diameter composition with SPST switch



1-1/8" diameter concentric tandem tone switch and composition variable resistor with SPST on-off switch



1-1/8" diameter composition with SPST switch



1-17/64" diameter 2 watt wirewound



1-17/32" diameter 4 watt wirewound

Typical Ear-Mounted Controls



Molded shaft twist ear mounted 15/16" diameter composition



Hollow shaft twist ear mounted 15/16" diameter composition for screwdriver adjustment



Twist ear mounted 15/16" diameter composition with flattened shaft for push-on knobs



Twist ear mounted 15/16" diameter composition with SPST switch



Twist ear mounted 15/16" diameter pre-set tandem



Miniaturized clinch ear mounted composition



Miniaturized clinch ear mounted composition with SPST switch

Typical Printed Circuit Controls



Solder or clinch ear mounted 15/16" diameter composition with flush shaft



Bushing mounted 15/16" diameter concentric tandem composition with SPST switch



Self-supporting snap-in mounted 15/16" diameter composition



Self-supporting snap-in bracket mounted 15/16" diameter composition with SPST switch



Self-supporting snap-in mounted compact 3-section multiple composition



Miniaturized bushing mounted 3/4" diameter composition

Terminals For Wire Wrapping



Bushing mounted 15/16" diameter composition with SPST switch.

Typical Military Controls



Miniaturized 3/4" diameter 1/2 watt composition



15/16" diameter 1 watt composition



15/16" diameter composition with water-seal between shaft and bushing and panel



1-1/8" diameter composition



1-1/4" diameter 2 watt composition



1-17/64" diameter 2 watt wirewound with locking type bushing



1-17/32" diameter 4 watt wirewound

WEST COAST MANUFACTURERS: Many types of variable resistors now in production at our South Pasadena plant. Your coil, transformer and compression molding business also invited. Prompt delivery. Modern versatile equipment. L. A. phone Clinton 5-7186.

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 Phone: Pennsylvania 6-8239

Variable resistors shown 1/3 actual size



ELKHART • INDIANA

The Exclusive Specialists in Precision Mass Production of Variable Resistors • Founded 1896

Simac First for



TETRODES

4-65A 4W300B
 4-125A 4W20000A
 4-250A 4X150A
 4-400A 4X150D
 4-1000A 4X150G
 4CX150G 4X250B
 4CX250K 4X250F
 4CX250M 4X500A
 4CX300A 4X500F
 4PR60A 4CX5000A

TETRODES

EIMAC
TUBE
TYPE

MAXIMUM RATINGS

ELECTRICAL CHARACTERISTICS

EIMAC TUBE TYPE	MAXIMUM RATINGS					ELECTRICAL CHARACTERISTICS		
	Plate Dissipation Watts	Plate Voltage	Plate Current Milliamperes	Grid Dissipation Watts	Screen Voltage	Screen Dissipation Watts	Filament, Volts	Filament, Amperes	Amplification Factor

4-65A	65	3000	150	5	400	10	6.0	3.50	...
4-125A	125	3000	225	5	400	20	5.0	6.50	...
4-250A	250	4000	350	10	600	35	5.0	14.50	...
4-400A	400	4000	350	10	600	35	5.0	14.50	...
4-1000A*	1000	6000	700	25	1000	75	7.5	21.00	...

4CX150G*	150	1250	250	2	300	12	2.5	6.25	...
4CX250K*	250	1250	250	2	300	12	6.0	2.60	...
4CX250M*	250	1250	250	2	300	12	26.5	0.57	...
4CX300A*	300	2000	250	2	400	12	6.0	2.55	...
4PR60A**	60	20,000	†	†	1500	8	26.0	2.20	...
4W300B**	300	2000	200	2	300	12	6.0	2.10	...
4W20000A**	20,000	8000	15,000	60	1500	200	10.0	30.00	...
4X150A*	150	1250	250	2	300	12	6.0	2.60	...
4X150D*	150	1250	250	2	300	12	26.5	0.57	...
4X150G*	150	1250	250	2	300	15	2.5	6.25	...
4X250B*	250	2000	250	2	300	12	6.0	2.10	...
4X250F*	250	2000	250	2	300	12	26.5	0.50	...
4X500A*	500	4000	350	10	500	30	5.0	13.50	...
4X500F*	500	4000	350	10	500	30	5.0	13.50	...
4CX5000A*	5000	7500	3000	75	1500	250	7.5	75.00	...



TRIODES

2C39A 75TL
 2C39B 100TH
 3C24 100TL
 3CX100A5 152TH
 3W5000A3 152TH
 3W5000F3 250TH
 3X100A5 250TL
 3X2500A3 304TH
 3X2500F3 304TL
 3X3000A1 450TH
 3X3000F1 450TL
 6C21 592/3-200A3
 25T 750TL
 35T 1000T
 35TG 1500T
 75TH 2000T

TRIODES

2C39A*	100	1000	125†	2	...	...	6.3	1.00	100
2C39B*	100	1000	125†	2	...	...	6.3	1.00	100
3C24	25	2000	75	7	...	...	6.3	3.00	24
3CX100A5	100	1000	125†	2	...	...	6.3	1.00	100
3W5000A3**	5000	6000	2500	150	...	...	7.5	51.00	20
3W5000F3**	5000	6000	2500	150	...	...	7.5	51.00	20
3X100A5	100	1000	125†	2	...	...	6.3	1.00	100
3X2500A3*	2500	6000	2500	150	...	...	7.5	51.00	20
3X2500F3*	2500	6000	2500	150	...	...	7.5	51.00	20

3X3000A1*	3000	6000	2500	50	...	...	7.5	51.00	5
3X3000F1*	3000	6000	2500	50	...	...	7.5	51.00	5
6C21	300	30,000	†	†	...	...	8.2	17.00	30
25T	25	2000	75	7	...	...	6.3	3.00	24
35T	50	2000	150	15	...	...	5.0	4.00	39
35TG	50	2000	150	15	...	...	5.0	4.00	39

75TH	75	3000	225	16	...	...	5.0	6.25	20
75TL	75	3000	225	13	...	...	5.0	6.25	12
100TH	100	3000	225	20	...	...	5.0	6.30	38
100TL	100	3000	225	15	...	...	5.0	6.30	14
152TH	150	3000	450	30	...	...	5 or 10	12.50 or 6.25	20

152TL	150	3000	450	25	...	...	5 or 10	12.50 or 6.25	12
250TH	250	4000	350	40	...	...	5.0	10.50	37
250TL	250	4000	350	35	...	...	5.0	10.50	14
304TH	300	3000	900	60	...	...	5 or 10	25 or 12.50	20
304TL	300	3000	900	50	...	...	5 or 10	25 or 12.50	12

450TH	450	6000	600	80	...	...	7.5	12.00	38
450TL	450	6000	600	65	...	...	7.5	12.00	18
592/3-200A3	200	3500	250	25	...	...	10.0	5.00	25
750TL	750	10,000	1000	100	...	...	7.5	21.00	15
1000T	1000	7500	750	80	...	...	7.5	15.50	35

1500T	1500	8000	1250	125	...	...	7.5	24.00	24
2000T	2000	8000	1750	150	10.0	23.50	23

PENTODE

4E27A/5-125B	125	4000	200	5	750	20	5.0	7.50	5
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RECTIFIERS

2-01C 253
 2-25A 8020(100R)
 2-50A 2CL40A
 2-150D 2X1000A
 2-240A 2X3000F
 2-450A KY21A
 2-2000A RX21A
 250R

KLYSTRONS

EIMAC TUBE TYPE	Frequency Range Mc.	Collector Dissipation Watts	Beam Voltage	Beam Current		TV Peak Synchronizing Level	CW Power Amplifier
				Amperes	Amperes		
3K2500SG*	1700-2400	3000	7000	0.575	1500	1250	
3K3000LQ*	700-1000	3000	9000	0.750	2700	2000	
3KM3000LA*	375-540	3000	9000	0.750	2700	2000	
3K20,000LA**	470-580	20,000	13,000	1.700	5500	3000	
3K20,000LF**	580-720	20,000	13,000	1.700	5500	3000	
3K20,000LK**	720-890	20,000	13,000	1.700	5500	3000	
3K50,000LA**	470-580	50,000	19,500	2.560	12,000	6000	
3K50,000LF**	580-720	50,000	19,500	2.560	12,000	6000	
3K50,000LK**	720-890	50,000	19,500	2.560	12,000	6000	
3K50,000LQ**	750-1000	50,000	20,000	2.500	12,000	6000	
3KM50,000PA**	225-400	50,000	20,000	2.500	31,500	20,000	
4K50,000LQ**	700-1000	50,000	20,000	2.500	12,000	6000	

KLYSTRONS

3K2500SG 3K50,000LK
 3K3000LQ 3K50,000LQ
 3KM3000LA 3KM50,000PA
 3K20,000LA 4K50,000LQ
 3K20,000LF 1K015CA
 3K20,000LK 1K015CG
 3K50,000LA 1K015XA
 3K50,000LF 1K015XG

EIMAC TUBE TYPE	D-C Resonator		D-C Cathode Current	D-C Repeller		Heater Voltage	Heater Current	Frequency Range
	Voltage	Dissipation		Voltage	Voltage			
1K015CA	350	15	..	..	6.3	0.80	5400-6000
1K015CG***	350	15	..	..	6.3	0.80	5400-6000
1K015XA	350	15	45	0 to -500	6.3	0.80	8700-9600	
1K015XG***	350	15	45	0 to -500	6.3	0.80	8700-9600	

*Requires forced air cooling
 **Water cooled
 ***Waveguide output connections
 ****Grid controlled

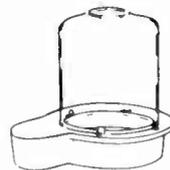
†Pulse modulator
 †Liquid cooled
 ‡Cathode Current

1 Pulse clipper service
 2 Grid-to-screen amplification factor

Reliability in power electron tubes

Continuing research and development adds constantly to the Eimac products list.
For latest information, contact our Technical Services Department.

RECTIFIERS	HIGH VACUUM TYPES				
	TYPE	FILAMENT VOLTAGE	FILAMENT CURRENT AMPS.	PEAK INVERSE VOLTAGE	PEAK PLATE CURRENT AMPS.	AVERAGE PLATE CURRENT MA
2-01C	5.3	0.4	1,000	0.010	1
2-25A	6.3	3.0	25,000	1.0	50
2-50A	5.0	4.0	30,000	1.0	75
2-150D	5.0	13.0	30,000	3.0	250
2-240A	7.5	12.0	40,000	4.0	500
2-450A	7.5	26.5	25,000	8.0	1000
2-2000A	10.0	25.0	75,000	12.0	750
250R	5.0	10.5	60,000	2.5	250
253	5.0	10.0	15,000	2.5	350
8020(100R)	5.0	6.5	40,000	1.5	100
2CL40A	6.0	2.1	8,000 or 16,000+	10.0	120+
2X1000A*	26.5	2.25	25,000	25.0†	1250
2X3000F	7.5	51.0	25,000	12.0	3000
MERCURY VAPOR TYPES					
KY21A****	2.5	10.0	11,000	3.0	750
RX21A	2.5	10.0	11,000	3.0	750

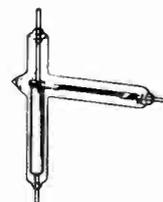


AIR SYSTEM SOCKETS

SK-100	SK-600	SK-700
SK-110	SK-602	SK-710
SK-200	SK-610	SK-406
SK-300	SK-620	SK-506
SK-400	SK-630	SK-606
SK-500	SK-640	



HR HEAT DISSIPATING CONNECTORS



VACUUM SWITCH

VS-2, 5, 6



17/32	13/16
31/32	1-17/32
1-3/8	2-1/4

TUBE EXTRACTOR

SK-601

*Grid Controlled

AIR SYSTEM SOCKETS & CHIMNEYS

SOCKETS (WITHOUT CHIMNEY)

- SK-100 For Klystrons with oxide coated cathodes such as the 3K3000LQ.
- SK-110 For Klystrons with bombardment heated cathodes such as the 3K50000LQ and 4K50000LQ.
- SK-200 Cathode end socket for klystrons such as the 3K2500SG.
- SK-300 4CX5000A (No Screen By-pass Capacitor).
- SK-400 4-400A, 4-250A, 4-125A.
- SK-500 4-1000A.
- SK-600 4X150A, 4X150D, 4X250B, 4X250F, 4W300B (Cathode Terminals Not Grounded).
- SK-602 4X150A, 4X150D, 4X250B, 4X250F, 4W300B (Modification of SK-600—Shield slotted between pins 1 & 2).
- SK-610 4X150A, 4X150D, 4X250B, 4X250F, 4W300B (Cathode Terminals Grounded).

- SK-620 4X150A, 4X150D, 4X250B, 4X250F, 4W300B (Cathode Terminals Not Grounded—Screen By-pass Capacitor Plastic Sealed).
- SK-630 4X150A, 4X150D, 4X250B, 4X250F, 4W300B (Cathode Terminals Grounded—Screen By-pass Capacitor Plastic Sealed).
- SK-640 4X150A, 4X150D, 4X250B, 4X250F, 4W300B (Cathode Terminals Not Grounded—No Screen By-pass Capacitor).
- SK-700 4CX300A (Cathode Terminal Not Grounded).
- SK-710 4CX300A (Cathode & One Heater Terminal Grounded).

CHIMNEYS

- SK-406 (For use with SK400 Air System Socket).
- SK-506 (For use with SK-500 Air System Socket).
- SK-606 (For use with SK-600 series and SK-700 series Air System Sockets).

HEAT DISSIPATING CONNECTORS

TYPE	HOLE DIA.
HR-1	.052
HR-2	.062
HR-3	.070
HR-4	.102
HR-5	.125
HR-6	.359
HR-7	.125
HR-8	.570
HR-9	.570
HR-10	.510

VACUUM SWITCH

Single pole double throw switch within a high vacuum adaptable for high voltage switching. Contact spacing .015". Switch will handle R-F potentials as high as 20 Kv. In DC switching will handle approximately 1.5 Amps. at 5 Kv.

Type	VS-2
	VS-5
	VS-6
Coils	12V
	24V

PREFORMED CONTACT FINGER STOCK

A prepared strip of spring material slotted and formed into a series of fingers designed to make sliding contact.

Single Edge	Width	Double Edge	Width
CF-100	17/32	CF-200	13/16
CF-300	31/32	CF-400	1-17/32
CF-500	1-3/8	CF-600	2-1/4
	Klystron Types		Width
	CF-700		17/32
	CF-800		13/32 x 5/16

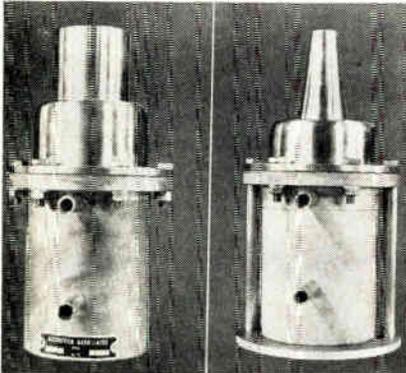
Used as contact between klystrons and klystron amplifier circuit assemblies.



EITEL-McCULLOUGH, INC.
SAN BRUNO, CALIFORNIA

ULTRASONIC TRANSDUCERS

Two ultrasonic transducers for high temperature and high amplitude motion applications. Model AT-1600B, (l), features water jacketed coupling slug. This arrangement per-

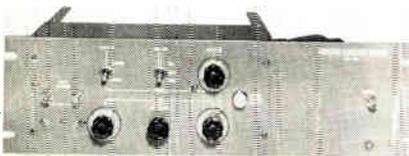


mits use of high power magnetostriction transducers for such high temperature (to 1500°F) applications. Model AT-1600C, (r), features a tapered steel amplitude multiplier. This level may be used for many kinds of ultrasonic work when large peak-to-peak amplitudes are required, such as drilling, blanking, shaping and grinding. Acoustica Associates, Inc., Glenwood Landing, L. I. N. Y.

Circle 189 on Inquiry Card, page 201

MAGNETIC CORE TESTERS

Two new current drivers were designed for testing of square loop, tape wound, bobbin cores. Type 3003 is a high impedance, high current source and produces negative current pulses. Type 3004 is designed for low impedance operation functioning as a cathode follower producing positive current pulses. Each unit has coarse and fine controls for continuous ad-



justment of the rise time (0.2 to 1.0 μ sec.), the duration (1.0 to 10 μ sec.), and the amplitude (up to 1.0 a.) of the rectangular output pulse. Burroughs Corp., 1209 Vine St., Phila. 7, Pa.

Circle 190 on Inquiry Card, page 201

WIRE SPlicing

A new product, the AMPLi-var splice with its automatic "Horizontal" splicing machine, is designed to produce up to 1200 per hour, identical, mass produced splices on enamel, polyvinyl



acetal and similarly coated wire. Stripping action eliminates scraping, dissolving in solvents, burning or other methods of removing insulation. No heat damage as in other methods of splicing. Designed to lock wires and connector into a high tensile strength splice. Joint is hermetically sealed during splicing. Soldering material and equipment are unnecessary. AMP Inc., Harrisburg 13, Pa.

Circle 191 on Inquiry Card, page 201

PUSHBUTTON SWITCH

A new "typewriter" pushbutton switch for manual keyboard control of electric equipment is being marketed. It was developed for rapid-repeat, one-finger operation such as found in the keyboards of electric typewriters, adding machines and similar equipment. Can be operated up to 300 times/minute. It may be engraved by the user. New, extra-

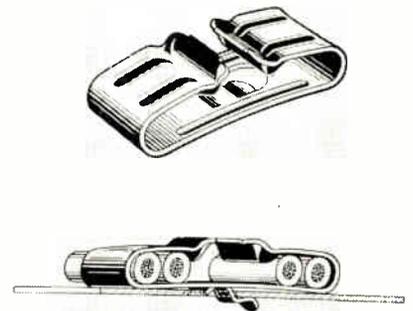


length turret terminals permit quick, easy wiring and positive soldering. Switch is listed by U. L. at 5 a. 125 or 250 vac. Micro Switch of Freeport, Ill., div of Minneapolis-Honeywell Regulator Co.

Circle 192 on Inquiry Card, page 201

SPEED CLIP

A new, twin U-type speed clip, developed for the attachment of electrical wiring on household appliances, electronic equipment and other products. Speed clip is front-mounting

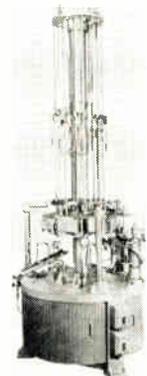


and eliminates the need for nuts, bolts or auxiliary fastening devices. Ideal for use in hard-to-reach locations. Inserted into a mounting hole in a panel with slight finger pressure down and forward, the clip snaps into wire-receiving position. Electrical wires, firmly secured, can be removed for servicing or replacement without detaching the clip. Tinnerman Products, Inc., Cleveland, O.

Circle 193 on Inquiry Card, page 201

BULB BLOWING MACHINE

A new automatic bulb blowing machine for incandescent lamps, radio tubes, and similar products is capable of production speeds up to 2,400 units/hr. A typical model, #2070 handles sizes up to 2½ in. o.d. by 5½ ft. over-all length and is fully automatic except for manual loading of 4 ft. lengths of glass. Oil-immersed and enclosed to reduce maintenance,

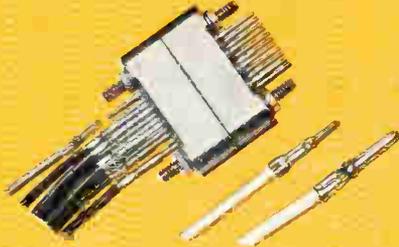


the rollers are precision tapered, hardened and ground to insure accuracy. Cutting knives are motor operated. Can be equipped with automatic tubing feed. Kahle Engineering Co., 1400 7th St., N. Bergen, N. J.

Circle 194 on Inquiry Card, page 201

IT'S ROUND-UP TIME AT AMP

... products for your **ELECTRONICS**
and **AVIONICS** applications



TAPER PINS

The A-MP Miniature Taper Pin Receptacle eliminates tedious and costly operations of soldering leads to miniature connectors. This solderless, quick-disconnect terminal is applied to the lead by means of A-MP Automachine and A-MP Certi-Crimp Tooling... then capped over other type connectors, modified to receive the A-MP 37 Series Miniature Taper Pin Receptacle.

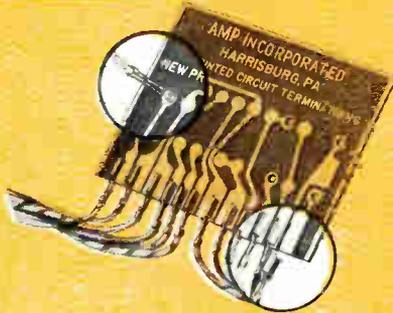
Other A-MP Taper Pins are available (Series 53 and 88) for wire sizes 24 - 12 AWG and a wide range of insulation sizes. Insulation piercing Taper Pins are available for small stranded wires and popular size tinsel cords.



TAPER TAB RECEPTACLES

A-MP Taper Tab Receptacles are a recent development for flat tabs employing the taper key principle. They are available for wire sizes 24 - 18 AWG, in gold, silver and tin plated finishes.

The tapered section of these receptacles is standardized to fit the same size tapered tab. Insulation piercing Taper Tab Receptacles are available for small wire sizes and tinsel cords.



CONNECTORS FOR PRINTED CIRCUITS

The AMP-Edge Connector is design-engineered with positive wiping contact and frictional grippage. This connector gives you: greater flexibility... its size does not limit the size of your completed unit; design versatility... easily applied, in any arrangement, to any section of the perimeter; costs reductions... in applying connector to the wire and to the printed circuit.

The AMPin Connector... gets leads to the printed circuit in one assembly operation... eliminates your investment in expensive automation equipment... no loose leads during the solder-dip process... construction promotes good capillary flow of solder during dipping process... can be applied to solid or stranded wires... is self-retaining and self-aligning.



THE SHIELDED WIRE TEAM

The A-MP Shielded Wire Splice joins sections of shielded wire so that the inner conductor and outer shield are firmly spliced and remain effectively insulated from each other. Features include: rectangular inspection window, in center, permits easy inspection to determine proper placement of ends of inner conductor; inspection ports, at each end, to check proper depth of braid enclosed after crimping; and overhang of outer sleeve projects beyond inner elements and grips braid for anti-vibration support.

The A-MP Termashield Shielded Wire Ferrule are of one-piece construction, is slightly thicker than the wires joined, and is the ideal one-step splice for ground tap accommodation.

This A-MP Shielded Wire Team is color-coded for easy identification of leads and connectors and provides a simple one-step operation that reduces assembly time and costs.

Further information on these products is available on request.

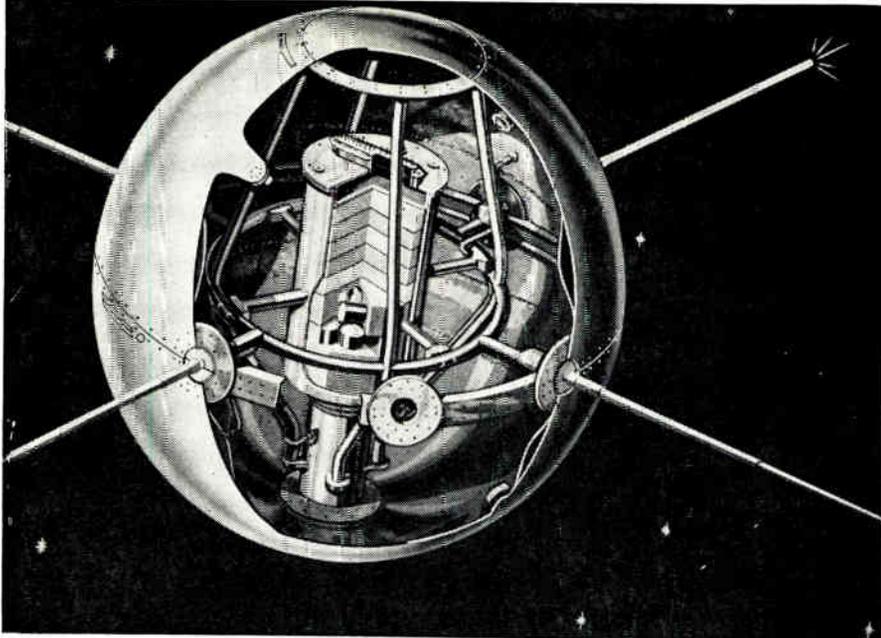
AMP INCORPORATED

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ENGINEERS: *Electronic & Mechanical, PHYSICISTS*



Melpar's work on the earth satellite is one of many diversified projects.

Melpar's more than 90 projects give wider scope to men of talent

At Melpar the problems posed by our more than 90 current projects allow you to work in the area of your choice and make contributions on advanced levels.

Our dynamic growth (we've doubled in size every 24 months for the past 11 years) constantly creates new middle and top level openings; our policy of *individual recognition* allows you to compete for them *strictly* on merit, and to receive financial compensation limited only by your ability.

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MELPAR Incorporated
A Subsidiary of Westinghouse Air Brake Company
3128 Arlington Boulevard
Falls Church, Virginia

(Continued from page 182)

$$f(ABCD) = (A+B+C'+D) (A+B+C'+D') (A+B'+C+D') \quad (5)$$

Switching

If in the analysis and synthesis of electronic switching circuits, use is to be made of Boolean algebra, then a direct correspondence between Boolean variables and circuit elements must be established.

This need not be a one to one correspondence since the type of circuit element used varies with the nature of the circuit. The correspondence between relays and vacuum tubes with Boolean literals has already been noted, and obviously speed of response required in the circuit is one of the determining factors in making a choice.

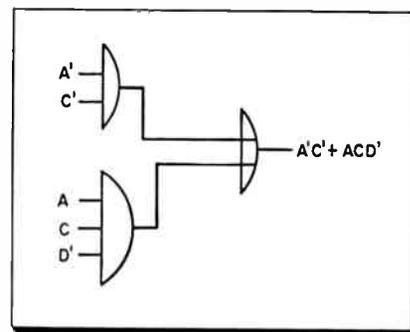


Fig. 8: The simplified Boolean function, Eq. 3, as it is represented graphically.

Boolean functions expressing the logical behavior of a combinational circuit may be described with the use of 3 graphic symbols for "and," "or," and "not." These symbols and one of the moving possible electrical counterparts is given in Fig. 6.

Consider once again Eq. 2:

$$f(ABCD) = A'B'C'D' + A'BC'D' + A'B'C'D + A'BC'D + ABCD' + AB'CD'$$

This function is given in Fig. 7 using the graphical symbols of Fig. 6.

The simplified Boolean function Eq. 3

$$f(ABCD) = A'C' + ACD'$$

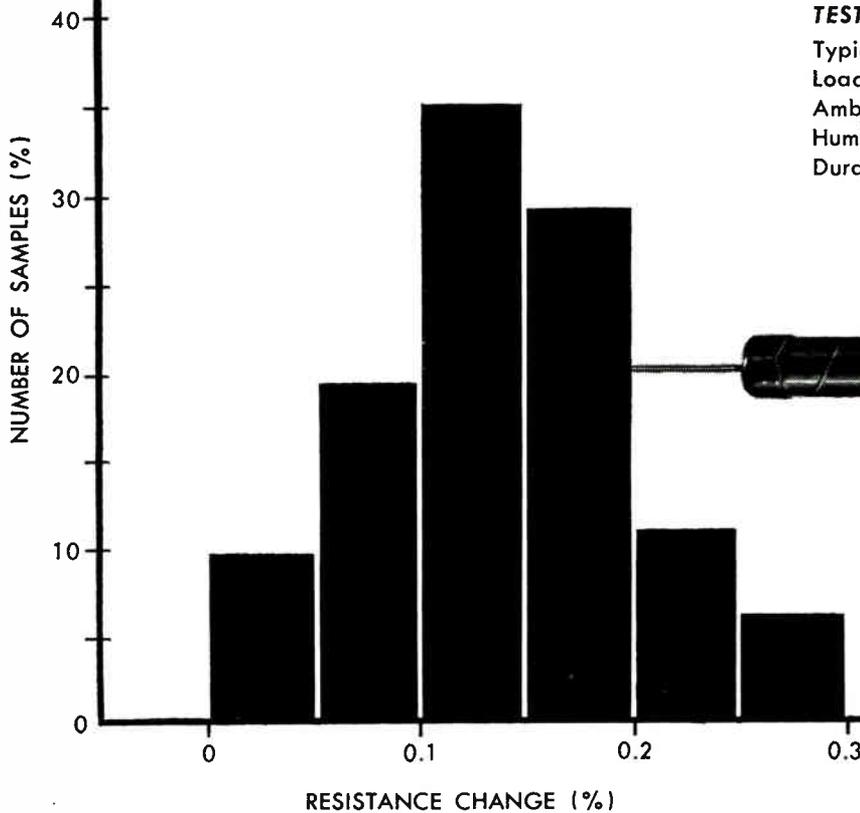
is drawn as Fig. 8.

The resultant decrease in circuit complexity is apparent.

A possible statement for the function of Eq. 2 might be: A light is controlled by 4 relays; A, B, C

(Continued on page 192)

N30 1 MEGOHM RESISTORS

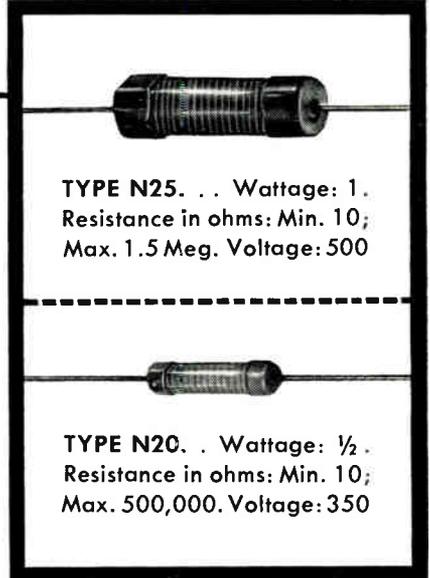


TEST CONDITIONS

Typical test lot . . . 100 pieces
 Load 40 Milliwatts
 Ambient Temp. . . . 25-27° C.
 Humidity 90-95% R.H.
 Duration 10 Days



TYPE N30. . . Wattage: 2.
 Resistance in ohms: Min. 30;
 Max. 4.2 Meg. Voltage: 750



TYPE N25. . . Wattage: 1.
 Resistance in ohms: Min. 10;
 Max. 1.5 Meg. Voltage: 500

TYPE N20. . . Wattage: 1/2.
 Resistance in ohms: Min. 10;
 Max. 500,000. Voltage: 350

Why Corning's Film-type Glass Resistors are unaffected by moisture

This graph gives some idea of the unusual properties that result when you fire a tin oxide film to a glass core.

Since film and core are fused into a single structure, you have a resistor that stands up under extreme humidity and moisture conditions.

Tin oxide reacts chemically with glass under heat; it actually becomes part of the glass.

So you have an integrated unit. One that's physically inseparable. Catastrophic failure is no problem with these rugged precision-film resistors.

You get *exceptional stability*. Less than 1.0% average change in resistance after 10,000 hours' operation at rated

dissipation.

Long shelf life. Less than 0.2% resistance change after a whole year's aging under the most adverse conditions.

Low TC. Guaranteed ± 300 ppm/°C. referred to 25°C. over a range of -55 to +105°C.

A last fact to shorten the long story we have to tell on our TYPE N FIXED-FILM RESISTORS:

They are guaranteed to meet, and the majority of characteristics of these resistors exceed, the requirements of MIL-R-10509B and comparable specs.

If you'd like the complete story on these amazing resistors, write for Data Sheet CD-2.00.

Keep your file up-to-date with data on these other electronic components made by Corning: Resistors: Low Power, Types S, R, H, HP, and WC-5; Capacitors: Fixed Glass, Transmitting, Canned High-Capacitance, Subminiature Tab-Lead, Special Combination. Direct Traverse* and Midget-Rotary* Trimmers. Metallized Glass Inductances; Electrolytic Level Switches; Attenuator Plates; Fotoform Glass.*

**Distributed by Erie Resistor Corporation*

Corning means research in Glass



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 Electronic Components Sales Department

WHY SPARK GAP TUBES ARE IMPORTANT—

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you with spark gap problems!



Bendix Red Bank "Spark Gap" Tubes are specially designed to do two big jobs in electronic circuits.

First, to act as a "triggering" switch—as on jet ignition systems. Here, Bendix* Spark Gaps pass high currents with relatively low voltage drop and have the advantage of being able to handle high voltages in small space. Further, these tubes can be made insensitive to ambient temperature variations and are not normally affected by pressure, altitude, or humidity changes.

The second function of Bendix Spark Gaps is as a *protective element*—guarding radar equipment against voltage overload, to name one example. Here, Bendix Spark Gaps keep high voltage surges from getting through to damage circuit components.

Our design and manufacturing experience with spark gap tubes is extremely broad. If our extensive line of these tubes . . . ranging from 750V to 50KV in DC breakdown voltages . . . does not already contain a type to fit your needs, we are in a position to design one to handle the job with the exact degree of efficiency that you require.

To find out more about what we can do to help you with your spark gap problems, get in touch with RED BANK DIVISION, BENDIX AVIATION CORPORATION, EATONTOWN, NEW JERSEY.

* TRADEMARK

West Coast Sales and Service:
117 E. Providencia Ave., Burbank, Calif.
Export Sales and Service:
Bendix International Division,
205 East 42nd St., New York 17, N. Y.
Canadian Affiliate:
Aviation Electric, Ltd., P. O. Box 6102,
Montreal, Quebec.



(Continued from page 190)

and D. The light is to be lit under any of the following conditions:

A open	B open	C open	D open
A open	B closed	C open	D open
A open	B open	C open	D closed
A open	B closed	C open	D closed
A closed	B closed	C closed	D open
A closed	B open	C closed	D open

The redundancy of these conditions has been established by the reduction of Eq. 4 to Eq. 3. The requirements are completely satisfied with only 3 relays and 5 contacts while the unreduced equation required 4 relays and 24 contacts.

The foregoing has been an introduction to the fundamentals of Boolean algebra and its application to the solution of switching circuit problems. The discussion has omitted such aspects of the art as symmetric circuits, sequential circuits, element design, etc. For the reader interested in further details, additional references are given.

References

Design of Switching Circuits, Keester, Ritchie, Washburn.

Synthesis of Electronic Computing and Control Circuits, Harvard University Press, 1951.

Elements of Boolean Algebra for the Study of Information Handling Systems, R. Ferrell, *Proc. IRE* Oct 1953.

The Recognition & Identification of Symmetric Switching Circuits, S. Caldwell, AIEE, 1954.

Synthesis of Sequential Switching Circuits, D. Huffman, *Journal of the Franklin Institute*, March-April 1954.

¹ This choice is arbitrary. The O could be associated just as easily with truth.

² The Map Method for Synthesis of Combinational Logic Circuits, M. Karnaugh, *Communications & Electronics*, Nov. 1953.

* * *

Motor Manufacturer Holds "Open House"

Trade magazine editors got an insight into the problems of precision electric motor manufacturing recently at an "Open House" gathering at Air Marine Motors, Inc., Amityville, N. Y.

The firm, one of the foremost manufacturers of subfractional horsepower motors, is now supplying motors to the major missile projects. One of the highlights of the demonstration dealt with the unique problems of high temperature operation.

Among the products demonstrated were a new laboratory plenum chamber, which measures the rate of air flow of air moving equipment, the "Torsynator," a remote positioning indicator, and various types of motors.

The mighty voice

of the

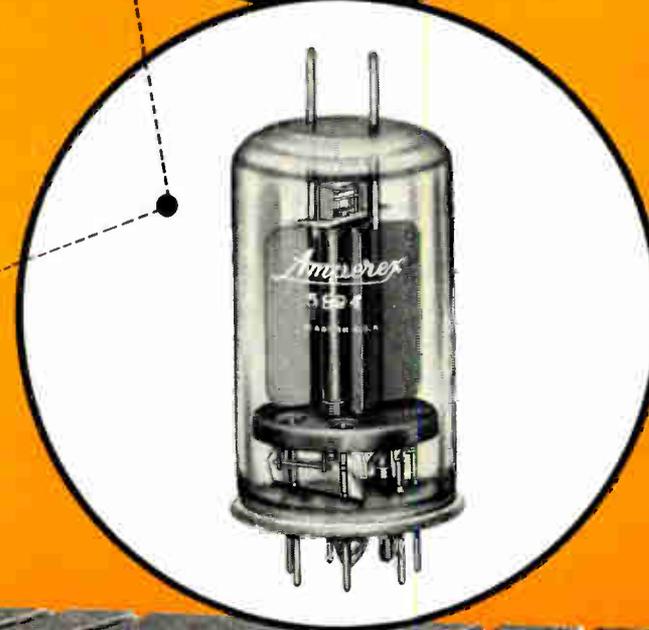
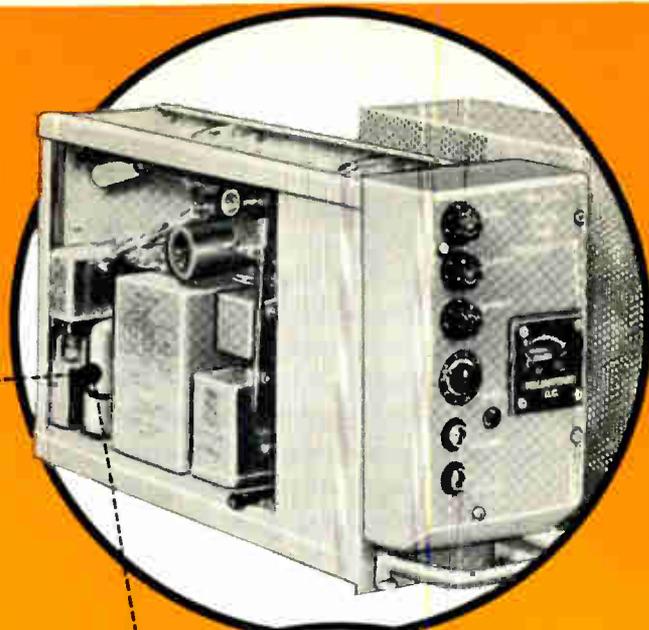
CANARI

The CANARI (Communications And Navigation Airborne Radio Instrumentation) System, developed by the Wilcox Electric Company, furnishes all the basic navigational and communications devices used on modern aircraft in a single, standardized package weighing only *one-third* as much as conventional installations. Its mutually compatible elements, all of the same height and depth, are assembled on one custom-fitted shockmount, reducing ordinary space requirements by *more than half*. The lightest twin-engine aircraft as well as the newest superjet transports are being equipped with CANARI Systems. This definitive solution of the bulk problem in aircraft electronics owes a great part of its design efficiency to the

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which gives the CANARI's VHF transmitter 35 watts of minimum rated power combined with the ultimate degree of size and weight* reduction. No other equipment on the market of comparable miniaturization equals the output of the AMPEREX-powered transmitter of the mighty little CANARI.



Manufactured by
Wilcox Electric Company, Inc., Fourteenth & Chestnut, Kansas City 27, Missouri



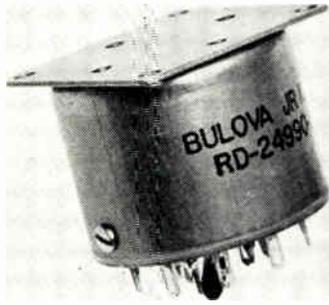
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AMPEREX ELECTRONIC CORP., 230 DUFFY AVENUE, HICKSVILLE, LONG ISLAND, N. Y.
In Canada: Rogers Electronic Tubes & Components, 11-19 Brentcliffe Road, Leaside, Toronto 17.

CRYSTAL OVENS

The new BHC-18 crystal oven series are specifically designed for the new military CR types utilizing the sub-miniature HC-18/U holder. The units will conform to the military

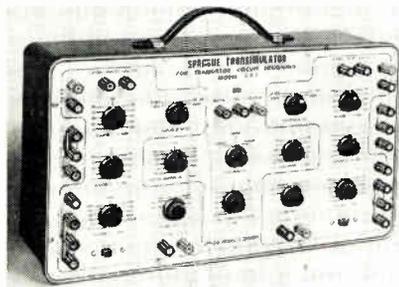


warm-up requirement. The 10 and 15 crystal oven will stabilize within $\pm 2^\circ\text{C}$ over an ambient of -55°C to below reference temp. Available in units housing a 1, 2, 10 and 15 crystals. Operating voltage for the 10 and 15 crystal units is 6-115 v. ac or dc. The one unit oven is available from 6-24 v. ac or dc. Bulova Watch Co., Electronic Div., Woodside 77, N. Y.

Circle 200 on Inquiry Card, page 201

CIRCUIT SIMULATOR

A new instrument that eliminates breadboard layout by simulating complete transistorized amplifier stages has been introduced. Any ac or direct-coupled amplifier stage short of high power audio output can be simulated with the LF-1. Common or grounded emitter, base, or collector circuits may be simulated using pnp, npn, or surface barrier transistors.

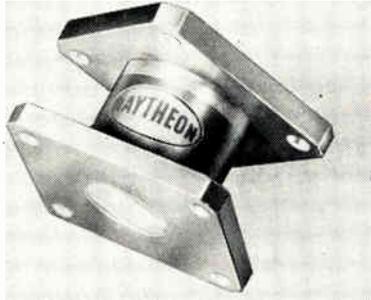


Built-in battery voltage supply for separate bias and load. Switch reverses polarity. Almost any external connection can be made at the 5-way binding posts provided. Sprague Products Co., North Adams, Mass.

Circle 201 on Inquiry Card, page 201

FERRITE ISOLATORS

Microwave isolators featuring improved performance and compactness are now available in standard and custom designs. Model IXL1, the X-brand type, has a range of 8.5-9.6



KMC and provides greater than 18 db isolation; weighs 6 oz. and is $1\frac{1}{8}$ in. long. Model IK_EL1, covers a range of 13.2-13.7 KMC in the K_E band with greater than 20 db isolation; weighs 7.5 oz. and is less than $1\frac{1}{2}$ in. long. Modified standard units with flanges rotated are available on special order. Raytheon Manufacturing Co., Seyon Building, Waltham 54, Mass.

Circle 202 on Inquiry Card, page 201

VARIABLE DELAY UNITS

Five new continuously variable delay lines for use as components or as test equipment in the design and development of advanced computer and radar systems are available. One control shaft, in 10 turns, covers the entire delay range. A locking device can be supplied to lock the unit at the desired delay. They can be used as components in equipment with a

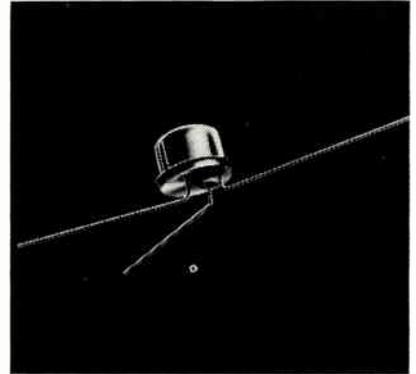


fixed delay, or as continuously variable test units. Resolution is better than 1/1000 of maximum delay. Termination is external. They meet all applicable Mil-Specs. ESC Corp., 534 Bergen Blvd., Palisades Park, N. J.

Circle 203 on Inquiry Card, page 201

SWITCHING TRANSISTOR

These new pnp computer transistors, the 2N-315, 2N-316 and 2N-317, are the germanium alloy type intended primarily for applications where high speed, high current switch-



ing is of paramount importance. The 2N-317 has, with only a minimum of drive current, a typical switching speed of 0.3 $\mu\text{sec.}$ at 400 ma. of collector current. Series resistance when conducting is $\frac{1}{2}$ ohm; nonconducting series resistance is as high as 10 Megs with a result that approaches optimum efficiency at high current levels. General Transistor Corp., 91-27 138th Place, Jamaica, N. Y.

Circle 204 on Inquiry Card, page 201

SYNCHRO INDICATOR

A new aircraft synchro indicator (Type 26800), can be used in any electronic system that provides a synchro output or in any electrical system in which remote position indication is desired. The hermetically sealed unit, 1 in. dia., weighs less than 3 oz. Meets Mil-Spec I-22540A. Designed for 26 v., single-phase, 400



cycle operation, it will operate with many standard pressure transmitters. Both dials and pointers are available in various finishes. The unit is designed for clamp mounting. Montrose Div. of Bendix Aviation Corp.

Circle 205 on Inquiry Card, page 201

FROM THE SMALLEST TO THE LARGEST UNITS...

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RADIO RECEPTOR *hcd PETTI-SEL**

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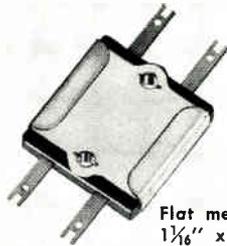
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Developed by Siemens Organization of West Germany, used extensively throughout Europe . . . and now manufactured exclusively in the U.S.A. by Radio Receptor Company.

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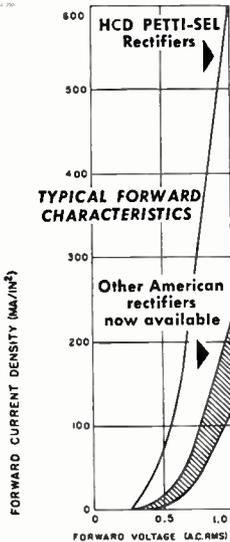
Plastic units, $\frac{7}{16}'' \times \frac{7}{16}'' \times \frac{3}{32}''$,
single phase, center tap,
30V AC, 150 MA DC



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bridge, 30V AC,
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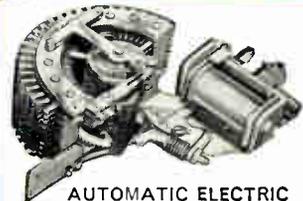
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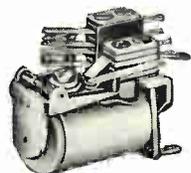
West Chicago, Ill.



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This **Design Engineer** had a temperature-compensating resistor in his **PLANNING**



This **Manufacturer** has a temperature-compensating resistor in his **PRODUCT**



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HERE'S HOW KEYSTONE HANDLES A TYPICAL COIL COMPENSATOR SELECTION PROBLEM— AND HOW WE CAN HELP YOU SOLVE YOURS!

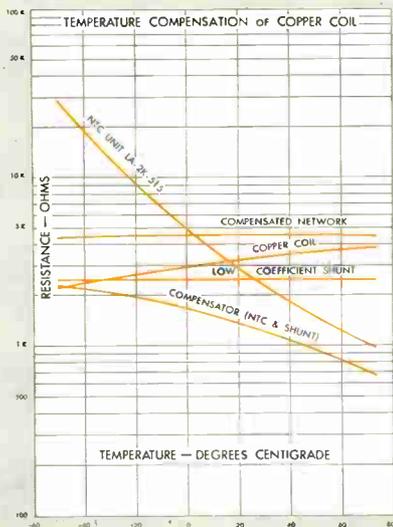
The Problem:

Provide temperature compensation of a copper coil with resistance 3200 ohms at 25°C over the temperature range of -50°C to +75°C. Coil current is 5 milliamperes. Desire total compensated resistance of approximately 4500 ohms.

The Solution:

- (a) Calculate coil resistance for 25 degree temperature increments throughout the temperature range.
- (b) Select Keystone NTC unit having a resistance change slightly greater than that of the coil at the hot end of the prescribed temperature range (i.e. from +50°C to +75°C).
This will result in good compensation with minimum added resistance. The graphed solution illustrates Keystone thermistor, LA-2K-515, with a change in resistance about twice that of the coil over the hot temperature increment. In general, the thermistor which is chosen depends upon specified requirements relating to permissible added circuit resistance.
Selection of the proper thermistor physical size depends upon required time of response, space limitations, and circuit current. For the problem in consideration, one watt size "LA"—5/32" diameter by 1/2" length—appears satisfactory.
- (c) Good compensation of coils over wide

- temperature ranges generally requires use of a low temperature coefficient shunt across the thermistor unit to provide a fairly linear NTC response throughout the temperature range. Hence, select the proper shunt value to provide the required resistance change and calculate the response at intermediate temperatures.
- (d) Add coil resistance and compensating resistance at each temperature. The total resistance of the compensated network should be constant within a small percentage.
- (e) Calculate initial wattage developed across the thermistor unit at the low and high end of the temperature range. For self-heating to be negligible, initial wattage should be a small percentage of the maximum wattage rating of the unit.
- (f) For best response under actual circuit conditions, the thermistor should be mounted in proximity with the coil so that they track each other with relation to any temperature changes.



CALCULATIONS

Temp °C	Coil R Ohms	Keystone Part LA-2K-515 Ohms	LTC Shunt Ohms	NTC & Shunt Ohms	Total R Ohms
-50	2265	30000	↑	2290	4555
-25	2576	11700		2050	4626
0	2888	5300	2480	1690	4578
25	3200	2700		1290	4490
50	3512	1550		955	4467
75	3824	950	↓	687	4511

Initial wattage @ -50°C = 0.00437 watt
 " " @ 75°C = 0.0125 watt

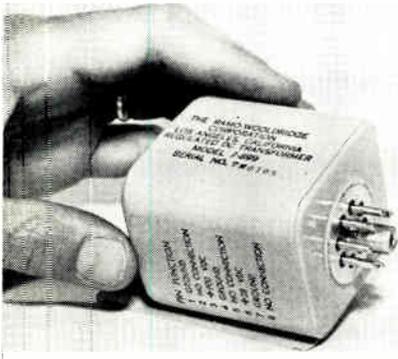
Keystone

CARBON COMPANY
 Resistor Division
 ST. MARYS, PA.

If you have a temperature compensation or other application suggesting the use of thermistors, we invite you to have your problem reviewed by Keystone engineers. Write us, without obligation of any kind.

DC POWER SUPPLIES

A 900 v. regulated dc. transformer has been added to a wide selection of transistorized, dc power suppliers. Designed for use in extreme environmental conditions, the unit is potted



in epoxy resin and sealed. Operates over ambient temperature range of -55 to 71°C. Unaffected by extremes of shock and vibration. Package operates on 24 to 32 vdc. input and delivers 900 vdc. at 30 μ a within 3%. Output ripple is regulated within 3 v. peak to peak. The entire unit is integrated in a 2 x 2 3/4 in. package. The Ramo-Wooldridge Corp., P. O. Box 8405, Denver 10, Colo.

Circle 209 on Inquiry Card, page 201

TRIMMING POTS

Sub-miniature, precision wire-wound trimming potentiometers with tabs especially for printed circuit applications, these new Acetrims have all the features of the regular line with round or flat tabs in place of terminals, to facilitate and speed up assembly with other circuit elements. Standard specifications: 1/2 in. size; weight 1/4 oz.; 10 ohms to 150K;

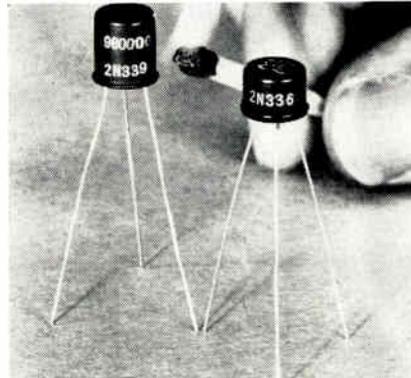


power 2 W @ 60° C. max.; temp. -55° C. to 125° C.; withstands shock, vibration, acceleration; meets applicable MIL SPECS. Ace Electronics Associates, Inc., 103 Dover St., Somerville 44, Mass.

Circle 210 on Inquiry Card, page 201

SILICON TRANSISTORS

Fifteen new silicon transistors are available. These round welded case transistors are designed and built for use with automatic production techniques in addition to meeting military

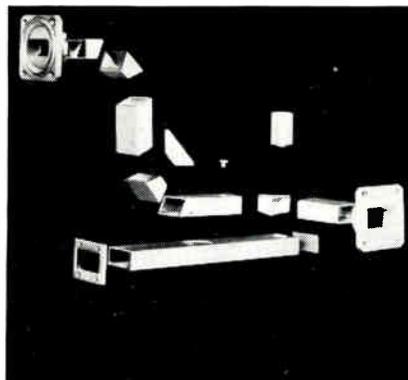


specs. Highlighting the silicon products are 2 switching transistors with total switching times down to 100 milli-microsec. Both switchers are N-P-N grown-diffused types featuring high alpha cutoff frequencies and low collector capacities. The other 13 welded case silicon units include 3 h-f tetrodes, 5 medium power devices, and 5 small signal transistors. Texas Instruments, Inc., Dallas 9, Tex.

Circle 211 on Inquiry Card, page 201

FLUX-DIP BRAZING

Flux-dip brazing, a new technique for joining complex, multi-joint aluminum assemblies in one operation, is now available. This process eliminates the many drawbacks of hand brazing, and assures unmatched high volume, low cost production. The major benefits of flux dip brazing are: mechanical accuracy, high strength, quality finish, and economy. It has proven

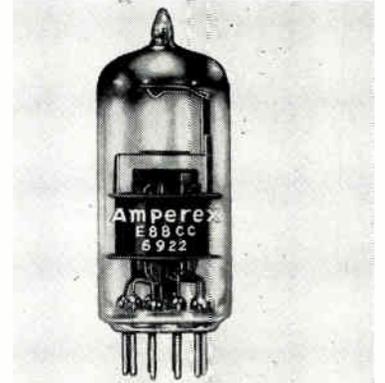


ideal for brazing waveguides, antennas, chassis and microwave assemblies and also has found wide application in the aviation, missile and instrument industries. Waveline, Inc., Caldwell, New Jersey.

Circle 212 on Inquiry Card, page 201

TWIN TRIODE

The new E88CC/6922 low-mu miniature twin triode is one of the "Premium Quality" line of guaranteed 10,000-hour tubes. Tube features, in addition to its long life, high trans-

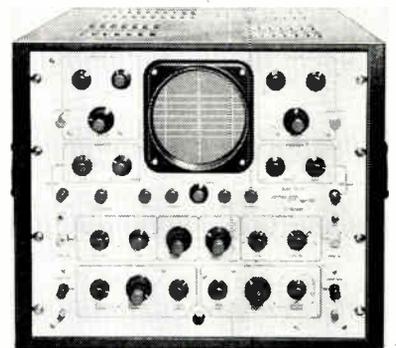


conductance, low noise and rugged construction. Its principal uses are in cascode circuits, HF and IF amplifiers, mixer and phase inverter stages, and as a multivibrator and cathode follower in computers. It has a separate cathode for each triode section. Detailed data and applications engineering information are available. Amperex Electronic Corp., 230 Duffy Ave., Hicksville, L. I., N. Y.

Circle 213 on Inquiry Card, page 201

2-CHANNEL SCOPE

Equipped with vertical amplifiers capable of handling any frequency from DC to 15 MC, the model K-215 2-channel oscilloscope provides for accurate triggering, viewing or recording of simultaneous phenomena on a wide range of test or laboratory procedures. Two variable sweep generators have expanded ranges from 0.1 μ sec/cm to 1 sec/cm. Features include



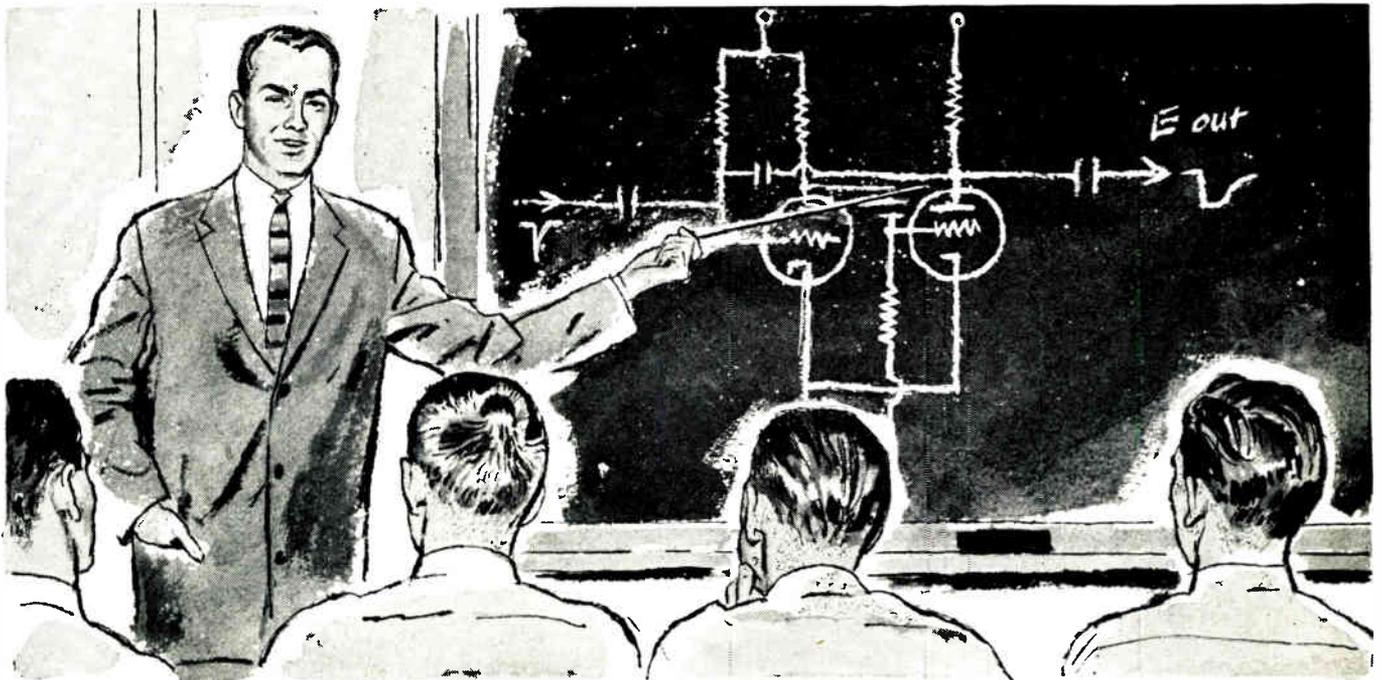
10 kv acceleration potential and transistorized multi-vibrator. Time base is separate or common as selected. Triggering is either internal or external. Electronic Tube Corp., 1200 E. Mermaid Lane, Phila. 18, Pa.

Circle 214 on Inquiry Card, page 201

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for the moon**

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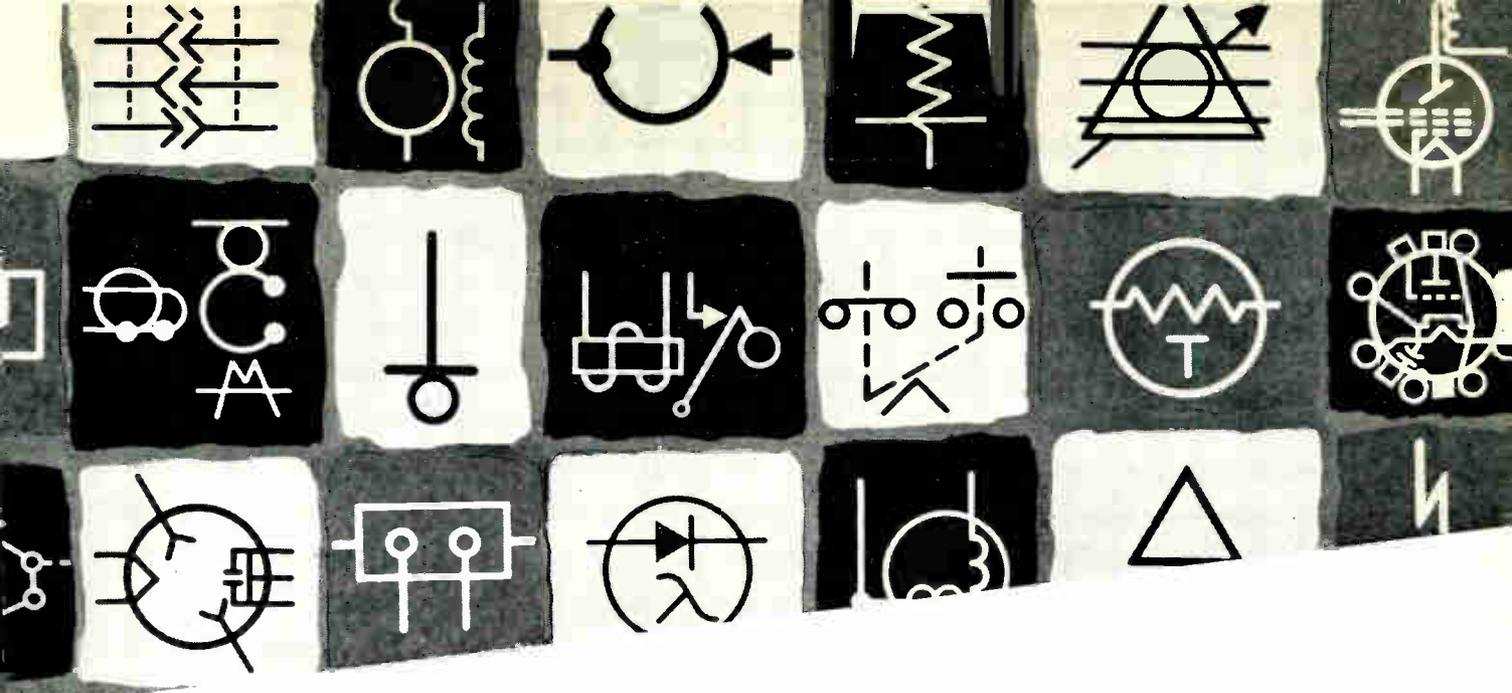
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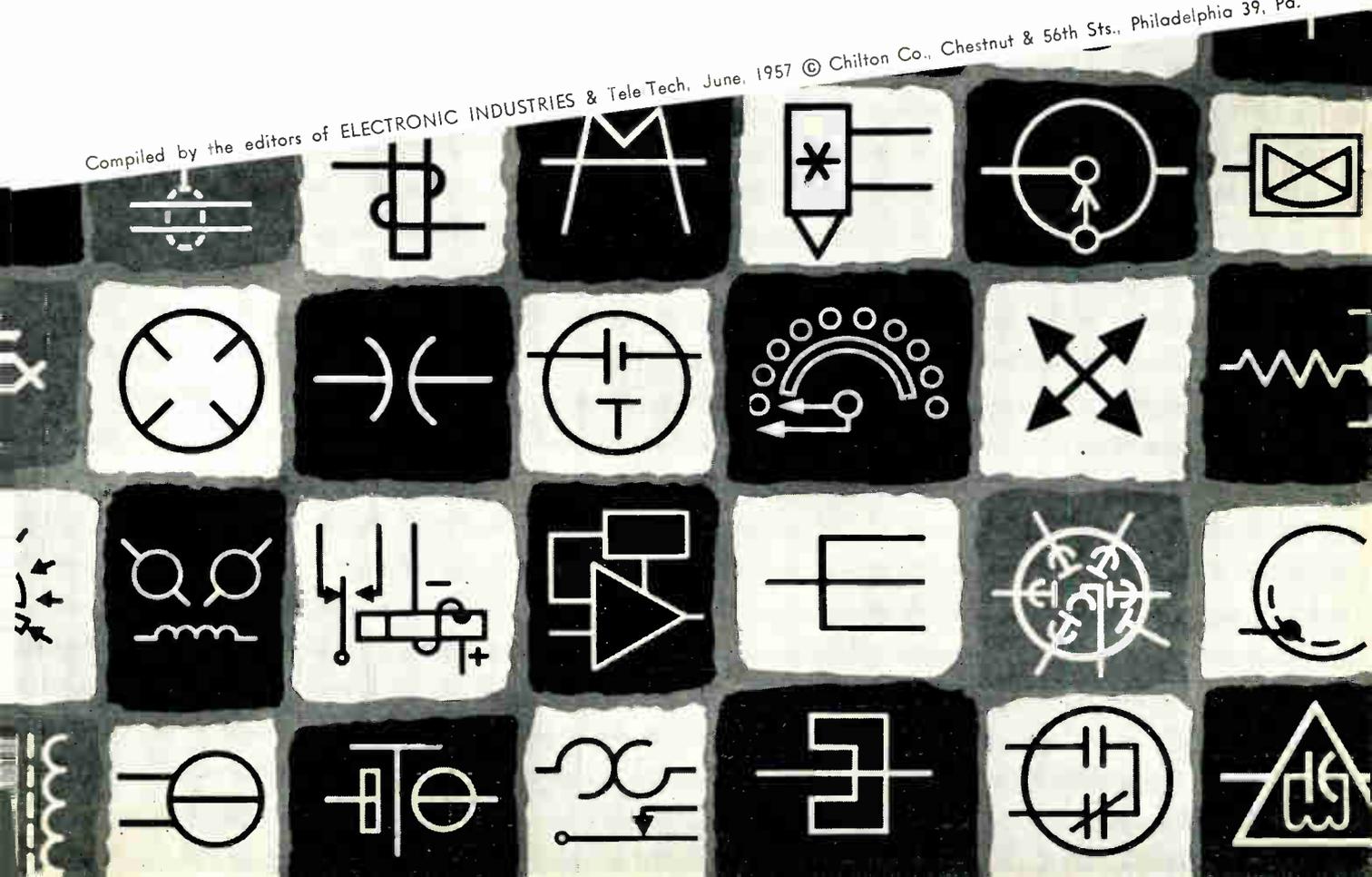




1957 ELECTRONIC INDUSTRIES DIRECTORY

(Fifteenth Edition)

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Product Finding Index

A fast reference guide that enables you to find the product you want in the Product Directory — quickly. Here's how to use the Product Finding Index:

(1) Look for the product you want (under the name you ordinarily use to identify it). (2) Turn to the section number given in the Product Finding

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		Screws, standard	28-52				

Product	Section & Code No.	Product	Section & Code No.	Product	Section & Code No.	Product	Section & Code No.
Telemetering, guided missiles	9-26	Transformers, instrument	94-11	Tubes, scintillation	97-28	Wire, high voltage	100-38
Telemetering, military equip.	55-12	Transformers, insulation	94-12	Tubes, scintillation, nuclear	65-30	Wire, hookup	100-39
Telemetering, military sys, eng.	56-7	Transformers, isolation	94-13	Tubes, sparkgap	97-29	Wire, litz	100-40
Telemetering, missiles	57-10	Transformers, microphone	53-7	Tubes, special purpose	97-30	Wire, magnet	100-41
Telephones, systems	86-19	Transformers, microwave	94-14	Tubes, probe	97-31	Wire, magnetic recording	76-21
Telephones, portable field	58-8	Transformers, modulation	94-15	Tubes, subminiature	97-32	Wire, magnetic recording	85-11
Telephones, sound powered	52-20	Transformers, plate	94-16	Tubes, switching	97-33	Wire, magnetic recording	100-42
Telephones, sound powered	86-20	Transformers, plug-in	94-17	Tubes, thyratron	97-34	Wire marking	100-43
Tellurium	47-47	Transformers, power receiving	94-18	Tubes, TR	97-35	Wire mesh	28-69
Terminal boards	20-40	Transformers, power transmit	94-19	Tubes, transducer	97-36	Wire, metal plated	100-44
Terminal lug swaggers	93-95	Transformers, precision		Tubes, transmitting-receiving	97-37	Wire, metal shielded	100-45
Terminal strips	20-41	Transformers, precision		Tubes, transmitting	97-38	Wire, molybdenum	100-46
Terminals & terminal strips	14-24	Transformers, precision TV	94-20	Tubes, traveling wave	97-39	Wire, monel	100-47
Terminals	20-35	Transformers, deflection	94-21	Tubes, TV camera iconoscopes	97-40	Wire, nickel-clad copper	98-40
Terminals, thermally sealed	20-36	Transformers, precision		Tubes, TV camera image		Wire parts, tube	98-40
Terminals, safety	14-14	Transformers, precision		orthicons	97-41	Wire, phosphor bronze	100-49
Terminals, snap	20-37	Transformers, pulse	94-23	Tubes, TV picture	97-42	Wire, plastic insulated	100-50
Terminals, solderless	20-38	Transformers, RF-IF	94-24	Tubes, TV picture, rebuilt	97-43	Wire, platinum	100-51
Terminals, standoff	20-39	Transformers, toroidal	94-25	Tubes, ultra-violet	97-44	Wire reels	100-52
Terminations, microwave	54-34	Transformers, transistor	94-26	Tubes, voltage regulators	97-45	Wire, resistance	100-53
Test equipment, aviation	9-13	Transformers, ultrasonic	94-27	Tubes, x-ray	97-46	Wire, shielded	100-54
Test equipment, combustion	44-12	Transformers, vibrator	94-28	Tubing, aluminum	47-66	Wire, silica bronze	100-55
Test equipment, microwave	46-26	Transformers, voltage regulat.	94-29	Tubing, asbestos	47-67	Wire, silver plated	100-56
Test equipment, microwave	54-41	Transistor analyzers	5-28	Tubing, brass	47-68	Wire, stainless steel	108-57
Test equipment, studio	90-11	Transistors, junction	81-4	Tubing, ceramic	47-69	Wire, steel	100-58
Test leads	100-19	Transistors, photo	81-5	Tubing, copper	47-70	Wire, strippers, mechanical	93-40
Test units, acceleration,		Transistors, point-contact	81-6	Tubing, glass fibre insulation	47-71	Wire, tantalum	100-59
military	55-13	Transistors, power	81-7	Tubing, glass precision	47-72	Wire, teflon insulated	100-60
Test units, vibration, military	55-14	Transistors, selenium	81-8	Tubing, metal alloy	47-73	Wire, thermocouple	100-61
Testers, battery	10-17	Transistors, surface barrier	81-9	Tubing, metal hose, flexible	47-74	Wire, titanium	100-62
Testers, battery	92-1	Transistors, switching	81-10	Tubing, monel	47-75	Wire, tungsten	100-63
Testers, cable	92-2	Transistors, tetraode	81-11	Tubing, nickel	47-76	Wire, zirconium	100-64
Testers, capacitor	92-3	Transmission line, wire &		Tubing, paper	47-77	Wirewound strips	79-48
Testers, cathode-ray tube	92-4	cable	100-20	Tubing, phenolic	47-78	Woofers	87-11
Testers, circuit	92-5	Transmission lines, microwave	54-35	Tubing, plastic	47-79	Wrenches	93-41
Testers, coil	92-6	Transmitters, amateur	95-3	Tubing, silver	47-80	Wrenches, wratchet	93-21
Testers, computer	19-9	Transmitters, aviation	95-4	Tubing, steel	47-81	X-ray cameras, medical	46-24
Testers, computer	92-8	Transmitters, aviation	9-34	Tubing, steel, stainless	47-82	X-ray equipment, medical	46-25
Testers, crystal	92-9	Transmitters, broadcast, AM	95-5	Tubing, tungston	47-83	X-ray equipment,	
Testers, diode	92-10	Transmitters, broadcast, FM	95-6	Tubing, varnished or		photographic	46-26
Testers, distortion	92-11	Transmitters, broadcast,		lacquered	47-84	X-ray inspection machines,	
Testers, guided missile	92-12	UHF-TV	95-7	Tubing, wire, woven or knitted	47-85	industrial	22-77
Testers, insulation	92-13	Transmitters, broadcast,		Uners, AM	99-1	Zinc	47-53
Testers, microwave	92-14	VHF-TV	95-8	Uners, AM-FM	99-2	Zirconium	47-54
Testers, motor	92-15	Transmitters, citizens radio	95-9	Uners, automatic	99-3		
Testers, multimeter	92-16	Transmitters, code	95-10	Uners, automatic	21-14		
Testers, radar	92-17	Transmitters, color TV	95-11	Uners, FM	99-4		
Testers, relay	92-18	Transmitters, cue	89-64	Uners, klystron	99-5		
Testers, synchro error	92-19	Transmitters, direction		Uners, microwave	54-36		
Testers, thickness, ultrasonic	92-20	finding	95-12	Uners, microwave	99-6		
Testers, transistor	92-21	Transmitters, facsimile	95-13	Uners, permeability	99-7		
Testers, tube, automatic	92-22	Transmitters, fixed frequency	95-14	Uners, television	99-8		
Testers, tube socket	92-23	Transmitters, fixed station		Uners, UHF	99-9		
Testers, vibration	92-24	communication	95-15	Tungston	47-51		
Thermistors	79-45	Transmitters, loran	95-16	Tuning forks	44-48		
Thermocouples	44-43	Transmitters, marine	95-17	Tuning units, antenna	8-28		
Thermopiles	44-44	Transmitters, microwave	95-18	Turntables, recording acces.	76-20		
Thickness equip., electronic	31-19	Transmitters, mobile	58-14	Turntables, sound equip.	84-38		
Thickness equip., ultrasonic	31-20	Transmitters, mobile	95-19	Turrets, camera	89-11		
Thorium	47-48	Transmitters, pulse time		Tweeters	87-10		
Timers, counting	22-70	modulation	95-20	Tweezers	93-38		
Timers, cyclic	22-71	Transmitters, radar	70-14	Ultrasonic equipment, medical	46-23		
Timers, impulse	22-72	Transmitters, radar	95-21	Ultra-violet equipment	31-25		
Timers, interval	22-73	Transmitters, radio range	95-22	Uronium	47-52		
Timers, photoelectric	22-74	Transmitters, railroad	95-23	Variators	79-46		
Timers, sequence	22-75	Transmitters, single sideband	95-24	Varnish	15-41		
Timers, thermal	22-76	Transmitters, sonar	95-25	Vibrators	67-25		
Tin & alloys	47-49	Transmitters, telemetering	95-26	Vibrators, ultrasonic	31-27		
Titanium	47-50	Transmitters, UHF	95-27	Vibrators, ultrasonic	47-26		
Titling equipment	61-24	Transmitters, VHF	95-28	Vises	93-39		
Titration apparatus, electron.	69-55	Transponders, missiles	57-11	Voltmeters, digital	49-33		
Tools, alignment	93-1	Transponders, navigation	64-15	Voltmeters, electrostatic	49-34		
Tools, compressed air product	69-9	Trays, cabinet	11-31	Voltmeters, slideback	49-35		
Tools, rivet	93-22	Tripods	89-65	Walkie-talkies	58-15		
Tools, splicing	93-33	Tube parts, fused quartz	98-20	Washers, brass	28-60		
Towers and supports,		Tube pin straighteners	93-36	Washers, ceramic	28-61		
commercial	6-25	Tube pullers	93-37	Washers, felt	28-62		
Towers and supports, home	7-13	Tube seal leads	98-36	Washers, fibre	28-63		
Tracers, signal	44-45	Tubes, ATR	97-1	Washers, lock	28-64		
Transceivers, aviation,		Tubes, backward wave	97-2	Washers, metal	28-65		
military	55-15	Tubes, ballast	97-3	Washers, mica	28-66		
Transceivers, aviation,		Tubes, battery charger	97-4	Washers, plastic	28-67		
mobile	58-9	Tubes, cathode-ray	97-5	Washers, rubber	28-68		
Transceivers, lifeboat,		Tubes, ceramic	97-6	Watches, stop	90-12		
military	55-16	Tubes, color	89-66	Waveguides, flexible	54-37		
Transceivers, lifeboat,		Tubes, color TV picture	97-7	Waveguides, rigid	54-38		
mobile	58-10	Tubes, computer, storage	19-49	Wave traps	72-23		
Transceivers, portable,		Tubes, counting	97-8	Wax	15-42		
military	55-17	Tubes, electron multiplier	97-9	Wedges, woodslot	63-39		
Transceivers, portable,		Tubes, gamma ray	97-10	Welders	69-56		
mobile	58-11	Tubes, gamma ray, nuclear	65-28	Windings, transformer	94-30		
Transceivers, UHF, mobile	58-12	Tubes, gas	97-11	Windows, glass	25-30		
Transceivers, VHF, military	55-18	Tubes, geiger counter	95-12	Windows, metallized	25-31		
Transceivers, VHF, mobile	58-13	Tubes, geiger counter, nuclear	67-29	Windows, waveguide	54-42		
Transducers, aviation	9-14	Tubes, glow or discharge	97-13	Wire, aluminum	100-21		
Transducers, industrial	31-21	Tubes, ignition	97-14	Wire, asbestos insulated	100-22		
Transducers, measurement	44-46	Tubes, infra-red	97-15	Wire, beryllium copper	100-23		
Transducers, sonar	44-47	Tubes, klystron	97-16	Wire, cat whiskers	100-24		
Transformers, antenna		Tubes, magnetron	97-17	Wire, ceramic insulated	100-25		
matching	94-1	Tubes, miniature	97-18	Wire, copper, bare	100-27		
Transformers, audio	94-2	Tubes, noise	97-19	Wire, copper clad	100-28		
Transformers, audio, very		Tubes, photo	97-20	Wire, copper, insulated	100-29		
low frequency	94-3	Tubes, pirani	97-21	Wire, cut & stripped	100-30		
Transformers, autotransformer	94-4	Tubes, power amplifier	97-22	Wire, enameled	100-31		
Transformers, bias	94-5	Tubes, projection	97-23	Wire filament	100-32		
Transformers, current	94-6	Tubes, receiving	97-24	Wire forms	100-33		
Transformers, filament	94-7	Tubes, rectifying, industrial	97-25	Wire, glass insulated	100-34		
Transformers, flyback	94-8	Tubes, rectifying, receiving	97-26	Wire, gold plated	100-35		
Transformers, 400 cycle	94-9	Tubes, rectifying,		Wire, guy	100-36		
Transformers, HV	94-10	transmitting	97-27	Wire harnesses	100-37		

82—SERVICES, BROADCAST

AM program packages	1
Audio design & service	2
Film, editing & titling	3
Film, magnetic stripe	4
Film processing	5
Film studios	6
Film, TV	7
Frequency measuring	8
Kinescoping	9
Libraries, film	10
Libraries, magnetic tape	11
Libraries, record	12
News services	13
Optical repairs	14
Recording services	15
Sound dubbing	16
Sound effects	17
Sound studios	18
Stylus resharpening	19
Tower erection & maintenance	20
TV program packages	21
TV props & scenery	22
TV special effects	23
TV slides	24
Transcription	25

83—SERVICES, INDUSTRIAL

Aerial surveys	1
Aircraft maintenance	2
Assembly	3
Brazing	4
Carrier current maintenance	5
Computer service	6
Construction	7
Electrical testing	8
Electronic equipment repairs	9
Encapsulation	10
Engraving & profiling	11
Fabrication, metal parts	12
Fabrication, non-metal parts	13
Frequency calibration	14
Heat treating	15
Hermetic sealing	16
Inspection	17
Marine maintenance	18
Marking	19
Metal finishing	20
Microwave calibrating	21
Microwave relay maintenance	22
Military systems engineering	23
Optical repairs	24
Packaging	25
Plating, metal on plastic	26
Plating, precious metal	27
Police, fire, municipal	
maintenance	28
Qualification testing	29
Soldering	30
Test equipment repairs	31
Testing	32
Tinning, hot dipped	33
Treating, fungus & moisture	
proof	34
Welding	35

1957 ELECTRONIC INDUSTRIES DIRECTORY

Product Listings

This is a listing of end products, component parts, equipment and instruments in the radio-TV-electronic industries, with the addition this year of such supplementary listings as accessories, cabinets, chemicals, hardware, raw materials and services related to the electronic field. Names and addresses of manufacturers are given for 2,666 product categories which are arranged into 100

major groups. Companies making these products or offering services in the field are arranged alphabetically into 100 major groups. Addresses are given with numbered references to group subdivisions. These numbers are printed to the right of each company to facilitate quick reference in selecting given categories.

1—AMPLIFIERS, AUDIO

Amplifiers, audio	1	Artisan Electronics Corp 171 Ridgedale Ave Morristown NJ	1	Collins Radio Co 855 35 St N E Cedar Rapids Iowa	1-7-18
Amplifiers, cuing	2	Atlantic Research Corp 901 N Columbus St Alexandria Va	10-16	Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio	21-57
Amplifiers, decade	3	Audio Equipment Co 805 Middle Neck Rd Great Neck NY	1-6-14-22	Commercial Radio Sound Corp 652 1 Ave New York 16 NY	1-4-6-10-18
Amplifiers, distribution	4	Audio Instrument Co 133 W 14th St New York 11 NY	10	Communication Equipment & Eng'g Co 5646 W Race Ave Chicago 44 Ill	1-6-8-18
Amplifiers, high-fidelity	5	Autoerat Electronics Co 5024 Elm St Skokie Ill	1	Computing Devices of Canada Ltd P O Box 508 Ottawa Ontario Can	11
Amplifiers, industrial sound	6	Avionics Ltd P O Box 200 Niagara-on- the-Lake Ontario Canada	1-5-6-10-11-16	Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	1-4-7-9-13 16-22-23
Amplifiers, isolation	7	Axler Associates Inc 102-42 43rd Ave Corona 68 NY	1-9-23	Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	16-18
Amplifiers, limiting ..	8	Ballantine Labs Inc Boonton NJ	1-3	Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	1
Amplifiers, line	9	Barber & Howard Co East Ave Westerly RI	20	Cook Labs Inc 101 2 St Stamford Conn	19
Amplifiers, microphone	10	Barker Sales Co 996 Edgewater Ave Ridgefield NJ	1-5-23	Cossor (Canada) Ltd 301 Windsor St	
Amplifiers, miniature plug-in ...	11	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	1-3-22	Halifax Nova Scotia Canada	1-5-6
Amplifiers, mixing	12	Beckman Instruments Inc Data & Control Systems Scientific Instrument Div 325 N Muller Ave Anaheim Calif	16	Dayton Aviation Radio & Equipment Corp R R 3 Troy Ohio	1
Amplifiers, monitoring	13	Bell Aircraft Corp P O Box 1 Buffalo 5 NY	1-3-7-8-9-11-12-13-15-16-18-23	Deagan Inc J C 1770 W Berceau Ave Chicago Ill	1
Amplifiers, musical instrument ..	14	Bell Sound Systems Inc 555 Marion Rd Columbus 7 Ohio	1-5-6-19	Denrad Mfg Co 310 W Woodard St Lenison Texas	1-2-10-12-13-17-18
Amplifiers, noise-suppressing ...	15	Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	1-22	Denson Electronics Corp P O Box 122 Rockville Conn	5-6
Amplifiers, plug-in	16	Bendix Radio Div Bendix Aviation Corp E Joppa Rd Towson 4 Md	1-22	DeWald Radio Mfg Corp 35-15 37 Ave Long Island City 1 NY	1-18
Amplifiers, recording	17	Bergen Labs 247 Crooks Ave Clifton NJ	22	Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	1-3-4-5-9 16-17-18-22
Amplifiers, remote	18	Berkshire Labs 586 Bank Village Greenville NH	16-22	DuKane Corp St Charles Ill	11-16-22
Amplifiers, stereophonic	19	Berndt-Bach Inc Auricon Div 6900 Romaine St Hollywood 38 Calif	17	Dunlap Electronics 764 9 St Des Moines 14 Iowa	1-5-11-20-23
Amplifiers, tape playback	20	Bliss Electronic Corp Box 366 Sussex NJ	1	Dwyer Eng'g Co Pine St Ext Nashua NH	22
Amplifiers, tone-control	21	Bogen Co David P O Box 500 Paramus NJ	1-5-6-14-16-19-20	Dyna Co 5142 Master St Philadelphia 31 Pa	1-5
Amplifiers, transistor	22	Briggs Associates 10 DeKalb St Norristown Pa	3	Dyna-Empire Inc 1075 Stewart Ave Garden City LI NY	10
Amplifiers, wideband	23	British Industries Corp 80 Shore Rd Port Washington NY	1-5	Dynalysis Development Labs Inc 11941 Wilshire Blvd Los Angeles 25 Calif	1
Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	1-22	Bruno-New York Industries Corp 460 W 34 St New York 1 NY	22	Dynamics Instrumentation Co Div Aberhill Corp	17
Advanced Electronics Inc 94 Silas Deane Hwy Rocky Hill 9 Conn	1	Brush Electronics Co 3405 Perkins Ave Cleveland Ohio	6-10-16-17	Dynamics Research Associates Div Universal Match Corp	16
Aerovox Corp 740 Belleville Ave New Bedford Mass	2	Budelman Radio Corp 375 Fairfield Ave Stamford Conn	1-6	Electrend Products Corp Box 110 St Joseph Mich	1-5
Alden Electronic & Impulse Recording P O Box 125 Westboro Mass	17	Bundy Electronics Corp 171 Fabyan Pl Newark 12 NJ	1-5-6-13-17	Electrola Inc 751 N Clark St Chicago 26 Ill	1
Airtronix Development Corp 4902 Church St Brooklyn 3 NY	1-5-6-12-14-20 21-22-23	Burr-Brown Research Corp Route 4 Box 139 Tucson Ariz	1-3-7-10-22-23	Electron Enterprises 6917 W Stanley Ave Berwyn Ill	1-5-14-22
Allied Radio Corp 100 N Western Ave Chicago 80 Ill	1-4-5-14	Buss-Clement-Doughten & Associates 201 B Studio Hill Chester Springs Pa	1-4-5-6-8-9-12-13-15 16-17-18-19-22-23	Electronic Communication Equipment Co 1249 W Loyola Ave Chicago 26 Ill	1-4-6-8-9-10 12-13-18
Altec Lansing Corp 1515 S Manchester Ave Anaheim Calif	1-4-5-6-8-9-10-11- 12-13-16-18-19-21	Calbest Electronics Co 4801 Exposition Blvd Los Angeles 16 Calif	1-5	Electronic Eng'g Co 362 W Bowers St Akron 7 Ohio	6-18-23
Ameco 2949 W Osborn Rd Phoenix Ariz	23	Capitol Transcription Service 1120-A Conn Ave N W Washington 6 D C	1-2-9-10-12-18 17-18-21-22	Electronic Eng'g Co of Calif 180 S Alvarado Los Angeles 57 Calif	9-22
American Communications Corp 280 Broadway New York 17 NY	1-4-5	Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wis	1-10-22	Electronic Instrument Co 84 Withers St Brooklyn 11 NY	1-5-23
American Electronic Labs 121 N 7 St Philadelphia 6 Pa	23	Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill	8-22	Electronic Research Associates 67 E Centre St Nutley 10 NJ	1-3
American Machine & Foundry Co Products Group 1101 N Royal St Alexandria Va	1-6-16	Century Projector Corp 729 7 Ave New York 19 NY	1	Electronic Systems Eng'g Co 903 Cravens Blvd Oklahoma City Okla	1-8-15
American Mica Radio Corp 235 Parker Ave Manasquan NJ	1-5	Chesapeake Instrument Corp Shady Side Md	1	Electrosolids Corp 7436 Varma Ave N Hollywood Calif	1-12-16-22
American Research & Mfg Corp 920 Halpine Ave Rockville Md	17	Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill	3-11-16	Electro Sound Corp 115 Halleck St Boston 15 Mass	1-6-20
AMI Inc 1500 Union Ave Grand Rapids 2 Mich	1-5-6	Cinematic Developments 2125 32 Ave San Francisco 16 Calif	1-20	Electro-Technical Labs Div Mandrel Industries 5134 Glenmont Houston Texas	20
Amplifier Corp of America 398 Broadway New York 13 NY	1-17	Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	1		
Anchor Specialty Mfg Co Hollister Rd Teterboro NJ	15				
Anderton Electronic Lab 129 E 1800 S St Bountiful Utah	1-2-3-4-5-7-8-9-10 12-13-16-17-18-19-20				
Ansley Mfg Co Arthur New Hope Pa	5				
Antlab Inc 4950 N High St Columbus 14 Ohio	13				
Applied Electronics Co 213 E Grand Ave S San Francisco Calif	1				

Electro-Voice Inc					
Cecil & Carrol Sts Buchanan Mich	1-5-9-10				
Elm Labs					
10 Washington Ave					
Hastings-on-Hudson NY	1				
El-Tronics Inc					
Penn Ave Mayfield Pa	1				
Endevco Corp					
161 E California St Pasadena Calif	10				
Engineered Electronics Co					
506 E 1 St Santa Ana Calif	1-11-16-23				
E O Electronics Inc					
Mountain Lakes NJ	3				
Epsco Inc					
588 Commonwealth Ave Boston 15 Mass	1				
Ercona Corp					
551 5 Ave New York 17 NY	1-5-17-19-20				
Erco Radio Labs Inc					
637 Stewart Ave Garden City NY	1-8-22				
Fairchild Guided Missiles Div					
Fairchild Engine & Airplane Corp					
Straight Path Wyandanch LI NY	3-15				
Fairchild Recording Equipment Co					
10-40 45 Ave Long Island City 1 NY	1-5				
Federal Mfg & Eng'g Corp					
1055 Stewart Ave Garden City NY	1				
Federal Telephone & Radio Co Div IT&T					
100 Kingsland Rd Clifton NJ	1				
Femco Inc					
Irwin Pa	1-6				
Fidelity Amplifier Co					
703 Willow St Chicago 14 Ill	1-22				
Fisher Radio Corp					
21-21 44 Dr	1-5-6-10-12-14-15-17				
Long Island City 1 NY	18-20-21-22-23				
Freed Transformer Co					
1718-36 Weirfield St Brooklyn 27 NY	11				
Gates Radio Co					
123 Hampshire St					
Quincy Ill	1-8-9-10-12-13-18-22				
General Precision Lab Inc					
63 Bedford Rd Pleasantville NY	4				
General Radio Co					
275 Massachusetts Ave					
Cambridge 39 Mass	1-23				
G & M Equipment Co					
7315 Varna Ave N Hollywood Calif	1-6				
Good Electric Corp					
Natick Mass	11-16				
Goodyear Aircraft Corp					
1210 Massillon Rd Akron 15 Ohio	16-22				
Gotham Audio Development Corp	1-4-6-9-13				
2 W 46 St New York 86 NY	17-20-23				
GPS Instrument Co					
811 Boylston St Boston 16 Mass	6				
Gray Research & Development Co					
Hilliard St Manchester Conn	1-5-6-13				
Greene Co L Charlton					
314 Washington St Newton 58 Mass	16				
Hallcrafters Co					
4401 W 5 Ave Chicago 24 Ill	1-4				
Hall-Scott Inc Electronics Div					
2950 N Ontario St Burbank Calif	16				
Hamilton Electronics					
2726 Pratt Ave					
Chicago 45 Ill	1-4-5-6-10-12-22				
Hancock Electronics Corp					
2553 Middlefield Rd Redwood City Calif	22				
Harman-Kardon Inc					
520 Main St Westbury LI NY	1				
Harrison Labs					
45 Industrial Rd Berkeley Heights NJ	16				
Harvey-Wells Electronics Inc					
North St Southbridge Mass	1-5				
Hathaway Instrument Div Hamilton					
Watch Co					
5800 E Jewell Ave Denver 22 Colo	17				
Heath Co					
305 Territorial Rd					
Benton Harbor Mich	1-5-23				
Heiland Div Minneapolis-Honeywell					
5200 E Evans Ave Denver 22 Colo	16-17				
Hoover Electronics Co					
3640 Woodland Ave Baltimore 7 Md	11				
Industrial Development Eng'g Assoc					
7900 Pendleton Pike Indianapolis Ind	5				
Industrial Research Labs Div Aeronca					
Mfg Corp					
Hilltop & Frederick Rds Baltimore 28, Md	1				
Industrial Test Equipment Co					
55 E 11 St New York 3 NY	1-3-7-8-23				
Industrial TV Inc					
369 Lexington Ave Clifton NJ	1-4-8				
International Research Associates					
2221 Warwick Ave					
Santa Monica Calif	1-10-22				
Johnson Co E F					
Waseca Minn	1-8				
Kaiser Aircraft & Electronics Corp					
Toledo Electronics Div					
P O Box 437					
Toledo Ohio	1-3-6-9-10-11-12-16-20-22				
Kay Electric Co					
14 Maple Ave Pine Brook NJ	22				
Keithley Instruments Inc.					
12415 Euclid Ave					
Cleveland 6 Ohio	1-3-7-17-23				
Keystone Products Co					
904 23 St Union City NJ	1				
Kinevox-Hallen Div Electromation Co					
1646 18 St Santa Monica Calif	18				
Krohn-Hite Corp					
580 Massachusetts Ave					
Cambridge 39 Mass	1-23				
Kuss Industries Inc					
Tacony & Lewis Sts Philadelphia 24 Pa	22				
Labko Scientific Inc					
111 W Elm Stillwater Okla	5-11-22				
Lab-Tronics Inc					
3656 N Lincoln Ave Chicago Ill	22				
Land-Air Inc Instrument & Electronic Div					
2133 Adams Ave San Leandro Calif	22				
Lane Electronics Mfg Corp					
7254 Atoll Ave N Hollywood Calif	1-7				
Langevin Mfg Corp					
47-37 Austell Pl	1-2-3-4-6-7-9-10-12-13				
Long Island City 1 NY	16-18-22-23				
L E E Inc					
625 NY Ave N W Washington 1 D C	12				
Leads & Northrup Co					
4970 Stenton Ave Philadelphia 44 Pa	17				
Lehigh Valley Electronics Eng'g & Mfg Co					
215 S 3 St Allentown Pa	1				
Lel Inc					
380 Oak St Copiague NY	1				
Ling Electronics Inc					
5120 W Jefferson Blvd					
Los Angeles 16 Calif	1				
Linlar Inc					
4101 San Fernando Rd Glendale 4 Calif	5-22				
Loge Sound Engrs J M					
2171 W Washington Blvd					
Los Angeles 18 Calif	1-6				
Lynmar Engineers Inc					
1432 N Carlisle St					
Philadelphia 21 Pa	1-5-22-23				
McIntosh Laboratory Inc					
2 Chambers St					
Binghamton NY	1-4-5-6-9-12-13-17-23				
Mack Electronics Div Inc Sub Mack					
Trucks Inc					
1120 S 2 St Plainfield NJ	1				
Madison-Fielding Corp					
863 Madison St Brooklyn 21 NY	5-6-10-12				
Magna Electronics Co					
9810 Anza Ave Inglewood 1 Calif	1-14-17				
Magnasync Mfg Co					
5546 Satsuma Ave					
N Hollywood Calif	1-12-13-16-17-19-20				
Magnecord Div Midwestern Instruments Inc					
1101 S Kilbourn Ave					
Chicago 24 Ill	1-17-19-20				
Magnetic Amplifiers Inc					
632 Tinton Ave New York 55 NY	22				
Majestic Int'l Corp					
79 Washington St Brooklyn 1 NY	5				
Marantz Co					
4415 Vernon Blvd					
Long Island City 1 NY	1-5				
Matthew Labs					
146 Riverdale Ave Yonkers NY	17				
Maurer Inc J A					
37-01 31 St					
Long Island City 1 NY	1-12-13-15-17				
Maxson Corp W L					
475 10 Ave New York 18 NY	10				
MB Mfg Co Div Textron Inc					
1060 State St New Haven 11 Conn	1				
Measurement Eng'g Ltd					
232 John St Arnprior Ont Can	1-6-9-22				
Melody Master Mfg Co					
2842 N Cicero Ave					
Chicago 41 Ill	1-3-4-5-18				
Michigan Electronics Inc					
854 N Rockwell St Chicago 22 Ill	1-12-14				
Mid-Century Instrument Co					
611 Broadway New York 12 NY	17				
Midwestern Instruments					
PO Box 7186 Tulsa Okla	17				
Millivac Instrument Corp					
2315 2 Ave Carman Schenectady NY	15-22				
Mine Safety Appliances Co					
201 N Braddock Ave Pittsburgh 8 Pa	1				
Minn-Honeywell Regulator Co					
Ordinance Div Hopkins Minn	16				
Model Eng'g & Mfg Inc					
50 Frederick St Huntington Ind	1-10-16				
Mohawk Business Machines Corp					
944 Halsey St					
Brooklyn 33 NY	1-6-10-12-17-20-22				
Motigraph Inc					
4441 W Lake St Chicago 24 Ill	1-19				
MP Engineering Co Fairfield 3 Conn	1-5				
M Ten Bosch Inc					
80 Wheeler Ave Pleasantville NY	22				
National Aircraft Corp					
3411 Tulare Ave Burbank Calif	1				
National Bell Corp					
6 Lafayette Ave Brooklyn 17 NY	6-14				
National Company Inc					
61 Sherman St Malden 48 Mass	5				
Navco Navigation Computer Corp					
1621 Snyder Ave Philadelphia 45 Pa	11-17				
Neill Co R W					
4320 Montrose Ave Chicago 41 Ill	1-9-10				
Newcomb Audio Products Co					
6824 Lexington Ave	1-4-5-6-9-10-12-14				
Los Angeles 38 Calif	17-18-19-20				
Northern Radio Co					
143 W 22 St New York 11 NY	9				
Nuclear-Electronics Corp					
2632 W Cumberland St Philadelphia 32 Pa	1				
Oberline Inc PO Box 921	1-2-4-5-6-7-12				
Beverly Hills Calif	16-18-19-22				
Oitronix Corp					
235 Underwood Dr Atlanta 5 Ga	17				
Omega Instrument Co					
103 E Altadena Dr Altadena Calif	23				
Palmer Inc M V					
4002 Fruit Valley Rd					
Vancouver Wash	5-6-7-8-9-19-21				
Pampa Electronics Corp					
7354 Frankford Ave					
Philadelphia 36 Pa	1-20				
Pedersen Electronics					
3667A Mt Diablo Blvd Lafayette Calif	1-5-6				
Peer Inc 1200 Milton St					
Benton Harbor Mich	1				
Pentron Corp					
777 S Tripp Ave					
Chicago 24 Ill	1-6-12-17-19-20				
Permoflux products Co					
4101 San Fernando Rd					
Glendale Calif	1-5-7-10-11-16-19-22				
Philbrick Researches Inc George A					
230 Congress St Boston 10 Mass	16				
Philmore Mfg Co					
113 University Pl New York 3 NY	5				
Photon Instrument Co					
6516 Detroit Ave Cleveland 2 Ohio	16-17				
Plastics & Electronics Corp					
P O Box 38 Station J					
Buffalo 8 NY	1-22				
Power Supplies Inc					
1005 Olive St Highland Ill	3				
Pratt Albert					
114 W Lake View Ave Milwaukee 17 Wisc	5				
Precise Development Corp					
2 Neil Ct Oceanside NY	1-10-22-23				

Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	16	US Recording Co 1121 Vermont Ave Washington 5 DC	1-2-4-5-6-9-10 12-17-18-20	Ampitel Inc 342 W 40 St New York 18 NY	1-2-14
Shasta Div Beckman Instruments Inc PO Box 296 Station A Richmond Calif	23	Valandy Electronics Corp 61-35 166 St Flushing 68 NY	4-5-22	Amtron Corp 17 Felton St Waltham 54 Mass	9-14-15
Shepard Labs Inc 480 Morris Ave Summit NJ	10-20	Valco Mfg Co 4700 W Walton St Chicago 51 Ill	14	Andersen Labs Inc 39 Talcott Rd W Hartford Conn	8
Sherwood Electronic Labs Inc 2802 W Cullom Ave Chicago 18 Ill	5	Varo Mfg Co 2201 Walnut St Garland Texas	1-22	Antlab Inc 4950 N High St Columbus 14 Ohio	11
Shrader Sound Inc 2802 M St NW Washington 7 DC	1	Vicon Inc 1353 Mesita Rd Colorado Springs Colo	22	Applied Research Inc 163-07 Depot Rd Flushing 58 NY	3-14-16
Simplex Equipment Corp 55 La France Ave Bloomfield NJ	1-5-6-10-19-22	Vidaire Electronics Mfg Corp 576 W Merrick Rd Lynbrook NY	1-16	Babcock Radio Eng'g Inc 7942 Woodley Ave Van Nuys Calif	8
Simpson Mfg Co Mark 32-28 49 St Long Island City 3 NY	1-4-5-6-7-9-12 13-14-17-18-21	Virginia Electronics Co River Rd & B&O RR Washington 16 DC	1-4-7-9-10-11 12-18-22	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	3-14-15-16
Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	2-5-17	V-M Corp 4 & Park Sts Benton Harbor Mich	5	Bell Aircraft Corp P O Box 1 Buffalo 5 NY	3-4-6-7-8-9-10-11 12-13-14-15-16
Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	1-23	Volkers & Schaffer Mfg Corp 2315 2 Ave Carman Schenectady NY	1-22-23	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	13
Sonex Inc 73 S State Rd Upper Darby Pa	1-5-21-22	Voron & Co George 835 N 19 St Philadelphia 30 Pa	4-5-6-8-9-10-12-23	Blonder-Tongue Laboratories 9-25 Alling St Newark 2 NJ	1-16
Spivey Inc James S 4908 Hampden Lane Washington 14 DC	1-22	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	1-22	Boehme Inc H O 915 Broadway New York 10 NY	5
Stancil-Hoffman Corp 921 N Highland Ave Hollywood 38 Calif	1-6-8-17-19-20-22	Walkirt Co 141 W Hazel St Inglewood 3 Calif	1-16	Bozue Electric Mfg Co Iowa Ave Paterson 3 NJ	13
Standard Electronics Div Radio Eng'g Labs 30 & Borden Sts Long Island City NY	12	Wallon Associates Ltd 963 Frelinghuysen Ave Newark 12 NJ	1	Bolton Labs Inc W Main St Bolton Mass	9
Standard Instruments PO Box 11556 Dallas 18 Texas	1-5-6-9-10-13-14-17 18-19-20-21-22-23	Webster Electric Co 1900 Clark St Racine Wisc	1-5-6	Brach Mfg Corp 200 Central Ave Newark 8 NJ	2
Stelma Inc 190 Henry St Stamford Conn	1	West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	17	Browning Labs Inc 750 Main St Winchester Mass	6-9
Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-2-3-11-15-22	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	16	Budelman Radio Corp 375 Fairfield Ave Stamford Conn	14
Stratford Corp 44 W 28 St New York 1 NY	1-22	Western Electro Acoustic Lab Inc 11789 San Vicente Blvd Los Angeles 49 Calif	1-6-9-10-23	Calbest Electronics Co 4801 Exposition Blvd Los Angeles 16 Calif	2-4-14
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	1-2-4-6-9-13-18	Westrex Corp 111 8 Ave New York 11 NY	1-6-10-13-16-17	Calif Technical Industries 1421 Old County Rd Belmont 10 Calif	1
Symphony Electronics Corp 925 S Western Ave Los Angeles 6 Calif	1-22	Westronics Inc 3605 McCart Ft Worth Texas	17	Canoga Corp 5955 Sepulveda Blvd Van Nuys Calif	8
Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	1-3	Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn	1-4-7-8-9	Central Electronic Inc 1247 W Belmont Ave Chicago 13 Ill	3-14-15-16
Tarc Electronics Inc 48 Urban Ave Westbury LI NY	1-4-9-11-12-13-16-18-23	White Instrument Labs Box 9006 Allandale Station Austin 17 Texas	16	CG Electronics Corp 305 Dallas St N E Albuquerque New Mex	16
Tarzian Inc Sarkes E Hillside Drive Bloomington Ind	1	Whitley Electronics Inc 411 S Chauncey St Columbia City Ind	1	CGS Laboratories Inc 391 Ludlow St Stamford Conn	1
Tech-Master Corp 75 Front St Brooklyn 1 NY	1	Wide Range Recording Corp 527 N Grand Blvd St Louis 13 Mo	11-12-13-15-16-17-18-22	Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill	1
Techtron Electronics Ltd 583 Gramatan Ave Mt Vernon NY	1-4-5-13-15-19-20-23	Wilmar Mfg Co 1110 Truman Rd Kansas City Mo	1	Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	9-15
Tektronix Inc PO Box 831 Portland 7 Ore	11			Coil Winders Inc New York Ave Westbury LI NY	12
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	1-5-17-19-20			Collins Radio Co 855 35 St N E Cedar Rapids Iowa	15
Telectronic Labs Inc 1835 W Rosecrans Ave Gardena Calif	1-5			Commercial Radio Sound Corp 652 1 Ave New York 16 NY	1-2
Telematic Industries Inc 16 Howard Ave Brooklyn 7 NY	1-5-22			Community Eng'g Corp Box 824 State College Pa	2-14-16
Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif	17			Continental Electronics Mfg Co 4212 S Buckner Blvd Dallas 27 Texas	9-13-14 15-16
Telephonics Corp Park Ave Huntington LI NY	1-3-7-8-10-16-22			Corbin Corp 5419 56 Pl Riverdale Md	1
Teletone Co of America 1178 E 180 St Bronx 60 NY	21			DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	9-18
Teletronics Lab Inc 54 Kinkel St Westbury NY	1			Denson Electronics Corp P O Box 122 Rockville Conn	3
Telex 1633 Eustis St St Paul 1 Minn	1			Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	2-3
Textran Corp Box 4252 Austin 51 Texas	22			Dwyer Eng'g Co Pine St Ext Nashua NH	3-9-13-14
Thorens Co Thorens Ave New Hyde Park NY	5			Eitel-McCullough Inc 798 San Mateo Ave San Bruno Calif	6
Transelectric Mfg Co Hopewell Rd Oxford Pa	22			Electrend Products Corp Box 110 St Joseph Mich	1
Transcoil Corp Worcester Pa	22			Electrical & Physical Instrument Corp 42-19 27 St Long Island City 1 NY	16
Transistor Components Co 301 Oakwood Ave E Aurora NY	1-11-22			Electro Sound Corp 115 Haleck St Boston 15 Mass	2
Trans-Tel Corp 736 N Highland Ave Los Angeles 38 Calif	1			Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo	3-9-13-14
Transval Eng'g Co 10401 W Jefferson Blvd Culver City Calif	7-11-16-20-22			Entron Inc 4902 Lawrence St Bladensburg Md	1-2-4-7-8-10-14-16
Transvision Inc 460 North Ave New Rochelle NY	5			Erco Radio Labs Inc 637 Stewart Ave Garden City NY	1-5-14-15-16
Trott Electronics Inc 412 Smith St Rochester 6 NY	1			F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	9
Trutone Electronics Inc 812 N Highland Ave Los Angeles 38 Calif	1-14			Gates Radio Co 123 Hampshire St Quincy Ill	14
Ultradyne Eng'g Labs PO Box 3308 Albuquerque New Mex	17			General Precision Lab Inc 63 Bedford Rd Pleasantville NY	2-4
United Control Corp 4540 Union Bay Pl Seattle 5 Wash	11-16-22			General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	3-14
United Electro-dynamics 1200 S Marengo Ave Pasadena Calif	11			G & M Equipment Co 7315 Varna Ave N Hollywood Calif	8
Universal Atomics Corp 50 Bond St Westbury LI NY	1-22			Goodyear Aircraft Corp 1210 Massillon Rd Akron 15 Ohio	7-13-14-16
Univox Corp 102 Warren St New York 7 NY	1			Grem Eng'g Co 488 1 St Brooklyn 15 NY	9
				Hallamere Electronics Co 8352 Brookhurst Ave Anaheim Calif	2
				Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	6-14-16
				Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	14
				Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	9-14
				Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	12

2—AMPLIFIERS, RF-IF

Amplifiers, antenna	1
Amplifiers, distribution	2
Amplifiers, IF	3
Amplifiers, isolation	4
Amplifiers, keying	5
Amplifiers, klystron	6
Amplifiers, limiting	7
Amplifiers, line	8
Amplifiers, microwave	9
Amplifiers, mixing	10
Amplifiers, monitoring	11
Amplifiers, noise-suppressing	12
Amplifiers, radar	13
Amplifiers, R-F	14
Amplifiers, single-sideband	15
Amplifiers, wideband	16

Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	10-14-16
Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	1-13
Airmec Ltd High Wycombe Buckinghamshire England	16
Airtron Inc 1101 W Elizabeth Ave Linden NJ	2-3
Alfred Electronics 897 Commercial St Palo Alto Calif	9
Ameco 2949 W Osborn Rd Phoenix Ariz	1-16
Amerac Inc 116 Topsfield Rd Wenham Mass	8-9-13-14-16
American Communications Corp 280 Broadway New York 17 NY	1-2
American Electronic Laboratories 121 N 7th St Philadelphia 6 Pa	3
American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	1-13-10
American Mica Insulation Co 235 Parker Ave Manassquan NJ	1
American Microwave Corp 11754 Vose St N Hollywood Calif	3-9

Industrial Research Labs Div Aerona Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	9	Shepard Labs Inc 450 Morris Ave Summit NJ	1-2	Advanced Electronics Inc 94 Silas Deane Hwy Rocky Hill 9 Conn	30
Industrial TV Inc 369 Lexington Ave Clifton NJ	1-2	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	13	Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	1-2-4-5-6-9 11-21-22-28
Instruments for Industry Inc 150 Glen Cove Rd Mineola NY	3-16	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	16	Advance Instrument Corp 1709 F St Belmar NJ	5-7-9-15-17-24-27-28
International Research Associates 2221 Warwick Ave Santa Monica Calif	3	Spectralab Instruments 404 N Halstead Ave Pasadena Calif	9-14	Aero Electronics Co 1512 N Wells St Chicago 10 Ill	9-24-27-28
International Telemeter Corp 2000 Stoner Ave Los Angeles 25 Calif	1-2-8-16	Spencer-Kennedy Labs Inc 1320 Soldiers Field Rd Boston 35 Mass	2-8-11-14-16	AiResearch Mfg Co Div Garrett Corp 9851 Sepulveda Blvd Los Angeles 45 Calif	4-15-24-28
Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	1-2-4-8 10-14-16	Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	6-9	Airmec Ltd High Wycombe Buckinghamshire England	7-18
Johnson Co E F Waseca Minn	14-15-16	Standard Electronics Div Radio Eng'g Labs 30th & Borden Sts Long Island City NY	6-10-14-15	Airpax Products Co Middle River Baltimore 20 Md	7-15
J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	4-6-8-9-10-13-14	Stewart-Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-3-6-12-16	Airtron Inc 1101 W Elizabeth Ave Linden NJ	15
Kahn Research Labs 22 Pine St Freeport NY	16	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	2	Airtronix Development Corp 4902 Church Ave Brooklyn NY	5-28
Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	3-8-9-10-13-14-15	Symphony Electronics Corp 925 S Western Ave Los Angeles 6 Calif	1	Alcar Instruments Inc 17 Industrial Ave Little Ferry NJ	29
Lambda-Pacific Eng'g Inc 14725 Arminta St Van Nuys Calif	9	Tektronix Inc P O Box 831 Portland 7 Ore	16	Alden Electronic & Impulse Recording Equip Co P O Box 125 Westboro Mass	6-12-14-19
Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	3-7-10-12-13-14-15-16	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	3-14-15-16	Allegany Instrument Co 1091 Wills Mountain Cumberland Md	7-19-25
Langvein Mfg Corp 47-37 Austell Pl Long Island City 1 NY	3-16	Telephonics Corp Park Ave Huntington LI NY	3-4-15	Alpha Instrument Co 43 Hempstead St New London Conn	31
Lear Inc 3171 S Bundy Drive Santa Monica Calif	1	Tel-Instrument Electronics Corp 728 Garden St Carlstadt NJ	2	Altec Lansing Corp 1515 S Manchester Ave Anaheim Calif	3-20
Lel Inc 380 Oak St Copiague NY	1-2-3-4-13-14-15-16	Trans-Tel Corp 736 N Highland Ave Los Angeles 38 Calif	1-2	Alto Scientific Co 855 Commercial St Palo Alto Calif	9
Leonard Electric Products Co 67 34 St Brooklyn 32 NY	1-3-5-14	Uniwave Inc 2 Marine St Farmingdale NY	2-3-8-9-14-16	Ameco 2949 W Osborn Rd Phoenix Ariz	31
Levinthal Electronic Products Inc 3180 Hanover St Palo Alto Calif	6-9-13	Varian Associates 611 Hansen Way Palo Alto Calif	6	Amerac Inc 116 Topsfield Rd Wenham Mass	22
Lynmar Engineers Inc 1432 N Carlisle St Philadelphia 21 Pa	3-14-16	Virginia Electronics Co River Rd & B & O R R Washington 16 D C	3-14	American Communications Corp 280 Broadway New York 17 NY	20
Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	3-13-14	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	1-8	American Electronics Inc Instrument Div 9503 W Jefferson Blvd Culver City Calif	24-27
Madison-Fielding Corp 863 Madison St Brooklyn 21 NY	3	Waveline Inc Passaic Ave Caldwell NJ	9	American Electronic Laboratories 121 N 7 St Philadelphia 6 Pa	7-9-16 20-25-28-31
Maxson Corp W L 475 10 Ave New York 18 NY	9-13	Wave Particle Corp P O Box 252 Menlo Park Calif	16	American Gyro Corp 3030 Nebraska Ave Santa Monica Calif	15
Maxson Instruments Div W L Maxson Corp 47-37 Austell Place Long Island City 1 NY	8	Westbury Electronics Inc 300 Shames Dr Westbury NY	1-2-3-4-8-10 12-13-14-16	American Machine & Foundry Co Electronics Div 1085 Commonwealth Ave Boston 15 Mass	7-9-21
Millivac Instrument Corp 2315 2 Ave Carman Schenectady NY	12	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	13	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	2-5-9-20-21-28
Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	3	Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn	2	American Research & Mfr Corp 920 Halpine Ave Rockville Md	5-7-15 24-25-28
Narda Corp 160 Herricks Rd Mineola NY	9	White Electronic Devices Inc Roger 92 4 Ave Haskell NY	9-16	Ampex Corp 934 Charter St Redwood City Calif	6
National Company Inc 61 Sherman St Malden 48 Mass	6	3—AMPLIFIERS, SPECIAL PURPOSE			
Nevada Air Products Co P O Box 2472 Reno Nev	13	Amplifiers, bolometer	1	Analogue Controls Inc 39 Roselle St Mineola NY	4-6-7-13-24-27
Norden-Ketay Corp Commerce Rd Stamford Conn	3-13	Amplifiers, cathode followers	2	Anchor Specialty Mfg Co Hollister Rd Teterboro NJ	5-9
Omega Instrument Co 103 E Altadena Dr Altadena Calif	16	Amplifiers, compressor	3	Anderdon Electronic Lab 129 E 1800 S St Bountiful Utah	2-3
Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	9-13-14-15	Amplifiers, computer	4	Ansley Mfg Co Arthur New Hope Pa	21
Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	9-15	Amplifiers, control	5	Antlab Inc 4950 N High St Columbus 14 Ohio	1
Panoramic Radio Products Inc 10 S 2 St Mt Vernon NY	14	Amplifiers, data recording	6	Applegate & Co C J 1840 24 St Boulder Colo	31
Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	16	Amplifiers, DC	7	Applied Research Inc 163-07 Depot Rd Flushing 58 NY	31
Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	9	Amplifiers, decade	8	Arnoux Corp 11924 W Washington Blvd Los Angeles 66 Calif	6-7-15
Polytronic Research Inc 7660 Woodbury Dr Silver Spring Md	9	Amplifiers, developmental	9	Atlantic Research Corp 901 N Columbus St Alexandria Va	2-11-29-31
Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	5-14	Amplifiers, differential	10	Atlas Eng'g Co 176 Blue Hill Ave Roxbury 19 Mass	7-15
Production Research Corp Thornwood NY	1-2-3-4-5-7-8-10 11-12-13-14-15-16	Amplifiers, differential	11	Audio Instrument Co 133 W 14 St New York 11 NY	2-14
Pye Telecommunications Ltd Newmarket Rd Cambridge England	9-16	Amplifiers, encapsulated	11	Autonetics Div North American Aviation 9150 E Imperial Hwy Downey Calif	24
Radio Corp of America Commercial Electronic Products Camden 2 NJ	1-2-4-9 14-16	Amplifiers, facsimile	12	Autron Eng'g Inc 1254 W 6 St Los Angeles 17 Calif	5-9-19-21-24
Ramo-Wooldridge Corp 5730 Arbor Vitae St Los Angeles 45 Calif	3-14	Amplifiers, intergrating	13	Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	4-7-9-11-13-15 21-24-27-28
Ransom Research 323 W 7th St San Pedro Calif	7	Amplifiers, logarithmic	14	Avionics Ltd P O Box 200 Niagara-on-the-Lake Ontario Canada	9-11-19-21-30
Reflectone Corp Boston Post Rd Stamford Conn	5	Amplifiers, magnetic	15	Axler Associates Inc 102-42 43 Ave Corona 68 NY	14-17-19-28
Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	9	Amplifiers, medical	16	Babcock Radio Eng'g Inc 7942 Woodley Ave Van Nuys Calif	28
Rheem Mfg Co Electronics Div 7777 Industry Ave Rivera Calif	14	Amplifiers, null	17	Baird-Atomic Inc 33 University Rd Cambridge 38 Mass	2-7-22-28
Rhein Sound Systems Inc 133 Hamilton St New Haven 5 Conn	5	Amplifiers, oscilloscope	18	Barber & Howard Co East Ave Westerly RI	7
Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	14	Amplifiers, photocell	19	Barker Sales Co 996 Edgewater Ave Ridgefield NJ	11
Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	2-8	Amplifiers, power	20	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	31
RS Electronics Corp 435 Portage Ave Palo Alto Calif	2-3-7-9-10-12-13-14-15-16	Amplifiers, printed circuit	21		
Shasta Div Beckman Instruments Inc P O Box 296 Station A Richmond Calif	16	Amplifiers, pulse	22		
		Amplifiers, seismograph	23		
		Amplifiers, servo	24		
		Amplifiers, strain gage	25		
		Amplifiers, sweep	26		
		Amplifiers, synchro	27		
		Amplifiers, transistor	28		
		Amplifiers, ultrasonic	29		
		Amplifiers, vibration pick-up	30		
		Amplifiers, wideband	31		
Acoustica Associates Short Rd Glenwood Landing LI NY	29				
Acton Laboratories 533 Main St Acton Mass	7-8-20-31				
Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	15-21-28-31				
Admittance Namco Corp Marine St Farmingdale LI NY	1				

Barton Electronics Inc 1000 Farmington Ave W Hartford 7 Conn	19	Coil Winders Inc New York Ave Westbury LI NY	15-26	Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich	19
Basler Electric Co 601 5 St Highland Ill	15-29	Commercial Radio Sound Corp 652 1 Ave New York 16 NY	2-3	Electronic Eng'g Co of Calif 180 S Alvarado Los Angeles 57 Calif	7-9-25
Beckman-Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	4-7	Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	24	Electronic Research Associates 67 E Centre St Nutley 10 NJ	28
Beckman Instruments Inc Data & Control Systems Scientific Instrument Div 325 N Muller Ave Anaheim Calif	4-5-6-7-8-9-10-14 15-17-20-21-24-25-28-31	Community Eng'g Corp Box 824 State College Pa	31	Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	15
Beckman Instruments Inc Process Instruments Div 2500 Fullerton Rd Fullerton Calif	4-6-21-28	Computing Devices of Canada Ltd P O Box 508 Ottawa Ontario Can	9	Electronic Systems Eng'g Co 903 Cravens Blvd Oklahoma City Okla	3
Behlman Eng'g Co 114 S Hollywood Way Burbank Calif	20	Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	2-5-7-11-24-28	Electronic Tube Corp 1200 E Mermaid Lane Philadelphia 18 Pa	7-18-25
Bell Aircraft Corp P O Box 1 Buffalo 5 NY	4-5-7-8-9-13 17-21-22-30	Consolidated Avionics 66 Brooklyn Ave Westbury NY	1-4-5-6-9-20	Electro Products Labs Inc 4501 N Ravenswood Ave Chicago 40 Ill	31
Belock Instrument Corp 111-01 14 Ave College Point 56 NY	2-7-15	Consolidated Electrodynamics Corp 300 N Sierra Madre Villa Pasadena Calif	6-7-18-25-30	Electrosolids Corp 7436 Varna Ave N Hollywood Calif	15-21-28
Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif	30	Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	5-19-20	Electro-Technical Labs Div Mandrel Industries 5134 Glenmont Houston Texas	23
Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	4-29	Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	8-9	Ellis Associates 67 Lincoln Ave Pelham NY	7-18-25-28
Bendix Radio Div Bendix Aviation Corp E Joppa Rd Towson 4 Md	28	Control Specialists Inc 115 E Arbor Vitae St Inglewood 1 Calif	24-28	El-Tronics Inc Penn Ave Mayfield Pa	6-9-14-18
Bergen Labs 247 Crooks Ave Clifton NJ	28	Cook Co Frank R 36 S Santa Fe Dr Denver 23 Colo	9	Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo	4
Berkshire Labs 586 Bank Village Greenville NH	9-10-13-16-28	Corbin Corp 5419 56 Pl Riverdale Md	12-14-31	Endevco Corp 161 E California St Pasadena Calif	2-8-19-25
Beva Laboratory 1640 N Olden Ave Ext Trenton 8 NJ	22	Corona Eng'g Service 94-52 Corona Ave Elmhurst 73 NY	5-19	Engelhardt Eng'g Co 38 Burrill Ave S Norwalk Conn	7
Biophysical Instruments Inc 20 Herman St Philadelphia 44 Pa	7-10-25-28	Cosmic Radiation Labs 247 Blue Point Ave Blue Point LI NY	2-22	Engineered Electronics Co 506 E 1 St Santa Ana Calif	2-7-21-22-26-28-31
B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	14-22	Coscor (Canada) Ltd 301 Windsor St Halifax Nova Scotia Canada	14-18	Engineered Magnetics Div Gulton Industries Inc 13030 Cerise Ave Hawthorne Calif	24
Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ	15-20-28	Crescent Eng'g & Research Co 5440 N Peck Rd El Monte Calif	5-25-30	E O Electronics Inc Mountain Lakes NJ	8-18
Bolton Labs Inc W Main St Bolton Mass	1	Cycle Transformer Corp 356 Glenwood Ave E Orange 11 NJ	15	Epsco Inc 588 Commonwealth Ave Boston 15 Mass	7-25
Briggs Associates 10 DeKalb St Norristown Pa	4-6-8-15-28	Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	16-28-29	Erco Radio Labs Inc 637 Stewart Ave Garden City NY	3-9-11-21-28
Bristol Co P O Box 1790 EITT Waterbury 20 Conn	5-6-7-17-24-25	Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	7-19-20-21-28	Erie Resistor Corp 644 W 12 St Erie 6 Pa	21
Bruno-New York Industries Corp 460 W 34 St New York 1 NY	11-28	Daystrom Instrument Div Daystrom Inc Archbald Pa	9	Erwood Inc 1770 W Berteau Ave Chicago 13 Ill	30
Brush Electronics Co 3405 Perkins Ave Cleveland O	5-6-7-24-25-30	Daytronic Corp 216 S Main St Dayton 2 Ohio	10	Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch LI NY	5-9-21
Brush Electronics Co Texas Div 3732 Westheimer Rd Houston 6 Texas	23	Deitz Co S J 9 E Wesley St S Hackensack NJ	5	Farnsworth Electronics Co Div IT & T 3702 E Pontiac St Ft Wayne Ind	9
Budelman Radio Corp 375 Fairfield Ave Stamford Conn	9-20	Del Electronics Corp 41 N MacQuesten Pkwy Mt Vernon NY	9-11	Federal Telephone & Radio Co Div IT & T 100 Kingsland Rd Clifton NJ	17-21
Bundy Electronics Corp 171 Fabyan Pl Newark 12 NJ	5-15-23	Delttime Inc 608 Fayette Ave Mamaroneck NY	31	Feedback Controls Inc 899 Main St Waltham 54 Mass	4-15-24-28
Burr-Brown Research Corp Route 4 Box 139 Tucson Ariz	8-16-17-21-28-31	Deltron Inc 2905 N Leithgow St Philadelphia 33 Pa	15-17	Femco Inc Irwin Pa	7-20-29
Burroughs Corp Electronic Instruments Div 1209 Vine St Philadelphia 7 Pa	15-22	Denrad Mfg Co 310 W Woodard St Denison Texas	5-19	Fidelity Amplifier Co 703 Willow St Chicago 14 Ill	19
Calif Magnetic Control Corp 11922 Valerio St N Hollywood Calif	11-15	Detroit Controls Corp Norwood Controls Unit 934 Washington St Norwood Mass	15-25	Fielden Instrument Div Robertshaw- Fulton Controls Co 2920 N 4 St Philadelphia 33 Pa	7
Calif Technical Industries 1421 Old County Rd Belmont 10 Calif	1-14	Diatron Co 3327 Dixie Dr Houston 21 Texas	5-7-9-15	Fisher Eng'g Inc P O Box 327 Huntington Ind	22
Cambridge Instrument Co Grand Central Terminal New York 17 NY	16	Donner Scientific Co 888 Galindo St Concord Calif	4-18-31	Fisher Radio Corp 21-21 44 Dr Long Island City 1 NY	20-21
Cedar Eng'g Inc 5806 W 36th St Minneapolis 16 Minn	5-9	Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	2-4-5-6-7-8-9-11 16-20-21-22-26-28	Photo-Video Labs Inc 25 Amity St Little Falls NJ	2-5-9-22-31
CEI/CO Constantine Eng'g Labs Co P O Box 555 Mahwah NJ	15	DuKane Corp St Charles Ill 3-4-7-10-11-17-21-22-24-28	18	Franklin Electronics Inc Box 113 Bridgeport Pa	4-6-7-22
Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wis	16-21-28	Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	18	Frederick Tool & Eng'g Corp 414 Pine Ave Frederick Md	31
Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill	3-31	Dunlap Electronics 764 9 St Des Moines 14 Iowa	5-21	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	15-29
Central Transformer Co 910 W Jackson Blvd Chicago 7 Ill	15	Dwyer Eng'g Co Pine St Ext Nashua NH	21	F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	1-22
Century Electronics Co 34 Oleander St Cocoa Fla	6-7-9	Dynalysis Development Labs Inc 11941 Wilshire Blvd Los Angeles 25 Calif	4-7-9	Garrett Corp AiResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif	4-15-24-25
Century Electronics & Instruments Inc 1333 N Utica Ave Tulsa 10 Okla	6-7	Dynamics Instrumentation Co Div Alberhill Corp 1118 Mission St S Pasadena Calif	6-7-10-13-15 20-24-25-28-30-31	Gates Radio Co 123 Hampshire St Quincy Ill	20-21-28
Century Engineers 2741 N Naomi St Burbank Calif	24	Dynamics Research Associates Div Universal Match Corp P O Box 5841 Ferguson 21 Mo	5-7-10-11 13-15-19-25	General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY	21
Century Projector Corp 729 7 Ave New York 19 NY	19	Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	8-9-11-28	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	7-25
CG Electronics Corp 305 Dallas St N E Albuquerque New Mex	28-31	Edin Co 207 Main St Worcester 8 Mass	6-7-9-30	General Magnetics Inc 135 Bloomfield Ave Bloomfield NJ	24
CGS Laboratories Inc 391 Ludlow St Stamford Conn	9	Egan Lab 107-56 113 St Richmond Hill 19 NY	9-16	General Precision Lab Inc 63 Bedford Rd Pleasantville NY	9-15-22-26-27-31
Chesapeake Instrument Corp Shadyside Md	2-9-29-30	Eldorado Electronics Co 1401 Middle Harbor Rd Oakland Calif	22	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	7-17-22-29-30
Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill	1-2-4-5-6-7-8-9 10-11-13-24-27-28	Electrical & Physical Instrument Corp 42-19 27 St Long Island City 1 NY	22-31	Geotechnical Corp 3712 Haggar Dr Dallas 9 Texas	6-7-23
Chicago Electronic Eng'g Co 3223 W Armitage Ave Chicago 47 Ill	16	Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn	15	Geotronic Labs Inc 1314 Cedar Hill Ave Dallas 8 Texas	23
Chicago Magnetic Control 1616 N Damen Ave Chicago 47 Ill	15	Electro-Measurements Inc 7524 S W Macadam Ave Portland 1 Ore	17	Gertsch Products Inc 11846 Mississippi Ave Los Angeles 25 Calif	17
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England	7	Electro-Medical Lab Inc S Woodstock 10 Vt	16	Giannini & Co G M 918 E Green St Pasadena Calif	4-5
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio	15	Electronic Associates Inc Long Branch NJ	7-10-14-24	Goldak Co 1544 W Glenoaks Blvd Glendale 1 Calif	15
Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	9-31	Electronic Communication Equip Co 1249 W Loyola Ave Chicago 26 Ill	20	Good Electric Corp Natick Mass	16-21-25
Cleveland Instrument Co 735 Carnegie Ave Cleveland 15 Ohio	5-10	Electronic Computer Co 6191 Ridge Ave Philadelphia 28 Pa	7	Goodyear Aircraft Corp 1210 Massillon Rd Akron 15 Ohio	7-21-22-24-31

Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	19	Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass	7	Moseley Co F L 409 N Fair Oaks Ave Pasadena Calif	14
Gotham Audio Development Corp 2 W 46 St New York 36 NY	20-29	Lab-Tronics Inc 3656 N Lincoln Ave Chicago Ill	30	M Ten Bosch Inc 80 Wheeler Ave Pleasantville NY	24
GPS Instrument Co 811 Boylston St Boston 16 Mass	4-7-9-10-14-25-31	Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	9-21-22-26-28-30	Mt Sopris Instrument Corp 1320 Pearl St Boulder Colo	22
Gray Research & Development Co Hilliard St Manchester Conn	9	Lane Electronics Mfg Corp 7254 Atoll Ave N Hollywood Calif	28	Muirhead & Co Ltd Beckenham Kent England	12
Gulton Industries Inc 212 Durham Ave Metuchen NJ	2	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	2-3-5-6-7 15-20-21-22-24-28	Muirhead Instruments Inc 677 5 Ave New York 22 NY	17-24-27-30
Gyro Electronics Co 325 Canal St New York 13, NY	28	Lear Inc 3171 S Bundy Drive Santa Monica Calif	5-9-24-27	National Aircraft Corp 3411 Tulare Ave Burbank Calif	7
Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	7-24	Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	3-17-24	National Scientific Labs Inc 2010 Massachusetts Ave N W Washington 6 D C	9
Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	7-9-15-17-24-28	Lee Electric & Mfg Co 2806 Clearwater St Los Angeles 39 Calif	15	Navco Navigation Computer Corp 1621 Snyder Ave Philadelphia 45 Pa	6-7-28
Haller Raymond & Brown 124 N Atherton St State College Pa	14-19-28-31	Lel Inc 380 Oak St Copiague NY	9-14-21-22-28	Nevada Air Products Co P O Box 2472 Reno Nev	1-4-7-16-19-28-29
Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	15-28-31	Leonard Electric Products Co 67 34 St Brooklyn 32 NY	4	Non-Linear Systems Inc Del Mar Airport Del Mar Calif	8-17-25
Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	4-7-21	Librascope Inc 808 Western Ave Glendale Calif	4-5-13-15	Norden-Ketay Corp Commerce Rd Stamford Conn	4-5-12-15-21-22-24-27-28
Hamilton Electronics 2726 Pratt Ave Chicago 45 Ill	20-28	Ling Electronics Inc 5120 W Jefferson Blvd Los Angeles 16 Calif	2-3-20-30	North American Instruments Inc 2420 N Lake St Altadena Calif	6-9
Hammarlund Mfg Co 460 W 34 St New York 1 NY	5	Link Aviation Inc Binghamton NY	24	Northern Plastics Corp 2nd Market St LaCrosse Wisc	21
Hamner Electronics Co Princeton NJ	2-19-22-31	Linlar Inc 4101 San Fernando Rd Glendale 4 Calif	28	Norton Co 1 New Bond St Worcester 6 Mass	4-22
Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	9-21-28-31	Liston-Becker Plant Beckman Instruments Inc 649 Hope St Springdale Conn	7	Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	2-7
Hanson-Gorrell-Brian 85 Hazel St Glen Cove NY	6	Liton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	9	Nucleonic Corp of America 196 Derraw St Brooklyn 31 NY	22
Harrison Labs 45 Industrial Rd Berkeley Heights NJ	28-31	Liton Industries of Md Inc 4910 Calvert Rd College Park Md	15-24-27	Oberline Inc PO Box 921 Beverly Hills Calif	3
Harvey-Wells Electronics Inc North St Southbridge Mass	5-7-9-18-21-22	Lynmar Engineers Inc 1432 N Carlisle St Philadelphia 21 Pa	31	Offner Electronics Inc 5320 N Kedzie Ave Chicago 25 Ill	6-7-10-13-16-18-25
Hathaway Instrument Div Hamilton Watch Co 5800 E Jewell Ave Denver 22 Colo	26	Lytle Eng'g & Mfg Co 1404 San Mateo Blvd S E Albuquerque New Mex	9-21	Oltronic Corp 235 Underwood Dr Atlanta 5 Ga	7
Heath Co 305 Territorial Rd Benton Harbor Mich	4	McKenna Laboratories 2503 Main St Santa Monica Calif	29	Omega Instrument Co 103 E Altadena Dr Altadena Calif	6-31
Heiland Div Minneapolis-Honeywell 5200 E Evans Ave Denver 22 Colo	6-7-9-13-16-25-30-31	Macarr Inc 2543 Boston Rd New York 67 NY	15	Osborne Electronic Corp 712 SE Hawthorne Blvd Portland 14 Ore	15
Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	28-31	Machinery Electrification Inc 35 Hudson St Northboro Mass	19-28	Oster Mfg Co John 1 Main St Racine Wisc	28
Hogan Labs Inc 155 Perry St New York 14 NY	12	Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	4-5-6-24-27-28	Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	4-5-22-24-29
Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	4-6-9-11-13-21-28	Mack Electronics Div Ino Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	9-21	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	5
Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	19	Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	15-28	Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	12
Indikon Co 76 Coolidge Hill Rd Watertown 72 Mass	24-25	Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif	7-15-24-25	Pampa Electronics Corp 7354 Frankford Ave Philadelphia 36 Pa	5
Industrial Control Co 805 Albin Ave Lindenhurst LI NY	7-8-10-16-24-25	Manning Maxwell & Moore Inc Shelter Rock Lane Danbury Conn	5-7-17-24	Parameters Inc 195 Herricks Rd New Hyde Park NY	9
Industrial Research Labs Div Aeronca Mfr Corp Hilltop & Frederick Rds Baltimore 28 Md	4-6-9-20-24-25	Matthew Labs 146 Riverdale Ave Yonkers NY	7-14-19	Parsons Co Ralph M Electronics Div 151 S DeLacey Ave Pasadena Calif	7
Industrial Test Equipment Co 55 E 11 St New York 3 NY	2-4-5-7-8-9-17-24-31	Maurer Inc J A 37-01 31 St Long Island City 1 NY	5	Pedersen Electronics 3667A Mt Diablo Blvd Lafayette Calif	2
Industrial TV Inc 369 Lexington Ave Clifton NJ	18-24	Maxson Corp W L 475 10 Ave New York 18 NY	9	Peer Inc 1200 Milton St Benton Harbor Mich	9
Instruments for Industry Inc 150 Glen Cove Rd Mineola NY	31	Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY	15-24-28	Pegasus Labs Inc 3690 W 11 Mile Rd Berkley Mich	24
International Research Associates 2221 Warwick Ave Santa Monica Calif	7-21-28	MB Mfg Co Div Textron Inc 1060 State St New Haven 11 Conn	20-30-31	Penn-East Eng'g Corp Willow St Kutztown Pa	5-15
Jarrell-Ash Co 26 Farwell St Newtonville 60 Mass	7	Measurement Eng'g Ltd 232 John St Arnprior Ont Can	3-7-9-19-22	Pentron Corp 777 S Tripp Ave Chicago 24 Ill	6-15
Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	31	Medcraft Electronic Corp 426 Great East Neck Rd Babylon NY	16	Performance Measurements Co 15301 W McNichols Rd Detroit 35 Mich	17-24
Johnson Co E F Waseca Minn	3	Melody Master Mfg Co 2842 N Cicero Ave Chicago 41 Ill	2-16-20	Permotux Products Co 4101 San Fernando Rd Glendale Calif	11-23
Kaiser Aircraft & Electronics Corp Toledo Electronics Div 2-4-5-6-7-8-13-14-15-20 P O Box 437 Toledo Ohio	21-22-24-26-27-28	Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	28	Peschel Electronics Inc 13 Garden St New Rochelle NY	20-24
Kay Electric Co 14 Maple Ave Pine Brook NJ	28	Microtran Co 145 E Mineola Ave Valley Stream NY	30	Philbrick Researches Inc George A 230 Congress St Boston 10 Mass	4-7-20
Kenyon Transformer Co 840 Barry St New York 59 NY	15	Mid-Century Instrumental Corp 611 Broadway New York 12 NY	4-7-9-13	Phoenix Precision Instrument Co 3803 N 5 St Philadelphia 40 Pa	7-14-19
Keithley Instruments Inc 12415 Euclid Ave Cleveland 6 Ohio	2-5-7-8-10-14-16 18-25-29-31	Midwestern Instruments P O Box 7186 Tulsa Okla	6-7-13-14-22-24-25	Photobell Co 43 Vesey St New York 7 NY	19
Kenco Labs 131-38 Sanford Ave Flushing NY	15	Milgo Electronic Corp 7601 N W 37 Ave Miami 47 Fla	4-7-10-13-24	Photocircuits Corp 31 Sea Cliff Ave Glen Cove NY	9
Keystone Products Co 904 23 St Union City NJ	15	Millen Mfg Co James 150 Exchange St Malden 48 Mass	18	Photocon Research Products 421 N Altadena Drive Pasadena Calif	7
Kintel (Kay Lab) 5725 Kearny Villa Rd San Diego 12 Calif	7-10-13-17	Miller Instruments Inc William 325 N Halstead Ave Pasadena 8 Calif	6-7-25-30	Photron Instrument Co 6516 Detroit Ave Cleveland 2 Ohio	4-6-7-16-19-25
Kistler Instrument Corp 15 Webster St N Tonawanda NY	7	Millivac Instrument Corp 2315 2 Ave Carman Schenectady NY	7-9-10-16-25	Plastics & Electronics Corp P O Box 33 Station J Buffalo 8 NY	21-24-28
Kollsman Instrument Corp Standard Coil Products 80-08 45 Ave Elmhurst 73 NY	15	Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	5-7-9-11-21-24-28	Plectron Corp Overton Nebr	16
Krohn-Hite Corp 580 Massachusetts Ave Cambridge 39 Mass	20-31	Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	5-7-17-22-24	Polyphase Instrument Co E 4 St Bridgeport Pa	25
Kuss Industries Inc Tacony & Lewis Sts Philadelphia 24 Pa	9-21	Model Eng'g & Mfg Inc 50 Frederick St Huntirnton Ind	2-4-5-16-18-20-26	Polytronic Research Inc 7660 Woodbury Dr Silver Spring Md	18-21
Labko Scientific Inc 111 W Elm Stillwater Okla	16-21-28	Modern Industries Inc 2601 Colorado Ave Santa Monica Calif	5-7-9-11-15-17 20-24-25-27-28	Potter Instrument Co 115 Cuttermill Rd Great Neck NY	15
		Mohawk Business Machines Corp 944 Halsey St Brooklyn 33 NY	15-28	Power Supplies Inc 1005 Olive St Highland Ill	15
				Precise Development Corp 2 Neil Ct Oceanside NY	7-8-21
				Precision Hearing Aids 5157 W Grand Ave Chicago 39 Ill	3
				Precision Technology Inc 66 South P St Livermore Calif	9

Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	3-5-12	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	2-3-4-5-6-7-8-9- 12-14-21-22-24-31	Trott Electronics Inc 412 Smith St Rochester 6 NY	2-7-9
Process & Instruments 15 Stone Ave Brooklyn 33 NY	7-10-16	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	2-4-7-10-13-18-20-29	Ultradyne Eng'g Labs PO Box 3308 Albuquerque New Mex	6-30
Production Research Corp Thornwood NY	10-11-12-13-14-15-16-17-18- 19-20-21-22-24-25-26-27-28-29-30-31	Sonex Inc 73 S State Rd Upper Darby Pa	9-20-28	United Control Corp 4540 Union Bay Pl Seattle 5 Wash	5-7-11-15-17- 24-25-27-28
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	28-29	Southern Instruments Computer Div Frimley Rd Camberley Surrey England	4	United Electrodynamics 1200 S Marengo Ave Pasadena Calif	2-7-21-23-25-28-30
Pye Telecommunications Ltd Newmarket Rd Cambridge England	28	Southwestern Industrial Electronics Co 2831 Post Oak Rd Houston 19 Texas	7-15-23	United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif	15
Radiation Counter Labs Inc 5121 W Grove St Skokie Ill	14-22	Spencer-Kennedy Labs Inc 1320 Soldiers Field Rd Boston 35 Mass	22-31	Universal Atomics Corp 50 Bond St Westbury LI NY	7-8-22
Radiation Inc PO Box 37 Melbourne Fla	5-24-25	Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	24-28	US Gauge Div American Machine & Metals Sellersville Pa	27-28
Radiation Instrument Co PO Box 733 Silver Spring Md	22	Spivey Inc James S 4908 Hampden Lane Washington 14 DC	5-7-25-28	US Recording Co 1121 Vermont Ave Washington 5 DC	2-16-20
Radio Corp of America Commercial Electronic Products Camden 2 NJ	2-21	Stancil-Hoffman Corp 921 N Highland Ave Hollywood 38 Calif	3-20-21-28	Valandy Electronics Corp 61-35 166 St Flushing 68 NY	21-28
Radio Eng'g Co 8 State St New York 4 NY	9-28	Standard Electronics Div., Radio Eng'g Labs 30th & Borden Sts LIC NY	9-31	Vapor Heating Corp 80 E Jackson Blvd Chicago 4 Ill	15
Radio Eng'g Products Ltd 1080 University St Montreal 3 Quebec Canada	31	Standard Instruments PO Box 11556 Dallas 18 Texas	9-28	Varo Mfg Co 2201 Walnut St Garland Texas	15-28
Radio Kits Inc 120 Cedar St New York 6 NY	28	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	4-7-9-10-12-13- 18-20-24-27-28	Vemaline Products Co P O Box 222 Hawthorne NJ	24
Radionics Inc PO Box 186 Cockeysville Md	7-8-11-20-22-28	Stoelting Co C H 424 N Homan Ave Chicago 24 Ill	7-16	Vec-Trol Eng'g Inc P O Box 1089 Stamford Conn	5-19-24
Ransom Research 323 W 7 St San Pedro Calif	4-5-8-9-15- 21-22-28-29-31	Stratford Corp 44 W 28 St New York 1 NY	11	Vicon Inc 1353 Mesita Rd Colorado Springs Colo	28
Rayco Electronic Mfg Inc 11116 Cumpston St N Hollywood Calif	15	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	3-4-5-6-7-9-21	Victoreen Instrument Co 5806 Hough Ave Cleveland 3 Ohio	7
Raymond Eng'g Lab Inc Smith St Middletown Conn	15	Strong Electric Corp 87 City Park Ave Toledo 1 Ohio	24	Virzinia Electronics Co River Rd & B & O RR Washington 16 DC	5-9
Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 54 Mass	24	Sullivan Ltd H W 80 Shore Rd Port Washington NY	17	Volkers & Schaffer Mfg Corp 2315 2 Ave Carman Schenectady NY	9-10-16-18-21- 23-25-28-31
Reeves Instrument Corp 215 E 91 St New York 28 NY	4-7-13	Syntronic Instruments Inc 170 Industrial Rd Addison Ill	26	Voron & Co George 835 N 19 St Philadelphia 30 Pa	2-3-20-29
Reflectone Corp Boston Post Rd Stamford Conn	4-15	Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	2-7-9	WacLine Inc 35 S St Clair St Dayton 2 Ohio	5-15-16-20-28
Remler Co 2101 Bryant St San Francisco Calif	21-28	Tarc Electronics Inc 48 Urban Ave Westbury LI NY	2-3-9-19-26	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	27-28
Rese Eng'g Inc 731 Arch St Philadelphia 6 Pa	2-4-22	Tatnall Measuring Systems Co Kimberton Rd Phoenixville Pa	25	Walkirt Co 141 W Hazel St Inglewood 3 Calif	10-11-20-21-22
Research Electronics Lab Roslyn Pa	7-26	Teca Corp 80 Main St White Plains NY	16	Wallson Associates Ltd 963 Frelinghuysen Ave Newark 12 NJ	15
Rheem Mfg Co Electronics Div 7777 Industry Ave Rivera Calif	7	Technical Measurement Corp 140 State St New Haven 11 Conn	22	Warren Mfg Co Newtown Rd Littleton Mass	24
Rhein Sound Systems Inc 133 Hamilton St New Haven 5 Conn	2-3-9-30-31	Technograph Printed Electronics 185 Valley St Tarrytown NY	21	Waveline Inc Passaic Ave Caldwell NJ	1
Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	6-28	Techtron Electronics Ltd 583 Gramatan Ave Mt Vernon NY	2	Wave Particle Corp PO Box 252 Menlo Park Calif	31
Rixon Electronics Inc 2414 Reedie Dr Silver Spring Md	28	Tektronix Inc PO Box 831 Portland 7 Ore	7-10-18	Webster Electric Co 1900 Clark St Racine Wisc	2
RME Div Electro Voice Inc Buchanan Mich	28	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	2-7-8-9-10-14-18- 19-20-22-31	Weinschel Eng'g 10503 Metropolitan Ave Kensington Md	1
Robinette Co W C 802 Fair Oaks Ave S Pasadena Calif	24	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	6-11	Westbury Electronics Inc 300 Shames Dr Westbury NY	2-4-8-9-24-31
Rockwell Eng'g Co 2133 E 45 St Indianapolis 5 Ind	19	Telematic Industries Inc 16 Howard Ave Brooklyn 7 NY	28	West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	4-5-6-7-8-21- 22-24-25-27-28
Ronar Inc 1316 Sherman Ave Evanston Ill	16	Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif	4-8-15-21-22-28	Western Radiation Lab 1107 W 24 St Los Angeles 7 Calif	9-16
RS Electronics Corp 435 Portage Ave Palo Alto Calif	9-11-21-22-28-31	Telephonics Corp Park Ave Huntington LI NY	2-4-5-7-8-9-10- 11-21-25-28-29	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	9-10-11-14-15-17-24-26
Sanborn Co 175 Wyman St Waltham 54 Mass	24-25	Teletronics Lab Inc 54 Kinkel St Westbury NY	18-22	Westrex Corp 111 8 Ave New York 11 NY	19
Sarato-a Industries Congress & Ballston Aves Saratoga Springs NY	15	Telex 1633 Eustis St St Paul 1 Minn	7-11	Westronics Inc 3605 McCart Ft Worth Texas	24
Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	4-19-28	Texas Instruments Inc Industrial Instrumentation Div 3609 Buffalo Speedway Houston 6 Texas	6-7-18-20-23-28	Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn	20-22
Schaevitz Eng'g PO Box 505 Camden 1 NJ	24	Textran Corp Box 4252 Austin 51 Texas	21-28	White & Son James L 374 Verona Ave Newark 4 NJ	5-15
Schirmer-National Alarm Co 20 Westside Ave Bergenfield NJ	5-15-29-30	Thompson Products Inc Electronics Div 2196 Clarkwood Rd Cleveland 3 Ohio	15	Wiancko Eng'g Co 255 Halstead St Pasadena Calif	25
Schulmerich Electronics Inc Sellersville Pa	2-5-6-9-11-28	Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	21-24-25-30	Wide Range Recording Corp 527 N Grand Blvd St Louis 3 Mo	21-28
Seismograph Service Corp 6200 E 41 St Tulsa 1 Okla	23-31	Torwico Electronics Inc 1090 Morris Ave Union NJ	24	Wilmar Mfg Co 1110 Truman Rd Kansas City Mo	7
Seneca Falls Machine Co 314 Fall St Seneca Falls NY	9-11-20-21-24	Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass	31	Worner Electronic Devices Rankin Ill	5-19
Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	1-4-5-7-24-27	Transformer Technicians Inc 2608 N Cicero Ave Chicago 39 Ill	15-20		
Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	4-5-24	Transformers Inc 200 Stage Rd Vestal NY	15		
Servonics Inc 822 N Henry St Alexandria Va	4-15-24	Traniscoil Corp Worcester Pa	28		
Servo-Recording Instruments Inc 1815 W Van Buren St Phoenix Ariz	22-28	Transistor Components Co 301 Oakwood Ave E Aurora NY	9-11-20-21-28		
Servo-Tek Products Co 1086 Goffle Rd Hawthorne NJ	13-20-24	Transval Eng'g Corp 10401 W Jefferson Blvd Culver City Calif	9-24-28		
Shepard Labs Inc 480 Morris Ave Summit NJ	2-4-6-7-9-15-18-19- 20-21-22-28	Tri-Dex Electronics PO Box 1207 Lindsay Calif	9-21		
Sigmadyne of Conn P O Box 869 Port Chester NY	5	Tripl-T Electronics Co Box 5352 Pasadena Calif	28		
Simplex Equipment Corp 55 La France Ave Bloomfield NJ	5-9-19	Tri-R Instruments 24-15 44 Rd Long Island City 1 NY	16		
Simpson Mfg Co Mark 32-28 49 St Long Island City 3 NY	2-19				

4—AMPLIFIERS, TELEVISION

Amplifiers, booster	1
Amplifiers, distribution	2
Amplifiers, isolation	3
Amplifiers, keying	4
Amplifiers, limiting	5
Amplifiers, line	6
Amplifiers, mixing	7
Amplifiers, monitoring	8
Amplifiers, montage	9
Amplifiers, remote	10
Amplifiers, sweep	11
Amplifiers, television	12

Adler Electronics Inc
1 LeFevre Lane New Rochelle NY 1-2-7-12

Advance Industries Inc
640 Memorial Dr Cambridge 39 Mass 1

Airtronix Development Corp
4902 Church Ave Brooklyn NY 12

Altec Lansing Corp
1515 S Manchester Ave Anaheim Calif 1

Ameco
2949 W Osborn Rd Phoenix Ariz 12

American Communications Corp
280 Broadway New York 17 NY

American Electronics Inc Instrument Div
9503 W Jefferson Blvd
Culver City Calif 1

American Electronic Laboratories
121 N 7 St Philadelphia 6 Pa 2

American Microwave Corp
11754 Vose St N Hollywood Calif 12

Amplitel Inc
342 W 40 St New York 18 NY 2-7-10-12

Applied Research Inc
163-07 Depot Rd Flushing 58 NY 12

Avionics Ltd
PO Box 200 Niagara-on-the-Lake
Ontario Canada 1

Bell Aircraft Corp
PO Box 1 Buffalo 5 NY 3-5-6-7-8-10

Blonder-Tongue Laboratories
9-25 Alling St Newark 2 NJ 2-3-6-10-12

Bogen Co David
PO Box 500 Paramus NJ 1

Buss-Clement-Doughten & Associates
201 B Studio Hill
Chester Springs Pa 2-7-8-10-11-12

Cinema-Television Ltd
Worsley Bridge Rd Lower Sydenham
London S E 26 England 8

Commercial Radio Sound Corp
652 1 Ave New York 16 NY 1-2

Community Eng'g Corp
Box 824 State College Pa 2-10

Consolidated Productions Inc
Broward Int'l Airport Ft Lauderdale Fla 10

Continental Electronics Mfg Co
4212 S Buckner Blvd Dallas 27 Texas 12

Dage TV Div Thompson Products
W 10 St Michigan City Ind 2-6

Doty Acoustical Electronic Labs
431 Broome St New York 13 NY 1

Electro Sound Corp
115 Halleck St Boston 15 Mass 1-2

Electronic Communication Equipment Co
1249 W Loyola Ave Chicago 26 Ill 1

Entron Inc
4902 Lawrence St
Bladensburg Md 2-3-5-6-7-10-12

Femco Inc
Irwin Pa 1

Fidelity Amplifier Co
703 Willow St Chicago 14 Ill 1

Foto-Video Labs Inc
25 Amity St 1-2-3-4-5-6-7-
Little Falls NJ 8-9-10-11-12

Gates Radio Co
123 Hampshire St Quincy Ill 12

General Precision Lab Inc
63 Bedford Rd
Pleasantville NY 1-2-3-6-8-10-11-12

Hamilton Electronics
2726 Pratt Ave Chicago 45 Ill 1

Hancock Electronics Corp
2553 Middlefield Rd
Redwood City Calif 2-3-4-5-6-7-8-9-10-11-12

Harrison Labs
45 Industrial Rd Berkeley Heights NJ 6-11-12

Holland Electronics
2133 Central Dr
S East Meadow NY 2-3-5-6-7-8-11-12

Industrial TV Inc
369 Lexington Ave Clifton NJ 1-12

International Research Associates
2221 Warwick Ave Santa Monica Calif 1

International Telemeter Corp
2000 Stoner Ave
Los Angeles 25 Calif 2-3-6-12

Jerrold Electronics Corp
23 & Chestnut Sts
Philadelphia 3 Pa 1-2-3-6-7-10-12

Kaiser Aircraft & Electronics Corp
Toledo Electronics Div
PO Box 437 Toledo Ohio 1

Kintel (Kay Lab) 5725 Kearny Villa Rd
San Diego 12 Calif 2-6-10

Langevin Mfg Corp
47-37 Austell Pl
Long Island City 1 NY 1-2-3-6-7

Leonard Electric Products Co
67 34 St Brooklyn 32 NY 4-12

Neill Co R W
4320 Montrose Ave Chicago 41 Ill 1

Palmer Inc M V
4002 Fruit Valley Rd
Vancouver Wash 1

Polarad Electronics Corp
43-20 34 St Long Island City 1 NY 2

Production Research Corp
Thornwood NY 1-2-3-4

Pulse Techniques Inc
1411 Palisade Ave W Englewood NJ 1

Pye Canada Ltd
82 Northline Rd
Toronto 16 Ontario Canada 2-7-8-12

Radio Corp of America
Commercial Electronic Products 1-2-5-6-7
Camden 2 NJ 10-12

Radio Kits Inc
120 Cedar St New York 6 NY 12

Ramo-Woodbridge Corp
5730 Arbor Vitae St Los Angeles 45 Calif 2-8

Rauland-Borg Corp
3515 W Addison St Chicago 18 Ill 1

Reeves Instrument Corp
215 E 91 St New York 28 NY 1

Research Electronics Lab
Roslyn Pa 11

Rhein Sound Systems Inc
133 Hamilton St New Haven 5 Conn 1

Rixon Electronics Inc
2414 Reddie Dr Silver Spring Md 1

Schulmerich Electronics Inc
Sellersville Pa 1

Spencer-Kennedy Labs Inc
1320 Soldiers Field Rd
Boston 35 Mass 2-10-12

Standard Electronics Corp
Sub Dynamics Corp of America
285 Emmett St Newark 5 NJ 12

Standard Electronics Div Radio Eng'g Labs
30 & Borden Sts
Long Island City NY 2-8-12

Stewart Warner Electronics Div
1300 N Kostner Ave Chicago 51 Ill 1-3

Stromberg-Carlson Div
General Dynamics Corp
100 Carlson Rd
Rochester 3 NY 1

Taffet Radio & TV Co
27-05 Brooklyn-Queens Expressway
W Woodside 77 NY 1

Tarc Electronics Inc
48 Urban Ave 2-5-6-7-8-9-
Westbury LI NY 10-11-12

Tarzian Inc
Sarkes E Hillside Drive
Bloomington Ind 2-6-12

Teletchrome Mfg Corp
28 Ranick Dr 2-4-5-6-7-8-
Amityville LI NY 9-11-12

Telephonics Corp
Park Ave Huntington LI NY 1

Tel-Instrument Electronics Corp
726 Garden St Carlstadt NJ 2-12

Trans-Tel Corp
736 N Highland Ave
Los Angeles 38 Calif 1-2

Transvision Inc
460 North Ave New Rochelle NY 12

Voron & Co George
835 N 19 St Philadelphia 30 Pa 1-2

Waldom Electronics Inc
4625 W 53 St Chicago 32 Ill 2

Warwick Mfg Corp
7300 N Lehigh Ave Chicago 31 Ill 12

Webster Electric Co
1900 Clark St Racine Wis 1

Westbury Electronics Inc
300 Shames Dr Westbury NY 1-3-6-7-12

Winder Aircraft Corp of Florida
P O Box 2397 Drane Field
Lakeland Fla 1

5—ANALYZERS

Analyzers, antenna pattern 1

Analyzers, audio-amplifier 2

Analyzers, cable 3

Analyzers, capacitor 4

Analyzers, circuit 5

Analyzers, coincidence 6

Analyzers, color 7

Analyzers, crystal 8

Analyzers, differential 9

Analyzers, digital 10

Analyzers, dimensional 11

Analyzers, electrochemical 12

Analyzers, engine 13

Analyzers, frequency 14

Analyzers, gas 15

Analyzers, harmonic 16

Analyzers, intermodulation 17

Analyzers, internal combustion 18

Analyzers, magnetic 19

Analyzers, microwave 20

Analyzers, noise 21

Analyzers, radar 22

Analyzers, servo 23

Analyzers, spectrum 24

Analyzers, stress 25

Analyzers, surface 26

Analyzers, transducer 27

Analyzers, transistor 28

Analyzers, ultrasonic 29

Analyzers, vibration 30

Analyzers, video 31

Analyzers, waveform 32

Acoustica Associates Shore Rd
Glenwood Landing LI NY 29

Advanced Electronics Inc
94 Silas Deane Hwy Rocky Hill 9 Conn 30

Advanced Instruments Inc
21 Oakcrest Rd Needham 92 Mass 12

Airborne Electronics Co
6813 Troost Ave N Hollywood Calif 24

AiResearch Mfx Co Div Garrett Corp
9851 Sepulveda Blvd Los Angeles 45 Calif 27

Airmec Ltd High Wycombe
Buckinghamshire England 16-32

Amerac Inc 116 Topsfield Rd
Wenham Mass 20-22

Alto Scientific Co
855 Commercial St Palo Alto Calif 5

Aloe Scientific
5655 Kingsbury Blvd St Louis 12 Mo 7

American Electronic Laboratories
121 N 7 St Philadelphia 6 Pa 28

American Instrument Co
8030 Georgia Ave Silver Spring Md 13

Analogue Controls Inc
39 Roselle St Mineola NY 9

Applied Physics Corp
362 W Colorado St Pasadena 1 Calif 15

Applied Research Inc
163-07 Depot Rd Flushing 58 NY 21-24

Arenberg Ultrasonic Laboratory
94 Green St
Jamaica Plain 30 Mass 29

Audio Accessories Amityville NY 3

Audio Instrument Co
133 W 14 St New York 11 NY 17

Axler Associates Inc
102-42 43 Ave Corona 68 NY 15

Bailey Meter Co
1050 Ivanhoe Rd
Cleveland 10 Ohio 15

Baird-Atomic Inc
33 University Rd
Cambridge 38 Mass 6-9-24

Baker & Co
113 Astor St Newark 2 NJ 15

Barker & Williamson Inc
Canal & Beaver Sts
Bristol Pa 2-16-17

Beckman/Berkeley Div
Beckman Instruments Inc
2200 Wright Ave Richmond 3 Calif 14

Beckman Instruments Inc Process
Instruments Div 2500 Fullerton Rd
Fullerton Calif 7-9-12-15-24

Bendix Aviation Corp Bendix Computer Div
5630 Arbor Vitae St
Los Angeles 45 Calif 9-10

Bendix Aviation Corp
1104 Fisher Bldg Detroit 2 Mich 9-10-13-22

Benson-Lehner Corp
11930 W Olympic Blvd
Los Angeles 64 Calif 10-11

B & K Mfg Co
3726 N Southport Chicago Ill 28

Bolton Labs Inc
W Main St Bolton Mass 20-24

Boonton Electronics Corp
738 Speedwell Ave Morris Plains NJ 4

Bristol Co
PO Box 1790 EITT
Waterbury 20 Conn 5-12-23

Brush Electronics Co
3405 Perkins Ave
Cleveland O 14-21-23-24-25-30

Brush Electronics Co Texas Div
3732 Westheimer Rd Houston 6 Texas 30

Calif Technical Industries
1421 Old County Rd Belmont 10 Calif 1-5

Cambridge Instrument Co
Grand Central Terminal New York 17 NY 15

Canoga Corp
5955 Sepulveda Blvd
Van Nuys Calif 20-22-24

CGS Laboratories Inc
391 Ludlow St Stamford Conn 14

Chemalloy Electronics Corp
Gillespie Airport Santee Calif 22

Chesapeake Instrument Corp
Shadyside Md 27

Cleveland Instrument Co
735 Carnegie Ave Cleveland 15 Ohio 11-27

Collins Radio Co
855 35 St NE Cedar Rapids Iowa 24

Computing Devices of Canada Ltd
PO Box 508 Ottawa Ontario Can 31

Consolidated Avionics Corp
66 Brooklyn Ave Westbury NY 25-28

Consolidated Electrodynamics Corp
300 N Sierra Madre Villa
Pasadena Calif 15-25-27-30

Consolidated Wire & Associated Cos
1635 S Clinton St
Chicago 16 Ill 3

Cornell-Dubilier Electric Corp
333 Hamilton Blvd
S Plainfield NJ 4

Crescent Eng'g & Research Co
5440 N Peck Rd
El Monte Calif 30

Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	8-29	Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	32	Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	9-10
Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	5	Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	2-4-5-7-13	Pace Electrical Instruments Co 70-31 84 St Glendale 27 LI NY	5
Defender Instrument & Regulator Co Boody Ill	15-18	Ideal-Aerosmith Inc 12909 S Cerise Ave Hawthorne Calif	27	Panoramic Radio Products Inc 10 S 2 St Mt Vernon NY	2-14-16-17-20 24-29-30-31-32
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	20-24	Industrial Control Co 805 Albin Ave Lindenhurst LI NY	4-19-23	Parameters Inc 195 Herricks Rd New Hyde Park NY	2
Devco Eng'g Inc PO Box 387 Caldwell NJ	15	Industrial Research Labs Div Aerona Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	20	Patwin Instruments Div Patent Button Co Waterbury 20 Conn	12-17
Dit-Mco Inc Electronics Div 911 Broadway Kansas City Mo	3-5	Industrial Test Equipment Co 55 E 11 St New York 3 NY	2-14-16-23	Perkin-Elmer Corp Main Ave Norwalk Conn	7-15-24
Donner Scientific Co 888 Galindo St Concord Calif	32	Instrumentation Associates 17 W 60 St New York 23 NY	15	Permutit Co 330 W 42 St New York 36 NY	15
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	13	Instruments Labs 315 W Walton Pl Chicago 10 Ill	5	Phaestron Instrument & Electronic Co 151 Pasadena Ave S Pasadena Calif	5
Dyna-Empire Inc 1075 Stewart Ave Garden City LI NY	19-27	International Research & Development Corp 797 Thomas Lane Columbus 16 Ohio	14-30	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	14-20-24-32
Dynamics Instrumentation Co Div Alberhill Corp 1118 Mission St S Pasadena Calif	21-24-30	Interstate Electronics Corp 875 S East St Anaheim Calif	24	Polyphase Instrument Co E 4 St Bridgeport Pa	28
Edin Co 207 Main St Worcester 8 Mass	14-24	Irwin Labs 1238 S Gerhart Ave Los Angeles 22 Calif	19-25	Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	24
Electronic Research Associates 67 E Centre St Nutley 10 NJ	28	Johnson Aircraft Eng'g Co M J Morristown Airport Box 10 Morristown NJ	3-5	Polytronic Research Inc 7660 Woodbury Dr Silver Spring Md	20-24
Electronic Tube Corp 1200 E Mermaid Lane Philadelphia 18 Pa	25-30	Johnson-Williams Inc 2625 Park Blvd Palo Alto 15 Calif	15	Precision Apparatus Co 70-31 84 St Glendale 27 LI NY	5
Electro-Physics Co 287 Broadway New York 7 NY	12	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	20-22	Process & Instruments 15 Stone Ave Brooklyn 33 NY	15
Ellis Associates 67 Lincoln Ave Pelham NY	25	Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	3-5-22	Production Research Corp Thornwood NY	10-22-30
Ellison Draft Gage Co 584 W Monroe St Chicago 6 Ill	15	Kay Electric Co 14 Maple Ave Pine Brook NJ	2-3-14-20-21-30	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	12-15-29
Empire Devices Products Corp 38-15 Bell Blvd Bayside 61 NY	21	King Electric Equipment Co 9123 Inman Ave Cleveland 5 Ohio	13-15	Pye Telecommunications Ltd Newmarket Rd Cambridge England	3-20-32
Endevco Corp 161 E California St Pasadena Calif	27-30	Kistler Instrument Corp 15 Webster St N Tonawanda NY	13	Pyramid Electric Co 1445 Hudson Blvd N Bergen NJ	4
Ercona Corp 551 5 Ave New York 17 NY	24-26	Kit-Tronics 2315 Hendola Dr N E Albuquerque New Mex	28	Quantum Electronics Inc 2312 Wisconsin St N E Albuquerque N Mex	28
Erwood Inc 1770 W Berteau Ave Chicago 13 Ill	30	Lab-Tronics Inc 3656 N Lincoln Ave Chicago 13 Ill	30	Radar Engineers 401 E 45 St Seattle 5 Wash	3
Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch LI NY	28	Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	13-30	Radiation Counter Labs Inc 5121 W Grove St Skokie Ill	9
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	16-32	Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill	13	Radio City Products Co Centre & Glendale Sts Easton Pa	4-5
Feiler Eng'g & Mfg Co 8026 N Monticello Ave Skokie Ill	5	Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	24	Ransom Research 323 W 7 St San Pedro Calif	10-14-28
First Electronics Corp 117 Blue Hill Ave Boston 19 Mass	3	Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	15	Research Electronics Lab Roslyn Pa	28
Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa	12	Liston-Becker Plant Beckman Instru- ments Inc 649 Hope St Springdale Conn	15	Rese Eng'g Inc 731 Arch St Philadelphia 6 Pa	19
Foto-Video Labs Inc 25 Amity St Little Falls NJ	14-31	Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	24	Rhein Sound Systems Inc 133 Hamilton St New Haven 5 Conn	2
Franklin Electronics Inc Box 113 Bridgeport Pa	2-9-24-32	Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	28	Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	1
Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	16	Manufacturers Eng'g & Equip Corp York Rd & Sunset Lane Hatboro Pa	15	Milton Roy Co 1300 E Mermaid Lane Philadelphia 18 Pa	12
F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	1-20-24	Marconi Instruments Ltd 44 New St New York 4 NY	17-24-32	RS Electronics Corp 435 Portage Ave Palo Alto Calif	21
Garrett Corp AiResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif	27	Mass Laboratories Inc 5 Fottler Rd Hingham Mass	30	Schauer Mfg Corp 4501 Alpine Ave Rossmoyne Ohio	13
General Communication Co 677 Beacon St Boston 15 Mass	20-22-24	Memo Research Lab 538 Phelan Ave San Jose Calif	26	Scott Inc H H 385 Putnam Ave Cambridge 39 Mass	2-21
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	15-19	Metronix Inc Mill Lane Waterford Conn	28	Seco Mfg Co 6015 Penn Ave S Minneapolis 19 Minn	5
General Electric Co X-Ray Dept 4855 Electric Ave Milwaukee 1 Wis	24	Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass	16	Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	12-14-23
General Precision Lab Inc 63 Bedford Rd Pleasantville NY	7-24	Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa	15-21	Shallcross Mfg Co Jackson & Pusey Aves Collingdale Pa	4
General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	14-16-21-30-32	Minneapolis-Honeywell Regulator Co Davies Labs Div 10721 Hanna St Beltsville Md	14-32	Shepard Labs Inc 480 Morris Ave Summit NJ	6
Gerber Scientific Instrument Co 162 State St Hartford 3 Conn	14-30	Muirhead & Co Ltd Beckenham Kent England	2-5-14-16-21-30	Sierra Electronic Corp 3885 Bohannon Dr Menlo Park Calif	3-32
G & M Equipment Co 7315 Varna Ave N Hollywood Calif	20-24	Muirhead Instruments Inc 677 5 Ave New York 22 NY	14-16-21-30-32	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	6-9-10-11-22 23-24-31-32
GPS Instrument Co 811 Boylston St Boston 16 Mass	9	National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif	19-28	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	2-10-13-15-22-23-30
Giannini & Co G M 918 E Green St Pasadena Calif	10	National Instrument Labs Inc 6108 Rhode Island Ave Riverdale Md	15	Sonex Inc 73 S State Rd Upper Darby Pa	28
Gow-Mac Instrument Co 100 Kings Rd Madison NJ	15	Network Mfg Corp 213 W 5 St Bayonne NJ	4	Southern Instruments Computer Div Frimley Rd Camberley Surrey England	12
Grem Eng'g Co 488 1 St Brooklyn 15 NY	20	New England Transformer Co 47 McGrath Hwy Somerville 43 Mass	28	Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	12-13-14-18-20-22-24
Gulton Industries Inc 212 Durham Ave Metuchen NJ	29	Non-Linear Systems Inc Del Mar Airport Del Mar Calif	10	Sprague Electric Co Marshall St North Adams Mass	'
Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	10	Norden-Ketay Corp Commerce Rd Stamford Conn	28	Stelma Inc 190 Henry St Stamford Conn	5
Hallikainen Instruments 1341 7 St Berkeley 10 Calif	7-15	North American Instruments Inc 2420 N Lake St Altadena Calif	10	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	22
Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	13	Northeastern Eng'g Inc 25 S Bedford St Manchester NH	24	Stoddart Aircraft Radio Co 6644 Santa Monica Blvd Hollywood 38 Calif	32
Hamner Electronics Co Princeton NJ	19	NRC Equipment Corp Sub National Research Corp 160 Charlemont St Newton Highlands 61 Mass	15	Taller & Cooper 75 Front St Brooklyn 1 NY	15
Hanson-Gorrill-Brian 85 Hazel St Glen Cove NY	13-18	Nucleonic Corp of America 196 Degraw St Brooklyn 31 NY	9	Tarc Electronics Inc 48 Urban Ave Westbury LI NY	7-31
Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio	7	Oberline Inc P O Box 921 Beverly Hills Calif	2	Tatnall Measuring Systems Co Kimberton Rd Phoenixville Pa	25
Harvey-Wells Electronics Inc North St Southbridge Mass	13	Offner Electronics Inc 5320 N Kedzie Ave Chicago 25 Ill	14	Technical Products Co Instrument Div 6670 Lexington Ave Los Angeles 38 Calif	32
Hays Corp Michigan City Ind	15	Optron Corp 3526 State St Santa Barbara Calif	30	Teachrome Mfg Corp 28 Ranick Dr Amityville LI NY	7-14-17-31-32
Heath Co 305 Territorial Rd Benton Harbor Mich	2-13-17			Telectro Industries Corp 35-18 37 St Long Island City 1 NY	2-5-18

Industrial Development Eng'g Assoc 7900 Pendleton Pike Indianapolis Ind	12-21	Premier Instrument Corp 52 W Houston St New York 12 NY	11	Thomas Mold & Die Co Henry & Grant St Wooster Ohio	25
Industrial Products Co Div Danbury- Knudsen Box 148 Danbury Conn	12	Prodelin Inc 307 Bergen Ave Kearny NJ	3-4-5-6-11-12-13 15-19-20-21-25	Tornrgren Co C W 236 Pearl St Somerville 45 Mass	11-12-13-23
Industrial Radio Corp 428 N Parkside Ave Chicago 44 Ill	21	Production Research Corp Thornwood NY	5-11	Tower Construction Co 2700 Hawkeye Dr Sioux City 2 Iowa	11-23-25
Insuline Corp of America 186 Granite St Manchester NH	12-16-19-20-21-23	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	2-4-6-7 10-12-16-20	Tranco Products Inc 12210 Nebraska Ave Los Angeles 25 Calif	11
I-T-E Circuit Breaker Co Special Products Div 601 E Erie Ave Philadelphia 34 Pa	4-5-7-10-11-13-18	Pye Telecommunications Ltd Newmarket Rd Cambridge England	6-11-12-15 21-22-23	Tri-Ex Tower Corp 127 E Inyo St Tulare Calif	25
JaMac Products Co 8845 N E Sandy Blvd Portland 20 Ore	1-2-3-4-6-7-10 15-16-20-21	Q-Line Mfg Corp 1562 61 St Brooklyn 19 NY	1-2-5-6-7-10 16-20-21	Trilsch Inc John D P O Box 14201 Houston 21 Texas	23-25
Jarvis Electronics Corp 1140 Cherry St Winnetka Ill	5	Radiation Eng'g Labs Main St Maynard Mass	1-6-7-11-14	Truscon Steel Div Republic Steel Corp Youngstown 1 Ohio	25
Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	16	Radiation Inc P O Box 37 Melbourne Fla	1	TV Hardware Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	16
JFD Mfg Co 6101-16 Ave Brooklyn 4 NY	16	Radio City Products Co Centre & Glendale Sts Easton Pa	5	Universal Products Eng'g Co 4100 Taylor Ave Racine Wis	2
Johnson Co E F Waseca Minn	2-6-7-17-24	Radio Corp of America Camden 2 NJ	3-4-10-11-13-20-21	Uniwave Inc 2 Marine St Farmingdale NY	20-21-23-24
Johnson Electronics Inc 521 Elwell St Orlando Fla	9	Radio Merchandise Sales Inc 2016 Bronxdale Ave Bronx 62 NY	20-21-24	Video Industries Co 242 Madison Ave Port Chester NY	16
J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	11-13	Raytheon Mfg Co 100 River St Waltham 54 Mass	10-11	Virginia Electronics Co River Rd & B & O R R Washington 16 DC	10
Kennedy & Co D S 155 King St Cohasset Mass	6-10-11-13-20	Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 54 Mass	13	Walworth Co 89 Union St Mineola NY	11
K-W Eng'g Works 3145-A N 48 St Milwaukee 16 Wis	12	Reeves Instrument Corp 215 E 91 St New York 28 N Y	13	Walworth Co 60 E 42 St New York 17 NY	11-13-23
Lambda-Pacific Eng'g Inc 14725 Armita St Van Nuys Calif	11	Regency Div IDEA Inc 7900 Pendleton Pike Indianapolis Ind	21	Ward Products Corp 1148 Euclid Ave Cleveland 15 Ohio	2-6-7-12
LaPointe Industries Inc 155 W Main St Rockville Conn	2-4-24	Rich Electronics Inc 212 N W 8 Ave Miami 36 Fla	4-10-16-21-24	Waveguide Inc 14837 Oxnard St Van Nuys Calif	11
Lear Inc 3171 S Bundy Drive Santa Monica Calif	1-5-8-20-21	Rohn Mfg Co 116 Limestone Bellevue Peoria 5 Ill	25	Waveline Inc Passaic Ave Caldwell NJ	11-13
Leitch Eng'g Corp 326 Lincoln St Manchester NH	6-12-20-21	Roflan Co Topsfield Mass	1	Webster Mfg Co 242 Shoreline Hwy Mill Valley Calif	2-6-10-12-21
Lieco Inc 3610 Oceanside Rd Oceanside LI NY	11-13	Rollan Electric Co 8233 S Princeton Ave Chicago 20 Ill	8-9-16	Westbury Electronics Inc 300 Shames Dr Westbury NY	11-16-18
Lysco Mfg Co 1401 Clinton St Hoboken NJ	2-7-10	Rostan Corp 5660 59 St Maspeth 78 NY	25	Western Coil & Electrical Co 215 State St Racine Wis	2
Mackay Radio & Telegraph Co Marine Div 133 Terminal Ave Clark NJ	10	S & A Electronics 1025 Nevada St Toledo 5 Ohio	16	Wheeler Labs Inc 122 Cutter Mill Rd Great Neck NY	11-20-21
Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	11	Sage Labs Inc 30 Guinan St Waltham 54 Mass	11-20-21	White & Son James I 374 Verona Ave Newark 4 NJ	6-19-20-21
Mark Products Co 6412 W Lincoln Ave Morton Grove Ill	1-2-6-7-11-12 14-15-20-21	Sanders Associates 95 Canal St Nashua NH	1-11-18	Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	1-23
Master Mobile Mounts Inc 1306 Bond St Los Angeles 15 Calif	6-7-12	Scala Radio Co 2814 19 St San Francisco 10 Calif	6-7-12-15 16-20-21	Wind Turbine Co E Market St & P R R W Chester Pa	3-6-47-20-21-24-25
Mathis Co G E 6100 S Oak Park Ave Chicago 38 Ill	23-25	Seismograph Service Corp 6200 E 41 St Tulsa 1 Okla	8	WRL Electronics Inc 3415 W Broadway Council Bluffs Iowa	2
Maxson Corp W L 475 10 Ave New York 18 NY	1-11	Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	5	Zenith Plastics Co 1600 W 135 St Gardena Calif	11-12
Measurement Eng'g Ltd 232 John St Arnprior Ont Can	6-7-21	Simplex Equipment Corp 55 La France Ave Bloomfield NJ	18	Z & W Mfg Corp 30240 Lakeland Blvd Wickliffe Ohio	1-7-10
Medal Mfg Co P O Box 292 Sharon Pa	16-20-21	Snyder Mfg Co 22 & Ontario Sts Philadelphia 40 Pa	12		
Meridian Metalcraft Inc 8739 S Millergrove Dr Whittier Calif	11	Spaulding Products Co 550 W Barner St Frankfort Ind	25		
Merkle Korff Gear Co 213 N Morgan St Chicago 7 Ill	24	Specific Electronics 570 W Woodbury Rd Altadena Calif	2		
Metal Fabricators Corp 73 Pond St Waltham 54 Mass	25	Specific Products Co 14515 Dickens St Sherman Oaks Calif	2		
Miller Co J W 5917 S Main St Los Angeles 3 Calif	8-9	Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	1-10-11		
Miller Electronics 2840 Naomi St Burbank Calif	16	Spinform Inc 65 Mechanic St Attleboro Mass	10-11-13-15-23		
Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	11	Stainless Inc 3 St North Wales Pa	3-4-6-11-12-13-14-15 16-18-19-20-21-25		
Mosley Electronics Inc 8622 St Charles Rock Rd St Louis 14 Mo	2-6-17	Standard Coil Products Co 2085 N Hawthorne Ave Melrose Park Ill	8-9		
Narda Corp 160 Herricks Rd Mineola NY	11	Standwyck Winding Co 137-151 Walsh Ave Newburgh NY	3-9		
Nichols Products Co 325 W Main St Moorestown NJ	11	Stavid Eng'g Inc U S Route 22 Plainfield NJ	1		
N R K Mfg & Eng'g Co 4601 W Addison St Chicago 41 Ill	11	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-5-8-10-11-13-15-20-21		
Omega Labs Inc Haverhill St Rowley Mass	2-10-11-14-20-21	Superex Electronics Corp 4 Radford Pl Yonkers NY	9		
Park Products Co 6900 Wade Park Ave Cleveland 3 Ohio	9	Swedlow Plastics Co 6986 Bandini Blvd Los Angeles 22 Calif	11		
Pearce Simpson Inc 3023 Coral Way Miami 34 Fla	10	Tabet Mfg Co 1336 Ballentine Blvd Norfolk 12 Va	25		
Peerless Products Industries 812 N Pulaski Rd Chicago 51 Ill	2-16-19	Tarzian Inc Sarkes E Hillside Drive Bloomington Ind	25		
Petroff Corp Peter A 127 Water St New York 5 NY	1-5-19	Technical Appliance Corp 1 Taco St Sherburne NY	1-2-5-6-7-10-11-12 13-15-16-17-20-21		
Phaonstrom Instrument & Electronic Co 151 Pasadena Ave S Pasadena Calif	1	Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn	11		
Philmore Mfg Co 113 University Pl New York 3 NY	3-8	Teletenna Co P O Box 7 Labaz Ind	2-6-7		
Philson Mfg Co 60 Sackett St Brooklyn 31 NY	19	Tele-Vue Towers Inc 701 49 St St Petersburg Fla	25		
Planet Service Corp 88-02 88-06 102 St Richmond Hill 18 NY	7-10	Telkor Inc N Murray Ridge Rd Elyria Ohio	4		
Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	11	Telrex Labs Asbury Park NJ	3-4-5-16-17-20-21-24		
Polytronic Research Inc 7660 Woodbury Dr Silver Spring Md	11	Tennalab 417 S 10 St Quincy Ill	2-6-7-16-17-19-21		
Premax Products Div Chisholm-Ryder Co College & Highland Aves Niagara Falls NY	1-2-6-7-10-12	Tenna Mfg Co 7580 Garfield Blvd Cleveland 25 Ohio	2-12		
		Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	11		
				Advance Electronics Co 8510 North End Ave Oak Park 37 Mich	3-8-11-12
				Aerocoil Inc 24 Cliff St Jersey City 6 NJ	4-5-6
				Afton Industries 406 St Louis Ave Valley Park Mo	3-4-8-10-11
				All Channel Products Corp 47-39 49 St Woodside 77 NY	3-4-9-10-11
				Alliance Mfg Co Lake Park Blvd Alliance Ohio	12
				Alpar Mfg Corp 2910 Spring St Redwood City Calif	1-13
				Alprodec Inc P O Box 4974 Memphis Tenn	13
				American Elite Inc 7 Park Ave New York 16 NY	8
				American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	12
				American Tower Co RFD 2 Box 29 Shelby Ohio	13
				Amphenol Electronics Corp 1830 S 54 Ave Chicago 50 Ill	1-8-10-11
				Andrew Antenna Corp 606 Beech St Whitby Ontario Can	7
				Andrew California Corp 941 E Maryland Ave Claremont Calif	7-12
				Antenna Specialists Co 12435 Euclid Ave Cleveland 6 Ohio	1-2-3-4-9

7—ANTENNAS, HOME

Antennas, amateur	1
Antennas, auto radio	2
Antennas, home all-wave	3
Antennas, indoor FM & TV	4
Antennas, loop	5
Antennas, loop-core	6
Antennas, master community	7
Antennas, outdoor FM & TV	8
Antennas, telescopic	9
Antennas, UHF	10
Antennas, VHF	11
Rotators	12
Towers & supports, home	13

American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	9-11-18	Coaxial Connector Co 37 N 2 Ave Mt Vernon NY	1-6-7	Erie Resistor Corp 644 W 12 St Erie 6 Pa	1-15
American Microwave Corp 11754 Vose St N Hollywood Calif	2-6	Collings Radio Co 855 35 St NE		Erwood Inc 1770 W Berneau Ave Chicago 13 Ill	28
Amphenol Electronics Corp 1830 S 54 Ave Chicago 50 Ill	15-21	Cedar Rapids Iowa	2-19-23-28	Federal Shockmount Corp 1060 Washington Ave New York 56 NY	20
Amplitel Inc 342 W 40 St New York 18 NY	22	Colman Tool & Machine Co 1017 NE 3 Ave Amarillo Texas	2	Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa	10
Amtron Corp 17 Felton St Waltham 54 Mass	5	Colonial Insulator Co 945 Grant St Akron 11 Ohio	12	Fluorocarbon Products Inc Div US Gasket Co 602 N 10 St Camden 1 NJ	12-22
Anchor Plastics Co 36-36 36 St Long Island City 6 NY	20	Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	23	Frequency Standards Inc P O Box 504 Asbury Park NJ	5-7
Anchor Products Co 2712 W Montrose Ave Chicago 18 Ill	21	Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	9	Fretco Inc 406 N Craig St Pittsburgh 13 Pa	12
Andrew Antenna Corp 606 Beech St		Consolidated Productions Inc Broadway Int'l Airport Ft Lauderdale Fla	1	Gabriel Electronics Div Gabriel Co 135 Crescent Rd Needham Heights 94 Mass	5-7-11-16-23
Whitby Ontario Can	2-5-7-9-11-17-26-27	Consolidated Wire & Associated Cos 1686 S Clinton St Chicago 16 Ill	12-15	Garde Mfg Co 588 Eddy St Providence 3 RI	12-15
Andrew California Corp 941 E Maryllnd Ave	5-7-9-11-17-	Continental Electronics Mfg Co 4212 S Buckner Blvd Dallas 27 Texas	2	Gates Radio Co 123 Hampshire St Quincy Ill	4-18-21
Claremont Calif	20-26-27-28	Corbin Corp 5419 56 Pl Riverdale Md	2	Gee-Lar Mfg Co 418 S Wyman St Rockford Ill	3-9-12-15-20
Andrew Corp 363 E 75th Chicago 19 Ill	7-27	Cornell-Dubilier Electric Corp 333 Hamilton Blvd S Plainfield NJ	15	General Bronze Corp 711 Stewart Ave Garden City NY	5-7
Antlab Inc 4950 N High St Columbus 14 Ohio	19-20-23	Corning Glass Works Corning NY	6	General Cement Mfg Co Div Textron Inc 4400 S Wyman St Rockford Ill	3-9-12
Arlin Products Inc 13541 Auburn Ave Detroit 23 Mich	8	Cox & Co 115 E 23 St New York 10 NY	10	General Ceramics Corp Keasbey NJ	12
Arvin Industries Inc Columbus Ind	10	Crane Packing Co 6400 Oakton St Morton Grove Ill	12	General Coil Products Corp 43 Roselle St Mineola NY	1
Atlas Precision Products Co 3801 Castor Ave Philadelphia 24 Pa	20	Crown Controls Co 40 S Washington St New Bremen Ohio	21	General Communication Co 677 Beacon St Boston 15 Mass	5-19-26
Automatic Metal Products Corp 323 Berry St Brooklyn 11 NY	1	Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wisc	10	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	10
Automatic Methods Inc 965 W Grand St Elizabeth NJ	8	Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	2	General Precision Lab Inc 63 Bedford Rd Pleasantville NY	18
Autron Eng'g Inc 1254 W 6 St Los Angeles 17 Calif	8	Daimo Victor Co Div Textron Inc 1515 Industrial Way Belmont Calif	23	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	2
Avionics Ltd PO Box 200 Niagara-on-the-Lake Ontario Canada	21	Dante Electric Mfg Co Bantam Conn	3	General RF Fittings Inc 702 Beacon St Boston 15 Mass	1-6-7
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	1-2-6-12-16-19-28	Delttime Inc 608 Fayette Ave Mamaroneck NY	1	Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	14
Bell Aircraft Corp PO Box 1 Buffalo 5 NY	1	Defiance Eng'g & Microwave Corp Beverly Airport Beverly Mass	5-6-7-8	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	1
Bernco Engineering Corp 2320 S Tibbs Ave Indianapolis 41 Ind	1	DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	6	Grinnell Co 260 W Exchange St Providence 1 RI	10
Birnbach Radio Co 145 Hudson St New York 13 NY	3-9-12-15	Detroit Controls Corp Norwood Controls Unit 934 Washington St Norwood Mass	18	Guild Electronics Inc 388 Broadway New York 13 NY	1-8
Blaco Mfg Co 6541 Euclid Ave Cleveland 3 Ohio	3	Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	5-6-7-8-16-20	Hackensack Cable Corp 110 Orchard St Hackensack NJ	9
Blaine Electronics Inc 14757 Keswick St Van Nuys Calif	2	Diamond Power Specialty Corp Lancaster Ohio	19	Hallett Mfg Co 1601 W Florence Inglewood Calif	1-3
Blonder-Tongue Laboratories 9-25 Alling St Newark 2 NJ	2-18-21	Dielectric Products Eng'g Co Raymond Me	2	Hallierafters Co 4401 W 5 Ave Chicago 24 Ill	5-7
Bogart Mfg Corp 315 Seigel St Brooklyn 6 NY	6-12	Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wisc	6	Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	17
Bolton Labs Inc W Main St Bolton Mass	2-5-6	Dollin Corp 636 S 21 St Irvington 11 NJ	9	Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	18
Bowmar Instrument Corp 2415 Pennsylvania St Ft Wayne Ind	23	Dossert Mfg Corp 249 Huron St Brooklyn 62 NY	3	Hansen Electronics Co 7117 Santa Monica Blvd Los Angeles 46 Calif	2
Brach Mfg Corp 200 Central Ave Newark 3 NJ	1	D & S Mfg Co 424 Burk Ave Ridley Park Pa	7-9-17	Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio	10
Breeze Corps 700 Liberty Ave Union NJ	20	Dwyer Eng'g Co Pine St Ext Nashua NH	4	Harvey-Wells Electronics Inc North St Southbridge Mass	18
Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	11-20	Eagle Electric Mfg Co 23-10 Bridge Plaza S Long Island City 1 NY	3	Heath Co 805 Territorial Rd Benton Harbor Mich	13
Bruno-New York Industries Corp 460 W 34 St New York 1 NY	19	Edgerton, Germeshausen & Grier 160 Brookline Ave Boston 15 Mass	2	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	6-7
Budd Stanley Co 43-01 22 St Long Island City 1 NY	7	Electrend Products Corp Box 110 St Joseph Mich	20-22	Hughey & Phillips 3300 N San Fernando Blvd Burbank Calif	27
Budelman Radio Corp 375 Fairfield Ave Stamford Conn	7	Electrical Products Research & Development Co 1206 Cherry St Toledo 4 Ohio	10	iE Mfg 325 N Hoyne Ave Chicago 12 Ill	3-11-12-17-20-25
Buhl Optical Co 1009 Beech Ave Pittsburgh 33 Pa	14	Electric Hotpack Co Cottman Ave & Melrose St Philadelphia 35 Pa	22	Ilg Electric Ventilating Co 2850 N Pulaski Rd Chicago 41 Ill	10
Burndy Corp Omaton Div Norwalk Conn	3	Electric Regulator Corp Pearl St Norwalk Conn	18	Ilumitronic Eng'g Co 680 E Taylor Ave Sunnyvale Calif	2
Buss-Clement-Doughten & Associates 201 R Studio Hill Chester Springs Pa	18	Electric Trading Co 313 Canal St New York 13 NY	10	Industrial Radio Corp 428 N Parkside Ave Chicago 44 Ill	18
Cable Electric Products 234 Daboll St Providence 7 RI	1	Electro-Flex Heat Inc 83 Woodbine St Hartford 6 Conn	10	Insuline Corp of America 186 Granite St Manchester NH	9-11-12-20
Camera Equipment Co 315 W 43 St New York 36 NY	20	Electro Impulse Lab Inc 208 River St Red Bank NJ	6-19	International Research & Development Corp 797 Thomas Lane Columbus 16 Ohio	18
Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada	2-23	Electrola Inc 7517 N Clark St Chicago 26 Ill	23	Isolantite Mfg Corp Warren Ave Stirling NJ	12
Canoga Corp 5955 Senulveda Blvd Van Nuys Calif	7	Electromode Div Commercial Contro's Corp 45 Crouch St Rochester 3 NY	10	I-T-E Circuit Breaker Co Special Products Div 601 E Erie Ave Philadelphia 34 Pa	5-6-7-20-26
Capps & Co 20 Addison Pl Valley Stream LI NY	10	Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	2-5	JaMac Products Co 8845 NE Sandy Blvd Portland 20 Ore	5
Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wisc	26	Elm Labs 10 Washington Ave Hastings-on-Hudson NY	11-20	Javex PO Box 646 Redlands Calif	21
Central Electronic Mfrs Inc Sub Nuclear Corp of America 2 Richwood Pl Denville NJ	5-7	El-Rad Mfg Co 2800 W Cullom Ave Chicago 18 Ill	2	Jeffrey Mfg Co 803 N 4 St Columbus 16 Ohio	8
Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill	19	Elzee Metal Products Co 775 39 St Brooklyn 32 NY	3-11	Jennings Radio Mfg Corp 970 McLauz'hlin Ave San Jose 8 Calif	26
CG Electronics Corp 305 Dallas St NE Albuquerque New Mex	5-7	Emerson & Cuming Inc 869 Washington St Canton 1 Mass	6-14	Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	13-22-26
CGS Laboratories Inc 391 Ludlow St Stamford Conn	7-21	Empire Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY	12	JFD Mfg Co 6101-16 Ave Brooklyn 4 NY	9-20
Channel Master Corp Ellenville NY	9-15-17-20-21	Empire Electronics Co 166 River St Paterson 1 NJ	1	Johnson Co E F Waseca Minn	4-9-12-13-26
Chemalloy Electronics Corp Gillespie Airport Santee Calif	6	Endeco Eng'g Development Co of Los Angeles 922 E Anaheim St Wilmington Calif	20	Johnson Electronics Inc 521 Elwell St Orlando Fla	2
Clear Beam Antenna Corp 21341 Roscoe Blvd Canoga Park Calif	12-17-20	Epo Electronics Inc 140 Liberty St New York 6 NY	21-26	Jones Electronics Co M C 185 M Main St Bristol Conn	6
Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	1-7	Erco Radio Labs Inc 637 Stewart Ave Garden City NY	1-28		

J-V-M Eng'g Co					
4633 S Lawndale Ave Lyons Ill	2-5-6-7-14				
Kahl Scientific Instrument Corp					
PO Box 1166 El Cajon Calif	6				
Kaiser Aircraft & Electronics Corp					
Toledo Electronics Div					
PO Box 437 Toledo Ohio	1				
Kemlite Labs Inc					
1819 W Grand Ave Chicago 22 Ill	27				
Kennedy & Co D S					
155 King St Cohasset Mass	5				
Kenwood Eng'g Co					
265 Colfax Ave Kenilworth NJ	17-20				
Kling Metal Spinning & Stamping Co					
245 Centre St New York 13 NY	11				
Kupfrian Mfg Corp					
395 State St Binghamton NY	23				
Land-Air Inc Instrument & Electronic Div					
2133 Adams Ave San Leandro Calif	1				
Lane Electronics Mfg Corp					
7254 Atoll Ave N Hollywood Calif	1-6				
LaPointe Industries Inc					
155 W Main St					
Rockville Conn	4-9-11-20-21				
Lapp Insulator Co Radio Specialties Div					
24 Summer St LeRoy NY	6-12-24				
Lear Inc					
3171 S Bundy Drive					
Santa Monica Calif	13-16-23				
Lieco Inc					
3610 Oceanside Rd Oceanside LI NY	6-7				
Litton Industries of Calif					
336 N Foothill Rd Beverly Hills Calif	13				
Lord Mfg Co					
1635 W 12 St Erie 6 Pa	20				
Lorentzen Inc H K					
391 W Broadway New York 12 NY	11-17				
Lynmar Engineers Inc					
1432 N Carlisle St Philadelphia 21 Pa	2				
McMillan Industrial Corp					
Brownville Ave Ipswich Mass	14				
Magnetic Amplifiers Inc					
632 Tinton Ave New York 55 NY	23				
Maliory & Co Inc PR					
42 S Gray St Indianapolis 6 Ind	26				
Maryland Electronic Mfg Corp					
5009 Calvert Rd College Park Md	20				
Measurement Eng'g Ltd					
232 John St Arnprior Ont Canada	28				
Medal Mfg Co PO Box 292 Sharon Pa	20				
Metal Fabricators Corp					
73 Pond St Waltham 54 Mass	11				
Metal Specialty Products Corp					
27-01 Brooklyn Queens Expressway W					
Woodside 77 NY	3-11-20				
Microphase Corp					
Box 1166 Greenwich Conn	4-7-21				
Microwave Associates Inc					
Burlington Mass	6				
Mil Case Corp					
35-18 37 St Long Island City NY	11				
Millen Mfg Co James					
150 Exchange St Malden 48 Mass	2				
Model Eng'g & Mfg Inc					
50 Frederick St					
Huntington Ind	1-20				
Modern Laboratory Equip Co					
1811 1 Ave New York 28 NY	10				
Mosley Electronics Inc					
8622 St Charles Rock Rd					
St Louis 14 Mo	2-12-21-22				
Mueller Electric Co					
1585H E 31 St Cleveland 14 Ohio	3				
Mykroy Inc					
Wheeling Ill	12				
National Company Inc					
61 Sherman St Malden 48 Mass	12				
National Electric Products Corp					
2 Gateway Center Pittsburgh 22 Pa	17-20				
Newcomb Spring of Conn					
College Hwy Southington Conn	25				
Newcomb Spring Corp					
177 E Hawthorne Ave					
Valley Stream NY	9-20-25				
North Electric Co					
553 S Market St Gallon Ohio	18				
N R K Mfg & Eng'g Co					
4601 W Addison St Chicago 41 Ill	6				
Ohio Brass Co					
380 N Main St Mansfield Ohio	15				
Ohmite Mfg Co					
3601 Howard St Skokie Ill	6				
Palmer Inc M V					
4002 Fruit Valley Rd Vancouver Wash	2				
Panellit Inc					
7401 N Hamlin Ave Skokie Ill	18				
Parker Metal Goods Co					
85 Prescott St Worcester 5 Mass	9-12-17-26				
Petroff Corp Peter A					
127 Water St New York 5 NY	6-12-17				
Photocircuits Corp					
31 Sea Cliff Ave Glen Cove NY	21				
Photographic Analysis Inc					
13273 Ventura Blvd N Hollywood Calif	8				
Porcelain Products Inc					
420 W Sandusky St Findlay Ohio	12				
Premax Products Div Chisolm-Ryder Co					
College & Highland Aves					
Niagara Falls NY	12-20				
Premier Instrument Corp					
52 W Houston St New York 12 NY	2-5-6-7				
Prodelin Inc					
307 Bergen Ave Kearny NJ	5				
Pye Canada Ltd					
82 Northline Rd Toronto 16					
Ontario Canada	18				
Pye Telecommunications Ltd					
Newmarket Rd	2-11-19-20-				
Cambridge England	22-23-26				
Radar Design Corp					
210 5 Ave New York 16 NY	6				
Radiation Inc					
PO Box 37 Melbourne Fla	6				
Radio Corp of America Commercial					
Electronics Products					
Camden 2 NJ	2-10-13-21-22-28				
Radio Industries Inc					
5225 N Ravenswood Ave					
Chicago 25 Ill	2				
Radio Merchandise Sales Inc					
2016 Bronxdale Ave Bronx 62 NY	9-20				
Raytheon Mfg Co Commercial Equip Div					
100 River St Waltham 54 Mass	5				
Reliable Spring & Wire Forms Co					
3167 Fulton Rd Cleveland 9 Ohio	25				
Resistoflex Corp					
Woodland Rd Roseland NJ	12-14				
Rich Electronics Inc					
212 NW 8 Ave Miami 36 Fla	1-26-28				
Rixon Electronics Inc					
2414 Reddie Dr Silver Spring Md	2-19-26				
Rockwell Co W S					
220 Eliot St Fairfield Conn	10				
Roflan Co Topsfield Mass	6				
Rohn Mfg Co					
116 Limestone Bellevue Peoria 5 Ill	20				
Sage Labs Inc					
30 Guinan St					
Waltham 54 Mass	2-5-6-19-26				
Saxton Products Inc					
1661 Boone Ave New York 60 NY	15				
Sciaky Bros					
4915 W 67 St Chicago 38 Ill	10				
Scientific Electric					
105 Monroe St Garfield NJ	10				
Seismograph Service Corp					
6200 E 41 St Tulsa 1 Okla	6				
Sierra Electronic Corp					
3885 Bohannon Dr Menlo Park Calif	1-6				
Silicone Insulation Inc					
Seabury Ave & Butler Pl Bronx 61 NY	12				
Smith Inc Herman H					
2326 Nostrand Ave Brooklyn 10 NY	9				
Snyder Mfg Co					
32 & Ontario Sts Philadelphia 40 Pa	20				
South River Metal Products Co					
377 Turnpike South River NJ	20				
South River Prods Co					
377 Turnpike South River NJ	20				
Spencer-Kennedy Labs Inc					
1320 Soldiers Field Rd Boston 35 Mass	2				
Sperry Gyroscope Co Div Sperry Rand Corp					
Great Neck NY	7				
Spinform Inc					
65 Mechanic St Attleboro Mass	11				
Spivey Inc James S					
4908 Hampden Lane Washington 14 D C	6				
Stainless Inc					
3 St North Wales Pa	27				
Standard Electronics Div Radio Eng'g Labs					
30 & Borden Sts					
Long Island City NY	5-6-7-19				
States Co					
19 New Park Ave Hartford 6 Conn	6				
Steiner-Ives Co					
Springfield Rd Union NJ	10				
Stewart Instrument Co					
6507 Grand River Detroit 8 Mich	18				
Stone City Machine & Tool Co					
1206 7 St Bedford Ind	3-9				
Superex Electronics Corp					
4 Radford Pl Yonkers NY	1				
Surface Combustion Corp					
2875 Dorr St Toledo 1 Ohio	10				
Taffet Radio & TV Co					
27-05 Brooklyn-Queens Expressway W					
Woodside 77 NY	6				
Tarc Electronics Inc					
48 Urban Ave Westbury LI NY	18				
Taylor Fibre Co					
Norristown Pa	12				
Technical Appliance Corp					
1 Taco St Sherburne NY	2-4-20-21-22				
Technicraft Labs Inc					
Thomaston-Waterbury Rd					
Thomaston Conn	5-7				
Tech-Ohm Resistor Corp					
86-11 33 St Long Island City 6 NY	10				
Telescope Mfg Corp					
28 Ranick Dr Amityville LI NY	7-18				
Tele-Coil Co					
2733 Saunders St Camden 5 NJ	27				
Telectro Industries Corp					
35-18 37 St					
Long Island City 1 NY	1-6-11-18-20				
Telematic Industries Inc					
16 Howard Ave Brooklyn 7 NY	21				
Telerad Mfg Corp					
1440 Broadway New York 18 NY	6				
Tel-Instrument Electronics Corp					
728 Garden St Carlstadt NJ	18				
Telkor Inc					
N Murray Ridge Rd Elyria Ohio	21				
Telrex Labs					
Asbury Park NJ	17				
Temperature Eng'g Corp					
U S Hwy 130 Riverton NJ	10				
Tevco Insulated Wire					
108 E Prospect Ave Burbank Calif	12-21-22				
Texas Instruments Inc					
6000 Lemmon Ave Dallas 9 Texas	5-7				
Thomas Mold & Die Co					
Henry & Grant St Wooster Ohio	17				
Thomas & Sons R					
Lisbon Ohio	12				
Topp Industries Inc					
5255 W 102 St Los Angeles 45 Calif	10				
Tracerlab Inc					
1601 Trapelo Rd Waltham 54 Mass	18				
Trane Co					
Cameron & 2 St La Crosse Wis	10				
Tranco Products Inc					
12210 Nebraska Ave Los Angeles 25 Calif	2				
Trico Fuse Mfg Co					
2948 N 5 St Milwaukee 12 Wis	3				
Tricraft Products Corp					
1535 N Ashland Ave Chicago 22 Ill	9				
Tri-Point Plastics Inc					
175-1 U Willets Rd Albertson LI NY	12				
TV Hardware Mfg Co Div Textron Inc					
400 S Wyman St Rockford Ill	20				
TV Specialty Co					
350 W 31 St New York 1 NY	18				
TV Utilities Corp					
112-33 Colonial Ave Corona 68 NY	18-19				
Ulanet Co George					
413 Market St Newark 5 NJ	10				
Universal Clay Products Co					
1528 E 1 St Sandusky Ohio	12				
Uniwave Inc					
2 Marine St Farmingdale NY	6-7-9-17-21				
U S Rubber Co					
1230 6 Ave New York 20 NY					

Facsimile	23	Arma Div American Bosch Arma Corp		Century Electronics & Instruments Inc	
Flight simulators & trainers	24	Garden City NY	6-18-26-29-31	1333 N Utica Ave Tulsa 10 Okla	11
Ground landing systems	25	Arnoux Corp		Century Engineers	
Guided missile telemetering	26	11924 W Washington Blvd		2741 N Naomi St Burbank Calif	20
Intercommunication systems ...	27	Los Angeles 66 Calif	9	CG Electronics Corp	
Lamps, aircraft	28	Askania Regulator Co		305 Dallas St	
Navigation equipment, airborne 29		240 E Ontario St		N E Albuquerque New Mex	21-26
Navigation equipment, ground.. 30		Chicago 11 Ill	4-13-19-20-21-29-30	CGS Laboratories Inc	21-26
Radar	31	Associated Research Inc		391 Ludlow St Stamford Conn	32
Radar beacons	32	3758 W Belmont Ave Chicago 18 Ill	13	Chatham Electronics Div Gera Corp	
Receivers	33	Atlas Eng'g Co		W Mt Pleasant Ave Livingston NJ	7-8
Transmitters	34	176 Blue Hill Ave Roxbury 19 Mass	9	Chicago Aerial Industries Inc	
		Authorized Mfrs Service Co		1980 N Hawthorne Ave	
		919 Wyckoff Ave Brooklyn 27 NY	13	Melrose Park Ill	4-19-20-25-29
		Autonetics Div North American Aviation		Chicago Miniature Lamp Works	
		9150 E Imperial Hwy		1500 N Ogden Ave Chicago 10 Ill	28
		Downey Calif	3-11-16-18-20-31	Chu Associates	
		Autron Eng'g Inc		634 Waverly St Framingham Mass	1-2
		1254 W 6 St Los Angeles 17 Calif	15	Circon Component Co	
		Avion Div ACF Industries Inc		Santa Barbara Municipal Airport	
		11 Park Pl	4-7-9-18-19-20	Goleta Calif	28
		Paramus NJ	25-26-29-30-32	Clark Electronic Labs	
		Avionics Ltd		Box 165 Palm Springs Calif	14
		P O Box 200		Clevite Harris Products Inc	
		Niagara-on-the-Lake Ontario Can	2-12-14-26	6545 Carnegie Ave Cleveland 3 Ohio	15
		Avtron Mfg Inc		Clifton Precision Products Co	
		10409 Meech Ave Cleveland 5 Ohio	13	Marple at Broadway Clifton Heights Pa	18
		Babcock Radio Eng'g Inc		Coaxial Connector Co	
		7942 Woodley Ave Van Nuys Calif	13-21-32	37 N 2 Ave Mt Vernon NY	2
		Barry Controls Inc		Coil Winders Inc	
		700 Pleasant St Watertown 72 Mass	15	New York Ave Westbury LI NY	26
		Behlman Eng'g Co		Collins Electronics Mfg Corp	
		114 S Hollywood Way Burbank Calif	9	Stevensville Md	9
		Bell Aircraft Corp		Collins Radio Co	
		P O Box 1	1-2-3-4-7-8-9-13-16-17-18-19-20	855 35 St N E	1-2-3-4-13-16-19-21-22
		Buffalo 5 NY	22-25-26-27-29-30-31-32-33-34	Cedar Rapids Iowa	25-27-29-30-31-33-34
		Bell & Gossett Co		Colorado Research Corp	
		8200 Austin Ave Morton Grove Ill	26	4697 E Evans Ave Denver 22 Colo	4
		Belock Instrument Corp		Columbia Products Co	
		111-01 14 Ave	4-6-18-19	6625 Shakespeare Rd Columbia SC	2
		College Point 56 NY	20-24-26-29	Colvin Labs Inc	
		Bendix Aviation Corp Bendix Computer		364 Glenwood Ave E Orange NJ	14
		Div 5630 Arbor Vitae St		Commercial Radio Sound Corp	
		Los Angeles 45 Calif	24	652 1 Ave New York 16 NY	9
		Bendix Aviation Corp Pacific Div		Communication Accessories Co	
		11600 Sherman Way		110 St & 71 Hwy Hickman Mills Mo	7-9-21
		N Hollywood Calif	16-20-22-26-31-32	Computer Control Co	
		Bendix Aviation Corp Bendix Radio Div		92 Broad St Wellesley 57 Mass	17-18
		East Joppa Rd	2-7-16-19-20-21-25-26-27	Computing Devices of Canada Ltd	
		Towson 4 Md	29-30-31-32-33-34	P O Box 508 Ottawa Ontario Can	4-18-29
		Bendix Aviation Corp	2-3-4-6-7-8-9-13-16	Condenser Products Div New Haven	
		1104 Fisher Bldg	18-19-20-21-22-25-26	Clock & Watch Co 140 Hamilton St	
		Detroit 2 Mich	27-29-30-31-32-33-34	New Haven 4 Conn	7-8-9
		Bendix Aviation Corp Red Bank Div		Conn Telephone & Electric Corp	
		Eatontown NJ	7-8-9	70 Britannia St Meriden Conn	13-27
		Bergen Wire Rope Co		Conrad & Moser	
		455 Gregg St Lodi NJ	4	2 Borden Ave Long Island City 1 NY	29-30
		Berndt-Bach Inc Auricon Div		Consolidated Electrodynamics Corp	
		6900 Romaine St Hollywood 38 Calif	10-11	300 N Sierra Madre Villa	
		Bernco Engineering Corp		Pasadena Calif	11-13-14
		2320 S Tibbs Ave		Consolidated Avionics Corp	
		Indianapolis 41 Ind	4-13-20	66 Brooklyn Ave	3-4-9-13-14-18
		R & F Instruments Inc		Westbury NY	19-20-26-31
		4732 N Broad St Philadelphia 41 Pa	14	Consolidated Productions Inc	
		R & H Instrument Co		Broward Int'l Airport	
		3479 W Vickery Blvd Ft Worth 7 Texas	13	Ft Lauderdale Fla	21-24
		R J Electronics Borg-Warner Corp		Continental Electric Co	
		3300 Newport Ave Santa Ana Calif	26	325 Ferry St Newark 5 NJ	9
		Blaine Electronics Inc		Control Specialists Inc	
		14757 Keswick St Van Nuys Calif	1-2-13	115 E Arbor Vitae St Inglewood 1 Calif	3
		Boehme Inc H O		Cook Electric Co	
		915 Broadway New York 10 NY	30	2700 Southport Ave Chicago 14 Ill	4-19
		Bogue Electric Mfg Co		Corbin Corp	
		Iowa Ave Paterson 3 NJ	7-8-9	5419 56 Pl Riverdale Md	16-18-23-25-29-30
		Bourns Labs Inc		Craig Systems Inc	
		6135 Magnolia Ave Riverside Calif	14	90 Holten St Danvers Mass	25
		Bowmar Instrument Corp		Crescent Eng'g & Research Co	
		2415 Pennsylvania St		5440 N Peck Rd El Monte Calif	4-11-20
		Ft Wayne Ind	4-19-20-21	Curtiss-Wright Corp Electronics Div	
		Brach Mfg Corp		631 Central Ave Carlstadt NJ	24
		200 Central Ave Newark 3 NJ	2	Dale Products Inc	
		Brubaker Electronics Inc		Columbus Nebr	1-2
		3652 Eastham Dr Culver City Calif	29-30	Dalmo Victor Co Div Textron Inc	
		Bruno-New York Industries Corp		1515 Industrial Way Belmont Calif	1-20
		460 W 34 St New York 1 NY	13-16-29	Darco Industries Inc Gyro Dynamics Div	
		Brush Electronics Co		2151 E Rosecrans Ave	
		3405 Perkins Ave Cleveland O	14-20	El Segundo Calif	3-4-6-14-19-20
		Bundy Electronics Corp		Datran Electronics	
		171 Fabyan Pl Newark 12 NJ	8	3615 Aviation Blvd	
		Burroughs Corp		Manhattan Beach Calif	14
		6071 2 Ave	2-4-6-11-12-16-18-19-20	Daven Co	
		Detroit 32 Mich	23-25-26-29-30-33	Route 10 Livingston NJ	20-26-33
		Cable Electric Products		Davenport Mfg Co	
		234 Daboll St Providence 7 RI	20-28	1713 N Ashland Ave Chicago 22 Ill	13
		Calif Magnetic Control Corp		Daystrom Pacific Corp	
		11922 Valerio St N Hollywood Calif	7-8-9	3030 Nebraska Ave Santa Monica Calif	6-14
		Calif Technical Industries		Dayton Aviation Radio & Equipment Corp	
		1421 Old County Rd Belmont 10 Calif	24	R R 3 Troy Ohio	2-18-21-22-25-27-29-33-34
		Canadian Aviation Electronics Ltd		Daytronic Corp	
		6214 Cote de Liesse Rd	7-18-21-24-26	216 S Main St Dayton 2 Ohio	14
		St Laurent Quebec Canada	29-30-32-33	Dearborn Electronic Labs Inc	
		Canoga Corp		1421 N Wells St Chicago 10 Ill	9
		5955 Sepulveda Blvd Van Nuys Calif	26-32	Defance Eng'g & Microwave Corp	
		CELCO Constantine Eng'g Labs Co		Beverly Airport Beverly Mass	2
		P O Box 555 Mahwah NJ	7	Del Electronics Corp	
		Central Electronic Mfrs Inc Sub Nuclear		41 N Mac Questen Pkwy Mt Vernon NY	9
		Corp of America 2 Richwood Pl		Deming Indicator Co	
		Denville NJ	32	1016 Acorn Dr Dayton 9 Ohio	13
		Central Electronics Inc		Designers for Industry	
		1247 W Belmont Ave Chicago 13 Ill	34	4241 Fulton Pkwy Cleveland 9 Ohio	31-32
		Central Scientific Co of Calif		Detroit Controls Corp Norwood Controls	
		1040 Martin Ave Santa Clara Calif	6	Unit 934 Washington St	
				Norwood Mass	14

Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass 1-2-22-31-32			
Dirigo Compass & Instrument Co Boeing Field Box 37 Seattle 8 Wash	13		
Dit-Mco Inc Electronics Div 911 Broadway Kansas City Mo	13		
Donner Scientific Co 888 Galindo St Concord Calif	14		
Dorne & Margolin 29 New York Ave Westbury NY	2-31		
Dressen-Barnes Corp 250 N Vinado Ave Pasadena Calif	9		
Dwyer Eng'g Co Pine St Ext Mashua NH	3-26		
Dyna-Empire Inc 1075 Stewart Ave Garden City LI NY	4		
Dynamics Instrumentation Co Div Alberhill Corp 1118 Mission St S Pasadena Calif	9		
Dynamics Research Associates Div Universal Match Corp P O Box 5841 Ferguson 21 Mo	4-7-20		
Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	7-9		
Eberline Instrument Div Reynolds Electrical 805 Early St Santa Fe N Mexico	20		
Eclipse-Pioneer Div Bendix Aviation Corp Teterboro NJ	3-4-6-16-18-19-20-29		
Edcliff Instruments 1711 S Mountain Ave Monrovia Calif	14		
Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ	14-20		
Edko Electronics Eng'g Co 202 Grand St Brooklyn 11 NY	7-9		
Edo Corp 13-10 111 St College Point 56 LI NY	29		
Eicor Inc 4235 W North Ave Chicago 39 Ill	7-8-9		
Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	4-19-20-21-26		
Electric Cord Co 21 Spruce St New York 38 NY	5		
Electric Regulator Corp Pearl St Norwalk Conn	20		
Electric Specialty Co 211 South St Stamford 1 Conn	9		
Electrola Inc 7517 N Clark St Chicago 26 Ill	21		
Electronic Brazing Co 140 Glenridge Ave Montclair NJ	13		
Electronic Measurements Co Lewis St & Maple Ave Eatontown NJ	7-9		
Electronic Research Associates 67 E Centre St Nutley 10 NJ	7		
Electronics Development Co 3743 N Cahuenga Blvd N Hollywood Calif	26		
Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	2-4-7-9-20-29		
Electrosolids Corp 7436 Varna Ave N Hollywood Calif	7-8-9-27		
Electro-Switch & Controls Inc 5755 Camille Ave Culver City Calif	4		
Elm Labs 10 Washington Ave Hastings-on-Hudson NY	1-27		
Emeloid Co 1239 Central Ave Hillside 5 NJ	18		
Emerson-Sack-Warner Corp 85 Washington St Somerville 43 Mass	1		
Empire Devices Products Corp 38-15 Bell Blvd Bayside 61 NY	9		
Empire Electronics Co 166 River St Paterson 1 NJ	1		
Endevco Corp 161 E California St Pasadena Calif	14		
Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ	1		
Epsco Inc 588 Commonwealth Ave Boston 15 Mass	26		
Erro Radio Labs Inc 637 Stewart Ave Garden City NY	2-30-34		
Erikson Specialized Tool Co 4902 S Lexington Rd Pico 1 Calif	1		
Fairchild Controls Corp Components Div 225 Park Ave Hicksville LI NY	20		
Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch LI NY	3		
Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind	20-26		
Farrand Controls Inc 4401 Bronx Blvd New York 70 NY	20		
Fecker Inc J W 6592 Hamilton Ave Pittsburgh 6 Pa	18		
Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY	30		
Federal Shockmount Corp 1060 Washington Ave New York 56 NY	15		
Federal Telecommunication Labs Div IT&T 500 Washington Ave Nutley NJ	2-3-17-18-29		
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	3-21-22-29-30-31-32-33-34		
Flieth Research Inc P O Box 1-F Richmond 1 Va	10		
Fluidyne Eng'g Corp 425 N 7 St Minneapolis 6 Minn	4-13		
Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY	18-19-20-26-29-30		
Frequency Standards Inc P O Box 504 Asbury Park NJ	32		
Fretco Inc 406 N Craig St Pittsburgh 13 Pa	1-2		
Friez Instrument Div Bendix Aviation Corp 1400 Taylor Ave Baltimore 4 Md	14		
Gabriel Electronics Div Gabriel Co 135 Crescent Rd Needham Heights 94 Mass	1-2		
Garrett Corp A/R Research Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif	5-13-14-18-20		
Gates Electronic Co 2090 Barnes Ave Bronx 62 NY	7		
General Bronze Corp 711 Stewart Ave Garden City NY	1-2		
General Coil Products Corp 43 Roselle St Mineola NY	1		
General Communication Co 677 Beacon St Boston 15 Mass	13-26-29-30-31-32-33		
General Control Co 1200 Soldiers Field Rd Boston 34 Mass	21		
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	26		
General Electric Co Light Military Electronic Equip Dept French Rd Utica NY	29-31-33		
General Precision Lab Inc 63 Bedford Rd Pleasantville NY	29		
General RF Fittings Inc 702 Beacon St Boston 15 Mass	2		
Genisco Inc 2233 Federal Ave Los Angeles 64 Calif	13-1		
Giannini & Co G M 918 E Green St Pasadena Calif	4-6-13-14-18-19-20-26-29		
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio	6		
Good Electric Corp Natick Mass	13		
Goodyear Aircraft Corp 1210 Massillon Rd Akron 15 Ohio	13-20-24-29-31		
Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	9		
Gotham Audio Development Corp 2 W 46 St New York 36 NY	9		
GPS Instrument Co 811 Boylston St Boston 16 Mass	18		
Gray Research & Development Co Hilliard St Manchester Conn	23		
Greenleaf Mfg Co Div Mandrel Industries 7814 Maplewood Industrial Ct St Louis 17 Mo	6		
Greer Hydraulics Inc N Y Int'l Airport Jamaica 30 NY	13		
Guardian Electric Mfg Co 1621 W Walnut St Chicago 12 Ill	4		
Gulton Industries Inc 212 Durham Ave Metuchen NJ	7-11-26		
Gyro Electronics Co 325 Canal St New York 13 NY	21		
Hackensack Cable Corp 110 Orchard St Hackensack NJ	2		
Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	14		
Hallamore Electronics Co 3352 Brookhurst Ave Anaheim Calif	3-7-13-20-26-29-30		
Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	1-26-33-34		
Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	27		
Harrison Labs 45 Industrial Rd Berkeley Heights NJ	9		
Hastings-Raydist Inc Newcomb Ave Hampton Va	29-30		
Haydon Co A W 232 N Elm St Waterbury 20 Conn	4		
Heiland Div Minneapolis-Honeywell 5200 E Evans Ave Denver 22 Colo	10		
Helco Products Corp 7832 Balboa Blvd Van Nuys Calif	14		
Hersox Miniature Lamp Works 60-17 5 St Long Island City 1 NY	28		
Hewson Co 443 Broad St Newark 2 NJ	13		
Highland Eng'g Co 90 Magnolia St Westbury NY	7-9		
Hill Electronic Eng'g & Mfg Co New Kingstown Pa	9		
Hobart Bros Hobart Square E Troy 3 Ohio	9-13		
Hogan Labs Inc 165 Perry St New York 14 NY	23		
Homelite Div Textron Inc 87 Riverdale Ave Port Chester NY	7-8-9		
Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	7-21-26-32		
Hughes Aircraft Co Florence & Teale Sts Culver City Calif	29		
Humphrey Inc 2305 Canon St San Diego Calif	6-14		
Ideal-Aerosmith Inc 12909 S Cerise Ave Hawthorne Calif	13-14		
IE Mfg 325 N Hoyne Ave Chicago 12 Ill	15		
I-L-S Instrument Corp 4525 W 160 St Cleveland 11 Ohio	9		
Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	7-20		
Industrial Test Equipment Co 55 E 11 St New York 3 NY	9-13		
Industrial TV Inc 369 Lexington Ave Clifton NJ	9		
Intelix Systems Inc 22 Thames St New York 6 NY	17		
International Business Mach 590 Madison Ave NY 23 NY	3-13-17-18-29-31		
International Research Associates 2221 Warwick Ave Santa Monica Calif	7-9-14		
Interstate Electronics Corp 875 S East St Anaheim Calif	13-26		
Isolantite Mfg Corp Warren Ave Stirling NJ	1		
Jack Scientific Instrument Co Bill 143 Cedros St Solana Beach Calif	13		
Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md	18-29		
JaMac Products Co 8845 N E Sandy Blvd Portland 20 Ore	2		
Jarvis Electronics Corp 1140 Cherry St Winnetka Ill	18-22-29-33-34		
Johnson Aircraft Eng'g Co M J Box 10 Morristown Airport Morristown NJ	4-13-19-24		
J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	20-26-31-32		
Kahn & Co 541 Windsor St Hartford 1 Conn	13		
Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	3-18-20-24-27-31		
Kato Eng'g Co 1415 1 Ave Mankato Minn	7-8-9		
Katolight Corp Box 891 Mankato Minn	7-8-9		
Kemlite Labs Inc 1819 W Grand Ave Chicago 22 Ill	5-25		
Kennedy & Co D S 155 King St Cobasset Mass	2		
Keppo Labs 131-38 Sanford Ave Flushing NY	7-9		
King Electric Equipment Co 9123 Inman Ave Cleveland 6 Ohio	13		
Kistler Instrument Corp 15 Webster St N Tonawanda NY	14		
Kollman Instrument Corp Standard Coil Products 80-08 45 Ave Elmhurst 73 NY	4-13-14-18-20-29		
Krengel Mfg Co 227 Fulton St New York 7 NY	23		
Kupfrian Mfg Corp 895 State St Binghamton NY	21		
Lambda Electronics Corp 11-11 131 St College Point 56 NY	7-9		
Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	7-9-13-16-25-26-27-33		
Lane Electronics Mfg Corp 7254 Atoll Ave N Hollywood Calif	17-21		
Langevin Mfg Corp 47-37 Austell Pt Long Island City 1 NY	7-27		
Lansing Sound Inc James B 3249 Casitas Ave Los Angeles 39 Calif	14		
LaPointe Industries Inc 165 W Main St Rockville Conn	1		
Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	30-32		
Lawn Electronics Co E Freehold Rd Freehold NJ	7-9		
Leach Corp Inet-Palmer Div 4441 S Santa Fe Ave Los Angeles 58 Calif	7-8-9		
Lear Inc 3171 S Bundy Drive Santa Monica Calif	1-2-4-5-6-8-9-16-19 20-21-27-29-33-34		
Lee Electric & Mfg Co 2806 Clearwater St Los Angeles 39 Calif	7-8		
Leland Electric Co Div American Machine & Foundry 1501 Webster St Dayton 1 Ohio	7-8-9		
Lenkurt Electric Co 1105 County Rd San Carlos Calif	21		
Levinthal Electronic Products Inc 3180 Hanover St Palo Alto Calif	9		
Librascope Inc 808 Western Ave Glendale Calif	18-29-30		
Link Aviation Inc Binghamton NY	18		
Linlar Inc 4101 San Fernando Rd Glendale 4 Calif	7-9-27		
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	3-6-7-9-16-18-19-20-21 22-24-26-29-30-31-32-34		
Loral Electronics Corp 749 E 140 St New York 54 NY	18		
Lord Mfg Co 1635 W 12 St Erie 6 Pa	15		
Lytle Eng'r & Mfg Co 1404 San Mateo Blvd S E Albuquerque New Mex	4-19		
Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	9-20-29-30		

Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	3-13-33	New York Mfg & General Supply 10-38 Jackson Ave Long Island City 1 NY 28	Radio Receptor Co 240 Wythe Ave Brooklyn 11 NY	29-30
Magnecord Div Midwestern Instruments Inc 1101 S Kilbourn Ave Chicago 24 Ill	12	Norden-Ketay Corp Commerce Rd Stamford Conn 2-6-18-29-31	Rahm Instruments Inc 237 Lafayette St New York 12 NY	6-14-19-20
Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	4-7-8-9-19-20	Norma Hoffmann Bearings Corp Walker Div Hamilton Ave Stamford Conn	Rea Co J B 1723 Cloverfield Blvd Santa Monica Calif	6
Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif	7-9-26	North American Instruments Inc 2420 N Lake St Altadena Calif	Reed & Reese Inc 717 N Lake Ave Pasadena 6 Calif	9
Manning Maxwell & Moore Inc Shelter Rock Lane Danbury Conn	4-20	Northeastern Eng'g Inc 25 S Bedford St Manchester NH	Reeves Instrument Corp 215 E 91 St New York 28 NY	6-20-30
Marion Electrical Instrument Co Grenier Field Manchester NH	29	Northern Radio Co 143 W 22 St New York 11 NY	Reflectone Corp Boston Post Rd Stamford Conn	4-7-19
Mark Products Co 6412 W Lincoln Ave Morton Grove Ill	1	Northrop Aircraft Inc 11101 E Broadway Hawthorne Calif	Reliance Electric and Eng'g Co 24701 Euclid Ave Cleveland 17 Ohio	13
Maryland Electronic Mfg Corp 5009 Calvert Rd College Park Md	25-26-30-32	Oltronic Corp 235 Underwood Dr Atlanta 5 Ga	Remington Rand Univac Div Sperry Rand Corp Univac Park St Paul 16 Minn	1
Martlab Co 249 Haverford Ave Swarthmore Pa	3-19	Olympic Radio & TV 34-01 38 Ave Long Island City 1 NY	Remington Rand Div Sperry Rand Corp 315 4 Ave New York 10 NY	1
Matchless Electric Co 1700 Washington Blvd Chicago 12 Ill	28	Omega Instrument Co 103 E Altadena Dr Altadena Calif	Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	32
Maurer Inc J A 37-01 31 St Long Island City 1 NY	10	Onan & Sons D W 2515 University Ave S E Minneapolis 14 Minn	Revere Corp of America Wallingford Conn	13
Maxson Corp W L 475 10 Ave New York 18 NY	18-31	Ordnance Eng'g Corp P O Box 460 Frederick Md	Rheem Mfg Co Electronics Div 7777 Industry Ave Rivera Calif	26
Measurement Eng'g Ltd 232 John St Arnprior Ont Canada	32	Oregon Electronic Mfg Co 2105 S E 6 Ave Portland 14 Ore	Rhein Sound Systems Inc 133 Hamilton St New Haven 5 Conn	33-34
Melco Products Inc 301 5 Ave S Minneapolis 15 Minn	7-9	Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	1-3-4-13-20-26
Melpar Inc 3000 Arlington Blvd Falls Church Va	24-31	Pace Eng'g Co 6914 Beck Ave N Hollywood Calif	Riverbank Labs Eng'g Dept P O Box 65 Geneva Ill	9
Mercury Electronic Co Box 450 B Red Bank NJ	7-9-15	Pacific Scientific Co P O Box 22019 Los Angeles 22 Calif	Rubbercraft Corp of Calif 1800 W 220 St Torrance Calif	15
Meridian Metalcraft Inc 8739 S Millergrove Dr Whittier Calif	1	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	Sanders Associates 25 Canal St Nashua NH	6-31
Merz Eng'g Inc 200 S Harding St Indianapolis Ind	13	Paragon Revolute Corp 77 South Ave Rochester 4 NY	Schaevitz Eng'g P O Box 505 Camden 1 NJ	14
Midwestern Instruments P O Box 7186 Tulsa Okla	11	Parker Metal Goods Co 85 Prescott St Worcester 5 Mass	Schaffer Air Industries 290 N Henry St Brooklyn 22 NY	13
Miles Reproducer Co 812 Broadway New York 3 NY	10	Parsons Co Ralph M Electronics Div 151 S De Lacey Ave Pasadena Calif	Schutte & Koerting Co Cornwells Heights Bucks Co Pa	13
MinAtron Corp Belle Mead 9 NJ	14	Peerless Electrical Products 1515 S Manchester Ave Anaheim Calif	Seaboard Electric Products Corp 417 Canal St New York 13 NY	4-19-29-30
Minneapolis-Honeywell Regulator Co Davies Labs Div 10721 Hanna St Beltsville Md	11	Peerless Photo Products Inc Shoreham LI NY	Sel-Rex Corp 155 Manchester Pl Newark 4 NJ	7-8
Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	9	Pegasus Labs Inc 3690 W 11 Mile Rd Berkley Mich	Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	20-29
Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	3-4-6-13-14-16 17-18-19-20-25	Peirce Dictation Systems 5900 N Northwest Hwy Chicago 31 Ill	Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	14-18-20-29
Minor Rubber Co Ackerman St Bloomfield NJ	15	Pentron Corp 777 S Tripp Ave Chicago 24 Ill	Servonic Instruments Inc 1145 S Fair Oaks Ave Pasadena 2 Calif	14
Missileconics Inc P O Box 716 Melbourne Fla	30	Perkin-Elmer Corp Main Ave Norwalk Conn	Servonics Inc 822 N Henry St Alexandria Va	18-24
Mitchell Industries Inc P O Box 17 F M 1195 Municipal Airport Mineral Wells Texas	2-3-33	Permoflux Products Co 4101 San Fernando Rd Glendale Calif	Shepard Labs Inc 480 Morris Ave Summit NJ	1
Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	1-2-7-9-26-27-33-34	Peschel Electronics Inc 13 Garden St New Rochelle NY	Signal Transformer Co 902 Coney Island Ave Brooklyn 18 NY	9
Model Rectifier Corp 1065 Utica Ave Brooklyn 3 NY	7	Petroff Corp Peter A 127 Water St New York 5 NY	Simmonds Accessories Inc 105 White Plains Rd Tarrytown NY	13
Modern Industries Inc 2601 Colorado Ave Santa Monica Calif	7-9	Philips Electronics Inc 750 S Fulton Ave Mt Vernon NY	Simplex Equipment Corp 55 La France Ave Bloomfield NJ	18
Mohawk Business Machines Corp 944 Halsey St Brooklyn 33 NY	11	Philmore Mfg Co 113 University Pl New York 3 NY	Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill	13
Monroe Calculating Machine Co Electronics Div Morris Plains NJ	18	Plastic Capacitors Inc 2620 N Clybourn Ave Chicago 14 Ill	Simpson Mfg Co Mark 32-28 49 St Long Island City 3 NY	27
Moog Valve Co Proner Airport E Aurora NY	14	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	Skatiron Electronics & TV Corp 180 Varick St New York 14 NY	4-10-16-17-20-22 23-26-29-30-31-32
Moran Instrument Corp 170 E Orange Grove Ave Pasadena 3 Calif	32	Power Designs Inc 89-25 130 St Richmond Hill 18 NY	Skysweeper Inc P O Box 92 McHenry Ill	7
Morrow Radio Mfg Co 2794 Market St Salem Ore	34	Power Supplies Inc 1005 Olive St Highland Ill	Solar Aircraft Co 2200 Pacific Hwy San Diego 12 Calif	4-7-8
Motoresearch Co 1600 Junction Ave Racine Wis	9	Power Transformer Co 91 Edison Pl Newark 5 NJ	Sorenson & Co Stamford Conn	7-9
M Ten Bosch Inc 80 Wheeler Ave Pleasantville NY	4-6-16-18-19-20-29	Premax Products Div Chisholm-Ryder Co College & Highland Aves Niagara Falls NY	Sorenson & Co Richards Ave Norwalk Conn	9-17
Muirhead & Co Ltd Beckenham Kent England	23	Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	Southern Instruments Computer Div Frimley Rd Camberley Surrey England	26
Muirhead Instruments Inc 677 5 Ave New York 22 NY	9-23	Presto Recording Corp Box 500 Paramus NJ	Southwest Products Inc Alamo Downs Rt 4 San Antonio Texas	13
Multi-Amp Corp 465 Lehigh Ave Union NJ	7-9	Prodelin Inc 307 Bergen Ave Kearny NJ	Specialties Inc Skunks Misery Rd Syosset LI NY	14-18
Nader Mfg Co 2661 S Myrtle Ave Monrovia Calif	9	Production Research Corp Thornwood NY	Sperry Gyroscope Co Div Sperry Rand Corp	1-2-3-6-13-18-19-29 30-31-32
National Aeronautical Corp Ft Washington Industrial Park Ft Washington Pa	2-7-29-33-34	PSC Applied Research Ltd 1500 O'Connor Dr Toronto 16 Canada	Spinform Inc 65 Mechanic St Attleboro Mass	1
National Aircraft Corp 3411 Tulare Ave Burbank Calif	4-7-9-20-21	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	Spivey Inc James S 4908 Hampden Lane Washington 14 DC	17-26
National Carbon Co Div Union Carbide & Carbon Corp 30 E 42 St New York 17 NY	28	Pye Telecommunications Ltd Newmarket Rd Cambridge England	Springer Aircraft Radio Co Earl W Route 11 Box 330 Indianapolis Ind	33-34
Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	10-11-22-26	Q-Line Mfg Corp 1562 61 St Brooklyn 19 NY	Stancil-Hoffman Corp 921 N Highland Ave Hollywood 38 Calif	10-11-12
Nems-Clarke Inc 919 Jesup-Blair Dr Silver Spring Md	26	Radiaphone Co 600 E Evergreen Ave Monrovia Calif	Standard Electrical Products Co 2240 E 3 St Dayton 3 Ohio	7
Nevada Air Products Co P O Box 2472 Reno Nev	13-18-20-25-26-29-30-31-33-34	Radiation Eng'g Labs Main St Maynard Mass	Statham Labs Inc 12401 W Olympic Blvd Los Angeles 64 Calif	14
Newcomb Spring Corp 177 E Hawthorne Ave Valley Stream NY	1	Radiation Inc P O Box 37 Melbourne Fla	Stavid Eng'g Inc U S Route 22 Plainfield NJ	13-22-26-29-30-31-32
N J E Corp 345 Carnegie Ave Kenilworth NJ	7-9	Radio City Products Co Centre & Glendale Sts Easton Pa	Stephens Tru-sonic Inc 8538 Warner Dr Culver City Calif	14
		Radio Corp of America Camden 2 NJ	Stewart Corp F W 4311 Ravenswood Ave Chicago 13 Ill	21
		Radionics Inc P O Box 186 Cockeysville Md		

Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-2-7-9-17-18-22 26-29-30-33-34		
Stone City Machine & Tool Co 1206 7 St Bedford Ind		15	
Stratford Corp 44 W 28 St New York 1 NY		4-33	
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY		13	
Superior Electric Co 83 Laurel St Bristol Conn		9	
Sylvania Electric Products Inc 1740 Broadway New York 19 NY	18-24-28-29-31-33		
Systrom Corp 2055 Concord Blvd Concord Calif		26	
Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	4-13-27		
Tatnall Measuring Systems Co Kimberlon Rd Phoenixville Pa		13-14	
Technical Appliance Corp 1 Taco St Sherburne NY		1-2	
Technical Electronics Corp 4060 Ince Blvd Culver City Calif		13	
TelAutograph Corp 8700 Bellanca Ave Los Angeles 45 Calif		23	
Teledrome Mfg Corp 28 Ranick Dr Amityville LI NY		7-20-26	
Telecommunications Ltd Newmarket Rd Cambridge England	4-13-19-34		
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	7-8-9-10-11-12-13 15-26-27-32-34		
Tele-Dynamics Inc 32 & Walnut Sts Philadelphia 4 Pa		26	
Telemarine Communications Co 3040 W 21 St Brooklyn 24 NY		13-33	
Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif		18	
Telephonics Corp Park Ave Huntington LI NY	5-7-8-9-14-27-33		
Tel-Instrument Electronics Corp 728 Garden St Carlstadt NJ		9	
Tenney Eng'g Inc 1090 Springfield Rd Union NJ		13	
Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	18-20-26-27-31		
Thompson Products Inc Electronics Div 2196 Clarkwood Rd Cleveland 3 Ohio	4-20		
Times Facsimile Corp 540 W 58 St New York 19 NY		23	
Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	3-4-13-16-18-19-20-34		
Transco Products Inc 12210 Nebraska Ave Los Angeles 25 Calif		1-2	
Transdyne Corp 7337 Grand Ave Maspeth 78 NY		13	
Trans Electronics Inc 7349 Canoga Ave Canoga Park Calif		9	
Transonic Inc 808 16 St Bakersfield Calif		7-9	
Transval Eng'g Corp 10401 W Jefferson Blvd Culver City Calif	11-13-29-33		
TV Specialty Co 350 W 31 St New York 1 NY		10	
Ultradyne Eng'g Labs P O Box 3308 Albuquerque New Mex		14	
Union Switch & Signal Div Westinghouse Air Brake Co Braddock Ave Pittsburgh 18 Pa		24	
United Control Corp 4540 Union Bay Pl Seattle 5 Wash	4-13-20		
United Electric Controls Co 85 School St Watertown 72 Mass		4	
United Electrodynamics 1200 S Marengo Ave Pasadena Calif	22-26-32		
United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif		20	
Universal Atomics Corp 50 Bond St Westbury LI NY	7-8-9		
Univox Corp 102 Warren St New York 7 NY	4-19-21		
Uniwave Inc 2 Marine St Farmingdale NY		26	
U S Dynamics Corp 1250 Columbus Ave Boston 20 Mass	5-7-8		
U S Time Corp Waterbury Conn		3-6	
Vapor Heating Corp 80 E Jackson Blvd Chicago 4 Ill		4	
Varo Mfg Co 2201 Walnut St Garland Texas	7-9		
Vitro Corp of America 261 Madison Ave New York 16 NY		9	
Voron & Co George 835 N 19 St Philadelphia 30 Pa	27-34		
Vought Co P O Box 1350 Beverly Hills Calif		10	
WacLine Inc 35 S St Clair St Dayton 2 Ohio	20-21		
Wagner Co H A 14707 Keswick St Van Nuys Calif	4-13-20-22		
Waco Inc 2032 Broadway Santa Monica Calif		9	
Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	4-18-20-29-30		
Wallson Associates Ltd 963 Frelinghuysen Ave Newark 12 NJ		9	
Waltham Watch Co 221 Crescent St Waltham 54 Mass		6	
Warren Corp J C 21 Hanse Ave Freeport NY		12	
Welch Mfg Co W M 1515 Sedgwick St Chicago 10 Ill		6	
Wells-Gardner & Co 2701 N Kildare Ave Chicago 39 Ill		21	
Westbury Electronics Inc 300 Shames Dr Westbury NY		32	
West Coast Electronics Co 9261 W 3 St Beverly Hills Calif	7-32		
West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	4-7-13-18-20-21 24-26-29-30		
Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif		9	
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	3-6-29-31		
Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn		9	
White & Sons Wilfrid O 178 Atlantic Ave Boston 10 Mass		3	
Wiancko Eng'g Co 255 Halstead St Pasadena Calif		14	
Wilcox Electric Co 1490 Chestnut St Kansas City 27 Mo	29-30		
Wilmar Mfg Co 1110 Truman Rd Kansas City Mo		19	
Wincharger Corp E 7 & Division St Sioux City 2 Iowa	7-8		
Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	1-2-4-5-7-8-13-15-20-24-27		
Z & W Mfg Corp 30240 Lakeland Blvd Wickliffe Ohio	1-2		
Zenith Plastics Co 1600 W 135 St Gardena Calif		2	

10—BATTERIES, CHARGERS & ACCESSORIES

Batteries, dry cell	1
Batteries, hearing aid	2
Batteries, lead-acid	3
Batteries, mercury	4
Batteries, nickel alkaline	5
Batteries, nickel cadmium	6
Batteries, nuclear	7
Batteries, silver	8
Batteries, silver zinc	9
Batteries, standard cell	10
Batteries, storage	11
Batteries, storage nonspill	12
Batteries, transistor	13
Battery adapters	14
Battery chargers	15
Battery charging regulators	16
Battery testers	17

Acme Battery Corp 200 Henry St Stamford Conn	1-2-13		
Accurate Electronics Corp 169 S Abbe Rd W Elyria Ohio		14	
Adler Electronics Inc 1 LeFevre Lane New Rochelle NY		15	
Aerolite Electronics Corp 507 26 St Union City NJ		14	
Airmec Ltd High Wycombe Buckinghamshire England	15		
Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	1-3-5		
American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	9-14		
American Television & Radio Co 300 E 4 St St Paul 1 Minn		15	
Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio		16	
Automatic Electric Co 1033 W Van Buren St Chicago 7 Ill		15	
Basler Electric Co 601 5 St Highland Ill		15	
Berger Communications 109-01 72 Rd Forest Hills LI NY		7	
Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ	15-16-17		
Bowers Battery & Spark Plur Co P O Box 1262 Reading Pa	3-11-12		
Bright Star Industries 600 Getty Ave Clifton NJ		1	
Bundy Electronics Corp 171 Fabyan Pl Newark 12 NJ		15	
Burgess Battery Co Freeport Ill	1-2-10-13		
Cable Electric Products 234 Daboll St Providence 7 RI	14-17		
Carol Electronics Corp 315 W Stephen St Martinsburg W Va		15	
Chicago Industrial Instrument Co 865 N Sangamon St Chicago 22 Ill		17	
Christie Electric Corp 3410 W 67 St Los Angeles 43 Calif	15-17		
Control Corp 718 Central Ave N E Minneapolis 14 Minn	15		
Cook Co Frank R 36 S Santa Fe Dr Denver 23 Colo	8-9-11-12		
Cornell-Dubilier Electric Corp 333 Hamilton Blvd S Plainfield NJ		15	
Dresser Electric Co 942 E Larned Detroit 7 Mich		15	
Eagle-Picher Co American Bldg Parkway & Walnut Cincinnati 2 Ohio	6-9		
Electric Storage Battery Co Exide Automotive Div 42 S 15 St Philadelphia 2 Pa	3-11-15-17		
Electronic Batteries Inc 23-34 35 St Brooklyn 32 NY		12	
Electronic Instrument Co 84 Withers St Brooklyn 11 NY		17	
Elgin National Watch Co 107 National St Elgin Ill	7-9		
Ercona Corp 551 5 Ave New York 17 NY	6-9		
Ernst & Affiliates W Arthur 825 Hayes Ave Racine Wis		15	
Exide Industrial Div Electric Storage Battery Co 42 S 15 St Philadelphia 2 Pa	3-11-12-15		
Fansteel Metallurgical Corp 2200 Sheridan Rd N Chicago Ill		15	
Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa	15-16		
Fox Products Co 4720 N 18 St Philadelphia 41 Pa	15-17		
General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY		1	
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY		15	
General Nuclear Corp 550 5 Ave New York 32 NY		15	
General Scientific Equipment Co 7516 Limekiln Pike Philadelphia 50 Pa		17	
Goldak Co 1544 W Glenoaks Blvd Glendale 1 Calif		17	
Gould-National Batteries Inc E-1201 First National Bank St Paul 1 Minn	2-3-6-10-11-12-13		
Gray Instrument Co 200 E Church Lane Philadelphia 44 Pa	8-10		
Gyro Electronics Co 325 Canal St New York 13 NY		15	
Hal-Hen Co 36-14 11 St Long Island City 6 NY	2-13-15		
Heath Co 305 Territorial Rd Benton Harbor Mich		17	
Hevi-Duty Electric Co 4212 W Highland Blvd Milwaukee 1 Wis		16	
Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio		17	
Hobart Bros Hobart Square E Troy 3 Ohio		15	
Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY		15	
Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md		17	
Interelectronics 2432 Grand Concourse New York 58 NY	11-12-13		
Kepeco Labs 131-38 Sanford Ave Flushing NY	15-16		
King Electric Equipment Co 9123 Inman Ave Cleveland 5 Ohio		17	
Knopp Inc 4224 Holden St Oakland 8 Calif		15	
Lee Electric & Mfg Co 2806 Clearwater St Los Angeles 39 Calif		15	
Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio		15	
Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY		16	
Mallory Battery Co Div P R Mallory & Co 13000 Athens Ave Cleveland 7 Ohio	1-2-4-13		
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	1-2-4		
Marathon Battery Co 840 Henrietta St Wausau Wis	1-2-13		
Melco Products Inc 301 5 Ave S Minneapolis 15 Minn		15	
Mobil Electronics Mfg Co 1111 State Rd 67 E Anderson Ind		15	
Model Rectifier Corp 1065 Utica Ave Brooklyn 3 NY		15	
National Carbon Co Div Union Carbide & Carbon Corp 30 E 42 St New York 17 NY	1-2-4-10-13		
Nickel Cadmium Battery Corp Pleasant St Easthampton Mass	2-5-6-9-11-12-13		
N J E Corp 345 Carnegie Ave Kenilworth NJ	15-16		
Norma Hoffman Bearings Corp Walker Div Hamilton Ave Stamford Conn		15	
Northeastern Eng'g Inc 25 S Bedford St Manchester NH		15	

North Electric Co			
553 S Market St Galion Ohio	15		
Olin Mathieson Chemical Corp			
460 Park Ave New York 22 NY	1		
Onan & Sons D W			
2515 University Ave S E			
Minneapolis 14 Minn	15		
Philco Corp Accessory Div "A"			
Allegheny Ave Philadelphia 34 Pa	1-4-13		
Power Supplies Inc			
1005 Olive St Highland Ill	15		
Power Transformer Co			
91 Edison Pl Newark 5 NJ	15		
Precise Development Corp			
2 Neil Ct Oceanside NY	17		
Radiation Research Corp			
140 E 59 St New York 22 NY	7		
Radio Corp of America			
415 S 5 St Harrison NJ	1-4-13		
Radio Kits Inc			
120 Cedar St New York 6 NY	17		
Ray-O-Vac Co			
212 E Washington Ave			
Madison Wis	1-2-5-10-13		
Raytheon Mfg Co			
100 River St Waltham 54 Mass	15-16		
Rectifier Eng'g Co			
1803 E 7 St Los Angeles 21 Calif	15-17		
Schauer Mfg Corp			
4501 Alpine Ave Rossmoyne Ohio	15		
Scientific Glass Apparatus Co			
100 Lakewood Terrace Bloomfield NJ	1-11-13		
Sel-Rex Corp			
155 Manchester Pl Newark 4 NJ	15		
Sensitive Research Instrument Corp			
310 Main St New Rochelle NY	17		
Shurite Meters			
61 Hamilton St New Haven 8 Conn	17		
Simpson Electric Co			
5200 W Kinzie St Chicago 44 Ill	17		
Standard Electric Time Co			
89 Logan St Springfield 2 Mass	5-15		
Stewart Warner Electronics Div			
1300 N Kostner Ave Chicago 51 Ill	14		
Stone City Machine & Tool Co			
1206 7 St Bedford Ind	15		
Telectro Industries Corp			
35-18 37 St Long Island City 1 NY	15-16		
TV Specialty Co			
350 W 31 St New York 1 NY	1-6		
United Transformer Corp			
150 Varick St New York 13 NY	16		
U S Dynamics Corp			
1250 Columbus Ave Boston 20 Mass	6-15		
Welch Mfg Co W M			
1515 Sedgwick St Chicago 10 Ill	15		
Willard Storage Battery			
246 E 131 St			
Cleveland 1 Ohio	3-9-11-12-15-17		
Winder Aircraft Corp of Florida			
P O Box 2397 Drane Field			
Lakeland Fla	14-15		
Yardney Electric Corp			
40 Leonard St			
New York 13 NY	5-8-9-11-12-13-15		
A A Metal Products Inc			
154 Elliot St Brattleboro Vt	8-14		
Abalon Precision Mfg Corp			
540 Casanova St			
New York 59 NY	8-21-22-24-26-28		
Accurate Electronics Corp			
169 S Abbe Rd W Elyria Ohio	3-25-27		
ACF Industries Nuclear Prods-Ereco Div			
48 Lafayette St Riverdale Md	7-8-28		
Ackerman Engravers			
468 Broadway New York 13 NY	26-27		
Acromark Co			
443 Morrell St Elizabeth 4 NJ	26-27		
Adler Electronics Inc			
1 LeFevre Lane New Rochelle NY	15-28		
Aerolite Electronics Corp			
507 26 St Union City NJ	25		
Aetna Felt Co			
204 Centre St New York 13 NY	18		
Ainslie Corp			
312 Quincy Ave Quincy 69 Mass	16		
Airflo Instrument Co			
53 Addison Rd Glastonbury Conn	27		
Air Transport Mfg Co	1-4-5-6-7-8-11-12		
1114 N Sycamore Ave	13-14-15-16-17-21		
Los Angeles 38 Calif	22-24-26-28-29-30		
Alden Products Co			
123A N Main St			
Brockton Mass	8-11-14-21-22-28		
Allied Eng'g & Production Corp			
2421 Blanding Ave Alameda Calif	9-16		
Allied Engraving & Stamping Co			
17 Elm St Buffalo 3 NY	26-27		
Allied Fabricating Corp			
1538 N Clybourn Ave			
Chicago 10 Ill	8-22-26-28		
Allied Radio Corp			
100 N Western Ave Chicago 80 Ill	17		
Alloy Metalsmiths Inc			
89 Commerce Rd Cedar Grove NJ	14-15-28		
Altec Lansing Corp			
1515 S Manchester Ave Anaheim Calif	8-28		
American Machine & Foundry Co			
Defense Products Group 1101 N Royal St			
Alexandria Va	8-15-21-26-28		
Amco Eng'g Co			
7333 W Ainslie St			
Chicago 31 Ill	7-8-15-21-22-26-28		
American Insulator Corp			
New Freedom Pa	9		
Anchor Specialty Mfg Co			
Hollister Rd Teterboro NJ	8-10-15-28		
Anderson & Sons			
N Elm St Westfield Mass	26		
Apex Coated Fabrics Co			
12 E 22 St New York 10 NY	23		
Apollo Metal Works			
6651 S Oak Park Ave Chicago 38 Ill	26		
Argos Products Co			
Main St Genoa Ill	10-11-13-17		
Armstrong Cork Co			
W Liberty St Lancaster Pa	18		
Artisan Metal Works Co			
11400 Madison Ave	4-5-7-8-11-14-15		
Cleveland 2 Ohio	16-21-22-24-26-28		
Auburn Mfg Co			
Stack St Middletown Conn	18-20		
Antel Electronics Co			
P O Box 225 Linden NJ	8-22-26		
Avionics Ltd			
P O Box 200			
Niagara-on-the-Lake Ontario Canada	3		
Baltic Metal Products			
126 Sutton St Brooklyn 22 NY	7-8-14		
Barker Sales Co			
996 Edgewater Ave Ridgefield NJ	7-10-17		
Barrett Div Allied Chemical & Dye Corp			
40 Rector St New York 6 NY	25-27		
Beck's Inc			
298 E 5 St St Paul 1 Minn	3		
Berkshire Labs			
586 Bank Village Greenville NH	21		
Bernard Franklin Co			
4155 E Hedley St			
Philadelphia 37 Pa	2-5-8-16-28		
Bestcraft Products Co			
626 Broadway New York 12 NY	23-25		
Bodnar Industries			
238 Huzenot St New Rochelle NY	26		
Boonton Molding Co			
326 Myrtle Ave Boonton NJ	9		
Bradley Associates			
1650 N Damen Ave Chicago 47 Ill	4		
British Industries Corp			
80 Shore Rd Port Washington NY	1-29-30		
Brooks & Perkins Inc			
1950 W Fort St			
Detroit 16 Mich	4-5-8-15-16-21-22-26-28		
Browning Labs Inc			
750 Main St Winchester Mass	10		
Bucks County Enterprises			
Quakertown Pa	8-14-16		
Cable Electric Products			
234 Daboll St Providence 7 RI	12		
California Chassis Co			
5445 E Century Blvd			
Lynwood Calif	8-14-26-28		
Cambridge Pattern Works			
55 1 St Cambridge 41 Mass	10		
Campro Products Inc			
3131 Alliance Rd N E Canton 1 Ohio	1-8-9		
Chassis Trak Inc			
525 S Webster Ave			
Indianapolis 19 Ind	29		
Chicago Industrial Instrument Co			
865 N Sangamon St Chicago 22 Ill	21-22		
Christiansen Co C B			
164 Pennington St Newark 5 NJ	16		
Churchill Lighting Corp			
344 Franklin St			
Melrose 76 Mass	4-8-11-14-21-22-26-28		
Cinch Mfg Corp			
1026 S Homan Ave Chicago 24 Ill	3		
Collins Radio Co			
855 35 St N E Cedar Rapids Iowa	1-7-8-28		
Columbia Metal Box Co			
260 E 143 St New York 51 NY	8-14-21-22		
Commercial Radio Sound Corp			
652 1 Ave New York 16 NY	7		
Communication Equipment & Eng'g Co			
5646 W Race Ave Chicago 44 Ill	8-15-22		
Conrad & Moser			
2 Borden Ave			
Long Island City 1 NY	8-15-21-22		
Consolidated Productions Inc			
Broward Int'l Airport			
Ft Lauderdale Fla	3-7-8-14-15		
Controlled Atmosphere Enclosures Corp			
230-11 141 Ave	1-4-5-9-11		
Springfield Gardens 13 LI NY	21-27-31		
Control Specialty Corp			
1515 Spring Houston 5 Texas	15		
Corrugated Paper Products			
2233 Utica Ave Brooklyn 34 NY	4		
Corry-Jamestown Mfg Corp			
43 N Center St Corry Pa	7-8-15		
Cossor (Canada) Ltd			
301 Windsor St			
Halifax Nova Scotia Canada	8		
Craig Systems Inc			
90 Holten St			
Danvers Mass	4-5-8-9-11-15-16-22-28		
Croname Inc			
3701 Ravenswood Ave			
Chicago 13 Ill	8-21-22-26		
Crystal-X-Westlake Corp			
Lenni Rd Lenni Mills Pa	27		
Dahlstrom Metallic Door Co			
Buffalo & 2 Sts Jamestown NY	4-8-11-21-26		
Daven Co			
Route 10 Livingston NJ	4-10		
Devco Eng'g Inc			
P O Box 387 Caldwell NJ	21-22-26		
Dittmore-Freimuth Corp			
2517 E Norwich St Milwaukee 7 Wis	22		
Dolin Metal Products Inc			
315 Lexington Ave Brooklyn 16 NY	8-22		
Donnelly Mfg Co			
580 Winter St			
Waltham 54 Mass	14-15-22-24-26-28		
Downing Crystal Co			
191 Shaffer Ave Westminster Md	8		
Dudek & Co R C			
407 N Maple Dr Beverly Hills Calif	1		
DuKane Corp			
St Charles Ill	28		
DuMont Labs Inc Allen B			
760 Bloomfield Ave Clifton NJ	1		
Duralith Corp			
1025 Race St Philadelphia 7 Pa	27		
Eastern Etching & Mfg Co			
Grape St Chicopee Mass	26		
Electron Enterprises			
6917 W Stanley Ave Berwyn Ill	11		
Electro Sound Corp			
115 Halleck St Boston 15 Mass	8		
Electro-Voice Inc			
Cecil & Carrol Sts Buchanan Mich	7-10-15-17		
Ellis & Sons George D			
4028 N American St			
Philadelphia 40 Pa	4-21-22		
Elm Labs			
10 Washington Ave			
Hastings-on-Hudson NY	4-10-22-26-27		
Elzee Metal Products Co			
775 39 St	2-4-5-6-7-8-11-12-13		
Brooklyn 32 NY	14-21-22-24-26-28		
Emerson Plastics Corp			
Seabury Ave & Butler Pl Bronx 61 NY	27		
Emerson-Sack-Warner Corp			
85 Washington St	1-2-4-5-8-15		
Somerville 43 Mass	16-26-28-31		
Engineered Electronics Co			
506 E 1 St Santa Ana Calif	3		
Epoxy Products Inc Div Joseph Waldman			
& Sons 133 Coit St			
Irvington NJ	11		
Equipto Div Aurora Equipment Co			
Aurora Ill	2-8		
Ercona Corp			
551 5 Ave New York 17 NY	7-17		
Etched Products Corp			
39-01 Queens Blvd			
Long Island City 4 NY	26		
Factory Service Co			
4615 N 21 St Milwaukee 9 Wis	2-16		
Falstrom Co			
Falstrom Court			
Passaic NJ	1-4-5-7-8-11-12-13-14-15-22-26-28		
Fey Co Neal			
427 Olive St Santa Barbara Calif	26		
Feiner & Sons P			
522 W 45 St			
New York 36 NY	5-8-11-14-26-28		
Felters Co			
210 South St Boston 11 Mass	18		

11—CABINETS, RACKS, PANELS & ACCESSORIES

Accessories, mounting	1
Bias	2
Boards, plug-in	3
Boxes	4
Boxes, storage	5
Cabinet covering	6
Cabinets, audio radio equip.	7
Cabinets, metal	8
Cabinets, plastic	9
Cabinets, wood	10
Cases, portable	11
Cases, transformer	12
Cases, tube	13
Chassis	14
Consoles	15
Dollies, equipment	16
Enclosures, speaker	17
Felt	18
Film Finishes	19
Handles, leather	20
Housings, instrument	21
Housings, metal	22
Leatherette	23
Louvres, chassis ventilating	24
Panels, fibre	25
Panels, metal	26
Panels, plastic	27
Racks	28
Slides, chassis	29
Slides, equipment	30
Trays	31

Fibre Containers Co 4700 District Blvd Los Angeles 58 Calif	4	Lane Electronics Mfg Corp 7264 Atoll Ave N Hollywood Calif	26	Permotlux Products Co 4101 San Fernando Rd Glendale Calif	17
Fisher & Crone 109 N Camac St Philadelphia 7 Pa	14-27	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	28	Petroff Corp Peter A 127 Water St New York 5 NY	8
Florman & Babb 68 W 45 St New York 36 NY		Lansing Sound Inc James B 3249 Casitas Ave Los Angeles 39 Calif	7	Photocircuits Corp 31 Sea Cliff Ave Glen Cove NY	3
Fluorocarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ	9-27	Leiman Bros 146 Christie St Newark 5 NJ	8	Plastofilm Inc 916 W Union Ave Wheaton Ill	4
Formica Metal Products Co Corporation Way Medford 55 Mass	8-15	Lindsay Structure Inc 5009 Dempster St Skokie Ill	6-8-21-22	Plummer Co Walter A 752 S San Pedro St Los Angeles 14 Calif	13
Franklin Fibre-Lamitex Corp Wilmington Del	25-27	Logo Inc 12904 S Stony Island Ave Chicago 33 Ill	19	Pomona Electronics Co 1126 W 5 Ave Pomona Calif	3
Furane Plastics Inc 4516 Brazil St Los Angeles 32 Calif	27	Lorentzen Inc H K 391 W Broadway New York 12 NY	7-8-11-12-13-14-21-26-31	Poray Inc 3369 W Grand Ave Chicago 51 Ill	6-7-8-11
Gary Wells Co 361 Rockaway Ave Valley Stream NY	8-15-22-28	Lowell Mfg Co 3030 Laclede Station Rd St Louis 17 Mo	8-14-17-21-22-26-28	Premier Metal Products Co 337 Manida St New York 59 NY	7-8-14-26-28
Gates Radio Co 123 Hampshire St Quincy Ill	7-8-15-26-28	Lyon Metal Products Inc 11 Railroad Ave Aurora Ill	5	Printloid Corp 93 Mercer St New York 12 NY	27
General American Transportation Corp 135 S LaSalle St Chicago 90 Ill	9-27	Lytle Eng'g & Mfg Co 1404 San Mateo Blvd S E Albuquerque New Mex	26	Protectoseal Co 1920 S Western Ave Chicago 8 Ill	8
General Bronze Corp 711 Stewart Ave Garden City NY	8-15	Macarr Inc 2543 Boston Rd New York 67 NY	26	Q-Line Mfg Corp 1562 61 St Brooklyn 19 NY	26
General Machine & Instrument Co Clinton Rd & Rt 46 Caldwell NJ	21-22	Magic-Vue Television Corp 323 E 13 St New York 3 NY	7-10-14-15-17	Radio Corp of America Commercial Electronics Products Camden 2 NJ	1-7-8-10-11-15-28
General Metal Products Co 1010 Centre St Easton Pa	4-8-11-14-26-28-31	Magna Electronics Co 9810 Anza Ave Inglewood 1 Calif	7-8-10	Radio Frequency Labs Inc Boonton NJ	29-30
Glass & Bro Harry H 10 Van Cortlandt Ave E New York 68 NY	26-27	Malkin-Illion Co 400 Coit St Irvington 11 NJ	1-7-8-11-12-14-15-17 21-22-24-26-28-31	Radio-Matic of America Inc 760 Ramsey Ave Hillside NJ	10
Golden Co 1854 38 St Brooklyn 19 NY	8-14-22-24-26-28	Master Engraving Studios 135 Liberty St New York 6 NY	26	Ransom Research 323 W 7 St San Pedro Calif	3
Grant Pulley & Hardware Corp 31-85 Whitestone Pkwy Flushing 54 NY	29-30	Mathis Co G E 6100 S Oak Park Ave Chicago 38 Ill	21-28	REF Mfg Corp 393 Jericho Turnpike Mineola NY	4-8-9-11-15-22-26-27-28
Graphic Systems 55 W 42 St New York 36 NY	26	Measurement Eng'g Ltd 232 John St Arnprior Ont Canada	1-3-7-8-11-14 15-17-22-26-28	Reiner Electronics Co Centre & Glendale Sts Easton Pa	4-8-11-14-21-22-26-28-31
Graphik Circuits Div Cinch Mfg Corp 200 S Turnbull Canyon Rd La Puente Calif	3	Metal Fabricators Corp 73 Pond St Waltham 54 Mass	8-11-14-15-22-24-26-28	Remler 2101 Bryant St San Francisco Calif	27-29
Gruen Mfg Co 2631 Brenner Dr Dallas 20 Texas	14	Metal Specialty Products Corp 27-01 Brooklyn Queens Expressway W Woodside 77 NY	4-5-11-12-21-22-28	Republic Steel Corp Republic Bldg Cleveland 1 Ohio	2-5-8
Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	8-11-15	Metaplast Corp Davisville Rd at Pa Turnpike Hatboro Pa	8-9-31	Richardson Co 27 Ave & Lake St Melrose Park Ill	9-21-27
Hamilton Electronics 2726 Pratt Ave Chicago 45 Ill	8	Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill	27	Riester & Thesmacher Co 1526 W 25 St Cleveland 13 Ohio	8-11-21-22-28
Hammer Electronics Co Princeton NJ	14-26	Midget Louver Co 6-8 Wall St Norwalk Conn	24	River Edge Sales Corp 80 Shore Rd Port Washington NY	7-10-17
Harwood Electronics Co 466 W Superior St Chicago 10 Ill	4-5-8-14	Midland Industrial Finishes Co Waukegan Ill	19	R-J Audio Products 80 Shore Rd Port Washington NY	7
Hawley Products Co N 1 Ave St Charles Ill	11	Mid-West Conveyor Co Metal Products Div 7 & Sunshine Rd Kansas City 15 Kan	1-7-8-11-14-15-16 22-25-26-27-28-31	Rockbar Corp 650 Halstead Ave Mamaroneck NY	17
Heath Co 305 Territorial Rd Benton Harbor Mich	17	Mil Case Corp 35-18 37 St 2-4-5-6-7-8-9-10-11-12-13-14-15-17 Long Island City NY	21-22-26-27-28-29-30	Rogers Corp Rogers Conn	25
Helder Mfg Corp 238 Lewis St Paterson NJ	8-12-14-21-22-26	Miller Dial & Nameplate Co 4400 N Temple City Blvd El Monte Calif	26-27	Rohn Mfg Co 116 Limestone Bellevue Peoria Ill	8
Hirschman-Pohle Co 120 Lent Ave Leroy NY	24	Mobil Electronics Mfg Co 1111 State Rd 67 E Anderson Ind	4-7-11-14-17-21-22-26	Rotating Components Inc 267 Green St Brooklyn 22 NY	8
Hoffman Eng'g Corp Anoka Minn	8-15-26	Molded Fiber Glass Co 4801 Benefit Ave Ashtabula Ohio	11-12-21-27	Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	3
Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	3	Molded Products Div Admiral Corp Washington & Creamery Rd W Chicago Ill	1-9-11-27	Scientific Wood Cabinet Co 89 Holmes St Belleville 9 NJ	10
Hull Corp 1941 Woodland Rd Abington Pa	9	Molding Corp of America 58 Weybosset St Providence 3 RI	27	Scovill Mfg Co 99 Mill St Waterbury 20 Conn	8
iE Mfg 325 N Heyne Ave Chicago 12 Ill	7-8-14-21-22-28-29	Muckle Mfg Co U S Hwy 14 Owatonna Minn	4-8-11	Seismograph Service Corp 6200 E 41 St Tulsa 1 Okla	8
I-L-S Instrument Corp 4525 W 160 St Cleveland 11 Ohio	22	Mutual Electronics Industries Corp 85 Beechwood Ave New Rochelle NY	27	Service Parts Systems 13380 E 9 Mile Rd E Detroit Mich	2
Industrial Engravers Inc 2212 McDonald Ave Brooklyn 23 NY	27	National Tel-Tronics Corp 52 St Casimir Ave Yonkers NY	3	Shepard Labs Inc 450 Morris Ave Summit NJ	3
Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	28	Neosil Products Div Rubber Associates 745 5 Ave New York 22 NY	19	Sieler Design Products 10460 San Pablo Ave EI Cerrito Calif	7-10-17
Industrial Systems Co 32 Main St Matawan NJ	8-28	Neumade Products Corp 250 W 57 St New York 19 NY	8-28-30	Sightmaster Corp 85 Beechwood Ave New Rochelle NY	27
Instrument Cases Inc 510 W Garfield St Glendale 4 Calif	11	Newcomb Audio Products Co 6824 Lexington Ave Los Angeles 38 Calif	28	Silicone Insulation Inc Seabury Ave & Butler Pl Bronx 61 NY	21-27
Insuline Corp of America 186 Granite St Manchester NH	1-4-5-6-7-8-11-13-14 16-17-21-22-25-26-28	New England Etching & Plating Co Spring St Holyoke Mass	26	Skydyne Inc River Rd Port Jervis NY	11
Jansa Woodworking Corp 350 Meserole St Brooklyn 6 NY	4-10	New England Laminates Co 481 Canal St Stamford Conn	27	Snap-on Tools Corp Kenosha Wis	11
Jensen Mfg Co 6601 S Laramie Ave Chicago 38 Ill	17	Northeastern Eng'g Inc 25 S Bedford St Manchester NH	8-28	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	15-28
Jodee Plastics Co 213 Shepherd Ave Brooklyn 8 NY	4-5-9-11-27	Northern Metal Products Corp 9599 W Grand Ave Franklin Park Ill	5	Spaulding Fibre Co 310 Wheeler St Tonawanda NY	5-25-27
Johns-Manville 22 E 40 St New York 16 NY	21-25	Oberline Inc P O Box 921 Beverly Hills Calif	7	Sphere Co 25 Amity St Little Falls NJ	12
Kane Mfg Corp P O Box 641 Kane Pa	1-6-7-8-14-26-28	O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif	1-7-8-15-28	Spinform Inc 65 Mechanic St Attleboro Mass	8-9-22-25-26-27
Kees Mfg Co F D 700 Park St Beatrice Nebr	1-12-21-22	Olympic Plastics Co 3471 S LaCienega Blvd Los Angeles 16 Calif	9-11-12	Stackbin Corp 1079 Main St Pawtucket RI	2-4
Keller Products Inc 41 Union St Manchester NH	25-26-27	Panelit Inc 7401 N Hamlin Ave Skokie Ill	8-15-26-27	Stamford Metal Specialty Co 427 W Broadway New York 12 NY	8-21-22-26
Kent Metal Mfg Co 500 Johnson Ave Brooklyn 37 NY	8-22	Par-Metal Products Corp 32-62 49 St Long Island City 3 NY	8-14-15-26-28	Standard Electric Time Co 89 Logan St Springfield 2 Mass	26
Kent TV Inc 505 Driggs Ave Brooklyn 11 NY	10-15	P B R Mfg Co H & Luzerne Sts Philadelphia 24 Pa	8-11-16	Staver Co 41-51 N Saxon Ave Bay Shore LI NY	22
Keystone Electronics Corp 423 Broome St New York 13 NY	3	Penn Fibre & Specialty Co 2020 E Westmoreland St Philadelphia 34 Pa	25-27	Stephens Tru-sonic Inc 8538 Warner Dr Culver City Calif	17
Kling Metal Spinning & Stamping Co 245 Centre St New York 13 NY	12-21-22			Stevens Walden Inc Shrewsbury St Worcester 4 Mass	4
Koch & Sons H Box 127 Corte Madera Calif	11-21			Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-6-8
Kollman Case Corp P O Box 180 Ft Wayne 1 Ind	11			Stone City Machine & Tool Co 1206 7 St Bedford Ind	4-11-12-21-22-26
Kost Products Co 2335 N Cicero Ave Chicago 39 Ill	1			Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	7-28
Kuss Industries Inc Tacony & Lewis Sts Philadelphia 24 Pa	1-7-8-15-26				
Laminated Sheet Products Corp 449 Neponset St Norwood Mass	25-27				

Sun Dial Corp P O Box 326 Caldwell NJ	26-27	Capacitors, decade	5	Cornell-Dubilier Electric Corp	2-3-4-5-6-8-11
Sun Tube Corp 181 Long Ave Hillside NJ	21	Capacitors, electrolytic dry	6	333 Hamilton Blvd	12-13-14-15-16-17-18-19
Swedlow Plastics Co 6986 Bandini Blvd Los Angeles 22 Calif	9-11-26-27	Capacitors, electrolytic wet	7	S Plainfield NJ	20-21-22-23-24-26-27-28-29
Swenson & Co V H 554 Elm St Arlington NJ	9-21	Capacitors, feed-through	8		30-31-32-33
Synthane Corp Montgomery Ave Oaks Pa	27	Capacitors, gas-filled	9	Corning Glass Works Corning NY	10-11-12-14-17-26-33
Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	8-12-14-17-22-26-28-29	Capacitors, glass	10	Corson Electric Mfg Corp 540 39 St Union City NJ	11-12-18-21-22-24-31
Tarzian Inc Sarkes E Hillside Drive Bloomington Ind	1-28	Capacitors, high temperature	11	Cosmic Condenser Co 853 Whittier St Bronx NY	7-21
Taylor Fibre Co Norristown Pa	25-27	Capacitors, high voltage	12	Dearborn Electronic Labs Inc	2-5-8-10-11-12
Technical Service Corp 1404 W Market St Louisville 3 Ky	16	Capacitors, industrial	13	1421 N Wells St	13-14-15-17-18-19-20-21
Technical Ply-Woods Sales 6756 Grandon Ave Chicago 49 Ill	25-26	Capacitors, MIL type	14	Chicago 10 Ill	22-23-24-26-27-29-31-32
Techniques Inc 52 Jackson Ave Hackensack NJ	3	Capacitors, metallized paper	15	Deutschmann Corp Tobe	2-8-11-12-13-14-15-17
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	11-21-22	Capacitors, mica	16	Norwood Mass	18-19-20-21-22-23-24-26-27
Telephone Co of America 1178 E 180 St Bronx 60 NY	11	Capacitors, miniature	17		31-32-33
Teletronics Lab Inc 54 Kinkel St Westbury NY	7-8-21	Capacitors, mylar dielectric	18	Dilectron Div Gudeman Co 2669 S Myrtle Ave Monrovia Calif	3-11-12-23-32
Temperature Eng'g Corp U S Hwy 130 Riverton NJ	8-14-22-28-31	Capacitors, neutralizing	19	Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wisc	1
Terris Div Consolidated Siphon Supply Co 22 Wooster St New York 13 NY	4	Capacitors, oil	20	Dolinko & Wilkens Inc 1907 Summit Ave Union City NJ	12-33-34
Topatron Inc 942 E Ojai Ave Ojai Calif	15-28	Capacitors, paper	21	Dumont Airplane & Marine Instruments Inc 15 William St New York 5 NY	2-6-13-14-17-18-20-21-22-23-24-26-27-31
Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	21	Capacitors, plastic dielectric	22	Eastman Pacific Co 2320 E 8 St Los Angeles 21 Calif	3-11-13-14-17-32
Transformer Technicians Inc 2608 N Cicero Ave Chicago 39 Ill	12	Capacitors, porcelain	25	Eitel-McCullough Inc 798 San Mateo Ave San Bruno Calif	34
Triad Portable Case Corp 2541 Boston Rd Bronx 69 NY	11	Capacitors, printed circuit	26	Electra Mfg Co 4051 Broadway Kansas City Mo	3-13-14-32
Triad Transformer Corp 4055 Redwood Ave Venice Calif	12	Capacitors, polystyrene in-sulated	24	Electrical Specialty Co 158 11 St San Francisco 3 Calif	6-15-18-20-21-22
U M & F Mfg Corp 10929 Vanover St N Hollywood Calif	14	Capacitors, silicene-filled	27	Electrical Utilities Co 2427 St Vincent's Ave	2-11-12-13-14-17-18-19-20-21-22-24-27-31
University Loudspeakers Inc 80 S Kensico Ave White Plains NY	17	Capacitors, silvered mica	28	Electro-Ceramics Inc 120 State St New Haven Conn	3-17-32
Uniwave Inc 2 Marine St Farmingdale NY	21-22	Capacitors, standard	29	Electro-Measurements Inc 7524 S W Macadam Ave Portland 1 Ore	5
U S Radium Corp Morristown NJ	26-27	Capacitors, tantalum	30	Electro Motive Mfg Co Willimantic Conn	3-8-11-14-16-17-21-22-28
Utah Radio Products Corp 1124 E Franklin St Huntington Ind	10	Capacitors, teflon dielectric	31	Electronic Fabricators Inc Efccon Div 682 Broadway New York 12 NY	2-11-17-18-22-24-26-31
Utility Metal Products Co 117 Elliott St Beverly Mass	8-14-26-28	Capacitors, temperature compensated	32	Electron Products Inc 430 N Halstead St	2-5-8-11-12-13-14-15-17-18-20-21-22-23-24-26-27-29-30-31
U S Plywood Corp 55 W 44 St New York 36 NY	6-23-25-26	Capacitors, transmitting	33	Endevco Corp 161 E California St Pasadena Calif	5
Vari Equip Co P O Box 46 W Cornwall Conn	27	Capacitors, vacuum	34	Erie Resistor Corp 644 W 12 St Erie 6 Pa	3-4-8-10-11-12-13-14-16-17-23-26-28-31-32
Vector Electronic Co 3352 San Fernando Rd Los Angeles 65 Calif	3-7	Advance Electronics Co 8510 North End Ave Oak Park 38 Mich	1	Fansteel Metallurgical Corp 2200 Sheridan Rd N Chicago Ill	30
Victory Mfg Corp 1722 W Arcade Pl Chicago 12 Ill	9-11	Aerovox Corp 2-3-5-6-7-8-11-12-13-14		Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	1-5
Vis-U-All Corp 3325 W Bryn Mawr Ave Chicago 45 Ill	3-8-10	740 Belleville Ave 15-18-19-20-21-22-23		Film Capacitors Inc 3400 Park Ave New York 56 NY	5-11-12-13-14-17-18-20-22-24-31
Vocalite Screen Corp 19 Debevoise Ave Roosevelt NY	23-27	New Bedford Mass 24-25-26-27-28-30-31-33		Filtron Co 10023 W Jefferson Blvd Culver City Calif	2-8-11-12-17-18-20-21-22-27
Walsco Electronics Mfg Co 100 W Green St Rockford Ill	5-30	Airborne Accessories Corp 1414 Chestnut Ave Hillside 5 NJ	18-31	Filtron Co 131-15 Fowler Ave Flushing 55 NY	2-3-8-11-12-13-15-17-18-20-21-22-24-27-31
Walton Tool & Die Co 2707 Empire Ave Burbank Calif	8-16-28	Ajax Condenser Co 932 W Wrightwood Ave Chicago 14 Ill	2-6-11-12-13-17-18-20-21-22-23-26-32	Fluorocarbon Products Inc Div US Gasket Co 602 N 10 St Camden 1 NJ	12-22-24-31-33
Warren Corp 2901 Brighton Rd Pittsburgh 12 Pa	8	Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis	3-8-11-12-14-17-25-26-32	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	5
Watson Mfg Co 3700 Taylor St Jamestown NY	6-7-8-11-12-14-15-17-22-27-28-29-30	American Condenser Corp 4410 N Ravenswood Ave Chicago 40 Ill	2-6-11-13-14-18-21-23-24-26-31	Gary Wells Co 361 Rockaway Ave Valley Stream NY	6-7
Western Electro Acoustic Lab 11789 San Vicente Blvd Los Angeles Calif	17	Amperex Electronic Corp 230 Duffy Ave Hicksville LI NY	12-34	General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY	3-17-26
Westinhouse Electric Corp P O Box 868 Pittsburgh 30 Pa	21	AMP Inc Harrisburg Pa	12	General Electric Co Capacitor Dept John St Hudson Falls NY	2-4-6-7-8-11-12-13-14-16-17-18-20-21-22-29-30-33
Westlab Electronics Inc 2475 Central Ave Yonkers NY	1	AMP Inc Chemical Dielectrics Div 155 Park St Elizabethtown Pa	12-22	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	1-4-5-7-8-12-13-16-21-30
Willson Camera Co 1395 Lawrence Rd Havertown Pa	27	Arrow Radio Co 1829 Davenport Rd Toronto Ontario Canada	18-20-21-22	General Electric Co Electronic Components Div 1 River Rd Schenectady 5 NY	34
Wilmington Fibre Specialty Co New Castle Del	25	Astron Corp 255 Grant Ave E Newark NJ	2-3-6-11-13-14-15-17-18-20-21-22-23-26-27-31-32	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	1-5-16-22-29
Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	8-11-12-13-14-16-17-21-22-24-25-26-29-30	Automation Components Inc 875 Hickory St Peckville Pa	3-8-12-29-32	Geotronic Labs Inc 1314 Cedar Hill Ave Dallas 3 Texas	8-24
Wright Equipment Co 128 N Main St Milltown NJ	26	Axel Electronics 134-20 Jamaica Ave Jamaica 13 NY	8-12-18-21-31	Girard-Hopkins 1000 40 Ave Oakland 1 Calif	2-13-14-20-21-33
WYCO Metal Products 6918 Beck Ave N Hollywood Calif	7-8-14-26-28	Balco Research Labs 49 Edison Place Newark 2 NJ	11-14-22-31	Good-All Electric Mfg Co Good-All Bldg Ogallala Nebr	2-3-8-11-12-13-14-17-18-20-21-22-24-26-31
Zenith Plastics Co 1600 W 135 St Gardena Calif	6-7-9-27	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	1-19-33	Gudeman Co 340 W Huron St Chicago 10 Ill	2-6-8-17-21-22
Zero Mfg Co 1121 Chestnut Burbank Calif	8-11	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	11	Gulton Industries Inc 212 Durham Ave Metuchen NJ	3-11-32
		Berkshire Labs 586 Bank Village Greenville NH	23	Hallett Mfg Co 1601 W Florence Inglewood Calif	8
		Boonton Electronics Corp 738 Speedwell Ave Morris Plains NJ	29	Hansen Electronics Co 7117 Santa Monica Blvd Los Angeles 46 Calif	26
		British Radio Electronics Ltd 1833 Jefferson Pl NW Washington 6 DC	3-26-28-32		
		Cambridge Instrument Co Grand Central Terminal New York 17 NY	5		
		Cambridge Thermionic Corp 445 Concord Ave Cambridge 38 Mass	3		
		Cardwell Co Allen D 97 Whiting St Plainville Conn	1-2		
		Carnf Co Box 554 Brookhaven Miss	2-8-11-13-14-15-17-18-20-21-22-24-26-27-29-31-33		
		Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wis	3-8-11-12-13-14-17-26-32		
		Chicago Condenser Corp 3255 W Armitage Ave Chicago 47 Ill	1-2-8-11-12-13-14-15-18-20-21-22-24-26-31		
		Condenser Mfrs Inc 1018 Pearl St Nashville Tenn	6-17-23-25-26		
		Condenser Products Div New Haven Clock & Watch Co 140 Hamilton St New Haven 4 Conn	1-2-11-12-13-14-17-18-20-22-24-26-27-29-31-32-33		

12—CAPACITORS, FIXED

Capacitors, air	1
Capacitors, bathtub	2
Capacitors, ceramic	3
Capacitors, composition	4

Heath Co					
305 Territorial Rd					
Benton Harbor Mich		5			
Hi-Q Div Aerovox Corp					
Box 68	3-8-11-12-13-14-17-				
	23-26-32-33				
Myrtle Beach SC					
Hopkins Eng'g Co					
12900 Foothill Blvd	2-5-8-11-14-15-17-18-20-				
San Fernando Calif	21-22-23-24-26-27-29-31				
Illinois Condenser Co					
1616 N Throp St					
Chicago 22 Ill	6-14-17-18-21-26				
Industrial Condenser Corp					
3243 N California Ave	2-5-6-11-12-13-14-17-				
Chicago 18 Ill	18-20-21-22-23-24-26-29-32-33				
Insulation & Wires Inc					
1534 Swinney Ave Ft Wayne Ind		6			
Intelox Systems Inc					
22 Thames St					
New York 6 NY	14-15-21-24-30				
International Electronic Industries					
PO Box 1368 Nashville 3 Tenn	6-17-23-26				
Jackson Electronics Inc					
23 Woodcrest Rd West Chester Pa		26			
Jeffers Electronics Div Speer Carbon Co					
Hoover Ave DuBois Pa		4			
Jennings Radio Mfg Corp					
970 McLaughlin Ave					
San Jose 8 Calif	8-12-19-34				
Jerrold Electronics Corp					
23 & Chestnut Sts					
Philadelphia 3 Pa		31			
Johnson Co E F					
Waseca Minn		1-33			
Kistler Instrument Corp					
15 Webster St N Tonawanda NY		24			
Landsverk Electrometer Co					
550 W Garfield Ave	18-22-				
Glendale 4 Calif	24-31-34				
Lapp Insulator Co Radio Specialties Div					
24 Summer St LeRoy NY	9-12-13-33				
Leeds & Northrup Co					
4970 Stenton Ave					
Philadelphia 44 Pa	5-16-28-29				
London Electric Mfg Co Ltd					
80 Shore Rd Port Washington NY	3-8-16-28				
Luther Electronic Mfg Co					
5728 W Washington Blvd					
Los Angeles 16 Calif	12-20-21-31				
McDowell Electronics Inc					
105 Forrest St Metuchen NJ		13			
Macleod & Hanopol					
10 Roland St					
Charlestown 29 Mass		29			
Maida Development Co					
214 Academy St					
Hampton Va	3-8-12-14-26-32				
Mallory & Co Inc PR					
42 S Gray St					
Indianapolis 6 Ind	6-7-14-21-26-30				
Mica Fabricating Co					
Rochelle Park NJ		16			
Micamold Electronics Mfg Corp	2-6-8-11-12-				
Flushing Ave	13-14-15-16-17-18-20-21-22-23-				
Brooklyn 37 NY	24-27-28-29-30-31-32-33				
Mitronics Inc					
1290 Central Ave Hillside NJ	3-8-10-16-28				
Mucon Corp					
9 St Francis St Newark 5 NJ	3-17-19-26-32				
Muirhead & Co Ltd Beckenham					
Kent England	5-29				
Muirhead Instruments Inc					
677 5 Ave New York 22 NY	5-16-21-28-29				
Muter Co					
1255 S Michigan Ave Chicago 5 Ill	3-8-12-26				
National Capacitor Co	2-8-11-12-13-14-15-				
18 Webster St	17-18-19-20-21-22-23-				
Brookline 46 Mass	24-26-27-31-32-33				
New York Coil Co					
40 2 Ave Phoenixville Pa	18-21-24				
Nichols Products Co					
325 W Main St Moorestown NJ		31			
Nucleonic Products Co					
1601 Grande Vista Ave					
Los Angeles 23 Calif		6			
Ohmite Mfg Co					
3601 Howard St Skokie Ill	7-17-30				
Onondaga Pottery Co					
1858 W Fayette St					
Syracuse 1 NY	3-11-12-14-32				
Painton & Co Ltd					
c/o British Electronic Sales Co					
Box 132 Oakland Gardens 64 NY		31			
Planet Mfg Corp					
225 Belleville Ave Bloomfield NJ	6-28-26				
Plastic Capacitors Inc					
2620 N Clybourn Ave	2-11-13-14-19-21-				
Chicago 14 Ill	22-24-27-31-32				
Potter Co	2-8-11-12-13-14-15-				
1950 Sheridan Rd	17-18-20-21-22-23-24-26-				
N Chicago Ill	27-29-31-32-33				
Precise Development Corp					
2 Neil Ct Oceanside NY		5			
Precision Capacitors Inc					
150 W Cypress St	2-5-11-12-				
Burbank Calif	18-22-23-24				
Pyramid Electric Co					
1445 Hudson Blvd	2-6-7-8-11-12-13-14-				
N Bergen NJ	15-20-21-23-26				
Quality Components Inc					
St Marys Pa		4			
Radiation Research Corp					
140 E 59 St New York 22 NY	22-24				
Radio Frequency Co					
44 Park St Medfield Mass		33			
Radio Industries Inc					
5225 N Ravenswood Ave					
Chicago 25 Ill	3-8-26-28-32				
Radio Materials Corp					
3325 N California Ave					
Chicago 18 Ill		8			
Research Instrument Co					
PO Box 9168 Montavilla Station					
Portland 16 Ore		5			
Saftee Glass Co					
4717 Stenton Ave Philadelphia 44 Pa		10			
Sanders Associates 95					
Canal St Nashua NH		18			
San Fernando Electric Mfg Co					
1509 1 St	2-8-11-12-14-15-17-18-21-22-				
San Fernando Calif	23-24-26-27-29-31				
Sangamo Electric Co	2-6-7-8-11-12-13-14-16-17-				
Springfield Ill	18-21-23-25-26-28-30-33				
Skottie Electronics Inc Sub Astron Corp					
204 Bridge St Peckville Pa	3-8-12-32				
Solar Mfg Corp					
4553 Seville					
Los Angeles 58 Calif	3-8-12-14-26-32				
Southern Electronics Corp					
239 W Orange Grove Ave	2-5-11-12-18-22-				
Burbank Calif	23-24-26-31-32				
Sprague Electric Co					
Marshall St	2-3-6-7-8-11-12-13-14-15-				
North Adams Mass	16-17-18-20-21-22-23-24				
Sprague of Wisconsin Inc					
6 & Beech Sts	3-8-12-14-				
Grafton Wisc	17-26-32				
Stackpole Carbon Co					
St Marys Pa		4			
Sullivan Ltd H W					
80 Shore Rd Port Washington NY	5-16-29				
Telegraph Condenser Co	2-3-4-6-7-8-11-12-13-				
N Acton	14-16-17-19-20-21-22-23-24-25-26-28				
London W 3 Enrland	29-30-32-33				
Teleradio Eng'g Corp					
Shannon & Barrett Sts					
Wilkes-Barre Pa	1-8-14-16-26-28-30				
Telesivo Corp					
1415 Golf Rd Des Plaines Ill		8			
Texas Capacitor Co Div K-C-K Corp					
922 S 75 St Houston 23 Texas	18-22				
United Electronic Mfg Corp					
529 39 St Union City NJ	6-26				
United Electronics Co					
42 Spring St Newark 4 NJ		34			
United Mineral & Chemical Corp					
16 Hudson St New York 13 NY	8-25-28				
US Electronics Devel Corp					
1323 Air Way	1-2-5-8-11-15-18-20-				
Glendale 1 Calif	21-22-23-24-30-31				
US Instrument Corp					
PO Box 33E Charlottesville Va		21			
Universal Condenser Co					
3435 N Kimball Ave	2-11-12-17-18-20-21-22-				
Chicago 18 Ill	23-24-26-27-31-32				
Vitramon Inc					
Box 544 Bridgeport 1 Conn		25			
Welwyn Int'l Inc					
3355 Edgelynn Terrace					
Cleveland 11 Ohio		3			
Wesco Electrical & Mfg Co					
27 Olive St Greenfield Mass		13			

13—CAPACITORS, VARIABLE

Capacitors, air	1
Capacitors, ceramic trimmer	2
Capacitors, gas filled	3
Capacitors, glass trimmer	4
Capacitors, high temperature	5
Capacitors, mica trimmer	6
Capacitors, miniature	7
Capacitors, modulated sweep	8
Capacitors, neutralizing	9
Capacitors, oil filled	10
Capacitors, piston	11
Capacitors, plastic	12
Capacitors, precision	13
Capacitors, printed circuit	14
Capacitors, receiver tuning	15
Capacitors, transmitter tuning	16
Capacitors, vacuum	17

Advance Electronics Co					
8510 North End Ave					
Oak Park 37 Mich		1			
Ajax Condenser Co					
932 W Wrightwood Ave Chicago 14 Ill	10-12				
American Condenser Corp					
4410 N Ravenswood Ave					
Chicago 40 Ill		10			
Aerovox Corp					
740 Belleville Ave					
New Bedford Mass	6-10-12-13				
All Star Products Inc					
Squire Ave					
Defiance Ohio		1-2			
AMP Inc Chemical Dielectrics Div					
155 Park St Elizabethtown Pa		10			
AMP Inc					
Harrisburg Pa					13
Arrow Radio Co					
1829 Davenport Rd					
Toronto Ontario Canada					10-12
Astron Corp					
E Newark NJ					10-12
Axel Electronics					
134-20 Jamaica Ave Jamaica 18 NY					12
Balco Research Labs					
49 Edison Place Newark 2 NJ					12
Barker & Williamson Inc					
Canal & Beaver Sts Bristol Pa					1-9-16
British Radio Electronics Ltd					
1833 Jefferson Pl					
N W Washington 6 DC					1-7-13-14
Cambridge Thermionic Corp					
445 Concord Ave Cambridge 38 Mass					2-7
Cardwell Co Allen D					
97 Whiting St Plainville Conn					1
Carnf Co					
Box 554 Brookhaven Miss					10-12
Centralab Div Globa Union Inc					
900 E Keefe Ave Milwaukee 1 Wis					2-7
Chicago Condenser Corp					
3255 W Armitage Ave Chicago 47 Ill	10-12				
Condenser Products Div New Haven					
Clock & Watch Co 140 Hamilton St					
New Haven 4 Conn					10-12-13-16
Cornell-Dubilier Electric Corp					
333 Hamilton Blvd					
S Plainfield NJ					10-12-13-15
Corning Glass Works					
Corning NY					4-11-13
Corson Electric Mfg Corp					
540 39 St Union City NJ					10
Cossor (Canada) Ltd					
361 Windsor St					
Halifax Nova Scotia Canada					1-2
Dearborn Electronic Labs Inc					
1421 N Wells St Chicago 10 Ill	10-12-15-16				
Deutschmann Corp Tope					
Norwood Mass					10-12-13
Dittmore-Freimuth Corp					
2517 E Norwich St Milwaukee 7 Wis					1
Dumont Airplane & Marine Instruments					
Inc 15 William St					
New York 5 NY					10-12-13
Eastman Pacific Co					
2320 E 8 St Los Angeles 21 Calif					2
Eitel-McCullough Inc					
798 San Mateo Ave San Bruno Calif					17
Electrical Specialty Co					
158 11 St San Francisco 3 Calif	10-12				
Electrical Utilities Co					
2427 St Vincent's Ave La Salle Ill					10
Electro Motive Mfg Co					
Willimantic Conn					6
Electronic Fabricators Inc					
Efcron Div					
682 Broadway New York 12 NY					12
Electron Products Inc					
430 N Halstead St Pasadena 8 Calif	10-12-13				
Endevco Corp					
161 E California St Pasadena Calif					7
Erie Resistor Corp					
644 W 12 St Erie 6 Pa	2-4-5-6-7-14				
Federal Telephone & Radio Co Div IT&T					
100 Kingsland Rd Clifton NJ					13
Filtron Co					
10023 W Jefferson Blvd					
Culver City Calif					10-12
Filtron Co					
131-15 Fowler Ave Flushing 55 NY	10-12				
Fluorocarbon Products Inc Div U S					
Gasket Co 602 N 10 St					
Camden 1 NJ	5-7-12-13-14-16				
Gary Wells Co					
361 Rockaway Ave Valley Stream NY					1
General Electric Co Capacitor Dept					
John St Hudson Falls NY					10-12
General Electric Co Apparatus Sales Div					
1 River Rd Schenectady 5 NY					12
General Radio Co					
275 Massachusetts Ave					
Cambridge 39 Mass					1-13
Girard-Hopkins					
1000 40 Ave Oakland 1 Calif					10
Good-All Electric Mfg Co					
Good-All Bldg Ogallala Nebr					10

Lapp Insulator Co Radio Specialties Div	
24 Summer St LeRoy NY	3-16
Leeds & Northrup Co	
4970 Stenton Ave Philadelphia 44 Pa	1-13
London Electric Mfg Co Ltd	
80 Shore Rd Port Washington NY	7
McDowell Electronics Inc	
105 Forrest St Metuchen NJ	10
Maida Development Co	
214 Academy St Hampton Va	2
Micamold Electronics Mfg Corp	
1087 Flushing Ave Brooklyn 37 NY	10
Millen Mfg Co James	
150 Exchange St Malden 48 Mass	1-9-16
Mitronics Inc	
1290 Central Ave Hillside NJ	2-4
Muirhead & Co Ltd	
Beckenham Kent England	1-13
Muter Co	
1255 S Michigan Ave Chicago 5 Ill	2
Muirhead Instruments Inc	
677 5 Ave New York 22 NY	1-13
National Capacitor Co	
18 Webster St Brookline 46 Mass	10-12-16
National Company Inc	
61 Sherman St Malden 48 Mass	1-6-9-15-16
Nilsen Mfg Co	
21 N Church St Addison Ill	13
Nucleonic Products Co	
1601 Grande Vista Ave	
Los Angeles 23 Calif	12
Plastic Capacitors Inc	
2620 N Clybourn Ave Chicago 14 Ill	10-12
Potter Co	
1960 Sheridan Rd N Chicago Ill	10-12-13
Precision Capacitors Inc	
150 W Cypress St Burbank Calif	12
Pyramid Electric Co	
1445 Hudson Blvd N Bergen NJ	10
Q-Line Mfg Corp	
1562 61 St Brooklyn 19 NY	4
Radiation Research Corp	
140 E 59 St New York 22 NY	12-13
Radio Condenser Co	
Davis & Copewood Sts Camden 3 NJ	1-7-14
Romar Plastics Inc	
1311 E Main St St Charles Ill	12
San Fernando Electric Mfg Co	
1509 E St San Fernando Calif	10
Sangamo Electric Co	
Springfield Ill	10-16
Solar Mfg Corp	
4563 Seville Ave Los Angeles 58 Calif	2
Southern Electronics Corp	
239 W Orange Grove Ave	
Burbank Calif	12-13
Sprague Electric Co	
Marshall St North Adams Mass	2-10-12-13
Sprague of Wisconsin Inc	
6 & Beech Sts Grafton Wis	2
Stupakoff Div Carborundum Co	
Latrobe Pa	2
Sullivan Ltd H W	
80 Shore Rd Port Washington NY	1-13
Tarzan Inc Sarkes	
E Hillside Drive Bloomington Ind	1
Telectro Industries Corp	
35-18 37 St Long Island City 1 NY	1-5-13
Telegraph Condenser Co	
N Acton London W 3 England	2-10-12-13
Teleradio Eng'g Corp	
Shannon & Barrett Sts	
Wilkes-Barre Pa	1-2-6-9-14
Texas Capacitor Co Div K-C-K Corp	
922 S 75 St Houston 23 Texas	12
United Mineral & Chemical Corp	
16 Hudson St New York 13 NY	6-13
Universal Condenser Co	
3435 N Kimball Ave Chicago 18 Ill	10-12-13
U S Electronics Devel Corp	
1323 Air Way Glendale 1 Calif	10-13
Vacap Corp	
1906 Summit Ave Union City NJ	17
WacLine Inc	
35 S St Clair St Dayton 2 Ohio	8
Wheaton Co T C	
Millville NJ	4
Wisconsin Porcelain Co	
121 Lincoln St Sun Prairie Wis	2

14—CHASSIS ACCESSORIES

Adapters, crystal	1
Adapters, lamp socket	2
Adapters, plug	3
Adapters, test	4
Adapters, tube socket	5
Binding posts	6
Coaxial cable fittings	7
Harnesses	8
Implosion plates	9
Jack covers	10
Jacks	11
Jumpers	12
Lugs	13
Safety terminals	14
Sockets, coil	15

Sockets, relay	16
Sockets, subminiature	17
Sockets, transistor	18
Sockets, tube	19
Soldering lugs	20
Solderless lugs	21
Spaghetti	22
Tapes, pressure sensitive	23
Terminals & terminal strips	24

FUSES & FUSE HOLDERS

Fuse clips	25
Fuse holders	26
Fuses, cartridge	27
Fuses, instrument	28
Fuses, plug	29

SHIELDING

Cathode ray shielding	30
Coil shielding	31
Electrostatic shielding	32
Ferrite shielding	33
Glass r-f shielding	34
Heat shielding	35
Ignition shielding	36
Lead shielding	37
Magnetic shielding	38
Radiation shielding	39
Rubber shielding	40
Screen shielding	41
Sheet on screen shielding	42
Solid shielding	43
Transformer shielding	44
Tube shielding	45
Wire shielding	46
Screen rooms	47

Accurate Electronics Corp	
169 E Abbe Rd	
W Elyria Ohio	3-6-11-13-15-19-20-24-26
Ace Eng'g & Machine Co	
3644 N Lawrence St	
Philadelphia 40 Pa	38-41-42-47
Aerolite Electronics Corp	
507 26 St	
Union City NJ	2-3-4-6-8-11-12-24-25
Aeronautical Electric Co	
5656 Northwest Hwy Chicago 30 Ill	17-18
Aerovox Corp Pacific Coast Div	
2724 S Peck Rd Monrovia Calif	19
Aerovox Corp Crowley Div	
1 Central Ave W Orange NJ	39
Aircon Inc	
1209 E Grand St Elizabeth NJ	7
Aircraft & Electronic Specialties	
22 S Green St Brownsburg Ind	8
Airflo Instrument Co	
53 Addison Rd Glastonbury Conn	11
Air Transport Mfg Co	
1114 N Sycamore Ave	13-20-26-30-31
Los Angeles 38 Calif	32-38-44-45
Airtron Inc	
1101 W Elizabeth Ave Linden NJ	7-36
A-K Mfg Co	
115 S Northwest Hwy Barrington Ill	8
Alden Products Co	
123A N Main St	
Brockton Mass	4-5-8-11-19-24-25-26
Alford Mfg Co	
299 Atlantic Ave Boston 10 Mass	7
Allegheny Ludlum Steel Corp	
Oliver Bldg Pittsburgh 22 Pa	38-44
Allen-Bradley Co	
136 W Greenfield Ave Milwaukee 4 Wis	24
Allied Allegri Co	
141 River Rd Nutley 10 NJ	8
Allied Resinous Products Inc	
Whitney Rd & Clark St	
Conneaut Ohio	39-43
Alpha Metals Inc	
56 Water St Jersey City 4 NJ	37-39-43
Alpha Wire Corp	
200 Varick St New York 14 NY	46
Ameray Corp	
Route 46 Kenil NJ	37
Amerac Inc	
116 Topsfield Rd Wenham Mass	1
American Lava Corp Subs Minn Mining &	
Mfg Cherokee Blvd & Mfgs Rd	
Chattanooga 5 Tenn	19
American Machine & Foundry Co	
Defense Products Group	
1101 N Royal St Alexandria Va	8-39
AMP Inc	
Harrisburg Pa	21
Amphenol Electronics Corp	
1830 S 54 Ave Chicago 50 Ill	3-8-11-19
Anchor Products Co	
2712 W Montrose Ave Chicago 18 Ill	8
Andrew California Corp	
941 E Maryland Ave Claremont Calif	7
Andrew Corp	
363 E 75 St Chicago 19 Ill	7-8
Apparatus Development Co	
115 Main St Wethersfield 9 Conn	11-28
Ark Eng'g	
431 W Tabor Rd Philadelphia 20 Pa	47
Ark-Les Switch Corp	
51 Water St Watertown 72 Mass	21-24
Armel Electronics Inc	
840 5 Ave Brooklyn 32 NY	16-24
Arnold Eng'g Co	
P O Box G Marengo Ill	38
Art Wire & Stamping Co	
227 High St Newark 2 NJ	13-20-21
Associated Eng'g Corp	
65 Kent St Brookline 46 Mass	4
Atlas E-E Corp	
47 Prospect St Woburn Mass	13-20-25
Auburn Mfg Co	
Stack St Middletown Conn	40
Audio Accessories	
Amityville NY	11-21
Audio Development Co	
2833 13 Ave S Minneapolis Minn	11
Avery Adhesive Label Corp	
1616 S California Ave Monrovia Calif	23
B & C Insulation Products Inc	
490 Lincoln Hwy Iselin NJ	22
Bead Chain Mfg Co	
110 Mountain Grove St	
Bridgport 5 Conn	6-11-13
Bel Fuse Inc	
311 Mountain Rd Union City NJ	28
Bernco Engineering Corp	
2320 S Tibbs Ave Indianapolis 41 Ind	8
Birnbach Radio Co	
145 Hudson St	6-11-13-19-20-21-22
New York 13 NY	24-25-26-36-46
Bliss Electronic Corp	
Box 366 Sussex NJ	8
Bolton Labs Inc	
W Main St Bolton Mass	1
Borden Co Chemical Div Resinite Dept	
P O Box 1589 Santa Barbara Calif	22
Boston Woven Hose & Rubber Co	
PO Box 1071 Boston 3 Mass	23
Brady Co W H	
727 W Glendale Ave Milwaukee 9 Wis	23
Brand & Co William	
41 North St Willimantic Conn	8-22
Brand Dielectrics Inc	
57 North St Willimantic Conn	23
Breeze Corps	
700 Liberty Ave Union NJ	8-36
Briggs Associates	
10 DeKalb St Norristown Pa	4
Brilhart Plastics Corp	
Old Country Rd Mineola NY	11
British Electronic Sales	
Box 132 Oakland Gardens 64 NY	19
Buchanan Electrical Products Corp	
225 Route 22 Hillside NJ	12-13-21-24
Buffalo Electronics Corp	
37 Franklin St Buffalo 2 NY	8
Burdy Corp Omaton Div	
Norwalk Conn	13-21-24-25-27
Bussman Mfg Co	
University at Jefferson	
St Louis 7 Mo	27-28-29
Cable Electric Products	
234 Daboll St	
Providence 7 RI	1-2-3-8-27-28-29
Cable & Wire Products Co	
Chicago Rd Swanton Ohio	8
Cambridge Thermionic Corp	
445 Concord Ave	
Cambridge 38 Mass	6-11-20-21-24
Carter Parts Co	
3401 W Madison St Skokie Ill	11
C B C Electronics Co	
2601 N Howard St Philadelphia 33 Pa	8
Century Lighting Inc	
521 W 43 St New York 36 NY	11
Chase-Shawmut Co	
374 Merrimac St Newburyport Mass	27-28-29
Chase & Sons	
26 Spruce St N Quincy Mass	23
Chester Morton Electronics Corp	
10 St & Morton Ave Chester Pa	8-12
Chicago Gasket Co	
1271 W North Ave Chicago 22 Ill	23
Chicago Industrial Instrument Co	
865 N Sangamon St Chicago 22 Ill	5
Cinch Mfg Corp	
1026 S Homan Ave	
Chicago 24 Ill	5-11-16-17-18-19-20-21-24-26-45
Circon Component Co	
Santa Barbara Municipal Airport	
Goleta Calif	13
Coaxial Connector Co	
37 N 2 Ave Mt Vernon NY	3-6-8-11
Coil Winders Inc	
New York Ave Westbury LI NY	31-38
Community Eng'g Corp	
Box 824 State College Pa	19
Connector Corp	
6025 N Keystone Ave	
Chicago 30 Ill	5-18-19-25-26
Conn Telephone & Electric Corp	
70 Brittainia St Meriden Conn	8-11
Consolidated Productions Inc	
Broward Int'l Airport	
Ft Lauderdale Fla	8

Consolidated Wire & Associated Cos 1635 S Clinton St Chicago 16 Ill	46	Garde Mfg Co 588 Eddy St Providence 3 RI	24	Kelley & Co O G 98 Taylor St Boston 22 Mass	37-39-45
Continental-Diamond Fibre Corp Newark Del	23	Garlock Packing Co 402 Main St Palmyra NY	22	Kendall Co Polyken Sales Div 309 W Jackson Blvd Chicago 20 Ill	23
Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	10	Gee-Lar Mfg Co 418 S Wyman St Rockford Ill	11-25	Keystone Electronics Corp 423 Broome St New York 13 NY	11-20-21-24
Controlled Atmosphere Enclosures Corp 230-11 141 Ave Springfield Gardens 13 LI NY	39	General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	4-5-6-11-12-13-19-20-21-22-25	Kliegl Bros 321 W 50 St New York 19 NY	21
Co-operative Industries Inc 100 Oakdale Rd Chester NJ	36	General Ceramics Corp Keasbey NJ	33	Kling Metal Spinning & Stamping Co 245 Centre St New York 13 NY	44-45-46
Cornish Wire Co 50 Church St New York 7 NY	8	General Components Inc 225 E 144 St Bronx 51 NY	13-20-21-24-26	Kolton Electric Mfg Co 123 N J Railroad Ave Newark 5 NJ	20-21-25-26
Croname Inc 3701 Ravenswood Ave Chicago 13 Ill	10	General Electric Co Construction Materials Div 1285 Boston Ave Bridgeport 2 Conn	29	Kost Products Co 2335 N Cicero Ave Chicago 39 Ill	25
Crystalex-Westlake Corp Lenni Rd Lenni Mills Pa	39	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	27	Krueger & Hudepohl 1041 Evans St Cincinnati 4 Ohio	13-21
Dale Boisen Co 2928 Nebraska Ave Santa Monica Calif	8	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	6-7-11	Kulka Electric Mfg Co 633 S Fulton Ave Mt Vernon NY	2-3-12-13-20-24-25
Dante Electric Mfg Co Bantam Conn	24-25	General RF Fittings Inc 702 Beacon St Boston 15 Mass	1-3-6-7-8-11	Kupfrian Mfg Corp 395 State St Binghamton NY	8
Dearborn Glass Co 6600 S Harlem Ave Bedford Park Argo Ill	9	Globe Electrical Mfg Co 1729 W 134 St Gardena Calif	24	Labelon Tape Co 450 Atlantic Ave Rochester 9 NY	23
Decatur Electronic Industries Corp 203 Orinoco Dr Brightwaters LI NY	8-10	Goat Co Fred 314 Dean St Brooklyn 17 NY	39-45	Lab-Tronics Inc 3656 N Lincoln Ave Chicago 13 Ill	3-4-11-12
Decimeter Products Co 730 Hooker St Denver 4 Colo	23	Goe Eng'g Co 219 S Mednik Ave Los Angeles 22 Calif	13-20	La Moree C D 2433 Birkdale St Los Angeles 31 Calif	22
Defiance Eng'g & Microwave Corp Beverly Airport Beverly Mass	7	Goodrich Industrial Products Co B F 500 S Main St Akron 18 Ohio	23	Lear Inc 3171 S Bundy Drive Santa Monica Calif	47
Dielectric Materials Co 5315 N Ravenswood Ave Chicago 40 Ill	46	Graphik Circuits Div Cinch Mfg Corp 200 S Turnbull Canyon Rd La Puente Calif	24	Lerco Electronics Inc 501 S Varney St Burbank Calif	24
Dielectric Products Eng'g Co Raymond Me	1-7	Grayhill Inc 561 Hillgrove Ave LaGrange Ill	6-11-17	Lieco Inc 3610 Oceanside Rd Oceanside LI NY	1
Dit-Mco Inc Electronics Div 911 Broadway Kansas City Mo	4	Great Western Div Interlectric Corp Warren Pa	25-27-29	Lindgren & Associates Erik A 4515 N Ravenswood Ave Chicago 40 Ill	38-39-41-42-43-47
Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wis	11	Guild Electronics Inc 388 Broadway New York 13 NY	5-19-47	Lindsay Structure Inc 5099 Dempster St Skokie Ill	43
D & M Products 13144 W McNichols Rd Detroit 35 Mich	26	Hal-Hen Co 36-14 11 St Long Island City 6 NY	11	Littelfuse Inc 1865 Miner St Des Plaines Ill	26-27-28
Dossert Mfg Corp 249 Huron St Brooklyn 62 NY	13-21	Hallett Mfg Co 1601 W Florence Inglewood Calif	7-8-31-32-33-36-37-38-46	Liton Industries Components Div 5873 Rodeo Rd Los Angeles 16 Calif	24
Douglas Roesch Cable Div Hall-Scott Inc 2950 N Ontario St Burbank Calif	8	Hansen Co Wm 165 Silverbrook Ave Niles Mich	36	Lorentzen Inc H K 391 W Broadway New York 12 NY	24
Drake Mfg Co 1713 W Hubbard St Chicago 22 Ill	20	Hart Mfg Co 128 Bartholomew Ave Hartford 1 Conn	16-17	McMillan Industrial Corp Brownville Ave Ipswich Mass	39-47
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	4-5-17-19-30	Harwood Electronics Co 466 W Superior St Chicago 10 Ill	6	Magnetic Metals Co Hayes Ave & 21 St Camden 1 NJ	38-44-45
Dwyer Eng'g Co Pine St Ext Nashua NH	8	Haveg Industries Inc 900 Greenbank Rd Wilmington 8 Del	22-46	Malco Tool & Mfg Co 4025 W Lake St Chicago 24 Ill	13-20-21
Eagle Electric Mfg Co 23-10 Bridge Plaza S Long Island City 1 NY	2-3-27-29	Hayward Scientific Glass Corp 217 N Magnolia Ave Whittier 1 Calif	34-37-39	Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	11
Eberline Instrument Div Reynolds Electrical 805 Early St Santa Fe N Mex	39	Hi Grade Alloy Corp 1236 S Talman Chicago 8 Ill	37-39	Mandex Mfg Co 2608 W 16 St Chicago 8 Ill	13-19-20-21
Eitel-McCullough Inc 798 San Mateo Ave San Bruno Calif	19-42	Hoffman Electronics Corp 3761 S Hill St Los Angeles 7 Calif	19	Mayfair Molded Products Corp 3700 N Rose St Franklin Park Ill	15-17-19
Elco Corp M St below Erie Ave Philadelphia 24 Pa	6-16-17-18-19-45	Holyoke Wire & Cable Corp 720 Main St Holyoke Mass	8	Mercury Eng'g Corp 339 E Cottage Pl York Pa	8
Elco Mfg Co 137 Herrick Rd New Hyde Park LI NY	1	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	8	Metal Textile Corp 647 E First Ave Roselle NJ	32-36-45
Electrical Specialty Co 158 11 St San Francisco 3 Calif	13-20-21-23	Houlihan Co T J 2508 W Lawrence Ave Chicago 25 Ill	8	Methode Mfg Corp 7447 W Wilson Ave Chicago 31 Ill	3-5-13-16-17-18-19-20-31-37-45
Electric Terminals Corp 2019 Center St Cleveland 13 Ohio	13-21	Hubbell Inc Harvey State Rd & Bostwick Ave Bridgeport 2 Conn	11-24	Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill	6-17-18-19-20
Electronic Brazing Co 140 Glenridge Ave Montclair NJ	8	Iluse Liberty Mica Co Peabody Industrial Center Peabody Mass	23	Micro-Circuits Co New Buffalo Mich	30-36
Electro-Physics Co 287 Broadway New York 7 NY	8	iE Mfg 325 N Hoyne Ave Chicago 12 Ill	13-14-20-21-24-45	Mil Case Corp 35-18 37 St Long Island City NY	24
Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ	23	Industrial Acoustics Co 341 Jackson Ave New York 54 NY	32-38-47	Millen Mfg Co James 150 Exchange St Malden 48 Mass	11-14-19-24-30-38
Elm Labs 10 Washington Ave Hastings-on-Hudson NY	1	Industrial Hardware Mfg Co 109 Prince St New York 12 NY	17-18-19-24	Minnesota Mining & Mfg Co 900 Fauquier Ave St Paul 6 Minn	23
Emerson Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY	24	Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	4	Minor Rubber Co Ackerman St Bloomfield NJ	10-40
Emerson-Sack-Warner Corp 85 Washington St Somerville 43 Mass	10	Industrial Wiring & Cable Co 103 Foundry St Wakefield Mass	8	Modelectric Products Corp Asbury Park NJ	8
Empire Electronics Co 166 River St Paterson 1 NJ	8	Insulation & Wires Inc 1534 Swinney Ave Ft Wayne Ind	22	Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	8
Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ	1-19-22-23-24-26-35	Isotopes Specialties Co 703 S Main St Burbank Calif	37-39	Molded Fiber Glass Co 4801 Benefit Ave Ashtabula Ohio	34
Engineered Electronics Co 506 E 1 St Santa Ana Calif	8	Insulation Mfrs Corp 565 W Washington Blvd Chicago 39 Ill	23	Molded Insulation Co 335 E Price St Philadelphia 44 Pa	11
Entron Inc 4902 Lawrence St Bladensburg Md	4-7	Insuline Corp of America 186 Granite St Manchester NH	1-6-11-13-19-20-21-25-26	Molded Products Div Admiral Corp Washington & Creamery Rd W Chicago Ill	5
Exacto Industries Inc 8730 Santa Monica Blvd Los Angeles 46 Calif	25	Janco Corp 3111 Winona Ave Burbank Calif	12	Molding Corp of America 58 Weybosset St Providence 3 RI	24
Excellex Electronics Inc 475 Chestnut St Cedarhurst LI NY	24	Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY	10-30-38-44-45	Morse Co Frank W 1300 Soldiers Field Rd Boston 35 Mass	2
Factory Enterprises Inc 3431 Butler St Pittsburgh 1 Pa	41	JFD Mfg Co 6101-16 Ave Brooklyn 4 NY	3	Mosley Electronics Inc 8622 St Charles Rock Rd St Louis 14 Mo	1
Factory Service Co 4615 N 21 St Milwaukee 9 Wis	11	Johns-Manville Dutch Brand Div 7800 Woodlawn Ave Chicago 19 Ill	23	Muter Co 1255 S Michigan Ave Chicago 5 Ill	37
Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY	8	Johns-Manville 22 E 40 St New York 16 NY	23	Mutual Electronic Industries Corp 85 Beechwood Ave New Rochelle NY	27-28
Federal Screw Products Inc 3917 N Kedzie Ave Chicago 18 Ill	6-13-20-21-24	Johnson Co E F Waseca Minn	6-11-19	Mycalex Corp of America 125 Clifton Blvd Clifton NJ	19
Fish-Schurman Corp 70 Portman Rd New Rochelle NY	39	Johnson & Hoffman Mfg Corp 31 E 2 St Mineola NY	13	National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif	18
Florman & Babb 68 W 45 St New York 36 NY	2	Jones Div Howard B Cinch Mfg Co 1026 S Homan Ave Chicago 24 Ill	11	National Company Inc 61 Sherman St Malden 48 Mass	19
Fluorocarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ	3-6-7-8-11-17-18-19-22-24-46	Jones Electronics Hiram 2313 W Olive St Burbank Calif	11-13-20-24	National-Standard Co Niles Mich	46
Frankel Connector Co 27 Vestry St New York 13 NY	21	Kane Mfg Corp P O Box 641 Kane Pa	47	National Tel-Tronics Corp 52 St Casimir Ave Yonkers NY	11-15-20-24-25
				Natvar Corp 211 Randolph Ave Woodbridge NJ	22

Nems-Clarke Inc 919 Jesup-Blair Dr Silver Spring Md	11	Smith Inc Herman H 2326 Nostrand Ave Brooklyn 10 NY	6-11-13-20-21-24-25	Walworth Co 60 E 42 St New York 17 NY	7
Neosil Products Div Rubber Associates 745 5 Ave New York 22 NY	26-40	Sparta Mfg Co Dover Ohio	35-46	Wenzel Projector Co 2505 S State St Chicago 16 Ill	21
Newark Wire Cloth Co 351 Verona Ave Newark 4 NJ	32-41	Spring Packing Corp 332 S Michigan Ave Chicago 4 Ill	23	Westbury Electronics Inc 300 Shames Dr Westbury NY	8
Newcomb Spring Corp 177 E Hawthorne Ave Valley Stream NY	25	Standard Electric Time Co 89 Logan St Springfield 2 Mass	6-11	Western Int'l Co 45 Vesey St New York 7 NY	1-3-11
New England Electrical Works 365 Main St Lisbon NH	46	Star-A Electric Mfg Co 269 Meserole St Brooklyn 6 NY	2-27-29	Westline Products Div Western Lithograph Co 600 E 2 St Los Angeles 54 Calif	15-23
Nichols Products Co 325 W Main St Moorestown NJ	1-7	Staver Co 41-51 N Saxon Ave Bay Shore LI NY	45	Wheaton Co T C Millville NJ	24
Noel Mfg Co 3 W 18 St New York 11 NY	8	Steward Mfg Co D M Chattanooga Tenn	33-38-39	Whitaker Cable Corp 1301 Burlington St N Kansas City 16 Mo	13-20-21
North Electric Co 553 S Market St Galion Ohio	6-8-11-24	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-28	Whitso Inc 9330 Byron St Schiller Park Ill	11
NRD Instrument Co 6425 Etzel Ave St Louis 14 Mo	37-39	Stone City Machine & Tool Co 1206 7 St Bedford Ind	13-20-24-25	Wilmar Mfg Co 1110 Truman Rd Kansas City Mo	4
Nucleonic Corp of America 196 Degraw St Brooklyn 31 NY	39	Strat-O-Seal Mfg Co 3039 W Fullerton Ave Chicago 47 Ill	24	Winchester Electronics Inc Willard Rd Norwalk Conn	19
Olympic Plastics Co 3471 S LaCienega Blvd Los Angeles 16 Calif	24	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	11	Winder Aircraft Corp of Florida PO Box 2397 Drane Field Lakeland Fla	2-3-4-10- 11-12-43
Pacific Electricord Co 3217 Exposition Pl Los Angeles 18 Calif	8	Superex Electronics Corp 4 Radford Pl Yonkers NY	4-8	Yale & Towne Powdered Metal Prods Div 9335 W Belmont Ave Franklin Park Ill	33
Painton & Co Ltd c/o British Electronic Sales Co Box 132 Oakland Gardens 64 NY	6	Superior Electric Co 83 Laurel St Bristol Conn	6	York Co Otto H 6 Central Ave W Orange NJ	42
Paul & Beekman 1801 Courtland St Philadelphia 40 Pa	31	Swedlow Plastics Co 6986 Bandini Blvd Los Angeles 22 Calif	35-39	Zierick Mfg Corp Beechwood & Rockdale Ave New Rochelle NY	20-25
Perfection Mica Co Magnetic Shield Div 20 N Wacker Dr Chicago 6 Ill	30-31-32-38-44-45	Swift Metallizing & Laminating Corp 10 Love Lane Hartford 1 Conn	32-34-39-41-42		
Pernacel Tape Corp U S Hwy 1 New Brunswick NJ	23	Switchcraft Inc 1328 N Halsted St Chicago 22 Ill	3-4-10-11		
Permonite Mfg Co 444 Lake Shore Dr Chicago 11 Ill	13-19-20-21-24-26	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	4-17-18-19-26-45		
Pfaudler Co 1000 West Ave Rochester 3 NY	34	Taffet Radio & TV Co 27-05 Brooklyn Queens Expressway W Woodside 77 NY	8-39		
Phalo Plastics Corp 25 Foster St Worcester 8 Mass	46	Taylor Fibre Co Norristown Pa	26		
Philadelphia Insulated Wire Co 200 N 3 St Philadelphia 43 Pa	8-46	Technicraft Co 1156 Commonwealth Ave Boston 34 Mass	6		
Photographic Analysis Inc 13273 Ventura Blvd N Hollywood Calif	7	Techron Corp 81 Washington St Boston 8 Mass	17		
Pix Mfg Co 75 Hudson St Newark 3 NJ	13-20-21	Telect Industries Corp 35-18 37 St Long Island City 1 NY	11-31-37-39-42-43		
Plastic Mold & Eng'g Co 157 Clifford St Providence RI	18-19	Telephonics Corp Park Ave Huntington LI NY	11		
Plummer Co Walter A 752 S San Pedro St Los Angeles 14 Calif	8	Teleradio Eng'g Corp Shannon & Barrett Sts Wilkes-Barre Pa	11		
Polymer Corp 2120 Fairmont Ave Reading Pa	22-38	Teletronic Labs Inc 1835 W Rosecrans Ave Gardena Calif	8		
Pomona Electronics Co 1126 W 5 Ave Pomona Calif	5-11-12	Telex 1633 Eustis St St Paul 1 Minn	11		
Precision Metal Products Co 41 Elm St Stoneham Mass	24	Thale Eng'g Corp 2104 E Villa St Pasadena Calif	8-31-36-43		
Precision Tube Co Church Rd & Wissahickon Ave North Wales Pa	46	Thermal Refractories Corp 4501 Dell Ave N Bergen NJ	33		
Printed Cellophane Tape Co 521 N La Brea St Los Angeles 36 Calif	23	Thor Ceramics Inc 225 Belleville Ave Bloomfield NJ	22		
Pye Telecommunications Ltd Newmarket Rd Cambridge England	1-8	Topatun Inc 942 E Ojai Ave Ojai Calif	32-38-41-42-43		
Radiation Counter Labs Inc 5121 W Grove St Skokie Ill	39	Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	8		
Raypar Inc 7800 W Addison St Chicago 34 Ill	19	Trico Fuse Mfg Co 2948 N 5 St Milwaukee 12 Wis	27		
Raytheon Mfg Co 100 River St Waltham 54 Mass	6-11	Tri-Dex Electronics P O Box 1207 Lindsay Calif	24		
Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 54 Mass	25	Trimm Inc 400 W Lake St Libertyville Ill	11		
Remler Co 2101 Bryant St San Francisco Calif	19	Tri-Point Plastics Inc 175-I U Willets Rd Albertson LI NY	24		
Resistoflex Corp Woodland Rd Roseland NJ	22	Tru-Connector Corp 416 Union St Lynn Mass	7		
Revere Corp of America Wallingford Conn	8	Ucinite Co Div United-Carr Fastener Corp 459 Watertown St Newtonville 60 Mass	11		
Richards Electrocraft Inc 3739 N Kedzie Ave Chicago 18 Ill	3-11	United-Carr Fastener Corp Cambridge 42 Mass	11		
Rodale Mfg Co 6 & Minor Sts Emmaus Pa	2-3	United Mineral & Chemical Corp 16 Hudson St New York 13 NY	23		
Rogers Corp Rogers Conn	35-40	U S Instrument Corp P O Box 33E Charlottesville Va	11-28		
Rosenau Harris & Co Ontario & I Sts Philadelphia 34 Pa	8	U S Plywood Corp 55 N 44 St New York 36 NY	39		
Royal Electric Corp 95 Grand Ave Pawtucket RI	27-29	U S Rubber Co 1230 6 Ave New York 20 NY	40-42		
Safetee Glass Co 4717 Stenton Ave Philadelphia 44 Pa	9	Vaco Products Co 317 E Ontario St Chicago 11 Ill	21		
Saratoga Plastics Inc N Walpole NH	8	Varflex Corp 511 W Court St Rome NY	22		
Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	23	Vector Electronic Co 3352 San Fernando Rd Los Angeles 65 Calif	4-5-19-24		
Seallectro Corp 610 Fayette Ave Mamaroneck NY	11	Vidaire Electronics Mfg Corp 576 W Merrick Rd Lynbrook NY	4-5		
Seamless Rubber Co 253 Hallowell Ave New Haven 3 Conn	23	Vitroseal Corp 709 E 106 St Indianapolis 20 Ind	24		
Sensory Inc Pleasantville Rd New Vernon NJ	8	Vocalite Screen Corp 19 Debevoise Ave Roosevelt NY	23		
Shakeproof Div Illinois Tool Works St Charles Rd Elgin Ill	20	Volk Radiochemical Co 5412 N Clark St Chicago 40 Ill	37-39		
Shielding Inc 8 Reserve St Riverside NJ	38-41-43-47	Wade Electric Products Co Box 271 Sturgis Mich	13-24		
Sightmaster Corp 85 Beechwood Ave New Rochelle NY	27-28	Waldem Electronics Inc 4625 W 53 St Chicago 32 Ill	6-10-13-19-20-21		
Sinclair Mfg Co P O Box 243 Chartley Mass	13-20-21	Walsco Electronics Mfg Co 100 W Green St Rockford Ill	4-5-11-13-20-21-25		
Skysweeper Inc P O Box 92 McHenry Ill	8				

15—CHEMICALS, COATINGS & RELATED PRODUCTS

Adhesives	1
Binders, liquid	2
Cement	3
Ceramics, high temperature	4
Chemicals, dehumidifying	5
Chemicals, electroplating	6
Chemicals, etching	7
Chemicals, fluorescent	8
Chemicals, phosphorescent	9
Chemicals, photosensitive	10
Chemicals, radioactive	11
Chemicals, wire stripper	12
Cleaners, contact	13
Coatings, printed circuit	14
Coatings, protective	15
Coil dope	16
Compounds, cleaning	17
Compounds, waterproofing	18
Enamels	19
Finishes, wrinkle	20
Flux, brazing & soldering	21
Fungicides	22
Greases, vacuum	23
Ink, marking	24
Lacquer	25
Lubricants	26
Materials, fluorescent	27
Paint, conductive	28
Paint, metallic	29
Paint, resistive	30
Phosphors, b&w TV tube	31
Phosphors, color TV tube	32
Pitch	33
Plastic, electrically conductive	34
Resins, encapsulating	35
Rubber, conductive	36
Selenium	37
Silicones	38
Silverpaste	39
Solvents	40
Varnish	41
Wax	42

Acheson Colloids Co 1635 Washington Ave Port Huron Mich	14-26
Acme Wire Co 1255 Dixwell Ave New Haven 14 Conn	15-18-25-41
Acromark Corp 443 Morrell St Elizabeth 4 NJ	24
Airflyte Electronics Co 535 Avenue A Bayonne NJ	34
Akron Rubber Co 53 Warren St New York 7 NY	36
Alconox Inc 853 Broadway New York 3 NY	17
All-State Welding Alloys Co 249 Ferris Ave White Plains NY	21
Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	3-5-6-7-8-9-10-11- 12-28-42

Alpha Metals Inc 56 Water St Jersey City 4 NJ	21	Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wis	4	Fish-Schurman Corp 70 Portman Rd New Rochelle NY	4
Alpha Molykote Corp 65 Harvard Ave Stamford Conn	26	Central Coil Co 1720 N Luett St Indianapolis 22 Ind	1-3-15-16-18-35	Floquil Products Inc Cobleskill NY	15-24-29-30
Aluminum Co of America Alcoa Bldg Pittsburgh 19 Pa	5	Chemical Commerce 166 Clifford St Newark 5 NJ	6-10	Fluorocarbon Products Inc Div US Gasket Co 602 N 10 St Camden 1 NJ	34
Ambroid Co Box 30 Weymouth 88 Mass	1-3-25	Chemical Process Co 1901 Spring St Redwood City Calif	35	Franklin Fibre-Lamitex Corp Wilmington Dela	84
Amercoat Corp 4809 Firestone Blvd South Gate Calif	15	Chemical Products Corp King Philip Rd E Providence 14 RI	1-14-15-30-40	Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ	4
American Lava Corp Subs Minn Mining & Mfg Cherokee Blvd & Mfrs Rd Chattanooga 5 Tenn	4	Chicago Gasket Co 1271 W North Ave Chicago 22 Ill	1	Furane Plastics Inc 4516 Brazil St Los Angeles 32 Calif	1-14-15-18-34-35
American Metal Co 61 Broadway New York 6 NY	37	Ciba Co Plastics Div Kimberton Pa	35	Garlock Packing Co 402 Main St Palmyra NY	38
American Platinum Works 231 NJRR Ave Newark 5 NJ	21	City Chemical Corp 132 W 22 St New York 11 NY	5-6-7-8-17- 22-27-37-40	Gates & Co Geo W Hempstead Tpke & Lucille Ave Franklin Square LI NY	7-8
American Products Mfg Co 8127 Oleander St New Orleans 18 La	1-3-8-9-15-18-25	Clowes Ceramic Corp 3711 Calhoun Ave Chattanooga 7 Tenn	4	General American Transportation Corp 135 S LaSalle St Chicago 90 Ill	14-15
American Silver Co 3607 Prince St Flushing 54 NY	21	Cobehn Inc 18-24 Passaic Ave Caldwell NJ	13-40	General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	1-12-13-14-15-19- 25-26-40-41
American Solder & Flux Co 19 & Willard Sts Philadelphia 40 Pa	21	Colonial Alloys Co Ridge Ave & Crawford St Philadelphia 29 Pa	13	General Ceramics Corp Keasbey NJ	4
Anchor Metal Co 966 Meeker Ave Brooklyn 22 NY	21	Communication Products Co Marlboro NJ	25	General Chemical Div Allied Chemical & Dye Corp 40 Rector St New York 6 NY	5-6-7-8-9-11- 12-31-32-37
Anderson Associates HV 233 Broad St Summit NJ	21-28-39	Constad Labs 85-02 162 St Jamaica NY	1-17	General Electric Co Lamp Wire & Phosphors Dept 1331 Chardon Rd Cleveland 17 Ohio	31-32
Anton Electronics Labs 1226 Flushing Ave Brooklyn 6 NY	11	Continental-Diamond Fibre Corp Newark Del	38	General Electric Co Silicone Products Dept Waterford NY	1-15-18-26-38
Apex Coated Fabrics Co 12 E 22 St New York 10 NY	15	Cox & Co 115 E 23 St New York 10 NY	1	General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY	4
Arco Co 7301 Bessemer Ave Cleveland 27 Ohio	15-19-25-41	Crown Industrial Products Co 713 Amsterdam Woodstock Ill	24-30	General Mills Inc Chemical Div South Kensington Rd Kankakee Ill	1-15
Aries Labs Inc 45-33 Davis St Long Island City 1 NY	1-15-17-26-35-40	CrystalX-Westlake Corp Lenni Rd Lenni Mills Pa	34	General Plastics Corp 165 3 Ave Paterson 4 NJ	34
Associated Eng'g & Mfg Corp 210 Stonehouse Rd Glen Ridge NJ	27-31-32	Cudner & O'Connor Co 4035 W Kinzie St Chicago 24 Ill	30-35	Glaser Lead Co 31 Wyckoff Ave Brooklyn 37 NY	21
Atlas Mineral Products Co Mertztown Pa	3-15-30	Decimeter Products Co 730 Hooker St Denver 4 Colo	21	Glyco Products Co 350 5 Ave New York 1 NY	42
Auburn Mfg Co Stack St Middletown Conn	36-38	Delta Chemical Works 1-3-4-5-6-7-8-9-10-11-12- 23 W 60 St 19-24-25-26-27-28-29-30-31-32- New York 23 NY	37-38-39-42	Goldsmith Bros Smelting & Refining Co 1300 W 59 St Chicago 36 Ill	21
Axler Associates Inc 102-42 43 Ave Corona 68 NY	15	Delta Co 333 W 24 Pl Chicago 16 Ill	14-15	Goodrich Industrial Products Co B F 500 S Main St Akron 18 Ohio	1
Babbitt Chemical Co 38 Prospect St New Bedford Mass	15-17-18	Diamonite Products Mfg Co 217 4 St NE Canton 2 Ohio	4	Grafo Colloids Corp 310 Wilkes Pl Sharon Pa	26
Bacon Industries 192 Pleasant St Watertown 72 Mass	1	Dixon Crucible Co Joseph 167 Wayne St Jersey City 3 NJ	15	Gulton Industries Inc 212 Durham Ave Metuchen NJ	4
Bakelite Co Div Union Carbide & Carbon Corp 30 E 42 St New York 17 NY	1-15-34-38	Dow Chemical Co Midland Mich	5-17-22-40	Handy & Harman 82 Fulton St New York 38 NY	21-28-39
Baker & Co 113 Astor St Newark 2 NJ	6	Dow Corning Corp 1-14-15-18-26- Midland Mich	35-38-41	Hardman Co H V 571 Cortlandt St Belleville 9 NJ	3-35-36
Baker Chemical Co JT Phillipsburg NJ	5-6-7-8-10	Drakenfeld & Co B F 45 Park Pl New York 7 NY	39	Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio	5-6-17-22
Barco Chemical Products Co 701 S LaSalle St Chicago 5 Ill	6	Du-Co Ceramics Co Box 278 Saxonburg Pa	3-4	High Vacuum Equipment Corp 2 Churchill Rd Hingham Mass	23
Barium & Chemicals Inc Willoughby Ohio	5	Dunton Co M W 7 Goff St Providence RI	21	Hi Grade Alloy Corp 1236 S Talman Chicago 8 Ill	12-21
Barrett Div Allied Chemical & Dye Corp 40 Rector St New York 6 NY	1-15-18-30- 33-35-40	Du Pont De Nemours & Co EI 1-5-6-7-8-9-10- Wilmington 98	14-15-17-18-19-21-22-25-27- 28-29-30-31-32-39-40-41	Hitemp Wires Inc 26 Windsor Ave Mineola NY	24
Barrett Varnish Co 1532 S 50 Court Cicero 50 Ill	3-19-25-41	Eastern Chemical Corp 34 Spring St Newark 4 NJ	6-8-9	Hi-Test Chemical Corp 722-64 St Brooklyn 20 NY	42
Beck's Inc 298 E 5 St St Paul 1 Minn	14-15	Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	14-15-35	Hogan Labs Inc 155 Perry St New York 14 NY	15
Belmont Smelting & Refining Works 330 Belmont Ave Brooklyn 7 NY	6-18-21-37	Eastern Smelting & Refining Corp 109 W Brookline St Boston 18 Mass	39	Hommel Co O 209 4 Ave Pittsburgh 22 Pa	19-39
Biggs Co Carl H 2255 Barry Ave Los Angeles 64 Calif	14-15	Eastman Kodak Co 343 State St Rochester 4 NY	1-25-42	Hooper Chemical Corp PO Box 313 Rutherford NJ	6-7-8-9-10-11-37
Bio-Rad Labs 800 Delaware St Berkeley Calif	11	Electrical Refractories Co E Clark St E Palestine Ohio	4	Houghton Laboratories Inc 302 Houghton Ave Olean NY	1
Bios Labs Inc 17 W 60 St New York 23 NY	1-3-4-5-6-7-8-9-10-11- 12-19-24-25-26-27-28-29- 30-31-32-37-38-39-42	Electrical Specialty Co 158 11 St San Francisco 3 Calif	15-18-26-35-38-42	Hunt Co Philip A Foot of Roosevelt Pl Palisades Park NJ	7
Birnbach Radio Co 145 Hudson St New York 13 NY	4	Electro-Chemical Eng'g & Mfg Co 750 Broad St Emmaus Pa	3-15-18-30	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	10
Biwax Corp 3445 Howard St Skokie Ill	18-42	Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ	15	Huron Industries PO Box 557 Port Huron Mich	26
Bloomington Rubber Co 1 Flower St Chester Pa	1	Elektro Serv Co 480 Johnson Ave Brooklyn 37 NY	34	Industrial Accessories Inc Line Rd Matawan NJ	36-38
Borden Co Chemical Div 350 Madison Ave New York 17 NY	1-15-18-40-42	Elgin National Watch Co 107 National St Elgin Ill	26	Injection Molders Supply Co 5514 Lee Rd Cleveland 20 Ohio	26-38
Borthix Co George C PO Box 115 E Rutherford NJ	19-22-41	Ellanar Chemical Co 2308 Oakton St Evanston Ill	12-21-35	Insl-x Sales Co 26 Rittenhouse Pl Ardmore Pa	15-19-25-41-42
Bow Solder Products Co 251 Freeman St Brooklyn 22 NY	21	Emerson & Cuming Inc 869 Washington St Canton 1 Mass	1-3-30-34-35-36	Insulating Fabricators of NE Inc 69 Grove St Watertown 72 Mass	38
Bram Chemical Co Metals & Minerals Div 820 65 Ave Philadelphia 26 Pa	8-9-27-37-39	Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ	84	Insulation Mfrs Corp 565 W Washington Blvd Chicago 39 Ill	38-41
Brooklyn Paint & Varnish Co 50 Jay St Brooklyn 1 NY	14-15	Enthone Inc 442 Elm St New Haven 8 Conn	6-7-15-17	Isolantite Mfg Corp Warren Ave Stirling NJ	4
Burnley Battery & Mfg Co 103 Clay St North East Pa	21	Ernie Resistor Corp 644 W 12 St Erie 6 Pa	4	Isotopes Specialties Co 703 S Main St Burbank Calif	11
Caddell-Burns Mfg Co 40 E 2 St Mineola NY	16	Federated Metals Div American Smelting & Refining Co 120 Broadway New York 5 NY	21-37	Jodee Plastics Co 213 Shepherd Ave Brooklyn 8 NY	38
Caix Labs 46 Stanwood Rd New Hyde Park NY	13	Fidelity Chemical Products Corp 470 Frelinghuysen Ave Newark 12 NJ	6-7-12-14-15-17-19-25-28	Johns-Manville Dutch Brand Div 7800 Woodlawn Ave Chicago 19 Ill	1-3
Canadian Radium & Uranium Corp 630 5 Ave New York 20 NY	8-9-11	Firth Sterling Inc 3113 Forbes St Pittsburgh 13 Pa	4	Johnson Mfg Co Mt Vernon Iowa	21
Carbide & Carbon Chemicals Co Div Union Carbide & Carbon 30 E 42 St New York 17 NY	5-6-17-22-40	Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa	40	Johns-Manville 22 E 40 St New York 16 NY	1-3-15-18
Carbolite Co 331 Thornton Ave St Louis 19 Mo	1-15-30			Keil Eng'g Products Co 4356 Duncan Ave St Louis 10 Mo	7
Carstedt Research Inc 2501 E 68 St Long Beach 5 Calif	15				

Kellogg Co M W PO Box 469 Jersey City 3 NJ	15-24-26	New England Tape Co 30 Tower St Hudson Mass	18	Sanders Associates 95 Canal St Nashua NH	14
Kendall Co Polyken Sales Div 309 W Jackson Blvd Chicago 20 Ill	15	Norco Mfg Co 392 Bleecker St New York 14 NY	8-9	Sauereisen Cements Co 1045 N Canal St Pittsburgh 15 Pa	1-3-15
Kester Solder Co 4201 Wrightwood Ave Chicago 39 Ill	21	Norton Co 1 New Bond St Worcester 6 Mass	4-15	Saxonburg Ceramics Saxonburg Pa	4
Kinney Mfg Div Vacuum Equip Div NY Air Brake Co 3529 Washington St Boston 30 Mass	15	NRC Equipment Corp Sub National Research Corp 160 Charlemont St Newton Highlands 61 Mass	27	Schrack Electrical Sales Corp 45 W 81 St New York 24 NY	4
Kirchberger & Co M 83 W Forest Ave Englewood NJ	4	NRD Instrument Co 6425 Etzel Ave St Louis 14 Mo	11	Schenectady Varnish Co Congress St & 9 Ave Schenectady 3 NY	16-41
Koppers Co Koppers Bldg Pittsburgh 19 Pa	1-15-18-29-30-33	Nuclear-Chicago Corp 223 W Erie St Chicago 10 Ill	11	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	1-3-5-6-7-17-23-30-42
Krylon Inc 18 W Airy St Norristown Pa	14-15-19-24-29	Nuclear Corp of America Empire State Bldg New York NY	11	Sel-Rex Corp 155 Manchester Pl Newark 4 NJ	6-7
Laminated Sheet Products Corp 449 Neponset St Norwood Mass	38	Nukem Products Corp 111 Colgate Ave Buffalo 20 NY	1-2-3-15-30-35	Shannon Luminous Materials Co 7356 Santa Monica Blvd Hollywood 46 Calif	8-9-27
La Moree C D 2433 Birkdale St Los Angeles 31 Calif	41	Nye Inc Wm F 10 Howland Rd Fairhaven Mass	26-40	Sherwin-Williams Co 101 Prospect Ave Cleveland 1 Ohio	19-25-28-29-30-40
Lupp Insulator Co Radio Specialties Div 24 Summer St LeRoy NY	4	Oakite Products Inc 70 Rector St New York 6 NY	15-17-40	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	31-32
Lawter Chemicals Inc 3550 Touhy Ave Chicago 45 Ill	25	Olin Mathieson Chemical Corp 460 Park Ave New York 22 NY	22-40	Slip Ring Co of America 3612 W Jefferson Blvd Los Angeles 16 Calif	14
Lithium Corp of America 2500 Rand Tower Minneapolis 2 Minn	5	Olympic Plastics Co 3471 S LaCienega Blvd Los Angeles 16 Calif	34	Smooth-On Mfg Co 572 Communipaw Ave Jersey City 4 NJ	3-35
Litton Eng'g Labs PO Box 949 Grass Valley Calif	26	Organic Development Corp 8841 Orangewood Ave Anaheim Calif	1-8-24	Solar Aircraft Co 2200 Pacific Hwy San Diego 12 Calif	4-15
Lozo Inc 12904 S Stony Island Ave Chicago 33 Ill	14-15-18-19-20-28-29-30-34-41	Painton & Co Ltd c/o British Electronic Sales Co Box 132 Oakland Gardens 64 NY	13	Solar Mfg Corp 4553 Seville Ave Los Angeles 58 Calif	4
London Chemical Co 1535 N 31 Ave Melrose Park	21	Paisley Products Inc Div Morningstar Nicol Inc 630 W 51 St New York 19 NY	1-2-3-15	Sonneborn Sons L 404 4 Ave New York 16 NY	15-17-18-19-29-30-33
L&R Mfg Co 577 Elm St Arlington NJ	13-17	Pettinos Inc Charles 1 E 42 St New York 17 NY	26	Sparta Mfg Co Dover Ohio	15
McDowell Electronics Inc 105 Forrest St Metuchen NJ	16	Pfaudler Co 1000 West Ave Rochester 3 NY	4	Spraylat Corp 1 Park Ave New York 16 NY	15
Maas & Waldstein Co 2121 McCarter Hwy Newark 4 NJ	19-25-28-29-30	Philadelphia Quartz Co 1146F Public Ledger Bldg Philadelphia 6 Pa	1-2	Spring Packing Corp 332 S Michigan Ave Chicago 4 Ill	15
Mackay Inc AD 198 Broadway New York 38 NY	8-9-10-11-27-31-32-37	Phillips Process Co 192 Mill St Rochester 14 NY	24	Sterling Varnish Co Haysville Borough Sewickley Pa	18-19-25-41
Mallinckrodt Chemical Works 2 & Mallinckrodt Sts St Louis 7 Mo	8-10-22	Photochemicals Corp 31 Sea Cliff Ave Glen Cove NY	14-15	Stevenson Bro 110 Race St Philadelphia 6 Pa	15-18-26-42
Marblette Corp 37-31 30 St Long Island City 1 NY	35	PIC Design Corp 477 Atlantic Ave E Rockaway LI NY	26	Steward Mfg Co D M Chattanooga Tenn	4
Marbon Chemical Div Borg-Warner Corp 7165 Chicago Ave Gary Ind	1	Plasti-Kote Inc 9801 Harvard Ave Cleveland 5 Ohio	28-29-30	Stroblite Co 75 W 45 St New York 36 NY	8
Markem Machine Co 150 Congress St Keene NH	24	Polymer Corp 2120 Fairmount Ave Reading Pa	15	Stupakoff Div Carborundum Co Latrobe Pa	4
Markwik Mfg Co 31 Sexton Rd Plainview LI NY	24	Polymer Industries Inc Springdale Conn	1-2-15-18	Sun Chemical Corp 10-10 44 Ave Long Island City 1 NY	15-25
Martindale Electric Co Box 617 Edgewater Branch Cleveland 7 Ohio	17	Quietrol Co 395 St John St Spartanburg SC	26	Superex Electronics Corp 4 Radford Pl Yonkers NY	13-17-26
Mathews & Co Jas H 3956 Forbes St Pittsburgh 13 Pa	24	Radio Corp of America 415 S 5 St Harrison NJ	31-32	Superior Flux & Mfg Co 1302 Ontario St Cleveland 13 Ohio	21
Mayfair Molded Products Corp 3700 N Rose St Franklin Park Ill	36	Radium Chemical Co 161 E 42 St New York 17 NY	8-9-11	Superior Steatite & Ceramic Corp 91 W Forest Ave Englewood NJ	4
Merk & Co Inc Chemical Div Rahway NJ	6-7-8-9-10-11	Randolph Products Co Carlstadt NJ	20	Swedlow Plastics Co 6986 Bandini Blvd Los Angeles 22 Calif	1
Merix Chemical Co 1021 E 55 St Chicago 15 Ill	15-26-27-28	Rascher & Betzold Inc 730 N Franklin St Chicago 10 Ill	5-6-7-8-9-10-11-12	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	8-9-25-27-31-32
Metal Hydrides Inc 1224 Congress St Beverly Mass	5	Raybestos-Manhattan Inc 61 Willett St Passaic NJ	15	Synthane Corp Montgomery Ave Oaks Pa	34
Metaplast Corp Davisville Rd at Pa Turnpike Hatboro Pa	14-15	Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass	4	Taylor Fibre Co Norristown Pa	38
Metz Refining Co 369 Mulberry St Newark 2 NJ	39	Raytheon Mfg Co Microwave & Power Tube Operations Foundry Ave Waltham Mass	4	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	18
Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass	21	Reichhold Chemicals Inc 525 N Broadway White Plains NY	1-22-35	Teleradio Eng'g Corp Shannon & Barrett Sts Wilkes-Barre Pa	14
Micro-Circuits Co New Buffalo Mich	1-3-7-14-15-25-28-29-30-34-39	Reilly Tar & Chemical Corp 1615 Merchant Bank Bldg Indianapolis 4 Ind	15-19-33	Terrell Corp 19 Lane St Waltham 54 Mass	1-2-3-15-35-42
Midland Paint & Varnish Co 3801 E 91 St Cleveland 5 Ohio	28-29-30	Republic Rubber Div Lee Rubber & Tire Corp 1410 Albert St Youngstown 1 Ohio	36	Thermal Refractories Corp 4501 Dell Ave N Bergen NJ	3-4-15
Mil Case Corp 35-18 37 St Long Island City NY	34	Research Specialties Co 2005 Hopkins St Berkeley 7 Calif	11	Thermo Materials Inc 4040 Campbell Ave Menlo Park Calif	4
Millen Mfg Co James 150 Exchange St Malden 48 Mass	16	Richardson Co 27 Ave & Lake St Melrose Park Ill	34	Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass	11
Minnesota Mining & Mfg Co 900 Fauquier Ave St Paul 6 Minn	35	Roberts Toledo Rubber Co 1200 Prospect Ave Toledo 6 Ohio	36	Tricon Mfg Co 8012 Wallace St Chicago 20 Ill	21
Minnesota Rubber & Gasket Co 3630 Wooddale Ave St Louis Park Minneapolis 16 Minn	36-38	Rogers Corp Rogers Conn	36	Tri-Point Plastics Inc 175-I U Willets Rd Albertson LI NY	34
Minor Rubber Co Ackerman St Bloomfield NJ	36	Rosco Labs 29 Moore St Brooklyn 6 NY	3-7-13-17-24	TV Hardware Mfg Co Div Tectron Inc 400 S Wyman St Rockford Ill	13
Modern Adhesives & Electronics Inc 148 Greene St New York 12 NY	16	Rubber & Asbestos Corp 225 Belleville Ave Bloomfield NJ	1	U B S Chemical Corp 491 Main St Cambridge 42 Mass	1-3-15
Mona Industries Inc 65 E 23 St Paterson 17 NJ	6-7-40	Rubbercraft Corp of Calif 1800 W 220 St Torrance Calif	3-15-18-36-38	Ultra-Violet Products Inc 5114 Walnut Grove Ave San Gabriel Calif	8
Monsanto Chemical Co 1700 S 2 St St Louis 4 Mo	5-6-12-17-22-35-42	Ruby Chemical Co 68-70 McDowell St Columbus 16 Ohio	21	Union Carbide and Carbon Corp Silicones Div 30 E 42 St New York 17 NY	16-18-35-36-38-41
Montaine Corp 2446 S Prairie Ave Chicago 16 Ill	4-15	Sage Labs Inc 30 Guinan St Waltham 54 Mass	21	United Mineral & Chemical Corp 16 Hudson St New York 13 NY	10-27-37
Moore Corp John B PO Box 3 Dept EI Peerless Bldg Nutley 10 NJ	13-17-40	Safetee Glass Co 4717 Stenton Ave Philadelphia 44 Pa	34	U S Plywood Corp 55 W 44 St New York 36 NY	1-3
Multicore Solders Ltd Maylands Ave Hemel Hempstead Hertfordshire England	21	St Eloi Corp 3509 Debolt Rd Newtown Ohio	9	U S Radium Corp Morristown NJ	31
Mycalex Corp of America 125 Clifton Blvd Clifton NJ	4	St Regis Paper Co Panelyte Div 150 E 42 St New York 16 NY	34	U S Rubber Co 1230 6 Ave New York 20 NY	1-36
National Eng'g Products Inc 435 Washington Bldg Washington 5 DC	1	Samson Chemical & Pigment Corp 2830 W Lake St Chicago 12 Ill	8-9-11-27	U S Stoneware Co Alite Div Orville Ohio	4
National Lead Co 111 Broadway New York 6 NY	21			United Wire & Supply Corp 1497 Elmwood Ave Providence 7 RI	21
Neosil Products Div Rubber Associates 745 5 Ave New York 22 NY	20-36				

Vitro Corp of America 261 Madison Ave New York 16 NY	15	Coil Winders Inc New York Ave Westbury LI NY	1-2-3-4-5-6-7-8	Muirhead Instruments Inc 677 5 Ave New York 22 NY	1-2
Vocalite Screen Corp 19 Debevoise Ave Roosevelt NY	29	Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	1-2-3	Mystic Transformers Inc 63 Swanton St Winchester Mass	1-2-3-4
Volk Radiochemical Co 5412 N Clark St Chicago 40 Ill	11	Communication Equipment & Eng'g Co 5646 W Race Ave Chicago 44 Ill	2	New York Coil Co 40 2 Ave Phoenixville Pa	1-2-3-7-8
Vorac Co 147 Meadow Rd Rutherford NJ	1-15-19	Del Electronics Corp 41 N MacQueen St Pkwy Mt Vernon NY	4-5	National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif	1-2-3-4-5-7-8
Waldom Electronics Inc 4625 W 53 St Chicago 32 Ill	15-19-20	Delevan Electronics Corp Royercroft Campus E Aurora NY	1-2-3-7-8	National Coil Co P O Box 1237 Sheridan Wyo	1-2-3-4-7-8
Walsco Electronics Mfg Co 100 W Green St Rockford Ill	3-12-13-14-15-17-19-21-25-41	Diamond Coils Inc 540 39 St Union City NJ	1-2-5	National Company Inc 61 Sherman St Malden 48 Mass	7-8
Wax Corp of America 21-29 Dunham Pl Brooklyn 11 NY	42	Eastman Pacific Co 2320 E 8 St Los Angeles 21 Calif	1-2-3-7	New York Transformer Co 3 Ave Alpha NJ	1-2-3
Western Gold & Platinum Co 525 Harbor Blvd Belmont Calif	4-28-29	Electran Mfg Co 1901 Clybourn Ave Chicago 14 Ill	1-2-3-4-5	North Hills Electric Co 402 Sagamore Ave Mineola LI NY	7-8
White Dental Mfg Co S S Industrial Div 10 E 40 St New York 16 NY	3	Electrical Windings Inc 2015 N Kolmar Ave Chicago 39 Ill	3-4	Nothelfer Winding Labs Inc 106 Albemarle Ave Trenton 8 NJ	1-3-4-5
Wildberg Bros Smelting & Refining Co 742 Market St San Francisco 2 Calif	6-21	Electro Assemblies Inc 4444 N Kedzie Ave Chicago 25 Ill	7-8	NYT Electronics Inc 2979 N Ontario St Burbank Calif	1-2-3-4-5-7-8
Wisconsin Porcelain Co 121 Lincoln St Sun Prairie Wisc	4	Electro Eng'g Works 401 Preda St San Leandro Calif	1-2-3-4-5-8	Ogden Coil & Transformer Co 3323 W Cermak Rd Chicago 23 Ill	2-3-4-5
Workman TV Inc 309 Queen Anne Rd Teaneck NJ	1-13-26	Electronic Coil Co 2506 N Ontario St Burbank Calif	7-8	Ohmite Mfg Co 3601 Howard St Skokie Ill	5-7-8
Zenith Plastics Co 1600 W 135 St Gardena Calif	4-38	Electronic Transformer Co 70 Washington St Brooklyn 1 NY	1-2-3-5	Ortho Filter Corp 196 Albion Ave Paterson 2 NJ	1-2-3-4-5
Zophar Mills Inc 112 26 St Brooklyn 32 NY	14-15-18-33-42	El-Rad Mfg Co 2800 W Cullom Ave Chicago 18 Ill	2-7-8	Osborne Electronic Corp 712 S E Hawthorne Blvd Portland 14 Ore	1-2-3-5-7-8
16-CHOKES					
Chokes, A-F	1	Essex Electronics Div NYT Electronics Inc 7303 Atoll Ave N Hollywood Calif	7-8	Osborne Transformer Corp 948 E Lafayette Ave Detroit 7 Mich	3-4-5-8
Chokes, audio	2	Ferranti Electric Inc 30 Rockefeller Plaza New York 20 NY	1-2-3-4-5	Oxford Electric Corp 3911 S Michigan Ave Chicago 15 Ill	1-2-3
Chokes, filter	3	Filtcon Co 10023 W Jefferson Blvd Culver City Calif	2-3-4	Painton & Co Ltd c/o British Electronics Sales Co Box 132 Oakland Gardens 64 NY	7
Chokes, heavy-wire	4	Filtcon Co 131-15 Fowler Ave Flushing 55 NY	2-3-4-5-7-8	Palo Alto Eng'g Co 620 Page Mill Rd Palo Alto Calif	1-2-3-4-5
Chokes, power	5	Fisher Eng'g Inc PO Box 327 Huntington Ind	1-2-3-4-5	Partridge Transformers Ltd Roebuck Rd Tolworth Surrey England	1-2-3-4-5-6
Chokes, relay	6	Foster Transformer Co 3820 Colerain Ave Cincinnati 23 Ohio	2-3	Peerless Electrical Products 1515 S Manchester Ave Anaheim Calif	1-2-3-4
Chokes, R-F receiving	7	Freed Transformer Co 17-18-36 Weirfield St Brooklyn 27 NY	1-2-3-4-5	Penn-East Eng'g Corp Willow St Kutztown Pa	1-2-3
Chokes, R-F transmitting	8	General Instrument Corp F W Sickles Div Chicopee Mass	4-7-8	Permoflux Products Co 4101 San Fernando Rd Glendale 4 Calif	1-2-3-4-5
Ace Coil & Electronics Co 916 Lincoln Hwy Metuchen NJ	7-8	General Instrument Corp Automatic Mfg Div 65 Gouverneur St Newark 4 NJ	1-7	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	1-2-3
Aerovox Corp Pacific Coast Div 2724 S Peck Rd Monrovia Calif	1-2-3-4-5-7-8	Geotronic Labs Inc 1314 Cedar Hill Ave Dallas 8 Texas	1-2-3	Q L C Corp Flocktown Rd Long Valley NJ	7
Airpax Products Co Middle River Baltimore 20 Md	1-2-5	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	1-2-3-4-5	Radio Industries Inc 5225 N Ravenswood Ave Chicago 25 Ill	7
Aladdin Electronics 100 Blanton Ave Nashville 10 Tenn	3-7	Gramer-Halldorson Transformer Corp 2734 N Pulaski Rd Chicago 39 Ill	1-2-3-4-5	Raypac Inc 7800 W Addison St Chicago 34 Ill	3-7-8
American Coil Inc 21-28 45 Rd Long Island City 1 NY	7	Grand Ra-Ironics Inc 17360 Hayes Rd Grand Haven Mich	2-3-5	Raytheon Mfg Co 100 River St Waltham 54 Mass	2-3-5
A P W Co 72 W Main St Rockaway NJ	3	Grand Transformers Inc Beechtree & Marion Sts Grand Haven Mich	1-2-3-4-5	Redman Electronics Corp 92 Prospect St Thompsonville Conn	3-7
Arco Transformer & Electric Corp 1602 S Hanna St Ft Wayne Ind	1-2-3-4-5-6-7	Hermetic Seal Transformer Co P O Box 277 Garland Texas	2-3-5	Research Development Mfg Inc 429 E Collom St Philadelphia 41 Pa	7-8
Artted Co 367 Worthington St Springfield 3 Mass	3-4-6-7-8	Highland Eng'g Co 90 Magnolia St Westbury NY	1-2-3-1-5-6	RK Mfg Co P O Box 112 Marion Ill	2-3
Atlas Eng'g Co 176 Blue Hill Ave Roxbury 19 Mass	1-2-3-4-5-6	Hi-Q Div Aerovox Corp Box 68 Myrtle Beach SC	7	Rollan Electric Co 8233 S Princeton Ave Chicago 20 Ill	1-2-7-8
Automatic Coil Co 415 Bedford Ave Brooklyn 11 NY	1-2-3-4-5-6-7-8	Inductor Eng'g Inc 117 Schley Ave Lewes Del	1-2-3	Ross Mfg Co 2538 Peterson Ave Chicago 45 Ill	1-2-3-4-5-6-7-8
Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	1-2-3-4-5-6-7-8	Insuline Corp of America 186 Granite St Manchester NH	7-8	Saratoga Industries Congress & Ballston Aves Saratoga Springs NY	3
Ballastran Corp 1701 N Calhoun St Ft Wayne Ind	1-2-3-4-5	International Resistance Co 401 N Broad St Philadelphia 8 Pa	7	Sigmadyne of Conn P O Box 869 Port Chester NY	3-4-5
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	7-8	Johnson Co E F Waseca Minn	8	Signal Transformer Co 902 Coney Island Ave Brooklyn 18 NY	1-2-3-4-5
Barwood Electronics Inc 921 E Broadway Glendale 5 Calif	2-3	Johnson Electronics Inc 521 Elwell St Orlando Fla	1-2-3-4-6-7-8	Skysweeper Inc P O Box 92 McHenry Ill	1-2-3-4-5
Basler Electric Co 601 5 St Highland Ill	2-3-4-5	Kenyon Transformer Co 840 Barry St New York 59 NY	1-2-3-4-5	SNC Mfg Co P O Box 277 Oshkosh Wis	1-2-3-4-5
Better Coil & Transformer Corp Goodland Ind	1-2-3	Keystone Products Co 904 23 St Union City NJ	1-2-3-4-5-6	Southwestern Industrial Electronics Co 2831 Post Oak Rd Houston 19 Texas	1-2-3
Bittermann Electric Co Barlow St Canaan Conn	1-2-3-4-5-6	Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass	1-2-3-5-7-8	Specific Electronics 570 W Woodbury Rd Altadena Calif	7
Bogart Mfg Corp 315 Seigel St Brooklyn 6 NY	7-8	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	1-2-3-4-5	Standard Coil Products Co 2085 N Hawthorne Ave Melrose Park Ill	4-7-8
Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ	5	Leonard Electric Products Co 67 34 St Brooklyn 32 NY	3-7-8	Standard Electronics Div Radio Eng'g Labs 30 & Borden Sts Long Island City NY	1-2-3-5
Bundy Electronics Corp 171 Fabyan Pl Newark 12 NJ	3	Liton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	1-2-3	Stanwyck Winding Co 137-151 Walsh Ave Newburgh NY	3-5-6-7-8
Burnell & Co 45 Warburton Ave Yonkers 2 NY	1	Magnatran Inc PO Box 211 Kearny NJ	2-3-5	Sterling Transformer Corp 297 N 7 St Brooklyn 11 NY	1-2-3-4-5
Cable Electric Products 234 Daboll St Providence 7 RI	6	Merit Coil & Transformer Corp 4427 N Clark St Chicago 40 Ill	1-2-3-4-5-7	Strong Electric Corp 87 City Park Ave Toledo 1 Ohio	4
Caddell-Burns Mfg Co 40 E 2 St Mineola NY	7-8	Microtran Co 145 E Mineola Ave Valley Stream NY	1-2-3-4-5	Superex Electronics Corp 4 Radford Pl Yonkers NY	1-2-3-1-5-7-8
Caledonia Electronics & Transformer Corp P O Box 298 Caledonia NY	1-2-3-5	Millen Mfg Co James 150 Exchange St Malden 48 Mass	7-8	Tele-Coil Co 2733 Saunders St Camden 5 NJ	4-7-8
Cambridge Thermionic Corp 445 Concord Ave Cambridge 38 Mass	1-7-8	Miller Co J W 5917 S Main St Los Angeles 3 Calif	3-4-7-8	Telex 1633 Eustis St St Paul 1 Minn	1-2-3
Carol Electronics Corp 315 W Stephen St Martinsburg W Va	2-4-5	Miller Co Sanford 691 Bedford Ave Brooklyn 6 NY	5	Teleradio Eng'g Corp Shannon & Barrett Sts Wilkes-Barre Pa	7-8
Central Coil Co 1720 N Luett St Indianapolis 22 Ind	1-2-3-4-5-6-7-8	Milwaukee Transformer Co 5231 N Hopkins St Milwaukee 12 Wis	1-2-3-4	Tel-Rad Electronics Corp 73-20 Trotting Course Lane Glendale LI 27 NY	2-3-4-5-7-8
Central Transformer Co 910 W Jackson Blvd Chicago 7 Ill	1-2-3-4-5	Mohawk Business Machines Corp 944 Halsey St Brooklyn 33 NY	1-2-3-4-5-6-7-8	Todd Products Co 156 Gramatan Ave Mt Vernon NY	1-2-3-4-5

Torwico Electronics Inc 1090 Morris Ave Union NJ	2-3-5	Aerovox Corp Crowley Div 1 Central Ave W Orange NJ	4	Burnell & Co 45 Warburton Ave Yonkers NY	18-30-31-40
Transformers Inc 200 Stage Rd Vestal NY	1-2-3	Aladdin Electronics 100 Blanton Ave Nashville 10 Tenn	3-16-18-25-33	Cable Electric Products 234 Daboll St Providence 7 RI	3-15-33
Transformer Technicians Inc 2608 N Cicero Ave Chicago 39 Ill	1-2-3-4-5-6	Alcar Instruments Inc 17 Industrial Ave Little Ferry NJ	5	Caddell-Burns Mfg Co 40 E 2 St Mineola NY	3-4-7-8-10-16-18-19-23-24 25-26-28-38-39-40-41
Tranconic Inc 808 16 St Bakersfield Calif	1-2-3-4-5-6	Alden Products Co 123A N Main St Brockton Mass	1-30	Calbest Electronics Co 4801 Exposition Blvd Los Angeles 16 Calif	3-7-25-26-28-38-39-41
Triad Transformer Corp 4055 Redwood Ave Venice Calif	1-2-3-4-5-6	Allied Allegri Co 141 River Rd Nutley 10 NJ	3-23	Calif Magnetic Control Corp 11922 Valerio St N Hollywood Calif	1-2-18-27-28-30-32-33
United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif	1-2-3-4-5	Allied Control Co 2 East End Ave New York 21 NY	19-24-28	Cambridge Thermionic Corp 445 Concord Ave Cambridge 38 Mass	1-3-4-7-8-15-16 23-25-26-40-41
Uttrad Corp 305 N Briant St Huntington Ind	1-2-3-4-5	Alto Scientific Co 855 Commercial St Palo Alto Calif	3-40	Carad Corp 2850 Bay Rd Redwood City Calif	30
Vanguard Electronics Co 3384 Motor Ave Los Angeles 34 Calif	7-8	American Coil Inc 21-28 45 Rd Long Island City 1 NY	41	Carnf Co Box 554 Brookhaven Miss	30
Varo Mfg Co 2201 Walnut St Garland Texas	2-3	American Electric Fusion Corp 2600 Diversey Ave Chicago 47 Ill	33	CELCO Constantine Eng'g Labs Co P O Box 555 Mahwah NJ	11-12-13-15-18-27-30-31-40-41
Virginia Electronics Co River Rd & B & O R R Washington 16 DC	1-2-3-4-5-6-7-8	American Lava Corp Sub Minn Mining & Mfg Cherokee Blvd & Mfrs Rd Chattanooga 5 Tenn	1-2-4	Central Coil Co 1720 N Luett St Indianapolis 22 Ind	23-24-25-26-27-28-30-32 33-34-35-36-38-39-40-41
Vokar Corp 7300 Huron River Dr Dexter Mich	7	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	5	Central Transformer Co 910 W Jackson Blvd Chicago 7 Ill	18-27-33
Waters Mfg Inc Boston Post Rd Wayland Mass	1-2	American Molded Products Co 2727 W Chicago Ave Chicago 22 Ill	1-2-4	Century Coil Corp 1534 N Clybourn Ave Chicago 10 Ill	3-33
Western Coil Products Co 969 Commercial St Palo Alto Calif	7-8	American Rectifier Corp 95 Lafayette St New York 13 NY	33	CG Electronics Corp 305 Dallas St N E Albuquerque New Mex	23
Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn	1-2-3-5	American Research & Mfg Corp 920 Halpine Ave Rockville Md	18-30	CGS Laboratories Inc 391 Ludlow St Stamford Conn	18-27-30
Wilco Corp 546 Drover St Indianapolis 21 Ind	7	AMI Inc 1500 Union Ave Grand Rapids 2 Mich	8	Chicago Standard Transformer Corp 3501 W Addison St Chicago 31 Ill	11-13-30-37-38-39
Wilmar Mfg Co 1110 Truman Rd Kansas City Mo	3-7-8	Anchor Plastics Co 36-36 36 St Long Island City 6 NY	4	Chicago Telephone of Calif 105 Pasadena Ave S Pasadena Calif	1-15-17-24-28-33
Wyeth Eng'g Inc 9911 Walden Pkwy Chicago 43 Ill	3	Anderson Controls Inc 2777 Manheim Rd Des Plaines Ill	3-14-15-19-22-24-28	Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England	37

17—COILS

Bobbins, coil winding	1	Arnold Magnetics Corp 4615 W Jefferson Blvd Los Angeles 16 Calif	18-23-27 30-31-33-49	Cleveland Container Co 6201 Barberton Ave Cleveland 2 Ohio	4
Bobbins, transformer winding	2	Artisan Electronics Corp 171 Ridgedale Ave Morristown NJ	24-28	Cleveland Instrument Co 735 Carnegie Ave Cleveland 15 Ohio	22
Coil assemblies	3	Artco Corp 367 Worthington St Springfield 3 Mass	3-7-16-25-28-30-38-39-40-41	Cleveland Metal Specialties Co 1783 E 21 St Cleveland 14 Ohio	23
Coil forms	4	Associated American Trading Div 750 St Ann's Ave New York 56 NY	5-6	Clippard Instrument Lab 7374 Colerain Rd Cincinnati 24 Ohio	7-9-11-16-17-25-26 34-35-36-37-38-39-41
Coil winding machine	5	Associated Eng'g & Mfg Corp 210 Stonehouse Rd Glen Ridge NJ	5	Coil Company of America 207 Washington St Northvale NJ	18-27-28-30-31-33
Coil winding machines, toroidal	6	Associated Production Co 162 N Clinton St Chicago 6 Ill	5-6	Colcraft Inc Cary Ill	24-25-28-30-33-38-39-40-41
Coils, antenna	7	Atlas Eng'g Co 176 Blue Hill Ave Roxbury 19 Mass	9-24-27-28-29-30-31-32-33	Coil Eng'g & Mfg Co Roanoke Ind	12-33
Coils, audio crossover	8	Atlas Resistor Co 1128 Madison St Chester Pa	19	Coil Winders Inc New York Ave Westbury LI NY	3-4-7-8-9-10-11-12-14-15-16 17-18-19-21-22-23-24-25-26 27-28-29-30-31-32-33-40
Coils, color purity	9	Automatic Coil Co 415 Bedford Ave Brooklyn 11 NY	3-7-8-9-10-13-15-16-18 21-23-24-25-26-30-31 32-33-38-39-40-41	Coil Winding Equipment Co 19 Maxwell Ave Oyster Bay NY	5
Coils, crossover	10	Automatic Switch Co Hanover Rd Florham Park NJ	28	Colber Corp 26 Buffington St Irvington 11 NJ	4
Coils, deflection yokes	11	Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	3-30-31-38	Colman Tool & Machine Co 1017 N E 3 Ave Amarillo Texas	3-7
Coils, field	12	Avionics Ltd P O Box 200 Niagara-on-the-Lake Ontario Canada	23	Comar Electric Co 3349 Addison St Chicago 18 Ill	24
Coils, flyback	13	Ballastran Corp 1701 N Calhoun St Ft Wayne Ind	18-27-30-33	Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	18-27-30
Coils, heating	14	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	3-7-8-10-16-18-25-26-28-30-31	Conn Telephone & Electric Corp 70 Britania St Meriden Conn	3-18-19
Coils, high temperature	15	Barwood Electronics Inc 921 E Broadway Glendale 5 Calif	18-27-28-33	Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	3-11-13
Coils, IF	16	Basler Electric Co 601 5 St Highland Ill	18-27-30-33	Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	3
Coils, ignition	17	Bassett Inc Rex 1314 N E 17 Ct Ft Lauderdale Fla	3-7	Continental X-Ray Corp 1536 N Clybourn Ave Chicago 10 Ill	3-33
Coils, inductor	18	Beckman/Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	27	Corning Glass Works Corning NY	4-15-16-18-20-23-25
Coils, magnet	19	Better Coil & Transformer Corp Goodland Ind	3	Cosa Corp 405 Lexington Ave New York 17 NY	5-6
Coils, metallized glass	20	Bittermann Electric Co Barlow St	3-8-10-12-18-19	Cossor (Canada) Ltd 301 Windsor St Halifax Nova Scotia Canada	11
Coils, pickup	21	Blackburn Electronic Corp 55 W 7 St Wyoming Pa	11-25-30-37	Coto-Coil Co 65 Pavilion Ave Providence 5 RI	3-8-15-19-24-28-30-32-33
Coils, PM focusing	22	Boesch Mfg Co 45 River St Danbury Conn	5-6	Crittenden Transformer Works 1220 Nadeau St Los Angeles 1 Calif	18-33
Coils, printed circuit	23	Boonton Molding Co 326 Myrtle Ave Boonton NJ	1-2	Crown Industrial Products Co 713 Amsterdam Woodstock Ill	5
Coils, relay	24	Boonton Radio Corp Intervale Rd Boonton NJ	18	Cycle Transformer Corp 356 Glenwood Ave E Orange 11 NJ	8-19-27-28
Coils, R-F receiving	25	Bradford Components Inc 33-35 Bishop St Bradford Pa	16-23-25-41	Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	14
Coils, R-F transmitting	26	Brillhart Plastics Corp Old Country Rd Mineola NY	4	Dano Electric Co Winsted Conn	24
Coils, saturable reactor	27	British Industries Corp 80 Shore Rd Port Washington NY	5	DeCoursey Eng'g Lab 11828 W Jefferson Blvd Culver City Calif	27-30
Coils, solenoid	28	Buckeye Bobbin Co 12200 Sprecher Ave Cleveland 11 Ohio	1-2-4	Del Electronics Corp 41 N MacQuessen Pkwy Mt Vernon NY	3-27-33
Coils, speaker	29	Bundy Electronics Corp 171 Fabyan Pl Newark 12 NJ	3-25-28-30-31	Delevan Electronics Corp Roycroft Campus E Aurora NY	3-15-18-23-25-26 28-33-38-39-40-41
Coils, toroidal	30				
Coils, toroidal variable	31				
Coils, transducer	32				
Coils, transformer	33				
Coils, TV centering	34				
Coils, TV convergence	35				
Coils, TV field	36				
Coils, TV focusing	37				
Coils, TV linearity	38				
Coils, TV width	39				
Coils, variable	40				
Coils, video peaking	41				
Accurate Paper Tube Co 805 N Peoria St Chicago 22 Ill	4				
Ace Coil & Electronics Co 916 Lincoln Hwy Metuchen NJ	3-7-15-16-21-23 25-38-39-40-41				
Acme Wire Co 1255 Dixwell Ave New Haven 14 Conn	19-24-28-33				
Advanced Electronics Inc 94 Silas Deane Hwy Rocky Hill 9 Conn	3-15-28				
Aerocoil Inc 24 Cliff St Jersey City 6 NJ	1-2-3-7-16-21-25-26 28-29-30-33-38-39-41				
Aerolite Electronics Corp 507 26 St Union City NJ	3				
Aerovox Corp Pacific Coast Div 2724 S Peck Rd Monrovia Calif	3-7-8-10-15-16 18-25-26-27-30				

Delta Coils Inc 1128 Madison Ave Paterson 3 NJ	7-16-18-23-25-28-33-39-40	First Electronics Corp 117 Blue Hill Ave Boston 19 Mass	3-18-24-28	Insuline Corp of America 186 Granite St Manchester NH	4-25
Delta Radio Co 115 Worth St New York 13 NY	3-7-16-18-25-26-33	Fisher Eng'g Inc P O Box 327 Huntington Ind	3-15-18-19 24-27-28-30-33	Islip Transformer & Metal Co Beech St Islip NY	7-16-25-26-33
Deutschmann Corp Tobe Norwood Mass	30	Five Star Co W Main St Plantsville Conn	3-15-17-18-19-24-28	Isolantite Mfg Corp Warren Ave Stirling NJ	1
DeWitt Development Co 3008 W 127 St Blue Island Ill	3-18-21-24-28	Forbes & Wagner Inc 343 Central Ave Silver Creek NY	3-5-7-11-13-15-16-18 25-28-35-38-39-40	Jackson Electronics Inc 23 Woodcrest Rd West Chester Pa	3-7-23-25-26-29-40
Diamond Coils Inc 540 39 St Union City NJ	3-7-16-18-19-23-38-39-40-41	Franklin Fibre-Lamitex Corp Wilmington Del	4	Jeffers Electronics Div Speer Carbon Co Hoover Ave DuBois Pa	25
Diamonite Products Mfg Co 217 4 St N E Canton 2 Ohio	4	Frederick Tool & Eng'g Corp 414 Pine Ave Frederick Md	7	Johnson Aircraft Eng'g Co M J Morristown Airport Box 10 Morristown NJ	3-33
Dietz Design & Mfg Co Grandview 13 Mo	3-7-10-16-25-26-30-31-33-41	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	8-18-27-30-33	Johnson Co E F Waseca Minn	3-7-18-26-40
Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wis	6-28	Fugle-Miller Labs Inc 301 Central Ave Clark NJ	3-7-15-16-18-25-26-27 30-37-38-39-40-41	Johnson Electronics Inc 521 Elwell St Orlando Fla	3-7-8-9-10-15-16-18 19-21-23-24-25-27-28 30-33-38-39-40-41
Dollin Corp 636 S 21 St Irvington 11 NJ	1-2	Garde Mfg Co 588 Eddy St Providence 3 RI	1-2-4	Kable Eng'g Co 1307 7 St N Bergen NJ	5
Dormeyer Industries 3418 Milwaukee Ave Chicago 41 Ill	3-12-15-17-19-24-27-28-33	Gates Radio Co 123 Hampshire St Quincy Ill	7-26	Keystone Products Co 904 23 St Union City NJ	27-30-33
D & R Ltd 402 E Gutierrez St Santa Barbara Calif	30	Gavitt Wire & Cable Co Central St Brookfield Mass	7	King Electric Equipment Co 9123 Inman Ave Cleveland 5 Ohio	19-24-28-33
Driver Co Wilbur B 1875 McCarter Hwy Newark 4 NJ	14	General Bronze Corp 711 Stewart Ave Garden City NY	7	Kirchberger & Co M 83 W Forest Ave Englewood NJ	4-14
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	30	General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	3	Knopp Inc 4224 Holden St Oakland 8 Calif	28
Dunlap Electronics 764 9 St Des Moines 14 Iowa	23	General Coil Products Corp 43 Roselle St Mineola NY	3-7-10-16-18-23-25 26-32-38-39-40-41	K-V Transformer Corp 20 E Franklin St Danbury Conn	27-33
Dynamics Research Associates Div Universal Match Corp P O Box 5841 Ferguson 21 Mo	17-30-31	General Instrument Corp F W Sickles Div Chicopee Mass	3-11-13-30-33-34 35-36-37-38-39-41	Laboratory Equipment Corp P O Box 161 St Joseph Mich	18
Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	25-26	General Instrument Corp Automatic Mfg Div 65 Gouverneur St Newark 4 NJ	3-7-9-16-23-25	Laboratory For Electronics Inc 75 Pitta St Boston 14 Mass	25-26-30-41
Eastman Pacific Co 2320 E 8 St Los Angeles 21 Calif	3-4-14-40	Geotronics Labs Inc 1314 Cedar Hill Ave Dallas 8 Texas	33	La Cesa Eng'g Corp 5614 W Grand Ave Chicago 39 Ill	5
Edko Electronics Eng'g Co 202 Grand St Brooklyn 11 NY	3-18-19-24-27-28-33	Gerlyn Eng'g Co 2151 N Damen Ave Chicago 47 Ill	7-16-23-24-25-26 28-30-38-39-40-41	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	15-27-30-33-41
Eisler Eng'g Co 750 S 13 St Newark 3 NJ	1-5	Glaser-Steers Corp 20 Main St Belleville 9 NJ	3-9-19-22-34-36-37	Lee Chemical Corp Walter Seabury Ave & Butler Pl Bronx 61 NY	1-4
Electran Mfg Co 1901 Clybourn Ave Chicago 14 Ill	19	Globe Electrical Mfg Co 1729 W 134 St Gardena Calif	24	Lee Electric Inc 866 52 St W New York NJ	19-28-33
Electrend Products Corp Box 110 St Joseph Mich	7	Good-All Electric Mfg Co Good-All Bldg Ogallala Nebr	28	Leonard Electric Products Co 67 84 St Brooklyn 32 NY	3-7-8-9-10-11 12-13-16-22-23-24-25-26-29-30 31-33-34-35-36-37-38-39-40-41
Electric Coil Co 4911 S Marshfield Ave Chicago 9 Ill	3-11-12-19-28	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	3-15-16-18-27-28-30-33	Lindberg Eng'g Co 2450 W Hubbard St Chicago 12 Ill	18
Electrical Refractories Co E Clark St E Palestine Ohio	4	Grand Ra-Tronics Inc 17360 Hayes Rd Grand Haven Mich	28-29-32-33	Linlar Inc 4101 San Fernando Rd Glendale 4 Calif	8-21
Electrical Specialty Co 158 11 St San Francisco 3 Calif	1-2-4-5	Grand Transformers Inc Beechtree & Marion Sts Grand Haven Mich	8-12-19-33	Litton Industries of Calif 386 N Foothill Rd Beverly Hills Calif	11-13-30-33-38-39
Electrical Windings Inc 2015 N Kolmar Ave Chicago 39 Ill	1-2-19-24-28-33	Gray Instrument Co 200 E Church Lane Philadelphia 44 Pa	3	Litton Industries of Md Inc 4910 Calvert Rd College Park Md	30
Electro Assemblies Inc 4444 N Kedzie Ave Chicago 25 Ill	3-4-16-18-25-26	Gray & Kuhn 20 Railroad Ave Roslyn Heights NY	7-16-25-38-39-40-41	Long Inc Thomas J 215 Stonehenge Lane Carle Place LI NY	4
Electro Eng'g Works 401 Preda St San Leandro Calif	12-18-19-22-27-33	Grayhill Inc 561 Hillgrove Ave LaGrange Ill	1-4	Lynmar Engineers Inc 1482 N Carlisle St Philadelphia 21 Pa	7-26
Electronic Assembly Co 5 Prescott St Roxbury 19 Mass	3-19	Gries Reproducer Corp 125 Beechwood Ave New Rochelle NY	1-4	McDowell Electronics Inc 105 Forrest St Metuchen NJ	14
Electronic Coil Co 2506 N Ontario St Burbank Calif	3-7-15-16-17-25-28-40-41	Guild Electronics Inc 388 Broadway New York 13 NY	26-40	MagneTec Corp 11785 W Olympic Blvd W Los Angeles 64 Calif	19-28-32
Electronic Coil Engineers Inc 5830 Main St Hollvdale Calif	15-18-21-24-28	Hallett Mfg Co 1601 W Florence Inglewood Calif	17	Magnetic Specialties Co 18 Scudder Ave Northport LI NY	30-32
Electronic Coils Inc P O Box 1665 Springfield Mass	3-7-12-18-19-21 24-27-28-30-33	Hallcrafters 4401 W 5 Ave Chicago 24 Ill	3-25-26	Magnetics Inc Box 391 Butler Pa	27
Electronic Designs Inc 28 School St Yonkers NY	5	Halm Instrument Co 100 Glen Head Rd Glen Head NY	5	Master Mobile Mounts Inc 1806 Bond St Los Angeles 15 Calif	3-7
Electronic Transformer Co 70 Washington St Brooklyn 1 NY	30-34	Hansen Electronics Co 7117 Santa Monica Blvd Los Angeles 46 Calif	20-23	Mayfair Molded Products Corp 3700 N Rose St Franklin Park Ill	1-2
Electro-Voice Inc Cecil & Carroll Sts Buchanan Mich	8	Harder Co Donald C 3710 Midway Dr San Diego 10 Calif	6	Merit Coil & Transformer Corp 4427 N Clark St Chicago 40 Ill	7-11-13-16-18-23-25 26-33-37-38-39-40-41
EJ-Rad Mfg Co 2800 W Cullom Ave Chicago 18 Ill	3-7-8-10-12-13 16-18-19-23-24-25-26 28-30-35-38-39-40-41	Harvey-Wells Electronics Inc North St Southbridge Mass	25-26	Micarta Fabricators Inc 6324 N Ravenswood Ave Chicago 40 Ill	4-23
Emerson Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY	1-2-4	Hermetic Seal Transformer Co P O Box 277 Garland Texas	27-30-33	Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass	6-30
Enfo Corp Rte 38A at Airport Circle Pennsauken 11 NJ	1-2	Hetherington Inc 1200 Elmwood Ave Sharon Hill Pa	3-19-24-28	Microntran Co 145 E Mineola Ave Valley Stream NY	40
Epo Products Inc 2500 Atlantic Ave Brooklyn 7 NY	8-15-18-21-27-30-33	Hevi-Duty Electric Co 4212 W Highland Blvd Milwaukee 1 Wis	14	Millen Mfg Co James 150 Exchange St Malden 48 Mass	3-16-18-25-26
Erco Radio Labs Inc 637 Stewart Ave Garden City NY	30	Hillburn Electronic Products Co 55 Nassau Ave Brooklyn 22 NY	28	Miller Co J W 5917 S Main St Los Angeles 3 Calif	3-4-7-15-16-23-25-26 33-38-39-40-41
Essex Electronics Div NYT Electronics Inc 7303 Atoll Ave N Hollywood Calif	3-16-18-25 26-30-38-39-40-41	Hindle Transformer Co Woods Church Rd Flemington NJ	19-27-33	Milwaukee Gas Specialty Co 730 N Jackson St Milwaukee 1 Wis	17-28
Essex Electronics 550 Springfield Ave Berkeley Heights NJ	3-7-16-25-26-27-28 33-38-39-40-41	Houlihan Co T J 2508 W Lawrence Ave Chicago 25 Ill	3-7-12-16-19-21-24-25 26-28-29-30-38-39-40-41	Minitron Inc 7643 Fay Ave La Jolla Calif	23
Exact Eng'g & Mfg Inc P O Box 668 Oceanside Calif	28	Hydro Molding Co 100 Sharron Ave Plattsburgh NY	1-2-4	Mitronics Inc 1290 Central Ave Hillside NJ	20
Ferranti Electric Inc 30 Rockefeller Plaza New York 20 NY	18	Illumintron Eng'g Co 680 E Taylor Ave Sunnyvale Calif	3-7-18-26	Modelectric Products Corp Asbury Park NJ	17-28
Filtron Co 10923 W Jefferson Blvd Culver City Calif	3-18-30	Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY	18	Modern Adhesives & Electronics Inc 148 Greene St New York 12 NY	15-33
Filtron Co 131-15 Fowler Ave Flushing 55 NY	16-18-25-26-27-28-30-33	Inductor Eng'g Inc 117 Schley Ave Lewes Del	18-30-33	Modern Industries Inc 2601 Colorado Ave Santa Monica Calif	3-18-24-27- 28-30-33
		Industrial Transformer Corp Gouldsboro Pa	30	Mohawk Business Machines Corp 944 Halsey St Brooklyn 33 NY	8-10-13-24-27-28- 29-30-31-32-33
		Industrial Winding Machinery Co 120 Wall St New York 5 NY	5	Molding Corp of America 58 Weybosset St Providence 3 RI	1-4
		Insulation & Wires Inc 1534 Swinney Ave Ft Wayne Ind	5	Muter Co 1255 S Michigan Ave Chicago 5 Ill	16-25
				Mystic Transformers Inc 63 Swanton St Winchester Mass	18-33

Mycalex Corp of America 125 Clifton Blvd Clifton NJ	4	Printloid Corp 93 Mercer St New York 12 NY	4	Spivey Inc James S 4908 Hampden Lane Washington 14 DC	7
National Aircraft Corp 3411 Tulare Ave Burbank Calif 3-11-15-16-25-26-27-28-29-31-33		Pulse Eng'g Inc 2657 Spring St Redwood City Calif	8-27-30-33	Stancil-Hoffman Corp 921 N Highland Ave Hollywood 38 Calif	30
National Coil Co PO Box 1237 Sheridan Wyo	3-1-7-15-16-18-23-25-26-33-40-41	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	11	Standard Coil Products Co 2085 N Hawthorne Ave Melrose Park Ill	3-7-9-11-13-16-25-26-28-35-33-39-41
National Company Inc 61 Sherman St Malden 48 Mass	3-16-25-26	Q L C Corp Flocktown Rd Long Valley NJ	7-16-25-38-39-40	Standard Winding Co 44 Johnes St Newburgh NY	3-13-16-19-25-26-28-30-38-39-40-41
National Moldite Co 1410 Chestnut Ave Hillside 5 NJ	4	Quality Components Inc St Marys Pa	4	Stanwyck Winding Co 137-151 Walsh Ave Newburgh NY	3-7-9-16-18-21-23-24-25-26-28-30-32-33-34-35-38-39-40-41
Naylor Laboratories Inc E V 2 Yennicoek Ave Port Washington NY	24-28	Radio Corp of America Camden 2 NJ	11-13	Stevens Mfg Co Geo 6022 N Rogers Ave Chicago 30 Ill	5-6
Newcomb Spring Corp 177 E Hawthorne Ave Valley Stream NY	34-35-36-37-38-39	Radio Industries Inc 5225 N Ravenswood Ave Chicago 25 Ill	3-7-9-16-23-25-34-35-38-39-41	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	3
New Rochelle Tool Corp 320 Main St New Rochelle NY	18	Ram Electronics Inc 600 Industrial Ave Paramus NJ	11-13-16-18-25-26-33-38-39-40-41	Stone Paper Tube Co 900 Franklin St NE Washington 17 DC	4
New York Coil Co 40 2 Ave Phoenixville Pa	3-8-15-16-17-18-19-24-25-26-28-33-38-39	Randall Inc Douglas 6 Pawcatuck Ave Westerly RI	3-15-19-24-28-30-31-33	Stupakoff Div Carborundum Co Latrobe Pa	4
New York Transformer Co 3 Ave Alpha NJ	15-30	Ransom Research 323 W 7 San Pedro Calif	27	Summit Coil Co 4 Claremont Rd Bernardville NJ	3-7-16-25-26-38-39-40-41
Nichols Products Co 325 W Main St Moorestown NJ	4	Ratigan Electronics Inc 3614 Maple Ave Los Angeles 11 Calif	16-18-24-25-26-33	Superex Electronics Corp 4 Radford Pl Yonkers NY	3-4-7-16-18-23-25-26-28-39-40-41
Norden-Ketay Corp Commerce Rd Stamford Conn	27	Rayco Electronic Mfg Inc 11116 Cumpston St N Hollywood Calif	6-18-30	Superior Steatite & Ceramic Corp 91 W Forest Ave Englewood NJ	4-14
Norrich Plastics Corp 35 E 32 St New York 16 NY	1-2	Raypar Inc 7800 W Addison St Chicago 34 Ill	3-7-13-16-25-28-30-33-38-39-41	Swan Electronics Co 5016 N Austin Ave Chicago 30 Ill	18-19-21-23-24-25-26-28-30-31-32-38-39-40-41
North Electric Co 553 S Market St Galion Ohio	3-24	Raytheon Mfg Co 100 River St Waltham 54 Mass	11-16-18-27-30-33	Synchor Products Co 30 Eastern Ave Malden 48 Mass	15-20
North Hills Electric Co 402 Sagamore Ave Mineola LI NY	3-4-5-6-15-16-18-21-23-25-26-40-41	Redman Electronics Corp 92 Prospect St Thompsonville Conn	3-7-16-18-21-25-30-32-33	Syntronic Instruments Inc 170 Industrial Rd Addison Ill	11-87
NYT Electronics Inc 2979 N Ontario St Burbank Calif	3-7-8-15-16-17-18-23-24-25-26-27-28-30-33-37-38-39-41	Redmond Co Owosso Mich	11	Taylor Fibre Co Norristown Pa	1-4
Ohio Crankshaft Co Tocco Div 3800 Harvard Ave Cleveland 5 Ohio	18	Reed & Reese Inc 717 N Lake Ave Pasadena 6 Calif	3-24-27-28-32-33	Techtron Electronics Ltd 583 Gramatan Ave Mt Vernon NY	8
Olympic Plastics Co 3471 S LaCienega Blvd Los Angeles 16 Calif	4	Rex Rheostat Co 3 Foxhurst Rd Baldwin LI NY	6	Teachrome Mfg Corp 28 Ranick Dr Amityville LI NY	13
Ohmite Mfg Co 3601 Howard St Skokie Ill	19	Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	3	Tele-Coil Co 2733 Saunders St Camden 5 NJ	3-11-16-25-26-33-37-38-39-40-41
Orange Products Inc 554 Mitchell St Orange NJ	1	Rogers Corp Rogers Conn	23	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	3
Ortho Filter Corp 196 Albion Ave Paterson 2 NJ	27-30	Rogers Electronic Corp 49 Blecker St New York 12 NY	3-11-13-38-39	Telectron Co Div Elliott & Evans Bldg #9 Broward Int'l Airport Ft Lauderdale Fla	11-37
Osborne Electronic Corp 712 SE Hawthorne Blvd Portland 14 Ore	18-24-27-28-30-33	Rollan Electric Co 8233 S Princeton Ave Chicago 20 Ill	1-2-3-16-19-28	Tel-Rad Electronics Corp 73-20 Trotting Course Lane Glendale LI 27 NY	3-7-8-9-11-13-16-19-23-25-26-28-29-30-31-35-36-38-39-41
Osborne Transformer Corp 948 E Lafayette Ave Detroit 7 Mich	27-30	Romax Plastics Inc 1311 E Main St St Charles Ill	4	Teleradio Eng'g Corp Shannon & Barrett Sts Wilkes-Barre Pa	19-22-23-24-25-26-28-29-34-35-36-37-38-39-40-41
Pacific Electricord Co 3217 Exposition Pl Los Angeles 18 Calif	3	Ross Mfg Co 2538 Peterson Ave Chicago 45 Ill	19-21-25-28-32-33-34-35-36-38-39-40-41	Telex 1633 Eustis St St Paul 1 Minn	3-18-30
Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	8	Rowe Industries 1702 Wayne St Toledo 9 Ohio	3	Thermador Electronics Div Norris-Thermador Corp 2000 S Camfield Ave Los Angeles 22 Calif	15-18-27-30-33
Palo Alto Eng'g Co 620 Page Mill Rd Palo Alto Calif	8-10-18-19-28-33	Sag Harbor Industries Sag Harbor NY	3-14-15-18-19-24-28-33	Thermal Refractories Corp 4501 Dell Ave N Bergen NJ	14
Paramount Paper Tube Corp 614 S Lafayette St Fort Wayne 2 Ind	4	Sangamo Electric Co Springfield Ill	18	Thor Ceramics Inc 225 Belleville Ave Bloomfield NJ	4
PCA Electronics Inc 16799 Schoenborn St Sepulveda Calif	30	Saratoga Industries Congress & Ballston Aves Saratoga Springs NY	3-30	Toracoil Co 2615 Bristol Rd Columbus 21 Ohio	30
Peerless Electrical Products 1515 S Manchester Ave Anaheim Calif	10	Schraack Electrical Sales Corp 45 W 81 St New York 24 NY	18-19-24	Torwico Electronics Inc 1090 Morris Ave Union NJ	18-30-33
Peerless Products Industries 812 N Pulaski Rd Chicago 51 Ill	4	Scientific Coil Co 5619 Broadway Chicago 40 Ill	3-13-16-25-38-39-41	Trane Co Cameron & 2 St La Crosse Wisc	14
Penn-East Eng'g Corp Willow St Kutztown Pa	18-27-33	Seismograph Service Corp 6200 E 41 St Tulsa 1 Okla	32	Transformer Technicians Inc 2608 N Cicero Ave Chicago 39 Ill	8-18-27-28-33
Penn Fibre & Specialty Co 2020 E Westmoreland St Philadelphia 34 Pa	4	Sherwood Electronic Labs Inc 2802 W Cullom Ave Chicago 18 Ill	10	Transformers Inc 200 Stage Rd Vestal NY	18-27-30
Penn Transformer Corp E Bishop St Ext Bellefonte Pa	11-13-24-38-39	Sibley Co Bridge St Haddam Conn	23	Tranconic Inc 808 16 St Bakersfield Calif	3-8-10-15-18-21-23-24-27-28-30-31-33
Permoflux Products Co 4101 San Fernando Rd Glendale 4 Calif	8-21-24-28-29-32-33	Sigmadyne of Conn PO Box 869 Port Chester NY	8-18-27-28-30-33	Tresco Inc 3824 Terrace St Philadelphia 28 Pa	33
Permonite Mfg Co 444 Lake Shore Dr Chicago 11 Ill	4	Signal Transformer Co 902 Coney Island Ave Brooklyn 18 NY	18-27	Triad Transformer Corp 4055 Redwood Ave Venice Calif	8-11-12-13-18-19-27-29-30-32-33-37-38-39
Philmore Mfg Co 113 University Pl New York 3 NY	7	Silicone Insulation Inc Seabury Ave & Butler Pl Bronx 61 NY	1-2-4	Tri-Dex Electronics PO Box 1207 Lindsay Calif	3-7-18-19-21
Photocircuits Corp 31 Sea Cliff Ave Glen Cove NY	23	Sinclair Mfg Co PO Box 243 Chartley Mass	4	Tur-bo Jet Products Inc 424 S San Gabriel Blvd San Gabriel Calif	15-19-21-24-25-28-32-33
Pickering & Co 309 Woods Ave Oceanside NY	21-28	Skysweeper Inc PO Box 92 McHenry Ill	3-8-18-19-28-33	Ultradvne Eng'g Labs PO Box 3308 Albuquerque New Mex	32
Pittsburgh Coil Co Box 700 Carnegie Pa	7-18-19-24-26-27-29-33	Slin Ring Co of America 3612 W Jefferson Blvd Los Angeles 16 Calif	1-2-4	United Aircraft Products Inc 1116 Bolander Ave Dayton 8 Ohio	28
Plastic Accessories Inc 91 Mercer St New York 12 NY	4	SNC Mfg Co PO Box 277 Oshkosh Wisc	12-17-19-24-28-33	United Control Corp 4540 Union Ray Pl Seattle 5 Wash	3
Plastic Mold & Eng'g Co 157 Clifford St Providence RI	1-2	Spaulding Fibre Co 310 Wheeler St Tonawanda NY	4	United Fabricators & Electronics Myrtle & Water Sts Stillwater Minn	1
Polypphase Instrument Co E 4 St Bridgeport Pa	18-40-33	Specialties Inc Skunks Misery Rd Syosset LI NY	6	United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif	18-27-28-30-33-37
Potter & Brumfield Inc 1200 E Broadway Princeton Ind	3	Specific Electronics 570 W Woodbury Rd Altadena Calif	7-16-25	United Transformer Corp 150 Varick St New York 13 NY	15-18-30-31-33-40
Power Transformer Co 91 Edison Pl Newark 5 NJ	15-18-19-27-33	Speer Resistor Div Speer Carbon Co Bradford Pa	4	Universal Mfg Co 410 Hillside Ave Hillside NJ	6-30
Precision Inc 730 N Lyndale Ave Minneapolis 11 Minn	3-14-19-28-30	Spellman TV Co 3029 Webster Ave New York 67 NY	26-33	Universal Winding Co P O Box 1605 Providence 1 RI	5
Precision Paper Tube Co 2035 W Charleston St Chicago 47 Ill	2-4	Sphere Co 25 Amity St Little Falls NJ	4	US Electronics Corp 7-11-12-13-14-15-16-17-278 Warren St Lyndhurst NJ	7-11-12-13-14-15-16-17-278-29-30-33-36-37-38-39-40-41
Premax Products Div Chisholm-Ryder Co College & Highland Ave Niagara Falls NY	3-7				
Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	3-26				

US Instrument Corp PO Box 33E Charlottesville Va	18-33	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	1-2-8-10-18	Control Corp 718 Central Ave NE Minneapolis 14 Minn	3-18
US Stoneware Co Alite Div Orville Ohio	4	American Mica Insulation Co 235 Parker Ave Manasquan NJ	5	Corbin Corp 5419 56 Pl Riverdale Md	1-2-6-10-11-16-17-19-20
Valandy Electronics Corp 61-35 166 St Flushing 68 NY	7	American Mica Radio Corp 235 Parker Ave Manasquan NJ	5-8-15	Cossor (Canada) Ltd 301 Windsor St Halifax Nova Scotia Canada	1-2-4-5
Valor Electronic Components Co 5808 Marilyn Ave Culver City Calif	18	American Microwave Corp 11754 Vose St N Hollywood Calif	10-11-18-21	Craig Systems Inc 90 Holten St Danvers Mass	2-6-10-12-20
Vanguard Electronics Co 3384 Motor Ave Los Angeles 34 Calif	3-7-16-18-25-26-30-40-41	Applied Electronics Co 213 E Grand Ave S San Francisco Calif	4-5-9-22	Crosby Labs Inc Box 233 Robbins Lane Hicksville NY	2-5-11-16
Vari-L Co 432 Fairfield Ave Stamford Conn	18-30	Applied Research Inc 163-07 Depot Rd Flushing 58 NY	11	Dayton Aviation Radio & Equipment Corp RR 3 Troy Ohio	1-14
Virginia Electronics Co River Rd & B & O R R Washington 16 DC	3-7-8-16-25-26-30-33	Applied Science Corp of Princeton PO Box #44 Princeton NJ	18	Deltone Inc 608 Fayette Ave Mamaroneck NY	10-11-16
Vitro Corp of America 261 Madison Ave New York 16 NY	30	Arma Div American Bosch Arma Corp Garden City NY	18	DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	10
Vokar Corp 7300 Huron River Dr Dexter Mich	3-7-16-33	Auth Electric Co 34-20 45 St Long Island City 1 NY	8-9-15-19	DeWald Radio Mfg Corp 35-15 37 Ave Long Island City 1 NY	8
Voita Mfg Co 2154 N Halsted St Chicago 14 Ill	3-16-25-28-38-39-41	Automatic Electric Co 1033 W Van Buren St Chicago 7 Ill	3-5-8-10-13-15-19-22	Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	10-21
Waco Inc 2032 Broadway Santa Monica Calif	3-15-18-19-24-27-28-33	Autron Eng'g Inc 1254 W 6 St Los Angeles 17 Calif	6	Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	8-12-15
Waldom Electronics Inc 4625 W 53 St Chicago 32 Ill	12-29	Avia Products Co 7266 Beverly Blvd Los Angeles 36 Calif	19-22	D & R Ltd 402 E Gutierrez St Santa Barbara Calif	16
Walton Tool & Die Co 2707 Empire Ave Burbank Calif	4	Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	1	DuKane Corp St Charles Ill	4-5-8-15-19
Warsaw Coil Co Segal St Warsaw Ind	3-7-16-18-19-23-24-25-28-30-38-39-40-41	Avionics Ltd PO Box 200 Niagara-on-the-Lake Ontario Canada	2-8	Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	22
Waters Mfg Inc Boston Post Rd Wayland Mass	16-30	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	4-5-11-12-16-17-18-20-22	Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	1-3-5-6-7-8-9-10-11-12-13-14-15-16-18-19-20-21-22
Western Coil Products Co 969 Commercial St Palo Alto Calif	7-8-16-25-26	Bassett Inc Rex 1314 NE 17 Ct Ft Lauderdale Fla	9-19	Electrical Products Research & Development Co 1206 Cherry St Toledo 4 Ohio	8
Wheaton Co T C Millville NJ	20	Bell Aircraft Corp PO Box 1 Buffalo 5 NY	1-2-3-4-5-8-10-12-14-16-17-18	Electronic Communication Equipment Co 1249 W Loyola Ave Chicago 26 Ill	8-13-15
Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn	19-27-28-30-32-33	Bell & Gossett Co 8200 Austin Ave Morton Grove Ill	1-3-4-5-9-15-18-20	Electronic Eng'g Co 362 W Bowery St Akron 7 Ohio	4-3
Whitewater Electronics Inc 136 Main St Whitewater Wisc	5-7-9-12-15-16-18-19-23-25-26-28-32-33-35-38-39-40-41	Bell Sound Systems Inc 555 Marion Rd Columbus 7 Ohio	5-8	Electronics Development Co 3743 N Cahuenga Blvd N Hollywood Calif	21
Wilco Corp 546 Droyer St Indianapolis 21 Ind	23-25-41	Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif	18	Electronic Secretary Industries Inc 805 S 5 St Milwaukee 4 Wis	19
Wilmar Mfg Co 1110 Truman Rd Kansas City Mo	3-16-25-26	Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	1-2-4-12-13-14-22	Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	11
Wincharger Corp E 7 & Division St Sioux City 2 Iowa	12	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	1-2-13-22	Electrosolids Corp 7436 Varna Ave N Hollywood Calif	1
Wright Zimmerman Inc New Brighton St Paul 12 Minn	13-16-25-29	Bliss Electronic Corp Box 366 Sussex NJ	12-19	Electro Sound Corp 115 Halleck St Boston 15 Mass	3-4-5-7-8-9-12-14-15-19
Wyeth Eng'g Inc 9911 Walden Pkwy Chicago 43 Ill	30	Boehme Inc H O 915 Broadway New York 10 NY	20	Elm Labs 10 Washington Ave Hastings-on-Hudson NY	3

18—COMMUNICATION SYSTEMS

Aircraft	1
Airport traffic control	2
Carrier current	3
Civil defense	4
Commercial	5
Facsimile	6
Induction	7
Intercom	8
Marine	9
Microwave	10
Multiplex	11
Portable	12
Railroad	13
Search & Rescue	14
Selective paging	15
Single sideband	16
Speech scrambling	17
Telemetry	18
Telephone	19
Teletypewriter	20
TV microwave lines	21
Vehicular	22

Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	16-18-22	Browning Labs Inc 750 Main St Winchester Mass	11	Erco Radio Labs Inc 637 Stewart Ave Garden City NY	2-3-5-7-9-12-15-16-19-20-22
Aeronautical Comm Equip Co 3090 Douglas Rd Miami 33 Fla	2-19	Brubaker Electronics Inc 3652 Eastham Dr Culver City Calif	2	Executive Inc 415 Lexington Ave New York 17 NY	5-8-15
Aeronautical Electronics Inc PO Box 6527 Raleigh NC	1-2-4-5-12-14-22	Budelman Radio Corp 375 Fairfield Ave Stamford Conn	3-5-10-11-15	Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY	1
Aircraft Radio Corp Boonton NJ	1-12	Bundy Electronics Corp 171 Fabyan Pl Newark 12 NJ	8	Federal Telecommunication Labs Div IT&T 500 Washington Ave Nutley NJ	5-19
Alden Electronic & Impulse Recording Equip Co PO Box 125 Westboro Mass	6-8	Burroughs Corp 6071 2 Ave Detroit 32 Mich	1-2-6-11-12-18-19-20	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	1-3-5-8-10-11-12-13-15-19-20-21-22
Altec Lansing Corp 1515 S Manchester Ave Anaheim Calif	4-5-13	Buss-Clement-Doughten & Associates 201 B Studio Hill Chester Springs Pa	8	Feiler Eng'g & Mfg Co 8026 N Monticello Ave Skokie Ill	3-8-12-15
Amerac Inc 116 Topsfield Rd Wenham Mass	10-21	Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada	1-2-10-14-18	Femco Inc Irwin Pa	3-8-13
American Communications Corp 280 Broadway New York 17 NY	4-19	Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill	1-4-5-16	First Electronics Corp 117 Blue Hill Ave Boston 19 Mass	8
		CGS Laboratories Inc 391 Ludlow St Stamford Conn	5-20	Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY	18
		Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	4-5-10-12-16-22	Gates Radio Co 123 Hampshire St Quincy Ill	5-15
		Collins Radio Co 855 35 St NE Cedar Rapids Iowa	1-2-3-4-5-6-8-9-10-11-12-13-16-18-20-21-22	General Bronze Corp 711 Stewart Ave Garden City NY	10-21
		Commercial Radio Sound Corp 652 1 Ave New York 16 NY	8	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	3-22
		Communication Equipment & Eng'g Co 5646 W Race Ave Chicago 44 Ill	3-5-9-13-15-18-19	General Electric Co Communication Products Dept Syracuse NY	3-4-5-9-10-11-12-13-22
		Communications Co Coral Gables Fla	2-4-22	General Electric Co Light Military Electronic Equip Dept French Rd Utica NY	1
		Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	8-12-19-20	General Precision Lab Inc 63 Bedford Rd Pleasantville NY	10
		Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	1-18-20	G & M Equipment Co 7315 Varna Ave N Hollywood Calif	8-9
		Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	4-5-8	Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	11
		Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	20	Goslin Electric & Mfr Co 2921 W Olive Ave Burbank Calif	12
		Continental Electronics Mfg Co 4212 S Buckner Blvd Dallas 27 Texas	5-10-16	Gulton Industries Inc 212 Durham Ave Metuchen NJ	18
				Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	4-5-8-15

Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	1-16-18	National Aeronautical Corp Ft Washington Industrial Park Ft Washington Pa	1	Sparton Control Systems Div Sparks-Withington Co 2301 E Michigan Ave Jackson Mich	18
Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	1-8-10-18-21	National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif	1-14	Spinform Inc 65 Mechanic St Attleboro Mass	10
Harvey-Wells Electronics Inc North St Southbridge Mass	4-12	National Scientific Labs Inc 2010 Massachusetts Ave N W Washington 6 DC	10-20	Springer Aircraft Radio Co Earl W Route 11 Box 330 Indianapolis Ind	1
Hogan Labs Inc 155 Perry St New York 14 NY	6	Neill Co R W 4320 Montrose Ave Chicago 41 Ill	5-8-13	Standard Electric Time Co 89 Logan St Springfield 2 Mass	15
Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	18	Nevada Air Products Co P O Box 2472 Reno Nev	1-2-18	Stelma Inc 190 Henry St Stamford Conn	11-18-19-20
Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	15-16-17-18-20	Norden-Ketay Corp Commerce Rd Stamford Conn	17	Stratford Corp 44 W 28 St New York 1 NY	1-8
Hycan Mfg Co 707 S Raymond Ave Pasadena Calif	10-21	North Electric Co 553 S Market St Galion Ohio	2-3-5-8-15-18-19	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-2-5-6-8-9-10-12 13-14-16-17-18
Industrial Radio Corp 428 N Parkside Ave Chicago 44 Ill	4-5-12-13-14-15-22	Northern Radio Co 143 W 22 St New York 11 NY	4-5-11-18-19	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	3-5-8-10-11-13-15-19
Intelix Systems Inc 22 Thames St New York 6 NY	5-8-10-16-17-19-20	Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	9	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	1-10
International Research Associates 2221 Warwick Ave Santa Monica Calif	1	Oberline Inc P O Box 921 Beverly Hills Calif	3-15	Talk-A-Phone Co 1512 S Pulaski Rd Chicago 23 Ill	3-5-8-15-19
I-T-E Circuit Breaker Co Special Products Div 601 E Erie Ave Philadelphia 34 Pa	10	O'Brien Electric Corp 6514 Monica Blvd Hollywood 38 Calif	8-15	Tarzian Inc Sarkes E Hillside Drive Bloomington Ind	10-21
Jarvis Electronics Corp 1140 Cherry St Winnetka Ill	1	Otis Elevator Co Electronics Div 35 Ryerson St Brooklyn 5 NY	1-2-16-18-20	TelAutograph Corp 8700 Bellanca Ave Los Angeles 45 Calif	25
Johnson Co E F Waseca Minn	4-16-22	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	1-4-14-18	Teledyne Mfg Corp 28 Ranick Dr Amityville LI NY	18
J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	10-21	Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	1-3-5-7-8-9-10 11-15-16-17-19	Tele-Dynamics Inc 32 & Walnut Sts Philadelphia 4 Pa	10-18-22
Kaar Eng'g Corp 2995 Middlefield Rd Palo Alto Calif	22	Parsons Co Ralph M Electronics Div 151 S De Lacey Ave Pasadena Calif	18	Telephonics Corp Park Ave Huntington LI NY	1-8-10-14-16-19
Kahn Research Labs 22 Pine St Freeport NY	1-2-5-6-11-16-19	Partrick & Wilkins Co 51 N 7 St Philadelphia 6 Pa	5-9	Teletronic Labs Inc 1835 W Rosencrans Ave Gardena Calif	8
Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	1-8-16	Permoflux Products Co 4101 San Fernando Rd Glendale 4 Calif	4-8	Telecommunications Ltd Newmarket Rd Cambridge England	5
Kuss Industries Inc Tacony & Lewis Sts Philadelphia 24 Pa	8	Philco Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	10-11-13-15-21	Times Facsimile Corp 540 W 58 St New York 19 NY	6
Lambda-Pacific Eng'g Inc 14725 Armita St Van Nuys Calif	10-21	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	10	Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	1-21
Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill	10-22	Polytronic Research Inc 7660 Woodbury Dr Silver Spring Md	10-21	Transelectric Mfg Co Hopewell Rd Oxford Pa	8-19
Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	1-5-8-10-18	Pratt Albert 114 W Lake View Ave Milwaukee 17 Wis	8-12-22	Transitron Inc 186 Granite St Manchester NH	5-9-12
Langevin Mfg Corp 47-27 Austell Pl Long Island City 1 NY	8-13	Premier Instrument Corp 52 W Houston St New York 12 NY	10-21	Union Switch & Signal Div Westinghouse Air Brake Co Braddock Ave Pittsburgh 18 Pa	3-12-13
Lear Inc 3171 S Bundy Drive Santa Monica Calif	1-2-5-22	Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	5	United Electrodynamics 1200 S Marengo Ave Pasadena Calif	18
Lenkurt Electric Co 1105 County Rd San Carlos Calif	10	Prodell Inc 307 Bergen Ave Kearny NJ	10-21	Uniwave Inc 2 Marine St Farmingdale NY	10-18-21
Lieco Inc 3610 Oceanside Rd Oceanside LI NY	21	Production Research Corp Thornwood NY 1-3-7-8-10-11-12-14-15-16-17-18		U S Instrument Corp P O Box 33E Charlottesville Va	4-5-8-9-12-13-19-20
Link-Radio Corp 110 Jericho Turnpike New Hyde Park LI NY	4-5-8-10-13-15 16-19-20-22	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	1-2-3-4-5-8-9 10-11-12-19-22	Vapor Recovery Systems Co 2820 N Alameda St Compton Calif	18
Liton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	14-16	Pye Telecommunications Ltd Newmarket Rd Cambridge England	2-3-4-5-8-9-10-11-12 13-14-15-19-20-21-22	Varo Mfg Co 2201 Walnut St Garland Texas	2-22
Loge Sound Engrs J M 2171 W Washington Blvd Los Angeles 18 Calif	8	Radio Corp of America Commercial Electronic Products Camden 2 NJ	5-8-9-10-15-16-19-21-22	Virginia Electronics Co River Rd & B & O R R Washington 16 DC	2-4-8-9-17-22
Lynch Carrier Systems Inc 695 Bryant St San Francisco 7 Calif	3-5-11-13-16 17-18-19-20	Radio Eng'g Products Ltd 1080 University St Montreal 3 Quebec Canada	11-19-20-22	Vocaline Co of America Old Saybrook Conn	3-8
Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	2	Radio Frequency Labs Inc Boonton NJ	18	Voron & Co George 835 N 19 St Philadelphia 30 Pa	1-5-7-8-15-19-20
Magna Electronics Co 9810 Anza Ave Inglewood 1 Calif	12	Radio Receptor Co 240 Wythe Ave Brooklyn 11 NY	2	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	18
Majestic Int'l Corp 79 Washington St Brooklyn 1 NY	8	Radio Specialty Mfg Co 125 S E 7 Ave Portland 14 Ore	4-5-12	Warren Corp J C 21 Hanse Ave Freeport NY	12-22
Manson Laboratories Inc 207 Greenwich Ave Stamford Conn	3-11-16	Rauland-Borx Corp 3515 W Addison St Chicago 18 Ill	8-15	Warren Mfg Co Newton Rd Littleton Mass	3-5-19
M-B Communication Co 4626 Walnut St Philadelphia 39 Pa	5-8-10-18	Raytheon Mfg Co 100 River St Waltham 54 Mass	10	Webster Electric Co 1900 Clark St Racine Wis	8
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	5-12-14-17	Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 54 Mass	5-9	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	10-16
Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	4-5-7-8-9-12-13-14-15	Remler Co 2101 Bryant St San Francisco Calif	1-7-8-9	Westrex Corp 111 8 Ave New York 11 NY	5-9-16
Microwave Development Labs 92 Broad St Babson Park 57 Mass	10	Rich Electronics Inc 212 N W 8 Ave Miami 36 Fla	18	Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn	5-8
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa	3-7-8-12-15-19-22	Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	5-11-20	Wickes Eng'g & Construction Co 12 St & Ferry Ave Camden 4 NJ	2-12-22
Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	20	Royal Communication Systems 11462 Euclid Ave Cleveland 6 Ohio	15-18-22	Wilcox Electric Co 1400 Chestnut St Kansas City 27 Mo	1-2-16
Mobil Electronics Mfg Co 1111 State Rd 67 E Anderson Ind	22	Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	15-17	Worner Electronic Devices Rankin Ill	8
Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	1-8	Schrack Electrical Sales Corp 45 W 81 St New York 24 NY	5-8-19	WRL Electronics Inc 3415 W Broadway Council Bluffs Iowa	4
Morrow Radio Mfg Co 2794 Market St Salem Ore	1-4-5-22	Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	2-8		
Mosler Research Products Inc 3 Keeler St Danbury Conn	12	Simplex Equipment Corp 55 La France Ave Bloomfield NJ	5-15		
Motigraph Inc 4441 W Lake St Chicago 24 Ill	5-8-15	Simpson Mfg Co Mark 32-28 49 St Long Island City 3 NY	1-3-4-5-8-12-15		
Motorola Communications & Electronics Inc 4501 W Augusta Blvd Chicago 51 Ill	4-10-11-12-13-15-22	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	1-2-3-6-11-14-17-18-20		
Muirhead & Co Ltd Beckenham Kent England	6	Smith-Meeker Eng'g Co 157 Chambers St New York 7 NY	1-5-10-16		
Muirhead Instruments Inc 677 5 Ave New York 22 NY	6				

19—COMPUTERS

Accumulators	1
Amplifiers	2
Analog computers	3
Analog-to-digital converters ...	4
Board plugs	5
Computer components	6
Computer heads	7
Computer testers	8
Counters	9
Data recorders, analog	10
Data recorders, digital	11

Decoders	12
Delay lines	13
Demodulators	14
Differential analyzers	15
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Digital-to-analog converters	18
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Function generators	21
Input equipment	22
Logic circuits	23
Matrixes	24
Memory, crystal	25
Memory, drums	26
Memory, multi-core magnetic	27
Memory, tape loop	28
Memory tubes	29
Multipliers	30
Output equipment	31
Plotters, X-Y	32
Printers, high speed	33
Printers, keyboard	34
Printers, line	35
Proportioning units	36
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Readout devices	38
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Samplers	40
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Storage acoustic	42
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Storage, electrostatic	44
Storage, ferroelectric	45
Storage, magnetic	46
Storage, mechanical	47
Storage, photographic	48
Storage, tubes	49
Tape mechanisms	50

A C Electronics Div General Motors Corp Toledo Ohio	3-17-18
Acton Laboratories 533 Main St Acton Mass	10
Addressograph-Multigraph Corp 1200 Babbitt Rd Cleveland 17 Ohio	22-31-33-38-50
Advance Electronics Lab Inc 249 Terhune Ave Passaic NJ	13
Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	3-4-6-17-18-22 31-38-45-46-47
Aero Electronics Co 1512 N Wells St Chicago 10 Ill	3-32-38
Airborne Instruments Lab Modac Div 864 Franklin Ave Thornwood NY	11-17-22-31-46
AirResearch Mfg Co Div Garrett Corp 9851 Sepulveda Blvd Los Angeles 45 Calif	2-22-31
Airflyte Electronics Co 535 Avenue A Bayonne NJ	4-6-18-20-26
Alden Electronic & Impulse Recording Equip Co P O Box 125 Westboro Mass	10-11
Alden Products Co 123A N Main St Brockton Mass	6-13-27
Alleghany Instrument Co 1091 Wills Mountain Cumberland Md	11-17-22-31
AltoScientific Co 855 Commercial St Palo Alto Calif	6-8
Alwac Corp 13040 S Cerise Hawthorne Calif	6-11-17-22-31-32-37-46
American Electronics Inc 655 W Washington Blvd Los Angeles 15 Calif	39
American Electronics Inc Instrument Div 9503 W Jefferson Blvd Culver City Calif	39
American Machine & Foundry Co Electronics Div 1085 Commonwealth Ave Boston 15 Mass	38
American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	4-8-11-18-38
Ampex Corp 934 Charter St Redwood City Calif	10-11-31-46-50
Amphenol Electronics Corp 1830 S 54 Ave Chicago 50 Ill	6
Amplex Div Chrysler Corp P O Box 2718 Detroit 31 Mich	6
Analogue Controls Inc 39 Roselle St Mineola NY	2-3-10-11-15-17-30-32
Andersen Labs Inc 39 Talcott Rd W Hartford Conn	13
ANelec Corp 150 Causeway St Boston 14 Mass	33-35

Antlab Inc 4950 N High St Columbus 14 Ohio	32
Applegate & Co C J 1840 24 St Boulder Colo	23
Arenberg Ultrasonic Laboratory 94 Green St Jamaica Plain 30 Mass	13-42
Askania Regulator Co 240 E Ontario St Chicago 11 Ill	4
Associated Eng'g Corp 65 Kent St Brookline 46 Mass	6
Atlas Precision Products Co 3801 Castor Ave Philadelphia 24 Pa	3
Atomic Labs Inc 3086 Claremont Ave Berkeley 5 Calif	3
Aurex Corp 1117 N Franklin St Chicago 10 Ill	22-46
Austin Co Special Devices Div 76 9 Ave New York 11 NY	3-4-10-11-17-22-31
Automation Management Inc Adams St Westboro Mass	17
Autonetics Div North American Aviation 9150 E Imperial Hwy Downey Calif	3-17
Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	2-3-10-11-12-17-46
Avionics Ltd P O Box 200 Niagara-on-the-Lake Ontario Canada	19
Baird-Atomic Inc 33 University Rd Cambridge 38 Mass	1-3-4-10-11-17-18-33
Baldwin Piano Co 1801 Gilbert Ave Cincinnati 2 Ohio	4-20
Beckman-Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	3-6-10-11-17-30
Beckman/Heliport Corp Newport Beach Calif	13
Beckman Instruments Inc Data & Control Systems Scientific Instrument Div 325 N Muller Ave Anaheim Calif	2-3-8-9-10-11-17
Beckman Instruments Inc Process Instruments Div 2500 Fullerton Rd Fullerton Calif	4-6-10-11-18
Beck's Inc 298 E 5 St St Paul 1 Minn	5-6-19-27-45
Bel Fuse Inc 311 Mountain Rd Union City NJ	13
Bell Aircraft Corp P O Box 1 Buffalo 5 NY	2-3-4-6-9-17-18-22-31-42 43-44-45-46-47-48
Belock Instrument Corp 111-01 14 Ave College Point 56 NY	3-5-6-30-38-46-47
Bendix Aviation Corp Bendix Computer Div 5630 Arbor Vitae St Los Angeles 45 Calif	6-15-17-22-31
Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	8
Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	1-2-9-15-16-17-22 26-31-39-45-46
Bendix Aviation Corp Cincinnati Div 3130 Wason Rd Cincinnati 8 Ohio	9
Benson-Lehner Corp 11930 W Olympic Blvd Los Angeles 64 Calif	4-11-16-18 22-31-32-34-38
B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	7-11-26
Berkshire Labs 586 Bank Village Greenville NH	6
Bliley Electric Co Union Station Bldg Erie Pa	13
Bowmar Instrument Corp 2415 Pennsylvania St Ft Wayne Ind	9
Brew & Co Richard D 90 Airport Concord NH	13
Briggs Associates 10 DeKalb St Norristown Pa	4-6-8-10-11-16-17-18 19-22-23-30-31-45-46
Bristol Co P O Box 1790 EITT Waterbury 20 Conn	4-18-32
Brubaker Electronics Inc 3652 Eastham Dr Culver City Calif	12-13
Brush Electronics Co 3405 Perkins Ave Cleveland 14 Ohio	7-10
Burroughs Corp 6071 2 Ave Detroit 32 Mich	3-4-5-8-9-10-11-13-14-17- 18-22-26-27-28-30-31-33- 34-35-42-45-46-47-48
Burroughs Corp Electronic Tube Div Box 1226 Plainfield NJ	9-12-38-49
Bryant Gage & Spindle Div Box 620-R Springfield Vt	13-26
Burnell & Co 45 Warburton Ave Yonkers NY	13
Burroughs Corp 6071 2 Ave Philadelphia 7 Pa	3-4-5-8-9-10-11-13-14-17- 18-22-26-27-28-30-31-33- 6-13-17-22-27-31-38-41
Cambridge Thermionic Corp 445 Concord Ave Cambridge 38 Mass	5-6
Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada	3-13
Central Coil Co 1720 N Luett St Indianapolis 22 Ind	6-13
Century Electronics Co 34 Oleander St Cocoa Fla	17
Century Engineers 2741 N Naomi St Burbank Calif	3-8
Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill	2-3

Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England	25
Clary Corp 408 Junipero St San Gabriel Calif	11-22-31-34-35-38
Clevite Harris Products Inc 6545 Carnegie Ave Cleveland 3 Ohio	29
Coil Winders Inc New York Ave Westbury LI NY	2-13
Coleman Eng'g Co 6040 W Jefferson Blvd Los Angeles 16 Calif	4-18
Colorado Research Corp 4697 E Evans Ave Denver 22 Colo	3-4-6-10-11-15 21-22-31-33-38
Columbia Technical Corp 61-02 31 Ave Woodside 77 NY	13
Commercial Controls Corp Sub Friden Calculating Mach 1 Leighton Ave Rochester 2 NY	22-31
Computer Control Co 92 Broad St Wellesley 57 Mass	6-22-31-42-46
Computer Eng'g Associates 350 N Halstead St Pasadena 8 Calif	3-17
Computer Instruments Corp 92 Madison Ave Hempstead NY	39
Computer-Measurements Corp 5528 Vineland Ave N Hollywood Calif	9-33
Computing Devices of Canada Ltd P O Box 508 Ottawa Ontario Can	23-45
Conrad & Moser 2 Borden Ave Long Island City 1 NY	26
Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	3-4-6-8-10-14-17-18-22 23-31-45-46-47
Consolidated Electrodynamics Corp 300 N Sierra Madre Villa Pasadena Calif	4-10-11
Cook Electric Co 2700 Southport Ave Chicago 14 Ill	50
Corbett Science Labs F W 3117 Venice Blvd Los Angeles 19 Calif	10-11
Corbin Corp 5419 56 Pl Riverdale Md	3-17
Corning Glass Works Corning NY	13
Dale Products Inc Columbus Nebr	6
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	13
DATAmatic Corp 151 Needham St Newton Highlands 61 Mass	17
Datex Div G M Giannini & Co 1307 S Myrtle Ave Monrovia Calif	4-11-18
Daven Co Route 10 Livingston NJ	13
Daystrom Instrument Div Daystrom Inc Archbald Pa	27
Delaware Products Co 300 Broadway Camden 3 NJ	4-11
Delevan Electronics Corp Royerfort Campus E Aurora NY	33
Deltine Inc 608 Fayette Ave Mamaroneck NY	2-4-6-13-42
Deutschmann Corp Tobe Norwood Mass	13
Devol Research Co Brookside Dr Greenwich Conn	4-6-7-18-26-46
Diehl Mfg Co Finderne Ave Somerville NJ	6-39
Digitronics Corp 35-10 36 Ave Long Island City 6 NY	13-17-46
Dilectron Div Gudeman Co 2669 S Myrtle Ave Monrovia Calif	13
Donner Scientific Co 888 Galindo St Concord Calif	3-6-21-30
Dotv Acoustical Electronic Labs 431 Broome St New York 13 NY	2-3-6-12-17
DuKane Corp St Charles Ill	2
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	17
Dwyer Eng'g Co Pine St Ext Nashua NH	6-14
Dynalysis Development Labs Inc 11941 Wilshire Blvd Los Angeles 25 Calif	2-3-30
Dynamics Research Associates Div Universal Match Corp P O Box 5841 Ferguson 21 Mo	2
Dynamu Magnetics Corp Div Maico Co 21 N 3 St Minneapolis 1 Minn	7
Eagle Pencil Co 703 E 13 St New York 9 NY	22
Eastern Precision Resistor Corp 675 Barby St Brooklyn 7 NY	5
Eastman Kodak Co 343 State St Rochester 4 NY	33
Eclipse-Pioneer Div Bendix Aviation Corp Teterboro NJ	4-20-39
Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ	7
Electric Regulator Corp Pearl St Norwalk Conn	6
Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	6-17

Electrical Products Research & Development Co 1206 Cherry St Toledo 4 Ohio	9	Grafton Eng'g Co 628 Vernon Rd Springfield Pa 10-11-22-31	Loral Electronics Corp 749 E 140 St New York 54 NY	12
Electrodata Div Burroughs Corp 460 Sierra Madre Villa Pasadena Calif 17		Graphik Circuits Div Cinch Mfg Corp 200 S Turnbull Canyon Rd La Puente Calif 5-19	Loyola Labs Box 46074 Airport Station Los Angeles 45 Calif	22
Electro Instruments Inc 3794 Rosecrans St San Diego 10 Calif 38		Greer Hydraulics Inc N Y Int'l Airport Jamaica 30 NY 1	Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass 20-22-24-27-31-38-45	
Electro-Mec Lab Inc 47-51 33 St Long Island City 1 NY 4		Gries Reproducer Corp 125 Beechwood Ave New Rochelle NY 5	Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ 3-17	
Electronic Associates Inc Long Branch NJ 3-10-11-30-31-32-39		Gulton Industries Inc 212 Durham Ave Metuchen NJ 13-25	Macloed & Hanopol 10 Roland St Charlestown 29 Mass 4	
Electronic Control Systems 2136 Westwood Blvd Los Angeles 25 Calif 12-16-17-20		Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa 3-10-22	Magnasync Mfg Co 5546 Satsuma Ave N Hollywood Calif 50	
Electronic Computer Co 6191 Ridge Ave Philadelphia 28 Pa 4		Haller Raymond & Brown 124 N Atherton St State College Pa 17	Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY 3	
Electronic Contractors Inc 2101 SE 6 Ave Portland 14 Ore 2-3-6		Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill 9-16-20-24	Magnetics Inc Box 391 Butler Pa 6	
Electronic Eng'g Co of Calif 180 S Alvarado Los Angeles 57 Calif 22		Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif 2-3-30	Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind 5	
Electronics Corp of America 1 Memorial Dr Cambridge 42 Mass 4-20-26		Hanson-Gorrill-Brian 85 Hazel St Glen Cove NY 4-10-11-18-22	Marchant Calculators Inc 1475 Powell St Oakland 8 Calif 11-17-35-45-46-50	
El-Rad Mfg Co 2800 W Cullom Ave Chicago 18 Ill 13		Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio 17	Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY 2	
Endevco Corp 161 E California St Pasadena Calif 4-9		Heath Co 305 Territorial Rd Benton Harbor Mich 2-3-6-21	Melco Products Inc 301 S Ave S Minneapolis 15 Minn 6-22-31	
Engineered Electronics Co 506 E 1 St Santa Ana Calif 6-9-23		Heiland Div Minneapolis-Honeywell 5200 E Evans Ave Denver 22 Colo 10-48	Melpar Inc 3000 Arlington Blvd Falls Church Va 3-17	
EpSCO Inc 588 Commonwealth Ave Boston 15 Mass 4-6-10-11-18 22-27-28-31-41-42-46		Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif 21	Mica Fabricating Co Rochelle Park NJ 19	
Ercona Corp 551 S Ave New York 17 NY 23		Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio 21-37	Mid-Century Instrumatic Corp 611 Broadway New York 12 NY 2-3-22-31	
Erie Resistor Corp 644 W 12 St Erie 6 Pa 24-27		Hogan Labs Inc 155 Perry St New York 14 NY 11	Mid-West Conveyor Co Metal Products Div 7 & Sunshine Rd Kansas City 15 Kan 20	
ESC Corp 534 Bergen Blvd Palisades Park NJ 13		Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md 2-4-5-6-8-12-14-17-20	Milgo Electronic Corp 7601 N W 37 Ave Miami 47 Fla 2-3-4-5-6-18-22-30-31-38-39-46	
Essex Electronics Div NYT Electronics Inc 7303 Atoll Ave N Hollywood Calif 13		Hughes Aircraft Co Florence & Teale Sts Culver City Calif 6	Miller Co J W 5917 S Main St Los Angeles 3 Calif 13	
Essex Electronics 550 Springfield Ave Berkeley Heights NJ 13		Hughes Products Hughes Aircraft Co 5340 W 104 St Int'l Airport Sta Los Angeles 45 Calif 49	Milton Roy Co 1300 E Mermaid Lane Philadelphia 18 Pa 36	
Exact Eng'g & Mfg Inc P O Box 668 Oceanside Calif 6		Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill 4	Mincom Minn Mining & Mfg Co 2049 S Barrington Ave Los Angeles 25 Calif 6	
Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind 29-44		Hycon Eastern Inc 75 Cambridge Pkwy Cambridge 42 Mass 6-10-11	Minneapolis-Honeywell Regulator Co Davies Labs Div 10721 Hanna St Beltsville Md 4-7-10-11-22-28-31-50	
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ 3-4-10-11-14-17-23		I-L-S Instrument Corp 4525 W 160 St Cleveland 11 Ohio 3	Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn 8-22	
Feedback Controls Inc 899 Main St Waltham 54 Mass 2-3-6-30		Industrial Electronic Engineers 3973 Lankershim Blvd N Hollywood Calif 4-9-11-17-23-31-11	Mobil Electronics Mfg Co 1111 State Rd 67 E Anderson Ind 12	
Ferranti Electric Inc 30 Rockefeller Plaza New York 20 NY 26-42-46-50		Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md 2-8-9	Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind 2-6	
Filtrom Co 10023 W Jefferson Blvd Culver City Calif 13		Industrial Test Equipment Co 55 E 11 St New York 3 NY 2-3-6-30	Mohawk Business Machines Corp 944 Halsey St Brooklyn 33 NY 26	
Filtrom 131-15 Fowler Ave Flushing 55 NY 13		Industrial Timer Corp 1407 McCarter Hwy Newark 4 NJ 37	Monroe Calculating Machine Co Electronics Div Morris Plains NJ 6-17-22-31-46	
Fisher & Porter Co 478 Warmminster Rd Hatboro Pa 3-4-6-9-10-11-17 18-22-31-33-34-35-36		Instrument Development Labs Inc 67 Mechanic St Attleboro Mass 4-10	M Ten Bosch Inc 80 Wheeler Ave Pleasantville NY 3-14-50	
Florman & Babb 68 W 45 St New York 36 NY 48		Intelligent Machines Research Corp 7019 Edsall Rd Research Park Alexandria Va 37	Muirhead & Co Ltd Beckenham Kent England 6-39	
Forbes & Wagner Inc 343 Central Ave Silver Creek NY 13		Intercontinental Dynamics Corp 170 Coolidge Ave Englewood NJ 21	Muirhead Instruments Inc 677 S Ave New York 22 NY 39	
Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY 3-6-17-22-31-39		Int'l Business Machines Corp 590 Madison Ave New York 23 NY 11-17-22-31-33-34 35-37-38-44-45-46	Nader Mfg Co 2661 S Myrtle Ave Monrovia Calif 31	
Franklin Electronics Inc Box 113 Bridgeport Pa 3-4-8-9-38		International Telemeter Corp 200 Stoner Ave Los Angeles 25 Calif 6-27-46-48	National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif 6	
F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY 21		Jack Scientific Instrument Co Bill 143 Cedros St Solana Beach Calif 3	National Cash Register Co Dayton 9 Ohio 11-17	
Fuzile-Miller Labs Inc 301 Central Ave Clark NJ 13		Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md 6-9-13-17-20-22-31-46	National Coil Co P O Box 1237 Sheridan Wyo 13	
Garrett Corp AiResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif 2-3-22-31		Johnson Electronics Inc 521 Elwell St Orlando Fla 6-13	National Tel-Tronics Corp 52 St Casimir Ave Yonkers NY 5	
General Ceramics Corp Keasbey NJ 27-46		Julie Research Labs 556 W 168 St New York 32 NY 37	Navco Navigation Computer Corp 1621 Snyder Ave Philadelphia 45 Pa 1-5-6-8-9-17-18-23	
General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY 13		Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio 2-17	Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif 4-9-10-11-18-26-27	
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY 21		Key Electric Corp 287 Post Ave Westbury NY 22-31-50	Non-Linear Systems Inc Del Mar Airport Del Mar Calif 4-8-11-16-18-22-31	
General Electric Co Electronic Components Div 1 River Rd Schenectady 5 NY 49		Kybernetes Corp 9 E 40 St New York 17 NY 10-11-22-31	Norden-Ketay Corp Commerce Rd Stamford Conn 2-3-4-8-17-39	
General Electric Co Ltd of England 80 Shore Rd Port Washington NY 49		Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass 4-11-23	North American Instruments Inc 2420 N Lake St Altadena Calif 10-14	
General Kinetics Inc 555 23 St S Arlington 2 Va 8-11-22-31-50		Lab-Tronics Inc 3656 N Lincoln Ave Chicago 13 Ill 5	Norton Associates Inc P O Box 96 Garden City NY 6-7-16	
General Precision Lab Inc 63 Bedford Rd Pleasantville NY 4-10-11-18		Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif 18	Nuclear Development Corp of America 5 New St White Plains NY 3-17-46	
General Transistor Western Corp 6110 Venice Blvd Los Angeles 34 Calif 7-26		Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY 3-6	NYT Electronics Inc 2979 N Ontario St Burbank Calif 13	
Genisco Inc 2233 Federal Ave Los Angeles 64 Calif 4		Leads & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa 10	Offner Electronics Inc 5320 N Kedzie Ave Chicago 25 Ill 10	
Gerber Scientific Instrument Co 162 State St Hartford 3 Conn 3		Librascope Inc Commercial Div 133 E Santa Anita Ave Burbank Calif 4-7-18-26-32-37	Optron Corp 3536 State St Santa Barbara Calif 21	
Gertsch Products Inc 11846 Mississippi Ave Los Angeles 25 Calif 18		Librascope Inc 808 Western Ave Glendale Calif 26-27-31-45-46-47-50	Optium Eng'g Co 2017 Willow St Grand Prairie Texas 6	
Giannini & Co G M 918 E Green St Pasadena Calif 2-3-4-6-8-11-16 17-18-22-31-40		Link Aviation Inc Binghamton NY 3-6	Oregon Electronic Mfg Co 2105 S E 6 Ave Portland 14 Ore 3	
Gilmore Industries Inc 5713 Euclid Ave Cleveland 3 Ohio 10		Lipps Co Edwin A 5485 W Washington Blvd Los Angeles 16 Calif 7	Oster Mfg Co John 1 Main St Racine Wis 39	
Goodyear Aircraft Corp 1210 Massillon Rd Akron 15 Ohio 3		Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif 3-4-6-10-11-15-16 17-18-26-29-31-33-46	Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY 2-3-4-6-10-15-16-17-18-32	
GPS Instrument Co 811 Boylston St Boston 16 Mass 2-3-6-15-21-22-31				

Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif Panellit Inc 7401 N Hamlin Ave Skokie Ill PCA Electronics Inc 16799 Schoenborn St Sepulveda Calif Pentron Corp 777 S Tripp Ave Chicago 24 Ill Performance Measurements Co 15301 W McNichols Rd Detroit 35 Mich Philbrick Researches Inc George A 230 Congress St Boston 10 Mass Philco Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa Photocircuits Corp 31 Sea Cliff Ave Glen Cove NY Photographic Analysis Inc 13273 Ventura Blvd N Hollywood Calif Photon Instrument Co 6516 Detroit Ave Cleveland 2 Ohio Plastic Accessories Inc 91 Mercer St New York 12 NY Polarad Electronics Corp 43-20 34 St Long Island City 1 NY Poiyphase Instrument Co E 4 St Bridgeport Pa Pomona Electronics Co 1126 W 5 Ave Pomona Calif Potter Instrument Co 115 Cuttermill Rd Great Neck NY Printloid Corp 93 Mercer St New York 12 NY Production Research Corp Thornwood NY Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada Radiation Counter Labs Inc 5121 W Grove St Skokie Ill Radiation Inc P O Box 37 Melbourne Fla Radio City Products Co Centre & Glendale Sts Easton Pa Radio Corp of America Commercial Electronic Products Camden 2 NJ Radio Corp of America 415 S 5 St Harrison NJ Ransom Research 323 W 7 St San Pedro Calif Raytheon Mfg Co Receiving & Cathode Ray Tube Operations 55 Chapel St Newton 58 Mass Raytheon Mfg Co 100 River St Waltham 54 Mass Rea Co J B 1723 Cloverfield Blvd Santa Monica Calif Redman Electronics Corp 92 Prospect St Thompsonville Conn Reed & Reese Inc 717 N Lake Ave Pasadena 6 Calif Reeves Instrument Corp 215 E 91 St New York 28 NY Reflectone Corp Boston Post Rd Stamford Conn Reliance Mica Co 341-39 St Brooklyn 32 NY Remington Rand Univac Div Sperry Rand Corp Univac Park St Paul 16 Minn Remington Rand Univac Div Sperry Rand Corp 315 4 Ave New York 10 NY Rese Eng'g Inc 731 Arch St Philadelphia 6 Pa Resitron Labs Inc 2908 Nebraska Ave Santa Monica Calif Rixon Electronics Inc 2414 Reedie Dr Silver Spring Md Rolab Studios Walnut Tree Hill Sandy Hook Conn Rollan Electric Co 8233 S Princeton Ave Chicago 20 Ill Royal Precision Corp Westchester Ave Port Chester NY Royson Eng'g Co 103 N Penn St Hatboro Pa RS Electronics Corp 435 Portage Ave Palo Alto Calif Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif Servomex Controls Ltd 80 Shore Rd Port Washington NY Servronics Inc 822 N Henry St Alexandria Va Shallcross Mfg Co Jackson & Pusey Aves Collingdale Pa	13-17-22-31 1-3-4-9-10-11-17-22 6-13 50 4 2-3-15-30 17-20 5-19 16-17 2 35 12 6 5 11-27-28 35 2-14-16 28 4-15 4-10-11-18-20-33 39 6-17-22-31-33-34-35-45-50 27-49 2-5-6-9-13-16-17-22-23 49 13 6-7-17-22-26-31-46 13 14 2-3-6-10-21-22-30-31-39 3-17 19 17-22-31-33-35-46 6-11-16-17-22-26-27-31-33-35-42-46 8-27 29 4-9-17-18-38-46 48 6-22-31 17 10 4 2-3-5-17-20-22-31 2-3-14 3-6-8-22-31 21 2-3-4-6-17-18-22-23-29-30-31-32 13	Shannon Luminous Materials Co 7356 Santa Monica Blvd Hollywood 46 Calif Shepard Labs Inc 480 Morris Ave Summit NJ Signalite Inc 37 Neptune Hwy Neptune NJ Simplex Equipment Corp 55 La France Ave Bloomfield NJ Skiatron Electronics & TV Corp 180 Varick St New York 14 NY Smith Inc Herman H 2326 Nostrand Ave Brooklyn 10 NY Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England Soroban Eng'g Inc Box 338 Melbourne Fla Southern Instruments Computer Div Frimley Rd Camberley Surrey England Spivey Inc James S 4908 Hampden Lane Washington 14 DC Stancil-Hoffman Corp 921 N Highland Ave Hollywood 38 Calif Standard Record Mfg Co 70 N San Gabriel Blvd Pasadena 8 Calif Standard Register Co 626 Albany St Dayton 1 Ohio Staplex Co 775 5 Ave Brooklyn 32 NY Stavid Eng'g Inc U S Route 22 Plainfield NJ Steward Mfg Co D M Chattanooga Tenn Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill Stoelting Co C H 424 N Homan Ave Chicago 24 Ill Stromberg-Carlson Div General Dynamics Corp 1895 Hancock St San Diego 12 Calif Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY Sturupp Inc 50 Silver St Middletown Conn Sylvania Electric Products Inc 1740 Broadway New York 19 NY Systron Corp 2055 Concord Blvd Concord Calif Taller & Cooper 75 Front St Brooklyn 1 NY Talley Register Corp 5300 14 Ave N W Seattle 7 Wash Tarc Electronics Inc 48 Urban Ave Westbury LI NY Tatnall Measuring Systems Co Kimberton Rd Phoenixville Pa Technitrol Eng'g Co 1952 E Allegheny Ave Philadelphia 34 Pa Techniques Inc 52 Jackson Ave Hackensack NJ Telectro Industries Corp 35-18 37 St Long Island City 1 NY Telecomputing Div Telecomputing Corp 12838 Saticoy St N Hollywood Calif Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif Telephonics Corp Park Ave Huntington LI NY Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas Topflight Corp 160 E 9 Ave York Pa Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass Transdyne Corp 7337 Grand Ave Maspeth 78 NY Transformers Inc 200 Stage Rd Vestal NY Transonic Inc 808 16 St Bakersfield Calif Underwood Corp Electronic Computer Div 35-10 36 Ave Long Island City 6 NY Union Switch & Signal Div West- inghouse Air Brake Co Braddock Pittsburgh 18 Pa Union Thermolectric Corp 2001 Greenleaf St Ewanston Ill United Electrodynamics 1200 S Marengo Ave Pasadena Calif U S Instrument Corp P O Box 33E Charlottesville Va United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif	31 16-22-23-30-31-33-34 6 3 1-2-3-4-6-9-10-11-12-16-17-18-19-20-21-22-23-24-27-29-30-31-33-34-42-43-44-45-46-48 5 2-3-16-17 11-12-17-20-22-31-34-38-47-50 2-3-4-10-11-17-30-38 12 50 50 11-22 40 8-10-11 26 2-3-6-13-16-17-22-26-27-31-42-46 26 31-33 2-17-31-49 13 6-17-22-31-49 4-9-10-11-18 4-9-10-11-15-16-17-18-20-33-34-35-37-38 32 12 37 13-17-25-42 5-6-23 7-8-10-11-12-26-28 4-10-11 1-2-4-6-8-9-11-17-18-23-27-31-41-46-48 2 3-6-17 12 3 11 27 6 13-14 6-7-8-11-13-17-22-26-27-28-30-33-34-35-38-41-44-45-46-47-48-50 15-38 4 18 6 13 13	Vacuum Tube Products Co 506 S Cleveland St Oceanside Calif Valor Electronic Components Co 5808 Marilyn Ave Culver City Calif Vanguard Electronics Co 3384 Motor Ave Los Angeles 34 Calif Vapor Heating Corp 80 E Jackson Blvd Chicago 4 Ill Vapor Recovery Systems Co 2820 N Alameda St Compton Calif Vector Electronic Co 3352 San Fernando Rd Los Angeles 65 Calif Vectron Inc 1611 Trapelo Rd Waltham 54 Mass Victor Adding Machine Co 3900 N Rockwell St Chicago 18 Ill Vitro Corp of America 261 Madison Ave New York 16 NY Wagner Co H A 14707 Keswick St Van Nuys Calif Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY Walkirt Co 141 W Hazel St Inglewood 3 Calif Wang Labs Inc 37 Hurley St Cambridge 41 Mass Warren Corp J C 21 Hanse Ave Freeport NY Westbury Electronics Inc 300 Shames Dr Westbury NY West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif Western Electronic Co 717 Dexter Ave Seattle 9 Wash Westinghouse Electric Corp Box 284 Elmira NY Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa Weston Electrical Instrument Corp Sub Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ Westronics Inc 3605 McCart Ft Worth Texas Whitewater Electronics Inc 136 Main St Whitewater Wis Wiancko Eng'g Co 255 Halstead St Pasadena Calif Wright Equipment Co 128 N Main St Milltown NJ Zoomar Inc 55 Sea Cliff Ave Glen Cove NY	49 24 13 36 4 5 3-39 33-34-35 3-4-17 3 3-6-17-22-31 9-17-23 1-10-11-17-23 28-46 2 23-26-30-31-42-44-45-46-47-50 3-6 49 4-18 39 8 13 4-11-16-17-18-46 6 32
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20—CONNECTORS & TERMINALS

Connectors, AN	1
Connectors, anode	2
Connectors, antenna	3
Connectors, audio	4
Connectors, battery	5
Connectors, cable	6
Connectors, coaxial cable	7
Connectors, feed through	8
Connectors, ground sheath	9
Connectors, hermetically sealed	10
Connectors, high-voltage	11
Connectors, interlock	12
Connectors, jack & telephone	13
Connectors, MIL	14
Connectors, junction	15
Connectors, microphone	16
Connectors, miniature	17
Connectors, phonograph	18
Connectors, power	19
Connectors, pressurized	20
Connectors, printed circuit	21
Connectors, R-F	22
Connectors, solderless	23
Connectors, strip	24
Connectors, subminiature	25

Accurate Electronics Corp 169 S Abbe Rd W Elyria Ohio	2-3-4-5-6-12-14-24
Admittance Namco Corp Marine St Farmingdale LI NY	1-7-22
Aerolite Electronics Corp 507 26 St Union City NJ	2-5-7-12-18
Aeronautical Electric Co 5656 Northwest Hwy Chicago 30 Ill	17-18-24-25
Airtron Inc 1101 W Elizabeth Ave Linden NJ	15-22
Alden Products Co 123A N Main St Brocton Mass	2-4-5-6-8-11-12-17-18
Allied Industries Inc 2500 Woodland Ave Louisville 10 Ky	7-10-11-14-17-20-22

Aluminum Co of America					
Alcoa Bldg Pittsburgh 19 Pa	19				
American Communications Corp					
280 Broadway New York 17 NY	3-7-23-25				
American Lava Corp Subs Minn Mining & Mfg Cherokee Blvd & Mfrs Rd Chattanooga 5 Tenn	7				
American Machine & Foundry Co Defense Products Group					
1101 N Royal St Alexandria Va	9-11-19				
Amphenol Electronics Corp					
1830 S 54 Ave Chicago 58 Ill	1-3-4-6-7-8-10-11-14-15-16-17-19-20-21-22-23-24-25				
AMP Inc Chemical Dielectrics Div					
155 Park St Elizabethtown Pa	23				
AMP Inc Harrisburg Pa	23				
Andrew California Corp					
941 E Maryland Ave Claremont Calif	1-3-6-7-8-22				
Andrew Corp					
363 E 75 St Chicago 19 Ill	3-7-14				
Anton Electronic Labs					
1226 Flushing Ave Brooklyn 6 NY	1-7-10-11-12-17-20-21-23-25				
Apparatus Development Co					
115 Main St Wethersfield 9 Conn	25				
Ark-Les Switch Corp					
51 Water St Watertown 72 Mass	17-21-23-24-25				
Armel Electronics Inc					
840 5 Ave Brooklyn 32 NY	6-11-14-17-19				
Auburn Spark Plug Co					
89 York St Auburn NY	6				
Audio Accessories Amityville NY	13				
Audio Sears Corp					
Shepard Hill Rd Roxbury NY	4-17				
Automatic Metal Products Corp					
323 Berry St Brooklyn 11 NY	7-19-22-25				
Automatic & Precision Mfg Co					
252 Hawthorne Ave Yonkers NY	14-19				
Avia Products Co					
7266 Beverly Blvd Los Angeles 36 Calif	1-20				
Barker & Williamson Inc					
Canal & Beaver Sts Bristol Pa	3-22				
Bead Chain Mfg Co					
110 Mountain Grove St Bridgeport 5 Conn	13				
Bendix Aviation Corp					
1104 Fisher Bldg Detroit 2 Mich	1-6-14				
Berg Mfg Corp					
142 Reno St New Cumberland Pa	21-23-24				
Bergen Wire Rope Co					
455 Gregg St Lodi NJ	6				
Birnbach Radio Co					
145 Hudson St New York 13 NY	2-4-5-6-8-11-12-13-16-17-18-19-23-24				
Blaco Mfg Co					
6541 Euclid Ave Cleveland 3 Ohio	9				
Blonder-Tongue Laboratories					
9-25 Alling St Newark 2 NJ	7-23				
Breeze Corps					
700 Liberty Ave Union NJ	5				
Buchanan Electrical Products Corp					
225 Route 22 Hillside NJ	6-11-17-19-20-23				
Buggie Inc H H PO Box 817	6-7-8-10-11-14-17-19-20-21-22-25				
Burdry Corp					
Omaton Div Norwalk Conn	5-6-7-8-9-14-19-20-23-24				
Cable Electric Products					
284 Daboll St Providence 7 RI	1-3-6-7-13-14-16-17-19				
Cal-Connector Co					
7360 Varna Ave N Hollywood Calif	1-3-6-13-14-20-22				
Cal-Met Electronics					
5860 Spring Oak Dr Hollywood 28 Calif	21				
Cambridge Thermionic Corp					
445 Concord Ave Cambridge 38 Mass	17-23				
Cannon Electric Co					
Eastern Div Pingree & Leavitt Sts Salem Mass	1-2-3-4-5-6-7-8-10-11-14-15-16-17-19-21-22-23-24-25				
Cannon Electric Co					
3208 Humboldt St Los Angeles 31 Calif	1-4-5-6-7-8-10-11-12-13-14-15-16-17-19-20-21-22-23-24-25				
Carol Electronics Corp					
315 W Stephen St Martinsburg W Va	4-19				
Central Porcelain Co					
511 Railroad St Columbiana Ohio	23				
Century Lighting Inc					
521 W 48 St New York 36 NY	19-24				
Chester Morton Electronics Corp					
10 St & Morton Ave Chester Pa	13-20				
Cinch Mfg Corp					
1026 S Homan Ave Chicago 24 Ill	3-5-6-7-8-16-17-18-19-20-21-22-23-24-25				
Circon Component Co.					
Santa Barbara Municipal Airport Goleta Calif	8-11-16-17-19-21-22-24-25				
Clark Controller Co					
1146 E 152 St Cleveland 10 Ohio	6				
Coaxial Connector Co					
37 N 2 Ave Mt Vernon NY	3-6-7-8-10-11-12-13-14-15-17-20-21-22-23-25				
Commercial Radio Sound Corp					
652 1 Ave New York 16 NY	7				
Connector Corp					
6025 N Keystone Ave Chicago 30 Ill	5-12-18-21				
Conn Telephone & Electric Corp					
70 Britannia St Meriden Conn	13				
Connector Corp of America					
3223 Burton Ave Burbank Calif	7				
Consolidated Electrodynamics Corp					
300 N Sierra Madre Villa Pasadena Calif	17				
Constantin & Co L L					
Route 46 Lodi NJ	10				
Continental Connector Corp					
34-63 56 St Woodside 77 NY	6-8-10-11-17-19-20-21-23-25				
Continental Electronics Ltd					
302 Oakland St Brooklyn 22 NY	7-13				
Corning Glass Works Corning NY	10-11				
Dage Electric Co					
67 N 2 St Beech Grove Ind	6-7-8-10-14-17-22-25				
Dante Electric Mfg Co					
Bantam Conn	5-6-23				
DeJur-Amsco Corp					
Electronic Sales Div 45-01 Northern Blvd Long Island City 1 NY	1-6-7-8-10-11-12-14-17-19-20-21-23-25				
Dielectric Products Eng'g Co					
Raymond Me	7-22				
Deutsch Co					
7000 Avalon Blvd Los Angeles 3 Calif	1-10-17				
Dialight Corp					
60 Stewart Ave Brooklyn 37 NY	14-15-16				
Dittmore-Freimuth Corp					
2517 E Norwich St Milwaukee 7 Wisc	7-8-10-14				
Dossert Mfg Corp					
249 Huron St Brooklyn 62 NY	6-14-19-23				
Dow-Key Co					
PO Box 57 Warren Minn	7				
Dudek & Co R C					
407 N Maple Dr Beverly Hills Calif	6-10-12-14-17-21-25				
Du Mont Labs Inc Allen B					
760 Bloomfield Ave Clifton NJ	1-7				
Duro Specialty Co					
811 Boston St Lynn Mass	6				
Eagle Electric Mfg Co					
23-10 Bridge Plaza S S Long Island City 1 NY	12-17				
Elco Corp					
M St below Erie Ave Philadelphia 24 Pa	6-17-21-23-24-25				
Electrical & Physical Instrument Corp					
42-19 27 St Long Island City 1 NY	7				
Electrical Specialty Co					
158 11 St San Francisco 3 Calif	23				
Electric Terminals Corp					
2019 Center St Cleveland 13 Ohio	23				
Enflo Corp					
Rte 38 at Airport Circle Pennsauken 11 NJ	3-8-11-17-25				
Entron Inc					
4902 Lawrence St Bladensburg Md	7-22-23				
Farnsworth Electronics Co Div IT&T					
3702 E Pontiac St Ft Wayne Ind	10-36				
Flexicon Corp					
1315 S 3 Ave Maywood Ill	1				
Fluorocarbon Products Inc Div US Gasket Co					
602 N 10 St Camden 1 NJ	3-7-8-11-12-13-14-17-18-19-21-25				
Frankel Connector Co					
27 Vestry St New York 13 NY	6-19-23				
Garde Mfg Co					
588 Eddy St Providence 3 RI	8-10-17-21-23-24-25				
Gee-Lar Mfg Co					
418 S Wyman St Rockford Ill	3				
General Cement Mfg Co Div Textron Inc					
400 S Wyman St Rockford Ill	3-5-6-13-14-16-17				
General Radio Co					
275 Massachusetts Ave Cambridge 39 Mass	7				
General RF Fittings Inc					
702 Beacon St Boston 15 Mass	3-6-7-8-10-11-12-13-14-15-17-19-20-21-22-23-25				
Good-All Electric Mfg Co					
Good-All Bldg Ogallala Nebr	14-22				
Gorn Electric Co					
Stamford Conn	10-11-14-17-20-21-25				
Graphik Circuits Div Cinch Mfg Corp					
200 S Turnbull Canyon Rd La Fuente Calif	6-21				
Gremer Mfg Co					
7 North Ave Wakefield Mass	3-4-7-10-11-14-16-17-20-21-22-25				
Gries Reproducer Corp					
125 Beechwood Ave New Rochelle NY	6-7				
Gruen Industries Inc Time Hill					
Cincinnati 6 Ohio	7				
Gulton Industries Inc					
212 Durham Ave Metuchen NJ	7-10-25				
Hallett Mfg Co					
1601 W Florence Inglewood Calif	6-7-8-9				
Heldor Mfg Corp					
238 Lewis St Paterson NJ	10				
Hermetic Connector Corp					
481 Washington St Newark NJ	8-10-14				
Hermetic Seal Corp					
29 S 6 St Newark 7 NJ	1-10-14				
Hobson Bros					
4940 W Lawrence Ave Chicago 30 Ill	2-11-23				
Hubbell Inc Harvey					
State St & Bostwick Ave Bridgeport 2 Conn	12-17-21-23-24-25				
Ideal Industries Inc					
5127 Park Ave Sycamore Ill	23				
Industrial Hardware Mfg Co					
109 Prince St New York 12 NY	2-3-5-12-21				
Industrial Products Co					
Div Danbury-Knudsen Box 148 Danbury Conn	7-22				
Insuline Corp of America					
186 Granite St Manchester NH	16				
Javex					
PO Box 646 Redlands Calif	3-4-6-7-8-19-23				
Jerrold Electronics Corp					
23 & Chestnut Sts Philadelphia 3 Pa	7-22-24				
Johnson Co E F					
Waseca Minn	17-23				
Jones Div Howard B Cinch Mfg Co					
1026 S Homan Ave Chicago 24 Ill	19-24				
Jones Electronics Hiram					
2313 W Olive St Burbank Calif	8				
Joy Mfg Co Electrical Products Div					
1201 Macklind Ave St Louis 10 Mo	6-8-10-11-14-15-19-23				
Joy Mfg Co					
333 Oliver Bldg Pittsburgh 22 Pa	1-2-6-7-8-9-10-11-12-14-15-17-19-20				
Keller Tool Div Gardner-Denver Co					
1333 Fulton St Grand Haven Mich	23				
Kennedy Industries					
6808 Vista del Mar Playa del Rey Calif	21-23				
Keystone Electronics Corp					
423 Broome St New York 13 NY	5-24				
Kliegl Bros					
321 W 50 St New York 19 NY	5-6				
Koiled Kords Inc					
1565 Dixwell Ave New Haven 14 Conn	1-14				
Kolton Electric Mfg Co					
123 NJ Railroad Ave Newark 5 NJ	6-23				
Krueger & Hudepohl					
1041 Evans St Cincinnati 4 Ohio	6-8-11-19-23				
Lab-Tronics Inc					
3656 N Lincoln Ave Chicago 13 Ill	3-4-5-6-8-10-13-16-17-18-25				
Lerco Electronics Inc					
501 S Varney St Burbank Calif	8-21				
Maconson Co					
3260 Motor Ave Los Angeles 34 Calif	6-8-16-18				
Malco Tool & Mfg Co					
4025 W Lake St Chicago 24 Ill	3-12-21-23				
Mandex Mfg Co					
2608 W 16 St Chicago 8 Ill	2-4-7-8-16-17-18-21-22				
Mayfair Molded Products Corp					
3700 N Rose St Franklin Park Ill	2-11				
Metal Specialty Products Corp					
27-01 Brooklyn Queens Expressway W Woodside 77 NY	19				
Methode Mfg Corp					
7447 W Wilson Ave Chicago 31 Ill	5-6-17-21				
Micarta Fabricators Inc					
5324 N Ravenswood Ave Chicago 40 Ill	2-5-12-21				
Microdot Inc	</				

Potter Aeronautical Corp
P O Box 532 Union NJ 6
Prodelin Inc
307 Bergen Ave Kearny NJ 6-7
Progress Electronics Co
296 Broadway New York 7 NY 1-7-22
Pye Canada Ltd
82 Northline Rd
Toronto 16 Ontario Canada 6-7
The Pyle-National Co
1334 N Kostner Ave
Chicago 51 Ill 6-8-9-14-19-20
Raypar Inc
7800 W Addison St Chicago 34 Ill 12
Raytheon Mfg Co Ceramic Sales
Foundry Ave Waltham Mass 7-8-10-11-20-25
Remler Co
2101 Bryant St
San Francisco Calif 4-11-14-16-19
Revere Corp of America
Wallinford Conn 6-14
Richards Electrocraft Inc
3739 N Kedzie Ave Chicago 18 Ill 13-16-17-25
Robinson Machine Works
802 E 8 St New Albany Ind 7-8-9-17-21
Rodale Mfg Co
6 & Minor Sts Emmaus Pa 6-12-17
Roflan Co
Topsfield Mass 3-13-16-17
Sangamo Electric Co
Springfield Ill 24
Scintilla Div Bendix Aviation Corp
Delaware Ave
Sidney NY 1-6-11-14-17-19-20-23
Seals Ltd
1010 Mission St
S Pasadena Calif 1-10-14-17-20-25
Smith Inc Herman H
2326 Nostrand Ave 2-3-5-6-7-8-12-13
Brooklyn 10 NY 14-16-17-18-23-24-25
Stimpson Co Edwin B
70 Franklin Ave Brooklyn 5 NY 6
Stone City Machine & Tool Co
1206 T St Bedford Ind 24
Stupakoff Div Carborundum Co
Latrobe Pa 8-10
Switchcraft Inc
1328 N Halsted St Chicago 22 Ill 4-6-13-16-17
Techniques Inc
52 Jackson Ave Hackensack NJ 21
Telex
1633 Eustis St St Paul 1 Minn 25
Tenna Mfg Co
7580 Garfield Blvd Cleveland 25 Ohio 7
Thomas & Betts Co
36 Butler St Elizabeth NJ 6-7-9-23
Tru-Connector Corp
416 Union St
Lynn Mass 3-7-10-11-14-17-19-20-22-25
TV Hardware Mfg Co Div Textron Inc
400 S Wyman St Rockford Ill 3
Ucinite Co Div United-Carr Fastener Corp
459 Watertown St
Newtonville 60 Mass 2-5-8-13-21
Unimatic Corp
Sherwood Lane Caldwell NJ 6
Union Electronics & Machine Corp
Moulton & Monroe St
Georgetown Mass 6-7-10-11-17-20-22-25
United-Carr Fastener Corp
Cambridge 42 Mass 2-5-6-25-26
Uniwave Inc
2 Marine St Farmingdale NY 8
US Components Inc
454 E 148 St
New York 55 NY 6-10-14-17-19-21-23-25
US Instrument Corp
P O Box 33E Charlottesville Va 13-24
US Stoneware Co Alite Div
Orville Ohio 10
Vaco Products Co
317 E Ontario St Chicago 11 Ill 23
Viking Industries Inc
21343 Roscoe Blvd
Canoga Park Calif 10-11-14-17-20-21-25
Wade Electric Products Co
Box 271 Sturgis Mich 6-15
Waldom Electronics Inc
4625 W 53 St Chicago 32 Ill 2-12-13-18-23
Walco Electronics Mfg Co
100 W Green St
Rockford Ill 3-4-5-8-13-16-17-18-23-24-25
Waltham Horological Corp
395 Lynnway
Lynn Mass 3-4-6-7-8-10-13-14-16-17-20-22-25
Waltham Screw Co
77 Rumford Ave Waltham 54 Mass 7
Walworth Co
60 E 42 St New York 17 NY 7-14-22
Westbury Electronics Inc
300 Shames Dr Westbury NY 7-8-22
Western Int'l Co
45 Vesey St
New York 7 NY 2-4-6-7-8-13-14-15-16-20-22
Wheaton Co T C
Millville NJ 10
Whitaker Cable Corp
1301 Burlington St N Kansas City 16 Mo 23
Willard Storage Battery
246 E 131 St Cleveland 1 Ohio 5

Winchester Electronics Inc
Willard Rd
Norwalk Conn 6-10-11-14-17-19-20-21-25
Winder Aircraft Corp of Florida
P O Box 2397 Drane Field
Lakeland Fla 5-6-16
Wisconsin Porcelain Co
121 Lincoln St Sun Prairie Wisc 23
Workman TV Inc
309 Queen Anne Rd Teaneck NJ 18

20A—CONNECTORS & TERMINALS

Connectors, tube 26
Connectors, twin line 27
Connectors, waterproof 28
Connectors, wire 29
Patch cords 30
Plugs 31

TERMINALS & JACK PANELS

Headers 32
Jack panels 33
Junction boxes 34
Terminals 35
Terminal, hermetically sealed .. 36
Terminals, snap 37
Terminals, solderless 38
Terminals, standoff 39
Terminal boards 40
Terminal strips 41

Abalon Precision Mfg Corp
540 Casanova St New York 59 NY 34
Accurate Electronics Corp
169 S Abbe Rd W Elyria Ohio 31-33-35-40-41
Adler Electronics Inc
1 LeFevre Lane New Rochelle NY 33
Advanced Vacuum Products Inc
430 Fairfield Ave Stamford Conn 35
Aerolite Electronics Corp
507 26 St Union City NJ 30-33-34-35-39-40-41
Aeronautical Electric Co
5656 Northwest Hwy Chicago 30 Ill 29-31
Aeronautical Electronics Inc
P O Box 6527 Raleigh NC 34
Aircraft & Electronic Specialties
22 S Green St Brownsburg Ind 34
Aircraft Radio Corp
Boonton NJ 40
Airflo Instrument Co
53 Addison Rd Glastonbury Conn 31-33
Air Transport Mfg Co
1114 N Sycamore Ave
Los Angeles 38 Calif 34-40
A-K Mfg Co
115 S Northwest Hwy Barrington Ill 30
Alden Products Co
123A N Main St
Brocton Mass 26-27-29-30-31-35-40
Allen-Bradley Co
136 W Greenfield Ave
Milwaukee 4 Wisc 35-39-41
Allied Allegri Co
141 River Rd Nutley 10 NJ 40
American Communications Corp
280 Broadway New York 17 NY 33-40
American Insulator Corp
New Freedom Pa 40
American Lava Corp Subs Minn Mining
& Mfg Cherokee Blvd & Mfrs Rd
Chattanooga 5 Tenn 35-36-39-40-41
American Machine & Foundry Co Defense
Products Group 1101 N Royal St
Alexandria Va 28
Amphenol Electronics Corp
1830 S 54 Ave
Chicago 50 Ill 26-27-28-29-31-32-40
AMP Inc
Harrisburg Pa 38
Anchor Products Co
2712 W Montrose Ave Chicago 18 Ill 34
Anchor Specialty Mfg Co
Hollister Rd Teterboro NJ 40
Anton Electronic Labs
1226 Flushing Ave
Brooklyn 6 NY 28-31-36-41
Ark-Les Switch Corp
51 Water St
Watertown 72 Mass 29-31-35-38-40-41
Armel Electronics Inc
840 5 Ave Brooklyn 32 NY 35-39-40-41
Artisan Metal Works Co
11400 Madison Ave Cleveland 2 Ohio 31
Associated Eng'g Corp
65 Kent St Brookline 46 Mass 30
Atlantic Research Corp
901 N Columbus St Alexandria Va 28
Atlas E-E Corp
47 Prospect St Woburn Mass 35-40
Audio Accessories
Amityville NY 30-33-41
Audio Development Co
2833 13 Ave S Minneapolis Minn 31-33

Autel Electronics Co
P O Box 226 Linden NJ 36
Automatic Coil Co
415 Bedford Ave Brooklyn 11 NY 40
Automatic Electric Co
1033 W Van Buren St Chicago 7 Ill 33-40-41
Automatic & Precision Mfg Co
252 Hawthorne Ave Yonkers NY 31
Bead Chain Mfg Co
110 Mountain Grove St
Bridgeport 5 Conn 13-31-35
Beck's Inc
298 E 5 St St Paul 1 Minn 40-41
Bendix Aviation Corp
1104 Fisher Bldg Detroit 2 Mich 28
Berg Mfg Corp
142 Reno St New Cumberland Pa 38
Bernco Engineering Corp
2320 S Tibbs Ave Indianapolis 41 Ind 34
Birnbach Radio Co
145 Hudson St
New York 13 NY 29-31-35-39-40
Brilhart Plastics Corp
Old Country Rd Mineola NY 36
British Electronic Sales
Box 132 Oakland Gardens 64 NY 36-39
Buchanan Electrical Products Corp
225 Route 22 Hillside NJ 29-35-38-40-41
Buggie Inc H H
P O Box 817 Toledo 1 Ohio 28-30
Bundy Electronics Corp
171 Fabyan Pl Newark 12 NJ 30
Burndy Corp Omator Div
Norwalk Conn 28-29-35
Cable Electric Products
234 Daboll St Providence 7 RI 29-31
Cal-Connector Co
7360 Varna Ave N Hollywood Calif 31
Cambridge Thermionic Corp
445 Concord Ave
Cambridge 38 Mass 31-35-38-39-40-41
Cannon Electric Co Eastern Div
Pingree & Leavitt Sts Salem Mass 28
Cannon Electric Co
3208 Humboldt St
Los Angeles 31 Calif 28-29-31
Carter Parts Co
3401 W Madison St Skokie Ill 31
C B C Electronics Co
2601 N Howard St Philadelphia 33 Pa 30
Century Electronics Co
34 Oleander St Cocoa Fla 30
Century Lighting Inc
521 W 43 St New York 36 NY 30-33
Ceramaseal Inc
P O Box 25 New Lebanon Center NY 36
Cinch Mfg Corp
1026 S Homan Ave
Chicago 24 Ill 31-35-39-40-41
Circon Component Co
Santa Barbara Municipal Airport
Goleta Calif 27-29-35
Coaxial Connector Co
37 N 2 Ave Mt Vernon NY 27-28-29-30-31-33
Collins Radio Co
855 35 St N E Cedar Rapids Iowa 33
Columbia Metal Box Co
260 E 143 St New York 51 NY 34
Column Machine Co
87 State St Lynn Mass 35
Connector Corp
6025 N Keystone Ave Chicago 30 Ill 26
Conn Telephone & Electric Corp
70 Britannia St Meriden Conn 33
Consolidated Productions Inc
Broward Int'l Airport Ft Lauderdale Fla 34
Constantin & Co L L
Route 46 Lodi NJ 32-36
Continental Connector Corp
34-63 56 St
Woodside 77 NY 28-35-36-39-40-41
Continental Electronics Ltd
302 Oakland St Brooklyn 22 NY 33
Curtis Development & Mfg Co
3266 N 33 St Milwaukee 16 Wis 40-41
Dale Boisen Co
2928 Nebraska Ave Santa Monica Calif 40
Dante Electric Mfg Co
Bantam Conn 29-35-38
Dayton Aviation Radio & Equipment Corp
R R 3 Troy Ohio 33
Decatur Electronic Industries Corp
203 Orinoco Dr Brightwaters LI NY 30-40
Deutsch Co
7000 Avalon Blvd Los Angeles 3 Calif 31
Diamonite Products Mfg Co
217 4 St N E Canton 2 Ohio 39
Dittmore-Freimuth Corp
2517 E Norwich St Milwaukee 7 Wis 33
Dossert Mfg Corp
249 Huron St Brooklyn 62 NY 35-38
Dudek & Co R C
407 N Maple Dr Beverly Hills Calif 31
Duralith Corp
1025 Race St Philadelphia 7 Pa 40-41
Eagle Electric Mfg Co
23-10 Bridge Plaza S
Long Island City 1 NY 28-29-31
Eastern Specialty Co
3617 N 8 St Philadelphia 40 Pa 38
Eitel-McCullough Inc
798 San Mateo Ave San Bruno Calif 26

Elco Corp M St below Erie Ave Philadelphia 24 Pa	26-29-31	Hoffman Electronics Corp 3761 S Hill St Los Angeles 7 Calif	41	Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	30
Electrical Industries 691 Central Ave Murray Hill NJ	36	Hoffman Eng'g Corp Anoka Minn	34	Mid-West Conveyor Co Metal Products Div 7 & Sunshine Rd Kansas City 15 Kan	33
Electric Terminals Corp 2019 Center St Cleveland 13 Ohio	35-38	Holland Electronics 2133 Central Dr S East Meadow NY	33	Mil Case Corp 35-18 37 St Long Island City NY	33-31-40-41
Elm Labs 10 Washington Ave Hastings-on-Hudson NY	40-41	Hollingsworth Co Phoenixville Pa	38	Milgo Electronic Corp 7601 N W 37 Ave Miami 47 Fla	30
Elzee Metal Products Co 775 39 St Brooklyn 32 NY	33-34	Holub Industries Inc 413 De Kalb Ave Sycamore Ill	29	Millen Mfg Co James 150 Exchange St Malden 48 Mass	40-41
Emerson Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY	40-41	Hubbell Inc Harvey State St & Bostwick Ave Bridgeport 2 Conn	28-31-35-38-41	Miller Co J W 5917 S Main St Los Angeles 3 Calif	40-41
Empire Electronics Co 166 River St Paterson 1 NJ	30	Hughey & Phillips 3300 N San Fernando Blvd Burbank Calif	34	Minnesota Mining & Mfg Co 900 Fauquier Ave St Paul 6 Minn	29
Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ	36-39-40-41	Ideal Industries Inc 5127 Park Ave Sycamore Ill	29	Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	34
Engineered Electronics Co 506 E 1 St Santa Ana Calif	33	iE Mfg 325 N Hoyne Ave Chicago 12 Ill	35-36-37-38-39-40-41	Mitronics Inc 1290 Central Ave Hillside NJ	35-36
Equipment & Service Co 6815 Oriole Dr Dallas 7 Texas	31-34	Industrial Devices Inc 982 River Rd Edgewater NJ	31	Molded Insulation Co 335 E Price St Philadelphia 44 Pa	31
Excellex Electronics Inc 475 Chestnut St Cedarhurst LI NY	35-41	Industrial Hardware Mfg Co 109 Prince St New York 12 NY	40-41	Molding Corp of America 58 Weybosset St Providence 3 RI	35-36-39-40-41
Farnsworth Electronic Co Pacific Div 815 S San Antonio Rd Palo Alto Calif	36-39	Industrial Engravers Inc 2212 McDonald Ave Brooklyn 23 NY	41	Morse Co Frank W 1300 Soldiers Field Rd Boston 35 Mass	29-35
Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind	36	Insuline Corp of America 186 Granite St Manchester NH	30-31-33-40	Mosley Electronics Inc 8622 St Charles Rock Rd St Louis 14 Mo	27
Federal Screw Products Inc 3917 N Kedzie Ave Chicago 18 Ill	35-38-40-41	International Resistance Co 401 N Broad St Philadelphia 8 Pa	36	Motiograph Inc 4441 W Lake St Chicago 24 Ill	33
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	40-41	Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY	33	Mutual Electronic Industries Corp 85 Beechwood Ave New Rochelle NY	41
Feiner & Sons P 522 W 45 St New York 36 NY	34	Janco Corp 3111 Winona Ave Burbank Calif	34	National Company Inc 61 Sherman St Malden 48 Mass	35
Fisher & Crome 109 N Camac St Philadelphia 7 Pa	33-40-41	Javex P O Box 646 Redlands Calif	27-29-31	National Tel-Tronics Corp 52 St Casimir Ave Yonkers NY	30-31-33-35-37-39-40-41
Flexonics Corp 1315 S 3 Ave Maywood Ill	26	JFG Mfg Co 6101-16 Ave Brooklyn 4 NY	30	Nems-Clarke Inc 9919 Jesup-Blair Dr Silver Spring Md	33
Fluorocarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ	31-33-35-36-39-40	Jodee Plastics Co 213 Shepherd Ave Brooklyn 8 NY	40	Neosil Products Div Rubber Associates 745 5 Ave New York 22 NY	28
Frankel Connector Co 27 Vestry St New York 13 NY	38	Johns-Manville 22 E 40 St New York 16 NY	40	Newcomb Spring Corp 177 E Hawthorne Ave Valley Stream NY	29-37
Freeway Washer & Stamping Co 4911 Grant Ave Cleveland 5 Ohio	35	Jones Div Howard B Cinch Mfg Co 1026 S Homan Ave Chicago 24 Ill	31-40-41	Norma Hoffman Bearings Corp Walker Div Hamilton Ave Stamford Conn	33
Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ	35-36	Jones Electronics Hiram 2313 W Olive St Burbank Calif	35-36-39-40-41	North Electric Co 553 S Market St Galion Ohio	30-31-33-35-41
Fusite Corp 6000 Fernview Ave Cincinnati 13 Ohio	36	Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo	28	Northern Plastics Corp 2nd Market St LaCrosse Wis	40
Garde Mfg Co 588 Eddy St Providence 3 RI	31-32-35-36-39-40	Joy Mfg Co 333 Oliver Bldg Pittsburgh 22 Pa	28	Olympic Plastics Co 3471 S LaCienega Blvd Los Angeles 16 Calif	40
General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	31	Kees Mfg Co F D 700 Park St Beatrice Nebr	34	Omega Industries Inc 36-39 171 St Flushing NY	35
General Ceramics Corp Crows Mill Rd Keasbey NJ	36	Keisler Bros 321 W 50 St New York 19 NY	29	Page-Foxwell Corp 1311 Riverside Dr Los Angeles 31 Calif	31
General Components Inc 225 E 144 St Bronx 51 NY	29-35-38-39-40-41	Koiled Kords Inc 1565 Dixwell Ave New Haven 14 Conn	28-31	Painton & Co Ltd c/o British Electronic Sales Co Box 132 Oakland Gardens 64 NY	31
General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY	29	Kolton Electric Mfg Co 123 N J Railroad Ave Newark 5 NJ	29-35-38	Panellit Inc 7401 N Hamlin Ave Skokie Ill	33
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	40	Krueger & Hudspohl 1041 Evans St Cincinnati 4 Ohio	35-36-38-39	Patton-MacGuyer Co 17 Virginia Ave Providence 5 RI	35
General Machine & Instrument Co Clinton Rd & Rt 46 Caldwell NJ	41	Kulka Electric Mfg Co 633 S Fulton Ave Mt Vernon NY	35-37-40-41	Permonite Mfg Co 444 Lake Shore Dr Chicago 11 Ill	31-35-40-41
General Metal Products Co 1010 Centre St Easton Pa	34-40	Kuss Industries Inc Tacony & Lewis Sts Philadelphia 24 Pa	30	Phalo Plastics Corp 25 Foster St Worcester 8 Mass	31
General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	30-31	Lab-Tronics Inc 3656 N Lincoln Ave Chicago 13 Ill	30-31-35	PIC Design Corp 477 Atlantic Ave E Rockaway LI NY	35-40
General RF Fittings Inc 702 Beacon St Boston 15 Mass	27-28-29-31	Laminated Sheet Products Corp 449 Neponset St Norwood Mass	40-41	Pix Mfg Co 75 Hudson St Newark 3 NJ	29-32-35
Glass & Bro Harry H 10 Van Cortlandt Ave E New York 68 NY	41	Lane Electronics Mfg Corp 7254 Atoll Ave N Hollywood Calif	33	Plastic-Craft Products Corp 1 Station Plaza W Nyack NY	40-41
Globe Electrical Mfg Co 1729 W 134 St Gardena Calif	35-36-39-40-41	Lercio Electronics Inc 501 S Varney St Burbank Calif	35-37-38-39-40-41	Plastic Mold & Fng'g Co 157 Clifford St Providence RI	26
Goe Eng'g Co 219 S Mednik Ave Los Angeles 22 Calif	35-39	Litton Industries Components Div 5873 Rodeo Rd Los Angeles 16 Calif	35-39-40-41	Pomona Electronics Co 1126 W 5 Ave Pomona Calif	30-31-33
Graphik Circuits Div Cinch Mfg Corp 200 S Turnbull Canyon Rd La Puente Calif	40-41	Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	35-40	Precise Instrument Parts Co 4520 San Fernando Rd Glendale 4 Calif	35
Grayhill Inc 561 Hillgrove Ave LaGrange Ill	27	Long Inc Thomas J 215 Stonehinge Lane Carle Place LI NY	40-41	Precision Metal Products Co 41 Elm St Stoneham Mass	35-39-40
Gremar Mfg Co 7 North Ave Wakefield Mass	28	Lorentzen Inc H K 391 W Broadway New York 12 NY	35-41	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	33-36
Gulton Industries Inc 212 Durham Ave Metuchen NJ	28	Lundey Associates 694 Main St Waltham 54 Mass	36	The Pyle-National Co 1334 N Kostner Ave Chicago 51 Ill	28-31-34
Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	34	McCormick Selph Assoc P O Box 6 Hollister Airport Hollister Calif	36	Radio Corp of America Commercial Electronic Products Camden 2 NJ	33
Hallett Mfg Co 1601 W Florence Inglewood Calif	28-29-31-34-35	Macon Co 3260 Motor Ave Los Angeles 34 Calif	28	Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass	28-35-36-39
Harwood Electronics Co 466 W Superior St Chicago 10 Ill	34	Malkin-Illion Co 400 Coit St Irvington 11 NJ	33	Raytheon Mfg Co Microwave & Power Tube Operations Foundry Ave Waltham Mass	35-36
Heldor Mfg Corp 238 Lewis St Paterson NJ	35-36-39	Mandex Mfg Co 2608 W 16 St Chicago 8 Ill	26-35-41	REF Mfg Corp 893 Jericho Turnpike Mineola NY	34
Hermaseal Co 1101 Lafayette St Elkhart Ind	36	Marshall Associates Inc John Box 2463 Bridgeport 8 Conn	37	Reiner Electronics Co Centre & Glendale Sts Easton Pa	34-40
Hermetite Corp 702 Beacon St Boston 15 Mass	36	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	40	Remler Co 2101 Bryant St San Francisco Calif	28-31-33
Hobson Bros 4940 W Lawrence Ave Chicago 30 Ill	26-40	Metal Specialty Products Corp 27-01 Brooklyn Queens Expressway W Woodside 77 NY	34	Revere Corp of America Wallingford, Conn	34
		Method Mfg Corp 7447 W Wilson Ave Chicago 31 Ill	31-35	Richards Electrocraft Inc 3739 N Kedzie Ave Chicago 18 Ill	25-31
		Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill	31-35-40-41	Richardson Co 27 Ave & Lake St Melrose Park Ill	35-40-41
				Rodale Mfg Co 6 & Minor Sts Emmaus Pa	28-31

Rogers Corp		U S Instrument Corp		Comac Instrument Co	
Rogers Conn	40	P O Box 33E		66-11 99 St Forest Hills 74 NY	10
Romar Plastics Inc		Charlottesville Va	31-33-40-41	Communication Accessories Co	
1311 E Main St St Charles Ill	40	U S Stoneware Co Alite Div	36	110 St & 71 Hwy Hickman Mills Mo	10
Rubbercraft Corp of Calif		Orville Ohio		Consolidated Avionica Corp	4-5
1800 W 220 St Torrance Calif	35	Vaco Products Co	35-38	66 Brooklyn Ave Westbury NY	
Saxton Products Inc		317 E Ontario St Chicago 11 Ill		Consolidated Productions Inc	
1661 Boone Ave New York 60 NY	29	Vector Electronic Co		Broward Int'l Airport Ft Lauderdale Fla	10
Scintilla Div Bendix Aviation Corp		3352 San Fernando Rd		Continental Electronics Ltd	
Delaware Ave Sidney NY	28	Los Angeles 65 Calif	31-35-37-40-41	302 Oakland St Brooklyn 22 NY	5-10
Sealectro Corp		Viking Industries Inc		Continental Electronics Mfg Co	
610 Fayette Ave Mamaroneck NY	30-35-36-39	21343 Roscoe Blvd Canoga Park Calif	28-31	4212 S Buckner Blvd Dallas 27 Texas	10
Seals Ltd		Vitrosol Corp		Cook Electric Co	
1010 Mission St S Pasadena Calif	31-32-36	709 E 106 St		2700 Southport Ave Chicago 14 Ill	4
Shakeproof Div Illinois Tool Works		Indianapolis 20 Ind	32-35-36-39-40-41	Dalmo Victor Co Div Textron Inc	
St Charles Rd Elgin Ill	35	Volta Mfg Co		1515 Industrial Way Belmont Calif	2
Shaw Insulator Co		2154 N Halsted St Chicago 14 Ill	40	Daven Co	
160 Coit St Irvington NJ	40	Wade Electric Products Co		Route 10 Livingston NJ	1-3-9
Sheffco Mfg Corp		Box 271 Sturgis Mich	29-35-37-38-40-41	Dayton Aviation Radio & Equipment Corp	4-10
323 Berren Blvd Fairview NJ	35	Waldom Electronics Inc		R R 3 Troy Ohio	
Silicone Insulation Inc		4625 W 53 St Chicago 32 Ill	27	DeMornay-Bonardi Corp	
Seabury Ave & Butler Pl Bronx 61 NY	40	Waisco Electronics Mfg Co		780 S Arroyo Pkwy Pasadena Calif	4
Silicone Seals Inc		100 W Green St Rockford Ill	29-35-38-41	Devco Eng'g Inc	
3125 Milwaukee Ave Chicago 18 Ill	36-39-41	Waltham Horological Corp		P O Box 387 Caldwell NJ	5
Smith Inc Herman H		395 Lynnway Lynn Mass	31	Diamond Power Specialty Corp	
2326 Nostrand Ave		Waltham Screw Co		Lancaster Ohio	11
Brooklyn 10 NY	26-31-35-40-41	77 Rumford Ave Waltham 54 Mass	35	Dietz Co Henry G	
Spaulding Fibre Co		Warren Plastics Corp		12-16 Astoria Blvd	
310 Wheeler St Tonawanda NY	40	Warren Pa	32	Long Island City 2 NY	13
Sphere Co		Western Int'l Co		Dunlap Electronics	
25 Amity St Little Falls NJ	36	45 Vesey St New York 7 NY	28-33	764 9 St Des Moines 14 Iowa	1
Spivey Inc James S		Millville NJ	35-36-39-41	Dynamics Research Associates Div	
4908 Hampden Lane Washington 14 DC	33	Whitaker Cable Corp		Universal Match Corp P O Box 5341	4
Standard Electric Time Co		1301 Burlington St		Ferguson 21 Mo	4
89 Logan St Springfield 2 Mass	30-31	N Kansas City 16 Mo	29-35-38	Electric Regulator Corp	
Standard Electronics Corp Sub Dynamics		Whitso Inc		Pearl St Norwalk Conn	4-9
Corp of America 285 Emmett St		9330 Byron St Schiller Park Ill	39	Electrical Communications Inc	
Newark 5 NJ	30	Willard Storage Battery		765 Clementina St	
Standard Record Mfg Co		246 E 131 St Cleveland 1 Ohio	38	San Francisco 3 Calif	6-10-12
70 N San Gabriel Blvd		Winchester Electronics Inc		Electro-Physics Co	
Pasadena 8 Calif	40-41	Willard Rd Norwalk Conn	28-39	287 Broadway New York 7 NY	7-8
States Co		Winder Aircraft Corp of Florida		Electrola Inc	
19 New Pa Ave Hartford 6 Conn	40	P O Box 2397 Drane Field		7517 N Clark St Chicago 26 Ill	10
Stimpson Co Edwin B		Lakeland Fla	33-34-40-41	Electron-Radar Products	
70 Franklin Ave Brooklyn 5 NY	29-35-38	Wisconsin Porcelain Co		4806 W Chicago Ave Chicago 51 Ill	7-12
Stone City Machine & Tool Co		121 Lincoln St Sun Prairie Wis	29	Electronic Specialty Co	
1206 7 St Bedford Ind	26-29-35-41	Zell Products Corp		5121 San Fernando Rd	
Strat-O-Seal Mfg Co		280 Main St Norwalk Conn	36	Los Angeles 39 Calif	4-6
3039 W Fullerton Ave		Zierick Mfg Corp		Elm Labs	
Chicago 47 Ill	36-40-41	Beechwood & Rockdale Ave		10 Washington Ave	
Stromberg-Carlson Div General		New Rochelle NY	85	Hastings-on-Hudson NY	10-11
Dynamics Corp 100 Carlson Rd				Erco Radio Labs Inc	
Rochester 3 NY	31-41			637 Stewart Ave Garden City NY	10
Stupakoff Div Carborundum Co				Federal Telephone & Radio Co	
Latrobe Pa	35-36-39			Div IT&T 100 Kingsland Rd	
Swedlow Plastics Co				Clifton NJ	2-4-10
6986 Bandini Blvd				Fischer & Porter Co	
Los Angeles 22 Calif	40-41			478 Warminster Rd Hatboro Pa	9
Switchcraft Inc				Fisher Pierce Co	
1328 N Halsted St Chicago 22 Ill	31-33			170 Pearl St S S Braintree 85 Mass	5-7
Sylvania Electric Products Inc				Frequency Standards Inc	
1740 Broadway New York 19 NY	31-32			P O Box 504 Asbury Park NJ	4
Tatnall Measuring Systems Co				General Control Co	
Kimberton Rd Phoenixville Pa	34			1200 Soldiers Field Rd	
Taylor Fibre Co Norristown Pa	40-41			Boston 34 Mass	10-11
Technical Ply-Woods Sales				General Electric Co Apparatus Sales Div	
6756 Crandon Ave Chicago 49 Ill	33			1 River Rd Schenectady 5 NY	4
Techniques Inc				General Radio Co	
52 Jackson Ave Hackensack NJ	40			275 Massachusetts Ave	
Telectro Industries Corp				Cambridge 39 Mass	5
35-18 37 St Long Island City 1 NY	30-33			Gordon Enterprises	
Telematic Industries Inc				5362 N Cahuenga Blvd N Hollywood Calif	8
16 Howard Ave Brooklyn 7 NY	30			Hallamore Electronics Co	
Telephonics Corp				8352 Brookhurst Ave Anaheim Calif	11
Park Ave Huntington LI NY	33			Hammarlund Mfg Co	
Telex				460 W 34 St New York 1 NY	10
1633 Eustis St St Paul 1 Minn	33			Hancock Electronics Corp	
Telker Inc N Murray				2553 Middlefield Rd Redwood City Calif	11
Ridge Rd Elyria Ohio	40			Hanson-Gorrill-Brian	
Thale Eng'g Corp				85 Hazel St Glen Cove NY	6
2104 E Villa St Pasadena Calif	34			Hartman Electrical Mfg Co	
Thomas & Betts Co				175 N Diamond St Mansfield Ohio	4
36 Butler St Elizabeth NJ	28-29-35-38			Hoover Electronics Co	
Thompson-Bremer & Co Sub				3640 Woodland Ave Baltimore 7 Md	10
American Machine & Fdry				Hughey & Phillips	
520 N Dearborn St Chicago 10 Ill	35			3300 N San Fernando Blvd	
Thor Ceramics Inc				Burbank Calif	5-7-12
225 Belleville Ave Bloomfield NJ	39			Hupp Electronics Co Div Hupp Corp	
Torwico Electronics Inc				743 Circle Ave Forest Park Ill	5-7-12
1090 Morris Ave Union NJ	35-36			Illumitronic Eng'g Co	
Triad Transformer Corp				680 E Taylor Ave Sunnyvale Calif	7
4055 Redwood Ave Venice Calif	36			Industrial Research Labs Div Aeronca	
Tri-Dex Electronics				Mfg Corp Hilltop & Frederick Rds	
P O Box 1207 Lindsay Calif	40-41			Baltimore 28 Md	4-9
Trimm Inc				Jerrold Electronics Corp	
400 W Lake St Libertyville Ill	31-33			23 & Chestnut Sts Philadelphia 3 Pa	4-11
Tri-Point Plastics Inc				Johnson Co	
175-I U Willets Rd				E F Waseca Minn	4
Albertson LI NY	35-39-40-41			Kintel (Kay Lab)	
Tru-Connector Corp				5725 Kearny Villa Rd	
416 Union St Lynn Mass	28			San Diego 12 Calif	11
Ucinite Co Div United-Carr				Kliegl Bros	
Fastener Corp 459 Watertown St				321 W 50 St New York 19 NY	5
Newtonville 60 Mass	31			Kollman Instrument Corp Standard	
Union Electronics & Machine Corp				Coil Products 80-08 45 Ave	
Moulton & Monroe St Georgetown Mass	28			Eimhurst 73 NY	7
United Fabricators & Electronics				Kupfrian Mfg Corp	
Myrtle & Water Sts Stillwater Minn	32			395 State St Binghamton NY	10-11
United Mineral & Chemical Corp				Lane Electronics Mfg Corp	
16 Hudson St New York 13 NY	35-36			7254 Atoll Ave N Hollywood Calif	10
				Larson Instrument Co	
				24 Orchard St Tarrytown NY	7

21—CONTROL EQUIPMENT, COMMUNICATIONS

Controls, audio recording	1
Controls, automatic tuning	2
Controls, broadcast input	3
Controls, frequency	4
Controls, illumination	5
Controls, motor & generator	6
Controls, photoelectric	7
Controls, photographic	8
Controls, power level	9
Controls, remote radio	10
Controls, remote TV	11
Controls, tower lighting	12
Controls, ventilation	13
Tuners, automatic	14

Adler Electronics Inc		1 LeFevre Lane New Rochelle NY	3
Alliance Mfg Co		Lake Park Blvd Alliance Ohio	11
Allis-Chalmers Mfg Co		Milwaukee 1 Wis	6
Altec Lansing Corp		1515 S Manchester Ave Anaheim Calif	1
American Metric Corp		40 Haddon Ave Camden 3 NJ	5
Anton Electronic Labs		1226 Flushing Ave Brooklyn 6 NY	7
Askania Regulator Co		240 E Ontario St Chicago 11 Ill	4-7
Avion Div ACF Industries Inc		11 Park Pl Paramus NJ	4
Avionics Ltd		P O Box 200	
Niagara-on-the-Lake Ontario Canada	7		
Bendix Aviation Corp Bendix Radio		Div East Joppa Rd	
Towson 4 Md	10		
Bendix Aviation Corp		1104 Fisher Bldg Detroit 2 Mich	10
Bogoe Electric Mfg Co		Iowa Ave Paterson 3 NJ	6
Bowmar Instrument Corp		2415 Pennsylvania St Ft Wayne Ind	10
Canadian Aviation Electronics Ltd		6214 Cote de Liesse Rd	
St Laurent Quebec Canada	10		
Century Lighting Inc		521 W 43 St New York 36 NY	5
Collins Radio Co		855 35 St N E Cedar Rapids Iowa	2-4-10

66-11 99 St Forest Hills 74 NY	10
Communication Accessories Co	
110 St & 71 Hwy Hickman Mills Mo	10
Consolidated Avionica Corp	
66 Brooklyn Ave Westbury NY	4-5
Consolidated Productions Inc	
Broward Int'l Airport Ft Lauderdale Fla	10
Continental Electronics Ltd	
302 Oakland St Brooklyn 22 NY	5-10
Continental Electronics Mfg Co	
4212 S Buckner Blvd Dallas 27 Texas	10
Cook Electric Co	
2700 Southport Ave Chicago 14 Ill	4
Dalmo Victor Co Div Textron Inc	
1515 Industrial Way Belmont Calif	2
Daven Co	
Route 10 Livingston NJ	1-3-9
Dayton Aviation Radio & Equipment Corp	
R R 3 Troy Ohio	4-10
DeMornay-Bonardi Corp	
780 S Arroyo Pkwy Pasadena Calif	4
Devco Eng'g Inc	
P O Box 387 Caldwell NJ	5
Diamond Power Specialty Corp	
Lancaster Ohio	11
Dietz Co Henry G	
12-16 Astoria Blvd	
Long Island City 2 NY	13
Dunlap Electronics	
764 9 St Des Moines 14 Iowa	1
Dynamics Research Associates Div	
Universal Match Corp P O Box 5341	
Ferguson 21 Mo	4
Electric Regulator Corp	
Pearl St Norwalk Conn	4-9
Electrical Communications Inc	
765 Clementina St	
San Francisco 3 Calif	6-10-12
Electro-Physics Co	
287 Broadway New York 7 NY	7-8
Electrola Inc	
7517 N Clark St Chicago 26 Ill	10
Electron-Radar Products	
4806 W Chicago Ave Chicago 51 Ill	7-12
Electronic Specialty Co	
5121 San Fernando Rd	
Los Angeles 39 Calif	4-6
Elm Labs	
10 Washington Ave	
Hastings-on-Hudson NY	10-11
Erco Radio Labs Inc	
637 Stewart Ave Garden City NY	10
Federal Telephone & Radio Co	
Div IT&T 100 Kingsland Rd	
Clifton NJ	2-4-10
Fischer & Porter Co	
478 Warminster Rd Hatboro Pa	9
Fisher Pierce Co	
170 Pearl St S S Braintree 85 Mass	5-7
Frequency Standards Inc	
P O Box 504 Asbury Park NJ	4
General Control Co	
1200 Soldiers Field Rd	
Boston 34 Mass	10-11
General Electric Co Apparatus Sales Div	
1 River Rd Schenectady 5 NY	4
General Radio Co	
275 Massachusetts Ave	
Cambridge 39 Mass	5
Gordon Enterprises	
5362 N Cahuenga Blvd N Hollywood Calif	8
Hallamore Electronics Co	
8352 Brookhurst Ave Anaheim Calif	11
Hammarlund Mfg Co	
460 W 34 St New York 1 NY	10
Hancock Electronics Corp	
2553 Middlefield Rd Redwood City Calif	11
Hanson-Gorrill-Brian	
85 Hazel St Glen Cove NY	6
Hartman Electrical Mfg Co	
175 N Diamond St Mansfield Ohio	4
Hoover Electronics Co	
3640 Woodland Ave Baltimore 7 Md	10
Hughey & Phillips	
3300 N San Fernando Blvd	
Burbank Calif	5-7-12
Hupp Electronics Co Div Hupp Corp	
743 Circle Ave Forest Park Ill	5-7-12
Illumitronic Eng'g Co	
680 E Taylor Ave Sunnyvale Calif	7
Industrial Research Labs Div Aeronca	
Mfg Corp Hilltop & Frederick Rds	
Baltimore 28 Md	4-9
Jerrold Electronics Corp	
23 & Chestnut Sts Philadelphia 3 Pa	4-11
Johnson Co	
E F Waseca Minn	4
Kintel (Kay Lab)	
5725 Kearny Villa Rd	
San Diego 12 Calif	11
Kliegl Bros	
321 W 50 St New York 19 NY	5
Kollman Instrument Corp Standard	
Coil Products 80-08 45 Ave	
Eimhurst 73 NY	7
Kupfrian Mfg Corp	
395 State St Binghamton NY	10-11
Lane Electronics Mfg Corp	
7254 Atoll Ave N Hollywood Calif	10
Larson Instrument Co	
24 Orchard St Tarrytown NY	7

Leach Corp Inet-Palmer Div 4441 S Santa Fe Ave Los Angeles 58 Calif 6	WacLine Inc 35 S St Clair St Dayton 2 Ohio 4-6-10	A R F Products Inc 7627 Lake St River Forest Ill 9
Learn Inc 3171 S Bundy Drive Santa Monica Calif 6	Walkirt Co 141 W Hazel St Inglewood 3 Calif 4	Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 3 Conn 30
Lenkurt Electric Co 1105 County Rd San Carlos Calif 10	Warren Mfg Co Newtown Rd Littleton Mass 4	Askania Regulator Co 240 E Ontario St 2-3-7-8-11-13-18-20-21 Chicago 11 Ill 27-28-29-30-34
Lumenite Electronic Co 407 S Dearborn St Chicago 5 Ill 5-7	Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla 5	Assembly Products Inc Wilson Mills Rd 1-11-20-24-26-28-30-33 Chesterland 1 Ohio 42-50-52-58-67-68
Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif 4	Worner Electronic Devices Rankin Ill 5-12	Atlas Electric Products Co P O Box 1591 Erie Pa 1
Manson Laboratories Inc 207 Greenwich Ave Stamford Conn 10		Auburn Spark Plug Co 89 York St Auburn NY 25
Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY 4	22—CONTROL EQUIPMENT, INDUSTRIAL	Automatic Control Co 995 University Ave St Paul 4 Minn. 1-25
Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill 5-10	Controls, alarm system 1	Automatic Switch Co Hanover Rd Florham Park NJ 11-26-30
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa 4	Controls, chemical 2	Autonetics Div North American Aviation 9150 E Imperial Hwy Downey Calif 14
Mutual Electronic Industries Corp 85 Beechwood Ave New Rochelle NY 5	Controls, combustion 3	Autron Eng'g Inc 1264 W 6 St 6-11-19-25 Los Angeles 17 Calif 26-32-34-35
National Aircraft Corp 3411 Tulare Ave Burbank Calif 6	Controls, computer 4	Autotron Inc 3629 N Vermilion St Danville Ill 34
Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif 8	Controls, conductivity 5	Avion Div ACF Industries Inc 11 Park Pl Paramus NJ 11
Nevada Air Products Co P O Box 2472 Reno Nev 14	Controls, counting & sorting . . . 6	Avionics Ltd PO Box 200 Niagara-on-the-Lake Ontario Canada 11-15-25-27-29-34
Norrman Laboratories Ernst Williams Bay Wis 4	Controls, density 7	Avtron Mfg Inc 10409 Meech Ave Cleveland 5 Ohio 10-11
North Electric Co 553 S Market St Galion Ohio 5-9-10	Controls, dimension 8	Bailey Meter Co 1050 Ivanhoe Rd 3-5-7-16-17-18- Cleveland 10 Ohio 21-22-25-33
Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa 7	Controls, door 9	Baird-Atomic Inc 33 University Rd Cambridge 38 Mass 6-11-16-34
O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif 3	Controls, dynamometer 10	Barber-Colman Co Rock St Rockford Ill 3-11-15-16-21-22
Ohmite Mfg Co 3601 Howard St Skokie Ill 6	Controls, electronic 11	Barlowe Television 402 N Wantagh Ave Bethpage NY 11-25
Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY 10	Controls, elevator 12	Barnes Development Co 213 W Baltimore Pike Lansdowne Pa 6-19
Painton & Co Ltd c/o British Electronic Sales Co Box 132 Oakland Gardens 64 NY 1-3	Controls, film thickness 13	Barton Electronics Inc 1000 Farmington Ave W Hartford 7 Conn 6-9-11-19-25-28-34
Pantek Co P O Box 212 El Segundo Calif 4	Controls, fire 14	Basic Controls Co 1714 Westwood Blvd 1-6-7-9-11-19- Los Angeles 24 Calif 21-23-25-34
Par Products Corp 602 Colorado Ave Santa Monica Calif 8	Controls, flame failure 15	Beckman Instruments Inc Process Instruments Div 2500 Fullerton Rd Fullerton Calif 2-29-33
Photo Crystals Inc 15 S 1 St Geneva Ill 8-12	Controls, fluid flow 16	Beckman Scientific Instruments Inc Data & Control Systems Scientific Instrument Div 325 N Muller Ave Anaheim Calif 2-4
Photobell Co 43 Vesey St New York 7 NY 5-7-12	Controls, food processing 17	Belfab Corp 11 Ramah Circle Agawam Mass 16-25
Photographic Products Inc 1000 N Olive St Anaheim Calif 8	Controls, gas 18	Bell Aircraft Corp PO Box 1 Buffalo 5 NY 20
Precision Crystal Lab 2223 Warwick Ave Santa Monica Calif 4	Controls, grading & sorting . . . 19	Belock Instrument Corp 111-01 14 Ave College Point 56 NY 4-11
Production Research Corp Thornwood NY 5	Controls, guided missile 20	Bendix Aviation Corp Pacific Div 11690 Sherman Way N Hollywood Calif 1-20
PSC Applied Research Ltd 1500 O'Connor Dr Toronto 16 Canada 18	Controls, heat treating 21	Bendix Aviation Corp 1104 Fisher Bldg 4-7-13-20-22- Detroit 2 Mich 25-27-29-31
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada 10-11	Controls, humidity 22	Bendix Aviation Corp Cincinnati Div 3130 Wasson Rd Cincinnati 8 Ohio 6-7-11-25
Pye Telecommunications Ltd Newmarket Rd Cambridge England 2-3-10	Controls, illumination 23	Bergen Wire Rope Co 455 Gregg St Lodi NJ 12
Rich Electronics Inc 212 N W 8 Ave Miami 36 Fla 14	Controls, inspection 24	Berkshire Labs 586 Bank Village Greenville NH 6-24
Robotron Corp 21300 W 8 Mile Rd Detroit 19 Mich 7	Controls, liquid level 25	Bernco Engineering Corp 2320 S Tibbs Ave Indianapolis 41 Ind 11-20-34
Royal Communication Systems 11462 Euclid Ave Cleveland 6 Ohio 10	Controls, machine safety 26	B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif 11
Schafer Custom Eng'g 235 S 3 St Burbank Calif 10	Controls, materials thickness . . 27	Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ 11-30
Scott Inc H H 385 Putnam Ave Cambridge 39 Mass 1	Controls, mechanical overload . . 28	Bosch Inc M Ten 80 Wheeler Ave Pleasantville NY 11
Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY 4-10	Controls, moisture 29	Bowmar Instrument Corp 2415 Pennsylvania St Ft Wayne Ind 4-6-11-20
Servo-Tek Products Co 1086 Goffle Rd Hawthorne NJ 6	Controls, motor & generator . . . 30	Briggs Associates 10 DeKalb St Norristown Pa 1-2-4-6-8-11-19-20-24-34
Skiatron Electronics & TV Corp 180 Varick St New York 14 NY 5-7-3	Controls, oxygen 31	Bristol Co PO Box 1790 EITT 16-17-18-21-22-25- Waterbury 20 Conn 28-29-31-33
Specialty Eng'g & Electronics Co 79 Clifton Pl Brooklyn 38 NY 12	Controls, package wrapping . . . 32	Brooke Eng'g Co 4517 Wayne Ave Philadelphia 44 Pa 3
Stewart Corp F W 4211 Ravenswood Ave Chicago 13 Ill 10-11	Controls, pH 33	Brooks Rotameter Co PO Box 432 Lansdale Pa 16
Tabet Mfg Co 1336 Ballentine Blvd Norfolk 12 Va 10	Controls, photoelectric 34	Bruno-New York Industries Corp 460 W 34 St New York 1 NY 11
Taller & Cooper 75 Front St Brooklyn 1 NY 11-13	Controls, photographic 35	Burroughs Corp 6071 2 Ave Detroit 32 Mich 2-4-11-20
Tarc Electronics Inc 48 Urban Ave Westbury LI NY 3		B/W Controller Corp 2200 E Maple Birmingham Mich 17-25
Teledrome Mfg Corp 28 Ranick Dr Amityville LI NY 4		Cable Electric Products 234 Daboll St Providence 7 RI 1-9-11-14
Telephonics Corp Park Ave Huntington LI NY 10		Calbest Electronics Co 4801 Exposition Blvd Los Angeles 16 Calif 9-11-29
Times Facsimile Corp 540 W 58 St New York 19 NY 7		Cambridge Instrument Co Grand Central Terminal New York 17 NY 33
Tiptronic Inc 4 & Franklin Sts Tipp City Ohio 9		
TV Specialty Co 350 W 31 St New York 1 NY 8		
United Electric Controls Co 85 School St Watertown 72 Mass 6		
Varo Mfg Co 2201 Walnut St Garland Texas 4-6-10		
Virginia Electronics Co River Rd & B & O R R Washington 16 DC 10		
Voron & Co George 835 N 19 St Philadelphia 30 Pa 10		
Abbeon Supply Co 179-15 Jamaica Ave Jamaica 32 NY 22-29		
Accurate Eng'g Co 2005 Blue Island Ave Chicago 8 Ill 30		
Acoustica Associates Shore Rd Glenwood Landing LI NY 1-9-20-25		
Advanced Electronics Inc 94 Silas Deane Hwy Rocky Hill 9 Conn 11-24		
Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass 11-26-32		
Advance Instrument Corp 1709 F St Belmar NJ 11		
Aero Electronics Co 1512 N Wells St Chicago 10 Ill 11-20		
AiResearch Mfg Co Div Garret Corp 9851 Sepulveda Blvd Los Angeles 45 Calif 11-30-31		
Airmatic Valve Inc 7314 Associate Ave Cleveland 9 Ohio 16		
Airmec Ltd High Wycombe Buckinghamshire England 6-11-25-34		
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis 11-25-30		
Alliance Mfg Co Lake Park Blvd Alliance Ohio 9		
Allied Eng'g & Production Corp 2421 Blanding Ave Alameda Calif 26		
Allis-Chalmers Mfg Co Milwaukee 1 Wis 30		
Allis Co Louis 427 E Stewart St Milwaukee 1 Wis 30		
American Communications Corp 280 Broadway New York 17 NY 1		
American Instrument Co 8030 Georgia Ave Silver Spring Md 13-22-29		
American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va 20-24-25-27-28		
American Metrix Corp 40 Haddon Ave Camden 3 NJ 23		
American Rectifier Corp 95 Lafayette St New York 13 NY 12		
Analogue Controls Inc 39 Roselle St Mineola NY 4-11-20		
Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY 11		

Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada	33	Electronic Contractors Inc 2101 SE 6 Ave Portland 14 Ore	4	Hays Mfg Co 12 & Liberty Sta Erie Pa	16
Cash Valve Mfg Corp A W 666 E Wabash Ave Decatur Ill	16	Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich	6-8-11-19-23-26-34	Healy-Ruff Co 2255 University Ave St Paul 14 Minn	25
Central Electronics Mfrs Inc Sub Nuclear Corp of America 2 Richwood Pl Denville NJ	11-25-27-33	Electronic Control Systems 2136 Westwood Blvd Los Angeles 25 Calif	11	Hewson Co 443 Broad St Newark 2 NJ	16
Century Engineers 2741 N Naomi St Burbank Calif	11	Electronic Machine Parts Inc 204 Lafayette St New York 12 NY	32	Holland Electronics 2133 Central Dr S East Meadow NY	6-34
Century Lighting Inc 521 W 43 St New York 36 NY	23	Electronics Corp of America 1 Memorial Dr Cambridge 42 Mass	3-7-9-15-23-25-34	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	6-11-19
Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill	8-27	Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	1-11-20	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	6-9-12-15-23-34
Cinema Eng'g Div Aerovox Corp 1100 Chestnut St Burbank Calif	11	Electron-Radar Products 4806 W Chicago Ave Chicago 51 Ill	3-6-15-22-29-34	Huppert Co K H 6830 Cottage Grove Ave Chicago 37 Ill	21
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England	5-8	Electro-Physics Co 287 Broadway New York 7 NY	34-35	Ideal-Aerosmith Inc 12909 S Cerise Ave Hawthorne Calif	11-20
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio	11-14-16-28-30-34	Electro Products Labs Inc 4501 N Ravenswood Ave Chicago 40 Ill	6	Ideal Electric & Mfg Co 300 E 1 St Mansfield Ohio	30
Cleveland Instrument Co 735 Carnegie Ave Cleveland 15 Ohio	6-3	El-Tronics Inc Penn Ave Mayfield Pa	22	Illinois Testing Labs Inc 420 N LaSalle St Chicago 18 Ill	21
Colorado Research Corp 4697 E Evans Ave Denver 22 Colo	11	Emmett Machine & Mfg 445 E Turkeyfoot Lake Rd Akron 19 Ohio	6	Illumitronic Eng'g Co 680 E Taylor Ave Sunnyvale Calif	11-17-23-32
Conoflow Corp 2100 Arch St Philadelphia 3 Pa	16-17-18	Eas Instrument Co 96 S Washington Ave Bergenfield NJ	32-34	Indikon Co 76 Coolidge Hill Rd Watertown 72 Mass	11
Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	4-6-8-13-20-27	Fairchild Controls Corp Components Div 225 Park Ave Hicksville LI NY	11	Industrial Control Co 805 Albin Ave Lindenhurst LI NY	11-20-30
Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	11-20	Farmer Electric Products Co 2300 Washington St Newton Lower Falls 62 Mass	34	Industrial Electronic Engineers 3973 Lankershim Blvd N Hollywood Calif	4-11-19-20
Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	1-4	Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind	11	Industrial Electronics Inc 8060 Wheeler St Detroit 10 Mich	8-11-26-27-29-34
Controlled Atmosphere Enclosures Corp 230-11 141 Ave Springfield Gardens 13 LI NY	22-29	Fenwal Inc Pleasant St Ashland Mass	3-14-15-16-17-21-25	Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ	5-6
Control Specialty Corp 1515 Spring Houston 5 Texas	26	Ferranti Electric Inc 30 Rockefeller Plaza New York 20 NY	4	Industrial Neopneics Corp 1205 Chesapeake Ave Columbus 12 Ohio	11-13-24-27
Cook Electric Co 2700 Southport Ave Chicago 14 Ill	1-11-26	Fielden Instrument Div Robertshaw-Fulton Controls Co 2920 N 4 St Philadelphia 33 Pa	5-17-22-25-27-29	Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	11-20-34
Corbin Corp 5419 56 Pl Riverdale Md	22-31	Fischer & Porter Co 478 Warminster Rd Hattboro Pa	1-2-3-4-6-7-8-11-16-17-18-21-22-25-31	Industrial Test Equipment Co 55 E 11 St New York 3 NY	11
Corona Eng'g Service 94-52 Corona Ave Elmhurst 73 NY	11-25-34	Fisher Governor Co Marshalltown Iowa	25	Instrumentation Associates 17 W 60 St New York 23 NY	31
Crescent Eng'g & Research Co 5440 N Peck Rd El Monte Calif	8-11-13-16	Fisher Peirce Co 170 Pearl St S Braintree 85 Mass	23-34	Instruments Inc 122 N Madison St Tulsa Okla	7-25
Curtiss-Wright Corp Electronics Div 631 Central Ave Carlstadt NJ	11-13-17-25	Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa	2-7-25-33	International Business Machines Corp 590 Madison Ave New York 23 NY	4
Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wisc	11-16-18-25-28-30	Fluidyne Eng'g Corp 425 N 7 St Minneapolis 6 Minn	1-4-11-16-26	I Q Industries 1714 Westwood Blvd Los Angeles 24 Calif	1-6-7-9-11-19 21-23-25-34
Dalmo Victor Co Div Textron Inc 1515 Industrial Way Belmont Calif	3-11	Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY	4-11	Irwin Labs 1238 S Gerhart Ave Los Angeles 22 Calif	5-21-24
Daven Co Route 10 Livingston NJ	11	Friez Instrument Div Bendix Aviation Corp 1400 Taylor Ave Baltimore 4 Md	22-29	Isotope Products 1711 Elmwood Ave Buffalo 7 NY	7-13-24-25-29
Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	5-6-11-34	Furnas Electric Co 1000 McKee St Batavia Ill	25	Jo-Bell Products Inc 5456 W 111 St Oak Lawn Ill	25
Dayton Aviation Radio & Equipment Corp RR 3 Troy Ohio	11	Garrett Corp AiResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif	11-31	Johnson Corp 805 Wood St Three Rivers Mich	25
Daytronic Corp 216 S Main St Dayton 2 Ohio	8-11	General Controls Co 801 Allen Ave Glendale 1 Calif	3-15-16-17-18-22-25	Johnson Service Co 507 E Michigan St Milwaukee 1 Wis	22
Defender Instrument & Regulator Co Boody Ill	3-14-16-18-25	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	9-11-12-15-21-23-25-26-34	Kahlenberg Bros 1700 13 St Two Rivers Wisc	1
Deitz Co S J 9 E Wesley St S Hackensack NJ	11-32-34	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	23	Kahl Scientific Instrument Corp PO Box 1166 El Cajon Calif	29
Deltron Inc 2905 N Leithgow St Philadelphia 33 Pa	25-34	Giannini & Co G M 918 E Green St Pasadena Calif	1-4-11-14-16-20	Kaiser Aircraft & Electronics Corp Toledo Electronics Div PO Box 437 Toledo Ohio	20
Denison Eng'g Div American Brake Shoe 1160 Dublin Rd Columbus 16 Ohio	16	Glens Falls Lab Box 685 Glens Falls NY	54	Kollaman Instrument Corp Standard Coil Products 80-08 45 Ave Elmhurst 73 NY	20
Denrad Mfg Co 310 W Woodard St Denison Texas	11-34	Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	35	LaMotte Chemical Products Co Chestertown Md	33
Devol Research Co Brookside Dr Greenwich Conn	19	Grafton Eng'g Co 628 Vernon Rd Springfield Pa	4	Larson Instrument Co 24 Orchard St Tarrytown NY	3-7-11-34
Deveco Eng'g Inc PO Box 387 Caldwell NJ	1-2-3-5-6-16-18 23-25-26-32-34	Guardian Electric Mfg Co 1621 W Walnut St Chicago 12 Ill	25	Leach Corp Inet-Palmer Div 4441 S Santa Fe Ave Los Angeles 58 Calif	30
Diatron Co 3327 Dixie Dr Houston 21 Texas	1	Guild Electronics Inc 388 Broadway New York 13 NY	32	Lear Inc 3171 S Bundy Drive Santa Monica Calif	11-16-18-30
Dietz Co Henry G 12-16 Astoria Blvd Long Island City 2 NY	25	Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	2-3-4-5-7-10-11-16-18-21-25-28-33	Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	8-5-11-21-31-33
Dunlap Electronics 764 9 St Des Moines 14 Iowa	1-6-26-34	Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	11	Lennard Co P M PO Box 56 Village Sta New York 14 NY	22
Dynamics Research Associates Div Universal Match Corp PO Box 5841 Ferguson 21 Mo	1-4-11-16-17-18-20-25-28-34	Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	27	Leslie Co Lyndhurst NJ	25
Eastman Kodak Co 343 State St Rochester 4 NY	35	Hammarlund Mfg Co 460 W 34 St New York 1 NY	1-11	Librascope Inc 808 Western Ave Glendale Calif	4-20
Eclipse Fuel Eng'g Co 1100 Buchanan Rockford Ill	3-15-21	Hansen Co Wm 165 Silverbrook Ave Niles Mich	29	Liquidometer Corp 41-03 36 St Long Island City 1 NY	25
Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ	11	Hanson-Gorrill-Brian 85 Hazel St Glen Cove NY	30	Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	4-11-20
Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	1-5-6-11-20-24-30	Hart Mfg Co 128 Bartholomew Ave Hartford 1 Conn	11	LogElectronics Inc 500 E Monroe Ave Alexandria Va	35
Electrical Service Co 1271 Mission St San Francisco 3 Calif	1-6-11-15-19-23-26-34	Hays Corp Michigan City Ind	3-16-18-25	Lumenite Electronic Co 407 S Dearborn St Chicago 5 Ill	1-11-17-25-34
Electric Eye Equipment Co 1941 E Fairchild St Danville Ill	11-13-27-29-34			Lunkenheimer Co Beekman St & Waverly Ave Cincinnati 14 Ohio	25
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn	30				
Electric Regulator Corp Pearl St Norwalk Conn	30				
Electro-Devices Inc 4 Godwin Ave Paterson 1 NJ	11-30				

Machinery Electrification Inc 35 Hudson St Northboro Mass	5-6-11-19-25-28-34				
Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	4-11				
Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	11-20-25-30-34				
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	11				
Manning Maxwell & Moore Inc Shelter Rock Lane Danbury Conn	15-16-20				
Measurement Eng's Ltd 232 John St Arnprior Ontario Can	11-34				
Mercoind Corp 4201 Belmont Ave Chicago 41 Ill	1-3-25				
Merz Eng's Inc 200 S Harding St Indianapolis Ind	24				
Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	1				
Milgo Electronic Corp 7601 N W 37 Ave Miami 47 Fla	14-20				
Miller-Trojan Co 3 North Ridge Ave Troy Ohio	35				
Milwaukee Gas Specialty Co 730 N Jackson St Milwaukee 1 Wisc	18				
MinAttron Corp Belle Mead 9 NJ	6-8				
Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	11-25-31				
Minn-Honeywell Regulator Co 2753 4 Ave S Minneapolis 8 Minn	3-15-16-18-22-25				
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	3-15-17-21- 22-25-33				
Modern Laboratory Equip Co 1811 1 Ave New York 28 NY	21-22				
Motordyne Inc 2661 S Myrtle Ave Monrovia Calif	30				
Multi-Products Co 21470 Coolidge Hwy Oak Park 37 Mich	9-11-12				
Mutual Electronic Industries Corp 85 Beechwood Ave New Rochelle NY	23				
Nagor Associates Inc Littleton Mass	11-34				
National Aircraft Corp 3411 Tulare Ave Burbank Calif	30				
National Bell Corp 6 Lafayette Ave Brooklyn 17 NY	11				
Naybor Laboratories Inc E V 2 Yennicock Ave Port Washington NY	7				
Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	6-20-34-35				
Nevada Air Products Co PO Box 2472 Reno Nev	11-20				
Newark Controls Co 15 Ward St Bloomfield NJ	25				
North American Instruments Inc 2420 N Lake St Altadena Calif	16				
North Electric Co 553 S Market St Galion Ohio	4-6-23				
Northrop Aircraft Inc 1101 E Broadway Hawthorne Calif	20				
NRD Instrument Co 6425 Etzel Ave St Louis 14 Mo	25				
Nuclear Corp of America Empire State Bldg New York NY	7-13-16-25				
Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	34				
O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif	1				
Ohmart Corp 2236 Bogen St Cincinnati 14 Ohio	7-25				
Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	11-12-14				
Panellit Inc 7401 N Hamlin Ave Skokie Ill	1-17-20-21-22-25				
Par Products Corp 602 Colorado Ave Santa Monica Calif	35				
Partlow Corp 2 Campion Rd New Hartford NY	3-22				
Peer Inc 1200 Milton St Benton Harbor Mich	11				
Penn Controls Inc Goshen Ind	3-15-18-22-25				
Peschel Electronics Inc 13 Garden St New Rochelle NY	11				
Philadelphia Scientific Glass Co Box 460 Paledon Rd Quakertown Pa	29				
Phoenix Precision Instrument Co 3803 N 5 St Philadelphia 40 Pa	34				
Photo Crystals Inc 15 S 1 St Geneva Ill	3-6-15-22-29-34				
Photobell Co 43 Vesey St New York 7 NY	6-7-8-9-11-13-19-23- 24-25-26-27-32-34				
Photographic Analysis Inc 13273 Ventura Blvd N Hollywood Calif	1-3-24-31				
Pioneer Patents & Products Co 3720 N New England Ave Chicago 34 Ill	20				
Powers Regulator Co 3400 Oakton St Skokie Ill	17-22				
Precision Thermometer & Instrument Co 1431 Brandywine St Philadelphia 30 Pa	7				
Process & Instruments 15 Stone Ave Brooklyn 33 NY	33				
Protectowire Co Hanover Mass	1				
PSC Applied Research Ltd 1500 O'Connor Dr Toronto 16 Canada	35				
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	29-33				
Pye Telecommunications Ltd Newmarket Rd Cambridge England	1				
Quantametric Devices Inc Box 1107 Binghamton NY	34				
Quaré Associates Canton Mass	5-33				
Radionics Inc PO Box 186 Cocksaysville Md	14				
Rabm Instruments Inc 237 Lafayette St New York 12 NY	20				
Ransom Research 323 W 7 St San Pedro Calif	4-35				
Reeves Instrument Corp 215 E 91 St New York 28 NY	4-11				
Reliance Electric and Eng'g Co 24701 Euclid Ave Cleveland 17 Ohio	10-11-30				
Remington Rand Univac Div Sperry Rand Corp 315 4 Ave New York 10 NY	4				
Remler Co 2101 Bryant St San Francisco Calif	1				
Republic Flow Meters Co 2240 Diversey Pkwy Chicago 47 Ill	3				
Research Electronics Lab Roslyn Pa	11				
Revere Corp of American Wallingford Conn	16-25				
Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	20-34				
Ripley Co 1 Factory St Middletown Conn	23-25-34				
Robinette Co W C 802 Fair Oaks Ave S Pasadena Calif	11-30				
Robotron Corp 21300 W 8 Mile Rd Detroit 19 Mich	11				
Rockwell Eng'g Co 2133 E 45 St Indianapolis 5 Ind	34				
Ronan & Kunzl 502 S Kalamazoo Ave Marshall Mich	9				
Scaico Controls Inc Market St Palmyra NJ	11-21				
Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	34				
Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	18-31-33				
Schirmer-National Alarm Co 20 Westside Ave Bergenfield NJ	1				
Schrack Electrical Sales Corp 45 W 81 St New York 24 NY	30				
Schulmerich Electronics Inc Sellersville Pa	11				
Seaboard Electric Products Corp 417 Canal St New York 13 NY	1				
Seneca Falls Machine Co 314 Fall St Seneca Falls NY	8-11-19-24				
Sensory Inc Pleasantville Pa New Vernon NJ	6-8-19-24-32-34				
Serdex Inc 91 Cambridge St Boston 14 Mass	22				
Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	11-21				
Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	11				
Servo-Tek Products Co 1086 Goffe Rd Hawthorne NJ	11-25-30				
Sigmadyne of Conn PO Box 869 Port Chester NY	21-34				
Simmonds Aeroessories Inc 105 White Plains Rd Tarrytown NY	25				
Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	1-6				
Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	3-4-6-19				
Soroban Eng'g Inc Box 338 Melbourne Fla	4				
Sparton Control Systems Div Sparks-Withington Co 2301 E Michigan Ave Jackson Mich	1-2-6-16- 17-25-26				
Specialties Inc Skunks Misery Rd Syosset LI NY	34				
Sperry Products Inc Shelter Rock Rd Danbury Conn	11-24-25-27-28				
Stewart Instrument Co 6507 Grand River Detroit 8 Mich	6-11-30				
Strandberg Eng'g Labs Inc 416 W Market St Greensboro N Car	29				
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	30				
Strong Electric Corp 87 City Park Ave Toledo 1 Ohio	23				
Superior Electric Co 53 Laurel St Bristol Conn	23				
Sylvania Electric Products Inc 140 Broadway New York 19 NY	11				
Systron Corp 2055 Concord Blvd Concord Calif	1-6-8-10-11				
Tabet Mfg Co 1336 Ballentine Blvd Norfolk 12 Va	23-34				
Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	11				
Taller & Cooper 75 Front St Brooklyn 1 NY	18				
Ta-Mar Inc 11571 W Jefferson Blvd Cuiver City Calif	9				
Telescope Mfg Corp 28 Ranick Dr Amityville LI NY	6-11				
Telectron Co Div of Elliot & Evans Bldg 9 Broward International Airport Ft Lauderdale Fla	9-11				
Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif	4-11-20				
Telectronics Lab Inc 54 Kinkel St Westbury NY	24				
TelePrompter Corp 311 W 43 St New York 36 NY	11				
Temperature Eng'g Corp US Hwy 130 Riverton NJ	22				
Thompson Products Inc Electronics Div 2196 Clarkwood Rd Cleveland 3 Ohio	11-16				
'Tipptronic Inc 4 & Franklin Sts Tipp City Ohio	1-3-5-12-15-21-22-23-24- 26-28-29-30-33-34				
Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	4-11-26				
Trans Electronics Inc 7349 Canoga Ave Canoga Park Calif	1				
Trimount Instrument Co 3119 W Lake St Chicago 12 Ill	25				
Trott Electronics Inc 412 Smith St Rochester 6 NY	1-6-11-19-24-34-35				
TV Specialty Co 350 W 31 St New York 1 NY	35				
Union Switch & Signal Div Westinghouse Air Brake Co Braddock Ave Pittsburgh 18 Pa	11-12				
United Control Corp 4540 Union Bay Pl Seattle 5 Wash	1-11-25				
United Electric Controls Co 85 School St Watertown 72 Mass	1-2-25-30-31-32				
United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif	20				
Uniwave Inc 2 Marine St Farmingdale NY	34				
US Controls Inc 161 Grand St New York 13 NY	2-6-11-16-17-19- 24-26-30-32-34				
Vapor Recovery Systems Co 2820 N Alameda St Compton Calif	18-25				
Varo Mfg Co 2201 Walnut St Garland Texas	30				
Vectrol Eng'g Inc P O Box 1089 Stamford Conn	11-30-34				
Victory Eng'g Corp 117 Springfield Rd Union NJ	11-16-18-25-31				
Virginia Electronics Co River Rd & B&O RR Washington 16 DC	11				
Vitro Corp of America 261 Madison Ave New York 16 NY	11				
WacLine Inc 35 S St Clair St Dayton 2 Ohio	11-30				
Wagner Co H A 14707 Keswick St Van Nuys Calif	12				
Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	4-11-19-20 21-22-24-25				
Walkirt Co 141 W Hazel St Inglewood 3 Calif	11				
Wallson Associates Ltd 963 Frelinghuysen Ave Newark 12 NJ	11-34				
Ward Leonard Electric Co Mt Vernon NY	23-30				
Warrick Co Charles F 1964 W 11 Mile Rd Berkley Mich	5-25				
Waugh Eng'g Co 7842 Burnet Ave Van Nuys Calif	16				
Wells-Gardner & Co 2701 N Kildare Ave Chicago 39 Ill	9				
West Coast Research Corp 2271 1/2 Westwood Blvd Los Angeles 64 Calif	4-7-11-20-30				
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	2-3-6-17				
West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill	21				
Weston Electrical Instrument Corp Sub Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ	22-23-34-35				

Wilcolator Co
1001 Newark Ave Elizabeth NJ 1
Winder Aircraft Corp of Florida
PO Box 2397 Drane Field
Lakeland Fla 20-26-28
Winterburn Mfg Co
11 Whittemore St Putnam Conn 26-28-30
Worner Electronic Devices
Rankin Ill 1-3-6-7-8-9-14-16-23-24-25-34
Zenith Electric Co
152 W Walton St Chicago 10 Ill 30

Allen-Bradley Co
136 W Greenfield Ave 38-50-52-56-57-
Milwaukee 4 Wisc 59-71-73-75
Allis-Chalmers Mfg Co
Milwaukee 1 Wisc 36
Allis Co Louis
427 E Stewart St Milwaukee 1 Wisc 58
Aloe Scientific
6655 Kingsbury Blvd St Louis 12 Mo 58
American Electronics Inc Instrument Div
9503 W Jefferson Blvd Culver City Calif 41
American Gyro Corp
3030 Nebraska Ave Santa Monica Calif 64
American Instrument Co
8030 Georgia Ave Silver Spring Md 50
American Machine & Foundry Co
Defense Products Group
1101 N Royal St Alexandria Va 49-58
American Metrix Corp
40 Haddon Ave Camden 3 NJ 42-54
American Rectifier Corp
96 Lafayette St New York 13 NY 37-46-58
American Scientific Co
1295 Grand Concourse New York 52 NY 52
Amglo Corp
4333 Ravenswood Ave
Chicago 13 Ill 52-71-75
Analogue Controls Inc
39 Roselle St Mineola NY 36-41
Antlab Inc
4950 N High St Columbus 14 Ohio 36
Anton Electronic Labs
1226 Flushing Ave Brooklyn 6 NY 58
Arma Div American Bosch Arma Corp
Garden City NY 41-49-64
Askania Regulator Co
240 E Ontario St 36-37-38-39-40-41
Chicago 11 Ill 43-50-51-53-58-67
Assembly Products Inc
Chesterland Ohio 46-47-49-50
Atkomatic Valve Co
545 W Abbott St Indianapolis 25 Ind 69
Atlas Electric Products Co
PO Box 1591 Erie Pa 50-52
Automatic Control Co
995 University Ave St Paul 4 Minn 38
Automatic Switch Co
Hanover Rd Florham Park NJ 38-69
Automation Management Inc
Adams St Westboro Mass 36-11-49-52
Autonetics Div North American Aviation
9150 E Imperial Hwy Downey Calif 64
Autron Eng'g Inc
1254 W 6 St
Los Angeles 17 Calif 36-38-40-41-50-63
Autotron Inc
3629 N Vermilion St Danville Ill 74
Avion Div ACF Industries Inc
11 Park Pl Paramus NJ 53-58
Avionics Ltd
PO Box 200 Niagara-on-the-Lake
Ontario Canada 52-74-75
Bailey Meter Co
1050 Ivanhoe Rd
Cleveland 10 Ohio 36-38-44-46-49-50-56
Baird-Atomic Inc
33 University Rd
Cambridge 38 Mass 52-63-70-72-74-75
Balteau Electric Corp
New and Meadow Sts Stamford Conn 77
Barber-Colman Co
Rock St Rockford Ill 36-50-57-71
Barker Sales Co
996 Edgewater Ave Ridgefield NJ 63
Barkley & Dexter Laboratories
50 Frankfort St Fitchburg Mass 63
Barton Electronics Inc
1000 Farmington Ave W
Hartford 7 Conn 36-52-73
Basic Controls Co
1714 Westwood Blvd 42-43-44-50
Los Angeles 24 Calif 70-71-72-73-74-75
Bayside Timers
45-25 162 St Flushing 58 NY 71-72-73-75
Beckman/Berkeley Div
Beckman Instruments Inc 63-70-
2200 Wright Ave Richmond 3 Calif 73-74
Beckman Instruments Inc Process
Instruments Div 2500 Fullerton Rd
Fullerton Calif 41
Belfab Corp
11 Ramah Circle Agawam Mass 38-56
Bell Aircraft Corp
PO Box 1 Buffalo 5 NY 41-49-64
Belock Instrument Corp
111-01 14 Ave College Point 56 NY 41-64-75
Bendix Aviation Corp Pacific Div
11600 Sherman Wav N Hollywood Calif 49
Bendix Aviation Corp
1104 Fisher Bldg
Detroit 2 Mich 45-49-64-67-68
Bendix Aviation Corp
Red Bank Div Eatontown NJ 68
Bendix Aviation Corp Cincinnati Div
3130 Wasson Rd Cincinnati 8 Ohio 45
Bergen Labs
247 Crooks Ave Clifton NJ 41-52
Bernco Engineering Corp
2320 S Tibbs Ave Indianapolis 41 Ind 50-65
Berkshire Labs
586 Bank Village Greenville NH 67

Black & Webster Inc
445 Watertown St Newton 58 Mass 71
Bogue Electric Mfg Co
Iowa Ave Paterson 3 NJ 58-67-68
Bosch Inc M Ten
80 Wheeler Ave Pleasantville NY 41-64
Boulin Instrument Corp
10 1 St Pelham NY 63
Bowmar Instrument Corp
2415 Pennsylvania St
Ft Wayne Ind 40-41-46
Brailsford & Co
670 Milton Rd Rye NY 73-75
Breeze Corps
700 Liberty Ave Union NJ 65
Briggs Associates
10 DeKalb St
Norristown Pa 41-46-52-60-61-63
Bristol Co 36-37-38-41-43-44-45-
PO Box 1790 EITT 46-47-49-50-52-56-57-
Waterbury 20 Conn 63-70-71-72-73-75

22A—CONTROL EQUIPMENT, INDUSTRIAL

Controls, position 36
Controls, power level 37
Controls, pressure 38
Controls, printing 39
Controls, register 40
Controls, servo 41
Controls, signal 42
Controls, smoke & combustion . 43
Controls, smoke density 44
Controls, specific gravity 45
Controls, speed 46
Controls, strain 47
Controls, surface finish 48
Controls, telemetering 49
Controls, temperature 50
Controls, tension 51
Controls, timing 52
Controls, torque 53
Controls, traffic 54
Controls, ultrasonic 55
Controls, vacuum 56
Controls, ventilating 57
Controls, voltage regulator . . . 58
Controls, volume 59
Controls, weight 60
Controls, welding 61
Controls, x-ray 62
Counting devices 63
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Ignition systems, electronic . . . 65
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Regulators, automatic current . . 67
Regulators, automatic voltage . . 68
Solenoid Valves 69
Timers, counting 70
Timers, cyclic 71
Timers, impulse 72
Timers, interval 73
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Timers, sequence 75
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Abrams Instrument Corp
606 E Shawassee St 49-52-63-70-
Lansing 1 Mich 71-72-73-75
Acoustica Associates Shore Rd
Glenwood Landing LI NY 55
Adler Electronics Inc
1 LeFevre Lane New Rochelle NY 67-68
Advanced Instruments Inc
21 Oakcrest Rd Needham 92 Mass 50
Advanced Products Co
59 Broadway North Haven Conn 71-72-73
Advance Industries Inc 36-41
640 Memorial Dr Cambridge 39 Mass 49-53
Advance Instrument Corp
1709 F St Belmar NJ 41
AEMCO Inc
10 State St Mankato Minn 71-73-75
Aero Electronics Co
1512 N Wells St Chicago 10 Ill 41
Aeroflex Labs
34-06 Skillman Ave
Long Island City 1 NY 64
Aero Instrument Co
11423 Vanowen St N Hollywood Calif 70-73
AIRResearch Mfg Co Div Garrett Corp
9851 Sepulveda Blvd
Los Angeles 45 Calif 36-41-46
Airmatic Valve Inc
7314 Associate Ave Cleveland 9 Ohio 38-46-56
Airmev Ltd High Wycombe
Buckinghamshire England 50-58-68-73-74
Airtron Inc
1101 W Elizabeth Ave Linden NJ 65
Alcar Instruments Inc
17 Industrial Ave Little Ferry NJ 55
Alden Electronic & Impulse Recording
Equip Co PO Box 125
Westboro Mass 71-72-73-74-75
Alleghany Instrument Co
1091 Wills Mountain Cumberland Md 47

British Electronic Sales
Box 132 Oakland Gardens 64 NY 69
Brooke Eng'g Co
4517 Wayne Ave Philadelphia 44 Pa 43-44
Buffalo Instrument Corp
1780 Elmwood Ave Buffalo 7 NY 36
Burling Instrument Co
16 River Rd Chatham NJ 50
Burroughs Corp
6071 2 Ave Detroit 32 Mich 64-70-73
Burroughs Corp Electronic Tube Div
Box 1226 Plainfield NJ 63
Burroughs Corp
Electronic Instruments Div
1209 Vine St Philadelphia 7 Pa 63
Caltron Products Co
3518 W Pico Blvd Los Angeles 19 Calif 69
Camera Equipment Co
315 W 43 St New York 36 NY 64
Campbell X-Ray Corp
110 Commington St Boston 15 Mass 77
Canadian Aviation Electronics Ltd
6214 Cote de Liesse Rd
St Laurent Quebec Canada 33-41-47-61
Carter Parts Co
3401 W Madison St Skokie Ill 59
Cash Valve Mfg Corp A W
666 E Wabash Ave Decatur Ill 38-56
C B C Electronics Co
2601 N Howard St Philadelphia 33 Pa 68
Cedar Eng'g Inc
5806 W 36 St Minneapolis 16 Minn 64
Central Electronic Mfrs Inc
Sub Nuclear Corp of America
2 Richwood Pl Denville NJ 33-56
Century Coil Corp
1534 N Clybourn Ave Chicago 10 Ill 62-77
Century Engineers
2741 N Naomi St Burbank Calif 36-11
CG Electronics Corp
305 Dallas St NE Albuquerque New Mex 77
Chicago Aerial Industries Inc
1980 N Hawthorne Ave Melrose Park Ill 73
Cincinnati Time Recorder Co
1733 Central Ave Cincinnati 14 Ohio 42-63
Cinema-Television Ltd
Worsley Bridge Rd Lower Sydenham 58
London S E 26 England 63-68-70-72-73-74-75
Clark Controller Co
1146 E 152 St 36-38-39-46-
Cleveland 10 Ohio 50-52-58
Claroast Mfg Co
Washington St Dover NH 59
Clary Corp
408 Junipero St San Gabriel Calif 70-73
Comac Instrument Co
66-11 99 St Forest Hills 74 NY 49
Communication Accessories Co
110 St & 71 Hwy
Hickman Mills Mo 41-53-68
Conn Telephone & Electric Corp
70 Britannia St Meriden Conn 41
Conoflow Corp
2100 Arch St Philadelphia 3 Pa 36-38-56
Consolidated Avionics Corp
66 Brooklyn Ave 36-38-41-49-52-58
Westbury NY
Consolidated Electro Dynamics Corp
300 N Sierra Madre Villa
Pasadena Calif 56
Consolidated Electro Dynamics Corp
Rochester Div
1775 Mt Read Blvd Rochester 4 NY 56
Consolidated Productions Inc
Broward Int'l Airport Ft Lauderdale Fla 36
Continental X-Ray Corp
1536 N Clybourn Ave Chicago 10 Ill 62-77
Control Corp
718 Central Ave NE
Minneapolis 14 Minn 49
Control Specialists Inc
115 E Arbor Vitae St Inglewood 1 Calif 41
Control Specialty Corp
1515 Spring Houston 5 Texas 49-52
Cook Electric Co
2700 Southport Ave
Chicago 14 Ill 38-50-52-56-76
Corbin Corp
5419 56 Pl Riverdale Md 38-50-51
Corona Eng'g Service
94-52 Corona Ave Elmhurst 73 NY 50

Cramer Controls Corp Centerbrook Conn 52-70-71-72-73-75	Elfa Instrument Center 55 Reade St New York 7 NY 60	Hagan Chemicals & Controls Inc Hagan Bldg 36-38-41-43-45-46-49- Pittsburgh 30 Pa 50-51-52-53-56-60
Crescent Eng'g & Research Co 5440 N Peck Rd El Monte Calif 36-38-41-47-53-60	El-Tronics Inc Penn Ave Mayfield Pa 63	Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif 41
Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wisc 38-39-52-58-68	Emmett Machine & Mfg 445 E Turkeyfoot Lake Rd Akron 19 Ohio 38-50-52-71-75	Hallikainen Instruments 1341 7 St Berkeley 10 Calif 50
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif 55	Endevco Corp 161 E California St Pasadena Calif 38-63	Hamilton Watch Co Allied Products Div Columbia Ave Lancaster Pa 71
Daimo Victor Co Div Textron Inc 1515 Industrial Way Belmont Calif 41-69	Engineered Magnetics Div Gulton Industries Inc 13030 Cerise Ave Hawthorne Calif 41-58-67-68	Hammarlund Mfg Co 460 W 34 St New York 1 NY 42-49
Darco Industries Inc Gyro Dynamics Div 2151 E Rosecrans Ave El Segundo Calif 41-64	Exide Industrial Div Electric Storage Battery Co 42 S 15 St Philadelphia 2 Pa 58	Hamner Electronics Co Princeton NJ 70
Daven Co Route 10 Livingston NJ 36-37-49	Fairchild Controls Corp Components Div 225 Park Ave Hicksville LI NY 38	Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif 49
Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill 34-50-63-74	Farmer Electric Products Co 2300 Washington St Newton Lower Falls 62 Mass 52-73-74	Hansen Co Wm 165 Silverbrook Ave Niles Mich 71-73
Daystrom Pacific Corp 3030 Nebraska Ave Santa Monica Calif 38-52-64-71-73-75	Farrand Controls Inc 4401 Bronx Blvd New York 70 NY 36-41	Harrison Labs 45 Industrial Rd Berkeley Heights NJ 68
Defender Instrument & Regulator Co Body III 36-38-43-50-56	Federal Equipment Co 38 Brady St San Francisco 3 Calif 63	Hastings-Raydist Inc Newcomb Ave Hampton Va 56
Deitz Co S J 9 E Wesley St S Hackensack NJ 40	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ 36-41-50-68	Haydon Co A W 232 N Elm St Waterbury 20 Conn 49-52-71-72-73-75
Del Electronics Corp 41 N Mac Questen Pkwy Mt Vernon NY 62	Feedback Controls Inc 899 Main St Waltham 54 Mass 41	Haydon Mfg Co 245 E Elm St Torrington Conn 52-70-71-72-73-75
Denison Eng'g Div American Brake Shoe 1160 Dublin Rd Columbus 16 Ohio 38-69	Fenwal Inc Pleasant St Ashland Mass 50	Hays Corp Michigan City Ind 38-41-60
Design Tool Corp 80 Washington St New York 6 NY 36	Fielden Instrument Div Robertshaw-Fulton Controls Co 2920 N 4 St Philadelphia 33 Pa 50	Hays Mfg Co 12 & Liberty Sts Erie Pa 69
Devol Research Co Brookside Dr Greenwich Conn 41	First Electronics Corp 117 Blue Hill Ave Boston 19 Mass 73	Healy-Ruff Co 2255 University Ave St Paul 14 Minn 38-49
Devco Eng'g Inc PO Box 387 Caldwell NJ 36-38-41-42-45-49- 50-51-52-53-57-59	Fischer & Porter Co 478 Warminster Rd Hartboro Pa 37-38-42-45-49-50-56	Hevi-Duty Electric Co 4212 W Highland Blvd Milwaukee 1 Wisc 67
Dietz Co Henry G 12-16 Astoria Blvd Long Island City 2 NY 71-72-73-75	Fisher Governor Co Marshalltown Iowa 38	High Vacuum Equipment Corp 2 Churchill Rd Hingham Mass 56
Dimco-Gray Co 207 E 6 St Dayton 2 Ohio 73	Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa 45-50	High Voltage Eng'g Corp Burlington Mass 77
Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wisc 63	Flight Research Inc PO Box 1-F Richmond 1 Va 74	Hillburn Electronic Products Co 55 Nassau Ave Brooklyn 22 NY 69
Durant Mfg Co 1950 N Buffum St Milwaukee 1 Wisc 63	Fluidyne Eng'g Corp 425 N 7 St Minneapolis 6 Minn 41-47	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md 49
Dynalysis Development Labs Inc 11941 Wilshire Blvd Los Angeles 25 Calif 58	Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY 41	Hubbard Scientific Labs 1292 E 3 St Pomona Calif 72-73-75
Dynamics Instrumentation Co Div Alberhill Corp 1118 Mission St S Pasadena Calif 67-68	Foster Eng'g Co 835 Lehigh Ave Union NJ 38-50	Humphrey Inc 2805 Canon St San Diego Calif 64
Dynamics Research Associates Div Universal Match Corp PO Box 5841 Ferguson 21 Mo 36-41-45-50-51-52-58	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY 63	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill 36-49
Eagle Signal Corp 202 20 St Moline Ill 71-73-75	Friez Instrument Div Bendix Aviation Corp 1400 Taylor Ave Baltimore 4 Md 38-50-77	Hupp Instru/mation Co 2119 Sepulveda Blvd Los Angeles 25 Calif 70-73
Eastman Pacific Co 2320 E 8 St Los Angeles 21 Calif 71-73	Furnas Electric Co 1000 McKee St Batavia Ill 38	Ideal-Aerosmith Inc 12909 S Cerise Ave Hawthorne Calif 69
Eberline Instrument Div Reynolds Electrical 805 Early St Santa Fe N Mexico 63	Garrett Corp AIRsearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif 36-41-46	Illinois Testing Labs Inc 420 N LaSalle St Chicago 18 Ill 50
Eclipse Fuel Eng'g Co 1100 Buchanan Rockford Ill 43	Gates Radio Co 123 Hampshire St Quincy Ill 58-68	I-I-S Instrument Corp 4525 W 160 St Cleveland 11 Ohio 70-73
Eclipse-Pioneer Div Bendix Aviation Corp Teterboro NJ 41-64	General Bronze Corp 711 Stewart Ave Garden City NY 41	Indikon Co 76 Coolidge Hill Rd Watertown 72 Mass 38-47-50
Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ 50-76	General Communication Co 677 Beacon St Boston 15 Mass 45	Industrial Control Co 805 Albin Ave Lindenhurst LI NY 41-53
Eisler Eng'g Co 750 S 13 St Newark 3 NJ 61	General Control Co 1200 Soldiers Field Rd Boston 34 Mass 42-49-52-71-72-73-74-75	Industrial Electronic Engineers 3973 Lankershim Blvd N Hollywood Calif 52-60-63-70
Electrical Communications Inc 765 Clementina St San Francisco 3 Calif 41-42-49-54	General Controls Co 801 Allen Ave Glendale 1 Calif 38-50-56-69	Industrial Electronics Inc 8060 Wheeler St Detroit 10 Mich 38-41-60
Electrical & Physical Instrument Corp 42-19 27 St Long Island City 1 NY 63	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY 36-38-39-40-52-56- 58-61-68-71-73	Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md 36-37-41-49-58
Electric Eye Equipment Co 1941 E Fairchild St Danville Ill 39-40	General Electric Co X-Ray Dept 4855 Electric Ave Milwaukee 1 Wisc 77	Industrial Timer Corp 1407 McCarter Hwy Newark 4 NJ 52-70-71-73-75
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn 46-53-58	General Magnetics Inc 135 Bloomfield Ave Bloomfield NJ 67-68	Industrial Winding Mch Co 120 Wall St New York 5 NY 63
Electric Regulator Corp Pearl St Norwalk Conn 37-46-51-58	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass 46-50-58-68	International Business Machines Corp 590 Madison Ave New York 23 NY 52
Electro-Devices Inc 4 Godwin Ave Paterson 1 NJ 41-51-53	General RF Fittings Inc 702 Beacon St Boston 15 Mass 65	International Register Co 2620 W Washington Blvd Chicago 12 Ill 71-73
Electrola Inc 7517 N Clark St Chicago 26 Ill 36-41	Giannini & Co G M 918 E Green St Pasadena Calif 36-38-41-42-46-49-50-56-64	I Q Industries 1714 Westwood Blvd Los Angeles 24 Calif 42-43-44-50-70- 71-72-73-74-75
Electro-Mechanical Div General Riveters Inc 785 Hertel Ave Buffalo 7 NY 53	Gilmore Industries Inc 5713 Euclid Ave Cleveland 3 Ohio 60	Iron Fireman Mfg Co Electronics Div 2838 SE 9 Ave Portland 2 Ore 64
Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich 43-44-50-52-53	Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio 64	Isotope Products 1711 Elmwood Ave Buffalo 7 NY 45-62
Electronic Control Systems 2136 Westwood Blvd Los Angeles 25 Calif 41	Gorrell & Gorrell 336 Old Hook Rd Westwood NJ 52-70-71-72-75	Jacks-Evans Mfg Co 4427 Geraldine Ave St Louis 15 Mo 69
Electronic Eng'g Co of Calif 180 S Alvarado Los Angeles 57 Calif 52-63-70	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif 58-68	Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md 70
Electronic Machine Parts Inc 204 Lafayette St New York 12 NY 40	Greenleaf Mfg Co Div Mandel Industries 7814 Maplewood Industrial Ct St Louis 17 Mo 64	James Pond & Clark 2181 E Foothill Blvd Pasadena Calif 38
Electronic Measurements Co Lewis St & Maple Ave Eatontown NJ 67-68	Guardian Electric Mfg Co 1621 W Walnut St Chicago 12 Ill 69	Johnson Service Co 507 E Michigan St Milwaukee 1 Wis 50
Electronics Corp of America 1 Memorial Dr Cambridge 42 Mass 43-52-74	Gulton Industries Inc 212 Durham St Metuchen NJ 38	Kahl Scientific Instrument Corp PO Box 1166 El Cajon Calif 50-56
Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif 52-58-67-68-72-73-75	G-V Controls Inc 45 Hollywood Plaza E Orange NJ 76	Kahn & Co 541 Windsor St Hartford 1 Conn 46
Electron-Radar Products 4806 W Chicago Ave Chicago 51 Ill 43-44-61	Hacker & Co Wm J 82 Beaver St New York 5 NY 48-51	Kaiser Aircraft & Electronics Corp Toledo Electronics Div PO Box 487 Toledo Ohio 36-41
Electro Products Labs Inc 4601 N Ravenswood Ave Chicago 40 Ill 36		Kenyon Transformer Co 840 Barry St New York 59 NY 68
		Kepco Labs 131-38 Sanford Ave Flushing NY 58-67-68
		Kidde & Co Walter 1156 Main St Belleville 9 NJ 55

Kinney Mfg Div Vacuum Equip Div NY Air Brake Co 3529 Washington St Boston 30 Mass	56	Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	37-38-41-50-56	Production Research Corp Thornwood NY	41-42-49-63-72-73
Kollsman Instrument Corp Sub Standard Coil Products 80-08 45 Ave Elmhurst 73 NY	36-38-46	Modelectric Products Corp Asbury Park NJ	65	P S P Eng'g Co Div Induction Motors 8608 Otis St South Gate Calif	69
Labline Inc 3070 W Grand Ave Chicago 22 Ill	73	Modern Industries Inc 2601 Colorado Ave Santa Monica Calif	41-50-58-67-68	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	55
Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass	63	Modern Laboratory Equip Co 1811 1 Ave New York 28 NY	50-73	Pye Telecommunications Ltd Newmarket Rd Cambridge England	58-68
Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	49	Moeller Instrument Co 132-02-89 Ave Richmond Hill 18 NY	50	Radiation Research Corp 140 E 59 St New York 22 NY	73-75
Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill	62	Montgomery Mfg Co 206 S Main Owensville Ind	42-52-71-73-75	Radio Frequency Labs Inc Boonton NJ	49
Landis & Cyr 45 W 45 St New York 36 NY	63	Moog Valve Co Proner Airport E Aurora NY	41	Ram Meter Inc 1100 Hilton Rd Ferndale 20 Mich	63
Larson Instrument Co 24 Orchard St Tarrytown NY	43-44-50	Muirhead Instruments Inc 677 5 Ave New York 22 NY	41	Ransom Research 323 W 7 St San Pedro Calif	53-63-73
Leach Corp Inet-Palmer Div 4441 S Santa Fe Ave Los Angeles 58 Calif	58	Nagog Associates Inc Littleton Mass	52-53	Raytheon Mfg Co 100 River St Waltham 64 Mass	68
Learn Inc 3171 S Bundy Drive Santa Monica Calif	36-41-64	National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif	67-69	Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 64 Mass	41
Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	37-41-50	National Bell Corp 6 Lafayette Ave Brooklyn 17 NY	52	Rea Co J B 1723 Cloverfield Blvd Santa Monica Calif	64
Lektra Labs Inc 154 11 Ave New York 11 NY	71-73-74-75	National Cine Equipment Inc 209 W 48 St New York 36 NY	73	Reeves Instrument Corp 215 E 91 St New York 28 NY	36-41-64
Leslie Co Lyndhurst NJ	38-50	National Spectrographic Labs Inc 6300 Euclid Ave Cleveland 3 Ohio	77	Reliance Automatic Lighting Co 1922 Mead St Racine 3 Wisc	52-73
Liebel-Flarsheim Co 111 E Amity Rd Cincinnati 15 Ohio	71-73	National X-Ray Products Corp 71 S Newman St Hackensack NJ	77	Reliance Electric and Eng'g Co 24701 Euclid Ave Cleveland 17 Ohio	46-58-68
Lisk Co G W Clifton Springs NY	69	Navco Navigation Computer Corp 1621 Snyder Ave Philadelphia 45 Pa	63	Research Electronics Lab Roslyn Pa	56
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	41-64	Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	41-49-64-70-71	Resistor Labs Inc 2908 Nebraska Ave Santa Monica Calif	77
Lumenite Electronic Co 407 S Dearborn St Chicago 5 Ill	43-52-71-72-73-74-75	Newark Controls Co 15 Ward St Bloomfield NJ	38	Revo Inc 1900 Lyndale Ave S Minneapolis 5 Minn	46
Lux Clock Mfg Co Johnson St Waterbury Conn	73	New York Air Brake Co 230 Park Ave New York 17 NY	56	Reynolds Electric Co 3000 River Rd River Grove Ill	42-54-76
Lytel Eng'g & Mfg Co 1404 San Mateo Blvd SE Albuquerque New Mexico	71-73	N J E Corp 345 Carnegie Ave Kenilworth NJ	67-68	Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	41-49
McQuay-Norris Mfg Co 2320 Marconi St St Louis 10 Mo	69	Norden-Ketay Corp Commerce Rd Stamford Conn	41-64	Ripley Co 1 Factory St Middletown Conn	40-44-52
Machinery Electrification Inc 35 Hudson St Northboro Mass	40-52-71-72-73-74-75	North American Instruments Inc 2420 N Lake St Altadena Calif	36-38	Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	63
Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	36-41-46-63	North Atlantic Industries Inc 603 Main St Westbury NY	60	Robertshaw-Fulton Controls Co Fulton Sylphon Div PO Box 400 Knoxville 1 Tenn	50-56-57
Magneto Amplifiers Inc 632 Tinton Ave New York 55 NY	36-37-41-58-67-68	North Electric Co 553 S Market St Galion Ohio	37-49	Robinette Co W C 802 Fair Oaks Ave S Pasadena Calif	36-41-46-51
Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif	36-41-58-68	NRC Equipment Corp Sub National Research Corp 160 Charlemont St Newton Highlands 61 Mass	38-56	Robotron Corp 21300 W 8 Mile Rd Detroit 19 Mich	61
Magnuson Engineers Inc 590 Emory St San Jose 10 Calif	72	O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif	71	Rockwell Eng'g Co 2133 E 45 St Indianapolis 5 Ind	41
Magtrol Inc 38 Virginia Pl Buffalo 2 NY	53	Ohmart Corp 2236 Bogen St Cincinnati 14 Ohio	45	Robal Studios Walnut Tree Hill Sandy Hook Conn	73
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	52-71-73-75-76	Ohmite Mfg Co 3601 Howard St Skokie Ill	46	Rollan Electric Co 8233 S Princeton Ave Chicago 20 Ill	51
Manning Maxwell & Moore Inc Shelter Rock Lane Danbury Conn	38-41-46-50-56-69	Omega Instrument Co 103 E Altadena Dr Altadena Calif	38	Ronan & Kunz 502 S Kalamazoo Ave Marshall Mich	52
Manostat Corp 20-26 N Moore St New York 13 NY	38-56	Otis Elevator Electronic Div 35 Ryerson St Brooklyn 5 NY	41-55	Rotex Punch Co 2350 Alvarado St San Leandro Calif	69
Marvel-Schebler Products Div Borg Warner Corp Box 863 Decatur Ill	41	Pacific Scientific Co PO Box 22019 Los Angeles 22 Calif	64	Royal Communication Systems 11462 Euclid Ave Cleveland 6 Ohio	49
Matthew Labs 146 Riverdale Ave Yonkers NY	67-68	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	68	Royson Eng'g Co 103 N Penn St Hatboro Pa	63
Maxon Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY	58-68	Pantek Co PO Box 212 El Segundo Calif	36-38-47-63	St John X-Ray Lab Califon NJ	77
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	71	Paragon Electric Co 1600 12 St Two Rivers Wisc	52-72-73	Sanders Associates 95 Canal St Nashua NH	64
Mercoid Corp 4201 Belmont Ave Chicago 41 Ill	38-50-56	Parsons Co Ralph M Electronics Div 151 S De Lacey Ave Pasadena Calif	49	Sangamo Electric Co Springfield Ill	73
Mercury Electronic Co Box 450 B Red Bank NJ	67-68	Pegasus Labs Inc 3690 W 11 Mile Rd Berkley Mich	36-41	Sarco Co 350 Fifth Ave New York 1 NY	50
Metals & Controls Corp Spencer Thermostat Div 48 Forest St Attleboro Mass	50	Penn Controls Inc Goshen Ind	38-50	Scanco Controls Inc Market St Palmyra NJ	38-50-52
Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	52	Penn-East Eng'g Corp Willow St Kutztown Pa	41	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	70-71
Micrometrical Mfg Co 345 S Main St Ann Arbor Mich	48	Peschel Electronics Inc 13 Garden St New Rochelle NY	68	Schirmer-National Alarm Co 20 Westside Ave Bergenfield NJ	44
Microtran Co 145 E Mineola Ave Valley Steam NY	68	Philadelphia Scientific Glass Co Box 460 Paletton Rd Quakertown Pa	67	Seaboard Electric Products Corp 417 Canal St New York 13 NY	41
Miller-Harris Instrument Co 601 E Ogden Ave Milwaukee 2 Wisc	71-73-75	Philips Electronics Inc 750 S Fulton Ave Mt Vernon NY	77	Seely Instrument Co 377 4 St Niagara Falls NY	71-73-75
Miller-Trojan Co 3 North Ridge Ave Troy Ohio	39-56	Phoenix Precision Instrument Co 3803 N 5 St Philadelphia 40 Pa	43-44	Seneca Falls Machine Co 314 Fall St Seneca Falls NY	36-41-46-53-60
Milwaukee Gas Specialty Co 780 N Jackson St Milwaukee 1 Wisc	69	Photo Crystals Inc 15 S 1 St Geneva Ill	43-44-61	Sensory Inc Pleasantville Rd New Vernon NJ	36
MinAtron Corp Belle Mead 9 NJ	36	Photobell Co 43 Vesey St New York 7 NY	40-43-44-45-46-52-54-59-60-63-70-74	Serdex Inc 91 Cambridge St Boston 14 Mass	50
Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	41-55-58	Photographic Analysis Inc 13273 Ventura Blvd N Hollywood Calif	43-50	Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	36-41-50
Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	38-50-60-64	Photovolt Corp 95 Madison Ave New York 16 NY	74	Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	86-41
Minn-Honeywell Regulator Co 2753 4 Ave S Minneapolis 8 Minn	38-43-50-56-69	Polyphase Instrument Co E 4 St Bridgeport Pa	61	Servomex Controls Ltd 80 Shore Rd Port Washington NY	68
		Potter Instrument Co 115 Cuttermill Rd Great Neck NY	70-72-73-74-75	Servonics Inc 1145 S Fair Oaks Ave Pasadena 2 Calif	38
		Powers Regulator Co 3400 Oakton St Skokie Ill	50-57-69	Servonics Inc 822 N Henry St Alexandria Va	41-46-47-53
		Power Transformer Co 91 Edison Pl Newark 5 NJ	61-62	Servo-Recording Instruments Inc 1815 W Van Buren St Phoenix Ariz	63
		Process & Instruments 15 Stone Ave Brooklyn 33 NY	50-55	Servo-Tek Products Co 1086 Goffle Rd Hawthorne NJ	36-41-46-51-58
		Production Instrument Co 710 W Jackson Blvd Chicago 6 Ill	63	Shepard Labs Inc 480 Morris Ave Summit NJ	68
				Simplex Time Recorder Co 24 S Lincoln St Gardner Mass	73
				Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	41-42-49-55-63

Sola Electric Co
4633 W 16 St Chicago 50 Ill 58-68

Solar Aircraft Co
2200 Pacific Hwy San Diego 12 Calif 38

Solartron Electronic Group Ltd
Queens Rd
Thames Ditton Surrey England 41

Sorensen & Co
Richards Ave Norwalk Conn 67-68

Sparton Control Systems Div
Sparks-Withington Co
2301 E Michigan Ave Jackson Mich 38-49

Specialty Eng'g & Electronics Co
79 Clifton Pl Brooklyn 38 NY 68

Spencer Mfg Co
3253 N Cicero Ave Chicago 41 Ill 63

Sperry Gyroscope Co Div Sperry Rand Corp
Great Neck NY 64

Sperry Products Inc
Shelter Rock Rd Danbury Conn 36-55

Standard Electric Time Co
89 Logan St Springfield 2 Mass 70-72-73

Standard Electronics Div Radio Eng'g Labs
30 & Borden Sts Long Island City NY 68

Stevens Mfg Co
P O Box 1007 Annex
Mansfield Ohio 50-76

Stewart Instrument Co
6507 Grand River Detroit 8 Mich 37-61

Sticht Co Herman H
27 Park Pl New York 7 NY 73

Stoelting Co C H
424 N Homan Ave Chicago 24 Ill 71-72-73

Strandberg Eng'g Labs Inc
416 W Market St Greensboro N Car 63

Stratford Corp
44 W 28 St New York 1 NY 41-42

Stromberg-Carlson Div General Dynamics
Corp 100 Carlson Rd
Rochester 3 NY 36-41-54

Stromberg Time Corp
135 S Main St Thomaston Conn 52

Superior Electric Co
83 Laurel St Bristol Conn 58-68

Syston Corp
2055 Concord Blvd
Concord Calif 46-50-63-70-71-73-75

Taller & Cooper
75 Front St
Brooklyn 1 NY 39-43-49-54-57-60-63

Teca Corp
80 Main St White Plains NY 52-72

Telescope Mfg Corp
28 Ranick Dr Amityville LI NY 58-70

Telectro Industries Corp
35-18 37 St Long Island City 1 NY 67-68

Teletronic Labs Inc
1835 W Rosecrans Ave
Gardena Calif 52-72-73

Tel-Instrument Electronics Corp
728 Garden St Carlstadt NJ 68

Tempo Instrument Co
5 Centre St Hempstead NY 52-73

Tensitron Inc
Pin Hill Harvard Mass 52-53

Texas Instrument Inc
6000 Lemmon Ave Dallas 9 Texas 70-72-73

Thomas Instrument Co
Phoenix NY 77

Thompson Clock Co H C
38 Federal St Bristol Conn 70-71-73-75

Thompson Products Inc Electronics Div
2196 Clarkwood Rd Cleveland 3 Ohio 41-46

Therm-O-Disc Inc
S Main St Rd Mansfield Ohio 50

Thermo Electric Co
109 5 St Saddle Brook NJ 50

Tiptronic Inc
4 & Franklin Sts
Tipp City Ohio 37-38-46-47-50-52-53-56

Toledo Scale Co
1027 Telegraph Rd Toledo Ohio 60

Topp Industries Inc
5255 W 102 St
Los Angeles 45 Calif 41-52-73

Tork Time Controls Inc
1 Grove St Mt Vernon NY 73

Transval Eng'g Corp
10401 W Jefferson Blvd
Culver City Calif 41

Tricraft Products Corp
1535 N Ashland Ave Chicago 22 Ill 71

Triplet & Barton
831 N Lake St Burbank Calif 77

Trott Electronics Inc
412 Smith St Rochester 6 NY 42-52-58-63

Tuttle & Kift Inc
1823 N Monitor Ave Chicago 39 Ill 50

Ulanet Co George
413 Market St Newark 5 NJ 50-76

Union Switch & Signal Div
Westinghouse Air Brake
Braddock Ave Pittsburgh 18 Pa 42

Union Thermolectric Corp
2001 Greenleaf St Evanston Ill 63

United Aircraft Products Inc
1116 Bolander Ave Dayton 8 Ohio 50-69

United Control Corp
1540 Union Bay Pl Seattle 5 Wash 41-50

United Electric Controls Co
85 School St
Watertown 72 Mass 38-50-56-67

United Electrodynamics
1200 S Marengo Ave Pasadena Calif 49-67-68

United Transformer Corp
150 Varick St New York 13 NY 67-68

Universal Atomics Corp
50 Bond St Westbury LI NY 58

Universal X-Ray Products Inc
1140 N Western Ave Chicago 22 Ill 77

U S Controls Inc
161 Grand St New York 13 NY 52-56

U S Dynamics Corp
1250 Columbus Ave Boston 20 Mass 67-68

U S Time Corp
Waterbury Conn 64

Vacuum-Electronic Eng'g Co
86 Denton Ave New Hyde Park LI NY 56

Vacuum Specialties Co
77 Prospect St Somerville Mass 56

Vacuum Tube Products Co
506 S Cleveland St
Oceanside Calif 52-56-71

Valverde Labs
252 Lafayette St New York 12 NY 50

Vapor Heating Corp
80 E Jackson Blvd Chicago 4 Ill 38-50

Vapor Recovery Systems Co
2820 N Alameda St Compton Calif 49

Varo Mfg Co
2201 Walnut St Garland Texas 46-68

Vectrol Eng'g Inc
P O Box 1089
Stamford Conn 36-37-41-46-49-50-51-52-58-61

Veeder Root Inc
70 Sargeant St Hartford 2 Conn 63

Vernaline Products Co
P O Box 222 Hawthorne NJ 71

Victory Eng'g Corp
117 Springfield Rd Union NJ 50

Vocaline Co of America
Old Saybrook Conn 73-75

WacLine Inc
35 S St Clair St 41-46-53-58-63-68
Dayton 2 Ohio

Waldorf Instrument Co Div
F C Huyck & Sons Park Ave
Huntington Station NY 49-50-51-52

Walkirt Co
141 W Hazel St
Inglewood 3 Calif 52-63-70-71-72-73-74-75

Wallson Associates Ltd
963 Frelinghuysen Ave Newark 12 NJ 36-41

Waltham Watch Co
221 Crescent St
Waltham 54 Mass 52-64-70-71-72-73-75

Ward Leonard Electric Co
Mt Vernon NY 37-46-57

Warner Electric Brake & Clutch Co
Industrial Div Beloit Wis 36-41-51-52-53

Warren Corp
2901 Brighton Rd Pittsburgh 12 Pa 77

Warren Mfg Co
Newtown Rd Littleton Mass 41-58-67-68

Weltronic Co
19500 W 8 Mile Rd
Detroit 19 Mich 52-58-61-67-68-75

West Coast Research Corp
2371 1/2 Westwood Blvd 36-38-41-47-49-50-51-52
Los Angeles 64 Calif

Westinghouse Electric Corp
P O Box 868 Pittsburgh 30 Pa 64

West Instrument Corp
4363 W Montrose Ave Chicago 41 Ill 50

Weston Electrical Instrument Corp Sub
Daystrom Inc 614 Frelinghuysen Ave
Newark 12 NJ 38-50-56

Wilcolator Co
1001 Newark Ave Elizabeth NJ 50

Wilson & Co G C
1915 8 Ave Huntington 3 W Va 52-71-73-75

Winder Aircraft Corp of Florida
P O Box 2397 Drane Field Lakeland Fla 38

Winterburn Mfg Co
11 Whittemore St Putnam Conn 41-46

Worner Electronic Devices
Rankin Ill 40-43-44

Yellow Springs Instrument Co
P O Box 106 Yellow Springs Ohio 50

Zenith Electric Co
152 W Walton St Chicago 10 Ill 52-72-73-75

23—CRYSTALS, ACCESSORIES & CORES

Crystals, barium titanate 1

Crystals, color TV frequency control 2

Crystals, communication 3

Crystals, diode 4

Crystals, frequency control 5

Crystals, galena 6

Crystals, germanium 7

Crystals, hermetically sealed .. 8

Crystals, quartz 9

Crystals, rochelle salt 10

Crystals, scintillation 11

Crystals, silicon 12

Crystals, synthetic sapphire ... 13

Crystals, tourmaline 14

Crystals, transducer 15

CRYSTAL ACCESSORIES

Crystal blanks 16

Crystal cartridges 17

Crystal electrodes 18

Crystal filters 19

Crystal heaters 20

Crystal mounts 21

Crystal ovens 22

Crystal sockets 23

Holders 24

Pickups, quartz crystal 25

Probes 26

CORES

Cores, c-type 27

Cores, ceramic 28

Cores, cut 29

Cores, e-type 30

Cores, ferrite 31

Cores, high permeability 32

Cores, laminated 33

Cores, powered 34

Cores, slug tuning 35

Cores, tape wound 36

Cores, toroidal 37

Cores, u-type 38

Ferric oxides 39

Ferrites 40

Admittance Namco Corp Marine
St Farmingdale LI NY 26

Aeronautical Electronics Inc
P O Box 6527 Raleigh NC 3-5-8

Aerovox Corp Crowley Div
1 Central Ave 27-28-30-31-32
W Orange NJ 34-35-37-38-40

Aircon Inc
1209 E Grand St Elizabeth NJ 21

Airtron Inc
1101 W Elizabeth Ave Linden NJ 40

Alden Products Co
123A N Main St Brockton Mass 31-37

Allen-Bradley Co
136 W Greenfield Ave
Milwaukee 4 Wis 30-31-37-38-40

Allied Industries Inc
2500 Woodland Ave Louisville 10 Ky 21-23

American Electronic Laboratories
121 N 7 St Philadelphia 6 Pa 24

American Lava Corp Subs Minn Mining &
Mfg Cherokee Blvd & Mfrs Rd
Chattanooga 5 Tenn 28

Amersil Co
685 Ramsey Ave Hillsdale NJ 9

Amplex Div Chrysler Corp
P O Box 2718 Detroit 31 Mich 34

Arenberg Ultrasonic Laboratory
94 Green St Jamaica Plain 30 Mass 14-25

Arnold Eng'g Co
P O Box G
Marengo Ill 27-29-30-32-33-34-35-36-37-38

Astatic Corp
250 Harbor St Conneaut Ohio 17

Audiogersh Corp
514 Broadway New York 12 NY 17

Baird-Atomic Inc
33 University Rd Cambridge 38 Mass 19

Barker Sales Co
996 Edgewater Ave Ridgefield NJ 27

Bassett Inc Rex
1314 N E 17 Ct
Ft Lauderdale Fla 3-5-8-9-19

Beckman/Berkeley Div Beckman
Instruments Inc 2200 Wright Ave
Richmond 3 Calif 40

Belmont Smelting & Refining
330 Belmont Ave Brooklyn 7 NY 12

Berkeley Crystal Co
1740 University Ave Berkeley 3 Calif 11-15

Bios Labs Inc
17 W 60 St
New York 23 NY 4-7-8-9-10-11-12-13-14

Birther Corp Industrial Div
4371 Valley Blvd Los Angeles 32 Calif 21

Biley Electric Co
Union Station Bldg
Erie Pa 2-3-5-8-9-15-20-22

Bogart Mfg Corp
315 Seigel St Brooklyn 6 NY 24

Bogue Electric Mfg Co
Iowa Ave Paterson 3 NJ 4-8-12

Bram Chemical Co Metals & Minerals
Div 820 65 Ave
Philadelphia 26 Pa 1-10-15-32-34

Branson Instruments Inc
37 Brown House Rd Stamford Conn 9

Breen Labs
1520 Evergreen Rd Williamsport Pa 3-5-16-21

Browning Labs Inc
750 Main St Winchester Mass 26

Brush Electronics Co 3400 Perkins Ave Cleveland 14 Ohio 1-3-5-9-10-15	Erie Resistor Corp 644 W 12 St Erie 6 Pa 1-15	Keystone Electronics Co 65 7 Ave Newark 4 NJ 2-5-8-9-16-21-22
Bulova Watch Co Electronics Div 40-01 61 St Woodside 77 NY 3-5-8-9-16-19-20-22-23	Erwood Inc 1770 W Berteau Ave Chicago 13 Ill 22-26	King Lab Inc 2645 S 2 St W Salt Lake City 15 Utah 1-15
Burnell & Co 45 Warburton Ave Yonkers NY 19	Fair-Rite Products Corp Commercial Row Walkkill NY 31-35	Kirchberger & Co M 83 W Forest Ave Englewood NJ 28
Burnett Radio Lab W W L 4814 Idaho St San Diego 16 Calif 3-5-9-21-22-24	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ 7-12	Kistler Instrument Corp 15 Webster St N Tonawanda NY 15-25
Burrughs Corp Electronic Instruments Div 1209 Vine St Philadelphia 7 Pa 32	Ferroxcube Corp of America 35 E Bridge St Saugerties NY 34-38	Knights Co James Church & Wells Sts Sandwich Ill 2-3-5-8-9-15-16-19-20-22
Carstedt Research Inc 2501 E 68 St Long Beach 5 Calif 27-29-32-33-36-37-38	Flight Research Inc P O Box 1-F Richmond 1 Va 12	Krystinel Corp P O Box 6 Port Chester NY 27-28-30-31-32-34-35-37
Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wisc 28-32	Fluorocarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ 23	Lapp Insulator Co Radio Specialties Div 24 Summer St LeRoy NY 28
Century Coil Corp 1534 N Clybourn Ave Chicago 10 Ill 33	Footo Mineral Co 18 W Chelton Ave Philadelphia 44 Pa 39	Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ 22
Chesapeake Instrument Corp Shadyside Md 15	F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY .21	Lehigh Valley Electronics Eng'g & Mfg Co 215 S 3 St Allentown Pa 22
Cinch Mfg Corp 1026 S Homan Ave Chicago 24 Ill 23-24	Franklin Fibre-Lamitex Corp Wilmington Dela 33	Leonard Electric Products Co 67 34 St Brooklyn 32 NY 39-40
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England 22	Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ 28	Lewis Co E B 11 Bragg St E Hartford 8 Conn 3-5-8-9-15-19
City Chemical Corp 132 W 22 St New York 11 NY 7-11-12-39	Fretco Inc 406 N Craig St Pittsburgh 13 Pa 10-11	Lieco Inc 3610 Oceanside Rd Oceanside LI NY 21
Clark Crystal Co 2 Farm Rd Marlboro Mass 3-5-8-9-14-16-22	Gates Radio Co 123 Hampshire St Quincy Ill 22	Linde Air Products Co Div Union Carbide & Carbon Co 30 E 42 St New York 17 NY 13
Clowes Ceramic Corp 3711 Calhoun Ave Chattanooga 7 Tenn 28	General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill 26	Louthan Mfg Co Harvey Ave E Liverpool Ohio 28
Coil Winders Inc New York Ave Westbury LI NY 19	General Ceramics Corp Crows Mill Rd Keasbey NJ 27-28-29-30-31-32-35-37-38-40	McCoy Electronics Co Chestnut & Watts Sts Mt Holly Springs Pa 19-20-22-25
Collins Radio Co 855 35 St N E Cedar Rapids Iowa 31	General Chemical Div Allied Chemical Dye Corp 40 Rector St New York 6 NY 39	Mackay Inc A D 198 Broadway New York 38 NY 6-7-9-11-12-18
Columbian Carbon Co Mapico Color Unit 380 Madison Ave New York 17 NY 39	General Crystal Co P O Box 9 Burlington Wis 1-2-3-5-6-8-9-10-15 16-19-20-21-22-23	Magnafux Corp 7300 W Lawrence Ave Chicago 31 Ill 15
Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo 40	General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY 1-27-30-31-32-37-38-40	Magnetic Core Corp John & Lawrence Sts Newburgh NY 32-34-35-37
Cryco Inc 1138 Mission St S Pasadena Calif :	General Electric Co Ltd of England 80 Shore Rd Port Washington NY 4-7-12	Magnetic Metals Co Hayes Ave & 21 St Camden 1 NJ 32-36
Custom Components Inc P O Box 248 Caldwell NJ 30-32-34-35-37	General Instrument Corp Automatic Mfg Div 65 Gouverneur St Newark 4 NJ 4-12	Magnetics Inc Box 391 Butler Pa 32-31-36-37
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif 3-5-8-9-15-16	General RF Fittines Inc 702 Beacon St Boston 15 Mass 19-21-24-26	Mallinckrodt Chemical Works 2 & Mallinckrodt Sts St Louis 7 Mo 10-39
Dana Inc P A 233 Broadway New York 7 NY 9	General Transistor Corp 91-27 138 Pl Jamaica 35 NY 4-7-12	Manson Laboratories Inc 207 Greenwich Ave Stamford Conn 5-22
Dayton Aviation Radio & Equipment Corp R R 3 Troy Ohio 19-26	G-L Electronics Co 2921 Admiral Wilson Blvd Camden 5 NJ 32-36-37	Methode Mfg Corp 7447 W Wilson Ave Harwood Heights Ill 24
Defiance Eng'g & Microwave Corp Beverly Airport Beverly Mass 21	Gulton Industries Inc 212 Durham Ave Metuchen NJ 1-15	Metro Inc R I 230 Toronto Ave Providence 5 RI 17
Delta Chemical Works 23 W 60 St New York 23 NY 4-7-8-9-10-11-12-13-14	Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio 8-11-16-39	Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill 21
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif 21	Hermetic Seal Corp 29 S 6 St Newark 7 NJ 24	Microlab Okner Pkwy Livingston NJ 21
Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass 19-21-24	Hermetite Corp 702 Beacon St Boston 15 Mass 8-24	Microwave Associates Inc Burlington Mass 12-40
Diamond Drill Carbon Co 244 Madison Ave New York 16 NY 9	Hewlett-Packard Co 275 Pare Mill Rd Palo Alto Calif 21	Microwave Development Labs 92 Broad St Babson Park 57 Mass 21
Diamonite Products Mfg Co 217 4 St N E Canton 2 Ohio 21-28	Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 9 Ohio 26	Midland Mfg Co 3155 Fiberglass Rd Kansas City 15 Kan 2-5-16-19-20-22
Douglas Microwave Co 252 E 3 St Mt Vernon NY 21	Hill Electronic Eng'g & Mfr Co New Kingstown Pa 2-3-5-8-9-15-16-19-20-22	Millen Mfg Co James 150 Exchange St Malden 48 Mass 23
Downing Crystal Co 191 Shaffer Ave Westminster Md 2-3-5-8-9-16-19-22	Hoffman Co P R 321 Cherry St Carlisle Pa 9-15-16-18-21	Molded Fiber Glass Co 4801 Benefit Ave Ashtabula Ohio 33
Du-Co Ceramics Co Box 278 Saxonburg Pa 28	Hoffman Semiconductor Div Hoffman Electronics Corp 930 Pitner Ave Evanston Ill 12	Moloney Electric Co 5390 Bircher Blvd St Louis 20 Mo 27-29-30-38
Dudek & Co R C 407 N Maple Dr Beverly Hills Calif 11	Hooper Chemical Corp P O Box 313 Rutherford NJ 40	Monitor Products Co 815 Fremont Ave South Pasadena Calif 3-9-15-22
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ 26	Howard Crystal Holders Inc 2600 Grand Ave Kansas City 8 Mo 18-22-23-24	Mosley Electronics Inc 8622 St Charles Rock Rd St Louis 14 Mo 23
Duotone Co Locust St Keyport NJ 17	Hudson American Div 25 W 43 St New York 36 NY 9	National Moldite Co 1410 Chestnut Ave Hillside 5 NJ 31-32-34-35-37-40
Dyna-Empire Inc 1075 Stewart Ave Garden City LI NY 1	Hunt Corp 453 Lincoln St Carlisle Pa 3-5-8-9-22	National Radiac Inc 475 Washington St Newark 2 NJ 11-16
Eagle-Picher Co American Bldg Parkway & Walnut Cincinnati 2 Ohio 7-12	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill 2-3-5-9-16-18-19-21-22-24	Nebel Laboratory R E 1634 E 12 St Brooklyn 29 NY 3-16-18-21
Edison Electronic Co 1902 N 3 St Temple Texas 3-5-8-9-16	Hupp Electronics Co Div Hupp Corp 265 E Pomfret St Carlisle Pa 2-3-5-9-16-22	Nichols Products Co 325 W Main St Moorestown NJ 26
Edo Corp 13-10 111 St College Point 56 LI NY 1-15	Hycon Mfg Co 707 S Raymond Ave Pasadena Calif 19	Northern Eng'g Labs 372 Wilmot Ave Burlington Wis 3-5-8-9-15-20-22
Elco Mfg Co 137 Herrick Rd New Hyde Prk LI NY 21	Indiana Steel Products Co Valparaiso Ind 27-32-36-38	Norton Co 1 New Bond St Worcester 6 Mass 28
Electrical Specialty Co 158 11 St San Francisco 3 Calif 12	Intelx Systems Inc 22 Thames St New York 6 NY 28-31-32-33-34-36-37-38-40	Omega Labs Inc Haverhill St Rowley Mass 21
Electron Instrument Co 84 Withers St Brooklyn 11 NY 26	International Crystal Mfg Co 18 N Lee Ave Oklahoma City 1 Okla 3-5-8-9-22	Ortho Filter Corp 196 Albion Ave Paterson 2 NJ 19
Electro Mechanical Co Div Union Carbide & Carbon 30 E 42 St New York 17 NY 12	International Telemeter Corp 2000 Stoner Ave Los Angeles 25 Calif 31	Pacific Semiconductors Inc 10451 W Jefferson Blvd Culver City Calif 4-7-16
Electro-Voice Inc Cecil & Carrol Sts Buchanan Mich 17	Isolantite Mfg Corp Warren Ave Stirling NJ 28	Pacific Transducer Corp 11836 W Pico Blvd Los Angeles 64 Calif 25
Elgin National Watch Co Electronics Div 2435 N Naomi St Burbank Calif 17	Isomet Corp 118 Union St Palisades Park NJ 11-16	Pan-Electronics Corp Ruth St Griffin Ga 2-3-5-8-9-16-22
Elm Labs 10 Washington Ave Hastings-on-Hudson NY 20-21-22-24	Javex P O Box 646 Redlands Calif 23-24	Permonite Mfg Co 444 Lake Shore Dr Chicago 11 Ill 24
Endeco Eng'g Development Co of Los Angeles 922 E Anaheim St Wilmington Calif 3	Johnson Co E F Waseca Minn 23	Philmore Mfg Co 113 University Pl New York 3 NY 4-6-7
Endevco Corp 161 E California St Pasadena Calif 15	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill 26	Pix Mfg Co 75 Hudson St Newark 3 NJ 21-24
Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ 21-23-24	Kahle Eng'g Co 1307 7 St N Bergen NJ 22	Polymer Corp 2120 Fairmont Ave Reading Pa 32-34-35-36-37-40

Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	21	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Tex	12	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	12
Precise Development Corp 2 Neil Ct Oceanside NY	26	Thermo Materials Inc 4040 Campbell Ave Menlo Park Calif	40	Beckman Berkeley Div Beckman Instruments Inc 2200 Wright Ave	16
Precision Crystal Lab 2223 Warwick Ave Santa Monica Calif	2-3-5-8-9-15-16-19-22	Thomas & Skinner Inc 1120 E 28 St Indianapolis 7 Ind	27-29-33-36-37	Beckman Instruments Inc Process Instruments Div 2500 Fullerton Rd	5-7
Premier Instrument Corp 52 W Houston St New York 12 NY	21-24	Thorens Co Thorens Ave New Hyde Park NY	17	Fullerton Calif	
Premier Research Labs Inc 79 7 Ave New York 11 NY	2-3-5-8-14-15-16-20-21-22	Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass	11	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	14
Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	26	Trad Electronics Corp 1001 1 Ave Asbury Park NJ	21	Bendix Aviation Corp Cincinnati Div 3130 Wasson Rd Cincinnati 8 Ohio	14
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	3-8-9-16	Transitron Electronic Corp 168 Albion St Wakefield Mass	4	Berger Communications 109-01 72 Rd Forest Hills LI NY	16
Pye Telecommunications Ltd Newmarket Rd Cambridge England	1-2-3-4-5-7-9-20 21-22-23-24	Ultradyne Eng'g Labs P O Box 3308 Albuquerque New Mex	30-33	Berkeley Crystal Co 1740 University Ave Berkeley 3 Calif	1-14-16
Pyroferic Co Pyroferic Bldg E 216 St at Bronx Blvd New York 67 NY	32-34-35-37	Uniwave Inc 2 Marine St Farmingdale NY	21-24	Berman Labs 112-13 Rockaway Blvd Ozone Park 20 NY	10
Quality Components Inc St Marys Pa	34-35	U S Dynamics Corp 1250 Columbus Ave Boston 20 Mass	4-7-12	B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	14-18
Radar Design Corp 210 5 Ave New York 16 NY	21	U S Stoneware Co Alite Div Orville Ohio	28	Black Light Corp of America 5114 Walnut Grove Ave San Gabriel Calif	11
Radiation Counter Labs Inc 5121 W Grove St Skokie Ill	11-31	Valpey Crystal Corp 1244 Highland St Holliston Mass	3-5-9-14-15-16-19-22	Brimmayer Laboratories E W 86 Fulton St New York 38 NY	10
Radio City Products Co Centre & Glendale Sts Easton Pa	26	Vari-L Co 432 Fairfield Ave Stamford Conn	34	Boonton Electronics Corp 738 Speedwell Ave Morris Plains NJ	12-14-29
Radio Cores Inc 9540 Tulley Ave Oak Lawn Ill	34-35-37	WacLine Inc 35 S St Clair St Dayton 2 Ohio	26	Brooke Eng'g Co 4717 Wayne Ave Philadelphia 44 Pa	17
Radio Corp of America Camden 2 NJ	31-37	Waldom Electronics Inc 4625 W 53 St Chicago 32 Ill	24	Browning Labs Inc 750 Main St Winchester Mass	2-18
Raytheon Mfg Co Receiving & Cathode Ray Tube Operations 55 Chapel St Newton 58 Mass	4	Waveguide Inc 14837 Oxnard St Van Nuys Calif	24	Bruno-New York Industries Corp 460 W 34 St New York 1 NY	12-20
Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass	40	Webster Electric Co 1900 Clark St Racine Wis	17	Brush Electronics Co Texas Div 3732 Westheimer Rd Houston 6 Texas	19
Raytheon Mfg Co Microwave & Power Tube Operations Foundry Ave Waltham Mass	40	Westinghouse Electric Corp P O Box 868 Pittsburgh 80 Pa	27-29-30-32-36-37-38	Calif Technical Industries 1421 Old County Rd Belmont 10 Calif	18
Reeves-Hoffman Div Standard Electronics Corp 145 Cherry St Carlisle Pa	2-3-5-8-9-15-16-18-19-22	Williamson Development Co 317 Main St W Concord Mass	22	CG Electronics Corp 305 Dallas St N E Albuquerque New Mex	6
Remler Co 2101 Bryant St San Francisco Calif	22	Wisconsin Porcelain Co 121 Lincoln St Sun Prairie Wis	28	Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England	10-13-14
Research Development Mfg Inc 429 E Collom St Philadelphia 41 Pa	31	Workman TV Inc 309 Queen Anne Rd Teaneck NJ	31-34	Coilcraft Inc Cary Ill	9
Rixon Electronics Inc 2414 Reedie Dr Silver Spring Md	20-22	Wright Electronics Inc 1519 McGee St Kansas City 5 Mo	2-3-5-8-9-16-19-20-22	Consolidated Electrodynamics Corp 300 N Sierra Madre Villa Pasadena Calif	7-19
Romar Plastics Inc 1311 E Main St St Charles Ill	20	Yale & Towne Powdered Metal Prods Div 9335 W Belmont Ave Franklin Park Ill	27-28-31-32-34-38-40	Consolidated Electrodynamics Corp Rochester Div 1775 Mt Read Blvd Rochester 4 NY	7
Rubbercraft Corp of Calif 1800 W 220 St Torrance Calif	12			Control Products Inc 306 Sussex St Harrison NJ	2
Sage Labs Inc 30 Guinan St Waltham 54 Mass	19-21-24			Crescent Eng'g Research Co 5440 N Peck Rd El Monte Calif	12-19
Scala Radio Co 2814 19 St San Francisco 10 Calif	26			Deltron Inc 2905 N Leithgow St Philadelphia 33 Pa	12
Scientific Radio Products Inc 215 S 11 St Omaha Nebr	2-3-5-8-9-16-19-20-22			DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	18
Scientific Radio Service 4301 Sheridan St University Park Hyattsville Md	3-5			Devco Eng'g Inc P O Box 387 Caldwell NJ	5
Sealectro Corp 610 Payette Ave Mamaroneck NY	23			Devol Research Co Brookside Drive Greenwich Conn	9
Semimetals Inc 130-11 90 Ave Richmond Hill 18 NY	7-12			Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	1-18
Solar Mfg Corp 4553 Seville Ave Los Angeles 58 Calif	1-15			Diatron Co 3327 Dixie Dr Houston 21 Texas	5
Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	40			Dice Co J W 16 Highwood Ave Englewood NJ	3-10
Sprague Electric Co Marshall St North Adams Mass	36-37			Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	13
Stackpole Carbon Co St Marys Pa	31-32-34-35-37-10			Douglas Microwave Co 252 E 3 St Mt Vernon NY	1
Standard Crystal Co 1714 Locust St Kansas City Mo	2-5-8-9-15-16-18-19-21			Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	14-16
Standard Electronics Div Radio Eng'g Labs 30 & Borden Sts Long Island City NY	26			Dyna-Empire Inc 1075 Stewart Ave Garden City LI NY	9
Steward Mfg Co D M Chattanooga Tenn	27-28-29-30-31-35-37-38-40			Eagle Electric Mfg Co 23-10 Bridge Plaza S Long Island City 1 NY	20
Stone Paper Tube Co 900 Franklin St N E Washington 17 DC	33			Eastman Kodak Co 343 State St Rochester 4 NY	14
Stupakoff Div Carborundum Co Latrobe Pa	1			Eberline Instrument Div Reynolds Electrical 805 Early St Santa Fe N Mexico	14
Superex Electronics Corp 4 Radford Pl Yonkers NY	29-32-35-40			Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ	2-15
Superior Steatite & Ceramic Corp 91 W Forest Ave Englewood NJ	28			Eisler Eng'g Co 750 S 13 St Newark 3 NJ	7
Sylvania Electric Products Inc 1740 Broadway New York 19 NY	4-7-12-24-40			Elco Mfg Co 137 Herrick Rd New Hyde Park LI NY	1
Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn	21-40			Electric Regulator Corp Pearl St Norwalk Conn	20
Tedford Crystal Labs 4126 Colerain Ave Cincinnati 23 Ohio	2-3-5-9-9-15-16-19			Electro-Medical Lab Inc S Woodstock 10 Vt	8
Tele-Coil Co 2783 Saunders St Camden 5 NJ	20			Electro Products Labs Inc 4501 N Ravenswood Ave Chicago 40 Ill	10-19
Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif	28-31-34			Electro-Technical Labs Div Mendrel Industries 5184 Glenmont Houston Texas	19
Teletronics Lab Inc 54 Kinkel St Westbury NY	26			Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich	9-17
Temperature Eng'g Corp U S Hwy 130 Riverton NJ	22			Electronics Corp of America 1 Memorial Dr Cambridge 42 Mass	2-17
				Electron-Radar Products 4806 W Chicago Ave Chicago 51 Ill	17
				El-Tronics Inc Penn Ave Mayfield Pa	14-16

24—DETECTORS

Detectors, crystal	1
Detectors, fire	2
Detectors, flaw	3
Detectors, galena	4
Detectors, gas	5
Detectors, impedance	6
Detectors, leak	7
Detectors, lie	8
Detectors, magnetic	9
Detectors, metal	10
Detectors, mineral	11
Detectors, null	12
Detectors, pipe & cable	13
Detectors, radiation	14
Detectors, resistance	15
Detectors, scintillation	16
Detectors, smoke	17
Detectors, standing wave	18
Detectors, vibration	19
Detectors, voltage	20
Detectors, water leak	21

Admittance Namco Corp Marine St Farmingdale LI NY	1
Advanced Electronics Inc 94 Silas Deane Hwy Rocky Hill 9 Conn	7-19
Airmec Ltd High Wycombe Buckinghamshire England	12-14
Amerac Inc 116 Topsfield Rd Wenham Mass	1
American District Telegraph Co 155 6 Ave New York 13 NY	2-17
American Electronics Inc 655 W Washington Blvd Los Angeles 15 Calif	7
Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	5-7-16-17-20
Arnoux Corp 11924 W Washington Blvd Los Angeles 66 Calif	2
Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio	12
Associated Research Inc 3758 W Belmont Ave Chicago 18 Ill	8
Atomic Labs Inc 3086 Claremont Ave Berkeley 5 Calif	14
Baird-Atomic Inc 33 University Rd Cambridge 38 Mass	1-14-16

Ercona Corp	551 5 Ave New York 17 NY	5	Magnaflux Corp	7300 W Lawrence Ave Chicago 31 Ill	3-7-9-10-13	Sage Labs Inc	30 Guinan St Waltham 54 Mass	1-18
Ees Instrument Co	96 S Washington Ave Bergenfield NJ	17	Massa Laboratories Inc	5 Fottler Rd Hingham Mass	19	Seismograph Service Corp	6200 E 41 St Tulsa 1 Okla	19
Federal Telephone & Radio Co	Div IT&T 100 Kingsland Rd Clifton NJ	12-17	MB Mfg Co Div Textron Inc	1060 State St New Haven 11 Conn	19	Seico Controls Inc	Palmyra NJ	2
Fenwal Inc	Pleasant St Ashland Mass	2-17	Measurement Eng'g Ltd	232 John St Arnprior Ontario Can	14-16	Sensitive Research Instrument Corp	310 Main St New Rochelle NY	20
Fielden Instrument Div	Robertshaw-Fulton Controls Co 2920 N 4 St Philadelphia 33 Pa	19	Menlo Research Lab	538 Phelan Ave San Jose Calif	14-16	Servo Corp of America	2020 Jericho Turnpike New Hyde Park NY	2-14
Fisher Research Lab	1961 University Ave Palo Alto Calif	10-11-13-14-16-21	Microtran Co	145 E Mineola Ave Valley Stream NY	9-10-19	Servo-Recording Instruments Inc	1815 W Van Buren St Phoenix Ariz	14-16
Forro Scientific Co	833 Lincoln St Evanston Ill	14-16	Microwave Associates Inc	Burlington Mass	1	Sierra Electronic Corp	3885 Bohannon Dr Menlo Park Calif	1
F-R Machine Works Inc	Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	1-18	Minco Products Inc	740 Washington Ave Minneapolis 1 Minn	15	Solertron Electronic Group Ltd	Queens Rd Thames Ditton Surrey England	12-18-19-20
Franklin Electronics Inc	Box 113 Bridgeport Pa	16	Mine Safety Appliances Co	201 N Braddock Ave Pittsburgh 8 Pa	5-7	Sperry Gyroscope Co Div Sperry Rand Corp	Great Neck NY	1
Freed Transformer Co	1718-36 Weirfield St Brooklyn 27 NY	12	Minneapolis-Honeywell Regulator Co	Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	12	Sperry Products Inc	Shelter Rock Rd Danbury Conn	3
Fretco Inc	406 N Craig St Pittsburgh 13 Pa	16	Mt Sopris Instrument Corp	1320 Pearl St Boulder Colo	16	Standard Instruments	P O Box 11556 Dallas 18 Texas	14
Gardiner Electronics Co	2545 E Indian School Rd Phoenix Ariz	10-11-13-14-16	Muirhead Instruments Inc	677 5 Ave New York 22 NY	12	Stoelting Co C H	424 N Homan Ave Chicago 24 Ill	8
Gates & Co	Geo W Hempstead Tpke & Lucille Ave Franklin Square LI NY	3-11-21	Narda Corp	160 Herricks Rd Mineola NY	18	Stratford Corp	44 W 28 St New York 1 NY	2
General Bronze Corp	711 Stewart Ave Garden City NY	18	National Radiac Inc	475 Washington St Newark 2 NJ	16	Sullivan Ltd H W	80 Shore Rd Port Washington NY	12
General Electric Co Apparatus Sales Div	1 River Rd Schenectady 5 NY	7-17-19	Network Mfg Corp	213 W 5 St Bayonne NJ	20	Sylvania Electric Products Inc	1740 Broadway New York 19 NY	1
General Electric Co X-Ray Dept	4855 Electric Ave Milwaukee 1 Wisc	14	Nevada Air Products Co	PO Box 2472 Reno Nev	2-8-14-17	Taller & Cooper	75 Front St Brooklyn 1 NY	5-17
General Radio Co	275 Massachusetts Ave Cambridge 39 Mass	1-12-18-19	Newark Controls Co	15 Ward St Bloomfield NJ	17	Technical Associates	140 W Providence Ave Burbank Calif	14-16
General RF Fittings Inc	702 Beacon St Boston 15 Mass	1	Nilsson Electrical Laboratory Inc	103 Lafayette St New York 13 NY	13	Technicraft Labs Inc	Thomaston-Waterbury Rd Thomaston Conn	18
General Scientific Equipment Co	7516 Limekiln Pike Philadelphia 50 Pa	5-17	NRD Instrument Co	6425 Ezel Ave St Louis 14 Mo	14-16	Tele-Smoke Corp	15 Ward St Bloomfield NJ	17
G&M Equipment Co	7315 Varna Ave N Hollywood Calif	2	Nuclear-Chicago Corp	223 W Erie St Chicago 10 Ill	14-16	Tal-Instrument Electronics Corp	728 Garden St Carlstadt NJ	19
Goldak Co	1544 W Glenoaks Blvd Glendale 1 Calif	7-10-11-13-14-16-21	Nuclear Corp of America	Empire State Bldg New York NY	16	Telonic Industries Inc	73 N 2 Ave Beech Grove Ind	1
Harworth Mfg Co	409 El Camino Real Menlo Park Calif	10	Nuclear-Electronics Corp	2632 W Cumberland St Philadelphia 32 Pa	14-16	Texas Instruments Inc	6000 Lemmon Ave Dallas 9 Texas	9-10
Hewlett-Packard Co	275 Page Mill Rd Palo Alto Calif	1	Nuclear Measurements Corp	2460 N Arlington Ave Indianapolis 18 Ind	16	Tracerlab Inc	1601 Trapelo Rd Waltham 54 Mass	1-14
Hewson Co	443 Broad St Newark 2 NJ	16	Nucleonic Corp of America	196 Degraw St Brooklyn 31 NY	14-16	Trad Electronics Corp	1001 1 Ave Asbury Park NJ	1
Hickok Electrical Instrument Co	10514 Dupont Ave Cleveland 8 Ohio	20	OMCO	U S 93 & Las Palomas St Kingman Ariz	10-11-14	Transitron Electronic Corp	168 Albion St Wakefield Mass	1
Hupp Electronics Co Div Hupp Corp	743 Circle Ave Forest Park Ill	14	Omega Instrument Co	103 E Altadena Dr Altadena Calif	19	Turner Brass Works	821 Park Ave Scamore Ill	7
Industrial Control Co	805 Albin Ave Lindenhurst LI NY	12	Omega Labs Inc	Haverhill St Rowley Mass	1-18	Ultradyne Eng'g Labs	P O Box 3308 Albuquerque New Mex	19
Industrial Test Equipment Co	55 E 11 St New York 3 NY	6-12-20	Optron Corp	3526 State St Santa Barbara Calif	19	Ultra-Violet Products Inc	5114 Walnut Grove Ave San Gabriel Calif	11-14
International Research & Development Corp	797 Thomas Lane Columbus 16 Ohio	19	Parr Mfg Corp	48 Hale St Cranford NJ	13	Universal Atomic Corp	50 Bond St Westbury LI NY	14-16
Irwin Labs	1238 S Gerhart Ave Los Angeles 22 Calif	3-9-10	Peschel Electronics Inc	13 Garden St New Rochelle NY	20	Uniwave Inc	2 Marine St Farmingdale NY	1
Isomet Corp	118 Union St Palisades Park NJ	1	Philips Electronics Inc	750 S Fulton Ave Mt Vernon NY	14-16	U S Dynamics Corp	1250 Columbus Ave Boston 20 Mass	1
Johnson Aircraft Eng'g Co M J	Box 10 Morristown Airport Morristown NJ	11-12-13	Philmore Mfg Co	113 University Pl New York 3 NY	1-4	Vacuum-Electronic Eng'g Co	86 Denton Ave New Hyde Park LI NY	7
Johnson-Williams Inc	2625 Park Blvd Palo Alto 15 Calif	5	Photo Crystals Inc	15 S 1 St Geneva Ill	17	Vacuum Tube Products Co	506 S Cleveland St Oceanside Calif	5
J-V-M Eng'g Co	4633 S Lawndale Ave Lyons Ill	1	Photohell Co	43 Vesey St New York 7 NY	3-17	VecTrol Eng'g Inc	P O Box 1089 Stamford Conn	12
Kidde & Co Walter	1156 Main St Belleville 9 NJ	2-3-7-17	Photocon Research Products	421 N Altadena Drive Pasadena Calif	3	Vectron Inc	1611 Trapelo Rd Waltham 54 Mass	18
Keithley Instruments Inc	12415 Euclid Ave Cleveland 6 Ohio	12-20	Photographic Analysis Inc	13273 Ventura Blvd N Hollywood Calif	2-5	Victoreen Instrument Co	5806 Hough Ave Cleveland 3 Ohio	14-16
Kinney Mfg Div Vacuum Equip Div	NY Air Brake Co 3529 Washington St Boston 30 Mass	7	Polytechnic Research & Development Co	303 Tillary St Brooklyn 1 NY	1-18	Volk Radiochemical Co	5412 N Clark St Chicago 40 Ill	14-16
Knopp Inc	4224 Holden St Oakland 8 Calif	12	Potter Aeronautical Corp	PO Box 532 Union NJ	7-21	Waveline Inc	Passaic Ave Caldwell NJ	18
Kruger Instruments Harold	Box 164 San Gabriel Calif	5	Precise Development Corp	2 Neil Ct Oceanside NY	1	Western Radiation Lab	1107 W 24 St Los Angeles 7 Calif	14-16
Land-Air Inc Instrument & Electronic Div	2133 Adams Ave San Leandro Calif	19	Precision Technology Inc	66 South P St Livermore Calif	10-13	Whittington Pump & Eng's Corp	1126 Prospect St Indianapolis 3 Ind	7
Landsverk Electrometer Co	550 W Garfield Ave Glendale 4 Calif	14	Production Research Corp	Thornwood NY	14	Wilcolator Co	1001 Newark Ave Elizabeth NJ	2
Larson Instrument Co	24 Orchard St Tarrytown NY	17	Protectowire Co	Hanover Mass	2	Wood Counter Lab N	1525 E 53 St Chicago 15 Ill	1-14-16
Leeds & Northrup Co	4970 Stenton Ave Philadelphia 44 Pa	12	Pye Telecommunications Ltd	Newmarket Rd Cambridge England	1	Worner Electronic Devices	Rankin Ill	2-17
Lieco Inc	3610 Oceanside Rd Oceanside LI NY	1-18	Radar Design Corp	210 5 Ave New York 16 NY	1	Zenith Electric Co	152 W Walton St Chicago 10 Ill	7
Linde Air Products Div	Union Carbide & Carbon 30 E 42 St New York 17 NY	7	Radiation Counter Labs Inc	5121 W Grove St Skokie Ill	14-16			
Lord-Taber Co	40 Ontario St Canandaigua NY	2	Radio Corp of America Commercial	Electronic Products Camden 2 NJ	1			
Lumenite Electronic Co	407 S Dearborn St Chicago 5 Ill	10-17-21	Raytheon Mfg Co Commercial Equip Div	100 River St Waltham 54 Mass	5			
Machinery Electrification Inc	35 Hudson St Northboro Mass	17	Rich Electronics Inc	212 NW 8 Ave Miami 36 Fla	5			
			Ripley Co	1 Factory St Middletown Conn	17			
			Rowe Industries	1702 Wayne St Toledo 9 Ohio	10			
			Ryan Co S C	1316 Yale Place Minneapolis 3 Minn	10			

25—DIALS & FRONT PANEL ACCESSORIES

Belts	1
Bezels	2
Chains	3
Cords	4
Crystals	5
Decalcomanias	6
Dials, complete	7
Dials, precision	8
Dials, telephone	9
Escutcheon	10
Faceplates	11

Faces	12	Brunswick Instruments		General RF Fittings Inc	
Knobs, metal	13	PO Box 813 New Brunswick NJ	18	702 Beacon St Boston 15 Mass	14
Knobs, molded	14	Cambridge Thermionic Corp		Glass & Bro Harry H	
Knobs, wood	15	445 Concord Ave		10 Van Cortlandt Ave E	
Lights, dial	16	Cambridge 38 Mass	14-22-23	New York 68 NY	25
Lights, dial assembly	17	Canadian Radium & Uranium Corp		Globe Electrical Mfg Co	
Lights, indicator	18	630 5 Ave New York 20 NY	7-8	1729 W 134 St Gardena Calif	25
Lights, jewel pilot	19	Central Electronic Mfrs Inc Sub		Gordon Enterprises	
Lights, miniature	20	Nuclear Corp of America		5362 N Cahuenga Blvd	
Lights, panel	21	2 Richwood Pl Denville NJ	31	N Hollywood Calif	25
Locks, dial	22	Century Lighting Inc		Gries Reproducer Corp	
Locks, shaft	23	521 W 43 St New York 36 NY	21	125 Beechwood Ave New Rochelle NY	13-14
Luminous Markers	24	Chicago-Allis Mfg Corp		Griffin Co John	
Nameplates	25	113 N Green St Chicago 7 Ill	1	2157 James Ave St Paul 5 Minn	25
Pointers, dial	26	Chicago Miniature Lamp Works		Gudebrod Bros Silk Co	
Printers, drive	27	1500 W Ogden Ave Chicago 10 Ill	16-18-21	225 W 34 St New York 1 NY	4
Springs, knob	28	Cinch Mfg Corp		Hamilton Glass Co	
Tags	29	1026 S Homan Ave Chicago 24 Ill	28	2750 W Grand Ave Chicago 12 Ill	7
Windows, glass	30	Circon Component Co		Hayward Scientific Glass Corp	
Windows, metallized	31	Santa Barbara Municipal Airport		217 N Magnolia Ave Whittier 1 Calif	30
		Goleta Calif	16-17-18-19-20-21	Hermes Plastics Inc	
		Clearview Co		13 University Pl New York 13 NY	25
		172 Stanton St New York 2 NY	25	Hermetite Corp	
		Clevite Harris Products Inc		702 Beacon St Boston 15 Mass	30
		6545 Carnegie Ave Cleveland 3 Ohio	27	Hetherington Inc	
		Colman Tool & Machine Co		1200 Elmwood Ave	
		1017 NE 3 Ave Amarillo Texas	14	Sharon Hill Pa	16-17-18-19-20-21
		Conn Telephone & Electric Corp		Hudson Lamp Co	
		70 Britannia St Meriden Conn	4-9-17	528 Elm St Kearny NJ	20
		Croname Inc		iE Mfg	
		3701 Ravenswood Ave		325 N Hoyne Ave Chicago 12 Ill	25-28
		Chicago 13 Ill	2-5-7-8-10-13-25	Industrial Devices Inc	
		Dale Products Inc Columbus Nebr	14	982 River Rd Edgewater NJ	14-18-19
		Dallons Labs		Industrial Engravers Inc	
		5066 Santa Monica Blvd		2212 McDonald Ave Brooklyn 23 NY	8-25
		Los Angeles 29 Calif	13	Insuline Corp of America	
		Davies Molding Co Harry		186 Granite St Manchester NH	7-13-14
		1428 N Wells St Chicago 10 Ill	14	Intelex Systems Inc	
		Dearborn Glass Co		22 Thames St New York 6 NY	9
		6600 S Harlem Ave		Jan Hardware Mfg Co	
		Bedford Park Argo Ill	7-8-30	75 N 11 St Brooklyn 11 NY	2-14-23
		Decimeter Products Co		Janco Corp	
		730 Hooker St Denver 4 Colo	6	3111 Winona Ave Burbank Calif	14
		Dialight Corp		Jeffrey Mfg Co	
		60 Stewart Ave		803 N 4 St Columbus 16 Ohio	3
		Brooklyn 37 NY	16-17-18-19-20-21	JFD Mfg Co	
		Diamonite Products Mfg Co		6101-16 Ave Brooklyn 4 NY	4
		217 4 St NE Canton 2 Ohio	28-30	Jodee Plastics Co	
		Dietz Co Henry G		213 Shepherd Ave Brooklyn 8 NY	8-11
		12-16 Astoria Blvd		Johnson Co E F	
		Long Island City 2 NY	7-8-25	Waseca Minn	7-13-14-19-21
		Dimco-Gray Co		Johnson Research Corp	
		207 E 6 St Dayton 2 Ohio	14	Bethpage LI NY	6
		D&M Products		Jones Electronics Hiram	
		13144 W McNichols Rd Detroit 35 Mich	23	2313 W Olive St Burbank Calif	13-14-23
		Drake Mfg Co		Keil Eng'g Products Co	
		1713 W Hubbard St		4356 Duncan Ave St Louis 10 Mo	25
		Chicago 22 Ill	2-16-19-20-21	Keystone Electronics Corp	
		Dry Screen Process Inc		423 Broome St New York 13 NY	22-23
		1016 Madison Ave Pittsburgh 12 Pa	25	Kirkland Co H R	
		Du Mont Labs Inc Allen B		8 King St Morristown 4 NJ	16-17-18-19-21
		760 Bloomfield Ave Clifton NJ	2-14	Kliegl Bros	
		Duralith Corp		321 W 50 St New York 19 NY	21
		1025 Race St Philadelphia 7 Pa	7-11-25	Krengel Mfg Co	
		Eastern Etching & Mfg Co		227 Fulton St New York 7 NY	25
		Grape St Chicopee Mass	8-25	Kurz-Kasch Inc	
		Eldema Corp		1421 S Broadway Dayton 1 Ohio	14
		9844 Remer St		Laminated Sheet Products Corp	
		El Monte Calif	16-18-19-20-21	449 Neponset St Norwood Mass	25
		Electrical Specialty Co		La Moree C D	
		158 11 St San Francisco 3 Calif	25	2433 Birkdale St Los Angeles 31 Calif	25
		Elm Labs		Lancaster Glass Corp Lancaster Ohio	11
		10 Washington Ave		Liberty Mirror Div	
		Hastings-on-Hudson NY	7-8-22-25	Libbey Owens Ford Glass Co	
		Emerson Plastics Corp		Brackenridge Pa	30-31
		Seabury Ave & Butler Pl Bronx 61 NY	8-25	Link-Belt Co	
		Erie Resistor Corp		Prudential Plaza Chicago 1 Ill	3
		644 W 12 St Erie 6 Pa	10-14-25	Linlar Inc	
		Etched Products Corp		4101 San Fernando Rd	
		39-01 Queens Blvd		Glendale 4 Calif	14-17
		Long Island City 4 NY	8-25	Litton Industries of Calif	
		Feav Co Neal		336 N Foothill Rd Beverly Hills Calif	13
		427 Olive St		Lytle Eng'g & Mfg Co	
		Santa Barbara Calif	7-8-13-25	1404 San Mateo Blvd SE	
		Fecker Inc J W		Albuquerque New Mexico	25
		6592 Hamilton Ave		Luminous Processes Inc	
		Pittsburgh 6 Pa	8	161 E 42 St New York 17 NY	7-8-24-25
		Federal Screw Products Inc		Matchless Electric Co	
		3917 N Kedzie Ave Chicago 18 Ill	17-19-21	1700 Washington Blvd	
		Fish-Schurman Corp		Chicago 12 Ill	16-18-20-21
		70 Portman Rd New Rochelle NY	30	Mathews & Co Jas H	
		Fluorocarbon Products Inc Div US Gasket Co		3956 Forbes St Pittsburgh 13 Pa	25
		602 N 10 St Camden 1 NJ	14	Maxson Instruments Div W L Maxson Corp	
		Frenchtown Porcelain Co		47-37 Austell Pl Long Island City 1 NY	8
		Muirhead Ave Trenton 9 NJ	31	Mayer Corp	
		Fuze-on Products Div Aetna Supply Inc		1961 W 112 St Cleveland 2 Ohio	8-25
		15 N Hickory St Arlington Heights Ill	10-11	Metal Specialty Products Corp	
		Gaertner Scientific Corp		27-01 Brooklyn Queens Expressway W	
		1250 Wrightwood Ave Chicago 14 Ill	30	Woodside 77 NY	13
		Gee-Lar Mfg Co		Meyercord Co	
		418 S Wyman St Rockford Ill	13-14	5323 W Lake St	
		General Cement Mfg Co		Chicago 44 Ill	6
		Div Textron Inc		Micarta Fabricators Inc	
		400 S Wyman St	14-16-17-18-19-21-28	5324 N Ravenswood Ave	
		Rockford Ill		Chicago 40 Ill	7-8-9-16-17-19-25
		General Components Inc		Mid-West Conveyor Co Metal Products Div	
		225 E 144 St Bronx 51 NY	22-23	7 & Sunshine Rd Kansas City 15 Kan	10-11
		General Electric Co Apparatus Sales Div		Mid-West Spring Mfg Co	
		1 River Rd Schenectady 5 NY	17-19-21	Etna St Mentone Ind	28
		General Radio Co			
		275 Massachusetts Ave			
		Cambridge 39 Mass	7-8-14		
Accurate Electronics Corp	14				
169 S Abbe Rd W Elyria Ohio					
Accurate Spring Mfg Co	28				
3811 W Lake St Chicago 24 Ill					
Ace Spring Mfg Co	28				
78 W Houston St New York 12 NY					
Ackerman Engravers	7-8				
458 Broadway New York 13 NY					
Acromark Co	7-8-9-25				
443 Morrell St Elizabeth 4 NJ					
Acton Laboratories	7-8-14				
533 Main St Acton Mass					
Aerolite Electronics Corp					
507 26 St	16-17-18-19-20-21				
Union City NJ					
Aerolux Light Corp	18				
653 11 Ave New York 36 NY					
Air Transport Mfg Co	10				
1114 N Sycamore Ave					
Los Angeles 38 Calif					
Alden Products Co	14-16-18-19-21				
123A N Main St					
Brookton Mass					
Allied Allegri Co	17				
141 River Rd Nutley 10 NJ					
Allied Engraving & Stamping Co	8-10-11-25				
17 Elm St Buffalo 3 NY					
Allmetal Screw Products Co	10				
821 Stewart Ave Garden City NY					
Alpha Metals Inc	1				
56 Water St Jersey City 4 NJ					
Amerac Inc	7-8				
116 Topsfield Rd Wenham Mass					
American Decalcomania Co	6				
4334 5 Ave Chicago 24 Ill					
American Insulator Corp	14				
New Freedom Pa					
Anderson Associates H V	31				
233 Broad St Summit NJ					
Anderson & Sons	7-25				
N Elm St Westfield Mass					
Anti-Corrosive Metal Products Co	10				
Castleton-on-Hudson NY					
Askania Regulator Co	8				
240 E Ontario St Chicago 11 Ill					
Atlas E-E Corp	25				
47 Prospect St Woburn Mass					
Automatic Electric Co	9				
1033 W Van Buren St Chicago 7 Ill					
Avionics Ltd	25				
PO Box 200 Niagara-on-the-Lake					
Ontario Canada					
Bache & Co Semon	19-30				
636 Greenwich St New York 14 NY					
Barker & Williamson Inc	13				
Canal & Beaver Sts Bristol Pa					
Barnes Co Wallace	28				
Div Associated Spring Corp					
Bristol Conn					
Bead Chain Mfg Co	3				
110 Mountain Grove St					
Bridgeport 5 Conn					
Beckman-Helipot Corp	7-8				
Newport Beach Calif					
Bestcraft Products Co	25				
626 Broadway New York 12 NY					
Birnback Radio Co	4-14-23				
145 Hudson St New York 13 NY					
Bolling Industries Inc	8-25				
1117 N Main Ave P O Box 981					
Scranton 2 Pa					
Bolta Products Div General Tire & Rubber Co	14				
70 Garden St Lawrence Mass					
Borg Equip Div George W Borg Corp	8				
120 S Main St Janesville Wisc					
Boston Woven Hose & Rubber Co	1				
P O Box 1071 Boston 3 Mass					
Brady Co W H	25				
727 W Glendale Ave					
Milwaukee 9 Wisc					
Brilhart Plastics Corp	8				
Old Country Rd Mineola NY					
British Electronic Sales	16-17-18-19-20-21				
Box 182					
Oakland Gardens 64 NY					

Mil Case Corp	
35-18 37 St Long Island City NY	10-25
Millen Mfg Co James	
150 Exchange St	
Malden 48 Mass	2-7-8-13-14-22-23-26
Miller Dial & Nameplate Co	
4400 N Temple City Blvd	
El Monte Calif	6-7-25
Mitronics Inc	
1290 Central Ave Hillside NJ	31
Molded Insulation Co	
335 E Price St Philadelphia 44 Pa	14
Molded Products Div Admiral Corp	
Washington & Creamery Rd	
W Chicago Ill	14
Molding Corp of America	
58 Weybosset St Providence 3 RI	14
Muirhead & Co Ltd	
Beckenham Kent England	14
Muirhead Instruments Inc	
677 5 Ave New York 22 NY	8-14
Mutual Electronic Industries Corp	
85 Beechwood Ave	
New Rochelle NY	7-8-26
National Carbon Co	
Div Union Carbide & Carbon Corp	
30 E 42 St New York 17 NY	18-20-21
National Company Inc	
61 Sherman St	
Malden 48 Mass	7-8-13-14-22-23-26
National Screw & Mfg Co	
2440 E 75 St Cleveland 4 Ohio	8
Newcomb Spring of Conn	
College Hwy Southington Conn	28
Newcomb Spring Corp	
177 E Hawthorne Ave	
Valley Stream NY	1-28
New England Electrical Works	
365 Main St Lisbon NH	4
New England Etching & Plating Co	
Spring St Holyoke Mass	8-25
New York Mfg & General Supply Co	
10-38 Jackson Ave	
Long Island City 1 NY	18-20-21
Norsid Mfg Co	
33 Prospect St Yonkers 1 NY	6
North Electric Co	
553 S Market St Galion Ohio	9
North Shore Nameplate Inc	
214-27 Northern Blvd Bayside 61 NY	25
Nucleonic Products Co	
1601 Grande Vista Ave	
Los Angeles 23 Calif	18
Olympic Plastics Co	
3471 S LaCienega Blvd	
Los Angeles 16 Calif	14
Oxford Electric Corp	
3911 S Michigan Ave	
Chicago 15 Ill	20
Pacific Transducer Corp	
11836 W Pico Blvd	
Los Angeles 64 Calif	13
Painton & Co Ltd	
c/o British Electronic Sales Co	
Box 132 Oakland Gardens 64 NY	14
Palmer Inc M V	
4002 Fruit Valley Rd Vancouver Wash	9
Pampa Electronics Corp	
7354 Frankford Ave Philadelphia 36 Pa	25
Panellit Inc	
7401 N Hamlin Ave Skokie Ill	25
Park Nameplate Co	
34-10 Linden Pl Flushing 54 NY	6-7-25
Perkin-Elmer Corp	
Main Ave Norwalk Conn	30
Permonite Mfg Co	
444 Lake Shore Dr Chicago 11 Ill	16-17
PIC Design Corp	
477 Atlantic Ave	
E Rockaway LI NY	7-8-14
Plastic Accessories Inc	
91 Mercer St New York 12 NY	5-8-25
Plastic Mold & Eng'g Co	
157 Clifford St Providence RI	14
Poray Inc	
3369 W Grand Ave Chicago 51 Ill	2-10
Pratt Albert	
114 W Lake View Ave	
Milwaukee 17 Wisc	25
Printed Cellorhane Tape Co	
521 N La Brea St	
Los Angeles 36 Calif	6-25
Printloid Corp	
93 Mercer St New York 12 NY	5-7-8
Pye Telecommunications Ltd	
Newmarket Rd Cambridge England	5
Raybestos-Manhattan Inc	
61 Willett St Passaic NJ	1
Raytheon Mfg Co	
100 River St Waltham 54 Mass	14-23
Raytheon Mfg Co Ceramic Sales	
Foundry Ave Waltham Mass	31
Reeves Instrument Corp	
215 E 91 St New York 28 NY	8
Reliable Spring & Wire Forms Co	
3167 Fulton Rd Cleveland 9 Ohio	28
Remler Co	
2101 Bryant St	
San Francisco Calif	7-13-14
Republic Rubber Div Lee Rubber & Tire Corp	
1410 Albert St Youngstown 1 Ohio	1

Roflan Co Topsfield Mass	13-14
Rogan Bros	
8031 N Monticello Skokie Ill	10-14
Romar Plastics Inc	
1311 E Main St St Charles Ill	7
Rubbercraft Corp of Calif	
1800 W 220 St Torrance Calif	14
Safetee Glass Co 4717 Stenton Ave	
Philadelphia 44 Pa	30-31
Sage Labs Inc	
30 Guinan St Waltham 54 Mass	30-31
Sampson Chemical & Pigment Corp	
2830 W Lake St Chicago 12 Ill	7-8-24-26
Schrack Electrical Sales Corp	
45 W 81 St New York 24 NY	9
Semrow Products Co	
4317 N Ravenswood Ave Chicago 13 Ill	2
Servo Corp of America	
2020 Jericho Turnpike New Hyde Park NY	8
Signalite Inc	
37 Neptune Hwy Neptune NJ	18-20
Sillocks-Miller Co	
10 W Parker Ave Maplewood NJ	5-8-9
Sinclair Mfg Co	
PO Box 243 Chertley Mass	13
Smith Inc Herman H 2326 Nostrand Ave	
Brooklyn 10 NY	14-19-22-23-26
Soderberg Mfg Co	
628 S Palm Ave	
Alhambra Calif	16-17-18-19-20-21
Stokes Molded Products Div	
Electric Storage Battery Co	
241 Taylor St Trenton 4 NJ	14
Stone City Machine & Tool Co	
1206 7 St Bedford Ind	2-25
Stromberg-Carlson Div General Dynamics Corp	
100 Carlson Rd Rochester 3 NY	4-7-8-9
Sun Dial Corp	
PO Box 326 Caldwell NJ	7-8
Sylvania Electric Products Inc	
1740 Broadway New York 19 NY	14-18-20
Swenson & Co V H	
554 Elm St Arlington NJ	10-14-25
Taffet Radio & TV Co	
27-05 Brooklyn	
Queens Expressway W Woodside 77 NY	13
Technicraft Co	
1156 Commonwealth Ave Boston 34 Mass	7
Techniques Inc	
52 Jackson Ave Hackensack NJ	7-8-10-25
Teletro Industries Corp	
35-18 37 St Long Island City 1 NY	1-10
Telex	
1633 Eustis St St Paul 1 Minn	14
Toman & Co E	
8700 W 47 St Lyons Ill	14-25
Tung-Sol Electric Inc	
95 8 Ave Newark 4 NJ	16-18-20-21
Ucinite Co	
Div United-Carr Fastener Corp	
459 Watertown St Newtonville 60 Mass	18-19
U S Instrument Corp	
PO Box	
33E Charlottesville Va	7-8-9-13-14
U S Radium Corp	
Morristown NJ	7-8
U S Rubber Co	
1230 6 Ave New York 20 NY	1
U S Stoneware Co	
Alite Div Orville Ohio	31
Vari Equip Co	
P O Box 46	
W Cornwall Conn	25
Vector Electronic Co	
3352 San Fernando Rd	
Los Angeles 65 Calif	23
Victory Mfg Corp	
1722 W Arcade Pl Chicago 12 Ill	2-14-25
Vocalite Screen Corp	
19 Debevoise Ave Roosevelt NY	11-25
Waldom Electronics Inc	
4625 W 53 St	
Chicago 32 Ill	2-7-8-10-14-22-23-25
Walsco Electronics Mfg Co	
100 W Green St Rockford Ill	1-4-19-28
Waltham Watch Co	
221 Crescent St Waltham 54 Mass	8-24
Walton Tool & Die Co	
2707 Empire Ave Burbank Calif	13
Westline Products Div Western Lithograph Co	
600 E 2 St Los Angeles 54 Calif	24-25
Wheaton Co T C	
Millville NJ	13-14
White Dental Mfg Co S S Industrial Div	
10 E 40 St New York 16 NY	1
Winder Aircraft Corp of Florida	
P O Box 2397	
Drane Field Lakeland Fla	7-11-25
Wisconsin Porcelain Co	
121 Lincoln St	
Sun Prairie Wisc	14

26—FILTERS

Filters, antenna	1
Filters, audio	2
Filters, bandpass	3
Filters, band rejection	4
Filters, crystal	5

Filters, equalizer	6
Filters, high pass	7
Filters, IF	8
Filters, interference	9
Filters, line	10
Filters, low pass	11
Filters, mechanical	12
Filters, microwave	13
Filters, needle scotch	14
Filters, noise suppressing	15
Filters, radio interference	16
Filters, radio tower lighting	17
Filters, R-F	18
Filters, screen room	19
Filters, telemetering	20
Filters, TV	21
Filters, UHF-VHF	22
Filters, variable	23
Filters, vestigial sideband	24
Filters, video	25
Filters, wavetrop	26

Adler Electronics Inc	
1 LeFevre Lane New Rochelle NY	3-7-11
Admittance Namco Corp	
Marine St	
Farmingdale LI NY	3-4-7-11-13-21-22
Advance Electronics Co	
8510 North End Ave	
Oak Park 37 Mich	9-21-22-26
Aerovox Corp Pacific Coast Div	
2724 S Peck Rd	3-4-7-8-9-10-11-15-16
Monrovia Calif	18-19-20-22-24-25-26
Aerovox Corp	
740 Belleville Ave New Bedford Mass	9-10-16
Airborne Accessories Corp	
1414 Chestnut Ave Hillside 5 NJ	18
Air-Maze Corp	
25000 Miles Rd Cleveland 28 Ohio	12
Airtron Inc	
1101 W Elizabeth Ave Linden NJ	13
Alford Mfg Co	
299 Atlantic Ave Boston 10 Mass	24
Allen-Bradley Co	
136 W Greenfield Ave Milwaukee 4 Wisc	22
Allison Labs Inc	
14185 Skyline Dr La Puente Calif	2-3-7-11-23
All-Tronics Inc	
45 Bond St Westbury NY	9-10-16
American Communications Corp	
280 Broadway New York 17 NY	21-22-25-26
American Electronics Laboratories	
121 N 7 St Philadelphia 6 Pa	13
American Electronics Co	
1203 Bryant Ave	
New York 69 NY	1-3-4-7-9-11-16
American Research & Mfg Corp	
920 Halpine Ave Rockville Md	2-3-8
Amphenol Electronics Corp	
1830 S 54 Ave Chicago 50 Ill	7
Amplex Div Chrysler Corp	
P O Box 2718 Detroit 31 Mich	15
Amtron Corp	
17 Felton St Waltham 54 Mass	22
Anchor Specialty Mfg Co	
Hollister Rd Teterboro NJ	2-3
Anderton Electronic Lab	
129 E 1800 S St Bountiul Utah	2-4-7-11-14
Andrew California Corp	
941 E Maryland Ave Claremont Calif	1-13-17
Andrew Corp	
363 E 75 St Chicago 19 Ill	1
Apparatus Development Co	
115 Main St Wethersfield 9 Conn	4
Applied Research Inc	
163-07 Depot Rd	
Flushing 58 NY	3-6-13-18-21-22
Ark Eng'g Co	
431 W Tabor Rd	9-10-13-15
Philadelphia 20 Pa	16-18-19-20-22
Arrow Radio Co	
1829 Davenport Rd	8-9-10-15
Toronto Ontario Canada	16-18-19
Arted Co	
367 Worthington St Springfield 3 Mass	18-26
Astron Corp	
255 Grant Ave	
E Newark NJ	7-9-11-15-16-18-19
Atlas Eng'g Co	
176 Blue Hill Ave Roxbury 19 Mass	2-15
Audio Development Co	
2833 13 Ave S	
Minneapolis Minn	1-2-3-4-6-7-10-11-14
Automatic Switch Co	
Hanover Rd Florham Park NJ	10
Axel Electronics	
134-20 Jamaica Ave Jamaica 18 NY	15
Baird-Atomic Inc	
33 University Rd Cambridge 38 Mass	3-4-9
Balco Research Labs	
49 Edison Place Newark 2 NJ	1-3-7-11
Barker Sales Co	
996 Edgewater Ave Ridgefield NJ	2
Barker & Williamson Inc	
Canal & Beaver Sts	1-2-3-4-7-8-9-10-
Bristol Pa	11-16-17-18-24-26

Basler Electric Co 601 S St Highland Ill	3-7-11	Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	1-3-4-7-10-11-13-18	Gulton Industries Inc 212 Durham Ave Metuchen NJ	8-11
Bassett Inc Rex 1314 N E 17 Ct Ft Lauderdale Fla	2-5-9-15	Dielectric Products Eng'g Co Raymond Me	1-3-4-11-18-22-24	Hallett Mfg Co 1601 W Florence Inglewood Calif	9-15-16
Bell & Gossett Co 8200 Austin Ave Morton Grove Ill	3	Douglas Microwave Co 252 E 3 St Mt Vernon NY	13	Hallierafters Co 4401 W 5 Ave Chicago 24 Ill	5-13-21-24
Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif	3-20	D & R Ltd 402 E Gutierrez St Santa Barbara Calif	2-3-4-7-11-16-21	Hammarlund Mfg Co 460 W 34 St New York 1 NY	20
Bird Electronic Corp 1800 E 38 St Cleveland 14 Ohio	18	Downing Crystal Co 191 Shaffer Ave Westminster Md	5	Hermetic Seal Transformer Co P O Box 277 Garland Texas	2-3-4-7-11
B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	7-11-22	Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	4	Hill Electronic Eng'g & Mfg Co New Kingstown Pa	2-3-4-5-20
Blackburn Electronic Corp 55 W 7 St Wyoming Pa	11	Eastman Kodak Co 343 State St Rochester 4 NY	9-21	Hogan Labs Inc 155 Perry St New York 14 NY	24
Blonder-Tongue Laboratories 9-25 Alling St Newark 2 NJ	3-10-26	Edin Co 207 Main St Worcester 8 Mass	3	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	9-15-16
Bogart Mfg Corp 315 Seigel St Brooklyn 6 NY	13	Electro Assemblies Inc 4444 N Kedzie Ave Chicago 25 Ill	3-8-11-18	Hopkins Eng'g Co 12900 Foothill Blvd San Fernando Calif	9-10-11-15-16-18-19
Budd Stanley Co 43-01 22 St Long Island City 1 NY	13	Electronic Designs Inc 28 School St Yonkers NY	9	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	5
Bulova Watch Co Electronics Div 40-01 61 St Woodside 77 NY	5	Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	1-3-4-7-9-11-13-18-22	Hycan Eastern Inc 75 Cambridge Pkwy Cambridge 42 Mass	3-4-5-8-24
Bundy Electronics Corp 171 Fabyan Pl Newark 12 NJ	2-3-4-7-8-9-10-11-15-16-20	Electronic Transformer Co 70 Washington St Brooklyn 1 NY	1-2-3-4-7-11	Hycan Mfg Co 707 S Raymond Ave Pasadena Calif	5
Burnell & Co 45 Warburton Ave Yonkers NY	1-2-3-4-5-6-7-8-11-20-24	Electronics Development Co 3743 N Cahueunga Blvd N Hollywood Calif	24	Inductor Eng'g Inc 117 Schley Ave Lewes Del	2-3-4-7-11
Caledonia Electronics & Transformer Corp P O Box 298 Caledonia NY	2-3-4-7-11	Electron Products Inc 430 N Halstead St Pasadena 8 Calif	9-15-16-19	Industrial Development Eng'g Assoc 7900 Pendleton Pike Indianapolis Ind	7
Calif Magnetic Control Corp 11922 Valerio St N Hollywood Calif	2	Electrosolids Corp 7436 Varna Ave N Hollywood Calif	2-3	Industrial Transformer Corp Gouldsboro Pa	2-3-4-7-11-20
Cambridge Thermionic Corp 445 Concord Ave Cambridge 38 Mass	1-4-8-18-23	Electro-Technical Labs Div Mandrel Industries 5134 Glenmont Houston Texas	11	Interference Measurement Lab Inc 907 E 51 St Brooklyn 3 NY	9-10-16
Canoga Corp 5955 Sepulveda Blvd Van Nuys Calif	13	El-Rad Mfg Co 2800 W Cullom Ave Chicago 18 Ill	1-2-3-4-7-8-9-11-26	Intele Systems Inc 22 Thames St New York 6 NY	9
Capitol Transcription Service 1120-A Conn Ave N W Washington 6 DC	2	Entron Inc 4902 Lawrence St Bladensburg Md	1-3-4-6-7-9-10-11-16-18-21-22-23	Int'l Research & Development 797 Thomas Lane Columbus 16 Ohio	3-7-11-23
Carnf Co Box 554 Brookhaven Miss	9-10-11-15-16-18-19-22	Epo Electronics Inc 140 Liberty St New York 6 NY	7-9-10-26	Jackson Electronics Inc 23 Woodcrest Rd West Chester Pa	3-8-13-18-22
CELCO Constantine Eng'g Labs Co P O Box 555 Mahwah NJ	2-3	Epsco Inc 588 Commonwealth Ave Boston 15 Mass	3-11	Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	3-18-21-22-25-26
Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill	3-18	ESC Corp 534 Bergen Blvd Palisades Park NJ	3-4-6-7-11-22	JFD Mfg Co 6101-16 Ave Brooklyn 4 NY	1-7-9-10-21
CG Electronics Corp 305 Dallas St N E Albuquerque New Mex	1-3-4-13-22	Essex Electronics Div NYT Electronics Inc 7303 Atoll Ave N Hollywood Calif	1-7-8-11-18	Johnson Co E F Waseca Minn	11-18
CGS Laboratories Inc 391 Ludlow St Stamford Conn	18-23	Essex Electronics 550 Springfield Ave Berkeley Heights NJ	3-4-8-11-18	Johnson Electronics 521 Elwell St Orlando Fla	1-2-3-4-5-6-7-8-9-10-11-15-16-18-20-21-25-26
Channel Master Corp Ellenville NY	1-3	Farrand Controls Inc 4401 Bronx Blvd New York 70 NY	9	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	1-13-22
Chicago Electronic Eng'g Co 3223 W Armitage Ave Chicago 47 Ill	2-3-7-11	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	1-5-11-26	Keystone Products Co 904 23 St Union City NJ	2-3-4-7-11
Chicago Standard Transformer Corp 3501 W Addison St Chicago 31 Ill	2-3-4-6-7-11	Femco Inc Irwin Pa	2	Knight's Co James Church & Wells Sts Sandwich Ill	5
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England	21	Filtron Co 10023 W Jefferson Blvd Culver City Calif	1-3-4-7-8-9-10-11-13-15-16-18-19-20	Krohn-Hite Corp 580 Massachusetts Ave Cambridge 39 Mass	2-3-4-23
Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	1-3-4-7-9-11-16-21-22-26	Fisher Radio Corp 21-21 44 Dr Long Island City 1 NY	2-6-14	Lambda-Pacific Eng'g Inc 14725 Arminta St Van Nuys Calif	18
Coilcraft Inc Cary Ill	3-4-8-26	Foster Transformer Co 3820 Colerain Ave Cincinnati 23 Ohio	3-10-11	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	2-3-4-6-7-11
Coil Winders Inc New York Ave Westbury LI NY	1-2-3-4-6-7-8-9-10-11-15-16-18-22-23-26	Foto-Video Labs Inc 25 Amity St Little Falls NJ	21-25	LaPointe Industries Inc 155 W Main St Rockville Conn	1-3-22
Collins Radio Co 855 35 St N E Cedar Rapids Iowa	1-3-8-12	F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	13	Lear Inc 3171 S Bundy Drive Santa Monica Calif	1-9
Colman Tool & Machine Co 1017 N E 3 Ave Amarillo Texas	21	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	7-11-20	Leonard Electric Products Co 67 34 St Brooklyn 32 NY	1-2-3-7-8-9-11-18-21-22
Commercial Radio Sound Corp 652 1 Ave New York 16 NY	2	Frequency Standards Inc P O Box 504 Asbury Park NJ	1-3-4-13-18	Lewis Co E B 11 Bragg St E Hartford 8 Conn	5
Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	2-3-4-5-6-7-8-11-12-20	Fugle-Miller Labs Inc 301 Central Ave Clark NJ	1-3-6-7-8-11-18-22-25	Lieco Inc 3610 Oceanside Rd Oceanside LI NY	13
Communication Equipment & Eng'g Co 5646 W Race Ave Chicago 44 Ill	2-3-7-11	Gabriel Electronics Div Gabriel Co 135 Crescent Rd Needham Heights 94 Mass	1	Ling Electronics Inc 5120 W Jefferson Blvd Los Angeles 16 Calif	2-3-4-6-11
Community Eng'g Corp Box 824 State College Pa	21	Gates Radio Co 123 Hampshire St Quincy Ill	2-18-24	Link-Radio Corp 110 Jericho Turnpike New Hyde Park LI NY	22
Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	3-7-11	General Bronze Corp 711 Stewart Ave Garden City NY	1-11-13	Lynch Carrier Systems Inc 695 Bryant St San Francisco 7 Calif	3-4-10-11
Controlled Atmosphere Enclosures Corp 230-11 141 Ave Springfield Gardens 13 LI NY	12	General Communication Co 677 Beacon St Boston 15 Mass	13	Lynmar Engineers Inc 1432 N Carlisle St Philadelphia 21 Pa	1-2-4-6-7-9-11
Corbin Corp 5419 56 Pl Riverdale Md	1-3-4-26	General Crystal Co P O Box 9 Burlington Wis	5	Lysco Mfg Co 1401 Clinton St Hoboken NJ	11
Cornell-Dubilier Electric Corp 333 Hamilton Blvd S Plainfield NJ	2-3-4-7-9-10-11-15-16-18-19-21-22-26	General Instrument Corp 65 Gouveneur St Newark NJ	8-18-21-26	McCoy Electronics Co Chestnut & Watts Sts Mt Holly Springs Pa	5
Cycle Transformer Corp 356 Glenwood Ave E Orange 11 NJ	2-3-4-11	General Precision Lab Inc 63 Bedford Rd Pleasantville NY	13	Mack Electronics Div Mack Trucks Inc 1120 S 2 St Plainfield NJ	3
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	5	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	2-3-22	Maryland Electronic Mfg Corp 5009 Calvert Rd College Park Md	13-18
DeCoursey Eng'g Lab 11828 W Jefferson Blvd Culver City Calif	2-3-4-6-7-11-20	Geotronic Labs Inc 1314 Cedar Hill Ave Dallas 8 Texas	3-7-11	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	2-3-4-7-11
Defiance Eng'g & Microwave Corp Beverly Airport Beverly Mass	1-3-13-18-22-23-24-26	Glaser-Steers Corp 20 Main St Belleville 9 NJ	6	Melpar Inc 3000 Arlington Blvd Falls Church Va	13
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	13	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	2-6-8-22	Meridian Metalcraft Inc 8739 S Miller Grove Dr Whittier Calif	13
Deutschmann Corp Tobe Norwood Mass	1-2-3-4-7-8-9-10-11-13-15-16-18-19-21-26	Gudeman Co 340 W Huron St Chicago 10 Ill	16	Merit Coil & Transformer Corp 4427 N Clark St Chicago 40 Ill	2-3-7-8-9-10-11-16-18-21-25-26
Devol Research Co Brookside Dr Greenwich Conn	3-4-20			Metavac Inc 45-68 162 St Flushing 58 NY	9
				Micameld Electronics Mfg Corp 1087 Flushing Ave Brooklyn 37 NY	9-18

Dice Co J W 16 Highland Ave Englewood NJ	7	Opto Eng'g Co 3524 W Washington Blvd Los Angeles 18 Calif	4-7	Couplings, shaft, rigid	22
Edeliff Instruments 1711 S Mountain Ave Monrovia Calif	3	Pacific Transducer Corp 11836 W Pico Blvd Los Angeles 64 Calif	3-4	Diaphragms	23
Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ	3	Panellit Inc 7401 N Hamlin Ave Skokie Ill	3	Diecastings	24
Eitel-McCullough Inc 793 San Mateo Ave San Bruno Calif	1	Phillips Electronics Inc 750 S Fulton Ave Mt Vernon NY	7	Dowels	25
Electronics Corp of America 1 Memorial Dr Cambridge 42 Mass	3	Photocon Research Products 421 N Altadena Drive Pasadena Calif	3	Extensions, shaft	26
Ellison Draft Gage Co 548 W Monroe St Chicago 6 Ill	3-8	Process & Instruments 15 Stone Ave Brooklyn 33 NY	1-8	Eyelets	27
Endevco Corp 161 E California St Pasadena Calif	3-4-6	Quality Control Corp 401 Broadway New York 13 NY	4-5-6-7	Fasteners	28
Ercona Corp 551 5 Ave New York 17 NY	7	Research Electronics Lab Roslyn Pa	1-8	Felt parts	29
Federal Products Corp 1144 Eddy St Providence 1 RI	7	Royco Instruments 720 Arthur St Albany Calif	5	Gaskets	30
Fischer & Porter Co 478 Warminster Rd Hatboro Pa	3-5-8	Scherr Co George 200 Lafayette St New York 12 NY	6-7-9	Gears, precision	31
Gardner Lab Inc P O Box 5723 Bethesda 14 Md	7	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	1-2-3-8	Grommets	32
General Controls Co 801 Allen Ave Glendale 1 Calif	3-5-8	Seneca Falls Machine Co 314 Fall St Seneca Falls NY	8	Handles	33
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	4-7-8	Servo-Recording Instruments Inc 1815 W Van Buren St Phoenix Ariz	1	Hinges	35
General Electric Co X-Ray Dept 4855 Electric Ave Milwaukee 1 Wis	7	Sheffield Corp Box 393 Dayton 1 Ohio	7	Latches, magnetic	36
General Electric Co Ltd of England c/o IMTRA Corp 58 Charles St Cambridge 41 Mass	6	Sierra Electronic Corp 3885 Bohannon Dr Menlo Park Calif	1	Locknuts	37
Giannini & Co G M 918 E Green St Pasadena Calif	3-5-8	Size Control Div American Gage & Machine Co 2500 W Washington Blvd Chicago 12 Ill	9	Locks	38
Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	3-5	Sperry Products Inc Shelton Rock Rd Danbury Conn	7	Markers, code	39
Hamilton Watch Co Allied Products Div Columbia Ave Lancaster Pa	4	Standard Gage Co Poughkeepsie NY	7	Mirrors	40
Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio	3-5-8	Statham Labs Inc 12401 W Olympic Blvd Los Angeles 64 Calif	3-4	Mounst, shockproof	41
Hastings-Raydist Inc Newcomb Ave Hampton Va	3-8	Stokes Corp F J 5500 Tabor Rd Philadelphia 20 Pa	8	Mounst, vibration	42
Hathaway Instrument Div Hamilton Watch Co 5800 E Jewell Ave Denver 22 Colo	4	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	1	Nails	43
Hays Corp Michigan City Ind	8-8	Tatnall Measuring Systems Co Kimberton Rd Phoenixville Pa	4	Nuts	44
High Vacuum Equipment Corp 2 Churchhill Rd Hingham Mass	8	Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass	7	Pins	45
Hill & Co E Vernon P O Box 189 Lake Geneva Wis	3-5	Trimount Instrument Co 3119 W Lake St Chicago 12 Ill	3-8	Plugs	46
Hull Corp 1941 Woodland Rd Abington Pa	8	Ultradyne Eng'g Labs P O Box 3308 Albuquerque New Mex	3	Reducers, shaft	47
Illinois Testing Labs Inc 420 N LaSalle St Chicago 18 Ill	5	Uniwave Inc 2 Marine St Farmingdale NY	7	Rivets	48
Industrial Nucleonics Corp 1205 Chesapeake Ave Columbus 12 Ohio	7	U S Gauge Div American Machine & Metals Sellersville Pa	3-5	Screw machine products	49
Instrumentation Associates 17 W 60 St New York 23 NY	3	Vacuum-Electronic Eng'g Co 86 Denton Ave New Hyde Park LI NY	1-8	Screws, self-tapping	50
I Q Industries 1714 Westwood Blvd Los Angeles 24 Calif	3-5	Vacuum Specialties Co 77 Prospect St Somerville Mass	8	Screws, set	51
Isotope Products 1711 Elmwood Ave Buffalo 7 NY	7	Vacuum Tube Products Co 506 S Cleveland St Oceanside Calif	8	Screws, standard	52
Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY	7	Van Keuren Co 176 Waltham St Watertown 72 Mass	7-9	Shafts, flexible	53
King Electric Equipment Co 9123 Inman Ave Cleveland 5 Ohio	8	Vapor Recovery Systems Co 2820 N Alameda St Compton Calif	5	Shafts, rigid	54
Kinney Mfg Co Div Vacuum Equip Div NY Air Brake Co 3529 Washington St Boston 30 Mass	1-2-8	Weksler Thermometer Corp 195 E Merrick Rd Freeport LI NY	3-5-8	Slides, equipment	55
Kistler Instrument Corp 15 Webster St N Tonawanda NY	3	West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	3-4-5	Spacers	56
Kollsman Instrument Corp Standard Coil Products Sub 80-08 45 Ave Elmhurst 73 NY	3	West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill	5	Springs	57
Lewis Eng'g Co 339 Church St Naugatuck Conn	5	Western Electrical Instrument Corp Sub Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ	3-5-8	Stampings	58
Link Aviation Inc Binghamton NY	7	Wiencko Eng'g Co 255 Halstead St Pasadena Calif	3-6	Strain reliefs	59
Lufkin Rule Co 1730 Hess St Saginaw Mich	7	28—HARDWARE			
Manning Maxwell & Moore Inc Shelter Rock Lane Danbury Conn	3-5-8	Balls, screw	1	Washers, brass	60
Marshalltown Mfg Co 810 E Nevada St Marshalltown Iowa	3-5-8	Bearings	2	Washers, ceramic	61
Martindale Electric Co Box 617 Edgewater Branch Cleveland 7 Ohio	7	Bolts	3	Washers, felt	62
Millers Falls Co 57 Wells Greenfield Mass	7	Brackets	4	Washers, fibre	63
Moeller Instrument Co 132-02 89 Ave Richmond Hill 18 NY	5	Brackets, mounting	5	Washers, lock	64
New York Air Brake Co 230 Park Ave New York 17 NY	8	Bushings, hermetically sealed	6	Washers, metal	65
Norden-Ketay Corp Commerce Rd Stamford Conn	3-5	Bushings, non-metallic	7	Washers, mica	66
North American Instruments Inc 2420 N Lake St Altadena Calif	3	Cans	8	Washers, plastic	67
NRC Equipment Corp Sub National Research Corp 160 Charlemont St Newton Highlands 61 Mass	8	Casters	9	Washers, rubber	68
Nuclear Corp of America Empire State Bldg New York NY	1-7	Clamps	10	Wire mesh	69
Nucleonic Corp of America 196 Degraw St Brooklyn 31 NY	1	Clamps, tube	11	Abalon Precision Mfg Corp 540 Casanova St New York 59 NY	4-5-58
Omega Instrument Co 103 E Altadena Dr Altadena Calif	3-6-7-8	Clips, alligator	12	Accurate Electronics Corp 169 S Abbe Rd W Elyria Ohio	21-22-46-58-60-63-65-67
		Clips, crystal diode	13	Accurate Spring Mfg Co 3811 W Lake St Chicago 24 Ill	57-58
		Clips, fahnstock	14	Ace Plastic Co 91-30 VanWyck Expwy Jamaica 35 NY	7-33-49-66-67
		Clips, grid	15	Ace Spring Mfg Co 78 W Houston St New York 12 NY	57
		Clips, spring	16	Acme Mfg & Gasket Co 738 N 41 St Philadelphia 4 Pa	30-60-62-65-67-68
		Clips, test	17	Acromark Co 443 Morrell St Elizabeth 4 NJ	39
		Contact points	18	Adel Precision Products Div General Metals Corp 1444 Washington Ave Huntington 4 W Va	16
		Cords & tape, lacing	19	Advanced Products Co 59 Broadway North Haven Conn	30
		Couplings	20	Advance Electronics Co 8510 North End Ave Oak Park 37 Mich	49-57-58
		Couplings, shaft, flexible	21	Aeroflex Labs 34-06 Skillman Ave Long Island City 1 NY	42
				Aerolite Electronics Corp 507 26 St Union City NJ	4-12-15-16-26-32-34-58
				Aerotron Supply Co 8504 S Normandie Ave Los Angeles 44 Calif	44-49-50-51-52-60-64-65
				Aetna Felt Co 204 Centre St New York 13 NY	29-30-62
				Aircraft Radio Corp Boonton NJ	8
				Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	4-5-10-41-42-55
				Airtron Inc 1101 W Elizabeth Ave Linden NJ	30
				Akron Rubber Co 53 Warren St New York 7 NY	30
				Alden Products Co 123A N Main St Brockton Mass	5-8-11-15-34-52

Allen Mfg Co 143 Sheldon St Hartford 2 Conn	51	Barnes Co Wallace Div Associated Spring Corp Bristol Conn	57	Conn Hard Rubber Co P O Box 1911 New Haven 9 Conn	30-42
Allied Engraving & Stamping Co 17 Elm St Buffalo 3 NY	30-67	Bead Chain Mfg Co 110 Mountain Grove St Bridgeport 5 Conn	25-28-45-46	Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	18
Allied Fabricating Corp 1538 N Clybourn Ave Chicago 10 Ill	4-5-8-10-60-63-65-67	Beaver Gear Works 1025 Parmele St Rockford Ill	31	Continental-Diamond Fibre Corp Newark Dela	63-66-67
Allmetal Screw Products Co 821 Stewart Ave Garden City NY	3-25-28-34-37-43-44-45 48-49-50-51-52-64-65	Beckman/Heliport Corp Newport Beach Calif	10-16-31-34	Continental Electronic Ltd 302 Oakland St Brooklyn 22 NY	18
Alpha Metals Inc 56 Water St Jersey City 4 NJ	65	Belmont Smelting & Refining Works 330 Belmont Ave Brooklyn 7 NY	24-30-65	Continental Screw Co New Bedford Mass	44-50-52
Aluminum Co of America Alcoa Bldg Pittsburgh 19 Pa	2-3-24-49-50-51-52-58-65	Belock Instrument Corp 111-01 14 Ave College Point 56 NY	31	Corning Glass Works Corning NY	6-7
Alvo Nut & Bolt Co 1601 Grande Vista Ave Los Angeles 23 Calif	3-44-50-51-52-65	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	23	Crane Packing Co 6400 Oakton St Morton Grove Ill	7-67
American Hinge Corp 206 Wallabout St Brooklyn 6 NY	49	Bendix Foundries Div Bendix Aviation Corp Teterboro NJ	24	Crystal-Westlake Corp. Lenni Rd Lenni Mills Pa	63-67
American Hoist & Derrick Co 63 S Robert St St Paul 1 Minn	3	Bernard Franklin Co 4155 E Hedley St Philadelphia 37 Pa	55	Custom Gear Co 648 College St South Bend 28 Ind	31
American Insulator Corp New Freedom Pa	33-67	Bestcraft Products Co 626 Broadway New York 12 NY	29-30	Daco Instrument Co Tillary & Prince Sts Brooklyn 1 NY	31
American Lava Corp Subs Minn Mining & Mfg Cherokee Blvd & Mfrs Rd Chattanooga 5 Tenn	6-7-25-27-32-54-61	Bethlehem Steel Co Bethlehem Pa	3	Dakota Eng'g Inc 6641 Crenshaw Blvd Los Angeles 43 Calif	11
American Mica Radio Corp 235 Parker Ave Manasquan NJ	63-66	Bird & Co Richard H 1 Spruce St Waltham 54 Mass	2	Davies Molding Co Harry 1428 N Wells St Chicago 10 Ill	33
American Screw Co Willimantic Conn	50-52	Birnbach Radio Co 145 Hudson St New York 13 NY	7-10-11-12-14-16-17-19-20 21-22-31-37-46-53-59	Dazor Mfg Corp 4481 Duncan Ave St Louis 10 Mo	5
American Sealants Co 103 Woodbine St Hartford 6 Conn	37-14	Birtcher Corp Industrial Div 4371 Valley Blvd Los Angeles 32 Calif	11	Decatur Electronic Industries Corp 203 Orinoco Dr Brightwaters LI NY	32
American Silver Co 3607 Prince St Flushing 54 NY	18	Blaco Mfg Co 6541 Euclid Ave Cleveland 3 Ohio	58	Dewey & Almy Chemical Co 62 Whitmore Ave Cambridge 40 Mass	30
American Super-Temperatures Wires Inc West Canal St Winooski Vt	19	Boots Aircraft Nut Corp Newtown Turnpike Norwalk Conn	37-14	Diamondite Products Mfg Co 217 4 St NE Canton 2 Ohio	7
Amplex Div Chrysler Corp P O Box 2718 Detroit 31 Mich	2-18-22-31-60-65	Bowmar Instrument Corp 2415 Pennsylvania St Ft Wayne Ind	31-47	Dimco-Gray Co 207 E 6 St Dayton 2 Ohio	28-33
Anchor Metal Co 966 Meeker Ave Brooklyn 22 NY	65	Brady Co W H 727 W Glendale Ave Milwaukee 9 Wis	39	Dollin Corp 636 S 21 St Irvington 11 NJ	24
Anchor Plastics Co 36-36 36 St Long Island City 6 NY	33-34-67	Brainin Co C S 320 Washington St Mt Vernon NY	18	Dry Screen Process Inc 1016 Madison Ave Pittsburgh 12 Pa	69
Anchor Specialty Mfg Co Hollister Rd Teterboro NJ	17	Brand & Co William 41 North St Willimantic Conn	39	D & S Mfg Co 424 Burk Ave Ridgley Park Pa	34
Anti-Corrosive Metal Products Co Castleton-on-Hudson NY	3-25-28-43-44-45-48 49-50-51-52-64-65-67	Bristol Co P O Box 1790 EITT Waterbury 20 Conn	23-25-28-49-51	Du-Co Ceramics Co Box 278 Saxonburg Pa	61
Arch Gear Works 97 Holmes St N Quincy Mass	31	British Electronic Sales Box 132 Oakland Gardens 64 NY	6-11	Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	16-28-34-37-14-61
Arch Instrument Co 101 Holmes St N Quincy Mass	31	British Industries Corp 80 Shore Rd Port Washington NY	55	Durable Rubber Products Co 609 W Lake St Chicago 6 Ill	30
Arco Transformer & Electric Corp 1602 S Hanna St Ft Wayne 5 Ind	58	Brush Nail Expansion Bolt Co Greenwich Conn	28	Dynamic Gear Co 20 Merrick Rd Amityville LI NY	31
Armstrong Cork Co W Liberty St Lancaster Pa	29-30	Buchanan Electrical Products Corp 225 Route 22 Hillside NJ	46	Dzus Fastener Co Box 185 Babylon NY	28-32-57
Artisan Metal Works Co 11400 Madison Ave Cleveland 2 Ohio	5	Cal-Connector Co 7360 Varna Ave N Hollywood Calif	46	Eagle Electronics Corp P O Box 775 Meriden Conn	33-34
Art Wire & Stamping Co 227 High St Newark 2 NJ	45	California Chassis Co 5445 E Century Blvd Lynwood Calif	5	Eastern Specialty Co 3617 N 3 St Philadelphia 40 Pa	49
Asheville-Schoonmaker Mica Co 900 Jefferson Ave Newport News Va	66	Cambridge Thermionic Corp 445 Concord Ave Cambridge 38 Mass	4-5-11-33-31	Eaton Mfg Co Reliance Dix 25 Charles Ave SE Massillon Ohio	10-44-50-64
Askania Regulator Co 240 E Ontario St Chicago 11 Ill	23	Camcar Screw & Mfg Co Div Textron Inc 600 18 Ave Rockford Ill	28-50-52	Elastic Stop Nut Corp of America 2330 Vauxhall Rd Union NJ	28-37-45
Associated Eng'g Corp 65 Kent St Brookline 46 Mass	12-17	Camloc Fastener Corp 22 Spring Valley Rd Paramus NJ	28	Elco Corp M St below Erie Ave Philadelphia 24 Pa	46
Associated Mfg Co 4755 N Rockwell St Chicago 25 Ill	28-58	Cardwell Co Allen D 97 Whiting St Plainville Conn	21	Elco Tool & Screw Corp 1800 Broadway Rockford Ill	50-52
Associated Production Co 162 N Clinton St Chicago 6 Ill	49-58	Central Screw Co 3501 Shields Ave Chicago 9 Ill	28-44-50-52	Electrical Refractories Co E Clark St E Palestine Ohio	61
Associated Spring Co 1800 Clybourn Ave Chicago 14 Ill	57	Ceramaseal Inc P O Box 25 New Lebanon Center NY	6	Electrical Specialty Co 158 11 St San Francisco 3 Calif	2-19-39-63-66
Atlantic & Pacific Wire & Cable Co 112-01 Northern Blvd E Elmhurst LI NY	69	Chase Brass & Copper Co 236 Grand St Waterbury 20 Conn	3-28-32-43-44-15 48-49-52-60-64-65	Electronic Coil Engineers Inc 5830 Main St Hollydale Calif	8
Atlas E-E Corp 47 Prospect St Woburn Mass	11-13-16-49-78	Chassis Trak Inc 525 S Webster Ave Indianapolis 19 Ind	55	Ellis & Sons George D 4028 N American St Philadelphia 40 Pa	8
Atlas Precision Products Co 3801 Castor Ave Philadelphia 24 Pa	31	Chicago Gasket Co 1271 W North Ave Chicago 22 Ill	2-23-30-67	Elm Labs 10 Washington Ave Hastings-on-Hudson NY	5
Atlas Screw & Specialty Co 450 Broome St New York 13 NY	3-44-49-50-51 52-60-64-65	Chicago Rivet & Machine Co 950 S 25 Ave Bellwood Ill	48	Elzee Metal Products Co 775 39 St Brooklyn 32 NY	4-5-8-10-58
Auburn Mfg Co Stack St Middletown Conn	23-29-30-32-56-58-60 61-62-63-65-66-67-68	Chicago Screw Co Div Standard Screw Co 2701 Washington Blvd Bellwood Ill	3-28-41-49-51-52	Emeloid Co 1239 Central Ave Hillside 5 NJ	67
Auburn Spark Plug Co 89 York St Auburn NY	32-49	Churchill Lighting Corp 344 Franklin St Melrose 76 Mass	5-31-42-58	Emerson Plastic Corp Seabury Ave & Butler Pl Bronx 61 NY	7-23-32
Audio Development Co 2833 13 Ave S Minneapolis Minn	46	Cinch Mfr Corp 1026 S Homan Ave Chicago 24 Ill	5-11-13-15	Emerson-Sack Warner Corp 85 Washington St Somerville 43 Mass	58
Augat Bros 33 Perry Ave Attleboro Mass	10-11-13-16	Circon Component Co Santa Barbara Municipal Airport Goleta Calif	34-48-52-60-63-64-65-67	Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ	2-7-22-23-30-32-56-67
Autel Electronics P O Box 225 Linden NJ	6	Cleveland Wire Cloth & Mfg Co 3573 E 78 St Cleveland 5 Ohio	69	Engineering Co 23 Wright St Newark 5 NJ	49
Automatic & Precision Mfg Co 252 Hawthorne Ave Yonkers NY	23-52	Clevis Herts Products Inc 6545 Carnegie Ave Cleveland 3 Ohio	7-41-42	Erea Tool Die & Stamping Co 19 Ash St Brooklyn 22 NY	58
Autoscrew Co 216 W 18 St New York 11 NY	3-28-44-51-52	Clowes Ceramic Corp 3711 Calhoun Ave Chattanooga 7 Tenn	7-61	Exact Eng'g Mfg Co P O Box 668 Oceanside Calif	31
Avionics Ltd P O Box 200 Niagara-on-the-Lake Ontario Canada	2	Coaxial Connector Co 37 N 2 Ave Mt Vernon NY	49	Exacto Industries Inc 8730 Santa Monica Blvd Los Angeles 46 Calif	10-11-16
Bache & Co Semon 636 Greenwich St New York 14 NY	40	Collins Radio Co 855 35 St N E Cedar Rapids Iowa	41	E-Z-Hook Test Products 1536 Woodburn Ave Covington Ky	17
Bacon Industries 192 Pleasant St Watertown 72 Mass	23-30	Column Tool & Machine Co 1017 N E 3 Ave Amarillo Texas	46	Factory Enterprises Inc 3431 Butler St Pittsburgh 1 Pa	69
Baker & Co 113 Astor St Newark 2 NJ	18-48	Columbia Tape Mills Bank St E Greenville Pa	19	Fafnir Bearing Co 37 Booth St New Britain Conn	2
Baldwin Products Corp 432 E Valley Blvd San Gabriel Calif	5-10-11-34	Column Machine Co 87 State St Lynn Mass	49	Falstrom Co Falstrom Court Passaic NJ	5

Federal Shockmount Corp 1060 Washington Ave New York 56 NY 41-42			
Feedback Controls Inc 899 Main St Waltham 54 Mass	31		
Feiner & Sons P 522 W 45 St New York 36 NY	4-5		
Felters Co 210 South St Boston 11 Mass	29-42-62		
Felt Products Mfg Co 1504 Carroll Ave Chicago 7 Ill	29-30-60-61-62-63-65-67-68		
Finn & Co T R 200 Central Ave Hawthorne NJ	41-42		
Flock Process Co 375 Main Ave Norwalk Conn	41-42		
Floquil Products Inc Cobleskill NY	39		
Fluorocarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ	15-30-32-67		
Foot Bros Gear & Machine Corp 4545 S Western Blvd Chicago 9 Ill	31		
Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY	21		
Forsberg Mfg Co 125 Seaview Ave Bridgeport 1 Conn	49-58		
Franklin Fibre-Lamitex Corp Wilmington Del	63-67		
Freeway Washer & Stamping Co 4911 Grant Ave Cleveland 5 Ohio	56-60-63-65-67		
Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ	61		
Friez Instrument Div Bendix Aviation Corp 1400 Taylor Ave Baltimore 4 Md	23-23		
Garde Mfg Co 588 Eddy St Providence 3 RI	6-56		
Garlock Packing Co 402 Main St Palmyra NY	30-67-68		
Gear Specialists Inc 2635 W Medill Ave Chicago 47 Ill	31		
Geartronics Corp 2514 Broadway Long Island City NY	31-53-54		
Gee-Lar Mfg Co 418 S Wyman St Rockford Ill	4-5-20		
Gemex Corp 1200 Commerce Ave Union NJ	58		
General Cement Mfg Co Div Textron Inc 10-12-13-14-15-16-17-20 400 S Wyman St 21-34-37-46-49-50-51-52 Rockford Ill 56-57-60-62-64-65-68			
General Components Inc 225 E 144 St Bronx 51 NY	5-21-33-34-58-67		
General Control Co 1200 Soldiers Field Rd Boston 34 Mass	18		
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	2		
General Findings & Supply Co Industrial Div Leach & Garner Bldg Attleboro Mass	18-32-49		
General Machine & Instrument Co Clinton Rd & Rt 46 Caldwell NJ	24		
General Metal Products Co 1010 Centre St Easton Pa	4-5		
Gibson Electric Co 8317 Frankstown Ave Pittsburgh 21 Pa	18		
Glaser-Steers Corp 20 Main St Belleville 9 NJ	36		
Gleason-Avery Inc 45 Aurelius Ave Auburn NY	49		
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio	31		
Goat Co Fred 314 Dean St Brooklyn 17 NY	15-16		
Goe Eng'g Co 219 S Mednik Ave Los Angeles 22 Calif	20-22-33-34-49		
Golden Co 1054 38 St Brooklyn 19 NY	4-5-58		
Goodrich Aviation Products Div 500 S Main St Akron 18 Ohio	28-48		
Goodrich Industrial Products Co B F 500 S Main St Akron 18 Ohio	30		
Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	40		
Graflex Inc 154 Clarissa St Rochester 8 NY	49		
Grant Gear Works 154 W 2 St S Boston Mass	31		
Grant Pulley & Hardware Corp 31-85 Whitestone Pkwy Flushing 54 NY	55		
Graphite Metallizing Corp 1002 Nepperhan Ave Yonkers NY	18		
Grayhill Inc 561 Hillgrove Ave LaGrange Ill	17-67		
Greer Hydraulics Inc N Y Int'l Airport Jamaica 30 NY	23		
Greer Stop Nut Co 2608 W Flournoy St Chicago 12 Ill	44-49-51		
Gries Reproducer Corp 125 Beechwood Ave New Rochelle NY	3-7-24-28-31 32-48-51-52-67		
Groov-Pin Corp 1125 Hendricks Causeway Ridgefield NJ	28-34-45		
Gudebrod Bros Silk Co 225 W 34 St New York 1 NY	19		
Guild Electronics Inc 388 Broadway New York 13 NY	11		
Halax Corp P O Box 425 Los Gatos Calif	2		
Hallett Mfg Co 1601 W Florence Inglewood Calif	7-27-32-37-44		
Hamilton Glass Co 2750 W Grand Ave Chicago 12 Ill	40		
Hamilton Watch Co Allied Products Div Columbia Ave Lancaster Pa	31		
Handy & Harmen 82 Fulton St New York 38 NY	27-65-69		
Harper Co H M 8200 Lehigh Ave Morton Grove Ill	3-28-44-48-49-50-51		
Harwood Electronics Co 466 W Superior St Chicago 10 Ill	4-5-8-10-58		
Hassall Inc John Cantiarue Rd Westbury LI NY	28-43-48		
Havag Industries Inc 900 Greenbank Rd Wilmington 8 Del	30		
Hawley Products Co N 1 Ave St Charles Ill	23		
Haydu Electronic Products 1426 W Front St Plainfield NJ	16-31-57-58		
Hayward Scientific Glass Corp 217 N Magnolia Ave Whittier 1 Calif	40		
Heldor Mfg Corp 238 Lewis St Paterson NJ	5-6-8		
Heli-Coil Corp Shelter Rock Lane Danbury Conn	28		
Hermetic Seal Corp 29 S 6 St Newark 7 NJ	8		
Heminway & Bartlett Mfg Co 500 5 Ave New York 36 NY	19		
Hermaseal Co 1101 Lafayette St Elkhart Ind	6		
Heyman Mfg Co 147 N Michigan Ave Kenilworth NJ	7-32-59		
Hi Grade Alloy Corp 236 S. Talman Chicago 8 Ill	65		
Hitchiner Mfg Co P O Box 232 Milford NH	24		
Hobson Bros 4940 W Lawrence Ave Chicago 30 Ill	15		
Huck Mfg Co 2480 Bellevue Ave Detroit 7 Mich	3-28-48		
Hunter Spring Co 1 Spring Ave Lansdale Pa	10-16		
iE Mfg 325 N Hoyne Ave 4-5-10-11-16-45-57-58- Chicago 12 Ill 60-61-62-63-64-65-66-67-68			
Indium Corp of America 1676 Lincoln Ave Utica 4 NY	65		
Industrial Accessories Inc Line Rd Matawan NJ	30-32		
Industrial Devices Inc 982 River Rd Edgewater NJ	12-17		
Industrial Hardware Mfg Co 109 Prince St New York 12 NY	58		
Industrial Test Equipment Co 55 E 11 St New York 3 NY	53		
Instruments Inc 122 N Madison St Tulsa Okla	23		
Insulating Fabricators of N E Inc 69 Grove St Watertown 72 Mass	67		
Insulation Mfrs Corp 565 N Washington Blvd Chicago 39 Ill	63-66-67		
Insulation & Wires Inc 1534 Swinney Ave Ft Wayne Ind	63		
Insuline Corp of America 186 Granite St 4-5-9-12-16-20-22-26-27- Manchester NH 44-46-52-58-63-64-65-68			
Int'l Electronic Research Corp 145 W Magnolia Blvd Burbank Calif	11		
Int'l Powder Metallurgy Co 439 W Main St Ridgeway Pa	2-7		
Isolantite Mfg Corp Warren Ave Stirling NJ	6-7-61		
Jacobson Nut Mfg Corp Box 177 Kenilworth NJ	44		
Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY	4-20-21-22-34-37-53-54		
Janette Electric Mfg Co 8350 Lehigh Ave Morton Grove Ill	31		
Jelliff Mfg Corp CO Southport Conn	69		
JFD Mfg Co 6106-16 Ave Brooklyn 4 NY	12		
Jodee Plastics Co 213 Shepherd Ave Brooklyn 8 NY	49		
Johnson Bronze Co S Mill St New Castle Pa	2		
Johnson Co E F Waseca Minn	20-21-22		
Johnson & Hoffman Mfg Corp 31 E 2 St Mineola NY	18-27		
Johns-Manville 22 E 40 St New York 16 NY	30		
Jones Electronics Hiram 2313 W Olive St Burbank Calif	27-34-46-49		
Kaynar Co Box 2001 Terminal Annex Los Angeles 54 Calif	37-44		
Kees Mfg Co F D 700 Park St Beatrice Nebr	4-5-58		
Kenwood Eng'g Co 265 Colfax Ave Kenilworth NJ	4-5		
Keystone Bolt & Nut Corp 125 Church St. New York 7 NY	3-4-43-49-50-51-60-64-65		
Keystone Electronics Co 65 7 Ave Newark 4 NJ	34		
Keystone Electronics Corp 423 Broome St New York 13 NY	4-7-13-17-21-22-34-46-49-58		
Kirchberger & Co M 83 W Forest Ave Englewood NJ	61		
Klincher Locknut Corp 2153 Hillside Ave Indianapolis 18 Ind	37		
Kling Metal Spinning & Stamping Co 245 Centre St New York 13 NY	60-65		
Klise Mfg Co 51 Cottage Grove St SW Grand Rapids 2 Mich	1		
Kontes Glass Co Vineland NJ	8		
Koppers Co Koppers Bldg Pittsburgh 19 Pa	21		
Kost Products Co 2335 N Cicero Ave Chicago 39 Ill	4-5-11-13-16-28-34-58		
Krengel Mfg Co 227 Fulton St New York 7 NY	39		
Krueger & Hudepohl 1041 Evans St Cincinnati 4 Ohio	58		
Kulite Tungsten Co 1040 Hoyt Ave Ridgefield NJ	18		
Kulka Electric Mfg Co 633 S Fulton Ave Mt Vernon NY	10-11-15		
Kupfrian Mfg Corp 395 State St Binghamton NY	20-21-53		
Labline Inc 3070 W Grand Ave Chicago 22 Ill	10		
Laminated Sheet Products Corp 449 Neponset St Norwood Mass	63-67		
Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill	41		
Landsis & Gyr 45 W 45 St New York 36 NY	2		
LaPointe Industries Inc 155 W Main St Rockville Conn	4-5-58		
Lee Chemical Corp Walter Seabury Ave & Butler Pl Bronx 61 NY	7-23-32		
Lercos Electronics Inc 501 S Varney St Burbank Calif	27-34-44		
Lewis Spring & Mfg Co 2652 W North Ave Chicago 47 Ill	57		
Liberty Mirror Div Libbey Owens Ford Glass Co Brackenridge Pa	40		
Link Aviation Inc Binghamton NY	31		
Link-Belt Co Prudential Plaza Chicago 1 Ill	2-21-22-31-47		
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	8-34		
Litton Industries of Md Inc 4910 Calvert Rd College Park Md	31		
Lord Mfg Co 1635 W 12 St Erie 6 Pa	21-23-41-42		
Lorentzen Inc H K 391 W Broadway New York 12 NY	4-5-42-58		
Louthan Mfg Co Harvey Ave E Liverpool Ohio	61		
Lundey Associates 694 Main St Waltham 54 Mass	6		
Malco Tool & Mfg Co 4025 W Lake St Chicago 24 Ill	34		
Malkin-Illion Co 400 Coit St Irvington 11 NJ	5		
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	18		
Mandex Mfg Co 2608 W 16 St Chicago Ill	34		
Markem Machine Co 150 Congress St Keene NH	39		
Markwik Mfg Co 31 Sexton Rd Plainville LI NY	39		
Marlin-Rockwell Corp 402 Chandler St Jamestown NY	2		
Martindale Electric Co Box 617 Edgewater Branch Cleveland 7 Ohio	17-63		
Mathews & Co Jas H 3956 Forbes St Pittsburgh 13 Pa	39		
Mayfair Molded Products Corp 3700 N Rose St Franklin Park Ill	30-32-41-42-67-68		
Mercury Electronic Co Box 450 B Red Bank NJ	41-42		
Metals & Controls Corp General Plate Div 48 Forest St Attleboro Mass	18		
Metal Specialty Products Corp 27-01 Brooklyn Queens Expressway W Woodside 77 NY	4-5-10-11-16-58-65		
Metal Textile Corp 647 E First Ave Roselle NJ	30-69		
Methode Mfg Corp 7447 W Wilson Ave Harwood Heights Ill	46-58		
Metpro Inc R I 230 Toronto Ave Providence 5 R I	8-27		

Mica Fabricating Co Rochelle Park NJ 61-63-66-67	Nylok Corp 611 Industrial Ave Paramus NJ 3-28-37-44-51-52	Rohn Mfg Co 116 Limestone Bellevue Peoria 5 Ill 4-5-32
Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill 63-67	Ohio Carbon Co. 12508 Berea Rd Cleveland 11 Ohio 2-7-18	Roller Bearing Co of America Sullivan Way W Trenton NJ 2
Micromold Products Corp 1 School St Yonkers NY 30	Olin Mathieson Chemical Corp 460 Park Ave New York 22 NY 28	Romac Products Co 48-01 25 Ave Long Island City 3 NY 58
Micron Gear Mfg Co 73 Rushmore St Westbury LI NY 31	Omega Industries Inc 36-39 171 St Flushing NY 45	Romar Plastics Inc 1311 E Main St St Charles Ill 33-67
Mid-West Conveyor Co Metal Products Div 7 & Sunshine Rd Kansas City 15 Kan 5-8	Palnut Co 25 Glen Rd Mountainside NJ 28-37-44	Rosan Inc 2901 W Coast Hwy Newport Beach Calif 3-28-37-49
Mid-West Spring Mfg Co Etna St Mentone Ind 57	Parker-Kalon Div General American Transportation Corp Clifton NJ 28-50-51	Rubbercraft Corp of Calif 1800 W 220 St Torrance Calif 23-30-32-41-68
Mil Case Corp 35-18 37 St Long Island City NY 4-5-8-9-30-33-55	Parker Metal Goods Co 85 Prescott St Worcester 5 Mass 34	Russell Burdall & Ward Bolt & Nut Co Midland Ave Port Chester NY 3-44-48-50-51-52
Milford Rivet & Machine Co 857 Bridgeport Ave Milford Conn 48	Paul & Beekman 1801 Courtland St Philadelphia 40 Pa 8	Safetee Glass Co 4717 Stenton Ave Philadelphia 44 Pa 40
Millen Mfg Co James 150 Exchange St Malden 48 Mass 11-15-20-21-22-34	Peerless Electronics Inc 5338 Alhambra Ave Los Angeles 32 Calif 10-11	Saginaw Steering Gear Div GMC 3900 Holland Saginaw Mich 1
Miller Co J W 5917 S Main St Los Angeles 3 Calif 8	Peerless Products Industries 812 N. Pulaski Rd Chicago 51 Ill 49	St Marys Carbon Co State St St Marys Pa 2-7
Miniature Precision Bearings Inc Precision Park Keene NH 2	Pem Eng'g & Mfg Corp Box 311 Doylestown Pa 28-44	Samples Machine Co A M 208 Tazewell Pike Knoxville 18 Tenn 16-49
Minnesota Rubber & Gasket Co 3630 Wooddale Ave St Louis Park Minnneapolis 16 Minn 23-30-32	Penn Fibre & Specialty Co. 2020 E Westmoreland St. Philadelphia 34 Pa 30-32-49-60-62 63-65-66-67-68	Schmidt Inc Geo T 4100 N Ravenswood Ave Chicago 13 Ill 39
Minor Rubber Co Ackerman St Bloomfield NJ 7-30-32-42-67-68	Perkins Machine & Gear Co Circuit Ave West Springfield Mass 31	Schrack Electrical Sales Corp 45 W 81 St New York 24 NY 51-52-62-63-65-67
Mitronics Inc 1290 Central Ave Hillside NJ 61	Permonite Mfg Co 444 Lake Shore Dr Chicago 11 Ill 4-5-58-63-67	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ 8-10-12-69
Mobil Electronics Mfg Co 1111 State Rd 67 E Anderson Ind 5	Pheoll Mfg Co 5700 W Roosevelt Rd Chicago 50 Ill 3-28-44-50-52	Scovill Mfg Co 99 Mill St Waterbury 20 Conn 27-28-34-49-58
Molding Corp of America 58 Weybosset St Providence 3 R I 6-7-32-67	PIC Design Corp 477 Atlantic Ave E Rockaway LI NY 2-21-31-51-60-65	Sealectro Corp 610 Fayette Ave Mamaroneck NY 49
Moody Machine Products Co 40 Dudley St Providence 5 RI 49	Pilgrim Screw Corp 259 Dexter St Providence 1 RI 50-52	Segal Edward 72 Spring St New York 12 NY 27-32
Morris Co J I 390 Elm St Southbridge Mass 28-49-51-62	Piqua Machine & Mfg Co 441 S College St Piqua Ohio 49	Shakeproof Div Illinois Tool Works St Charles Rd Elgin Ill 28-37-44-50-64
Moser Jewel Co 544 Fayette St Perth Amboy NJ 2	Pix Mfg Co 75 Hudson St Newark 3 NJ 16-34-58	Sheffco Mfg Corp 323 Bergen Blvd Fairview NJ 58-60-63-65-67-68
Muckle Mfg Co US Hwy 14 Owatonna Minn 33	Plastic Mold & Eng'g Co 157 Clifford St Providence RI 7-67	Silicone Insulation Inc Seabury Ave & Butler Pl Bronx 61 NY 7-32
Mueller Electric Co 1585H E 31 St Cleveland 14 Ohio 12-17	Polymer Corp 2120 Fairmont Ave Reading Pa 2-7-30-44-67	Sillcocks-Miller Co 10 W Parker Ave Maplewood NJ 67
Mycalex Corp of America 125 Clifton Blvd Clifton NJ 61-66	Pomona Electronics Co 1126 W 5 Ave Pomona Calif 17	Simmonds Aerocessories Inc 105 White Plains Rd Tarrytown NY 28
Nagel-Chase Mfr Co 2811 N Ashland Ave Chicago 13 Ill 4-9	Ponn Machine Cutting Co Tileston St Everett 4 Mass 30	Simmons Fastener Corp N Broadway Albany 1 NY 28
Narrow Fabric Co PO Box 742 Reading Pa 19	Positive Lock Washer Co Avenue A & Miller St Newark 5 NJ 64	Simmonds Saw & Steel Co 470 Main St Fitchburg Mass 56
National Ceramic Co 500 Southard St Trenton 2 NJ 61	Precise Instrument Parts Co 4520 San Fernando Rd Glendale 4 Calif 28-49-54-60-63-65-67	Sinclair Mfg Co P O Box 243 Charley Mass 5-7-11-28-34-44-49-58
National Cine Equipment Inc 209 W 48 St New York 36 NY 10	Precision Metal Products Co. 41 Elm St Stoneham Mass 33	SKF Industries Inc Front St & Erie Ave Philadelphia 32 Pa 2
National Company Inc 61 Sherman St Malden 48 Mass 11-15-20-21-22	Premmco Inc 5470 Valley Blvd Los Angeles 32 Calif 28	Slip Ring Co of America 3612 W Jefferson Blvd Los Angeles 16 Calif 7-66-67
National Gasket & Washer Mfg Co 124 E 25 St New York 10 NY 63-65-67-68	Printloid Corp 93 Mercer St New York 12 NY 67	Smith Inc Herman H 2326 Nostrand Ave Brooklyn 10 NY 10-11-12-14-15-16-17- 19-20-21-22-26-32-34- 44-46-49-50-51-52-53- 54-58-60-61-62-63-64-65-67-68
National Lock Washer Co 40 Hermon St Newark 5 NJ 64	Protectoseal Co 1920 S Western Ave Chicago 8 Ill 8	Solar Mfr Corp 4553 Seville Ave Los Angeles 58 Calif 61
National Screw & Mfg Co 2440 E 75 St Cleveland 4 Ohio 3-37-44-45-48- 49-50-51-52	Quaker City Gear Works Bethayres Pa 31	Southco Div South Chester Corp Lester Pa 28-48
National-Standard Co Niles Mich 69	Rada Products Co 2911 Carroll Ave Chicago 12 Ill 4-5-58	Southern Screw Co P O Box 1360-EI Statesville NC 50
National Tel-Tronics Corp 52 St Casimir Ave Yonkers NY 15-46-58	Radio Frequency Labs Inc Boonton NJ 55	South River Metal Prods Co 377 Turnpike South River NJ 5-58
National Vulcanized Fibre Co P O Box 311 Wilmington 99 Del 63-67	Rapid Specialties Co 325 W Huron St Chicago 10 Ill 17	Sparta Mfg Co Dover Ohio 2-30-61
Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif 2	Raybestos-Manhattan Inc 61 Willett St Passaic NJ 30-42-68	Spaulding Fibre Co 310 Wheeler St Tonawanda NY 2-7-9-30-32-33-37 44-49-63-67
Neosil Products Div Rubber Associates 745 S Ave New York 22 NY 30	Raytheon Mfg Co 100 River St Waltham 54 Mass 5-34	Sphere Co 25 Amity St Little Falls NJ 6-8
Neumade Products Corp 250 W 57 St New York 19 NY 8	Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass 6-7-61	Spring Packing Corp 332 S Michigan Av Chicago 4 Ill 29-30
Newcomb Spring of Conn College Hwy Southington Conn 57-65	Reeves Instrument Corp 215 E 91 St New York 28 NY 31	Spruce Pine Mica Co P O Box 456 Spruce Pine NC 66
Newcomb Spring Corp 177 E Hawthorne Ave Valley Stream N Y 57-58-60-61-64-65-67	Reflectone Corp Boston Post Rd Stamford Conn 21	Stamford Metal Specialty Co 427 W Broadway New York 12 NY 4-5-8
New Departure Div GMC 269 N Main St Bristol Conn 2	Reiner Electronics Co Centre & Glendale Sts Easton Pa 4-5	Standard Electric Time Co 89 Logan St Springfield 2 Mass 12-16
New England Tape Co. 30 Tower St Hudson Mass 19-67	Reliable Spring & Wire Forms Co 3167 Fulton Rd Cleveland 9 Ohio 10-16-57	Standard Locknut & Lockwasher Inc 2250 Valley Ave Indianapolis 18 Ind 44-49
Ney Co J M P O Box 990 Hartford 1 Conn 18	Remington Rand Univac Div Sperry Rand Corp 315 4 Ave New York 10 NY 34	Standard Pressed Steel Co Box 899 Jenkintown Pa 3-25-28-37-44-45-51
N H Ball Bearings Inc Petersborough 1 NH 2	Remier 2101 Bryant St San Francisco Calif 11-41	Standard Record Mfg Co 70 N San Gabriel Blvd Pasadena 8 Calif 8-24-28
Nichols Products Co. 325 W Main St Moorestown NJ 7-49-67	Repatch Pacific Div Arnold Eng'g Co 641 E 61 St Los Angeles 1 Calif 8	Star Stainless Screw Co 655 Union Blvd Paterson NJ 3-44-45-49-50-51-52-64-65
Nielsen Hardware Corp 770 Wethersfield Ave Hartford 14 Conn 10-28-33	Republic Steel Corp Republic Bldg Cleveland 1 Ohio 3-28-37-44	Star-A-Electric Mfg Co 269 Meserole St Brooklyn 6 NY 46
Niemand Bros 37-05 35 Ave Long Island City 1 NY 63	Research Development Mfg Inc 429 E Collom St Philadelphia 41 Pa 2-49-54	Staver Co 41-51 N Saxon Ave Bay Shore LI NY 11-27-58
Norden-Ketay Corp Commerce Rd Stamford Conn 31	Resistflex Corp Woodland Rd Roseland NJ 23	Steel Co Herman D Lafayette Bldg Philadelphia 6 Pa 31-49
Norrich Plastics Corp 35 E 32 St New York 16 NY 7	Rhodes & Sons Co M M Box 627 Taunton Mass 43	Sterling Bolt Co 363 W Erie St Chicago 10 Ill 3-44-50-51-52-60-64-65
Northern Metal Products Corp 9599 W Grand Ave Franklin Park Ill 8-58	Richardson Co 27 Ave & Lake St Melrose Park Ill 33-67	Stevens Products Inc 86 Main St E Orange NJ 23
Northern Plastics Corp 2nd Market St LaCrosse Wisc 67	Roberts Toledo Rubber Co 1200 Prospect Ave Toledo 6 Ohio 7-32-42-68	Stewart Corp F W 4311 Ravenswood Ave Chicago 13 Ill 53
North Shore Nameplate Inc 214-27 Northern Blvd Bayside 61 NY 39	Robinson Aviation Inc Teterboro NJ 41-42	Steward Mfg Co D M Chattanooga Tenn 61
	Robinson Machine Works 802 E 8 St New Albany Ind 3	
	Rogers Corp Rogers Conn 30-63-67-68	

Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	5	Waldes Kohinoor Inc 47-16 Austel Pl Long Island City 1 NY	28	Hal-Hen Co 36-14 11 St Long Island City 6 NY	3-4
Stimson Co Edwin B 70 Franklin Ave Brooklyn 5 NY	27-32-48-64-65	Waldom Electronics Inc 4625 W 53 St Chicago 32 Ill	13-28-32-34-50- 51-63-64-65	Insuline Corp of America 186 Granite St Manchester NH	1
Stokes Molded Products Div Electric Storage Battery Co 241 Taylor St Trenton 4 NJ	68	Walker Co George 118 Amsterdam Ave Passaic NJ	59	Knowles Electronics Inc 9400 Belmont Franklin Park Ill	3-4
Stone City Machine & Tool Co 1206 7 St	4-5-8-10-11-16-17-84	Walasco Electronics Mfg Co 100 W Green St	4-7-10-12-14-15-16- 17-19-27-28-32-44-46-48-57- Rockford Ill	Linlar Inc 4101 San Fernando Rd Glendale 4 Calif	2
Stow Mfg Co 443 State St Binghamton NY	53	Walworth Watch Co 77 Rumford Ave Waltham 54 Mass	49-51-52	Master Mobile Mounts Inc 1306 Bond St Los Angeles 15 Calif	4
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	46	Walton Tool & Die Co 2707 Empire Ave Burbank Calif	4-5-49	Melody Master Mfg Co 2842 N Cicero Ave Chicago 41 Ill	2-3
Stupakoff Div Carborundum Co Latrobe Pa	6-7-61	Waterbury Pressed Metal Co 300 Chase Ave Waterbury 14 Conn	27-28-37-44-58	Mytron Mfg Co 4522 Brazil St Los Angeles 39 Calif	1
Sun Tube Corp 181 Long Ave Hillside NJ	8	Waters Mfg Inc Boston Post Rd Wayland Mass	28	Permoflux Products Co 4101 San Fernando Rd Glendale 4 Calif	2
Superior Steatite & Ceramic Corp 91 W Forest Ave Englewood NJ	61	Watson Mfg Co 3700 Taylor St Jamestown NY	41-55	Plastic Mold & Eng'g Co 157 Clifford St Providence RI	3
Swiss Jewel Co Lafayette Bldg Philadelphia 6 Pa	2	Weckesser Co 5701 Northwest Hwy Chicago 30 Ill	11-28-44-51-52-67	Pye Canada Ltd 82 Northline Rd Toronto 16 Ont Canada	4
Sylvania Electric Products Inc 1740 Broadway New York 19 NY	27-61	Welch Mfg Co W M 1515 Sedgwick St Chicago 10 Ill	14	Roanwell Corp 662 Pacific St Brooklyn 17 NY	2-4
Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	5-16-58	Wenco Mfg Co 1133 W Hubbard Chicago 22 Ill	8	Roflan Co Topsfield Mass	2-4
TA Mfg Corp 4607 Alger St Los Angeles 39 Calif	4-5-10-11	Western Gold & Platinum Co 525 Harbor Blvd Belmont Calif	61-65	Superex Electronics Corp 4 Radford Pl Yonkers NY	4
Taylor Fibre Co Norristown Pa	7-32-49-56-63-67	Westfeld Metal Products Co 1035 Lower Union St Westfield Mass	3-44-49-52	Telephonics Corp Park Ave Huntington L1 NY	2-3-4
Taylorcel Corp 185 Murray St Rochester 6 NY	8	Westline Products Div Western Lithograph Co 600 E 2 St Los Angeles 54 Calif	39	Telex 1633 Eustis St St Paul 1 Minn	3-4
Technicraft Co 1156 Commonwealth Ave Boston 34 Mass	34	Wheaton Co T C Millville NJ	24	Trim Inc 400 W Lake St Libertyville Ill	4
Techniques Inc 52 Jackson Ave Hackensack NJ	27	Whitaker Cable Corp 1301 Burlington St N Kansas City 16 Mo	12-16	U S Instrument Corp P O Box 33E Charlottesville Va	4
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	36-42-47	White & Son James L 374 Verona Ave Newark 4 NJ	31		
Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	40	White Dental Mfg Co S S Industrial Div 10 E 40 St New York 16 NY	21-53		
Thale Eng'g Corp 2104 E Villa St Pasadena Calif	34	Wirgin Oil Tool Co E B 3424 E Olympic Blvd Los Angeles 23 Calif	20		
Thompson-Bremer & Co Sub American Machine & Fdry 520 N Dearborn St Chicago 10 Ill	44-50-64	Wilcolator Co 1001 Newark Ave Elizabeth NJ	23		
Thomson Industries Inc 1029 Plandome Rd Manhasset NY	2-6-7-54	Wilmington Fibre Specialty Co New Castle Del	7-32-63		
Thor Ceramics Inc 225 Belleville Bloomfield NJ	61	Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	4-5-10-11-16-17 28-30-32-41-42 55-56-60-62-65-68		
Times Facsimile Corp 540 W 58 St New York 19 NY	11	Wind Turbine Co E Market St & PRR W Chester Pa	69		
Timken Roller Bearing Co 1835 Duerber Ave S W Canton 6 Ohio	2	Winzeler Mfg & Tool Co 7355 W Wilson Ave Chicago 31 Ill	31		
Tinnerman Products Inc Department 16 P O Box 6688 Cleveland 1 Ohio	11-28-44	Wolfe Co F C Div Parker Appliance Co 10567 Jefferson Blvd Culver City Calif	30		
Titan Metal Mfg Co Bellefonte Pa	24	Worcester Pressed Aluminum Corp 13 Hope Ave Worcester 3 Mass	8-58		
Titchener & Co E H 67 Clinton St Binghamton NY	3-5-33	Workman TV Inc 309 Queen Anne Rd Teaneck NJ	16		
Toman & Co E 8700 W 47 St Lyons Ill	33	Wrought Washer Mfg Co 2275 S Bay St Milwaukee 7 Wis	56-58-60-65-66-67		
Transcoil Corp Worcester Pa	31	Wyzenbeek & Staff Inc 223 N California Ave Chicago 12 Ill	53		
Triad Transformer Corp 4055 Redwood Ave Venice Calif	8	Yale & Towne Powdered Metal Prods Div 9335 W Belmont Ave Franklin Park Ill	2		
Tricon Mfg Co 8012 Wallace St Chicago 20 Ill	18-23-48-60	Zagora Gears Inc 1327 S Mint St Charlotte 3 NC	31		
Tri-Point Plastics Inc Tri-Point Mfg Inc 175 I U Willets Rd Albertson LI NY	7	Zierick Mfg Corp Reechwood & Rockdale Ave New Rochelle NY	12-14-15-17-58		
Tru-Lock Fasteners Inc Woodbury Conn	28				
Tubular Rivet & Stud Co Lindon St Wollaston 70 Mass	18-44-48				
United-Carr Fastener Corp Cambridge 42 Mass	3-34-41-42-44-45-58				
United Fabricators & Electronics Myrtle & Water Sts Stillwater Minn	31				
United Shoe Machinery Corp 140 Federal St Boston 7 Mass	27-28-48				
Universal Condenser Co 3435 N Kimball Ave Chicago 18 Ill	8				
Uniwave Inc 2 Marine St Farmingdale NY	20-21-22-34-49				
U S Gear Corp 71 Broadway Wakefield Mass	31				
U S Engineering Co 5873 Rodeo Rd Los Angeles 16 Calif	33				
US Graphite Co Div Wickes Corp 1621 Holland Ave Saginaw Mich	2				
U S Stoneware Co Alite Div Orville Ohio	6-7-61				
Utilities Service Co 1 Pine St Allentown Pa	3-10-44-45-65				
Vallorbs Jewel Co Lancaster Pa	2-49				
VanKeuren Co 176 Waltham St Watertown 72 Mass	45				
Vector Electronics Co 3352 San Fernando Rd Los Angeles 65 Calif	8				
Video Industries Co 242 Madison Ave Port Chester NY	34				
Wabash Metal Products Co 1569 Morris St Wabash Ind	60-65-67				
Wade Electric Products Co Box 271 Sturgis Mich	5				

30—INDICATORS

Indicators, annunciators	1
Indicators, antenna position	2
Indicators, arc-over	3
Indicators, broadcast	4
Indicators, capacitor leakage	5
Indicators, data display	6
Indicators, deviation	7
Indicators, dew paint	8
Indicators, dielectric constant	9
Indicators, film thickness	10
Indicators, frequency	11
Indicators, ground detector	12
Indicators, illumination	13
Indicators, industrial	14
Indicators, linear displacement	15
Indicators, magnetic field	16
Indicators, materials thickness	17
Indicators, medical electronic	18
Indicators, modulation	19
Indicators, moisture	20
Indicators, moving target	21
Indicators, null	22
Indicators, oxygen	23
Indicators, plan position	24
Indicators, power level	25
Indicators, pressure	26
Indicators, proximity	27
Indicators, pulse time rise	28
Indicators, radiation	29
Indicators, R-F	30
Indicators, servo	31
Indicators, shorted turn	32
Indicators, sound level	33
Indicators, speed	34
Indicators, strain	35
Indicators, telemetering	36
Indicators, temperature	37
Indicators, timing	38
Indicators, torque	39
Indicators, vacuum	40
Indicators, vibration	41
Indicators, volume	42

29—HEADPHONES

Headphones, crystal	1
Headphones, dynamic	2
Headphones, hearing aid	3
Headphones, magnetic	4

Abbeon Supply Co 179-15 Jamaica Ave Jamaica 32 NY	20
Abrams Instrument Corp 606 E Shiawassee St Lansing 1 Mich	38
Advanced Electronics Inc 94 Silas Deane Hwy Rocky Hill 9 Conn	41
Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	6
Advance Instrument Corp 1709 F St Belmar NJ	31
Aero Electronics Co 1512 N Wells St Chicago 10 Ill	6-31
Aero Instrument Co 11423 Vanowan St N Hollywood Calif	11-38
Aero Research Instrument Co 315 N Aberdeen St Chicago 7 Ill	34
Aerojet-General Corp 6352 N Irwindale Ave Azusa Calif	29
Aerolite Electronics Corp 507 26 St Union City NJ	13

Airborne Electronics Co 6813 Troost Ave N Hollywood Calif	2	B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	6-11-26-30-36-37	Elfa Instrument Center 55 Reade St New York 7 NY	37
Airmec Ltd High Wycombe Buckinghamshire England	11-22-38	Boonton Electronics Corp 738 Speedwell Ave Morris Plains NJ	11-22-30	Ellis Associates 67 Lincoln Ave Pelham NY	35
Airpax Products Co Middle River Baltimore 20 Md	11-34	Boonton Radio Corp Intervale Rd Boonton NJ	10	Ellison Draft Gage Co 548 W Monroe St Chicago 6 Ill	26-40
Alden Electronic & Impulse Recording Equip Co P O Box 125 Westboro Mass	29	Bosch Inc M Ten 80 Wheeler Ave Pleasantville NY	31	Endevco Corp 161 E California St Pasadena Calif	41
Alfred Electronics 897 Commercial St Palo Alto Calif	40	Bristol Co PO Box 1790 EITT Waterbury 20 Conn	7-8-20-22-23-25-26-31-34-35-36-37-38-40-42	Erwood Inc 1770 W Berteau Ave Chicago 13 Ill	41
Allard Instrument Corp 146 E 2 St Mineola LI NY	6	Bruno-New York Industries Corp 460 W 34 St New York 1 NY	22	ESC Corp 534 Bergen Blvd Palisades Park NJ	28
Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	18-26-37	Brunswick Instruments PO Box 813 New Brunswick NJ	25	Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch L I N Y	27
American Communications Corp 280 Broadway New York 17 NY	1	Brush Electronics Co 3405 Perkins Ave Cleveland 14 Ohio	7	Farnsworth Electronics Co Div I T & T 3702 E Pontiac St Ft Wayne Ind	6
American Electronics Inc Instruments Div 9503 W Jefferson Blvd Culver City Calif	34	Burroughs Corp 6071 2 Ave Detroit 32 Mich	6-16-27-36	Federal Products Corp 1144 Eddy St Providence RI	15
American Instrument Co 8030 Georgia Ave Silver Spring Md	8-10-17-20	Cambridge Instrument Co Grand Central Terminal New York 17 NY	37	Federal Telephone & Radio Co Div IT & T 100 Kingsland Rd Clifton NJ	11-22-25
American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	2-10-11-21-26-27-36	Central Scientific Co of Calif 1040 Martin Ave Santa Clara Calif	40	Feedback Controls Inc 899 Main St Waltham 54 Mass	31
American Machine & Foundry Co Electronics Div 1085 Commonwealth Ave Boston 15 Mass	6-21-24	Channel Master Corp Ellenville NY	2	Fenwal Inc Pleasant St Ashland Mass	37
American Microwave Corp 11754 Vose St N Hollywood Calif	11	Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill	17-34	Fielden Instrument Div Robertshaw-Fulton Controls Co 2920 N 4 St Philadelphia 33 Pa	14-15-20-29-34-37-39-41
Analogue Controls Inc 39 Roselle St Mineola NY	31	Chicago Industrial Instrument Co 865 N Sangamon St Chicago 22 Ill	20	Fischer & Porter Co 478 Warminster Rd Hathoro Pa	14-25-26-36-37-40
Antlab Inc 4950 N High St Columbus 14 Ohio	2	Colvin Labs Inc 364 Glenwood Ave E Orange NJ	26	Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa	37
Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	29	Communication Equipment & Eng'g Co 5646 W Race Ave Chicago 44 Ill	1	Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY	31
Apparatus Development Co 115 Main St Wethersfield 9 Conn	2	Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	17-26-31	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	22
Applied Science Corp of Princeton P O Box 44 Princeton NJ	36	Consolidated Electrodyamics Corp 300 N Sierra Madre Villa Pasadena Calif	20-23-26-35-40-41	Frequency Standards Inc P O Box 504 Asbury Park NJ	11-30
Arnoux Corp 11924 W Washington Blvd Los Angeles 66 Calif	37	Consolidated Electrodyamics Corp Rochester Div 1775 Mt Read Blvd Rochester 4 NY	40	Friez Instrument Div Bendix Aviation Corp 1400 Taylor Ave Baltimore 4 Md	20
Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio	22-29-30-37-40	Continental Electric Co Taylor Tubes Inc 6 N Michigan Ave Chicago 2 Ill	40	Gary Wells Co 361 Rockaway Ave Valley Stream NY	11
Associated Research Inc 3758 W Belmont Ave Chicago 18 Ill	12-14	Corbin Corp 5419 56 Pl Riverdale Md	8-37	General Controls Co 801 Allen Ave Glendale 1 Calif	14-26-37-40
Atlas Precision Products Co 3801 Castor Ave Philadelphia 24 Pa	2	Cornell-Dubilier Electric Corp 333 Hamilton Blvd S Plainfield NJ	5	General Electric Co Apparatus Sales Div 10-11-15-17-20-37-40 1 River Rd Schenectady 5 NY	10-11-15-17-20-37-40
Auth Electric Co 34-20 45 St Long Island City 1 NY	1	Collins Radio Co 855 35 St N E Cedar Rapids Iowa	7	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	7-11-19-22-33-34-41
Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	6-39	Cramer Controls Corp Centerbrook Conn	38	Gertsch Products Inc 11846 Mississippi Ave Los Angeles 25 Calif	7-22
Avionics Ltd PO Box 200 Niagara-on-the-Lake Ontario Canada	1	Crescent Eng'g & Research Co 5440 N Peck Rd El Monte Calif	15-17-22-26-31-35-39-41	Giannini & Co G M 918 E Green St Pasadena Calif	14-15-22-26-31-34-36-37-40
Bailey Meter Co 1050 Ivanhoe Rd Cleveland 10 Ohio	29-26-31-36-37	Curtiss-Wright Corp Electronics Div 631 Central Ave Carlstadt NJ	10-17-34	Gilmore Industries Inc 5713 Euclid Ave Cleveland 3 Ohio	26-35-39
Baker & Co 113 Astor St Newark 2 NJ	8-23	Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wisc	14-25-34	GM Mfg Co 134 W 26 St New York 1 NY	37
Baldwin-Lima-Hamilton Corp Electronics & Instrumentation Div 42 4 Ave Waltham 54 Mass	26-35-39	Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	18	Goldak Co 1544 W Glenoaks Blvd Glendale 1 Calif	29
Ballantine Labs Inc Boonton NJ	22	Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	3	Hasan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	6-15-26-31-36-37-39-40
Barber-Colman Co Rock St Rockford Ill	22-37	Dayton Aviation Radio & Equipment Corp R R 3 Troy Ohio	11-30	Hal-Hen Co 36-14 11 St Long Island City 6 NY	20
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	22-29-30	Defender Instrument & Regulator Co Boody Ill	26-37	Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	24
Barton Electronics Inc 1000 Farmington Ave W Hartford 7 Conn	15	Delta Chemical Works 23 W 60 St New York 23 NY	20	Hallikainen Instruments 1341 7 St Berkeley 10 Calif	9
Beckman/Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	6-11-20-28-29-31-36-38	De Mornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	11	Hamilton Watch Co Allied Products Div Columbia Ave Lancaster Pa	26-41
Beckman Instruments Inc Process Instruments Div 2500 Fullerton Rd Fullerton Calif	20	Detroit Controls Corp Norwood Controls Unit 934 Washington St Norwood Mass	22-26-31-37	Hastings-Raydist Inc Newcomb Ave Hampton Va	26-40
Bell Aircraft Corp P O Box 1 Buffalo 5 NY	21-22-24-28-30-31-36-40	Devo Eng'g Inc P O Box 387 Caldwell NJ	1-14	Hathaway Instrument Div Hamilton Watch Co 5800 E Jewell Ave Denver 22 Colo	36
Belock Instrument Corp 111-01 14 Ave College Point 56 NY	31	Devol Research Co Brookside Dr Greenwich Conn	16-27	Haydon Co A W 232 N Elm St Waterbury 20 Conn	38
Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif	36	Dice Co J W 16 Highwood Ave Englewood NJ	10-17	Haydon Mfg Co 245 E Elm St Torrington Conn	38
Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	16-17-20-21-24-29-36	Diehl Mfg Co Funderne Ave Somerville NJ	34	Hays Corp Michigan City Ind	23-26
Bendix Aviation Corp Cincinnati Div 3130 Wasson Rd Cincinnati 8 Ohio	29	Doelcam Div Minn-Honeywell 1400 Soldiers Field Rd Boston 35 Mass	22	Heath Co 305 Territorial Rd Benton Harbor Mich	29
Benson-Lehner Corp 11930 W Olympic Blvd Los Angeles 64 Calif	6	Drake Mfg Co 1713 W Hubbard St Chicago 22 Ill	13	Heiland Div Minneapolis-Honeywell 5200 E Evans Ave Denver 22 Colo	15-26-34-35-37-39-41
B & H Instrument Co 3479 W Vickery Blvd Ft Worth 7 Texas	37	Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	29	High Vacuum Equipment Corp 2 Churchhill Rd Hingham Mass	40
Biddle Co James G 1316 Arch St Philadelphia 7 Pa	34	Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	11-17-18-16-33	Hill & Co E Vernon P O Box 189 Lake Geneva Wisc	20-26-37
Bios Labs Inc 17 W 60 St New York 23 NY	20	Dyna-Empire Inc 1075 Stewart Ave Garden City L I N Y	1-37	Hogan Labs Inc 155 Perry St New York 14 NY	36
		Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ	6	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	36
		Eldema Corp 9844 Remer St El Monte Calif	6	Hupp Instru/mation Co 2119 Sepulveda Blvd Los Angeles 25 Calif	11-38
		Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	36	Illinois Testing Labs Inc 420 N LaSalle St Chicago 18 Ill	8-37
		Electric Eye Equipment Co 1941 E Fairchild St Danville Ill	10-17	I-L-S Instrument Corp 4525 W 160 St Cleveland 11 Ohio	11-34-38
		Electro Impulse Lab Inc 208 River St Red Bank NJ	25	Impact-O-Graph Corp 1900 Euclid Ave Cleveland 15 Ohio	15-41
		Electro-Mechanical Instrument Co 8 & Chestnut St Perkasie Pa	22	Indikon Co 76 Coolidge Hill Rd Watertown 72 Mass	26-31-35-37-41
		Electronic Tube Corp 1200 E Mermaid Lane Philadelphia 18 Pa	35	Industrial Control Co 805 Albin Ave Lindenhurst LI NY	22-32-35-37-39
		Electro-Physics Co 287 Broadway New York 7 NY	13	Industrial Electronic Engineers 3973 Lankershim Blvd N Hollywood Calif	6-14
		Electro Products Labs Inc 4501 N Ravenswood Ave Chicago 40 Ill	27-34-41	Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ	5-20
		Electro-Pulse Inc 11861 Teale St Culver City Calif	11		
		Electro-Sonic Labs 35-54 36 St Long Island City 6 NY	1		

Industrial Test Equipment Co 55 E 11 St New York 3 NY	7-22-31	Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	6-22-23-26-37	Schaevitz Eng'g P O Box 505 Camden 1 NJ	15-17-26-31-35-40
Instrument Labs 315 W Walton Pl Chicago 10 Ill	14	Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	14-22-26-37-40	Scherr Co George 200 Lafayette St New York 12 NY	10-34-39
International Research & Development Corp 797 Thomas Lane Columbus 16 Ohio	41	Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	18	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	20-37-40
I Q Industries 1714 Westwood Blvd Los Angeles 24 Calif	14	Moeller Instrument Co 132-02 89 Ave Richmond Hill 18 NY	37	Sensitive Research Instrument Corp 310 Main St New Rochelle NY	5-11-16-30-37
Irwin Labs 1238 S Gerhart Ave Los Angeles 22 Calif	16	Moisture Register Co 1510 W Chestnut St Alhambra Calif	20	Serdex Inc 91 Cambridge St Boston 14 Mass	20
Jarvis Electronics Corp 1140 Cherry St Winnetka Ill	24	Muirhead Instruments Inc 677 5 Ave New York 22 NY	22-31	Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	29-31-37
Johnson Aircraft Eng'g Co M J Morristown Airport Box Morristown NJ	12-22-31	Navco Navigation Computer Corp 1621 Snyder Ave Philadelphia 45 Pa	6	Servonics Inc 822 N Henry St Alexandria Va	31
Johnson Co E F Waseca Minn Kartron P O Box 472 Huntington Beach Calif	32	Nevada Air Products Co P O Box 2472 Reno Nev	18-29	Servo-Recording Instruments Inc 1815 W Van Buren St Phoenix Ariz	29
Kay Electric Co 14 Maple Ave Pine Brook NJ	11-30	Non-Linear Systems Inc Del Mar Airport Del Mar Calif	6	Servo-Tek Products Co 1086 Goffie Rd Hawthorne NJ	34
Keithley Instruments Inc 12415 Euclid Ave Cleveland 6 Ohio	5-9-18-22	Norden-Ketay Corp Commerce Rd Stamford Conn	26	Shannon Luminous Materials Co 7356 Santa Monica Blvd Hollywood 46 Calif	6
King Electric Equipment Co 9123 Inman Ave Cleveland 5 Ohio	34	North American Instruments Inc 2420 N Lake St Altadena Calif	26	Shurite Meters 61 Hamilton St New Haven 8 Conn	16
Kinney Mfg Div Vacuum Equip Div NY Air Brake Co 3529 Washington St Boston 30 Mass	40	NRC Equipment Corp Sub National Research Corp 160 Charlemont St Newton Highlands 61 Mass	40	Signalite Inc 37 Neptune Hwy Neptune NJ	13
Kintel (Kay Lab) 5725 Kearney Villa Rd San Diego 12 Calif	22	NRD Instrument Co 6425 Etzel Ave St Louis 14 Mo	29	Simmonds Aerocessories Inc 105 White Plains Rd Tarrytown NY	42
Kirkland Co H R 8 King St Morristown 4 NJ	1	Nucleonic Corp of America 196 Degraw St Brooklyn 31 NY	29	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	6-24-36
Kistler Instrument Corp 15 Webster St N Tonawanda NY	41	O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif	1	Skyway Precision Tool Co 825 E Broadway San Gabriel Calif	39
Knopp Inc 4224 Holden St Oakland 8 Calif	22	Omega Instrument Co 103 E Altadena Dr Altadena Calif	26-41	Solartron Electronic Group Ltd Queens Rd Thomas Ditton Surrey England	14-39
Kollsman Instrument Corp Standard Coil Products Sub 80-08 45 Ave Elmhurst 73 NY	26-34	Optron Corp 3526 State St Santa Barbara Calif	41	Southern Instruments Computer Div Frimley Rd Camberley Surrey England	6
Kybernetics Corp 9 E 40 St New York 16 NY	37	Pace Electrical Instruments Co 70-31 84 St Glendale 27 L I NY	42	Specialities Inc Skunks Misery Rd Syosset L I NY	13
Lampkin Labs Inc R F D 1 Bradenton Fla	19	Panellit Inc 7401 N Hamlin Ave Skokie Ill	1-6-15	Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	7
Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill	41	Panoramic Radio Products Inc 10 S 2 St Mt Vernon NY	7-11-19-36-41	Sperry Products Inc Shelter Rock Rd Danbury Conn	10
Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	41	Parks Lab Henry Francis 920 Stambaugh St Redwood City Calif	20	Spivey Inc James S 4908 Hampden Lane Washington 14 DC	11
Landsverk Electrometer Co 550 W Garfield Ave Glendale 4 Calif	29	Partlow Corp 2 Campion Rd New Hartford NY	37	Standard Electric Time Co 89 Logan St Springfield 2 Mass	1
Larson Instrument Co 24 Orchard St Tarrytown NY	37	Patrick & Wilkins Co 51 N 7 St Philadelphia 6 Pa	14	Stavid Eng'g Inc U S Route 22 Plainfield NJ	21-24-36
Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	6	Penn-East Eng'g Corp Willow St Kutztown Pa	21-24	Stewart Instrument Co 6507 Grand River Detroit 8 Mich	14
Lear Inc 3171 S Bundy Drive Santa Monica Calif	6-7-31	Performance Measurements Co 15301 W McNichols Rd Detroit 35 Mich	15-31-34-35-37-39	Sticht Co Herman H 27 Park Pl New York 7 NY	11-34
Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	37	Peschel Electronics Inc 13 Garden St New Rochelle NY	3	Stokes Corp F J 5500 Tabor Rd Philadelphia 20 Pa	40
Lewis Eng'g Co 339 Church St Naugatuck Conn	37	Phaostro Instrument & Electronic Co 151 Pasadena Ave S Pasadena Calif	33-42	Strandberg Eng'g Labs Inc 416 W Market St Greensboro N Car	20
Liquidometer Corp 41-03 36 St Long Island City 1 NY	14-23-42	Philips Electronics Inc 750 S Fulton Ave Mt Vernon NY	16	Stromberg-Carlson Div General Dynamics Corp 1895 Hancock St San Diego 12 Calif	6
Liton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	6-21	Photobell Co 43 Vesey St New York 7 NY	9-10-13-17-27	Sturtevant Co P A Addison Ill	39
Luminate Electronic Co 407 S Dearborn St Chicago 5 Ill	38	Photo Research Products 421 N Altadena Drive Pasadena Calif	15-17-26-27-33	Surface Combustion Corp 2375 Dorr St Toledo 1 Ohio	8
Lytte Eng'g & Mfg Co 1404 San Mateo Blvd SE Albuquerque New Mexico	38	Photographic Analysis Inc 13273 Ventura Blvd N Hollywood Calif	23	Syston Corp 2055 Concord Blvd Concord Calif	6-11-14-26 34-35-36-38-39
Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	31	PM Industries Instrument Motors Div 460 North Ave New Rochelle NY	34	Taller & Cooper 75 Front St Brooklyn 1 NY	1-6-35-36-37
Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	2	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	24	Sullivan Ltd H W 80 Shore Rd Port Washington NY	22
Magnaflex Corp 7300 W Lawrence Ave Chicago 31 Ill	10-16-17-35	Polypphase Instrument Co E 4 St Bridgeport Pa	35-39	Swan Electronics Co 5016 N Austin Ave Chicago 30 Ill	30
Magnecessories Box 6960 Washington 20 DC	16	Potter Aeronautical Corp P O Box 532 Union NJ	11-34-42	Tatnall Measuring Systems Co Kimberton Rd Phoenixville Pa	35
Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	31	Powers Regulator Co 3400 Oakton St Skokie Ill	26-37	Teledrome Mfg Corp 28 Ranick Dr Amityville LI NY	7-11-36
Magtrol Inc 38 Virginia Pl Buffalo 2 NY	34-39	Precision Apparatus Co 70-31 84 St Glendale 27 L I NY	42	Teletronics Lab Inc 54 Kinkel St Westbury NY	11-28
Manning Maxwell & Moore Inc Shelter Rock Lane Danbury Conn	26-37-40	Precision Thermometer & Instrument Co 1434 Brandywine St Philadelphia 30 Pa	37	Tel-Instrument Electronics Corp 728 Garden St Carlstadt NJ	41
Manostat Corp 20-26 N Moore St New York 13 NY	26-40	Process & Instruments 15 Stone Ave Brooklyn 33 NY	40	Telrex Labs Asbury Park NJ Tempil Corp 132 W 22 St New York 11 NY	37
Marconi Instruments Ltd 44 New St New York 4 NY	7	Production Research Corp Thornwood NY Pye Telecommunications Ltd Newmarket Rd Cambridge England	4-30	Thermo Electric Co 109 5 St Saddle Brook NJ	37
Marion Electrical Instrument Co Grenier Field Manchester NH	22-33-38	Pyrometer Instrument Co 92 Portland Ave Bergenfield NJ	37	Touch-Plate Mfg Corp P O Box 1970 Long Beach 1 Calif	1
MB Mfg Co Div Textron Inc 1060 State St New Haven 11 Conn	41	Radar Engineers 401 E 45 St Seattle 5 Wash	12	Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass	29
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	37	Ransom Research 323 W 7 St San Pedro Calif	11-38	Trimount Instrument Co 3119 W Lake St Chicago 12 Ill	26-40
Menlo Research Lab 538 Phelan Ave San Jose Calif	29	Rascher & Betzold Inc 730 N Franklin St Chicago 10 Ill	37	Tri-R Instruments 24-15 44 Rd Long Island City 1 NY	18-37
Mercury Electronic Co Box 450 B Red Bank NJ	34	Rawson Electrical Instrument Co 117 Potter St Cambridge 42 Mass	16-25	Union Switch & Signal Div Westinghouse Air Brake Co Braddock Ave Pittsburgh 18 Pa	6
Merz Eng'g Inc 200 S Harding St Indianapolis Ind	15-17	Reliance Electric and Eng'g Co 24701 Euclid Ave Cleveland 17 Ohio	34	United Control Corp 4540 Union Bay Pl Seattle 5 Wash	1
Metron Instrument Co 432 Lincoln St Denver 3 Colo	34	Research Electronics Lab Roslyn Pa Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	40	United Electric Controls Co 85 School St Watertown 72 Mass	37
Michvan Electronics Inc 854 N Rockwell St Chicago 22 Ill	4	Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	30	United Electroynamics 1200 S Marenzo Ave Pasadena Calif	36
Millers Falls Co 57 Wells St Greenfield Mass	34	Robinette Co W C 802 Fair Oaks Ave S Pasadena Calif	31	Universal Atomics Corp 50 Bond St Westbury LI NY	29
Millitest Co 88 Madison Ave Hempstead NY	22	Rogan Bros 8031 N Monticello Skokie Ill	2	Uniwave Inc 2 Marine St Farmingdale NY	34
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa	23-33	Royco Instruments 720 Arthur St Albany Calif	37	U S Gauge Div American Machine & Metals Sellersville Pa	26-31-39
		Sage Labs Inc 30 Guilman St Waltham 54 Mass	22	Vacuum-Electronic Eng'g Co 86 Denton Ave New Hyde Park LI NY	40
				Vacuum Tube Products Co 506 S Cleveland St Oceanside Calif	40
				Vapor Recovery Systems Co 2820 N Alameda St Compton Calif	36

Varo Mfg Co 2201 Walnut St Garland Texas	11	American Air Filter Co 215 Central Ave Louisville 8 Ky	18	Cornelius Co 550 39 Ave NE Minneapolis 21 Minn	14
Victoreen Instrument Co 5506 Hough Ave Cleveland 3 Ohio	29	American Electronic Laboratories 121 N 7 St Philadelphia 6 Pa	11	Corning Glass Works Corning NY	12
Victory Eng'g Corp 117 Springfield Rd Union NJ	23-37	American Gyro Corp 3030 Nebraska Ave Santa Monica Calif	21	Crescent Eng'g & Research Co 5440 N Peck Rd El Monte Calif	21
Virginia Electronics Co River Rd & B&O RR Washington 16 DC	42	American Mica Insulation Co 235 Parker Ave Manasquan NJ	12	Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wis	12
WacLine Inc 35 S St Clair St Dayton 2 Ohio	22-34-41-42	American Speedlight Corp 63-01 Metropolitan Ave Middle Village 79 NY	7	Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	6-12-15-21-23-25-27
Waltham Watch Co 221 Crescent St Waltham 54 Mass	38	Amplivox Ltd 2 Bentiner St London W I England	21	Dalmator Co Div Dalmo Victor Co Div Textron Inc 1375 Clay St Santa Clara Calif	5
Warsaw Coil Co Segal St Warsaw Ind	30	Anchor Specialty Mfg Co Hollister Rd Teterboro NJ	26	Dalmo Victor Co Div Textron Inc 1515 Industrial Way Belmont Calif	1-19
Waters Mfg Inc Boston Post Rd Wayland Mass	39	Annis Co R B 1101 N Delaware St Indianapolis 2 Ind	3	Damp-Chaser Inc Box 520 Hendersonville NC	12
Weathers Industries Div Advance Industries 66 E Gloucester Pike Barrington NJ	26	Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	1-11-19	Darco Industries Inc Gyro Dynamics Div 2151 E Rosecrans Ave El Segundo Calif	1
Weksler Thermometer Corp 195 E Merrick Rd Freeport L I NY	7	Applied Physics Corp 382 W Colorado St Pasadena 1 Calif	15	Datran Electronics 3615 Aviation Blvd Manhattan Beach Calif	21
West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	6-15-21-24-27-31-35-36-37	Artisan Electronics Corp 171 Ridgedale Ave Morristown NJ	1	Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	7-18
Westinghouse Electric Corp P O Box 866 Pittsburgh 30 Pa	11-30-34-36-37-38	Atlantic Research Corp 901 N Columbus St Alexandria Va	21	Daytronic Corp 216 S Main St Dayton 2 Ohio	21
West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill	37	Atomic Labs Inc 3086 Claremont Ave Berkeley 5 Calif	15	Decker Aviation Corp 1361 Frankford Ave Philadelphia 25 Pa	3
Weston Electrical Instrument Corp Sub Dayton Inc	5-11-13-20-33-34	Autron Eng'g Inc 1254 W 6 St Los Angeles 17 Calif	20-21	Detroit Controls Corp Norwood Control Unit 934 Washington St Norwood Mass	21
614 Frelinghuysen Ave Newark 12 NJ	37-42	Baldwin-Lima-Hamilton Corp Electronics & Instrumentation Div 42 4 Ave Waltham 54 Mass	5	Diamond Power Specialty Corp Lancaster Ohio	22
Westronics Inc 3605 McCart Ft Worth Texas	11-31-37	Barco Chemical Products Co 701 LaSalle St Chicago 5 Ill	23	Dice Co J W 16 Highwood Ave Englewood NJ	9-19-20
White & Son Sons Wilfrid O 178 Atlantic Ave Boston 10 Mass	34	Barton Electronics Inc 1000 Farmington Ave W Hartford 7 Conn	19	Donner Scientific Co 888 Galindo St Concord Calif	21
Yellow Springs Instrument Co P O Box 106 Yellow Springs Ohio	37-38	Beckman Instruments Inc Process Instruments Div 2500 Fullerton Rd Fullerton Calif	2	Driver Co Wilbur B 1875 McCarter Hwy Newark 4 NJ	12
Zernickow Co O 15 Park Row New York 38 NY	34	Beckman & Whitley 973 E San Carlos Ave San Carlos Calif	16	Dumont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	19-22
31—INDUSTRIAL ELECTRONIC EQUIPMENT					
Actuators	1	Bell Aircraft Corp P O Box 1 Buffalo 5 NY	14	Eastman Kodak Co 343 State St Rochester 4 NY	14
Analysis equipment, electro-chemical	2	Bendix Aviation Corp Pioneer-Central Div 2734 Hickory Grove Rd Davenport Iowa	23	Edgerton, Germeshausen & Grier 160 Brookline Ave Boston 15 Mass	7
Balancing equipment, dynamic	3	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	1-19-23	Edin Co 207 Main St Worcester 8 Mass	2
Dielectric heating equipment	4	Renson-Lehner Corp 11930 W Olympic Blvd Los Angeles 64 Calif	11-16	Electronic Mechanisms Inc P O Box 1156 Greenwich Conn	1
Dynameters	5	R & F Instruments Inc 4732 N Broad St Philadelphia 41 Pa	21	Electrical Eng'g & Mfg Corp 4612 W Jefferson Blvd Los Angeles 16 Calif	1
Electric furnaces	6	B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	21	Electrical Specialty Co 158 11 St San Francisco 3 Calif	17
Electronic photoflash	7	Black Light Corp of America 5114 Walnut Grove Ave San Gabriel Calif	25	Electric Furnace Co W Wilson St Salem Ohio	6
Electroplating equipment	8	Black Light Eastern Corp 33-00 Northern Blvd Long Island City 1 NY	25	Electric Hotpack Co Cottman Ave & Melrose St Philadelphia 35 Pa	6-17
Flaw locators, metal	9	Black Light Products Inc 53 W Jackson Blvd Chicago 4 Ill	25	Electro-Chemical Eng'g & Mfg Co 750 Broad St Emmaus Pa	8
Flow locators, non metal	10	Blue M Electric Co 138 & Chatham St Blue Island Ill	6	Electro-Flex Heat Inc 83 Woodbine St Hartford 6 Conn	12
Geophysical instruments	11	Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ	5-13	Electro-Mechanical Div General Riveters Inc 785 Hertel Ave Buffalo 7 NY	1-5
Heating elements	12	Roonton Radio Corp Intervale Rd Roonton NJ	19	Electronic Assembly Co 5 Prescott St Roxbury 19 Mass	26
Induction heating equipment	13	Bosch Inc M Ten 80 Wheeler Ave Pleasantville NY	3	Electronic Processes Corp of Calif 2190 Folsom St San Francisco 10 Calif	4
Infrared equipment	14	Bourns Labs Inc 6135 Magnolia Ave Riverside Calif	21	Electronics Development Co 3743 N Cahuenga Blvd N Hollywood Calif	22
Ionization chambers	15	Branson Instruments Inc 37 Brown House Rd Stamford Conn	20	Electro Products Labs Inc 4501 N Ravenswood Ave Chicago 40 Ill	21
Meteorological equipment	16	Bristol Co P O Box 1790 EITT Waterbury 20 Conn	1-2-21	Elektro Serv Co 480 Johnson Ave Brooklyn 37 NY	12
Ovens, infra-red drying	17	Brush Electronics Co Div Clevite Corp 3405 Perkins Ave Cleveland 14 Ohio	21	El-Tronics Inc Penn Ave Mayfield Pa	15
Precipitators, electrostatic	18	Brush Electronics Co Texas Div 3732 Westheimer Rd Houston 6 Texas	11	Emerson-Sack-Warner Corp 85 Washington St Somerville 43 Mass	17
Thickness equipment, electronic	19	Rurdick Corp 635 Plumb St Milton Wis Burroughs Corp 6071 2 Ave Detroit 32 Mich	14-25 16	Endevco Corp 161 E California St Pasadena Calif	21
Thickness equipment, ultrasonic	20	Buss-Clement-Doughten & Associates 201 B Studio Hill Chester Springs Pa	22	Enthone Inc 442 Elm St New Haven 8 Conn	8-23
Transducers	21	Carborundum Co Global Div Hvd Park Blvd Niagara Falls NY	12	Ercona Corp 551 5 Ave New York 17 NY	11
TV industrial	22	Cavitron Electron Oscillator Co Div Short Wave Plastic Forming 355 N Newport Blvd Newport Beach Calif	21	Erie Resistor Corp 644 W 12 St Erie 6 Pa	21
Ultrasonic cleaners	23	Chesapeake Instrument Corp Shadyside Md	21-23	Falstrom Co Falstrom Court Passaic NJ	26
Ultrasonic soldering	24	Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill	19	Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY	1
Ultra-violet equipment	25	Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England	11-22	Federated Metals Div American Smelting & Refining Co 120 Broadway New York 5 NY	8
Vacuum tube aging racks	26	Clark Electronic Labs Box 165 Palm Springs Calif	21	Fischer & Co R A 517 Commercial St Glendale 3 Calif	27
Vibrators, ultrasonic	27	Colvin Labs Inc 364 Glenwood Ave E Orange NJ	21	Fisher Research Lab 1961 University Ave Palo Alto Calif	25
Acme Electric Heating Co 1217 Washington St Boston 18 Mass	12	Conn Hard Rubber Co P O Box 1911 New Haven 9 Conn	12	Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa	2-13
Acoustica Associates Shore Rd Glenwood Landing L I NY	21-23-24-27	Conoflow Corp 2100 Arch St Philadelphia 3 Pa	1	Flanders Mill Inc P O Box 718 Riverhead NY	18
Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	22	Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	19	Forster-Teichmann Co 1212 Clark Bldg Pittsburgh 22 Pa	6-12
Advanced Instruments Inc 21 Oakcrest Rd Needham 92 Mass	2	Consolidated Electrodynamics Corp 300 N Sierra Madre Villa Pasadena Calif	2-21-25	Fostoria Pressed Steel Corp N Main St Fostoria Ohio	17
Aerojet-General Corp 6352 N Irwindale Ave Azusa Calif	14	Cook Electric Co 2700 Southport Ave Chicago 14 Ill	15	Foto-Video Labs Inc 25 Amity St Little Falls NJ	22
Aerotec Corp Pemberwick Rd Greenwich Conn	18	Corbin Corp 5419 56 Pl Riverdale Md	14-16	Gardiner Electronics Co 2545 E Indian School Rd Phoenix Ariz	11
Airborne Accessories Corp 1414 Chestnut Ave Hillside 5 NJ	1			Gary Wells Co 361 Rockaway Ave Valley Stream NY	4
Air-Maze Corp 25000 Miles Rd Cleveland 28 Ohio	18				
Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	26				
Alear Instruments Inc 17 Industrial Ave Little Ferry NJ	20-21-24				
Allied Eng'g & Production Corp 2421 Blanding Ave Alameda Calif	15				
Allis-Chalmers Mfg Co Milwaukee 1 Wis	13				
Allis Co Louis 427 E Stewart St Milwaukee 1 Wis	5				
Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	2-11-13-14-23				

Gates & Co Geo W Hempstead Tpke & Lucille Ave Franklin Square LI NY	25	Johnson Aircraft Eng'g Co M J Box 10 Morristown Airport Morristown NJ	1-11	North American Electric Lamp Co 1520 N 13 St St Louis 6 Mo	14
Geartronics Corp 2514 Broadway Long Island City NY	1	Kahl Scientific Instrument Corp P O Box 1166 El Cajon Calif	16	North American Instruments Inc 2420 N Lake St Altadena Calif	21
General Controls Co 801 Allen Ave Glendale 1 Calif	1	Kahn & Co 541 Windsor St Hartford 1 Conn	26	Norton Co 1 New Bond St Worcester 6 Mass	12
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	5-12-21	Kanthal Corp Amelia Pl Stamford Conn	12	NRD Instrument Co 6425 Etzel Ave St Louis 14 Mo	15
General Electric Co Lihrt Military Electronic Equip Dept French Rd Utica NY	14	Kemlite Labs Inc 1819 W Grand Ave Chicago 22 Ill	7-25	Nuclear-Chicago Corp 223 W Erie St Chicago 10 Ill	15
General Kinetics Inc 555 23 St S Arlington 2 Va	23	Kistler Instrument Corp 15 Webster St N Tonawanda NY	21	Nuclear Corp of America Empire State Bldg New York NY	15
General Nuclear Corp 550 5 Ave New York 32 NY	23	Knights Co James Church & Wells Sts Sandwich Ill	21	Nucleonic Corp of America 196 Degraw St Brooklyn 31 NY	15
General Precision Lab Inc 63 Bedford Rd Pleasantville NY	22	Lab Corp E Onondaga Skaneateles NY	5	Nucleonic Products Co 1601 Grande Vista Ave Los Angeles 23 Calif	7-14
Geotronic Labs Inc 1314 Cedar Hill Ave Dallas 8 Texas	11	Laboratory Equipment Corp P O Box 151 St Joseph Mich	13	Oakite Products Inc 79 Rector St New York 6 NY	23
Giannini & Co G M 918 E Green St Pasadena Calif	21	Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	2-19	Ohio Crankshaft Co Toeco Div 3800 Harvard Ave Cleveland 5 Ohio	13
Gisholt Machine Co 1245 E Washington Ave Madison 10 Wis	3	Landsverk Electrometer Co 550 W Garfield Ave Glendale 4 Calif	15	Ohmart Corp 2236 Bogen St Cincinnati 14 Ohio	15
Glens Falls Lab Box 685 Glens Falls NY	25	Lansing Sound Inc James B 3249 Casitas Ave Los Angeles 39 Calif	21	Opto Eng'g Co 3524 W Washington Blvd Los Angeles 18 Calif	14
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio	1	Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	2-6-14	Oster Mfg Co John 1 Main St Racine Wis	1
Gordon Enterprises 5862 N Cahuenga Blvd N Hollywood Calif	7-11-14	Lepel High Frequency Labs 54-18 37 Ave Woodside 77 NY	4-13-24	Pace Eng'g Co 6914 Beck Ave N Hollywood Calif	21
Grand Ra-Tronics Inc 17360 Hayes Rd Grand Haven Mich	21	Leupold & Stevens Instruments Inc 4445 NE Glisan St Portland 13 Ore	21	Pacific Semiconductors Inc 10461 W Jefferson Blvd Culver City Calif	14
Graybar Electric Co 420 Lexington Ave New York 17 NY	22	Lindberg Eng'g Co 2450 W Hubbard St Chicago 12 Ill	6-13	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	14
Greer Hydraulics Inc Int'l Airport Jamaica 30 NY	1	Linde Air Products Co Div Union Carbide & Carbon Co 30 E 42 St New York 17 NY	14	Panellit Inc 7401 Hamlin Ave Skokie Ill	21
Grieve-Hendry Co 1401 W Carroll Ave Chicago 7 Ill	6	Liton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	14	Pegasus Labs Inc 3690 W 11 Mile Rd Berkley Mich	1
Guild Electronics Inc 388 Broadway New York 13 NY	4	Lydon Bros 85 Zabriskie St Hackensack NJ	6	Pereny Equipment Co 893 Chambers Rd Columbus 12 Ohio	6
Gulton Industries Inc 212 Durham Ave Metuchen NJ	20-23-24	Lyndon Aircraft Inc 140 Clifford St Newark 5 NJ	1	Perkin-Elmer Corp Main Ave Norwalk Conn	14-22
Hacker & Co Wm J 82 Beaver St New York 5 NY	25	McDowell Electronics Inc 105 Forrest St Metuchen NJ	13	Philco Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	22
Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	21	McKenna Laboratories 2503 Main St Santa Monica Calif	21	Philips Electronics Inc 750 S Fulton Ave Mt Vernon NY	19
Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	22	Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	21-27	Phillips Mfg Co 3475 W Touhy Ave Chicago 45 Ill	23
Haller Raymond & Brown 124 N Atherton St State College Pa	14	Magnaflux Corp 7300 W Lawrence Ave Chicago 31 Ill	9-10-25	Photobell Co 43 Vesey St New York 7 NY	9-10-14
Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	22	Magtrol Inc 38 Virginia Pl Buffalo 2 NY	5	Photocon Research Products 421 N Altadena Drive Pasadena Calif	7
Hanovia Chemical & Mfg Co 100 Chestnut St Newark 5 NJ	2	Majestic Int'l Corp 79 Washington St Brooklyn 1 NY	22	Potter & Brumfield Inc 1200 E Broadway Princeton Ind	1
Harper Electric Furnace Corp 56 River St Buffalo 2 NY	6	Marion Electrical Instrument Co Grenier Field Manchester NH	13	Production Research Corp Thornwood NY	14
Harris Transducer Corp Woodbury Conn	21-27	Massa Laboratories Inc 5 Fottler Rd Hingham Mass	21	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	2-11-13-14-21-22
Harwood Electronics Co 466 W Superior St Chicago 10 Ill	7	Master Appliance Mfg Co 530 4 St Racine Wis	18	Racon Electric Co 1261 Broadway New York 1 NY	27
Hathaway Instrument Div Hamilton Watch Co 5800 E Jewell Ave Denver 22 Colo	21	Matthew Labs 146 Riverdale Ave Yonkers NY	2	Radex Corp 2076 Elston Ave Chicago 14 Ill	18
Hauman Instruments Co 70 Coolidge Hill Rd Watertown 72 Mass	7	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	15-26	Radiation Inc P O Box 37 Melbourne Fla	5
Haydon Switch Inc 536 S Leonard St Waterbury Conn	1	Mech-Tronic Equipment Co P O Box 510 Silver Spring Md	6-17	Radio Corp of America Camden 2 NJ	22
Heiland Div Minneapolis-Honeywell 5200 E Evans Ave Denver 22 Colo	3-7	Menlo Research Lab 538 Phelan Ave San Jose Calif	9-25	Radio Eng'g Co 8 State St New York 4 NY	7
Hett Associates 603 Grand Ave Englewood NJ	14	Merz Eng'g Inc 200 S Harding St Indianapolis Ind	19	Radio Frequency Co 44 Park St Medfield Mass	4-13
Hevi-Duty Electric Co 4212 W Highland Blvd Milwaukee 1 Wis	6	Micro Balancing Inc 191 Herricks Rd Garden City Park NY	3	Radio Receptor Co 240 Wythe Ave Brooklyn 11 NY	4
Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	22	Mil Case Corp 35-18 37 St Long Island City NY	26	Rahm Instruments Inc 237 Lafayette St New York 12 NY	21
Humphrey Inc 2805 Canon St San Diego Calif	21	Milli-Switch Corp 1742 Berkeley St Santa Monica Calif	1	Rapid Electroplating Process 1414 S Wabash Ave Chicago 5 Ill	8
Huppert Co K H 6830 Cottage Grove Ave Chicago 37 Ill	6	MinAtron Corp Belle Mead 9 NJ	21	Raytheon Mfg Co 100 River St Waltham 54 Mass	18
Ideal-Aerosmith Inc 12909 S Cerise Ave Hawthorne Calif	21	Minn-Honeywell Regulator Co Ordinance Div Hopkins Minn	14	Reeve Electronics Inc 609 W Lake St Chicago 6 Ill	4-13
Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY	4-13	Minn-Honeywell Regulator Co 2753 4 Ave S Minneapolis 8 Minn	1-7	Reliance Electric and Eng'g Co 24701 Euclid Ave Cleveland 17 Ohio	5
Industrial Electronics Inc 8060 Wheeler St Detroit 10 Mich	21	Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	1	Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	4
Industrial Eng'g & Equip Co 24 Hanley Industrial Ct Brentwood St Louis 17 Mo	12	Miskella Infra-Red Co E 73 & Grand Ave Cleveland 4 Ohio	12-14-17	Research Development Mfg Inc 429 E Collom St Philadelphia 41 Pa	1
Industrial Nucleonics Corp 1205 Chesapeake Ave Columbus 12 Ohio	19	Missileonics Inc P O Box 716 Melbourne Fla	7	Research Electronics Lab Roslyn Pa	19
Industrial Test Equipment Co 55 E 11 St New York 3 NY	11	Modelectric Products Corp Ashbury Park NJ	7	Richardson Labs Kenneth 254 Vincent Ave Lynbrook NY	4
Industrial TV Inc 369 Lexington Ave Clifton NJ	22	Model Rectifier Corp 1065 Utica Ave Brooklyn 3 NY	8	Robotron Corp 21300 W 8 Mile Rd Detroit 19 Mich	4-13
Instrumentation Associates 17 W 60 St New York 23 NY	2-16	Modern Laboratory Equip Co 1811 E Ave New York 28 NY	6-12	Rockwell Co W S 220 Eliot St Fairfield Conn	6-17
Intele Systems Inc 22 Thames St New York 6 NY	7	Moore Corp John B P O Box 3 Dept EI Peerless Bldg Nutley 10 NJ	23	Milton Roy Co 1300 E Mermaid Lane Philadelphia 18 Pa	2
International Research & Development Corp 797 Thomas Lane Columbus 16 Ohio	3	Muirhead Instruments Inc 677 5 Ave New York 22 NY	16	Safeway Heat Elements Inc 680 Newfield St Middletown Conn	12
Irwin Labs 1238 S Gerhart Ave Los Angeles 22 Calif	9	Mytron Mfg Co 4522 Brazil St Los Angeles 39 Calif	4	Sampson Chemical & Pigment Corp 2830 W Lake St Chicago 12 Ill	18
Isotope Products 1711 Elmwood Ave Buffalo 7 NY	2	Nems-Clarke Inc 919 Jesup-Blair Dr Silver Spring Md	7	Sanborn Co 175 Wyman St Waltham 54 Mass	21
Jack & Heintz Inc 17600 Broadway Cleveland 1 Ohio	1	Nevada Air Products Co P O Box 2472 Reno Nev	14-27	Schaevitz Eng'g P O Box 505 Camden 1 NJ	21
Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	22	New England Oven & Furnace Co 385 Boston Post Rd Orange Conn	14-17	Scientific Electric 105 Monroe St Garfield NJ	18
		New Rochelle Toll Corp 320 Main St New Rochelle NY	4-13	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	6
		Norco Mfg Co 392 Blecker St New York 14 NY	25	Seismograph Service Corp 6200 E 41 St Tulsa 1 Okla	11
		Norma Hoffmann Bearings Corp Walker Div Hamilton Ave Stamford Conn	8		

Sel-Rex Corp	
155 Manchester Pl Newark 4 NJ	23
Seneca Falls Machine Co	
314 Fall St Seneca Falls NY	1-19
Sensory Inc	
Pleasantville Rd New Vernon NJ	21
Servo Corp of America	
2020 Jericho Turnpike	
New Hyde Park NY	14
Servonic Instruments Inc	
1145 S Fair Oaks Ave Pasadena 2 Calif	21
Servo-Tek Products Co	
1086 Gollie Rd Hawthorne NJ	1
Shannon Luminous Materials Co	
7336 Santa Monica Blvd	
Hollywood 46 Calif	25
Sherman Industrial Electronics Co	
505 Washington Ave Belleville NJ	12-13
Small Motors Inc	
2076 Elston Ave Chicago 14 Ill	1
Solartron Electronic Group Ltd	
Queens Rd	
Thames Ditton Surrey England	1-3
Southern Instruments Computer Div	
Frimley Rd Camberley Surrey England	2
Southwestern Industrial Electronics Co	
2831 Post Oak Rd Houston 19 Texas	11
Spellman TV Co	
3029 Webster Ave New York 67 NY	18-23-27
Sperry Gyroscope Co Div Sperry Rand Corp	
Great Neck NY	1
Sperry Products Inc	
Shelter Rock Rd Danbury Conn	20
Standard Electric Time Co	
89 Logan St Springfield 2 Mass	5
Statham Labs Inc	
12401 W Olympic Blvd	
Los Angeles 64 Calif	21
Stavid Eng'g Inc	
U S Route 22 Plainfield NJ	14
Steiner-Ives Co	
Springfield Rd Union NJ	6-12-17
Stewart Warner Electronics Div	
1300 N Kostner Ave Chicago 51 Ill	14
Stroblite Co	
75 W 45 St New York 36 NY	25
Taller & Cooper	
75 Front St Brooklyn 1 NY	22
Tarzian Inc Sarkes	
E Hillside Drive Bloomington Ind	22
Tatnall Measuring Systems Co	
Kimberlon Rd Phoenixville Pa	21
Technic Inc	
39 Snow St Providence 3 RI	8
Technical Associates	
140 W Providencia Ave Burbank Calif	15
Technicraft Co	
1155 Commonwealth Ave	
Boston 34 Mass	12-14
Tech-Ohm Resistor Corp	
36-11 33 St Long Island City 6 NY	12
Telechrome Mfg Corp	
28 Ranick Dr Amityville LI NY	22
Telephonics Corp	
Park Ave Huntington LI NY	11-21
Temperature Eng'g Corp	
U S Hw 130 Riverton NJ	12-17
Tenney Eng'g Inc	
1090 Springfield Rd Union NJ	22
Texas Instruments Inc	
6000 Lemmon Ave Dallas 9 Texas	14
Thermal Refractories Corp	
4501 Dell Ave N Bergen NJ	6
Topp Industries Inc	
6255 W 102 St Los Angeles 45 Calif	14
Tracerlab Inc	
1601 Trapelo Rd Waltham 54 Mass	15-19
Transco Products Inc	
12210 Nebraska Ave Los Angeles 25 Calif	1
Transformer Technicians Inc	
2608 N Cicero Ave Chicago 39 Ill	11
Transitron Inc	
186 Granite St Manchester NH	21
Transvision Inc	
460 North Ave New Rochelle NY	22
Trion Inc	
1000 Island Ave McKees Rocks Pa	18
Tuttle & Kift Inc	
1823 N Monitor Ave Chicago 39 Ill	12
TV Specialty Co	
350 W 31 St New York 1 NY	22
Ultradyne Eng'g Labs	
P O Box 3308 Alhuerque New Mex	21
Ultra-Violet Products Inc	
5114 Walnut Grove Ave San Gabriel Calif	25
United Electroynamics	
1200 S Marengo Ave Pasadena Calif	11
Universal Atomics Corp	
50 Bond St Westbury LI NY	11-15
Universal Industrial Equipment Corp	
1625 Paterson Plank Rd Secaucus NJ	8
Uniwave Inc	
2 Marine St Farmingdale NY	1
US Dynamics Corp	
1250 Columbus Ave Boston 20 Mass	6-8
U S Rubber Co	
1230 6 Ave New York 20 NY	12
Vapor Heating Corp	
80 E Jackson Blvd Chicago 4 Ill	12
Victoreen Instrument Co	
5806 Hough Ave Cleveland 3 Ohio	15
Volk Radiochemical Co	
5412 N Clark St Chicago 40 Ill	15

Vulcan Electric Co	
88 Holten St Danvers Mass	12
Watlow Electric Mfg Co	
1376 Ferguson Ave St Louis 14 Mo	12
West Coast Research Corp	
2371 1/2 Westwood Blvd Los Angeles 65 Calif	5
Western Coil & Electrical Co	
215 State St Racine Wis	25
Westinghouse Electric Corp	
P O Box 868 Pittsburgh 30 Pa	1-5-12
White Dental Mfg Co S S Industrial Div	
10 E 40 St New York 16 NY	1
Wiancko Eng'g Co	
255 Halstead St Pasadena Calif	21
Wiegand Co Edwin L	
7500 Thomas Blvd Pittsburgh 8 Pa	12
Worner Electronic Devices	
Rankin Ill	7
Wright Equipment Co	
128 N Main St Milltown NJ	26
Young Brothers Co	
1831 Columbus Rd Cleveland 13 Ohio	4-6
Zoomar Inc	
55 Sea Cliff Ave Glen Cove NY	22

32—INSULATION MATERIALS & COMPOUNDS

Asbestos	1
Asphalt	2
Ceramic	3
Coatings, cambric, varnished	4
Compounds, encapsulation	5
Compounds, impregnating	6
Compounds, mica	7
Compounds, phenolic molding	8
Cork	9
Dielectrics	10
Enamel	11
Fabric	12
Fabric, varnished	13
Fibre	14
Fibre, vulcanized	15
Glass	16
Glass fibre	17
Glass, mica-woven or laminated	18
Grain, alundum	19
Liners, can	20
Mica	21
Mica, glass bonded	22
Oxide, aluminum	24
Paper	25
Phenolics	26
Plastics	27
Plastics, laminated	28
Porcelain	29
Resin, synthetic	30
Rubber	31
Silicon	32
Steatite	33
Tape, coil	34
Tape, electrical	35

Accurate Electronics Corp	
169 S Abbe Rd W Elyria Ohio	26-28
Accurate Mfg Co	
41 Hepworth Pl Garfield NJ	35
Ace Plastic Co	
91-30 Van Wyck Expwy Jamaica 35 NY	27
Acheson Colloids Co	
1635 Washington Ave Port Huron Mich	6-7
Aeme Wire Co	
1255 Dixwell Ave	
New Haven 14 Conn	4-5-13-25
Aero Research Instrument Co	
315 N Aberdeen St Chicago 7 Ill	3
Aerovox Corp Crowley Div	
1 Central Ave W Orange NJ	10
Airdlyte Electronics Co	
535 Avenue A Bayonne NJ	5-6
Allied Resinuous Products	
Whitney Rd & Clark St Conneaut Ohio	27
Aloe Scientific	
5655 Kingsbury Blvd	
St Louis 12 Mo	1-9-17-24
Alpha Metals Inc	
56 Water St Jersey City 4 NJ	34
Aluminum Co of America	
Alcoa Bldg Pittsburgh 19 Pa	24
American Air Filter Co	
215 Central Ave Louisville 8 Ky	17
American Insulator Corp	
New Freedom Pa	26-27
American Lava Corp	
Subs Minn Mining & Mfg	
Cherokee Blvd & Mfrs Rd	
Chattanooga 5 Tenn	3-10-33
American Mica Insulation Co	
235 Parker Ave Manasquan NJ	21-22-28
American Mica Radio Corp	
235 Parker Ave Manasquan NJ	7-21-22
American Products Mfg Co	
8127 Oleander St New Orleans 18 La	4-6-27

American Window Glass Co	
Farmers Bank Bldg Pittsburgh 22 Pa	18
AMP Inc	
Harrisburg Pa	10
AMP Inc Chemical Dielectrics Div	
155 Park St Elizabethtown Pa	10
Anchor Plastics Co	
36-36 St Long Island City 6 NY	27
Apex Coated Fabrics Co	
12 E 22 St New York 10 NY	13-27
Aroco Co	
7301 Bessemer Ave Cleveland 27 Ohio	6-11
Aries Labs Inc	
45-33 Davis St	
Long Island City 1 NY	5-6-27-30
Armstrong Cork Co	
W Liberty St Lancaster Pa	9-28
Asheville-Schoonmaker Mica Co	
900 Jefferson Ave Newport News Va	21
Associated Commodity Corp	
Woolworth Bldg New York 7 NY	21
Atlas Mineral Products Co	
Mertztown Pa	27
Auburn Mfg Co	
Stack St Middletown Conn 1-9-25-27-28-31-35	
Bache & Co Semon	
636 Greenwich St New York 14 NY	16-27
Baer Co NS	
1-11 Montgomery St Hillside 5 NJ	15-28
Bakelite Co Div Union Carbide & Carbon Corp 30 E 42 St	
New York 17 NY	11-26-27
Baker Bros	
Post & Harleau Sts Toledo 10 Ohio	27
Barium & Chemicals Inc	
Willoughby Ohio	21
Barrett Div Allied Chemical & Dye Corp	
40 Rector St New York 6 NY	2-5-27-30
Behr-Manning Co	
3057 Howe St Troy NY	35
Belding Corticelli Industries Inc	
Putnam Conn	11-27-30
Belmont Smelting & Refining Works	
330 Belmont Ave Brooklyn 7 NY	32
Bestcraft Products Co	
626 Broadway New York 12 NY	15-25
Biggs Co Carl H	
2255 Barry Ave Los Angeles 64 Calif	27-28
Bios Labs Inc	
17 W 60 St	1-3-9-11-19
New York 23 NY	21-22-26-32
Birnback Radio Co	
145 Hudson St New York 13 NY	3-33
Biwax Corp	
3445 Howard St Skokie Ill	5-6
Blaine Electronics Inc	
14757 Keswick St Van Nuys Calif	28
Bolta Products Div General Tire & Rubber Co 70 Garden St	
Lawrence Mass	27-28
Boots Aircraft Nut Corp	
Newtown Turnpike Norwalk Conn 8-26-27-33	
Borden Co Chemical Div Resinite Dept	
P O Box 1589 Santa Barbara Calif	27
Borden Co Chemical Div	
350 Madison Ave New York 17 NY	30
Borthig Co George C	
P O Box 115 E Rutherford NJ	11
Boston Woven Hose & Rubber Co	
P O Box 1071 Boston 3 Mass	35
Bradley Associates	
1650 N Damen Ave Chicago 47 Ill	27
Bram Chemical Co Metals & Minerals Div	
820 65 Ave Philadelphia 26 Pa	7-21-33
Brand Dielectrics Inc	
57 North St	
Willmantic Conn 10-13-16-18-21-22-25-35	
Brillhart Plastics Corp	
Old Country Rd Mineola NY	27
British Electronic Sales	
Box 132 Oakland Gardens 64 NY	36
Brooklyn Paint & Varnish Co	
50 Jay St Brooklyn 1 NY	4
Brown-Bridge Mills	
E Water St Troy Ohio	25
Brush Beryllium Co	
4301 Perkins Ave Cleveland 3 Ohio	21
Buchanan Electrical Products Corp	
225 Route 22 Hillside NJ	23
Cambridge Thermionic Corp	
445 Concord Ave Cambridge 38 Mass	3
Campro Products Inc	
3131 Alliance Rd N E Canton 1 Ohio	27-28
Carbide & Carbon Chemicals Co	
Div Union Carbide & Carbon	
30 E 42 St New York 17 NY	6
Cavitron Electron Oscillator Co Div	
Short Wave Plastic Forming	
355 N Newport Blvd Newport Beach Calif	10
Centralab Div Globe Union Inc	
900 E Keefe Ave Milwaukee 1 Wis	3
Central Coil Co	
1720 N Luett St Indianapolis 22 Ind	5-6
Chase & Sons	
26 Spruce St N Quincy Mass	35
Chemical Process Co	
1901 Spring St Redwood City Calif	27
Chemical Products Corp	
King Philip Rd E Providence 14 RI	11-27
Chemo-Textiles Inc	
P O Box 169 W Warwick RI	27-28-35

Chicago-Allis Mfg Corp 113 N Green St Chicago 7 Ill	31	Farley & Loetscher Mfg Co Plastics Div 7 & White Sts Dubuque Iowa	28	Johnson Co E F Waseca Minn	33
Chicago Gasket Co 1271 W North Ave Chicago 22 Ill	27	Farnam Mfg Co 2000 Sweeten Creek Rd Asheville NC	21-28	Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo	31
Chicago Telephone Co of Calif 105 Pasadena Ave S Pasadena Calif	27	Fidelity Chemical Products Corp 470 Frelinghuysen Ave Newark 12 NJ	5	Kaiser Aluminum & Chemical 919 N Michigan Ave Chicago Ill	24
Ciba Co Plastics Div Kimberlon Pa	27-30	Flexrock Co 3609 Filbert St Philadelphia 1 Pa	27	Keasbey & Mattison Co Amber Pa	1
City Chemical Corp 132 W 22 St New York 11 NY	21-24-32	Flight Research Inc P O Box 1-F Richmond 1 Va	32	Keller Products Inc 41 Union St Manchester NH	27-28
Clowes Ceramic Corp 3711 Calhoun Ave Chattanooga 7 Tenn	3-33	Fluorcarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ	23-27-28-35	Kellogg Co M W P O Box 469 Jersey City 3 NJ	27-31
Cleveland Container Co 6201 Barberton Ave Cleveland 2 Ohio	25-28	Formica Corp 4614 Spring Grove Ave Cincinnati 32 Ohio	28	Kendall Co Polyken Sales Div 309 W Jackson Blvd Chicago 20 Ill	27-35
Colonial Insulator Co 945 Grant St Akron 11 Ohio	29	Franklin Fibre-Lamitex Corp Wilmington Dela	14-15-17-25-26-27-28	Kirchberger & Co M 83 W Forest Ave Englewood NJ	3-33
Columbia Tape Mills Bank St E Greenville Pa	16-17-18-34-35	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	5-6	Koppers Co Koppers Bldg Pittsburgh 19 Pa	27
Communication Products Co Marlboro NJ	6	Frenchtown Poreclain Co Muirhead Ave Trenton 9 NJ	3-33	Laminated Sheet Products Corp 449 Neponset St Norwood Mass	14-15-17-18-23-26-27-28
Conn Hard Rubber Co P O Box 1911 New Haven 9 Conn	12-31-35	Fuller Co H B 181 W Kellogg Blvd St Paul 2 Minn	27	La Moree C D 2433 Birkdale St Los Angeles 31 Calif	3-18-35
Continental-Diamond Fibre Corp Newark Del	15-21-22-26-28-35	Furane Plastics Inc 4516 Brazil St Los Angeles 32 Calif	5-6-27-28	Lapp Insulator Co Radio Specialties Div 24 Summer St LeRoy NY	3-29-33
Controlled Atmosphere Enclosures Corp 230-11 141 Ave Springfield Gardens 13 LI NY	27	Garlock Packing Co 402 Main St Palmyra NY	1-27-28	Lee Chemical Corp Walter Seabury Ave & Butler Pl Bronx 61 NY	27
Corning Glass Works Corning NY	10	Gavitt Wire & Cable Co Central St Brookfield Mass	31	L O F Glass Fibers Co 1810 Madison Ave Toledo 1 Ohio	14-17
Crane Packing Co 6400 Oakton St Morton Grove Ill	10-27	General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	4-11-35	Long Inc Thomas J 215 Stonehinge Lane Carle Place LI NY	15-26
Crystalx-Westlake Corp Lenni Rd Lenni Mills Pa	18-26-27-28	General Ceramics Corp Crow Mill Rd Keasbey NJ	3	Louthan Mfg Co Harvey Ave E Liverpool Ohio	3-29
Cudner & O'Connor Co 4035 W Kinzie St Chicago 24 Ill	5	General Electric Co Chemical Materials Dept 1 Plastics Ave Pittsfield Mass	8-30	Luminous Resins Inc 166 W Washinton St Chicago 2 Ill	27
Dale Boisen Co 2928 Nebraska Ave Santa Monica Calif	28	General Electric Co Coshocton Ohio	18-28	Luzerne Rubber Co Muirhead Ave Trenton NJ	27
Dalmo Victor Co Div Textron Inc 1515 Industrial Way Belmont Calif	28	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	10	McMillan Industrial Corp Brownville Ave Ipswich Mass	10-28
Dearborn Glass Co 6600 S Harlem Ave Bedford Park Argo Ill	18	General Electric Co Silicon Products Dept Waterford NY	5-6-30-31	Mackay Inc A D 198 Broadway New York 33 NY	19-24-32
Decatur Electronic Industries Corp 203 Orinoco Dr Brightwaters LI NY	26-31	General Mills Inc Chemical Div South Kensington Rd Kankakee Ill	5	Maigne Co O J 323 Pearl St New York 38 NY	27
Delta Chemical Works 23 W 60 St New York 23 NY	1-3-9-11-19-21-22-26-32	Glatic Corp 431 Glenridge Rd Cleveland 21 Ohio	28	Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	27-28
Delta Co 333 W 24 Pl Chicago 16 Ill	4	Goodrich Chemical Co B F 3135 Euclid Ave Cleveland 15 Ohio	6-27-30	Manning Paper Co John A P O Drawer 328 Troy NY	25
Dennison Mfg Co 300 Howard St Framingham Mass	25-34-35	Goodrich Industrial Products Co B F 500 S Main St Akron 18 Ohio	35	Marblette Corp 37-31 30 St Long Island City 1 NY	27-30
Diamonite Products Mfg Co 217 4 St NE Canton 2 Ohio	3-24	Goodrich Industrial Products Co B F Marietta Ohio	27-28	Marlon Chemical Div Borg-Warner Corp 7165 Chicago Ave Gary Ind	27-30
Dielect Inc Cedar & Gross Sts Fords NJ	10-27	Grafo Collicids Corp 310 Wilkes Pl Sharon Pa	6	Mayfair Molded Products Corp 3700 N Rose St Franklin Park Ill	26-27
Dilectrix Corp Allen Blvd Farmingdale LI NY	36	Guastavino Co R 660 Main St Woburn Mass	29-33	Mesa Plastics Co 11751 Mississippi Ave Los Angeles 25 Cali	27
Dimco-Gray Co 207 E 6 St Dayton 2 Ohio	27	Guild Electronics Inc 388 Broadway New York 13 NY	10	Metaplast Corp Davisville Rd Hatboro Pa	27
Dow Chemical Co Midland Mich	27-30	Hardman Co H V 571 Cortlandt St Belleville 9 NJ	5	Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill	15-26-28
Dow Corning Corp Midland Mich	5-6-10-11-27-30-31-34-35	Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio	21	Mica Corp 4031 Elenda St Culver City Calif	28
Du-Co Ceramics Co Box 278 Saxonburg Pa	3-10-29-33	Hartford City Paper Co South Spring Blvd Hartford City Ind	25	Miccraft Products Inc 701 McCarter Hwy Newark 5 NJ	21
Dunton Co M W 7 Goff St Providence RI	35	Havez Industries Inc 900 Greenbank Rd Wilmington 8 Del	36	Mica Fabricating Co Rochelle Park NJ	14-15-21-22-35
Du Pont de Nemours & Co E I Wilmington 98 Dela	5-6-11-12-14-27	Hermes Plastics Inc 13 University Pl New York 13 NY	28	Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass	28
Duralith Corp 1025 Race St Philadelphia 7 Pa	28	Hi-Test Chemical Corp 722-64 St Brooklyn 20 NY	5-6	Micromold Products Corp 1 School St Yonkers NY	27
Durez Plastics Div Hooker Electro-chemical Co 1926 Walck Rd Niagara Falls NY	8-26-27-30	Hommel Co O 209 4 Ave Pittsburgh 22 Pa	11	Mil Case Corp 35-18 37 St Long Island City NY	17-18-27-28
Eagle-Picher Co American Bldg Parkway & Walnut Cincinnati 2 Ohio	32	Houghton Laboratories Inc 322 Houghton Ave Olean NY	5-7	Millen Mfg Co James 150 Exchange St Malden 48 Mass	3-26-27
Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	5-6	Howard Crystal Holders Inc 2600 Grand Ave Kansas City 8 Mo	27	Minnesota Mining & Mfg Co 90 Fauquier Ave St Paul 6 Minn	5-6-30-34-35
Eastman Kodak Co 343 State St Rochester 4 NY	27	Huse Liberty Mica Co Peabody Industrial Center Peabody Mass	21-22-35	Minnesota Rubber & Gasket Co 3630 Wooddale Ave St Louis Park Minneapolis 16 Minn	31
Electrical Products Research & Development Co 1206 Cherry St Toledo 4 Ohio	27	Hydro Molding Co 100 Sharron Ave Plattsburgh NY	27	Minor Rubber Co Ackerman St Bloomfield NJ	31
Electrical Refractories Co E Clark St E Palestine Ohio	3-29	Illumitronic Eng'g Co 680 E Taylor Ave Sunnyvale Calif	27-28	Mitronics Inc 1290 Central Ave Hillside NJ	3
Electrical Specialty Co 158 11 St	16-17-18-21-22-26-27-28-30	Indentification Service Corp 144 W 46 St New York 36 NY	28	Molded Fiber Glass Co 4801 Benefit Ave Ashtabula Ohio	18-27-28
San Francisco 3 Calif	32-33-34-35	Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY	27	Molded Products Div Admiral Corp Washington & Creamery Rd W Chicago Ill	26-27
Electro-Chemical Eng'g & Mfg Co 750 Broad St Emmaus Pa	2-5-27	Industrial Accessories Inc Line Rd Matawan NJ	31-35	Molding Corp of America 58 Weybosset St Providence 3 RI	27
Electronic Mechanics Inc 101 Clifton Blvd Clifton NJ	22-27	Insulating Fabricators Inc 150 Union Ave E Rutherford NJ	28	Monsanto Chemical Co 1700 S 2 St St Louis 4 Mo	5-6-8-10-27-30
Electro Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ	4-13-16-25-34-35	Insulating Fabricators of N E Inc 69 Grove St Watertown 72 Mass	15-17-18-26-27-28	Montaine Corp 2446 S Prairie Ave Chicago 16 Ill	3
Ellanar Chemical Co 2308 Oakton Evanston Ill	30	Insulation Mfrs Corp 565 W Washington Blvd 1-5-7-10-11-14-15-16 Chicago 39 Ill	18-21-22-28-35	Mosinee Paper Mills Co Mosinee Wis	25
Emeloid Co 1239 Central Ave Hillside 5 NJ	27-28	Insulation & Wires Inc 1534 Swinney Ave Ft Wayne Ind	4-11-13	Multiplastics 770 W Factory Rd Addison Ill	27
Emerson & Cuming Inc 869 Washington St Canton 1 Mass	3-5-6-10-18-27-28-30	Integrated Mica Corp 202 Franklin Pl Woodmere LI NY	21	Mutual Electronic Industries Corp 85 Beechwood Ave New Rochelle NY	28
Emerson Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY	26-27-28-31	Irvington Div Minn Mining & Mfg Co 11 Argyle Terrace Irvington 11 NY	27	Mycalex Corp of America 125 Clifton Blvd Clifton NJ	3-7-10-21-22
Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ	28-35	Isolantite Mfg Corp Warren Ave Stirling NJ	3-33	National Ceramic Co 500 Southard St Trenton 2 NJ	3
Epoxy Products Inc Div Joseph Waldman & Sons 133 Coit St Irvington NJ	5-27	Jodee Plastics Co 213 Shepherd Ave Brooklyn 8 NY	23-27-28	National Eng'g Products Inc 435 Washington Bldg Washington 5 DC	27
Erie Resistor Corp 644 W 12 St Erie 6 Pa	3-10-27-28	Johns-Manville Dutch Brand Div 7800 Woodlawn Ave Chicago 19 Ill	31-34-35	National Gasket & Washer Mfg Co 124 E 25 St New York 10 NY	9-13-14-15-25-26-27-31
		Johns-Manville 22 E 40 St New York 16 NY	1-6-10-12-14-18-25-34-35		

National Radiac Inc 475 Washington St Newark 2 NJ	27	Saratoga Plastics Inc N Walpole NH	27	Universal Clay Products Co 1528 E 1 St Sandusky Ohio	3
National Tel-Tronics Corp 52 St Casimir Ave Yonkers NY	27-28	Sauerisen Cements Co 1045 N Canal St Pittsburgh 15 Pa	5-6	U S Plywood Corp 55 W 44 St New York 36 NY	27-28
National Vulcanized Fibre Co P O Box 311 Wilmington 99 Dela	14-15-28	Saxonburg Ceramics Saxonburg Pa	3	U S Rubber Co 1230 6 Ave New York 20 NY	35
Natvar Corp 211 Randolph Ave Woodbridge NJ	13	Schenectady Varnish Co Congress St & 9 Ave Schenectady 3 NY	6-11-30	U S Stoneware Co Alite Div Orville Ohio	3-29
New England Laminates Co 481 Canal St Stamford Conn	18-25-26-27-28	Schjeldahl Co G T Northfield Minn	27	Vitro Corp of America 261 Madison Ave New York 16 NY	3
New England Mica Co 66 Woerd Ave Waltham 54 Mass	18-21-22	Schrack Electrical Sales Corp 45 W 81 St New York 24 NY	3	Vocalite Screen Corp 19 Debevoise Ave Roosevelt NY	27
New England Tape Co 30 Tower St Hudson Mass	5-6-27-35	Schweitzer Inc Peter J 261 Madison Ave New York NY	25	Vorac Co 147 Meadow Rd Rutherford NJ	11
New Jersey Wood Finishing Co Amboy Ave Woodbridge NJ	4-27-35	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	17	Waldom Electronics Inc 4625 W 53 St Chicago 32 Ill	11-14
Nichols Products Co 325 W Main St Moorestown NJ	23	Seamless Rubber Co 253 Hallock Ave New Haven 3 Conn	34-35	Walsco Electronics Mfg Co 100 W Green St Rockford Ill	11-13
Niemand Bros 37-05 35 Ave Long Island City 1 NY	25	Secon Metals Corp 7 Intervale St White Plains NY	11	Weckesser Co 5701 Northwest Hwy Chicago 30 Ill	23
Norrlich Plastics Corp 35 E 32 St New York 16 NY	27	Shamban & Co W S 11617 W Jefferson Blvd Culver City Calif	27-28	Western Gold & Platinum Co 525 Harbor Blvd Belmont Calif	3
Northern Plastics Corp 2nd Market St LaCrosse Wis	18-28	Sherwin-Williams Co 101 Prospect Ave Cleveland 1 Ohio	11-30	Westlake Plastics Co 133 W Lenni Rd Lenni Mills Pa	27
Northern Industrial Chemical Co 7 Elkins St S Boston 27 Mass	27	Silicone Insulation Inc Seabury Ave & Butler Pl Bronx 61 NY	16-26-27-28-31	Wheaton Co T C Millville NJ	5-16-27
Norton Co 1 New Bond St Worcester 6 Mass	3-19-24	Silcocks-Miller Co 10 W Parker Ave Maplewood NJ	27-28	Whitso Inc 9330 Byron St Schiller Park Ill	27
Nukem Products Corp 111 Colgate Ave Buffalo 20 NY	27-28-30	Smooth-On Mfg Co 572 Communipaw Ave Jersey City 4 NJ	5-30	Wilmington Fibre Specialty Co New Castle Dela	14-15-25-26-28
Nureco Inc 1100 Pontiac Ave Cranston 10 RI	27	Solar Mfg Corp 4553 Seville Ave Los Angeles 58 Calif	3-10-33	Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	20
Ohio-Apex Div Food Mch & Chemical Corp Nitro W Va	5-6-27	Sound Screen Supplies Inc 752 Broadway New York 3 NY	27	Wisconsin Porcelain Co 121 Lincoln St Sun Prairie Wis	3-29-33
Okonite Co 2200 Passaic St Pasaic NJ	35	Sparta Mfg Co Dover Ohio	27	Zenith Plastics Co 1600 W 135 St Gardena Calif	26-27-28
Olympic Plastics Co 3471 S LaCienega Blvd Los Angeles 16 Calif	27-28	Spaulding Fibre Co 310 Wheeler St Tonawanda NY	14-15-17-25-28	Zophar Mills Inc 112 26 St Brooklyn 32 NY	56
Organic Development Corp 8841 Orangewood Ave Anaheim Calif	5-6-27	Spraylat Corp 1 Park Ave New York 16 NY	27		
Oronite Chemical Co 200 Bush St San Francisco 20 Calif	10	Spruce Pine Mica Co P O Box 456 Spruce Pine NC	21		
Osborne Electronic Corp 712 SE Hawthorne Blvd Portland 14 Ore	27	Star Porcelain Co Muirhead Ave Trenton 9 NJ	29		
Paul F H & Stein Bros 235 5 Ave New York 16 NY	12	Sterling Varnish Co Haysville Borough Sewickley Pa	5-6-11		
Penn Fibre & Specialty Co 2020 E Westmoreland St Philadelphia 34 Pa	14-15-17-25-27-28-31	Stevens Paper Mills Windsor Conn	25		
Perfection Mica Co Magnetic Shield Div 20 N Wacker Dr Chicago 6 Ill	21	Stevenson Bro 110 Race St Philadelphia 6 Pa	6		
Permacel Tape Corp U S Hwy 1 New Brunswick NJ	35	Steward Mfg Co D M Chattanooga Tenn	3-29-33		
Permonite Mfg Co 444 Lake Shore Dr Chicago 11 Ill	14-15-18-26-28	Stokes Molded Products Div Electric Storage Battery Co 241 Taylor St Trenton 4 NJ	27-31		
Plastic Accessories Inc 91 Mercer St New York 12 NY	27-28	Stone City Machine & Tool Co 1206 7 St Bedford Ind	25		
Plasticite Corp 327 Rider Ave Bronx 51 NY	27	Stupakoff Div Carborundum Co Latrobe Pa	3-10-33		
Plastic-Craft Products Corp 1 Station Plaza W Nyack NY	27-28	Sun Chemical Corp 10-10 44 Ave Long Island City 1 NY	25		
Plectron Corp Overton Nebr	27	Superior Steatite & Ceramic Corp 91 W Forest Ave Englewood NJ	3-33		
Polymer Corp 2120 Fairmont Ave Reading Pa	27-30	Swedlow Plastics Co 6986 Bandini Blvd Los Angeles 22 Calif	17-27-28		
Polymer Industries Inc Springdale Conn	6	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	21-22-27-32		
Ponn Machine Cutting Co Tileston St Everett 49 Mass	31	Synco Products Co 30 Eastern Ave Malden 48 Mass	16		
Porcelain Products Inc 420 W Sandusky St Findlay Ohio	29	Synthane Corp Montgomery Ave Oaks Pa	18-26-27-28		
Pres Industrial Equipment Ltd Box 302 Putt Corners Rd N New Paltz NY	35	Taylor Fibre Co Norristown Pa	15-16-17-18-25-26-27-28		
Printloid Corp 93 Mercer St New York 12 NY	26-27-28	Technical Ply-Woods Sales 6756 Crandon Ave Chicago 49 Ill	10-14-15		
Quality Components Inc St Marys Pa	27	Technicraft Co 1156 Commonwealth Ave Boston 34 Mass	27		
Ram Electronics Inc 600 Industrial Ave Paramus NJ	36	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	5-6		
Raybestos-Manhattan Inc Plastic Products Div Manheim Pa	35	Terrell Corp 19 Lane St Waltham 54 Mass	5-6-30		
Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass	3-10	Tecco Insulated Wire 108 E Prospect Ave Burbank Calif	23		
Raytheon Mfg Co Microwave & Power Tube Operations Foundry Ave Waltham Mass	3	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	32		
REF Mfg Corp 393 Jericho Turnpike Mineola NY	27-28	Thermal Refractories Corp 4501 D-11 Ave N Bergen NJ	3-16-24		
Reichhold Chemicals Inc 525 N Broadway White Plains NY	5-6-26-27-30	Thiokol Chemical Corp 780 N Clinton Ave Trenton 7 NJ	5-6-27		
Reid Enterprises 2610 E 67 St Long Beach 5 Calif	27	Thomas & Skinner Inc 1120 E 23 St Indianapolis 7 Ind	34-35		
Reliance Mica Co 341-39 St Brooklyn 32 NY	21	Thor Ceramics Inc 225 Belleville Ave Bloomfield NJ	3		
Resistoflex Corp Woodland Rd Roseland NJ	27	Trimount Plastic Co 71 Dudley St Arlington 74 Mass	27-28		
Richardson Co 27 Ave & Lake St Melrose Park Ill	27-28	Tri-Point Plastics Inc 175-I U Willets Rd Albertain LI NY	10-27-28-34		
Roberts Toledo Rubber Co 1200 Prospect Ave Toledo 6 Ohio	31	Union Carbide and Carbon Corp Silicones Div 30 E 42 St New York 17 NY	5-6-10-30-31		
Rogan Bros 8031 N Monticello Skokie Ill	27	United Fabricators & Electrons Inc Myrtle & Water Sts Stillwater Minn	27		
Rogers Corp Rogers Conn	3-8-14-15-25-26-27-31	United Mineral & Chemical Corp 16 Hudson St New York 13 NY	21-32		
Romar Plastics Inc 1311 E Main St St Charles Ill	36-37				
Rubbercraft Corp of Calif 1800 W 220 St Torrance Calif	31-32				
Safetee Glass Co 4717 Stenton Ave Philadelphia 44 Pa	18-22-28				
St Regis Paper Co Panelyte Div 150 E 42 St New York 16 NY	27-28				

33—INSULATORS

Insulators, antenna	1
Insulators, bead	2
Insulators, bearing	3
Insulators, ceramic	4
Insulators, cord	5
Insulators, coupling	6
Insulators, fabricated	7
Insulators, feed through	8
Insulators, glass bonded mica	9
Insulators, H. V. power line	10
Insulators, laminated	11
Insulators, metallized bushing	12
Insulators, mica	13
Insulators, molded	14
Insulators, plastic	15
Insulators, rods	16
Insulators, sheets	17
Insulators, shock	18
Insulators, sleeve	19
Insulators, standoff	20
Insulators, test clip	21
Insulators, thermocouple	22
Insulators, tower	23

Accurate Electronics Corp 169 S Abbe Rd W Elyria Ohio	7-11-14-15-16-17-19
Ace Plastic Co 91-30 VanWyck Expwy Jamaica 35 NY	13
Aerolite Electronics Corp 507 26 St Union City NJ	7-8-11-14-15-20
Airtron Inc 1101 W Elizabeth Ave Linden NJ	22
Allied Allegri Co 141 River Rd Nutley 10 NJ	11-15-20
American Lava Corp Subs Minn Mining & Mfg Cherokee Blvd & Mfrs Rd Chattanooga 5 Tenn	2-4-6-8-12-16-19-20-22-23
American Mica Radio Corp 235 Parker Ave Manasquan NJ	7-9-11-13-15-16-17
Anchor Plastics Co 36-36 36 St Long Island City 6 NY	15-16-19
Armel Electronics Inc 840 5 Ave Brooklyn 32 NY	8-14-15-20
Asheville-Schoonmaker Mica Co 900 Jefferson Ave Newport News Va	13
Auburn Mfg Co Stack St Middletown Conn	7-11-15-17
Auburn Spark Plug Co 89 York St Auburn NY	4
Bakelite Co Div Union Carbide & Carbon Corp 30 E 42 St New York 17 NY	15
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	1
Bentley Harris Mfg Co Conshohocken 30 Pa	19
Bestcraft Products Co 626 Broadway New York 12 NY	15-17
Birnbach Radio Co 145 Hudson St New York 13 NY	1-4-5-6-8-20-21
Bogart Mfg Corp 315 Seigel St Brooklyn 6 NY	1

Boonton Molding Co 326 Myrtle Ave Boonton NJ Borden Co Chemical Div Resinite Dept P O Box 1589 Santa Barbara Calif Borden Co Chemical Div 350 Madison Ave New York 17 NY Brand & Co William 41 North St Willimantic Conn Brand Dielectrics Inc 57 North St Willimantic Conn Bristol Co P O Box 1790 EITT Waterbury 20 Conn British Electronic Sales Box 132 Oakland Garden 64 NY Buchanan Electrical Products Corp 225 Route 22 Hillside NJ Cambridge Thermionic Corp 445 Concord Ave Cambridge 38 Mass Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wis Ceramasel Inc P O Box 25 New Lebanon Center NY Channel Master Corp Ellenville NY Chicago Gasket Co 1271 W North Ave Chicago 22 Ill Cincinnati Molding Co 2037 Florence Ave Cincinnati 6 Ohio Clear Beam Antenna Corp 21341 Roscoe Blvd Canoga Park Calif Clowes Ceramic Corp 3711 Calhoun Ave Chattanooga 7 Tenn Cleveland Container Co 6201 Barberton Ave Cleveland 2 Ohio Colonial Insulator Co 945 Grant St Akron 11 Ohio Connector Corp 6025 N Keystone Ave Chicago 30 Ill Consolidated Wire & Associated Cos 1635 S Clinton St Chicago 16 Ill Cook Ceramic Mfg Co Prospect St Trenton NJ Crane Packing Co 6400 Oakton St Morton Grove Ill Crown Industrial Products 713 Amsterdam Woodstock Ill Crystalx-Westlake Corp Lenni Rd Lenni Mills Pa Decatur Electronic Industries Corp 203 Orinoco Dr Brightwaters LI NY Dennison Mfg Co 300 Howard St Framingham Mass Diamondite Products Mfg Co 217 4 St NE Canton 2 Ohio Dielect Inc Cedar & Gross Sts Fords NJ Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wis Du-Co Ceramics Co Box 278 Saxenburg Pa Elco Corp M St below Erie Ave Philadelphia 24 Pa Electrical Refractories Co E Clark St E Palestine Ohio Electrical Specialty Co 158 11 St San Francisco 3 Calif Electronic Mechanics Inc 101 Clifton Blvd Clifton NJ Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ Emeloid Co 1239 Central Ave Hillside 5 NJ Emerson & Cuming Inc 869 Washington St Canton 1 Mass Emerson Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY Enfo Corp Rte 38 at Airport Circle Pennsauken 11 NJ Erie Resistor Corp 644 W 12 St Erie 6 Pa Farnsworth Electronic Co Pacific Div 815 S San Antonio Rd Palo Alto Calif Finn & Co T R 200 Central Ave Hawthorne NJ Fluorocarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ Formica Corp 4614 Spring Grove Ave Cincinnati 32 Ohio Franklin Fibre-Lamitex Corp Wilmington Dela Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ Fretco Inc 406 N Craig St Pittsburgh 13 Pa Furane Plastics Inc 4516 Brazil St Los Angeles 32 Calif Garde Mfg Co 588 Eddy St Providence 3 RI Gee-Lar Mfg Co 418 S Wyman St Rockford Ill General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill General Ceramics Corp Keasbey NJ General Components Inc 225 E 144 St Bronx 51 NY	13-14-15 19 19 19 11-13 4-22 4-8-10-12-20 12-14-15 4-8-20 4-8-12-20 8 20 15 14-15 1 4-20 15 4-10-12-20-22-23 7 1 4 8-15-20 15 11-15-16-17 7-11-14-21 17 4-12-16-19-20 15 8 1-2-3-4-8-14-16-19-20-22 13-14-15 4 4-9-11-13-15 17 11 15 11 4-8-15-20 4-8-20 18 1-8-14-15-17-20-21 15 15 4-12-22 1-4-8-14-15 11-14-15-16-17 1-7-8-14-15-20 1-14-15-20 1-8-14-15-16-18-19-20-21 1-2-4-8-12-20-23 8-15	General RF Fittings Inc 702 Beacon St Boston 15 Mass Glasic Corp 4321 Glenridge Rd Cleveland 21 Ohio Goe Eng'g Co 219 S Mednik Ave Los Angeles 22 Calif Grayhill Inc 561 Hillgrove Ave La Grange Ill Gremar Mfg Co 7 North Ave Wakefield Mass Gries Reproducer Corp 125 Beechwood Ave New Rochelle NY Guastavino Co R 660 Main St Woburn Mass Hermetic Seal Corp 29 S 6 St Newark 7 NJ Hobson Bros 4940 W Lawrence Ave Chicago 30 Ill Houghton Laboratories Inc 322 Houghton Ave Olean NY Huse Liberty Mica Co Peabody Industrial Center Peabody Mass iE Mfg 325 E Hoyne Ave Chicago 12 Ill Illinois Testing Labs Inc 420 N LaSalle St Chicago 18 Ill Industrial Accessories Inc Line Rd Matawan NJ Industrial Devices Inc 982 River Rd Edgewater NJ Industrial Engravers Inc 2212 McDonald Ave Brooklyn 23 NY Insulating Fabricators of N E Inc 69 Grove St Watertown 72 Mass Insulation Mfrs Corp 565 W Washington Blvd Chicago 39 Ill Insuline Corp of America 186 Granite St Manchester NH Integrated Mica Corp 202 Franklin Pl Woodmere LI NY Isolantite Mfg Corp Warren Ave Stirling NJ Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY Jodee Plastics Co 213 Shepherd Ave Brooklyn 8 NY Johns-Manville 220 E 40 St New York 16 NY Johnson Co E F Waseca Minn Jones Electronics Hiram 2313 W Olive St Burbank Calif Keystone Electronics Corp 423 Broome St New York 13 NY Kirchberger & Co M 83 W Forest Ave Englewood NJ Laminated Sheet Products Corp 449 Neponset St Norwood Mass Lapp Insulator Co Radio Specialties Div 24 Summer St LeRov NY Lee Chemical Corp Walter Seabury Ave & Butler Pl Bronx 61 NY Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa Lero Electronics Inc 501 S Varney St Burbank Calif Louthan Mfr Co Harvey Ave E Liverpool Ohio Maigne Co O J 323 Pearl St New York 38 NY Mavfair Molded Products Corp 3700 N Rose St Franklin Park Ill Methode Mfg Corp 7447 W Wilson Ave Harwood Heights Ill Mica Fabricating Co Rochelle Park NJ Mica Insulator Co 797 Broadway Schenectady 1 NY Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill Micromold Products Corp 1 School St Yonkers NY Millen Mfg Co James 150 Exchange St Malden 48 Mass Minnesota Rubber & Gasket Co 3630 Wooddale Ave St Louis Park Minneapolis 16 Minn Minor Rubber Co Ackerman St Bloomfield NJ Mitronics Inc 1290 Central Ave Hillside NJ Molded Fiber Glass Co 4801 Benefit Ave Ashtabula Ohio Molded Products Div Admiral Corp Washington & Creamery Rd W Chicago Ill Mosley Electronics Inc 8622 St Charles Rock Rd St Louis 14 Mo Mueller Electric Co 1585H E 31 St Cleveland 14 Ohio Mycalex Corp of America 125 Clifton Blvd Clifton NJ Mykroy Inc Wheeling Ill	7-8-22 14-15-16-17-20 8 20 15 3-15 4 8-20 8 15-17 9-13 1-2-4-18-20 22 14 14-15 1-15 7-15 7-9-11-13-14-15-17-19 7 4-9-13 1-2-3-4-6-7-8-12-16-19-20-22 6-10-14-18-20 15 17 1-4-6-8-20 4-8-14-15-20 7-15 2-4-14 11-15-16-17 1-4-8-10-16-20-23 7-15-16-17-19 22 8-20 4 15 7-14-15 7-11-14-15 3-7-9-11-13-14-15-16 13 11-15-20 4-6-14 6-14-16-17 14-15-16-17-18-19 4-8-12-19-20 17 15 8 21 9-13 1-2-4-7-8-9-10-14-15-16-17-19	National Ceramic Co 500 Southard St Trenton 2 NJ National Company Inc 61 Sherman St Malden 48 Mass National Moldite Co 1410 Chestnut Ave Hillside 5 NJ National Tel-Tronics Corp 52 St Casimir Ave Yonkers NY National Vulcanized Fibre Co P O Box 311 Wilmington 99 Dela Natvar Corp 211 Randolph Ave Woodbridge NJ New England Laminates Co 481 Canal St Stamford Conn New England Mica Co 66 Woerd Ave Waltham 54 Mass New England Tape Co 30 Tower St Hudson Mass Nichols Products Co 325 W Main St Moorestown NJ Northern Plastics Corp 2nd Market St LaCrosse Wis Ohio Brass Co 380 N Main St Mansfield Ohio Parker Metal Goods Co 85 Prescott St Worcester 5 Mass Penn Fibre & Specialty Co 2020 E Westmoreland St Philadelphia 34 Pa Permonite Mfg Co 444 Lake Shore Dr Chicago 11 Ill Petroff Corp Peter A 127 Water St New York 5 NY Plastic Accessories Inc 91 Mercer St New York 12 NY Plasticite Corp 327 Rider Ave Bronx 51 NY Plastic-Craft Products Corp 1 Station Plaza W Nyack NY Plastic Mold & Eng'g Co 157 Clifford St Providence RI Porcelain Products Inc 420 W Sandusky St Findlay Ohio Polymer Corp 2120 Fairmont Ave Reading Pa Precision Paper Tube Co 2035 W Charleston St Chicago 47 Ill Premax Products Div Chisholm-Ryder Co College & Highland Aves Niagara Falls NY Printloid Corp 93 Mercer St New York 12 NY Quality Components Inc St Marys Pa Raybestos-Manhattan Inc Plastic Products Div Manheim Pa Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass Raytheon Mfg Co Microwave & Power Tube Operations Foundry Ave Waltham Mass Red Seal Electric Co 6321 Detroit Ave Cleveland 2 Ohio Reid Enterprises 2610 E 67 St Long Beach 5 Calif Resistoflex Corp Woodland Rd Roseland NJ Richardson Co 27 Ave & Lake St Melrose Park Ill Richards Co Arklay S 35 Winchester St Newton Highlands 61 Mass Roberts Toledo Rubber Co 1200 Prospect Ave Toledo 6 Ohio Robinson Aviation Inc Terboro NJ Robinson Machine Works 802 E 8 St New Albany Ind Rogan Bros 8031 N Monticello Ave Skokie Ill Rogers Corp Rogers Conn Rubbercraft Corp of Calif 1800 W 220 St Torrance Calif Safetec Glass Co 4717 Stenton Ave Philadelphia 44 Pa Saxenburg Ceramics Saxenburg Pa Schrack Electrical Sales Corp 45 W 81 St New York 24 NY Shamban & Co W S 11617 W Jefferson Blvd Culver City Calif Shellco Mfg Corp 323 Bergen Blvd Fairview NJ Silicone Insulation Inc Seabury Ave & Butler Pl Bronx 61 NY Silicone Seals Inc 3125 Milwaukee Ave Chicago 18 Ill Sillocks-Miller Co 10 W Parker Ave Maplewood NJ Sinclair Mfg Co P O Box 243 Chertley Mass Smith Inc Herman H 2326 Nostrand Ave Brooklyn 10 NY Solar Mfg Corp 4553 Seville Ave Los Angeles 58 Calif	1-4-8-12-20 1-4-8-20 19 7-11-15-16-17 7-11-15-16-17 15-19 11-15-17 9-13 15-19 7-11-15-16-17 7-11-15-17 10 15 11-15 15 1-4 15-16-17 7-11-15 1 15 8 15 4-8-12-20 4-20 7-11-14-15 14-15 1-7-14-15-16-17-19-20 7-11-14-15-16-17 22 14 9-11 2-4-20-22 4 8-15-20 14-15 11-15 11-15 11-15 8-20 11-15 11-15 6-19-21 4
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Sparta Mfg Co Dover Ohio	8-15-19	Aerolite Electronics Corp 507 26 St Union City NJ	2	Nucleonic Corp of America 196 Degraw St Brooklyn 31 NY	7
Spaulding Fibre Co 310 Wheeler St Tonawanda NY	15	Alden Products Co 123A N Main St Brockton Mass	2-4	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	8-10
Spruce Pine Mica Co P O Box 456 Spruce Pine NC	13	Aladdin Electronics 100 Blanton Ave Nashville 10 Tenn	4	Paco Inc 70-31 84 St Glendale 27 NY	11
Star Porcelain Co Muirhead Ave Trenton 9 NJ	4	Allied Radio Corp 100 N Western Ave Chicago 80 Ill	2-3-4-6- 10-11-12	Parker Metal Goods Co 85 Prescott St Worcester 5 Mass	1
Stevens Products Inc 86 Main St E Orange NJ	7-11-14-15	American Electronics Co 1203 Bryant Ave New York 59 NY	1-12	PCA Electronics Inc 16799 Schoenborn St Sepulveda Calif	4
Steward Mfg Co D M Chattanooga Tenn 2-4-16-17-18-19-20-21-22-23		American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	3-8-11	Philmore Mfg Co 113 University Pl New York 3 NY	1-3-6-10-12
Stone City Machine & Tool Co 1206 7 St Bedford Ind	7-14-17-19	Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	4-6-7-8-11	PIC Design Corp 477 Atlantic Ave E Rockaway LI NY	2
Stupakoff Div Carborundum Co Latrobe Pa	1-2-4-6-8-20-22	Automation Electronics Inc 231 W Olive St Burbank Calif	8	Polypphase Instrument Co E 4 St Bridgeport Pa	6
Sun Chemical Corp 10-10 44 Ave Long Island City 1 NY	7-11-15	Beckman/Helipot Corp Newport Beach Calif	2	Pomona Electronics Co 1126 W 5 Ave Pomona Calif	2
Superior Steatite & Ceramic Corp 91 W Forest Ave Englewood NJ	2-4-14	Berkshire Labs 586 Bank Village Greenville NH	4	Precision Development Corp 2 Neil Ct Oceanside NY	3-6-10-11-12
Suprenant Mfg Co 172 Sterling St Clinton Mass	15	Berco Engineering Corp 2320 S Tibbs Ave Indianapolis 41 Ind	2-6	Precision Metal Products Co 41 Elm St Stoneham Mass	3
Swedlow Plastics Co 6986 Bandini Blvd Los Angeles 22 Calif	11-15-17-23	Birnback Radio Co 145 Hudson St New York 13 NY	1	Pye Telecommunications Ltd Newmarket Rd Cambridge England	3-8
Swenson & Co V H 554 Elm St Arlington NJ	15	Brach Mfg Corp 200 Central Ave Newark 3 NJ	1	Radio City Products Co Centre & Glendale Sts Easton Pa	6-7-11
Swiss Jewel Co Lafayette Bldg Philadelphia 6 Pa	3	Cambridge Thermionic Corp 445 Concord Ave Cambridge 38 Mass	4	Ransom Research 323 W 7 St San Pedro Calif	5
Sylvania Electric Products Inc 1740 Broadway New York 19 NY	13	Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill	3-11-12	Reeves Instrument Corp 215 E 91 St New York 28 NY	2
Syncor Products Co 30 Eastern Ave Malden 48 Mass	1-2-3-4-7-9-10- 12-19-20-23	Certified Radio Labs 5507 13 Ave Brooklyn 19 NY	6-10	Reiner Electronics Co Centre & Glendale Sts Easton Pa	8
Synthane Corp Montgomery Ave Oaks Pa	11-15-16-17	Channel Master Corp Ellenville NY	1	Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	8
Taylor Fibre Co Norristown Pa 1-3-6-7-10-11-15-16-17-19-20		Clear Beam Antenna Corp 21341 Roscoe Blvd Canoga Park Calif	1	Rollan Electric Co 8233 S Princeton Ave Chicago 20 Ill	4
Tecco Insulated Wire 108 E Prospect Ave Burbank Calif	20	Colman Tool & Machine Co 1017 NE 3 Ave Amarillo Texas	8	Seco Mfg Co 5015 Penn Ave S Minneapolis 19 Minn	11
Thomas & Sons R Lisbon Ohio	1-4-10-20	Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	3-8	Service Instruments Corp 171 Official Rd Addison Ill	11
Tri-Dex Electronics P O Box 1207 Lindsay Calif	7-11-15	Consolidated Wire & Associated Cos 1635 S Clinton St Chicago 16 Ill	1	Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	2
Tri-Point Plastics Inc 175-I U Willets Rd Albertson LI NY	1-7-8-11-15- 16-17-19-20	Dale Boisen Co 2928 Nebraska Ave Santa Monica Calif	2	Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	2
United Mineral & Chemical Corp 16 Hudson St New York 13 NY	13	DeWald Radio Mfg Corp 35-15 37 Ave Long Island City 1 NY	10	Snyder Mfg Co 22 & Ontario Sts Philadelphia 40 Pa	1
Universal Clay Products Co 1528 E 1 St Sandusky Ohio	1-4	Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	6-10	Specific Products Co 14515 Dickens St Sherman Oaks Calif	2
Uniwave Inc 2 Marine St Farmingdale NY	8-20	Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	2-6	Superex Electronics Corp 4 Radford Pl Yonkers NY	2-4-6-10
U S Stoneware Co Alite Div Orville Ohio	4-12	Dyna Co 5142 Master St Philadelphia 31 Pa	6	Swan Electronics Co 5016 N Austin Ave Chicago 30 Ill	6-10
Vaco Products Co 317 E Ontario St Chicago 11 Ill	15-19	Elco Corp M St below Erie Ave Philadelphia 24 Pa	4	Symphony Electronics Corp 925 S Western Ave Los Angeles 6 Calif	10
Vacuum Tube Products Co 506 S Cleveland St Oceanside Calif	9	Electronic Instrument Co 84 Withers St Brooklyn 11 NY	6-7-10-11	Tatnall Measuring Systems Co Kimberton Rd Phoenixville Pa	2
Varflex Corp 511 W Court St Rome NY	15-19	Electronic Measurements Corp 625 Broadway New York 12 NY	11	Tech-Master Corp 75 Front St Brooklyn 1 NY	6-10
Victor Insulator Div I-T-E Circuit Breaker Co Maple Ave Victor NY	4-10-20	Engineering Developments Inc Forest Ave Middletown RI	9	Techniques Inc 52 Jackson Ave Hackensack NJ	2
Vitroseal Corp 709 E 106 St Indianapolis 20 Ind	8-20	Erie Resistor Corp 644 W 12 St Erie 6 Pa	2-4	Tec-Kit Co Box 8827 Kansas City 15 Mo	1-2-3-4-5-6-7-8-9-10-11-12
Voltube Corp Lincoln Hwy Menlo Park NJ	19	First Electronics Corp 117 Blue Hill Ave Boston 19 Mass	4-6-8	Telegraph Condenser Co N Acton London W 3 England	4
Wade Electric Products Co Box 271 Sturgis Mich	14-15-19	Gardiner Electronics Co 2545 E Indian School Rd Phoenix Ariz	3-10	Telematic Industries Inc 16 Howard Ave Brooklyn 7 NY	10
Western Coil & Electrical Co 215 State St Racine Wis	20	G & M Equipment Co 7315 Varna Ave N Hollywood Calif	3	Temco Aircraft Corp P O Box 6191 Dallas 2 Texas	6
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	4	Giannini & Co G M 918 E Green St Pasadena Calif	11	Torocoil Co 2615 Bristol Rd Columbus 21 Ohio	6
West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill	22	Goldak Co 1544 W Glenoaks Blvd Glendale 1 Calif	3-7	Tran-Kit Electronics Co 467 S 5 Ave Mt Vernon NY	6-10
Westline Products Div Western Lithograph Co 600 E 2 St Los Angeles 54 Calif	15	Gyro Electronics Co 325 Canal St New York 13 NY	6-10-12	Transvision Inc 460 North Ave New Rochelle NY	6-10
West Virginia Pulp & Paper Co 230 Park Ave New York 17 NY	14	Hal-Hen Co 36-14 11 St Long Island City 6 NY	10	Tricraft Products Corp 1535 N Ashland Ave Chicago 22 Ill	1
Wheaton Co T C Millville NJ	8-12-20	Heath Co 305 Territorial Rd Benton Harbor Mich	5-6-7-10-11-12	TV Hardware Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	1
Whitaker Cable Corp 1301 Burlington St N Kansas City 16 Mo	15-19	Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	11	University Loudspeakers Inc 80 S Kensico Ave White Plains NY	4
Whitso Inc 9330 Byron St Schiller Park Ill	20	Hill & Co E Vernon PO Box 189 Lake Geneva Wis	11	Valandy Electronics Corp 61-35 166 St Flushing 68 NY	2-4-6-10
Wilmington Fibre Specialty Co New Castle Dela	7	Hubbell Inc Harvey State St & Bostwick Ave Bridgeport 2 Conn	11	Vector Electronic Co 3352 San Fernando Rd Los Angeles 65 Calif	2
Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	1	Insuline Corp of America 186 Granite St Manchester NH	1	Victory Eng'g Corp 117 Springfield Rd Union NJ	4
Wind Turbine Co E Market St & P R R W Chester Pa	1	JFD Mfg Co 6101-16 Ave Brooklyn 4 NY	1	Vokar Corp 7300 Huron River Dr Dexter Mich	10
Wisconsin Porcelain Co 121 Lincoln St Sun Prairie Wis	4-8	Johnson Co E F Waseca Minn	12	Walsco Electronics Mfg Co 100 W Green St Rockford Ill	1-2
		Keil Eng'g Products Co 4356 Duncan Ave St Louis 10 Mo	6	Warren Mfg Co Newtown Rd Littleton Mass	8
		Kit-Tronics 2315 Hendola Dr N E Albuquerque New Mex	6-11	Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	3-4-5-6-8-11-12
		Labko Scientific Inc 111 W Elm Stillwater Okla	6	Worner Electronic Devices Rankin Ill	6
		LaPointe Industries Inc 155 W Main St Rockville Conn	1	WRL Electronics Inc 3415 W Broadway Council Bluffs Iowa	12
		Miller Co J W 5917 S Main St Los Angeles 3 Calif	10		
		National Coil Co PO Box 1237 Sheridan Wyo	4		

34—KITS

Antenna, home	1
Breadboard	2
Communication	3
Component	4
Computer	5
Electronic	6
Geiger counter	7
Modification	8
Portable lighting	9
Receiver	10
Test equipment	11
Transmitter	12

35—LIGHTING EQUIPMENT & ACCESSORIES

Accessories & supplies	1
Cold cathode	2
Consoles, control	3
Dimmers	4

Gobos	5	Drake Mfg Co		M-B Communication Co	
Lamps, infra-red	6	1713 W Hubbard St Chicago 22 Ill	14-20	4626 Walnut St Philadelphia 39 Pa	26
Lamps, inspection	7	Edgerton, Germeshausen & Grier		Mercury Electronic Co	
Lighting, emergency	8	160 Brookline Ave Boston 15 Mass	25	Box 450 B Red Bank NJ	25
Lighting, preset panels	9	Edko Electronics Eng'g Co		Micarta Fabricators Inc	
Lighting, tower	10	202 Grand St Brooklyn 11 NY	23	5324 N Ravenswood Ave Chicago 40 Ill	14
Lighting, TV	11	Eldema Corp		Mil Case Corp	
Lights, arc	12	9844 Remer St El Monte Calif	14	35-18 37 St Long Island City NY	3
Lights, black	13	Electric Cord Co		Miller-Trojan Co	
Lights, dial	14	21 Spruce St New York 38 NY	8	3 North Ridge Ave Troy Ohio	12
Lights, flood	15	Electronic Brazing Co		Mole-Richardson Co	
Lights, fluorescent	16	140 Glenridge Ave Montclair NJ	25	937 N Sycamore Ave Hollywood 38 Calif	1-11
Lights, glow	17	Electro-Physics Co		National Carbon Co	
Lights, incandescent	18	287 Broadway New York 7 NY	22	Div Union Carbide & Carbon Corp	
Lights, neon test	19	Engineering Developments Inc		30 E 42 St New York 17 NY	8-19-20-21
Lights, signal	20	Forest Ave Middletown RI	7	National Cine Equipment Inc	
Lights, spot	21	Exide Industrial Div Electric Storage Battery		209 W 48 St New York 36 NY	1
Meters, light	22	Co 42 S 15 St Philadelphia 2 Pa	8	New York Mfg & General Supply Co	
Power supplies	23	Federal Screw Products Inc		10-38 Jackson Ave Long Island City 1 NY	18
Scoops	24	3917 N Kedzie Ave Chicago 18 Ill	14	Norco Mfg Co	
Stroboscopes	25	Flexo International Corp		392 Bleecker St	
Studio rigging	26	3255 W Lake St Chicago 24 Ill	16-18	New York 14 NY	2-13-15-16
		Florman & Babb		Norma Hoffmann Bearings Corp Walker Div	
		68 W 45 St New York 36 NY	1-5-11-15-21	Hamilton Ave Stamford Conn	23
		Gates & Co Geo W		Northeast Electronics Corp	
		Hempstead Tpke & Lucille Ave		PO Box 425 Concord NH	25
		Franklin Square LI NY	7-12-13-23	North American Electric Lamp Co	
		General Cement Mfg Co Div Textron Inc		1520 N 13 St St Louis 6 Mo	6-20
		400 S Wyman St Rockford Ill	7-14-19	Ohmite Mfg Co	
		General Electric Co Apparatus Sales Div		3601 Howard St Skokie Ill	4
		1 River Rd Schenectady 5 NY	20	Onan & Sons D W	
		General Radio Co		2515 University Ave SE	
		275 Massachusetts Ave		Minneapolis 14 Minn	8-23
		Cambridge 39 Mass	4-22-25	Pantek Co	
		Glen Falls Lab		P O Box 212 El Segundo Calif	25
		Box 685 Glens Falls NY		Permonite Mfg Co	
		Gordon Enterprises		444 Lake Shore Dr Chicago 11 Ill	14
		5362 N Cahuena Blvd		Peschel Electronics Inc	
		N Hollywood Calif		13 Garden St New Rochelle NY	23
		Great Western Div Interelectric Corp		Pioneer Gen-E-Motor Corp	
		Warren Pa	16-18	5841 W Dickens Ave Chicago 39 Ill	23
		Gyro Electronics Co		Production Research Corp	
		325 Canal St New York 13 NY	25	Thornwood NY	4
		Hall-Scott Inc Electronics Div		The Pyle-National Co	
		2950 N Ontario St Burbank Calif	15-21	1334 N Kostner Ave Chicago 51 Ill	15
		Hanovia Chemical & Mfg Co		Radiant Lamp Corp	
		100 Chestnut St Newark 5 NJ	6-13	300 Jelliff Ave Newark 8 NJ	6
		Hanson-Gorrill-Brian		Radio Corp of America	
		85 Hazel St Glen Cove NY	23	Camden 2 NJ	1-10-11
		Harshaw Chemical Co		Radio Eng'g Co	
		1945 E 97 St Cleveland 6 Ohio	7	8 State St New York 4 NY	11-23
		Harwood Electronics Co		Ready Power Co	
		466 W Superior St Chicago 10 Ill	1	11231 Freud Ave Detroit 14 Mich	8
		Herzog Miniature Lamp Works		Sampson Chemical & Pigment Corp	
		50-17 5 St Long Island City 1 NY	7	2830 W Lake St Chicago 12 Ill	2-16
		Hetherington Inc		Sangamo Electric Co	
		1200 Elmwood Ave Sharon Hill Pa	14-19-20	Springfield Ill	23
		Hickok Electrical Instrument Co		Scientific Glass Apparatus Co	
		10514 Dupont Ave Cleveland 8 Ohio	22-25	100 Lakewood Terrace	6-22
		Hobart Bros		Bloomfield NJ	
		Hobart Square E Troy 3 Ohio	8	Shannon Luminous Materials Co	
		Holland Electronics		7356 Santa Monica Blvd	
		2133 Central Dr S East Meadow NY	1	Hollywood 46 Calif	7-13
		Homelite Div Textron Inc		Sheppard Co R H	
		67 Riverdale Ave Port Chester NY	8-23	101 Philadelphia St Hanover Pa	23
		Hudson Lamp Co		Signalite Inc	
		528 Elm St Kearny NJ	17-18	37 Neptune Hwy Neptune NJ	17
		Hughey & Phillips		Soderberg Mfg Co	
		3300 N San Fernando Blvd	10	628 S Palm Ave	8-9-10-11-13-14-15-
		Burbank Calif		Alhambra Calif	16-17-18-20-21
		Industrial Devices Inc		Specialties Inc	
		982 River Rd Edgewater NJ	17-19	Skunks Misery Rd Syosset LI NY	22
		Jan Hardware Mfg Co		Spinform Inc	
		75 N 11 St Brooklyn 11 NY	1	65 Mechanic St Attleboro Mass	15
		Johnson Co E F Waseca Minn	20	Stamford Metal Specialty Co	
		Joy Mfg Co Electrical Products Div		427 W Broadway New York 12 NY	16-18-21
		1201 Macklind Ave St Louis 10 Mo	15-21	Standard Electric Time Co	
		Kato Eng'g Co		89 Logan St Springfield 2 Mass	8
		1415 1 Ave Mankato Minn	23	Stewart Warner Electronics Div	
		Katolight Corp		1300 N Kostner Ave Chicago 51 Ill	1
		Box 891 Mankato Minn	23	Stratford Corp	
		Katolight Corp		44 W 28 St New York 1 NY	4
		1415 1 Ave Mankato Minn	23	Stroblite Co	
		Kemlite Labs Inc		75 W 45 St New York 36 NY	13
		1819 W Grand Ave		Strong Electric Corp	
		Chicago 22 Ill	10-11-20-25	87 City Park Ave Toledo 1 Ohio	11-12-23
		Kirkland Co H R		Superior Electric Co	
		8 King St Morristown 4 NJ	14-20-21	83 Laurel St Bristol Conn	4-11
		Kliegl Bros		Sylvania Electric Products Inc	
		321 W 50 St	2-3-9-11-12-13-	1740 Broadway New York 19 NY	6-7-16-17-18
		New York 19 NY	15-16-18-21-24	Technicraft Co	
		Laine Electronics & Mfg Co		1156 Commonwealth Ave Boston 34 Mass	17
		91 Industrial Ave Little Ferry NJ	35	Telegraph Condenser Co	
		LaPointe Industries Inc		N Acton London W 3 England	1
		155 W Main St Rockville Conn	1-16	Terado Co	
		Lee Electric & Mfg Co		1068 Raymond Ave St Paul 14 Minn	8-16
		2806 Clearwater St Los Angeles 39 Calif	23	Terris Div Consolidated Siphon Supply Co	
		Lenox Instrument Co		22 Wooster St New York 13 NY	24
		2010 Chancellor St Philadelphia 3 Pa	7	Tranco Products Inc	
		Linde Air Products Div		12210 Nebraska Ave Los Angeles 25 Calif	21
		Union Carbide & Carbon		Tung-Sol Electric Inc	
		30 E 42 St New York 17 NY	15	95 8 Ave Newark 4 NJ	14-18
		Lindgren & Associated Erik A		TV Specialty Co	
		4515 N Ravenswood Ave		350 W 31 St New York 1 NY	11-15-24
		Chicago 40 Ill	2-18	Ucinite Co Div United-Carr Fastener Corp	
		Luxo Lamp Corp		459 Watertown St Newtonville 60 Mass	19
		102 Columbus Ave Tuckahoe NY	7-16-18	Ultra-Violet Products Inc	13
		Luxor Lighting Products Inc		5114 Walnut Grove Ave San Gabriel Calif	13
		350 5 Ave New York 1 NY	2-6-7-10-11-16-18	Universal Atomics Corp	
		Magnaflux Corp		50 Bond St Westbury LI NY	23
		7300 W Lawrence Ave Chicago 31 Ill	7-13	U S Radium Corp	
		Matchless Electric Co		Morristown NJ	20
		1700 Washington Blvd			
		Chicago 12 Ill	14-18-20		
Adams Lighting Inc					
10 1 St Pelham NY	15-16-18-21				
Aerolite Electronics Corp					
507 26 St Union City NJ	1-14				
Aerolux Light Corp					
653 11 Ave					
New York 36 NY	2-13-16-17-19-25				
Air Transport Mfg Co					
1114 N Sycamore Ave Los Angeles 38 Calif	3				
Airtron Inc					
1101 W Elizabeth Ave Linden NJ	1				
Alden Products Co					
123A Main St Brockton Mass	18-19				
Allied Eng'g & Production Corp					
2421 Blanding Ave Alameda Calif	16				
Aloe Scientific					
5655 Kingsbury Blvd St Louis 12 Mo	6-22				
American Television & Radio Co					
300 E 4 St St Paul 1 Minn	23				
Amgio Corp					
4333 Ravenswood Ave					
Chicago 13 Ill	2-17-19-20				
Andrew Antenna Corp					
606 Beech St Whitby Ontario Can	10				
Andrew California Corp					
941 E Maryland Ave Claremont Calif	10				
Art Specialty Co					
3245 W Lake St Chicago 24 Ill	6				
Automatic Switch Co					
Hanover Rd Florham Park NJ	8				
Barker & Williamson Inc					
Canal & Beaver Sts Bristol Pa	10				
Berkshire Labs					
586 Bank Village Greenville NH	25				
Black Light Corp of America					
5114 Walnut Grove Ave San Gabriel Calif	7				
Black Light Eastern Corp					
33-00 Northern Light Blvd					
Long Island City 1 NY	13				
Bogue Electric Mfg Co					
Iowa Ave Paterson 3 NJ	4-23				
Boulin Instrument Corp					
10 1 St Pelham NY	25				
British Electronic Sales					
Box 132 Oakland Gardens 64 NY	14-17-19-20				
Brooks & Perkins Inc					
1950 W Fort St Detroit 16 Mich	3				
Burdick Corp					
635 Phumb St Milton Wis	6				
Cable Electric Products					
234 Daboll St Providence 7 RI	7-8-17-19-20-21				
Camera Equipment Co					
315 W 43 St New York 36 NY	11-15				
Century Lighting Inc					
521 W 43 St					
New York 36 NY	1-3-5-9-11-12-13-15-16-18-21				
Channel Master Corp					
Ellenville NY	11				
Chicago Miniature Lamp Works					
1500 N Ogden Ave					
Chicago 10 Ill	7-14-17-18-20				
Circon Component Co					
Santa Barbara Municipal Airport					
Goleta Calif	1-14				
Communication Measurements Labs					
350 Leland Ave Plainfield NJ	25				
Condenser Products Div New Haven					
Clock & Watch Co					
140 Hamilton St New Haven 4 Conn	23				
Conn Ltd C G					
1101 E Beardsley Ave Elkhart Ind	25				
Dallons Labs					
5066 Santa Monica Blvd					
Los Angeles 29 Calif	2-13				
Davenport Mfg Co					
1713 N Ashland Ave Chicago 22 Ill	25				
Dazor Mfg Corp					
4481 Duncan Ave St Louis 10 Mo	7-16-18				
DeJur-Amsco Corp Electronic Sales Div					
45-01 Northern Blvd					
Long Island City 1 NY	22				
Devo Eng'g Inc					
P O Box 387 Caldwell NJ	9				
Dialight Corp					
60 Stewart Ave					
Brooklyn 37 NY	14-17-18-20				

U S Relay Co 1744 Albion St Los Angeles 31 Calif	4	Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	6	General Magnetic Corp 1001 Erwin Ave Detroit 34 Mich	8
Victory Mfg Corp 1722 W Arcade Pl Chicago 12 Ill	1	Brush Beryllium Co 4301 Perkins Ave Cleveland 3 Ohio	9	General Magnetics Inc 135 Bloomfield Ave Bloomfield NJ	2
Wappler Inc 27-10 Astoria Blvd Long Island City 2 NY	7	Bundy Electronics Corp 171 Fabyan Pl Newark 12 NJ	2	Gibson Electric Co 8317 Frankstown Ave Pittsburgh 21 Pa	9
Welch Mfg Co W M 1515 Sedgwick St Chicago 10 Ill	22	Burroughs Corp 6071 2 Ave Detroit 32 Mich	6	Glaser Lead Co 31 Wyckoff Ave Brooklyn 37 NY	9
Weston Electrical Instrument Corp Sub Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ	22	Burroughs Corp Electronic Instruments Div 1209 Vine St Philadelphia 7 Pa	2	Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio	3
Wind Turbine Co E Market St & P R R W Chester Pa	10	Calif Magnetic Control Corp 11922 Valerio St N Hollywood Calif	2	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	2
Winpower Mfg Co Newton Iowa	8-23	Cannon-Muskegon Corp Box 506 Muskegon Mich	1	Hycor Mfg Co 707 S Raymond Ave Pasadena Calif	2
Winkler Labs 5225 N 20 St Phoenix Ariz	25	Carpenter Steel Co Front & Bern Sts Reading Pa	1-9-12	Hycor Int'l Resistance Co 12970 Bradley Ave Sylmar Calif	3
Zoomar Inc 55 Sea Cliff Ave Glen Cove NY	22	Cedar Eng'g Inc 5806 W 36 St Minneapolis 16 Minn	2	Indiana Steel Products Co Valparaiso Ind	7-8
36—MAGNETICS					
Alloys, high permeability	1	CELCO Constantine Eng'g Labs Co PO Box 555 Mahwah NJ	2	International Powder Metallurgy Co 439 W Main St Ridgway Pa	9
Amplifiers, magnetic	2	Cerro De Pasco Sales Corp 300 Park Ave New York 22 NY	9	Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY	1
Clutches, magnetic	3	Chemical Commerce 166 Clifford St Newark 5 NJ	9	Johnson Electronics Inc 521 Elwell St Orlando Fla	7
Ironoxides, magnetic	4	Chicago Electronic Eng'g Co 3223 W Armitage Ave Chicago 47 Ill	2	Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	2
Magnesium	5	Chicago Magnetic Control 1616 N Damen Ave Chicago 47 Ill	2	Handy & Harman 82 Fulton St New York 38 NY	9
Magnetostriction	6	Chicago Standard Transformer Corp 3501 W Addison St Chicago 31 Ill	2	Johnson Aircraft Eng'g Co M J Morristown Airport Box 10 Morristown NJ	7
Magnets, electro	7	City Chemical Corp 132 W 22 St New York 11 NY	9	Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	2
Magnets, permanent	8	Clark Controller Co 1146 E 152 St Cleveland 10 Ohio	11	Kenyon Transformer Co 840 Barry St New York 59 NY	2
Metals, powdered	9	Coil Winders Inc New York Ave Westbury LI NY	2	Kepec Labs 131-38 Sanford Ave Flushing NY	2
Permeameters, high H	10	Columbian Carbon Co Mapico Color Unit 380 Madison Ave New York 17 NY	4	Keystone Products Co 904 23 St Union City NJ	2
Permeameters, R-F	11	Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	2	Kollsman Instrument Corp Standard Coil Products Sub 80-08 45 Ave Elmhurst 73 NY	2
Steel, electric	12	Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	2-7	Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	10
Acme Electric Corp Water St Cuba NY	2	Control Div Magnetics Inc Box 391 Butler Pa	2	Lanrevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	2
Adler Electronics Inc LeFevre Lane New Rochelle NY	2	Cook Electric Co 2700 Southport Ave Chicago 14 Ill	7	Lear Inc 3171 S Bundy Drive Santa Monica Calif	2
Aerovox Corp Pacific Coast Div 2724 S Peck Rd Monrovia Calif	2	Crucible Steel Co of America Henry W Oliver Bldg Pittsburgh 22 Pa	8-12	Linar Inc 4101 San Fernando Rd Glendale 4 Calif	2
Aerovox Corp Crowley Div 1 Central Ave W Orange NJ	8	Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wis	7	Litton Industries of Md Inc 4910 Calvert Rd College Park Md	2
AIResearch Mfg Co Div Garrett Corp 9851 Sepulveda Blvd Los Angeles 45 Calif	2	Cycle Transformer Corp 356 Glenwood Ave E Orange 11 NJ	2	Lux Clock Mfg Co Johnson St Waterbury Conn	9
Airpax Products Co Middle River Baltimore 20 Md	2	DeCoursey Eng'g Lab 11828 W Jefferson Blvd Culver City Calif	2	Macarr Inc 2543 Boston Rd New York 67 NY	2
Allegheny Ludlum Steel Corp Oliver Bldg Pittsburgh 22 Pa	12	Del Electronics Corp 41 N Mac Questen Pkwy Mt Vernon NY	2	Mackay Inc A D 198 Broadway New York 38 NY	4-5-9
Allis Co Louis 427 E Stewart St Milwaukee 1 Wis	2	Delta Chemical Works 23 W 60 St New York 23 NY	4-5-9-12	Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	2
Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	9	Delttime Inc 608 Fayette Ave Mamaroneck NY	6	MagneTec Corp 11785 W Olympic Blvd W Los Angeles 64 Calif	3
Alpha Metals Inc 56 Water St Jersey City 4 NJ	9	Diatron Co 3327 Dixie Dr Houston 21 Texas	2	Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	2
Aluminum Co of America Alcoa Bldg Pittsburgh 19 Pa	5-9	Dow Chemical Co Midland Mich Dynamics Instrumentations Co Div Alberhill Corp	5	Magnetic Powders Inc P O Box 247 Johnsonburg Pa	9
American Electronics Inc 655 W Washington Blvd Los Angeles 15 Calif	2	1118 Mission St S Pasadena Calif	2	Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif	2
American Gyro Corp 3030 Nebraska Ave Santa Monica Calif	2	Dynamics Research Associates Div Universal Match Corp PO Box 5841 Ferguson 21 Mo	2	Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	9
American Metal Co 61 Broadway New York 6 NY	9	Electomic Mechanisms Inc PO Box 1156 Greenwich Conn	3	Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY	2
American Research & Mfg Corp 920 Halpine Ave Rockville Md	2	Electro Eng'g Works 401 Preda St San Leandro Calif	7	Metz Refinery Co 360 Mulberry St Newark 2 NJ	9
Amplex Div Chrysler Corp P O Box 2718 Detroit 31 Mich	9	Electro-Mechanical Div General Riveters Inc 785 Hertel Ave Buffalo 7 NY	3	Midwestern Instruments P O Box 7186 Tulsa Okla	2
Antara Chemicals Div General Aniline & Film Corp 435 Hudson St New York 14 NY	9	Electronic Research Associates 67 E Centre St Nutley 10 NJ	2	Milwaukee Transformer Co 5231 N Hopkins St Milwaukee 12 Wis	2
Armo Steel Corp 703 Curtis St Middletown Ohio	12	Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	2	Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	3
Arnold Eng'g Co P O Box G Marengo Ill	8	Electrosolids Corp 7436 Varna Ave N Hollywood Calif	2	Murex Ltd Rainham Essex England	8
Atlas Eng'g Co 176 Blue Hill Ave Roxbury 19 Mass	2-3-4-7-11	Engineered Magnetics Div Gulton Industries Inc 13030 Cerise Ave Hawthorne Calif	2	Modern Industries Inc 2601 Colorado Ave Santa Monica Calif	2
Atomic Labs Inc 3086 Claremont Ave Berkeley 5 Calif	7	Exact Eng'g & Mfg Inc PO Box 668 Oceanside Calif	3	National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif	2
Autotronics Inc Rte 1 Box 812 Florissant Mo	3	Fansteel Metallurgical Corp 2200 Sheridan Rd N Chicago Ill	9	National Moldite Co 1410 Chestnut Ave Hillside 5 NJ	4
Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	2	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	2	Naybor Laboratories Inc E V 2 Yennicoek Ave Port Washington NY	7
Barker Sales Co 996 Edgewater Ave Ridgefield NJ	8	Feedback Controls Inc 899 Main St Waltham 54 Mass	2	New Jersey Zinc Co 160 Front St New York 38 NY	9
Basler Electric Co 601 5 St Highland Ill	2	Firth Sterling Inc 3113 Forbes St Pittsburgh 13 Pa	9-12	Norden-Ketay Corp Commerce Road Stamford Conn	2
Beckman/Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	7	Five Star Co W Main St Plantsville Conn	7	Nothelfer Winding Labs Inc 106 Albermarle Ave Trenton 8 NJ	2
Beckman/Helipot Corp Newport Beach Calif	3	Footo Mineral Co 18 W Chelton Ave Philadelphia 44 Pa	4-9	NYT Electronics Inc 2979 N Ontario St Burbank Calif	2
Beckman Instruments Inc Data & Control Systems Scientific Instrument Div 325 N Muller Ave Anaheim Calif	2	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	2	Ortho Filter Corp 196 Albion Ave Paterson 2 NJ	2
Belmont Smelting & Refining Works 330 Belmont Ave Brooklyn 7 NY	1-5-9	Garrett Corp AiResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif	2	Osborne Electronic Corp 712 SE Hawthorne Blvd Portland 14 Ore	2
Belock Instrument Corp 111-01 14 Ave College Point 56 NY	2-3	Geartronic Corp 2514 Broadway Long Island City NY	3	Penn-East Eng'g Corp Willow St Kutztown Pa	2
Bethlehem Steel Co Bethlehem Pa	12	General Electric Co Box 237 Roosevelt Park Annex Detroit 32 Mich	8	Penn Precision Products Inc 501 Crescent Ave Reading Pa	1
Bios Labs Inc 17 W 60 St New York 23 NY	4-5-9-12	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	8	Pentron Corp 777 S Tripp Ave Chicago 24 Ill	2
Bittermann Electric Co Barlow St Canaan Conn	2			Perkin Eng'g Corp 345 Kansas St El Segundo Calif	2
Blackburn Electronic Corp 55 W 7 St Wyoming Pa	2			Permag Corp 214 Teaffe Pl Brooklyn 5 NY	8
Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ	2-3				
Bram Chemical Co Metals & Minerals Div 820 65 Ave Philadelphia 26 Pa	1-5-9				

Non-Linear Systems Inc Del Mar Airport Del Mar Calif	3-7-9-12	Airborne Electronics Co 6813 Troost Ave N Hollywood Calif	12	Electrical & Physical Instrument Corp 42-19 27 St Long Island City 1 NY	1-6-10-12
Performance Measurements Co 15301 W McNichols Rd Detroit 35 Mich	9	Airmec Ltd High Wycombe Buckinghamshire England	2-3-4-5-8-9-10-11-13	Electrical Service Co 1271 Mission St San Francisco 3 Calif	2-8
Phoenix Precision Instrument Co 3803 N 5 St Philadelphia 40 Pa	9-12-16	Allyn Inc Welch Skaneteles Falls NY	5	Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich	8
Photobell Co 43 Vesey St New York 7 NY	1	Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	5-12	Electronic Eng'g Co of Calif 180 S Alvarado Los Angeles 57 Calif	13
Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	13	American Electronics Inc 655 W Washington Blvd Los Angeles 15 Calif	5-12	Electronic Instrument Co 84 Withers St Brooklyn 11 NY	5
Precise Development Corp 2 Neil Ct Oceanside NY	1-6-7	American Instrument Co 8080 Georgia Ave Silver Spring Md	13	Electronic Products Div Post Machinery 140 Elliot St Beverly Mass	2
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	1-2-3-4-5-6-7-8-16	Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	5-8-10	Electronics Corp of America 1 Memorial Dr Cambridge 42 Mass	2
Radex Corp 2076 Elston Ave Chicago 14 Ill	4	Askania Regulator Co 240 E Ontario St Chicago 11 Ill	12-13	Electro-Pulse Inc 11861 Teale St Culver City Calif	2-3-4-9-13
Radio City Products Co Centre & Glendale Sts Easton Pa	7	Automatic Electric Co 1033 W Van Buren St Chicago 7 Ill	1-6	Elgin National Watch Co 107 National St Elgin Ill	10
Radio Corp of America Commercial Electronic Products Camden 2 NJ	4	Autron Eng'g Inc 1254 W 6 St Los Angeles 17 Calif	1-2-8	El-Tronics Inc Penn Ave Mayfield Pa	5-9-10-12-13
Reiner Electronics Co Centre & Glendale Sts Easton Pa	7	Autotron Inc 3629 N Vermilion St Danville Ill	8	Endevco Corp 161 E California St Pasadena Calif	1-6-7-9-11
Reliance Mica Co 341-39 St Brooklyn 32 NY	1	Avionics Ltd P O Box 200 Niagara-on-the-Lake Ontario Canada	2-8	Engineered Electronics Co 506 E 1 St Santa Ana Calif	2-9
Research Instrument Co P O Box 9168 Montavilla Station Portland 16 Ore	1-3-4-6-7-16	Baird-Atomic Inc 33 University Rd Cambridge 38 Mass	2-5-6-7-8-9-10-12	Exact Eng'g & Mfg Inc P O Box 668 Oceanside Calif	7
Rixon Electronics Inc 2114 Reddie Dr Silver Spring Md	8-10	Barker Sales Co 996 Edgewater Ave Ridgefield NJ	1-3-7-9-11	Federal Equipment Co 38 Brady St San Francisco 3 Calif	1-8
Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	2	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	7-10	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	2
Shalleross Mfg Co Jackson & Pusey Aves Collingdale Pa	7-9-16	Barkley & Dexter Laboratories 50 Frankfort St Fitchburg Mass	1-8-9	First Electronics Corp 117 Blue Hill Ave Boston 19 Mass	13
Shasta Div Beckman Instruments Inc P O Box 296 Station A Richmond Calif	7	Basic Controls Co 1714 Westwood Blvd Los Angeles 24 Calif	2-8	Fischer & Porter Co 478 Warminster Rd Hatboro Pa	2-7
Simmonds Aerosecurities Inc 105 White Plains Rd Tarrytown NY	1-9	Beckman/Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	2-3-4-5-8-9-10-11-12-13	Forro Scientific Co 833 Lincoln St Evanston Ill	3-5-6-10-12
Southwestern Industrial Electronics Co 2831 Post Oak Rd Houston 19 Texas	1-4-5	Beckman/Helipot Corp Newport Beach Calif	11	Foto-Video Labs Inc 25 Amity St Little Falls NJ	2
Special Instruments Lab Inc 312 W Vine Ave Knoxville 02 Tenn	6-7	Beckman Instruments Inc Data & Control Systems Scientific Instrument Div 325 N Muller Ave Anaheim Calif	2-3-9-13	Franklin Electronics Inc Box 113 Bridgeport Pa	2-10-12
Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	13	Bendix Aviation Corp Cincinnati Div 3130 Wasson Rd Cincinnati 8 Ohio	2-3-9	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	2-6-8-9-11
Sticht Co Herman H 27 Park Pl New York 7 NY	6-7-16	Berger Communications 109-01 72 Rd Forrest Hills LI NY	6	General Electric Co X-Ray Dept 4855 Electric Ave Milwaukee 1 Wis	9-10
Sullivan Ltd H W 80 Shore Rd Port Washington NY	1-2-3-4-5-7-15-16	B. J. Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	2-12	Glass Eng'g Labs Inc 601 O'Neill St Belmont Calif	5
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	6-8	Black Light Corp of America 5114 Walnut Grove Ave San Gabriel Calif	12	Goldak Co 1544 W Glenoaks Blvd Glendale 1 Calif	5-10-12
Tri-R Instruments 24-15 44 Rd Long Island City 1 NY	12-13	Hoesch Mfg Co 45 River St Danbury Conn	2-9	Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	12
Ultradyne Eng'g Labs P O Box 3308 Albuquerque New Mex	3	Boulin Instrument Corp 10 1 St Pelham NY	1-3-6-9-11	Hallierafters Co 4401 W 5 Av Chicago 24 Ill	2-3-13
United Audio Products Div United Optical Mfg 202 E 19 St New York 3 NY	16	Bowmar Instrument Corp 2415 Pennsylvania St Ft Wayne Ind	7-11	Hammer Electronics Co Princeton NJ	10-12
United Control Corp 4540 Union Bay Pl Seattle 5 Wash	7-12-13-16	Briggs Associates 10 DeKalb St Norristown Pa	2-3-6-9-13	Hansen Co Wm 165 Silverbrook Ave Niles Mich	12
Waters Mfg Inc Boston Post Rd Wayland Mass	5	Bristol Co P O Box 1790 EITT Waterbury 20 Conn	3-6-13	Haydon Co A W 232 N Elm St Waterbury 20 Conn	13
Weinschel Eng'g 10503 Metropolitan Ave Kensington Md	13	Buffalo Instrument Corp 1780 Elmwood Ave Buffalo 7 NY	1	Haydon Mfg Co 245 E Elm St Torrington Conn	13
Welch Mfg Co W M 1515 Sedgwick St Chicago 10 Ill	16	Burroughs Corp 6071 2 Ave Detroit 32 Mich	1-2-3-4-5-6-7-9	Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	2-4-8-13
West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	12-13	Burroughs Corp Electronic Tube Div Box 1226 Plainfield NJ	9-13	Hoffman Electronics Corp 3761 S Hill St Los Angeles 7 Calif	5-10
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	3	Burroughs Corp Electronic Instruments Div 1209 Vine St Philadelphia 7 Pa	3	Holland Electronics 2133 Central Dr S East Meadow NY	8
Williamson Development Co 317 Main St W Concord Mass	3-13	Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada	5-12	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	2-8
WRL Electronics Inc 3415 W Broadway Council Bluffs Iowa 10		Chatham Electronics Div Gera Corp W Mt Pleasant Ave Livingston NJ	12	Hupp Instru/mation Co 2119 Sepulveda Blvd Los Angeles 25 Calif	2-3-4-13
38—MEASUREMENT & TEST EQUIPMENT—COUNTERS					
Counters, electromagnetic	1	Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham	2-3-4-6-8-10-11-13	Hyon Mfg Co 707 S Raymond Ave Pasadena Calif	
Counters, electronic	2	Computer-Measurements Corp 5528 Vineland Ave N Hollywood Calif	2-3-4-9-13	I.-I.-S Instrument Corp 4525 W 160 St Cleveland 11 Ohio	2-3-4-13
Counters, events-per-unit time	3	Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	3	Industrial Research Labs Div Aerona Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	2-3-4-7-8-13
Counters, frequency	4	Cramer Controls Corp Centerbrook Conn	13	Industrial Timer Corp 1407 McCarter Hwy Newark 4 NJ	13
Counters, geiger	5	Cyclotron Specialties Co P O Box 1000 Moraga Calif	1	Instrumentation Associates 17 W 60 St New York 23 NY	7
Counters, impulse	6	Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	2-5-8	Instruments Inc 122 N Madison St Tulsa Okla	5
Counters, mechanical	7	Deitz Co S J 9 E Wesley St S Hackensack NJ	2	Instruments Inc 122 N Madison St Tulsa Okla	5
Counters, photoelectric	8	Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wis	7-11	I Q Industries 1714 Westwood Blvd Los Angeles 24 Calif	2-8
Counters, preset	9	Douglas Radio Labs 176 Norfolk Ave Boston 19 Mass	5-10	Jack Scientific Instrument Co Bill 143 Cedros St Solana Beach Calif	1-2
Counters, radiation	10	Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	5-10-12	Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md	2-3-9-13
Counters, revolution	11	Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	2-13	Kollman Instrument Corp Standard Coil Products Sub 80-08 45 Ave Elmhurst 73 NY	11
Counters, scintillation	12	Dunlap Electronics 764 9 St Des Moines 14 Iowa	2-4	Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass	2-3-13
Counters, time-measuring	13	Durant Mfg Co 1950 N Buffum St Milwaukee 1 Wis	1-2-7-8-9-11	Landis & Gyr 45 W 45 St New York 36 NY	1-6-9
Abrams Instrument Corp 606 E Shiawassee St Lansing 1 Mich	1-6	Eberline Instrument Div Reynolds Electrical 805 Early St Santa Fe New Mex	5-10-12	Landsverk Electrometer Co 560 W Garfield Ave Glendale 4 Calif	5-10
Advanced Instruments Inc 21 Oakcrest Rd Needham 92 Mass	5-10			Larson Instrument Co 24 Orchard St Tarrytown NY	2
Advance Electronics Lab Inc 249 Terhune Ave Passaic NJ	2-4-13			Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	4
Advance Instrument Corp 1709 F St Belmar NJ	2			Leighton Labs H W York Rd & Sunset Lane Hatboro Pa	5
				Lumenite Electronic Co 407 S Dearborn St Chicago 5 Ill	6-8
				Machinery Electrification Inc 35 Hudson St Northboro Mass	2-8-9

Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	2	Stevens Mfg Co Geo 6022 N Rogers Ave Chicago 30 Ill	7	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	1-2
Magnuson Engineers Inc 590 Emory St San Jose 10 Calif	2	Sticht Co Herman H 27 Park Pl New York 7 NY	11	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	1-2-3
Magtrol Inc 38 Virginia Pl Buffalo 2 NY	2-3-8-11	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	2	Gray Instrument Co 200 E Church Lane Philadelphia 44 Pa	3
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	2-3-10-12	Systron Corp 2055 Concord Blvd Concord Calif	2-3-4-6-8-9-10-11-12-13	Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ	1-3
Menlo Research Lab 538 Phelan Ave San Jose Calif	5-10-12	Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	10	Heath Co 305 Territorial Rd Benton Harbor Mich	1-3
Milgo Electronic Corp 7601 N W 37 Ave Miami 47 Fla	2	Taller & Cooper 75 Front St Brooklyn 1 NY	1-2-3-4-6-7-9-13	Julie Research Labs 556 W 168 St New York 32 NY	3
Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	2-3	Tally Register Corp 5300 14 Ave N W Seattle 7 Wash	6	Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	1-3
Nader Mfg Co 2661 S Myrtle Ave Monrovia Calif	2-6-8-9-11-13	Tarc Electronics Inc 48 Urban Ave Westbury LI NY	12	Muirhead & Co Ltd Beckenham Kent England	1-2-3
National Radiac Inc 475 Washington St Newark 2 NJ	12	Technical Associates 140 W Providencia Ave Burbank Calif	5-10-12	Muirhead Instruments Inc 677 5 Ave New York 22 NY	1-2-3
Navco Navigation Computer Corp 1621 Snyder Ave Philadelphia 45 Pa	9	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	4	New York Transformer Co 3 Ave Alpha NJ	2
Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	1-2-7	Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif	1-2-6	Ohmite Mfg Co 3601 Howard St Skokie Ill	3
Nevada Air Products Co P O Box 2472 Reno Nev	5-10	Teletronics Lab Inc 54 Kinkel St Westbury NY	13	Precision Capacitors Inc 150 W Cypress St Burbank Calif	1
Northeastern Eng'g Inc 25 S Bedford St Manchester NH	2-3-4	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	13	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	1-2-3
North Electric Co 553 S Market St Galion Ohio	6	Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass	5-10-12	Ram Electronics Inc 660 Industrial Ave Paramus NJ	1-2-3
NRD Instrument Co 6425 Etzel Ave St Louis 14 Mo	5-10-12	Tripl-T Electronics Co Box 5352 Pasadena Calif	2	Shallcross Mfg Co Jackson & Pusey Aves Collingdale Pa	3
Nuclear-Chicago Corp 223 W Erie St Chicago 10 Ill	5-10-12	Trott Electronics Inc 412 Smith St Rochester 6 NY	2-6-8-10-13	Shasta Div Beckman Instruments Inc P O Box 296 Station A Richmond Calif	2
Nuclear Corp of America Empire State Bldg New York NY	5-10	Universal Atomics Corp 50 Bond St Westbury LI NY	5-8-10-12	Southern Electronics Corp 239 W Orange Grove Ave Burbank Calif	1
Nuclear Development Lab P O Box 7034 Kansas City 13 Mo	5-10	Uniwave Inc 2 Marine St Farmingdale NY	7-11	Sullivan Ltd H W 80 Shore Rd Port Washington NY	1-2-3
Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	4-5-8-10-12	U S Instrument Corp P O Box 33E Charlottesville Va	6	Torocoil Co 2615 Bristol Rd Columbus 21 Ohio	2
Nuclear Measurements Corp 2460 N Arlington Ave Indianapolis 18 Ind	12	Veeder Root Inc 70 Sargeant St Hartford 2 Conn	1-6-7-9-11-13	United Transformer Corp 150 Varick St New York 13 NY	2
Nuclear Systems Div Budd Co 2950 Roberts Ave Philadelphia 32 Pa	10	Victor Adding Machine Co 3900 N Rockwell St Chicago 18 Ill	2-9	Welch Mfg Co W M 1515 Sedgwick St Chicago 10 Ill	1-2-3
Nucleonic Corp of America 196 Degraw St Brooklyn 31 NY	5-10-12	Victoreen Instrument Co 5806 Hough Ave Cleveland 3 Ohio	5-10-12		
Pantek Co P O Box 212 El Segundo Calif	2-3-4-9	Volk Radiochemical Co 5412 N Clark St Chicago 40 Ill	5-10-12		
Philips Electronics Inc 750 S Fulton Ave Mt Vernon NY	5-10-12	WacLine Inc 35 S St Clair St Dayton 2 Ohio	11		
Photobell Co 43 Vesev St New York 7 NY	1-2-6-8	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	2-7		
Photocon Research Products 421 N Altadena Drive Pasadena Calif	1-2-6-7-9-11	Walkirt Co 141 W Hazel St Inglewood 3 Calif	2-3-4-6-9-11-13		
Potter Aeronautical Corp P O Box 532 Union NJ	2-3-4-6-9-11	Waltham Watch Co 221 Crescent St Waltham 54 Mass	1-7-11-13		
Precision Radiation Instruments Inc 4223 W Jefferson Blvd Los Angeles 16 Calif	5-12	West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	2		
Production Instrument Co 710 W Jackson Blvd Chicago 6 Ill	1-6-7-8-9-11	Western Radiation Lab 1107 W 24 St Los Angeles 7 Calif	5-10		
Production Research Corp Thornwood NY	2-3-4-6-13	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	13		
Radiation Counter Labs Inc 5121 W Grove St Skokie Ill	10-12	Wood Counter Lab N 1525 E 53 St Chicago 15 Ill	5-10-12		
Radio Corp of America Camden 2 NJ	5				
Ram Meter Inc 1100 Hilton Rd Ferndale 20 Mich	6				
Ransom Research 323 W 7 St San Pedro Calif	2-3-4-6-9-13				
Remington Rand Univac Div Sperry Rand Corp 315 4 Ave New York 10 NY	2				
Ripley Co 1 Factory St Middletown Conn	2-3				
Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	2-6				
Rockwell Eng'g Co 2133 E 45 St Indianapolis 5 Ind	8				
Royson Eng'g Co 103 N Penn St Hatboro Pa	1-7				
Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	2-3-4-8-9-13				
Scherr Co George 200 Lafayette St New York 12 NY	11				
Schirmer-National Alarm Co 20 Westside Ave Bergenfield NJ	8				
Sensory Inc Pleasantville Rd New Vernon NJ	1-2-6-8-9				
Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	2-10				
Servo-Recording Instruments Inc 1815 W Van Buren St Phoenix Ariz	3-5-10-12				
Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	2-3-4-6-9-13				
Southwest Products Inc Alamo Downs Rt 4 San Antonio Texas	8				
Spencer Mfg Co 3253 N Cicero Ave Chicago 41 Ill	1-6-9				
Standard Electric Time Co 89 Logan St Springfield 2 Mass	2-4-11-13				
Standard Instruments P O Box 11556 Dallas 18 Texas	5				

40—MEASUREMENT & TEST EQUIPMENT—GENERATORS

Generators, A-F signal	1
Generators, color TV bar	2
Generators, color TV dot	3
Generators, color TV signal	4
Generators, F-M signal	5
Generators, harmonic	6
Generators, microwave signal	7
Generators, noise	8
Generators, picture signal	9
Generators, pulse	10
Generators, R-F signal	11
Generators, single-sideband	12
Generators, square wave	13
Generators, sweep	14
Generators, sync	15
Generators, sync. stretcher	16
Generators, sync. studio TV	17
Generators, timing market	18
Generators, TV composite signal	19
Generators, TV signal	20
Generators, UHF	21
Generators, ultrasonic	22
Generators, VHF	23
Generators, video signal	24
Generators, waveform	25
Multipliers, frequency	26

39—MEASUREMENT & TEST EQUIPMENT—DECADE BOXES

Decade boxes, capacitance	1
Decade boxes, inductance	2
Decade boxes, resistance	3

Aero Electronics Co 1512 N Wells St Chicago 10 Ill	2	Acoustica Associates Shore Rd Glenwood Landing LI NY	22
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	2	Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	1-11-12
Beckman/Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	1	Admiral Corp 3800 W Cortland St Chicago 47 Ill	3
Cinema Eng'g Div Aerovox Corp 1100 Chestnut St Burbank Calif	3	Aircraft Radio Corp Boonton NJ	7
Clarostat Mfg Co Washington St Dover NH	3	Airmec Ltd High Wycombe Buckinghamshire England	1-11
Consolidated Resistance Co of America 44 Prospect St Yonkers 1 NY	3	Alcar Instruments Inc 17 Industrial Ave Little Ferry NJ	22
Cornell-Dubilier Electric Corp 333 Hamilton Blvd S Plainfield NJ	1-3	Alpha Instrument Co 43 Hempstead St New London Conn	1-5-11
Daven Co Route 10 Livingston NJ	3	Altec Lansing Corp 1515 S Manchester Ave Anaheim Calif	8
Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	3	Alto Scientific Co 855 Commercial St Palo Alto Calif	10
Electronic Measurements Co Lewis St & Maple Ave Eatontown NJ	3	Amerac Inc 116 Topsfield Rd Wenham Mass	7-26
Endevco Corp 161 E California St Pasadena Calif	1	American Electronic Laboratories 121 N 7 St Philadelphia 6 Pa	10-13-14-18
Epo Electronics Inc 140 Liberty St New York 6 NY	3	American Research & Mfg Corp 920 Halpine Ave Rockville Md	26
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	1-3	American Scientific Development 336 S Main St Fort Atkinson Wis	3-9
Fidelity Amplifier Co 703 Willow St Chicago 14 Ill	3		

American Time Products Inc 580 5 Ave New York 36 NY	13	Electronic Tube Corp 1200 E Mermaid Lane Philadelphia 18 Pa	14	Kintel (Kay Lab) 5725 Kearny Villa Rd San Diego 12 Calif	17-19
Antlab Inc 4950 N High St Columbus 14 Ohio	1-13	Electro-Pulse Inc 11861 Teale St Culver City Calif	10	Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass	7
Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	7	Engineering Associates 434 Patterson Rd Dayton 9 Ohio	5-7-21-23	Lambda-Pacific Eng'g Inc 14725 Arminta St Van Nuys Calif	7
Applied Research Inc 163-07 Depot Rd Flushing 58 NY	14-26	Eero Radio Labs Inc 637 Stewart Ave Garden City NY	12	Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	15
A R F Products Inc 7627 Lake St River Forest Ill	5-10-13	Ernst & Affiliates W Arthur 825 Hayes Ave Racine Wis	5	Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	10-11-21
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	1-12-13-26	Espey Mfg Co Congress & Ballston Ave Saratoga Springs NY	5	Lepel High Frequency Labs 54-18 37 Ave Woodside 77 NY	22
Beckman/Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	10	Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY	11-21-23	McDowell Electronics Inc 105 Forrest St Metuchen NJ	22
Bckey Electric Co 1327 S Main St Los Angeles 15 Calif	15	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	7-11-22-26	McKenna Laboratories 2503 Main St Santa Monica Calif	22
Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	8-22	Fisher Eng'g Inc P O Box 327 Huntington Ind	10	Majestic Int'l Corp 79 Washington St Brooklyn 1 NY	5-13-14-20-24-25
B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	5-10-11-14-21-23-26	Foto-Video Labs Inc 25 Amity St Little Falls NJ	2-3-4-9-10-13-15-16 17-18-19-20-24-25	Manson Laboratories Inc 207 Greenwich Ave Stamford Conn	6-10-11
Berkshire Labs 586 Bank Village Greenville NH	10-25	F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl	6-7-26	Manufacturers Eng'g & Equip Corp York Rd & Sunset Lane Hatboro Pa	14
B & K Mfg Co 3726 N Southport Chicago Ill	2-3-4	Franklin Electronics Inc Box 113 Bridgeport Pa	10	Marconi Instruments Ltd 44 New St New York 4 NY	5-7-11-14-21-23
Bozart Mfg Corp 315 Seigel St Brooklyn 6 NY	7	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	22	Massa Laboratories Inc 5 Fottler Rd Hingham Mass	22
Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ	22	General Communication Co 677 Beacon St Boston 15 Mass	7-10-11-24	Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY	7-11-21
Bolton Labs Inc W Main St Bolton Mass	1-5-7-11	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	22	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	1-8-13
Boonton Radio Corp Intervale Rd Boonton NJ	5-11-14	General Precision Lab Inc 63 Bedford Rd Pleasantville NY	2-3-4-7-15-19-20	Measurements Corp Boonton NJ	1-5-10-13-20-21
Branson Instruments Inc 37 Brown House Rd Stamford Conn	22	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	1-7-8-10-11-13 14-21-22-23	Metroneix Inc Mill Lane Waterford Conn	1-6-11
Brubaker Electronics Inc 3652 Eastham Dr Culver City Calif	10-18	General Ultrasonics Co 67 Mulberry St Hartford 3 Conn	22	Microlab Okner Pkwy Livingston NJ	6-26
Bruno-New York Industries Corp 460 W 34 St New York 1 NY	7-11-21	GPS Instrument Co 811 Boylston St Boston 16 Mass	8	Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	22
Burr-Brown Research Corp Route 4 Box 139 Tucson Ariz	13	Grand RaTronics Inc 17360 Hayes Rd Grand Haven Mich	22	Moloney Electric Co 5390 Bircher Blvd St Louis 20 Mo	10
Burroughs Corp 6071 2 Ave Detroit 32 Mich	10-13	Grem Eng'g Co 488 1 St Brooklyn 15 NY	7	Muirhead Instruments Inc 677 5 Ave New York 22 NY	1
Burroughs Corp Electronic Instruments Div 1209 Vine St Philadelphia 7 Pa	10	Guild Electronics Inc 388 Broadway New York 13 NY	21	Navco Navigation Computer Corp 1621 Snyder Ave Philadelphia 45 Pa	10-13
Canoga Corp 5955 Sepulveda Blvd Van Nuys Calif	8-14	Gulton Industries Inc 212 Durham Ave Metuchen NJ	22	Nevada Air Products Co P O Box 2472 Reno Nev	22
Cascade Research Corp 53 Victory Lane Los Gatos Calif	7	Hall Sonic Eng'g Co 2402 2 St Peru Ill	22	N J E Corp 345 Carnegie Ave Kenilworth NJ	10
Cavitron Electron Oscillator Co Div Short Wave Plastic Forming 355 N Newport Blvd Newport Beach Calif	22	Hamner Electronics Co Princeton NJ	10-13-25	Norrman Laboratories Ernst Williams Bay Wis	18
Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill	12	Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	4-15-19-20-24	Northeast Electronics Corp P O Box 425 Concord NH	1
CG Electronics Corp 305 Dallas St N E Albuquerque New Mex	7-21-33	Harris Transducer Corp Woodbury Conn	22	Northeast Scientific Corp 617 Concord Ave Cambridge 38 Mass	7
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham	2-3-4-10- 13-15-17	Harvey-Wells Electronics Inc North St Southbridge Mass	7	Nuclear-Electronics Corp 3632 W Cumberland St Philadelphia 32 Pa	10-11-13
Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	7-10-12-21	Heath Co 305 Territorial Rd Benton Harbor Mich	1-11-13-14-20	Pace Electrical Instruments Co 70-31 84 St Glendale 27 LI NY	1-2-3-11-13-14
Clough-Brengle Co 6014 Broadway Chicago 40 Ill	1-7-11-14-21-23	Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	1-5-7-10-11-13-14 18-21-23-24-25	Pacific Transducer Corp 11836 W Pico Blvd Los Angeles 64 Calif	1-14
Collins Radio Co 855 35 St N E Cedar Rapids Iowa	1-23	Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	1-2-3-4-5-6-8-9-10-11-13 14-15-19-21-22-23-24-25	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	10
Communication Measurements Lab 350 Leland Ave Plainfield NJ	22	Hill Electronic Eng'g & Mfg Co New Kingstown Pa	1-11	Panoramic Radio Products Inc 10 S 2 St Mt Vernon NY	14
Community Eng'g Corp Box 824 State College Pa	14-23	Holtzer Cabot Div Nat'l Pneumatic Co 125 Amory St Boston 19 Mass	6	Philamon Labs Inc 90 Hopper St Westbury LI NY	13
Conn Ltd C G 1101 E Beardsley Ave Elkhart Ind	1	Hycon Mfg Co 707 S Raymond Ave Pasadena Calif	2-3-5-8	Philbrick Researches Inc George A 230 Congress St Boston 10 Mass	9
Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	5-21	Ideal Electric & Mfg Co 300 E 1 St Mansfield Ohio	15	Phileo Corp Accessory Div "A" & Allegheny Ave Philadelphia 34 Pa	2-3-11-14
Crosby Labs Inc Box 233 Robbins Lane Hicksville NY	12	Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	7-26	Phileo Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	2-3-4-7-19
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	22	Industrial Test Equipment Co 55 E 11 St New York 3 NY	1	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	2-3-4-7-19
Dalmator Co Div Dalmo Victor Co Div Textron Inc 1375 Clay St Santa Clara Calif	25	Intercontinental Dynamics Corp 170 Coolidge Ave Englewood NJ	8	Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	6-7-8-26
DeMornay-Bonardi Corp 780 S Arroyo Pky Pasadena Calif	6-7-8-26	Jackson Electrical Instrument Co 18 S Patterson Blvd Dayton 2 Ohio	1-2-4-14-20	Potter Instrument Co 115 Cuttermill Rd Great Neck NY	10-18
Diehl Mfg Co Finderne Ave Somerville NJ	14	Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md	10	Power Supplies Inc 1005 Olive St Highland Ill	22
Donner Scientific Co 888 Galindo St Concord Calif	1	Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	7-11-14-20-21-23	Precise Development Corp 2 Neil Ct Oceanside NY	1-2-3-4-5-11-13-14-20
Douglas Microwave Co 252 E 3 St Mt Vernon NY	26	Johnson Co E F Waseca Minn	11-12	Precision Apparatus Co 70-31 84 St Glendale 27 LI NY	1-2-3-11-13-14
Dunlap Electronics 764 9 St Des Moines 14 Iowa	10-13-18	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	6-7-21-26	Production Research Corp Thornwood NY	6-7-11-18
Dyna-Empire Inc 1075 Stewart Ave Garden City LI NY	8	Kato Eng'g Co 1415 1 Ave Mankato Minn	1-15	Pulse Techniques Inc 1411 Palisade Ave W Engelwood NJ	1
Edgerton, Gerneshausen & Grier 160 Brookline Ave Boston 15 Mass	18	Katolight Corp 1415 1 Ave Mankato Minn	1-15	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	1-2-3-4-9-15-16 17-19-20-22-24
Electric Specialty Co 211 South St Stamford 1 Conn	15	Kay Electric Co 14 Maple Ave Pine Brook NJ	2-3-4-5-7-8-9-10-11 14-19-20-21-22-23-24	Pye Telecommunications Ltd Newmarket Rd Cambridge England	1-5-10-23-25
Electrical & Physical Instrument Corp 42-19 27 St Long Island City 1 NY	10	Kinevox-Hallen Div Electromotion Co 1646 18 St Santa Monica Calif	18	Radar Engineers 401 E 45 St Seattle 5 Wash	13
Electronic Associates Inc Long Branch NJ	8			Radiation Counter Labs Inc 5121 W Grove St Skokie Ill	10
Electronic Instrument Co 84 Withers St Brooklyn 11 NY	1-11-14			Radiation Inc P O Box 37 Melbourne Fla	7-10
Electronic Measurements Corp 625 Broadway New York 12 NY	1-3-11-20			Radiation Instrument Co P O Box 733 Silver Spring Md	10
Electronic Research Associates 67 E Centre St Nutley 10 NJ	8			Radio City Products Co Centre & Glendale Sts Easton Pa	2-3-4-11-14-20-21-23

Radio Corp of America Commercial Electronic Products Camden 2 NJ 1-2-3-7-10-11-14-15-19-20-23	Walworth Co 60 E 42 St New York 17 NY 7-11	Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif 8-9
Research Electronics Lab Roslyn Pa 10	Wang Labs Inc 37 Hurley St Cambridge 41 Mass 10-25	Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif 3-4
Rese Eng'g Inc 731 Arch St Philadelphia 6 Pa 10	Waveforms Inc 333 6 Ave New York 14 NY 1-22	Industrial Test Equipment Co 55 E 11 St New York 3 NY 5
Riverbank Labs Eng'g Dept P O Box 65 Geneva Ill 1	Waveline Inc Passaic Ave Caldwell NJ 7	Industrial TV Inc 369 Lexington Ave Clifton NJ 8-9
Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md 8-10-13-18-26	Weinschel Eng'g 10503 Metropolitan Ave Kensington Md 1-7-10-13	Kintel (Kay Lab) 5725 Kearny Villa Rd San Diego 12 Calif 9-10
RS Electronics Corp 435 Portage Ave Palo Alto Calif 8	Wells-Gardner & Co 2701 N Kildare Ave Chicago 39 Ill 22	Lampkin Labs Inc R F D 1 Bradenton Fla 3-4
Rutherford Electronics Co 3707 S Robertson Blvd Culver City Calif 10-18	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa 15	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY 2
Saratoga Industries Congress & Ballston Ave Saratoga Springs NY 5	White Electron Devices Inc Roker 92 4 Ave Haskell NJ 8-14	Litton Industries Electronic Display Lab 1476 66 St Emeryville Calif 8
Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY 13-25	Wickes Eng'g & Construction Co 12 St & Ferry Ave Camden 4 NJ 2-3	Magnecord Div Midwestern Instruments Inc 1101 S Kilbourn Ave Chicago 24 Ill 2
Servomex Controls Ltd 80 Shore Rd Port Washington NY 10-13-14-25	Winston Electronics Inc 4312 Main St Philadelphia 27 Pa 2-3	Majestic Int'l Corp 79 Washington St Brooklyn 1 NY 9
Scientific Electric 105 Monroe St Garfield NJ 22	Wollensak Optical Co 850 Hudson Ave Rochester 22 NY 10	Maryland Electronic Mfg Corp 5009 Calvert Rd College Park Md 1-5-11
Scott Inc H H 385 Putnam Ave Cambridge 39 Mass 8	Woodwelding Inc 355 N Newport Blvd Newport Beach Calif 22	Maurer Inc J A 37-01 31 St Long Island City 1 NY 2
Service Instruments Corp 171 Official Rd Addison Ill 11		North Electric Co 553 S Market St Galion Ohio 2
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill 2-3-5-10-13-18-20		Northern Radio Co 143 W 22 St New York 11 NY 3
Skiatron Electronics & TV Corp 180 Varick St New York 14 NY 9-10-13-16-17-18		Panoramic Radio Products Inc 10 S 2 St Mt Vernon NY 4
Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England 1		Polarad Electronics Corp 43-20 34 St Long Island City 1 NY 8-9-12
Specialty Eng'g Electronics Co 79 Clifton Pl Brooklyn 38 NY 10-11		Potter Aeronautical Corp P O Box 532 Union NJ 3
Spectralab Instruments 404 N Halstead Ave Pasadena Calif 11-21-23-26		Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada 8-9-10
Spencer-Kennedy Labs Inc 1320 Soldiers Field Rd Boston 35 Mass 10		Pye Telecommunications Ltd Newmarket Rd Cambridge England 2-12
Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY 7-10		Radio Corp of America Camden 2 NJ 2-3-4-8-9-10
Star-Kimble Motor Div Miehle Printing Press & Mfg Co 200 Bloomfield Ave Bloomfield NJ 15		Ransom Research 323 W 7 St San Pedro Calif 3
Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill 12		Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md 1-6
Stoddart Aircraft Radio Co 6644 Santa Monica Blvd Hollywood 38 Calif 8-10		Seco Mfg Co 5015 Penn Ave S Minneapolis 19 Min 7
Sullivan Ltd H W 80 Shore Rd Port Washington NY 1		Setchell-Carlson Inc New Brighton St Paul 12 Minn 10
Sylvania Electric Products Inc 1740 Broadway New York 19 NY 7		Skiatron Electronics & TV Corp 180 Varick St New York 14 NY 8-9-10-11-12
Syston Corp 2055 Concord Blvd Concord Calif 18-26		Stelma Inc 190 Henry St Stamford Conn 12
Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY 1-11		Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY 3-6
Tally Register Corp 5300 14 Ave N W Seattle 7 Wash 10		Syston Corp 2055 Concord Blvd Concord Calif 3-5
Tarc Electronics Inc 48 Urban Ave Westbury LI NY 2-3-4-9-10-16-17-19-24		Tare Electronics Inc 48 Urban Ave Westbury LI NY 8-9-16-12
Technitrol Eng'g Co 1952 E Allegheny Ave Philadelphia 34 Pa 10		Tarzan Inc Sarkes E Hillside Drive Bloomington Ind 2-9-12
Tektronix Inc P O Box 831 Portland 7 Ore 10-13-18-25		Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY 4-7-8-9-10-12
Telechrome Mfg Corp 28 Ranick Dr 2-3-4-5-8-9-10-11-12-13-14-15		Tel-Instrument Electronics Corp 728 Garden St Carlstadt NJ 8
Amityville LI NY 16-17-18-19-20-24-25-26		Transvision Inc 460 North Ave New Rochelle NY 9-10
Teletro Industries Corp 35-18 37 St Long Island City 1 NY 11-21		TV Utilities Corp 112-33 Colonial Ave Corona 68 NY 2-3-5-7-8-9-10-11
Telerad Mfg Corp 1440 Broadway New York 18 NY 11		U S Recording Co 1121 Vermont Ave Washington 5 DC 2
Teletronics Lab Inc 54 Kinkel St Westbury NY 10-13-14-24		Varo Mfg Co 2201 Walnut St Garland Texas 3
Tel-Instrument Electronics Corp 728 Garden St 2-3-4-5-9-11-14-15		Virginia Electronics Co River Rd & B & O R R Washington 16 DC 2
Carlstadt NJ 17-19-20-21-23-24		Walkirt Co 141 W Hazel St Inglewood 3 Calif 3
Telonic Industries Inc 73 N 2 Ave Beech Grove Ind 5-6-7-10-11-14-21-23-24		Westronics Inc 3605 McCart Ft Worth Texas 11
Trad Electronics Corp 1001 1 Ave Asbury Park NJ 11-23		Wickes Eng'g & Construction Co 12 St & Ferry Ave Camden 4 NJ 8
Transitron Inc 186 Granite St Manchester NH 5-6-7-11-14-21-23		
TV Utilities Corp 112-33 Colonial Ave Corona 68 NY 15		
Universal Atomics Corp 50 Bond St Westbury LI NY 10-13		
U S Instrument Corp P O Box 33E Charlottesville Va 1		
Vectron Inc 1611 Trapelo Rd Waltham 54 Mass 7		
Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY 7		
Walkirt Co 141 W Hazel St Inglewood 3 Calif 10-13-25		

41—MEASUREMENT & TEST EQUIPMENT—MONITORS

Monitors, antennas phose	1
Monitors, audio	2
Monitors, frequency	3
Monitors, modulation	4
Monitors, phase angle	5
Monitors, power	6
Monitors, service	7
Monitors, video color	8
Monitors, video line	9
Monitors, video off-the-air	10
Monitors, VOR	11
Monitors, waveform	12

Advance Electronics Lab Inc 249 Terhune Ave Passaic NJ 5	Aircraft Radio Corp Boonton NJ 11	Alden Electronic & Impulse Recording Equip Co P O Box 125 Westboro Mass 7
Altec Lansing Corp 1515 S Manchester Ave Anaheim Calif 2	American Communications Corp 280 Broadway New York 17 NY 2	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va 5-6
Andrew Antenna Corp 606 Beech St Whitby Ontario Can 5	Andrew California Corp 941 E Maryland Ave Claremont Calif 1-5	Andrew Corp 363 E 75 St Chicago 19 Ill 1
Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio 6	Biddle Co James G 1316 Arch St Philadelphia 7 Pa 3	Blonder-Tongue Laboratories 9-25 Alling St Newark 2 NJ 9
Browning Labs Inc 750 Main St Winchester Mass 3-4	Buss-Clement-Doughten & Associates 201 B Studio Hill Chester Springs Pa 2-9	Capitol Transcription Service 1120-A Conn Ave NW Washington 6 DC 2
Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill 4	Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham 2-3-7-8	Collins Radio Co 855 35 St NE Cedar Rapids Iowa 2
Commercial Radio Sound Corp 652 1 Ave New York 16 NY 2	Conrac Inc 19217 D Foothill Blvd Glendora Calif 8-9-10	Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY 3
Dage TV Div Thompson Products W 10 St Michigan City Ind 8-9	Diamond Power Specialty Corp Lancaster Ohio 9-10	Eidson Electronic Co 1902 N 3 St Temple Texas 7
Electrend Products Corp Box 110 St Joseph Mich 4	Electric Regulator Corp Pearl St Norwalk Conn 3-6	Foto-Video Labs Inc 25 Amity St Little Falls NJ 9-12
Gates Radio Co 123 Hampshire St Quincy Ill 2-3-4	General Precision Lab Inc 63 Bedford Rd Pleasantville NY 8-9-10-12	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass 3-4
Gotham Audio Development Corp 2 W 46 St New York 36 NY 2		

42—MEASUREMENT & TEST EQUIPMENT—OSCILLATORS

Oscillators, audio	1
Oscillators, cavity	2
Oscillators, code	3
Oscillators, crystal	4
Oscillators, grid dip	5
Oscillators, microwave	6
Oscillators, pulse	7
Oscillators, R-F	8
Oscillators, sweep	9
Oscillators, tuning fork	10
Oscillators, ultra low frequency	11
Oscillators, ultrasonic	12
Oscillators, video pattern	13
Oscillators, video range	14

Acoustica Associates Shore Rd Glenwood Landing LI NY 12	Admittance Nanco Corp Marine St Farmingdale LI NY 2-6
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Airmec Ltd High Wycombe Buckinghamshire England	1-8	El-Tronics Inc Penn Ave Mayfield Pa	1	Muirhead Instruments Inc 677 5 Ave New York 22 NY	1-10-11-12
Alfred Electronics 897 Commercial St Palo Alto Calif	6-9	Engineered Electronics Co 506 E 1 St Santa Ana Calif	1-4-7	Mytron Mfg Co 4522 Brazil St Los Angeles 39 Calif	8
Alto Scientific Co 855 Commercial St Palo Alto Calif	5-7-8	Ereo Radio Labs Inc 637 Stewart Ave Garden City NY	8	Norrman Laboratories Ernst Williams Bay Wis	4
Amerac Inc 116 Topsfield Rd Wenham Mass	2-6-7-8	Essex Electronics 550 Springfield Ave Berkeley Heights NJ	8	North American Instruments Inc 2420 N Lake St Altadena Calif	9-11
American Coil Inc 21-28 45 Rd Long Island City 1 NY	8	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	1	Northern Radio Co 143 W 22 St New York 11 NY	8
American Electronics Co 1203 Bryant Ave New York 59 NY	3	Femo Inc Irwin Pa	1	Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	1-8
American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	6	Foto-Video Labs Inc 25 Amity St Little Falls NJ	7-13-14	Oltronix Corp 235 Underwood Dr Atlanta 5 Ga	1
American Time Products Inc 580 5 Ave New York 36 NY	10	Frequency Standards Inc PO Box 504 Asbury Park NJ	2-6-8	Pace Electrical Instruments Co 70-31 84 St Glendale 27 LI NY	1-8-9
Anulab Inc 4950 N High St Columbus 11 Ohio	10	P-I Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	2-6-8	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	3
Applied Research Inc 163-07 Depot Rd Flushing 58 NY	9-11	Gates Radio Co 123 Hampshire St Quincy Ill	4	Panoramic Radio Products Inc 10 S 2 St Mt Vernon N Y	9
Artted Co 367 Worthington St Springfield 3 Mass	8	General Coil Products Corp 43 Roselle St Mineola NY	8-12	Philamon Labs Inc 90 Hopper St Westbury LI NY	10
Avionics Ltd P O Box 200 Niagara-on-the-Lake Ontario Canada	6	General Communication Co 677 Beacon St Boston 15 Mass	6-7-8-9	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	2-6-7
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	1-5-7-8-9-11-12	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	1-4-6-7-8-9-10-12	Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	2-6
Bell & Gossett Co 8200 Austin Ave Morton Grove Ill	10-11-12	Greene Co L Charlton 314 Washington St Newton 58 Mass	8	Polytronic Research Inc 7660 Woodbury Dr Silver Spring Md	6
Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif	1	Guild Electronics Inc 388 Broadway New York 13 NY	8	Power Supplies Inc 1005 Olive St Highland Ill	12
Biddle Co James G 1316 Arch St Philadelphia 7 Pa	10	Gyro Electronics Co 325 Canal St New York 13 NY	4	Precise Development Corp 2 Neil Ct Oceanside NY	1-8-9-13
B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	2-8	Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	2-6-7	Precision Apparatus Co 70-31 84 St Glendale 27 LI NY	1-8-9
Bozart Mfg Corp 315 Seigel St Brooklyn 6 NY	6	Hammarlund Mfg Co 460 W 34 St New York 1 NY	4	Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	8
Boonton Electronics Corp 738 Speedwell Ave Morris Plains NJ	5-8	Harvey-Wells Electronics Inc North St Southbridge Mass	1	Production Research Corp Thornwood NY	2-6-7-8
Bulova Watch Co Electronics Div 40-01 61 St Woodside 77 NY	4	Heath Co 305 Territorial Rd Benton Harbor Mich	1-5-8-9	Pulse Techniques Inc 1411 Palisade Ave W Englewood NJ	1
Burroughs Corp 6071 2 Ave Detroit 32 Mich	1	Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	1-2-6-9-11-12-14	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	1-4-12
Burr-Brown Research Corp Route 4 Box 139 Tucson Ariz	1	Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	1-4-7-8-9-11-12-13-14	Radex Corp 2076 Elston Ave Chicago 14 Ill	1
Buss-Clement-Doughten & Associates 201 B Studio Hill Chester Springs Pa	1	Hill Electronic Eng'g & Mfg Co New Kingstown Pa	4-10-11	Radiation Inc P O Box 37 Melbourne Fla	6-7
Calif Technical Industries 1421 Old County Rd Belmont 10 Calif	6	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	1	Radio City Products Co Centre & Glendale Sts Easton Pa	1-8-9
Canoga Corp 5955 Sepulveda Blvd Van Nuys Calif	9	Hughes Products Hughes Aircraft Co 5340 W 104 St Int'l Airport Sta Los Angeles 45 Calif	6	Radio Corp of America 415 S 5 St Harrison NJ	1-8-9
Carol Electronics Corp 315 W Stephen St Martinsburg W Va	1	Hyon Eastern Inc 75 Cambridge Pkwy Cambridge 42 Mass	4-6	Radio Eng'g Products Ltd 1080 University St Montreal 3 Quebec Canada	1
Cavitron Electron Oscillator Co Div Short Wave Plastic Forming 355 N Newport Blvd Newport Beach Calif	2-5-6-8-12	Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY	8-12	Ransom Research 323 W 7 St San Pedro Calif	1-8-10-12
Century Electronics Co 34 Oleander St Cocoa Fla	4	Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	1-2-3-4-12	Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 54 Mass	12
CG Electronics Corp 395 Dallas St N E Albuquerque New Mex	1-11	Industrial Test Equipment Co 55 E 11 St New York 3 NY	1-10	Reeves-Hoffman Div Standard Electronics Corp 145 Cherry St Carlisle Pa	4
CGS Laboratories Inc 391 Ludlow St Stamford Conn	2-6-7-9	Instrument Labs 315 W Walton Pl Chicago 10 Ill	1	Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	6
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London SE 26 England	1-7-8	International Research Associates 2221 Warwick Ave Santa Monica Calif	1	Riverbank Labs Eng'g Dept P O Box 65 Geneva Ill	10-11
Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	6-7-9	Jackson Electrical Instrument Co 18 S Patterson Blvd Dayton 2 Ohio	1-3-9	Ross Mfg Co 2538 Peterson Ave Chicago 45 Ill	1-8
Collins Radio Co 855 35 St N E Cedar Rapids Iowa	4	Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	8	Scala Radio Co 2814 19 St San Francisco 10 Calif	1
Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	8	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	2-6-8	Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	1-4-11
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	12	Johnson Co E F Waseca Minn	8	Seneca Falls Machine Co 314 Fall St Seneca Falls NY	1
Daven Co Route 10 Livingston NJ	1	Kay Electric Co 14 Maple Ave Pine Brook NJ	1-8	Servomex Controls Ltd 80 Shore Rd Port Washington NY	9-11
Deagan Inc J C 1770 W Berteau Ave Chicago 13 Ill	10	Knights Co James Church & Wells Sts Sandwich Ill	4	Shasta Div Beckman Instruments Inc P O Box 296 Station A Richmond Calif	1-12
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	6	Krohn Hite Corp 580 Massachusetts Ave Cambridge 39 Mass	1-11-12	Shepard Labs Inc 480 Morris Ave Summit NJ	7
Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	2-6-8	Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass	6	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	3-12-13-14
Donner Scientific Co 888 Galindo St Concord Calif	1-11-12	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	1-10	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	1-7-11-12
Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	1	Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	2	Southwestern Industrial Electronics Co 2831 Post Oak Rd Houston 19 Texas	1-11-12
Douglas Microwave Co 252 E 3 St Mt Vernon NY	2-6	Lehigh Valley Electronics Eng'g & Mfg Co 215 S 3 St Allentown Pa	4	Spectralab Instruments 404 N Halstead Ave Pasadena Calif	6-8
Dunlap Electronics 764 9 St Des Moines 14 Iowa	1	Lepel High Frequency Labs 54-18 37 Ave Woodside 77 NY	12	Standard Crystal Co 1714 Locust St Kansas City Mo	4
Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	7-8	Lysco Mfg Co 1401 Clinton St Hoboken NJ	3-4-5-8	Stanwyck Winding Co 137-151 Walsh Ave Newburgh NY	8
Electrend Products Corp Box 110 St Joseph Mich	8	McKenna Laboratories 2503 Main St Santa Monica Calif	12	Stewart Eng'g Co Box 277 Soquel Calif	6
Electronic Instrument Co 84 Withers St Brooklyn 11 NY	1-8	Majestic Int'l Corp 79 Washington St Brooklyn 1 NY	1-7	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	2
Electronic Measurements Co Lewis St & Maple Ave Eatontown NJ	1	Manson Laboratories Inc 207 Greenwich Ave Stamford Conn	4-8	Sullivan Ltd H W 80 Shore Rd Port Washington NY	1-5
Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	7-8	Marconi Instruments Ltd 44 New St New York 4 NY	6-7-8	Swan Electronics Co 5016 N Austin Ave Chicago 30 Ill	8
Electronic Tube Corp 1200 E Mermaid Lane Philadelphia 18 Pa	9	Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY	2-8	Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	1-3-4-5-8
Electro-Pulse Inc 11861 Teale St Culver City Calif	7	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	1-4-8	Tarc Electronics Inc 48 Urban Ave Westbury LI NY	13-14
Electro Sound Corp 115 Halleck St Boston 15 Mass	1	Metronix Inc Mill Lane Waterford Conn	1-11-12	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	4-13-14
		Muirhead & Co Ltd Beckenham Kent England	1-10-11		

Telectro Industries Corp		
35-18 37 St	1-2-3-4-5-6-7-8	
Long Island City 1 NY	9-10-11-12-14	
Tele Dynamics Inc		
32 & Walnut Sts		
Philadelphia 4 Pa	1-4-6-7-8-9	
Teletronics Lab Inc		
54 Kinkel St Westbury NY	1-8-9-11	
Textran Corp		
Box 4252 Austin 51 Texas	4	
Times Facsimile Corp		
540 W 58 St New York 19 NY	10	
Transitron Inc		
186 Granite St Manchester NH	2-6-8-9	
Triplett Electrical Instrument Co		
Harmon Rd Bluffton Ohio	8-9-11-13-14	
Ultradyn Eng'g Labs		
P O Box 3308 Albuquerque New Mex	1	
Uniwave Inc		
2 Marine St Farmingdale NY	6-7-8	
Vari-L Co		
432 Fairfield Ave Stamford Conn	9	
Vectron Inc		
1611 Trapelo Rd Waltham 54 Mass	6	
Virginia Electronics Co		
River Rd & B&O RR Washington 16 DC	1	
Vokar Corp		
7300 Huron River Dr Dexter Mich	8	
Voron & Co George		
835 N 19 St Philadelphia 30 Pa	1-3-6	
Walkirt Co		
141 W Hazel St Inglewood 3 Calif	4-10	
Waveforms Inc		
333 6 Ave New York 14 NY	1-11-12	
Wells-Gardner & Co		
2701 N Kildare Ave Chicago 39 Ill	12	
Westbury Electronics Inc		
300 Shames Dr Westbury NY	4-8	
Wheeler Labs Inc		
122 Cutter Mill Rd Great Neck NY	6-9	
White Electron Devices Inc Roger		
92 4 Ave Haskell NJ	6	
Wollensak Optical Co		
850 Hudson Ave Rochester 22 NY	7	
Woodwelding Inc		
355 N Newport Blvd		
Newport Beach Calif	2-5-8-12	
WRL Electronics Inc		
3415 W Broadway Council Bluffs Iowa	3	

43—MEASUREMENT & TEST EQUIPMENT—OSCILLOGRAPHS

Oscillographs, cathode-ray	1
Oscillographs, direct writing	2
Oscillographs, multi-channel	3
Oscillographs, multi-element	4
Oscillographs, portable	5
Oscillographs, projection	6
Oscillographs, recording	7
Oscillographs, transient study	8

Acton Laboratories		
533 Main St Acton Mass	7	
American Electronic Laboratories		
121 N 7 St Philadelphia 6 Pa	1	
Bolton Labs Inc		
W Main St Bolton Mass	1	
Bristol Co		
P O Box 1790 EITT Waterbury 20 Conn	7	
Browning Labs Inc		
750 Main St Winchester Mass	1	
Brush Electronics Co		
Div Clevite Corp		
3405 Perkins Ave		
Cleveland 14 Ohio	2-3-4-5-7-8	
Brush Electronics Co Texas Div		
3732 Westheimer Rd Houston 6 Texas	3-4-5-7	
Central Electronics Inc		
1247 W Belmont Ave Chicago 13 Ill	1	
Central Research Labs		
Red Wing Minn	1-2-3-7-8	
Century Electronics Co		
34 Oleander St Cocoa Fla	2-3-4	
Cinema-Television Ltd		
Worsley Bridge Rd Lower Sydenham		
London SE 26 England	1-3-7	
Consolidated Electrodynamics Corp		
300 N Sierra Madre Villa		
Pasadena Calif	2-3-1-5-7	
Cossor (Canada) Ltd		
301 Windsor St		
Halifax Nova Scotia Canada	1-2-5-6	
Crosby Labs Inc		
Box 233 Robbins Lane Hicksville NY	1	
Du Mont Labs Inc Allen B		
760 Bloomfield Ave Clifton NJ	1-5-7	
Edin Co		
207 Main St Worcester 8 Mass	7	
Electro-Medical Lab Inc		
S Woodstock 10 Vt	2	
Electronic Instrument Co		
84 Withers St Brooklyn 11 NY	1	

Electronic Measurements Corp		
625 Broadway New York 12 NY	1	
Electronic Tube Corp		
1200 E Mermaid Lane		
Philadelphia 18 Pa	3-4-5	
Feiler Eng'g & Mfg Co		
3026 N Monticello Ave Skokie Ill	1-5	
Franklin Electronics Inc		
Box 113 Bridgeport Pa	1	
General Electric Co Apparatus Sales Div		
1 River Rd Schenectady 5 NY	4-7	
Geotechnical Corp		
3712 Haggard Dr Dallas 9 Texas	2-3-4-7	
Gruen Industries Inc		
Time Hill Cincinnati 6 Ohio	1	
Hamilton Watch Co Allied Products Div		
Columbia Ave Lancaster Pa	3-7	
Hathaway Instrument Div		
Hamilton Watch Co		
5800 E Jewell Ave Denver 22 Colo	3-4-5-7	
Heath Co		
305 Territorial Rd Benton Harbor Mich	1	
Heiland Div Minneapolis-Honeywell		
5200 E Evans Ave Denver 22 Colo	2-3-5-7-8	
Hewlett-Packard Co		
275 Page Mill Rd Palo Alto Calif	1	
Hickok Electrical Instrument Co		
10514 Dupont Ave Cleveland 8 Ohio	1-5	
Hughes Aircraft Co		
Florence & Teale Sts Culver City Calif	8	
Hughes Products Hughes Aircraft Co		
5340 W 104 St Int'l Airport Sta		
Los Angeles 45 Calif	1-2-3-5-8	
Hycon Mfg Co		
707 S Raymond Ave Pasadena Calif	1	
Industrial TV Inc		
369 Lexington Ave Clifton NJ	1-5	
Jackson Electrical Instrument Co		
18 S Patterson Blvd Dayton 2 Ohio	1	
Lavoie Labs Inc		
Matzwan-Freehold Rd Morganville NJ	1	
Levinthal Electronic Products Inc		
3180 Hanover St Palo Alto Calif	1-3	
Massa Laboratories Inc		
5 Fottler Rd Hingham Mass	2	
Medcraft Electronic Corp		
426 Great East Neck Rd Babylon NY	1-2-3-4-7	
Mid-Century Instrument Corp		
611 Broadway New York 12 NY	2-3-7	
Midwestern Instruments		
P O Box 7186 Tulsa Okla	2-3-4-5-7	
Millen Mfg Co James		
150 Exchange St Malden 48 Mass	1-5	
Minn-Honeywell Regulator Co		
2753 4 Ave S Minneapolis 8 Minn	7	
Nuclear-Electronics Corp		
2632 W Cumberland St		
Philadelphia 32 Pa	1	
Offner Electronics Inc		
5320 N Kedzie Ave Chicago 25 Ill	2-3-7	
Pace Electrical Instruments Co		
70-31 84 St Glendale 27 LI NY	1	
Philco Corp Accessory Div		
"A" & Allegheny Ave Philadelphia 34 Pa	2	
Photographic Products Inc		
1000 N Olive St Anaheim Calif	7	
Photron Instrument Co		
6516 Detroit Ave Cleveland 2 Ohio	2-3-5-7	
Polytronic Research Inc		
7660 Woodbury Dr Silver Spring Md	5	
Precise Development Corp		
2 Neil Ct Oceanside NY	1	
Precision Apparatus Co		
70-31 84 St Glendale 27 LI NY	1	
Radio City Products Co		
Centre & Glendale Sts Easton Pa	1	
Radio Corp of America		
415 S 5 St Harrison NJ	1	
Railway Communications Inc		
9351 E 59 St Dayton 33 Mo	1-3	
Reeves Instrument Corp		
215 E 91 St New York 28 NY	3-7	
Sanborn Co		
175 Wyman St Waltham 54 Mass	2-3-5-7	
Seismograph Service Corp		
6200 E 41 St Tulsa 1 Okla	7-23	
Skiatron Electronics & TV Corp		
180 Varick St		
New York 14 NY	1-2-3-4-5-6-7-8	
Solartron Electronic Group Ltd		
Queens Rd Thames Ditton		
Surrey England	1-3-5-8	
Southwestern Industrial Electronics Co		
2831 Post Oak Rd Houston 19 Texas	5-7	
Stoelting Co C H		
424 N Homan Ave Chicago 24 Ill	2-3	
Sylvania Electric Products Inc		
1740 Broadway New York 19 NY	1	
Tektronix Inc		
P O Box 831 Portland 7 Ore	1-3-5-8	
Teletronics Lab Inc		
54 Kinkel St Westbury NY	1	
Texas Instruments Inc Industrial		
Instrumentation Div 3609 Buffalo Speedway		
Houston 6 Texas	2-3	
Trad Electronics Corp		
1001 1 Ave Asbury Park NJ	1	
Triplett Electrical Instrument Co		
Harmon Rd Bluffton Ohio	1-5	
Waterman Products Co		
2445 Emerald St Philadelphia 25 Pa	1	

44—MEASUREMENT & TEST EQUIPMENT—SPECIAL PURPOSE

Attenuators, A-F	1
Attenuators, logarithmic	2
Attenuators, R-F	3
Barreters	4
Bolometers	5
Cabinets, temperature test	6
Calibrators, sweep	7
Calibrators, UHF	8
Cameras, oscilloscope recording	9
Chronographs	10
Chronoscopes	11
Combustion test equipment	12
Comparators, automatic resistance	13
Comparators, circuit linearity	14
Comparators, voltage	15
Converters, frequency	16
Delay lines	17
Direction finders	18
Filters	19
Frequency measuring equipment	20
Integrators	21
Inverters	22
Locators, cable & line faults	23
Locators, open-short	24
Locators, pipe & cable	25
Microwave test equipment	26
Multivibrators	27
Pressure measuring equipment	28
Probes	29
Pulse equipment	30
Radar test sets	31
Recorders, frequency response	32
R-F interference equip.	33
Servos	34
Slotted lines	35
Specialties, capacitor	36
Specialties, inductance	37
Specialties, resistance	38
Spectrometers	39
Spectrophotometers	40
Spectroscopic source units	41
Synchoscopes	42
Thermocouples	43
Thermopiles	44
Tracers, signal	45
Transducers	47
Transducers, sonar	48
Tuning forks	49
Vibration measuring equipment	50
VSWR measuring equipment	51

Abrams Instrument Corp		
606 E Shawassee St Lansing 1 Mich	9	
Acoustica Associates		
Shore Rd Glenwood Landing LI NY	46-47	
Adler Electronics Inc		
1 LeFevre Lane New Rochelle NY	20-31	
Admittance Nameo Corp		
Marine St Farmingdale LI NY	3-26-31-50	
Advance Electronics Lab Inc		
249 Terhune Ave Passaic NJ	17	
Advance Industries Inc		
640 Memorial Dr Cambridge 39 Mass	31	
Advance Instrument Corp		
1709 F St Belmar NJ	34	
Advanced Electronics Inc		
94 Silas Deane Hwy Rocky Hill 9 Conn	29	
Aero Instrument Co		
11423 Vanowen St N Hollywood Calif	20	
Aerolite Electronics Corp		
507 26 St Union City NJ	29	
Aeronautical Electronics Inc		
P O Box 6527 Raleigh NC	18	
Aerovox Corp Pacific Coast Div		
2724 S Peck Rd Monrovia Calif	3	
Airborne Electronics Co		
6813 Troost Ave N Hollywood Calif	31	
Aircraft Radio Corp		
Boonton NJ	18	
AiResearch Mfg Co Div Garrett Corp		
9851 Sepulveda Blvd		
Los Angeles 45 Calif	28-46	
Airflo Instrument Co		
53 Addison Rd Glastonbury Conn	28-29-43	
Airmec Ltd High Wycombe		
Buckinghamshire England	9-20	
Airpax Products Co		
Middle River Baltimore 20 Mo	20	
Air Transport Mfg Co		
1114 N Sycamore Ave Los Angeles 38 Calif	6	

Airtron Inc	1101 W Elizabeth Ave Linden NJ	3-26-50	Barkley & Dexter	50 Frankfort St Fitchburg Mass	31	Cinema Eng'g Div Aerovox Corp	1100 Chestnut St Burbank Calif	1
Alcar Instruments Inc	17 Industrial Ave Little Ferry NJ	46-47	Earnes Development Co	213 W Baltimore Pike Lansdowne Pa	13	Cinema-Television Ltd	Worsley Bridge Rd	
Alford Mfg Co	299 Atlantic Ave Boston 10 Mass	35-50	Barton Electronics Inc	1000 Farmington Ave W Hartford 7 Conn	46	Lower Sydenham	London SE 26 England	9-10-11-15-18 20-23-25-37
Alfred Electronics	897 Commercial St Palo Alto Calif	28	Bassett Inc	1314 NE 17 Ct Ft Lauderdale Fla	20	Clark Electronic Labs	Box 165 Palm Springs Calif	38-46-47
Allegany Instrument Co	1091 Wills Mountain Cumberland Md	21-46	Beckman/Heliport Corp	Newport Beach Calif	17-21	Clarostat Mfg Co	Washington St Dover NH	1-38
Allied Allegri Co	141 River Rd Nutley 10 NJ	43	Beckman Instruments Inc	Process Instruments Div		Clegg Labs Div Clegg Inc	Ridgedale Ave Morristown NJ	26
Allied Engraving & Stamping Co	17 Elm St Buffalo 3 NY	35	Beckman Instruments Inc	2500 Fullerton Rd Fullerton Calif	40	Cleveland Instrument Co	735 Carnegie Ave Cleveland 15 Ohio	46
Allison Labs Inc	14185 Skyline Dr La Puente Calif	19	Beckman Instruments Inc	Scientific Instruments Div		Clippard Instrument Lab	7374 Colerain Rd	
Aloe Scientific	5655 Kingsbury Blvd St Louis 12 Mo	28-43	Beckman & Whitley	2500 Fullerton Rd Fullerton 1 Calif	40	Cincinnati 24 Ohio		13
Alto Scientific Co	855 Commercial St Palo Alto Calif	34-50	Belfab Corp	973 E San Carlos Ave San Carlos Calif	9	Coaxial Connector Co	37 N 2 Ave Mt Vernon NY	1-3
Aremac Associates	50 S San Gabriel Blvd Pasadena Calif	9	Bell Aircraft Corp	11 Ramah Circle Agawam Mass	28	Coleman Instruments Inc	318 Madison St Maywood Ill	40
Amerac Inc	116 Topsfield Rd Wenham Mass	3-20-26-31	Bell Aircraft Corp	P O Box 1 Buffalo 5 NY	1-3-18-20-21-31	Colorado Research Corp	4697 E Evans Ave Denver 22 Colo	46
American Communications Corp.	280 Broadway New York 17 NY	1	Belock Instrument Corp	111-01 14 Ave College Point 56 NY	18	Columbia Technical Corp	61-02 31 Ave Woodside 77 NY	17
American Electronic Laboratories	121 N 7 St Philadelphia 6 Pa	31	Bendix Aviation Corp	Pacific Div		Colvin Labs Inc	364 Glenwood Ave E Orange NJ	46
American Electronics Inc	655 W Washington Blvd	39	Bendix Aviation Corp	11600 Sherman Way N Hollywood Calif	28	Community Eng'g Corp	Box 824 State College Pa	3
American Gyro Corp	3030 Nebraska Ave Santa Monica Calif	22-46	Bendix Aviation Corp	Bendix Radio Div		Condenser Products Div New Haven	Clock & Watch Co 140 Hamilton St	30-36
American Instrument Co	8030 Georgia Ave Silver Spring Md	6-9-28	Bendix Aviation Corp	East Joppa Rd Towson 4 Md	30-31	Conn Ltd C G	1101 E Beardsley Ave Elkhart Ind	20
American Machine & Foundry Co	1085 Commonwealth Ave Boston 15 Mass	27	Bendix Aviation Corp	1104 Fisher Bldg		Consolidated Avionics	66 Brooklyn Ave Westbury NY	19-20-28-34-46
American Machine & Foundry Co	Defense Products Group 1101 N Royal St	12-20-26-29-31-32-37	Bendix Aviation Corp	Detroit 2 Mich	12-18-31-34-47	Consolidated Electrodynamic Corp	300 N Sierra Madre Villa	28-29-39-46
American Microwave Corp	11754 Vose St N Hollywood Calif	26	Bernco Engineering Corp	2320 S Tibbs Ave Indianapolis 41 Ind	43	Corbin Corp	5419 56 Pl Riverdale Md	30-33
American Optical Co Instrument Div	Box A Buffalo 15 NY	40	Berndt-Bach Inc Auricon Div	6900 Romaine St Hollywood 38 Calif	9	Corning Glass Works	Corning NY	3
American Thermo Electric Co	7269 Santa Monica Blvd	43	B & F Instruments Inc	4732 N Broad St Philadelphia 41 Pa	46	Cossor (Canada) Ltd	301 Windsor St	
AMP Inc Chemical Dielectrics Div	155 Park St Elizabethtown Pa	30	Bishop & Co Platinum Works J	Malvern Pa	43	Halifax Nova Scotia Canada	9-43	
Ampex Corp	934 Charter St Redwood City Calif	32	B J Electronics Borg-Warner Corp	3300 Newport Ave	3-19-28-30-35-46-50	Crescent Eng'g & Research Co	5440 N Peck Rd El Monte Calif	28-29-46
Analogue Controls Inc	39 Roselle St Mineola NY	34	Blackburn Electronic Corp	Santa Ana Calif		Custom Components Inc	P O Box 248 Caldwell NJ	3
Anchor Specialty Mfg Co	Hollister Rd Teterboro NJ	19	Blonder-Tongue Laboratories	55 W 7 St Wyoming Pa	3	Dale Products Inc	Columbus Nebr	38
Andersen Labs Inc	39 Talcott Rd W Hartford Conn	17	Blonder-Tongue Laboratories	9-25 Alling St Newark 2 NJ	3	Dallons Labs	5066 Santa Monica Blvd	28-46
Anderton Electronic Lab	129 E 1800 S St Bountiful Utah	19	Blue M Electric Co	138 & Chatham St Blue Island Ill	6	Datran Electronics	3615 Aviation Blvd	46
Andrew Antenna Corp	606 Beech St Whitby Ontario Can	50	Bogart Mfg Corp	315 Seigel St Brooklyn 6 NY	31	Manhattan Beach Calif	46	
Andrew California Corp	941 E Marylind Ave Claremont Calif	35-50	Bolton Labs Inc	W Main St Bolton Mass	20-26-31	Daven Co	Route 10 Livingston NJ	1-2-3-17-20-38
Andrew Corp	363 E 75 St Chicago 19 Ill	35	Boonton Electronics Corp	738 Speedwell Ave Morris Plains NJ	36	Daytronic Corp	216 S Main St Dayton 2 Ohio	46
Anetsberger Bros	Northbrook Ill	6	Bourns Labs Inc	6135 Magnolia Ave Riverside Calif	46	Deagan Inc J C	1770 W Berteau Ave Chicago 13 Ill	48
Antlab Inc	4950 N High St Columbus 14 Ohio	21	Bowser Technical Refrigeration Div	Bowser Inc Terryville Conn	6	Dearborn Electronic Labs Inc	1421 N Wells Ct Chicago 10 Ill	36
Applied Electronics Co	213 E Grand Ave S San Francisco Calif	18	Branson Instruments Inc	37 Brown House Rd Stamford Conn	46	Decatur Electronic Industries Corp	203 Orinoco Dr Brightwater LI NY	29
Applied Physics Corp	362 W Colorado St Pasadena 1 Calif	39-40	Brew & Co Richard D	90 Airport Rd Concord NH	17	Decker Aviation Corp	1361 Frankford Ave Philadelphia 25 Pa	46
Applied Research Inc	163-07 Depot Rd Flushing 58 NY	3	Bristol Co	P O Box 1790 EITT		Defender Instrument & Regulator Co	Boody Ill	28
Arenberg Ultrasonic Laboratory	94 Green St Jamaica Plain 30 Mass	2-3-17	Brown Lab Inc	Waterbury 20 Conn	10-21-22-28-43-46	Defiance Eng'g & Microwave Corp	Beverly Airport Beverly Mass	3-5
Askania Regulator Co	240 E Ontario St Chicago 11 Ill	12	Brubaker Electronics Inc	750 Main St Winchester Mass	7-9	DeMornay-Bonardi Corp	780 S Arroyo Pkwy	20-26-31-50
Associated Testing Labs	409 Clinton Rd Caldwell NJ	6	Bruno-New York Industries Corp	3652 Eastham Dr Culver City Calif	17	Designers for Industry	4241 Fulton Pkwy	31
Atlantic Research Corp	301 N Columbus St Alexandria Va	46-47	Bruno-New York Industries Corp	460 W 34 St New York 1 NY	5-26	Detroit Controls Corp Norwood	Controls Unit 934 Washington St	28-46
Atlas Eng'g Co	176 Blue Hill Ave Roxbury 19 Mass	19	Brush Electronics Co	Div Clevite Corp		Norwood Mass	23-36	
Atmosphere Control Co	5315 Chester Ave Philadelphia 43 Pa	6	Brush Electronics Co	3405 Perkins Ave		Devo Eng'g Inc	P O Box 387 Caldwell NJ	28
Audio Instrument Co	133 W 14 St New York 11 NY	2	Brush Electronics Co	Cleveland 14 Ohio	13-20-28-29-46-50	Diamond Antenna & Microwave Corp	7 North Ave Wakefield Mass	3-20-26-31-35
Avionics Ltd	P O Box 200 Niagara-on-the-Lake	26-50	Budd Stanley Co	43-01 22 St		Digitronics Corp	35-10 36 Ave Long Island City 6 NY	17-30
Axler Associates Inc	102-42 43 Ave Corona 68 NY	39-40	Budelman Radio Corp	375 Fairfield Ave Stamford Conn	20	Dilectron Div Gudeman Co	2669 S Myrtle Ave Monrovia Calif	17
Baird-Atomic Inc	33 University Rd	5-39-40-41	Burnell & Co	45 Warburton Ave Yonkers 2 NY	17-19	Dit-Mco Inc Electronics Div	911 Broadway Kansas City Mo	23-24
Baldwin-Lima-Hamilton Corp	Electronics & Instrumentation Div	28-46	Burroughs Corp	6071 2 Ave Detroit 32 Mich	17-27	Dittmore-Freimuth Corp	2517 E Norwich St Milwaukee 7 Wis	10
Baldwin Products Corp	432 E Valley Blvd San Gabriel Calif	43	Burroughs Corp	Electronic Instruments Div		Doty Acoustical Electronic Labs	431 Broome St New York 13 NY	27
Barber-Colman Co	Rock St Rockford Ill	43	Burroughs Corp	1209 Vine St Philadelphia 7 Pa	17	Douglas Microwave Co	252 E 3 St Mt Vernon NY	26
Barker Sales Co	996 Edgewater Ave Ridgefield NJ	9-43	Calif Technical Industries	1421 Old County Rd Belmont 10 Calif	26-50	Du-Co Ceramics Co	Box 278 Saxonburg Pa	43
Barker & Williamson Inc	Canal & Beaver Sts Bristol Pa	17-19-30-50	Cambridge Instrument Co	Grand Central Terminal		Du Mont Labs Inc Allen B	760 Bloomfield Ave Clifton NJ	9-19-20-29-32
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Canadian Aviation Electronics Ltd	New York 17 NY	10-29-43-44	Dunlap Electronics	764 9 St Des Moines 14 Iowa	7-50
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Canadian Aviation Electronics Ltd	6214 Cote de Liesse Rd	17-31	Dwyer Eng'g Co	Pine St Ext Nashua NH	13-21-38
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Canoga Corp	St Laurent Quebec Canada	17-31	Dyna-Empire Inc	1075 Stewart Ave Garden City LI NY	20-47
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Carad Corp	5955 Sepulveda Blvd Van Nuys Calif	31			
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Carad Corp	2850 Bay Rd Redwood City Calif	17			
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Carborundum Co Global Div	Hyde Park Blvd Niagara Falls NY	38			
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Cascade Research Corp	53 Victory Lane Los Gatos Calif	26			
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Central Coil Co	1720 N Luett St Indianapolis 22 Ind	17			
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Central Scientific Co of Calif	1040 Martin Ave Santa Clara Calif	39-40-44			
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Chesapeake Instrument Corp	Shadyside Md	28-29-46-47			
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Chicago Aerial Industries Inc	1980 N Hawthorne Ave Melrose Park Ill	9			
Beckman/Berkeley Div Beckman	Instruments Inc 2200 Wright Ave	28-29-50	Chromatic Television Laboratories	1501 Broadway New York 36 NY	31			

Dynalysis Development Labs Inc 11941 Wilshire Blvd Los Angeles 25 Calif 16	Flight Research Inc P O Box 1-F Richmond 1 Va 9	Hays Corp Michigan City Ind 28
Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY 31-38	Fluoracarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ 29	Heiland Div Minneapolis-Honeywell 5200 E Evans Ave Denver 22 Colo 21
Eberline Instrument Div Reynolds Electrical 805 Early St Santa Fe N Mex 30	Forbes & Wagner Inc 343 Central Ave Silver Creek NY 17	Hett Associates 603 Grand Ave Englewood NJ 30
Edgerton, Germeshausen & Grier 160 Brookline Ave Boston 15 Mass 9	Foto-Video Labs Inc 25 Amity St Little Falls NJ 17-27	Hevi-Duty Electric Co 4212 W Highland Blvd Milwaukee 1 Wis 43
Edo Corp 13-10 111 St College Point 56 LI NY 47	Franklin Electronics Inc Box 113 Bridgeport Pa 30	Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif 30
Elco Mfg Co 137 Herrick Rd New Hyde Park LI NY 3-26-35	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY 37	Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio 7-8-29
Electric Regulator Corp Pearl St Norwalk Conn 20	Frequency Standards PO Box 504 Asbury Park NJ 16-20-26-31	Hill & Co E Vernon P O Box 189 Lake Geneva Wis 28
Electrical & Physical Instrument Corp 42-19 27 St Long Island City 1 NY 3-30	F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY 5-20-26-30-31-35-50	Holland Electronics 2133 Central Dr S East Meadow NY 3
Electro Impulse Lab Inc 208 River St Red Bank NJ 3-26-31-43-44	Fugle-Miller Labs Inc 301 Central Ave Clark NJ 17	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md 21-31
Electro-Medical Lab Inc S Woodstock 10 Vt 9-10	Gaertner Scientific Corp 1250 Wrightwood Ave Chicago 14 Ill 10-39	Hupp Instru/mation Co 2119 Sepulveda Blvd Los Angeles 25 Calif 20
Electronic Designs Inc 28 School St Yonkers NY 29	Gardner Electronics Co 2545 E Indian School Rd Phoenix Ariz 25	Hycon Eastern Inc 75 Cambridge Pkwy Cambridge 42 Mass 19
Electronic Instrument Co 84 Withers St Brooklyn 11 NY 29	Garrett Corp AirResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif 28-46	Hycon Mfg Co 707 S Raymond Ave Pasadena Calif 20
Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif 16-20-33	Gary Wells Co 361 Rockaway Ave Valley Stream NY 20	Illinois Testing Labs Inc 420 N LaSalle St Chicago 18 Ill 43
Electronic Tube Corp 1200 E Mermaid Lane Philadelphia 18 Pa 9	Gates Radio Co 123 Hampshire St Quincy Ill 20	I-L-S Instrument Corp 4525 W 160 St Cleveland 11 Ohio 20
Electron Products Inc 430 N Halstead St Pasadena 8 Calif 36	General Bronze Corp 711 Stewart Ave Garden City NY 18-19-31	Impact-O-Graph Corp 1900 Euclid Ave Cleveland 15 Ohio 29
Electro Products Labs Inc 4501 N Ravenswood Ave Chicago 40 Ill 29-46	General Communication Co 677 Beacon St Boston 15 Mass 26-30-31	Indikon Co 76 Coolidge Hill Rd Watertown 72 Mass 28-29
Electro-Pulse Inc 11861 Teale St Culver City Calif 8	General Controls Co 801 Allen Ave Glendale 1 Calif 43	Industrial Condenser Corp 3243 N California Ave Chicago 18 Ill 36
Electrovert Inc 489 5 Ave New York NY 3-26	General Electric Co Capacitor Dept John St Hudson Falls NY 36	Industrial Electronics Inc 8060 Wheeler St Detroit 10 Mich 28-29
Elektro Serv Co 480 Johnson Ave Brooklyn 37 NY 3-38	General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY 17	Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md 20-26-27
Ellison Draft Case Co 548 W Monroe St Chicago 6 Ill 12-28	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY 39-40-42-43	Industrial Test Equipment Co 55 E 11 St New York 3 NY 13-15-20-36
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo 50	General Electric Co X-Ray Dept 4855 Electric Ave Milwaukee 1 Wis 39	Industrial Transformer Corp Gouldsboro Pa 19
Elm Labs 10 Washington Ave Hastings-on-Hudson NY 20	General Precision Lab Inc 63 Bedford Rd Pleasantville NY 26	Instrument Development Labs Inc 67 Mechanic St Attleboro Mass 40
El Rad Mfg Co 2800 W Cullom Ave Chicago 18 Ill 17	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass 1-5-9-17-20-27-29-35-48-50	Instrument Resistors Co 1036 Commerce Ave Union NJ 38
Empire Devices Products Corp 38-15 Bell Blvd Bayside 61 NY 3	General Resistance Inc 577 E 156 St New York 55 NY 38	Insuline Corp of America 186 Granite St Manchester NH 6
Enveco Corp 161 E California St Pasadena Calif 29-30-46	General RF Fittings Inc 702 Beacon St Boston 15 Mass 3-5-20-35	International Radiant Corp 4 Manhasset Ave Port Washington NY 6
Engineering Associates 434 Patterson Rd Dayton 9 Ohio 20-26	Genisco Inc 2233 Federal Ave Los Angeles 61 Calif 46	International Research Associates 2221 Warwick Ave Santa Monica Calif 46
Entron Inc 4902 Lawrence St Bladensburg Md 3	Gertsch Products Inc 11846 Mississippi Ave Los Angeles 25 Calif 20	International Research & Development Corp 797 Thomas Lane Columbus 16 Ohio 20-29
Epsco Inc 588 Commonwealth Ave Boston 15 Mass 17	Giannini & Co G M 918 E Green St Pasadena Calif 28-29-46	International Telemeter Corp 2000 Stoner Ave Los Angeles 25 Calif 3
Erie Resistor Corp 644 W 12 St Erie 6 Pa 38	G & M Equipment Co 7315 Varna Ave N Hollywood Calif 26	I-T-E Circuit Breaker Co Special Products Div 601 E Erie Ave Philadelphia 34 Pa 3-26-50
Erwood Inc 1770 W Berteau Ave Chicago 13 Ill 29	Goldak Co 1544 W Glenoaks Blvd Glendale 1 Calif 25	Jack Scientific Instrument Co Bill 143 Cedros St Solana Beach Calif 16
ESC Corp 534 Bergen Blvd Palisades Park NJ 17-30	Goodyear Aircraft Corp 1210 Massillon Rd Akron 15 Ohio 31	Jackson Electronics Inc 23 Woodcrest Rd West Chester Pa 36
Essex Electronics Div NYT Electronics Inc 7303 Atoll Ave N Hollywood Calif 17	Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif 9	Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md 17
Essex Electronics 550 Springfield Ave Berkeley Heights NJ 17	GPS Instrument Co 2921 W Olive Ave Burbank Calif 30	Jarrell-Ash Co 26 Farwell St Newtonville 60 Mass 39-40-41
Fairchild Camera and Instrument Corp Industrial Camera Div 88-06 Van Wyck Expwy Jamaica 1 NY 9	Gray Instrument Co 811 Boylston St Boston 16 Mass 21	Jarvis Electronics Corp 1140 Cherry St Winnetka Ill 18-23
Fairchild Controls Corp Components Div 225 Park Ave Hicksville LI NY 46	Gray Instrument Co 200 E Church Lane Philadelphia 44 Pa 38-43	Javex P O Box 646 Redlands Calif 29
Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch LI NY 31	Grav & Kuhn 20 Railroad Ave Roslyn Heights NY 17	Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa 3-20-26
Falstrom Co Falstrom Court Passaic NJ 6	Grem Eng'g Co 488 1 St Brooklyn 15 NY 26-31	Johnson Aircraft Eng'g Co M J Box 10 Morristown Airport Morristown NJ 23-24-25
Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind 31	Gruen Industries Inc Time Hill Cincinnati 6 Ohio 31	Johnson Co E F Waseca Minn 8-50
Farrand Controls Inc 4401 Bronx Blvd New York 70 NY 43-44	Gyro Electronics Co 325 Canal St New York 13 NY 27	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill 3-26-31
Fecker Inc J W 6592 Hamilton Ave Pittsburgh 6 Pa 10	Hacker & Co Wm J 82 Beaver St New York 5 NY 33	Kaar Eng'g Corp 2995 Middlefield Rd Palo Alto Calif 18
Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY 30	Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa 46	Kahl Scientific Instrument Corp P O Box 1166 El Cajon Calif 26
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ 13-15-17-20-21-26	Hallett Mfg Co 1601 W Florence Inglewood Calif 33	Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio 15-37
Feiler Eng'g Mfg Co 8026 N Monticello Ave Skokie Ill 45	Hallierafters Co 4401 W 5 Ave Chicago 24 Ill 27	Kay Electric Co 14 Maple Ave Pine Brook NJ 1-3-7-20-31
Fenwal Inc Pleasant St Ashland Mass 43	Hallikainen Instruments 1341 7 St Berkeley 10 Calif 6	Kearfoot Inc 1378 Main Ave Clifton NJ 26
Fielden Instrument Div Robertshaw-Fulton Controls Co 2920 N 4 St Philadelphia 33 Pa 43	Hamilton Watch Co Allied Products Div Columbia Ave Lancaster Pa 29	Keithley Instruments Inc 12415 Euclid Ave Cleveland 6 Ohio 29-36
Filmohm Corp 48 W 25 St New York 10 NY 3	Hamner Electronics Co Princeton NJ 27	Kepec Labs 131-38 Sanford Ave Flushing NY 15
Filtron Co 10023 W Jefferson Blvd Culver City Calif 17	Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif 9	Keystone Electronics Corp 423 Broome St New York 13 NY 29
Filtron Co 131-15 Fowler Ave Flushing 55 NY 3-17-19-30-33	Hansen Electronics Co 7117 Santa Monica Blvd Los Angeles 46 Calif 3-38	K-F Development Co 2606 Spring St Redwood City Calif 38
First Electronics Corp 117 Blue Hill Ave Boston 19 Mass 23	Harris Transducer Corp Woodbury Conn 47	Kistler Instrument Corp 15 Webster St N Tonawanda NY 28-29-46
Fischer & Porter Co 478 Warminster Rd Hatboro Pa 21	Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio 39-40	Kollsman Instrument Corp Standard Coil Products Sub 80-08 45 Ave Elmhurst 73 NY 42
Fisher Eng'g Inc P O Box 327 Huntington Ind 30	Hathaway Instrument Div Hamilton Watch Co 5800 E Jewell Ave Denver 22 Colo 48	Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass 20
Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa 28		Lambda-Pacific Eng'g Inc 14725 Arminta St Van Nuys Calif 26
		Lampkin Labs Inc RFD 1 Bradenton Fla 20

Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	9-29-30-40	MinAtron Corp Belle Mead 9 NJ	46	Phoenix Precision Instrument Co 3803 N 5 St Philadelphia 40 Pa	41
Lane Electronics Mfg Corp 7254 Atoll Ave N Hollywood Calif	18	Minco Products Inc 740 Washington Ave Minneapolis 1 Minn	38	Photocon Research Products 421 N Altadena Drive Pasadena Calif	46
Lansing Sound Inc James B 3249 Casitas Ave Los Angeles 39 Calif	47	Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	47	Photographic Analysis Inc 13273 Ventura Blvd N Hollywood Calif	9
Las-Lab Inc 220 S Mt Olivet Lane Baltimore 29 Md	9	Minn-Honeywell Regulator Co 2753 4 Ave S Minneapolis 8 Minn	9-43-44	Plastic Capacitors Inc 2620 N Clybourn Ave Chicago 14 Ill	36
Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	13-20	Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	28	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	3-20-26-31-41-50
Leach Corp Inet-Palmer Div 4441 S Santa Fe Ave Los Angeles 58 Calif	16	Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	15-20-28-43	Polyphase Instrument Co E 4 St Bridgeport Pa	28
Lear Inc 3171 S Bundy Drive Santa Monica Calif	18-30	Missileonics Inc PO Box 716 Melbourne Fla	30	Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	3-20-26
Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	39-43	Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	1-27-38	Potter Aeronautical Corp PO Box 532 Union NJ	16-20
Lehigh Valley Electronics Eng'g Mfg Co 215 S 3 St Allentown Pa	20	Modern Laboratory Equip Co 1811 1 Ave New York 28 NY	6	Potter Co 1950 Sheridan Rd N Chicago Ill	33-36
Leonard Electric Products Co 67 34 St Brooklyn 32 NY	17	Moran Instrument Corp 170 E Orange Grove Ave Pasadena 3 Calif	34	Precise Development Corp 2 Neil Ct Oceanside NY	7-20-29
Leupold & Stevens Instruments Inc 4445 NE Glisan St Portland 13 Ore	46	Muirhead & Co Ltd Beckenham Kent England	1-34-48	Precision Tube Co Church Rd & Wissahickon Ave North Wales Pa	43
Lewis Eng'g Co 339 Church St Naugatuck Conn	43	Muirhead Instruments Inc 677 5 Ave New York 22 NY	1-20-29-34-48	Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	31-50
Librascope Inc Commercial Div 133 E Santa Anita Ave Burbank Calif	21	Muter Co 1255 S Michigan Ave Chicago 5 Ill	38	Process & Instruments 15 Stone Ave Brooklyn 33 NY	40
Librascope Inc 808 Western Ave Glendale Calif	21	Narda Corp 160 Herricks Rd Mineola NY	4-5-26-31-50	Production Research Corp Thornwood NY	1-2-7-8-18-20-26-33
Lieco Inc 3610 Oceanside Rd Oceanside LI NY	26-31	National Coil Co PO Box 1237 Sheridan Wyo	17	PSC Applied Research Ltd 1500 O'Connor Dr Toronto 16 Canada	9
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	21-31	National Spectrographic Labs Inc 6300 Euclid Ave Cleveland 3 Ohio	40-41	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	39-40
Lorentzen Inc H K 391 W Broadway New York 12 NY	6	Navco Navigation Computer Corp 1621 Snyder Ave Philadelphia 45 Pa	15-16	Pye Telecommunications Ltd Newmarket Rd Cambridge England	23-30
Luther Electronic Mfg Co 5728 W Washington Blvd Los Angeles 16 Calif	30	Nevada Air Products Co PO Box 2472 Reno Nev	26-31	Radar Design Corp 210 5 Ave New York 16 NY	3
McKenna Laboratories 2503 Main St Santa Monica Calif	34	Nichols Products Co 325 W Main St Moorestown NJ	31-35	Radiation Inc PO Box 37 Melbourne Fla	26-46
McMillan Industrial Corp Brownville Ave Ipswich Mass	3-26	Nilsen Mfg Co 21 N Church St Addison Ill	36-46	Radio City Products Co Centre & Glendale Sts Easton Pa	18-29
Mackay Inc A D 198 Broadway New York 38 NY	41	Norden-Ketay Corp Commerce Rd Stamford Conn	31	Radio Corp of America Commercial Electronic Products Camden 2 NJ	3-20
Mackay Radio & Telegraph Co Marine Div 133 Terminal Ave Clark NJ	18	Norrman Laboratories Ernst Williams Bay Wis	20	Radio Corp of America 415 S 5 St Harrison NJ	20
Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	21	North American Instruments Inc 2420 N Lake St Altadena Calif	28-32-46	Radio Frequency Labs Inc Boonton NJ	20
Magnaflex Corp 7300 W Lawrence Ave Chicago 31 Ill	25	Northeastern Eng'g Inc 25 S Bedford St Manchester NH	20-31	Rahm Instruments Inc 237 Lafayette St New York 12 NY	34-46
Magnasync Mfg Co 5546 Satsuma Ave N Hollywood Calif	32	NRD Instrument Co 6425 Etzel Ave St Louis 14 Mo	29-39	Ransom Research 323 W 7 St San Pedro Calif	20-27-30
Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif	30	Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	31	Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 54 Mass	47
Magnuson Engineers Inc 590 Emory St San Jose 10 Calif	40	Nucleonic Products Co 1601 Grande Vista Ave Los Angeles 23 Calif	5-43	Ratigan Electronics Inc 3614 Maple Ave Los Angeles 11 Calif	17
Manning Maxwell & Moore Inc Shelter Rock Lane Danbury Conn	28-43	NYT Electronics Inc 2979 N Ontario St Burbank Calif	17	Raytheon Mfg Co 100 River St Waltham 54 Mass	18
Manson Laboratories Inc 207 Greenwich Ave Stamford Conn	20-26-30-31	Offner Electronics Inc 5320 N Kedzie Ave Chicago 25 Ill	28-29	RCL Mfg Co New Jersey Ave Riverside NJ	38
Marconi Instruments Ltd 44 New St New York 4 NY	3-20-26	Ohio Carbon Co 12503 Berea Rd Cleveland 11 Ohio	38	Reeves Instrument Corp 215 E 91 St New York 28 NY	3
Massa Laboratories Inc 5 Fottler Rd Hingham Mass	29-46-47	Ohmite Mfg Co 3601 Howard St Skokie Ill	1-38	Reflectone Corp Boston Post Rd Stamford Conn	21-30
Matthew Labs 146 Riverdale Ave Yonkers NY	21	Omega Labs Inc Haverhill St Rowley Mass	26-50	Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	31
Maurer Inc J A 37-01 31 St Long Island City 1 NY	9	Optimum Eng'g Co 2017 Willow St Grand Prairie Texas	21	Resistance Products Co 914 S 13 St Harrisburg Pa	38
MB Mfg Co Div Textron Inc 1060 State St New Haven 11 Conn	29	Ortho Filter Corp 196 Albion Ave Paterson 2 NJ	19	Revere Corp of America Wallingford Conn	43
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	10-39	Pace Eng'g Co 6914 Beck Ave N Hollywood Calif	46	Rheem Mfg Co Electronics Div 7777 Industry Ave Rivera Calif	15
Measurements Corp Boonton NJ	3-8	Pacific Scientific Co PO Box 22019 Los Angeles 22 Calif	46	Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	32-34
Menlo Research Lab 538 Phelan Ave San Jose Calif	25	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	17	Richards Co Arklay S 35 Winchester St Newton Highlands 61 Mass	43
Mepco Inc Abbett Ave Morristown NJ	38	Painton & Co Ltd c/o British Electronic Sales Co Rox 132 Oakland Gardens 64 NY	1-2-3	Riverbank Labs Eng'g Dept PO Box 65 Geneva Ill	20-48
Merz Eng'g Inc 200 S Harding St Indianapolis Ind	46	Panelit Inc 7401 N Hamlin Ave Skokie Ill	28	Rixon Electronics Inc 2414 Reedie Dr Silver Spring Md	3-20-50
Metavac Inc 45-68 162 St Flushing 58 NY	3-38	Panoramic Radio Products Inc 10 S 2 St Mt Vernon NY	9	Rosemount Eng'g Co Rosemount Minn	29
Metronix Inc Mill Lane Waterford Conn	8-20-29	Pantek Co PO Box 212 El Segundo Calif	20	Royco Instruments 720 Arthur St Albany Calif	43
Micamold Electronics Mfg Corp 1087 Flushing Ave Brooklyn 37 NY	17	Parr Mfg Corp 48 Hale St Cranford NJ	23-25	Ruge Associates Arthur C 733 Concord Ave Cambridge 28 Mass	38
Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass	20	PCA Electronics Inc 16799 Schoenborn St Sepulveda Calif	17	Rutherford Electronics Co 3707 S Robertson Blvd Culver City Calif	7
Micro-Circuits Co New Buffalo Mich	38	Peerless Photo Products Inc Shoreham LI NY	9	Sage Labs Inc 30 Guinan St Waltham 54 Mass	26
Microphase Corp Box 1166 Greenwich Conn	26	Peerless Products Industries 812 N Pulaski Rd Chicago 51 Ill	29	Sangamo Electric Co Springfield Ill	47
Microwave Associates Inc Burlington Mass	20-26-50	Perkin-Elmer Corp Main Ave Norwalk Conn	9-39-40-43	Scalin Radio Co 2814 19 St San Francisco 10 Calif	29
Mil Case Corp 35-18 37 St Long Island City NY	6	Peschel Electronics Inc 13 Garden St New Rochelle NY	23-24	Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	20-27
Millen Mfg Co James 150 Exchange St Malden 48 Mass	17-42	Petroff Corp Peter A 127 Water St New York 5 NY	37	Scherr Co George 200 Lafayette St New York 12 NY	28
Miller Associates PO Box 369 Lakeville Conn	31	Phaostroon Instrument & Electronic Co 151 Pasadena Ave S Pasadena Calif	29	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	39-40-43
Miller Instruments Inc William 325 N Halstead Ave Pasadena 8 Calif	46	Philamon Labs Inc 90 Hopper St Westbury LI NY	48	Seismograph Service Corp 6200 E 41 St Tulsa 1 Okla	9
Miller-Trojan Co 3 North Ridge Ave Troy Ohio	21	Phileo Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	26	Sensitive Research Instrument Corp 310 Main St New Rochelle NY	20-22-37-50
Milwaukee Gas Specialty Co 730 N Jackson St Milwaukee 1 Wisc	43-44	Philips Electronics Inc 750 S Fulton Ave Mt Vernon NY	39		
Milwaukee Resistor Co 700 W Virginia St Milwaukee 4 Wisc	38				

Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY 5-18-20-34	5-18-20-34	Transonic Inc 808 16 St Bakersfield Calif 19	19	Acton Laboratories 533 Main St Acton Mass 4	4
Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif 34-46	34-46	Trans-Tel Corp 736 N Highland Ave Los Angeles 38 Calif 16	16	Airmec Ltd High Wycombe Buckinghamshire England 2	2
Servonic Instruments Inc 1145 S Fair Oaks Ave Pasadena 2 Calif 46	46	Tripl-T Electronics Co Box 5352 Pasadena Calif 30	30	American Instrument Co 8030 Georgia Ave Silver Spring Md 7	7
Servonics Inc 822 N Henry St Alexandria Va 21-34	21-34	Trop-Artic Inc 637 S Mulberry St Muncie Ind 6	6	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Vt 2	2
Servo-Recording Instruments Inc 1815 W Van Buren St Phoenix Ariz 30	30	Tuttle & Kift Inc 1823 N Monitor Ave Chicago 39 Ill 43	43	Bassett Inc Rex 1314 N E 17 Ct Ft Lauderdale Fla 2	2
Shasta Div Beckman Instruments Inc PO Box 296 Station A Richmond Calif 20	20	TV Specialty Co 350 W 31 St New York 1 NY 9	9	Boonton Electronics Corp 738 Speedwell Ave Morris Plains NJ 1	1
Shepard Labs Inc 480 Morris Ave Summit NJ 27-34	27-34	Ultradyn Eng'g Labs P O Box 3308 Albuquerque New Mex 20-46	20-46	Calidyne Co 120 Cross St Winchester Mass 8	8
Sierra Electronic Corp 3885 Bohannon Dr Menlo Park Calif 23-26-14-50	23-26-14-50	Underwood Corp Electronic Computer Div 35-10 36 Ave Long Island City 6 NY 17	17	Cambridge Instrument Co Grand Central Terminal New York 17 NY 3-5-8	3-5-8
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill 29-13	29-13	Union Switch & Signal Div Westinghouse Air Brake Co Bradock Ave Pittsburgh 18 Pa 10	10	Collins Radio Co 855 35 St N E Cedar Rapids Iowa 2	2
Skiatron Electronics & TV Corp 180 Varick St New York 14 NY 20-21-27-31	20-21-27-31	United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif 17	17	Davenport Mfg Co 1718 N Ashland Ave Chicago 22 Ill 8	8
Solar Mfg Corp 4553 Seville Ave Los Angeles 58 Calif 47	47	Universal Atomics Corp 50 Bond St Westbury LI NY 16	16	DeMorney-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif 2	2
Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England 1-29-30-34	1-29-30-34	Uniwave Inc 2 Marine St Farmingdale NY 3-29-35	3-29-35	D & R Ltd 402 E Gutierrez St Santa Barbara Calif 2	2
Sonar Radio Corp 3050 W 21 St Brooklyn 24 NY 18	18	Vacuum Tube Products Co 506 S Cleveland St Oceanside Calif 28-43	28-43	Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY 5	5
Sound Apparatus Co Stirling NJ 32	32	Varian Associates 611 Hansen Way Palo Alto Calif 39	39	Engineering Associates 434 Patterson Rd Dayton 9 Ohio 2	2
Spencer-Kennedy Labs Inc 1320 Soldiers Field Rd Boston 35 Mass 19	19	Varo Mfg Co 2201 Walnut St Garland Texas 16-20-48	16-20-48	Fecker Inc J W 6592 Hamilton Ave Pittsburgh 6 Pa 2	2
Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY 4-12-20-26-31-39	4-12-20-26-31-39	Vector Inc 1611 Trapelo Rd Waltham 54 Mass 20-26-31	20-26-31	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ 1-2	1-2
Sprague Electric Co Marshall St North Adams Mass 18	18	Vibra Seal Corp 2832 E Grand Blvd Detroit 11 Mich 43	43	Foto-Video Labs Inc 25 Amity St Little Falls NJ 4-7	4-7
Standard Electronics Div Radio Eng'g Labs 30th & Borden Sts Long Island City NY 29	29	Vibration Research Labs 97 Lake Ave Tuckaheo NY 22	22	Frequency Standards Inc PO Box 504 Asbury Park NJ 2	2
Statham Labs Inc 12401 W Olympic Blvd Los Angeles 64 Calif 46	46	Vidaire Electronics Mfg Corp 576 W Merrick Rd Lynbrook NY 3	3	Gaertner Scientific Corp 1250 Wrightwood Ave Chicago 14 Ill 7	7
Stavid Eng'g Inc US Route 22 Plainfield NJ 31	31	Vought Co P O Box 1350 Beverly Hills Calif 9	9	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass 1-2-3-7	1-2-3-7
Stephens Tru-sonic Inc 8538 Warner Dr Culver City Calif 46	46	Wabash Metal Products Co 1569 Morris St Wabash Ind 43	43	Gertsch Products Inc 11846 Mississippi Ave Los Angeles 25 Calif 4	4
Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill 17	17	WacLine Inc 35 S St Clair St Dayton 2 Ohio 3-16-26-29-31-50	3-16-26-29-31-50	Gray Instrument Co 200 E Church Lane Philadelphia 44 Pa 5	5
Sticht Co Herman H 27 Park Pl New York 7 NY 10-11	10-11	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY 26-31-34	26-31-34	Hamilton Watch Co Allied Products Div Columbia Ave Lancaster Pa 2	2
Stoddart Aircraft Radio Co 6644 Santa Monica Blvd Hollywood 38 Calif 3	3	Walkirt Co 141 W Hazel St Inglewood 3 Calif 20	20	Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif 2	2
Sullivan Ltd H W 80 Shore Rd Port Washington NY 1-20-36-37-38-48	1-20-36-37-38-48	Walsco Electronics Mfg Co 100 W Green St Rockford Ill 3	3	Hill Electronic Eng'g & Mfg Co New Kingstown Pa 2	2
Sylvania Electric Products Inc 1740 Broadway New York 19 NY 23	23	Waltham Watch Co 221 Crescent St Waltham 54 Mass 10-11	10-11	Hupp Instru/mation Co 2119 Sepulveda Blvd Los Angeles 25 Calif 2	2
Systron Corp 2055 Concord Blvd Concord Calif 10-16-20-28	10-16-20-28	Waugh Eng'g Co 7842 Burnet Ave Van Nuys Calif 16	16	Hycon Eastern Inc 75 Cambridge Pkwy Cambridge 42 Mass 2	2
Takk Corp PO Box 346 Newark Ohio 33	33	Waveline Inc Passaic Ave Caldwell NJ 26-29-31-50	26-29-31-50	Industrial Test Equipment Co 55 E 11 St New York 3 NY 2-4	2-4
Taller & Cooper 75 Front St Brooklyn 1 NY 9	9	Weinschel Eng'g 10503 Metropolitan Ave Kensington Md 3	3	Julie Research Labs 556 W 168 St New York 32 NY 5	5
Tatnall Measuring Systems Co Kimberton Rd Phoenixville Pa 46	46	Welch Mfg Co W M 1515 Sedgwick St Chicago 10 Ill 39	39	Kintel (Kay Lab) 5725 Kearny Villa Rd San Diego 12 Calif 8	8
Technical Appliance Corp 1 Taco St Sherburne NY 1-3	1-3	Welwyn Int'l Inc 3355 Edgecliff Terrace Cleveland 11 Ohio 38	38	Knights Co James Church & Wells Sts Sandwich Ill 2	2
Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn 17-31-35	17-31-35	Westbury Electronics Inc 300 Shames Dr Westbury NY 3	3	Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ 2	2
Technitrol Eng'g Co 1952 E Allegheny Ave Philadelphia 34 Pa 17	17	West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif 28-30-34	28-30-34	Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa 1-5	1-5
Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY 2-3-9-20-30-40	2-3-9-20-30-40	West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill 43	43	Manning Maxwell & Moore Inc Shelter Rock Lane Danbury Conn 8	8
Telectro Industries Corp 35-18 37 St Long Island City 1 NY 19-31	19-31	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa 42-43-46	42-43-46	Manson Laboratories Inc 207 Greenwich Ave Stamford Conn 2	2
Telegraph Condenser Co N Acton London W 3 England 33	33	Weston Electrical Instrument Corp Sub Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ 42-43	42-43	Marconi Instruments Ltd 44 New St New York 4 NY 2	2
Telematic Industries Inc 16 Howard Ave Brooklyn 7 NY 3	3	Westronics Inc 8605 McCart Ft Worth Texas 20-29	20-29	Metronix Inc Mill Lane Waterford Conn 2	2
Telephonics Corp Park Ave Huntington LI NY 18-47	18-47	Wheeler Labs Inc 122 Cutter Mill Rd Great Neck NY 26	26	Moeller Instrument Co 132-02 89 Ave Richmond Hill 18 NY 6	6
Teletronics Lab Inc 54 Kinkel St Westbury NY 7-20-29-30	7-20-29-30	White Electron Devices Inc Roger 92 4 Ave Haskell NJ 26	26	Muirhead Instruments Inc 677 5 Ave New York 22 NY 1-2-5-8	1-2-5-8
Tel-Instrument Electronics Corp 728 Garden St Carlstadt NJ 29	29	Whitewater Electronics Inc 136 Main St Whitewater Wis 17	17	Norrman Laboratories Ernst Williams Bay Wis 2-7	2-7
Telonic Industries Inc 73 N 2 Ave Beech Grove Ind 3	3	Wiancko Eng'g Co 255 Halstead St Pasadena Calif 28-46	28-46	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif 7	7
Temperature Eng'g Corp U S Hwy 130 Riverton NJ 6	6	Winkler Labs 5225 N 20 St Phoenix Ariz 29	29	Philamon Labs Inc 90 Hopper St Westbury LI NY 2	2
Tenney Eng'g Inc 1090 Springfield Rd Union NJ 6	6	Workman TV Inc 309 Queen Anne Rd Teaneck NJ 38	38	Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY 2	2
Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas 23-25	23-25	Wyeth Eng'g Inc 9911 Walden Pkwy Chicago 43 Ill 19	19	Radiation Inc P O Box 37 Melbourne Fla 8	8
Texas Instruments Inc Industrial Instrumentation Div 3609 Buffalo Speedway Houston 6 Texas 9	9			Radio Frequency Labs Inc Boonton NJ 28	28
Thale Eng'g Corp 2104 E Villa St Pasadena Calif 33	33			Resistance Products Co 914 S 13 St Harrisburg Pa 5	5
Thermo Electric Co 109 5 St Saddle Brook NJ 43	43			Riverbank Labs Eng'g Dept P O Box 65 Geneva Ill 2	2
Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif 34	34			Scientific-Atlanta Inc 2162 Piedmont Rd N E Atlanta 9 Ga 2	2
Trad Electronics Corp 1001 1 Ave Asbury Park NJ 3	3			Sensitive Research Instrument Corp 310 Main St New Rochelle NY 5-8	5-8
Transitron Inc 186 Granite St Manchester NH 3-20	3-20			Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY 2	2

45—MEASUREMENT & TEST EQUIPMENT— STANDARDS

Standards, capacitance	1
Standards, frequency	2
Standards, inductance	3
Standards, phase	4
Standards, resistance	5
Standards, temperature	6
Standards, time	7
Standards, voltage	8

Transitron Inc	
186 Granite St Manchester NH	2
Varo Mfg Co	
2201 Walnut St Garland Texas	2
Walkirt Co	
141 W Hazel St Inglewood 3 Calif	2
Waltham Watch Co	
221 Crescent St Waltham 54 Mass	7
Winder Aircraft Corp of Florida	
P O Box 2397 Drane Field Lakeland Fla	1

46—MEDICAL ELECTRONIC EQUIPMENT

Ballistocardiographs	1
Blood pressure recorders	2
Diathermy accessories	3
Diathermy equipment	4
Electro cardiographs	5
Electro cauterizers	6
Electro encephalographs	7
Electro myographs	8
Electro sedative generators	9
Electro shock machines	10
Electro surgical equip	11
Epilators	12
Fluorescent machines	13
Germicidal lamps	14
Heating elements	15
Hemoglobino meters	16
Microscopes, electron	17
Oscillometers	18
Psychogalvanometers	19
Radioactivity equip	20
Stethographs & stethophones	21
Stimulators	22
Ultrasonic equip	23
X-ray cameras	24
X-ray equipment	25
X-ray equipment, photographic	26

Acoustica Associates	
Shore Rd Glenwood Landing LI NY	20-23
Admittance Namco Corp	
Marine St Farmingdale LI NY	26
Airborne Electronics Co	
6813 Troost Ave N Hollywood Calif	26
Aircrom Inc	
1209 E Grand St Elizabeth NJ	26
Alcar Instruments Inc	
17 Industrial Ave Little Ferry NJ	4-23
Aloe Scientific	
5655 Kingsbury Blvd St Louis 12 Mo	2-14
Amerac Inc 116 Topsfield Rd Wenham Mass	26
American Electronic Laboratories	
121 N 7 St Philadelphia 6 Pa	22
American Machine & Foundry Co	
Defense Products Group	
1101 N Royal St Alexandria Va	20-26
American Mica Insulation Co	
235 Parker Ave Manasquan NJ	15
American Microwave Corp	
11754 Vose St N Hollywood Calif	26
American Scientific Co	
1295 Grand Concourse New York 52 NY	10
Anton Electronic Labs	
1226 Flushing Ave Brooklyn 6 NY	20
Apparatus Development Co	
115 Main St Wethersfield 9 Conn	21
Art Specialty Co	
3245 W Lake St Chicago 24 Ill	14
Authorized Mfrs Service Co	
919 Wyckoff Ave Brooklyn 27 NY	26
Aviation Electronic Service	
N 12 St Wheeling Ill	9-10-22
Balteau Electric Corp	
New and Meadow Sts	
Stamford Conn	24-25-26
Baird-Atomic Inc	
33 University Rd Cambridge 38 Mass	26
Barkley & Dexter Labs	
50 Frankfort St Fitchburg Mass	20
Bendix Aviation Corp	
1104 Fisher Bldg Detroit 2 Mich	22-24-25
Biophysical Instruments Inc	
20 Herman St Philadelphia 44 Pa	2-5-22-25
Birnback Radio Co	
145 Hudson St New York 13 NY	3
Black Light Corp of America	
5114 Walnut Grove Ave	
San Gabriel Calif	14
Black Light Eastern Corp	
33-00 Northern Blvd	
Long Island City 1 NY	14
Blaine Electronics Inc	
14757 Keswick St Van Nuys Calif	26
Bolton Labs Inc W Main St Bolton Mass	26
Bruno-New York Industries Corp	
460 W 34 St New York 1 NY	26
Burdick Corp	
635 Plumb St Milton Wisc	3-4-5-10-11-23

Calif Technical Industries	
1421 Old County Rd Belmont 10 Calif	26
Campbell X-Ray Corp	
110 Commington St Boston 15 Mass	25-26
Cambridge Instrument Co	
Grand Central Terminal	
New York 17 NY	5-21
Canoga Corp	
5955 Sepulveda Blvd Van Nuys Calif	26
Cavitron Electron Oscillator Co	
Div Short Wave Plastic Forming	
355 N Newport Blvd	
Newport Beach Calif	23
Central Scientific Co of Calif	
1040 Martin Ave Santa Clara Calif	16
Century Coil Corp	
1534 N Clybourn Ave Chicago 10 Ill	25
CG Electronics Corp	
305 Dallas St NE Albuquerque New Mex	25
Clegg Labs Div Clegg Inc	
Ridgedale Ave Morristown NJ	26
Continental X-Ray Corp	
1536 N Clybourn Ave Chicago 10 Ill	13-25
Corbett Science Labs F W	
3117 Venice Blvd	
Los Angeles 19 Calif	6-10-11-23
Dale Boisen Co	
2928 Nebraska Ave Santa Monica Calif	15
Dale Products Inc Columbus Nebr	26
Dallons Labs	
5066 Santa Monica Blvd	3-4-5-11-
Los Angeles 29 Calif	12-14-15-22-23
DeMornay-Bonardi Corp	
780 S Arroyo Pkwy Pasadena Calif	26
Diamond Antenna & Microwave Corp	
7 North Ave Wakefield Mass	26
Douglas Microwave Co	
252 E 3 St Mt Vernon NY	26
Du Mont Labs Inc Allen B	
760 Bloomfield Ave Clifton NJ	26
Eastman Kodak Co	
343 State St Rochester 4 NY	26
Eberline Instrument Div Reynolds Electrical	
805 Early St Santa Fe N Mex	20
Electrodyn Co	
Endicott St Norwood Mass	5-10-22
Electro-Flex Heat Inc	
83 Woodbine St Hartford 6 Conn	15
Electro-Medical Lab Inc	
S Woodstock 10 Vt	7-8-19-21-22
El-Tronics Inc Penn Ave Mayfield Pa	20
Ercona Corp	
551 5 Ave New York 17 NY	17-26
Farrand Controls Inc	
4401 Bronx Blvd New York 70 NY	16-17
Federal Mfg & Eng'g Corp	
1055 Stewart Ave Garden City NY	26
Federal Telephone & Radio Co	
Div IT&T 100 Kingsland Rd Clifton NJ	26
Fischer & Co H G	
9451 W Belmont Ave	
Franklin Park Ill	3-4-23-25
Fischer & Co R A	
517 Commercial St Glendale 3 Calif	3-4
Fisher Scientific Co	
711 Forbes St Pittsburgh 22 Pa	16
Frequency Standards Inc	
PO Box 504 Asbury Park NJ	26
Friez Instrument Div Bendix Aviation Corp	
1400 Taylor Ave Baltimore 4 Md	25
F-R Machine Works Inc	
Electronic & X-Ray Div	
26-12 Borough Pl Woodside 77 NY	25-26
Gardiner Electronics Co	
2545 E Indian School Rd Phoenix Ariz	20
General Bronze Corp	
711 Stewart Ave Garden City NY	26
General Communication Co	
677 Beacon St Boston 15 Mass	26
General Crystal Co	
P O Box 9 Burlington Wis	3
General Electric Co Apparatus Sales Div	
1 River Rd Schenectady 5 NY	15
General Electric Co X-Ray Dept	
4855 Electric Ave	
Milwaukee 1 Wis	5-24-25-26
General RF Fittings Inc	
702 Beacon St Boston 15 Mass	3
G & M Equipment Co	
7315 Varna Ave N Hollywood Calif	26
Gorrell & Gorrell	
336 Old Hook Rd Westwood NJ	22
Graflex Inc	
154 Clarissa St Rochester 8 NY	26
Grason-Stadler Co	
W Concord Mass	19
Gulton Industries Inc	
212 Durham Ave Metuchen NJ	2-23
Hall Sonic Eng'g Co	
2402 2 St Peru Ill	23
Hamilton Watch Co Allied Products Div	
Columbia Ave Lancaster Pa	2
Hamner Electronics Co	
Princeton NJ	20
Hanovia Chemical & Mfg Co	
100 Chestnut St Newark 5 NJ	14
Harshaw Chemical Co	
1945 E 97 St Cleveland 6 Ohio	15
Hathaway Instrument Div Hamilton Watch	
Co 5800 E Jewell Ave Denver 22 Colo	2

Hewlett-Packard Co	
275 Page Mill Rd Palo Alto Calif	26
High Voltage Eng'g Corp	
Burlington Mass	25
Holland Electronics	
2133 Central Dr S East Meadow NY	5
Hoover Electronics Co	
3640 Woodland Ave Baltimore 7 Md	26
Houston Fearless Div Color Corp of America	
11801 W Olympic Blvd	
Los Angeles 64 Calif	26
Instrumentation Associates	
17 W 60 St	
New York 23 NY	1-2-7-8-11-14-16-19-21
Isotopes Specialties Co	
708 S Main St Burbank Calif	20
I-T-E Circuit Breaker Co	
Special Products Div	
601 E Erie Ave Philadelphia 34 Pa	26
J-V-M Eng'g Co	
4633 S Lawndale Ave Lyons Ill	26
Kay Electric Co	
14 Maple Ave Pine Brook NJ	26
Kearfott Products Co Inc Western Div	
14844 Oxnard St Van Nuys Calif	26
Keithley Instruments Inc	
12415 Euclid Ave Cleveland 6 Ohio	23
Lab-Tronics Inc	
3656 N Lincoln Ave Chicago 13 Ill	11-22
Lambda-Pacific Eng'g Inc	
14725 Arminta St Van Nuys Calif	26
Land-Air Inc Instrument & Electronic Div	
2133 Adams Ave San Leandro Calif	26
Land-Air Inc	
7444 W Wilson Ave Chicago 31 Ill	25
Landsverk Electrometer Co	
550 W Garfield Ave Glendale 4 Calif	20
Lavoie Labs Inc	
Matawan-Freehold Rd Morganville NJ	26
Levinthal Electronic Products Inc	
3180 Hanover St Palo Alto Calif	10-11
Liebel-Flarsheim Co	
111 E Amity Rd Cincinnati 15 Ohio	3-4-11-25
Litton Industries of Calif	
336 N Poothill Rd Beverly Hills Calif	25
Litton Industries of Md Inc	
4910 Calvert Rd College Park Md	24
McDowell Electronics Inc	
105 Forrest St Metuchen NJ	15
Mack Electronics Div Inc Sub Mack Trucks	
Inc 1120 S 2 St Plainfield NJ	23-26
Manson Laboratories Inc	
207 Greenwich Ave Stamford Conn	26
Marconi Instruments Ltd	
44 New St New York 4 NY	26
Measurement Eng'g Ltd	
232 John St Arnprior Ontario Can	22
Medcraft Electronic Corp	
426 Great East Neck Rd	
Babylon NY	7-8-10-11-22-23
Menlo Research Lab	
538 Phelan Ave San Jose Calif	20
Meridian Metalcraft Inc	
8739 S Millergrove Dr Whittier Calif	26
Model Eng'g & Mfg Inc	
50 Frederick St Huntington Ind	1-5-7
Modern Laboratory Equip Co	
1811 1 Ave New York 28 NY	15
Mooradian High Frequency Labs	
13 E Ft Lee Rd Bogota NJ	3-4-11-22
Moran Instrument Corp	
170 E Orange Grove Ave Pasadena 3 Calif	20
National Spectrographic Labs Inc	
6300 Euclid Ave Cleveland 3 Ohio	26
National X-Ray Products Corp	
71 S Newman St Hackensack NJ	24-25-26
Neumade Products Corp	
250 W 57 St New York 19 NY	25-26
Nevada Air Products Co	
P O Box 2472 Reno Nev	7-11-19-20-22-23-26
New England Nuclear Corp	
575 Albany St Boston 18 Mass	20
Norco Mfg Co	
392 Bleeker St New York 14 NY	14
Northeastern Eng'g Inc	
25 S Bedford St Manchester NH	26
NRD Instrument Co	
6425 Etzel Ave St Louis 14 Mo	20
Nuclear-Chicago Corp	
223 W Erie St Chicago 10 Ill	20
Nuclear-Electronics Corp	
2632 W Cumberland St	
Philadelphia 32 Pa	20-23
Offner Electronics Inc	
5320 N Kedzie Ave Chicago 25 Ill	2-7-8-19
Omega Labs Inc	
Haverhill St Rowley Mass	26
Philco Corp Govt & Industrial Div	
4700 Wissahickon Ave Philadelphia 44 Pa	25
Philips Electronics Inc	
750 S Fulton Ave Mt Vernon NY	17-26
Photovolt Corp	
95 Madison Ave New York 16 NY	16
Photon Instrument Co	
6516 Detroit Ave Cleveland 2 Ohio	2
Polarad Electronics Corp	
43-20 34 St Long Island City 1 NY	26
Polytechnic Research & Development Co	
202 Tillary St Brooklyn 1 NY	26
Press Wireless Labs Inc	
25 Prospect Pl W	
Newton 65 Mass	26
Process & Instruments	
15 Stone Ave Brooklyn 33 NY	7-8-11

Profexray Inc 1401 N 1 Ave Maywood Ill	25	Diamonds	3	Belmont Smelting & Refining Works 330 Belmont Ave	6-7-8-9-13-14-15-16-18-19
Radar Design Corp 210 5 Ave New York 16 NY	26	Graphite	4	Brooklyn 7 NY	23-24-25-30-31-32-33-34 35-42-46-47-49-50-51-53-54
Radiation Inc P O Box 37 Melbourne Fla	26	METALS			
Raytheon Mfg Co 100 River St Waltham 54 Mass	3-4-5	Alnico	5	Bennett & Co Paul 230 E Ohio St Chicago 11 Ill	3
Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 54 Mass	23	Aluminum	6	Beryllium Corp Tuckerton Rd Reading Pa	10
Resitron Labs Inc 2908 Nebraska Ave	21-25-26	Antimony	7	Bethlehem Apparatus Co Front & Depot Sts Hellertown Pa	32
Richardson Labs Kenneth 254 Vincent Ave Lynbrook NY	9-22	Arsenic	8	Bios Labs Inc	1-2-4-5-6-7-8-9-10-11 17 W 60 St 13-14-15-16-17-18-19-21 New York 23 NY 23-24-25-26-31-32-33-34 35-36-38-39-41-42-43-44-46-48-49-50-51-53-54
Ronar Inc 1316 Sherman Ave Evanston Ill	21	Barium	9	Birnback Radio Co 145 Hudson St New York 13 NY	14
Sage Labs Inc 30 Guinan St Waltham 54 Mass	26	Beryllium	10	Bishop & Co Platinum Works J Malvern Pa	24-36-41
Sampson Chemical & Pigment Corp 2830 W Lake St Chicago 12 Ill	14	Boron	11	Blaco Mfg Co 6541 Euclid Ave Cleveland 3 Ohio	4
Sanborn Co 175 Wyman St Waltham 54 Mass	5	Brass	12	Bow Solder Products Co 251 Freeman St Brooklyn 22 NY	25-49
Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	16	Bronze phosphor	13	Bradley Mining Co 660 Market St San Francisco 4 Calif	7-32
Servo-Recording Instruments Inc 1815 W Van Buren St Phoenix Ariz	20	Bronze phosphor	14	Bram Chemical Co Metals & Minerals Div	1-5-6-7-8-9-10-11 12-13-14-15-16-17 820 65 Ave 18-19-20-21-23-24 Philadelphia 26 Pa 29-30-31-32-33-34 35-36-39-41-42-45-46-47-50-51-54
Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	26	Cadmium	15	Bridgeport Brass Co 30 Grand St Bridgeport 2 Conn	12-13-11-21
Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	26	Calcium	16	Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	30
Steiner-Ives Co Springfield Rd Union NJ	15	Cesium	17	Brush Beryllium Co 4301 Perkins Ave Cleveland 3 Ohio	10
Stoelting Co C H 424 N Homan Ave Chicago 24 Ill	2-19-22	Chromium	18	Burroughs Corp 6071 2 Ave Detroit 32 Mich	47
Sylvania Electric Products Inc 1740 Broadway New York 19 NY	1-4	Cobalt	19	Canadian Radium & Uranium Corp 630 5 Ave New York 20 NY	37-38
Teca Corp 80 Main St White Plains NY	8-22	Columbium	20	Cannon Muskegon Corp Box 506 Muskegon Mich	5-44
Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn	26	Copper	21	Carborundum Metals Co Div Carborundum Co P O Box 32 Akron NY	54
Tech-Ohm Resistor Corp 36-11 33 St Long Island City 6 NY	15	Ferrites	22	Carpenter Steel Co Front & Bern Sts Reading Pa	41
Telescope Mfg Corp 28 Ranick Dr Amityville LI NY	26	Germanium	23	Cerro De Pasco Sales Corp 300 Park Ave New York 22 NY	5
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	20	Gold	24	Chase Brass & Copper Co 236 Grand St Waterbury 20 Conn	12-13-14-21-44-49
Telemarine Communications Co 3040 W 21 St Brooklyn 24 NY	26	Iron	25	Chromic Corp of America P O Box 1229 Waterbury 20 Conn	21-35
Telephonics Corp Park Ave Huntington LI NY	23	Iron oxide	26	City Chemical Corp 132 W 22 St	1-2-7-8-9-10-11-15-16-17 19-21-23-29-32-33-35-36
Temperature Eng'g Corp U S Hwy 130 Riverton NJ	15	Kovar	27	Colonial Alloys Co Ridge Ave & Crawford St Philadelphia 29 Pa	6
Thomas Instrument Co Phoenix NY	25	Lead & alloys	28	Columbia Wire & Supply Co 2850 Irving Park Rd Chicago 18 Ill	21
Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	26	Lithium	29	Columbian Carbon Co Mapiro Color Unit 380 Madison Ave New York 17 NY	26
Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass	20	Manganese alloys	30	Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	22
Transitron Inc 186 Granite St Manchester NH	26	Manganese	31	Copperweld Steel Co Wire & Cable Div Glassport Pa	43
Trott Electronics Inc 412 Smith St Rochester 6 NY	10	Mercury	32	Cross Co H 15 Beekman St New York 38 NY	33-51
TV Specialty Co 350 W 31 St New York 1 NY	24-25-26	Molybdenum	33	Crucible Steel Co of America Henry W Oliver Bldg Pittsburgh 22 Pa	5-44
United Aircraft Products Inc 1116 Bolander Ave Dayton 8 Ohio	15	Molybdenum	33	Davis-K-Products Co 135 W 29 St New York 1 NY	24-39-41
Universal Atomics Corp 50 Bond St Westbury LI NY	20	Monel	34	Davison Chemical Co Box 488 Pompton Plains NJ	48
Universal X-Ray Products Inc 1140 N Western Ave Chicago 22 Ill	25-26	Nickel	35	Delta Chemical Works 23 W 60 St	1-2-4-5-6-7-8-9-10-11 13-14-15-16-17-18-19-21-23 New York 23 NY 24-25-26-31-32-33-34-35-36 38-39-41-42-43-44-48-49-50-51-53-54
Uniwave Inc 2 Marine St Farmingdale NY	26	Palladium	36	Diamond Drill Carbon Co 244 Madison Ave New York 16 NY	3
U S Radium Corp Morristown NJ	20	Palladium	36	Dixon Crucible Co Joseph 167 Wayne St Jersey City 3 NJ	4
Vectron Inc 1611 Trapelo Rd Waltham 54 Mass	26	Polonium	37	Dow Chemical Co Midland Mich	30
Volk Radiochemical Co 5412 N Clark St Chicago 40 Ill	20	Radium	38	Driver Co Wilbur B 1875 McCarter Hwy Newark 4 NJ	27-34-35-44
Vulcan Electric Co 88 Holten St Danvers Mass	15	Rhodium	39	Driver-Harris Co Harrison NJ	35
WacLine Inc 35 S St Clair St Dayton 2 Ohio	26	Silver	41	Du Pont De Nemours & Co E I Wilmington 98 Del	50
Wappler Inc 27-10 Astoria Blvd Long Island City 2 NY	3-6-11-22	Silver alloys	42	Eagle-Picher Co American Bldg Parkway & Walnut Cincinnati 2 Ohio	23
Watlow Electric Mfg Co 1376 Ferguson Ave St Louis 14 Mo	15	Steel, metal coated	43	Eastern Rolling Mills 1126 E 180 St New York 60 NY	6-12-21
Waveline Inc Passaic Ave Caldwell NJ	26	Steel, stainless	44	Eastern Smelting & Refining Corp 109 W Brookline St Boston 18 Mass	24-36-41-42
Wave Particle Corp P O Box 252 Menlo Park Calif	26	Strontium	45	Eisler Eng'g Co 750 S 13 St Newark 3 NJ	33-34-51
White Electron Devices Inc Roger 92 4 Ave Haskell NJ	26	Tantalum	46	Electro Metallurgical Co Div Union Carbide & Carbon 30 E 42 St New York 17 NY	18-31-50
Wiekand Co Edwin L 7500 Thomas Blvd Pittsburgh 8 Pa	15	Tellurium	47	Elgin National Watch Co 107 National St Elgin Ill	3
Wood Counter Lab N 1525 E 53 St Chicago 15 Ill	20	Thorium	48	Fansteel Metallurgical Corp 2200 Sheridan Rd N Chicago Ill	20-33-46-51
Woodwelding Inc 355 N Newport Blvd Newport Beach Calif	23	Tin & alloys	49	Federated Metals Div American Smelting & Refining Co	7-8-13-15-21 28-11-47-49-53
X-Ray Mfg Corp of America 1750 Plaza Ave New Hyde Park NY	25	Titanium	50		
		Tungsten	51		
		Uranium	52		
		Zinc	53		
		Zirconium	54		
		Acheson Colloids Co 1635 Washington Ave Port Huron Mich	4		
		Aerovox Corp Crowley Div 1 Central Ave W Orange NJ	22		
		Aitron Inc 1101 W Elizabeth Ave Linden NJ	22		
		Allegheny Ludlum Steel Corp Oliver Bldg Pittsburgh 22 Pa	1-44		
		Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis	22		
		Aloe Scientific 5655 Kingsbury Blvd 4-7-8-9-18-19-24-25 St Louis 12 Mo 26-27-32-33-35-52-53-54			
		Alpha Metals Inc 56 Water St Jersey City 4 NJ	10-21-28-12-49		
		Aluminum Co of America Alcoa Bldg Pittsburgh 19 Pa	6-30		
		Ameray Corp Route 46 Kenvil NJ	28		
		American Metal Co 61 Broadway 8-15-21-23-21-28-36 New York 6 NY 39-41-42-47-49-53			
		American Platinum Works 231 NJ RR Ave Newark 5 NJ	41-42		
		American Silver Co 3607 Prince St Flushing 54 NY 13-14-21-35-41-44-46-50-54			
		Amplex Div Chrysler Corp P O Box 2718 Detroit 31 Mich	13-21-41-42		
		Anchor Metal Co 966 Meeker Ave Brooklyn 22 NY	41-42-53		
		Anderson Associates H V 233 Broad St Summit NJ	41		
		Armco Steel Corp 703 Curtis St Middletown Ohio	43-44		
		Attleboro Refining Co 36 Union St Attleboro Mass	41		
		Baker & Co 113 Astor St Newark 2 NJ	24-36-39-12		
		Baldwin Products Corp 432 E Valley Blvd San Gabriel Calif	42		
		Barker Sales Co 996 Edgewater Ave Ridgefield NJ	5		

47—METALS

Carbides	1
Carbon	2

Firth Sterling Inc 3113 Forbes St Pittsburgh 13 Pa	1-44-50-51	Metz Refining Co. 369 Mulberry St Newark 2 NJ	24-41-42	Technic Inc 39 Snow St Providence 3 RI	24-39
Fish-Schurman Corp 70 Portman Rd New Rochelle NY	3	Microwave Associates Inc Burlington Mass	22	Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn	22
Foot Mineral Co 18 W Cheltenham Ave Philadelphia 44 Pa	29-31-45-50-51	Miller Dial & Nameplate Co 4400 N Temple City Blvd El Monte Calif	38	Terris Div Consolidated Siphon Supply Co 22 Wooster St New York 13 NY	44
Fort Wayne Metals Inc 3211 MacArthur Dr Ft Wayne 6 Ind	44	Monsanto Chemical Co 1700 S 2 St St Louis 4 Mo	2	Thermal Refractories Corp 4501 Dell Ave N Bergen NJ	10-46
Gar Precision Parts Inc 703 Pacific St Stamford Conn	35	Murex Ltd Rainham Essex England	1-20-33-46-51-54	Thermo Materials Inc 4040 Campbell Ave Menlo Park Calif	22
General Ceramics Corp Keasbey NJ	22	National Carbon Co Div Union Carbide & Carbon 30 E 42 St New York 17 NY	2-4	Tricon Mfg Co 8012 Wallace St Chicago 20 Ill	36-41-42
General Electric Co Box 237 Roosevelt Park Annex Detroit 32 Mich	1-3-5	National Moldite Co 1410 Chestnut St Hillside 5 NJ	22-26	Uniform Tubes Inc Level Rd Collegeville 2 Pa	6-12-21
General Electric Co Lamp Wire & Phosphors Dept 1331 Chardon Rd Cleveland 17 Ohio	33-51	National-Standard Co Niles Mich	43-44-50	Union Carbide Nuclear Co Div Union Carbide & Carbon 30 E 42 St New York 17 NY	16-33-51-52
General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY	22	New Jersey Zinc Co 160 Front St New York 38 NY	53	United Carbon Products Co PO Box 269 Bay City Mich	4
Gibson Electric Co 8317 Frankstown Ave Pittsburgh 21 Pa	33-41-42-51	Ney Co J M P O Box 990 Hartford 1 Conn	41-42	United Mineral & Chemical Corp 16 Hudson St New York 13 NY	10-23-31-32-49-54
Glaser Lead Co 31 Wyckoff Ave Brooklyn 37 NY	28-49	Norden-Ketay Corp Commerce Rd Stamford Conn	45	US Dynamics Corp 1250 Columbus Ave Boston 20 Mass	23
Grato Colloids Corp 310 Wilkes Pl Sharon Pa	4	North American Phillips Co Elmet Div Lisbon Rd Lewiston Me	3-33-51	U S Graphite Co Div Wickes Corp 1621 Holland Ave Saginaw Mich	2-4
Graphik Circuits Div Cinch Mfg Corp 200 S Turnbull Canyon Rd La Puente Calif	15-21-24-39	Norton Co 1 New Bond St Worcester 6 Mass	11	U S Steel Corp 525 William Penn Pl Pittsburgh 30 Pa	13-44
Handy & Harman 82 Fulton St New York 38 NY	24-41-42	NRC Equipment Corp Sub National Research Corp 160 Charlemont St Newton Highlands 61 Mass	54	Utility Brass & Copper Corp 255 Conover St Brooklyn 31 NY	6-12-13-14-21
Harmon Lichtenstein & Co 26 Broadway New York 4 NY	15-23-28-53	Numberall Stamp & Tool Co Huguenot Park Staten Island 12 NY	36	Vaculloy Corp W Kemrow Ave Wooster Ohio	50
Harper-Leader Inc 1046 S Main St Waterbury 20 Conn	24-36-39-41	Ohio Carbon Co 12508 Berea Rd Cleveland 11 Ohio	2-4	Vacuum Metals Corp Div Crucible Steel Co P O Box 977 Syracuse 1 NY	44
Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio	19-24-25-26-29-49-53	Olin Mathieson Chemical Corp 460 Park Ave New York 22 NY	6-12-14	Vitro Corp of America 261 Madison Ave New York 16 NY	31-48-50-52-54
Hi Grade Alloy Corp 1236 S Talman Chicago 8 Ill	7-28-42	Paul F H & Stein Bros 235 5 Ave New York 16 NY	6-46	Wallington Steel Co Valley St Wallingford Conn	44-50
Hill Co C R 35 W Grand River Ave Detroit 26 Mich	32	Penn Precision Products Inc 501 Crescent Ave Reading Pa	10-12-14-21	Werner Co R D 295 5 Ave New York 16 NY	6
Hooper Chemical Corp P O Box 313 Rutherford NJ	15-20	Permag Corp 214 Taaffe Pl Brooklyn 5 NY	5	Western Gold & Platinum Co 525 Harbor Blvd Belmont Calif	24-36-41-42
Indiana Steel & Wire Co 700 S Council St Muncie Ind	44	Pettinos Inc Charles 1 E 42 St New York 17 NY	4	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	5
Intelix Systems Inc 22 Thames St New York 6 NY	22	Phelps Dodge Copper Products Corp 300 Park Ave New York 22 NY	12-13-14-21	Wildberg Bros Smelting & Refining Co 742 Market St San Francisco 2 Calif	24-32-41-42
International Nickel Co 67 Wall St New York 5 NY	34-35	Phila Bronze & Brass Corp Sub P R Mallory & Co Inc 22 & Master Sts Philadelphia 21 Pa	2 1	Williams & Co C K 640 N 13 St Easton Pa	26
International Powder Metallurgy Co 439 W Main St Ridgway Pa	13-14	Polymer Corp 2120 Fairmont Ave Reading Pa	22	Yale & Towne Powdered Metal Prods Div 9335 W Belmont Ave Franklin Park Ill	22
Isotope Products 1711 Elmwood Ave Buffalo 7 NY	19	Poray Inc 3369 W Grand Ave Chicago 51 Ill	15		
Isotopes Specialties Co 703 S Main St Burbank Calif	37-38-45-48	Precision Supply Co 292 Belmont Ave Paterson 2 NJ	1-3		
Jelliff Mfg Corp C O Southport Conn	34-35	"Q" Glass Co 470 Broad St Bloomfield NJ	27		
Johnson Bronze Co S Mill St New Castle Pa	13-14	Radium Chemical Co 161 E 42 St New York 17 NY	38		
Johnston & Funk Titanium Corp W Kemrow Ave Wooster Ohio	50	Ray Proof Corp 513 W 54 St New York 19 NY	28-37		
Johnston Foil Mfg Co 6008 S Broadway St Louis 11 Mo	6	Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass	22		
Johnson Mfg Co Mt Vernon Iowa	15-49-53	Raytheon Mfg Co Microwave & Power Tube Operations Foundry Ave Waltham Mass	22		
Kelley & Co O G 98 Taylor St Boston 22 Mass	28	Rembar Co 147 Main St Dobbs Ferry NY	33-51		
King Labs Inc 127 Solar St Syracuse 3 NY	9-15	Rem-Cru Titanium Inc Midland Pa	50		
Kinney Co Joseph Locust St Carnegie Pa	43	Republic Steel Corp Republic Bldg Cleveland 1 Ohio	25-43-44-50		
Kulite Tungsten Co 1040 Hoyt Ave Ridgfield NJ	19-51	Revere Copper & Brass Inc 230 Park Ave New York 17 NY	21		
Landsverk Electrometer Co 550 W Garfield Ave Glendale 4 Calif	38	Riverside-Alloy Metal Div Porter Co H K 1 Pavillion Ave Riverside NJ	10-12-14-34-35-44		
Leach & Garner Co Industrial Div Leach & Garner Bldg Attleboro Mass	24-36-41-42	Romac Products Co 48-01 25 Ave Long Island City 3 NY	27		
Leonard Electric Products Co 67 34 St Brooklyn 32 NY	22	Rome Cable Corp Ridge St Rome NY	6		
Linde Air Products Div Union Carbide & Carbon 30 E 42 St New York 17 NY	16	Ryerson & Son Joseph T 16 & Rockwell Sts Chicago 8 Ill	6-43-44		
Lithium Corp of America 2500 Rand Tower Minneapolis 2 Minn	29	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	16-17-18-19-32		
Mackay Inc A D 198 Broadway New York 38 NY	1-2-4-7-8-9-10-11-13-15 16-17-19-21-23-24-25-26 28-29-31-32-33-34-35-36	Seovill Mfg Co 99 Mill St Waterbury 20 Conn	6-12-13-14-21		
Malavan Tin Bureau 1028 Conn Ave N W Washington 6 DC	49	Seager Standard Carbon Co 291 Church St New York 13 NY	2		
Mallinckrodt Chemical Works 2 & Mallinckrodt Sts St Louis 7 Mo	32-52	Secor Metals Corp 7 Intervale St White Plains NY	35-42-50		
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	10-46	Seymour Mfg Co 15 Franklin St Seymour Conn	12-13-14		
Merck & Co Inc Chemical Div Rahway NJ	7-8-9	Shieldalloy Corp Newfield NJ	11-18-20-33-46		
Metal Hydrides Inc 1224 Congress St Beverly Mass	50-54	Somers Brass Co Baldwin Ave Waterbury Conn	12-13-14-21-34-35		
Metals & Controls Corp General Plate Div 48 Forest St Attleboro Mass	24-36-39-41-42-43-50	Spinform Inc 65 Mechanic St Attleboro Mass	27-33		
		Stackpole Carbon Co St Marys Pa	2-22		
		Standard Metals Corp 262 Broad St N Attleboro Mass	24-41-42-43		
		Steward Mfg Co D M Chattanooga Tenn	22		
		Stupakoff Div Carborundum Co Latrobe Pa	27		
		Suprex Electronics Corp 4 Radford Pl Yonkers NY	22		
		Superior Graphite Co. 33 S Clark St Chicago 3 Ill	4		
		Sylvania Electric Products Inc 1740 Broadway New York 19 NY	22-23-51		
				A A Metal Products Inc 154 Elliot St Brattleboro Vt	59
				Abalon Precision Mfg Corp 540 Casanova St New York 59 NY	59
				Accurate Electronics Corp 169 S Abbe Rd W Elyria Ohio	59
				Accurate Paper Tube Co 805 N Peoria St Chicago 22 Ill	67-77

47-A—METALS

METAL STOCK

Foil	55
Porous bearing metal	56
Sheet	57
Spring contact	58
Stampings	59
Thermostatic metal	60

SOLDER

Aluminum	61
Indium	62
Lead-tin	63
Printed circuit	64
Silver	65

TUBING

Aluminum	66
Asbestos	67
Brass	68
Ceramic	69
Copper	70
Glass fibre insulation	71
Glass precision	72
Metal alloy	73
Metal hose, flexible	74
Monel	75
Nickel	76
Paper	77
Phenolic	78
Plastic	79
Silver	80
Steel	81
Steel, stainless	82
Tungsten	83
Varnished or lacquered	84
Woven or knitted wire	85

Ace Plastic Co 91-30 VanWyck Expwy Jamaica 35 NY	79	Chase Brass & Copper Co 236 Grand St Waterbury 20 Conn	58-63-65-68-70-82	General Electric Co Coshocton Ohio	71-78
Acme Mfg & Gasket Co 738 N 41 St Philadelphia 4 Pa	59	Chemalloy Electronics Corp Gillespie Airport Santee Calif	61	Glass Eng'g Labs Inc 601 O'Neill St Belmont Calif	72
Advance Electronics Co 8510 North End Ave Oak Park 37 Mich	59	Chicago Gasket Co 1271 W North Ave Chicago 22 Ill	79	Glaser Lead Co 31 Wyckoff Ave Brooklyn 37 NY	61-63
Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	59	Chromium Corp of America P O Box 1229 Waterbury 20 Conn	55	Golden Co 1054 38 St Brooklyn 19 NY	59
Allegheny Ludlum Steel Corp Oliver Bldg Pittsburgh 22 Pa	82	Cleveland Container Co 6201 Barberton Ave Cleveland 2 Ohio	67-77-78	Goldsmith Bros Smelting & Refining Co 1300 W 59 St Chicago 36 Ill	61-65
Allied Engraving & Stamping Co 17 Elm St Buffalo 3 NY	59	Clowes Ceramic Corp 3711 Calhoun Ave Chattanooga 7 Tenn	69	Goodrich Industrial Products Co B F Marietta Ohio	79
All-State Welding Alloys Co 249 Ferris Ave White Plains NY	61-63-65	Columbia Products Co 6625 Shakespeare Rd Columbia SC	71	Hallett Mfg Co 1601 W Florence Inglewood Calif	74
Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	55-75	Columbia Tape Mills Bank St E Greenville Pa	71	Handy & Harman 82 Fulton St New York 38 NY	55-65-80
Alpha Metals Inc 56 Water St Jersey City 4 NJ	55-57-59-61-62-63-64-65	Columbia Wire & Supply Co 2850 Irving Park Rd Chicago 18 Ill	21	Harwood Electronics Co 466 W Superior St Chicago 10 Ill	59
Alpha Wire Corp 200 Varick St New York 14 NY	71-79-84-85	Conrad & Moser 2 Borden Ave Long Island City 1 NY	59	Havex Industries Inc 900 Greenbank Rd Wilmington 8 Del	79
Aluminum Co of America Alcoa Bldg Pittsburgh 19 Pa	55-59-61-66	Continental-Diamond Fibre Corp Newark Del	78-79	Haydu Electronic Products 1426 W Front St Plainfield NJ	58
American Lava Corp Subs Minn Mining & Mfg Cherokee Blvd & Mfrs Rd Chattanooga 5 Tenn	69	Corning Glass Works Corning NY	72	Heldor Mfg Corp 238 Lewis St Paterson NJ	59
American Metal Co 61 Broadway New York 6 NY	63-64-65	Croname Inc 3701 Ravenswood Ave Chicago 13 Ill	59	Hi Grade Alloy Corp 1236 S Talman Chicago 8 Ill	61-62-63-64-65
American Platinum Works 231 NJ RR Ave Newark 5 NJ	80	Crucible Steel Co of America Henry W Oliver Bldg Pittsburgh 22 Pa	73-74-76-82	Hitepm Wires Inc 26 Windsor Ave Mineola NY	71-79-84
American Silver Co 3607 Prince St Flushing 54 NY	65	Crystal-X Westlake Corp Lenni Rd Lenni Mills Pa	78-79	Honeycomb Co of America 3 Burroughs St Bridgeport 8 Conn	71-78
American Super-Temperatures Wires Inc West Canal St Winoski Vt	71-79	Delta Chemical Works 23 W 60 St New York 23 NY	56-60-66-73-75 76-80-81-82-83	Hudson Tool & Die Co 18 Malvern St Newark 5 NJ	59
Amplex Div Chrysler Corp P O Box 2718 Detroit 31 Mich	56	Delta Co 333 W 24 Pl Chicago 16 Ill	55	Huse Liberty Mica Co Peabody Industrial Center Peabody Mass	71-78
Anchor Metal Co 966 Meeker Ave Brooklyn 22 NY	55-61-62-63-64-65	Diamonite Products Mfg Co 217 4 St N E Canton 2 Ohio	69	iE Mfr 325 N Hoyne Ave Chicago 12 Ill	58-59
Anchor Plastics Co 36-36 36 St Long Island City 6 NY	79	Dielectric Materials Co 5315 N Ravenswood Ave Chicago 40 Ill	71-79-84	Improved Seamless Wire Co 775 Eddy St Providence 5 RI	80
Anderson & Sons N Elm St Westfield Mass	59	Dow Chemical Co Midland Mich	73-79	Indium Corp of America 1676 Lincoln Ave Utica 4 NY	62
Armo Steel Corp 703 Curtis St Middletown Ohio	81	Downing Crystal Co 191 Shaeffer Ave Westminster Md	57	Industrial Hardware Mfg Co 109 Prince St New York 12 NY	59
Associated Mfg Co 4755 N Rockwell St Chicago 25 Ill	59	Driver Co Wilbur B 1875 McCarter Hwy Newark 4 NJ	58	Insulating Fabricators of NE Inc 69 Grove St Watertown 72 Mass	64-78-79
Associated Production Co 162 N Clinton St Chicago 6 Ill	59	Du-Co Ceramics Co Box 278 Saxonburg Pa	69	Insulation Mfrs Corp 565 W Washington Blvd Chicago 39 Ill	67-71-77-78-79-84
Atlantic Metal Hose Co 308 Dyckman St New York 34 NY	74	Dunton Co M W 7 Goff St Providence RI	63-64	Insulation & Wires Inc 1534 Swinney Ave Ft Wayne Ind	71-78-84
Auburn Mfg Co Stack St Middletown Conn	59	Du Pont de Nemours & Co E I Wilmington 98 Del	63	Insuline Corp of America 186 Granite St Manchester NH	78-79
Automatic Methods Inc 965 W Grand St Elizabeth NJ	59	Eastern Smelting & Refining Corp 109 W Brookline St Boston 18 Mass	80	International Nickel Co 67 Wall St New York 5 NY	73-75-76
Avon Tube Div Higbie Mfg Co Barrett Rd Rochester Mich	81	Eaiser Eng'g Co 750 S 13 St Newark 3 NJ	83	Irvington Div Minn Mining & Mfr Co 11 Argyle Terrace Irvington 11 NY	79
Babcock & Wilcox Co Tubular Products Div Beaver Falls Pa	73-81-82	Electrical Refractories Co E Clark St E Palestine Ohio	69	Isolantite Mfg Corp Warren Ave Stirling NJ	69
Bache & Co Semon 636 Greenwich St New York 14 NY	72	Electrical Specialty Co 158 11 St San Francisco 3 Calif	61-63-67-71 77-78-79-84-85	Johns-Manville 22 E 40 St New York 16 NY	67
B & C Insulation Products Inc 490 Lincoln Hwy Iselin NJ	71-84	Elzee Metal Products Co 775 39 St Brooklyn 32 NY	59	Johnson & Hoffman Mfg Corp 31 E 2 St Mineola NY	59
Belmont Smelting & Refining Works 330 Belmont Ave Brooklyn 7 NY	55-61-62-63-65	Emerson Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY	71-78-79	Johnson Mfg Co Mt Vernon Iowa	61-63-64
Bentley Harris Mfg Co Conshohocken 30 Pa	71-79-84	Emerson-Sack-Warner Corp 85 Washington St Somerville 43 Mass	59	Johnston Foil Mfg Co 6008 S Broadway St Louis 11 Mo	55-61-63
Bernard Franklin Co 4155 E Hedley St Philadelphia 37 Pa	59-81	Enthoven Solders Ltd 113 N Water St Rochester 4 NY	61-63	Jones & Laughlin Steel Corp 3 Gateway Center Pittsburgh 30 Pa	81
Bethlehem Steel Co Bethlehem Pa	57	Erca Tool Die & Stamping Co 19 Ash St Brooklyn 22 NY	59	Kaiser Aluminum & Chemical 919 N Michigan Ave Chicago Ill	55
Bios Labs Inc 17 W 60 St New York 23 NY	56-60-66-73-75 76-80-81-82-83	Erie Resistor Corp 644 W 12 St Erie 6 Pa	59	Keasbey & Mattison Co Ambler Pa	67
Birnbach Radio Co 145 Hudson St New York 13 NY	71-79-84-85	Erwood Inc 1770 W Berteau Ave Chicago 13 Ill	59	Kees Mfg Co F D 700 Park St Beatrice Nebr	59
Bishop & Co Platinum Works J Malvern Pa	73-75-76-82	Extruders Inc 3232 W El Segundo Blvd Hawthorne Calif	79	Kester Solder Co 4201 Wrightwood Ave Chicago 39 Ill	63
Borden Co Chemical Div Resinite Dept P O Box 1589 Santa Barbara Calif	71-79	Falstrom Co Falstrom Court Passaic NJ	59	Keystone Electronics Corp 423 Broome St New York 13 NY	59
Borden Co Chemical Div 350 Madison Ave New York 17 NY	71-79	Federal Tool & Mfr Co 3600 Alabama Ave Minneapolis 16 Minn	59	Kirchberger & Co M 83 W Forest Ave Englewood NJ	69
Bow Solder Products Co 251 Freeman St Brooklyn 22 NY	61-62-63-64	Federated Metals Div American Smelting & Refining Co 120 Broadway New York 5 NY	61-62-63-64-65	Kling Metal Spinning & Stamping Co 245 Centre St New York 13 NY	59
Brach Mfg Corp 200 Central Ave Newark 3NJ	63	Fischer & Porter Co 478 Warminster Rd Hatboro Pa	72	Kontes Glass Co Vineland NJ	72
Bram Chemical Co Metals & Minerals Div 820 65 Ave Philadelphia 26 Pa	55-57-60-65-68 70-75-76-80-83	Fish-Schurman Corp 70 Portman Rd New Rochelle NY	72	Krueger & Hudepohl 1041 Evans St Cincinnati 4 Ohio	59
Brand & Co William 41 North St Willimantic Conn	71-79-84	Flexaust Co 100 Park Ave New York 7 NY	74	Kuss Industries Inc Tacony & Lewis Sts Philadelphia 24 Pa	59
Bridgeport Brass Co 30 Grand St Bridgeport 2 Conn	66-68-70-73	Flexonics Corp 1315 S 3 Ave Maywood Ill	74-79-82	Lamaco Inc 9230 W Grand Ave Franklin Park Ill	77
Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	57	Fluorocarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ	79	Laminated Sheet Products Corp 449 Neponset St Norwood Mass	71-78
Carpenter Steel Co Alloy Tube Div Springfield Rd Union NJ	82	Forsberg Mfg Co 125 Seaview Ave Bridgeport 1 Conn	59	La Moree C D 2433 Birkdale St Los Angeles 31 Calif	71
Carpenter Steel Co Front & Bern Sts Reading Pa	60-82	Franklin Fibre-Lamitex Corp Wilmington Del	71-78-79	La Pointe Industries Inc 155 W Main St Rockville Conn	66
Carstedt Research Inc 2501 E 68 St Long Beach 5 Calif	71	Freeway Washer & Stamping Co 4911 Grant Ave Cleveland 5 Ohio	59	Lapp Insulator Co Radio Specialties Div 24 Summer St LeRoy NY	69
Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wis	69	Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ	69	Leach & Garner Industrial Div Leach & Garner Bldg Attleboro Mass	55-57-58-68-70-73-80
Cerro De Pasco Sales Corp 300 Park Ave New York 22 NY	62-65	Furane Plastics Inc 4516 Brazil St Los Angeles 32 Calif	71-79	Lee Chemical Corp Walter Seabury Ave & Butler Pl Bronx 6 NY	79
Chace Co W M 1600 Beard Ave Detroit 9 Mich	60	Garlock Packing Co 402 Main St Palmyra NY	67-79	Lenk Mfg Co 30 Cummington St Boston 15 Mass	64
Channel Master Corp Ellenville NY	66-81	Gemex Corp 1200 Commerce Ave Union NJ	59	Long Inc Thomas J 215 Stonehinge Lane Carle Place LI NY	78
		General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	64-78-79	Luzerne Rubber Co Muirhead Ave Trenton NJ	79
				Mackay Inc A D 198 Broadway New York 38 NY	55-57-76-83
				Majestic Extruders Inc 32-37 Downing St Flushing 52 NY	79

Chicago Industrial Instrument Co 865 N Sangamon St Chicago 22 Ill	2-8	Ransom Research 323 W 7 St San Pedro Calif	4	Airmec Ltd High Wycombe Buckinghamshire England	17-21-24-29
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London SE 26 England	4	Rawson Electrical Instrument Co 117 Potter St Cambridge 42 Mass	8	Airpax Products Co Middle River Baltimore 20 Md	7
Computer-Measurements Corp 5528 Vineland Ave N Hollywood Calif Daven Co	4	Scott Inc H H 385 Putnam Ave Cambridge 39 Mass	7	Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	23
Route 10 Livingston NJ	1-2-3-4-7-8	Sensitive Research Instrument Corp 310 Main St New Rochelle NY	1-2-4	All-State Welding Alloys Co 249 Ferris Ave White Plains NY	6
Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	11	Shasta Div Beckman Instruments Inc PO Box 296 Station A Richmond Calif	4	Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	1-30
Dayton Aviation Radio & Equipment Corp R R 3 Troy Ohio	8	Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill	2-8	Alpha Instrument Co 43 Hempstead St New London Conn	18-21-26-29-30
DeJur-Amsco Corp Electronic Sales Div 45-01 Northern Blvd Long Island City 1 NY	1-2	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	1-2-9	Alto Scientific Co 855 Commercial St Palo Alto Calif	17-22-29-30
Deltron Inc 2905 N Leithgow St Philadelphia 33 Pa	9	Southern Instruments Computer Div Frimley Rd Camberley Surrey England	9	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	22-25
Donner Scientific Co 888 Galindo St Concord Calif	12	Systron Corp 2055 Concord Blvd Concord Calif	4-9	American Metrix Corp 1-2-3-8-9-12-13-14- 40 Haddon Ave Camden 3 NJ	23-25-27-29-30-31
D & R Ltd 402 E Gutierrez St Santa Barbara Calif	12	Tatnall Measuring Systems Co Kimberton Rd Phoenixville Pa	10	Anchor Products Co 2712 W Montrose Ave Chicago 18 Ill	29
Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	1	Technical Products Co Instrument Div 6670 Lexington Ave Los Angeles 38 Calif	11	Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	1-4-13-16-18-23-30
Dyna-Empire Inc 1075 Stewart Ave Garden City LI NY	3-7-11	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	1-7-10-12	Askania Regulator Co 240 E Ontario St Chicago 11 Ill	25
Electric Design & Mfg Co Jefferson St Burlington Iowa	2	Teletronics Lab Inc 54 Kinkel St Westbury NY	4	Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio	1-4-13-15-16-17-21-23-30
Electro-Mechanical Instrument Co 8 & Chestnut St Perkasio Pa	2-8	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	1-2-11	Associated Research Inc 3758 W Belmont Ave Chicago 18 Ill	30
Electronic Research Associates 87 E Centre St Nutley 10 NJ	7	Triplet Electrical Instrument Co Harmon Rd Bluffton Ohio	2-6-7-11	Autron Eng'g Inc 1254 W 6 St Los Angeles 17 Calif	30
Empire Devices Products Corp 38-15 Bell Blvd Bayside 61 NY	3-7-8-10	US Recording Co 1121 Vermont Ave Washington 5 DC	1	Baldwin-Lima-Hamilton Corp Electronics & Instrumentation Div 42 4 Ave Waltham 54 Mass	28
Ercona Corp 551 5 Ave New York 17 NY	2	Varo Mfg Co 2201 Walnut St Garland Texas	4	Ballantine Labs Inc Boonton NJ	2-15-17-18-29
Esterline-Angus Co P O Box 596 Indianapolis 6 Ind	10	Voron & Co George 835 N 19 St Philadelphia 30 Pa	2-7-11	Barber-Colman Co Rock St Rockford Ill	17
Elm Labs 10 Washington Ave Hastings-on-Hudson NY	4	WacLine Inc 35 S St Clair St Dayton 2 Ohio	2-11	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	9
Fischer & Porter Co 478 Warminster Rd Hatboro Pa	10	Waters Mfg Inc Boston Post Rd Wayland Mass	1-2	Beckman/Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	7-24
Fluke Mfg Co John 1111 W Nickerson St Seattle 99 Wash	8	Welch Mfg Co W M 1515 Sedgwick St Chicago 10 Ill	2-11	Beckman/Helipot Corp Newport Beach Calif	1-33-34
General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	1-2-3-4-6-7-8-11	Western Electro Acoustic Lab Inc 11789 San Vicente Blvd Los Angeles 49 Calif	1-2-7-11	Beede Electrical Instrument Co Penacook NH	1-4-8-13-16- 17-18-21-22-23-30
Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	10	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	1-2-10	Bergen Labs 247 Crooks Ave Clifton NJ	29
Heath Co 305 Territorial Rd Benton Harbor Mich	2-3-5-8	Weston Electrical Instrument Corp Sub Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ	9-10	Beta Electric Div Sorensen Co 333 E 103 St New York 29 NY	10-13
Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	2-3-4			B & H Instrument Co 3479 W Vickery Blvd Ft Worth 7 Texas	7
Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	1-2-3-4-6-7-8-9-11			Biddle Co James G 1316 Arch St Philadelphia 7 Pa	7-12-21
Hoyt Electrical Instrument Works 42 Carleton St Cambridge 42 Mass	2			Bird Electronic Corp 1800 E 38 St Cleveland 14 Ohio	31
Hupp Instru/mation Co 2119 Sepulveda Blvd Los Angeles 25 Calif	4			Bolton Labs Inc W Main St Bolton Mass	18
I-L-S Instrument Corp 4525 W 160 St Cleveland 11 Ohio	4			Boonton Electronics Corp 738 Speedwell Ave Morris Plains NJ	17-29-30
Industrial Test Equipment Co 55 E 11 St New York 3 NY	9			Boonton Radio Corp Intervale Rd Boonton NJ	26
International Instruments Inc Box 2954 New Haven 15 Conn	11			Booth Co Arthur E 265 Alexandria Ave Los Angeles 4 Calif	24
Jackson Electronics Inc 23 Woodcrest Rd West Chester Pa	2-4-7-9			Boulin Instrument Corp 10 1 St Pelham NY	28
Kay Electric Co 14 Maple Ave Pine Brook NJ	4			Bristol Co P O Box 1790 EITT Waterbury 20 Conn	1-5-8-10-11-12-13-16 17-21-22-23-25-30-31
Lampkin Labs Inc RFD 1 Bradenton Fla	6			British Industries Corp 80 Shore Rd Port Washington NY	18-25
Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	9			Bruno-New York Industries Corp 460 W 34 St New York 1 NY	21-30
Larson Instrument Co 24 Orchard St Tarrytown NY	10			Burton-Rogers Co 42 Carleton St Cambridge 42 Mass	1-4-13-16-17-23-30
Marconi Instruments Ltd 44 New St New York 4 NY	8			Calif Magnetic Control Corp 11922 Valerio St N Hollywood Calif	30
Marion Electrical Instrument Co Grenier Field Manchester NH	1-2			Cambridge Instrument Co Grand Central Terminal New York 17 NY	5-8-13-15-16-17-34
Measurements Corp Boonton NJ	5-7			Central Scientific Co of Calif 1040 Martin Ave Santa Clara Calif	8-16-17
Melody Master Mfg Co 2842 N Cicero Ave Chicago 44 Ill	2-7-11			Chicago Industrial Instrument Co 865 N Sangamon St Chicago 22 Ill	1-2-4-10-12-13-16 17-18-21-22-23-29-30
Meters Inc 5353 N Keystone Ave Indianapolis 20 Ind	2			Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London SE 26 England	7-27
Metronix Inc Mill Lane Waterford Conn	4			Collins Radio Co 855 35 St N E Cedar Rapids Iowa	31
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa	1-2-7-11			Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio	1-30
Muirhead & Co Ltd Beckenham Kent England	9			Communication Measurements Lab 350 Leland Ave Plainfield NJ	12-29
Muirhead Instruments Inc 677 5 Ave New York 22 NY	4-7-9			Computer-Measurements Corp 5528 Vineland Ave N Hollywood Calif	7
Non-Linear Systems Inc Del Mar Airport Del Mar Calif	10			Consolidated Avionics Corp 77 Brooklyn Ave Westbury NY	7
Northeast Electronics Corp P O Box 425 Concord NH	7			Cornell-Duhlier Electric Corp 333 Hamilton Blvd S Plainfield NJ	2
Northern Radio Co 143 W 22 St New York 11 NY	4			Daven Co Route 10 Livingston NJ	7-22-29
Otarion Inc 185 Ashford Ave Dobbs Ferry NY	1			Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	12-21
Pace Electrical Instruments Co 70-31 84 St Glendale 27 LI NY	1-2-8				
Penn-East Eng'g Corp Willow St Kutztown Pa	9				
Phaotron Instrument & Electronic Co 151 Pasadena Ave S Pasadena Calif	2-8-11				
Potter Aeronautical Corp P O Box 532 Union NJ	10				
Precision Apparatus Co 70-31 84 St Glendale 27 LI NY	2				
Radio City Products Co Centre & Glendale Sts Easton Pa	8				
		Acton Laboratories 533 Main St Acton Mass	29		
		Advance Electronics Lab Inc 249 Terhune Ave Passaic NJ	24		
		Aero Instrument Co 11423 Vanowen St N Hollywood Calif	7		
		Aero Research Instrument Co 315 N Aberdeen St Chicago 7 Ill	1		

49—METERS, ELECTRICAL MEASUREMENT

Meters, ammeter	1
Meters, capacitance	2
Meters, conductance	3
Meters, d'arsonval	4
Meters, electrometer	5
Meters, flux	6
Meters, frequency	7
Meters, galvanometer	8
Meters, impedance	9
Meters, kilovolt	10
Meters, kilowatt	11
Meters, megohm	12
Meters, microampere	13
Meters, microfarad	14
Meters, microvolt	15
Meters, milliampere	16
Meters, millivolt	17
Meters, multimeter	18
Meters, multiplier	19
Meters, noise	20
Meters, ohm	21
Meters, output	22
Meters, panel	23
Meters, phase	24
Meters, power factor	25
Meters, Q	26
Meters, snap around	27
Meters, tension	28
Meters, vacuum tube volt	29
Meters, volt	30
Meters, watt	31
Meters, watt-hour	32
Voltmeters, digital	33
Voltmeters, electrostatic	34
Voltmeters, slideback	35

DeJur-Amsco Corp Electronic Sales Div 45-01 Northern Blvd Long Island City 1 NY	1-4-8-10-13-15-16 17-18-22-23-30		
Delaware Products Co 300 Broadway Camden 3 NJ		33	
Deltron Inc 2905 N Leithgow St Philadelphia 33 Pa		24	
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif		9	
Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wisc	1-30-31		
Donner Scientific Co 888 Galindo St Concord Calif		35	
Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	1-4-13-16-23-30		
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	5-7-17-29		
Dunlap Electronics 764 9 St Des Moines 14 Iowa	15-21-29-30		
Dyna-Empire Inc 1075 Stewart Ave Garden City LI NY		6	
Eastern Specialty Co 3617 N 8 St Philadelphia 40 Pa		24	
Electric Design & Mfg Co Jefferson St Burlington Iowa	1-4-10-13 16-17-23-30		
Electro Impulse Lab Inc 208 River St Red Bank NJ		27	
Electro Instruments Inc 3794 Rosecrans St San Diego 10 Calif		33	
Electro-Mechanical Instrument Co 8 & Chestnut St Perkasie Pa	1-13-16-17-21-22-23-30		
Electronic Associates Inc Long Branch NJ		33	
Electronic Designs Inc 28 School St Yonkers NY		29	
Electronic Instrument Co 84 Withers St Brooklyn 11 NY		18-29	
Electronic Measurements Co Lewis St & Maple Ave Eatontown NJ	17-30		
Electronic Measurements Corp 625 Broadway New York 12 NY	16-21-29-30		
Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif		22	
Electrovert Inc 489 5 Ave New York NY	1-8-17-21-30-31		
Elfa Instrument Center 55 Reade St New York 7 NY		1	
Ellis Associates 67 Lincoln Ave Pelham NY	30		
Empire Devices Products Corp 38-15 Bell Blvd Bayside 61 NY		20	
Engelhardt Eng'g Co 38 Burritt Ave S Norwalk Conn		29	
Esterline-Angus Co P O Box 596 Indianapolis 6 Ind	1-7-10-11-16-17-25-30-31		
Federal Telephone & Radio Co Div I&T 100 Kingsland Rd Clifton NJ	2-7-15		
Feiler Eng'g & Mfg Co 8026 N Monticello Ave Skokie Ill	18-21-29-30		
Ferranti Electric Inc 30 Rockefeller Plaza New York 20 NY		34	
Fischer & Porter Co 478 Warminster Rd Hatboro Pa		23	
Fisher Research Lab 1961 University Ave Palo Alto Calif	29-34		
Fluke Mfg Co John 1111 W Nickerson St Seattle 99 Wash	1-22-30-31-35		
Franklin Electronics Inc Box 113 Bridgeport Pa	18-29-33		
Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	12-26-29		
Gary Wells Co 361 Rockaway Ave Valley Stream NY		7	
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	1-4-6-7-8-10-13 16-17-21-23-24-25		
General Radio Co 275 Massachusetts Ave Cambridge 30 Mass	5-7-12-22-29		
Gilmore Industries Inc 5713 Euclid Ave Cleveland 3 Ohio		33	
G-M Laboratories Inc 4300 N Knox Ave Chicago 41 Ill		8	
Goldak Co 1544 W Glenoaks Blvd Glendale 1 Calif		17	
Gray Instruments Co 200 E Church Lane Philadelphia 44 Pa		17	
Gulton Industries Inc 212 Durham Ave Metuchen NJ	1-8-12-13-15-16- 17-18-21-23-30		
Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa		30	
Hathaway Instrument Div Hamilton Watch Co 5800 E Jewell Ave Denver 22 Colo		8	
Heath Co 305 Territorial Rd Benton Harbor Mich	2-9-14-17-18- 21-29-30-31		
Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	7-17-19-29-30		
Hewson Co 443 Broad St Newark 2 NJ		13	
Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	1-2-3-4-7-8-10- 15-16-17-18-19- 20-21-22-23-24-27-29-30-31		
Howell Instrument Co 3101 Trinity St Ft Worth 7 Texas		8	
Hoyt Electrical Instrument Works 42 Carleton St Cambridge 42 Mass	1-4-13-16-17-23-30		
Hycron Mfg Co 707 S Raymond Ave Pasadena Calif	29-30-33		
Industrial Control Co 805 Albin Ave Lindenhurst LI NY	17-30		
Industrial Development Labs Inc 17 Pollock Ave Jersey City 5 NJ	2-9		
Industrial Devices Inc 982 River Rd Edgewater NJ		30	
Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ	12-21		
Industrial Test Equipment Co 55 E 11 St New York 3 NY	9-24-25-31		
Instrument Electronics Corp 90 Main St Port Washington NY		29	
Instruments Inc 122 N Madison St Tulsa Okla		2	
International Instruments Inc Box 2954 New Haven 15 Conn	1-4-13-16-17-18-30		
Irwin Labs 1238 S Gerhart Ave Los Angeles 22 Calif		6	
Jackson Electrical Instrument Co 18 S Patterson Blvd Dayton 2 Ohio		29	
Jackson Electronics Inc 23 Woodcrest Rd West Chester Pa	1-9-29		
Jennings Radio Mfg Corp 970 McLaughlin Ave San Jose 8 Calif		29	
Johnson Aircraft Eng'g Co M J Box 10 Morristown Airport Morristown NJ	8-13-21		
Kaiser Aircraft & Electronics Corp Toledo Electronics Div PO Box 437 Toledo Ohio		33	
Kay Electric Co 14 Maple Ave Pine Brook NJ		17	
Keithley Instruments Inc 12415 Euclid Ave Cleveland 6 Ohio	1-5-8-10-12-13-15- 16-17-29-30-34		
King Electric Equipment Co 9123 Inman Ave Cleveland 5 Ohio	1-4		
Kintel (Kay Lab) 5725 Kearny Villa Rd San Diego 12 Calif	8-13-15-16-29-30		
Knopp Inc 4224 Holden St Oakland 8 Calif		24-30	
Landsverk Electrometer Co 550 W Garfield Ave Glendale 4 Calif		5	
Larson Instrument Co 24 Orchard St Tarrytown NY		4	
Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ		7	
Lehigh Valley Electronics Eng'g & Mfg Co 215 S 3 St Allentown Pa		9	
Leitch Eng'g Corp 326 Lincoln St Manchester NH	18-21-29-30		
Link Aviation Inc Binghamton NY		30	
Macleod & Hanopol 10 Roland St Charlestown 29 Mass		12	
Magnalux Corp 7300 W Lawrence Ave Chicago 31 Ill	3-6		
Majestic Int'l Corp 79 Washington St Brooklyn 1 NY	29-30		
Marconi Instruments Ltd 44 New St New York 4 NY	2-12-26-29		
Marion Electrical Instrument Co Grenier Field Manchester NH	1-4-8-10-12-13-16- 17-18-21-23-30		
Martindale Electric Co Box 617 Edgewater Branch Cleveland 7 Ohio	1-12-21-27-30-31		
Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY	24		
Measurements Corp Boonton NJ		20-30	
Meters Inc 5353 N Keystone Ave Indianapolis 20 Ind	1-4-8-10-13- 16-17-21-23-30		
Metronix Inc Mill Lane Waterford Conn		9-30	
Midwestern Instruments PO Box 7186 Tulsa Okla		8	
Miller M C Box 721 E Saddle River Rd Allendale NJ	1-16-17-30		
Millivac Instrument Corp 2315 2 Ave Carman Schenectady NY	29-30		
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa		20	
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa		17	
Moseley Co F L 409 N Fair Oaks Ave Pasadena Calif		30	
Muirhead & Co Ltd Beckenham Kent England		24	
Muirhead Instruments Inc 677 5 Ave New York 22 NY	7-9-20-24		
National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif		33	
New York Air Brake Co 230 Park Ave New York 17 NY		29	
Non-Linear Systems Inc Del Mar Airport Del Mar Calif	15-17-21-30-33		
Northeast Electronics Corp PO Box 425 Concord NH		1-21-30-31	
Northeastern Eng'g Inc 25 S Bedford St Manchester NH		18-30	
Norton Electrical Instrument Co 71 Hilliard St Manchester Conn		1-30-31	
Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa		5	
Olttronix Co 235 Underwood Dr Atlanta 5 Ga	1-8-16-17-30-31		
Pace Electrical Instruments Co 70-31 84 St Glendale 27 LI NY	1-4-8-13-16-17- 18-23-29-30		
Pameco Mill Lane Waterford Conn		29	
Parker Electronics Co 130 Cutter Mill Rd Great Neck NY	1-4-16-17-23-30		
Penn-East Eng'g Corp Willow St Kutztown Pa		24	
Phaostrotron Instrument & Electronic Co 151 Pasadena Ave S Pasadena Calif	1-4-10-13-15-16- 17-18-22-23-30		
Philco Corp Accessory Div "A" & Allegheny Ave Philadelphia 34 Pa		21-29	
Photohell Co 43 Vesey St New York 7 NY		2	
Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY		9	
Potter Aeronautical Corp PO Box 532 Union NJ		7	
Precise Development Corp 2 Neil Ct Oceanside NY	2-10-29		
Precision Apparatus Co 70-31 84 St Glendale 27 LI NY	1-4-8-13-16-17- 18-23-29-30		
Precision Meter Co 126 Greenpoint Ave Brooklyn 22 NY	1-4-8-15-16-17-23-30		
Pve Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	8-10-12-34		
Pyramid Instrument Corp 630 Merrick Rd Lynbrook LI NY		33	
Q-V-S Inc 20 N 15 St E Orange NJ	1-4-8-13-16-17-21-22-23		
Radio City Products Co Centre & Glendale Sts Easton Pa	21-22-30		
Radio Corp of America Commercial Electronic Products Camden 2 NJ	16-30-35		
Radio Corp of America 415 S 5 St Harrison NJ		16	
Radio Kits Inc 120 Cedar St New York 6 NY	29-31		
Railway Communications Inc 9351 E 59 St Raytown 33 Mo		30	
Ransom Research 323 W 7 St San Pedro Calif		5-7	
Rawson Electrical Instrument Co 117 Potter St Cambridge 42 Mass	4-5-6-10-13-16-17- 18-22-23-30-31-34		
Sangamo Electric Co Springfield Ill	1-11-31-32		
Saratoga Industries Congress & Ballston Aves Saratoga Springs NY		7	
Scherr Co George 200 Lafayette St New York 12 NY		28	
Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ		1	
Sensitive Research Instrument Co 310 Main St New Rochelle NY	1-2-3-4-5- 6-7-8-10-11-13-15-16-17-18-19- 20-22-23-24-25-30-31-34		
Servo-Recording Instruments Inc 1815 W Van Buren St Phoenix Ariz	5-34		
Shasta Div Beckman Instruments Inc PO Box 296 Station A Richmond Calif	7-29-30		
Shurite Meters 61 Hamilton St New Haven 3 Conn	1-16-21-23-30		
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill	1-4-7-8-10-13-14- 15-16-17-18-21-22- 23-24-26-30-31		
Sittler Corp 18 N Ada St Chicago 7 Ill		30	
Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	15-17-20-24-29-30		
Southern Instruments Computer Div Frimley Rd Camberley Surrey England		33	
Southwest Products Inc Alamo Downs Rt 4 San Antonio Texas		32	
Southwestern Industrial Electronics Co 2831 Post Oak Rd Houston 19 Texas	12-29		
Specialty Eng'g & Electronics Co 79 Clifton Pl Brooklyn 38 NY		18	
Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	7-9-31		
Sprague Electric Co Marshall St North Adams Mass		2	

Sterling Mfg Co 1201 Wentworth Ave Cleveland Ohio	1-13-16-23-30	Alpha Instrument Co 43 Hempstead St New London Conn	14	Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	1-3-4-5-7-9-10-11-12-13
Stewart Instrument Co 6507 Grand River Detroit 8 Mich	7	Alto Scientific Co 855 Commercial St Palo Alto Calif	8	International Instruments Inc Box 2954 New Haven 15 Conn	1-7
Sticht Co Herman H 27 Park Pl New York 7 NY	7-12-21-34	Amerac Inc 116 Topsfield Rd Wenham Mass	15	Irwin Labs 1238 S Gerhart Ave Los Angeles 22 Calif	5
Stoddard Aircraft Radio Co 6644 Santa Monica Blvd Hollywood 38 Calif	20	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	6-7	Jackson Electronics Inc 23 Woodcrest Rd West Chester Pa	1-3-7-9-10-11-12-14
Sullivan Ltd H W 80 Shore Rd Port Washington NY	2-3-7-8-9	American Metrix Corp 40 Haddon Ave Camden 3 NJ	1-2-14	Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	5-
Systron Corp 2055 Concord Blvd Concord Calif	7-30	American Microwave Corp 11754 Vose St N Hollywood Calif	9-15	Johnson Co E F Waseca Minn	14
Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	18	Andrew Antenna Corp 606 Beech St Whitby Ontario Can	12	Jones Electronics Co M C 185 N Main St Bristol Conn	11-13-14
Taller & Cooper 75 Front St Brooklyn 1 NY	30-33	Anton Electric Labs 1226 Flushing Ave Brooklyn 6 NY	3	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	7-9-14-15
Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	10-24	Assembly Products Inc Chesterland Ohio	1	Kay Electric Co 14 Maple Ave Pine Brook NJ	3-7
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	2-20	Avionics Ltd PO Box 200 Niagara-on-the-Lake Ontario Canada	9	Lampkin Labs Inc RFD 1 Bradenton Fla	6-7
Telematic Industries Inc 16 Howard Ave Brooklyn 7 NY	30	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	3-4-8-10-11-13-14	Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	7
Teletronics Lab Inc 54 Kinkel St Westbury NY	17-21-29-33	Beckman/Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	7-12	Lysco Mfg Co 1401 Clinton St Hoboken NJ	8
Tensitron Inc Pin Hill Harvard Mass	26	Beckman/Heliport Corp Newport Beach Calif	7	Magnaflux Corp 7300 W Lawrence Ave Chicago 31 Ill	5
Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	1-4-10-13-16-17-22-30	Beede Electrical Instrument Co Penacook NH	1-3	Majestic Int'l Corp 79 Washington St Brooklyn 1 NY	8
Thermo Electric Co 109 S St Saddle Brook NJ	17	B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	6-14	Marconi Instruments Ltd 44 New St New York 4 NY	6-13
Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	7	Blonder-Tongue Laboratories 9-25 Alling St Newark 2 NJ	5	Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY	12
Transitron Inc 186 Granite St Manchester NH	12	Bogart Mfg Corp 315 Seigel St Brooklyn 6 NY	7	Measurements Corp Boonton NJ	8-10
Trio Labs Inc 4025 Merrick Rd Seaford NY	29	Bolton Labs Inc W Main St Bolton Mass	5-7-8-9-10-13-14-15	Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass	15
Triplet Electrical Instrument Co Harmon Rd Bluffton Ohio	1-2-4-12-13-16-17- 21-23-29-30-31	Boonton Electronics Corp 738 Speedwell Ave Morris Plains NJ	3-4-8-11	Microwave Associates Inc Burlington Mass	7-9-14
Union Switch & Signal Div Westinghouse Air Brake Co Braddock Ave Pittsburgh 18 Pa	18	Browning Labs Inc 750 Main St Winchester Mass	6-14	Millen Mfg Co James 150 Exchange St Malden 48 Mass	7-8-14
U S Gauge Div American Machine & Metals Sellersville Pa	1	Bruno-New York Industries Corp 460 W 34 St New York 1 NY	13	Narda Corp 160 Herricks Rd Mineola NY	7-9-13-14-15
Varo Mfg Co 2201 Walnut St Garland Texas	7	Brunswick Instruments PO Box 813 New Brunswick NJ	11	Nems-Clarke Inc 919 Jesup-Blair Dr Silver Spring Md	5
Victoreen Instrument Co 5806 Hough Ave Cleveland 3 Ohio	5	Budelman Radio Corp 375 Fairfield Ave Stamford Conn	6-7-13	Northeast Electronics Corp PO Box 425 Concord NH	11
Voron & Co George 835 N 19 St Philadelphia 30 Pa	18	Calif Technical Industries 1421 Old County Rd Belmont 10 Calif	14	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	5-9-14
WacLine Inc 35 S St Clair St Dayton 2 Ohio	1-2-4-5-8-9-10-13-15-16-17- 18-23-28-30-34	Chemalloy Electronics Corp Gillespie Airport Santee Calif	9	Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	2-7-9-13-14
Waters Mfg Inc Boston Post Rd Wayland Mass	1-4-7-13-15-16-17- 21-22-23-30	Chicago Industrial Instrument Co 865 N Sangamon St Chicago 22 Ill	1	Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	8
Waveforms Inc 333 6 Ave New York 14 NY	30	Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London SE 26 England	7	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	5
Welch Mfg Co W M 1515 Sedgwick St Chicago 10 Ill	1-4-8-10-13-16-17- 21-23-25-30-31	Daven Co Route 10 Livingston NJ	2	Radar Design Corp 210 5 Ave New York 16 NY	7-15
Western Electro Acoustic Lab Inc 11789 San Vicente Blvd Los Angeles 49 Calif	29	DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	7-9-14	Radiation Inc PO Box 37 Melbourne Fla	7
Westinghouse Electric Corp PO Box 868 Pittsburgh 30 Pa	1-4-7-8-10-11-12-13-16-17-18- 21-23-25-30-31-32	Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	2-7-9-12-15	Radio Corp of America Commercial Electronic Products Camden 2 NJ	5-13
Weston Electrical Instrument Corp Sub Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ	1-4-7-8-17-18-21- 23-25-29-30-31	Douglas Microwave Co 252 E 3 St Mt Vernon NY	7-9	Radio Kits Inc 120 Cedar St New York 6 NY	8
		Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	1	Radion Corp 1130 W Wisconsin Ave Chicago 14 Ill	5
		Dunlap Electronics 764 9 St Des Moines 14 Iowa	14	Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	5
		Elco Mfg Co 137 Herrick Rd New Hyde Park LI NY	9	Rixon Electronics Inc 2414 Reedie Dr Silver Spring Md	10-14
		Electro Impulse Lab Inc 208 River St Red Bank NJ	11-13	RS Electronics Corp 435 Portage Ave Palo Alto Calif	10
		Electrovert Inc 489 5 Ave New York NY	9	Sensitive Research Instrument Corp 310 Main St New Rochelle NY	1-10
		Empire Devices Products Corp 38-15 Bell Blvd Bayside 61 NY	4-5-10	Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill	1-3-5
		Engineering Associates 434 Patterson Rd Dayton 9 Ohio	10	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	2-14
		Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	5-6-7-15	Sperry Gyroscopic Co Div Sperry Rand Corp Great Neck NY	2-7-9-14-15
		Frequency Standards P O Box 504 Asbury Park NJ	7-9-15	Spivey Inc James S 4908 Hampden Lane Washington 14 DC	7
		F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	15	Stoddart Aircraft Radio Co 6644 Santa Monica Blvd Hollywood 38 Calif	5-10
		General Communication Co 677 Beacon St Boston 15 Mass	7-13	Sullivan Ltd H W 80 Shore Rd Port Washington NY	7-8
		General Electric Co Apparatus Sales Div River Rd Schenectady 5 NY	5	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	12
		General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	4-6	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	5-10
		General RF Fittings Inc 702 Beacon St Boston 15 Mass	7	Telerad Mfg Corp 1440 Broadway New York 18 NY	7
		Gertsch Products Inc 11846 Mississippi Ave Los Angeles 25 Calif	6-7	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	1
		Gruen Industries Inc Time Hill Cincinnati 6 Ohio	7	Transmission Inc 460 North Ave New Rochelle NY	5
		Health Co 305 Territorial Rd Benton Harbor Mich	8	Triplet Electrical Instrument Co Harmon Rd Bluffton Ohio	1-3
		Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	3-4-9-14	WacLine Inc 35 S St Clair St Dayton 2 Ohio	1-2-3-7-9-11-13-15
				Waveline Inc Passaic Ave Caldwell NJ	9-14
				Weinschel Eng'g 10503 Metropolitan Ave Kensington Md	2

50—METERS—RF

Meters, ammeters, RF	1
Meters, attenuation	2
Meters, decibel	3
Meters, distortion	4
Meters, field strength	5
Meters, FM deviation	6
Meters, frequency	7
Meters, grid dip	8
Meters, microwave	9
Meters, noise	10
Meters, output	11
Meters, phase	12
Meters, R-F power	13
Meters, standing wave ratio	14
Meters, wave	15

Admittance Nameco Corp Marine St Farmingdale LI NY	7-9
Advance Electronics Lab Inc 249 Terhune Ave Passaic NJ	12
Airmec Ltd High Wycombe Buckinghamshire England	12
Airtron Inc 1101 W Elizabeth Ave Linden NJ	7

Westinghouse Electric Corp
PO Box 868 Pittsburgh 30 Pa 1
Wheeler Labs Inc
122 Cutter Mill Rd Great Neck NY 9-15
Winston Electronics Inc
4312 Main St Philadelphia 27 Pa 5

Baldwin-Lima-Hamilton Corp
Electronics & Instrumentation Div
42 4 Ave Waltham 54 Mass 18
Barber-Colman Co
Rock St Rockford Ill 27-28
Barkley & Dexter Laboratories
50 Frankfort St Fitchburg Mass 30
Beckman/Berkeley Div
Beckman Instruments Inc
2200 Wright Ave
Richmond 3 Calif 6-7-11-13-23-24-26-29
Beckman Instruments Inc
Process Instruments Div
2500 Fullerton Rd
Fullerton Calif 1-25
Beckman & Whitley
973 E San Carlos Ave San Carlos Calif 26
Beede Electrical Instrument Co
Penacook NH 22-27
Bendix Aviation Corp
1104 Fisher Bldg Detroit 2 Mich 3-4-10
Biddle Co James G
1316 Arch St Philadelphia 7 Pa 31
B J Electronics Borg-Warner Corp
3300 Newport Ave Santa Ana Calif 5-23
Biophysical Instruments Inc
20 Herman St Philadelphia 44 Pa 10
Boulin Instrument Corp
10 1 St Pelham NY 26
Branson Instruments Inc
37 Brown House Rd Stamford Conn 18
Bristol Co
P O Box 1790 EITT 7-9-11-13-18
Waterbury 20 Conn 22-26-27-28-29
Browning Labs Inc
750 Main St Winchester Mass 9
Brunswick Instruments
P O Box 813 New Brunswick NJ 24
Brush Electronics Co Div Clevite Corp
3405 Perkins Ave Cleveland 14 Ohio 18
Calidyne Co 120 Cross St Winchester Mass 32
Cambridge Instrument Co
Grand Central Terminal
New York 17 NY 22-27-34
Central Scientific Co of Calif
1040 Martin Ave Santa Clara Calif 4-16
Chicago Industrial Instrument Co
865 N Sangamon St Chicago 22 Ill 36
Cinema-Television Ltd
Worsley Bridge Rd
Lower Sydenham London S E 26 England 10
Cleveland Instrument Co
735 Carnegie Ave Cleveland 15 Ohio 12
Computer-Measurements Corp 5528 7-11-13-
Vineland Ave N Hollywood Calif 23-29
Consolidated Electrodynamics Corp
300 N Sierra Madre Villa Pasadena Calif 32
Cramer Controls Corp
Centerbrook Conn 11
Crescent Eng'g & Research Co
5440 N Peck Rd El Monte Calif 5-8-18-32
Davenport Mfg Co
1713 N Ashland Ave Chicago 22 Ill 34
Defiance Eng'g & Microwave Corp
Beverly Airport Beverly Mass 34
DeJur-Amsco Corp Electronic Sales Div
45-01 Northern Blvd
Long Island City 1 NY 7-11-14-16
Dice Co J W
16 Highwood Ave Englewood NJ 12
Dirigo Compass & Instrument Co
Boeing Field Box 37 Seattle 8 Wash 4
Douglas Radio Labs
176 Norfolk Ave Boston 19 Mass 7
D & R Ltd
402 E Gutierrez St Santa Barbara Calif 15
Dudek & Co R C
407 N Maple Dr Beverly Hills Calif 7-23
Dyna-Empire Inc
1075 Stewart Ave Garden City LI NY 2
Eastern Precision Resistor Corp
675 Barbey St Brooklyn 7 NY 32-34-36
Edeliff Instruments
1711 S Mountain Ave Duarte Calif 5-24
Edison Industries Thomas A Instrument Div
93 Lakeside Ave W Orange NJ 24
Electrical Eng'g & Mfg Corp
4612 W Jefferson Blvd
Los Angeles 16 Calif 1
Elfa Instrument Center
55 Reade St New York 7 NY 20-21-28
Ereona Corp
551 5 Ave New York 17 NY 1
Erwood Inc
1770 W Berteau Ave Chicago 13 Ill 32
Esterline-Angus Co
P. O. Box 596
Indianapolis 6 Ind 11-13-18-26-29
Electro-Physics Co
287 Broadway New York 7 NY 20-21
Farnsworth Electronics Co Div I T & T
3702 E Pontiac St Ft Wayne Ind 19
Federal Telephone & Radio Co Div IT&T
100 Kingsland Rd Clifton NJ 4
Fenwal Inc
Pleasant St Ashland Mass 27
Fischer & Porter Co
478 Warminster Rd Hatboro Pa 18-23-24
Fisher Scientific Co
711 Forbes St Pittsburgh 22 Pa 1
Ferro Scientific Co
833 Lincoln St Evanston Ill 13
Foster Eng'g Co
835 Lehigh Ave Union NJ 23

Gaertner Scientific Corp
1250 Wrightwood Ave Chicago 14 Ill 17
Gardner Lab Inc
P O Box 5728 Bethesda 14 Md 1
Garrett Corp AiResearch Mfg Co Div
9851 Sepulveda Blvd Los Angeles 45 Calif 3
Geartronics Corp
2514 Broadway Long Island City NY 26
General Electric Co Apparatus Sales Div
1 River Rd Schenectady 5 NY 5-26-32-34
General Radio Co
275 Massachusetts Ave
Cambridge 39 Mass 9-16-20-32
Gertsch Products Inc
11846 Mississippi Ave Los Angeles 25 Calif 9
Giannini & Co G M
918 E Green St Pasadena Calif 3-5-18-23-24
Glen Falls Lab
Box 685 Glen Falls NY 18-20
Gordon Enterprises
5362 N Cahuenga Blvd N Hollywood Calif 1
Gray Instrument Co
200 E Church Lane Philadelphia 44 Pa 34
Gulton Industries Inc
212 Durham Ave Metuchen NJ 18-27
Hacker & Co Wm J
82 Beaver St New York 5 NY 1-21
Hagan Chemicals & Controls Inc
Hagan Bldg Pittsburgh 30 Pa 26-27
Hall Sonic Eng'g Co
2402 2 St Peru Ill 18
Haydon Co A W
232 W Elm St Waterbury 20 Conn 11-29
Haydon Mfg Co
245 E Elm St Torrington Conn 11-29
Hewlett-Packard Co
275 Page Mill Rd Palo Alto Calif 13-24-26
Hewson Co
443 Broad St Newark 2 NJ 6
Hickok Electrical Instrument Co
10514 Dupont Ave
Cleveland 8 Ohio 8-9-20-26-27-28-36
Hill & Co E Vernon
P O Box 189 Lake Geneva Wis 35
Howell Instrument Co
3101 Trinity St Ft Worth 7 Texas 22
Hupp Instru/mation Co
2119 Sepulveda Blvd
Los Angeles 25 Calif 7-11-13
Hycon Mfg Co
707 S Raymond Ave Pasadena Calif 24
Ideal-Aerosmith Inc
12909 S Cerise Ave Hawthorne Calif 5
Illinois Testing Labs Inc
420 N LaSalle St Chicago 18 Ill 22-27-28
I-I-S Instrument Corp
4525 W 160 St Cleveland 11 Ohio 13-26
Industrial Test Equipment Co
55 E 11 St New York 3 NY 24
Industrial Timer Corp
1407 McCarter Hwy Newark 4 NJ 11-29
Instrument Development Labs Inc
67 Mechanic St Attleboro Mass 1
Instrument Labs
315 W Walton Pl Chicago 10 Ill 6-18
International Research & Development Corp
797 Thomas Lane Columbus 16 Ohio 32
I Q Industries
1714 Westwood Blvd Los Angeles 24 Calif 18
Irwin Labs
1238 S Gerhart Ave Los Angeles 22 Calif 4
Jack & Heintz Inc
17600 Broadway Cleveland 1 Ohio 34
Jacobs Instrument Co
4718 Bethesda Ave Bethesda 14 Md 13
Janco Corp
3111 Winona Ave Burbank Calif 34
Johnson Aircraft Eng'g Co M J
Box 10 Morristown Airport
Morristown NJ 6
Keithley Instruments Inc
12415 Euclid Ave Cleveland 6 Ohio 34
K-F Development Co
2606 Spring St Redwood City Calif 34
King Electric Equipment Co
9123 Inman Ave Cleveland 5 Ohio 26-34
Land-Air Inc Instrument & Electronic Div
2133 Adams Ave San Leandro Calif 1-32
Leighton Labs H W
York Rd & Sunset Lane Hatboro Pa 7
Lewis Eng'g Co
339 Church St Naugatuck Conn 22-27-28
Ling Electronics Inc
5120 W Jefferson Blvd
Los Angeles 16 Calif 32
Lytle Eng'g & Mfg Co
1404 San Mateo Blvd SE
Albuquerque New Mexico 11-29
Magnaflux Corp
7300 W Lawrence Ave Chicago 31 Ill 4-12
Manning Maxwell & Moore Inc
Shelter Rock Lane Danbury Conn 28
Marconi Instruments Ltd
44 New St New York 4 NY 9
Marion Electrical Instrument Co
Grenier Field
Manchester NH 11-14-29-35
Matthew Labs
146 Riverdale Ave Yonkers NY 21
Maxson Instruments Div
W L Maxson Corp
47-37 Austell Pl Long Island City 1 NY 5

51—METERS, SPECIAL PURPOSE

Colorimeters 1
Gaussmeters 2
Machmeters 3
Magnetometers 4
Meters, acceleration 5
Meters, cable testing 6
Meters, counting rate 7
Meters, deflection 8
Meters, deviation 9
Meters, dosimeter 10
Meters, elapsed time 11
Meters, electronic micrometer 12
Meters, events-per-unit time 13
Meters, exposure for film 14
Meters, flutter 15
Meters, foot candle 16
Meters, goniometer 17
Meters, industrial 18
Meters, infrared 19
Meters, light 20
Meters, photoelectric 21
Meters, pyrometer 22
Meters, rate 23
Meters, ratio 24
Meters, spectral 25
Meters, tachometer 26
Meters, thermocouple 27
Meters, thermomometer 28
Meters, time 29
Meters, ultra violet 30
Meters, vibrating reed 31
Meters, vibration 32
Meters, x-ray intensity 33
Meter shunts 34
Micromanometers 35
Multipliers, meter 36

Advanced Electronics Inc
94 Silas Deane Hwy Rocky Hill 9 Conn 32
Aero Instrument Co
11423 Vanowen St N
Hollywood Calif 11
Airmec Ltd
High Wycombe
Buckinghamshire England 7-26-29
AiResearch Mfg Co Div Garrett Corp
9851 Sepulveda Blvd
Los Angeles 45 Calif 3
Airpax Products Co
Middle River Baltimore 20 Md 26
Aloe Scientific
5655 Kingsbury Blvd
St Louis 12 Mo 20-21-27-28
American Electronics Inc
655 W Washington Blvd
Los Angeles 15 Calif 23
American Machine & Foundry Co
Defense Products Group
1101 N Royal St Alexandria Va 3
American Metrix Corp
40 Haddon Ave Camden 3 NJ 6-18-26
Anton Electronic Labs
1226 Flushing Ave
Brooklyn 6 NY 7-10-11-21-23-27
Arnoux Corp
11924 W Washington Blvd
Los Angeles 66 Calif 28
Assembly Products Inc
Wilson Mills Rd
Chesterland 1 Ohio 12-18-22-27-29
Associated Research Inc
3758 W Belmont Ave
Chicago 18 Ill 6-18-26
Audio Accessories
Amityville NY 6
Audio Instrument Co
133 W 14 St New York 11 NY 34
Avia Products Co
7266 Beverly Blvd Los Angeles 36 Calif 34
Avionics Ltd
PO Box 200
Niagara-on-the-Lake
Ontario Canada 5
Bailey Meter Co
1050 Ivanhoe Rd
Cleveland 10 Ohio 22-24-27-28
Baird-Atomic Inc
33 University Rd
Cambridge 38 Mass 7

MB Mfg Co Div Textron Inc
1060 State St New Haven 11 Conn 32
Measurement Eng'g Ltd
232 John St Arnprior Ontario Can 7-23
Meters Inc
5333 N Keystone Ave Indianapolis 20 Ind 22
Miller M C
Box 721 E Saddle River Rd
Allendale NJ 34
Minn-Honeywell Regulator Co Aero Div
1433 Stinson Blvd
Minneapolis Minn 5-13-27
Minneapolis-Honeywell Regulator Co
Industrial Div
Wayne & Windrim Ave
Philadelphia 44 Pa 22-27
Moeller Instrument Co
132-02 89 Ave Richmond Hill 18 NY 28
M Ten Bosch Inc
80 Wheeler Ave Pleasantville NY 5
Muirhead Instruments Inc
677 5 Ave New York 22 NY 32
National Instrument Labs Inc
6108 Rhode Island Ave Riverdale Md 35
Network Mfg Corp
213 W 5 St Bayonne NJ 6
Non-Linear Systems Inc
Del Mar Airport
Del Mar Calif 24-27-28
Norden-Ketay Corp
Commerce Rd Stamford Conn 3
NRD Instrument Co
6425 Etzel Ave St Louis 14 Mo 23
Nuclear-Chicago Corp
223 W Erie St Chicago 10 Ill 7-31
Nuclear Corp of America Empire
State Bldg New York NY 31
Nuclear Systems Div Budd Co
2950 Roberts Ave Philadelphia 32 Pa 10
Nucleonic Corp of America
196 Degraw St Brooklyn 31 NY 10
Optron Corp
3526 State St Santa Barbara Calif 32
Face Electrical Instruments Co
70-31 84 St Glendale 27 LI NY 18
Pantek Co
PO Box 212 El Segundo Calif 7-13
Perkin-Elmer Corp
Main Ave Norwalk Conn 2
Peschel Electronics Inc
13 Garden St New Rochelle NY 6-18
Phaotron Instrument & Electronic Co
151 Pasadena Ave S
Pasadena Calif 18-34-36
Phoenix Precision Instrument Co
3803 N 5 St Philadelphia 40 Pa 1
Photobell Co
43 Vesey St New York 7 NY 1-7-21
Photovolt Corp
95 Madison Ave New York 16 NY 14
Polarad Electronics Corp
43-20 84 St Long Island City 1 NY 24
Potter Aeronautical Corp
PO Box 532 Union NJ 7-23
Precision Apparatus Co
70-31 84 St Glendale 27 LI NY 18
Precision Meter Co
126 Greenpoint Ave Brooklyn 22 NY 18-27
PSC Applied Research Ltd
1500 O'Connor Dr Toronto 16 Canada 4
Pye Canada Ltd
82 Northline Rd
Toronto 16 Ontario Canada 2-18
Quality Control Corp
401 Broadway New York 13 NY 35
Quantametric Devices Inc
Box 1107 Binghamton NY 1
Radar Engineers
401 E 45 St Seattle 5 Wash 6
Radio Frequency Labs Inc
Boonton NJ 2
Ram Meter Inc
1100 Hilton Rd Ferndale 20 Mich 34
Ransom Research
323 W 7 St San Pedro Calif 13-23-29
Rawson Electrical Instrument Co
117 Potter St Cambridge 42 Mass 2-4-27
Resistance Products Co
914 S 13 St Harrisburg Pa 36
Revere Corp of America Wallingford Conn 7-23
Samples Machine Co A M
208 Tazewell Pike Knoxville 18 Tenn 14
Sangamo Electric Co
Springfield Ill 18-34
Scherr Co George
200 Lafayette St New York 12 NY 26
Scientific Glass Apparatus Co
100 Lakewood Terrace Bloomfield NJ 22
Sensitive Research Instrument Corp
310 Main St
New Rochelle NY 2-8-24-27-33-36
Servo Corp of America
2020 Jericho Turnpike
New Hyde Park NY 14-19
Servo-Recording Instruments Inc
1815 W Van Buren St
Phoenix Ariz 7-10-12-23-31
Simpson Electric Co
5200 W Kinzie St Chicago 44 Ill 11-18-27-28
Slaughter Co
Young & College Sts Piqua 9 Ohio 18

Solartron Electronic Group Ltd
Queens Rd Thames Ditton
Surrey England 6-27
Southwest Products Inc
Alamo Downs Rt 4 San Antonio Texas 1
Specialties Inc
Skunks Misery Rd Syosset LI NY 20
Statham Labs Inc
12401 W Olympic Blvd
Los Angeles 64 Calif 5
Stewart Instrument Co
6507 Grand River Detroit 8 Mich 7-13
Sticht Co Herman H
27 Park Pl New York 7 NY 11-26-29-31
Sullivan Ltd H W
80 Shore Rd Port Washington NY 34
Syston Corp
2055 Concord Blvd Concord Calif 11-13-24-26
Tatnall Measuring Systems Co
Kimberton Rd Phoenixville Pa 12
Telechrome Mfg Corp
28 Ranick Dr Amityville LI NY 10-21
Telectro Industries Corp
35-18 37 St Long Island City 1 NY 15
Texas Instruments Inc
6000 Lenmon Ave
Dallas 9 Texas 4-11-27-28-29-34
Thermo Electric Co
109 5 St Saddle Brook NJ 22-27
Topp Industries Inc
5255 W 102 St Los Angeles 45 Calif 13
Tracerlab Inc
1601 Trapelo Rd Waltham 54 Mass 10
Triplet Electrical Instrument Co
Harmon Rd Bluffton Ohio 27
Ultradyne Eng'g Labs
PO Box 3308 Albuquerque New Mex 5
Union Switch & Signal Div
Westinghouse Air Brake Co
Braddock Ave Pittsburgh 18 Pa 24
Universal Atomics Corp
50 Bond St Westbury LI NY 23
Uniwave Inc
2 Marine St Farmingdale NY 26
US Taximeter Corp
516 W 54 St New York 19 NY 26-29-32
Varian Associates
611 Hansen Way Palo Alto Calif 4
Victoreen Instrument Co
5806 Hough Ave Cleveland 3 Ohio 7-33
Vocaline Co of America
Old Saybrook Conn 29
Volk Radiochemical Co
5412 N Clark St Chicago 40 Ill 10
Wabash Metal Products Co
1569 Morris St Wabash Ind 22
WacLine Inc
35 S St Clair St
Dayton 2 Ohio 18-26-27-32-34-35
Walkirt Co
141 W Hazel St Inglewood 3 Calif 13
Waltham Watch Co
221 Crescent St Waltham 54 Mass 7-11-29
Weksler Thermometer Corp
195 E Merrick Rd Freeport LI NY 28
Welch Mfg Co W M
1515 Sedgwick St
Chicago 10 Ill 4-14-16-20-21-22-26-27-34
West Instrument Corp
4363 W Montrose Ave Chicago 41 Ill 27-28
Westberg Mfg Co
144 S Coombs St Napa Calif 26
Weston Electrical Instrument Corp
Sub Daystrom Inc
614 Frelinghuysen Ave
Newark 12 NJ 11-14-16-22-26-27-28-34
Westronics Inc
3605 McCart Ft Worth Texas 26-32
Williamson Development Co
317 Main St W Concord Mass 19-22
Yellow Springs Instrument Co
PO Box 106 Yellow Springs Ohio 28
Zenith Optical Lab
1940 Great Neck Rd
Copiague LI NY 11-26-27-28-29-34
Zoomar Inc
55 Sea Cliff Ave Glen Cove NY 14-20

Microphones, throat 17
Microphones, velocity 18
Microphones, wireless 19
Sound powered telephones 20

Altec Lansing Corp
1515 S Manchester Ave
Anaheim Calif 2-5-6-9-12-16-18
American Elite Inc
7 Park Ave New York 16 NY 5-9-12-14
Amplivox Ltd
2 Bentiner St
London W I England 2-8-11-14-15
Astatic Corp
250 Harbor St 3-4-5-6-7-8-9-10-11-12
Conneaut Ohio 13-14-15-16-17-18-19
Atlantic Research Corp
901 N Columbus St Alexandria Va 7-16-18
Audio Instrument Co
133 W 14 St New York 11 NY 5
Audio Sears Corp
Shepard Hill Rd 1-2-3-8-9-13-
Roxbury NY 14-15-16-20
Automatic Electric Co
1033 W Van Buren St Chicago 7 Ill 1
Barker & Williamson Inc
Canal & Beaver Sts Bristol Pa 5
Brush Electronics Co
3405 Perkins Ave Cleveland 14 Ohio 5
Budelman Radio Corp
375 Fairfield Ave Stamford Conn 19
Burroughs Corp
6071 2 Ave Detroit 32 Mich 20
Camera Equipment Co
315 W 43 St New York 36 NY 5-7-9-16
Capps & Co
20 Addison Pl Valley Stream LI NY 5-7
Century Lighting Inc
521 W 43 St New York 36 NY 19
Chesapeake Instrument Corp
Shadyside Md 4-7-16
Commercial Radio Sound Corp
652 1 Ave New York 16 NY 8-9-15-18-19
Conn Telephone & Electric Corp
70 Britannia St
Meriden Conn 1-2-3-13-15-20
Continental Electronics Ltd
302 Oakland St Brooklyn 22 NY 20
Duotone Co Locust St Keyport NJ 11-12
Dyna-Empire Inc
1075 Stewart Ave
Garden City LI NY 4-7-11-14-16
Electro-Sonic Labs
35-51 36 St Long Island City 6 NY 15-16
Electrovert Inc
389 5 Ave New York NY 5-9-13-14-15
Electro-Voice Inc
Cecil & Carrol Sts 2-3-4-5-6-7-8-9
Buchanan Mich 12-15-16-17-18
Elgin National Watch Co
Electronics Div 2435 N Naomi St
Burbank Calif 2-3-7-9-12-15-16-18-19
Elgin National Watch Co
107 National St
Elgin Ill 3-4-5-6-7-9-12-15-16
Endeco Eng'g Development Co of Los
Angeles 922 E Anaheim St
Wilmington Calif 3
Ereona Corp
551 5 Ave New York 17 NY 7-9
Femco Inc
Irwin Pa 3
Hal-Hen Co
36-14 11 St Long Island City 6 NY 7-11
Intelix Systems Inc
22 Thames St New York 6 NY 14-15-18-20-29
International Research Associates
2221 Warwick Ave Santa Monica Calif 5
Knowles Electronics Inc
9400 Belmont Franklin Park Ill 11
Linlar Inc
4101 San Fernando Rd Glendale 4 Calif 9
Massa Laboratories Inc
5 Fottler Rd Hingham Mass 7-16
Michigan Electronics Inc
854 N Rockwell St Chicago 22 Ill 19
North Electric Co
553 S Market St Galion Ohio 1-20
Omega Instrument Co
103 E Altadena Dr Altadena Calif 5-16
Palmer Inc M V
4002 Fruit Valley Rd Vancouver Wash 1
Permoflux Products Co
4101 San Fernando Rd
Glendale 4 Calif 1-2-9-15
Philmore Mfg Co
113 University Pl New York 3 NY 3
Photocon Research Products
421 N Altadena Dr Pasadena Calif 5-16
Plastic Mold & Eng'g Co
157 Clifford St Providence RI 11
Precision Hearing Aids
5157 W Grand Ave Chicago 39 Ill 9
Pye Canada Ltd
82 Northline Rd
Toronto 16 Ontario Canada 3
Pye Telecommunications Ltd
Newmarket Rd Cambridge England 3-19

52—MICROPHONES

Handsets, telephone 1
Microphones, aircraft type 2
Microphones, carbon 3
Microphones, ceramic 4
Microphones, condenser 5
Microphones, contact 6
Microphones, crystal 7
Microphones, differential 8
Microphones, dynamic 9
Microphones, electron 10
Microphones, hearing aid 11
Microphones, lapel 12
Microphones, lip 13
Microphones, magnetic 14
Microphones, noise cancelling 15
Microphones, pressure 16

Radio Corp of America Commercial Electronic Products Camden 2 NJ	2-6-9-12-15-16-18		
Radio Corp of America 415 S 5 St Harrison NJ		2-9	
Remler Co 2101 Bryant St San Francisco Calif	2-4-8-11-15		
Roanwell Corp 662 Pacific St Brooklyn 17 NY	1-2-3-9-13-14-15		
Roffan Co Topsfield Mass	2-3-9-14-15		
Ronette Acoustical Corp 190 Earle Ave Lynbrook NY	7-12		
Shure Bros 222 Hartrey Ave Evanston Ill	1-3-4-7-9-11-12-14-16-18-19		
Simpson Mfg Co Mark 32-28 49 St Long Island City 3 NY		1	
Stephens Tru-sonic Inc 8538 Warner Dr Culver City Calif	16-19		
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	1-9-14-15		
Telephonics Corp Park Ave Huntington LI NY	1-2-3-8-9-13-14-15-20		
Telex 1633 Eustis St St Paul 1 Minn	8-9-14-15		
Tibbetts Industries Inc Colcord Ave Camden Me	7-11-14		
Turner Co 909 17 St N E Cedar Rapids Iowa	3-4-7-9-12-14		
University Loudspeakers Inc 80 S Kensico Ave White Plains NY	3		
Universal Microphone Co Box 55 Inglewood Calif	2-3-9-12-13-15-17		
U S Instrument Corp P O Box 33E Charlottesville Va	1-3-14-20		
Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn	1-20		
Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	2		
53—MICROPHONE ACCESSORIES			
Microphone booms	1		
Microphone connectors	2		
Microphone covers	3		
Microphone desk mounts	4		
Microphone springs	5		
Microphone stands	6		
Microphone transformers	7		
Accurate Spring Mfg Co 3811 W Lake St Chicago 24 Ill	5		
Ace Spring Mfg Co 78 W Houston St New York 12 NY	5		
Aerovox Corp Pacific Coast Div 2724 S Peck Rd Monrovia Calif	7		
Altec Lansing Corp 1515 S Manchester Ave Anaheim Calif	6-7		
Amphenol Electronics Corp 1830 S 54 Ave Chicago 50 Ill	2		
Arco Transformer & Electric Corp 1602 S Hanna St Ft Wayne 5 Ind	7		
Atlas Eng'g Co 176 Blue Hill Ave Roxbury 19 Mass	7		
Atlas Sound Corp 1449 39 St Brooklyn 18 NY	4-6		
Audio Development Co 2833 13 Ave S Minneapolis Minn	7		
Ballastran Corp 1701 N Calhoun St Ft Wayne Ind	7		
Barnes Co Wallace Div Associated Spring Corp Bristol Conn	5		
Basler Electric Co 601 5 St Highland Ill	7		
Baughman Co E J 1914 N Cogswell Rd El Monte Calif	1		
Better Coil & Transformer Corp Goodland Ind	7		
Birnback Radio Co 145 Hudson St New York 13 NY	2		
Cable Electric Products 234 Daboll St Providence 7 RI	2		
Caledonia Electronics & Transformer Corp P O Box 298 Caledonia NY	7		
Calif Magnetic Control Corp 11922 Valerio St N Hollywood Calif	7		
Camera Equipment Co 315 W 43 St New York 36 NY	6		
Camera Mart Inc 1845 Broadway New York 23 NY	1		
Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif	2		
Cannon Electric Co Eastern Div Pingree & Leavitt Sts Salem Mass	2		
CELCO Constantine Eng'g Labs Co P O Box 555 Mahwah NJ	7		
Central Coil Co 1720 N Luett St Indianapolis 22 Ind	7		
Chicago Standard Transformer Corp 3501 W Addison St Chicago 31 Ill	7		
Cinch Mfg Corp 1026 S Homan Ave Chicago 24 Ill	2		
Circon Component Co Santa Barbara Municipal Airport Goleta Calif	2		
Columbus Process Co 2850 Southeastern Ave Columbus Ind	7		
Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	7		
Crest Transformer Corp 1834 W North Ave Chicago 22 Ill	7		
Cycle Transformer Corp 356 Glenwood Ave E Orange 11 NJ	7		
Dinion Coil Co Caledonia NY	7		
Donnelly Mfg Co 580 Winter St Waltham 54 Mass	3		
Electrical Windings Inc 2015 N Kolmar Ave Chicago 39 Ill	7		
Electro-Voice Inc Cecil & Carrol Sts Buchanan Mich	1-3		
Elgin National Watch Co 107 National St Elgin Ill	3-6		
Epeco Products Inc 2500 Atlantic Ave Brooklyn 7 NY	7		
Espey Mfg Co Congress & Ballston Ave Saratoga Springs NY	7		
Federal Shockmount Corp 1060 Washington Ave New York 56 NY	4		
Florman & Babb 68 W 45 St New York 36 NY	1		
Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	7		
General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	2		
General Transformer Co 18240 Harwood Ave Homewood Ill	7		
Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	7		
Gramer & Halldorson Transformer Corp 2734 N Pulaski Rd Chicago 39 Ill	7		
Grand Transformers Inc Beechtree & Marion Sts Grand Haven Mich	7		
Gremar Mfg Co 7 North Ave Wakefield Mass	2		
Highland Eng'g Co 90 Magnolia St Westbury NY	7		
iE Mfg 325 N Hoyne Ave Chicago 12 Ill	5		
Inductor Eng'g Inc 117 Schley Ave Lewes Del	7		
Industrial Transformer Corp Goldsboro Pa	7		
Insuline Corp of America 186 Granite St Manchester NH	2		
Kenyon Transformer Co 840 Barry St New York 59 NY	7		
Keystone Electronics Corp 423 Broome St New York 13 NY	2		
Keystone Products Co 904 23 St Union City NJ	7		
Koiled Kords Inc 1565 Dixwell Ave New Haven 14 Conn	2		
K-V Transformer Corp 20 E Franklin St Danbury Conn	7		
Lab-Tronics Inc 3656 N Lincoln Ave Chicago 13 Ill	2		
Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	7		
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	7		
Luxo Lamp Corp 102 Columbus Ave Tuckahoe NY	1		
Mandex Mfg Co 2608 W 16 St Chicago 8 Ill	2		
Melco Products Inc 301 5 Ave S Minneapolis 15 Minn	7		
Merit Coil & Transformer Corp 4427 N Clark St Chicago 40 Ill	7		
Microtran Co 145 E Mineola Ave Valley Stream NY	7		
Mohawk Business Machines Corp 944 Halsey St Brooklyn 33 NY	7		
National Cine Equipment Inc 209 W 48 St New York 36 NY	1		
Newcomb Audio Products Co 6824 Lexington Ave Los Angeles 38 Calif	7		
Newcomb Spring Corp 177 E Hawthorne Ave Valley Stream NY	5		
Newcomb Spring of Conn College Hwy Southington Conn	5		
New England Transformer Co 47 McGrath Hwy Somerville 43 Mass	7		
New York Transformer Co 3 Ave Alpha NJ	7		
NYT Electronics Inc 2979 N Ontario St Burbank Calif	7		
Ortho Filter Corp 196 Albion Ave Paterson 2 NJ	7		
Osborne Electronic Corp 712 S E Hawthorne Blvd Portland 14 Ore	7		
Palo Alto Eng'g Co 620 Page Mill Rd Palo Alto Calif	7		
Partridge Transformers Ltd Roebuck Rd Tolworth Surrey England	7		
Peerless Electrical Products 1515 S Manchester Ave Anaheim Calif	7		
Permoflux Products Co 4101 San Fernando Rd Glendale 4 Calif	7		
Petroff Corp Peter A 127 Water St New York 5 NY	6		
Pye Telecommunications Ltd Newmarket Rd Cambridge England	4		
Racon Electric Co 1261 Broadway New York 1 NY	6		
Radio Corp of America Commercial Electronic Products Camden 2 NJ	6-7		
Richards Electrocraft Inc 3739 N Kedzie Ave Chicago 18 Ill	2		
RK Mfg Co P O Box 112 Marion Ill	7		
Roanwell Corp 662 Pacific St Brooklyn 17 NY	1-6		
Roffan Co Topsfield Mass	2		
Sangamo Electric Co Springfield Ill	7		
Saratoga Industries Congress & Ballston Ave Saratoga Springs NY	7		
Shure Bros 222 Hartrey Ave Evanston Ill	6		
Signal Transformer Co 902 Coney Island Ave Brooklyn 18 NY	7		
Skysweeper Inc P O Box 92 McHenry Ill	7		
Smith Inc Herman H 2326 Nostrand Ave Brooklyn 10 NY	2		
SNC Mfg Co P O Box 277 Oshkosh Wis	7		
Snyder Mfg Co 22 & Ontario Sts Philadelphia 40 Pa	6		
Standard Electrical Products Co 2240 E 3 St Dayton 3 Ohio	7		
Sterling Transformer Corp 297 N 7 St Brooklyn 11 NY	7		
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	6		
Switchcraft Inc 1328 N Halsted St Chicago 22 Ill	2		
Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn	4		
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	7		
Telex 1633 Eustis St St Paul 1 Minn	1		
Tensor Electric Development Co 1873 Eastern Pkwy Brooklyn 33 NY	7		
Todd Products Co 156 Gramatan Ave Mt Vernon NY	7		
Transformer Technicians Inc 2608 N Cicero Ave Chicago 39 Ill	7		
Transonic Inc 808 16 St Bakersfield Calif	7		
Trenton Transformer Corp P O Box 568 EI Trenton NJ	7		
Triad Transformer Corp 4055 Redwood Ave Venice Calif	7		
Turner Co 909 17 St NE Cedar Rapids Iowa	6		
TV Specialty Co 350 W 31 St New York 1 NY	1		
Union Electric Products Co 24 Edison Pl Newark 2 NJ	7		
United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif	7		
United Transformer Corp 150 Varick St New York 13 NY	7		
Uniwave Inc 2 Marine St Farmingdale NY	4		
U S Electronics Corp 278 Warren St Lyndhurst NJ	7		
Utrad Corp 305 N Briant St Huntington Ind	7		
Virginia Electronics Co River Rd & B & O R R Washington 16 DC	7		
Walsco Electronics Mfg Co 100 W Green St Rockford Ill	2		
Waltham Horological Corp 395 Lynnway Lynn Mass	2		
Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn	7		
Western Int'l Co 45 Vesey St New York 7 NY	2		
Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	1-2-3		
54—MICROWAVE COMPONENTS			
Antennas	1		
Assemblies	2		
Attenuators	3		
Bands	4		
Cavities	5		
Colorimeters	6		
Converters	7		
Couplers, directional	8		
Crystal mounts	9		
Diodes, microwave mixer	10		
Discriminators	11		
Duplexers	12		
Filters	13		

Flanges	14	Barker & Williamson Inc		Diamond Antenna & Microwave Corp	
Horns	15	Canal & Beaver Sts Bristol Pa	11	7 North Ave	1-2-3-5-8-9-12-13-15-23-25-26
Hybrid junctions	16	Barkley & Dexter Laboratories		Wakefield Mass	29-31-32-33-35-36-38-40-41
Isolators	17	50 Frankfort St Fitchburg Mass	1	Dielectric Products Eng'g Co	
Joints, fixed	18	Bart Mfg Corp		Raymond Me	1-33
Joints, rotating	19	227 Main St Belleville NJ	5-38	Dittmore-Freimuth Corp	
Modulators, magnetic	20	Bean & Co		2517 E Dorwich St	
Modulators, phase	21	Morris Hyde Rd Yellow Springs Ohio	38	Milwaukee 7 Wis	2-18-19-38
Modulators, pulse	22	Bell Aircraft Corp		Dorne & Margolin	
Mounts	23	P O Box 1 Buffalo 5 NY	2-3-7-20	29 New York Ave Westbury NY	1
Parabolals	24	Bendix Aviation Corp Pacific Div		Douglas Microwave Co	
Phasers	25	Bendix Aviation Corp		252 E 3 St	1-3-8-9-12-13-15-26
Probes	26	1104 Fisher Bldg Detroit 2 Mich	12	Mt Vernon NY	36-38-40-41
Repeaters	27	Berco Engineering Corp		D & R Ltd	
Repeaters, passive	28	2320 S Tibbs Ave Indianapolis 41 Ind	2	402 E Gutierrez St	
R-F heads	29	Birther Corp Industrial Div		Santa Barbara Calif	11
Shutters	30	4371 Valley Blvd Los Angeles 32 Calif	9	D & S Mfg Co	
Sliding loads	31	B J Electronics Borg-Warner Corp		424 Burk Ave Ridley Park Pa	1-12-15
Slotted lines	32	3300 Newport Ave Santa Ana Calif	32	Dunn Eng'g Associates	
Switches	33	Blaine Electronics Inc		186 Massachusetts Ave	
Terminations	34	14757 Keswick St Van Nuys Calif	1-15-24-41	Cambridge 39 Mass	36
Transmission lines	35	Bogart Mfg Corp		Dwyer Eng'g Co	
Turners	36	315 Seigel St	1-2-3-5-8-12-13-15	Fine St Ext Nashua NH	1-11-24
Waveguides, flexible	37	Brooklyn 6 NY	25-26-27-30-33-40-42	Eitel-McCullough Inc	
Waveguides, rigid	38	Bolton Labs Inc		798 San Mateo Ave San Bruno Calif	2
Waveguide stands	39	W Main St Bolton Mass	3-41	Elco Mfg Co	
Waveguide switches	40	Bomac Labs Inc		137 Herrick Rd	2-3-5-8-9-10-12
Waveguide tests equipment	41	Salem Rd Beverly Mass	5-10-12	New Hyde Park LI NY	14-23-32-38
Waveguide windows	42	Brach Mfg Corp		Electrical & Physical Instrument Corp	
ACF Industries Nuclear Prods-Erco Div		200 Central Ave Newark 3 NJ	1-2	42-19 27 St Long Island City 1 NY	3-34
48 Lafayette St Riverdale Md	1	Browning Labs Inc		Electro Impulse Lab Inc	
Adler Electronics Inc		750 Main St Winchester Mass	26	208 River St Red Bank NJ	3-34
1 LeFevre Lane New Rochelle NY	1	Budd Stanley Co		Electronic Specialty Co	
Admittance Namco Corp		43-01 22 St	8-12-13-18-19	5121 San Fernando Rd	
Marine St	1-3-5-8-9-12-13-14-15-16	Long Island City 1 NY	26-30-33-38	Los Angeles 39 Calif	7-8-13-29
Farmingdale LI NY	18-19-26-36-38-40-41	Budelman Radio Corp		Electron-kadar Products	
Advance Electronics Co		375 Fairfield Ave Stamford Conn	12	4806 W Chicago Ave Chicago 51 Ill	1-3
8510 North End Ave Oak Park 37 Mich	1	Burnell & Co		Electrovert Inc	
Aerovox Corp Crowley Div		45 Warburton Ave Yonkers NY	11	489 5 Ave New York NY	14
1 Central Ave W Orange NJ	34	Burroughs Corp		Elektro Serv Co	
Ainslie Corp		6071 2 Ave Detroit 32 Mich	20	480 Johnson Ave Brooklyn 37 NY	3
312 Quincy Ave Quincy 69 Mass	1-15-23-24	Calif Technical Industries		Elm Labs	
Airborne Electronics Co		1421 Old County Rd Belmont 10 Calif	22-41	10 Washington Ave	
6813 Troost Ave N Hollywood Calif	2-15	Canoga Corp		Hastings-on-Hudson NY	9
Aircom Inc	1-2-3-4-5-7-8-9-10-11-12-14-15	5955 Sepulveda Blvd	1-2-5-12-13	El-Rad Mfg Co	
1209 E Grand St	16-18-19-23-25-26-29-30	Van Nuys Calif	17-19-20-29-31-36-41	2800 W Cullom Ave Chicago 18 Ill	11
Elizabeth NJ	31-33-34-35-36-37-38-40-41	Carad Corp		Emerson & Cumink Inc	
Air Transport Mfg Co		2850 Bay Rd Redwood City Calif	22	869 Washington St Canton 1 Mass	1-3
1114 N Sycamore Ave		Cascade Research Corp		Emerson Electric Mfg Co	
Los Angeles 38 Calif	38-39	53 Victory Lane Los Gatos Calif	12-17-20	8100 Florissant Ave St Louis 21 Mo	41
Airtron Inc		Cavitron Electron Oscillator Co		Empire Devices Products Corp	
1101 W Elizabeth Ave	1-2-3-4-12-13-14-18	Div Short Wave Plastic Forming		38-15 Bell Blvd Bayside 61 NY	3
Linden NJ	19-23-29-33-36-37-38-40-42	355 N Newport Blvd Newport Beach Calif	5	Enflo Corp	
Alford Mfg Co		Central Electronic Mfrs Inc Sub		Rte 38 at Airport Circle	
299 Atlantic Ave Boston 10 Mass	16-32	Nuclear Corp of America	1-2-4-5-12	Pennsauken 11 NJ	9
Alpar Mfg Corp		2 Richwood Pl Denville NJ	15-38-42	Essex Electronics Div NYT Electronics Inc	
2910 Spring St Redwood City Calif	1	CG Electronics Corp		7303 Atoll Ave N Hollywood Calif	11
Alpha Metals Inc		305 Dallas St		Essex Electronics	
56 Water St Jersey City 4 NJ	4	N E Albuquerque New Mex	1-5-12-13-30-31	550 Springfield Ave Berkeley Heights NJ	11
Amerac Inc		CGS Laboratories Inc		Farnsworth Electronics Co Div IT&T	
116 Topsofield Rd	1-2-3-4-5-7-8	391 Ludlow St Stamford Conn	5	3702 E Pontiac St Ft Wayne Ind	1-2
Wenham Mass	12-18-19-20-21-22-29-41	Chemalloy Electronics Corp		Federal Mfg & Eng'g Corp	
American Electronic Laboratories		Gillespie Airport Santee Calif	41	1055 Stewart Ave Garden City NY	38
121 N 7 St Philadelphia 6 Pa	1-13	Chu Associates		Federal Shockmount Corp	
American Machine & Foundry Co		634 Waverly St Framingham Mass	1	1060 Washington Ave New York 56 NY	9
Defense Products Group		Clegg Labs Div Clegg Inc		Federal Telecommunication Labs Div IT&T	
1101 N Royal St Alexandria Va	1-2-27-41	Ridgedale Ave Morristown NJ	12-41	500 Washington Ave Nutley NJ	1
American Mica Radio Corp		Coaxial Connector Co		Federal Telephone & Radio Co Div IT&T	
235 Parker Ave Manasquan NJ	42	37 N 2 Ave	1-2-3-8-12-16	100 Kingsland Rd Clifton NJ	3-12-22-41
American Microwave Corp		Mt Vernon NY	18-26-32-34-38	Filmohm Corp	
11754 Vose St	1-2-3-11-15-17-27	Coilcraft Inc		48 W 25 St New York 10 NY	3
N. Hollywood Calif	28-29-36-38-41	Cary Ill	11	Filtron Co	
American Radar Components Inc		Coil Winders Inc		10023 W Jefferson Blvd	
Rt 10 Whippany NJ	14	New York Ave Westbury LI NY	11	Culver City Calif	13
Amstron Corp		Collins Radio Co		Filtron Co	
17 Felton St Waltham 54 Mass	5	855 35 St N E Cedar Rapids Iowa	2-27-28	131-15 Fowler Ave Flushing 55 NY	20-22
Andrew Antenna Corp		Columbia Wire & Supply Co		Fisher Eng'g Inc	
606 Beech St Whitby Ontario Can	1-5-12-15	2850 Irving Park Rd Chicago 18 Ill	2	P. O. Box 327 Huntington Ind	22
Andrew California Corp		Connector Corp of America		Fluorocarbon Products Inc Div U S	
941 E Marylind Ave		3223 Burton Ave Burbank Calif	14	Gasket Co 602 N 10 St	
Claremont Calif	1-5-12-13-14-15-24-38	Consolidated Productions Inc		Camden 1 NJ	2-14-17-34-38
Andrew Corp		Broward Int'l Airport		Forbes & Wagner Inc	
363 E 75 St Chicago 19 Ill	1-12-14-24-32-38	Ft Lauderdale Fla	2-3	343 Central Ave Silver Creek NY	11
Applied Research Inc		Continental Electronics Mfg Co		Forro Scientific Co	
163-07 Depot Rd Flushing 58 NY	13-34	4212 S Buckner Blvd		833 Lincoln St Evanston Ill	11
A R F Products Inc		Dallas 27 Texas	20-21-22	Foto-Video Labs Inc	
7627 Lake St River Forest Ill	41	Co-operative Industries Inc		25 Amity St Little Falls NJ	41
Ark Eng'g Co		160 Oakdale Rd Chester NJ	37	Frenchtown Porcelain Co	
431 W Tabor Rd Philadelphia 20 Pa	13	Corning Glass Works		Muirhead Ave Trenton 9 NJ	42
Asheville-Schoonmaker Mica Co		Corning NY	3	Frequency Standards Inc	
900 Jefferson Ave Newport News Va	42	Custom Components Inc		P O Box 504	
Astatic Corp		P O Box 248 Caldwell NJ	3	Asbury Park NJ	5-8-12-13-29-36-41
250 Harbor St Conneaut Ohio	29	Dale Products Inc		Fretco Inc	
Authorized Mfrs Service Co		Columbus Nebr	41	406 N Craig St Pittsburgh 13 Pa	35
919 Wyckoff Ave Brooklyn 27 NY	41	Dalmo Victor Co Div Tectron Inc		F-R Machine Works Inc	
Automatic Electric Co		1515 Industrial Way		Electronic & X-Ray Div	4-5-7-8-9-13-14
1033 W Van Buren St Chicago 7 Ill	34	Belmont Calif	1-12-29-36-38	26-12 Borough Pl	15-21-22-26-29-31-32
Automatic Switch Co		Daven Co		Woodside 77 NY	33-34-35-36-39-40-41
Hanover Rd Florham Park NJ	33	Route 10 Livingston NJ	3	Gabriel Electronics	
Avion Div ACF Industries Inc		Defiance Eng'g & Microwave Corp		Div Gabriel Co 135 Crescent Rd	
11 Park Pl Paramus NJ	20	Beverly Airport	1-2-3-5-8-9-12-13-14-15	Needham Heights 94 Mass	1-2-5-25-26-36
Avionics Ltd		Beverly Mass	18-19-21-22-24-26-37-38	Gar Precision Parts Inc	
P O Box 200 Niagara-on-the-Lake		Deltone Inc		703 Pacific St Stamford Conn	38
Ontario Canada	3-4-8-12-25-29-32-35	608 Fayette Ave Mamaroneck NY	2-22-27	General Bronze Corp	
		DeMornay-Bonardi Corp	1-2-3-4-5-7-8-9-10	711 Stewart Ave	1-3-4-5-7-12-13
		780 S Arroyo Pkwy	12-13-15-16-21-22-23	Garden City NY	15-36-38-41-42
		Pasadena Calif	25-26-29-30-32-36-38	General Communication Co	
		Deutschmann Corp Tobe	39-40-41-42	677 Beacon St	
		Norwood Mass	18	Boston 15 Mass	1-3-5-12-13-29-33-40-41
				General Crystal Co	
				P O Box 9 Burlington Wis	9

General Magnetics Inc 135 Bloomfield Ave Bloomfield NJ	20	Manson Laboratories Inc 207 Greenwich Ave Stamford Conn	22-41	Radio Corp of America Camden 2 NJ	1
General Precision Lab Inc 63 Bedford Rd Pleasantville NY	1-5	Marconi Instruments Ltd 44 New St New York 4 NY	41	Radio Industries Inc 5225 N Ravenswood Ave Chicago 25 Ill	11
General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	32	Mark Products Co 6412 W Lincoln Ave Morton Grove Ill	1	Raytheon Mfg Co Receiving & Cathode Ray Tube Operations 55 Chapel St Newton 58 Mass	10
General RF Fittings Inc 702 Beacon St Boston 15 Mass	1-2-3-4-5-8-9-12 14-26-31-32-35-36	Maryland Electronic Mfg Corp 5009 Calvert Rd College Park Md	1-13-15	Raytheon Mfg Co 100 River St Waltham 54 Mass	1
Glaser-Steers Corp 20 Main St Belleville 9 NJ	20	Mathis Co G E 6100 S Oak Park Ave Chicago 38 Ill	23	Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass	42
G & M Equipment Co 7315 Varna Ave N Hollywood Calif	3-41	Maxxon Instruments Div W L Maxxon Corp 47-37 Austell Pl Long Island City 1 NY	5	Reed & Reese Inc 717 N Lake Ave Pasadena 6 Calif	20
Good Electric Corp Natick Mass	11	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	11	Reeves Instrument Corp 215 E 91 St New York 28 NY	3-37
Goodrich Co Canal St Shelton Conn	3	Melbar Inc 3000 Arlington Blvd Falls Church Va	13	Research Development Mfg Inc 429 E Collom St Philadelphia 41 Pa	14-23-26
Gordon Enterprises 5362 N Cahuenza Blvd N Hollywood Calif	6	Meridian Metalcraft Inc 8739 S Millergrove Dr Whittier Calif	2-3-4-5-8-9-12-14 19-31-33-35-38	Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	8
Hallicrafters Co 4401 W 5 Ave Chicago 24 Ill	1-2-7-12-13-15-29	Metal Fabricators Corp 73 Pond St Waltham 54 Mass	15	Robinson Machine Works 802 E 8 St New Albany Ind	9
Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	24	Metals & Controls Corp General Plate Div 48 Forest St Attleboro Mass	38	Romac Products Co 48-01 25 Ave Long Island City 3 NY	14-42
Hammer Electronics Co Princeton NJ	11	Metavac Inc 45-68 162 St Flushing 58 NY	3	Ross Mfg Co 2538 Peterson Ave Chicago 45 Ill	11
Hansen Electronics Co 7117 Santa Monica Blvd Los Angeles 46 Calif	3-34	Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill	9	RS Electronics Corp 435 Portage Ave Palo Alto Calif	3-8-11
Harvey-Wells Electronics Inc North St Southbridge Mass	5	Microflect Co 2300 S 25 St Salem Ore	27-28	Safetee Glass Co 4717 Stenton Ave Philadelphia 44 Pa	42
Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	3-5-8-17-23-26-32-41	Microlab Okner Pkwy Livingston NJ	1-3-9-13-23-34-36	Sage Labs Inc 30 Guinan St Waltham 54 Mass	1-2-3-4-5-7-8-9-13 15-16-23-24-26-29 30-33-36-40-41-42
Holland Electronics 2133 Central Dr S East Meadow NY	3-34	Miller Co J W 5917 S Main St Los Angeles 3 Calif	11	Sanders Associates 95 Canal St Nashua NH	1-3-13
Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	41	Minneapolis-Honeywell Regulator Co Davies Labs Div 10721 Hanna St Beltsville Md	11	Scientific-Atlanta Inc 2162 Piedmont Rd N E Atlanta 9 Ga	1
Houston Fearless Div Color Corp of America 11801 W Olympic Blvd Los Angeles 64 Calif	23	Model Eng'g & Mfg Inc F O Frederick St Huntington Ind	1-2-4-5-9-13-18-19-30	Scientific Radio Products Inc 215 S 11 St Omaha Nebr	13
Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	9	Muter Co 1255 S Michigan Ave Chicago 5 Ill	11	Seneca Falls Machine Co 314 Fall St Seneca Falls NY	11
Industrial Test Equipment Co 55 E 11 St New York 3 NY	11	Narda Corp 160 Herricks Rd Mineola NY	1-3-8-9-12-13 15-26-35-36-38-39	Sierra Electronic Corp 2885 Bohannon Dr Menlo Park Calif	2-3-8-34-36
International Research Associates 2221 Warwick Ave Santa Monica Calif	28	National Radiac Inc 475 Washington St Newark 2 NJ	11	Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill	26
I-T-E Circuit Breaker Co Special Products Div 601 E Erie Ave Philadelphia 34 Pa	1-2-3-4-15-32-36 38-39-40-41	Nebel Laboratory R F 1634 E 12 St Brooklyn 29 NY	9	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	22
Jackson Electronics Inc 23 Woodcrest Rd West Chester Pa	13-17-34	Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	11	Specialty Automatic Machine Corp 88 Gerrish Ave Chelsea 50 Mass	2-4-38
Jarrell-Ash Co 26 Farwell St Newtonville 60 Mass	38	Nevada Air Products Co P O Box 2472 Reno Nev	41	Spectralab Instruments 404 N Halstead Ave Pasadena Calif	5
Javex P O Box 646 Redlands Calif	17	Nichols Products Co 325 W Main St Moorestown NJ	1-2-9-14-15-26-32	Sperry Gyroscope Co 15-20-21-22-23-24-25 26-33-34-35-36-39-40-41	1-2-3-4-5-7-8-9-12-13
Johnson Electronics Inc 521 Elwell St Orlando Fla	11	Norden-Ketay Corp Commerce Rd Stamford Conn	29	Spencer-Kennedy Labs 1320 Soldiers Field Rd Boston 35 Mass	8
Jones Electronics Co M C 185 N Main St Bristol Conn	8	North American Instruments Inc 2420 N Lake St Altadena Calif	10	Spinform Inc 65 Mechanic St Attleboro Mass	1-15-23-24
J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	2-3-4-5-7-8-12-13 14-17-18-19-21-23-25 26-29-33-36-38-39-40	Northern Eng'g Labs 372 Wilmot Ave Burlington Wis	9	Spruce Pine Mica Co P O Box 456 Spruce Pine NC	42
Kaiser Aircraft & Electronic Corp Toledo Electronics Div P O Box 437 Toledo Ohio	2	N R K Mfg & Eng'g Co 4601 W Addison St Chicago 41 Ill	3-5-8-12-15-20-38-40	Stainless Inc 3 St North Wales Pa	1
Kearfott Co Western Div 14844 Oxnard St Van Nuys Calif	41	Omega Labs Inc Haverhill St Rowley Mass	1-2-3-4-5-8-9-15-16 25-26-34-38-41	Standard Coil Products Co 2085 N Hawthorne Ave Melrose Park Ill	11
Kemtron Electron Products Inc 14 Prince Pl Newburyport Mass	10	Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	27	Standard Crystal Co 1714 Locust St Kansas City Mo	9
Kennedy & Co D S 155 King St Cohasset Mass	1-24	Pearson Electronics 1200 Bryant St Palo Alto Calif	22	Standard Metals Corp 262 Broad St N Attleboro Mass	38
Kent Co F C 64 Howard St Irvington 11 NJ	37-38	Philco Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	27	Stavid Eng'g Inc U S Route 22 Plainfield NJ	1
Keystone Electronics Co 65 7 Ave Newark 4 NJ	9	Pix Mfg Co 75 Hudson St Newark 3 NJ	9	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	4
Kinney Co Joseph Locust St Carnegie Pa	38	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	1-3-5-13-15 24-36-41	Stoddart Aircraft Radio Co 6644 Santa Monica Blvd Hollywood 38 Calif	3
Kost Products Co 2335 N Cicero Ave Chicago 39 Ill	9	Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	26-29-34-36-41	Swan Electronics Co 5016 N Austin Ave Chicago 30 Ill	11
Lambda-Pacific Eng'g Inc 14725 Arminta St Van Nuys Calif	1-3-4-12-13-27-28-41	Polytronic Research Inc 7660 Woodbury Dr Silver Spring Md	2-3-4-5-7	Swedlow Plastics Co 6986 Bandini Blvd Los Angeles 22 Calif	1
Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	2-6-7	Portchester Instrument 114 Wilkins Port Chester NY	37-39	Swiss Jewel Co Lafayette Bldg Philadelphia 6 Pa	42
Lansdale Tube Co Div Philco Corp Church Rd Lansdale Pa	10	Premier Instrument Corp 52 W Houston St New York 12 NY	1-2-3-4-5-7-8-9 11-12-14-15-16-18	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	2-3-10-12
Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	5-41	Premier Research Labs Inc 79 7 Ave New York 11 NY	9	Tarzian Inc Sarkes E Hillside Dr Bloomington Ind	8-27-28
Leach & Garner Co Industrial Div Leach & Garner Bldg Attleboro Mass	38	Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	2-26-41	Technical Appliance Corp 1 Taco St Sherburne NY	1-24
Levinthal Electronic Products Inc 3180 Hanover St Palo Alto Calif	20-22	Prodell Inc 307 Bergen Ave Kearny NJ	1	Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn	1-3-4-8-9-12-14-15 18-19-26-30-32-33 35-36-37-38-39-40
Liberty Mirror Div Libbey Owens Ford Glass Co Brackenridge Pa.	42	Production Research Corp Thornwood NY	2-11-21-22-26-28-36	Techrome Mfg Corp 28 Ranick Dr Amityville LI NY	11-41
Lieco Inc 3610 Oceanside Rd Oceanside LI NY	1-3-4-8-9-12 13-14-15-30 31-32-36-38-40-41	Pye Telecommunications Ltd Newmarket Rd Cambridge England	1-2-7-8-9-12-13 15-17-22-23-24-26-27-28 29-31-33-34-35-36-40	Telectro Industries Corp 35-13 37 St Long Island City 1 NY	2-11
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	9-16-17-18-19 20-23-38	Racon Electric Co 1261 Broadway New York 1 NY	24	Telerad Mfg Corp 1440 Broadway New York 18 NY	1-2-4-5-8-9-10-12-14-15 16-18-19-25-26-29-30-34 35-36-37-38-40-41-42
Litton Industries Components Div 5893 Rodeo Rd Los Angeles 16 Calif	8-17-19	Radar Design Corp 210 5 Ave New York 16 NY	3-8-15-26-36	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	1-2-12-38
Luhrs & Co C H 297 Hudson St Hackensack NJ	8-33	Radiation Eng'g Labs Main St Maynard Mass	1	Thompson Products Inc Electronics Div 2196 Clarkwood Rd Cleveland 3 Ohio	2-3-33-40
McMillan Industrial Corp Brownville Ave Ipswich Mass	3	Radiation Inc P O Box 37 Melbourne Fla	3	Torgren Co C W 236 Pearl St Somerville 45 Mass	1
Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	1-3			Tower Construction Co 2700 Hawkeye Dr Sioux City 2 Iowa	1-28
				Tracerlab Inc 1601 Trapeze Rd Waltham 54 Mass	11
				Trad Electronics Corp 1001 1 Ave Asbury Park NJ	3-9

Transco Products Inc 12210 Nebraska Ave Los Angeles 25 Calif	1-33	Airpax Products Co Middle River Baltimore 20 Md	6	Budd Stanley Co 43-01 22 St Long Island City 1 NY	2
Transitron Inc 186 Granite St Manchester NH	5-41	Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	2-3-4	Burroughs Corp 6071 2 Ave Detroit 32 Mich	5-6-8-10-11-12-16-18
Transonic Inc 808 16 St Bakersfield Calif	11	All American Eng'g Co DuPont Airport Box USS 2668 Wilmington 5 Del	13	Calif Magnetic Control Corp 11922 Valerio St N Hollywood Calif	10
United Mineral & Chemical Corp 16 Hudson St New York 13 NY	42	Allis Co Louis 427 E Stewart St Milwaukee 1 Wis	5	Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada	17-18
Uniwave Inc 2 Marine St Farmlandale NY	1-2-3-4-5-8-9-12-13 15-16-17-18-19-26-27 28-32-34-38-39-41	Alpar Mfg Corp 2910 Spring St Redwood City Calif	2	Canoga Corp 5955 Sepulveda Blvd Van Nuys Calif	12-19
U S Stoneware Co Alite Div Orville Ohio	42	Alto Scientific Co 855 Commercial St Palo Alto Calif	10	Central Electronic Mfrs Inc Sub Nuclear Corp of America	8-10-12
United Transformer Corp 150 Varick St New York 13 NY	11-13	Amerac Inc 116 Topsfield Rd Wenham Mass	6	Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill	15-17
U S Rubber Co 1230 6 Ave New York 20 NY	3-34	American Machine & Foundry Co Electronics Div 1085 Commonwealth Ave Boston 15 Mass	8	Century Electronics Co 34 Oleander St Cocoa Fla	12
Utility Brass & Copper Corp 255 Conover St Brooklyn 31 NY	38	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	2-6-9-10-12-13-14-15	CG Electronics Inc 305 Dallas St NE Albuquerque NM	2-12-19
Vectron Inc 1611 Trapelo Rd Waltham 54 Mass	2-3-5-7-13-29-32-36-41	American Research & Mfg Corp 920 Halpine Ave Rockville Md	10	Chatham Electronics Div Gera Corp W Mt Pleasant Ave Livingston NJ	10
WacLine Inc 35 S St Clair St Dayton 2 Ohio	2-3-26-32-41	American Television & Radio Co 300 E 4 St St Paul 1 Minn	10	Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill	8
Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	5	Ampex Corp 934 Charter St Redwood City Calif	12	Christie Electric Corp 3410 W 67 St Los Angeles 43 Calif	10
Walworth Co 60 E 42 St New York 17 NY	2-3-4-8-12-14-15-18-19 26-29-37-38	Analogue Controls Inc 39 Roselle St Mineola NY	8	Chu Associates 634 Waverly St Framingham Mass	2
Warren Mfg Co Newtown Rd Littleton Mass	5-33-36	Andrew Antenna Corp 606 Beek St Whitby Ontario Can	2	Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London SE 26 England	6
Warren Plastics Corp Warren Pa	9	Andrew California Corp 941 E Maryland Ave Claremont Calif	2	Clark Controller Co 1146 E 152 St Cleveland 10 Ohio	5
Waveguide Inc 14837 Oxnard St Van Nuys Calif	3-4-5-12-15-18-19-38-40	Andrew Corp 363 E 75 St Chicago 19 Ill	2	Clark Electronic Labs Box 165 Palm Springs Calif	10
Waveline Inc Passaic Ave Caldwell NJ	1-2-3-5-8-9-12-13-14-23 26-30-31-32-36-38-39-41	Antenna Specialists Co 12435 Euclid Ave Cleveland 6 Ohio	2	Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	10-15-16-17-18
Wave Particle Corp P O Box 252 Menlo Park Calif	20-41	Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	10	Collins Radio Co 855 35 St NE Cedar Rapids Iowa	8-15-17-18
Weinschel Eng'g 10503 Metropolitan Ave Kensington Md	3-22-23	Applegate & Co C J 1840 24 St Boulder Colo	10	Computing Devices of Canada Ltd P O Box 508 Ottawa Ontario Can	8
Western Int'l Co 45 Vesey St New York 7 NY	38	Applied Science Corp of Princeton P O Box No. 44 Princeton NJ	12	Condenser Products Div New Haven Clock & Watch Co 140 Hamilton St New Haven 4 Conn	10
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	20-22	A R F Products Inc 7627 Lake St River Forest Ill	2-3	Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	3
Wheeler Labs Inc 122 Cutter Mill Rd Great Neck NY	1-2-3-4-7-8-12-13 16-19-34-36-38	Arma Div American Bosch Arma Corp Garden City NY	8	Conoflow Corp 2100 Arch St Philadelphia 3 Pa	1
White Electron Devices Inc Roger 92 4 Ave Haskell NJ	3-12-21-29-33-40-41	A R & T Electronics Box 370 N Little Rock Ark	12	Consolidated Avionics Corp 69 Brooklyn Ave Westbury NY	6-10
Zenith Plastics Co 1600 W 135 St Gardena Calif	1	Artisan Electronics Corp 171 Ridgedale Ave Morristown NJ	1	Consolidated Electrodynamic Corp 300 N Sierra Madre Villa Pasadena Calif	14

55—MILITARY EQUIPMENT

Actuators	1
Antennas, all wave	2
Cases, transit	3
Containers, shipping	4
Control center, portable	5
Frequency measuring equipment	6
Fungicide equipment	7
Navigation equipment	8
Packaging materials	9
Power supplies	10
Scramblers, speech	11
Telemetry	12
Test units, acceleration	13
Test units, vibration	14
Transceivers, aviation	15
Transceivers, lifeboat	16
Transceivers, portable	17
Transceivers, VHF	18

Acme Electric Corp Water St Cuba NY	10	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	11-12	Darco Industries Inc Gyro Dynamics Div 2151 E Rosecrans Ave El Segundo Calif	1
Adler Electronics Inc 1 Lefevre Lane New Rochelle NY	3-6-10-12	Bell Aircraft Corp P O Box 1 Buffalo 5 NY	1-5-6-8-10 11-12-13-15-16-17-18-19	Daubert Chemical Co 333 N Michigan Ave Chicago 1 Ill	9
Admiral Corp 3800 W Cortland St Chicago 47 Ill	17	Bell & Gossett Co 8200 Austin Ave Morton Grove Ill	12	Daven Co Route 10 Livingston NJ	6
Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	5-11-12-18	Belock Instrument Corp 111-01 14 Ave College Point 56 NY	1-8-10-12	Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	10
Aero Electronics Co 1512 N Wells St Chicago 10 Ill	8	Bemis Bros Bag Co 408 Pine St St Louis 2 Mo	4-9	Dayton Aviation Radio & Equipment Corp R R 3 Troy Ohio	2-8-15-17-18
Aeroflex Labs 34-06 Skillman Ave Long Island City 1 NY	13	Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif	8-12-19	Defiance Eng'g & Microwave Corp Beverly Airport Beverly Mass	2
Aero Instrument Co 11423 Vanowen St N Hollywood Calif	6	Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	8-10-12-15-17-18	Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	2-6
Aerophysics Development Corp Sub Curtiss-Wright Corp P O Box 689 Santa Barbara Calif	4-14	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	1-8-12-15-17-18-19	Dressen-Barnes Corp 250 N Vinado Ave Pasadena Calif	10
Ainslie Corp 312 Quincy Ave Quincy 69 Mass	2-3	B & F Instruments Inc 4732 N Broad St Philadelphia 41 Pa	13-14	Du Mont Labs Inc Allen B 760 Bloomfield Ave Chifton NJ	6-8-10
Airborne Accessories Corp 1414 Chestnut Ave Hillside 5 NJ	1	Biddle Co James G 1316 Arch St Philadelphia 7 Pa	6	Durable Rubber Products Co 609 W Lake St Chicago 6 Ill	9
Aircraft Radio Corp Boonton NJ	15	B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	6-12-13	Dwyer Eng'g Co Pine St Ext Nashua NH	12
AilResearch Mfg Co Div Garret Corp 9851 Sepulveda Blvd Los Angeles 45 Calif	1	Blue M Electric Co 138 & Chatham St Blue Island Ill	13	Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	9-10
		Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ	10	Eberline Instrument Div Reynolds Electrical 805 Early St Santa Fe N Mexico	10
		Bolton Labs Inc W Main St Bolton Mass	6	Eclipse-Pioneer Div Bendix Aviation Corp Teterboro NJ	8
		Brach Mfg Corp 200 Central Ave Newark 3 NJ	2	Edko Electronics Eng'g Co 202 Grand St Brooklyn 11 NY	10
		Breeze Corps 700 Liberty Ave Union NJ	1-2	Eicor Inc 4235 W North Ave Chicago 39 Ill	10
		Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	3-4	Elco Mfg Co 137 Herriek Rd New Hyde Park L.I. NY	1-2
		Brubaker Electronics Inc 3652 Eastham Dr Culver City Calif	8-19	Electomic Mechanisms Inc P O Box 1156 Greenwich Conn	1
		Bruno-New York Industries Corp 460 W 34 St New York 1 NY	8	Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	5-12
		Brush Electronics Co 3405 Perkins Ave Cleveland 14 Ohio	6	Electrical Specialty Co 158 11 St San Francisco 3 Calif	9
				Electric Regulator Corp Pearl St Norwalk Conn	6-10
				Electric Specialty Co 211 South St Stamford 1 Conn	10
				Electro Impulse Lab Inc 208 River St Red Bank NJ	6
				Electro-Mechanical Div General Riveters Inc 785 Hertel Ave Buffalo 7 NY	1
				Electronic Research Associates 67 E Centre St Nutley 10 NJ	10

Electronics Development Co 3743 Cahuenga Blvd N Hollywood Calif	12	Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	5-8-10-12-19	Lawn Electronics Co E Freehold Rd Freehold NJ	10
Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	6-10	Haller Raymond & Brown 124 N Atherton St State College Pa	2	Lear Inc 3171 S Bundy Drive Santa Monica Calif	1-2-8-9-10-13-15-18
Electrosolids Corp 3743 Cahuenga Blvd N Hollywood Calif	12	Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	2-6-10-12	Lee Electric & Mfg Co 2806 Clearwater St Los Angeles 39 Calif	10
Flm Labs 10 Washington Ave Hastings-on-Hudson NY	3	Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	3-10	Lel Inc 380 Oak St Copiague NY	12
El-Tronics Inc Penn Ave Mayfield Pa	6-15	Hammerlund Mfg Co 460 W 34 St New York 1 NY	12	Librascope Inc 808 Western Ave Glendale Calif	5-8-12
Elzee Metal Products Co 775 39 St Brooklyn 32 NY	3	Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	12	Litton Industries of Calif 836 N Foothill Rd Beverly Hills Calif	5-8-10-11-12-15 16-17-18-19-21
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo	2	Hanson-Gorrill-Brian 85 Hazel St Glen Cove NY	12	Litton Industries of Md Inc 4910 Calvert Rd College Park Md	8-14
Endevco Corp 161 E California St Pasadena Calif	13-14	Harrison Labs 45 Industrial Rd Berkeley Heights NJ	10	Loral Electronics Corp 749 E 140 St New York 54 NY	8
Engineered Magnetics Div Gulton Industries Inc 13030 Cerise Ave Hawthorne Calif	10	Harvey-Wells Electronics Inc North St Southbridge Mass	17	Lorentzen Inc H K 591 W Broadway New York 12 NY	3
Engineering Associates 434 Patterson Rd Dayton 9 Ohio	6	Hastings-Raydist Inc Newcomb Ave Hampton Va	8	Lyndon Aircraft Inc 140 Clifford St Newark 5 NJ	1
Espey Mfg Co Congress & Ballston Ave Saratoga Springs NY	9-10-13-17-18	Haydon Switch Inc 536 S Leonard St Waterbury Conn	1	Lytel Eng'g & Mfg. Co 1404 San Mateo Blvd SE Albuquerque New Mexico	1
Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch LI NY	3-4	Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	6	Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	6
Falstrom Co Falstrom Court Passaic NJ	3-4	Hewson Co 443 Broad St Newark 2 NJ	10	Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	10
Fairand Controls Inc 4401 Bronx Blvd New York 70 NY	6	Hoffman Electronics Corp 3761 S Hill St Los Angeles 7 Calif	8-15-16-17	Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif	6-10-12
Fecker Inc J W 6592 Hamilton Ave Pittsburgh 6 Pa	6-13	Hogan Labs Inc 155 Perry St New York 14 NY	12	Malkin-Illion Co 400 Coit St Irvington 11 NJ	3
Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY	1	Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY	10	Manson Laboratories Inc 207 Greenwich Ave Stamford Conn	6
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	2-5-6-8-10-11-12-15-17-18-19	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	10-12	Maryland Electronic Mfg Corp 5009 Calvert Rd College Park Md	2-8-12
Fidelity Chemical Products Corp 470 Frelinghuysen Ave Newark 12 NJ	9	Hughes Aircraft Co Florence & Teale Sts Culver City Calif	8	Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY	13
Filtcon 131-15 Fowler Ave Flushing 55 NY	10	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	13	Melco Products Inc 301 S Ave S Minneapolis 15 Minn	10
Finney Co 34 W Interstate St Bedford Ohio	2	Hupp Instrumentation Co 2119 Sepulveda Blvd Los Angeles 25 Calif	6	Mercury Electronic Co Box 540 B Red Bank NJ	10
Firestone Guided Missile Div Los Angeles 54 Calif	8	Hycoin Mfg Co 707 S Raymond Ave Pasadena Calif	6	Metal Fabricators Corp 73 Pond St Waltham 54 Mass	2-3
Forbes & Wagner Inc 343 Central Ave Silver Creek NY	1	Ideal-Aerosmith Inc 12909 S Cerise Ave Hawthorne Calif	13	Metal Specialty Products Corp 27-01 Brooklyn Queens Expressway W Woodside 77 NY	3
Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY	8-12	Industrial Radio Corp 428 N Parkside Ave Chicago 44 Ill	17	Mid-West Conveyor Co Metal Products Div 7 & Sunshine Rd Kansas City 15 Kans	3
Foto-Video Labs Inc 25 Amity St Little Falls NJ	6-10	Industrial Research Labs Div Aerona Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	6-10-12	Mil Case Corp 35-18 37 St Long Island City NY	3-4-9
Franklin Electronics Inc Box 113 Bridgeport Pa	12	Industrial Test Equipment Co 55 E 11 St New York 3 NY	6	Milli-Switch Corp 1742 Berkely St Santa Monica Calif	1
Frequency Standards Inc P O Box 604 Asbury Park NJ	6	Intellex Systems Inc 22 Thames St New York 6 NY	10	Minn-Honeywell Regulator Co Ordinance Div Hopkins Minn	10-19
Fretco Inc 406 N Craig St Pittsburgh 13 Pa	2	Instrument Cases Inc 510 W Garfield St Glendale 4 Calif	3	Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	1-8
F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	6	Instrument Development Labs Inc 67 Mechanic St Attleboro Mass	3	Missileonics Inc P O Box 716 Melbourne Fla	6-8-10
Gabriel Electronics Div Gabriel Co 135 Crescent Rd Needham Heights 94 Mass	2-12	Insuline Corp of America 186 Granite St Manchester NH	2-3	Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	10-12-15-16-17-18-19
Gaertner Scientific Corp 1250 Wrightwood Ave Chicago 14 Ill	14	International Business Machines Corp 590 Madison Ave New York 23 NY	8	Model Rectifier Corp 1065 Utica Ave Brooklyn 3 NY	10
Garrett Corp AResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif	1	International Radiant Corp 4 Manhasset Ave Port Washington NY	7-14	Modern Industries Inc 2601 Colorado Ave Santa Monica Calif	10
Gates Radio Co 123 Hampshire St Quincy Ill	10	I-T-E Circuit Breaker Co Special Products Div 601 E Erie Ave Philadelphia 34 Pa	2	Moog Valve Co Proner Airport E Aurora NY	1
Geartronics Corp 2514 Broadway Long Island City NY	1	Interstate Electronics Corp 875 S East St Anaheim Calif	12	Motoresearch Co 1600 Junction Ave Racine Wis	10
General Bronze Corp 711 Stewart Ave Garden City NY	2	Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md	8	Motorola Communications & Electronics Inc 4501 W Augusta Blvd Chicago 51 Ill	17-18
General Communication Co 677 Beacon St Boston 15 Mass	5-6-8-10-12-13 15-16-17-18-19	Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY	13	M Ten Bosch Inc 80 Wheeler Ave Pleasantville NY	7-8
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	12	Johnson Aircraft Eng'g Co M J Box 10 Morristown Airport Morristown NJ	1	Muckle Mfg Co U S Hwy 14 Owatonna Minn	3-4-9
General Electric Co Communication Products Dept Syracuse NY	18	Joy Mfg Co 333 Oliver Bldg Pittsburgh 22 Pa	10	Narda Corp 160 Herricks Rd Mineola NY	6
General Electric Co Light Military Electronic Equip Dept French Rd Utica NY	8-15-17-18	Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	6-10-19	National Aircraft Corp 3411 Tulare Ave Burbank Calif	10
General Precision Lab Inc 63 Bedford Rd Pleasantville NY	8	Kato Eng'g Co 1415 1 Ave Mankato Minn	10	Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	12
General RF Fittings Inc 702 Beacon St Boston 15 Mass	6	Katolight Corp Box 891 Mankato Minn	10	Nems-Clarke Inc 919 Jesup-Blair Dr Silver Spring Md	12
Gertsch Products Inc 11846 Mississippi Ave Los Angeles 25 Calif	6	Katolight Corp 1415 1 Ave Mankato Minn	10	Nevada Air Products Co P O Box 2472 Reno Nev	8-12-15-17-19
Giannini & Co G M 918 E Green St Pasadena Calif	8-12-13	Kay Electric Co 14 Maple Ave Pine Brook NJ	6-14	N J E Corp 345 Carnegie Ave Kenilworth NJ	10
Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio	1	Keppo Labs 131-38 Sanford Ave Flushing NY	10	Norden-Ketay Corp Commerce Rd Stamford Conn	8-11-12
G & M Equipment Co 7315 Varna Ave N Hollywood Calif	6	Koch & Sons H Box 127 Corte Madera Calif	4	Norma Hoffmann Bearings Corp Walker Div Hamilton Ave Stamford Conn	10
Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	3-4	Kollman Case Corp P O Box 180 Ft Wayne 1 Ind	3	Norman Laboratories Ernst Williams Bay Wis	6
Gorrell & Gorrell 336 Old Hook Rd Westwood NJ	5	Kuss Industries Inc Tacony & Lewis Sts Philadelphia 24 Pa	3	Northeastern Eng'g Inc 25 S Bedford St Manchester NH	6
Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	17	Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	3-6-7-8	North Hills Electric Co 402 Sagamore Ave Mineola LI NY	10
Gould Corp Jerome F 200 Stewart Ave Brooklyn 37 NY	9	Lambda Electronics Corp 11-11 131 St College Point 56 NY	10	Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	6-10
Greer Hydraulics Inc N Y Int'l Airport Jamaica 30 NY	1	Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	8-10-12	Olympic Plastics Co 3471 S LaCienega Blvd Los Angeles 16 Calif	3
Gulton Industries Inc 212 Durham Ave Metuchen NJ	10-12-13-14	Lane Electronics Mfg Corp 7254 Atoll Ave N Hollywood Calif	15	Olympic Radio & TV 34-01 38 Ave Long Island City 1 NY	8
		Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	10	Onan & Sons D W 2515 University Ave SE Minneapolis 14 Minn	10
				Ordinance Eng'g Corp P O Box 460 Frederick Md	12

Ortho Filter Corp 196 Albion Ave Paterson 2 NJ	10	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	5-6-8-11-12	Waveline Inc Passaic Ave Caldwell NJ	6
Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	5-8-10-12-18	Skydyne Inc River Ad Port Jervis NY	3-4	Watson Mfg Co 3700 Taylor St Jamestown NY	3
Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	8-10-17-19	Snyder Mfg Co 22 & Ontario Sts Philadelphia 40 Pa	2	Waugh Eng'g Co 7842 Burnet Ave Van Nuys Calif	12
Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	11	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	1	Webster Mfg Co 242 Shoreline Hwy Mill Valley Calif	2
Parsons Co Ralph M Electronics Div 151 S De Lacey Ave Pasadena Calif	8-12-19	Sorensen & Co Richards Ave Norwalk Conn	10	West Coast Electronics Co 9261 W 3 St Beverly Hills Calif	8-10-12
Peer Inc 1200 Milton St Benton Harbor Mich	5	Specialty Eng'g & Electronics Co 79 Clifton Pl Brooklyn 38 NY	3	West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	1-5-8-10-12-13
Permotlux Products Co 4101 San Fernando Rd Glendale 4 Calif	10	Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	1-6-8	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	6-8-13
Peschel Electronics Inc 13 Garden St New Rochelle NY	10	Sphere Co 25 Amity St Little Falls NJ	3	Westronics Inc 3605 McCart Ft Worth Texas	6
Peter Partitions Corp 124 Boerum Pl Brooklyn 1 NY	9	Stainless Inc 4908 Hampden Lane Washington 14 DC	10-12	Wiancko Eng'g Co 255 Halstead St Pasadena Calif	13
Peters-Dalton Inc Div Detroit Harvester 17900 Ryan Rd Detroit 12 Mich	4	Stavid Eng'g Inc U S Route 22 Plainfield NJ	5-8-12-19	Wickes Eng'g & Construction Co 12 St & Ferry Ave Camden 4 NJ	5
Petroff Corp Peter A 127 Water St New York 5 NY	2-12-15-17	Stevenson Bro 110 Race St Philadelphia 6 Pa	9	Wilcox Electric Co 1400 Chestnut St Kansas City 27 Mo	8
Philco Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	6	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-2-3-4-5-6-7-8-9-10 11-12-13-16-17-18-19	Wincharger Corp E 7 & Division St Sioux City 2 Iowa	10
Plastic Capacitors Inc 2620 N Clybourn Ave Chicago 14 Ill	10	Stone City Machine & Tool Co 1206 7 St Bedford Ind	3	Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	3-4-5-15
Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	2-6-8-12-19	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	8-11-15	Wind Turbine Co E Market St & PRR W Chester Pa	2
Potter Aeronautical Corp P O Box 532 Union NJ	6	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	8-10-15-17-18	Winkler Labs 5225 N 20 St Phoenix Ariz	14
Power Designs Inc 89-25 130 St Richmond Hill 18 NY	10	Systrom Corp 2055 Concord Blvd Concord Calif	6-12	Zero Mfg Co 1121 Chestnut Burbank Calif	3-4-9
Power Supplies Inc 1005 Olive St Highland Ill	10	Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	2-3	Z & W Mfg Corp 30240 Lakeland Blvd Wickliffe Ohio	2
Pres Industrial Equipment Ltd Box 302 Putt Corners Rd N New Paltz NY	9	Taller & Cooper 75 Front St Brooklyn 1 NY	12		
Prodelin Inc 307 Bergen Ave Kearny NJ	2	Tatnall Measuring Systems Co Kimberton Rd Phoenixville Pa	14		
Production Research Corp Thornwood NY	2-6-10-11-12-15-16-17-18-19	Technical Appliance Corp 1 Taco St Sherburne NY	2		
PSC Applied Research Ltd 1500 O'Connor Dr Toronto 16 Canada	8	Teletone Mfg Corp 28 Ranick Dr Amityville LI NY	12		
Pye Telecommunications Ltd Newmarket Rd Cambridge England	2-5-8-16-17-18	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	3-4-7-10-11-12		
Q-Line Mfg Corp 1562 61 St Brooklyn 19 NY	2	Tele-Dynamics Inc 32 & Walnut Sts Philadelphia 4 Pa	12		
Radiation Eng'g Labs Main St Maynard Mass	2	Telemarine Communications Co 3040 W 21 St Brooklyn 24 NY	17		
Radiation Inc P O Box 37 Melbourne Fla	12	Telephonics Corp Park Ave Huntington LI NY	15-16-17-18-19		
Radio City Products Co Centre & Glendale Sts Easton Pa	6-8-10	Telkor Inc N Murray Ridge Rd Elyria Ohio	6-10		
Radionics Inc P O Box 186 Cocksaysville Md	10	Telrex Labs Ashury Park NJ	2		
Ransom Research 323 W 7 St San Pedro Calif	6-10	Tenney Eng'g Inc 1090 Springfield Rd Union NJ	7-13-14		
Reeves Instrument Corp 215 E 91 St New York 28 NY	2	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	12		
REF Mfg Corp 393 Jericho Turnpike Mineola NY	3	Texloid Products Co 81 Rumford Ave Waltham 54 Mass	9		
Reflectone Corp Boston Post Rd Stamford Conn	11	Tranco Products Inc 12210 Nebraska Ave Los Angeles 25 Calif	2		
Reid Enterprises 2610 E 67 St Long Beach 5 Calif	9	Transdyne Corp 7337 Grand Ave Maspeth 78 NY	8-10-12		
Reliance Electric and Eng'g Co 24701 Euclid Ave Cleveland 17 Ohio	13	Trans Electronics Inc 7349 Canoga Ave Canoga Park Calif	10		
Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	15-18-19	Transformer Technicians Inc 2608 N Cicero Ave Chicago 39 Ill	10		
Research Development Mfg Inc 429 E Collom St Philadelphia 41 Pa	1	Transitron Inc 186 Granite St Manchester NH	6		
Rheem Mfg Co Electronics Div 7777 Industry Ave Rivera Calif	12	Transonic Inc 808 16 St Bakersfield Calif	10		
Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	12	United Aircraft Products Inc 1116 Bolander Ave Dayton 8 Ohio	3		
Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	6-10	United Electrodynamics 1200 S Marengo Ave Pasadena Calif	12-19		
Rotating Components Inc 267 Green St Brooklyn 22 NY	1	United Mineral & Chemical Corp 16 Hudson St New York 13 NY	9		
RS Electronics Corp 435 Portage Ave Palo Alto Calif	10	Universal Atomic Corp 50 Bond St Westbury LI NY	10		
Sangamo Electric Co Springfield Ill	10	Uniwave Inc 2 Marine St Farmingdale NY	2		
Saratoga Industries Congress & Ballston Ave Saratoga Springs NY	9-10-12-17-18	U S Dynamics Corp 1250 Columbus Ave Boston 20 Mass	10		
Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	11	U S Plywood Corp 55 W 44 St New York 36 NY	9		
Schafer Custom Eng'g 235 S 3 St Burbank Calif	12	Vapor Heating Corp 80 E Jackson Blvd Chicago 4 Ill	1		
Schjeldahl Co G T Northfield Minn	9	Varo Mfg Co 2201 Walnut St Garland Texas	6-10-18		
Seaboard Electric Products Corp 417 Canal St New York 13 NY	5-6-7-8	Vectron Inc 1611 Trapelo Rd Waltham 54 Mass	6-8		
Sel-Rex Corp 155 Manchester Pl Newark 4 NJ	10	Virginia Electronics Co River Rd & B&O RR Washington 16 DC	10-17		
Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	8	Wagner Co H A 14707 Keswick St Van Nuys Calif	1-10		
Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	8	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	12		
Servonics Inc 822 N Henry St Alexandria Va	8	Walkirt Co 141 W Hazel St Inglewood 3 Calif	6		
Shepard Labs Inc 480 Morris Ave Summit NJ	2-10-12	Wallson Associates Ltd 963 Frelinghuysen Ave Newark 12 NJ	10		
Sheppard Co R H 101 Philadelphia St Hanover Pa	10	Warren Corp J C 21 Hanse Ave Freeport NY	17		
		Warren Mfg Co Newtown Rd Littleton Mass	12		

56—MILITARY SYSTEMS ENGINEERING

Alarm systems	1
Communications	2
Counter measures	3
Data recording systems	4
Data reduction systems	5
Fire control	6
Telemetry	7

GUIDANCE CONTROL SYSTEMS

Command control, navigation	8
Inertial navigation	9
Infra-red navigation	10
Radar beam navigation	11
Stellar navigation	12
Abrams Instrument Corp 606 E Shawassee St Lansing 1 Mich	6-7
Acoustica Associates Shore Rd Glenwood Landing LI NY	1
Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	2-7
Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	1-3-5-6-7-8-10-11-12
Aero Electronics Co 1512 N Wells St Chicago 10 Ill	8
Aeroflex Labs 34-06 Skillman Ave Long Island City 1 NY	4
Aerojet-General Corp 6352 N Irwindale Ave Azusa Calif	6-10
Airborne Instruments Lab Modac Div 864 Franklin Ave Thornwood NY	5
AiResearch Mfg Co Div Garrett Corp 9851 Sepulveda Blvd Los Angeles 45 Calif	5
Aitron Inc 1101 W Elizabeth Ave Linden NJ	3-6-8-11
Alto Scientific Co 855 Commercial St Palo Alto Calif	1-2-3-4-7
Alwac Corp 13040 S Cerise Hawthorne Calif	5
Amerac Inc 116 Topsfield Rd Wenham Mass	2-11
American District Telegraph Co 155 6 Ave New York 13 NY	1
American Electronic Laboratories 121 N 7 St Philadelphia 6 Pa	3
American Machine & Foundry Co Electronics Div 1085 Commonwealth Ave Boston 15 Mass	2-3-5-6-8-11
American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	1-2-3-4-5-6-7-8-9-10-11-12
American Microwave Corp 11754 Vose St N Hollywood Calif	2
Ampex Corp 934 Charter St Redwood City Calif	4-5-7
Amtron Corp 17 Felton St Waltham 54 Mass	2
Analogue Controls Inc 39 Roselle St Mineola NY	3-4-5-6-8-9
Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	3-6
Applied Research Inc 163-07 Depot Rd Flushing 58 NY	2-3
Applied Science Corp of Princeton P O Box No 44 Princeton NJ	7
A R F Products Inc 7627 Lake St River Forest Ill	2-3-11
Arma Div American Bosch Arma Corp Garden City NY	6-9-10
Arnoux Corp 11924 W Washington Blvd Los Angeles 66 Calif	4-5

Askania Regulator Co 240 E Ontario St Chicago 11 Ill	8-10-12	Dayton Aviation Radio & Equipment Corp R R 3 Troy Ohio	2-3-8	Haller Raymond & Brown 124 N Atherton St State College Pa	1-2-3-5-6-10
Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio	1	Designers for Industry 4241 Fulton Pkwy Cleveland 9 Ohio	2-3-5	Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	1-2-3-4-5-6-7-8-9-10-11-12
Atlas Precision Products Co 3801 Castor Ave Philadelphia 24 Pa	6	Devol Research Co Brookside Dr Greenwich Conn	4-5	Hammarlund Mfg Co 460 W 34 St New York 1 NY	2-7
Austin Co Special Devices Div 76 9 Ave New York 11 NY	4-5-6-7-8	Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	2-3	Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	7
Automatic Control Co 995 University Ave St Paul 4 Minn	7	Diatron Co 3327 Dixie Dr Houston 21 Texas	1	Hanson-Gorrill-Brian 85 Hazel St Glen Cove NY	4-5-7-10
Autonetics Div North American Aviation 9150 E Imperial Hwy Downey Calif	4-5-6-9-12	Doty Acoustical Electronics Labs 431 Broome St New York 13 NY	9	Harvey-Wells Electronics Inc North St Southbridge Mass	2
Avco Manufacturing Corp Crosley Div 1329 Arlington St Cincinnati 25 Ohio	1-2-3-6-7 8-9-10-11	Douglas Aircraft Co 3000 Ocean Park Blvd Santa Monica Calif	2	Hastings-Raydiat Inc Newcomb Ave Hampton Va	9
Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	2-3-4-5-6 7-8-10-11	Dwyer Eng'g Co Pine St Ext Nashua NH	7	Hewson Co 443 Broad St Newark 2 NJ	1
Babcock Radio Eng'g Inc 7942 Woodley Ave Van Nuys Calif	8	Eastman Kodak Co 343 State St Rochester 4 NY	10	Hoffman Electronics Corp 3761 S Hill St Los Angeles 7 Calif	2-3-6
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	2-3-7	Eclipse-Pioneer Div Bendix Aviation Corp Teterboro NJ	8-9	Hogan Labs Inc 155 Perry St New York 14 NY	3-4
Beckman/Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	4-5-7	Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	1-2-7	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	3-4-7-8
Beckman Instruments Inc Data & Control Systems Scientific Instrument Div 325 N Muller Ave Anaheim Calif	1-4-5	Electronic Control Systems 2136 Westwood Blvd Los Angeles 25 Calif	2-3-4 5-8	Houston Fearless Div Color Corp of America 11801 W Olympic Blvd Los Angeles 64 Calif	5
Bell Aircraft Corp P O Box 1 Buffalo 5 NY	2-3-4-5-6-7 8-9-10-11-12	Electronic Eng'g Co of Calif 180 S Alvarado Los Angeles 57 Calif	4-5-7	Hughes Aircraft Co Florence & Teale Sts Culver City Calif	2-6
Belock Instrument Corp 111-01 14 Ave College Point 56 NY	3-4-5-6-7-8-9-10-11	Electronics Corp of America 1 Memorial Dr Cambridge 42 Mass	1-6-10	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	7
Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif	5-6-7-8	Electronics Development Co 3743 N Cahuenga Blvd N Hollywood Calif	7	Hycan Eastern Inc 75 Cambridge Pkwy Cambridge 42 Mass	4-5
Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	2-3-7-8-11	Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	1-2-3-6	Hycan Mfg Co 707 S Raymond Ave Pasadena Calif	2-10
Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	2-3-4-5-6 7-8-9-11	Electrosolids Corp 7436 Varna Ave N Hollywood Calif	2	Industrial Electronic Engineers 3973 Lankershim Blvd N Hollywood Calif	4
Benson-Lehner Corp 11930 W Olympic Blvd Los Angeles 64 Calif	5	Electro Sound Corp 115 Hallett St Boston 15 Mass	2	Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	1-4-5-7-10
B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	2-4-5-7	El-Tronics Inc Penn Ave Mayfield Pa	1	Instrument Development Labs Inc 67 Mechanic St Attleboro Mass	9
Brubaker Electronics Inc 3652 Eastham Dr Culver City Calif	2-3-6-8-11	Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo	6	International Business Machines Corp 590 Madison Ave New York 23 NY	4
Brush Electronics Co 3405 Perkins Ave Cleveland 14 Ohio	4	Erco Radio Labs Inc 637 Stewart Ave Garden City NY	2-12	Interstate Electronics Corp 875 S East St Anaheim Calif	1-2-3-4-5-7
Buhl Optical Co 1009 Beech Ave Pittsburgh 33 Pa	6	Espey Mfg Co Congress & Ballston Ave Saratoga Springs NY	1-2	Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md	3-5-6-8-9-10-11-12
Burroughs Corp 6071 2 Ave Detroit 32 Mich	2-3-4-5-6-7-8-9-10-11-12	Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch LI NY	3-6-9-11	Johnson Aircraft Eng'g Co M J Morristown Airport Box 10 Morristown NJ	7
Calif Technical Industries 1421 Old County Rd Belmont 10 Calif	2-6-10-11	Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind	3-6-7-10-11	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	11
Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada	6	Farrand Controls Inc 4401 Bronx Blvd New York 70 NY	3-6-8-9-10-12	Kahn Research Labs 22 Pine St Freeport NY	2
Canoga Corp 5955 Sepulveda Blvd Van Nuys Calif	3-6-7-8-11	Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY	2-3-6	Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	2-3-4-6
Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill	2	Federal Telecommunication Labs Div IT&T 500 Washington Ave Nutley NJ	3	Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	4-7
Century Electronics Co 34 Oleander St Cocoa Fla	7	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	1-2-3-4-5-6-7-8-9-10-11-12	Kollman Instrument Corp Sub Standard Coil Products 80-08 45 Ave Elmhurst 73 NY	12
CG Electronics Corp 305 Dallas St NE Albuquerque New Mex	3-6-7	Firestone Guided Missile Div Los Angeles 54 Calif	2	Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	2-8-11
CGS Laboratories Inc 391 Ludlow St Stamford Conn	2-3	Fischer & Porter Co 478 Warminster Rd Hatboro Pa	5	Lear Inc 3171 S Bundy Drive Santa Monica Calif	2-3-7-8-9-11
Chance Vought Aircraft Inc Dallas Texas	2-6	Flight Research Inc P O Box 1-F Richmond 1 Va	4	Librascope Inc 808 Western Ave Glendale Calif	3-4-5-6-7-8-10-12
Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill	4-5 10-12	Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY	4-5-6-7-8-9-11-12	Link-Radio Corp 110 Jericho Turnpike New Hyde Park LI NY	2
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London SE 26 England	3	Franklin Electronics Inc Box 113 Bridgeport Pa	5	Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	2-3-4-5-6-7 8-9-10-11-12
Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	2-3	Gaertner Scientific Corp 1250 Wrightwood Ave Chicago 14 Ill	5	Litton Industries of Md Inc 4910 Calvert Rd College Park Md	4-5-6-8
Coleman Eng'g Co 6040 W Jefferson Blvd Los Angeles 16 Calif	5	Garrett Corp AiResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif	5	Lytle Eng'g & Mfg Co 1404 San Mateo Blvd S E Albuquerque New Mex	1-4
Collins Radio Co 855 35 St NE Cedar Rapids Iowa	2-3-8	General Bronze Corp 711 Stewart Ave Garden City NY	2	Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	4-6-8
Colorado Research Corp 4697 E Evans Ave Denver 22 Colo	4-5	General Communication Co 677 Beacon St Boston 15 Mass	1-2-3-7-8	Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	2
Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	2	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	4-7	Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	6
Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	3-4-5-7 9-10-11	General Electric Co Communication Products Dept Syracuse NY	2	Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif	7
Consolidated Electroynamics Corp 300 N Sierra Madre Villa Pasadena Calif	4-5	General Electric Co Light Military Electronic Equip Dept French Rd Utica NY	2-3-4-5-6-11	Manson Laboratories Inc 207 Greenwich Ave Stamford Conn	2
Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	2-6	Giannini & Co G M 918 E Green St Pasadena Calif	1-4-5-6-7-9	Marion Electronic Instrument Co Grenier Field Manchester NH	8
Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	1-2	Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	4-5-10	Martin Co Glenn L Baltimore 3 Md	2
Continental Electronics Mfg Co 4212 S Buckner Blvd Dallas 27 Texas	2	Gorrell & Gorrell 336 Old Hook Rd Westwood NJ	4	Maryland Electronic Mfg Corp 5009 Calvert Rd College Park Md	2-3-7
Corbett Science Labs F W 3117 Venice Blvd Los Angeles 19 Calif	4-5	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	2	Maurer Inc J A 37-01 31 St Long Island City 1 NY	4-5-8
Corbin Corp 5419 56 Pl Riverdale Md	1-2-3-6-8-9-10-11	GPS Instrument Co 811 Boylston St Boston 16 Mass	6-9	Maxson Corp W L 475 10 Ave New York 18 NY	6-9-11
Craig Systems Inc 90 Holten St Danvers Mass	2	Graflex Inc 154 Clarissa St Rochester 8 NY	6	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	1-2
Crosby Labs Inc Box 233 Robbins Lane Hicksville NY	2	Gulton Industries Inc 212 Durham Ave Metuchen NJ	4-7	Mechaneers Inc Westport Conn	1-2-3-4-5-6-7-8-9-10-11-12
Daco Instrument Co Tillary & Prince Sts Brooklyn 1 NY	6	Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	4	Melpar Inc 3000 Arlington Blvd Falls Church Va	3
Darco Industries Inc Gyro Dynamics Div 2151 E Rosecrans Ave El Segundo Calif	9	Hallamere Electronics Co 8352 Brookhurst Ave Anaheim Calif	1-2-3-4-5-6-7-8-9-10-11-12	Menlo Research Lab 538 Phelan Ave San Jose Calif	1-2-3-4-5-6-7-8-11
Datex Div G M Giannini & Co 1307 S Myrtle Ave Monrovia Calif	4				
Daystrom Instrument Div Daystrom Inc Archbald Pa	3-4-5-6-8				

Merz Eng'g Inc 200 S Harding St Indianapolis Ind	3	Rheem Mfg Co Electronics Div 7777 Industry Ave Rivera Calif	2-7	Western Electro Acoustic Lab Inc 11789 San Vicente Blvd Los Angeles 49 Calif	2
Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	1-2	Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	1-2-4-7	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	2-3-5-6-10-11
Milgo Electronic Corp 7601 N W 37 Ave Miami 47 Fla	6	Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	2	Wiancko Eng'g Co 255 Halstead St Pasadena Calif	4-5
Mincom Div Minn Mining & Mfg Co 2049 S Barrington Ave Los Angeles 25 Cal	4	Saratoga Industries Congress & Ballston Ave Saratoga Springs NY	1-2	Wickes Eng'g & Construction Co 12 St & Ferry Ave Camden 4 NJ	2-3
Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	2-6-7-10	Seaboard Electric Products Corp 417 Canal St New York 13 NY	1-6-8	Wilcox Electric Co 1400 Chestnut St Kansas City 27 Mo	2
Minneapolis-Honeywell Regulator Co Davies Labs Div 10721 Hanna St Beltsville Md	4-5-7	Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	2-5-10	Wollensak Optical Co 850 Hudson Ave Rochester 22 NY	6
Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	6-9	Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	9	57—MISSILES	
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	4	Servonics Inc 822 N Henry St Alexandria Va	6-8-9-10-11-12	Frequency controls	1
Missileonics Inc P O Box 716 Melbourne Fla	2-5-7-11	Shepard Labs Inc 480 Morris Ave Summit NJ	4	Frequency regulators	2
Mosler Research Products Inc 3 Keefer St Danbury Conn	1	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	1-2-3-4-5-6-7-8-9-10-11-12	Fuses, electronic	3
Motorola Communications & Electronics Inc 4501 W Augusta Blvd Chicago 51 Ill	2	Smith-Meeker Eng'g Co 157 Chambers St New York 7 NY	2-3-11	Ground check-out equipment	4
M Ten Bosch Inc 80 Wheeler Ave Pleasantville NY	9-12	Soroban Eng'g Inc Box 338 Melbourne Fla	4-5	Ground handling equipment	5
National Scientific Labs Inc 2010 Massachusetts Ave N W Washington 6 DC	2-3-4	Southern Instruments Computer Div Frimley Rd Camberley Surrey England	4-5	Guidance equipment	6
Navco Navigation Computer Corp 1621 Snyder Ave Philadelphia 45 Pa	5	Southwestern Industrial Electronics Co 2831 Post Oak Rd Houston 19 Texas	4-5	Gyros	7
Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	7	Sperry Gyroscopic Co Div Sperry Rand Corp Great Neck NY	3-6-9-11-12	Power supplies	8
Nevada Air Products Co P O Box 2472 Reno Nev	1-2-3-6-7-9-10	Spivey Inc James S 4908 Hampden Lane Washington 14 DC	7	Seals	9
Non-Linear Systems Inc Del Mar Airport Del Mar Calif	4-5	Stavid Eng'g Inc U S Route 22 Plainfield NJ	3-4-5-6-7-8-10-11	Telemetering	10
Norden-Ketay Corp Commerce Rd Stamford Conn	3-6-7-8-9-10-11-12	Stelma Inc 190 Henry St Stamford Conn	2	Transponders	11
North American Instruments Inc 2420 N Lake St Altadena Calif	4-5	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	2-3-4-5-6-7-8-9-10-11-12	A C Electronics Div General Motors Corp Toledo Ohio	6
North Electric Co 553 S Market St Galion Ohio	2	Stratford Corp 44 W 28 St New York 1 NY	1	ACF Industries Nuclear Prods-Erco Div 48 Lafayette St Riverdale Md	4-5
Olympic Radio & TV 34-01 38 Ave Long Island City 1 NY	2-11	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	2-4	Acme Electric Corp Water St Cuba NY	8
Ordnance Eng'g Corp P O Box 460 Frederick Md	7	Strong Electric Corp 87 City Park Ave Toledo 1 Ohio	10	Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	8
Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	2-3-4-5-6-7-8-9-11	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	2-3-4-5-6-8-11	Advanced Products Co 59 Broadway North Haven Conn	9
Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	9-10	Systron Corp 2055 Concord Blvd Concord Calif	3-4-5-7	Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	1-11
Panelit Inc 7401 N Hamlin Ave Skokie Ill	4	Taller & Cooper 75 Front St Brooklyn 1 NY	4-5-7	Aero Electronics Co 1512 N Wells St Chicago 10 Ill	4
Par Products Corp 602 Colorado Ave Santa Monica Calif	4	Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn	3	Aeroflex Labs 34-06 Skillman Ave Long Island City 1 NY	4-5-7
Parsons Co Ralph M Electronics Div 151 S De Lacey Ave Pasadena Calif	7-8	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	7	Aerophysics Development Corp Sub Curtiss-Wright Corp P O Box 689 Santa Barbara Calif	5-6
Pentron Corp 777 S Tripp Ave Chicago 24 Ill	4-7	Telecomputing Div Telecomputing Corp 12338 Saticoy St N Hollywood Calif	5	AiResearch Mfg Co Div Garrett Corp 9851 Sepulveda Blvd Los Angeles 45 Calif	5-6-8
Perkin-Elmer Corp Main Ave Norwalk Conn	6-10	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	1-4-5	Airpax Products Co Middle River Baltimore 20 Md	1-2-8
Philco Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	2-6	Tele-Dynamics Inc 32 & Walnut Sts Philadelphia 4 Pa	7	Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	4-5-6
Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	1-2-3-4-5-6-7 8-9-10-11-12	Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif	4-5	Alto Scientific Co 855 Commercial St Palo Alto Calif	4
Potter Aeronautical Corp P O Box 532 Union NJ	1	Telephonics Corp Park Ave Huntington LI NY	1-2-3-4-8	Amerac Inc 116 Topsfield Rd Wenham Mass	5
Potter Instrument Co 115 Cuttermill Rd Great Neck NY	4-5	Televisto Corp 1415 Golf Rd Des Plaines Ill	3	American Gyro Corp 3030 Nebraska Ave Santa Monica Calif	6
Pratt Albert 114 W Lake View Ave Milwaukee 17 Wis	2	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	3-5-6-7-9-10-11	American Machine & Foundry Co Electronics Div 1085 Commonwealth Ave Boston 15 Mass	4-5-11
Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	1	Textran Corp Box 4252 Austin 51 Texas	3-4-5-11	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	2-4-5-6-8-10-11
Prodelin Inc 307 Bergen Ave Kearny NJ	2	Thompson Products Inc Electronics Div 2196 Clarkwood Rd Cleveland 3 Ohio	3	American Research & Mfg Corp 920 Halpine Ave Rockville Md	8
Producers Sales Corp 2704 W Olive Ave Burbank Calif	4	Times Facsimile Corp 540 W 58 St New York 19 NY	2	Ampex Corp 934 Charter St Redwood City Calif	10
Production Research Corp Thornwood NY	1-2-3-4-5-7-10	Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	2-3-6	Analogue Controls Inc 39 Roselle St Mineola NY	4-5-6
Pye Telecommunications Ltd Newmarket Rd Cambridge England	2	TV Specialty Co 350 W 31 St New York 1 NY	4	Applegate & Co C J 1840 24 St Boulder Colo	8
Radiation Inc P O Box 37 Melbourne Fla	3-4-5-7	Underwood Corp Electronic Computer Div 35-10 36 Ave Long Island City 6 NY	4-5	Applied Science Corp of Princeton P O Box No 44 Princeton NJ	10
Radio City Products Co Centre & Glendale Sts Easton Pa	3	United Electrodynamics 1200 S Marengo Ave Pasadena Calif	5-7	Arma Div American Bosch Arma Corp Garden City NY	6-7
Radio Corp of America Camden 2 NJ	2	U S Instrument Corp P O Box 33E Charlottesville Va	2	Arnoux Corp 11924 W Washington Blvd Los Angeles 66 Calif	8
Radio Eng'g Products Ltd 1080 University St Montreal 3 Quebec Canada	2	Vapor Heating Corp 80 E Jackson Blvd Chicago 4 Ill	1	Askania Regulator Co 240 E Ontario St Chicago 11 Ill	1
Radionics Inc P O Box 186 Cockeysville Md	6	Varo Mfg Co 2201 Walnut St Garland Texas	2-6-7-9	Associated Missile Products Sub American Mch & Fdry 2709 N Garey Ave Pomona Calif	1-2-3-4-5-6-7-8-9
Rahm Instruments Inc 237 Lafayette St New York 12 NY	7	Vectron Inc 1611 Trapelo Rd Waltham 54 Mass	3	Atlas Eng'g Co 176 Blue Hill Ave Roxbury 19 Mass	8
Ransom Research 323 W 7 St San Pedro Calif	4-5	Virginia Electronics Co River Rd & B&O RR Washington 16 DC	2-8	Atlas Precision Products Co 3801 Castor Ave Philadelphia 24 Pa	6
Raymond Eng'g Lab Inc Smith St Middletown Conn	3	Vought Co Box 1350 Beverly Hills Calif	4-5	Auburn Mfg Co Stack St Middletown Conn	9
Reeves Instrument Corp 215 E 91 St New York 28 NY	2-6-8-9-11-12	Wagner Co H A 14707 Keswick St Van Nuys Calif	3-10	Autonetics Div North American Aviation 9150 E Imperial Hwy Downey Calif	6
Reflectone Corp Boston Post Rd Stamford Conn	3	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	2-3-4-5-6-7-8-9-10	Avco Manufacturing Corp Crosley Div 1329 Arlington St Cincinnati 25 Ohio	6-10
Remington Rand Univac Div Sperry Rand Corp 315 4 Ave New York 10 NY	4	Warren Corp J C 21 Hanse Ave Freeport NY	2	Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	1-2-4-5-6-11
Remler Co 2101 Bryant St San Francisco Calif	1-2	Waveline Inc Passaic Ave Caldwell NJ	2	Avionics Ltd P O Box 200 Niagara-on-the-Lake Ontario Canada	4-6-10
Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	2-7	Westbury Electronics Inc 300 Shames Dr Westbury NY	3-6	Babcock Radio Eng'g Inc 7942 Woodley Ave Van Nuys Calif	4-6
		West Coast Electronics Co 9261 W 3 St Beverly Hills Calif	2-7-8-9-10-11	Baldwin-Lima-Hamilton Corp Electronics & Instrumentation Div 42 4 Ave Waltham 54 Mass	4-5
		West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	1-3-4-5-6-7-8-9-10-11-12	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	10

Beckman Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	10	Edko Electronics Eng'g Co 202 Grand St Brooklyn 11 NY	8	Interstate Electronics Corp 875 S. East St Anaheim Calif	4-10-11
Beckman Instruments Inc Data & Control Systems Scientific Instrument Div 325 N Muller Ave Anaheim Calif	4	Eicor Inc 4235 W North Ave Chicago 39 Ill	8	Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md	6
Bel Fuse Inc 311 Mountain Rd Union City NJ	8	Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	10	Johnson Aircraft Eng'g Co M J Morrilstown Airport Box 10 Morrilstown NJ	10
Bell Aircraft Corp P O Box 1 Buffalo 5 NY 1-2-4-6-7-8-10-11		Electric Regulator Corp Pearl St Norwalk Conn	1-2	Kahn & Co 541 Windsor St Hartford 1 Conn	5
Belock Instrument Corp 111-01 14 Ave College Point 56 NY	6-7-8-10	Electronic Control Systems 2136 Westwood Blvd Los Angeles 25 Calif	4	Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	4-6-8-11
Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif	6-10	Electronic Research Associates 180 So Alvarado Los Angeles 57 Calif	4	Kepeco Labs 131-38 Sanford Ave Flushing NY	8
Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	6-10	Electronics Development Co 67 E Centre St Nutley 10 NJ	8	Lambda Electronics Corp 11-11 131 St College Point 56 NY	8
Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	2-4-5-6-7-8-10-11	Electronic Specialty Co 3743 Cahuenga Blvd N Hollywood Calif	10	Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill	8
Bendix Aviation Corp Red Bank Div Eatontown NJ	8	Electrosolids Corp 5121 San Fernando Rd Los Angeles 39 Calif	1-2-3-4-8	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	2-8
Bernco Engineering Corp 2320 S Tibbs Ave Indianapolis 41 Ind	4	Elgin National Watch Co 7436 Varma Ave N Hollywood Calif	8	Lawn Electronics Co E Freehold Rd Freehold NJ	8
B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	10	Elgin National Watch Co 107 National St Elgin Ill	3	Leach Corp Inet-Palmer Div 441 S Santa Fe Ave Los Angeles 58 Calif	4-5-8
Boeing Airplane Co Missiles Div Seattle Wash	6	Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo	5-6	Lear Inc 3171 S Bundy Drive Santa Monica Calif	4-5-6-7-8
Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ	2-4-5-8	Engineered Magnetics Div Gulton Industries Inc 13030 Cerise Ave Hawthorne Calif	8	Lee Electric & Mfg Co 2806 Clearwater St Los Angeles 39 Calif	8
Brush Electronics Co Div Clevelte Corp 3405 Perkins Ave Cleveland 14 Ohio	4-6	Epsco Inc 588 Commonwealth Ave Boston 15 Mass	10	Leland Electric Co Div American Machine & Foundry Co 1501 Webster St Dayton 1 Ohio	8
Burroughs Corp 6071 2 Ave Detroit 32 Mich	1-3-4-5-6-7-10	Exact Eng'g & Mfg Inc P O Box 668 Oceanside Calif	6	Librascope Inc 808 Western Ave Glendale Calif	4
Bussmann Mfg Co University at Jefferson St Louis 7 Mo	3	Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch LI NY	4-5-6	Litton Industries of Calif 386 N Foothill Rd	4-5-6-7
Cable Electric Products 234 Daboll St Providence 7 RI	3-8	Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind	4-5-6	Beverly Hills Calif	8-10-11
Calif Magnetic Control Corp 11922 Valerio St N Hollywood Calif	8	Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY	6	Lockheed Aircraft Corp Missile Systems Div 7701 Woodley	1-2-3-4-5-6
Calif Technical Industries 1421 Old County Rd Belmont 10 Calif	4	Federal Telecommunication Labs Div IT&T 500 Washington Ave Nutley NJ	6	Van Nuys Calif	7-8-9-10-11
Canoga Corp 5955 Sepulveda Bldg Van Nuys Calif	4-6-10-11	Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY	1-2-3-6-7-10	Loewy-Hydropress Div Baldwin-Lima-Hamilton Corp 111 5 Ave New York 3 NY	5
Cedar Eng'g Inc 5806 W 36 St Minneapolis 16 Minn	7	Frequency Standards Inc P O Box 504 Asbury Park NJ	1	Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	6
Century Electronics Co 34 Oleander St Cocoa Fla	4-10	Garlock Packing Co 402 Main St Palmyra NY	9	Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	8
CG Electronics Corp 305 Dallas St N E Albuquerque New Mex	6-10	Garrett Corp AiResearch Mfg Co Div 9851 Spulveda Blvd Los Angeles 45 Calif	5-6-8	Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif	1-2-4 6-8-10
Chatham Electronics Div Gera Corp W Mt Pleasant Ave Livingston NJ	8	Geartronic Corp 2514 Broadway Long Island City NY	6	Martlab Co 249 Haverford Ave Swarthmore Pa	1-3-8
Christiansen Co C B 164 Pennington St Newark 5 NJ	5	General Communication Co 677 Beacon St Boston 15 Mass	10-11	Maxson Corp W L 475 10 Ave New York 18 NY	3-6-7
Christie Electric Corp 3410 W 67 St Los Angeles 43 Calif	8	General Devices Inc P O Box 253 Princeton NJ	10	Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY	1-2
Chrysler Corp Missiles Div Detroit Mich	6	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	10	Mayfair Molded Products Corp 3700 N Rose St Franklin Park Ill	9
Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	1-2-8	General Electric Co Light Military Electronic Equip Dept French Rd Utica NY	3-6	Mercury Electronic Corp Box 450 B Red Bank NJ	6
Condenser Products Div New Haven Clock & Watch Co 140 Hamilton St New Haven 4 Conn	8	General Magnetics Inc 135 Bloomfield Ave Bloomfield NJ	2-8	Milgo Electronic Corp 7601 NW 37 Ave Miami 47 Fla	4
Conn Hard Rubber Co P O Box 1911 New Haven 9 Conn	9	General Precision Lab Inc 63 Bedford Rd Pleasantville NY	6	Minnesota Rubber & Gasket Co 3630 Wooddale Ave St Louis Park Minncneapolis 16 Minn	9
Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	1-2-4-10	Genisco Inc 2233 Federal Ave Los Angeles Calif	6	Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	1-2-3-4-5-8-11
Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	4	Giannini & Co G M 918 E Green St Pasadena Calif	4-6-7-10	Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	6-7
Convair Pomona Div General Dynamics Corp P O Box 1011 Pomona Calif	1-2-3-4-5-6-7-8-9	Goodyear Aircraft Corp 1210 Massillon Rd Akron 15 Ohio	4-5-6	Minor Rubber Co Ackerman St Bloomfield NJ	9
Corbin Corp 5419 56 Pl Riverdale Md	6-11	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	2-8	Model Eng'g & Mfg Inc 60 Frederick St Huntington Ind	6-8-10-11
Craig Systems Inc 90 Holten St Danvers Mass	4-5	Graflex Inc 154 Clarissa St Rochester 8 NY	6	Model Rectifier Corp 1065 Utica Ave Brooklyn 3 NY	8
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	1	Gray Research & Development Co Hilliard St Manchester Conn	6	Modern Industries Inc 2601 Colorado Ave Santa Monica Calif	2-8
Darco Industries Inc Gyro Dynamics Div 2151 E Rosecrans Ave El Segundo Calif	7	Greenleaf Mfg Co Div Mandrel Industries 7814 Maplewood Industrial Ct St Louis 17 Mo	7	M Ten Bosch Inc 80 Wheeler Ave Pleasantville NY	7
Daven Co Route 10 Livingston NJ	6	Gruen Industries Inc Time Hill Cincinnati 6 Ohio	4	Mutual Electronics Industries Corp 85 Beechwood Ave New Rochelle NY	3
Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	8	Gulton Industries Inc 212 Durham Ave Metuchen NJ	10	National Aircraft Corp 3411 Tulare Ave Burbank Calif	4-5-8
Daystrom Pacific Corp 3030 Nebraska Ave Santa Monica Calif	7	Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	4-6-8-10-11	Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	6-7-8-10
Designers for Industry 4241 Fulton Pkwy Cleveland 9 Ohio	6	Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	4-6-8-10	Nevada Air Products Co P O Box 2472 Reno Nev	4-5-6-10-11
Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	6	Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	4	New York Transformer Co 3 Ave Alpha NJ	8
Dit-Mco Inc Electronics Div 911 Broadway Kansas City Mo	4	Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	10	N J E Corp 345 Carnegie Ave Kenilworth NJ	8
Douglas Aircraft Co 3000 Ocean Park Blvd Santa Monica Calif	5	Heiland Div Minneapolis-Honeywell 5200 E Evans Ave Denver 22 Colo	4	Non-Linear Systems Inc Del Mar Airport Del Mar Calif	4
Dressen-Barnes Corp 250 N Vinedo Ave Pasadena Calif	8	Hobart Bros Hobart Square E Troy 3 Ohio	4-5-8	Norden-Ketay Corp Commerce Rd Stamford Conn	4-6-7
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	5-6-7	Hoffman Electronics Corp 3761 S Hill St Los Angeles 7 Calif	4-6	Norrman Laboratories Ernst Williams Bay Wisc	1
Dwyer Eng'g Co Pine St Ext Nashua NH	6-10	Hogan Labs Inc 155 Perry St New York 14 NY	10	North American Instruments Inc 2420 N Lake St Altadena Calif	6
Dynamics Research Associates Div Universal Match Corp P O Box 5841 Ferguson 21 Mo	1-2-8	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	4-6-8-10-11	Northern Radio Co 143 W 22 St New York 11 NY	10
Eastern Industries Inc 100 Skiff St Hamden 14 Conn	6-8	Hughes Aircraft Co Florence & Teale Sts Culver City Calif	4	Northrup Aircraft Inc 1101 E. Broadway Hawthorne Calif	1-2-3-4-5-6-7-8-9-10-11
Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	8-10	Humphrey Inc 2805 Canon St San Diego Calif	7	Onan & Sons D W 2515 University Ave SE Minneapolis 14 Minn	8
Eclipse-Pioneer Div Bendix Aviation Corp Teterboro NJ	6-7	Hycon Mfg Co 707 S Raymond Ave Pasadena Calif	4-5	Opto Eng'g Co 3524 W Washington Blvd Los Angeles 18 Calif	4-5
		Ideal-Aerosmith Inc 12909 S Cerise Ave Hawthorne Calif	4	Ordnance Eng'g Corp P O Box 460 Frederick Md	10
		Industrial Research Labs Div Aerona Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	1-4-8-10		

Ortho Filter Corp 196 Albion Ave Paterson 2 NJ	1	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	4-6-8-9	Avia Products Co 7266 Beverly Blvd Los Angeles 36 Calif	6-7-14
Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	4-5-6-8-10	Tele-Dynamics Inc 32 & Walnut Sts Philadelphia 4 Pa	8-10	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	6
Pacific Scientific Co P O Box 22019 Los Angeles 22 Calif	6-7	Telephonics Corp Park Ave Huntington LI NY	8	Bell Aircraft Corp P O Box 1 Buffalo 5 NY	3-6-11-12-13-14
Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	4-6-8-10-11	Telerad Mfg Corp 1440 Broadway New York 18 NY	6	Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	6-7-9-11-12-13-14
Panoramic Radio Products Inc 10 S 2 St Mt Vernon NY	4-10	Temco Aircraft Corp P O Box 6191 Dallas 2 Texas	6	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	3-7-9-11-12-13-14
Parsons Co Ralph M Electronics Div 151 S De Lacey Ave Pasadena Calif	4-10	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	6-8-10	Burroughs Corp 6071 2 Ave Detroit 32 Mich	8
Perkin-Elmer Corp Main Ave Norwalk Conn	4-6	Thompson Products Inc Electronics Div 2196 Clarkwood Rd Cleveland 3 Ohio	4	Collins Radio Co 855 35 St NE Cedar Rapids Iowa	6-7-9-14
Peschel Electronics Inc 13 Garden St New Rochelle NY	8	Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	1-4-5-6	Communications Co Coral Gables Fla	6-14
Philco Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	6	Trans Electronics Inc 7349 Canoga Ave Canoga Park Calif	8	Conn Telephone & Electric Corp 70 Brittonia St Meriden Conn	1-2-3-6-7-8
Photographic Analysis Inc 13273 Ventura Blvd N Hollywood Calif	4	Transonic Inc 808 16 St Bakersfield Calif	8	Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	2
Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	4-5-6-10-11	Union Switch & Signal Div Westinghouse Air Brake Co Braddock Ave Pittsburgh 18 Pa	4-5	Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	14
Power Designs Inc 89-25 130 St Richmond Hill 18 NY	8	United Electrodynamics 1200 S Marengo Ave Pasadena Calif	4-6-8-10-11	Craig Systems Inc 90 Holten St Danvers Mass	7
Power Supplies Inc 1005 Olive St Highland Ill	8	Universal Atomics Corp 50 Bond St Westbury LI NY	8	Daven Co Route 10 Livingston NJ	6
Precision Technology Inc 66 South P St Livermore Calif	3-6	U S Dynamics Corp 1250 Columbus Ave Boston 20 Mass	8	Dayton Aviation Radio & Equipment Corp R R 3 Troy Ohio	9-13
Production Research Corp Thornwood NY	4-6-8-10-11	U S Gauge Div American Machine & Metals Sellersville Pa	4-5-6-11	DeWald Radio Mfg Corp 35-15 37 Ave Long Island City 1 NY	1
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	10	U S Time Corp Waterbury Conn	6-7-10	Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	5-7
Quantum Electronics Inc 2312 Wisconsin St N E Albuquerque N Mex	8	Varo Mfg Co 2201 Walnut St Garland Texas	1-2-4	Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	3
Radiation Inc P O Box 37 Melbourne Fla	4-6-10	Vecron Inc 1611 Trapelo Rd Waltham 54 Mass	4	Electronic Creations Co 1178 E 180 St New York 60 NY	1
Radionics Inc P O Box 186 Cockeysville Md	8	Virginia Electronics Co River Rd & B & O R R Washington 16 DC	4	Erco Radio Labs Inc 637 Stewart Ave Garden City NY	6-7-14
Rahm Instruments Inc 237 Lafayette St New York 12 NY	6-8-10	WacLine Inc 35 S St Clair St Dayton 2 Ohio	2	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	3-6-7-9
Ransom Research 323 W 7 St San Pedro Calif	1-2-8	Wagner Co H A 14707 Keswick St Van Nuys Calif	4-5-6	Flush Wall Radio Co 1012 Cleveland St Clearwater Fla	3
Raymond Eng'g Lab Inc Smith St Middletown Conn	8	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	4	Gardiner Electronics Co 2545 E Indian School Rd Phoenix Ariz	1
Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass	9	Waltham Watch Co 221 Crescent St Waltham 54 Mass	7	General Electric Co Communication Products Dept Syracuse NY	7
Rea Co J B 1723 Cloverfield Blvd Santa Monica Calif	7	Walton Tool & Die Co 2707 Empire Ave Burbank Calif	5	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	7-14-15
Reeves Instrument Corp 215 E 91 St New York 28 NY	6-7	Waugh Eng'g Co 7842 Burnet Ave Van Nuys Calif	1-2-10	Harvey-Wells Electronics Inc North St Southbridge Mass	3-11
Remler Co 2101 Bryant St San Francisco Calif	4-5-6	Wells-Gardner & Co 2701 N Kildare Ave Chicago 39 Ill	3	Industrial Development Eng'g Assoc 7900 Pendleton Pike Indianapolis Ind	6-7
Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	4-11	Westbury Electronics Inc 300 Shames Dr Westbury NY	6-10-11	Industrial Radio Corp 428 N Parkside Ave Chicago 44 Ill	6-7-14-15
Resistoflex Corp Woodland Rd Roseland NJ	9	West Coast Electronics Co 9261 W 3 St Beverly Hills Calif	4-8	Intelix Systems Inc 22 Thames St New York 6 NY	8
Rheem Mfg Co Electronics Div 7777 Industry Ave Rivera Calif	4-8-10	West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 54 Calif	3-4-5-6-8-10-11	Johnson Co EF Waseca Minn	14
Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	4-6	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	4-5-6-7	Kaar Eng'g Corp 2995 Middlefield Rd Palo Alto Calif	6-12-13-14
Rogers Corp Rogers Conn	9	Wincharger Corp E 7 & Division St Sioux City 2 Iowa	8	Kluge Electronics Inc 5 & Main Sts Albion Nebr	11
R S Electronics Corp 435 Portage Ave Palo Alto Calif	6-8	Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	4-5-6	Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill	3
Sanders Associates 95 Canal St Nashua NH	7	Zoomar Inc 55 Sea Cliff Ave Glen Cove NY	6	Lane Electronics Mfg Corp 7254 Atoll Ave N Hollywood Calif	9
Sangamo Electric Co Springfield Ill	8	58—MOBILE COMMUNICATIONS EQUIPMENT		Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	3
Schaffer Air Industries 290 N Henry St Brooklyn 22 NY	4-5	Citizens radio	1	Lear Inc 3171 S Bundy Drive Santa Monica Calif	9-13
Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	6	Handsets	2	Leitch Eng'g Corp 326 Lincoln St Manchester NH	10-12-13
Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	4-6-8	Intercommunicating systems	3	Link-Radio Corp 110 Jericho Tpke New Hyde Park LI NY	14
Servonics Inc 822 N Henry St Alexandria Va	6	Pack sets	4	Linal Inc 4101 San Fernando Rd Glendale 4 Calif	3
Sightmaster Corp 85 Beechwood Ave New Rochelle NY	3	Pickup units, mobile TV	5	Lynmar Engineers Inc 1432 N Carlisle St Philadelphia 21 Pa	11
Skiatron Electronics & TV Corp 180 Variek St New York 14 NY	10	Receivers, fixed	6	Lysco Mfg Co 1401 Clinton St Hoboken NJ	6-7-14
Solar Aircraft Co 2200 Pacific Hwy San Diego 12 Calif	4	Receivers, mobile	7	Mackay Radio & Telegraph Co Marine Div 133 Terminal Ave Clark NJ	10
Sorensen & Co Richards Ave Norwalk Conn	8	Telephones, portable field	8	Major Electronics Corp 762 Wythe Ave Brooklyn 11 NY	1
Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	4-6-7	Transceivers, aviation	9	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	4
Spellman TV Co 8029 Webster Ave New York 67 NY	8	Transceivers, lifeboat	10	Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	11-15
Spivey Inc James S 4908 Hampden Lane Washington 14 DC	10	Transceivers, portable	11	Mil Case Corp 35-18 37 St Long Island City NY	4
Stavid Eng'g Inc U S Route 22 Plainfield NJ	4-6-10-11	Transceivers, UHF	12	Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa	3
Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	3-4-5-6-8-10-11-20	Transceivers, VHF	13	Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	3-7-9-10-11-12-13-14
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	4	Transmitters	14	Morrow Radio Mfg Co 2794 Market St Salem Ore	14
Sylvania Electric Products Inc 1740 Broadway New York 19 NY	6	Walkie-talkies	15	Mosler Research Products Inc 3 Keeler St Danbury Conn	14
Systron Corp 2055 Concord Blvd Concord Calif	5-10	Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	14	Motorola Communications & Electronics Inc 4501 W Augusta Blvd Chicago 51 Ill	6-7-11-12-13-14-15
Taller & Cooper 75 Front St Brooklyn 1 NY	10	Aeronautical Electronics Inc P O Box 6527 Raleigh NC	6-14	Multi-Products Co 21470 Coolidge Hwy Oak Park 37 Mich	7-14
Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	1-8-10	Airtronix Development Corp 4902 Church Ave Brooklyn 3 NY	1	National Aeronautical Corp Ft Washington Industrial Park Ft Washington Pa	9
Telecommunications Ltd Newmarket Rd Cambridge England	6	Applied Electronics Co 213 E Grand Ave S San Francisco Calif	6-10-11	Nevada Air Products Co P O Box 2472 Reno Nev	9-11-12
		Arvin Industries Inc Columbus Ind	7	North Electric Co 553 S Market St Galion Ohio	2-8
		Audio Sears Corp Shepard Hill Rd Roxbury NY	2		
		Avco Mfg Corp Crosley Div 1329 Arlington St Cincinnati 25 Ohio	11-18		

Olympic Radio & TV 34-01 38 Ave Long Island City 1 NY	14	Microphones	6	Dielectric Products Eng'g Co Raymond Me	1
Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	4	Power supplies	7	Downing Crystal Co 191 Shaffer Ave Westminster Md	5
Pearce Simpson Inc 3023 Coral Way Miami 34 Fla	7-14	Power supplies, emergency	8	Dressen-Barnes Corp 250 N Vinedo Ave Pasadena Calif	7
Permotlux Products Co. 4101 San Fernando Rd Glendale 4 Calif	2-3	Recorders, film	9	Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	4-6-7-8
Petroff Corp Peter A 127 Water St New York 5 NY	15	Recorders, magnetic	10	Edko Electronics Eng'g Co 202 Grand St Brooklyn 11 NY	7
Pratt Albert 114 W Lake View Ave Milwaukee 17 Wis	1-3-6-11-12-14	Vibration mountings	11	Eicor Inc 4235 W North Ave Chicago 39 Ill	7
Production Research Corp Thornwood NJ	3-9-10-11-12-13-14	Aeronautical Electronics Inc P O Box 6527 Raleigh NC	1-5-7	Eidson Electronic Co 1902 N 3 St Temple Texas	5
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	3-5-6-9-11-12-13	Aifton Industries 406 St Louis Ave Valley Park Mo	10	Electrend Products Corp Box 110 St Joseph Mich	1
Pye Corp of America 1149 Raritan Ave Highland Park NJ	14	Ainslie Corp 312 Quincy Ave Quincy 69 Mass	2	Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	4-7-8
Pye Telecommunications Ltd Newmarket Rd Cambridge England	3-4-6-7-10-11-13-14-15	Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	1-2	Electric Regulator Corp Pearl St Norwalk Conn	7-8
Radio Corp of America Commercial Electronics Products Camden 2 NJ	3-6-7-14	Alpar Mfg Corp 2910 Spring St Redwood City Calif	1	Electric Specialty Co 211 South St Stamford 1 Conn	7
Radio Kits Inc 120 Cedar St New York 6 NY	1-10	American Communications Corp 280 Broadway New York 17 NY	3	Electrovert Inc 489 5 Ave New York NY	6
Regency Div IDEA Inc 7900 Pendleton Pike Indianapolis Ind	6-7	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	7-8	Electro-Voice Inc Cecil & Carrol Sts Buchanan Mich	6
Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	9-12-13	American Rectifier Corp 95 Lafayette St New York 13 NY	8	Elgin National Watch Co Electronics Div 2435 N Naomi St Burbank Calif	6
Resistron Labs Inc 2908 Nebraska Ave Santa Monica Calif	5	American Television & Radio Co 300 E 4 St St Paul 1 Minn	7	Elgin National Watch Co 107 National St Elgin Ill	6
Roanwell Corp 662 Pacific St Brooklyn 17 NY	2	Ampex Corp 934 Charter St Redwood City Calif	10	Elm Labs 10 Washington Ave Hastings-on-Hudson NY	2
Roffan Co Topsfield Mass	2	Amplivox Ltd 2 Bentiner St London W I England	6	Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ	2
Roland Radio Corp 716 S Columbus Ave Mt Vernon NY	1	Andrew California Corp 941 E Marylind Ave Claremont Calif	1	Erco Radio Labs Inc 637 Stewart Ave Garden City NY	4
Royal Communication Systems 11462 Euclid Ave Cleveland 6 Ohio	1-7-12-13-14	Andrew Antenna Corp 606 Beech St Whitby Ontario Can	1	Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY	10
Ryan Co S C 1316 Yale Place Minneapolis 3 Minn	1	Andrew Corp 363 E 75 St Chicago 19 Ill	1	Federal Shockmount Corp 1060 Washington Ave New York 56 NY	11
Seeley Electronics 1060 S La Brea Ave Los Angeles 19 Calif	6-7	Antenna Specialists Co 12435 Euclid Ave Cleveland 6 Ohio	1	Federal Telephone & Radio Co. Div IT&T 100 Kingsland Rd Clifton NJ	4
Simpson Mfg Co Mark 32-28 49 St Long Island City 3 NY	2-3	Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio	3	Felt & Tarrant Mfg Co Comptometer Dictation Div Algonquin Ill	10
Specialty Eng'g & Electronics Co 79 Clifton Pl Brooklyn 38 NY	3	Astatic Corp 250 Harbor St Conneaut Ohio	6	Fischer & Porter Co 478 Warminster Rd Hatboro Pa	3
Springer Aircraft Radio Co Earl W Route 11 Box 330 Indianapolis Ind	9	Atlas Precision Products Co 3801 Castor Ave Philadelphia 24 Pa	2	General Crystal Co P O Box 9 Burlington Wisc	5
Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	6-14	Avia Products Co 7266 Beverly Blvd Los Angeles 36 Calif	6	Gabriel Electronics Div Gabriel Co 135 Crescent Rd Needham Heights 94 Mass	1
Sperry Products Inc Shelter Rock Rd Danbury Conn	3	Bassett Inc Rex 1314 N E 17 Ct Ft Lauderdale Fla	1-2-5	General Nuclear Corp 550 5 Ave New York 32 NY	8
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	1-2-13	Bell Aircraft Corp P O Box 1 Buffalo 5 NY	4-7-8	General Precision Lab Inc 63 Bedford Rd Pleasantville NY	4
Tarzan Inc Sarkes E Hillside Drive Bloomington Ind	5	Bell Sound Systems Inc 555 Marion Rd Columbus 7 Ohio	10	Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	9
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	3	Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	1-4-7-8	Hallamar Electronics Co 8352 Brookhurst Ave Anaheim Calif	4
Tele-Dynamics Inc 32 & Walnut Sts Philadelphia 4 Pa	14	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	1-4	Heath Co 305 Territorial Rd Benton Harbor Mich	7
Telemarine Communications Co 3040 W 21 St Brooklyn 24 NY	6-7-14	Biley Electric Co Union Station Bldg Erie Pa	5	Hill Electronic Eng'g & Mfg Co New Kingstown Pa	5
Telephonics Corp Park Ave Huntington LI NY	2-8-9-10-11-12-13-15	Bogoe Electric Mfg Co Iowa Ave Paterson 3 NJ	8	Hobart Bros Hobart Square E Troy 3 Ohio	8
Teletone Co of America 1178 E 180 St Bronx 60 NY	1	Breon Labs 1520 Evergreen Rd Williamsport Pa	5	Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY	7-8
Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	3	Bristol Co P O Box 1790 EITT Waterbury 20 Conn	5	Hunt Corp 453 Lincoln St Carlisle Pa	5
Transitron Inc 186 Granite St Manchester NH	6-7-13	Brush Electronics Co Div Clevite Corp 3405 Perkins Ave Cleveland 14 Ohio	5	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	3-5
Trans-Tel Corp 736 N Highland Ave Los Angeles 38 Calif	1	Budelman Radio Corp 375 Fairfield Ave Stamford Conn	1	Industrial Development Eng'g Assoc 7900 Pendleton Pike Indianapolis Ind	1
Transval Eng'g Corp 10401 W Jefferson Blvd Culver City Calif	9	Burgie Inc H H P O Box 817 Toledo 1 Ohio	1	Industrial Radio Corp 428 N Parkside Ave Chicago 44 Ill	7
Trutone Electronics Inc 812 N Highland Ave Los Angeles 38 Calif	1	Bulova Watch Co Electronics Div 40-01 61 St Woodside 77 NY	5	Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	3
U S Instrument Corp P O Box 33E Charlottesville Va	2-8	Calif Magnetic Control Corp 11922 Valerio St N Hollywood Calif	8	Insuline Corp of America 186 Granite St Manchester NH	1-2
Virginia Electronics Co River Rd & B & O R R Washington 16 DC	3-6-14	Channel Master Corp Ellenville NY	2	International Crystal Mfg Co 18 N Lee Ave Oklahoma City 1 Okla	5
Vocaline Co of America Old Saybrook Conn	11	Chu Associates 634 Waverly St Framingham Mass	1	Isolantite Mfg Corp Warren Ave Stirling NJ	1
Voron & Co George 835 N 19 St Philadelphia 30 Pa	3-8-15	Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London SE 26 England	3	I-T-E Circuit Breaker Co Special Products Div 601 E Erie Ave Philadelphia 34 Pa	2
Warren Corp J C 21 Hanse Ave Freeport NY	11-15	Clark Crystal Co 2 Farm Rd Marlboro Mass	5	James Vibrapowr Co 4050 N Rockwell St Chicago 18 Ill	7-8
Wincharger Corp E 7 & Division St Sioux City 2 Iowa	1	Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	7	Kato Eng'g Co 1415 1 Ave Mankato Minn	7-8
Zenith Radio Corp 6001 Dickens Ave Chicago 39 Ill	1	Collins Radio Co 855 35 St NE Cedar Rapids Iowa	7	Katolight Corp Box 891 Mankato Minn	7-8
Z & W Mfg Corp 30240 Lakeland Blvd Wickliffe Ohio	1	Columbia Products Co 6625 Shakespear Rd Columbia SC	1	Katolight Corp 1415 1 Ave Mankato Minn	7-8
		Condenser Products Div New Haven Clock & Watch Co 140 Hamilton St New Haven 4 Conn	8	Kecco Labs 131-38 Sanford Ave Flushing NY	7-8
		Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	6	Kidde & Co Walter 1156 Main St Belleville 9 NJ	3
		Corbin Corp 5419 56 Pl Riverdale Md	3	Kluge Electronics Inc 5 & Main Sts Albion Nebr	3
		Cornell-Dubilier Electric Corp 333 Hamilton Blvd S Plainfield NJ	7-8	Knights Co James Church & Wells St Sandwich Ill	5
		Craig Systems Inc 90 Holten St Danvers Mass	1-4	K-W Eng'g Works 3145-A N 43 St Milwaukee 16 Wis	1
		Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	5	Leach Corp Inet-Palmer Div 4441 S Santa Fe Ave Los Angeles 58 Calif	8
		Defender Instrument & Regulator Co Boody Ill	4	Lee Electric & Mfg Co 2806 Clearwater St Los Angeles 39 Calif	8
		Devco Eng'g Inc P O Box 387 Caldwell NJ	3	Leitch Eng'g Corp 326 Lincoln St Manchester NH	1
		Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	2		
		Diatron Co 3327 Dixie Dr Houston 21 Texas	3		

59—MOBILE COMMUNICATIONS ACCESSORIES

Antennas	1
Antenna bases	2
Auto alarms	3
Control equipment	4
Crystals	5

Lewis Co E B
11 Bragg St E Hartford 8 Conn 5
Lorentzen Inc H K
391 W Broadway New York 12 NY 2
Lord Mfg Co
1635 W 12 St Erie 6 Pa 11
Lysco Mfg Co
1401 Clinton St Hoboken NJ 1-7
McCoy Electronics Co
Chestnut & Watts Sts Mt Holly Springs Pa 5
Mackay Radio & Telegraph Co Marine Div
133 Terminal Ave Clark NJ 3
Magnetic Amplifiers Inc
632 Tinton Ave New York 55 NY 8
Manson Laboratories Inc
207 Greenwich Ave Stamford Conn 5
Mark Products Co
6412 W Lincoln Ave Morton Grove Ill 1
Master Mobile Mounts Inc
1306 Bond St Los Angeles 15 Calif 1
Mayfair Molded Products Corp
3700 N Rose St Franklin Park Ill 2
Measurement Eng'g Ltd
232 John St Arnprior Ontario Can 3
Mercury Electronic Co
Box 450 B Red Bank NJ 7-11
Metal Fabricators Corp
73 Pond St Waltham 54 Mass 2
Michigan Electronics Inc
854 N Rockwell St Chicago 22 Ill 4-10
Miles Reproducer Co
812 Broadway New York 3 NY 9
Minnesota-Honeywell Regulator Co
Davies Labs Div 10721 Hanna St
Beltsville Md 10
Minor Rubber Co
Ackerman St Bloomfield NJ 11
Mobil Electronics Mfg Co
1111 State Rd 67 E Anderson Ind 3
Model Eng'g & Mfg Inc
50 Frederick St Huntington Ind 7
Mohawk Business Machines Corp
944 Halsey St Brooklyn 33 NY 10
Monitor Products Co
815 Fremont Ave South Pasadena Calif 5
Multi-Products Co
21470 Coolidge Hwy Oak Park 37 Mich 7
Nebel Laboratory R E
1634 E 12 St Brooklyn 29 NY 5
Newcomb Spring Corp
177 E Hawthorne Ave Valley Stream NY 11
Norma Hoffmann Bearings Corp Walker Div
Hamilton Ave Stamford Conn 8
North Electric Co
553 S Market St Galion Ohio 7
O'Brien Electric Corp
6514 Santa Monica Blvd
Hollywood 38 Calif 3
Onan & Sons D W
2515 University Ave SE
Minneapolis 14 Minn 7-8
Otis Elevator Co Electronic Div
35 Ryerson St Brooklyn 5 NY 4-7
Pan-Electronics Corp
Ruth St Griffin Ga 5
Panellit Inc
7401 N Hamlin Ave Skokie Ill 3
Pentron Corp
777 S Tripp Ave Chicago 24 Ill 10
Permoflux Products Co
4101 San Fernando Rd Glendale 4 Calif 7-8
Permonite Mfg Co
444 Lake Shore Dr Chicago 11 Ill 2
Peschel Electronics Inc
13 Garden St New Rochelle NY 7-8
Petroff Corp Peter A
127 Water St New York 5 NY 1-2
Pioneer Gen-E-Motor Corp
5841 W Dickens Ave Chicago 39 Ill 8
Potter Acronautical Corp
P O Box 532 Union NJ 3
Power Supplies Inc
1005 Olive St Highland Ill 7-8
Pratt Albert
114 W Lake View Ave Milwaukee 17 Wis 7
Precision Crystal Lab
2223 Warwick Ave Santa Monica Calif 5
Premax Products Div Chisholm-Ryder Co
College & Highland Aves
Niagara Falls NY 1
Premier Research Labs Inc
79 7 Ave New York 11 NY 5
Prodell Inc
307 Bergen Ave Kearny NJ 1
Production Research Corp
Thornwood NY 8
Pye Canada Ltd
82 Northline Rd
Toronto 16 Ontario Canada 1-4-5-7
Pye Telecommunications Ltd
Newmarket Rd
Cambridge England 1-2-3-4-5-6
Quantum Electronics Inc
2312 Wisconsin St NE
Albuquerque N Mex 7-8
Radio Corp of America Commercial
Electronic Products Camden 2 NJ 1-4
Ransom Research
323 W 7 St San Pedro Calif 7
Reeves-Hoffman Div Standard Electronics
Corp 145 Cherry St
Carlisle Pa 5
Regency Div IDEA Inc
7900 Pendleton Pike Indianapolis Ind 1
Remler Co
2101 Bryant St San Francisco Calif 6



Roanwell Corp
662 Pacific St Brooklyn 17 NY 6
Rollan Co
Topsfield Mass 6
Rohn Mfg Co
116 Limestone Bellevue Peoria 5 Ill 2
Royal Communication Systems
11462 Euclid Ave Cleveland 6 Ohio 1-7
Rubbercraft Corp of Calif
1800 W 220 St Torrance Calif 11
Sangamo Electric Co
Springfield Ill 7-8
Scala Radio Co
2814 19 St San Francisco 10 Calif 1
Schirmer-National Alarm Co
20 Westside Ave Bergenfield NJ 3
Scientific Radio Products Inc
215 S 11 St Omaha Nebr 5
Scientific Radio Service
4301 Sheridan St University Park
Hyattsville Md 5
Sel-Rex Corp
155 Manchester Pl Newark 4 NJ 8
Sheppard Co R H
101 Philadelphia St Hanover Pa 7
Shure Bros
222 Hartrey Ave Evanston Ill 6
Snyder Mfg Co
22 & Ontario Sts Philadelphia 40 Pa 1
Sound Scriber Corp
146 Munson St New Haven 9 Conn 10
South River Metal Products Co
377 Turnpike South River NJ 2
Spartan Control Systems Div Sparks-
Withington Co 2301 E Michigan Ave
Jackson Mich 3
Specialty Eng'g & Electronics Co
79 Clifton Pl Brooklyn 38 NY 3
Stancil-Hoffman Corp
921 N Highland Ave Hollywood 38 Calif 10
Standard Crystal Co
1714 Locust St Kansas City Mo 5
Stone City Machine & Tool Co
1206 7 St Bedford Ind 11
Taller & Cooper
75 Front St Brooklyn 1 NY 3
Technical Appliance Corp
1 Taco St Sherburne NY 1-2
Tedford Crystal Labs
4126 Colerain Ave Cincinnati 23 Ohio 5
Telectro Industries Corp
35-18 37 St
Long Island City 1 NY 7-10-11
Telephonics Corp
Park Ave Huntington LI NY 6
Tenna Mfg Co
7580 Garfield Blvd Cleveland 25 Ohio 1
Trans Electronics Inc
7349 Canoga Ave Canoga Park Calif 8
Turner Co
909 17 St N E Cedar Rapids Iowa 6
TV Hardware Mfg Co Div Textron Inc
400 S Wyman St Rockford Ill 2
TV Specialty Co
350 W 31 St New York 1 NY 9
Universal Atomics Corp
50 Bond St Westbury LI NY 7-8
Universal Microphone Co
Box 55 Inglewood Calif 6
Uniwave Inc
2 Marine St Farmingdale NY 2
U S Dynamics Corp
1250 Columbus Ave Boston 20 Mass 7
U S Instrument Corp
P O Box 33E Charlottesville Va 6
Valpey Crystal Corp
1244 Highland St Holliston Mass 5
Varo Mfg Co
2201 Walnut St Garland Texas 7
Vibration Research Labs
97 Lake Ave Tuckahoe NY 8
Virginia Electronics Co
River Rd & B & O R R
Washington 16 DC 1-4-7-8
Voron & Co George
835 N 19 St Philadelphia 30 Pa 4
Ward Products Corp
1148 Euclid Ave Cleveland 15 Ohio 1
Warren Corp J C
21 Hanse Ave Freeport NY 10
Webster Mfg Co
242 Shoreline Hwy Mill Valley Calif 1
White & Son James L
374 Verona Ave Newark 4 NJ 1
Wide Range Recording Corp
527 N Grand Blvd St Louis 3 Mo 9
Wincharger Corp
E 7 & Division St Sioux City 2 Iowa 7
Winder Aircraft Corp of Florida
P O Box 2397 Drane Field Lakeland Fla 3
Wind Turbine Co
E Market St & P R R W Chester Pa 2
Winpower Mfg Co
Newton Iowa 8

Wright Electronics Inc
1519 McGee St Kansas City 5 Mo 5
Zenith Plastics Co
1600 W 135 St Gardena Calif 1
**60—MOTION PICTURE
EQUIPMENT**
Cameras, 8MM 1
Cameras, 16MM 2
Cameras, 35MM 3
Kinescope recording apparatus 4
Projectors, 8MM 5
Projectors, 16MM 6
Projectors, 35MM 7
Projectors, rear 8
Projectors, theatre TV 9
Sound readers 10
Tape, synchronized magnetic ... 11
Afton Industries
406 St Louis Ave Valley Park Mo 5-6-11
Aloe Scientific
5655 Kingsbury Blvd St Louis 12 Mo 3
Ampex Corp
934 Charter St Red City Calif 11
Audio-Video Recording Co
730 5 Ave New York 19 NY 11
Beckman & Whitley
973 E San Carlos Ave San Carlos Calif 3
Bell & Howell
7100 McCormick Rd Chicago 45 Ill 1-2-3-5-6
Berndt-Bach Inc Auricon Div
6900 Romaine St Hollywood 38 Calif 2-4
Benson-Lehner Corp
11930 W Olympic Blvd
Los Angeles 64 Calif 2
Beseler Co Charles
219 S 18 St E Orange NJ 8-9
Bodde Screen & Projector Co
11541 Bradley Ave San Fernando Calif 8
Buss-Clement-Doughten & Associates
201 B Studio Hill Chester Springs Pa 2-3-4-10
Cameraflex Corp
1947 Broadway New York 23 NY 3
Camera Mart Inc
1845 Broadway New York 23 NY 10
Century Lighting Inc
521 W 43 St New York 36 NY 8
Century Projector Corp
729 7 Ave New York 19 NY 7
Cinema-Television Ltd
Worsley Bridge Rd Lower Sydenham
London SE 26 England 9
Cinematic Developments
2125 32 Ave San Francisco 16 Calif 2-3
Cossor (Canada) Ltd
301 Windsor St
Halifax Nova Scotia Canada 6
Eastman Kodak Co
343 State St Rochester 4 NY 1-2-3-4-5-6-7-9
Exakta Camera Co
705 Bronx River Rd Bronxville 8 NY 1-3
Fairchild Camera & Instrument Corp
Industrial Camera Div 88-06 Van Wyck
Expressway Jamaica 1 NY 2
Fecker Inc J W
6592 Hamiltion Ave Pittsburgh 6 Pa 3
Federal Mfg & Eng'g Corp
1055 Stewart Ave Garden City NY 6
Flight Research Inc
P O Box 1-F Richmond 1 Va 2-3
General Precision Lab Inc
63 Bedford Rd Pleasantville NJ 4-6-7-8-9
Gordon Enterprises
5362 N Cahuenga Blvd
N Hollywood Calif 1-2-3-4-5-6-7-8-9-10
Graflex Inc
154 Clarissa St Rochester 8 NY 3-6
Houston Fearless Div Color Corp of America
11801 W Olympic Blvd
Los Angeles 64 Calif 2-3
Land-Air Inc Instrument & Electronic Div
2133 Adams Ave San Leandro Calif 1-2-3
Las-Lab Inc
220 S Mt Olivet Lane Baltimore 29 Md 2-3
Mack Electronics Div Inc Sub Mack Trucks
Inc 1120 S 2 St Plainfield NJ 6
Magnasyn Mfg Co
5546 Satsuma Ave N Hollywood Calif 10
Mauver Inc J A
37-01 31 St Long Island City 1 NY 2-3
Motiograph Inc
4441 W Lake St Chicago 24 Ill 7
National Cine Equipment Inc
209 W 48 St New York 36 NY 2-3-4
Nemeth Inc
2223 S Carmelina Ave
Los Angeles 64 Calif 1-2
Pembrex Theatre Supply Corp
1969 S Vermont Ave Los Angeles 7 Calif 8
Pentron Corp
777 S Tripp Ave Chicago 24 Ill 11
Photographic Analysis Inc
13273 Ventura Blvd N Hollywood Calif 2
Producers Sales Corp
2704 W Olive Ave Burbank Calif 2-3-6-7-8
PSC Applied Research Ltd
1500 O'Connor Dr Toronto 16 Canada 3
Radio Corp of America Commercial
Electronic Products Camden 2 NJ 6-7
Rangertone Inc
73 Winthrop St Newark 4 NJ 11

Simplex Equipment Corp	
35 La France Ave Bloomfield NJ	7
Skiatron Electronics & TV Corp	
180 Varick St New York 14 NY	10
Sylvania Electric Products Inc	
1740 Broadway New York 19 NY	3-7
Taller & Cooper	
75 Front St Brooklyn 1 NY	2
Tarc Electronics Inc	
48 Urban Ave Westbury LI NY	5-6-7-8-9
Tarzian Inc Sarkes	
E Hillside Drive Bloomington Ind	2-3-6-7
Trans-Lux Corp	
625 Madison Ave New York 22 NY	8
TV Specialty Co	
350 W 31 St New York 1 NY	1-2-3-4-8
Victor Animatograph Corp	
Plainville Conn	6
Vought Co	
P O Box 1350 Beverly Hills Calif	2-3
Wenzel Projector Co	
2505 S State St Chicago 16 Ill	7
Wide Range Recording Corp	
527 N Grand Blvd St Louis 3 Mo	11
Wilmar Mfg Co	
1110 Truman Rd Kansas City Mo	6
Wollensak Optical Co	
850 Hudson Ave Rochester 22 NY	1-2-3-5-6

61—MOTION PICTURE EQUIPMENT ACCESSORIES

Animation equipment	1
Chemical developers	2
Cue markers	3
Editing equipment	4
Film cans	5
Film scrapers	6
Lenses	7
Magnetic filmheads	8
Optical apparatus	9
Printing equipment	10
Processing equipment	11
Projection lamps	12
Projector carbon	13
Projector stands	14
Range finders	15
Rapid development equipment	16
Reels, continuous projection	17
Rewinds, auto	18
Screens, background	19
Screens, projection	20
Special effects equipment	21
Splicing equipment	22
Tape-to-film sound transfer equip	23
Titling equipment	24
View finders	25
Zoom lenses	26

Aifton Industries	
406 St Louis Ave Valley Park Mo	23
Air Transport Mfg Co	
1114 N Sycamore Ave	
Los Angeles 38 Calif	14
Aloe Scientific	
5655 Kingsbury Blvd St Louis 12 Mo	12
Anchor Specialty Mfg Co	
Hollister Rd Teterboro NJ	1
Astatic Corp	
250 Harbor St Conneaut Ohio	14
Atlas Film Corp	
1111 S Blvd Oak Park Ill	5
Axler Associates Inc	
102-42 43 Ave Corona 68 NY	9
Bache & Co Semon	
636 Greenwich St New York 14 NY	7
Bausch & Lomb Optical Co	
628 St Paul St Rochester 2 NY	9
Bell & Howell	
7100 McCormick Rd Chicago 45 Ill	4-5
Bodde Screen & Projector Co	
11541 Bradley Ave	
San Fernando Calif	11-19-20
Brush Electronics Co	
3405 Perkins Ave Cleveland 14 Ohio	8
Buchanan Electrical Products Corp	
225 Route 22 Hillside NJ	22
Buhl Optical Co	
1009 Beech Ave Pittsburgh 33 Pa	7-9
Burnell & Co	
45 Warburton Ave Yonkers NY	15
Buss-Clement-Doughten & Associates	
201 B Studio Hill Chester Springs Pa	1
Camera Equipment Co	
315 W 43 St	
New York 36 NY	4-7-11-14-23-26
Camera Mart Inc	
1845 Broadway New York 23 NY	4-21
Century Projector Corp	
729 7 Ave New York 19 NY	18
Chicago Aerial Industries Inc	
1980 N Hawthorne Ave Melrose Park Ill	9-25
Chromatic Television Laboratories	
1501 Broadway New York 36 NY	9-11-16

Corona Eng'g Service	
94-52 Corona Ave Elmhurst 73 NY	1
Da-Lite Screen Co	
Warsaw Ind	20
Dallons Labs	
5066 Santa Monica Blvd	
Los Angeles 29 Calif	21
Davenport Mfg Co	
1713 N Ashland Ave Chicago 22 Ill	1
Dittmore-Freimuth Corp	
2517 E Norwich St Milwaukee 7 Wis	22
Dynamo Magnetics Corp Div Maico Co	
21 N 3 St Minneapolis 1 Minn	8
Eastman Kodak Co	
343 State St Rochester 4 NY	2-4-6-7-22
Eisler Eng'g Co	
750 S 13 St Newark 3 NJ	24
Equipto Div Aurora Equipment Co	
Aurora Ill	14
Ereona Corp	
551 5 Ave New York 17 NY	7-9-22
Exakta Camera Co	
705 Bronx River Rd Bronxville 8 NY	7
Fecker Inc J W	
6592 Hamilton Ave Pittsburgh 6 Pa	7
Fish-Shurman Corp	
70 Portman Rd New Rochelle NY	9-10-25
Florman & Babl	
68 W 45 St New York 36 NY	4-7-21-22
Gaertner Scientific Corp	
1250 Wrightwood Ave Chicago 14 Ill	9
General Chemical Div Allied Chemical	
& Dye Corp 40 Rector St	
New York 6 NY	2
General Photo Products Co	
15 Summit Ave Chatham NJ	2
General Precision Lab Inc	
63 Bedford Rd Pleasantville NY	26
General Transistor Western Corp	
6110 Venice Blvd Los Angeles 34 Calif	8
Gordon Enterprises	
5362 N Cahuenga Blvd	1-3-4-5-7-9-10-11
N Hollywood Calif	14-15-18-19-20-25-26
Gray Research & Development Co	
Hilliard St Manchester Conn	9
Griswold Machine Works	
Port Jefferson NY	22
Hallamore Electronics Co	
8352 Brookhurst Ave Anaheim Calif	26
Hayward Scientific Glass Corp	
217 N Magnolia Ave Whittier 1 Calif	7-9
Houston Fearless Div Color Corp of America	
11801 W Olympic Blvd	
Los Angeles 64 Calif	7-11
Instrumentation Associates	
17 W 60 St New York 23 NY	9
Jarrell-Ash Co	
26 Farwell St Newtonville 60 Mass	9
Kinevox-Hallen Div Electromotion Co	
1646 18 St Santa Monica Calif	22
Land-Air Inc Instrument & Electronic Div	
2133 Adams Ave San Leandro Calif	5-9
Lenox Instrument Co	
2010 Chancellor St Philadelphia 3 Pa	9
Liberty Mirror Div Libbey Owens Ford	
Glass Co Brackentridge Pa	9
Lipps Co Edwin J	
5485 W Washington Blvd	
Los Angeles 16 Calif	8
Magnasync Mfg Co	
5546 Satsuma Ave N Hollywood Calif	8-23
MagneTec Corp	
11785 W Olympic Blvd	
W Los Angeles 64 Calif	8
Maurer Inc J A	
37-01 31 St	
Long Island City 1 NY	9-11-15-22-25
Merk & Co Inc Chemical Div	
Rahway NJ	2
Michigan Electronics Inc	
854 N Rockwell St Chicago 22 Ill	1
Minnesota Mining & Mfg Co	
900 Fauquier Ave St Paul 6 Minn	22
Motigraph Inc	
4441 W Lake St Chicago 24 Ill	12-14
Moviola Mfg Co	
1451 N Gordon St Hollywood 28 Calif	4
National Carbon Co	
Div Union Carbide & Carbon	
30 E 42 St New York 17 NY	13
National Cine Equipment Inc	
209 W 48 St New York 36 NY	7-9-21-25
Neumade Products Corp	
250 W 57 St	
New York 19 NY	5-6-11-14-18-22
Norton Associates Inc	
PO Box 96 Garden City NY	8
Optical Coating Lab Inc	
1035 Sebastopol Rd Santa Rosa Calif	9
Optical Gaging Products Inc	
26 Forbes St Rochester 11 NY	9
Optionic Research Inc	
1374 Massachusetts Ave	
Cambridge 38 Mass	9
Opto Eng'g Co	
3524 W Washington Blvd	
Los Angeles 18 Calif	9
Pacific Optical Corp	
120 Glasgow Ave Inglewood 1 Calif	7-9-26
Pampa Electronics Corp	
7354 Frankford Ave Philadelphia 36 Pa	8
Par Products Corp	
602 Colorado Ave Santa Monica Calif	9

Pentron Corp	
777 S Tripp Ave Chicago 24 Ill	23
Perkin-Elmer Corp	
Main Ave Norwalk Conn	9-26
Polarizing Instrument Co	
S Buckhout St Irvington NY	9
Prestoscal Mfg Corp	
37-27 33 St Long Island City 1 NY	22
Producers Sales Corp	
2704 W Olive Ave Burbank Calif	24
Production Research Corp	
Thornwood NY	15
Pye Canada Ltd	
82 Northline Rd Toronto 16 Ont Canada	26
Radiant Lamp Corp	
300 Jelliff Ave Newark 8 NJ	12
Radio Corp of America	
Commercial Electronic Products	
Camden 2 NJ	14-21
Radio Corp of America	
415 S 5 St Harrison NJ	21
Raven Screen Corp	
124 E 124 St New York 35 NY	19-20
Robbins Industries Corp	
214-26 41 Ave Bayside 61 NY	22
Rosco Labs	
29 Moore St Brooklyn 6 NY	4
Scientific Glass Apparatus Co	
100 Lakewood Terrace Bloomfield NJ	12
Shepard Labs Inc	
480 Morris Ave Summit NJ	6
Skiatron Electronics & TV Corp	
180 Varick St New York 14 NY	9-10
Sound Screen Supplies Inc	
752 Broadway New York 3 NY	20
Stancil-Hoffman Corp	
921 N Highland Ave Hollywood 38 Calif	8
Standard Record Mfg Co	
70 N San Gabriel Blvd	
Pasadena 8 Calif	5-17
Strong Electric Corp	
87 City Park Ave Toledo 1 Ohio	12
Sylvania Electric Products Inc	
1740 Broadway New York 19 NY	12
Tarc Electronics Inc	
48 Urban Ave Westbury LI NY	21
Taylorcel Corp	
185 Murray St Rochester 6 NY	17
Telectro Industries Corp	
35-18 37 St Long Island City 1 NY	22
Terris Div Consolidated Siphon Supply Co	
22 Wooster St New York 13 NY	24
Testa Mfg Co	
10122 E Rush St El Monte Calif	9
Texas Instruments Inc	
6000 Lemmon Ave Dallas 9 Texas	7-9
Tinsley Labs Inc	
2526 Grove St Berkeley 4 Calif	9
Trans-Lux Corp	
625 Madison Ave New York 22 NY	19-20
TV Specialty Co	
350 W 31 St	1-4-5-8-11-12-14-
New York 1 NY	16-19-20-21-24
Uhler Cine Machine Co	
15762 Wyoming Ave Detroit 38 Mich	10
Vocalite Screen Corp	
19 Debevoise Ave Roosevelt NY	19-20
Wagner Co H A	
14707 Keswick St Van Nuys Calif	9
Watson Mfg Co	
3700 Taylor St Jamestown NY	19
Westrex Corp	
111 8 Ave New York 11 NY	4
Wide Range Recording Corp	
527 N Grand Blvd St Louis 3 Mo	8-23
Winder Aircraft Corp of Florida	
PO Box 2397 Drane Field Lakeland Fla	5
Wollensak Optical Co	
850 Hudson Ave Rochester 22 NY	7-26
Zenith Optical Lab	
1940 Great Neck Rd Copiague LI NY	9
Zoomar Inc	
55 Sea Cliff Ave Glen Cove NY	7-26

62—MOTION PICTURE FILM

Film, magnetic stripe	1
Film, raw stock	2
Film, storage	3
Atlas Film Corp	
1111 S Blvd Oak Park Ill	2-3
Audio Devices Inc	
444 Madison Ave New York 22 NY	1
Bell & Howell	
7100 McCormick Rd Chicago 45 Ill	1
Camera Equipment Co	
315 W 43 St New York 36 NY	3
Du Mont Labs Inc Allen B	
760 Bloomfield Ave Clifton NJ	3
Du Pont De Nemours & Co E I	
Wilmington 98 Dela	2
Eastman Kodak Co	
343 State St Rochester 4 NY	2
Minnesota Mining & Mfg Co	
900 Fauquier Ave St Paul 6 Minn	1
Musicolor Inc	
333 N Michigan Ave Chicago 1 Ill	1
Neumade Products Corp	
250 W 57 St New York 19 NY	3
Sparta Mfg Co Dover O	2
Westrex Corp	
111 8 Ave New York 11 NY	1

63—MOTORS & GENERATORS

Alternators	1
Blowers	2
Brush holders	3
Brushes, motor	4
Clutches	5
Commutators	6
Contacts, motor & generator ..	7
Controls	8
Converters, rotary	9
Couplings, flexible	10
Couplings, rigid	11
Dynamotors	12
Engines, diesel	13
Engines, gas	14
Fans	15
Generators, AC	16
Generators, DC	17
Generators, hand-crank	18
Generators, high freq. power ..	19
Motors, AC	20
Motors, clock	21
Motors, control	22
Motors, DC	23
Motors, fractional hp	24
Motors, hysteresis	25
Motors, miniature	26
Motors, phonograph	27
Motors, servo	28
Motors, synchronous	29
Motors, timing	30
Motors, turntable	31
Motors, universal	32
Power plants	33
Rotors	34
Servos	35
Starters	36
Stators	37
Synchros	38
Wedges, woodslot	39

Accurate Electronics Corp 169 S Abbe Rd W Elyria Ohio	3-10
Advanced Products Co 59 Broadway North Haven Conn	20-26-29-30
Advance Instrument Corp 1709 F St Belmar NJ	35
Air Controls Inc 2310 Superior Ave Cleveland 14 Ohio	15
AIRResearch Mfg Co Div Garrett Corp 9851 Sepulveda Blvd Los Angeles 45 Calif	17-23-24 26-28-35
Airflyte Electronics Co 535 Avenue A Bayonne NJ	4
Air-Marine Motors Inc 369 Bayview Ave Amityville NY	2-20-22-24-25 26-28-29-31-38
Allard Instrument Corp 146 E 2 St Mineola LI NY	23-24
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis	8-36
Alliance Mfg Co Lake Park Blvd Alliance Ohio	15-20-22-23 24-26-27-30-31
Allis-Chalmers Mfg Co Milwaukee 1 Wisc	8-9-20-23-29
Allis Co Louis 427 E Stewart St Milwaukee 1 Wisc	1-8-16-17 20-23-29-34-37
Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	4
Alto Scientific Co 855 Commercial St Palo Alto Calif	35
American Air Filter Co 215 Central Ave Louisville 8 Ky	15
American Electronics Inc 655 W Washington Blvd Los Angeles 15 Calif	5-17-23-28-29-38
American Electronics Inc Instrument Div 9503 W Jefferson Blvd Culver City Calif	16-20-22-26-28-35-38
American Gyro Corp 3030 Nebraska Ave Santa Monica Calif	20-23-28
American Rectifier Corp 95 Lafayette St New York 13 NY	8
Anglo Corp 4333 Ravenswood Ave Chicago 13 Ill	23-26-30
Amplex Div Chrysler Corp PO Box 2718 Detroit 31 Mich	6
Analogue Controls Inc 39 Roselle St Mineola NY	35
Arma Div American Bosch Arm Corp Garden City NY	35
Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 3 Conn	8-22
Arvin Industries Inc Columbus Ind	15
Askania Regulator Co 240 E Ontario St Chicago 11 Ill	30-35
Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio	8
Barber-Colman Co Rock St Rockford Ill	20-23-24-27-28-29-31

Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	19
Beckman/Helipot Corp Newport Beach Calif	16-28
Bekey Electric Co 1327 S Main St Los Angeles 15 Calif	1-16-17-19-20-22-23- 24-25-28-29-32
Bell Aircraft Corp P O Box 1 Buffalo 5 NY	9
Belock Instrument Corp 111-01 14 Ave College Point 56 NY	35
Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	1-9-12-16-20-23- 24-26-28-38
Bendix Aviation Corp Red Bank Div Eatontown NJ	1-9-16-17
Birnbach Radio Co 145 Hudson St New York 13 NY	11
B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	19
Bodine Electric Co 2254 W Ohio St Chicago 12 Ill	20-22-23-24- 25-26-27-28-29-30-32
Boxue Electric Mfg Co Iowa Ave Paterson 3 NJ	1-5-7-8-12-16- 17-19-20-23-29
Borg Equip Div George W Borg Corp 120 S Main St Janesville Wisc	20-24-29
Brach Mfg Corp 200 Central Ave Newark 3 NJ	35
Brailsford & Co 670 Milton Rd Rye NY	23-24
British Electronic Sales Box 132 Oakland Gardens 64 NY	37
B/W Controller Corp 2200 E Maple Birmingham Mich	36
Camera Equipment Co 315 W 43 St New York 36 NY	29
Carter Motor Co 2711 W George St Chicago 18 Ill	1-9-12-17
Caterpillar Tractor Co Peoria Ill	13-14-16-17-33
Cavitron Electron Oscillator Co Div Short Wave Plastic Forming 355 N Newport Blvd Newport Beach Calif	19
Cedar Eng'g Inc 5806 W 36 St Minneapolis 16 Minn	16-28-35
CELCO Constantine Eng'g Labs Co PO Box 555 Mahwah NJ	24-25-26-28
Century Electric Co 1806 Pine St St Louis 3 Mo	20-23-24
CG Electronics Corp 305 Dallas St NE Albuquerque New Mex	19
CGS Laboratories Inc 391 Ludlow St Stamford Conn	8
Channel Master Corp Ellenville NY	34
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London SE 26 England	33
Clarage Fan Co Kalamazoo Mich	15
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio	8-36
Clevite Harris Products Inc 6545 Carnegie Ave Cleveland 3 Ohio	10
Clifton Precision Products Co Marple at Broadway Clifton Heights Pa	23-28-29-38
Collector Corp 216 E 45 St New York 17 NY	6
Colorado Research Corp 4697 E Evans Ave Denver 22 Colo	35
Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio	16-17
Communication Measurements Lab 350 Leland Ave Plainfield NJ	16
Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	18-24
Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	19-35
Consumer Industrial Products PO Box 128 Cuyahoga Falls Ohio	20-23-24- 27-32
Continental Electric Co 325 Ferry St Newark 5 NJ	1-12-16-17-19- 20-23-29-33
Cornelius Co 550 39 Ave NE Minneapolis 21 Minn	20-23
Cornell-Dubilier Electric Corp 333 Hamilton Blvd S Plainfield NJ	34
Cramer Controls Corp Centerbrook Conn	23-29-30
Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wisc	8
Dalmotor Co Div Dalmo Factor Co Div Textron Inc 1375 Clay St Santa Clara Calif	12-16-17-20-23-24- 25-26-28-29-32
Dalmo Victor Co Div Textron Inc 1515 Industrial Way Belmont Calif	35
Damon Recording Studios 117 W 14 St Kansas City 5 Mo	29-31
D & R Ltd 402 E Gutierrez St Santa Barbara Calif	1-9
Darco Industries Inc Gyro Dynamics Div 2151 E Rosecrans Ave El Segundo Calif	20-23-25
Datran Electronics 3615 Aviation Blvd Manhattan Beach Calif	35

Design Tool Corp 80 Washington St New York 6 NY	35
Devol Research Co Brookside Dr Greenwich Conn	35
Diehl Mfg Co Finderne Ave Somerville NJ	2-17-20-22-23- 24-26-28-35
Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	15
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	28
Dumore Co 1300 17 St Racine Wisc	24
Dynamic Air Eng'g Inc 7412 Maie Ave Los Angeles 1 Calif	2-15-20-23-24-32
Dynamics Instrumentation Co Div Alberhill Corp 1118 Mission St S Pasadena Calif	6
Eastern Air Devices Inc 385 Central Ave Dover NH	1-16-20-22-24- 25-26-27-28-29-30
Eastern Industries Inc 100 Skiff St Hamden 14 Conn	35
Eclipse-Pioneer Div Bendix Aviation Corp Teterboro NJ	28-35-38
Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ	28-35-38
Eicor Inc 4235 W North Ave Chicago 39 Ill	1-9-12-17- 18-23-24
Eisler Eng'g Co 750 S 13 St Newark 3 NJ	31
Electomic Mechanisms Inc PO Box 1156 Greenwich Conn	35
Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	8
Electrical Eng'g & Mfg Corp 4612 W Jefferson Blvd Los Angeles 16 Calif	20-23-24
Electrical Products Research & Development Co 1206 Cherry St Toledo 4 Ohio	17
Electrical Specialty Co 158 11 St San Francisco 3 Calif	4-39
Electric Indicator Co Camp Ave Stamford Conn	16-17-20-22-23-24-25- 26-27-28-29-31-32
Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn	1-8-16-17-20-29
Electric Motors & Specialties King & Hampsher St Garrett Ind	1-24
Electric Regulator Corp Pearl St Norwalk Conn	8
Electric Specialty Co 211 South St Stamford 1 Conn	12-16-17-19 20-23-24-25-28
Electric Trading Co 313 Canal St New York 13 NY	2-15
Electro-Devices Inc 4 Godwin Ave Paterson 1 NJ	8
Electro-Mechanical Div General Riveters, Inc 785 Hertel Ave Buffalo 7 NY	5
Electro-Miniatures Corp 1060 Elm Ave Ridgefield NJ	6
Electronic Control Systems 2136 Westwood Blvd Los Angeles 25 Calif	35
Electrosolids Corp 7436 Varna Ave N Hollywood Calif	12
Elektro Serv Co 480 Johnson Ave Brooklyn 37 NY	6
Electro Tec Corp 4 Romanelli Ave S Hackensack NJ	6
El Products Corp P O Box 41 New York 63 NY	21-23-26-30
Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ	10-11-13
Engineering Associates 434 Patterson Rd Dayton 9 Ohio	19
Erdo Eng'g Corp Official & Westgate Addison Ill	19
Ernst & Affiliates W Arthur 825 Hayes Ave Racine Wisc	16-17-18-19-20-22-23 24-25-26-28-29-31-32
Essex Wire Corp 1601 Wall St Ft Wayne 6 Ind	36
Exact Eng'g & Mfg Inc P O Box 668 Oceanside Calif	35
Fairchild Electrical Products Div 110 Main St Burlington Vt	20-22-23-24-25 28-29-31-32
Farrand Controls Inc 4401 Bronx Blvd New York 70 NY	38
Feedback Controls Inc 899 Main St Waltham 54 Mass	35
FluidDyne Eng'g Corp 425 N 7 St Minneapolis 6 Minn	8
Forbes & Wagner Inc 343 Central Ave Silver Creek NY	5
Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY	28-35-38
Furnas Electric Co 1000 McKee St Batavia Ill	8-36
Garrett Corp AIRResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif	8-17-23-24 26-28-35
General Components Inc 225 E 144 St Bronx 51 NY	10

General Controls Co 801 Allen Ave Glendale 1 Calif	24-26	Jack Scientific Instrument Co Bill 143 Cedros St Solana Beach Calif	9-17-20-23-24-28	Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	28-35
General Crystal Co P O Box 9 Burlington Wis	16	Janette Electric Mfg Co 8350 Lehigh Ave Morton Grove Ill	22	Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	28
General Devices Inc P O Box 253 Princeton NJ	6	Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY	10-11	Modern Industries Inc 2601 Colorado Ave Santa Monica Calif	8
General Electric Co Apparatus Sales Div 1 River Road	8-9-12-24-27	Jeffrey Mfg Co 803 N 4 St Columbus 16 Ohio	10	Moog Valve Co Proner Airport E Aurora NY	35
Schenectady 5 NY	28-29-30-31	Joy Mfg Co 338 Oliver Bldg Pittsburgh 22 Pa	2-15	Morganite Inc 33-02 48 Ave Long Island City 1 NY	7
General Findings & Supply Co Industrial Div Leach & Garner Bldg Attleboro Mass	7	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	19	Moseley Co F L 409 N Fair Oaks Ave Pasadena Calif	35
General Industries Co Olive & Taylor Sts Elyria Ohio	27-31	Kahlenberg Bros 1700 13 St Two Rivers Wis	13	Motiograph Inc 4441 W Lake St Chicago 24 Ill	17
General RF Fittings Inc 702 Beacon St Boston 15 Mass	11	Kato Eng'g Co 1415 1 Ave	9-16-17-19	Motordyne Inc 2661 S Myrtle Ave	20-23-24-32
Gibson Electric Co 8317 Frankstown Ave Pittsburgh 21 Pa	7	Mankato Minn	20-23-29-33	Monrovia Calif	
Gleason-Avery Inc 45 Aurelius Ave Auburn NY	20-24-29	Katolight Corp Box 891 Mankato Minn	9-16-17-19-20-23-33	Motoresearch Co 1600 Junction Ave	1-8-16-17-19-20-24
Globe Industries Inc 1784 Stanley Ave	2-16-20-22-23-24	Katolight Corp 1415 1 Ave	9-16-17-19	Muirhead & Co Ltd Beckenham Kent England	38
Dayton 4 Ohio	25-26-28-29-30	Mankato Minn	20-23-29-33	Muirhead Instruments Inc 677 5 Ave	20-23-24-25-28-29-30-35-38
G-M Laboratories Inc 4300 N Knox Ave Chicago 41 Ill	28-35	Keystone Carbon Co 1935 State St St Marys Pa	7	Myalex Corp of America 125 Clifton Blvd Clifton NJ	6
Graphite Metallizing Corp 1002 Nepperhan Ave Yonkers NY	4-7	Keystone Electronics Corp 423 Broome St New York 13 NY	10	National Aircraft Corp 3411 Tulare Ave Burbank Calif	8
Great Lakes Electric Mfg Co 17 S Desplaines St Chicago 6 Ill	1-9-16-17	King-Seelye Corp Signal Electric Div Menominee Mich	15	National Carbon Co Div Union Carbide & Carbon 30 E 42 St New York 17 NY	4
Greenleaf Mfg Co Div Mandrel Industries 7814 Maplewood Industrial Ct St Louis 17 Mo	35	Kollsman Instrument Corp Sub Standard Coil Products 80-08 45 Ave Elmhurst 73 NY	26-28-29-38	National Company Inc 61 Sherman St Malden 48 Mass	10-11
Gries Reproducer Corp 125 Beechwood Ave New Rochelle NY	3	Kooltronic Fan Co Carter Rd at Rosedale Princeton NJ	15	Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	22-25-28-30
Guild Electronics Inc 388 Broadway New York 13 NY	19	Koppers Co Koppers Bldg Pittsburgh 19 Pa	10	Newcomb Spring Corp 177 E Hawthorne Ave Valley Stream NY	3
Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	35	Kroger Eng'g & Devel Co 3022 N 77 Ct Elmwood Park 35 Ill	9-23-24-26	New Rochelle Tool Corp 320 Main St New Rochelle NY	19
Hansen Mfg Co RR 1 Princeton Ind	21-23-26-29-30	Kupfrian Mfg Corp 395 State St Binghamton NY	16	Norden-Ketay Corp Commerce Rd Stamford Conn	16-26-28-29-35-38
Hanson-Gorrill-Brian 85 Hazel St Glen Cove NY	8	Laminations Co 300 Main St Stamford Conn	34-37	Ohio Carbon Co 12508 Berea Rd Cleveland 11 Ohio	4-7
Harnischfeger Corp Crystal Lake Ill	13-16	Lamtex Industries Inc 51 State St Westbury NY	6	Ohio Crankshaft Co Tocco Div 3800 Harvard Ave Cleveland 5 Ohio	19
Harwood Electronics Co 466 W Superior St, Chicago 10 Ill	10	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	9	Ohmite Mfg Co 3601 Howard St Skokie Ill	8
Hartman Electrical Mfg Co 175 N Diamond St Mansfield Ohio	8	LaPointe Industries Inc 155 W Main St Rockville Conn	34	Onan & Sons D W 2515 University Ave SE Minneapolis 14 Minn	13-14-33
Haydon Co A W 232 N Elm St	8-20-22-23-25-26-29-30	Leach Corp Inet-Palmer Div 4441 S Santa Fe Ave	8-9-16 17-19-29	Oster Mfg Co John 1 Main St	1-2-16-17-20-22-23-24-25-26-28-29-30-32-35-38
Haydon Mfg Co 245 E Elm St	20-21-22-23	Los Angeles 58 Calif	1-8-9-16-17	Par Products Corp 602 Colorado Ave Santa Monica Calif	26-32
Torrington Conn	25-26-29-30	Lear Inc 3171 S Bundy Drive Santa Monica Calif	20-22-23-24	Peerless Electric Co 1401 W Market St Warren Ohio	2-20-23-29
Heinz Mueller Eng'g Co 1906 N Cicero Ave	12-17-18-20	Leland Electric Co Div American Machine & Foundry Co 1501 Webster St Dayton 1 Ohio	25-26-28-29-35-38 16-17-19-20-23-24	Pegasus Labs Inc 3690 W 11 Mile Rd Berkley Mich	35
Chicago 39 Ill	22-23-24-28-32	Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio	20	Pioneer Gen-E-Motor Corp 5841 W Dickens Ave Chicago 39 Ill	16-17-33
Heinze Electric Co Div Consolidated Electric Lamp 685 Lawrence St Lowell Mass	2-20-23-24-26	Lindberg Eng'g Co 2450 W Hubbard St Chicago 12 Ill	19	Piqua Machine & Mfg Co 441 S College St Piqua Ohio	20-23-24
Helwir Co 2544 N 30 St Milwaukee 10 Wis	4	Link Aviation Inc Binghamton NY	35	PM Industries Inc Instrument Motors Div 460 North Ave New Rochelle NY	16-17-20-22-23 25-26-28-29-32
Hickock Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	19	Link-Belt Co Prudential Plaza Chicago 1 Ill	10-11	Poly-Scientific Corp Blacksburg Va	4-6
Hirschman-Pohle Co 120 Lent Ave Leroy NY	15	Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	35	Potter & Brumfield Inc 1200 E Broadway Princeton Ind	20
Hohart Bros Hohart Square E Troy 3 Ohio	1-16-17-19	Litton Industries of Md Inc 4910 Calvert Rd College Park Md	35	P S P Eng'g Co Div Induction Motors 8608 Otis St South Gate Calif	35-38
Holtzer Cabot Div Nat'l Pneumatic Co 125 Amory St	1-12-16-17-18 22-23-24-25-26	Lord Mfg Co 1635 W 12 St Erie 6 Pa	10	Rae Motor Corp 2009 Kewaunee St Racine Wis	21-22-23-32
Boston 19 Mass	28-29-30-34-37	L & R Mfg Co 577 Elm St Arlington NJ	24	Rea Co J B 1723 Cloverfield Blvd Santa Monica Calif	20-22-23-24 25-26-28-29-30
Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY	1-16-17-33	Lux Clock Mfg Co Johnson St Waterbury Conn	29-30	Ready Power Co 11231 Freud Ave Detroit 14 Mich	16-17-18-33
Howard Industries Inc 1760 State St Racine Wis	24-25-26-28-29-32	Lytel Eng'g & Mfg Co 1404 San Mateo Blvd SE Albuquerque New Mexico	21-22 28-29-30	Redmond Co Owosso Mich	2-12-23-24
Howell Electric Motors Co 409 N Roosevelt Howell Mich	20-22-24	McDowell Electronics Inc 105 Forrest St Metuchen NJ	19	Reed & Reese Inc 717 N Lake Ave Pasadena 6 Calif	20-23-28
Hunter Spring Co 1 Spring Ave Lansdale Pa	21	Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	35	Reeve Electronics Inc 609 W Lake St Chicago 6 Ill	19
Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	23-24	Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	8-35	Reeves Instrument Corp 215 E 91 St New York 28 NY	35
Ideal Electric & Mfg Co 300 E 1 St Mansfield Ohio	8-19-20-23-29	Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif	35	Reflectone Corp Boston Post Rd Stamford Conn	10
Ilg Electric Ventilating Co 2850 N Pulaski Rd Chicago 41 Ill	15	Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	7	Reliance Electric and Eng'g Co 24701 Euclid Ave Cleveland 17 Ohio	8-16-17-20-23-29
Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY	19	Marble-Crad Electric Corp Gladstone Mich	20	Remington Rand Univac Div Sperry Rand Corp 315 4 Ave New York 10 NY	35
Induction Motors Corp 570 Main St Westbury LI NY	12-23-24-25-28-29-31-38	Marvel-Schebler Products Div Borg-Warner Corp Box 863 Decatur Ill	35	Rembrandt Inc 98 Kirkland St Cambridge 38 Mass	10
Industrial Research Labs Div Aeronca Mfr Corp Hilltop & Frederick Rds Baltimore 28 Md	35	Master Appliance Mfg Co 530 4 St Racine Wis	15-20-23-24-32	Reynolds Electric Co 3000 River Rd River Grove Ill	15-24
Industrial Test Equipment Co 55 E 11 St New York 3 NY	16-35	Master Electric Co 126 Davis Ave Dayton 1 Ohio	16-17-20-23-24-29	Ripley Co 1 Factory St Middletown Conn	2
Infra Electronic Corp 47 Factory Pl Cedar Grove NJ	23-24-26-27-31	Melpar Inc 3000 Arlington Blvd Falls Church Va	35		
Instrument Development Labs Inc 67 Mechanic St Attleboro Mass	6-9	Merkle Korff Gear Co 213 N Morgan St Chicago 7 Ill	21-24-29-30		
Insulation Mfrs Corp 565 W Washington Blvd Chicago 39 Ill	39	Metzner Eng'g Corp 1041 N Sycamore Ave Hollywood 38 Calif	27-31		
Insuline Corp of America 186 Granite St Manchester NH	11	Midwestern Instruments PO Box 7186 Tulsa Okla	35		
Intelec Systems Inc 22 Thames St New York 6 NY	20-24-29-32	Milgo Electronic Corp 7601 NW 37 Ave Miami 47 Fla	35		
International Eng'g Inc 1145 Bolander Ave Dayton 1 Ohio	15	Millen Mfg Co James 150 Exchange St Malden 48 Mass	10-11		
International Register Co 2620 W Washington Blvd Chicago 12 Ill	21-30				
Jack & Heintz Inc 17600 Broadway Cleveland 1 Ohio	1-16-17-20-23-24				

Robbins & Myers Inc
1345 Lagonda Ave
Springfield Ohio 1-15-20-23-24-32

Robinette Co W C
802 Fair Oaks Ave S Pasadena Calif 35

Rotating Components Inc
267 Green St 1-2-15-16-20-22-
Brooklyn 22 NY 24-25-26-28-29-81

Rotron Mfg Co
Schoonmaker Lane Woodstock NY 2-15

Rubbercraft Corp of Calif
1800 W 220 St Torrance Calif 10

St Marys Carbon Co
State St St Marys Pa 4

Sanders Associates
95 Canal St Nashua NH 2

Sangamo Electric Co
Springfield Ill 9-12-16-17-18-
23-25-26-29-30

Schrack Electrical Sales Corp
45 W 81 St New York 24 NY 8

Scientific Coil Co
5619 Broadway
Chicago 40 Ill 20-22-23-26

Loyd Scruggs Co
PO Drawer 232 Festus Mo 20-23-24-32

Seager Standard Carbon Co
291 Church St New York 13 NY 4-6

Servo Corp of America
2020 Jericho Turnpike
New Hyde Park NY 35

Servomechanisms Inc
12500 Aviation Blvd
Hawthorne Calif 2-22-25-26-28-29-35

Servonics Inc
822 N Henry St Alexandria Va 35

Servo-Tek Products Co
1086 Goffle Rd
Hawthorne NJ 8-17-22-23-24-26-28-30-32-35

Shepard Labs Inc
480 Morris Ave Summit NJ 35

Sheppard Co R H
101 Philadelphia St Hanover Pa 13-33

Sigmadyne of Conn
PO Box 869 Port Chester NY 8

Sittler Corp 18 N Ada St Chicago 7 Ill 4

Skil Corp 5033 Elston Ave Chicago 30 Ill 2

Small Motors Inc
2076 Elston Ave 2-12-16-20-22-23
Chicago 14 Ill 24-26-28-29-30-32

Smith Inc Herman H
2326 Nostrand Ave Brooklyn 10 NY 10-11

Solar Aircraft Co
2200 Pacific Hwy San Diego 12 Calif 33

Solartron Electronic Group Ltd
Queens Rd Thames Ditton
Surrey England 16-17

Specialties Inc
Skunks Misery Rd Syosset LI NY 35

Spectralab Instruments
404 N Halstead Ave Pasadena Calif 19

Sperry Gyroscope Co Div Sperry Rand Corp
Great Neck NY 35

Stackpole Carbon Co St Marys Pa 4

Stancil-Hoffman Corp
921 N Highland Ave Hollywood 38 Calif 25

Standard Coil Products Co
2085 N Hawthorne Ave Melrose Park Ill 23

Standard Electric Mfg Co
Haddon Ave W Berlin NJ 15

Star-Kimble Motor Div
Miehle Printing Press & Mfg Co
200 Bloomfield Ave
Bloomfield NJ 16-17-19-20-23

Sterling Electric Motors Inc
5401 Telegraph Rd
Los Angeles 22 Calif 20-29

Taller & Cooper 75 Front St Brooklyn 1 NY 24

Taylor Fibre Co Norristown Pa 3

Technical Electronics Corp
4060 Ince Blvd Culver City Calif 25-29

Technical Ply-Woods Sales
6756 Crandon Ave Chicago 49 Ill 39

Technicraft Labs Inc
Thomaston-Waterbury Rd
Thomaston Conn 10

Tele-Dynamics Inc
32 & Walnut Sts Philadelphia 4 Pa 6-12

Telkor Inc
N Murray Ridge Rd Elyria Ohio 16-23

Telonic Industries Inc
73 N 2 Ave Beech Grove Ind 19

Thomas & Skinner Inc
1120 E 23 St Indianapolis 7 Ind 34-37

Thompson Products Inc Electronics Div
2196 Clarkwood Rd Cleveland 3 Ohio 1-8-16

Times Facsimile Corp
540 W 58 St New York 19 NY 29-30

Tiptronic Inc
4 & Franklin Sts Tipp City Ohio 8

TKM Electric Corp
1160 University Ave
Rochester 7 NY 16-17-19

Toledo Commutator Co Owosso Mich 6

Topp Industries Inc
5255 W 102 St Los Angeles 45 Calif 35

Transicoil Corp
Worcester Pa 16-22-28-38

Universal Electric Co
300 E Main St
Owosso Mich 20-23-24-27-32

Uniwave Inc
2 Marine St Farmingdale NY 11-34

U S Electrical Motors Inc
200 E Slauson Ave
Los Angeles 54 Calif 20-24

U S Gauge Div American Machine & Metals
Sellersville Pa 38

U S Graphite Co Div Wickes Corp
1621 Holland Ave Saginaw Mich 4

U S Instrument Corp
P O Box 33E Charlottesville Va 18

Varo Mfg Co
2201 Walnut St Garland Texas 8

Vectrol Eng'g Inc
P O Box 1089 Stamford Conn 8

Vocaline Co of America
Old Saybrook Conn 21-29-30

WacLine Inc
35 S St Clair St
Dayton 2 Ohio 1-8-16-20-22-24-26-28-32-34

Waco Inc
2032 Broadway
Santa Monica Calif 20-23-24-26-27

Wagner Co H A
14707 Keswick St Van Nuys Calif 26-35

Waldorf Instrument Co Div
F C Huyck & Sons Park Ave 5-20-23-26
Huntington Station NY 28-30-35-38

Waltham Watch Co
221 Crescent St Waltham 54 Mass 28

Ward Leonard Electric Co
Mt Vernon NY 8

Warren Corp J C
21 Hanse Ave Freeport NY 22-23-30

Warren Mfg Co
Newtown Rd Littletown Mass 8

Weasche Electric Co BA
1622 Vine St Cincinnati 10 Ohio 20-22-23-24

West Coast Research Corp
2871 1/2 Westwood Blvd 8-35
Los Angeles 64 Calif

Western Gear Corp Electro Products Div
132 W Colorado St 16-17-20-23
Pasadena 1 Calif 24-25-26-29-32

Weston Electrical Instrument Corp
Sub Daystrom Inc 614 Frelinghuysen Ave
Newark 12 NJ 16-17

Westinghouse Electric Corp
PO Box 868 16-17-20-23
Pittsburgh 30 Pa 25-29-30-38

Wiggins Oil Tool Co E B
3424 E Olympic Blvd 10-11
Los Angeles 23 Calif

Wincharger Corp
E 7 & Division St
Sioux City 2 Iowa 1-9-12-16-17-20-23-33

Winder Aircraft Corp of Florida
PO Box 2397 Drane Field
Lakeland Fla 18

Winpower Mfg Co Newton Iowa 1-16-17

Woodwelding Inc
355 N Newport Blvd
Newport Beach Calif 19

Zenith Electric Co
152 W Walton St Chicago 10 Ill 8

Bendix Aviation Corp Bendix Radio Div
East Joppa Rd Towson 4 Md 1-4-8-9

Bendix Aviation Corp Pacific Div
1600 Sherman Way N Hollywood Calif 5-8

Brubaker Electronics Inc
3652 Eastham Dr Culver City Calif 1

Burroughs Corp
6071 2 Ave Detroit 32 Mich 1-3

Canadian Aviation Electronics Ltd
6214 Cote de Liesse Rd
St Laurent Quebec Canada 7-9

Chesapeake Instrument Corp
Shady Side Md 14

Chromatic Television Laboratories
1501 Broadway New York 36 NY 8

Collins Radio Co
855 35 St N E Cedar Rapids Iowa 1-2-7-9-15

Computing Devices of Canada Ltd
PO Box 508 Ottawa Ontario Can 4

Conrad & Moser
2 Borden Ave Long Island City 1 NY 8

Consolidated Avionics Corp
66 Brooklyn Ave Westbury NY 8

Corbin Corp
5419 56 Pl Riverdale Md 1-2-4-5-8-9-15

Craig Systems Inc
90 Holten St Danvers Mass 1

C-Thru Ruler Co
827 Windsor St Hartford Conn 5

Dalmo Victor Co Div Textron Inc
1515 Industrial Way Belmont Calif 14

Dayton Aviation Radio & Equipment Corp
R R 3 Troy Ohio 1-5-9

Designers for Industry
4241 Fulton Pkwy Cleveland 9 Ohio 8

Diamond Antenna & Microwave Corp
7 North Ave Wakefield Mass 5-8

Eclipse-Pioneer Div Bendix Aviation Corp
Teterboro NJ 1

Edo Corp
13-10 111 St College Point 56 LI NY 3-6-8-14

Ercona Corp
551 5 Ave New York 17 NY 3

Erco Radio Labs Inc
637 Stewart Ave Garden City NY 9

Fairchild Guided Missiles Div Fairchild
Engine & Airplane Corp Straght Path
Wyandanch LI NY 8

Farrand Controls Inc
4401 Bronx Blvd New York 70 NY 4

Federal Telephone & Radio Co Div IT&T
100 Kingsland Rd Clifton NJ 1-4-5-7-8-9

Ford Instrument Co Div Sperry Rand Corp
31-10 Thomson Ave Long Island City 1 NY 1

General Communication Co
677 Beacon St Boston 15 Mass 8-9-15

General Electric Co Light Military Elec-
tronic Equip Dept French Rd Utica NY 8

Hallamore Electronics Co
8352 Brookhurst Ave Anaheim Calif 8-15

Harris Transducer Corp
Woodbury Conn 14

Hastings-Raydist Inc
Newcomb Ave Hampton Va 10

Hoffman Electronics Corp
3761 S Hill St Los Angeles 7 Calif 8-14

Hoover Electronics Co
3640 Woodland Ave Baltimore 7 Md 5

International Research Associates
2221 Warwick Ave Santa Monica Calif 9

I-T-E Circuit Breaker Co Special Products
Div 601 E Erie Ave Philadelphia 34 Pa 8

International Business Machines Corp
590 Madison Ave New York 23 NY 4

Interstate Electronics Corp
875 S East St Anaheim Calif 15

Jarvis Electronics Corp
1140 Cherry St Winnetka Ill 4-9

J-V-M Eng'g Co
4633 S Lawndale Ave Lyons Ill 8

Kemlite Labs Inc
1819 W Grand Ave Chicago 22 Ill 1

Kollsman Instrument Corp Sub Standard
Coil Products
80-08 45 Ave Elmhurst 73 NY 4

Land-Air Inc Instrument & Electronic Div
2133 Adams Ave San Leandro Calif 1

Lavoie Labs Inc
Matawan-Freehold Rd Morganville NJ 7-8

Lear Inc
3171 S Bundy Drive
Santa Monica Calif 1-4-7-9

Litton Industries of Calif
336 N Foothill Rd
Beverly Hills Calif 1-5-8-16

Loral Electronics Corp
749 E 140 St New York 54 NY 4

Mack Electronics Div Inc
Sub Mack Trucks Inc
1120 S 2 St Plainfield NJ 8

Martlab Co
249 Haverford Ave Swarthmore Pa 1

Maryland Electronic Mfg Corp
5099 Calvert Rd College Park Md 7-9

Massa Laboratories Inc
5 Fottler Rd Hingham Mass 14

Maxxon Corp W L
475 10 Ave New York 18 NY 8

Missileonics Inc PO Box 716 Melbourne Fla 8

Moran Instrument Corp
170 E Orange Grove Ave
Pasadena 3 Calif 8-9

National Aeronautical Corp
Ft Washington Industrial Park
Ft Washington Pa 1-5-7-9

64—NAVIGATION SYSTEMS

Aircraft landing 1

Calling systems, selective 2

Depth sounders 3

Direction finding 4

Distance measuring equipment.. 5

Loran 6

Omnirange 7

Radar 8

Radio 9

Raydist 10

Sea rescue 11

Shoran 12

Sofar 13

Sonar 14

Transponders 15

Advance Industries Inc
640 Memorial Dr Cambridge 39 Mass 1-8-9-15

Aircraft Radio Corp
Boonton NJ 4-9

Alcar Instruments Inc
17 Industrial Ave Little Ferry NJ 14

Alford Mfg Co
299 Atlantic Ave Boston 10 Mass 7

Amerac Inc
116 Topsfield Rd Wenham Mass 1-8

American Machine & Foundry Co
Electronics Div
1085 Commonwealth Ave
Boston 15 Mass 5-15

American Machine & Foundry Co
Defense Products Group
1101 N Royal St
Alexandria Va 1-4-5-8-9-15

Arma Div American Bosch Arma Corp
Garden City NY 1-8

Avco Manufacturing Corp Crosley Div
1329 Arlington St Cincinnati 25 Ohio 1

Avion Div ACF Industries Inc
11 Park Pl Paramus NJ 1-8-9-15

Bell Aircraft Corp
PO Box 1 Buffalo 5 NY 1-3-4-5-7-8-9-15

Bell & Gossett Co
8200 Austin Ave Morton Grove Ill 2

Belock Instrument Corp
111-01 14 Ave College Point 56 NY 1-4-8

Bendix Aviation Corp 1-2-4-5-
1104 Fisher Bldg Detroit 2 Mich 8-9-14-15

Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	5		
Nevada Air Products Co P O Box 2472 Reno Nev	9-15		
Norden-Kelay Corp Commerce Rd Stamford Conn	8		
Olympic Radio & TV 34-01 38 Ave Long Island City 1 NY	4-9		
Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	4-8		
Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	5-15		
Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	2	Abrams Instrument Corp 606 E Shiawassee St Lansing 1 Mich	9
Production Research Corp Thornwood NY	3-4-5-15	Advanced Instruments Inc 21 Oakcrest Rd Needham 92 Mass	3-9-29
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	1-3-14	Airmec Ltd High Wycombe Buckinghamshire England	9-13-17-19-21
Pye Telecommunications Ltd Newmarket Rd Cambridge England	1-2-3-4-5-7-9	Alden Electronic & Impulse Recording Equip Co P O Box 125 Westboro Mass	17
Radiation Inc P O Box 37 Melbourne Fla	14	Allied Eng'g & Production Corp 2421 Blanding Ave Alameda Calif	18-25-26
Radio City Products Co Centre & Glendale Sts Easton Pa	4	Allied Resinous Products Inc Whitney Rd & Clark St Conneaut Ohio	25-26
Radio Corp of America Commercial Electronic Products Camden 2 NJ	9-14	Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	21
Radio Receptor Co 240 Wythe Ave Brooklyn 11 NY	8	Alpha Metals Inc 56 Water St Jersey City 4 NJ	25-26
Raytheon Mfg Co 100 River St Waltham 54 Mass	3-8	Ameray Corp Route 46 Kenvil NJ	15-16-25-26
Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 54 Mass	4-9	American Electronics Inc 655 W Washington Blvd Los Angeles 15 Calif	2-4-5-7-10-22-27
Sangamo Electric Co Springfield Ill	14	American Machine & Foundry Co Defense Products Group 1101 N Royal St	1-2-3-4-8-9-10-12-13-14-15-16-17-18-19-20-21-22-23-24-26
Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	2	American-Standard Atomic Energy Div 1682 Broadway Redwood City Calif	8
Seismograph Service Corp 6200 E 41 St Tulsa 1 Okla	5-9	American Tradair Corp 3401 30 St Long Island City 6 NY	10-11-14-19-24-29-30
Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	4	Ampere Electronic Corp 230 Duffy Ave Hicksville LI NY	28-29
Servonics Inc 822 N Henry St Alexandria Va	9	Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	1-2-3-4-7-8-9-10-12-13-14-16-17-19-21-23-24-25-26-28-29-30
Simmonds Aerocessories Inc 105 White Plains Rd Tarrytown NY	11	Applied Radiation Corp 2404 N Main St Walnut Creek Calif	16
Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	1-4-5-7-8-14	Arma Div American Bosch Arma Corp Garden City NY	8
Sonar Radio Corp 3050 W 21 St Brooklyn 24 NY	4	Askania Regulator Co 240 E Ontario St Chicago 11 Ill	8-9
Sperry Gyroscope Co. Div Sperry Rand Corp Great Neck NY	4-5-6-8	Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio	8-17-21
Stavid Eng'g Inc U S Route 22 Plainfield NJ	5-8-9-14-15	Atomic Labs Inc 3086 Claremont Ave Berkeley 5 Calif	9-16
Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-5-15	Baird-Atomic Inc 33 University Rd Cambridge 33 Mass	1-3-9-10-11-13-14-16-19-27-28-29-30
Sylvania Electric Products Inc 1740 Broadway New York 19 NY	8	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	9
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	7	Beckman Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif	9-10-13-14-17-19-21
Telephonics Corp Park Ave Huntington LI NY	4-14	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	8-13-17-20
Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	8-14	Bendix Aviation Corp Cincinnati Div 3130 Wasson Rd Cincinnati 8 Ohio	13-17-20-21
Topp Industries Inc 6255 W 102 St Los Angeles 45 Calif	9	Berger Communications 109-01 72 Rd Forrest Hills LI NY	2-3-4-6-9-10-12-17-19-25
United Electro-dynamics 1200 S Marengo Ave Pasadena Calif	15	Berkeley Crystal Co 1740 University Ave Berkeley 3 Calif	11-13-14
Wagner Co H A 14707 Keswick St Van Nuys Calif	14	Beva Laboratory 1640 N Olden Ave Ext Trenton 8 NJ	3
Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	14	Bios Labs Inc 17 W 60 St New York 23 NY	11
Wells-Gardner & Co 2701 N Kildare Ave Chicago 39 Ill	8	B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	1-3-8-9-10-13-14-16-17-19-20-21-27
West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	4-8-15	Black Light Corp of America 5114 Walnut Grove Ave San Gabriel Calif	9-10-16
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	8-9-15	Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	4
White & Sons Wilfrid O 178 Atlantic Ave Boston 10 Mass	3-14	Cambridge Instrument Co Grand Central Terminal New York 17 NY	13-17-20
Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	5	Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada	10-14

65—NUCLEAR PRODUCTS

Analyzers, coincidence	1
Analyzers, neutron absorption	2
Analyzers, spectrum	3
Assemblies, shield	4
Badges, radiation	5
Batteries, nuclear	6
Chambers, alpha	7
Controls, reactor	8
Counters, radiation	9
Counters, scintillation	10
Crystals, scintillation	11
Detection systems, leak	12
Detectors, radiation	13
Detectors, scintillation	14
Equipment, food irradiation	15
Equipment, nuclear radiation	16
Indicators, radiation	17
Manipulators	18
Meters, counting rate	19
Meters, dosimeter	20

Meters, nuclear radiation	21
Processors, catalytic flow rate	22
Radioactive stack	23
Sealers	24
Shielding, lead	25
Shielding, radiation	26
Spectrometers	27
Tubes, gamma ray	28
Tubes, geiger counter	29
Tubes, scintillation	30

Computing Devices of Canada Ltd P O Box 508 Ottawa Ontario Can	3
Consolidated Electro-dynamics Corp 300 N Sierra Madre Villa Pasadena Calif	12-27
Controlled Atmosphere Enclosures Corp 230-11 141 Ave Springfield Gardens 13 LI NY	4-7-26
Cook Electric Co 2700 Southport Ave Chicago 14 Ill	7-15-16-26
Cosmic Radiation Labs 247 Blue Point Ave Blue Point LI NY	3-9-10-11-13-14-19
Crystalx-Westlake Corp Lenni Rd Lenni Mills Pa	26
Curtiss-Wright Corp Electronics Div 631 Central Ave Carlstadt NJ	8-17-19
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	15
Delta Chemical Works 23 W 60 St New York 23 NY	11
Douglas Radio Labs 176 Norfolk Ave Boston 19 Mass	9-19
Dudek & Co R C 407 N Maple Dr	7-8-9-10-11-12-13-14-15-16
Beverly Hills Calif	17-19-21-23-26-28-29-30
Dynamics Research Associates Div Universal Match Corp P O Box 5841 Ferguson 21 Mo	8
Eastman Kodak Co 343 State St Rochester 4 NY	5-13-17-20
Eberline Instrument Div Reynolds 805 Early St Santa Fe N Mexico	4-7-8-9-10-13-14-15-16-17-21-25-26
Egan Lab 107-56 113 St Richmond Hill 19 NY	17
Eldorado Electronics Co 1401 Middle Harbor Rd Oakland Calif	3
Electrical & Physical Instrument Corp 42-19 27 St Long Island City 1 NY	9-16
Electronic Products Co 111 E 3 St Mt Vernon NY	16-28-29
Elgin National Watch Co 107 National St Elgin Ill	6-9
Elm Labs 10 Washington Ave Hastings-on-Hudson NY	18
El-Tronics Inc Penn Ave Mayfield Pa	3-7-9-10-13-14-16-17-19-21-29-30
Fish-Schurman Corp 70 Portman Rd New Rochelle NY	25-26
Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY	8
Forro Scientific Co 833 Lincoln St Evanston Ill	1-3-9-10-12-13-14-16-17-19-21-28-29
Franklin Electronics Inc Box 113 Bridgeport Pa	1-3-8-9-10-13-14-16-17-19-21-27
Fretco Inc 406 N Craig St Pittsburgh 13 Pa	11-14-16
Furane Plastics Inc 4516 Brazil St Los Angeles 32 Calif	25
Gardiner Electronics Co 2545 E Indian School Rd Phoenix Ariz	13-14
General Electric Co X-Ray Dept 4855 Electric Ave Milwaukee 1 Wisc	15-29
Greer Hydraulics Inc NY Int'l Airport Jamaica 30 NY	18
Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	8
Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	14
Hammer Electronics Co Princeton NJ	3-9-10-14-16-27
Hansen Co Wm 165 Silverbrook Ave Niles Mich	9-10-13-14
Harshaw Chemical Co 1945 E 47 St Cleveland 6 Ohio	11
Hayward Scientific Glass Corp 217 N Magnolia Ave Whittier 1 Calif	4-25-26
Hewlett-Packard Co 275 Pure Mill Rd Palo Alto Calif	19
Hi Grade Alloy Corp 1236 S Talman Chicago 8 Ill	25-26
High Voltage Eng'g Corp Burlington Mass	3-15-16
Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	17
Hycron Mfg Co 707 S Raymond Ave Pasadena Calif	11
Intel Systems Inc 22 Thames St New York 6 NY	29
Isomet Corp 118 Union St Palisades Park NJ	11-14
Isotope Products 1711 Elmwood Ave Buffalo 7 NY	15
Isotopes Specialties Co 703 S Main St 4-5-7-9-10-11-12-13-14-16-18	
Burbank Calif	19-20-21-25-26-27-28-29-30
Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY	4
Jordan Electronics Inc Sub Panellit Inc 3025 W Mission Rd Alhambra Calif	13-16-20-21
Keithley Instruments Inc 12415 Euclid Ave Cleveland 6 Ohio	8-17
Kelley & Co O G 98 Taylor St Boston 22 Mass	4-8-15-16-18-25-26
Kemlite Labs Inc 1819 W Grand Ave Chicago 22 Ill	28
Kulite Tungsten Co 1040 Hoyt Ave Ridgefield NJ	25-26

Landsverk Electrometer Co 550 W Garfield Ave Glendale 4 Calif	7-9-13-17-20-21-28-29	St John X-Ray Lab Califon NJ	6	Canoga Corp 5955 Sepulveda Blvd Van Nuys Calif	9
Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	8	Sampies Machine Co A M 208 Tazewell Pike Knoxville 18 Tenn	5-13-20	Central Electronic Mfrs Inc Sub Nuclear Corp of America 2 Richmond Pl Denville NJ	5
Lennard Co. P M P O Box 56 Village Sta New York 14 NY	18-25-26	Servonics Inc 822 N Henry St Alexandria Va	8-18	Century Lighting Inc 521 W 43 St New York 36 NY	4
Levinthal Electronic Products Inc 3180 Hanover St Palo Alto Calif	11	Servo-Recording Instruments Inc 1815 W Van Buren St Phoenix Ariz	1-7-9-10-11-13-14 16-17-19-20-21	Cinema-Television Ltd Worsley Bridge Ltd Lower Sydenham London SE 26 England	5-9
Lithium Corp of America 2500 Rand Tower Minneapolis 2 Minn	26	Special Instruments Lab Inc 312 W Vine Ave Knoxville 02 Tenn	1;	Clairex Corp 50 W 26 St New York 10 NY	5
Lytle Eng'g & Mfg Co 1404 San Mateo Blvd SE Albuquerque New Mexico	18	Specialty Eng'g & Electronics Co 70 Clifton Pl Brooklyn 38 NY	13-15-21	Coleman Instruments Inc 318 Madison St Maywood Ill	1
Mackay Inc A D 198 Broadway New York 38 NY	11	State Labs Inc 649 Broadway New York 12 NY	29	Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	3
Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	7-10-17-19-21	Steward Mfg Co D M Chattanooga Tenn	26	Continental Electric Co Taylor Tubes Inc 6 N Michigan Ave Chicago 2 Ill	5
Marvel-Schebler Products Div Borg-Warner Corp Box 863 Decatur Ill	18	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	13	Corona Eng'g Service 94-52 Co. ona Ave Elmhurst 73 NY	8
Matthew Labs 146 Riverdale Ave Yonkers NY	26	Systrom Corp 2055 Concord Blvd Concord Calif	9-10-24	Dalmo Victor Co Div Textron Inc 1515 Industrial Way Belmont Calif	9
Measurement Eng'g Ltd. 232 John St Arnprior Ontario Can	14-19-21	Tarc Electronics Inc 48 Urban Ave Westbury LI NY	9-13-15	Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	6-8
Menlo Research Lab 538 Phelan Ave San Jose Calif	9-10-12-13-14-17-21	Technical Associates 140 W Providencia Ave Burbank Calif	5-7-9-10-13-14-17 19-20-21-25-26	Deitz Co S J 9 E Wesley St S Hackensack NJ	8
Mil Case Corp 35-18 37 St Long Island City NY	7-25-26	Technical Measurement Corp 140 State St New Haven 11 Conn	1-3-9-10-13 14-19-21-27	Deltron Inc 2905 N Leithgow St Philadelphia 33 Pa	8
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	8-19	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	4-24-25-26	Devo Eng'g Inc P O Box 387 Caldwell NJ	9
Moran Instrument Corp 170 E Orange Grove Ave Pasadena 3 Calif	14	Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass	1-3-4-5-6-7-9-10-11-13 14-16-17-18-19-20-21-22 23-25-26-27-28-29-30	Dudek & Co RC 407 N Maple Dr Beverly Hills Calif	8
Mt Sopris Instrument Corp 1320 Pearl St Boulder Colo	3-13-14-27	Trott Electronics Inc 412 Smith St Rochester 6 NY	9	Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	5
National Carbon Co Div Union Carbide & Carbon 30 E 42 St New York 17 NY	26	Universal Atomic Corp 50 Bond St Westbury LI NY	7-9-10-13-14-17	Eastman Kodak Co 343 State St Rochester 4 NY	5
National Radiac Inc 475 Washington St Newark 2 NJ	4-7-9-10-11-13 14-19-25-26-27	U S Radium Corp Morristown NJ	6-7-16	Eldorado Electronics Co 1401 Middle Harbor Rd Oakland Calif	7
Nems-Clarke Inc 919 Jesup-Blair Dr Silver Spring Md	21	Varian Associates 611 Hansen Way Palo Alto Calif	27	Electrical Service Co 1271 Mission St San Francisco 3 Calif	6
Nevada Air Products Co P O Box 2472 Reno Nev	9-12-13-14-16-17	Victoreen Instrument Co 5806 Hough Ave Cleveland 3 Ohio	7-8-9-10-13-14 16-17-19-20-21-28-29	Electro-Mechanical Specialties Co 1016 N Highland Ave Los Angeles 38 Calif	8
New England Nuclear Corp 575 Albany St Boston 18 Mass	10	Volk Radiochemical Co 5412 N Clark St Chicago 40 Ill	1-3-5-7-9-10-11 13-14-16-17-18-19-20 21-25-26-27-28-29-30	Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich	8
Norton Co 1 New Bond St Worcester 6 Mass	4-8-26	Western Radiation Lab 1107 W 24 St Los Angeles 7 Calif	1-9-10-13-14 16-17-19-26-29	Electron-Radar Products 4806 W Chicago Ave Chicago 51 Ill	5
NRD Instrument Co 6425 Etsel Ave St Louis 14 Mo	4-5-7-8-9-10-12-13- 14-16-17-19-20-21- 25-26-27-28-29-30	Westinghouse Electric Corp Box 284 Elmira NY	28	Electro-Physics Co 287 Broadway New York 7 NY	6-7-8
Nuclear-Chicago Corp 223 W Erie St Chicago 10 Ill	1-3-5-7-9-10-12-13- 14-16-17-18-19-20- 21-25-26-27-28-29-30	Wood Counter Lab N 1525 E 53 St Chicago 15 Ill	9-10-11-13-14 16-17-28-29-30	Elfa Instrument Center 55 Reade St New York 7 NY	7
Nuclear Corp of America Empire State Bldg New York NY 20-21-22-23-24-25-26-27-28-29-30	12-13-14-15-16-17-18-19- 20-21-22-23-24-25-26-27-28-29-30			Ess Instrument Co 96 S Washington Ave Bergenfield NJ	6-8
Nuclear Development Corp of America 5 New St White Plains NY	18			Fecker Inc J W 6592 Hamilton Ave Pittsburgh 6 Pa	7
Nuclear Development Lab P O Box 7034 Kansas City 13 Mo	9-13-28-29			Federal Equipment Co 38 Brady St San Francisco 3 Calif	6
Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	3-7-8-9-10-13-14- 16-17-19-21-27-29-30			Fielden Instrument Div Robertshaw- Fulton Controls Co 2920 N 4 St Philadelphia 33 Pa	9
Nuclear Measurements Corp 2460 N Arlington Ave Indianapolis 18 Ind	7-9-10-13-14-16-21			Fisher Pierce Co 170 Pearl St S Braintree 85 Mass	6
Nuclear Systems Div Budd Co 2950 Roberts Ave Philadelphia 32 Pa	4-9-10-13-15-16 17-20-21-25-26			Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa	1-7
Nucleonic Corp of America 196 Dextraw St Brooklyn 31 NY	1-2-4-5-7-9-10-13-14-16-17 19-20-21-25-26-27-28-29-30			Forro Scientific Co 833 Lincoln St Evanston Ill	9
Ohmart Corp 2236 Bogen St Cincinnati 14 Ohio	6-13-17-21			Gardner Lab Inc P O Box 5728 Bethesda 14 Md	1
Penberthy Instrument Co 4301 6 Ave S Seattle Wash	13			Gates & Co Geo W Hempstead Tpke & Lucille Ave Franklin Square LI NY	4
Perkin-Elmer Corp Main Ave Norwalk Conn	3-27			General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	1-5-6-8
Potter Aeronautical Corp P O Box 532 Union NJ	22			General Electric Co Electronic Components Div 1 River Rd Schenectady 5 NY	5
Precision Radiation Instruments Inc 4223 W Jefferson Blvd Los Angeles 16 Calif	10-11			Giannini & Co G M 918 E Green St Pasadena Calif	9
Pulse Eng'g Inc 2657 Spring St Redwood City Calif	15			Glens Falls Lab Box 685 Glens Falls NY	6
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	3-9			Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	1-4-9
Radiation Counter Labs Inc 5121 W Grove St Skokie Ill	1-2-3-4-5-7-8-9-10-11-13-14 16-19-20-21-25-26-27-28-29-30			Graflex Inc 154 Clarissa St Rochester 8 NY	4-6
Radiation Instrument Co P O Box 733 Silver Spring Md	16-21			Hacker & Co Wm J 82 Beaver St New York 5 NY	1
Radiation Research Corp 140 E 59 St New York 22 NY	6			Hallikainen Instruments 1341 7 St Berkeley 10 Calif	1
Ransom Research 323 W 7 St San Pedro Calif	19			Hall Sonic Eng'g Co 2402 2 St Peru Ill	7
Ray Proof Corp 513 W 54 St New York 19 NY	25-26			Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	9
Raytheon Mfg Co Receiving & Cathode Ray Tube Operations 55 Chapel St Newton 58 Mass	29			Hillburn Electronic Products Co 55 Nassau Ave Brooklyn 22 NY	8
Reeves Instrument Corp 215 E 91 St New York 28 NY	8			Hoffman Electronics Corp 3761 S Hill St Los Angeles 7 Calif	5-6
Reliance Electric and Eng'g Co 24701 Euclid Ave Cleveland 17 Ohio	8			Hogan Labs Inc 155 Perry St New York 14 NY	9
Resitron Labs Inc 2908 Nebraska Ave Santa Monica Calif	28			Hughes & Phillips 3300 N San Fernando Blvd Burbank Calif	6-8
				Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	2-3-5-8
				Industrial Development Labs Inc 17 Pollock Ave Jersey City 5 NJ	6
				Instrument Development Labs Inc 67 Mechanic St Attleboro Mass	1-6
				Intelix Systems Inc 22 Thames St New York 6 NY	5
				International Rectifier Corp 1521 E Grand Ave El Segundo Calif	5
				Kliegl Bros 321 W 50 St New York 19 NY	4
				Kurman Electric Co 191 Newel St Brooklyn 22 NY	8
				Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	1-7

66—PHOTOELECTRIC EQUIPMENT

Colorimeters	1
Counting machines	2
Headlight dimmers	3
Light supplies	4
Photocells & phototubes	5
Photoelectric units, complete	6
Photometers	7
Relays	8
Scanners	9

Advanced Instruments Inc 21 Oakcrest Rd Needham 92 Mass	1-7
Airmec Ltd High Wycombe Buckinghamshire England	6-8
Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	8
Autron Eng'g Inc 3629 N Vermilion St Danville Ill	8
Autron Eng'g Inc 1254 W 6 St Los Angeles 17 Calif	2-6
Avionics Ltd P O Box 200 Niagara-on-the-Lake Ont Canada	3-6-8
Axler Associates Inc 102-42 43 Ave Corona 68 NY	1
Baird-Atomic Inc 33 University Rd Cambridge 38 Mass	7
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	3
Barton Electronics Inc 1000 Farmington Ave W Hartford 7 Conn	8
Basic Controls Co 1714 Westwood Blvd Los Angeles 24 Calif	1
Bausch & Lomb Optical Co 628 St Paul St Rochester 2 NY	1
Beckman Instruments Inc Process Instruments Div 2500 Fullerton Rd Fullerton Calif	1-7
Bennett Co R P 43 S Carroll St Frederick Md	8
Brooke Eng'g Co 4517 Wayne Ave Philadelphia 44 Pa	6
Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	9
Burroughs Corp 6071 2 Ave Detroit 32 Mich	9
Camera Equipment Co 315 W 43 St New York 36 NY	4

Larson Instrument Co					
24 Orchard St Tarrytown NY	6				
Leach Corp Leach Relay Div					
5915 Avalon Blvd Los Angeles 3 Calif	8				
Lumenite Electronic Co					
407 S Dearborn St Chicago 5 Ill	6-8				
Luxor Lighting Products Inc					
350 5 Ave New York 1 NY	4				
Machinery Electrification Inc					
35 Hudson St Northboro Mass	6-8				
Magnadyne Corp					
84 S Water St Byram Conn	8				
Manufacturers Eng'g & Equip Corp					
York Rd & Sunset Lane Harbor Pa	1				
Matthew Labs					
146 Riverdale Ave Yonkers NY	1-7				
Measurement Eng'g Ltd					
232 John St Arnprior Ontario Can	8				
Micro Balancing Inc					
191 Herricks Rd Garden City Park NY	6				
Milwaukee Gas Specialty Co					
730 N Jackson St Milwaukee 1 Wis	8				
Morse Co Frank W					
1300 Soldiers Field Rd Boston 35 Mass	4				
Nucleonic Products Co					
1601 Grande Vista Ave					
Los Angeles 23 Calif	5				
Pantek Co					
P O Box 212 El Segundo Calif	2-8				
Patwin Instruments Div Patent Button Co					
Waterbury 20 Conn	7				
Perkin-Elmer Corp					
Main Ave Norwalk Conn	7-9				
Phillips Control Corp					
59 W Washington St Joliet Ill	8				
Phoenix Precision Instrument Co					
3803 N 5 St Philadelphia 40 Pa	7				
Photobell Co					
43 Vesey St New York 7 NY	2-5-6-8				
Photo Crystals Inc					
15 S 1 St Geneva Ill	5				
Photovolt Corp					
95 Madison Ave New York 16 NY	1-7				
Potter & Brumfield Inc					
1200 E Broadway Princeton Ind	8				
Practical Electronics Mfg Co					
569 W Van Buren St Chicago 7 Ill	5-6				
Quantametric Devices Inc					
Box 1107 Binghamton NY	7				
Radio Corp of America					
415 S 5 St Harrison NJ	5				
Radio Eng'g Co					
8 State St New York 4 NY	8				
Ripley Co					
1 Factory St Middletown Conn	6-8				
Rockwell Eng'g Co					
2133 E 45 St Indianapolis 5 Ind	8				
Rosco Labs					
29 Moore St Brooklyn 6 NY	4				
Sensory Inc					
Pleasantville Rd New Vernon NJ	8				
Servo Corp of America					
2020 Jericho Tpke New Hyde Park NY	7				
Sigmadyne of Conn					
P O Box 869 Port Chester NY	8				
Sigma Instruments Inc					
170 Pearl St S Braintree Mass	8				
Skiatron Electronics & TV Corp					
180 Varick St New York 14 NY	9				
Soderberg Mfg Co					
628 S Palm Ave Alhambra Calif	4				
Southwest Products Inc					
Alamo Downs Rt 4 San Antonio Texas	1				
Sperry Gyroscope Co Div Sperry Rand Corp					
Great Neck NY	9				
State Labs Inc					
649 Broadway New York 12 NY	5				
Taller & Cooper					
75 Front St Brooklyn 1 NY	9				
Tare Electronics Inc					
48 Urban Ave Westbury LI NY	9				
Technical Measurement Corp					
140 State St New Haven 11 Conn	9				
Telechrome Mfg Corp					
28 Ranick Dr Amityville LI NY	1-9				
Telectro Industries Corp					
35-18 37 St Long Island City 1 NY	8				
Telegraph Condenser Co					
N Acton London W 3 England	4				
U S Controls Inc					
161 Grand St New York 13 NY	2				
Waldorf Instrument Co Div F C Huyck & Sons Park Ave					
Huntington Station NY	9				
Weston Electrical Instrument Corp Sub					
Daystrom Inc 614 Frelinghuysen Ave					
Newark 12 NJ	1				
Wheelock Signals Inc					
Long Branch NJ	8				
Winkler Labs					
5225 N 20 St Phoenix Ariz	4				
Worner Electronic Devices					
Rankin Ill	2-8				
67—POWER SUPPLIES & CONVERTERS					
Power supplies, AC	1				
Power supplies, computer	2				
Power supplies, DC	3				
Power supplies, high voltage ..	4				
Power supplies, klystron	5				
Power supplies, low voltage ..	6				
Power supplies, microwave	7				
Power supplies, miniature	8				
Power supplies, mobile	9				
Power supplies, radar	10				
Power supplies, regulated	11				
Power supplies, special purpose ..	12				
Power supplies, transistor	13				
Power supplies, variable frequency	14				
Choppers	15				
Controls, voltage regulator ...	16				
Converters, AC-DC	17				
Converters, DC-AC	18				
Converters, frequency	19				
Converters, voltage	20				
Converters, waveform	21				
Inverters	22				
Regulators, current	23				
Regulators, voltage	24				
Vibrators	25				
Vibrators, ultrasonic	26				
Accurate Eng'g Co					
2005 Blue Island Ave Chicago 8 Ill	3-12				
Acme Electric Corp					
Water St Cuba NY	1-2-3-6-11-13				
Acoustica Associates					
Shore Rd Glenwood Landing LI NY	12-14-26				
Adler Electronics Inc					
1 LeFevre Lane					
New Rochelle NY	3-6-11-12-22				
Advance Electronics Co					
8510 North End Ave Oak Park 37 Mich	3-8				
Advance Instrument Corp					
1709 F St Belmar NJ	1-3-8-11-12-13				
Aerovox Corp Pacific Coast Div					
2724 S Peck Rd Monrovia Calif	3-12				
AiResearch Mfg Co Div Garret Corp					
9851 Sepulveda Blvd					
Los Angeles 45 Calif	12-17-18-22				
Airmec Ltd High Wycombe					
Buckinghamshire England	3-5-11-21				
Airpac Products Co					
Middle River Baltimore 20 Md	12-18-22-25				
Alfred Electronics					
897 Commercial St					
Palo Alto Calif	4-5-7-11-12				
Allis Co Louis					
427 E Stewart St Milwaukee 1 Wis	10-24				
Aloe Scientific					
5655 Kingsbury Blvd St Louis 12 Mo	16				
Altec Lansing Corp					
1515 S Manchester Ave Anaheim Calif	12				
Alto Scientific Co					
855 Commercial St					
Palo Alto Calif	3-4-5-8-10-11-12-13				
Ameco					
2949 W Osborn Rd Phoenix Ariz	11-12				
American Electric Fusion Corp					
2600 Diversey Ave Chicago 47 Ill	23				
American Electronic Laboratories					
121 N 7 St Philadelphia 6 Pa	3-6-12				
American Gyro Corp					
3030 Nebraska Ave Santa Monica Calif	22				
American Instrument Co					
8030 Georgia Ave Silver Spring Md	4-11				
American Machine & Foundry Co Defense					
Products Group 1101 N Royal St					
Alexandria Va	2-3-4-7-8-10				
American Microwave Corp					
11754 Vose St N Hollywood Calif	4-7				
American Rectifier Corp					
95 Lafayette St New York 13 NY	3-6-9-11				
American Research & Mfg Corp					
920 Halpine Ave					
Rockville Md	4-6-8-11-12-13				
American Television & Radio Co					
300 E 4 St					
St Paul 1 Minn	1-3-6-8-9-17-18-20-22-25				
American Transformer Co.					
Div Standard Electronics					
285 Emmett St Newark 5 NJ	4-6-11-21				
Ampex Corp					
934 Charter St Redwood City Calif	11				
AMP Inc Chemical Dielectrics Div					
155 Park St Elizabethtown Pa	3-4-11-12				
Amtron Corp					
17 Felton St Waltham 54 Mass	12				
Anton Electronic Labs					
1226 Flushing Ave Brooklyn 6 NY	16				
Applegate & Co C J					
1840 24 St Boulder Colo	3-4-6-11-12-24				
Arnold Magnetics Corp					
4615 W Jefferson Blvd					
Los Angeles 16 Calif	18-20				
Arnoux Corp					
11924 W Washington Blvd					
Los Angeles 66 Calif	3-4-6-8-11-13-22				
Askania Regulator Co					
240 E Ontario St Chicago 11 Ill	16-17-20-23				
Assembly Products Inc					
Wilson Mills Rd Chesterland 1 Ohio	3-23-24				
Associated Eng'g Corp					
65 Kent St Brookline 46 Mass	3				
Associated Specialties Co					
1751 Main St Orfield Pa	11				
Atlantic Research Corp					
901 N Columbus St Alexandria Va	3-11				
Atlas Eng'g Co					
176 Blue Hill Ave Roxbury 19 Mass	1-3-4-8-11				
Authorized Mfrs Service Co					
919 Wycokoff Ave Brooklyn 27 NY	1-3-6-12-13				
Automatic Electric Co					
1033 W Van Buren St Chicago 7 Ill	3-6				
Autonetics Div North American Aviation					
9150 E Imperial Hwy Downey Calif	4				
Avion Div ACF Industries Inc					
11 Park Pl Paramus NJ	1-2-3-11-12-13-16				
Avionics Ltd					
P O Box 200					
Niagara-on-the-Lake Ont Canada	5-7-13				
Avtron Mfg Inc					
10409 Meech Ave Cleveland 5 Ohio	12				
Axler Associates Inc					
102-42 43 Ave Corona 68 NY	1-3-11				
Baird-Atomic Inc					
114 S University Rd Cambridge 38 Mass	4				
Barker & Williamson Inc					
Canal & Beaver Sta Bristol Pa	14				
Barnes Development Co					
213 W Baltimore Pike Lansdowne Pa	15				
Beckman/Heliport Corp					
Newport Beach Calif	24				
Beckman/Berkeley Div Beckman					
Instruments Inc					
2200 Wright Ave Richmond 3 Calif	2				
Beckman Instruments Inc Data & Control					
Systems Scientific Instrument Div					
325 N Muller Ave Anaheim Calif	1-2-3				
Behlman Eng'g Co					
114 S Hollywood Way					
Burbank Calif	1-11-12-14				
Bell Aircraft Corp					
P O Box 1					
1-2-3-4-5-6-7-8-9-10-11					
Buffalo 6 NY	12-13-14-17-18				
Belock Instrument Corp					
111-01 14 Ave College Point 56 NY	1-2-3				
Bendix Aviation Corp Bendix Radio Div					
East Joppa Rd					
Towson 4 Md	1-3-4-5-6-7-8-9-10-11-12				
Bendix Aviation Corp					
1104 Fisher Bldg Detroit 2 Mich	17-22				
Bendix Aviation Corp Red Bank Div					
Eatontown NJ	1-3-6-13-14-17-18-19-20-22-24				
Berkshire Labs					
586 Bank Village Greenville NH	11-12-13-24				
Beta Electric Div Sorensen Co					
333 E 103 St New York 29 NY	3-4-11-12				
Beva Laboratory					
1640 N Olden Ave Ext Trenton 8 NJ	4				
B J Electronics Borg-Warner Corp					
3300 Newport Ave Santa Ana Calif	4-11				
Bogue Electric Mfg Co					
Iowa Ave	1-2-3-4-6-8-9-11-12-13-14				
Paterson 3 NJ	16-17-18-19-20-22-23-24				
Bolton Labs Inc					
W Main St Bolton Mass	7-10-11				
Booth Co Arthur E					
265 S Alexandria Ave					
Los Angeles 4 Calif	1-3-6-12-14				
Bristol Co					
P O Box 1790 EITT					
Waterbury 20 Conn	15-17-18-22				
Browning Labs Inc					
750 Main St Winchester Mass	5				
Brunswick Instruments					
P O Box 813 New Brunswick NJ	18				
Buck Eng'g Co					
37 Marey St Freehold NJ	1-2				
Bundy Electronics Corp					
171 Fabyan Pl Newark 12 NJ	6				
Buss-Clement-Doughton & Associates					
201 B Studio Hill Chester Springs Pa	12				
Caledonia Electronics & Transformer Corp					
P O Box 298 Caledonia NY	4				
Calif Magnetic Control Corp					
11922 Valerio St	1-2-4-6-8-9-10				
N Hollywood Calif	11-12-13-20				
Calif Technical Industries					
1421 Old Court Rd Belmont 10 Calif	7				
Camera Equipment Co					
315 W 43 St New York 36 NY	8				
Canadian Aviation Electronics Ltd					
6214 Cote de Liesse Rd					
St Laurent Quebec Canada	13				
Canoga Corp					
5955 Sepulveda Blvd Van Nuys Calif	10				
Capitol Transcription Service					

Christie Electric Corp 3410 W 67 St Los Angeles 43 Calif	3-6-9-11-17	Electronic Assembly 5 Prescott St Roxbury 19 Mass	1-3-6-8-12-13	Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	12
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London SE 26 England	11-24	Electronic Communication Equipment Co 1249 W Loyola Ave Chicago 26 Ill	3	Hammer Electronics Co Princeton NJ	3-4-6-11-12
Clark Controller Co 1146 E 162 St Cleveland 10 Ohio	16-24	Electronic Contractors Inc 2101 SE 6 Ave Portland 14 Ore	2	Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	3
Clegg Labs Div Clegg Inc Rigdale Ave Morristown NJ	3-4-5-7-11-12	Electronic Instrument Co 84 Withers St Brooklyn 11 NY	17	Harrison Labs 45 Industrial Rd Berkeley Heights NJ	2-3-6-8-10-11-12-13-23
Collins Electronics Mfg Corp Stevensville Md	3-15-25	Electronic Measurements Co Lewis St & Maple Ave Eatontown NJ	3-4-5-6-7-8-10-11-12-13-17-23-24	Harris Transducer Corp Woodbury Conn	26
Collins Radio Co 855 35 St N E Cedar Rapids Iowa	1-3-13	Electronic Measurements Corp 625 Broadway New York 12 NY	3	Harvey-Wells Electronics Inc North St Southbridge Mass	3-9
Colorado Research Corp 4697 E Evans Ave Denver 22 Colo	2-12	Electronic Research Associates 67 E Centre St Nutley 10 NJ	3-6-9-11-13-20-22-23	Hathaway Instrument Div Hamilton Watch Co 5800 E Jewell Ave Denver 22 Colo	1-3
Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo	3-8-16-20-24	Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	1-3-8-16-17-18-22-24	Heath Co 305 Territorial Rd Benton Harbor Mich	2-3-6-9-11-13
Condenser Products Div New Haven Clock & Watch Co 140 Hamilton St New Haven 4 Conn	2-3-4-6-8-10-11-12	Electro-Physics Co 287 Broadway New York 7 NY	24	Hett Associates 603 Grand Ave Englewood NJ	4
Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	6-11-12	Electro Products Labs Inc 4501 N Ravenswood Ave Chicago 40 Ill	3	Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	3-5-11
Consolidated Avionics Corp 66 Brooklyn Ave Westbury NY	1-2-12-14-16-17	Electrosolids Corp 7436 Varna Ave N Hollywood Calif	1-3-12-13-17-18-22	Hewson Co 443 Broad St Newark 2 NJ	3-4
Consolidated Electrodynamics Corp 300 N Sierra Madre Villa Pasadena Calif	3-12	Electro-Technical Labs Div Mandrel Industries 5134 Glenmont Houston Texas	3	Highland Eng'g Co 90 Magnolia St Westbury NY	2-3-6-10-12-13
Continental Electric Co 325 Ferry St Newark 5 NJ	1-3-12-18-22	El-Tronics Inc Penn Ave Mayfield Pa	2-4	Hobart Bros Hobart Square E Troy 3 Ohio	1-3-17-18-19
Continental Electronics Mfg Co 4212 S Buckner Blvd Dallas 27 Texas	4-5-7-10	Empire Devices Products Corp 38-15 Bell Blvd Bayside 61 NY	12-14	Hoffman Electronics Corp 3761 S Hill St Los Angeles 7 Calif	24
Continental X-Ray Corp 1536 N Clybourn Ave Chicago 10 Ill	4	Endeco Eng'g Development Co of Los Angeles 922 E Anaheim St Wilmington Calif	13	Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY	1-3-4-6-8-9-10-11-12
Cornell-Dubilier Electric Corp 333 Hamilton Blvd S Plainfield NJ	7-9-11-12-17-18-22-25	Endevco Corp 161 E California St Pasadena Calif	3	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	2-3-8-12-13
Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wis	16-24	Engineered Electronics Co 506 E 1 St Santa Ana Calif	3-11-12	I-L-S Instrument Corp 4525 W 160 St Cleveland 11 Ohio	3-11-19
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	26	Engineered Magnetics Div Gulton Industries Inc 13030 Cerise Ave Hawthorne Calif	2-3-6-8-12-13-16-17-18-24	Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY	4
Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	1-2-3-4-5-6-8-11-12-13	Engineering Associates 434 Patterson Rd Dayton 9 Ohio	5-11-12-14	Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 23 Md	1-2-3-4-6-7-8-11-12-19
Dearborn Electronic Labs Inc 1421 N Wells St Chicago 10 Ill	4-6-12	Essex Electronics 550 Springfield Ave Berkeley Heights NJ	4	Industrial Test Equipment Co 55 E 11 St New York 3 NY	3-6-11-15
Del Electronics Corp 41 N MacQuesten Pkwy Mt Vernon NY	1-3-4-12	Exide Industrial Div Electrical Storage Battery Co 42 S 15 St Philadelphia 2 Pa	16	Industrial TV Inc 369 Lexington Ave Clifton NJ	11
Deltron Inc 2905 N Leithgow St Philadelphia 33 Pa	2-3-6-11-12	Fansteel Metallurgical Corp 2200 Sheridan Rd N Chicago Ill	3	Industronics P O Box 424 Arlington Hts Ill	14
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	5-7	Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY	3	Instrument Development Labs Inc 67 Mechanic St Attleboro Mass	17-18
Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wis	12	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	24	International Business Machines Corp 590 Madison Ave New York 23 N Y	2
Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	3	Filtron Co 131-15 Fowler Ave Flushing 55 NY	3-5-10	International Research Associates 2221 Warwick Ave Santa Monica Calif	1-3-8-11-12-13-14-19-22
Douglas Radio Labs 176 Norfolk Ave Boston 19 Mass	11	Fischer & Co R A 517 Commercial St Glendale 3 Calif	25-26	Jack & Heintz Inc 17600 Broadway Cleveland 1 Ohio	22-24
Downing Crystal Co 191 Shaffer Ave Westminster Md	15	Fluke Mfg Co John 1111 W Nickerson St Seattle 99 Wash	3-4-6-11	Jack Scientific Instrument Co Bill 143 Cedros St Solana Beach Calif	3
D & R Ltd 402 E Gutierrez St Santa Barbara Calif	19	Fox Products Co 4720 N 18 St Philadelphia 41 Pa	3-12	James Vibrapowr Co 4050 N Rockwell St Chicago 18 Ill	3-9-15-17-18-25
Dressen-Barnes Corp 260 N Vinedo Ave Pasadena Calif	2-3-4-6-7-9-10-11-12-13	F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	3-5-7	Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	3-11-12
Dresser Electric Co 942 E Larned Detroit 7 Mich	3	Garrett Corp AirResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif	12-17-18-22	Kahn & Co 641 Windsor St Hartford 1 Conn	3
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	4-6-24	Gates Electronic Co 2090 Barnes Ave Bronx 62 NY	3-6	Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	3-4-6-7-8-10-11-12-13
Dunlap Electronics 764 9 St Des Moines 14 Iowa	3	Gates Radio Co 123 Hampshire St Quincy Ill	3-4-6-11-16	Kato Eng'g Co 1415 1 Ave Mankato Minn	1-3-4-6-9-14-17-18-19-20-22
Dynalysis Development Labs Inc 11941 Wilshire Blvd Los Angeles 25 Calif	11-12-16	General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY	8-12	Katolight Corp Box 891 Mankato Minn	1-3-7-9-14-17-18
Dynamics Instrumentation Co Div Alberhill Corp 1118 Mission St S Pasadena Calif	2-3-6-11-12-13-23-24	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	1-3-16-19-22-24	Katolight Corp 1415 1 Ave Mankato Minn	1-3-4-6-9-14-17-18-19-20-22
Dynamics Research Associates Div Universal Match Corp P O Box 5341 Ferguson 21 Mo	1-3-11-16-17-18-19	General Magnetics Inc 135 Bloomfield Ave Bloomfield NJ	20-23-24	Kintel (Kay Lab) 5725 Kearny Villa Rd San Diego 12 Calif	3-11
Eagle-Picher Co American Bldg Parkway & Walnut Cincinnati 2 Ohio	3	General Nuclear Corp 550 5 Ave New York 32 NY	3-6-11-12	Kenyon Transformer Co 840 Barry St New York 59 NY	24
Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	2-3-4-5-6-8-10-11-12-13	General Photo Products Co 15 Summit Ave Chatham NJ	3-4-12	Kepeco Labs 131-38 Sanford Ave Flushing NY	1-2-3-4-5-6-7-8-9-10-11-12-13-14-16-20-22-23-24
Eberline Instrument Div Reynolds Electrical 805 Early St Santa Fe N Mex	4-6-8-13	General Precision Lab Inc 63 Bedford Rd Pleasantville NY	3-4-11	Keystone Products Co 904 23 St Union City NJ	1-3
Edko Electronics Eng'g Co 202 Grand St Brooklyn 11 NY	1-2-3-4-6-8-9-10-11-12	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	1-3-5-6-11-16	Kinney Mfg Div Vacuum Equip Div NY Air Brake Co 3529 Washington St Boston 30 Mass	1
Eicor Inc 4235 W North Ave Chicago 39 Ill	1-3-6-9-11-12-13-18-19-22	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	4-11-16-24	Krohn-Hite Corp 580 Massachusetts Ave Cambridge 39 Mass	3-11-12
Eicor Inc P O Box 354 McLean Va	3-8-11-12	Gotham Audio Development Corp 2 W 46 St New York 36 NY	12-14	Kurman Electric Co 191 Newel St Brooklyn 22 NY	25
Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	1-3-6-9-12	GPS Instrument Co 811 Boylston St Boston 16 Mass	2-3-11	Lab Corp E Onondaga Skaneateles NY	25
Electric Regulator Corp Pearl St Norwalk Conn	1-3-6-9-13-16-22	Great Lakes Electric Mfg Co 17 S Desplaines St Chicago 6 Ill	18	Lambda Electronics Corp 11-11 131 St College Point 56 NY	2-3-4-5-6-7-8-9-10-11-12-13
Electric Specialty Co 211 South St Stamford 1 Conn	1-3-4-6-9-10-11-14	Guild Electronics Inc 388 Broadway New York 13 NY	4-12-13	Lambda-Pacific Eng'g Inc 14725 Arminta St Van Nuys Calif	7
Electro Eng'g Works 401 Preda St San Leandro Calif	3-5-7-24	Gulton Industries Inc 212 Durham Ave Metuchen NJ	3-8	Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	3-4-6-7-8-11-12-13
		Gyro Electronics Co 325 Canal St New York 13 NY	1-3-6-8-12-13-17-18	Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill	8
		Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	2-3-11	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	1-3-4-6-8-9-10-12-13-15-22-24
		Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	1-3-6-11-12-17-18-22	Lawn Electronics Co E Freehold Rd Freehold NJ	2-3-5-6-8-10-11-12-22
		Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	2-3-11		

Leach Corp Inet-Palmer Div 4441 S Santa Fe Ave Los Angeles 58 Calif	1-2-3-4-9-10-11-12 14-16-17-18-20		
Learn Inc 3171 S Bundy Drive Santa Monica Calif	1-3-7-8-11-12-13-17-18		
Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	11		
Lee Electric Inc 566 52 St W New York NJ	24		
Lee Electric & Mfg Co 2806 Clearwater St Los Angeles 39 Calif	3-6-9-11-12		
L. E. E. Inc 625 NY Ave NW Washington 1 DC	3-11		
Lehigh Valley Electronics Eng'g & Mfg Co 215 S 3 St Allentown Pa	6		
Leland Electric Co Division American Machine & Foundry Co 1501 Webster St Dayton 1 Ohio	1-3-12-17-18-22		
Levinthal Electronic Products Inc 3180 Hanover St Palo Alto Calif	3-4-5-7-10-11-12		
Librascope Inc Commercial Div 133 E Santa Anita Ave Burbank Calif	12		
Ling Electronics Inc 5120 W Jefferson Blvd Los Angeles 16 Calif	25		
Linlar Inc 4101 San Fernando Rd Glendale 4 Calif	22		
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	1-8-11-12-14		
Lysco Mfg Co 1401 Clinton St Hoboken NJ	1-3-6-9-12		
Lytic Eng'g & Mfg Co 1404 San Mateo Blvd SE Albuquerque New Mex	8		
McDowell Electronics Inc 105 Forrest St Metuchen NJ	3-4-6-12		
Macarr Inc 2543 Boston Rd New York 67 NY	3-6		
Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	2-12-22		
Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	1-2-3-6-11-13-16-23-24		
Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif	2-3-6-8-11-18-21		
Majestic Int'l Corp 79 Washington St Brooklyn 1 NY	11		
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	3-25		
Manson Laboratories Inc 207 Greenwich Ave Stamford Conn	1-3-4-5-7-9-10-11-12		
Matthew Labs 146 Riverdale Ave Yonkers NY	3-4-6-11-12-13-23		
Maxson Instruments Div W L Maxson Corp 47-37 Austen Pl Long Island City 1 NY	16-24		
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	3-11-12		
Melco Products Inc 301 S Ave S Minneapolis 15 Minn	2-3-4-5-6-7-8-10-11-12-13		
Mercury Electronic Co Box 450 B Red Bank NJ	1-2-3-6-7-8-9-10-11-12 13-14-17-18-19-20-24		
Microtan Co 145 E Mineola Ave Valley Stream NY	24		
Microwave Associates Inc Burlington Mass	18		
Mid-Century Instrumental Corp 611 Broadway New York 12 NY	2-3-11		
Milgo Electronic Corp 7601 N W 37 Ave Miami 47 Fla	2-3		
Millen Mfg Co James 150 Exchange St Malden 48 Mass	3-4		
Miller Co Sanford 691 Bedford Ave Brooklyn 6 NY	3-6		
Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	3-8-13-16-17-18-22-24		
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	12-15		
Missileonics Inc P O Box 716 Melbourne Fla	12		
Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	1-2-9-12		
Model Rectifier Corp 1065 Utica Ave Brooklyn 3 NY	2-3-6-12-13-17-22		
Modern Industries Inc 2601 Colorado Ave Santa Monica Calif	1-2-3-4-6-8-10-11-12 12-16-17-18-20-22-24		
Motigraph Inc 444 W Lake St Chicago 24 Ill	1-3		
Motoresearch Co 1600 Junction Ave Racine Wis	1-3-6-11-12		
Multi-Amp Corp 465 Lehigh Ave Union NJ	1-3-4-6-9-12-13		
Multi-Products Co 21470 Coolidge Hwy Oak Park 37 Mich	6		
Nader Mfg Co 2661 S Myrtle Ave Monrovia Calif	13		
National Aircraft Corp 3411 Tulare Ave Burbank Calif	1-2-3-4-5-6-8-10-11-12- 13-14-17-18-19-23-24		
National Capacitor Co 18 Webster St Brookline 46 Mass	3-4-6-12		
National Radiac Inc 475 Washington St Newark 2 NJ	3-11		
Navco Navigation Computer Corp 1621 Snyder Ave Philadelphia 45 Pa	2-6-8-11-13		
Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	8		
Network Mfg Corp 213 W 5 St Bayonne NJ	1-3-4-6		
Networks Electronics Corp 14806 Oxnard St Van Nuys Calif	24		
Neutronic Associates 87-16 116 St Richmond Hill 18 NY	3-4-11-12		
Nevada Air Products Co P O Box 2472 Reno Nev	26		
New York Transformer Co 3 Ave Alpha NJ	1-3		
N J E Corp 345 Carnegie Ave Kenilworth NJ	1-2-3-4-5-6-8-9-10-11-12 13-14-17-18-19-20-23-24		
Non-Linear Systems Inc Del Mar Airport Del Mar Calif	12-17		
Norma Hoffmann Bearings Corp Walker Div Hamilton Ave Stanford Conn	1-2-3-4-9-11-12		
North American Instruments Inc 2420 N Lake St Altadena Calif	12-13		
Northeast Scientific Corp 617 Concord Ave Cambridge 38 Mass	2-3-4-5-6-11-12		
North Electric Co 553 S Market St Galion Ohio	1-3-6		
North Hills Electric Co 402 Sagamore Ave Mineola LI NY	2-3-4-6-7-11-23		
Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	3-11-12-14		
Oak Mfg Co 1260 N Clybourn Ave Chicago 10 Ill	15-25		
Oltronic Corp 285 Underwood Dr Atlanta 5 Ga	3-4-5-11-12		
Onan & Sons D W 2515 University Ave S E Minneapolis 14 Minn	1-3-9-10-11-12		
Oregon Electronic Mfg Co 2105 S E 6 Ave Portland 14 Ore	2-3-4-6-11-12-13-14		
Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	4-6-8-9-10-11-12		
Owen Labs Inc 55 Beacon Pl Pasadena Calif	3-6-11-12		
Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	2-8-11-24		
Peerless Electrical Products 1515 S Manchester Ave Anaheim Calif	4		
Pegasus Labs Inc 3690 W 11 Mile Rd Berkley Mich	12		
Perkin Eng'g Corp 345 Kansas St El Segundo Calif	1-2-3-10-11		
Perma-Power Co 3102 N Elston Ave Chicago 18 Ill	3		
Permotux Products Co 4101 San Fernando Rd Glendale 4 Calif	1-3-4-6-8-9-11- 12-13-17-18-22		
Peschel Electronics Inc 13 Garden St New Rochelle NY	1-2-3-4-5-6-7 8-9-10-11-12		
Philbrick Researches Inc George A 230 Congress St Boston 10 Mass	2-3-11		
Phoenix Precision Instrument Co 3803 N 5 St Philadelphia 40 Pa	4		
Pioneer Gen-E-Motor Corp 5841 W Dickens Ave Chicago 39 Ill	1-3-9-11		
Plastic Capacitors Inc 2620 N Clybourn Ave Chicago 14 Ill	3-4-6-7-8-11-12-14		
Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	3-4-5-7		
Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	3-5-7-11		
Polytron Eng'g Inc P O Box 5024 Middle River 20 Md	13		
Potter Aeronautical Corp P O Box 532 Union NJ	19		
Power Designs Inc 89-25 130 St Richmond Hill 18 NY	2-3-4-5-6-8-11-12-13		
Power Sources Inc 6 Schouler Ct Arlington 74 Mass	13-18-20		
Power Supplies Inc 1005 Olive St Highland Ill	1-2-3-4-6-7-8-9-10-11-12-14		
Power Transformer Co 91 Edison Pl Newark 5 NJ	1-3-4-6-11-12-17		
Pratt Albert 114 W Lake View Ave Milwaukee 17 Wis	9		
Precise Development Corp 2 Neil Ct Oceanside NY	1-3-4-6-11-12		
Pressman Associates 7803 Farnsworth St Philadelphia 15 Pa	11-13		
Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	4		
Production Research Corp Thornwood NY	2-3-4-5-6-8-10-11-12-13-21		
PSC Applied Research Ltd 1500 O'Connor Dr Toronto 16 Canada	3		
Pye Canada Ltd 82 Northline Rd Toronto 16 Ont Canada	9-11		
Pye Telecommunications Ltd Newmarket Rd Cambridge England	16		
Quantum Electronics Inc 2312 Wisconsin St NE Albuquerque N Mex	3-11-12-17-18-22		
Quarè Associates Canton Mass	17-18		
Racon Electric Co 1261 Broadway New York 1 NY	26		
Radiart Corp 3455 Vega Ave Cleveland 13 Ohio	17-18-20-25		
Radiation Counter Labs Inc 5121 W Grove St Skokie Ill	4		
Radiation Instrument Co P O Box 733 Silver Spring Md	4		
Radio City Products Co Centre & Glendale Sts Easton Pa	3		
Radio Corp of America Commercial Electronic Products Camden 2 NJ	2-3-4 6-11		
Radio Eng'g Co 8 State St New York 4 NY	12		
Radionics Inc P O Box 186 Cockeysville Md	1-3-4-6-11-12-13-14		
Ram Electronics Inc 600 Industrial Ave Paramus NJ	4		
Ramo-Woolbridge Corp 5730 Arbor Vitae St Los Angeles 45 Calif	3-8-13		
Rangertone Inc 73 Winthrop St Newark 4 NJ	22		
Ransom Research 323 W 7 St San Pedro Calif	2-3-6-8-11-12-13-15-16		
Rapid Electric Co 2881 Middletown Rd Bronx 61 NY	3-11		
Rayco Electronic Mfg Inc 11116 Cumpston St N Hollywood Calif	17-18		
Raypar Inc 7800 W Addison St Chicago 34 Ill	24		
Raytheon Mfg Co 100 River St Waltham 54 Mass	24		
Redmond Co Owosso Mich	22		
Reed & Reese Inc 717 N Lake Ave Pasadena 6 Calif	1-8		
Reeves Instrument Corp 215 E 91 St New York 28 NY	2-3		
Reflectone Corp Boston Post Rd Stamford Conn	1-3-11-14		
Reliance Electric & Eng'g Co 24701 Euclid Ave Cleveland 17 Ohio	1-3-16-24		
Research Electronics Lab Roslyn Pa	3-4		
Research Specialties Co 2005 Hopkins St Berkeley 7 Calif	11		
Rheem Mfg Co Electronics Div 7777 Industry Ave Rivera Calif	1-3-4-6 11-13-24		
Riverbank Labs Eng'g Dept P O Box 65 Geneva Ill	12-14		
Rixon Electronics Inc 2414 Reedie Dr Silver Spring Md	2-6-13-23		
Robbins & Myers Inc 1345 Lagonda Ave Springfield Ohio	19		
RS Electronics Corp 435 Portage Ave Palo Alto Calif	3-6-8-10-11-12-13-17		
Sangamo Electric Co Springfield Ill	1-3-4-6-8-9 10-12-13-18-20		
Saratoga Industries Congress & Ballston Aves Saratoga Springs NY	11-23-24		
Schauer Mfg Corp 4501 Alpine Ave Rossmoynne Ohio	8		
Schulmerich Electronics Inc Sellersville Pa	1-3		
Scientific Electric 105 Monroe St Garfield NJ	1-3-4-6-11-12-14		
Sel-Rex Corp 155 Manchester Pl Newark 4 NJ	3-4-6-11-17-20		
Seneca Falls Machine Co 314 Fall St Seneca Falls NY	8		
Service Instruments Corp 171 Official Rd Addison Ill	3-6		
Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	2-4-19		
Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	2		
Servo-Recording Instruments Inc 1815 W Van Buren St Phoenix Ariz	4-12		
Servo-Tek Products Co 1086 Gottle Rd Hawthorne NJ	3-6-11-16-17-24		
Shasta Div Beckman Instruments Inc P O Box 296 Station A Richmond Calif	3-6-11		
Shepard Labs Inc 480 Morris Ave Summit NJ	1-2-3-11-14		
Sheppard Co E H 101 Philadelphia St Hanover Pa	9-10		
Signalite Inc 37 Neptune Hwy Neptune NJ	24		
Simplatrol Products Corp 24 Salisbury St Worcester 5 Mass	17		
Simpson Mfg Co Mark 32-28 49 St Long Island City 3 NY	18		
Skysweeper Inc P O Box 92 McHenry Ill	1-2-3-4-6-8-12		
Slaughter Co Young & College Sts Piqua 9 Ohio	1-3-4-6-12		
Sola Electric Co 4633 W 16 St Chicago 50 Ill	2-11-12-24		
Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	2-3-5-6-8-9-11-12		

Sonex Inc 73 S State Rd Upper Darby Pa	3-6-12-13	Vectron Inc 1611 Trapelo Rd Waltham 54 Mass	1-5-7-11	Alden Products Co 123A N Main St Brockton Mass	11-16
Sorensen & Co Stamford Conn	9	Vibration Research Labs 97 Lake Ave Tuckahoe NY	1-3-4-6-15-22-25	Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis	18-21
Sorensen & Co. Richards Ave Norwalk Conn	1-2-3-4-6-8-11-12 13-14-19-24	Victoreen Instrument Co 5806 Hough Ave Cleveland 3 Ohio	24	Allied Allegri Co 141 River Rd Nutley 10 NJ	4-5-6-7-8-16-20
Specialty Eng'g electronics Co 79 Clifton Pl Brooklyn 38 NY	11-24	Virginia Electronics Co River Rd & B&O RR Washington 16 DC	3-4-6-9-11-12	Allied Engraving & Stamping Co 17 Elm St Buffalo 3 NY	8
Specific Electronics 570 W Woodbury Rd Altadena Calif	6-8-12	Vokar Corp 7300 Huron River Dr Dexter Mich	25	Alpha Metals Inc 56 Water St Jersey City 4 NJ	12
Spellman TV Co 3029 Webster Ave New York 67 NY	3-4-6-8-11-26	Voron & Co George 835 N 19 St Philadelphia 30 Pa	3-11-12	Alto Scientific Co 855 Commercial St Palo Alto Calif	16
Sperry Gyroscope Co. Div Sperry Rand Corp Great Neck NY	5-7	Wacline Inc 35 S St Clair St Dayton 2 Ohio	12-14-24	Alwac Corp 13040 S Cerise Hawthorne Calif	4-7-16
Spivey Inc James S 4908 Hampden Lane Washington 14 DC	1-12	Waco Inc 2032 Broadway Santa Monica Calif	6-12	Amelco Inc 2040 Colo Ave Santa Monica Calif	20
Standard Electric Time Co 89 Logan St Springfield 2 Mass	3	Wallson Associates Ltd 963 Frelinghuysen Ave Newark 12 NJ	1-2-3-4-5-6-11-12-13-24	American Condenser Corp 4410 N Ravenswood Ave Chicago 40 Ill	1
Standard Electrical Products Co 2240 E 3 St Dayton 3 Ohio	12-24	Warren Mfg Co Newton Rd Littleton Mass	11-13-16-23-24	American Electronic Laboratories 121 N 7 St Philadelphia 6 Pa	13
Standard Electronics Div Radio Eng'g Labs 30th & Borden Sts Long Island City NY	1-3-4-5-6-11-12-24	Wave Particle Corp P O Box 252 Menlo Park Calif	7-11-12	American Printed Circuits Co 104 Forrest St Metuchen NJ	5-7-11
Stelma Inc 190 Henry St Stamford Conn	11-21	Weltron Co 19500 W 8 Mile Rd Detroit 19 Mich	24	Amphenol Electronics Corp 1830 S 54 Ave Chicago 50 Ill	9
Stevens-Arnold Inc 7 Elkins St South Boston 27 Mass	15-18	Westbury Electronics Inc 200 Shames Dr Westbury NY	11-12	AMP Inc Harrisburg Pa	15
Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-2-3-4-5-7-8-10-13-14	West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	2-3-4-6-8-12-13	AMP Inc Chemical Dielectrics Div 155 Park St Elizabethtown Pa	15
Strong Electric Corp 87 City Park Ave Toledo 1 Ohio	3-6	Western Gear Corp Electro Products Div 132 W Colorado St Pasadena 1 Calif	1-3-8-22-24	Anderson & Sons N Elm St Westfield Mass	4-7-22
Stow Mfg Co 443 State St Binghamton NY	25	Westinghouse Electric Corp P O Box 863 Pittsburgh 30 Pa	17-18	Andrew Corp 363 E 75 St Chicago 19 Ill	13
Superior Electric Co 83 Laurel St Bristol Conn	1-3-6-11-16-24	Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn	12	Ansley Mfr Co Arthur New Hope Pa	4-5-7-16
Sylvania Electronic Products Inc 1740 Broadway New York 19 NY	5	White Electron Devices Inc Roger 92 4 Ave Haskell NJ	7-12	Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	9-23
Systron Corp 2055 Concord Blvd Concord Calif	20	Wickes Eng'g & Construction Co 12 St & Ferry Ave Camden 4 NJ	3-11	Applegate & Co CJ 1840 24 St Boulder Colo	6
Tarc Electronics Inc 48 Urban Ave Westbury LI NY	3-1-11-12-23	Wilmar Mfg Co 1110 Truman Rd Kansas City Mo	11	Astron Corp 255 Grant Ave E Newark NJ	1
Tarzian Inc Sarkes E Hillside Drive Bloomington Ind	11	Wincharger Corp E 7 & Division St Sioux City 2 Iowa	1-3-4-6-10-11-17-18-20-22	Automation Components Inc 875 Hickory St Peckville Pa	1
Technical Measurement Corp 140 State St New Haven 11 Conn	4-11	Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	17-18-20	Autron Eng'g Inc 1254 W 6 St Los Angeles 17 Calif	16
Telemeter Mfg Corp 23 Ranick Dr Amityville LI NY	1-3-4-6-11-12-16-23	Winpower Mfg Co Newton Iowa	1-3-11-12	Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	4-6-7
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	1-2-3-6-7-8-9-10 11-12-13-14	68—PRINTED CIRCUITS			
Tele-Dynamics Inc 32 & Walnut Sts Philadelphia 4 Pa	12	Capacitors, fixed	1	Baird-Atomic Inc 33 University Rd Cambridge 38 Mass	16
Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif	20	Capacitors, variable	2	Baker & Co 113 Astor St Newark 2 NJ	12
Telephonics Corp Park Ave Huntington LI NY	10	Capacitors, embossed	3	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	13-14
Teletronics Lab Inc 54 Kinkel St Westbury NY	3-11-12-13	Circuits, etched	4	Bart Mfg Corp 227 Main St Belleville NJ	5
Telkor Inc N Murray Ridge Rd Elyria Ohio	1-3-6-11-12-17-18-19-22	Circuits, plated	5	Bead Chain Mfg Co 110 Mountain Grove St Bridgeport 5 Conn	17
Tel-Instrument Electronics Corp 728 Garden St Carlstadt NJ	14-19	Circuits, potted	6	Beck's Inc 298 E 5 St St Paul 1 Minn	3-4-5-6-7-11-16
Terado Co 1068 Raymond Ave St Paul 14 Minn	18-20	Circuits, printed	7	Bel Fuse Inc 311 Mountain Rd Union City NJ	10
Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	13-22	Circuits, stamped	8	Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	7-16
Texas Instruments Inc Industrial Instrumentation Div 3609 Buffalo Speedway Houston 6 Texas	13	Connectors	9	Berg Mfg Corp 142 Reno St New Cumberland Pa	9
Textran Corp Box 4252 Austin 51 Texas	12	Delay lines	10	Berkshire Labs 586 Bank Village Greenville NH	6-16
TKM Electric Corp 1160 University Ave Rochester 7 NY	18-22	Laminates, copper	11	Bestcraft Products Co 626 Broadway New York 12 NY	22
Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass	3-12	Metal clad sheets	12	Bios Labs Inc 17 W 60 St New York 23 NY	12
Trans Electronics Inc 7349 Canoga Ave Canoga Park Calif	1-3-6-9-11-12-13-14	Networks, directional antenna phasing	13	Blonder-Tongue Laboratories 9-25 Alling St Newark 2 NJ	14
Transformer Technicians Inc 2608 N Cicero Ave Chicago 39 Ill	1-3-4-6	Networks, matching	14	Bolling Industries Inc 1117 N Main Ave P O Box 981 Scranton 2 Pa	22
Transitron Electronic Corp 168 Albion St Wakefield Mass	24	Networks, pulse forming	15	Bond Electronics Corp 60 Springfield Ave Springfield NJ	21
Transonic Inc 808 16 St Bakersfield Calif	2-3-6-15	Plug-in circuit units	16	Bradford Components Inc 33-35 Bishop St Bradford Pa	21
Transval Eng'g Corp 10401 W Jefferson Blvd Culver City Calif	4-6-8-11-13	Plugs	17	Bram Chemical Co Metals & Minerals Div 820 65 Ave Philadelphia 26 Pa	12
Trott Electronics Inc 412 Smith St Rochester 6 NY	3-6-8-11-12-13	Potentiometers	18	Briggs Associates 10 DeKalb St Norristown Pa	7
Underwood Corp Electronic Computer Div 35-10 36 Ave Long Island City 6 NY	2	Printed circuit equipment	19	Brubaker Electronics Inc 3652 Eastham Dr Culver City Calif	15
United Electrodynamics 1200 S Marengo Ave Pasadena Calif	8-11-13-17-18	Printed circuit soldering equipment	20	Buffalo Electronics Corp 37 Franklin St Buffalo 2 NY	16
United Transformer Corp 150 Varick St New York 13 NY	23-21	Resistors	21	Buggie Inc H H P O Box 817 Toledo 1 Ohio	9-17
Universal Atomics Corp 50 Bond St Westbury LI NY	1-2-3-4-6-7-8-9-10-11-12 13-14-17-18-19-22	Silk screen processing	22	Burnell & Co 45 Warburton Ave Yonkers NY	10
Universal Electronics Co 1720 22 St Santa Monica Calif	3-6-11	Sockets	23	Burroughs Corp 6071 2 Ave Detroit 32 Mich	7
U S Dynamics Corp 1250 Columbus Ave Boston 20 Mass	2-3-4-6-7-8-9-11-12-13-23-24	Accurate Electronics Corp 169 S Abbe Rd W Elyria Ohio	16	Cal-Met Electronics 5860 Spring Oak Dr Hollywood 28 Calif	9
U S Instrument Corp P O Box 33E Charlottesville Va	3-6	Acoustica Associates Shore Rd Glenwood Landing LI NY	20	Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif	9
Varian Associates 611 Hansen Way Palo Alto Calif	11	Adcola Products Ltd Gauden Rd Clapham High St London S W 4 England	20	Cannon Electric Co Eastern Div Pingree & Leavitt Sts Salem Mass	9
Varo Mfg Co 2201 Walnut St Garland Texas	1-3-6-8-11-12-13-19-22-24	Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	13	Capitol Transcription Service 1120-A Conn Ave NW Washington 6 DC	16
VecTrol Eng'g Inc P O Box 1089 Stamford Conn	3-11-17	Aeronautical Electric Co 5656 Northwest Hwy Chicago 30 Ill	17-23	Carad Corp 2850 Bay Rd Redwood City Calif	15
		Aerovox Corp Pacific Coast Div 2724 S Peck Rd Monrovia Calif	5-6-10	Carnf Co Box 554 Brookhaven Miss	1
		Aerovox Corp 740 Belleville Ave New Bedford Mass	1-3-4-5-7	Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wis	1-7-18-21
		Airflyte Electronics Co 535 Avenue A Bayonne NJ	7-16	Century Plating Co 229 Ferris Ave White Plains NY	7
		Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	22		
		Airtron Inc 1101 W Elizabeth Ave Linden NJ	11		
		Ajax Condenser Co 932 W Wrightwood Ave Chicago 14 Ill	1		

CG Electronics Corp 305 Dallas St NE Albuquerque New Mex	4-5-7	Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY	14-21	Good Electric Corp Natick Mass	16
Chicago Telephone Co of Calif 105 Pasadena Ave S Pasadena Calif	18	Eastman Kodak Co 343 State St Rochester 4 NY	19	Gorn Electric Co Stamford Conn	9
Chicago Telephone Supply Corp 1142 W Beardsley Ave Elkhart Ind	21	Eastman Pacific Co 2320 E 8 St Los Angeles 21 Calif	21	Graphik Circuits Div Cinch Mfg Corp 200 S Turnbull Canyon Rd La Puente Calif	3-4-5-6-7-8-17-19
Cinch Mfg Corp 1026 S Homan Ave Chicago 24 Ill	4-5-7-9-17-23	Eaton Electronics Corp Moodus Conn	4-5-6-7-16	Gremer Mfg Co 7 North Ave Wakefield Mass	9
Circon Component Co Santa Barbara Municipal Airport Goleta Calif	7-9-23	Edcliff Instruments 1711 S Mountain Ave Monrovia Calif	18	Griffin Co John 2157 James Ave St Paul 5 Minn	8
Clarostat Mfg Co Washington St Dover NH	18-21	Elco Corp M St below Erie Ave Philadelphia 24 Pa	9-17-23	Haloid Co Haloid St Rochester 3 NY	19
Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	15	Electralab Inc "A" St Needham Heights 94 Mass	3-4-5-7	Hansen Electronics Co 7117 Santa Monica Blvd Los Angeles 46 Calif	1-4-5-6-7-21
Cleveland Metal Specialties Co 1783 E 21 St Cleveland 14 Ohio	4-5-6-7-23	Electra Mfg Co 4051 Broadway Kansas City Mo	21	Hanson-Gorrill-Brian 85 Hazel St Glen Cove NY	15
Coaxial Connector Co 37 N 2 Ave Mt Vernon NY	9-17	Electrical Specialty Co 158 11 St San Francisco 3 Calif	11-12	Helco Products Corp 7832 Balboa Blvd Van Nuys Calif	18
Coilcraft Inc Cary Ill	16	Electronic Fabricators Inc Efcos Div 682 Broadway New York 12 NY	1	Hexacon Electric Co 161 W Clay Ave Roselle Park NJ	20
Coil Winders Inc New York Ave Westbury LI NY	6-14-15	Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	14-15	Hi-Q Div Aerovox Corp Box 68 Myrtle Beach SC	16-21
Collins Radio Co 855 35 St NE Cedar Rapids Iowa	13	Electron Products Inc 430 N Halstead St Pasadena 8 Calif	1	Holland Electronics 2133 Central Dr S East Meadow NY	14
Colorado Research Corp 4697 E Evans Ave Denver 22 Colo	7	Elektro Serv Co 480 Johnson Ave Brooklyn 37 NY	4-7	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	4-5-6-7-10-19
Columbia Technical Corp 61-02 31 Ave Woodside 77 NY	10	El-Rad Mfg Co 2300 W Cullom Ave Chicago 18 Ill	10-14	Hopkins Eng'g Co 12900 Foothill Blvd San Fernando Calif	1
Communication Accessories Co 110 St & 71 Hwy Hickman Millis Mo	14-15	Emerson & Cuming Inc 869 Washington St Canton 1 Mass	6	Hubbell Inc Harvey State St & Bostwick Ave Bridgeport 2 Conn	17
Condenser Products Div New Haven Clock & Watch Co 140 Hamilton St New Haven 4 Conn	1-15	Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo	7	Hull-Standard Corp Abington Pa	19
Connector Corp 6025 N Keystone Ave Chicago 30 Ill	9	Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ	11	Ideal Industries Inc 5127 Park Ave Sycamore Ill	20
Consolidated Electrodynamics Corp 300 N Sierra Madre Villa Pasadena Calif	4-7	Engineered Electronics Co 506 E 1 St Santa Ana Calif	4-16	Illinois Condenser Co 1616 N Throop St Chicago 22 Ill	1
Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	6	Engineering Enterprises Inc 1200 18 St N W Washington 6 DC	7	Improved Seamless Wire Co 775 Eddy St Providence 5 RI	12
Continental Connector Corp 34-63 56 St Woodside 77 NY	9	Equip-A-Matic Eng'g Corp 6045 W Ogden Ave Chicago 50 Ill	19-20	Industrial Condenser Corp 3243 N California Ave Chicago 18 Ill	1
Continental-Diamond Fibre Corp Newark Dela	11-12	Erie Resistor Corp 644 W 12 St Erie 6 Pa	1-2-3-7-16-17-21	Industrial Hardware Mfg Co 109 Prince St New York 12 NY	23
Condenser Mfrs Inc 1018 Pearl St Nashville Tenn	1	Erikson Specialized Tool Co 4902 S Lexington Rd Pico 1 Calif	20	Insulating Fabricators of NE Inc 69 Grove St Watertown 72 Mass	7-11-12-19-22
Cook Co Frank R 36 S Santa Fe Dr Denver 23 Colo	4	ESC Corp 534 Bergen Blvd Palisades Park NJ	10-15	Insuline Corp of America 186 Granite St Manchester NH	22
Corbett Science Labs F W 3117 Venice Blvd Los Angeles 19 Calif	18	Essex Electronics Div NYT Electronics Inc 7303 Atoll Ave N Hollywood Calif	10	Jackson Electronics Inc 23 Woodcrest Rd West Chester Pa	1-2-21
Cornell-Dubilier Electric Corp 333 Hamilton Blvd E P.ain.eld NJ	1-7-15	Essex Electronics 550 Springfield Ave Berkeley Heights NJ	10-15	Jeffers Electronics Div Speer Carbon Co Du Bois Pa	7-16
Corning Glass Works Corning NY	1-7-21	Etched Products Corp 39-01 Queens Blvd Long Island City 4 NY	4-5-7-8	JFD Mfg Co 6101-16 Ave Brooklyn 4 NY	2
Corson Electric Mfg Corp 540 39 St Union City NJ	15	Farley & Loetscher Mfg Co Plastics Div 7 & White Sts Dubuque Iowa	12	Jodee Plastics Co 213 Shepherd Ave Brooklyn 8 NY	22
Craftint Mfg Co 1615 Collamer Ave Cleveland 10 Ohio	19	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	4-7-8	Johnson Co E F Waseca Minn	13
Croname Inc 3701 Ravenswood Ave Chicago 13 Ill	4-5-7-22	Federal Tool & Mfg Co 3600 Alabama Ave Minneapolis 16 Minn	7-8	Johnson Electronics Inc 521 Elwell St Orlando Fla	10-15
Cudner & O'Connor Co 4035 W Kinzie St Chicago 24 Ill	19	Filtcon Co 10023 W Jefferson Blvd Culver City Calif	15	Johnston Foil Mfg Co 6008 S Broadway St Louis 11 Mo	12
Dale Boisen Co 2928 Nebraska Ave Santa Monica Calif	4-5-6-7-11-12-16	Filtcon Co 131-15 Fowler Ave Flushing 55 NY	15	Jones Electronics Hiram 2313 W Olive St Burbank Calif	4-5-7-17-23
Dale Products Inc Columbus Nebr	5-6-7-14-18-19-21	Fluorocarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ	3-5-7-8-9-11-12-17-23	Keil Eng'g Products Co 4356 Duncan Ave St Louis 10 Mo	4-5-6-7-11
Daven Co Route 10 Livingston NJ	14-15-18-21	Formica Corp 4614 Spring Grove Ave Cincinnati 32 Ohio	7	Kennedy Industries 680-8 Vista del Mar Playa del Rey Calif	9
Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	4-7	Franklin A W 39 Broadway New York 6 NY	19	Labko Scientific Inc 111 W Elm Stillwater Okla	4-7
Daystrom Pacific Corp Potentiometer Div 11150 La Grange Ave Los Angeles 25 Calif	18	Franklin Fibre-Lamitex Corp Wilmington Dela	11-12	Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass	3-4-5-7
Daystrom Pacific Corp 3030 Nebraska Ave Santa Monica Calif	18	Frederick Tool & Eng'g Corp 414 Pine Ave Frederick Md	14	Lambda-Pacific Eng'g Inc 14725 Arminta St Van Nuys Calif	7
Dearborn Electronic Labs Inc 1421 N Wells St Chicago 10 Ill	1	Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ	7	Laminated Sheet Products Corp 449 Nonapont St Norwood Mass	7-11-22
Defiance Printed Circuit Corp Moulton & Munroe Sts Georgetown Mass	4-5-7-22	F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	15	La More C D 2433 Birkdale St Los Angeles 31 Calif	12
Delevan Electronics Corp Royercroft Campus E Aurora NY	10	Furane Plastics Inc 4516 Brazil St Los Angeles 32 Calif	11	Lamtex Industries Inc 51 State St Westbury NY	11
Die-Form Circuits Inc 6045 W Ogden Ave Chicago 50 Ill	5-7	Garde Mfg Co 588 Eddy St Providence 3 RI	9-17	LaPoint Industries Inc 155 W Main St Rockville Conn	4-5-7-12-14
Delta Chemical Works 23 W 60 St New York 23 NY	12	Gates Radio Co 123 Hampshire St Quincy Ill	7	Leach & Garner Co Industrial Div Leach & Garrer Bldg Attleboro Mass	12
Design Tool Corp 80 Washington St New York 6 NY	19	Gavitt Wire & Cable Co Central St Brookfield Mass	4-5-7	Lear Inc 3171 S Bundy Drive Santa Monica Calif	7
Deutschmann Corp Tobe Norwood Mass	15	General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	19-20	Lectrohm Inc 5560 Northwest Hwy Chicago 30 Ill	21
Dilectron Div Gudeman Co 2669 S Myrtle Ave Monrovia Calif	10	General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY	1-5-7-21	Lenk Mfg Co 30 Cummington St Boston 15 Mass	20
Dmeter Mfg Co 22 Larkin Plaza Yonkers NY	14	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	15	Leonard Electric Products Co 67 34 St Brooklyn 32 NY	10
Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	7-16-19	General Electric Co Coshocton Ohio	11-12	Lercro Electronics Inc 501 S Varney St Burbank Calif	9
Doven Mach & Eng Inc 2706 W Van Buren St Chicago 12 Ill	20	General Research & Supply Co 572 S Division Ave Grand Rapids 3 Mich	19	Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	4-7-10-15
Dry Screen Process Inc 1016 Madison Ave Pittsburgh 12 Pa	19-22	General Resistance Inc 577 E 156 St New York 55 NY	21	Luma Electric Equipment Co P O Box 132 Toledo 1 Ohio	20
Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	9-17	General RF Fittings Inc 702 Beacon St Boston 15 Mass	9-17	Luminous Processes Inc 161 E 42 St New York 17 NY	7-22
Dumont Airplane & Marine Instruments Inc 15 William St New York 5 NY	1	Glass Products Co 6911 South Chicago Ave Chicago 37 Ill	7	Luther Electronic Mfg Co 5728 W Washington Blvd Los Angeles 16 Calif	15
Dunlap Electronics 764 9 St Des Moines 14 Iowa	4-7-10-19	Globe Electrical Mfg Co 1729 W 134 St Gardena Calif	4-5-7-22	Lynmar Engineers Inc 1432 N Carlisle St Philadelphia 21 Pa	13-14-15
Dunton Co M W 7 Goff St Providence RI	20	Goldak Co 1544 W Glenoaks Blvd Glendale 1 Calif	7	Lytle Eng'g & Mfg Co 1404 San Mateo Blvd S E Albuquerque New Mex	4-7
Dwyer Eng'g Co Pine St Ext Nashua NH	4-5-6-7-10-20				



ELECTRONIC INDUSTRIES DIRECTORY

McDowell Electronics Inc	
105 Forrest St Metuchen NJ	20
Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	4-7
Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	16
Maida Development Co 214 Academy St Hampton Va	1
Malco Tool & Mfg Co 4025 W Lake St Chicago 24 Ill	9
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	17-21
Mandex Mfg Co 2608 W 16 St Chicago 8 Ill	7-9-23
Maryland Electronic Mfg Corp 5009 Calvert Rd College Park Md	7-22
Maurey Instrument Corp 7924 S Exchange Ave Chicago 17 Ill	18
Maymer Corp 1961 W 112 St Cleveland 2 Ohio	4-7
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	14-22
Mech-Tronic Equipment Co P O Box 510 Silver Spring Md	19
Melpar Inc 3000 Arlington Blvd Falls Church Va	15
Mepco Inc Abbett Ave Morristown NJ	21
Metals & Controls Corp General Plate Div 48 Forest St Attleboro Mass	12-17
Methode Mfg Corp 7447 W Wilson Ave Chicago 31 Ill	4-5-7-8-9-17-23
Mica Corp 4031 Elenda St Culver City Calif	3-4-5-7
Micamold Electronics Mfg Corp 1087 Flushing Ave Brooklyn 37 NY	15
Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill	4-5-7-8-9-11-22
Micro-Circuits Co New Buffalo Mich	7-19-22
Microdot Inc 220 Pasadena Ave S Pasadena Calif	9
Mil Case Corp 35-18 37 St Long Island City NY	12
Milgo Electronic Corp 7601 N W 37 Ave Miami 47 Fla	16
Millen Mfg Co James 150 Exchange St Malden 48 Mass	15
Miller Co J W 5917 S Main St Los Angeles 3 Calif	10-14-15
Miller-Trojan Co 3 North Ridge Ave Troy Ohio	19-22
Milwaukee Resistor Co 700 W Virginia St Milwaukee 4 Wis	21
Minitron Inc 7643 Fay Ave La Jolla Calif	1-4-5-6-7-23
Modular Systems Inc 21-23 45 Rd Long Island City 1 NY	7
Molded Insulation Co 335 E Price St Philadelphia 44 Pa	7
Motson Co J Frank 1717 Bethlehem Pike Flourtown Pa	7
Mucon Corp 9 St Francis St Newark 5 NJ	1
Mycalex Corp of America 125 Clifton Blvd Clifton NJ	7
National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif	16
National Capacitor Co 18 Webster St Brookline 46 Mass	1-14-15
National Tel-Tronics Corp 52 St Casimir Ave Yonkers NY	11
National Vulcanized Fibre Co P O Box 311 Wilmington 99 Dela	11-12
New England Laminates Co 481 Canal St Stamford Conn	11-12-19
New Hermes Engraving Machine Corp 13 University Pl New York 3 NY	7-19
North American Instruments Inc 2420 N Lake St Altadena Calif	14
Northern Plastics Corp 2nd Market St LaCrosse Wis	4-7-11-12
NYT Electronics Inc 2979 N Ontario St Burbank Calif	6-10
Onondaga Pottery Co 1858 W Fayette St Syracuse 1 NY	1-21
Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	4-5-6-7-15
Painton & Co Ltd c/o British Electronic Sales Co Box 132 Oakland Gardens 64 NY	21
Paul F H & Stein Bros 235 5 Ave New York 16 NY	22
PCA Electronics Inc 16799 Schoenborn St Sepulveda Calif	10-15
Permanent Label Corp 49 Ackerman St Bloomfield NJ	22
Permonite Mfg Co 444 Lake Shore Dr Chicago 11 Ill	22-23
Photocircuits Corp 31 Sea Cliff Ave Glen Cove NY	4-5-7-11
Planet Mfg Corp 225 Belleville Ave Bloomfield NJ	1
Plastic Capacitors Inc 2620 N Clybourn Ave Chicago 14 Ill	1-15
Plastic Mold & Eng'g Co 157 Clifford St Providence RI	23
Plastics & Electronics Corp P O Box 38 Station J Buffalo 8 NY	5-6-7

Polytronic Research Inc 7600 Woodbury Dr Silver Spring Md	4-5-7-10
Potter Co 1950 Sheridan Rd N Chicago Ill	1
Premier Instrument Corp 52 W Houston St New York 12 NY	4-5-7
Printed Electronics Corp 7 North Ave Nattick Mass	3-4-5-7-8-19
Pye Telecommunications Ltd Newmarket Rd Cambridge England	13
Pyramid Electric Co 1445 Hudson Blvd N Bergen NJ	1
Radio Corp of America Commercial Electronic Products Camden 2 NJ	14
Radio Eng'g Products Ltd 1080 University St Montreal 3 Quebec Canada	14
Radio Industries Inc 5225 N Ravenswood Ave Chicago 25 Ill	1-15
Ransom Research 323 W 7 St San Pedro Calif	4-6-7
Raytheon Mfg Co 100 River St Waltham 54 Mass	15
RCL Mfg Co New Jersey Ave Riverside NJ	21
Reid Mfg Co A 80 Shore Rd Port Washington NY	20
Remler Co 2101 Bryant St San Francisco Calif	7
Reon Resistor Corp 117 Stanley Ave Yonkers NY	21
Resistance Products Co 914 S 13 St Harrisburg Pa	21
Revere Copper & Brass Inc 230 Park Ave New York 17 NY	11
Richardson Co 27 Ave & Lake St Melrose Park Ill	11-12
Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	7-13-14
Robinson Machine Works 802 E 8 St New Albany Ind	9-19
Rogers Corp Rogers Conn	3-4-7-8-18-21
Rowe Engravers 262 E 16 St Paterson 4 NJ	4-7-19
RS Electronics Corp 435 Portage Ave Palo Alto Calif	7
Rubber & Asbestos Corp 225 Belleville Ave Bloomfield NJ	11
Safetee Glass Co 4717 Stenton Ave Philadelphia 44 Pa	11-22
St Regis Paper Co Panelyte Div 150 E 42 St New York 16 NY	7
Sampson Chemical & Pigment Corp 2830 W Lake St Chicago 12 Ill	22
Sanders Associates 95 Canal St Nashua NH	7-20
San Fernando Electric Mfg Co 1509 1 St San Fernando Calif	1
Sangamo Electric Co Springfield Ill	1
Seneca Falls Machine Co 314 Fall St Seneca Falls NY	4-7
Servonics Inc 822 N Henry St Alexandria Va	7
Seymour Mfg Co 15 Franklin St Seymour Conn	12
Shallcross Mfg Co Jackson & Pusey Aves Collingdale Pa	14-21
Sibley Co Bridge St Haddam Conn	4-5-6-7
Skiatron Electronics & TV Corp 130 Varick St New York 14 NY	4-5-7
Slip Ring Co of America 3612 W Jefferson Blvd Los Angeles 16 Calif	3-4-5-6-7-8-11-16
Solar Mfg Corp 4553 Seville Ave Los Angeles 58 Calif	1-7-21
Spaulding Fibre Co 310 Wheeler St Tonawanda NY	7-11
Spectrol Electronics Div Carrier Corp 1704 S Del Mar Ave San Gabriel Calif	18
Sprague Electric Co Marshall St North Adams Mass	1-6-7-15-21
Sprague of Wisconsin Inc 6 & Beech Sts Grafton Wis	1-21
Stackpole Carbon Co St Marys Pa	18
Stavid Eng'g Inc U S Route 22 Plainfield NJ	7-19
Sta-Warm Electric Co 553 N Chestnut St Ravenna Ohio	20
Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	10
Stokes Corp F J 5500 Tabor Rd Philadelphia 20 Pa	19
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	4-7-19
Sun Chemical Corp 10-10 44 Ave Long Island City 1 NY	19
Superex Electronics Corp 4 Radford Pl Yonkers NY	4-7
Swedlow Plastics Co 6986 Bandini Blvd Los Angeles 22 Calif	4-7-8-11
Sylvania Electric Products Inc 1740 Broadway New York 19 NY	7-23
Synthane Corp Montgomery Ave Oaks Pa	11-12
Taylor Fibre Co Norristown Pa	11-12
Technitrol Eng'g Co 1952 E Allegheny Ave Philadelphia 34 Pa	15
Techniques Inc 52 Jackson Ave Hackensack NJ	4-5-7-9-11 12-17-19-22-23
Technograph Printed Electronics 185 Valley St Tarrytown NY	7-19-20
Tech-Ohm Resistor Corp 36-11 33 St Long Island City 6 NY	21
Techron Corp 81 Washington St Boston 8 Mass	7
Telectro Industries Corp 35-18 37 St Long Island City 1 NY	13-14-15-16
Telegraph Condenser Co N Acton London W 3 England	1-4-5-6-7-15-20
Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif	7
Telephonics Corp Park Ave Huntington LI NY	7
Telex 1633 Eustis St St Paul 1 Minn	6
Tel-Rad Electronics Corp 73-20 Trotting Course Lane Glendale LI 27 NY	6-7-10
Textron Corp Box 4252 Austin 51 Texas	4-6-7-16
Tranco Products Inc 12210 Nebraska Ave Los Angeles 25 Calif	14
Transformer Technicians Inc 2608 N Cicero Ave Chicago 39 Ill	14
Tran-Kit Electronics Co 467 S 5 Ave Mt Vernon NY	7
Transonic Inc 808 16 St Bakersfield Calif	10-13-14-15
Tricraft Products Corp 1535 N Ashland Ave Chicago 22 Ill	14
Tri-Dex Electronics P O Box 1207 Lindsay Calif	4-7
Trimm Inc 400 W Lake St Libertyville Ill	16
Trimout Plastic Co 71 Dudley St Arlington 74 Mass	11
Tripl-T Electronics Co Box 5352 Pasadena Calif	16
Utradyme Eng'g Labs P O Box 3308 Albuquerque New Mex	6-16
Underwood Corp Electronic Computer Div 35-10 36 Ave Long Island City 6 NY	10-15
Ungar Electric Tools Inc 4101 Redwood Ave Los Angeles 66 Calif	20
United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif	15
United Transformer Corp 150 Varick St New York 13 NY	15
Universal Condenser Co 3435 N Kimball Ave Chicago 18 Ill	1
University Loudspeakers Inc 80 S Kensico Ave White Plains NY	14
U S Components Inc 454 E 148 St New York 55 NY	9
U S Plywood Corp 55 W 44 St New York 36 NY	12
U S Steel Corp 525 William Penn Pl Pittsburgh 30 Pa	12
Valandy Electronics Corp 61-35 166 St Flushing 68 NY	7
Vanguard Electronics Co 3384 Motor Ave Los Angeles 34 Calif	6
Vidaire Electronics Mfg Corp 576 W Merrick Rd Lynbrook NY	14
Viking Industries Inc 21343 Roscoe Blvd Canoga Park Calif	9
Vocalite Screen Corp 19 Debevoise Ave Roosevelt NY	22
Vulcan Electric Co 88 Holten St Danvers Mass	20
Waage Electric Inc 720 Colfax Ave Kenilworth NJ	19
Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	6
Wales-Strippit Co Akron NY	19
Walkirt Co 141 W Hazel St Inglewood 3 Calif	6-15
Wall Mfg Co P Grove City Pa	20
Walsco Electronics Mfg Co 100 W Green St Rockford Ill	20
Ward Leonard Electric Co Mt Vernon NY	21
Weller Electric Corp 601 Stone's Crossing Rd Easton Pa	20
West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	6-19
Westinghouse Electric Corp Micarta Div Hampton S Car	11
Westronics Inc 3605 McCart Ft Worth Texas	16
Wheaton Co T C Millville NJ	10
Whitewater Electronics Inc 136 Main St Whitewater Wis	10
Wiedemann Machine Corp 4275 Wissahickon Ave Philadelphia 32 Pa	19
Winchester Electronics Inc Willard Rd Norwalk Conn	9

Winder Aircraft Corp of Florida
P O Box 2897 Drane Field Lakeland Fla 12
Zephyr Mfg Co Electronics Div
201 Hindry Ave Inglewood 1 Calif 20
Zero Mfg
1121 Chestnut Burbank Calif 7

69—PRODUCTION MACHINERY & EQUIPMENT

Air conditioning 1
Assemblers, feeders 2
Assembling equipment, automatic 3
Buffers & grinders 4
Chambers, environment 5
Chambers, temperature & humidity 6
Chambers, test 7
Cleaners, ultrasonic 8
Compressed air production tools 9
Conveyors 10
Crystal growing equipment 11
Crystal refining equipment 12
Dehumidifiers 13
Dehydrators 14
Demagnetizers 15
Drill presses 16
Dust enclosures 17
Furnaces, electric 18
Furnaces, gas fired 19
Lathes, bench 20
Machines, abrasive cutting 21
Machines, balancing 22
Machines, blueprint 23
Machines, capacitor mfg 24
Machines, coil winding 25
Machines, coil winding, toroidal 26
Machines, counting 27
Machines, crystal mfg. & finishing 28
Machines, die casting 29
Machines, electron tube mfg. ... 30
Machines, engraving 31
Machines, glass blowing & working 32
Machines, hermetic sealing 33
Machines, impregnating 34
Machines, lamination stacking .. 35
Machines, marking & numbering 36
Machines, metal forming 37
Machines, plastic press 38
Machines, riveting 39
Machines, shock testing 40
Machines, soldering 41
Machines, weighing 42
Machines, wirestripping 43
Magnetizers 44
Material handling equipment .. 45
Ovens, crystal 46
Ovens, temperature controlled .. 47
Pots & tanks, heating 48
Pressurization units 49
Pumps, high vacuum 57
Pumps, metering 50
Punch presses 51
Racks, relay 52
Stamps, marking 53
Stills & demineralizers 54
Titration apparatus, electronic .. 55
Welders 56

Abalon Precision Mfg Corp
540 Casanova St New York 59 NY 52
Abbeon Supply Co
179-15 Jamaica Ave Jamaica 32 NY 13
Ackerman-Gould Co
92 Bleecker St New York 12 NY 36
Aeme Electric Heating Co
1217 Washington St Boston 18 Mass 47
Acoustica Associates
Shore Rd
Glenwood Landing LI NY 8-16-21-34-41
Acromark Co
443 Monrell St Elizabeth 4 NJ 31-36-51-53
Aero Tool & Die Works
4554 Broadway Chicago 40 Ill 36
Advance Electronics Co
8510 North End Ave Oak Park 37 Mich 15
Aero Electronics Co
1512 N Wells St Chicago 10 Ill 15
Aireco Inc
2323 2 Ave Schenectady 3 NY 5-6-7

AiResearch Mfg Co Div Garrett Corp
9851 Sepulveda Blvd Los Angeles 45 Calif 1
Air Reduction Sales Co Div
Air Reduction Co
150 E 42 St New York 17 NY 56
Air & Refrigeration Corp
439 Madison Ave New York 22 NY 47
Air Transport Mfg Co
1114 N Sycamore Ave
Los Angeles 38 Calif 17-45-52
Alcar Instruments Inc
17 Industrial Ave Little Ferry NJ 8
Alden Products Co
123 A N Main St Brockton Mass 52
Allied Eng'g & Production Corp
2421 Blanding Ave
Alameda Calif 6-7-16-38-45-51
Allied Engraving & Stamping Co
17 Elm St Buffalo 3 NY 53
Alloy Metalsmiths Inc
89 Commerce Rd Cedar Grove NJ 17
Aloe Scientific
5655 Kingsbury Blvd
St Louis 12 Mo 5-6-7-8-42
Altec Lansing Corp
1515 S Manchester Ave Anaheim Calif 5-52
American Electric Fusion Corp
2600 Diversey Ave Chicago 47 Ill 37-56
American Gas Furnace Co
140 Spring St Elizabeth 1 NJ 19-47
American Hoist & Derrick Co
63 S Robert St St Paul 1 Minn 45
American Instrument Co
8030 Georgia Ave Silver Spring Md 5-6-21-47
American Machine & Foundry Co
Defense Products Group
1101 N Royal St Alexandria Va 5-7-22
American Oxygen Service Corp
600 Essex St Harrison NJ 56
American Photocopy Equip Co
1920 W Peterson Ave Chicago 26 Ill 23
American Products Mfg Co
8127 Oleander St New Orleans 18 La 38
American Research & Mfg Corp
920 Halpine Ave Rockville Md 8
American Research Corp
Route 6 Farmington Conn 5-6
Anchord Specialty Mfg Co
Hollister Rd Teterboro NJ 5-7-15
Andrew Calif Corp
941 E Maryland Ave Claremont Calif 49
Andrew Corp
363 E 75 St Chicago 19 Ill 14
Anetsberger Bros
Northbrook Ill 6
Annis Co R B
1101 N Delaware St Indianapolis 2 Ind 15
Arlin Products Inc
13541 Auburn Ave Detroit 23 Mich 42
Artes Eng'g Co
2757 S 28 St Milwaukee 46 Wis 43
Arvey Corp
Fibre Forming Div Olean NY 45
Associated American Trading Div
750 St Ann's Ave
New York 56 NY 24-25-26-35
Associated Eng'g & Mfg Corp
210 Stonehouse Rd Glen Ridge NJ 32-33
Associated Production Co
162 N Clinton St Chicago 6 Ill 25-26
Associated Testing Labs
409 Clinton Rd Caldwell NJ 5-6-7-47
Atmosphere Control Co
5315 Chester Ave Philadelphia 43 Pa 5
Automatic Methods Inc
965 W Grand St Elizabeth NJ 36-41
Baker Bros
Post & Harleau Sts Toledo 10 Ohio 16
Barkley & Dexter Laboratories
50 Frankfort St Fitchburg Mass 3
Barnstead Still & Demineralizer Co
253 Lanesville Terrace Boston 31 Mass 54
Barrett Co Leon J
P O Box 378 Worcester 1 Mass 34
Beach-Russ Co
50 Church St New York 7 NY 57
Bendix Aviation Corp
1104 Fisher Bldg Detroit 2 Mich 8
Bendix Aviation Corp
Pioneer-Central Div
2734 Hickory Grove Rd Davenport Iowa 8
Berg Mfg Corp
142 Reno St New Cumberland Pa 3
Berkeley Crystal Co
1740 University Ave Berkeley 3 Calif 11
Bernard Franklin Co
4155 E Hedley St Philadelphia 37 Pa 45-52
Bethlehem Apparatus Co
Front & Depot Sts Hellertown Pa 32
Bio-Rad Labs
800 Delaware St Berkeley Calif 54
Bios Labs Inc
17 W 60 St New York 23 NY 13-14
Black & Decker Mfg Co
E Penna Ave Towson 4 Md 4
Black & Webster Inc
445 Watertown St Newton 58 Mass 39
Blue M Electric Co
138 & Chatham St
Blue Island Ill 5-6-7-18-47-48
Boesch Mfg Co
45 River St Danbury Conn 25-26-27
Boston Woven Hose & Rubber Co
PO Box 1071 Boston 3 Mass 10
Bowser Technical Refrigeration Bowser Inc
Terryville Conn 5

Breuer Electric Mfg Co
5100 N Ravenswood Ave Chicago 40 Ill 1
British Industries Corp
80 Shore Rd Port Washington NY 25-29
Brooks & Perkins Inc
1950 W Fort St Detroit 16 Mich 45
Brunner Mfg Co
1821 Broad St Utica 1 NY 1
Bruno-New York Industries Corp
460 W 34 St New York 1 NY 19
Bulova Watch Co Electronics Div
40-01 61 St Woodside 77 NY 46
Burnett Radio Lab W W L
4814 Idaho St San Diego 16 Calif 46
California Chassis Co
5445 E Century Blvd Lynwood Calif 52
Caltron Products Co
3518 W Pico Blvd Los Angeles 19 Calif 44
Carrier Corp
300 S Geldes St Syracuse 1 NY 1-13
Caterpillar Tractor Co
Peoria Ill 45
Central Scientific Co
1700 Irving Park Rd Chicago 13 Ill 47
Central Scientific Co of Calif
1040 Martin Ave Santa Clara Calif 47-55
Chesapeake Instrument Corp
Shady Side Md 8
Chicago Rivet & Machine Co
950 S 25 Ave Bellwood Ill 39
Chicago Steel Furnace Co
9326 S Anthony Ave Chicago 28 Ill 19
Churchill Lighting Corp
344 Franklin St Melrose 76 Mass 49-52
Cinema-Television Ltd
Worsley Bridge Rd
Lower Sylemham
London SE 26 England 46
Cincinnati Sub-Zero Products
3932 Reading Rd
Cincinnati 29 Ohio 1-6
Clark Crystal Co
2 Farm Rd Marlboro Mass 46
Clearview Co
172 Stanton St New York 2 NY 36
Coil Winders Inc
New York Ave Westbury LI NY 15-44
Coil Winding Equipment Co
19 Maxwell Ave Oyster Bay NY 25
Cole Radio Works
86 Westville Ave Caldwell NJ 41
Communication Equipment & Eng'g Co
5646 W Race Ave Chicago 44 Ill 52
Condenser Machinery Co
28 Harbor St Stamford Conn 24
Conrad Inc
141 Jefferson St Holland Mich 6-7
Consolidated Electrodynamics Corp
300 N Sierra Madre Villa
Pasadena Calif 40
Consolidated Vacuum Corp
1775 Mt Read Blvd Rochester 3 NY 57
Controlled Atmosphere Enclosures Corp
230-11 141 Ave
Springfield Gardens 13 LI NY 5-6-7-13-17-49
Cook Electric Co
2700 Southport Ave Chicago 14 Ill 5-6-7
Cooper Co D C
1467 S Michigan Ave Chicago 5 Ill 34-45-48
Cosa Corp
405 Lexington Ave
New York 17 NY 22-25-26-31
Cox & Co
115 E 23 St New York 10 NY 46-47
Craig Systems Inc
90 Holten St Danvers Mass 52
Cro-Plate Co
747 Windsor St Hartford 1 Conn 21
Crown Controls Co
40 S Washington St New Bremen Ohio 45
Crucible Steel Co of America
Henry W Oliver Bldg Pittsburgh 22 Pa 15-14
Daco Instrument Co
Tillary & Prince Sts Brooklyn 1 NY 13
Dahlstrom Metallic Door Co
Buffalo & 2 Sts Jamestown NY 52
Dale Products Inc
Columbus Nebr 3
Dallons Labs
5066 Santa Monica Blvd
Los Angeles 29 Calif 8-12-21-28
Dalmo Victor Co Div Textron Inc
1515 Industrial Way Belmont Calif 14
Damp-Chaser Inc
Box 520 Hendersonville NC 13
Davenport Mfg Co
1713 N Ashland Ave Chicago 22 Ill 3
Del Electronics Corp
4 N Mac Quessen Pkwy
Mt Vernon NY 15
Delta Chemical Works
23 W 60 St New York 23 NY 13-14
Denison Eng'g Div American Brake Shoe
1160 Dublin Rd
Columbus 16 Ohio 29-32-35-37-38-50-51
Devco Eng'g Inc
PO Box 387 Caldwell NJ 17
Development Eng'g Co
9 Cross St Norwalk Conn 5-6-7
Dielectric Products Eng'g Co
Raymond Me 14
Dittmore-Freimuth Corp
2517 E Norwich St Milwaukee 7 Wisc 26

Doven Mach & Eng Inc 2706 W Van Buren St Chicago 12 Ill	41	High Vacuum Equipment Corp 2 Churchill Rd Ringham Mass	11-18	Loewy-Hydropress Div Baldwin-Lima-Hamilton Corp 111 5 Ave New York 3 NY	29-37
Dumore Co 1300 17 St Racine Wis	16	Hill Electronic Eng'g & Mfg Co New Kingstown Pa	46-47	Lowell Mfg Co 3030 Laclede Station Rd St Louis 17 Mo	52
Eastern Industries Inc 100 Skiff St Hamden 14 Conn	1-49	Hobart Bros Hobart Square E Troy 3 Ohio	56	Lufkin Rule Co 1730 Hess St Saginaw Mich	15
Eastman Pacific Co 2320 E 8 St Los Angeles 21 Calif	47	Hoffman Co P R 321 Cherry St Carlisle Pa	28	Luma Electric Equipment Co PO Box 132 Toledo 1 Ohio	15
Eclipse Fuel Eng'g Co 1100 Buchanan Rockford Ill	19	Hoover Electronics Co 2600 Grand Ave Kansas City 8 Mo	46	Lydson Bros 85 Zabriske St Hackensack NJ	18-19-47
Eisler Eng'g Co 750 S 13 St Newark 3 NJ	18-21-25-30-31-32-33-47-56	Hull Corp 1941 Woodland Rd Abington Pa	18-34-38	McCoy Electronics Co Chestnut & Watts Sts Mt Holly Springs Pa	46
Electrical Specialty Co 158 11 St San Francisco 3 Calif	25	Hull-Standard Corp Abington Pa	34-38	McKenna Laboratories 2503 Main St Santa Monica Calif	8
Electric Furnace Co W Wilson St Salem Ohio	18-19	Hunt Corp 453 Lincoln St Carlisle Pa	46-47	Magnaflux Corp 7300 W Lawrence Ave Chicago 31 Ill	15-44
Electric Hotpack Co Cottman Ave & Melrose St Philadelphia 35 Pa	18-46-47	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	46	Malkin-Illion Co 400 Coit St Irvington 11 NJ	17-52
Electronic Brazing Co 140 Glenridge Ave Montclair NJ	15-44	Huppert Co K H 6830 Cottage Grove Ave Chicago 37 Ill	18-47	Manson Laboratories Inc 207 Greenwich Ave Stamford Conn	46
Electronic Designs Inc 28 School St Yonkers NY	25	Hydraulic Press Mfg Co Div Boehring Co Marion Rd Mt Gilead Ohio	29-37-38	Marix Chemical Co 1021 E 55 St Chicago 15 Ill	13
Ellis & Watts Products Inc P O Box 33 Cincinnati 36 Ohio	1	Ideal-Aerosmith Inc 12909 S Cerise Ave Hawthorne Calif	49	Markem Machine Co 150 Congress St Keene NH	36
Elmes Eng'g Div American Steel Foundries 1150 Tennessee Ave Cincinnati 29 Ohio	35-37-38	Ideal Industries Inc 5127 Park Ave Sycamore Ill	15-43	Markwik Mfg Co 31 Sexton Rd Plainview LI NY	36
Elm Labs 10 Washington Ave Hastings-on-Hudson NY	46	iE Mfg 325 Hoyne Ave Chicago 12 Ill	52	Marshalltown Mfg Co 810 E Nevada St Marshalltown Iowa	51
Elzee Metal Products Co 775 39 St Brooklyn 32 NY	17	Impact-O-Graph Corp 1900 Euclid Ave Cleveland 15 Ohio	40	Martindale Electric Co Box 617 Edgewater Branch Cleveland 7 Ohio	15
Emerson-Sack-Warner Corp 85 Washington St Somerville 43 Mass	13-17-47-48	Induction Heating Corp 181 Wythe Ave Brooklyn 11 NY	41	Mathews & Co Jas H 3956 Forbes St Pittsburgh 13 Pa	36-53
Enthone Inc 442 Elm St New Haven 8 Conn	8	Industrial Electronic Engineers 3973 Lankershim Blvd N Hollywood Calif	27-45	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	52
Environmental Equipment Co 369 Linden St Brooklyn 27 NY	5-6-7	Industrial Winding Machinery Co 120 Wall St New York 5 NY	25	Mech-Tronic Equipment Co PO Box 510 Silver Spring Md	18-47
Equip-A-Matic Eng'g Corp 6045 W Ogden Ave Chicago 50 Ill	2-41	Ingersoll-Rand Co 11 Broadway New York 4 NY	9	Metal Fabricators Corp 73 Pond St Waltham 54 Mass	10-17-45
Ercona Corp 551 5 Ave New York 17 NY	15	Instrumentation Associates 17 W 60 St New York 23 NY	32	Metal Specialty Products Corp 27-01 Brooklyn Queens Expressway W Woodside 77 NY	52
Ewald Instruments Route 7E Kent Conn	56	Insuline Corp of America 186 Granite St Manchester NH	17-52	Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass	26-31
Factory Service Co 4615 N 21 St Milwaukee 9 Wis	45	International Radiant Corp 4 Manhasset Ave Port Washington NY	5-6-7-40	Mid-West Conveyor Co Metal Products Div 7 & Sunshine Rd Kansas City 15 Kan	10-17-45-52
Falstrom Co Falstrom Court Passaic NJ	52	International Research & Development Corp 797 Thomas Lane Columbus 16 Ohio	22	Mil Case Corp 35-18 37 St Long Island City NY	17-45-52
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	52	Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY	40	Milford Rivet & Machine Co 857 Bridgeport Ave Milford Conn	39
Feiner & Sons P 522 W 45 St New York 36 NY	17-52	Jeffrey Mfg Co 803 N 4 St Columbus 16 Ohio	10-45	Miller-Trojan Co 3 North Ridge Ave Troy Ohio	23
Fellows Gear Shaper Co 78 River St Springfield Vt	38	Jodee Plastics Co 213 Shepherd Ave Brooklyn 8 NY	45	Mobil Electronics Mfg Co 1111 State Rd 67 E Anderson Ind	17-52
First Electronics Corp 117 Blue Hill Ave Boston 19 Mass	43	Kahle Eng'g Co 1307 7 St N Berken NJ	11-12-18-19-25-28-30-32-33-36-46-56	Modern Laboratory Equip Co 1811 1 Ave New York 28 NY	1-18-47
Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa	47-55	Kahn & Co 541 Windsor St Hartford 1 Conn	13-14-49	Moore Corp John B PO Box 3 Dept El Peerless Bldg Nutley 10 NJ	8
Forbes & Wagner Inc 343 Central Ave Silver Creek NY	25	Kane Mfg Corp PO Box 641 Kane Pa	52	Morganite Inc 33002 48 Ave Long Island City 1 NY	4
Forster-Teichmann Co 1212 Clark Bldg Pittsburgh 22 Pa	18-19	Keller Tool Div Gardner-Denver Co 1333 Fulton St Grand Haven Mich	9	Motiograph Inc 4441 W Lake St Chicago 24 Ill	52
Fostoria Pressed Steel Corp N Main St Fostoria Ohio	47	Kelley & Co O G 98 Taylor St Boston 22 Mass	54	Multiplastics 770 W Factory Rd Addison Ill	34
Garrett Corp AResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif	1	Kinevox-Hallen Div Electromotion Co 1646 18 St Santa Monica Calif	15	Murphy & Miller 1326 S Michigan Ave Chicago 5 Ill	5-6-7
Gates Radio Co 123 Hampshire St Quincy Ill	52	Kinney Mfg Div Vacuum Equip Div NY Air Brake Co 3529 Washington St Boston 30 Mass	11-28-34-46	National Vulcanized Fibre Co P O Box 311 Wilmington 99 Dela	45
General Crystal Co P O Box 9 Burlington Wis	12	Klein Electronics Co Leo 2404 S LaBrea Ave Los Angeles 16 Calif	44	Nelson Vacuum Pump Co Geo F 2133 4 St Berkeley 10 Calif	57
General Electric Co Box 237 Roosevelt Park Annex Detroit 32 Mich	15-44	Kollsman Instrument Corp Sub Standard Coil Products 80-08 45 Ave Elmhurst 73 NY	49	Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	27
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	18-19-48	Kreuter & Co 585 18 Ave Newark 3 NJ	30	New England Oven & Furnace Co 385 Boston Post Rd Orange Conn	46-47
General Kinetics Inc 555 23 St S Arlington 2 Va	8	Krengel Mfg Co 227 Fulton St New York 7 NY	53	New Hermes Engraving Machine Corp 13 University Pl New York 3 NY	31
General Nuclear Corp 550 5 Ave New York 32 NY	8	Labline Inc 3070 W Grand Ave Chicago 22 Ill	5-6-7-8-47	New Rochelle Tool Corp 320 Main St New Rochelle NY	56
General RF Fittings Inc 702 Beacon St Boston 15 Mass	3	Lamaco Inc 9230 W Grand Ave Franklin Park Ill	35	New York Air Brake Co 230 Park Ave New York 17 NY	11-33
General Transistor Corp 91-27 138 Pl Jamaica 35 NY	11	Lamson Corp Lamson St Syracuse 1 NY	10-45	North American Instruments Inc 2420 N Lake St Altadena Calif	5-49
Gisholt Machine Co 1245 E Washington Ave Madison 10 Wis	22	Lapp Insulator Co Radio Specialties Div 24 Summer St LeRoy NY	50	North Electric Co 553 S Market St Galion Ohio	52
Green Instrument Co 385 Putnam Ave Cambridge 39 Mass	31	Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	46	Northern Metal Products Corp 9599 W Grand Ave Franklin Park Ill	45
Gries Reproducer Corp 125 Beechwood Ave New Rochelle NY	53	Learn Inc 3171 S Bundy Drive Santa Monica Calif	49	NRC Equipment Corp Sub National Research Corp 160 Charlemont St Newton Highlands 61 Mass	11-12-28-30-33-34
Grieve-Hendry Co 1401 W Carroll Ave Chicago 7 Ill	18-19-47	Lemert Eng'g Co 201 E Jefferson St Plymouth Ind	39	Numberall Stamp & Tool Co Huguenot Park Staten Island 12 NY	53
Griffin Co John 2157 James Ave St Paul 5 Minn	53	Leiman Bros 146 Christie St Newark 5 NJ	57	NY Air Brake Co 230 Park Ave New York 17 NY	57
Guild Electronics Inc 388 Broadway New York 13 NY	38	Lennard Co P M P O P O Box 56 Village Sta New York 14 NY	3-6-7-13-17	Oakite Products Inc 79 Rector St New York 6 NY	8
Gulton Industries Inc 212 Durham Ave Metuchen NJ	8	Lepel High Frequency Labs 54-18 37 Ave Woodside 77 NY	11-12	O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif	52
Halm Instrument Co 100 Glen Head Rd Glen Head NY	2-3-25-41	Levin & Son Louis 3610 S Broadway Los Angeles 7 Calif	16-20	O'Neil-Irwin Mfg Co Lake City Minn	37-38
Haloid Co Haloid St Rochester 3 NY	23	Lincoln Electric Co 22801 St Clair Ave Cleveland 17 Ohio	56	Osborne Electronic Corp 712 S E Hawthorne Blvd Portland 14 Ore	15
Harder Co Donald C 3710 Midway Dr San Diego 10 Calif	26	Lindberg Eng'g Co 2450 W Hubbard St Chicago 12 Ill	18-19	Pan-Electronics Corp Ruth St Griffin Ga	11
Hardman Co H V 571 Cortlandt St Belleville 9 NJ	50	Link-Belt Co Prudential Plaza Chicago 1 Ill	10-45	Panellit Inc 7401 N Hamlin Ave Skokie Ill	17
Harper Electric Furnace Corp 56 River St Buffalo 2 NY	18	Litton Eng'g Labs PO Box 949 Grass Valley Calif	32-37-57	Pantek Co P O Box 212 El Segundo Calif	27
Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio	6-8-54				
Heldor Mfg Corp 238 Lewis St Paterson NJ	52				
Hevi-Duty Electric Co 4212 W Highland Blvd Milwaukee 1 Wis	18				
Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	22				
High Speed Hammer Co 313 Norton St Rochester 21 NY	16-36-39-43				

Blaine Electronics Inc 14757 Keswick St Van Nuys Calif	3	General Communication Co 677 Beacon St Boston 15 Mass	5-11	Prodelin Inc 307 Bergen Ave Kearny NJ	3
Bogart Mfg Corp 315 Seigel St Brooklyn 6 NY	3-10	General Precision Lab Inc 63 Bedford Rd Pleasantville NY	12	Production Research Corp Thornwood NY	3-5-11-14
Bolton Labs Inc W Main St Bolton Mass	2	Goodyear Aircraft Corp 1210 Massillon Rd Akron 15 Ohio	3-10-11	PSC Applied Research Ltd 1500 O'Connor Dr Toronto 16 Canada	12
Brach Mfg Corp 200 Central Ave Newark 3 NJ	3	Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	4-12	Pye Telecommunications Ltd Newmarket Rd Cambridge England	1
Breeze Corp 700 Liberty Ave Union NJ	3	Grem Eng'g Co 488 1 St Brooklyn 15 NY	11-14	Q-Line Mfg Corp 1562 61 St Brooklyn 19 NY	3
Brooks & Perkins Inc 1950 W For. St Detroit 16 Mich	3-4	Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	3-11-14	Radiation Eng'g Labs Main St Maynard Mass	3
Bruno-New York Industries Corp 460 W 34 St New York 1 NY	1	Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	3	Radiation Inc P O Box 37 Melbourne Fla	3
Brush Electronics Co Div Clevite Corp 3405 Perkins Ave Cleveland 14 Ohio	9	Honeycomb Co of America 3 Burroughs St Bridgeport 8 Conn	10	Radio Corp of America Camden 2 NJ	12
Budd Stanley Co 43-01 22 St Long Island City 1 NY	3	Industrial TV Inc 369 Lexington Ave Clifton NJ	9	Raytheon Mfg Co 100 River St Waltham 54 Mass	3-11-14
Burroughs Corp 6071 2 Ave Detroit 32 Mich	1-3-4-8	Insuline Corp of America 186 Granite St Manchester NH	4	Reeves Instrument Corp 215 E 91 St New York 28 NY	3-14
Cameraflex Corp 1947 Broadway New York 23 NY	12	I-T-E Circuit Breaker Co Special Products Div 601 Erie Ave Philadelphia 34 Pa	3-11	Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	11-14
Canoga Corp 5955 Sepulveda Blvd Van Nuys Calif	3-5-9-11-14	Jarvis Electronics Corp 1140 Cherry St Winnetka Ill	7	RS Electronics Corp 435 Portage Ave Palo Alto Calif	3-11
CG Electronics Corp 305 Dallas St N E Albuquerque New Mex	2-3	Johnson Aircraft Eng'g Co M J Box 10 Morristown Airport Morristown NJ	1	Rutherford Electronics Co 3707 S Robertson Blvd Culver City Calif	5
Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill	12	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	3-5	Safe Flight Instrument Corp 4 Water St White Plains NY	1
Chromatic Television Laboratories 1501 Broadway New York 36 NY	12	Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	11	Sanders Associates 95 Canal St Nashua NH	3-11-14
Chu Associates 634 Waverly St Framingham Mass	3	Keller Products Inc 41 Union St Manchester NH	10	Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	4
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England	9-12	Kennedy Co D S 155 King St Cohasset Mass	3-10	Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	2
Coaxial Connector Co 37 N 2 Ave Mt Vernon NY	3	Koch & Sons H Box 127 Corte Madera Calif	10	Servonics Inc 822 N Henry St Alexandria Va	5
Computing Devices of Canada Ltd P O Box 508 Ottawa Ontario Can	4	Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass	14	Shepard Labs Inc 480 Morris Ave Summit NJ	3
Conrad & Moser 2 Borden Ave Long Island City 1 NY	3	Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	1	Silicone Insulation Inc Seabury Ave & Butler Pl Bronx 61 NY	10
Consolidated Avionics 66 Brooklyn Ave Westbury NY	4-5	Lane Electronics Mfg Corp 7254 Atoll Ave N Hollywood Calif	2	Simplex Equipment Corp 55 La France Ave Bloomfield NJ	3
Continental Electronics Mfg Co 4212 S Buckner Blvd Dallas 27 Texas	14	Las-Lab Inc 220 S Mt Olivet Lane Baltimore 29 Md	12	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	1-2-7-9 11-13-14
Corning Glass Works Corning NY	10	Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	3-11-14	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	9
Daimo Victor Co Div Tectron Inc 1515 Industrial Way Belmont Calif	3	Lear Inc 3171 S Bundy Drive Santa Monica Calif	1	Specialty Eng'g & Electronics Co 79 Clifton Pl Brooklyn 38 NY	10
Dayton Aviation Radio & Equipment Corp R R 3 Troy Ohio	3-14	Levinthal Electronic Products Inc 3180 Hanover St Palo Alto Calif	14	Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	3-5-11
Defiance Eng'g & Microwave Corp Beverly Airport Beverly Mass	3	Lieco Inc 3610 Oceanside Rd Oceanside LI NY	3	Spinform Inc 65 Mechanic St Attleboro Mass	3
Deltime Inc 608 Fayette Ave Mamaroneck NY	5	Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	11-14	Stainless Inc 3 St North Wales Pa	3
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	3-14	McMillan Industrial Corp Brownville Ave Ipswich Mass	10	Stavid Eng'g Inc U S Route 22 Plainfield NJ	3-6-7-11-14
Devol Research Co Brookside Dr Greenwich Conn	8	Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	3	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	1-2-3-14
Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	3-10	Mark Products Co 6412 W Lincoln Ave Morton Grove Ill	3	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	2-3-11
Doane & Margolin 29 New York Ave Westbury NY	3	Martlab Co 249 Haverford Ave Swarthmore Pa	1	Technical Appliance Corp 1 Taco St Sherburne NY	3
D & S Mfg Co 424 Burk Ave Ridley Park Pa	3	Maryland Electronic Mfg Corp 5009 Calvert Rd College Park Md	3	Telephonics Corp Park Ave Huntington LI NY	14
Dwyer Eng'g Co Pine St Ext Nashua N H	3	Maurer Inc J A 37-01 31 St Long Island City 1 NY	12	Teletronics Lab Inc 54 Kinkel St Westbury NY	5
Eclipse-Pioneer Div Bendix Aviation Corp Teterboro NJ	1-3	Maxson Corp W L 475 10 Ave New York 18 N Y	14	Telrex Labs Asbury Park NJ	3
Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	3	Meridian Millercraft Inc 8739 S Millergrrove Dr Whittier Calif	3	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	3-11-14
Electro Products Labs Inc 4501 N Ravenswood Ave Chicago 40 Ill	8	Metaplast Corp Davisville Rd at Pa Turnpike Hathor Pa	10	Thermal Refractories Corp 4501 Dell Ave N Bergen NJ	10
Electro-Pulse Inc 11861 Teale St Culver City Calif	5	Microlect Co 2300 S 25 St Salem Ore	13	Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	1-6-7
Elm Labs 10 Washington Ave Hastings-on-Hudson NY	4	Mil Case Corp 35-18 37 St Long Island City NY	4	Torgren Co C W 236 Pearl St Somerville 45 Mass	3
Emeloid Co 1239 Central Ave Hillside 5 NJ	4	Millen Mfg Co James 150 Exchange St Malden 48 Mass	9	Tranco Products Inc 12210 Nebraska Ave Los Angeles 25 Calif	3
Emerson & Cuming Inc 869 Washington St Canton 1 Mass	10	Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	1	TV Specialty Co 350 W 31 St New York 1 NY	12
Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo	3	Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	3	U S Stoneware Co Alite Div Orville Ohio	10
Emerson Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY	10	Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	4-12	Vectron Inc 1611 Trapelo Rd Waltham 54 Mass	5
Emerson-Sack-Warner Corp 85 Washington St Somerville 43 Mass	3	Nevada Air Products Co P O Box 2472 Reno Nev	11-14	Vought Co P O Box 1350 Beverly Hills Calif	12
Engineering Associates 434 Patterson Rd Dayton 9 Ohio	11	Norden-Kelay Corp Commerce Rd Stamford Conn	3-5-14	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	1
Ereona Corp 551 5 Ave New York 17 NY	12	Olympic Radio & TV 34-01 38 Ave Long Island City 1 NY	11	Walworth Co 60 E 42 St New York 17 NY	3
Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch LI NY	2-8-11	Omega Labs Inc Haverhill St Rowley Mass	3	Waveline Inc Passaic Ave Caldwell NJ	3
Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind	2-3-5-11	Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	4-14	Westbury Electronics Inc 300 Shames Dr Westbury NY	3
Farrand Controls Inc 4401 Bronx Blvd New York 70 NY	10	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	13	West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	6-7-8
Fecker Inc J W 6592 Hamilton Ave Pittsburgh 6 Pa	3-12	Penn-East Eng'g Corp Willow St Kutztown Pa	6-7	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	1-3-10-11-14
Federal Telecommunication Labs Div IT&T 500 Washington Ave Nutley NJ	3	Petroff Corp Peter Av 127 Water St New York 5 NY	3	Wheeler Labs Inc 122 Cutter Mill Rd Great Neck NY	3
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	3-14	Photobell Co 43 Vesey St New York 7 NY	8	Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	4
Flight Research Inc P O Box 1-F Richmond 1 Va	12	Plastic Mold & Eng'g Co 157 Clifford St Providence RI	10	Zenith Plastics Co 1600 W 135 St Gardena Calif	3-10
Franklin Electronics Inc Box 113 Bridgeport Pa	5	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	7		
Fretco Inc 406 N Craig St Pittsburgh 13 Pa	3				
Gabriel Electronics Div Gabriel Co 135 Crescent Rd Needham Heights 94 Mass	3				
General Bronze Corp 711 Stewart Ave Garden City NY	3				

71—RECEIVERS, COMMUNICATION

Converters, amateur	1
Converters, FM	2
Converters, R-F	3
Converters, UHF-TV	4
Preselectors	5

Receivers, amateur	6
Receivers, AM communication	7
Receivers, aviation fixed	8
Receivers, aviation mobile	9
Receivers, battery portable	10
Receivers, carrier telegraph	11
Receivers, civil defense	12
Receivers, diversity	13
Receivers, fixed frequency	14
Receivers, FM communication	15
Receivers, frequency shift	16
Receivers, marine	17
Receivers, microwave	18
Receivers, police	19
Receivers, radio paging	20
Receivers, railroad	21
Receivers, remote pickup, fixed	22
Receivers, remote pickup, mobile	23
Receivers, SSB	24
Receivers, TV	25
Receivers, UHF	26
Receivers, VHF	27
Receivers, WWV	28

ACF Industries Nuclear Prods-Erco Div	
48 Lafayette St Riverdale Md	9-18
Admiral Corp	
3800 W Cortland St Chicago 47 Ill	25
Aeronautical Comm Equip Co	
3090 Douglas Rd Miami 33 Fla	8-11-27
Aeronautical Electronics Inc	
P O Box 6527 Raleigh NC	8-9-12-27
Airborne Electronics Co	
6813 Troost Ave N Hollywood Calif	17
Aircraft Radio Corp Boonton NJ	9-26-27
Airmec Ltd	
High Wycombe Buckinghamshire England	7
Airtron Inc	
1101 W Elizabeth Ave Linden NJ	18
Amerac Inc	
116 Topsfield Rd Wenham Mass	18
American Communications Corp	
280 Broadway New York 17 NY	12
American Electronic Laboratories	
121 N 7 St Philadelphia 6 Pa	18
American Machine & Foundry Co	
Electronics Div 1085 Commonwealth Ave	
Boston 15 Mass	14
American Machine & Foundry Co	
Defense Products Group 1101 N Royal St	
Alexandria Va	18
American Microwave Corp	
11754 Vose St N Hollywood Calif	18
Amtron Corp	
17 Felton St Waltham 54 Mass	26
Applied Electronics Co	
213 E Grand Ave	
S San Francisco Calif	7-14-17
Applied Research Inc	
163-07 Depot Rd Flushing 58 NY	15-26-27
Avia Products Co	
7266 Beverly Blvd	
Los Angeles 36 Calif	14-19-26-27
Arvin Industries Inc Columbus Ind	12
Astatic Corp 250 Harbor St Conneaut Ohio	4
Barker & Williamson Inc	
Canal & Beaver Sts	
Bristol Pa	3-6-7-12-13-14-16-24-28
Bassett Inc Rex	
1314 N E 17 Ct Ft Lauderdale Fla	7-17
Beckman/Berkeley Div	
Beckman Instruments Inc 2200 Wright Ave	
Richmond 3 Calif	28
Bell Aircraft Corp	
P O Box 1	3-4-7-8-9-10-14-15-16-18-
Buffalo 5 NY	22-23-24-26-27-28
Bendix Aviation Corp Bendix Radio Div	
East Joppa Rd	
Towson 4 Md	7-8-9-10-14-15-19-21-26-27
Bendix Aviation Corp	
1104 Fisher Bldg	
Detroit 2 Mich	7-8-9-15-21-26-27
Blonder-Tongue Laboratories	
9-25 Alling St Newark 2 NJ	4
Bolton Labs Inc W Main St Bolton Mass	18
Bristol Co	
P O Box 1790 EITT	
Waterbury 20 Conn	14-18
Browning Labs Inc	
750 Main St Winchester Mass	2-7-14-15-28
Budelman Radio Corp	
375 Fairfield Ave	
Stamford Conn	15-18-20-26-27
Burrhoughs Corp	
6071 2 Ave Detroit 32 Mich	7
Calbest Electronics Co	
4801 Exposition Blvd	
Los Angeles 16 Calif	27
Canadian Aviation Electronics Ltd	
6214 Cote de Liesse Rd	
St Laurent Quebec Canada	7-14-26-27
Canoga Corp	
5955 Sepulveda Blvd Van Nuys Calif	18
Central Electronics Inc	
1247 W Belmont Ave Chicago 13 Ill	6-24
Clegg Labs Div Clegg Inc	
Ridgedale Ave	1-6-7-14-15
Morristown NJ	24-26-27-28

Collins Radio Co	
855 35 St N E	6-7-8-9-13-14-16
Cedar Rapids Iowa	17-18-24-26-27
Comac Instrument Co	
66-11 99 St Forest Hills 74 NY	1-6
Communication Equipment & Eng'g Co	
5646 W Race Ave Chicago 44 Ill	14
Communications Co	
Coral Gables Fla	7-8-14-15-19-27
Conn Telephone & Electric Corp	
70 Britannia St Meriden Conn	11-14-15-27
Conrac Inc	
19217 E Foothill Blvd Glendora Calif	25
Consolidated Productions Inc	
Broward Int'l Airport	
Ft Lauderdale Fla	22
Continental Electronics Ltd	
302 Oakland St Brooklyn 22 NY	7-26-27
Crosby Labs Inc	
Box 233 Robbins Lane Hicksville NY	24
Daven Co	
Route 10	7-10-11-13-14-15-16-20
Livingston NJ	21-22-23-24-26-27-28
Dayton Aviation Radio & Equipment Corp	
R R 3 Troy Ohio	4-8-9
Deltine Inc	
608 Fayette Ave Mamaroneck NY	18
DeMornay-Bonardi Corp	
730 S Arroyo Pkwy Pasadena Calif	18
DeWald Radio Mfg Corp	
35-15 37 Ave Long Island City 1 NY	4-26
Diamond Power Specialty Corp	
Lancaster Ohio	25
Doller Co Robert	
Communications Equip Div 50 Drumm St	
San Francisco 11 Calif	14-20
Du Mont Labs Inc Allen B	
760 Bloomfield Ave Clifton NJ	23
Electrical Communications Inc	
765 Clementina St	
San Francisco 3 Calif	23
Electronic Specialty Co	
5121 San Fernando Rd	
Los Angeles 39 Calif	3
Electronics Development Co	
3743 N Cahuenga Blvd	
N Hollywood Calif	25-26
Electro-Voice Inc	
Cecil & Carrol Sts Buchanan Mich	6-7-24
Elm Labs	
10 Washington Ave	
Hastings-on-Hudson NY	15
Engineering Associates	
434 Patterson Rd Dayton 9 Ohio	18-28
Endeco Eng'g Development Co of Los	
Angeles 922 E Anaheim St	
Wilmington Calif	17
Entron Inc	
4902 Lawrence St Bladensburg Md	3-4
Erco Radio Labs Inc	
637 Stewart Ave	7-8-11-13-14-16
Garden City NY	20-24-26-27-28
Federal Telephone & Radio Co	
Div IT&T 100 Kingsland Rd	
Clifton NJ	7-11-15-18-21-26-27
Femco Inc Irwin Pa	10-14-15
F-R Machine Works Inc Electronic &	
X-Ray Div 26-12 Borough Pl	
Woodside 77 NY	18
General Communication Co	
677 Beacon St Boston 15 Mass	9-18
General Electric Co	
Communication Products Dept	
Syracuse NY	12-15-18-27
General Electric Co	
Light Military Electronic Equip Dept	
French Rd Utica NY	26-27
Goodyear Aircraft Corp	
1210 Massillon Rd Akron 15 Ohio	18
Gray Radio Co	
501 Forest Hill Blvd W Palm Beach Fla	17
Grem Eng'g Co 488 1 St Brooklyn 15 NY	18
Gruen Industries Inc	
Time Hill Cincinnati 6 Ohio	34
Hallcrafters Co	
4401 W 5 Ave	1-3-4-6-7-10-13
Chicago 24 Ill	14-18-24-26-27
Hammjarlund Mfg Co 460 W 34 St	1-6-7-8
New York 1 NY	11-12-13-24-26-27
Hancock Electronics Corp	
2553 Middlefield Rd Redwood City Calif	25
Harvey-Wells Electronics Inc	
North St Southbridge Mass	6-7-12-14-17
Henth Co 305 Territorial Rd	
Benton Harbor Mich	6-7
Hudson American Div	
25 W 43 St New York 36 NY	17
Industrial Development Eng'g Assoc	
7900 Pendleton Pike	
Indianapolis Ind	1-12-14-15-19-21-27
Industrial Radio Corp	
428 N Parkside Ave	10-12-14-15-19
Chicago 44 Ill	20-22-23-27
Industrial TV Inc	
369 Lexington Ave Clifton NJ	25
Intelec Systems Inc	
22 Thames St New York 6 NY	13-24
International Research Associates	
2221 Warwick Ave Santa Monica Calif	10
I-T-E Circuit Breaker Co	
Special Products Div 601 E Erie Ave	
Philadelphia 34 Pa	18
Jarvis Electronics Corp	
1140 Cherry St Winnetka Ill	9
Jerrold Electronics Corp	
23 & Chestnut Sts Philadelphia 3 Pa	3-4

J-V-M Eng'g Co	
4633 S Lawndale Ave Lyons Ill	18
Kaar Eng'g Corp	
2995 Middlefield Rd	
Palo Alto Calif	7-12-14-15-17-27
Kahn Research Labs	
22 Pine St Freeport NY	8-24
Kaiser Aircraft & Electronics Corp	
Toledo Electronics Div	
PO Box 437 Toledo Ohio	18-24
K-F Development Co	
2606 Spring St Redwood City Calif	6
Kintel (Kay Lab)	
5725 Kearny Villa Rd	
San Diego 12 Calif	25
Lambda-Pacific Eng'g Inc	
14725 Armita St Van Nuys Calif	18
Land-Air Inc Instrument & Electronic Div	
2133 Adams Ave	
San Leandro Calif	2-3-7-15-18-26-27
Lane Electronics Mfg Corp	
7254 Atoll Ave N	
Hollywood Calif	9
Lavoie Labs Inc	
Matawan-Freehold Rd	
Morganville NJ	28
Lear Inc	
3171 S Bundy Drive	
Santa Monica Calif	7-8-9-13-14-15-26-27
Lel Inc	
380 Oak St Copiague NY	19
Litton Industries of Calif	13-14
336 N Foothill Rd Beverly Hills Calif	16-24
Lynmar Engineers Inc	
1432 N Carlisle St	
Philadelphia 21 Pa	10-14-15-19-24
Lysco Mfg Co	
1401 Clifton St	
Hoboken NJ	1-3-7-12-14-17-19
Mackay Radio & Telegraph Co	
Marine Div	
133 Terminal Ave Clark NJ	7-17-27
Mack Electronics Div Inc	
Sub Mack Trucks Inc	
1120 S 2 St Plainfield NJ	7-24-26
Madison Fielding Corp	
863 Madison St Brooklyn 21 NY	4
Manson Laboratories Inc	
207 Greenwich Ave Stamford Conn	7-26-27
Marconi Instruments Ltd	
44 New St	
New York 4 NY	6-7-15-26-27
Measurement Eng'g Ltd	
232 John St Annpur Ontario Can	7-10-14-17
Melpar Inc	
3000 Arlington Blvd Falls Church Va	26-27
Meridian Metalcraft Inc	
8739 S Millergrrove Dr Whittier Calif	18
Michigan Electronics Inc	
854 N Rockwell St	
Chicago 22 Ill	14-15-19-20-23
Model Eng'g & Mfg Inc	
50 Frederick St	
Huntington Ind	7-8-9-10-14-17-26-27
Modern Industries Inc	
2601 Colorado Ave Santa Monica Calif	1
Morrow Radio Mfg Co	
2794 Market St Salem Ore	6-7-8-9-10
Mosler Research Products Inc	
3 Keeler St Danbury Conn	10-14-15-19
Motorola Communications & Electronics Inc	
4501 W Augusta Blvd	
Chicago 51 Ill	10-12-14-15-18-20-21-27
Multi-Products Co	
21470 Coolidge Hwy	
Oak Park 37 Mich	6-7-12-27
National Aeronautical Corp	
Ft Washington Industrial Park	
Ft Washington Pa	8
National Company Inc	
61 Sherman St	
Malden 48 Mass	6-7-10-14-16-26-27
Nems-Clarke Inc	
919 Jesup-Blair Dr	
Silver Spring Md	7-14-15-24-25-26-27
Nevada Air Products Co	
P O Box 2472 Reno Nev	8
Northern Radio Co	
143 W 22 St New York 11 NY	11-13-16
Nuclear-Electronics Corp	
2632 W Cumberland St	
Philadelphia 32 Pa	14-17
O'Brien Electric Corp	
6514 Santa Monica Blvd	
Hollywood 38 Calif	15
Olympic Radio & TV	
34-01 38 Ave Long Island City 1 NY	9
Packard Bell Electronics Corp	
12333 W Olympic Blvd	
Los Angeles 64 Calif	7-12
Palmer Inc M V	
4002 Fruit Valley Rd Vancouver Wash	11
Pearce Simpson Inc	
3023 Coral Way Miami 34 Fla	17
Perma-Power Co	
3102 N Elston Ave Chicago 18 Ill	23
Planet Service Corp	
88-02 88-06 102 St Richmond Hill 18 NY	17
Polaron Corp Overton Nebr	14-15-19
Polarad Electronics Corp	
43-20 34 St Long Island City 1 NY	18
Polytechnic Research & Development Co	
202 Tillary St Brooklyn 1 NY	18

Pratt Albert
114 Lake View Ave
Milwaukee 17 Wisc 10-14-15-19-21-26-27

Precision Radiation Instruments Inc
4223 W Jefferson Blvd
Los Angeles 16 Calif 15

Premier Instrument Corp
52 W Houston St New York 12 NY 18

Press Wireless Labs Inc
25 Prospect Pl W Newton 65 Mass 13-16

Production Research Corp
Thornwood NY 2-7-8-10-13-14-18-24

Pye Canada Ltd
82 Northline Rd 10-11-14
Toronto 16 Ont Canada 15-19-25-26-27

Pye Telecommunications Ltd
Newmarket Rd 2-3-7-8-10-11-12-14-15
Cambridge England 17-18-19-21-22-23-25-27

Radio Corp of America
Commercial Electronic Products
Camden 2 NJ 4-7-15-17-18-24-26-27

Radio Eng'g Labs
36-40 37 St Long Island City 1 NY 26-27

Radio Frequency Labs Inc
Boonton NJ 11-16-28

Radio Kits Inc
120 Cedar St New York 6 NY 7-10-20-25

Raytheon Mfg Co
100 River St Waltham 54 Mass 17-18

Reency Div IDEA Inc
7900 Pendleton Pike
Indianapolis Ind 1-4-12-14-15-19-21-27

Resdel Eng'g Corp
330 S Fair Oaks Ave
Pasadena Calif 18-26-27

Rhein Sound Systems Inc
133 Hamilton St 8-14-15-16-
New Haven 5 Conn 19-22-23-24

RME Div Electro Voice Inc
Buchanan Mich 1-6-7-15

Royal Communication Systems
11462 Euclid Ave
Cleveland 6 Ohio 2-6-14-15-20-23-26-27

RS Electronics Corp
435 Portage Ave Palo Alto Calif 18

Sanders Associates
95 Canal St Nashua N H 18

Scantlin Electronics Inc
11624 W Pico Blvd
Los Angeles 64 Calif 7-20

Scott Inc H H
385 Putnam Ave Cambridge 39 Mass 15

Seeley Electronics
1060 S La Brea Ave
Los Angeles 19 Calif 6-7-14-15-19-20-27

Servo Corp of America
2020 Jericho Tpke New Hyde Park NY 27

Shasta Div Beckman Instruments Inc
P O Box 296 Station A Richmond Calif 28

Sonar Radio Corp
3050 W 21 St Brooklyn 24 NY 17

Specific Electronics
570 W Woodbury Rd Altadena Calif 14-28

Specific Products Co
14515 Dickens St Sherman Oaks Calif 28

Spencer-Kennedy Labs Inc
1320 Soldiers Field Rd Boston 35 Mass 4

Spivey Inc James S
4908 Hampden Lane Washington 14 D C 27

Springer Aircraft Radio Co Earl W
Route 11 Box 330 Indianapolis Ind 26

Stavid Eng'g Inc
U S Route 22 Plainfield NJ 18

Stelma Inc
190 Henry St Stamford Conn 11-16

Stewart Warner Electronics Div
1300 N Kostner Ave Chicago 51 Ill 8-10

Stromberg-Carlson Div General Dynamics Corp
100 Carlson Rd Rochester 3 NY 9-20

Superex Electronics Corp
4 Radford Pl Yonkers NY 12

Sutton Electronic Co
2415 Nicholasville Rd Lexington Ky 4

Sylvania Electric Products Inc
1740 Broadway New York 19 NY 9-18-25-26

Symphony Electronics Corp
925 S Western Ave Los Angeles 6 Calif 7

Taffet Radio & TV Co
27-05 Brooklyn-Queens Expressway
W Woodside 77 NY 7-10-17

Taller & Cooper
75 Front St Brooklyn 1 NY 16

Tarzan Inc Sarkes E
Hillside Drive Bloomington Ind 18-25

Telectron Co Div of Elliot & Evans
Bldg 9 Broward International Airport
Ft Lauderdale Fla 22

Tele-Dynamics Inc
32 & Walnut Sts Philadelphia 4 Pa 15-18

Telemarine Communications Co
3040 W 21 St Brooklyn 24 NY 7-8-14-15-17

Telephonics Corp
Park Ave Huntington LI NY 15-18-26-27

Teletronics Lab Inc
54 Kinkel St Westbury NY 28

Times Facsimile Corp
540 W 58 St New York 19 NY 2

Transitron Inc
186 Granite St Manchester N H 14-19-28

Trans-Tel Corp
736 N Highland Ave
Los Angeles 38 Calif 20

Trutone Electronics Inc
812 N Highland Ave
Los Angeles 38 Calif 7-15-20

Uniwave Inc
2 Marine St Farmingdale NY 4-26-27

Varo Mfg Co
2201 Walnut St Garland Tex 9-27

Vectron Inc
1611 Trapelo Rd Waltham 54 Mass 18

Virginia Electronics Co
River Rd & B & O R R
Washington 16 D C 7-10

Voron & Co George
835 N 19 St
Philadelphia 30 Pa 7-14-15-26-27

Warren Corp J C
21 Hanse Ave
Freeport NY 10-15-19-22-23

Westbury Electronics Inc
300 Shames Dr Westbury NY 3-4-25

Westinghouse Electric Corp
P O Box 868
Pittsburgh 30 Pa 7-17-18-24-26-27

Westrex Corp
111 8 Ave New York 11 NY 13

WRL Electronics Inc
3415 W Broadway Council Bluffs Iowa 1

Browning Labs Inc
750 Main St Winchester Mass 1-4-5-12-15

Calbest Electronics Co
4801 Exposition Blvd 4-5-6-9-10-12
Los Angeles 16 Calif 13-18-19-20-21

Canadian Aviation Electronics Ltd
6214 Cote de Liesse Rd
St Laurent Quebec Canada 18

C B C Electronics Co
2601 N Howard St Philadelphia 33 Pa 22

Clegg Labs Div Clegg Inc
Ridgedale Ave Morristown NJ 15

Collins Radio Co
355 35 St N E Cedar Rapids Iowa 15

Community Eng'g Corp
Box 824 State College Pa 22

Conrac Inc
19217 E Foothill Blvd Glendora Calif 18

Corbin Corp 5419 56 Pl Riverdale Md 23

Crosby Labs Inc
Box 233 Robbins Lane Hicksville NY 8

Davis & Co J W
9212 Denton Dr Dallas 35 Texas 4-11

Defiance Eng'g & Microwave Corp
Beverly Airport Beverly Mass 23

Delco Radio Div General Motors Corp
Kokomo Ind 6

DeWald Radio Mfg Corp
35-15 37 Ave 1-4-5-7-12-13
Long Island City 1 NY 16-17-18-19

Doty Acoustical Electronic Labs
431 Broome St New York 13 NY 17

Eckstein Radio & TV Co
2601 E Franklin Ave Minneapolis 6 Minn 4-6

Electro-Voice Inc
Cecil & Carrol Sts Buchanan Mich 5

Elm Labs
10 Washington Ave
Hastings-on-Hudson NY 3

Emerson Radio & Phonograph Corp
14 & Coles Sts 4-7-10-18
Jersey City 2 NJ 19-20-21

Ercona Corp 551 5 Ave New York 17 NY 5

Erco Radio Labs Inc
637 Stewart Ave Garden City NY 15

Espey Mfg Co
Congress & Ballston Ave
Saratoga Springs NY 45

Federal Telephone & Radio Co Div IT&T
100 Kingsland Rd Clifton NJ 6

Fisher Radio Corp
21-21 44 Dr Long Island City 1 NY 4-5-12-13

Flush Wall Radio Co
1012 Cleveland St Clearwater Fla 4

Franklin Electronics Inc
Box 113 Bridgeport Pa 12

Gardiner Electronics Co
2545 E Indian School Rd Phoenix Ariz 7-17

Gary Wells Co
361 Rockaway Ave Valley Stream NY 12

General Electric Co
Communication Products Dept
Syracuse NY 11

General Precision Lab Inc
63 Bedford Rd Pleasantville NY 22

G & M Equipment Co
7315 Varna Ave N Hollywood Calif 12-13

Granco Products Inc
36-07 20 Ave Long Island City NY 4-5

Gyro Electronics Co
325 Canal St New York 13 NY 17

Hal-Hen Co
36-14 11 St Long Island City 6 NY 17

Hallierafters Co
4401 W 5 Ave 4-5-7-12-15-16
Chicago 24 Ill 17-18-19-20-21

Hammarlund Mfg Co
460 W 34 St New York 1 NY 20-21

Harvey-Wells Electronics Inc
North St Southbridge Mass 15-16

Heath Co
305 Territorial Rd
Benton Harbor Mich 4-7-17

Hoffman Electronics Corp
3761 S Hill St
Los Angeles 7 Calif 7-18-20-21

Hotpoint Co Div General Electric Co
5600 Taylor St Chicago 44 Ill 18

Industrial Development Eng'g Assoc
7900 Pendleton Pike
Indianapolis Ind 2-1-7-17-22

Industrial Radio Corp
428 N Parkside Ave Chicago 44 Ill 21

Industrial TV Inc
369 Lexington Ave Clifton NJ 18-22

International Research Associates
2221 Warwick Ave
Santa Monica Calif 4-7-17-22

International Telemeter Corp
2000 Stoner Ave Los Angeles 25 Calif 22

Jerrold Electronics Corp
23 & Chestnut Sts Philadelphia 3 Pa 2-22

Johnson Electronics Inc
521 Elwell St Orlando Fla 23

J-V-M Eng'g Co
4633 S Lawndale Ave Lyons Ill 23

Kaar Eng'g Corp
2995 Middlefield Rd Palo Alto Calif 15

Kent TV Inc
505 Driggs Ave Brooklyn 11 NY 5-18-19

Kuss Industries Inc
Tacony & Lewis Sts
Philadelphia 24 Pa 4-5-12

Land-Air Inc Instrument & Electronic Div
2133 Adams Ave San Leandro Calif 15

72—RECEIVERS, HOME

Converters, FM	1
Converters, UHF-TV	2
Preselectors	3
Receivers, AM	4
Receivers, AM-FM	5
Receivers, automobile	6
Receivers, battery portable	7
Receivers, binaural	8
Receivers, coin operated	9
Receivers, color TV	10
Receivers, farm radio	11
Receivers, FM	12
Receivers, phono-radio comb.	13
Receivers, recorder-radio comb.	14
Receivers, short wave, fixed	15
Receivers, short wave, portable	16
Receivers, transistor	17
Receivers, TV	18
Receivers, TV combination	19
Receivers, UHF	20
Receivers, VHF	21
Television boosters	22
Wave traps	23

Adler Electronics Inc
1 LeFevre Lane New Rochelle NY 22

Admiral Corp
3800 W Cortland St 4-10-13-17
Chicago 47 Ill 18-19-20-21

Advance Electronics Co
8510 North End Ave Oak Park 37 Mich 23

Airborne Electronics Co
6813 Troost Ave N Hollywood Calif 16

Airtrox Development Corp
4902 Church Ave Brooklyn 3 NY 13-22

American Communications Corp
280 Broadway New York 17 NY 9

American Elite Inc
7 Park Ave New York 16 NY 6

American Machine & Foundry Co
Electronics Div 1085 Commonwealth Ave
Boston 15 Mass 17

American Machine & Foundry Co
Defense Products Group 1101 N Royal St
Alexandria Va 17

American Mica Radio Corp
235 Parker Ave Manasquan NJ 12-13

Andrea Radio Corp
27-01 Bridge Plaza N
Long Island City 1 NY 7-10-16-18-19

American Television & Radio Co
300 E 4 St St Paul 1 Minn 18

Ansley Mfg Co Arthur New Hope Pa 5-13

Applied Research Inc
163-07 Depot Rd Flushing 58 NY 22

Arvin Industries Inc
Columbus Ind 4-5-7-11-12-17

Astatic Corp 250 Harbor St Conneaut Ohio 22

Automatic Radio Mfg Co
122 Brookline Ave
Boston 15 Mass 4-6-7-11-15-17

Barber & Howard Co East Ave Westerly RI 12

Barker & Williamson Inc
Canal & Beaver Sts Bristol Pa 15

Barlowe Television
402 N Wantagh Ave Bethpage NY 4-7-17

Bell Aircraft Corp
P O Box 1 Buffalo 5 NY 15-16

Bendix Aviation Corp Bendix Radio Div
East Joppa Rd Towson 4 Md 6

Bendix Aviation Corp
1104 Fisher Bldg Detroit 2 Mich 6

Blonder-Tongue Laboratories
9-25 Alling St Newark 2 NJ 2-22-23

Bogen Co David
P O Box 500 Paramus NJ 4-5-12-22

Lear Inc 3171 S Bundy Drive Santa Monica Calif	17	Symphony Electronics Corp 925 S Western Ave Los Angeles 6 Calif	4-5-17	Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	1-2-3-4-7-9
Lel Inc 380 Oak St Copiague NY	7-17	Taffet Radio & TV Co 27-05 Brooklyn Queens Expressway W Woodside 77 NY	4-5-7-11-16	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	1-2-4-7-8-9
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	15	Tech-Master Corp 75 Front St Brooklyn 1 NY	18-20-21	Burrughs Corp 6071 2 Ave Detroit 32 Mich	8
Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	15	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	10-22	Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada	3-7
Madison Fielding Corp 863 Madison St Brooklyn 21 NY	2-4-5	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	14	CGS Laboratories Inc 391 Ludlow St Stamford Conn	12
Magnavox Corp 2131 Bueter Rd Ft Wayne 4 Ind	4-5-13-18-19	Telemarine Communications Co 3040 W 21 St Brooklyn 24 NY	15	Collins Radio Co 855 35 St N E Cedar Rapids Iowa	1-2-4-7-8-9
Majestic Int'l Corp 79 Washington St Brooklyn 1 NY	4-5-7-12-13-16-19	Telematic Industries Inc 16 Howard Ave Brooklyn 7 NY	2-4-5-12-20	Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	10
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	2	Teletronic Labs Inc 1835 W Rosecrans Ave Gardena Calif	4-5-12	Daven Co Route 10 Livingston NJ	1-2-3-4-5-6-7-8-9-10-11
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	15-16-17	Trans-Tel Corp 736 N Highland Ave Los Angeles 38 Calif	1-2-5-6-18	Dayton Aviation Radio & Equipment Corp R R 3 Troy Ohio	1-2-4-7-9
Merit Coil & Transformer Corp 4427 N Clark St Chicago 40 Ill	23	Transval Eng'g Corp 10401 W Jefferson Blvd Culver City Calif	17	Edo Corp 13-10 111 St College Point 56 LI NY	6
Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	14	Transvision Inc 460 North Ave New Rochelle NY	18-20-21	Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	7-8
Millen Mfg Co James 150 Exchange St Malden 48 Mass	23	Trav-Ler Radio Corp 571 W Jackson Blvd Chicago 6 Ill	4-7-18	Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind	5
Miller Co J W 5917 S Main St Los Angeles 3 Calif	23	Trutone Electronics Inc 812 N Highland Ave Los Angeles 38 Calif	13-15-16	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	1-2-4-6-7-9
Miller Electronics 2840 Naomi St Burbank Calif	4-5-8	TV Hardware Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	22	General Communication Co 677 Beacon St Boston 15 Mass	2
Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	16	Valandy Electronics Corp 61-35 166 St Flushing 68 NY	4	Gruen Industries Inc Time Hill Cincinnati 6 Ohio	3
Mosley Electronics Inc 8622 St Charles Rock Rd St Louis 14 Mo	23	Vidaire Electronics Mfg Corp 576 W Merrick Rd Lynbrook NY	23	Haller Kaymond & Brown 124 N Atherton St State College Pa	5
Motorola Communications & Electronics Inc 4501 W Augusta Blvd Chicago 51 Ill	6	Voron & Co George 835 N 19 St Philadelphia 30 Pa	16	Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	9-12
MP Engineering Co Fairfield 3 Conn	13	Warren Corp J C 11 Hanse Ave Freeport NY	14	Harvey-Wells Electronics North St Southbridge Mass	6
Multi-Products Co 21470 Coolidge Hwy Oak Park 37 Mich	6	Warwick Mfg Corp 7300 N Lehigh Ave Chicago 31 Ill	7-10-12-13-14-15 16-17-18-19-20-21	Heath Co 305 Territorial Rd Benton Harbor Mich	10
National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif	17	Wells-Gardner & Co 2701 N Kildaire Ave Chicago 39 Ill	4-13-18-19-20-21	Hogan Labs Inc 155 Perry St New York 14 NY	11
National Company Inc 61 Sherman St Malden 48 Mass	4-5-12-15-16	Westbury Electronics Inc 300 Shames Dr Westbury NY	2-22	Industrial Radio Corp 428 N Parkside Ave Chicago 44 Ill	8
Newcomb Audio Products Co 6824 Lexington Ave Los Angeles 38 Calif	4-5-11	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	4-5-15-18-21	Industrial TV Inc 369 Lexington Ave Clifton NJ	6
Olympic Radio & TV 34-01 33 Ave Long Island City 1 NY	4-5-7-10-12 13-15-18-19	Zenith Radio Corp 6001 Dickens Ave Chicago 39 Ill	4-5-7-13-16-18	I-T-E Circuit Breaker Co Special Products Div 601 E Erie Ave Philadelphia 34 Pa	1-2-3
Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif	4-5-7-18-19			Jarvis Electronics Corp 1140 Cherry St Winnetka Ill	1-2-9
Pentron Corp 777 S Tripp Ave Chicago 24 Ill	4-14			Karr Eng'g Corp 2995 Middlefield Rd Palo Alto Calif	1-10
Philco Corp Tioga & C Sts Philadelphia 24 Pa	3-4-10-17-18			Lear Inc 3171 S Bundy Drive Santa Monica Calif	1-3-4-9
Philmore Mfg Co 113 University Pl New York 3 NY	4-17			Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	1-2-3-5
Pratt Albert 114 W Lake View Ave Milwaukee 17 Wisc	12			Mackay Radio & Telegraph Co Marine Div 133 Terminal Ave Clark NJ	1-6-10
Precise Development Corp 2 Neil Ct Oceanside NY	5			Magnatran Inc P O Box 211 Kearny NJ	3
Precision Radiation Instruments Inc 4223 W Jefferson Blvd Los Angeles 16 Calif	5			Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	10
Prescott TV Co 7352 Beverly Blvd Los Angeles 36 Calif	18-19			Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	5
Production Research Corp Thornwood NY	15-16			Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	4-7
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Can	4-5-6-7-12-13 15-16-18-19			Mitchell Industries Inc P O Box 17 F M 1195 Municipal Airport Mineral Wells Texas	9
Pye Telecommunications Ltd Newmarket Rd Cambridge England	6			Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	1-2-3-4-6-9
Radio Corp of America Commercial Electronic Products Camden 2 NJ	2-4-5-7-10-13-17-18-19-22			Morrow Radio Mfg Co 2794 Market St Salem Oregon	9
Radio Kits Inc 120 Cedar St New York 6 NY	4-5-7-8-15-16 17-18-19-20-21			Muirhead Instruments Inc 677 5 Ave New York 22 NY	11
Regency Div Idea Inc 7900 Pendleton Pike Indianapolis 26 Ind	2-4-7-17-22			Muirhead & Co Ltd Beckenham Kent England	11
Rhein Sound Systems Inc 133 Hamilton St New Haven 5 Conn	5-12-15			National Aeronautical Corp Ft Washington Industrial Park Ft Washington Pa	9
RME Div Electro Voice Inc Buchanan Mich	2-22			Nevada Air Products Co P O Box 2472 Reno Nev	1-5
Saratoga Industries Congress & Ballston Ave Saratoga Springs NY	4-5			Northern Radio Co 143 W 22 St New York 11 NY	11
Scott Inc H H 385 Putnam Ave Cambridge 39 Mass	5-8-12			Olympic Radio & TV 34-01 33 Ave Long Island City 1 NY	1
Seeley Electronics 1060 S La Brea Ave Los Angeles 19 Calif	6			Panoramic Radio Products Inc 10 S 2 St Mt Vernon NY	8
Setchell-Carlson Inc New Brighton St Paul 12 Minn	18-19-20-21			Plectron Corp Overton Nebr	8
Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	9-10			Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	6
Spencer-Kennedy Labs Inc 1320 Soldiers Field Rd Boston 35 Mass	23			Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	12
Superex Electronics Corp 4 Radford Pl Yonkers NY	4-7-22-23			Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	11
Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	15-18			Production Research Corp Thornwood NY	1-2-5-8
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	4-5-6			Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	2
Sutton Electronic Co 2415 Nicholasville Rd Lexington Ky	17			Pye Telecommunications Ltd Newmarket Rd Cambridge England	8
Sylvania Electric Products Inc 1740 Broadway New York 19 NY	4-5-10-13-18-19			Raytheon Mfg Co 100 River St Waltham 54 Mass	1
				Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	9
				Rhein Sound Systems Inc 133 Hamilton St New Haven 5 Conn	3-10
				Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	10

73—RECEIVERS—NAVIGATION & SPECIAL PURPOSE

NAVIGATION

Receivers, direction finding	1
Receivers, distance measuring	2
Receivers, fixed frequency	3
Receivers, glide slope	4
Receivers, infra-red	5
Receivers, loran	6
Receivers, remote control	7
Receivers, selective signalling	8
Receivers, VHF omnirange	9

SPECIAL PURPOSE

Receivers, automatic alarm	10
Receivers, facsimile	11
Receivers, panoramic	12

Admiral Corp 3800 W Cortland St Chicago 47 Ill	6
Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	4-5
Aeronautical Comm Equip Co 3090 Douglas Rd Miami 33 Fla	9
Aeronautical Electronics Inc P O Box 6527 Raleigh NC	1
Airborne Electronics Co 6813 Troost Ave N Hollywood Calif	1
Aircraft Radio Corp Bonton NJ	1-4-9
Alden Electronic & Impulse Recording Equip Co P O Box 125 Westboro Mass	11
Along Products Inc 163 W 23 St New York 11 NY	17
American Machine & Foundry Co Electronics Div 1085 Commonwealth Ave Boston 15 Mass	2-3-10
American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	1-2-3-6-8
Applied Electronics Co 213 E Grand Ave S San Francisco Calif	1
Babcock Radio Eng'g Inc 7942 Woodley Ave Van Nuys Calif	7
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	10
Bassett Inc Rex 1314 N E 17 Ct Ft Lauderdale Fla	3
Bell Aircraft Corp P O Box 1 Buffalo 5 NY	1-2-3-4-5-6-7-8-9
Bell & Gossett Co 8200 Austin Ave Morton Grove Ill	10

Schafer Custom Eng'g					
235 S 3 St Burbank Calif	10				
Schirmer-National Alarm Co					
20 Westside Ave Bergenfield NJ	10				
Seismograph Service Corp					
6200 E 41 St Tulsa 1 Okla	2				
Servo Corp of America					
2020 Jericho Turnpike New Hyde Park NY	5				
Skiatron Electronics & TV Corp					
180 Varick St New York 14 NY	2-8-11				
Sperry Gyroscopic Co Div Sperry Rand Corp					
Great Neck NY	1-2-3-6				
Stavid Eng'g Inc					
U S Route 22 Plainfield NJ	2				
Stewart Warner Electronics Div					
1300 N Kostner Ave Chicago 51 Ill	1-2-5-11				
Telemarine Communications Co					
3040 W 21 St Brooklyn 24 NY	1-3				
Texas Instruments Inc					
6000 Lemmon Ave Dallas 9 Texas	5				
Times Facsimile Corp					
540 W 58 St New York 19 NY	11				
Vectron Inc					
1611 Trapelo Rd Waltham 54 Mass	12				
Wagner Co H A					
14707 Keswick St Van Nuys Calif	5				

74—RECORDERS, AUDIO

Duplicators, magnetic tape	1
Recorders, binaural tape	2
Recorders, dictation	3
Recorders, disc	4
Recorders, magnetic disc	5
Recorders, magnetic film stripe	6
Recorders, magnetic tape	7
Recorders, magnetic wire	8
Recorders, miniature tape/wire	9
Recorders, photographic film	
sound track	10
Recorders, portable	11
Recorders, sound	12
Recorders, studio	13
Recorders, synchronized film-	
tape	14
Recorders, tape loop	15
Recorders, telephone	16

Addressograph-Multigraph Corp					
1200 Babbitt Rd Cleveland 17 Ohio	7				
Afton Industries					
406 St Louis Ave					
Valley Park Mo	2-3-4-5-6-7-8-9-10-12-15				
Allied Radio Corp					
100 N Western Ave Chicago 80 Ill	7-11				
Allied Recording Products Co					
32-32 Greenpoint Ave					
Long Island City 1 NY	4				
American Elite Inc					
7 Park Ave New York 16 NY	7				
Ampex Corp					
934 Charter St					
Redwood City Calif	1-2-7-9-11-12-13-15-16				
Amplifier Corp of America					
398 Broadway New York 13 NY	7-15				
Audio-Master Corp					
17 E 46 St New York 17 NY	7				
Aurex Corp					
1117 N Franklin St Chicago 10 Ill	9-15				
Autonetics Div North American Aviation					
9150 E Imperial Hwy Downey Calif	7				
Beam Industries Inc					
624 S Michigan Chicago 5 Ill	7				
Bell & Howell					
7100 McCormick Rd Chicago 45 Ill	7				
Bell Sound Systems Inc					
555 Marion Rd Columbus 7 Ohio	4-7-11				
Berndt-Bach Inc Auricon Div					
6900 Romaine St					
Hollywood 38 Calif	6-7-10-14				
Broadcast Equipment Specialties Corp					
P O Box 149 Beacon NY	7-11-12				
Brush Electronics Co					
3405 Perkins Ave Cleveland 14 Ohio	12				
Brush Electronics Co Texas Div					
3732 Westheimer Rd Houston 6 Texas	7				
Burroughs Corp					
6071 2 Ave Detroit 32 Mich	5-7-15				
Buss-Clement-Doughten & Associates					
201 B Studio Hill Chester Springs Pa	12				
Camera Equipment Co					
315 W 43 St New York 36 NY	7-10				
Century Electronics & Instruments Inc					
1333 N Utica Ave Tulsa 10 Okla	7				
Cinematic Developments					
2125 32 Ave San Francisco 16 Calif	7				
Columbia Records Div Columbia					
Broadcasting System					
799 7 Ave New York NY	7				
Consolidated Electrodynamics Corp					
300 N Sierra Madre Villa					
Pasadena Calif	7				
Crescent Industries Inc					
5900 W Touhy Ave Chicago Ill	7				
Dictaphone Corp					
420 Lexington Ave					
New York 17 NY	3-7-9-12-16				

DuKane Corp					
St Charles Ill	7				
Dunlap Electronics					
764 9 St Des Moines 14 Iowa	7				
Electrola Inc					
7517 N Clark St Chicago 26 Ill	7				
Electronic Secretary Industries Inc					
805 S 5 St Milwaukee 4 Wis	16				
Electro-Sonic Labs					
35-54 36 St Long Island City 5 NY	12				
Electro-Technical Labs Div Mandrel					
Industries 5134 Glenmont					
Houston Texas	7				
Epsylon Sales & Service Ltd					
N Feltham Trading Estate Faggs Rd					
Bedfont Feltham Middlesex England	7				
Ercona Corp					
551 5 Ave New York 17 NY	2-7				
Fairchild Recording Equipment Co					
10-40 45 Ave Long Island City 1 NY	4-13				
Federal Mfg & Eng'g Corp					
1055 Stewart Ave Garden City NY	7				
Felt & Tarrant Mfg Co Comptometer					
Dictation Div Algonquin Ill	3-9-11				
General Kinetics Inc					
555 23 St S Arlington 2 Va	7				
Gordon Enterprises					
5362 N Cahuenga Blvd N Hollywood Calif	10				
Gotham Audio Development Corp					
2 W 46 St New York 36 NY	4				
Graflex Inc					
154 Clarissa St Rochester 8 NY	7-9				
Gulton Industries Inc					
212 Durham Ave Metuchen NJ	9				
Gyro Electronics Co					
325 Canal St New York 13 NY	7				
Hickok Electrical Instrument Co					
10514 Dupont Ave Cleveland 8 Ohio	11-12				
Infra Electronic Corp					
47 Factory Pl					
Cedar Grove NJ	3-4-5-9-11-16				
International Radio & Electronics Corp					
R 4 Box 123 Elkhart Ind	7				
International Scientific Industries					
Corp 2374 E Hiway 24					
Colorado Springs Colo	7				
I Q Industries					
1714 Westwood Blvd Los Angeles 24 Calif	7				
James Instrument Lab					
9110 S 52 Ct Oak Lawn Ill	7-13				
Kinevox-Hallen Div Electromotion Co					
1646 18 St					
Santa Monica Calif	6-7-11-12-14				
Magnasync Mfg Co					
5546 Satsuma Ave					
N Hollywood Calif	6-12-13-11				
Magnecord Div Midwestern Instruments Inc					
1101 S Kilbourn Ave					
Chicago 24 Ill	2-7-11-15-16				
Magnetic Recording Industries					
11 E 16 St New York 3 NY	2-3-5-7-12-16				
Majestic Int'l Corp					
79 Washington St Brooklyn 1 NY	7-11				
Maurer Inc J A					
37-01 31 St Long Island City 1 NY	10-12				
Metzner Eng'g Corp					
1041 N Sycamore Ave					
Hollywood 38 Calif	7-12				
Michigan Electronics Inc					
854 N Rockwell St					
Chicago 22 Ill	3-7-9-11-15				
Midwestern Instruments					
P O Box 7186 Tulsa Okla	7				
Miles Reproducer Co					
812 Broadway					
New York 3 NY	3-9-11-12-13-14-16				
Mincom Div Minn Mining & Mfg Co					
2049 S Barrington Ave					
Los Angeles Calif	7				
Minneapolis-Honeywell Regulator Co					
Davies Labs Div					
10721 Hanna St Beltsville Md	7-15				
Mohawk Business Machines Corp					
944 Halsey St					
Brooklyn 33 NY	2-3-7-9-11-12-13-15-16				
Monroe Calculating Machine Co					
Electronics Div Morris Plains NJ	5				
Nemeth Inc					
2223 S Carmelina Ave					
Los Angeles 64 Calif	7-15				
Newcomb Audio Products Co					
6824 Lexington Ave					
Los Angeles 38 Calif	7				
North American Instruments Inc					
2420 N Lake St Altadena Calif	7				
Olympic Radio & TV					
34-01 38 Ave Long Island City 1 NY	7				
Palmer Inc M V					
4002 Fruit Valley Rd Vancouver Wash	16				
Pampa Electronics Corp					
7354 Frankford Ave Philadelphia 36 Pa	6-7				
Peirce Dictation Systems					
5900 N Northwest Hwy					
Chicago 31 Ill	3-7-8-9-12				
Pentron Corp					
777 S Tripp Ave					
Chicago 24 Ill	2-5-7-9-11-12-13-14-15-16				
Potter Instrument Co					
115 Cuttermill Rd Great Neck NY	7-15				
Press Wireless Labs Inc					
25 Prospect Pl W Newton 65 Mass	7				
Presto Recording Corp					
Box 500 Paramus NJ	4-7-11-12-13				

Production Research Corp					
Thornwood NY	7				
Pye Canada Ltd					
82 Northline Rd Toronto 16					
Ontario Canada	7				
Radio Corp of America Commercial					
Electronic Products Camden 2 NJ	7-10-14				
Rek-O-Kut Co					
38-01 Queens Blvd					
Long Island City 1 NY	4-11				
Revere Camera Co					
320 E 21 St Chicago 16 Ill	7-11-15				
Rich Electronics Inc					
212 NW 8 Ave Miami 36 Fla	12				
Rockbar Corp					
650 Halstead Ave Mamaroneck NY	7				
Scully Machine Co					
62 Walter St Bridgeport 8 Conn	4				
Seismograph Service Corp					
6200 E 41 St Tulsa 1 Okla	5				
Simpson Mfg Co Mark					
32-28 49 St Long Island City 3 NY	7				
SoundScriber Corp					
146 Munson St					
New Haven 9 Conn	3-4-7-12-16				
Speak-O-Phone Recording & Equip Co					
23 W 60 St New York 23 NY	4-7				
Stancil-Hoffman Corp					
921 N Highland Ave					
Hollywood 38 Calif	2-6-7-9-11-12-13-14-15-16				
Symphonic Radio & Electronic Corp					
235 Jersey Ave New Brunswick NJ	7				
Talking Devices Co					
4447 Irving Park Rd Chicago 41 Ill	4-12				
Technical Electronics Corp					
4060 Ince Blvd Culver City Calif	7				
Techtron Electronics Ltd					
583 Gramatan Ave Mt Vernon NY	7				
Telectro Industries Corp					
35-18 37 St					
Long Island City 1 NY	2-3-5-7-8-9-12-16				
Texas Instruments Inc					
6000 Lemmon Ave Dallas 9 Texas	5				
Texas Instruments Inc Industrial					
Instrumentation Div					
3609 Buffalo Speedway Houston 6 Texas	5				
TV Specialty Co					
350 W 31 St New York 1 NY	10				
Van Eps Lab					
R D 2 Plainfield NJ	4				
Viking of Minn					
9600 Aldrich Ave S Minneapolis 20 Minn	2-7				
V-M Corp					
4 & Park Sts Benton Harbor Mich	2-7				
Warren Corp J C					
21 Hanse Ave Freeport NY	7-11-12-15-16				
Warwick Mfg Corp					
7300 N Lehigh Ave Chicago 31 Ill	2-7				
Webcor Inc					
5626 Bloomingdale Ave Chicago 39 Ill	7				
Webster Electric Co					
1900 Clark St Racine Wis	7				
West Coast Research Corp					
2371 1/2 Westwood Blvd					
Los Angeles 64 Calif	7				
Westrex Corp					
111 8 Ave New York 11 NY	4-7-10-12-13-14-15				
Wide Range Recording Corp					
527 N Grand Blvd					
St Louis 3 Mo	6-7-10-11-12-13-14-15				
Wilcox-Gay Corp					
Charlotte Mich	7				

75—RECORDERS—SPECIAL PURPOSE

Recorders, antenna pattern	1
Recorders, code	2
Recorders, data	3
Recorders, facsimile	4
Recorders, film	5
Recorders, film thickness	6
Recorders, frequency	7
Recorders, material thickness,	
electronic	8
Recorders, oscillograph	9
Recorders, ph	10
Recorders, polar	11
Recorders, portable	12
Recorders, power level	13
Recorders, pressure, electronic	14
Recorders, self-balancing	15
Recorders, smoke & combustion	16
Recorders, strain	17
Recorders, telemetering	18
Recorders, teletype	19
Recorders, temperature	20
Recorders, timing	21
Recorders, torque	22
Recorders, transient	23
Recorders, vacuum	24
Recorders, vibration	25
Recorders, video tape	26
Recorders, weight	27
Recorders, X-Y	28

Pye Canada Ltd	
82 Northline Rd Toronto 16 Ont Canada 10	
Radiation Inc	
P O Box 37 Melbourne Fla	3-18
Reeves Instrument Corp	
215 E 91 St New York 28 NY	3
Rek-O-Kut Co	
38-01 Queens Blvd Long Island City 1 NY	12
Rich Electronics Inc	
212 NW 8 Ave Miami 36 Fla	1-3-7-13-17-18
Sanborn Co	
175 Wyman St Waltham 54 Mass	9
Schnevitz Eng'g Co	
P O Box 505 Camden 1 NJ	14
Scherr Co George	
200 Lafayette St New York 12 NY	22
Scientific-Atlanta Inc	
2162 Piedmont Rd NE Atlanta 9 Ga	1-11-28
Seismograph Service Corp	
6200 E 41 St Tulsa 1 Okla	9
Sheffield Corp	
Box 893 Dayton 1 Ohio	21
Simplex Time Recorder Co	
24 S Lincoln St Gardner Mass	21
Skiatron Electronics & TV Corp	
180 Varick St New York 14 NY	2-3-4-5-19
Soroban Eng'g Inc	
Box 338 Melbourne Fla	3-19
Sound Apparatus Co	
Stirling NJ	1-11-13-25
Southern Instruments Computer Div	
Frimley Rd Camberley Surrey England	3
Southwest Products Inc	
Alamo Downs Rt 4 San Antonio Texas	27
Stancil-Hoffman Corp	
921 N Highland Ave Hollywood 38 Calif	12
Standard Register Co	
626 Albany St Dayton 1 Ohio	2-3
Stavid Eng'g Inc	
U S Route 22 Plainfield NJ	3-18
Stoelting Co C H	
424 N Homan Ave Chicago 24 Ill	11-15
Stone City Machine & Tool Co	
1206 7 St Bedford Ind	2
Stromberg Time Corp	
135 S Main St Thomaston Conn	21
Systron Corp	
2055 Concord Blvd Concord Calif	2-3-7-14-21
Taller & Cooper	
15 Front St Brooklyn 1 NY	16
Telectro Industries Corp	
35-18 37 St Long Island City 1 NY	2-3-26
Texas Instruments Inc	
6000 Lemmon Ave Dallas 9 Texas	9-12
Texas Instruments Inc Industrial	
Instrumentation Div 3609 Buffalo	
Speedway Houston 6 Texas	9-12-17
Thermo Electric Co	
109 5 St Saddle Brook NJ	20
Times Facsimile Corp	
540 W 58 St New York 19 NY	4-21
Toledo Scale Co	
1027 Telegraph Rd Toledo Ohio	27
Tri-R Instruments	
24-15 44 Rd Long Island City 1 NY	20
TV Specialty Co	
350 W 31 St New York 1 NY	3-5-12
Underwood Corp Electronic Computer Div	
35-10 36 Ave Long Island City 6 NY	3
U S Instrument Corp	
P O Box 33E Charlottesville Va	19
U S Taximeter Corp	
516 W 54 St New York 19 NY	3-12
Varian Associates	
611 Hansen Way Palo Alto Calif	15
Victor Adding Machine Co	
3900 N Rockwell St Chicago 18 Ill	3
Vought Co	
P O Box 1350 Beverly Hills Calif	5
Waltham Watch Co	
221 Crescent St Waltham 54 Mass	21
Warren Corp J C	
21 Hanse Ave Freeport NY	12-18
Weksler Thermometer Corp	
195 E Merrick Rd Freeport LI NY	20-24
West Coast Research Corp	
2371 1/2 Westwood Blvd	
Los Angeles 64 Calif	20
Westinghouse Electric Corp	
P O Box 868 Pittsburgh 30 Pa	7-12-18
West Instrument Corp	
4363 N Montrose Ave Chicago 41 Ill	15-20
Weston Electrical Instrument Corp	
Sub Daystrom Inc 614 Frelinghuysen Ave	
Newark 12 NJ	14-20-21-24
Westrex Corp	
111 8 Ave New York 11 NY	5
Westronics Inc	
3605 McCart Ft Worth Tex	15-20
Wide Range Recording Corp	
527 N Grand Blvd St Louis 3 Mo	5-12

76—RECORDING ACCESSORIES

Discs, blank	1
Drivers	2
Equalizers	3
Footage counters	4
Heads, cutting	5
Heads, recording	6
Needles, cutting	7

Paper, facsimile recording	8
Pickups, transcription & phonograph	9
Record molding compounds	10
Record preforms	11
Reels	12
Screw feeds	13
Stylus, rotary	14
Tape magazines, continuous	15
Tape, magnetic	16
Tape splicers	17
Tape, splicing	18
Tape threaders	19
Turntables	20
Wire, magnetic	21

Accurate Mfg Co		18
44 Hopwood Pl Garfield NJ		
Addressograph-Multigraph Corp		
1200 Babbitt Rd Cleveland 17 Ohio		16
Afton Industries		
406 St Louis Ave		12-15-16-17-18-19
Valley Park Mo		
Alden Electronic & Impulse Recording		
Equip Co P O Box 125		8
Westboro Mass		
Alfax Paper & Eng'g Co		8-12
Washington St Westboro Mass		
Allied Engraving & Stamping Co		
17 Elm St Buffalo 3 NY		1
Allied Radio Corp		
100 N Western Ave Chicago 80 Ill		16
Allied Recording Products Co		
32-32 Greenpoint Ave		
Long Island City 1 NY		1
Alpha Metals Inc		
56 Water St Jersey City 4 NJ		1-11
American Electronics Inc		
655 W Washington Blvd		
Los Angeles 15 Calif		16
American Molded Products Co		
2727 W Chicago Ave Chicago 22 Ill		12-15
Ampex Corp		
934 Charter St Redwood City Calif		3
Astatic Corp		
250 Harbor St Conneaut Ohio		6-9
Atlantic & Pacific Wire & Cable Co		
112-01 Northern Blvd		
E Elmhurst LI NY		21
Audio Devices Inc		
444 Madison Ave New York 22 NY		7-12-16
Audio-Master Corp		
17 E 45 St New York 17 NY		15-16
Audio-Video Recording Co		
730 5 Ave New York 19 NY		15-16-18
Automatic Methods Inc		
965 W Grand St Elizabeth NJ		13
Barker Sales Co		
996 Edgewater Ave Ridgfield NJ		4
Boston Woven Hose & Rubber Co		
P O Box 1071 Boston 3 Mass		18
Briggs Associates		
10 DeKalb St Norristown Pa		4
Brush Electronics Co		
3405 Perkins Ave Cleveland 14 Ohio		5-6
Burrughs Corp		
6071 2 Ave Detroit 32 Mich		4
Buss-Clement-Doughten & Associates		
201 B Studio Hill Chester Springs Pa		3
Caltron Products Co		
3518 W Pico Blvd Los Angeles 19 Calif		1
Capitol Transcription Service		
1120-A Conn Ave N W Washington 6 DC		3
Capps & Co		
Addison Pl Valley Stream LI NY		7
Chase & Sons		
26 Spruce St N Quincy Mass		18
Daven Co		
Route 10 Livingston NJ		3
Dunlap Electronics		
764 9 St Des Moines 14 Iowa		3
Dunton Co M W		
7 Goff St Providence RI		18
Duotone Co		
Locust St Keyport NJ		1-6-7
Durant Mfg Co		
1950 N Buffum St Milwaukee 1 Wis		4
Dynamu Magnetronics Corp Div Maico Co		
21 N 3 St Minneapolis 1 Minn		6
Edison Industries Thomas A		
Instrument Div 93 Lakeside Ave		
W Orange NJ		6
Electrical Specialty Co		
158 11 St San Francisco 3 Calif		18
Electrovox Co		
60 Franklin St E Orange NJ		7
Emmett Machine & Mfg		
445 E Turkeyfoot Lake Rd Akron 19 Ohio		4
Elgin National Watch Co Electronics Div		
2435 N Naomi St Burbank Calif		9
Elgin National Watch Co		
107 National St Elgin Ill		9
Ercona Corp		
561 5 Ave New York 17 NY		5-9-17
Erie Resistor Corp		
644 W 12 St Erie 6 Pa		9
Fairchild Recording Equipment Co		
10-40 45 Ave Long Island City 1 NY		3-5-9-20
Florman & Babb		
68 W 45 St New York 36 NY		4-12
Fort Wayne Metals Inc		
3211 MacArthur Dr Ft Wayne 6 Ind		21
Freed Transformer Co		
1718-36 Weirfield St Brooklyn 27 NY		4
Gary Wells Co		
361 Rockaway Ave Valley Stream NY		6
General Electric Co Construction		
Materials Div 1285 Boston Ave		
Bridgeport 2 Conn		18
General Electric Co Apparatus Sales Div		
1 River Rd Schenectady 5 NY		8
General Transistor Corp		
91-27 138 Place Jamaica 35 NY		6
General Transistor Western Corp		
6110 Venice Blvd Los Angeles 34 Calif		6
Goodrich Chemical Co B F		
3135 Euclid Ave Cleveland 15 Ohio		10
Goodrich Industrial Products Co B F		
500 S Main St Akron 18 Ohio		18
Gorrell & Gorrell		
335 Old Hook Rd Westwood NJ		8
Gotham Audio Development Corp		
2 W 46 St New York 36 NY		2
Gray Research & Development Co		
Hilliard St Manchester Conn		20
Handy & Harman		
82 Fulton St New York 38 NY		1
Hayward Scientific Glass Corp		
217 N Magnolia Ave Whittier 1 Calif		1
Hogan Labs Inc		
155 Perry St New York 14 NY		8
Industrial Accessories Inc		
Line Rd Matawan NJ		18
International Business Machines Corp		
590 Madison Ave New York 23 NY		16
Jensen Industries Inc		
7333 Harrison St Forest Park Ill		7
Jodee Plastics Co		
213 Shepherd Ave Brooklyn 8 NY		1
Johns-Manville		
22 E 40 St New York 16 NY		18
Kendall Co Polyken Sales Div		
309 W Jackson Blvd Chicago 20 Ill		18
Kinevox-Hallen Div Electromation Co		
1646 18 St Santa Monica Calif		17
Librascope Inc Commercial Div		
133 E Santa Anita Ave Burbank Calif		6
Lippis Co Edwin A		
5485 W Washington Blvd		
Los Angeles 16 Calif		5-6
Magnasynic Mfg Co		
5546 Satsuma Ave N Hollywood Calif		12
Magnecessories		
Box 6960 Washington 20 DC		17
Magnecord Div Midwestern Instruments Inc		
1101 S Kilbourn Ave Chicago 24 Ill		3-6
Marchant Calculators Inc		
1475 Powell St Oakland 8 Calif		16
Maurer Inc J A		
37-01 31 St Long Island City 1 NY		17
Metzner Eng'g Corp		
1041 N Sycamore Ave Hollywood 38 Calif		9
Midwestern Instruments		
P O Box 7186 Tulsa Okla		16
Miller Electronics		
2840 Naomi St Burbank Calif		12-17
Miller Mfg Co M A		
4 & Church Sts Libertyville Ill		7
Minneapolis-Honeywell Regulator Co		
Davies Labs Div 10721 Hanna St		
Beltsville Md		6
Minnesota Mining & Mfg Co		
900 Fauquier Ave St Paul 6 Minn		12-16-18
Mohawk Business Machines Corp		
944 Halsey St Brooklyn 33 NY		15
Monsanto Chemical Co		
1700 S 2 St St Louis 4 Mo		10
Muirhead & Co Ltd		
Beckenham Kent England		8
Muirhead Instruments Inc		
677 5 Ave New York 22 NY		8
Nader Mfg Co		
2661 S Myrtle Ave Monrovia Calif		4
National Cine Equipment Inc		
209 W 48 St New York 36 NY		4
Navco Navigation Computer Corp		
1621 Snyder Ave Philadelphia 45 Pa		2
Nemeth Inc		
2223 S Carmelina Ave		
Los Angeles 64 Calif		5-6
Neumade Products Corp		
250 W 57 St New York 19 NY		17-18
New Jersey Wood Finishing Co		
Amboy Ave Woodbridge NJ		18
Norton Associates Inc		
P O Box 96 Garden City NY		6
Okonite Co		
220 Passaic St Passaic NJ		18
ORRadio Industries Inc		
Shanrock Circle Opelika Ala		12-16
Pacific Transducer Corp		
11836 W Pico Blvd Los Angeles 64 Calif		9
Pampa Electronics Corp		
7354 Frankford Ave Philadelphia 36 Pa		9
Pantek Co		
P O Box 212 El Segundo Calif		4
Par Products Corp		
602 Colorado Ave Santa Monica Calif		4
Penn Fibre & Specialty Co		
2020 E Westmoreland St		
Philadelphia 34 Pa		1
Pentron Corp		
777 S Tripp Ave Chicago 24 Ill		15-16

77—RECTIFIERS

Permacel Tape Corp	
U S Hwy 1 New Brunswick NJ	18
Permo Inc	
6415 N Ravenswood Ave	
Chicago 26 Ill	7-16-21
Permonite Mfg Co	
444 Lake Shore Dr Chicago 11 Ill	1
Photocircuits Corp	
31 Sea Cliff Ave Glen Cove NY	1
Pickering & Co	
309 Woods Ave Oceanside NY	9
Presto Recording Corp	
Box 500 Paramus NJ	1-5-7-20
Prestoseal Mfg Corp	
37-27 33 St Long Island City 1 NY	17
Printloid Corp	
93 Mercer St New York 12 NY	1
Production Instrument Co	
710 W Jackson Blvd Chicago 6 Ill	4
Pulse Techniques Inc	
1411 Palisade Ave W Englewood NJ	3
Pyramid Screen Corp	
181 Harvard St Brookline 46 Boston Mass	1
Radio Corp of America Commercial	
Electronic Products Camden 2 NJ	9-16
Rangertone Inc	
72 Winthrop St Newark 4 NJ	16
Rea Magnet Wire Co	
E Pontiac St Ft Wayne Ind	12
Recordisc Corp	
33-01 Far Rockaway Blvd	
Edgemere 91 NY	1-7
Recoton Corp	
52-35 Barnett Ave	
Long Island City 4 NY	7-16
Reeves Soundcraft Corp	
10 E 52 St New York 22 NY	1-15-16
Reiter Co F	
3340 Bonnie Hill Dr Hollywood 28 Calif	17
Rek-O-Kut Co	
38-01 Queens Blvd	
Long Island City 1 NY	9-20
Reliance Mica Co	
341-39 St Brooklyn 32 NY	1
Robins Industries Corp	
214-26 41 Ave Bayside 61 NY	17-18-19
Rollab Studios	
Walnut Tree Hill Sandy Hook Conn	4
Ronette Acoustical Corp	
190 Earle Ave Lynbrook NY	9
St Cecilia Co	
125 Bergenline Ave Westwood NJ	16
Shure Bros	
222 Hartrey Ave Evanston Ill	6-9
Simonds Saw & Steel Co	
470 Main St Fitchburg Mass	1
Sorohan Eng'g Inc	
Box 338 Melbourne Fla	8-12
SoundScriber Corp	
146 Munson St New Haven 9 Conn	1
Stancil-Hoffman Corp	
921 N Highland Ave Hollywood 38 Calif	3-6
Standard Record Mfg Co	
70 N San Gabriel Blvd	
Pasadena 8 Calif	12-17
Standard Tool & Mfg Co	
237 Laurel Ave Kearny NJ	20
Stevens Mfg Co Geo	
6022 N Rogers Ave Chicago 30 Ill	4
Steward Mfg Co D M	
Chattanooga Tenn	6
Stone City Machine & Tool Co	
1206 7 St Bedford Ind	1
Systron Corp	
2055 Concord Blvd Concord Calif	4
Talking Devices Co	
4447 Irving Park Rd Chicago 41 Ill	5-6-9
Taller & Cooper	
75 Front St Brooklyn 1 NY	4
Taylorcel Corp	
185 Murray St Rochester 6 NY	12
Techalloy Co	
Rahns Pa	21
Techtron Electronics Ltd	
583 Gramstan Ave Mt Vernon NY	3-16-20
Telectro Industries Corp	
35-18 37 St Long Island City 1 NY	3-6
Tetrad Co	
62 St Mary St Yonkers NY	7
Thorens Co	
Thorens Ave New Hyde Park NY	20
Times Facsimile Corp	
540 W 58 St New York 19 NY	8
Topp Industries Inc	
5255 W 102 St Los Angeles 45 Calif	13
Tricon Mfg Co	
8012 Wallace St Chicago 20 Ill	1
Underwood Corp Electronic Computer Div	
35-10 36 Ave Long Island City 6 NY	6
U S Rubber Co	
1230 6 Ave New York 20 NY	18
U S Taximeter Corp	
516 W 54 St New York 19 NY	4
Utica Drop Forge & Tool Div Kelsey-Hayes	
Co 2415 Whitesboro St Utica 4 NY	13
Veeder Root Inc	
70 Sargent St Hartford 2 Conn	4
Wenzel Projector Co	
2505 S State St Chicago 16 Ill	12
Westrex Corp	
111 8 Ave New York 11 NY	3
Wide Range Recording Corp	
527 N Grand Blvd St Louis 3 Mo	6-16
Wrought Washer Mfg Co	
2275 S Bay St Milwaukee 7 Wis	1

Battery eliminators	1
Inverters	2
Rectifier power units	3
Rectifiers, copper oxide	4
Rectifiers, electronic tube	5
Rectifiers, germanium	6
Rectifiers, mercury arc	7
Rectifiers, metal oxide	8
Rectifiers, metal sulphide	9
Rectifiers, metallic stack	10
Rectifiers, selenium	11
Rectifiers, silicon	12
Rectifiers, titanium	13

Accurate Eng'g Co	
2005 Blue Island Ave	
Chicago 8 Ill	3-5-6-10-11
Adler Electronics Inc	
1 LeFevre Lane New Rochelle NY	2
Advance Electronics Co	
8510 North End Ave Oak Park 37 Mich	3
American Elite Inc	
7 Park Ave New York 16 NY	5
American Gyro Corp	
3030 Nebraska Ave Santa Monica Calif	2
American Rectifier Corp	
95 Lafayette St New York 13 NY	6-11-12
American Television & Radio Co	
300 E 4 St St Paul 1 Minn	1-2-3
Bell Aircraft Corp	
P O Box 1 Buffalo 5 NY	3
Bendix Aviation Corp	
1104 Fisher Bldg Detroit 2 Mich	6-12
Bendix Aviation Corp Red Bank Div	
Semiconductor Dept 201	
Westwood Ave Long Branch NJ	12
Berkshire Labs	
586 Bank Village Greenville NH	11
Bogue Electric Mfg Co	
Iowa Ave Paterson 3 NJ	2-3-8-10-11-12
Bradley Labs Inc	
168 Columbus Ave	
New Haven Conn	3-4-8-10-11
Central Electronic Mfrs Inc	
Sub Nuclear Corp of America	
2 Richwood Pl Denville NJ	5
Chatham Electronics Div Gera Corp	
W Mt Pleasant Ave Livingston NJ	10-11-12
Clark Electronic Labs	
Box 165	
Palm Springs Calif	3-5-6-7-10-11-12
Conant Labs	
6500 O St Lincoln 5 Nebr	4-11
Conn Telephone & Electric Corp	
70 Britannia St Meriden Conn	1
Continental Electric Co Taylor Tubes Inc	
6 N Michigan Ave Chicago 2 Ill	5-7
Dressen-Barnes Corp	
250 Vinedo Ave Pasadena Calif	3
Dresser Electric Co	
942 E Larned Detroit 7 Mich	3
Dynamics Research Associates Div	
Universal Match Corp P O Box 5841	
Ferguson 21 Mo	2
Eitel-McCullough Inc	
798 San Mateo Ave San Bruno Calif	5
Electric Regulator Corp	
Pearl St Norwalk Conn	2
Electronic Communication Equipment Co	
1249 W Loyola Ave Chicago 26 Ill	3
Electronic Devices Inc	
429 12 St Brooklyn 15 NY	3-10-11
Electronic Rectifiers Inc	
2102 Spann Ave Indianapolis 3 Ind	3-9-11
Electronic Research Associates	
67 E Centre St Nutley 10 NJ	2
Electronic Specialty Co	
5121 San Fernando Rd	
Los Angeles 39 Calif	2
Electrons Inc	
127 Sussex Ave Newark 3 NJ	5
Electrosolids Corp	
7436 Varna Ave N Hollywood Calif	3
Fansteel Metallurgical Corp	
2200 Sheridan Rd N Chicago Ill	3-10-11
Federal Telephone & Radio Co Div IT&T	
100 Kingsland Rd Clifton NJ	11-12
Gates Electronic Co	
2090 Barnes Ave Bronx 62 NY	3-10-11
General Electric Co Apparatus Sales Div	
1 River Rd Schenectady 5 NY	3-4-5-10-11
General Electric Co Ltd of England	
80 Shore Rd Port Washington NY	6-11-12
General Nuclear Corp	
550 5 Ave	
New York 32 NY	3-4-6-8-9-10-11-12-13
Hallamere Electronics Co	
8352 Brookhurst Ave Anaheim Calif	2-3
Heath Co	
305 Territorial Rd Benton Harbor Mich	1
Hewson Co	
443 Broad St Newark 2 NJ	3-5
Hobart Bros	
Hobart Square E Troy 3 Ohio	3
Hoffman Semiconductor Div Hoffman	
Electronics Corp 930 Pitcner Ave	
Evanston Ill	12

Hughes Aircraft Co Semiconductor Div	
Int'l Airport Station	
Los Angeles 45 Calif	12
Hughes Products Hughes Aircraft Co	
5340 W 104 St Int'l Airport Sta	
Los Angeles 45 Calif	12
Intelix Systems Inc	
22 Thames St New York 6 NY	11-12
International Rectifier Corp	
1521 E Grand Ave	
El Segundo Calif	6-10-11-12
International Resistance Co	
401 N Broad St Philadelphia 8 Pa	11
Kepeco Labs	
131-38 Sanford Ave Flushing NY	2-3
Knopp Inc	
4224 Holden St Oakland 8 Calif	3
Lawn Electronics Co	
E Freehold Rd Freehold NJ	2
Lee Electric & Mfg Co	
2806 Clearwater St	
Los Angeles 39 Calif	3-10-11
Lewis & Kaufman Ltd Div of Int'l Glass Corp	
P O Box 337 Los Gatos Calif	5
Lysco Mfg Co	
1401 Clinton St Hoboken NJ	3
Macarr Inc	
2543 Boston Rd New York 67 NY	3-6-11-12
Magnetic Research Corp	
3160 W El Segundo Blvd Hawthorne Calif	3
Mallory & Co Inc P R	
42 S Gray St Indianapolis 6 Ind	9
Meico Products Inc	
301 5 Ave S Minneapolis 15 Minn	3
Mercury Electronic Co	
Box 450 B Red Bank NJ	3-5
Microwave Associates Inc	
Burlington Mass	12
Miller Co Sanford	
691 Bedford Ave Brooklyn 6 NY	3-11-12
Model Rectifier Corp	
1065 Utica Ave Brooklyn 3 NY	1-2-3-11
Moloney Electric Co	
5390 Bircher Blvd St Louis 20 Mo	3-11-12
Motoresearch Co	
1600 Junction Ave Racine Wis	3
National Aircraft Corp Electronics Div	
3411 Tulare Ave Burbank Calif	3-6-12
N J E Corp	
345 Carnegie Ave Kenilworth NJ	3
Norrna Hoffman Bearings Corp	
Walker Div Hamilton Ave	
Stamford Conn	1-3-5-6-7-8-10-11-12-13
Pacific Semiconductors Inc	
10451 W Jefferson Blvd	
Culver City Calif	6-12
Perma-Power Co	
3102 N Elston Ave Chicago 18 Ill	1
Peschel Electronics Inc	
13 Garden St New Rochelle NY	3
Phileo Corp Accessory Div	
"A" & Allegheny Ave	
Philadelphia 34 Pa	11-12
Power Supplies Inc	
1005 Olive St Highland Ill	3
Power Transformer Co	
91 Edison Pl	
Newark 5 NJ	3-4-5-6-7-8-9-10-11-12
Pyramid Electric Co	
1445 Hudson Blvd N Bergen NJ	11
Radio Corp of America	
415 S 5 St Harrison NJ	5-11
Radio Eng'g Products Ltd	
1080 University St	
Montreal 3 Quebec Canada	5
Radio Receptor Co	
240 Wythe Ave Brooklyn 11 NY	11
Rapid Electric Co	
2881 Middletown Rd Bronx 61 NY	3-6-11-12
Raytheon Mfg Co Receiving & Cathode	
Ray Tube Operations	
55 Chapel St Newton 58 Mass	5-6-12
Raytheon Mfg Co Commercial Equip Div	
100 River St Waltham 54 Mass	1
Rectico Inc	
963 Frelinghuysen Ave	
Newark 12 NJ	10-11-12
Rectifier Corp	
21-23 45 Rd Long Island City 1 NY	11
Rectifier Eng'g Co	
1803 E 7 St Los Angeles 21 Calif	11
RS Electronics Corp	
435 Portage Ave Palo Alto Calif	3
Schauer Mfg Corp	
4501 Alpine Ave Rossmoyne Ohio	1-3-4-7-8-10
Schrack Electrical Sales Corp	
45 W 81 St New York 24 NY	2-3-4-5-10-11
Sel-Rex Corp	
155 Manchester Pl	
Newark 4 NJ	3-4-6-10-11-12
Shrader Co F W	
11623 S Broadway Los Angeles 61 Calif	3
Smith-Meeker Eng'g Co	
157 Chambers St New York 7 NY	3-11
Spaulding Fibre Co	
310 Wheeler St Tonawanda NY	11
Syntron Co	
263 Lexington Ave Homer City Pa	11
Stewart Warner Electronics Div	
1300 N Kostner Ave Chicago 51 Ill	6
Strong Electric Corp	
87 City Park Ave Toledo 1 Ohio	3
Sylvania Electric Products Inc	
1740 Broadway New York 19 NY	5-6-12
Tarc Electronics Inc	
48 Urban Ave Westbury LI NY	7

Tarzian Inc Sarkes E Hillside Drive Blomington Ind	11-12	American Instrument Co 8030 Georgia Ave Silver Spring Md	8	Dalmotor Co Div Dalmo Victor Co Div Textron Inc 1875 Clay St Santa Clara Calif	40
Teledrome Mfg Corp 28 Ranick Dr Amityville LI NY	3	Amperite Co 561 Broadway New York 12 NY	31	Deitz Co S J 9 E Wesley St S Hackensack NJ	8
Telkor Inc N Murray Ridge Rd Elyria Ohio	1-2-3	Anderson Controls Inc 2777 Mannheim Rd Des Plaines Ill	40	Deltron Corp 1507 Riverside Dr Los Angeles 31 Calif	28
Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	2-12	Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	6-8-20-30	Deltron Inc 2905 N Leithgow St Philadelphia 33 Pa	8-19
Thermosen Inc 361 W Main St Stamford Conn	5-12	Arrow-Hart & Hegeman Electric Co 103 Hawthorne St Hartford 3 Conn	4-14-18-23-30-33	Devtronics Inc 1995 Spruce St Trenton 8 NJ	8
TKM Electric Corp 1160 University Ave Rochester 7 NY	2	Artisan Electronics Corp 171 Ridgedale Ave Morristown NJ	10-11-23-33-40	Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wis	40
Transitron Electronic Corp 168 Albion St Wakefield Mass	6-12	Assembley Products Inc Wilson Mills Rd Chesterland 1 Ohio	6-7-10-16-18-19-22-23-24	Dormeyer Industries 3418 Milwaukee Ave Chicago 41 Ill	40
Union Switch & Signal Div Westinghouse Air Brake Co Braddock Ave Pittsburgh 18 Pa	4-8-11	Audimation Labs 7230 Clinton Rd Upper Darby 14 Pa	1	Dow-Key Co P O Box 57 Warren Minn	3-23-39
Universal Atomics Corp 50 Bond St Westbury LI NY	1	Automatic Electric Co 1033 W Van Buren St Chicago 7 Ill	7-8-10-12-13-14-15 19-21-22-25-26-27 28-29-32-33-36-38-39	Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	20
U S Dynamics Corp 1250 Columbus Ave Boston 20 Mass	1-3-5-6-10-13	Automatic Metal Products Corp 323 Berry St Brooklyn 11 NY	3	Eastman Pacific Co 2320 E 8 St Los Angeles 21 Calif	4-10-12-28
U S Instrument Corp P O Box 33E Charlottesville Va	1-3	Automatic Switch Co Hanover Rd Florham Park NJ	7-8-11-18-19-23-33-36-40	Ebert Electronics Corp 212-26 Jamaica Ave Queens Village 28 NY	8-10-14-15-23-33
Vacuum Tube Products Co 506 S Cleveland St Oceanside Calif	5	Autotron Inc 3629 N Vermilion St Danville Ill	20	Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ	6-10-16-22-30-31-33
Wallson Associates Ltd 963 Frelinghuysen Ave Newark 12 NJ	3	Avionics Ltd P O Box 200 Niagara-on-the-Lake Ont Canada	21-24-26-29	Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	26-27-29
Weltronic Co 19500 W 8 Mile Rd Detroit 19 Mich	5	Avtron Mfg Inc 10409 Meech Ave Cleveland 5 Ohio	40	Electric Regulator Corp Pearl St Norwalk Conn	17-19
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	3-4-6-10-11-12	Babcock Relays Inc 14743 Lull St Van Nuys Calif	7-10-14-22-28	Electro-Mechanical Specialties Co 1016 N Highland Ave Los Angeles 35 Calif	19-23-28-33-36
Workman TV Inc 309 Queen Anne Rd Teaneck NJ	5	Barber-Colman Co Rock St Rockford Ill	22	Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich	8-18-20-33
78—RELAYS					
Relays, audio operated	1	Barton Electronics Inc 1000 Farmington Ave W Hartford 7 Conn	8-18	Electro-Physics Co 287 Broadway New York 7 NY	8-20
Relays, capacitance	2	Bell & Gossett Co 8200 Austin Ave Morton Grove Ill	8-9-34-38	Electro-Switch & Controls Inc 5755 Camille Ave Culver City Calif	10-14-29-33
Relays, coaxial	3	Belltron Mfg Co 400 Hoover Ave Bloomfield NJ	10-19-28-30-33	Elfa Instrument Center 55 Reade St New York 7 NY	30
Relays, contact	4	Bennett Co R P 43 S Carroll St Frederick Md	1-3-4-5-7-8-10-11-12 13-14-18-19-21-23-24 26-27-29-32-33-34-36-39	Elgin National Watch Co Electronics Div 2435 N Naomi St	18-19-23-24-26-27-28-29
Relays, crossbar	5	Berkshire Labs 586 Bank Village Greenville NH	1-8	Burbank Calif	30-31-32-33-34-35-36-39
Relays, d'arsonval	6	Biddle Co James G 1316 Arch St Philadelphia 7 Pa	9-38	Elgin National Watch Co 107 National St Elgin Ill	13-14-15-18-19-22-23-24 25-27-28-29-33-35-36
Relays, differential	7	Black & Webster Inc 445 Watertown St Newton 58 Mass	40	Engelhardt Eng'g Co 38 Burrill Ave S Norwalk Conn	8
Relays, electronic	8	Blonder-Tongue Laboratories 9-25 Alling St Newark 2 NJ	30-33	Essex Wire Corp 1601 Wall St Ft Wayne 6 Ind	4-5-8-10-18-29
Relays, frequency selective	9	Branson Corp S Jefferson Rd Whippany NJ	10-22-23-28-29-30-33	Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind	10
Relays, hermetically sealed	10	Bristol Co P O Box 1790 EITT Waterbury 20 Conn	22-28-38	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	12-25-28-29-33
Relays, high voltage	11	British Electronic Sales Box 132 Oakland Gardens 64 NY	27-29-33-40	Filters Inc 30 Sagamore Hill Dr Port Washington NY	8-10-12-14-18-19 21-22-23-25-28-36
Relays, impulse	12	Brubaker Electronics Inc 3652 Eastham Dr Culver City Calif	10-28	Fisher Eng'g Inc P O Box 327 Huntington Ind	27
Relays, keying	13	B/W Controller Corp 2200 E Maple Birmingham Mich	40	Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa	8
Relays, latching	14	Cable Electric Products 234 Daboll St Providence 7 RI	4-8-12-18-30-40	Five Star Co W Main St Plantsville Conn	4-5-10-23-40
Relays, mercury	15	Caltron Products Co 3518 W Pico Blvd Los Angeles 19 Calif	33-40	General Automatic Corp 12 Carlton Ave Mountain View NJ	7-8-10-14-21-25-28-29
Relays, meter	16	Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif	40	General Communication Co 677 Beacon St Boston 15 Mass	3
Relays, overfrequency	17	CG Electronics Corp 305 Dallas St N E Albuquerque New Mex	34-38	General Controls Co 801 Allen Ave Glendale 1 Calif	4-40
Relays, overload	18	Clare & Co C P 3101 Pratt Blvd Chicago 45 Ill	10-13-14-15-21-22-23 27-28-29-33-37-39	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	14-18-19-20-26-28-33-36-40
Relays, overvoltage	19	Clark Controller Co 1146 E 152 St Cleveland 10 Ohio	4-8-14-18-19-30-31-32-33	General Electric Co Ltd of England c/o IMTRA Corp 58 Charles St Cambridge 41 Mass	14-25-27-29
Relays, photoelectric	20	Coil Company of America 207 Washington St Northvale NJ	40	Globe Electrical Mfg Co 1729 W 134 St Gardena Calif	8-11-13-18-19-21-23 25-28-29-32-33-36
Relays, plate circuit	21	Comar Electric Co 3349 Addison St Chicago 18 Ill	8-10-14-21-23-29-40	Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio	33
Relays, polarized	22	Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	3-33	Goat Co Fred 314 Dean St Brooklyn 17 NY	29
Relays, power	23	Control Specialty Corp 1515 Spring Houston 5 Texas	10	Gordos Corp 250 Glenwood Ave Bloomfield NJ	15
Relays, R-F	24	Cook Electric Co 2700 Southport Ave Chicago 14 Ill	3-4-7-10-11-13-14-16 17-18-19-22-23-25-26 27-28-29-30-33-35-36	Guardian Electric Mfg Co 1621 W Walnut St Chicago 12 Ill	4-8-10-12-13-14-18-19-21 25-26-27-28-29-32-33-36-40
Relays, rotary	25	Corona Eng'g Service 94-52 Corona Ave Elmhurst 73 NY	8-15-20-23-25-32	G-V Controls Inc 45 Hollywood Plaza E Orange NJ	10-17-18-19-30-33-35-36
Relays, sequence	26	Couch Ordnance Inc 3 Arlington St N Quincy 71 Mass	8-10-25-28	Gyro Electronics Co 325 Canal St New York 13 NY	8
Relays, stepping	27	Cramer Controls Corp Centerbrook Conn	33	Hartman Electrical Mfg Co 175 N Diamond St Mansfield Ohio	4-9-10-14-17-18-19 22-23-26-33-35-36
Relays, subminiature	28	Cunningham Son & Co James 33 Litchfield St Rochester 8 NY	5-40	Hart Mfg Co 128 Bartholomew Ave Hartford 1 Conn	4-8-10-12-22-23-28
Relays, telephone	29	Curtiss-Wright Corp Electronics Div 631 Central Ave Carlstadt NJ	30-33	Hathaway Instrument Div Hamilton Watch Co 5800 E Jewell Ave Denver 22 Colo	18-19-36
Relays, thermal	30	Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wis	8-10-11-18	Haydon Co A W 232 N Elm St Waterbury 20 Conn	10-26-33
Relays, thermostatic delay	31			Haydon Mfg Co 245 E Elm St Torrington Conn	33
Relays, three position	32			Heinemann Electric Co Pennsylvania Ave & Plum St Trenton 2 NJ	18-33
Relays, time-delay	33				
Relays, tuned audio	34				
Relays, underfrequency	35				
Relays, undervoltage	36				
Relays, vacuum contact	37				
Relays, vibrating reed type	38				
Relays, video switching	39				
Solenoids	40				
Abrams Instrument Corp 606 E Shawassee St Lansing 1 Mich	33				
Adams & Westlake Co 1025 N Michigan Elkhart Ind	15-33				
Ace Electronics Associates 99 Dover St Somerville 44 Mass	28				
Advanced Electronics Inc 94 Silas Deans Hwy Rocky Hill 9 Conn	1-8				
A'G'A Div Elastic Stop Nut Corp 1027 Newark Ave Elizabeth 3 NJ	33				
Airmec Ltd High Wycombe Buckinghamshire England	33				
Airpax Products Co Middle River Baltimore 20 Md	18				
Allard Instrument Corp 146 E 2 St Mineola LI NY	14-18				
Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wis	4-14-18-23-33-36-40				
Allied Control Co 3-7-10-11-12-13-14-18					
2 East End Ave New York 21 NY	19-21-22-23-24-25-26 28-29-32-33-36-37-39				
AMECO Inc 10 State St Mankato Minn	4-10-11-12-13-14 21-23-24-28-29-33				

Hetherington Inc
1200 Elmwood Ave
Sharon Hill Pa 11-14-23-30-31-33

Hi-G Inc
Bradley Field
Windsor Locks Conn 10-12-25-28

Hillburn Electronic Products Co
55 Nassau Ave
Brooklyn 22 NY 13-14-18-20-23-40

Houlihan Co T J
2508 W Lawrence Ave Chicago 25 Ill 40

Hufco Industries
2815 W Olive Ave Burbank Calif 10-28-29

Hupp Electronics Co Div Hupp Corp
743 Circle Ave Forest Park Ill 20

Induction Motors Corp
570 Main St Westbury LI NY 40

Industrial Electronic Engineers
3973 Lankershim Blvd N Hollywood Calif 8

Industrial Products Co Div Danbury-Knudsen
Box 148 Danbury Conn 3

Industrial Timer Corp
1407 McCarter Hwy Newark 4 NJ 33

Instrument Development Labs Inc
67 Mechanic St Attleboro Mass 39

Instruments Inc
122 W Madison St Tulsa Okla 2

Intelix Systems Inc
22 Thames St
New York 6 NY 4-5-22-25-26-27-29

Iron Fireman Mfg Co Electronics Div
2838 SE 9 Ave Portland 2 Ore 10-21-38

Jack & Heintz Inc
17600 Broadway Cleveland 1 Ohio 26

Jaidinger Mfg Co
1921 W Hubbard St
Chicago 22 Ill 4-5-10-14-18-21-28-31-33

Jennings Radio Mfg Corp
970 McLaughlin Ave
San Jose 8 Calif 3-11-12-14-18

Johnson Co E F
Waseca Minn 24

Johnson Electronics Inc
521 Elwell St Orlando Fla 40

Kellogg Switchboard & Supply Co
Div IT&T 79 W Monroe St
Chicago 3 Ill 5-9-12-29

King Electric Equipment Co
9123 Inman Ave Cleveland 5 Ohio 38

Kurman Electric Co
191 Newel St
Brooklyn 22 NY 13-14-18-20-21-22-23

Labline Inc
3070 W Grand Ave Chicago 22 Ill 8

Larson Instrument Co
24 Orchard St Tarrytown NY 6

Leach Corp
Leach Relay Div
5915 Avalon Blvd
Los Angeles 3 Calif 26-28-29-30-33-35-36

Lectronics Inc Lee Instrument Div
30 Main St Brooklyn 1 NY 40

Leland Inc G H
123 Webster St Dayton 2 Ohio 10-25-27-40

Life Instrument Co
P O Box 158 Braintree 85 Mass 10-18-23

Line Electric Co
271 S 6 St Newark 3 NJ 4-14-21-23

Lisk Co G W
Clifton Springs NY 40

Lumenite Electronic Co
407 Dearborn St
Chicago 5 Ill 2-8-12-15-20-25-26-27-33

Lysco Mfg Co
1401 Clinton St Hoboken NJ 3-21

Machinery Electrification Inc
35 Hudson St Northboro Mass 8-20-23

Mack Electric Devices Inc
48 Glenside Ave Wyncote Pa 15

Magnadyne Corp
84 S Water St
Byram Conn 7-10-14-20-21-28-33

Magnecraft Electric Co
3352 W Grand Ave
Chicago 51 Ill 3-4-5-7-10-11-12-13-14-18-19-22-23-26-28-29-33-36

MagneTec Corp
11785 W Olympic Blvd
W Los Angeles 64 Calif 38

Magnetic Devices Inc
712 East St Frederick Md 3-4-11-14-25

Marion Electrical Instrument Co
Grenier Field Manchester NH 22-28

Mason Electric Corp
3839 Verdugo Rd Los Angeles 65 Calif 25-27

Mercoird Corp
4201 Belmont Ave Chicago 41 Ill 4-36

Mercury Contacts Inc
P O Box 615-E Far Hills Sta
Dayton 9 Ohio 15

Metals & Controls Corp
Spencer Thermostat Div 48 Forest St
Attleboro Mass 18-31

Milwaukee Gas Specialty Co
730 N Jackson St
Milwaukee 1 Wis 10-18-19-20-21-25

Modelectric Products Corp
Asbury Park NJ 40

Muirhead Instruments Inc
677 5 Ave New York 22 NY 7

Mullenbach Div Electric Machinery Mfg Co
2100 E 27 St Los Angeles 58 Calif 8

National Aircraft Corp Electronics Div
3411 Tulare Ave Burbank Calif 40

Naylor Laboratories Inc E V
2 Yennicoek Ave
Port Washington NY 10-14-18-19

Nemeth Inc
2223 S Carmelina Ave
Los Angeles 64 Calif 8-10-12-25-27

Networks Electronics Corp
14806 Oxnard St Van Nuys Calif 30

New York Coil Co
40 2 Ave Phoenixville Pa 40

Niagara Electron Labs
Main St Andover NY 2

North Electric Co
553 S Market St
Galion Ohio 5-8-10-12-13-14-18

Oak Mfg Co
1260 N Clybourn Ave
Chicago 10 Ill 10-25-27-40

Ohmite Mfg Co
3601 Howard St
Skokie Ill 4-10-14-18-19-21-23-29-33-36

OK Electronics Corp
7 Hunt Pl Nutley 10 NJ 30-33

Pacific Relays Inc
12027 Vose St
N Hollywood Calif 8-10-21-23-28-33

Palmer Inc M V
4002 Fruit Valley Rd
Vancouver Wash 22-27-29

Pantek Co
P O Box 212 El Segundo Calif 8-20

Partlow Corp
2 Campion Rd New Hartford NY 33

Penta Laboratories Inc
312 N Nopal St Santa Barbara Calif 37

Peschel Electronics Inc
13 Garden St New Rochelle NY 8-11

Phaotron Instrument & Electronic Co
151 Pasadena Ave S Pasadena Calif 10-14-29

Philadelphia Scientific Glass Co
Box 46C Paletton Rd Quakertown Pa 24-37

Phillips Control Corp
59 W Washington St
Joliet Ill 4-8-10-11-12-13-14-19

Photobell Co
43 Vesev St
New York 7 NY 2-8-20-33

Pickering & Co
309 Woods Ave
Oceanside NY 40

Pollak Corp Joseph
81 Freeport St
Boston 22 Mass 3-7-8-10-11-12-19-21

Polytron Eng'g Inc
P O Box 5024 Middle River 20 Md 28

Potter & Brumfield Inc
1200 E Broadway
Princeton Ind 1-2-3-4-5-8-9-10

Powers Regulator Co
3400 Oakton St Skokie Ill 30

Precision Thermometer & Instrument Co
1434 Brandywine St Philadelphia 30 Pa 8-15

Prie Electric Corp
E Church & 2 St
Frederick Md 17-18-19-21-23-24-25

P S P Eng'g Co Div Induction Motors
8608 Otis St South Gate Calif 40

Pye Canada Ltd
82 Northline Rd
Toronto 16 Ont Canada 22-29-33

Pye Telecommunications Ltd
Newmarket Rd Cambridge England 24

Pyramid Instrument Corp
630 Merrick Rd Lynbrook LI NY 4-11

Radio Corp of America
Camden 2 NJ 10

Radio Eng'g Co
8 State St New York 4 NY 20

Radio Eng'g Products Ltd
1080 University St
Montreal 3 Quebec Canada 22

Radionics Inc
P O Box 186 Cockeyville Md 40

RBM Division Essex Wire Corp
131 Godfrey St
Logansport Ind 4-5-8-10-11-14-21-23-24-29

Resitron Labs Inc
2908 Nebraska Ave
Santa Monica Calif 15-24-37

Revere Corp of America
Wallingford Conn 4-5-19-29-38-39

Rich Electronics Inc
212 N W 8 Ave Miami 36 Fla 11-14-21

Ripley Co
1 Factory St Middletown Conn 8

Roto Mfg Co
1030 W 2 St Xenia Ohio 40

Scantlin Electronics Inc
11624 W Pico Blvd Los Angeles 64 Calif 38

Scherma Mfg Co F H
424 Broome St New York 13 NY 3-10-29

Schrack Electrical Sales Corp
45 W 81 St
New York 24 NY 8-10-23-27-29-30-33

Scully Machine Co
62 Walter St Bridgeport 8 Conn 40

Sealetric Switch & Relay Corp
6025 N Keystone Ave
Chicago 30 Ill 4-10-14-21-23-27-29

Sensitive Research Instrument Corp
310 Main St New Rochelle NY 16

Sensory Inc
Pleasantville Rd New Vernon NJ 8-20

Servo-Tek Products Co
1086 Goffle Rd Hawthorne NJ 8

Sigmadyne of Conn
P O Box 869
Port Chester NY 7-10-14-20-21-28-33

Sigma Instruments Inc
170 Pearl St
S Braintree Mass 10-13-14-22-32

Simpson Electric Co
5200 W Kinzie St Chicago 44 Ill 6-8-16-18

Stelma Inc
190 Henry St Stamford Conn 8

Stevens-Arnold Inc
7 Elkins St
South Boston 27 Mass 9-10-13-22-31-38

Stromberg-Carlson Div General Dynamics Corp
100 Carlson Rd
Rochester 3 NY 4-5-12-13-22-29-38

Telechrome Mfg Corp
28 Ranick Dr Amityville LI NY 39

Telectro Industries Corp
35-18 37 St
Long Island City 1 NY 1-8-10-11-13-24-33

Tel-Rad Electronics Corp
73-20 Trotting Course Lane
Glendale LI 27 NY 40

Tempo Instrument Co
5 Centre St Hempstead NY 8-33

Terado Co
1068 Raymond Ave St Paul 14 Minn 10-16-28

Thompson Products Inc Electronics Div
2196 Clarkwood Rd Cleveland 3 Ohio 3-24

Tork Time Controls Inc
1 Grove St Mt Vernon NY 33

Touch-Plate Mfg Corp
P O Box 1970 Long Beach 1 Calif 12-14

Tung-Sol Electric Inc
95 8 Ave Newark 4 NJ 10-18-19-30-33

Ulanet Co George
413 Market St Newark 5 NJ 30-31-33

Union Switch & Signal Div
Westinghouse Air Brake Co
Braddock Ave Pittsburgh 18 Pa 25-28-29-30

United Aircraft Products Inc
1116 Bolander Ave Dayton 8 Ohio 32-33

United Electric Controls Co
85 School St Watertown 72 Mass 40

United Transformer Corp Pacific Div
4008 W Jefferson Blvd
Los Angeles 16 Calif 7-30

Uniwave Inc 2 Marine St Farmingdale NY 3

U S Instrument Corp
P O Box 33E
Charlottesville Va 12-22-27-29-31-32

U S Relay Co
1744 Albion St
Los Angeles 31 Calif 4-8-10-11-14-17-18

Vapor Heating Corp
80 E Jackson Blvd
Chicago 4 Ill 21-28-29-30-33-35-40

Varo Mfg Co
2201 Walnut St Garland Tex 9

Victory Eng'g Corp
117 Springfield Rd Union NJ 8-28

Vocaline Co of America
Old Saybrook Conn 33

Vokar Corp
7300 Huron River Dr Dexter Mich 40

Waco Inc 2032 Broadway
Santa Monica Calif 40

Ward Leonard Electric Co
Mt Vernon NY 23

Waugh Eng'g Co
7842 Burnet Ave Van Nuys Calif 9-17

West Coast Electrical Mfg Corp
233 W 116 Pl Los Angeles 61 Calif 40

Westinghouse Electric Corp
P O Box 868
Pittsburgh 30 Pa 4-6-7-9-14-17-18-19-21

Weston Electrical Instrument Corp
Sub Daystrom Inc 614 Frelinghuysen Ave
Newark 12 NJ 22-23-30-33-35-36

Wheelock Signals Inc
Long Branch NJ 14-19-20-21-22-23-24-25

Wilcolator Co
1001 Newark Ave Elizabeth NJ 33

Wilson & Co G C
1915 8 Ave Huntington 3 W Va 8-33

Worner Electronic Devices
Rankin Ill 8-20

79—RESISTORS & VOLUME CONTROLS

Attenuators, audio 1

Attenuators, precision 2

Networks, potted 3

Potentiometers, composition ... 4

Potentiometers, high resistance. 5

Potentiometers, high voltage .. 6

Potentiometers, linear & non-linear 7

Potentiometers, metallic film .. 8

Potentiometers, precision, auto transformer 9

Potentiometers, precision, carbon film 10

Potentiometers, precision, wire-wound 11

Potentiometers, printed circuit. 12

Potentiometers, slide wire 13

Hays Mfg Co 12 & Liberty St Erie Pa	47	Networks Electronics Corp 14806 Onnard St Van Nuys Calif	31	Servomechanisms Inc 12500 Aviation Blvd Hawthorne Calif	8-10
Heath Co 305 Territorial Rd Benton Harbor Mich	17	Norden-Ketay Corp Commerce Rd Stamford Conn	7-11-13	Servonic Instruments Inc 1145 S Fair Oaks Ave Pasadena 2 Calif	5-6-11-13
Helco Products Corp 7832 Balboa Blvd Van Nuys Calif	7-11-12-38-39-40	Nucleonic Products Co 1601 Grande Vista Ave Los Angeles 23 Calif	18-22-31-35-38-40	Servonics Inc 822 N Henry St Alexandria Va	7-38
Herzog Miniature Lamp Works 50-17 5 St Long Island City 1 NY	31	NYT Electronics Inc 2979 N Ontario St Burbank Calif	3	Servotrol Co 114 W Illinois St Chicago 10 Ill	11
Hewlett-Packard Co 275 Page Mill Rd Palo Alto Calif	1-2	Ohio Carbon Co 12508 Berea Rd Cleveland 11 Ohio	16-21-22-23-25-26 27-28-38-40-44	Shallerross Mfg Co Jackson & Pusey Aves Collingdale Pa	1-3-11-17-19-22 25-26-27-28-31-35
Hi-Q Div Aerovox Corp Myrtle Beach S Car	15-18-19-20-31	Ohmite Mfg Co 3601 Howard St Skokie Ill	4-5-6-7-13-16-17 19-21-22-23-26-28-31 38-39-40-41-42-43	Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill	45
Howell Instrument Co 3101 Trinity St Ft Worth 7 Texas	7-13	Onondaga Pottery Co 1858 W Fayette St Syracuse 1 NY	32	Slip Ring Co of America 3612 W Jefferson Blvd Los Angeles 16 Calif	12
Humphrey Inc 2805 Canon St San Diego Calif	7-11-13	Osborne Electronic Corp 712 SE Hawthorne Blvd Portland 14 Ore	22-35-40	Solar Mfg Corp 4553 Seville Ave Los Angeles 58 Calif	32
Ideal-Aerosmith Inc 12909 S Cerise Ave Hawthorne Calif	7-11-14	Pacific Scientific Co P O Box 22019 Los Angeles 22 Calif	7-11	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	1-2-7-11
Insuline Corp of America 186 Granite St Manchester NH	44	Painton & Co Ltd c/o British Electronic Sales Co Box 132	1-2-7-11-13 14-17-18-19-20-22-24-25-26-27-28	Southern Electronics Corp 239 W Orange Grove Ave Burbank Calif	3
Instrument Resistors Co 1036 Commerce Ave Union NJ	17-19-22-26-31-35-37	Palo Alto Eng'g Co 620 Page Mill Rd Palo Alto Calif	11	Specialties Inc Skunks Misery Rd Syosset LI NY	7-11-13
Intelix Systems Inc 22 Thames St New York 6 NY	45	Peerless Electrical Products 1515 S Manchester Ave Anaheim Calif	3	Spectrol Electronics Div Carrier Corp 1704 S Del Mar Ave San Gabriel Calif	5-7-11-12-13-14 17-31-38-39-40
Interference Measurement Lab Inc 907 E 51 St Brooklyn 3 NY	44	Perkin-Elmer Corp Main Ave Norwalk Conn	7-9	Speer Resistor Div Speer Carbon Co Bradford Pa	21
International Resistance Co 401 N Broad St Philadelphia 8 Pa	4-6-7-11-15-16 18-19-20-21-22-23-25-26 27-31-33-38-40-46-47	Phaestron Instrument & Electronic Co 151 Pasadena Ave S Pasadena Calif	18-24	Sperry Gyroscopic Co Div Sperry Rand Corp Great Neck NY	2-45
Jackson Electronics Inc 23 Woodcrest Rd West Chester Pa	22-32-34-40	Photobell Co 43 Vesey St New York 7 NY	47	Sprague Electric Co Marshall St North Adams Mass	3-18-19-20 22-25-26-27-28-31-35
Janco Corp 3111 Winona Ave Burbank Calif	31	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	25-35	Sprague of Wisconsin Inc 6 & Beech Sts Grafton Wis	32
Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	2	Polytechnic Research & Development Co 202 Tillary St Brooklyn 1 NY	2-19-20	Stackpole Carbon Co St Marys Pa	4-5-12-16 21-36-38-39
Johnson Electronics Inc 521 Elwell St Orlando Fla	3	Potter Co 1950 Sheridan Rd N Chicago Ill	22	States Co 19 New York Ave Hartford 6 Conn	31
Julie Research Labs 556 W 168 St New York 32 NY	22-31	Precise Development Corp 2 Neil Ct Oceanside NY	17	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	44
Kay Electric Co 14 Maple Ave Pine Brook NJ	1	Precision Capacitors Inc 150 W Cypress St Burbank Calif	3	Sticht Co Herman H 27 Park Pl New York 7 NY	43
Keystone Carbon Co 1935 State St St Marys Pa	45	Precision Inc 730 N Lyndale Ave Minneapolis 11 Minn	19-22-31-37	Stoddard Aircraft Radio Co 6644 Santa Monica Blvd Hollywood 38 Calif	2
K-F Development Co 2606 Spring St Redwood City Calif	11-19-27-30-31-37-39-40	Precision Line Inc 63 Main St Maynard Mass	5-7-11-13-14-31-38-40	Sullivan Ltd H W 80 Shore Rd Port Washington NY	1-2-13-17-31
Lectrohm Inc 5560 Northwest Hwy Chicago 30 Ill	22-23-28-31-32	Precision Resistor Co 109 U S Hwy 22 Hillside NJ	17-19-22-27-31-37	Symphony Electronics Corp 925 S Western Ave Los Angeles 6 Calif	21
Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa	13-17-22-31	Production Research Corp Thornwood NY	1	Tarc Electronics Inc 48 Urban Ave Westbury LI NY	1
Lewis Eng'g Co 339 Church St Naugatuck Conn	37	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	13-31	Technology Instrument Corp 531 Main St Acton Mass	5-7-8-11-13-14-38-39-40
Lico Inc 3610 Oceanside Rd Oceanside LI NY	2	Pyrofilm Resistor Co 8 Whippany St Morristown NJ	18-20-24-25-26-29-31	Tech-Ohm Resistor Corp 36-11 33 St Long Island City 6 NY	7-13-22-26-28 29-31-32-33-40
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	5-6-7-11	Radio Corp of America Commercial Electronic Products Camden 2 NJ	1	Teachrome Mfg Corp 28 Ranick Dr Amityville LI NY	2
Litton Industries Components Div 5873 Rodeo Rd Los Angeles 16 Calif	7-11-13-38-40	Rahm Instruments Inc 237 Lafayette St New York 12 NY	5-7-11-14	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	3-19
Litton Industries of Md Inc 4910 Calvert Rd College Park Md	7-11-14	Raymond Eng'g Lab Inc Smith St Middletown Conn	11	Telegraph Condenser Co N Acton London W 3 England	3
Lux Clock Mfg Co Johnson St Waterbury Conn	23	Raytheon Mfg Co 100 River St Waltham 54 Mass	3	Teleradio Eng'g Corp Shannon & Barrett Sts Wilkes-Barre Pa	22
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	7-22-23-32-35-38 39-40-41-42	RCL Mfg Co New Jersey Ave Riverside NJ	19-22-31-32-33-35-40	Televisto Corp 1415 Golf Rd Des Plaines Ill	44
Maurey Instrument Corp 7921 S Exchange Ave Chicago 17 Ill	5-7-11-12-14-41	Reed & Reese Inc 717 N Lake Ave Pasadena 6 Calif	11	Telex 1633 Eustis St St Paul 1 Minn	30
Mel-Rain Corp 2100 E Fletcher Ave Indianapolis 3 Ind	38-39-40	Reon Resistor Corp 117 Stanley Ave Yonkers NY	16-17-19-22-26-31-32-35-38-39	Tel-Labs Inc 1050 2 St Manchester NH	17-19-22-26-27-29-31-35-37
Mepco Inc Abbett Ave Morristown NJ	17-18-19-20-22-24-25 26-28-29-30-31-32-35	Resistance Products Co 914 S 13 St Harrisburg Pa	3-19-20-22-25-27-30-31-35	Telonic Industries Inc 73 N 2 Ave Beech Grove Ind	2
Metavac Inc 45-68 162 St Flushing 58 NY	2-20-24	Resistors Inc 5226 W 26 St Chicago 13 Ill	22-38-40	Tepro Electric Corp 5 St Paul St Rochester 4 NY	22-26-31-35
Micamold Electronics Mfg Corp 1087 Flushing Ave Brooklyn 37 NY	44	Rex Rheostat Co 3 Foxhurst Rd Baldwin LI NY	13-22-25-28-40-43	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	18-19-20-25-26-29-31-35
Miller Co J W 5917 S Main St Los Angeles 3 Calif	3	Rogers Corp Rogers Conn	12-32-33	Thale Eng'g Corp 2104 E Villa St Pasadena Calif	2
Miller Electro-Research Labs 5529 S 5 St Milwaukee 7 Wis	31-45	Rollan Electric Co 8233 S Princeton Ave Chicago 20 Ill	19-31	Thermo Electric Co 109 5 St Saddle Brook NJ	5-7-11-13
Milwaukee Resistor Co 700 W Virginia St Milwaukee 4 Wis	22-23-26-27-28-32-38-40	Rosemont Eng'g Co Rosemount Minn	37	Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	7-11-38-39-40-41
Mingo Products Inc 740 Washington Ave Minneapolis 1 Minn	11	Ruge Associates Arthur C 733 Concord Ave Cambridge 38 Mass	37	Tranasonic Inc 808 16 St Bakersfield Calif	3
Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	45	Sage Electronics Corp 302 N Goodman St Rochester 7 NY	22-31	Tru-Ohm Products Div Model Eng'g & Mfg Co 2800 N Milwaukee Ave Chicago 18 Ill	7-22-40-42
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	13	St Marys Carbon Co State St St Marys Pa	21	Union Switch & Signal Div Westinghouse Air Brake Co Braddock Ave Pittsburgh 18 Pa	46
Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	1-2-22-26-27-28-31-38-40	San Fernando Electric Mfg Co 1509 1 St San Fernando Calif	7-11-38-39-40	United Mineral & Chemical Corp 16 Hudson St New York 13 NY	16-18-22-31-40-41
Muirhead & Co Ltd Beckenham Kent England	1-2-9-17-22-31	Scientific Coil Co 5619 Broadway Chicago 40 Ill	31	United Transformer Corp 150 Varick St New York 13 NY	3
Muirhead Instruments Inc 677 5 Ave New York 22 NY	2-11-13-17-22-31	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	43	U S Instrument Corp P O Box 33E Charlottesville Va	22
Muter Co 1255 S Michigan Ave Chicago 5 Ill	7-11-22-29-39-40	Sensitive Research Instrument Corp 310 Main St New Rochelle NY	22-27-31	Victoreen Instrument Co 5805 Hough Ave Cleveland 3 Ohio	18-19-31
Nagor Associates Inc Littleton Mass	11-31-40	Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	37-46	Victory Eng'g Corp 117 Springfield Rd Union NJ	29-37-45-46
National Capacitor Co 18 Webster St Brookline 46 Mass	3			Walkirt Co 141 W Hazel St Inglewood 3 Calif	3

Waveline Inc	
Passaic Ave Caldwell NJ	2
Welch Mfg Co W M	
1515 Sedgwick St Chicago 10 Ill	43
Welwyn Int'l Inc	
3355 Edgecliff Terrace	18-19-20-22-24-25
Cleveland 11 Ohio	26-27-29-31-35-40
Westbury Electronics Inc	
300 Shames Dr Westbury NY	2
West Coast Research Corp	
2371 1/2 Westwood Blvd	
Los Angeles 64 Calif	3
Westinghouse Electric Corp	
P O Box 868 Pittsburgh 30 Pa	22-27-31
Westronics Inc	
3605 McCart Ft Worth Texas	1
White Dental Mfg Co S S Industrial Div	
10 E 40 St New York 16 NY	21-27-31
White Instrument Labs	
Box 9006 Allandale Station	
Austin 17 Texas	3
Williamson Development Co	
317 Main St W Concord Mass	13
Wirt Co Continental Carbon Div	
5221 Greene St	
Philadelphia 44 Pa	18-20-22-28-31-38-40-44
Workman TV Inc	
309 Queen Anne Rd	
Teaneck NJ	21-22-23-27-29-35-37-45

80—SEALS

O-Rings	1
Rings, oil sealing	2
Rings, retaining	3
Rings, slip	4
Rings, slip & brush assemblies	5
Sealers, protective	6
Seals, carbon	7
Seals, hermetic	8
Seals, insulating	9
Seals, metal-to-glass	10
Seals, oil	11
Seals, shaft	12
Seals, switch	13

Acme Wire Co	
1255 Dixwell Ave New Haven 14 Conn	6
Advanced Products Co	
69 Broadway North Haven Conn	11
Advanced Vacuum Products Inc	
430 Fairfield Ave Stamford Conn	8-10
Aetna Felt Co	
204 Centre St New York 13 NY	11
Airflyte Electronics Co	
535 Avenue A Bayonne NJ	1-5
American Lava Corp Subs Minn Mining & Mfg Cherokee Blvd & Mfrs Rd Chattanooga 5 Tenn	8-9
Amphenol Electronics Corp	
1830 S 54 Ave Chicago 50 Ill	8
Andrew Corp	
363 E 75 St Chicago 19 Ill	1
Armstrong Cork Co	
W Liberty St Lancaster Pa	1-2-11-12
Auburn Mfg Co	
Stack St Middletown Conn	2-9-10-13
Autel Electronics Co	
P O Box 225 Linden NJ	8-10
Automatic Methods Inc	
965 W Grand St Elizabeth NJ	2-3-4-5
Automatic & Precision Mfg Co	
252 Hawthorne Ave Yonkers NY	11-12-13
Bacon Industries	
192 Pleasant St Watertown 72 Mass	1-11
Beck's Inc	
298 E 5 St St Paul 1 Minn	4-5
Belfab Corp	
11 Ramah Circle Agawam Mass	12
Bios Labs Inc	
17 W 60 St New York 23 NY	9-10
Breeze Corps	
700 Liberty Ave Union NJ	4-5
Brillhart Plastics Corp	
Old Country Rd Mineola NY	4
Bristol Co	
P O Box 1790 EITT	
Waterbury 20 Conn	11
Cartisreal Corp	
3515 W Touhy Ave Chicago 45 Ill	11-12
Ceramaseal Inc	
P O Box 25 New Lebanon Center NY	8
Cerro De Pasco Sales Corp	
300 Park Ave New York 22 NY	10
Chicago-Allis Mfg Corp	
113 N Green St Chicago 7 Ill	11-12
Chicago Gasket Co	
1271 W North Ave Chicago 22 Ill	1
Cinch Mfg Corp	
1026 S Homan Ave Chicago 24 Ill	3
Coaxial Connector Co	
37 N 2 Ave Mt Vernon NY	8
Conn Hard Rubber Co	
P O Box 1911 New Haven 9 Conn	8-9-10-11
Constantin & Co L L	
Route 46 Lodi NJ	10
Corning Glass Works	
Corning NY	8-10
Crane Packing Co	
6400 Oakton St Morton Grove Ill	1-12

Dallons Labs	
5066 Santa Monica Blvd	
Los Angeles 29 Calif	10
Delta Chemical Works	
23 W 60 St New York 23 NY	9-10
DeMornay-Bonardi Corp	
780 S Arroyo Pkwy Pasadena Calif	10
Eastman Pacific Co	
2320 E 8 St Los Angeles 21 Calif	8-10-13
Electrical Industries	
691 Central Ave Murray Hill NJ	8
Electrical Specialty Co	
153 11 St San Francisco 3 Calif	6
Electro-Miniatures Corp	
1060 Elm Ave Ridgefield NJ	4-5
Electro Tec Corp	
4 Romanelli Ave S Hackensack NJ	4-5
Emerson Plastics Corp	
Seabury Ave & Butler Pl	
Bronx 61 NY	8-9-11-12
Enflo Corp	
Rte 38 at Airport Circle	
Pennsauken 11 NJ	2-3-4-9-11-12-13
Farnsworth Electronics Co Div IT&T	
3702 E Pontiac St Ft Wayne Ind	13
Farnsworth Electronic Co Pacific Div	
815 S San Antonio Rd	
Palo Alto Calif	8-9-10-13
Felt Products Mfg Co	
1504 Carroll Ave Chicago 7 Ill	10-11
Fluorocarbon Products Inc Div U S	
Gasket Co 602 N 10 St	
Camden 1 NJ	1
Frenchtown Porcelain Co	
Muirhead Ave Trenton 9 NJ	8
Garde Mfg Co	
588 Eddy St Providence 3 RI	8-9
Garlock Packing Co	
402 Main St Palmyra NY	1-2-7-11-12
General Cement Mfg Co Div Textron Inc	
400 S Wyman St Rockford Ill	6-9-10
General Ceramics Corp	
Keasbey NJ	8-9
General Findings & Supply Co	
Industrial Div Leach & Garner Bldg	
Attleboro Mass	4
General Hermetic Sealing Corp	
99 E Hawthorne Ave Valley Stream NY	8
Graphite Metallizing Corp	
1002 Nepperhan Ave Yonkers NY	4-5
Handy & Harman	
82 Fulton St New York 38 NY	4
Heldor Mfr Corp	
238 Lewis St Paterson NJ	8-11
Hermaseal Co	
1101 Lafayette St Elkhart Ind	8-10
Hermetic Connector Corp	
481 Washington St Newark NJ	8
Hermetic Seal Corp	
29 S 6 St Newark 7 NJ	8-9-10
Hermetite Corp	
702 Beacon St Boston 15 Mass	8-9-10
Industrial Devices Inc	
982 River Rd Edgewater NJ	8
Industrial Electrical Works	
1509 Chicago St Omaha 2 Nebr	4
Industrial Retaining Ring Co	
57 Cordier St Irvington 11 NJ	3
Johns-Manville	
22 E 40 St New York 16 NY	1-2-6-9-10-11-12
Kling Metal Spinning & Stamping Co	
245 Centre St New York 13 NY	2
Koppers Co	
Koppers Bldg Pittsburgh 19 Pa	6
Kost Products Co	
2335 N Cicero Ave Chicago 39 Ill	3
Kulite Tungsten Co	
1040 Hoyt Ave Ridgefield NJ	10
Lantex Industries Inc	
51 State St Westbury NY	4
Lee Chemical Corp Walter	
Seabury Ave & Butler Pl	
Bronx 61 NY	8-9-11-12
Linear Inc	
State Rd & Levick St Philadelphia 35 Pa	1
Mayfair Molded Products Corp	
3700 N Rose St Franklin Park Ill	9-11
Metals & Controls Corp General Plate Div	
48 Forest St Attleboro Mass	4
Micromold Products Corp	
1 School St Yonkers NY	11
Midland Paint & Varnish Co	
3801 E 91 St Cleveland 5 Ohio	6
Minnesota Rubber & Gasket Co	
3630 Wooddale Ave St Louis Park	
Minneapolis 16 Minn	1-9-11-12-13
Minor Rubber Co	
Ackerman St Bloomfield NJ	2-9-11-12-13
Mitronics Inc	
1290 Central Ave Hillside NJ	8-9-10
Molding Corp of America	
58 Weybosset St Providence 3 RI	8
Morganite Inc	
33-02 48 Ave Long Island City 1 NY	11-12
National Carbon Co Div Union	
Carbide & Carbon	
30 E 42 St New York 17 NY	7
National Lock Washer Co	
40 Hermon St Newark 5 NJ	3
Neosil Products Div Rubber Associates	
745 5 Ave New York 22 NY	8-11-12-13
Newcomb Spring Corp	
177 E Hawthorne Ave Valley Stream NY	3

Ohio Carbon Co	
12508 Berea Rd Cleveland 11 Ohio	7-12
Optical Gaging Products Inc	
26 Forbes St Rochester 11 NY	1
Opto Eng'g Co	
3524 W Washington Blvd	
Los Angeles 18 Calif	1
Penn Fibre & Specialty Co	
2020 E Westmoreland St	
Philadelphia 34 Pa	2-3-9
Phillips Control Corp	
59 W Washington St Joliet Ill	8-10
PIC Design Corp	
477 Atlantic Ave E Rockaway LI NY	3
Pye Canada Ltd	
82 Northline Rd	
Toronto 16 Ontario Canada	8
Radio Frequency Labs Inc	
Boonton NJ	12-13
Raytheon Mfg Co Ceramic Sales	
Foundry Ave Waltham Mass	8-9-11
Raytheon Mfr Co Microwave & Power	
Tube Operations	
Foundry Ave Waltham Mass	8-9-11
Red Point Corp	
1907 Riverside Dr Glendale 1 Calif	12
Resistoflex Corp	
Woodland Rd Roseland NJ	9-11
Robertshaw-Fulton Controls Co	
Fulton Siphon Div	
P O Box 400 Knoxville 1 Tenn	12
Roberts Toledo Rubber Co	
1200 Prospect Ave Toledo 6 Ohio	1
Rogers Corp	
Rogers Conn	2 3-9-11
Romac Products Co	
48-01 25 Ave Long Island City 3 NY	8-10
Rubbercraft Corp of Calif	
1800 W 220 St Torrance Calif	2-9
St Marys Carbon Co	
State St St Marys Pa	2-4-5-7-11-12
Sealol Corp	
Warwick Industrial Park	
Providence 5 RI	11-12
Seals Ltd	
1010 Mission St S Pasadena Calif	8-9-10
Sealtron Corp	
Reading Rd at Amity	
Cincinnati 15 Ohio	8-10
Servonic Instruments Inc	
1145 S Fair Oaks Ave Pasadena 2 Calif	4-5
Silicon Insulation Inc	
Seabury Ave & Butler Pl Bronx 61 NY	9
Simonds Saw & Steel Co	
470 Main St Fitchburg Mass	3 4
Sinclair Mfg Co	
P O Box 243 Chertley Mass	4
Slip Ring Co of America	
3612 W Jefferson Blvd	
Los Angeles 16 Calif	4-5
Sonneborn Sons L	
404 4 Ave New York 16 NY	6-10
Sparta Mfg Co	
Dover Ohio	2-9-12
Spinform Inc	
65 Mechanic St Attleboro Mass	4
Stackpole Carbon Co	
St Marys Pa	2-7-11
Stupakoff Div Carborundum Co	
Latrobe Pa	8-10
Swedlow Plastics Co	
6986 Bandini Blvd Los Angeles 22 Calif	9
Syntro Co	
263 Lexington Ave Homer City Pa	11-12
Taylor Fibre Co	
Norristown Pa	1-9
Telectro Industries Corp	
35-18 37 St Long Island City 1 NY	4-5-8-12
Thompson Products Inc Piston Ring Div	
(Ramsey Corp) 3693 Forest Park Blvd	
St Louis 8 Mo	3
Titchener & Co E H	
67 Clinton St Binghamton NY	3
Toledo Commutator Co	
Owosso Mich	4
Tricon Mfg Co	
8012 Wallace St Chicago 20 Ill	4-5
United Aircraft Products Inc	
1116 Bolander Ave Dayton 1 Ohio	1-2-11
Uniwave Inc 2 Marine St Farmingdale NY	4-5
U S Graphite Co Div Wickes Corp	
1621 Holland Ave Saginaw Mich	2-3-4-7-11-12
U S Stoneware Co Alite Div	
Orville Ohio	8-9
Victory Mfg Corp	
1722 W Arcade Pl Chicago 12 Ill	1
Vitroseal Corp	
709 E 106 St Indianapolis 20 Ind	8-10
Waldes Kohinoor Inc	
47-16 Austel Pl Long Island City 1 NY	10
Warren Plastics Corp Warren Pa	10
Wesche Electric Co B A	
1622 Vine St Cincinnati 10 Ohio	4-5
Wheaton Co T C	
Millville NJ	8-9-10
Wolfe Co F C Div Parker Appliance Co	
10567 Jefferson Blvd Culver City Calif	8
Zell Products Corp	
280 Main St Norwalk Conn	8

81—SEMI-CONDUCTORS

Diodes, crystal	1
Diodes, germanium	2
Diodes, silicon	3
Transistors, junction	4

Transistors, photo	5
Transistors, point contact	6
Transistors, power	7
Transistors, selenium	8
Transistors, surface-barrier	9
Transistors, switching	10
Transistors, tetrode	11

American Elite Inc 7 Park Ave New York 16 NY	2
Amprex Electronic Corp 230 Duffy Ave Hicksville LI NY	2-3-4-6-7
Arnold Magnetics Corp 4615 W Jefferson Blvd Los Angeles 16 Calif	10
Askania Regulator Co 240 E Ontario St Chicago 11 Ill	1
Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	1-2-3-4-7-8-10
Bendix Aviation Corp Red Bank Div Eatontown NJ	7
Bendix Aviation Corp Red Bank Div Semiconductor Dept 201 Westwood Ave Long Branch NJ	1-3-4-7-10
Bios Labs Inc 17 W 60 St New York 23 NY	1-2-3
Bozue Electric Mfg Co Iowa Ave Paterson 3 NJ	1-3-4-6-10-11
Bomac Labs Inc Salem Rd Beverly Mass	1-3
CBS-Hytron Div Columbia Broadcasting System 100 Endicott St Danvers Mass	1-2-3-4-6-7-10
Clevite Transistor Products 241 Crescent St Waltham 54 Mass	1-2-3-4-7
Clowes Ceramic Corp 3711 Calhoun Ave Chattanooga 7 Tenn	3
Delco Radio Div General Motors Corp Kokomo Ind	4-7-10
Delta Chemical Works 23 W 60 St New York 23 NY	1-2-3
Fansteel Metallurgical Corp 2200 Sheridan Rd N Chicago Ill	3
Federal Telecommunication Labs Div IT&T 500 Washington Ave Nutley NJ	10
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	2-3
Fretco Inc 406 N Craig St Pittsburgh 13 Pa	2-4-6
Gahagan Inc Waterman Ave Esmond 17 RI	2
General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	1
General Electric Co Ltd of England 80 Shore Rd Port Washington NY	1-2-3-4-6-7
General Instrument Corp Automatic Mfg Div Div Gouveuner St Newark 4 NJ	1
General Transistor Corp 91-27 138 Pl Jamaica 35 NY	4-5-7-9-10
Hoffman Electronics Corp 3761 S Hill St Los Angeles 7 Calif	3
Hoffman Semiconductor Div Hoffman Electronics Corp 980 Pitner Ave Evanston Ill	3
Hughes Aircraft Co Florence & Teale Sts Culver City Calif	2-3
Hughes Aircraft Co Semiconductor Div Int'l Airport Station Los Angeles 45 Calif	2-3-4
Hughes Products Hughes Aircraft Co 5340 W 104 St Int'l Airport Sta Los Angeles 45 Calif	2-3-4
Intelix Systems Inc 22 Thames St New York 6 NY	2-3
International Rectifier Corp 1521 E Grand Ave El Segundo Calif	2-3
International Resistance Co 401 N Broad St Philadelphia 8 Pa	1
Kemtron Electron Products Inc 14 Prince Pl Newburyport Mass	1-2-3
Lansdale Tube Co Div Philco Corp Chureh Rd Lansdale Pa	2-4-7-9-10
Microwave Associates Inc Burlington Mass	3
Motorola Inc Semiconductor Products Div 5005 E McDowell Rd Phoenix Ari	4-7-10
National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif	4
Nucleonic Products Co 1601 Grande Vista Ave Los Angeles 23 Calif	1-2-3-6-7
Pacific Semiconductors Inc 10451 W Jefferson Blvd Culver City Calif	2-3
Philco Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	1-2-4-10
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	4
Pye Telecommunications Ltd Newmarket Rd Cambridge England	1
Radio Corp of America Camden 2 NJ	1-2
Radio Corp of America 415 S 5 St Harrison NJ	1-2-4-6-7

Radio Receptor Co 240 Wythe Ave Brooklyn 11 NY	2
Raytheon Mfg Co Receiving & Cathode Ray Tube Operations 55 Chapel St Newton 58 Mass	1-2-3-4-5-6-7-8-10-11
Sprague Electric Co Marshall St North Adams Mass	4-6-9-10
Sylvania Electric Products Inc 1740 Broadway New York 19 NY	1-2-3-4-6-7-10
Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	3-4-5-7-10-11
Thermosen Inc 361 W Main St Stamford Conn	3
Transitron Electronic Corp 168 Albion St Wakefield Mass	1-2-3-4-7
Tung-Sol Electric Inc 95 8 Ave Newark 4 NJ	2-4-7-10
U S Dynamics Corp 1250 Columbus Ave Boston 20 Mass	1-2-3-4-5-6-7-9-10-11
Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	2-3-7-10
Westinghouse Electric Corp Box 284 Elmira NY	1-2-7-10

82—SERVICES, BROADCAST

AM program packages	1
Audio design & service	2
Film, editing & titling	3
Film, magnetic stripe	4
Film processing	5
Film studios	6
Film, TV	7
Frequency measuring	8
Kinescoping	9
Libraries, film	10
Libraries, magnetic tape	11
Libraries, record	12
News services	13
Optical repairs	14
Recording services	15
Sound dubbing	16
Sound effects	17
Sound studios	18
Stylus resharpening	19
Tower erection & maintenance ..	20
TV program packages	21
TV props & scenery	22
TV special effects	23
TV slides	24
Transcriptions	25

ABC Film Syndication 1501 Broadway New York 36 NY	21
Academy Film Productions 123 W Chestnut St Chicago 10 Ill	6
Acus Pictures Corp 165 W 46 St New York 36 NY	7
Affiliated Photographic Co 21 W 45 St New York 36 NY	24
Alexander Film Co Alexander Film Bldg Colorado Springs Colo	6
Alend'or Productions 607 N La Brea Ave L's Angeles Calif	6
Allen-Moore Productions 7936 Santa Monica Blvd Hollywood 46 Calif	6
Alpha Erection Corp 210 E Main St W Branch Iowa	20
Amenic Inc 2421 N Ramsey Springfield Mo	6
American Communications Corp 280 Broadway New York 17 NY	2
American Film Co 1329 Vine St Philadelphia 7 Pa	6
American Film Producers 1600 Broadway New York 19 NY	6
Anderton Electronic Lab 129 E 1800 S St Bountiful Utah	2
Animation Inc 8564 Melrose Ave Hollywood 46 Calif	6
Apple Frequency Measuring Service H L 409 Union Ave Burlington NC	8
Armstrong & Co J 19 W 44 St New York NY	6
Atlas Film Corp 1111 S Blvd Oak Park Ill 3-4-5-6-7-15-16-17-18 21-22-23-24	6
ATV Film Productions 35-01 Northern Blvd Long Island City 1 NY	6
Audio-Master Corp 17 E 45 St New York 17 NY	1-10-11-12-17-21-25
Audio-Video Recording Co 730 5 Ave New York 19 NY	1-2-11-15-16-17-18-25
Aztecca Films 1743 S Vermont Ave Los Angeles 6 Calif	6
Barnes & Reinecke 230 E Ohio St Chicago 11 Ill	2

Bassett Inc Rex 1314 NE 17 Ct Ft Lauderdale Fla	8
Becker Productions V S 551 5 Ave New York 17 NY	1-7-21-25
Beck's Inc 298 E 5 St St Paul 1 Minn	6-26-27
Bell & Howell 7100 McCormick Rd Chicago 45 Ill	4
Bemiller Productions 2350 Hvrprion Ave Hollywood 27 Calif	6
Bennett & Co Paul 230 E Ohio St Chicago 11 Ill	19
Bodde Screen & Projector Co 11541 Bradley Ave San Fernando Calif	23-24
Boulevard Recording Studio 25 E Jackson Blvd Chicago 4 Ill	15-16-17-18
Bray Studios Inc 729 7 Ave New York 19 NY	6-7
Broadcast Equipment Specialties Corp P O Box 149 Beacon NY	2
Bry Kinescope Labs 3518 Devon Ave Chicago 45 Ill	6
Ruhl Optical Co 1009 Beach Ave Pittsburgh 33 Pa	14
Burnett Radio Lab W W L 4814 Idaho St San Diego 16 Calif	8
Russ-Clement-Doughten & Associates 201 B Studio Hill Chester Springs Pa	2-3-5-6-7-9-10-15 16-17-18-21-23-24
Byron Inc 1226 Wisconsin Ave Washington 7 DC	6
Camera Equipment Co 315 W 43 St New York 36 NY	14
Campus Film Productions 14 E 53 St New York NY	6
Capital Film Service 224 Abbott Rd E Lansing Mich 3-4-5-6-7-9-13-15-16-17-18-25	6
Capitol Transcription Service 1120-A Conn Ave NW Washington 6 DC	1-2-3-5-6-7 15-16-17-18-21-25
Cavalier Productions Hyde Park NY	6
Centaur Studios 7657 Melrose Ave Hollywood 46 Calif	6-7-11-15-18-21
Centron Corp 1107 Mass St Lawrence Kan	6
Charter Oak Tele-Pictures 846 7 Ave New York 19 NY	6
Chertok TV Inc 1010 Las Palmas Ave Los Angeles 38 Calif	6
Chicago Film Lab 56 E Superior St Chicago 11 Ill	6
Chromatic Television Laboratories 1501 Broadway New York 36 NY	9
Cinecraft Productions 2515 Franklin Ave Cleveland 13 Ohio	6
Cinegraphics Inc 5 E 57 St New York 22 NY	6
Cinematic Developments 2125 32 Ave San Francisco 16 Calif	2-3-4-15
Cine-Video Productions Milford Conn	6
Cleveland Productions 2103 Bellflower Blvd Long Beach 15 Calif	6
Coffman Film Co 4519 Maple Ave Dallas Texas	6
Colburn Lab G W 164 N Wacker Dr Chicago 6 Ill	5
Commercial Radio Monitoring Co P O Box 7037 Kansas City 13 Mo	3
Condor Films 1006 Olive St St Louis 1 Mo	6
Cook Labs 101 2 St Stamford Conn	15
CTN Film Productions 608 5 Ave New York 20 NY	6
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	23
Denove Productions Jack 6611 Santa Monica Blvd Los Angeles 38 Calif	6
Denson Electronics Corp P O Box 122 Rockville Conn	20
Dephoure Studios Inc 782 Commonwealth Ave Boston 15 Mass	3-4-5-6-7-9-12-13 15-16-17-18-21-24
de Rochemont Associates Inc Louis 380 Madison Ave New York 17 NY	6-21
Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	2
Dougfair Corp 666 N Robertson Blvd Los Angeles 46 Calif	6
Dudley TV Corp 9908 Santa Monica Blvd Beverly Hills Calif	6
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	13
Eastman Kodak Co 343 State St Rochester 4 NY	4
Editorial Films Inc 10 E 40 St New York 16 NY	6
Eidson Electronic Co 1902 N 3 St Temple Texas	8
Electrical Tower Service Inc 325 S Washington St Peoria Ill	20
Electro Sound Corp 115 Halleck St Boston 15 Mass	2-11-12-15-16-23
EMC Recordings Corp 806 E 7 St St Paul 6 Minn	1-2-11-15-16-17-18-25

Federal Telefilms					
1051 Formosa Ave Hollywood Calif	6	McCadden Corp			Smith Inc W R
Felthousen Audio Service		1040 N Las Palmas Hollywood 38 Calif	6		117 4 Ave Pittsburgh 22 Pa
17615 Ludlow St Granada Hills Calif	2	Melody Ranch Enterprises			Smith-Meeker Eng'g Co
Filmack Studios		6920 Sunset Blvd Hollywood 28 Calif	6		157 Chambers St New York 7 NY
1327 S Wabash Ave		Michigan Electronics Inc			Sonex Inc
Chicago 5 Ill	3-5-6-7-15-18-24	354 N Rockwell St			73 S State Rd Upper Darby Pa
Film Arts Productions		Chicago 22 Ill	15-16-18		SoundSound Masters Inc
1032 N 6 St		Milner Productions			165 W 46 St New York 36 NY
Milwaukee 3 Wisc	3-5-6-15-16-17-18-24	3800 Liberty Hts Ave Baltimore 15 Md	6		Spaeth Sigmund
Film Associates		Minnesota Mining & Mfg Co			400 E 58 St New York 22 NY
4600 S Dixie Hgwy		900 Fauquier Ave St Paul 6 Minn	4		Spaulding Products Co
Dayton 9 Ohio	3-5-6-7-9-12-15-16-17-18	Morris Productions Nelson			550 W Barber St Frankfort Ind
Filmcraft Productions		11 E 48 St New York 17 NY	6		Standard Record Mfg Co
8451 Melrose Ave Los Angeles 46 Calif	6	Motion Picture Service			70 N San Gabriel Blvd Pasadena 8 Calif
Film Creations		125 Hyde St San Francisco 2 Calif	6		Sturm Studios
16 E 40 St New York 16 NY	6	Motion Pictures for Industry			723 7 Ave New York 19 NY
Fitz & Assoc		2543 Keltone Ave Los Angeles 64 Calif	6		Sun Dial Films
6327 Santa Monica Blvd		MP Engineering Co			341 E 43 St New York NY
Hollywood 28 Calif	6	Pairfield 3 Conn	2-12-15		Sutherland Productions J
Photo-Video Labs Inc		Musicolor Inc			201 N Occidental Blvd
25 Amity St Little Falls NJ	24	333 N Michigan Ave			Los Angeles 26 Calif
Photovox Inc		Chicago 1 Ill	4-7-10-11-23		Tarc Electronics Inc
1447 Union Ave Memphis 4 Tenn	6	Myerberg Productions M			48 Urban Ave Westbury LI NY
Frederick Recording Co		234 W 44 St New York 36 NY	6		Technisonic Studios
101 Townsend St Midland Mich	15-16-25	National Cine Equipment Inc			1201 Brentwood Blvd St Louis 17 Mo
F-R Machine Works Inc		209 W 48 St New York 36 NY	14		Techtron Electronics Ltd
Electronic & X-Ray Div		Nat'l Screen Service			583 Gramatan Ave Mt Vernon NY
26-12 Borough Pl Woodside 77 NY	8	509 Madison Ave New York 22 NY	6		Telecast Films
Galahad Productions		Neal Productions S			247 W 46 St New York 36 NY
221 W 26 St New York 1 NY	6	475 5 Ave New York 17 NY	6		Teledrome Mfg Corp
Gates Radio Co		Northwest Motion Pictures			28 Ranick Dr Amityville LI NY
123 Hampshire St Quincy Ill	2	1716 30 Ave W Seattle 99 Wash	6		Telecine Film Studios
Gibbs & Co J E		Oberline Inc			100 S Northwest Hwy Park Ridge Ill
1270 6 Ave New York NY	6	P O Box 921			Tele Communications Inc
Gold Productions Mel		Beverly Hills Calif	1-2-15-21		41 E 42 St New York NY
1639 Broadway New York 19 NY	6	Pacific Optical Corp			Telemated Cartoons
Greene Film Productions Ben		120 Glasgow Ave Inglewood 1 Calif	14		70 E 45 St New York 17 NY
1650 Broadway New York 19 NY	6	Pacific Universal Products Corp			Telepix Corp
Guild Films		168 Vista Ave Pasadena 8 Calif	14		1515 N Western Ave
460 Park Ave New York 22 NY	6	Packaged Programs Inc			Hollywood 27 Calif
Hallmark Productions		634 Penn Ave	1-3-5-6-7-9-10-13-15		6-7-15-16-18
9100 Sunset Blvd Los Angeles 46 Calif	6	Pittsburgh 22 Pa	16-17-18-21-24-25		Telestudios
Hammer Milton		Pathe Pictures			1481 Broadway New York 36 NY
1145 19 St N W Washington D C	6	33 W 60 St New York 23 NY	6		Theodore Productions
Handel Film Corp		Peerless Film Processing Corp			730 5 Ave New York 19 NY
6926 Melrose Ave Hollywood 38 Calif	6	165 W 46 St New York 36 NY	5		Tower Builders Co
Harriscopie Inc		Pentron Corp			Box 356 Angola Ind
355 N Beverly Dr Beverly Hills Calif	6	777 S Tripp Ave Chicago 24 Ill	11		Transfilm Inc
Hartley Productions Inc		Pheelan Productions R A			35 W 45 St
339 E 48 St		550 5 Ave New York 36 NY	6		New York 36 NY
New York 17 NY	6-7-15-16-18-21-24	Phelps Precision Lab			3-4-5-6-7-15-16-17-18-24
Houston Fearless Div Color Corp of America		4232 Scott Terrace			Trans-Lux Corp
11801 W Olympic Blvd		Minneapolis 16 Minn	8		625 Madison Ave New York 22 NY
Los Angeles 64 Calif	5	Phillips Assoc R J			TV Adventure Film
Imperial World Films		130 W 57 St New York NY	6		9336 W Washington Blvd Culver City Calif
12 E Delaware Pl Chicago Ill	6	Pilot Productions			TV Programs of America
Impro Inc		6419 N Calif Ave Chicago 45 Ill	6		488 Madison Ave New York 22 NY
7324 Santa Monica Blvd		Polaris Pictures			TV Specialty Co
Hollywood 46 Calif	6	5859 W 3 St Los Angeles 36 Calif	6		350 W 31 St New York 1 NY
Information Productions		Premier Film & Recording			9-23
5 E 57 St New York 22 NY	6	3033 Locust St St Louis 3 Mo	6-15		17 E 45 St New York 17 NY
Int'l News 235 E 45 St New York 17 NY	6	Producers Film Studios			United World Films Inc
Ivanhoe Electronic Labs		540 Lake Shore Dr Chicago Ill	6		1445 Park Ave New York 29 NY
14238 S La Salle St Chicago 27 Ill	8	Pulse Techniques Inc			U S Recording Co
Jackson Productions Riley		1411 Palisade Ave W Englewood NJ	2		1121 Vermont Ave Washington 5 DC
6253 Hollywood Blvd		Pyramid Productions			15-18-25
Hollywood 28 Calif	6	1 E 57 St New York NY	6		Van Pragg Productions
Jam Handy		Q E D Productions			1600 Broadway New York 19 NY
2821 E Grand Blvd Detroit 11 Mich	6	Radio & TV Packagers			Video Pictures
Jamieson Film Co		11 E 40 St New York NY	1-21		500 5 Ave New York 36 NY
3825 Bryan St Dallas 4 Texas	6	Camden 2 NJ	15		Vidicam Pictures
Jewel Radio & TV Productions		Rainbow Pictures			210 E 5 Ave New York NY
540 N Michigan Ave Chicago 11 Ill	6	5711 S Dixie Hwy Miami 43 Fla	6		Vision Films
Kane Productions Al		Rarig Motion Picture Co			520 Royal St New Orleans 16 La
1411 Walnut St Philadelphia 2 Pa	6	5510 University Way Seattle 5 Wash	6		Vitro Corp of America
Karlen Productions B E		Recorded Publications Labs			261 Madison Ave New York 16 NY
270 Park Ave New York NY	6	1558 Pierce Ave			Vogue Film Productions
Kay Electric Co		Camden 5 NJ	1-15-16-17-18-25		Bowman Field Louisville 5 Ky
14 Maple Ave Pine Brook NJ	17	Reed TV Roland			Vogue Wright Studios
Ken-del Productions		650 Bronson Ave Hollywood 4 Calif	6		469 E Ohio St Chicago 11 Ill
920 King St	2-3-6-7-10-11	Reeves Soudercraft Corp			Volcano Productions
Wilmington 1 Dela	12-15-16-17-18-25	10 E 52 St New York 22 NY	4-19		1040 N Las Palmas Hollywood 38 Calif
Key Productions		Riviera Productions			Washington Video Productions
527 Madison Ave New York 22 NY	6	1715 Via El Prado Redondo Beach Calif	6		1536 Conn Ave NW Washington DC
Kline Productions F W		RKO Pathe			510 W 57 St New York 19 NY
1426 N Serrano Ave Hollywood 27 Calif	6	1270 6 Ave New York 20 NY	6		Western Electro Acoustic Lab Inc
Kling Film Productions		Roberts Productions C			11789 San Vicente Blvd
1058 W Washington Blvd Chicago 7 Ill	6	321 S Beverly Dr Beverly Hills Calif	6		Los Angeles 49 Calif
Knickerbocker Productions		Robinson Recording Labs			Westlab Electronics
1600 Broadway New York 19 NY	6	35 S 9 St Philadelphia 7 Pa	15-18-25		2475 Central Ave Yonkers NY
Lakeside TV Co		Rolab Studios			West Michigan Sound Co
1465 Broadway New York 36 NY	6	Walnut Tree Hill			1932 Peck St Muskegon Mich
Lance Productions		Sandy Hook Conn	3-6-7-15-18-23-24-25		Westrex Corp
315 W 57 St New York 19 NY	6	Rome Cable Corp			111 8 Ave New York 11 NY
Langevin Mfg Corp		Ridge St Rome NY	10		2-6-15-16-18
47-37 Austell Pl Long Island City 1 NY	1	Roquemore Films			Wilding-Henderson
Las-Lab Inc		44 Mt Vernon Blvd Hamburg NY	6		1345 Argyle St Chicago 40 Ill
220 W Mt Olivet Lane Baltimore 29 Md	15	Rough Productions L			Willard Pictures Inc
Laufman Film Productions		35 W 53 St New York 19 NY	6		45 W 45 St New York 36 NY
221 N La Salle St Chicago 1 Ill	6	Science Pictures Inc			3-4-6-7-15-21-24
Lodge Productions Arthur		5 E 57 St New York 22 NY	3-6-7-15-21-24		Williams Brown & Earle Inc
21 W 46 St New York 36 NY	6	Scott Recording Lah			904 Chestnut St Philadelphia 7 Pa
Magnasync Mfg Co		Municipal Airport			3-5-7-24
5546 Satsuma Ave N Hollywood Calif	2	Tuscaloosa Ala	15-18		Wind Turbine Co
Magnecord Div Midwestern Instruments		Seregnacraft Pictures			E Market St & PRR W Chester Pa
Inc 1101 S Kilbourn Ave		15 W 44 St New York 36 NY	6		20
Chicago 24 Ill	11	Sellers Co			Wolf Studios Inc Raphael G
Magnetic Sound Inc		2102 Jackson St			5631 Hollywood Blvd
4803 1/2 Grand Ave Des Moines 12 Iowa	15	Dallas 1 Tex	15-16-17-18-25		Hollywood 28 Calif
Magne-Tronics Inc		Shrader Sound Inc			6-7-10-21-24
49 W 45 St New York NY	11	2803 M St N W Washington 7 DC	2-18		Ziv TV Programs
Marathon TV Newsreel					488 Madison Ave New York 22 NY
10 E 49 St New York 17 NY	6				Zoomar Inc
Maxwell Assoc Robt					55 Sea Cliff Ave Glen Cove NY
5746 Sunset Blvd Hollywood 28 Calif	6				14

83—SERVICES, INDUSTRIAL

Aerial surveys	1
Aircraft maintenance	2
Assembly	3
Brazing	4

Carrier current maintenance	5
Computer service	6
Construction	7
Electrical testing	8
Electronic equipment repairs	9
Encapsulation	10
Engraving & profiling	11
Fabrication, metal parts	12
Fabrication, non-metal parts	13
Frequency calibration	14
Heat treating	15
Hermetic sealing	16
Inspection	17
Marine maintenance	18
Marking	19
Metal finishing	20
Microwave calibrating	21
Microwave relay maintenance	22
Military systems engineering	23
Optical repairs	24
Packaging	25
Plating, metal on plastic	26
Plating, precious metal	27
Police, fire, municipal maintenance	28
Qualification testing	29
Soldering	30
Test equipment repairs	31
Testing	32
Tinning, hot dipped	33
Treating, fungus & moisture proof	34
Welding	35

A A Metal Products Inc	154 Elliot St Brattleboro Vt	35
Abrams Instrument Corp	606 E Shawwassee St Lansing 1 Mich	1-32
Accurate Electronics Corp	169 S Abbe Rd W Elyria Ohio	12-13-19
Ackerman Engravers	458 Broadway New York 13 NY	11
Aeme Scientific Co	1450 W Randolph St Chicago 7 Ill	20-24
Aeme Wire Co	1255 Dixwell Ave New Haven 14 Conn	10
Acoustica Associates	Shore Rd Glenwood Landing LI NY	20
Acromark Co	443 Morrell St Elizabeth 4 NJ	11-19
Adler Electronics Inc	1 LeFevre Lane New Rochelle NY	14-23
Advanced Electronics Inc	94 Silas Deane Hwy Rocky Hill 9 Conn	3-12-13
Aero Electronics Co	1512 N Wells St Chicago 10 Ill	23
Aeroflex Labs	34-06 Skillman Ave Long Island City 1 NY	1-29
Aerolite Electronics Corp	507 26 St Union City NJ	3-10-12-13-30-34
Aerophysics Development Corp	Sub Curtiss-Wright Corp P O Box 689 Santa Barbara Calif	23
Aerotest Laboratories	129-11 18 Ave College Point 56 NY	8-17-29-32
Ainslie Corp	312 Quincy Ave Quincy 69 Mass	12
Airborne Instruments Lab Modac Div	864 Franklin Ave Thornwood NY	6
Aircorn Inc	1209 E Grand St Elizabeth NJ	3-4-12-30-35
Aircraft & Electronic Specialties	22 S Green St Brownsburg Ind	3-9
Airflo Instrument Co	53 Addison Rd Glastonbury Conn	3-4-35
Airflyte Electronics Co	535 Avenue A Bayonne NJ	3-10
Air Transport Mfg Co	1114 N Sycamore Ave Los Angeles 38 Calif	3-12-35
Alear Instruments Inc	17 Industrial Ave Little Ferry NJ	32
Alden Products Co	123A N Main St Brockton Mass	3
Alfax Paper & Eng'g Co	Washington St Westboro Mass	3-30
Allied Eng'g & Production Corp	2421 Blanding Ave Alameda Calif	30
Allied Engraving & Stamping Co	17 Elm St Buffalo 3 NY	11-12-13-19
Allied Fabricating Corp	1538 N Clybourn Ave Chicago 10 Ill	12-35
Allmetal Screw Products Co	821 Stewart Ave Garden City NY	12-15
Alloy Metalsmiths Inc	89 Commerce Rd Cedar Grove NJ	12-35
Aloe Scientific	5655 Kingsbury Blvd St Louis 12 Mo	24
Alpha Erection Corp	210 E Main St W Branch Iowa	7-17-22
Alto Scientific Co	855 Commercial St Palo Alto Calif	3-8-23-27

Alwac Corp	13040 S Cerise Hawthorne Calif	6
Amerac Inc	116 Topsfield Rd Wenham Mass	21
American Electronic Laboratories	121 N 7 St Philadelphia 6 Pa	8-23
American Gas Furnace Co	140 Spring St Elizabeth 1 NJ	4-15
American Lava Corp Subs Minn Mining & Mfg	Cherokee Blvd & Mfrs Rd Chattanooga 5 Tenn	13-16
American Machine & Foundry Co	Defense Products Group 1101 N Royal St Alexandria Va	12-15-20-21-23-25
American Machine & Foundry Co	Electronics Div 1085 Commonwealth Ave Boston 15 Mass	23
Amphenol Electronics Corp	1830 S 54 Ave Chicago 50 Ill	3
AMP Inc Chemical Dielectrics Div	155 Park St Elizabethtown Pa	10
Amplex Div Chrysler Corp	P O Box 2718 Detroit 31 Mich	12
Anchor Specialty Mfg Co	Hollister Rd Teterboro NJ	3-8-12-13-31
Apple Frequency Measuring Service H L	409 Union Ave Burlington NC	14
Applegate & Co C J	1840 24 St Boulder Colo	10-16-25
A R F Products Inc	7627 Lake St River Forest Ill	12-13
Arkay Co	605 1 Ave S W Rochester Minn	11-12
Ark Eng'g Co	431 W Tabor Rd Philadelphia 20 Pa	8-14-21
Arlin Products Inc	13541 Auburn Ave Detroit 23 Mich	17
Art Decorating Co	4201 Hudson Blvd N Bergen NJ	19
Arvey Corp Fibre Forming Div	202 Franklin St Olean NY	25
Associated Testing Labs	409 Clinton Rd Caldwell NJ	8-17-29-32
Atlas E-E Corp	47 Prospect St Woburn Mass	12-15
Atlas Mineral Products Co	Mertztown Pa	13
Auburn Mfg Co	Stack St Middletown Conn	12-13
Audio Electronics	15858 35 Ave N E Seattle 55 Wash	5-9
Austin Co Special Devices Div	76 9 Ave New York 11 NY	3-7-23
Autel Electronics Co	P O Box 225 Linden NJ	12-16
Automatic Methods Inc	965 W Grand St Elizabeth NJ	3-4-12-17-19-30-35
Automation Inc	212 Worcester St Wellesley Hills 82 Mass	23
Aviation Electronic Service	N 12 St Wheeling Ill	9
Avion Div ACP Industries Inc	11 Park Pl Paramus NJ	10
Avionics Ltd	P O Box 200 Niagara-on-the-Lake Ont Canada	2-3-9-10-11 25-30-31
Babcock Radio Eng'g Inc	7942 Woodley Ave Van Nuys Calif	23
Baird-Atomic Inc	33 University Rd Cambridge 38 Mass	24
Baker & Co	113 Astor St Newark 2 NJ	27
Baldwin Products Corp	432 E Valley Blvd San Gabriel Calif	35
Barber & Howard Co	East Ave Westerly RI	11
Barker & Williamson Inc	Canal & Beaver Sts Bristol Pa	3-4-7-8-9-10-12 13-14-16-19-20-23 25-26-27-29-31-32-34-35
Barkley & Dexter Laboratories	50 Frankfort St Fitchburg Mass	3-8-9-23-25-32
Barlowe Television	402 N Wantagh Ave Bethpage NY	9
Barnes & Reinecke	230 E Ohio St Chicago 11 Ill	8-23-32
Bart Mfg Corp	227 Main St Belleville NJ	26-27
Barton Electronics Inc	1000 Farmington Ave W Hartford 7 Conn	3-7
Belfab Corp	11 Ramah Circle Agawam Mass	35
Bell Aircraft Corp	P O Box 1 Buffalo 5 NY	2-8-9
Belock Instrument Corp	111-01 14 Ave College Point 56 NY	3-6-8-18-23-29
Bemis Bro Bag Co	408 Pine St St Louis 2 Mo	25
Bendix Aviation Corp Bendix Radio Div	East Joppa Rd Towson 4 Md	23
Bendix Aviation Corp Pacific Div	11600 Sherman Way N Hollywood Calif	23
Bennett Mfg Co	Railroad St Alden NY	12
Berkshire Labs	586 Bank Village Greenville NY	17-32
Bernard Franklin Co	4155 E Hedley St Philadelphia 37 Pa	12-35
Berneco Engineering Corp	2320 S Tibbs Ave Indianapolis 41 Ind	10
Bestcraft Products Co	626 Broadway New York 12 NY	3-12-13-25

B & H Instrument Co	3479 W Vickery Blvd Ft Worth 7 Tex	2
Bigelow Metallizing Chemicals Co	98 Bigelow St Quincy 69 Mass	26
Biggs Co Carl H	2255 Barry Ave Los Angeles 64 Calif	10
Biwax Corp	3445 Howard St Skokie Ill	10
B J Electronics Borg-Warner Corp	3300 Newport Ave Santa Ana Calif	29
Blaco Mfg Co	6541 Euclid Ave Cleveland 3 Ohio	12-30
Blaine Electronics Inc	14757 Keswick St Van Nuys Calif	10-12-13
Bodnar Industries	238 Huguenot St New Rochelle NY	32
Bolling Industries Inc	1117 N Main Ave P O Box 981 Scranton 2 Pa	3-11-20-25
Boonton Molding Co	326 Myrtle Ave Boonton NJ	10
Briggs Associates	10 DeKalb St Norristown Pa	3-7-8-9-23-25-32
Brihart Plastics Corp	Old Country Rd Mineola NY	13
Bron-Shoe Co	269 E Broad St Columbus 15 Ohio	26-27
Brooks & Perkins Inc	1950 W Fort St Detroit 16 Mich	3-12-20-35
Brubaker Electronics Inc	3652 Eastham Dr Culver City Calif	29
Buhl Optical Co	1609 Beech Ave Pittsburgh 33 Pa	26
Burnett Radio Lab W W L	4814 Idaho St San Diego 16 Calif	9-14
Burroughs Corp	6071 2 Ave Detroit 32 Mich	6
Burroughs Corp Electronic Instruments Div	1209 Vine St Philadelphia 7 Pa	6-32
Buss-Clement-Doughten & Associates	201 B Studio Hill Chester Springs Pa	9
Calbest Electronics Co	4801 Exposition Blvd Los Angeles 16 Calif	9-30-31-32
Calif Magnetic Control Corp	11922 Valerio St N Hollywood Calif	10
California Electronic Services	P O Box 2 Woodland Hills Calif	8-29-32
Camera Equipment Co	315 W 43 St New York 36 NY	22-24
Canadian Aviation Electronics Ltd	6214 Cote de Liesee Rd St Laurent Quebec Canada	9
Canadian Radium & Uranium Corp	630 5 Ave New York 20 NY	19
Cavitron Electron Oscillator Co	Div Short Wave Plastic Forming 355 N Newport Blvd Newport Beach Calif	9
C B C Electronics Co	2601 N Howard St Philadelphia 33 Pa	3
Century Electronics Co	34 Oleander St Cocoa Fla	3-23
Century Plating Co	229 Ferris Ave White Plains NY	27
Chemalloy Electronics Corp	Gillespie Airport Santee Calif	30-32-35
Chemo-Textiles Inc	P O Box 169 W Warwick RI	34
Chester Morton Electronics Corp	10 St & Morton Ave Chester Pa	3-30
Chicago Aerial Industries Inc	1980 N Hawthorne Ave Melrose Park Ill	1-23
Chicago Industrial Instrument Co	865 N Sangamon St Chicago 22 Ill	9-31
Chicago Screw Co Div Standard Screw Co	2701 Washington Blvd Bellwood Ill	20
Christiansen Co CB	164 Pennington St Newark 5 NJ	3-11-12-13-15-25
Cir-Pak Co	32-44 Francis Lewis Blvd Flushing 58 NY	10
Clegg Labs Div Clegg Inc	Ridgedale Ave Morristown NJ	7-8-23-31
Cohan Enper Co	142 W 14 St New York 11 NY	20
Coil Winders Inc	New York Ave Westbury LI NY	10-16
Collins Radio Co	855 35 St NE Cedar Rapids Iowa	23
Colonial Alloys Co	Ridge Ave & Crawford St Philadelphia 29 Pa	20
Commercial Radio Monitoring Co	P O Box 7037 Kansas City 13 Mo	14
Community Eng'g Corp	Box 824 State College Pa	3-8-9
Computing Devices of Canada Ltd	P O Box 508 Ottawa Ont Canada	6
Conn Marine Instrument Co	Essex Conn	9-18-28
Conn Telephone & Electric Corp	70 Brittainia St Meriden Conn	3-23-34
Conrad & Moser	2 Borden Ave Long Island City 1 NY	12-35
Consolidated Productions Inc	Broward Int'l Airport Ft Lauderdale Fla	8-9-23
Continental-Diamond Fibre Corp	Newark Del	13
Controlled Atmosphere Enclosures Corp	230-11 141 Ave Springfield Gardens 13 LI NY	13
Cook Electric Co	2700 Southport Ave Chicago 14 Ill	8-29-32

Corbin Corp 5419 56 Pl Riverdale Md	23	Emerson & Cuming Inc 869 Washington St Canton 1 Mass	10	Gilfillan Bros 1815 Venice Blvd Los Angeles 6 Calif	23
Cossor (Canada) Ltd 301 Windsor St Halifax Nova Scotia Canada	8-9-23-31	Emerson Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY	13	Glass & Bro Harry H 10 Van Cortlandt Ave E New York 68 NY	11-12-13-19
Craig Systems Inc 90 Holten St Danvers Mass	23	Emerson-Sack-Warner Corp 85 Washington St Somerville 43 Mass	12-20	Gleason-Avery Inc 45 Aurelius Ave Auburn NY	3
Croname Inc 3701 Ravenswood Ave Chicago 13 Ill	3-12-20	Empire Electronics Co 166 River St Paterson 1 NJ	3-30	Globe Electrical Mfg Co 1729 W 134 St Gardena Calif	11
Crystalx-Westlake Corp Lenni Kd Lenni Miss Pa	11-25	Endeco Eng'g Development Co of Los Angeles 922 E Anaheim St Wilmington Calif	18	Godfrey Mfg Co 1726 N Orchard St Chicago 14 Ill	3-8-17-30-33
Daco Instrument Co Tillary & Prince Sts Brooklyn 1 NY	12	Engelhardt Eng'g Co 38 Burrill Ave S Norwalk Conn	9-31	Golden Co 1054 38 St Brooklyn 19 NY	12
Dale Products Inc Columbus Nebr	10-12	Engineered Electronics Co 506 E 1 St Santa Ana Calif	3-25	Gordon Enterprises 5362 N Cahuena Blvd N Hollywood Calif	24
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	14	Engineering Associates 434 Patterson Rd Dayton 9 Ohio	9-21-31	Correll & Correll 336 Old Hook Rd Westwood NJ	3-12-23
Daven Co Route 10 Livingston NJ	10-16	Epoxy Products Inc Div Joseph Waldman & Sons 133 Coit St Irvington NJ	10-16	Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif	3-8-10-29-32
Davenport Mfg Co 1713 N Ashland Ave Chicago 22 Ill	2-3-8	Equipment & Service Co 6815 Oriole Dr Dallas 7 Tex	9-31-32	Gould Corp Jerome F 200 Stewart Ave Brooklyn 37 NY	25
Daystrom Instrument Div Daystrom Inc Archibald Pa	2-11-23	Erdo Eng'g Corp Official & Westgate Addison Ill	25	GPS Instrument Co 811 Boylston St Boston 16 Mass	6-23
Dayton Aviation Radio & Equipment Co R R 3 Troy Ohio	23-29-31-32	Erie Resistor Corp 644 W 12 St Erie 6 Pa	6	Greer Hydraulics Inc NY Int'l Airport Jamaica 30 NY	3-4-12-13
Decatur Electronic Industries Corp 203 Orinoco Dr Brightwaters L.I NY	12	Erwood Inc 1770 W Berteau Ave Chicago 13 Ill	11-12-13-35	Gries Reproducer Corp 125 Beechwood Ave New Rochelle NY	12-13
Designers for Industry 4241 Fulton Pkwy Cleveland 9 Ohio	23	Ewald Instruments Route 7E Kent Conn	35	Griffin Co John 2157 James Ave St Paul 5 Minn	11-19
Dietz Co S J 9 E Wesley St S Hackensack NJ	9	Falstrom Co Falstrom Court Passaic NJ	12-20-25-35	Guild Electronics Inc 388 Broadway New York 13 NY	9
Delta Co 333 W 24 Pl Chicago 16 Ill	33	Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind	23	Gulton Industries Inc 212 Durham Ave Metuchen NJ	23
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	14-21	Fecker Inc J W 6592 Hamilton Ave Pittsburgh 6 Pa	23-24	Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	23
Derivation & Tabulation Associates 67 Lawrence Ave W Orange NJ	8-29-32	Federal Cable Div Royal Electric Corp 95 Grand Ave Pawtucket RI	29	Haller Raymond & Brown 124 N Atherton St State College Pa	23
Designers for Industry 4241 Fulton Pkwy Cleveland 9 Ohio	23	Federal Machine Co 807 Garfield Ave Jersey City 5 NJ	3-12-35	Hallett Mfg Co 1601 W Florence Inglewood Calif	3-12-13-30
Deveo Eng'g Inc P O Box 387 Caldwell NJ	12-13	Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	23	Hallicrafters Co 4401 W 5 Ave Chicago 24 Ill	23
DeWitt Development Co 3008 W 127 St Blue Island Ill	1-10	Feiner & Sons P 522 W 45 St New York 36 NY	12-13	Hamilton Watch Co Allied Products Div Columbia Ave Lancaster Pa	3-11-12-13-15
Digitronics Corp 35-10 36 Ave Long Island City 6 NY	3-6	Felthousen Audio Service 17615 Ludlow St Granada Hills Calif	9	Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	23
Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wis	3-4-12-13-30	Fidelity Amplifier Co 703 Willow St Chicago 14 Ill	3-8-17-30-33	Hanson-Gorrill-Brian 85 Hazel St Glen Cove NY	23
Donnelley Mfg Co 580 Winter St Waltham 54 Mass	3-12-17-20-25-35	Filtcon Co 131-15 Fowler Ave Flushing 55 NY	29	Harper-Leader Inc 1046 S Main St Waterbury 20 Conn	20-27
Doty Acoustical Electronic Labs 431 Broome St New York 13 NY	9-12-13-23-30-34	Filtcon Co 10023 W Jefferson Blvd Culver City Calif	29	Hauman Instruments Co 70 Coolidge Hill Rd Watertown 72 Mass	3-7-30
Douglas Instrument Labs 176 Norfolk Ave Boston 19 Mass	9-31	First Electronics Corp 117 Blue Hill Ave Boston 19 Mass	8-10-19	Heinrich Co Carl 711 Concord Ave Cambridge 38 Mass	12-13
Dow Chemical Co Midland Mich	12	Fisher & Crome 109 N Camac St Philadelphia 7 Pa	11-13	Heldor Mfg Corp 238 Lewis St Paterson NJ	3-4-12-16
Dow-Key Co P O Box 57 Warren Minn	27	Fisher Research Lab 1961 University Ave Palo Alto Calif	3	Helko Products Co 243 W 55 St New York 19 NY	11
Downing Crystal Co 191 Shaffer Ave Westminster Md	3-12-15-16-17	Flexicon Corp 1315 S 3 Ave Maywood Ill	12	Hermes Plastics Inc 13 University Pl New York 13 NY	11
Dunlap Electronics 764 9 St Des Moines Iowa	3-4-7-12-13-29-30-35	Flexrock Co 3609 Filbert St Philadelphia 1 Pa	25	Highland Eng'g Co 90 Magnolia St Westbury NY	3-16-30
Dunn Eng'g Associates 186 Massachusetts Ave Cambridge 39 Mass	3-8-13-14-23-25-32	Fluidyne Eng'g Corp 425 N 7 St Minneapolis 6 Minn	23-32	Hobart Bros Hobart Square E Troy 3 Ohio	35
Duro Specialty Co 811 Boston St Lynn Mass	12	Fluorocarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ	26-34	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	8-23
Dwyer Eng'g Co Pine St Ext Nashua NH	3-10-23-25	Formica Metal Products Co Corporation Way Medford 55 Mass	12-13-35	Houghton Laboratories Inc 322 Houghton Ave Olean NY	10
Dynalysis Development Labs Inc 11941 Wilshire Blvd Los Angeles 25 Calif	6	Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY	10	Houston Fearless Div Color Corp of America 11801 W Olympic Blvd Los Angeles 64 Calif	23
Eastern Precision Resistor Corp 675 Barby St Brooklyn 7 NY	25	Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ	4-16	Hull Corp 1941 Woodland Rd Abington Pa	10
Eastern Specialty Co 3617 N 8 St Philadelphia 40 Pa	12	Frequency Standards Inc P O Box 504 Asbury Park NJ	14-21	Hycon Mfg Co 707 S Raymond Ave Pasadena Calif	1
Eidson Electronic Co 1902 N 3 St Temple Tex	14-28	Fretco Inc 406 N Craig St Pittsburgh 13 Pa	3	Ideal-Aerosmith Inc 12909 S Cerise Ave Hawthorne Calif	2-7-9-12-31
Eisler Eng'g Co 750 S 13 St Newark 3 NJ	9-12-35	F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	21	Impact-O-Graph Corp 1900 Euclid Ave Cleveland 15 Ohio	32
Electrical Testing Labs Inc 2 East End Ave New York 21 NY	8-17-32-39	Gar Precision Parts Inc 703 Pacific St Stamford Conn	12	Industrial Electronic Engineers 3973 Lankershim Blvd N Hollywood Calif	3
Electric Coil Co 4911 S Marshfield Ave Chicago 9 Ill	3-30	Cavitt Wire & Cable Co Central St Brookfield Mass	3	Industrial Electronics Inc 8060 Wheeler St Detroit 10 Mich	7
Electrochemical Industries Inc 35 Armory St Worcester 3 Mass	26-27	Gemex Corp 1200 Commerce Ave Union NJ	4-12-30	Industrial Engravers Inc 2212 McDonald Ave Brooklyn 23 NY	11
Electro-Fabricators 44 Heacon Pl Pasadena Calif	12	General American Transportation Corp 135 S LaSalle St Chicago 90 Ill	26	Industrial Test Equipment Co 55 E 11 St New York 3 NY	8-31-32
Electronic Assembly Co 5 Prescott St Roxbury 19 Mass	3-7-10-25-30-33	General Bronze Corp 711 Stewart Ave Garden City NY	3-12-21-35	Inland Electronics Corp 500 Rathbone Ave Aurora Ill	3-12
Electronic Associates Inc Long Branch NJ	6	General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	25	Instrumentation Associates 17 W 60 St New York 23 NY	9-24
Electronic Brazing Co 140 Glenridge Ave Montclair NJ	4-30	General Components Inc 225 E 144 St Bronx 51 NY	12-13	Instrument Labs 315 W Walton Pl Chicago 10 Ill	8-31-32
Electronic Parts Mfg Co 508 25 St Union City NJ	12	General Findings & Supply Co Industrial Div Leach & Garner Bldg Attleboro Mass	12-27	Insulating Fabricators Inc 150 Union Ave E Rutherford NJ	13
Electro-Physics Co 287 Broadway New York 7 NY	3-8-9-32	General Kinetics Inc 555 23 St S Arlington 2 Va	6-23	Insulation Mfrs Corp 565 W Washington Blvd Chicago 39 Ill	13
Electro Sound Corp 115 Halleck St Boston 15 Mass	5-9	General Metal Products Co 1010 Centre St Easton Pa	12	Insuline Corp of America 186 Granite St Manchester NH	3-12-13-20-30-35
Ellanar Chemical Co 2308 Oakton St Evanston Ill	10	General Resistance Inc 577 E 156 St New York 55 NY	10	Interference Measurement Lab Inc 907 E 51 St Brooklyn 3 NY	8-14-23-29-32
Elm Labs 10 Washington Ave Hastings-on-Hudson NY	3-11-12-13	General Testing Labs 227 W Chestnut Ave Monrovia Calif	8-29-32	Int'l Business Machines 590 Madison Ave New York 22 NY	6
El-Rad Mfg Co 2800 W Cullom Ave Chicago 18 Ill	3-7	Geotechnical Corp 3712 Hagger Dr Dallas 9 Tex	9-31	International Radiant Corp 4 Manhasset Ave Port Washington NY	31
Elzee Metal Products Co 775 39 St Brooklyn 32 NY	3-4-12-13-20-30-35	Giannini & Co G M 918 E Green St Pasadena Calif	23	Interstate Electronics Corp 875 S East St Anaheim Calif	3-23-25
				Irwin Labs 1238 S Gerhart Ave Los Angeles 22 Calif	17

Isotopes Specialties Co 703 S Main St Burbank Calif	10	Matthews & Co Jas H 3956 Forbes St Pittsburgh 13 Pa	19	Nukem Products Corp 111 Colgate Ave Buffalo 20 NY	7
Ivanhoe Electronic Labs 14238 S La Salle St Chicago 27 Ill	9-14-28-31	Maurer Inc J A 37-01 31 St Long Island City 1 NY	23	Nureco Inc 1100 Pontiac Ave Cranston 10 RI	10-34
Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md	23	Mayer Eng'g Co Frank 6442 Santa Monica Blvd Los Angeles 38 Calif	23-25	NYT Electronics Inc 2979 N Ontario St Burbank Calif	3-10
James Plating Works Inc 720 W Schubert Ave Chicago 14 Ill	20-27	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	3-4-9-12-13-20-23	Oakite Products Inc 79 Rector St New Yrkr 6 NY	20
Jodee Plastics Co 213 Shepherd Ave Brooklyn 8 NY	11-13-30	Mechaners Inc Westport Conn	23	O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif	3-7-12
Johnson & Hoffman Mfg Corp 31 E 2 St Mineola NY	35	Melco Products Inc 301 5 Ave S Minneapolis 15 Minn	3-7-10-16-34	Oiljak Mfg Co 18 Depot So Montclair N J	3-4-12-13-20-30-32-35
Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	23	Merit Plating Co 218 E 141 St New York 51 NY	27	Omega Labs Inc Haverhill St Rowley Mass	32
Keil Eng'g Products Co 4356 Duncan Ave St Louis 10 Mo	27	Metal Fabricators Corp 73 Pond St Waltham 54 Mass	4-12-30-35	Opto Eng'g Co 3524 W Washington Blvd Los Angeles 18 Calif	24
Kelley & Co O G 98 Taylor St Boston 22 Mass	12	Metal Finishing Service 711 W Root St Chicago 9 Ill	20	Orange Products Inc 554 Mitchell St Orange N J	13
Kent Co F C 64 Howard St Irvington 11 NJ	3-4-12-35	Metal Forging Corp 373 Van Sinderen Ave Brooklyn 7 NY	12	Pacific Optical Corp 120 Glasgow Ave Inglewood 1 Calif	24
Keystone Electronics Corp 423 Broome St New York 13 NY	3-12-13	Metal Specialty Products Corp 27-01 Brooklyn Queens Expressway W Woodside 77 NY	4-12-13-17-20-30-32-34-35	Pacific Universal Products Corp 168 Vista Ave Pasadena 8 Calif	24-26
Kinetics Corp 2 Churchill Rd Hingham Mass	3-4-12-13-15-26-27-30	Methode Mfg Corp 7447 W Wilson Ave Chicago 31 Ill	3-11-12-13-17-19-20-26-30-33	Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	5-22
King Electric Equipment Co 9123 Inman Ave Cleveland 5 Ohio	3-9	Metronix Inc Mill Lane Waterford Conn	3	Panellit Inc 7401 N Hamlin Ave Skokie Ill	3-7-12
Kling Metal Spinning & Stamping Co 245 Centre St New York 13 NY	4-12-30-35	Mica Corp 4031 Elenda St Culver City Calif	12	Parameters Inc 195 Herricks Rd New Hyde Park NY	8-17-23-29-32
Krengel Mfg Co 227 Fulton St New York 7 NY	19	Mica Fabricating Co 5324 N Ravenswood Ave Chicago 40 Ill	11-13-30	Paraplegics Mfg 10068 Franklyn Ave Franklyn Park Ill	3
Kupfrian Mfr Corp 395 State St Binghamton NY	3-30	Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill	11-13-30	Par Products Corp 602 Colorado Ave Santa Monica Calif	11-12
Kuss Industries Inc Taony & Lewis Sts Philadelphia 24 Pa	3-4-12-13-19-23-27-30-35	Microphase Corp Box 1166 Greenwich Conn	8-21-23	Parsons Co Ralph M Electronics Div 151 S De Lacey Ave Pasadena Calif	23
Lab Corp E Onondaga Skaneateles NY	32	Mid-West Conveyor Co Metal Products Div 7 & Sunshine Rd Kansas City 15 Kan	3-4-7-12-13-20-30-35	Pastushin Industries Inc 11221 Hindry Ave Los Angeles 45 Calif	2-12-15-29-35
Lab-Tronics Inc 3656 N Lincoln Ave Chicago 13 Ill	3-12-13	Milgo Electronic Corp 7601 N W 37 Ave Miami 47 Fla	23	Paul & Beekman 1801 Courtland St Philadelphia 40 Pa	3-12-20-35
Laminated Sheet Products Corp 449 Neponset St Norwood Mass	11-13-34	Missileonics Inc PO Box 716 Melbourne Fla	3-23-25	Pedersen Electronics 3667A Mt Diablo Blvd Lafayette Calif	12
La Moree C D 2433 Birkdale St Los Angeles 31 Calif	11-13	Mitronics Inc 1290 Central Ave Hillside NJ	10-16	Peerless Product Industries 812 N Pulaski Rd Chicago 51 Ill	3-12-13-19-34
Land-Air Inc 7444 W Wilson Ave Chicago 31 Ill	2-6-9-22-23-31-32	Mohawk Business Machines Corp 944 Halsey St Brooklyn 33 NY	12-13	Performance Measurements Co 15301 W McNichol Rd Detroit 35 Mich	7-8
Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	13-23	Molded Insulation Co 335 E Price St Philadelphia 44 Pa	3-8-11-12-13-15-17-20-25-27-29-30-32-33-34-35	Permanent Label Corp 49 Ackerman St Bloomfield NJ	19
Lane Electronics Mfg Corp 7254 Atoll Ave N Hollywood Calif	2-9-32	MP Engineering Co Fairfield 3 Conn	3	Peschel Electronics Inc 13 Garden St New Rochelle NY	3-8-9-29-31-32
Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	23	Muckle Mfg Co U S Hwy 14 Owatonna Minn	25	Petroff Corp Peter A 127 Water St New York 5 NY	3-4-12-20-23-30
Lee Chemical Corp Walter Seabury Ave & Butler Pl Bronx 61 NY	13	Mytron Mfg Co 4522 Brazil St Los Angeles 39 Calif	9	Phelps Precision Lab 4232 Scott Terrace Minneapolis 16 Minn	14
L E E Inc 625 N Y Ave NW Washington 1 DC	3-11	Nagor Associates Inc Littleton Mass	9	Philbrick Researches Inc 230 Congress St Boston 10 Mass	6
Lepel High Frequency Labs 54-18 37 Ave Woodside 77 NY	4-15-20	Narda Corp 160 Herricks Rd Mineola NY	21	Philips Electronics Inc 750 S Fulton Ave Mt Vernon NY	23
Levey Labs Harold A 8127 Oleander St New Orleans 18 La	34	National Cine Equipment Inc 209 W 48 St New York 36 NY	24	Photocon Research Products 421 N Altadena Drive Pasadena Calif	4
Link-Radio Corp 110 Jericho Tpke New Hyde Park LI NY	23-28	National Company Inc 61 Sherman St Malden 48 Mass	14	PIC Design Corp 477 Atlantic Ave E Rockaway LI NY	3
Little Inc Arthur D 30 Memorial Drive Cambridge Mass	8-23-29-32	National Eng'g Products Inc 435 Washington Blvd Washington 5 DC	10	Pioneer Patents & Products Co 3720 N New England Ave Chicago 34 Ill	3
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	3-10-16-23-30-32-34	National Gasket & Washer Mfg Co 125 E 25 St New York 10 NY	11-12-13	Plastic Accessories Inc 91 Mercer St New York 12 NY	13
Litton Industries of Md Inc 4910 Calvert Rd College Park Md	3-12-23	National Instrument Labs Inc Rhode Island Ave Riverdale Md	31	Plastics & Electronics Corp P O Box 38 Station J Buffalo 8 NY	26
Lockheed Aircraft Corp Missile Systems Div 7701 Woodley Van Nuys Calif	6	National Scientific Labs Inc 2010 Massachusetts Ave NW Washington 6 DC	23	PM Industries Inc Instrument Motors Div 460 North Ave New Rochelle NY	3
Long Inc Thomas J 215 Stonehinge Lane Carle Place LI NY	13	National Spectrographic Labs Inc 6300 Euclid Ave Cleveland 3 Ohio	17-32	Poinsettia Co 112 Cedar Ave Pitman 15 NJ	26
Lorentzen Inc H K 391 W Broadway New York 12 NY	12-35	National Tel-Tronics Corp 52 St Casimir Ave Yonkers NY	13	Potter Co 1950 Sheridan Rd N Chicago Ill	8
Los Alamos Scientific Lab Univ of Calif Los Alamos New Mex	6	Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	4-12-13-16	Precision Electroplating Co 519 Oakley Blvd Chicago 12 Ill	27
Lyman Electronic Corp 12 Cass St Springfield 4 Mass	3-4-7-12-30	Nevada Air Products Co P O Box 2472 Reno Nev	2-15-23-35	Premier Instrument Corp 52 W Houston St New York 12 NY	4-21-26-27-30
Lytel Eng'g & Mfg Co 1404 San Mateo Blvd SE Albuquerque N Mex	8-12-13-17-23	Newcomb Spring Corp 177 E Hawthorne Ave Valley Stream NY	3-12	Premier Research Labs Inc 79 7 Ave New York 11 NY	26-27
McDowell Electronics Inc 105 Forrest St Metuchen NJ	4-12-16-30-35	New York Testing Laboratories Inc 47 West St New York 6 NY	32	Printloid Corp 93 Mercer St New York 12 NY	11-13
MacLeod & Hanopol 10 Roland St Charlestown 29 Mass	3-10	Nichols Products Co 325 W Main St Moorestown NJ	12-13	PSC Applied Research Ltd 1500 O'Connor Dr Toronto 16 Ont Canada	29
Magna Electronics Co 9810 Anza Ave Inglewood 1 Calif	3-12	Nilsson Electrical Laboratory Inc 103 Lafayette St New York 13 NY	8-9-14-31-32	Pye Telecommunications Ltd Newmarket Rd Cambridge England	5-18-22-23-28
Magnaflex Corp 7300 W Lawrence Ave Chicago 31 Ill	17-32	Norden-Ketay Corp Commerce Rd Stamford Conn	23	Quality Control Corp 401 Broadway New York 13 NY	9-11-17-24-31
Magnasync Mfg Co 5546 Satsuma Ave N Hollywood Calif	3-30	Norma Hoffmann Bearings Corp Walker Div Hamilton Ave Stamford Conn	8-18-23-26-27	Radar Design Corp 210 5 Ave New York 16 NY	14-21
Malkin-Illion Co 400 Coit St Irvington 11 NJ	12	Northern Eng'g Labs 372 Wilmot Ave Burlington Wisc	9-14-31	Radiation Inc PO Box 37 Melbourne Fla	23
Mandex Mfg Co 2608 W 16 St Chicago 8 Ill	10-12-13	Northern Plastics Corp 2nd Market St LaCrosse Wisc	13	Radio City Products Co Centre & Glendale Sts Easton Pa	23
Master Engraving Studios 135 Liberty St New York 6 NY	11	NRC Equipment Corp Sub National Research Corp 160 Charlemont St Newton Highlands 61 Mass	26	Radio Corp of America Camden 2 NJ	9-23-31
Mathis Co G E 6100 S Oak Park Ave Chicago 38 Ill	7-12-35	Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	12-13	Radio Frequency Co 44 Park St Medfield Mass	4-15-30
				Ram Meter Inc 1100 Hilton Rd Ferndale 20 Mich	3-8-9-12-13
				Randall Inc Douglas 6 Pawcatuck Ave Westerly RI	3
				Ransom Research 323 W 7 St San Pedro Calif	6-32

Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass	13-16	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	6	Tri-Dex Electronics P O Box 1207 Lindsay Calif	3-13-25-30
Raytheon Mfg Co Microwave & Power Tube Operations Foundry Ave Waltham Mass	16	Slip Ring Co of America 3612 W Jefferson Blvd Los Angeles 16 Calif	26-27	Trimount Plastic Co 71 Dudley St Arlington 74 Mass	10
R & D Electronic Labs Inc 21-28 45 Rd Long Island City 1 NY	3-25	Smith-Meeker Eng'g Co 157 Chambers St New York 7 NY	2-9-18-23	Triplet & Barton 831 N Lake St Burbank Calif	8-17-29-32
Rea Co J B 1723 Cloverfield Blvd Santa Monica Calif	6	Solar Aircraft Corp 2200 Pacific Hwy San Diego 12 Calif	4-35	Tri-Point Plastics Inc Tri-Point Mfg Inc 175 I U Willets Rd Albertson LI NY	3-13
Red Point Corp 1907 Riverside Dr Glendale 1 Calif	10	Somer's Brass Co Baldwin Ave Waterbury Conn	33	Trot Electronics Inc 412 Smith St Rochester 6 NY	3-7-8-9-31
Red Seal Electric Co 6321 Detroit Ave Cleveland 2 Ohio	13	Sonex Inc 73 S State Rd Upper Darby Pa	3-7-8-32	TV Specialty Co 350 W 31 St New York 1 NY	12
Reed & Reese Inc 171 N Lake Ave Pasadena 6 Calif	10	Sorenson Industrial Electronic Co R #10 Dover NJ	3-12	Ulanet Co George 413 Market St Newark 5 NJ	4-30-35
REF Mfg Corp 393 Jericho Tpke Mineola NY	3-12-13	Southwest Products Inc Alamo Downs Rt 4 San Antonio Tex	31	Ultradyne Eng'g Labs P O Box 3308 Albuquerque N Mex	12
Regency Div Idea Inc 7900 Pendleton Pike Indianapolis 26 Ind	3	Speedassembler Equipment Co Box 344 Fords NJ	3	U M & F Mfg Corp 10929 Vanowen St N Hollywood Calif	12
Reiner Electronics Co Centre & Glendale Sts Easton Pa	12	Sperry Products Inc Shelter Rock Rd Danbury Conn	32	Underwood Corp Electronic Computer Div 35-10 36 Ave Long Is. and City 6 NY	6
Remington Rand Univac Div Sperry Rand Corp 315 4 Ave New York 10 NY	6	Spincraft Inc 4122 W State St Milwaukee 8 Wisc	12-20-35	United Aircraft Products Inc 1116 Bolander Ave Dayton 1 Ohio	12-23
Remler Co 2101 Bryant St San Francisco Calif	12-13-18-23-25-30	Spinform Inc 65 Mechanic St Attleboro Mass	3-4-12-13-15-30-35	United Electro-dynamics 1200 S Marengo Ave Pasadena Calif	8-32
Research Development Mfg Inc 429 E Collom St Philadelphia 41 Pa	12	Spivey Inc James S 4908 Hampden Lane Washington 14 DC	3-9-25	United Mineral & Chemical Corp 16 Hudson St New York 13 NY	25
Research Electronics Lab Roslyn Pa	8	Stackbin Corp 1079 Main St Pawtucket RI	3-12	United Shoe Machinery Corp 140 Federal St Boston 7 Mass	12-15
Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	9-13-18-23-31-32-34	Stamford Metal Specialty Co 427 W Broadway New York 12 NY	3-4-12-30-35	United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif	10-16
Riverbank Labs Eng'g Dept PO Box 65 Geneva Ill	14	Standard Instruments P O Box 11556 Dallas 18 Tex	9-31	Uniwave Inc 2 Marine St Farmingdale NY	12
Rixon Electronics Inc 2414 Reddie Dr Silver Spring Md	10-23	Standard Pressed Steel Co Box 899 Jenkintown Pa	12	Universal Industrial Equipment Corp 1625 Paterson Plank Rd Secaucus NJ	12
Rockwell Co W S 220 Eliot St Fairfield Conn	12	Standard Record Mfg Co 70 N San Gabriel Blvd Pasadena 8 Calif	12-20	US Controls Inc 161 Grand St New York 13 NY	3
Rockwell Eng'g Co 2133 E 45 St Indianapolis 5 Ind	8-9-31	Staver Co 41-51 N Saxon Ave Bay Shore LI NY	3	US Recording Co 1121 Vermont Ave Washington 5 DC	9
Rogan Bros 8031 N Monticello Skokie Ill	13	Steel & Alloy Tank Co 1 Bessemer St Newark 5 NY	12-15	US Testing Co 1415 Park Ave Hoboken NJ	8-14-17-29-32
Rogers Corp Rogers Conn	13	Steel Production & Chemical Co Mooresville Ind	33	Vanguard Electronics Co 3384 Motor Ave Los Angeles 34 Calif	10
Rollan Electric Co 8233 S Princeton Ave Chicago 20 Ill	10	Stokes Molded Products Div Electric Storage Battery Co Trenton 4 NJ	10	VanKeuren Co 176 Waltham St Watertown 72 Mass	17-20
Romar Plastics Inc 1311 E Main St St Charles Ill	13	Strandberg Eng'g Labs Inc 416 W Market St Greensboro NC	9	Vemaline Products Co PO Box 222 Hawthorne NJ	3-30
Rototest Labs Inc 2803 Los Flores Blvd Lymwood Calif	8-29-32	Strat-O-Steel Mfg Co 3039 W Fullerton Ave Chicago 47 Ill	16	Virginia Electronics Co River Rd & B & O RR Washington 16 DC	12-23-30
Royal Electric Corp 95 Grand Ave Pawtucket RI	29	Sturupp Inc 50 Silver St Middletown Conn	3-12	Vitro Corp of America 261 Madison Ave New York 16 NY	23
Royson Eng'g Co 103 N Penn St Hatboro Pa	3-30-35	Superelex Electronics Corp 4 Radford Pl Yonkers NY	3	Vocalite Screen Corp 19 Debevoise Ave Roosevelt NY	12-13-35
RS Electronics Corp 435 Portage Ave Palo Alto Calif	12-13-23-25	Syncor Products Co 30 Eastern Ave Malden 48 Mass	13-27	Wagner Co H A 14707 Keswick St Van Nuys Calif	23
Rubbercraft Corp of Calif 1800 W 220 St Torrance Calif	13	Synthane Corp Montgomery Ave Oaks Pa	13	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	23
Sage Labs Inc 30 Guinan St Waltham 54 Mass	21	Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	3-4-8-12-13	Walkirt Co 141 W Hazel St Inglewood 3 Calif	10
Saine Equipment Lab Harry T Rt 2 Box 407 E Main Ave Morgan Hill Calif	9	Tatnall Measuring Systems Co Kimberton Rd Phoenixville Pa	8-32	Wall Mfg Co P Grove City Pa	30
St John X-Ray Lab Califon NJ	17-29-32	Taylor Fibre Co Norristown Pa	13	Walton Tool & Die Co 2707 Empire Ave Burbank Calif	12-35
St Marys Carbon Co State St St Marys Pa	13	Technical Ply-Woods Sales 6756 Crandon Ave Chicago 49 Ill	13	Wappler Inc 27-10 Astoria Blvd Long Island City 2 NY	9
Sampson Chemical & Pigment Corp 2830 W Lake St Chicago 12 Ill	19-20	Technicraft Co 1156 Commonwealth Ave Boston 34 Mass	10-11-13	Warren Corp 2901 Brighton Rd Pittsburgh 12 Pa	12
Santa Monica Bay Sheltered Workshop 2521 5 St	3-8-9-12-13-17	Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn	4-21	Warren Corp J C 21 Hanse Ave Freeport NY	28
Santa Monica Calif Saratoga Plastics Inc N Walpole NH	19-25-29-30-32	Techniques Inc 52 Jackson Ave Hackensack NJ	3-11-19-30	Warren Plastics Corp Warren Pa	3-12-13
Sargeant & Wilbur Heat Treating Corp 170 York Ave Pawtucket RI	4-15-30	Techtron Electronics Ltd 583 Gramatan Ave Mt Vernon NY	31	Wassco Electric Products Corp 204 S Larkin Ave Joliet Ill	12
Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	6	Teiner Eng'g Corp 116 Madison St Malden Mass	12-35	Waveline Inc Passaic Ave Caldwell NJ	4-21
Scott Recording Lab Municipal Airport Tuscaloosa Ala	9-31	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	8	Weldex Inc 18425 Weaver Detroit 28 Mich	4-30-35
Scovill Mfg Co 99 Mill St Waterbury 20 Conn	12	Tele Communications Inc 41 E 42 St New York NY	7	Weltronic Co 19500 W 8 Mile Rd Detroit 19 Mich	35
Seals Ltd 1010 Mission St S Pasadena Calif	16	Telectro Industries Corp 35-18 37 St Long Island City 1 N Y	10-16-17-25-32-34	Westbury Electronics Inc 300 Shames Dr Westbury NY	3-12-13-30
Seco Mfg Co 5015 Penn Ave S Minneapolis 19 Minn	32	Tele-Dynamics Inc 32 & Walnut Sts Philadelphia 4 Pa	23-28	West Coast Research Corp 2371 1/2 Westwood Blvd Los Angeles 64 Calif	6
Seismograph Service Corp 6200 E 41 St Tulsa 1 Okla	3	Telemeter Magnetics Inc 2245 Pontius Ave Los Angeles 64 Calif	32	Western Instrument Co 826 N Victory Blvd Burbank Calif	8-9-31-32
Sel-Rex Corp 155 Manchester Pl Newark 4 NJ	27	Teletronics Lab Inc 54 Kinkel St Westbury NY	23	Wheaton Co T C Millville NJ	3-4-10-12-13-30-33
Semrow Products Co 4317 N Ravenswood Ave Chicago 13 Ill	3-12	Telex 1633 Eustis St St Paul 1 Minn	3-8-10-17-25-29-30-32-34	White & Son James L 374 Verona Ave Newark 4 NJ	11-12-13-35
Sensitive Research Instrument Corp 310 Main St New Rochelle NY	31	Telkor Inc N Murray Ridge Rd Elyria Ohio	3-9-11-19	Wiancko Eng'g Co 255 Halstead St Pasadena Calif	23
Sethco Mfg Co 70 Willoughby St Brooklyn 1 NY	10-13	Temperature Eng'g Corp US Hwy 130 Riverton NJ	3-4-12-20-35	Williams Ship-Radio Co 4366 Mentone St San Diego 7 Calif	18
Shallcross Mfg Co Jackson & Pusey Aves Collingdale Pa	31-32	Terris Div Consolidated Siphon Supply Co 22 Wooster St New York 13 NY	12-30-35	Wilmar Mfg Co 1110 Truman Rd Kansas City Mo	3-12
Shamban & Co W S 11617 W Jefferson Blvd Culver City Calif	13	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Tex	23	Winder Aircraft Corp of Florida P O Box 2397 Drane Field	3-4-8-9-11 12-13-17-19-20
Shepard Labs Inc 480 Morris Ave Summit NJ	12-23	Thale Eng'g Corp 2104 E Villa St Pasadena Calif	8-34	Lakeland Fla 25-29-32-34-35	
Shrader Sound Inc 2803 M St NW Washington 7 DC	7	Thermal Refractories Corp 4501 Dell Ave N Bergen NJ	7-15-18	Winston Electronics Inc 4312 Main St Philadelphia 27 Pa	31
Sibley Co Bridge St Haddam Conn	3	Tinsley Labs Inc 2526 Grove St Berkeley 4 Calif	24	Wollensak Optical Co 850 Hudson Ave Rochester 22 NY	3-11-12-24
Size Control Co Div American Gage & Machine Co 2500 W Washington Blvd Chicago 12 Ill	17	Toman & Co E 8700 W 47 St Lyons Ill	12	Woodwelding Inc 355 N Newport Blvd Newport Beach Calif	9
		Tricon Mfg Co 8012 Wallace St Chicago 20 Ill	3-4-12-30	Wright Metalcoaters Inc 255 West St Hackensack NJ	33
		Tricraft Products Corp 1535 N Ashland Ave Chicago 22 Ill	3-12-13-17-25-30-34-35	Wrought Washer Mfg Co 2275 S Bay St Milwaukee 7 Wis	12

Wyeth Eng'g Inc
9911 Walden Pkwy
Chicago 43 Ill 3-8-9-17-29-31-32
Zenith Optical Lab
1940 Great Neck Rd Copiague LI NY 24
Zierick Mfg Corp
Beechwood & Rockdale Ave
New Rochelle NY 33
Zoomar Inc
55 Sea Cliff Ave Glen Cove NY 24

84—SOUND REPRODUCING EQUIPMENT, DISC

Brushes	1
Cloths, record cleaning	2
Compensators	3
Equalizers, record	4
Filters, needle scratch	5
Needles, diamond	6
Needles, metal	7
Needles, sapphires	8
Needles, steel	9
Phonographs, electrics	10
Phonographs, hand-wound	11
Phonographs, radio combinations	12
Pickup, arms	13
Pickups, binaural	14
Pickups, capacities	15
Pickups, ceramic	16
Pickups, crystal	17
Pickups, dynamic	18
Pickups, magnetic	19
Pickups, photoelectric	20
Pickups, reluctance	21
Pickups, resistance	22
Record changers, automatic	23
Record compounds	24
Record pads	25
Record Players, coin-operated	26
Record Players, home	27
Record Players, transcription	28
Record Racks	29
Record Presses	30
Records, binaural	31
Records, blank	32
Records, commercial	33
Records, frequency	34
Records, home	35
Records, sound effects	36
Records, test	37
Turntables	38

Admiral Corp
3800 W Cortland St Chicago 47 Ill 23-27
Alfton Industries
406 St Louis Ave
Valley Park Mo 27-31-32-35-37
Airtronix Development Corp
4902 Church Ave Brooklyn 3 NY 10-12-27-28
Allied Recording Products Co
32-32 Greenpoint Ave
Long Island City 1 NY 32
American Elite Inc
7 Park Ave New York 16 NY 10-12-23
American Machine & Foundry Co
Defense Products Group
1101 N Royal St Alexandria Va 29
American Mica Radio Corp
235 Parker Ave Manasquan NJ 23
AMI Inc
1500 Union Ave Grand Rapids 2 Mich 12
Ampex Corp
934 Charter St Redwood City Calif 4
Andrea Radio Corp
27-01 Bridge Plaza
N Long Island City 1 NY 10-12
Ansley Mfg Co Arthur
New Hope Pa 12
Astatic Corp
250 Harbor St
Conneaut Ohio 16-17-18-19-21
Atlantic Research Corp
901 N Columbus St Alexandria Va 16-17
Audio Development Co
2833 13 Ave S Minneapolis Minn 5
Audio Devices Inc
444 Madison Ave New York 22 NY 7-8-9
Audiozersh Corp
514 Broadway New York 12 NY 23-27
Audio-Master Corp
17 E 45 St New York 17 NY 10-12-27-28
Audio-Video Recording Co
730 5 Ave New York 19 NY 33
Autocrat Electronics Co
5024 Elm St Skokie Ill 10-27
Automatic Radio Mfg Co
122 Brookline Ave Boston 15 Mass 27
Autron Eng'g Inc
1254 W 6 St Los Angeles 17 Calif 20

Baird-Atomic Inc
33 University Rd Cambridge 38 Mass 19-20
Beam Industries Inc
624 S Michigan Chicago 5 Ill 10
Bendix Aviation Corp Pacific Div
11600 Sherman Way
N Hollywood Calif 21
Bennett & Co Paul
230 E Ohio St Chicago 11 Ill 6-7-8-9
Bernard Franklin Co
4155 E Hedley St Philadelphia 37 Pa 29
Besteraft Products Co
626 Broadway New York 12 NY 25
Bogen Co David
P O Box 500 Paramus NJ 10-27-28
Boulevard Recording Studio
25 E Jackson Blvd Chicago 4 Ill 33-35
Brush Electronics Co
3405 Perkins Ave Cleveland 14 Ohio 34-37
Brush Electronics Co Texas Div
3732 Westheimer Rd Houston 6 Texas 17-18
Bundy Electronics Corp
171 Fabyan Pl Newark 12 NJ 10
Burroughs Corp
6071 2 Ave Detroit 32 Mich 19
Buss-Clement-Doughten & Associates
201 B Studio Hill Chester Springs Pa 36
Calbest Electronics Co
4801 Exposition Blvd
Los Angeles 16 Calif 23-27
Califone Corp
1041 N Sycamore Ave
Hollywood 38 Calif 10-28
Caltron Products Co
3518 W Pico Blvd Los Angeles 19 Calif 32
Canadian Aviation Electronics Ltd
6214 Cote de Liesse Rd
St Laurent Quebec Canada 12
Capitol Transcription Service
1120-A Conn Ave
N W Washington 6 DC 33-35-36
Capps & Co
20 Addison Pl
Valley Stream LI NY 7-8-9
Chesapeake Instrument Corp
Shadyside Md 16-17
Columbia Records Div Columbia
Broadcasting System 799 7 Ave
New York NY 10-12-27
Concert Hall Society
71 5 Ave New York 3 NY 35
Cook Labs Inc
101 2 St Stamford Conn 30
Crawford's of Beverly Hills
456 N Rodeo Dr Beverly Hills Calif 12
Crescent Industries Inc
5900 W Touhy Ave Chicago Ill 10
Decker Aviation Corp
1361 Frankford Ave Philadelphia 25 Pa 15
DeWald Radio Mfg Corp
35-15 37 Ave Long Island City 1 NY 12
Diamond Tool Eng'g Co
108 Massachusetts Ave Boston 15 Mass 6
D & R Ltd
402 E Gutierrez St
Santa Barbara Calif 37
Du Kane Corp
St Charles Ill 38
Duotone Co
Locust St Keyport NJ 1-2-6-7-8-9-25-32
Edin Co
207 Main St Worcester 8 Mass 34
Electron Enterprises
6917 W Stanley Ave Berwyn Ill 10
Electronic Creations Co
1178 E 180 St New York 60 NY 10-12
Electron-Radar Products
4806 W Chicago Ave Chicago 51 Ill 20
Electro Products Labs Inc
4501 N Ravenswood Ave Chicago 40 Ill 19
Electro-Sonic Labs
35-54 36 St Long Island City 6 NY 13-18
Electro-Voice Inc
Cecil & Carrol Sts Buchanan Mich 16-17
Electrovox Co
60 Franklin St E Orange NJ 6-7-8
Elgin National Watch Co
107 National St Elgin Ill 13
Emerson Radio & Phonograph Corp
14 & Colas Sts Jersey City 2 NJ 10-12-27
Emerson-Sack-Warner Corp
85 Washington St Somerville 43 Mass 29-38
Endevco Corp
161 E California St Pasadena Calif 16-17-18
Ereona Corp
551 5 Ave New York 17 NY 23-28
Erie Resistor Corp
644 W 12 St Erie 6 Pa 15-16
Factory Service Co
4615 N 21 St Milwaukee 9 Wis 29
Fairchild Recording Equipment Co
10-40 45 Ave Long Island City 1 NY 19-38
Falstrom Co
Falstrom Court Passaic NJ 29
Fidelity Amplifier Co
703 Willow St Chicago 14 Ill 10
Fisher Radio Corp
21-21 44 Dr Long Island City 1 NY 4-5-10-12
Frederick Recording Co
101 Townsend St Midland Mich 33-35-36
Garrard Sales Corp
80 Shore Rd Port Washington NY 23-28
Gates Radio Co
123 Hampshire St Quincy Ill 28

Glens Falls Lab
Box 685 Glens Falls NY 20
Granco Products Inc
36-07 20 Ave Long Island City NY 10
Gray Research & Development Co
Hilliard St Manchester Conn 4-10-13-19-38
Greene Co L Charlton
314 Washington St Newton 58 Mass 10
Gulton Industries Inc
212 Durham Ave Metuchen NJ 16
Hamilton Electronics
2726 Pratt Ave Chicago 45 Ill 10
Harvey-Wells Electronics Inc
North St Southbridge Mass 28
Hewlett-Packard Co
275 Page Mill Rd Palo Alto Calif 20
Hoffman Electronics Corp
3761 S Hill St Los Angeles 7 Calif 10-12
Hull Corp
1941 Woodland Rd Abington Pa 30
Hull-Standard Corp
Abington Pa 30
Hupp Electronics Co Div Hupp Corp
743 Circle Ave Forest Park Ill 20
iE Mfg
325 N Hoyne Ave Chicago 12 Ill 29
I-L-S Instrument Corp
4525 W 160 St Cleveland 11 Ohio 21
Infra Electronic Corp
47 Factory Pl Cedar Grove NJ 12
International Audio & Electronics Corp
R 4 Box 123 Elkhart Ind 31
International Research & Development Corp
797 Thomas Lane Columbus 16 Ohio 18-19
Jensen Industries Inc
7333 Harrison St Forest Park Ill 6-7-8-9
Kistler Instrument Corp
15 Webster St N Tonawanda NY 17-18
Kollman Instrument Corp
Sub Standard Coil Products
80-08 45 Ave Elmhurst 73 NY 22
Land-Air Inc Instrument &
Electronic Div 2133 Adonis Ave
San Leandro Calif 19
Linlar Inc
4101 San Fernando Rd Glendale 4 Calif 12
Lytle Eng'g & Mfg Co
1404 San Mateo Blvd SE
Albuquerque New Mex 30
McClure Talking Pictures O J
1115 W Washington Blvd Chicago 7 Ill 28
Magnadux Corp
7300 W Lawrence Ave Chicago 31 Ill 19
Magnavox Corp
2131 Bueter Rd Ft Wayne 4 Ind 10
Majestic Int'l Corp
79 Washington St 13-16-17
Brooklyn 1 NY 18-19-23
Major Electronics Corp
762 Wythe Ave Brooklyn 11 NY 10-12
Manufacturer's Lab
10610 Keswick St Sun Valley Calif 13
Marantz Co
4415 Vernon Blvd Long Island City 1 NY 4
Markel Electric Products Inc
145 E Seneca St Buffalo 3 NY 23
Metal Specialty Products Corp
27-01 Brooklyn Queens Expressway
W Woodside 77 NY 29
Metzner Eng'g Corp
1041 N Sycamore Ave
Hollywood 38 Calif 10-13-28
Miller Co J W
5917 S Main St Los Angeles 3 Calif 5
Miller Mfg Co M A
4 & Church Sts Libertyville Ill 6-7-8-9
Molded Insulation Co
335 E Price St Philadelphia 44 Pa 27
Molded Products Div Admiral Corp
Washington & Creamery Rd W Chicago Ill 13
MP Engineering Co
Fairfield 3 Conn 10-12
National Company Inc
61 Sherman St Malden 48 Mass 27
Neumade Products Corp
250 W 57 St New York 19 NY 29
Newcomb Audio Products Co
6824 Lexington Ave
Los Angeles 38 Calif 10-27-28
North American Instruments Inc
2420 N Lake St Altadena Calif 19-21
Norton Associates Inc
P O Box 96 Gardin City NY 19
Oberline Inc
P O Box 921 Beverly Hills Calif 33
Olympic Radio & TV
34-01 38 Ave Long Island City 1 NY 23-27
Ortho Filter Corp
196 Albion Ave Paterson 2 NJ 5
Pacific Transducer Corp
11836 W Pico Blvd
Los Angeles 64 Calif 4-6-8-13-19
Packard Bell Electronics Corp
12333 W Olympic Blvd
Los Angeles 64 Calif 27
Pampa Electronics Corp
7354 Frankford Ave
Philadelphia 36 Pa 13-18-19
Permoflux Products Co
4101 San Fernando Rd
Glendale 4 Calif 10-12-27
Permo Inc
6415 N Ravenswood Ave
Chicago 26 Ill 1-6-7-8-9
Pfanstiehl Chemical Corp
104 Lake View Ave Waukegan Ill 6-7-8-9

Phileo Corp					
Tioga & C Sts Philadelphia 24 Pa	10				
Phoenix Precision Instrument Co					
3803 N 5 St Philadelphia 40 Pa	20				
Photobell Co					
43 Vesey St New York 7 NY	20				
Photocon Research Products					
421 N Altadena Drive Pasadena Calif	15-18				
Photo Crystals Inc					
15 S 1 St Geneva Ill	20				
Pickering & Co					
309 Woods Ave Oceanside NY	4-13-19-21				
Precision Radiation Instruments Inc					
4223 W Jefferson Blvd					
Los Angeles 16 Calif	12				
Precision Supply Co					
292 Belmont Ave Paterson 2 NJ	8				
Presto Recording Corp					
Box 500 Paramus NJ	27-28-32-38				
Pulse Techniques Inc					
1411 Palisade Ave W Englewood NJ	4-5				
Pye Canada Ltd					
82 Northline Rd					
Toronto 16 Ontario Canada	10-12-27				
Radio Corp of America					
Camden 2 NJ	10-12-23-27-28-33-35-36-37-38				
Radio Corp of America Commercial					
Electronic Products					
Camden 2 NJ	13-19-23				
Radio Kits Inc					
120 Cedar St New York 6 NY	27				
Recordisc Corp					
33-01 Far Rockaway Blvd					
Edgemere 91 NY	7-8-9				
Recoton Corp					
52-35 Barnett Ave	6-7-8-9				
Long Island City 4 NY	13-19-21-32				
Rek-O-Kut Co					
38-01 Queens Blvd					
Long Island City 1 NY	13-27-28				
Rhein Sound Systems Inc					
133 Hamilton St New Haven 5 Conn	28				
Robins Industries Corp					
214-26 41 Ave Bayside 61 NY	1-2-29				
Robinson Recording Labs					
35 S 9 St Philadelphia 7 Pa	38				
Rockbar Corp					
650 Halstead Ave Mamaroneck NY	23-27-28				
Ronette Acoustical Corp					
190 Earle Ave Lynbrook NY	13-17-20				
Rowe Industries					
1702 Wayne St Toledo 9 Ohio	19				
Scott Inc H H					
385 Putnam Ave Cambridge 39 Mass	5-38				
Scully Machine Co					
62 Walter St Bridgeport 8 Conn	30				
Servonic Instruments Inc					
1145 S Fair Oaks Ave Pasadena 2 Calif	22				
Shure Bros					
222 Hartrey Ave Evanston Ill	13-16-17-19				
Simpson Mfg Co Mark					
32-28 49 St Long Island City 3 NY	4				
Sonex Inc					
73 S State Rd Upper Darby Pa					
Sonic Industries					
19 Wilbur St Lynbrook NY	10				
Speak-O-Phone Recording & Equip Co					
23 W 60 St New York 23 NY	35				
Standard Record Mfg Co					
70 N San Gabriel Blvd					
Pasadena 8 Calif	33-36				
Standard Tool & Mfg Co					
237 Laurel Ave Kearny NJ	30-38				
Statham Labs Inc					
12401 W Olympic Blvd					
Los Angeles 64 Calif	22				
Steelman Phonograph & Radio Co					
2-30 Anderson Ave Mt Vernon NY	10-11-12				
Stokes Corp F J					
5500 Tabor Rd Philadelphia 20 Pa	30				
Stromberg-Carlson Div General					
Dynamics Corp 100 Carlson Rd					
Rochester 3 NY	23-27				
Sylvania Electric Products Inc					
1740 Broadway New York 19 NY	10-12-23				
Symphonic Radio & Electronic Corp					
235 Jersey Ave New Brunswick NJ	10-12				
Symphony Electronics Corp					
925 S Western Ave					
Los Angeles 6 Calif	10-12				
Talking Devices Co					
4447 Irving Park Rd					
Chicago 41 Ill	10-11-28-38				
Techtron Electronics Ltd					
583 Gramatan Ave Mt Vernon NY	4-38				
Telechrome Mfg Corp					
28 Ranick Dr Amityville LI NY	20				
Telectro Industries Corp					
35-18 37 St Long Island City 1 NY	4				
Teletone Co of America					
1178 E 180 St Bronx 60 NY	10-12				
Televex Co					
46 Lakeview Ave Yonkers NY	6-8				
Temperature Eng'g Corp					
U S Hwy 130 Riverton NJ	29				
Tetrad Co					
62 St Mary St Yonkers NY	6				
Texas Instruments Inc Industrial					
Instrumentation Div					
3609 Buffalo Speedway Houston 6 Texas	37				
Thorens Co					
Thorens Ave					
New Hyde Park NY	10-11-17-23-27-28-38				
Toman & Co E					
8700 W 47 St Lyons Ill	11-13				
Transonic Inc					
808 16 St Bakersfield Calif	5				
Trans-Tel Corp					
736 N Highland Ave					
Los Angeles 38 Calif	10-12-27				
Transvision Inc					
460 North Ave New Rochelle NY	12				
Trav-Ler Radio Corp					
571 W Jackson Blvd Chicago 6 Ill	10				
Trutone Electronics Inc					
812 N Highland Ave					
Los Angeles 38 Calif	10-12				
Turner Co					
909 17 St N E Cedar Rapids Iowa	17				
U S Recording Co					
1121 Vermont Ave Washington 5 DC	28				
Vallorbs Jewel Co					
Lancaster Pa	8				
V-M Corp					
4 & Park Sts					
Benton Harbor Mich	10-12-23-27				
Voron & Co George					
835 N 19 St Philadelphia 30 Pa	5				
WacLine Inc					
35 S St Clair St Dayton 2 Ohio	15				
Waltham Watch Co					
221 Crescent St Waltham 54 Mass	6-8				
Warwick Mfg Corp					
7300 N Lehigh Ave Chicago 31 Ill	23-27				
Waters Conley Co					
Rochester 1 Minn	10				
Watson Mfg Co					
3700 Taylor St Jamestown NY	29				
Weathers Industries Div Advance					
Industries 66 E Gloucester Pike					
Barrington NJ	13-15				
Webeor Inc					
5626 Bloomingdale Ave Chicago 39 Ill	10				
Westrex Corp					
111 8 Ave New York 11 NY	4				
Westronics Inc					
3605 McCarr Ft Worth Texas	34				
Wiancko Eng'g Co					
255 Halstead St Pasadena Calif	21				
Zenith Radio Corp					
6001 Dickens Ave Chicago 39 Ill	23				
85—SOUND REPRODUCING EQUIPMENT, MAGNETIC					
Editing blocks	1				
Heads, magnetic film stripe	2				
Heads, magnetic tape playback	3				
Heads, magnetic wire playback	4				
Players, magnetic tape	5				
Players, magnetic wire	6				
Tape indexes	7				
Tape, magnetic	8				
Tape, prerecorded	9				
Tapes, test	10				
Wire, magnetic	11				
Afton Industries					
406 St Louis Ave Valley Park Mo	7-8-9-10				
Ampex Corp					
934 Charter St Redwood City Calif	5				
Astatic Corp					
250 Harbor St Conneaut Ohio	3				
Atlantic & Pacific Wire & Cable Co					
112-01 Northern Blvd					
E Elmhurst LI NY	11				
Audio Devices Inc					
444 Madison Ave New York 22 NY	8				
Audio-Master Corp					
17 E 45 St New York 17 NY	8-9				
Audiomation Labs					
7230 Clinton Rd Upper Darby 14 Pa	5-9				
Audio-Video Recording Co					
730 5 Ave New York 19 NY	8-9				
Bell Sound Systems Inc					
555 Marion Rd Columbus 7 Ohio	5				
Brady Co W H					
727 W Glendale Ave Milwaukee 9 Wis	7				
Brush Electronics Co					
3405 Perkins Ave Cleveland 14 Ohio	2-3-4				
Capitol Transcription Service					
1120-A Conn Ave N W Washington 6 DC	10				
Columbia Records Div Columbia					
Broadcasting System 799 7 Ave					
New York NY	5				
Concert Hall Society					
71 5 Ave New York 3 NY	9				
D & R Ltd					
402 E Gutierrez St Santa Barbara Calif	9				
Dubbings Sales Corp					
226 Franklin Ave Hewlett NY	6				
Dynamu Magnetics Corp Div Maico Co					
21 N 3 St Minneapolis 1 Minn	2-3				
Electro Sound Corp					
115 Halleck St Boston 15 Mass	9				
EMC Recordings Corp					
806 E 7 St St Paul 6 Minn	5-9				
Ercona Corp					
551 5 Ave New York 17 NY	4				
Fort Wayne Metals Inc					
3211 MacArthur Dr Ft Wayne 6 Ind	11				
Frederick Recording Co					
101 Townsend St Midland Mich	9				
Gary Wells Co					
361 Rockaway Ave Valley Stream NY	3				
General Transistor Western Corp					
6110 Venice Blvd Los Angeles 34 Calif	3				
Graflex Inc					
154 Clarissa St Rochester 8 NY	5				
Klipsch & Associates					
P O Drawer 96 Hope Ark	9				
Lipps Co Edwin A					
5485 W Washington Blvd					
Los Angeles 16 Calif	2-3				
Magnasync Mfg Co					
5546 Satsuma Ave N Hollywood Calif	3				
Magnecord Div Midwestern Instruments					
Inc 1101 S Kilbourn Ave					
Chicago 24 Ill	3-5				
MagneTec Corp					
11785 W Olympic Blvd					
W Los Angeles 64 Calif	3				
Magnetic Sound Inc					
4803 1/2 Grand Ave Des Moines 12 Iowa	9				
Magne-Tronics Inc					
49 W 45 St New York NY	9				
Mica Fabricating Co					
Rochelle Park NJ	9				
Michigan Electronics Inc					
854 N Rockwell St Chicago 22 Ill	5				
Midwestern Instruments					
P O Box 7186 Tulsa Okla	8				
Miller Electronics					
2840 Naomi St Burbank Calif	9				
Minneapolis-Honeywell Regulator Co					
Davies Labs Div					
10721 Hanna St Beltsville Md	3-9				
Minnesota Mining & Mfg Co					
900 Fauquier Ave St Paul 6 Minn	8				
Mohawk Business Machines Corp					
944 Halsey St Brooklyn 33 NY	5				
National-Standard Co					
Niles Michigan					
Nemeth Inc					
2223 S Carmelina Ave					
Los Angeles 64 Calif	3-4				
Norton Associates Inc					
P O Box 96 Garden City NY	2-3-4				
Pampa Electronics Corp					
7354 Frankford Ave					
Philadelphia 36 Pa	2-3				
Pentron Corp					
777 S Tripp Ave Chicago 24 Ill	8-9				
Permo Inc					
6415 N Ravenswood Ave Chicago 26 Ill	11				
Pres Industrial Equipment Ltd					
Box 302 Putt Corners Rd N					
New Paltz NY	10				
Presto Recording Corp					
Box 500 Paramus NJ	5				
Radio Corp of America					
Camden 2 NJ	8-9				
Rangertone Inc					
73 Winthrop St Newark 4 NJ	8				
Rea Co J B					
1723 Cloverfield Blvd Santa Monica Calif	3				
Recordisc Corp					
33-01 Far Rockaway Blvd Edgemere 91 NY	8				
Reeves Soundcraft Corp					
10 E 52 St New York 22 NY	8				
Shure Bros					
222 Hartrey Ave Evanston Ill	3-4				
Stancil-Hoffman Corp					
921 N Highland Ave					
Hollywood 38 Calif	2-3				
Stromberg-Carlson Div General					
Dynamics Corp 100 Carlson Rd					
Rochester 3 NY	3				
Symphonic Radio & Electronic Corp					
235 Jersey Ave New Brunswick NJ	5				
Talking Devices Co					
4447 Irving Park Rd					
Chicago 41 Ill	9				
Tape of the Month Inc					
449 W 51 St New York 19 NY	9				
Techalloy Co					
Rahns Pa	11				
Techtron Electronics Ltd					
583 Gramatan Ave Mt Vernon NY	9				
Telectro Industries Corp					
35-18 37 St Long Island City 1 NY	3-4-5-6				
Topflight Corp					
160 E 9 Ave York Pa	10				
Underwood Corp Electronic Computer Div					
35-10 36 Ave Long Island City 6 NY	3				
Viking of Minn					
9600 Aldrich Ave S Minneapolis 20 Minn	5				
Warren Corp J C					
21 Hanse Ave Freeport NY	5				
Westrex Corp					
111 8 Ave New York 11 NY	8				

Equalizers	8
Hearing aids	9
Home sound systems	10
Intercommunicators	11
Megaphones, electronic	12
Musical equipment, electronic ..	13
Musical instruments, electronic ..	14
Paging systems	15
Preamplifiers	16
Public address systems	17
Speaker systems, marine	18
Telephone systems	19
Telephones, sound powered	20
Theater sound systems	21

Adler Electronics Inc	1 LeFevre Lane New Rochelle NY	5
Airtronix Development Corp	4902 Church Ave Brooklyn 3 NY	2-15-17
Allen Organ Co	Locust St Macungie Pa	11
Allied Radio Corp	100 N Western Ave Chicago 80 Ill	2-15-17
Altec Lansing Corp	1515 S Manchester Ave Anaheim Calif	2-15-17
Amco Eng'g Co	7333 W Ainslie St Chicago 31 Ill	5
American Communications Corp	280 Broadway New York 17 NY	2-5-17-19
American Machine & Foundry Co	Defense Products Group	
	1101 N Royal St Alexandria Va	2-11
American Mica Insulation Co	235 Parker Ave Manasquan NJ	6
American Mica Radio Corp	235 Parker Ave Manasquan NJ	2
American Sound Products Inc	404 S Wells St Chicago 7 Ill	9
Ampex Corp	934 Charter St Redwood City Calif	10-21
Amplivox Ltd	2 Bentiner St London W 1 England	9
Anderton Electronic Lab	129 E 1800 S St Bountiful Utah	2
Applied Electronics Co	213 E Grand Ave S San Francisco Calif	1
Audio Electronics	15858 35 Ave N E Seattle 55 Wash	19
Audio Equipment Co	805 Middle Neck Rd Great Neck NY	1-9-12-13
Audio-Master Corp	17 E 45 St New York 17 NY	17
Audio Sears Corp	Shepard Hill Rd Roxbury NY	20
Audiovox Inc	123 Worcester St Boston 18 Mass	9
Aurex Corp	1117 N Franklin St Chicago 10 Ill	9
Auth Electric Co	34-20 45 St Long Island City 1 NY	3-15
Automatic Electric Co	1033 W Van Buren St Chicago 7 Ill	19
Avionics Ltd	P O Box 200 Niagara-on-the-Lake Ontario Canada	15-17
Axler Associates Inc	102-42 43 Ave Corona 68 NY	2
Bell Aircraft Corp	P O Box 1 Buffalo 5 NY	11
Bell & Gossett Co	8200 Austin Ave Morton Grove Ill	4
Bell Sound Systems Inc	555 Marion Rd Columbus 7 Ohio	1-2-11-17
Beltone Hearing Aid Co	2900 W 36 St Chicago 32 Ill	9
Bendix Aviation Corp Bendix Radio Div	East Joppa Rd Towson 4 Md	1
Bendix Aviation Corp	1104 Fisher Bldg Detroit 2 Mich	11
Bennett Labs Inc	2700 Bay Rd Redwood City Calif	11
Bliss Electronic Corp	Box 366 Sussex NJ	11-15
Bogen Co David	P O Box 500 Paramus NJ	1-15-21
Brooks & Perkins Inc	1950 W Fort St Detroit 16 Mich	5
Browning Labs Inc	750 Main St Winchester Mass	2
Brush Electronics Co	3405 Perkins Ave Cleveland 14 Ohio	9
Budelman Radio Corp	375 Fairfield Ave Stamford Conn	2-4-19
Bundy Electronics Corp	171 Fabyan Pl Newark 12 NJ	2
Burroughs Corp	6071 2 Ave Detroit 32 Mich	19-20
Buss-Clement-Doughten & Associates	201 B Studio Hill Chester Springs Pa	2-5-8-10-21
Cable Electric Products	234 Daboll St Providence 7 RI	3
Califone Corp	1041 N Sycamore Ave Hollywood 38 Calif	21
Capitol Transcription Service	1120-A Conn Ave N W Washington 6 DC	2-5-8

Century Projector Corp	129 7 Ave New York 19 NY	2-21
CG Electronics Corp	305 Dallas St N E Albuquerque N Mex	12
Collins Radio Co	855 35 St N E Cedar Rapids Iowa	5
Commercial Radio Sound Corp	652 1 Ave New York 16 NY	5-11-15-18
Communication Equipment & Engr'g Co	5646 W Race Ave Chicago 44 Ill	15-17
Conn Ltd C G	1101 E Beardsley Ave Elkhart Ind	21
Conn Telephone & Electric Corp	70 Britannia St Meriden Conn	3-4-11-19-20
Consolidated Productions Inc	Broward Int'l Airport Ft Lauderdale Fla	1-2
Continental Electronics Ltd	302 Oakland St Brooklyn 22 NY	20
Cooper Electronics Inc	5637 Tulip St Philadelphia 24 Pa	11
Crown Controls Co	40 S Washington St New Bremen Ohio	11
Dalmotron Co	534 Laurel St San Carlos Calif	11
Daven Co	Route 10 Livingston NJ	5
Deagan Inc J C	1770 W Berteau Ave Chicago 13 Ill	13-14
Denrad Mfg Co	310 W Woodard St Denison Texas	2
DeWald Radio Mfg Corp	35-15 37 Ave Long Island City 1 NY	9
Dollar Communication Equip Robert	50 Drumm St San Francisco 11 Calif	15
Doty Acoustical Electronic Labs	431 Broome St New York 13 NY	9
DuKane Corp	St Charles Ill	15-17-19
Dunlap Electronics	764 9 St Des Moines 14 Iowa	8
Electrical Communications Inc	765 Clementina St San Francisco 3 Calif	2
Electronic Communication Equipment Co	1249 W Loyola Ave Chicago 26 Ill	17
Electronic Control Systems	2136 Westwood Blvd Los Angeles 25 Calif	15
Electronic Eng'g Co	362 W Bowers St Akron 7 Ohio	15
Electronic Organ Arts	4878 Eagle Rock Blvd Los Angeles 41 Calif	13
Electro Sound Corp	115 Halleck St Boston 15 Mass	21
Electro-Voice Inc	Cecil & Carrol Sts Buchanan Mich	15-17
Elm Labs	10 Washington Ave Hastings-on-Hudson NY	4
Endeco Eng'g Development Co of	Los Angeles 922 E Anaheim St Wilmington Calif	12
Ercona Corp	551 5 Ave New York 17 NY	10
Erco Radio Labs Inc	637 Stewart Ave Garden City NY	4-15
Executone Inc	415 Lexington Ave New York 17 NY	15-17
Fairchild Recording Equipment Co	10-40 45 Ave Long Island City 1 NY	8-10
Federal Telephone & Radio Co Div IT&T	100 Kingsland Rd Clifton NJ	11-15-19
Feiler Eng'g & Mfg Co	8026 N Monticello Ave Skokie Ill	4-11
Femco Inc	Irwin Pa	2
Fidelity Amplifier Co	703 Willow St Chicago 14 Ill	2
First Electronics Corp	117 Blue Hill Ave Boston 19 Mass	15
Fisher Radio Corp	21-21 44 Dr Long Island City 1 NY	2
Gates Radio Co	123 Hampshire St Quincy Ill	2-5-15-21
General Electric Co Construction	Materials Div	
	1285 Boston Ave Bridgeport 2 Conn	3
General Electric Co Apparatus Sales Div	1 River Rd Schenectady 5 NY	2
General Electric Co Communication Products Dept	Syracuse NY	4
Godfrey Mfg Co	1726 N Orchard St Chicago 14 Ill	11
Gotham Audio Development Corp	2 W 46 St New York 36 NY	2
Grason-Stadler Co	W Concord Mass	9
Gray Research & Development Co	Hilliard St Manchester Conn	5-8
Greene Co L Charlton	314 Washington St Newton 58 Mass	2
Hal-Hen Co	36-14 11 St Long Island City 6 NY	9
Hallamore Electronics Co	8352 Brookhurst Ave Anaheim Calif	11-19
Hallcrafters Co	4401 W 5 Ave Chicago 24 Ill	11
Hamilton Electronics	2726 Pratt Ave Chicago 45 Ill	2-15-17
Hammond Organ Co	4200 W Diversey Ave Chicago 39 Ill	13-14
Harman-Kardon Inc	520 Main St Westbury LI NY	11
Harvey-Wells Electronics Inc	North St Southbridge Mass	1-2

Heath Co	305 Territorial Rd Benton Harbor Mich	2-10
Hoover Electronics Co	3640 Woodland Ave Baltimore 7 Md	4
Hy-Gain Antenna Products Co	249 N 48 St Lincoln Nebr	11
Intelec Systems Inc	22 Thames St N York 6 NY	10-19-20
International Business Machines Corp	590 Madison Ave New York 23 NY	17
International Research Associates	2221 Warwick Ave Santa Monica Calif	2
Johnson Co E F	Waseca Minn	3
Kaiser Aircraft & Electronics Corp	Toledo Electronics Div	
	P O Box 437 Toledo Ohio	1-2
Kellogg Switchboard & Supply Co Div IT&T	79 W Monroe St Chicago 3 Ill	19
K-F Development Co	2606 Spring St Redwood City Calif	4
Kriegel Bros	321 W 50 St New York 19 NY	5
Kuss Industries Inc	Tacony & Lewis Sts Philadelphia 24 Pa	5
Langevin Mfg Corp	47-37 Austell Pl Long Island City 1 NY	15-17
Lansing Sound Inc James B	3249 Casitas Ave Los Angeles 39 Calif	21
Lee Electric Inc	566 52 St W New York NJ	3
Lenkurt Electric Co	1105 County Rd San Carlos Calif	4
Ling Electronics Inc	5120 W Jefferson Blvd Los Angeles 16 Calif	2
Link-Radio Corp	110 Jericho Turnpike New Hyde Park LI NY	19
Loge Sound Engrs J M	2171 W Washington Blvd Los Angeles 18 Calif	11-17
Lynch Carrier Systems Inc	695 Bryant St San Francisco 7 Calif	4-19
Lynmar Engineers Inc	1432 N Carlisle St Philadelphia 21 Pa	2-8
McClure Talking Pictures O J	1115 W Washington Blvd Chicago 7 Ill	17
McIntosh Laboratory Inc	2 Chambers St Binghamton NY	2
Magna Electronics Co	9810 Anza Ave Inglewood 1 Calif	11
Magnasynic Mfg Co	5546 Satsuma Ave N Hollywood Calif	2-21
Marantz Co	4415 Vernon Blvd Long Island City 1 NY	2
Mesurement Eng'g Ltd	232 John St Arncliffe Ontario Can	2-5-12
Melody Master Mfg Co	2842 N Cicero Ave Chicago 41 Ill	2-17
Michigan Electronics Inc	854 N Rockwell St Chicago 22 Ill	1-12-15
Mil Case Corp	35-18 37 St Long Island City NY	5
Mohawk Business Machines Corp	944 Halsey St Brooklyn 33 NY	7
Motigraph Inc	4441 W Lake St Chicago 24 Ill	2-15-21
Motorola Communications & Electronics Inc	4501 W Augusta Blvd Chicago 51 Ill	15
MP Engineering Co	Fairfield 3 Conn	21
Newcomb Audio Products Co	6824 Lexington Ave Los Angeles 38 Calif	1-2
North Electric Co	553 S Market St Galion Ohio	4-11-15-19-20
Oberline Inc	P O Box 921 Beverly Hills Calif	2-15-17
O'Brien Electric Corp	6514 Santa Monica Blvd Hollywood 38 Calif	5-12-15-17-21
Otarion Inc	185 Ashford Ave Dobbs Ferry NY	9
Palmer Inc M V	4002 Fruit Valley Rd Vancouver Wash	4-11-19
Paravox Inc	2056 E 4 St Cleveland 15 Ohio	9
Partrick & Wilkins Co	51 N 7 St Philadelphia 6 Pa	3
Permoflux Products Co	4101 San Fernando Rd Glendale 4 Calif	2-12-18
Philco Corp Govt & Industrial Div	4700 Wissahickon Ave Philadelphia 44 Pa	15
Poray Inc	3369 W Grand Ave Chicago 51 Ill	9
Precise Development Corp	2 Neil Ct Oceanside NY	2
Precision Hearing Aids	5157 W Grand Ave Chicago 39 Ill	9
Production Research Corp	Thornwood NY	1-2-15
Protectowire Co	Hanover Mass	3
Pulse Techniques Inc	1411 Palisade Ave W Englewood NJ	8
Pye Canada Ltd	82 Northline Rd Toronto 16 Ontario Canada	4-12-19
Pye Telecommunications Ltd	Newmarket Rd Cambridge England	4-6-11-12-15-17-18-19
Racon Electric Co	1261 Broadway New York 1 NY	18

Radio Corp of America
Commercial Electronic Products
Camden 2 N.J. 2-10-11-15-17-19-21

Radio Eng'g Products Ltd
1080 University St
Montreal 3 Quebec Canada 4

Rauland-Borg Corp
3515 W Addison St
Chicago 18 Ill 1-2-11-15-17

Remler Co
2101 Bryant St San Francisco Calif 2-9-15

Rhein Sound Systems Inc
133 Hamilton St New Haven 5 Conn 1-2

RME Div Electro Voice Inc
Buchanan Mich 2

Rowe Industries
1702 Wayne St Toledo 9 Ohio 13-14

Royal Communication Systems
11462 Euclid Ave Cleveland 6 Ohio 11

Ryan Co S C
1316 Yale Place Minneapolis 3 Minn 9

Sargent-Raymont Co
4926 E 12 St Oakland 1 Calif 2

Scanthin Electronics Inc
11624 W Pico Blvd Los Angeles 64 Calif 15

Schruck Electrical Sales Corp
45 W 81 St New York 24 NY 19

Schulmerich Electronics Inc
Sellersville Pa 13-14

Sieler Design Products
10460 San Pablo Ave El Cerrito Calif 10

Simplex Equipment Corp
55 La France Ave Bloomfield N.J. 2

Simpson Mfg Co Mark
32-28 49 St 2-4-6-8
Long Island City 3 NY 10-11-15-17-21

Skiatron Electronics & TV Corp
180 Varick St New York 14 NY 14

Smith-Meeker Eng'g Co
157 Chambers St New York 7 NY 5-15-17-18

Solartron Electronic Group Ltd
Queens Rd Thames Ditton
Surrey England 2

Sonex Inc
73 S State Rd Upper Darby Pa 2-8

Spencer-Kennedy Labs
1320 Soldiers Field Rd Boston 35 Mass 8

Standard Electric Time Co
89 Logan St Springfield 2 Mass 15

Standard Instruments
P O Box 11556 Dallas 18 Texas 2

Stanley Webster Labs
5225 W St Charles Rd Berkeley Ill 9-17

Star-A Electric Mfg Co
269 Meserole St Brooklyn 6 NY 3

Stelma Inc
190 Henry St Stamford Conn 3-4

Stephens Tru-sonic Inc
8538 Warner Dr Culver City Calif 21

Stewart Warner Electronics Div
1300 N Kostner Ave Chicago 51 Ill 2

Stromberg-Carlson Div General
Dynamics Corp 100 Carlson Rd
Rochester 3 NY 3-4-15-18-19

Taffet Radio & TV Co
27-05 Brooklyn-Queens Expressway W
Woodside 77 NY 12

Talk-A-Phone Co
1512 S Pulaski Rd Chicago 23 Ill 11

Techtron Electronics Ltd
583 Gramatan Ave Mt Vernon NY 2-8-21

Teletro Industries Corp
35-18 37 St
Long Island City 1 NY 3-8-10-11-13-15-17

Telephonics Corp
Park Ave Huntington LI NY 11-17-20

Telex
1633 Eustis St St Paul 1 Minn 9

Texas Instruments Inc Industrial
Instrumentation Div 3609 Buffalo
Speedway Houston 6 Texas 1

Transelectric Mfg Co
Hopewell Rd Oxford Pa 11-19

Trans-Tel Corp
736 N Highland Ave
Los Angeles 38 Calif 11

Trutone Electronics Inc
812 N Highland Ave Los Angeles 38 Calif 17

Ultra Hi-Fi Co
709 Sip St Union City NJ 10

Universal Atomics Corp
50 Bond St Westbury LI NY 12

University Loudspeakers Inc
80 S Kensico Ave White Plains NY 18

U S Instrument Corp
P O Box 33E Charlottesville Va 3-11-19-20

U S Recording Co
1121 Vermont Ave Washington 5 DC 2-5-6

Utah Radio Products Corp
1124 E Franklin St Huntington Ind 18

Valco Mfg Co
4700 W Walton St Chicago 51 Ill 14

Vicon Inc
1353 Mesita Rd Colorado Springs Colo 9

Vidaire Electronics Mfg Corp
516 W Merrick Rd Lynbrook NY 8

Virginia Electronics Co
River Rd & B&O RR Washington 16 DC 1-15

Voron & Co George
835 N 19 St Philadelphia 30 Pa 1-2-11-15-19-21

Webster Electric Co
1900 Clark St Racine Wis 1-15

Western Electro Acoustic Lab Inc
11789 San Vicente Blvd
Los Angeles 49 Calif 2

Westrex Corp
111 8 Ave New York 11 NY 2-8-21

Wheeler Insulated Wire Co
150 E Aurora St Waterbury 20 Conn 2-20

Wide Range Recording Corp
527 N Grand Blvd St Louis 3 Mo 2

Zenith Radio Corp
6001 Dickens Ave Chicago 39 Ill 9

87—SPEAKERS

Horns 1

Speakers, ceramic 2

Speakers, crystal 3

Speakers, electrodynamic 4

Speakers, electrostatic 5

Speakers, explosion-proof 6

Speakers, high-fidelity 7

Speakers, magnetic 8

Speakers, PM dynamic 9

Tweeters 10

Woofers 11

Air Transport Mfg Co
1114 N Sycamore Ave Los Angeles 38 Calif 1

Allied Radio Corp
100 N Western Ave Chicago 80 Ill 7

Altec Lansing Corp
1515 S Manchester Ave
Anaheim Calif 1-1-6-7-9-10-11

American Communications Corp
280 Broadway New York 17 NY 1-7

American Elite Inc
7 Park New York 16 NY 7

American Mica Radio Corp
235 Parker Ave Manasquan NJ 9

Ampex Corp
934 Charter St Redwood City Calif 7

Atlas Sound Corp
1449 39 St Brooklyn 18 NY 1-6-10

Barker Sales Co
996 Edgewater Ave Ridgfield NJ 4-5-7-8-9

Becker Electronics Mfg Corp
1091 Rockaway Ave Valley Stream NY 8-9

Bell & Howell
7100 McCormick Rd Chicago 45 Ill 7-9

Bell Sound Systems Inc
555 Marion Rd Columbus 7 Ohio 7

British Industries Corp
80 Shore Rd Port Washington NY 7-10-11

Carbonneau Industries Inc
100 Lexington Ave SW
Grand Rapids 4 Mich 7-9

Commercial Radio Sound Corp
652 1 Ave New York 16 NY 6-7-8

Duotone Co
Locust St Keyport NJ 7

Electrical Products Research &
Development Co
1206 Cherry St Toledo 4 Ohio 7

Electronic Instrument Co
84 Withers St Brooklyn 11 NY 7

Electro-Voice Inc
Ceil & Carrol Sts Buchanan Mich 7-9

Ercona Corp
551 5 Ave New York 17 NY 1-7-10

Ferranti Electric Inc
30 Rockefeller Plaza New York 20 NY 5

Gray Research & Development Co
Hilliard St Manchester Conn
Hartley Products Co
521 E 162 St New York 51 NY 7

Heath Co
305 Territorial Rd Benton Harbor Mich 7

Heppner Mfg Co
Box 608 Round Lake Ill 4-5-8

Intelix Systems Inc
22 Thames St New York 6 NY 4-5-7-9-10-11

International Scientific Industries Corp
2374 E Hiway 24 Colorado Springs Colo 7

Jensen Mfg Co
6601 S Laramie Ave Chicago 38 Ill 1-4-7-8-9

Kling Metal Spinning & Stamping Co
245 Centre St New York 13 NY 1

Klipsch & Associates
P O Drawer 96 Hope Ark 7

Knowles Electronics Inc
9400 Belmont Franklin Park Ill 8

Lansing Sound Inc James B
3249 Casitas Ave Los Angeles 39 Calif 7

Linlar Inc
4101 San Fernando Rd
Glendale 4 Calif 4-6-7-9

McGregor Electronic Industries Inc
132 1 St McGregor Iowa 9

Majestic Int'l Corp
79 Washington St
Brooklyn 1 NY 4-5-7-8-9-10

Molded Fiber Glass Co
4801 Benefit Ave Ashtabula Ohio 1

Oxford Electric Corp
3911 S Michigan Ave
Chicago 15 Ill 4-7-8-9

Pampa Electronics Corp
7354 Frankford Ave
Philadelphia 36 Pa 5-7-10

Permoflux Products Co
4101 San Fernando Rd
Glendale 4 Calif 4-6-7-8-9-10

Philco Corp Accessory Div
"A" & Allegheny Ave Philadelphia 34 Pa 5

Pickering & Co
309 Woods Ave Oceanside NY 5-7

Pye Canada Ltd
82 Northline Rd Toronto 16 Ont Canada 5-7

Quam Nichols Co
234 E Marquette Rd Chicago 37 Ill 4-7-9

Racon Electric Co
1261 Broadway New York 1 NY 1-6-7-9-10

Radio Corp of America Commercial
Electronic Products Camden 2 NJ 1-6-7-9

Radio Corp of America
415 S 5 St Harrison NJ 7-8-9-11

Rockbar Corp
650 Halstead Ave Mamaroneck NY 7

Sherwood Electronic Labs Inc
2802 W Cullom Ave Chicago 18 Ill 5

Sieler Design Products
10460 San Pablo Ave El Cerrito Calif 1-7

Stephens Tru-sonic Inc
8538 Warner Dr Culver City Calif 7-8-9

Stromberg-Carlson Div General
Dynamics Corp 100 Carlson Rd
Rochester 3 NY 7-9-10-11

Symphony Electronics Corp
925 S Western Ave Los Angeles 6 Calif 9

Techtron Electronics Ltd
583 Gramatan Ave Mt Vernon NY 4-5-7-9

Transitron Inc
186 Granite St Manchester NH 5-7

Trutone Electronics Inc
812 N Highland Ave Los Angeles 38 Calif 9

United Audio Products Div
United Optical Mfg
202 E 19 St New York 3 NY 7-8-9-10-11

University Loudspeakers Inc
80 S Kensico Ave White Plains NY 6-7-9

Utah Radio Products Corp
1124 E Franklin St
Huntington Ind 4-5-6-7-9

Voron & Co George
835 N 19 St Philadelphia 30 Pa 1-6

Weathers Industries Div Advance
Industries 66 E Gloucester Pike
Barrington NJ 7

Wright Zimmerman Inc
New Brighton St Paul 12 Minn 7-9

88—SPEAKER ACCESSORIES

Baffles 1

Cabinets 2

Chambers, acoustic 3

Cloths, grill 4

Coils, crossover 5

Coils, fixed 6

Cones 7

Drivers, PM 8

Exciters, field 9

Grills 10

Materials, acoustic 11

Materials, sound absorbent 12

Mountings, car top 13

Networks, crossover 14

Shims, adjusting 15

Stands 16

Suspensions (for cones) 17

Acme Mfg & Gasket Co
738 N 41 St Philadelphia 4 Pa 15

Acoustica Associates
Shore Rd Glenwood Landing LI NY 3

Air Transport Mfg Co
1114 N Sycamore Ave
Los Angeles 38 Calif 1-10-16

Allied Radio Corp
100 N Western Ave Chicago 80 Ill 2

Altec Lansing Corp
1515 S Manchester Ave
Anaheim Calif 1-2-3-8

American Communications Corp
280 Broadway New York 17 NY 1-2

American Mica Insulation Co
235 Parker Ave Manasquan NJ 2

American Mica Radio Corp
235 Parker Ave Manasquan NJ 1

Anderson Controls Inc
2777 Mannheim Rd Des Plaines Ill 6

Anti-Corrosive Metal Products Co
Castleton-on-Hudson NY 15

Arco Transformer & Electric Corp
1602 S Hanna St Ft Wayne 5 Ind 5-6

Argos Products Co
Main St Genoa Ill 1-2

Armstrong Cork Co
W Liberty St Lancaster Pa 11-12

Atlas Sound Corp
1449 39 St Brooklyn 18 NY 8-13-16

Auburn Mfg Co
Stack St Middletown Conn 15

Automatic Coil Co
415 Bedford Ave Brooklyn 11 NY 5

Barker Sales Co
996 Edgewater Ave Ridgfield NJ 1-2-8-14

Barker & Williamson Inc
Canal & Beaver Sts Bristol Pa 5-14

Bestcraft Products Co
626 Broadway New York 12 NY 4-10

Bittermann Electric Co
Barlow St Canaan Conn 5-6

Cabinart Div G & H Wood Products
99 N 11 St Brooklyn 11 NY 2

Cambridge Pattern Works 55 1 St Cambridge 41 Mass	2	Palo Alto Eng'g Co 620 Page Mill Rd Palo Alto Calif	5	Color TV pickup tubes	21
CELCO Constantine Eng'g Labs Co P O Box 555 Mahwah NJ	6	Penn Fibre & Specialty Co 2020 E Westmoreland St Philadelphia 34 Pa	15	Color TV stabilizing amplifiers	23
Coilcraft Inc Cary Ill	5	Peerless Electrical Products 1515 S Manchester Ave Anaheim Calif	5-14	Color TV sync equipment	24
Coil Eng'g & Mfg Co Roanoke Ind	6	Permolux Products Co 4101 San Fernando Rd Glendale 4 Calif	1-2	Color TV test equipment	25
Coil Winders Inc New York Ave Westbury LI NY	5-6	PIC Design Corp 477 Atlantic Ave E Rockaway LI NY	15	Consoles, audio	26
Collins Radio Co 855 35 St N E Cedar Rapids Iowa	2	Powers Co J J P O Box 211 Maywood Ill	1	Consoles, control	27
Commercial Radio Sound Corp 652 1 Ave New York 16 NY	1	Premier Metal Products Co 337 Manida St New York 59 NY	2	Consoles, remote switching	28
Cossor (Canada) Ltd 301 Windsor St Halifax Nova Scotia Canada	2	Racon Electric Co 1261 Broadway New York 1 NY	14	Control equipment	29
Croname Inc 3101 Ravenswood Ave Chicago 13 Ill	10	Radio Corp of America Commercial Electronic Products Camden 2 NJ	1-2-8-14	Controls, camera	30
Daven Co Route 10 Livingston NJ	14	Radio-Matic of America Inc 760 Ramsey Ave Hillside NJ	2	Controls, master	31
Davis & Co J W 9212 Denton Dr Dallas 35 Texas	1-2	River Edge Sales Corp 80 Shore Rd Port Washington NY	2	Converters, field sequential	32
Dmeter Mfg Co 22 Larkin Plaza Yonkers NY	14	R-J Audio Products 80 Shore Rd Port Washington NY	1-2	Crystals, color TV frequency control	33
D & M Products 13144 W McNichols Rd Detroit 35 Mich	10	Rogers Corp Rogers Conn	1	Distribution equipment	34
Dormeyer Industries 3418 Milwaukee Ave Chicago 41 Ill	6	Ross Mfg Co 2538 Peterson Ave Chicago 45 Ill	5	Faders	35
Duotone Co Locust St Keyport NJ	14	Scovill Mfg Co 99 Mill St Waterbury 20 Conn	10	Generators, color signal	36
Electric Regulator Corp Pearl St Norwalk Conn	9	Semrow Products Co 4317 N Ravenswood Ave Chicago 13 Ill	1-4-10	Generators, sync	37
Electronic Coils Inc P O Box 1665 Springfield Mass	6	Sherwood Electronic Labs Inc 2802 W Cullom Ave Chicago 18 Ill	7	Generators, sync stretchers	38
Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	14	Sieler Design Products 10460 San Pablo Ave El Cerrito Calif	1-2-14	Generators, TV signal	39
Electro Sound Corp 115 Halleck St Boston 15 Mass	2	SNC Mfg Co P O Box 277 Oshkosh Wis	6	Lenses, TV magnifying	40
Electro-Voice Inc Cecil & Carrol Sts Buchanan Mich	1-2-7	Spaulding Fibre Co 310 Wheeler St Tonawanda NY	1	Lenses, TV projection	41
El-Rad Mfg Co 2800 W Cullom Ave Chicago 18 Ill	5-11	Stevens Products Inc 86 Main St E Orange NJ	7	Monitors, line & program	65
Ercona Corp 551 5 Ave New York 17 NY	2-14	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	2	Pan heads	42
Falstrom Co Falstrom Court Passaic NJ	2	Swan Electronics Co 5016 N Austin Ave Chicago 30 Ill	5-6	Pedestals	43
Flock Process Co 375 Main Ave Norwalk Conn	10	Techtron Electronics Ltd 583 Gramatan Ave Mt Vernon NY	8	Preamplifiers	44
Gee-Lar Mfg Co 418 S Wyman St Rockford Ill	4	Teichrome Mfg Corp 28 Ranick Dr Amityville LI NY	14	Projection units	45
General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	4	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	14	Projectors, TV film	46
General Coil Products Corp 43 Roselle St Mineola NY	5	Thermal Refractories Corp 4501 Dell Ave N Bergen NJ	1	Projectors, TV kaleidoscope	47
General Coil Products Corp 43 Roselle St Mineola NY	5	Transonic Inc 808 16 St Bakersfield Calif	5-14	Projectors, TV mirror multiplex- ers	48
Grand Transformers Inc Beechtree & Marion Sts Grand Haven Mich	6	Triad Transformer Corp 4055 Redwood Ave Venice Calif	6	Projectors, TV rear screen	49
Hamilton Electronics 2726 Pratt Ave Chicago 45 Ill	2	TV Hardware Mfg Co Div Dextron Inc 400 S Wyman St Rockford Ill	1	Projectors, TV slide	50
Hartley Products Co 521 E 162 St New York 51 NY	2-7	United Transformer Corp 150 Varick St New York 13 NY	14	Projectors, TV special purpose	51
Harwood Electronics Co 466 W Superior St Chicago 10 Ill	1	University Loudspeakers Inc 80 S Kensico Ave White Plains NY	2	Prompting equipment	52
Hawley Products Co N 1 Ave St Charles Ill	17	Univox Corp 102 Warren St New York 7 NY	14	Receivers, cue	53
Heath Co 305 Territorial Rd Benton Harbor Mich	2	U S Electronics Corp 278 Warren St Lyndhurst NJ	6	Receivers, studio	54
Houlihan Co T J 2508 W Lawrence Ave Chicago 25 Ill	6	Utah Radio Products Corp 1124 E Franklin St Huntington Ind	1-2	Remote pickup, audio	55
iE Mfg 325 N Hoyne Ave Chicago 12 Ill	15	Victory Mfg Corp 1722 W Arcade Pl Chicago 12 Ill	10	Remote pickup, video	56
Insuline Corp of America 186 Granite St Manchester NH	2-1	Vidaire Electronics Mfg Corp 576 W Merrick Rd Lynbrook NY	10-14	Reverberation units	57
Jensen Mfg Co 6601 S Laramie Ave Chicago 38 Ill	1-2-14	Walsee Electronics Mfg Co 100 W Green St Rockford Ill	4-10	Scanners, flying spot	58
JFD Mfg Co 6101-16 Ave Brooklyn 4 NY	4	Webstar Stamping Corp West Bend Wis	13	Shapers, TV	59
Johns-Manville 22 E 40 St New York 16 NY	11-12	Wincharger Corp E 7 & Division St Sioux City 2 Iowa	6	Special effects equipment	60
Johnson Electronics Inc 521 Elwell St Orlando Fla	5-14	Wright Washer Mfg Co 2275 S Bay St Milwaukee 7 Wis	15	Studio transmitter links	61
Kent TV Inc 505 Driggs Ave Brooklyn 11 NY	2	89—STUDIO EQUIPMENT (Color & Black-and-White)			
Kling Metal Spinning & Stamping Co 245 Centre St New York 13 NY	1	Adapters, field sequential	1	Transmitters, cue	62
Klise Mfg Co 51 Cottage Grove St SW Grand Rapids 2 Mich	10	Adapters, line & dot sequential	2	Tripods	63
LaPointe Industries Inc 155 W Main St Rockville Conn	14	Amplifiers, distribution	3	Tubes, color	64
L E E Inc 625 NY Ave NW Washington 1 DC	1-2	Amplifiers, montage	4	Abbeon Supply Co 179-15 Jamaica Ave Jamaica 32 NY	41
Leonard Electric Products Co 67 34 St Brooklyn 32 NY	5-6	Amplifiers, stabilizing	5	Abrams Instrument Corp 606 E Shiawassee St Lansing 1 Mich	9-30-31
Linlar Inc 4101 San Fernando Rd Glendale 4 Calif	1-2	Amplifiers, video faders	6	Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	3-17-26-27-29-35-44
L O F Glass Fibers Co 1810 Madison Ave Toledo 1 Ohio	12	Camera cranes	7	Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass	33
Lowell Mfg Co 3030 Laclade Station Rd St Louis 17 Mo	1	Camera dollies	8	Aero Electronics Co 1512 N Wells St Chicago 10 Ill	60
Lynmar Engineers Inc 1432 N Carlisle St Philadelphia 21 Pa	14	Camera mounts	9	Aeroflex Labs 34-06 Skillman Ave Long Island City 1 NY	9-31
Magie-Vue Television Corp 323 E 13 St New York 3 NY	2	Camera switching equipment	10	Ainslie Corp 312 Quincy Ave Quincy 69 Mass	45
Marantz Co 4415 Vernon Blvd Long Island City 1 NY	14	Camera turrets	11	Airtrox Development Corp 4902 Church Ave Brooklyn 3 NY	46
Mil Case Corp 35-18 37 St Long Island City NY	2-11	Cameras, field	12	Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	9-26-27-28
Mohawk Business Machines Corp 944 Halsey St Brooklyn 33 NY	5	Cameras, studio	13	Allis Co Lewis 427 E Stewart St Milwaukee 1 Wis	32
National Capacitor Co 18 Webster St Brookline 46 Mass	14	Cameras, TV film	14	Alter Lansing Corp 1513 S Manchester Ave Anaheim Calif	3-26-27-28-43-44-46
		Color slide & film scanners	22	American Communications Corp 280 Broadway New York 17 NY	26-27-28-29
		Color TV camera chains	15	American Microwave Corp 11754 Vose St N Hollywood Calif	17
		Color TV encoders	16	Anderton Electronic Lab 129 E 1800 S St Bountiful Utah	3-14-46
		Color TV equipment	17	Antlab Inc 4950 N High St Columbus 14 Ohio	45
		Color TV film chains	18	Automation Management Inc Adams St Westboro Mass	32
		Color TV generators	19	Avion Div ACF Industries Inc 11 Park Pl Paramus NJ	30
		Color TV monitors	20	Bache & Co Semon 636 Greenwich St New York 14 NY	41
				Barber & Howard Co East Ave Westerly RI	46
				Barker Sales Co 996 Edgewater Ave Ridgefield NJ	46
				Baughman Co E J 1914 N Cogswell Rd El Monte Calif	8-41
				Bausch & Lomb Optical Co 628 St Paul St Rochester 2 NY	42-52
				Beckman Instruments Inc Data & Control Systems Scientific Instruments Div 325 N Muller Ave Anaheim Calif	5

Bell Aircraft Corp P O Box 1 Buffalo 5 NY	26-27-28-33		
Bell & Howell 7100 McCormick Rd Chicago 45 Ill	48		
Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif	32		
Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	45		
Berndt-Bache Inc Auricon Div 6900 Romaine St Hollywood 38 Calif	14		
Beseler Co Charles 219 S 18 St E Orange NJ	47-49-50-51-52-53		
B & K Mfg Co 3726 N Southport Chicago Ill	22-25		
Bliley Electric Co Union Station Bldg Erie Pa	34		
Blonder-Tongue Laboratories 9-25 Alling St Newark 2 NJ	12-17		
Bodde Screen & Projector Co 11541 Bradley Ave San Fernando Calif	51-52		
Bogen Co David P O Box 500 Paramus NJ	46		
Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	26-27-28-45-65		
Brush Electronics Co 3405 Perkins Ave Cleveland 14 Ohio	44		
Buhl Optical Co 1009 Beech Ave Pittsburgh 33 Pa	41-42		
Burroughs Corp 6071 2 Ave Detroit 32 Mich	60		
Buss-Clement-Doughten & Associates 201 B Studio Hill Chester Springs Pa	3-6-12-14-26 27-28-30-44-46		
Camera Equipment Co 315 W 43 St New York 36 NY	8-9-12-65		
Camera Mart Inc 1845 Broadway New York 23 NY	8-62-65		
Capitol Transcription Service 1120-A Conn Ave N W Washington 6 DC	3-26-27-28-43-44-46		
CBS Hytron Div Columbia Broadcasting System 100 Endicott St Danvers Mass	66		
Century Lighting Inc 521 W 43 St New York 36 NY	51-53		
Century Projector Corp 729 7 Ave New York 19 NY	45		
Chromatic Television Laboratories 1501 Broadway New York 36 NY	66		
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham 17-18-19-20-22-24-25-37 London S E 26 England	38-48-52-53-60-66		
Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	44		
Collins Radio Co 855 35 St N E Cedar Rapids Iowa	26-27-28-44-63		
Columbia Metal Box Co 260 E 143 St New York 51 NY	28		
Commercial Radio Sound Corp 652 1 Ave New York 16 NY	3-31-44-46-62		
Communication Equipment & Eng'g Co 5646 W Race Ave Chicago 44 Ill	28-16		
Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	30-31		
Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	41-16		
Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wis	32		
Dage TV Div Thompson Products W 10 St Michigan City Ind	12-13-14-15-16-17-18-20-24		
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	62		
Daven Co Route 10 Livingston NJ	26-27-28-32-36-55		
Denrad Mfg Co 310 W Woodard St Denison Tex	44-16		
Deveco Eng'g Inc P O Box 387 Caldwell NJ	32		
Diamond Power Specialty Corp Lancaster Ohio	12-14		
Donner Scientific Co 888 Galindo St Concord Calif	5		
Downing Crystal Co 191 Shaffer Ave Westminster Md	34		
DuKane Corp St Charles Ill	5-26-27-28-16		
Eastman Kodak Co 343 State St Rochester 4 NY	14-30-12-18-52		
Eastman Pacific Co 2320 E 8 St Los Angeles 21 Calif	10		
Eberline Instrument Div Reynolds Electrical 805 Early St Santa Fe N Mex	60		
Edmund Scientific Co 101 E Gloucester Pike Barrington NJ	42		
Electrend Products Corp Box 110 St Joseph Mich	49		
Electronic Eng'g Co of Calif 180 S Alvarado Los Angeles 57 Calif	39		
Electronic Eng'g Co 362 W Bowery St Akron 7 Ohio	41-16		
Electronic Instrument Co 84 Withers St Brooklyn 11 NY	25		
Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	30-31		
Electro-Voice Inc Cecil & Carrol Sts Buchanan Mich	26		
Elzee Metal Products Co 775 39 St Brooklyn 32 NY	45		
Fairchild Recording Equipment Co 10-40 45 Ave Long Island City 1 NY	44-46		
Fecker Inc J W 6592 Hamilton Ave Pittsburgh 6 Pa	9-30-31-41-42-65		
Federal Shockmount Corp 1060 Washington Ave New York 56 NY	9		
Feiner & Sons P 522 W 45 St New York 36 NY	26		
Femco Inc Irwin Pa	46		
Fisher Radio Corp 21-21 44 Dr Long Island City 1 NY	44-46		
Flight Research Inc P O Box 1-F Richmond 1 Va	9-30-31		
Florman & Babb 68 W 45 St New York 36 NY	8-9-62-65		
Fluidyne Eng'g Corp 425 N 7 St Minneapolis 6 Minn	30-31		
Foto-Video Labs Inc 25 Amity St Little Falls NJ	3-4-5-6-12-13-14-16-17-19-23 24-25-37-38-39-40-44-61		
Furnas Electric Co 1000 McKee St Batavia Ill	32		
Gates Radio Co 123 Hampshire St Quincy Ill	26-27-28-29-44-46		
General Crystal Co P O Box 9 Burlington Wis	34		
General Precision Lab Inc 63 Bedford Rd Pleasantville NY	3-6-9-10-12-13 14-16-17-18-19-20-22-23 24-25-29-30-31-32-35-41		
General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	20		
Goodyear Aircraft Corp 1210 Massillon Rd Akron 15 Ohio	45-60		
Gordon Enterprises 5362 N Cahuena Blvd N Hollywood Calif	7-8-9-18-30-31-41 42-48-49-50-51-52-53		
Gorrell & Gorrell 336 Old Hook Rd Westwood NJ	9		
Gotham Audio Development Corp 2 W 46 St New York 36 NY	3		
GPS Instrument Co 811 Boylston St Boston 16 Mass	5		
Grafex Inc 154 Clarissa St Rochester 8 NY	9		
Gray Research & Development Co Hilliard St Manchester Conn	46-52		
Hagan Chemicals & Controls Inc Hagan Bldg Pittsburgh 30 Pa	32		
Hallamore Electronics Co 8352 Brookhurst Ave Anaheim Calif	12-31-53		
Hall-Scott Inc Electronics Div 2950 N Ontario St Burbank Calif	5		
Hamilton Electronics 2726 Pratt Ave Chicago 45 Ill	46		
Hancock Electronics Corp 2553 Middlefield Rd Redwood City Calif	12-13-14-15-16 17-18-19-20-22-23-24 25-29-30-31-47-56-58		
Harrison Labs 45 Industrial Rd Berkeley Heights NJ	6-17-23		
Harwood Electronics Co 466 W Superior St Chicago 10 Ill	2		
Hays Corp Michigan City Ind	32		
Heath Co 305 Territorial Rd Benton Harbor Mich	46		
Heiland Div Minneapolis-Honeywell 5200 E Evans Ave Denver 22 Colo	9		
Hett Associates 603 Grand Ave Englewood NJ	13		
Hickok Electrical Instrument Co 10514 Dupont Ave Cleveland 8 Ohio	17-19-25-37-60		
Hill Electronic Eng'g & Mfg Co New Kingstown Pa	34		
Holland Electronics 2133 Central Dr S East Meadow NY	6-17-23		
Houston Fearless Div Color Corp of America 11801 W Olympic Blvd Los Angeles 64 Calif	8-9-11-65		
Hunt Corp 453 Lincoln St Carlisle Pa	34		
Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	34		
Hupp Electronics Co Div Hupp Corp 265 E Pomfret St Carlisle Pa	34		
Hycon Mfg Co 707 S Raymond Ave Pasadena Calif	25		
Industrial TV Inc 369 Lexington Ave Clifton NJ	20		
Intelix Systems Inc 22 Thames St New York 6 NY	63		
International Business Machines Corp 590 Madison Ave New York 23 NY	32		
International Crystal Mfg Co 18 N Lee Ave Oklahoma City 1 Okla	34		
Jackson Electrical Instrument Co 18 S Patterson Blvd Dayton 2 Ohio	17-19 25-37		
Jack Scientific Instrument Co Bill 143 Cedros St Solana Beach Calif	30-31		
Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	31		
Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	46		
Kay Electric Co 14 Maple Ave Pine Brook NJ	19-37-38-40		
Keithley Instruments Inc 12415 Euclid Ave Cleveland 6 Ohio	46		
Kennedy & Co D S 155 King St Cohasset Mass	45		
Keystone Electronics Co 65 7 Ave Newark 4 NJ	34		
Kintel (Kay Lab) 5725 Kearny Villa Rd San Diego 12 Calif	12-13-14-48-52		
Kliegl Bros 321 W 50 St New York 19 NY	29-50-52-53-62		
Knights Co James Church & Wells Sts Sandwich Ill	34		
Kuss Industries Inc Tacony & Lewis Sts Philadelphia 24 Pa	26-27-28		
Labko Scientific Inc 111 W Elm Stillwater Okla	44-46		
Lab-Tronics Inc 3656 N Lincoln Ave Chicago 13 Ill	46		
Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif	30-31		
Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	3-5-23-29-44-46		
L E E Lnc 625 NY Ave N W Washington 1 DC	44		
Litton Industries Electronic Display Lab 1476 66 St Emeryville Calif	66		
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	17-21-23-66		
Lytle Eng'g & Mfg Co 1404 San Mateo Blvd SE Albuquerque New Mex	30		
McCoy Electronics Co Chestnut St & Watts Sts Mt Holly Springs Pa	34		
McIntosh Laboratory Inc 2 Chambers St Binghamton NY	46		
MacLeod & Hanopol 10 Roland St Charlestown 29 Mass	60		
Madison-Fielding Corp 863 Madison St Brooklyn 21 NY	44-46		
Magnetic Amplifiers Inc 632 Tinton Ave New York 55 NY	30-31		
Majestic Int'l Corp 79 Washington St Brooklyn 1 NY	46		
Marantz Co 4415 Vernon Blvd Long Island City 1 NY	46		
Marconi Instruments Ltd 44 New St New York 4 NY	60		
Maurer Inc J A 37-01 31 St Long Island City 1 NY	9-30-37		
M-B Communication Co 4626 Walnut St Philadelphia 39 Pa	63		
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	26-27		
Melody Master Mfg Co 2842 N Cicero Ave Chicago 41 Ill	26		
Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	31		
Midland Mfg Co 3155 Fiberglas Rd Kansas City 15 Kans	34		
Mil Case Corp 35-18 37 St Long Island City NY	26-27-28-65		
Monitor Products Co 815 Fremont Ave South Pasadena Calif	34		
Motigraph Inc 4441 W Lake St Chicago 24 Ill	46		
Munsell Color Co 10 E Franklin St Baltimore 2 Md	25		
Musicolor Inc 333 N Michigan Ave Chicago 1 Ill	49-51-53		
Myers & Sons E A P O Box 8032 Pittsburgh 16 Pa	9		
National Bell Corp 6 Lafayette Ave Brooklyn 17 NY	46		
National Cine Equipment Co 209 W 48 St New York 36 NY	8-9-14-44-62-65		
National Company Inc 61 Sherman St Malden 48 Mass	46		
Neill Co R W 4320 Montrose Ave Chicago 41 Ill	26-27-46		
Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	30		
Norden-Ketay Corp Commerce Rd Stamford Conn	12		
North Electric Co 553 S Market St Galion Ohio	43		
Oberline Inc P O Box 921 Beverly Hills Calif	26-27-44-46-57		
O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif	26-27-28-29-32		
Opto Eng'g Co 3524 W Washington Blvd Los Angeles 18 Calif	42		
Pace Electrical Instruments Co 70-31 84 St Glendale 27 LI NY	25		
Pacific Optical Corp 120 Glasgow Ave Inglewood 1 Calif	42		
Painton & Co Ltd c/o British Electronic Sales Co Box 132 Oakland Gardens 64 NY	36		
Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	43-63		
Pan Electronics Corp Ruth St Griffin Ga	34		
Parker Metal Goods Co 85 Prescott St Worcester 5 Mass	17		

Par Products Corp 602 Colorado Ave Santa Monica Calif	11-42	Studio TV Product Sales 342 W 40 St New York 18 NY	8	A A Metal Products Inc Elliot St Brattleboro Vt	7
Peer Inc 1200 Milton St Benton Harbor Mich	27-28	Sylvania Electric Products Inc 1740 Broadway New York 19 NY	66	ACF Industries Nuclear Prods-Erco Div 48 Lafayette St Riverdale Md	8
Pembrex Theatre Supply Corp 1969 S Vermont Ave Los Angeles 7 Calif	47-48	Taller & Cooper 75 Front St Brooklyn 1 NY	12	Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	6
Pentron Corp 777 S Tripp Ave Chicago 24 Ill	44-46	Tare Electronics Inc 48 Urban Ave Westbury LI NY	3-4-5-6-10-16-17-18-19- 20-22-23-24-25-36-37-38-39- 40-43-48-51-52-53-60-62	Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	8-9-10
Permotux Products Co 4101 San Fernando Rd Glendale 4 Calif	46	Tarzin Inc Sarkes E Hillside Dr Bloomington Ind	3-10-12-13-14-24-41- 42-18-50-52-58	Allied Fabricating Corp 1538 N Clybourn Ave Chicago 10 Ill	8
Philbrick Researches Inc 230 Congress St Boston 10 Mass	5	Tech-Master Corp 75 Front St Brooklyn 1 NY	46	American District Telegraph Co 155 6 Ave New York 13 NY	3
Philo Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	1-16-17-18-19-22- 23-25-40-48-50-52	Tedford Crystal Labs 4126 Colerain Ave Cincinnati 23 Ohio	31	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	3-8
Photocircuits Corp 31 Sea Cliff Ave Glen Cove NY	46	Telescope Mfg Corp 28 Ranick Dr Amityville LI NY	1-2-3-4-10-12-14-16-17-18- 19-20-22-23-24-25-30-31-33 37-38-39-40-42-54-56-60-61	Andrew California Corp 941 E Marylind Ave Claremont Calif	4-5
Photographic Analysis Inc 13273 Ventura Blvd N Hollywood Calif	30-31	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	44-46	Audio Accessories Amityville NY Audio Development Co 2833 13 Ave S Minneapolis Minn	4-5
Photon Instrument Co 6516 Detroit Ave Cleveland 2 Ohio	5	Telematic Industries Inc 16 Howard Ave Brooklyn 7 NY	25-46	Audio Instrument Co 133 W 14 St New York 11 NY	4
Pickering & Co 309 Woods Ave Oceanside NY	44-46	Telephonics Corp Park Ave Huntington LI NY	26-46	Authorized Mfrs Service Co 919 Wyckoff Ave Brooklyn 27 NY	11
Polarad Electronics Corp 43-20 34 St Long Islnd City 1 NY	17-18-19-20-22-25-37	TelePrompster Corp 311 W 43 St New York 36 NY	51-54	Bernard Franklin Co 4155 E Hedley St Philadelphia 37 Pa	7-8-9-10
Precise Development Corp 2 Neil Ct Oceanside NY	25-37-46	Telitone Co of America 1178 E 180 St Bronx 60 NY	46	Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	8
Precision Apparatus Co 70-31 84 St Glendale 27 LI NY	25	Teletronic Labs Inc 1835 W Rosecrans Ave Gardena Calif	46	Buggie Inc H H P O Box 817 Toledo 1 Ohio	4
Precision Crystal Lab 2223 Warwick Ave Santa Monica Calif	34	Tel-Instrument Electronics Corp 728 Garden St Carlstadt NJ	16-17-19-20-24 25-35-37-38-40	Bundy Electronic Corp 171 Fabyan Pl Newark 12 NJ	3
Premier Research Labs Inc 79 7 Ave New York 11 NY	34	Topatron Inc 942 E Ojai Ave Ojai Calif	26-27-28	Burroughs Corp 6071 2 Ave Detroit 32 Mich	5
Presto Recording Corp Box 500 Paramus NJ	46	Tran-Kit Electronics Co 467 S 5 Ave Mt Vernon NY	44-46	Burroughs Corp Electronic Instruments Div 1209 Vine St Philadelphia 7 Pa	8
Production Research Corp Thornwood NY	3-5	Trans-Lux Corp 625 Madison Ave New York 22 NY	51-52-53	Camera Equipment Co 315 W 43 St New York 36 NY	9
PSC Applied Research Ltd 1500 O'Connor Dr Toronto 16 Ont Canada	30-31	Trutone Electronics Inc 812 N Highland Ave Los Angeles 38 Calif	46	Capitol Transcription Service 1120-A Conn Ave NW Washington 6 DC	6
Pulse Techniques Inc 1411 Palisade Ave W Englewood NJ	44	TV Specialty Co 350 W 31 St New York 1 NY	7-8-44-47-51- 52-53-62-65	Century Electronics Co 34 Oleander St Cocoa Fla	4-5
Pye Canada Ltd 82 Northline Rd Toronto 16 Ont Canada	5-6-8-9-12-13-14-15 16-17-18-19-20-21-22-23 24-25-29-35-37-38 39-40-41-42-58-63	TV Utilities Corp 112-33 Colonial Ave Corona 68 NY	43	Century Lighting Inc 521 W 43 St New York 36 NY	4-5
Pye Telecommunications Ltd Newmarket Rd Cambridge England	28-34-56-57-58-63-64-65	Underwood Corp Electronic Computer Div 35-10 36 Ave Long Island City 6 NY	54	Chester Morton Electronics Corp 10 St & Morton Ave Chester Pa	4
Radio City Products Co Centre & Glendale Sts Easton Pa	25	US Controls Inc 161 Grand St New York 13 NY	32	Churchill Lighting Corp 344 Franklin St Melrose 76 Mass	8
Radio Corp of America Commercial Electronic Products Camden 2 NJ	3-13-15-16-17-18-19 20-21-22-23-24-25 26-27-28-29-35-37	US Recording Co 1121 Vermont Ave Washington 5 DC	3-26-27-28- 29-43-44-46	Cincinnati Time Recorder Co 1733 Central Ave Cincinnati 14 Ohio	1
Radio Corp of America 415 S 5 St Harrison NJ	21-66	Viking of Minn 9600 Aldrich Ave S Minneapolis 20 Minn	44-46	Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England	11
Rauland-Borg Corp 3515 W Addison St Chicago 18 Ill	46	Voron & Co George 835 N 19 St Philadelphia 30 Pa	27-46	Coil Winders Inc New York Ave Westbury LI NY	2
Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 54 Mass	17	WacLine Inc 35 S St Clair St Dayton 2 Ohio	31	Collins Radio Co 855 35 St N E Cedar Rapids Iowa	6-11
Raytheon Mfg Co Receiving & Cathode Ray Tube Operations 55 Chapel St Newton 58 Mass	66	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	60	Communication Equipment & Eng'g Co 5646 W Race Ave Chicago 44 Ill	8
Reeves-Hoffman Div Standard Electronics Corp 145 Cherry St Carlisle Pa	34	Watson Mfg Co 3700 Taylor St Jamestown NY	45	Daven Co Route 10 Livingston NJ	11
Research Electronics Lab Roslyn Pa	25	Western Electro Acoustic Lab Inc 11789 San Vicente Blvd Los Angeles 49 Calif	46	Decatur Electronic Industries Corp 203 Orinoco Dr Brightwaters LI NY	4
Resitron Labs Inc 2908 Nebraska Ave Santa Monica Calif	66	Westinghouse Electric Corp Box 284 Elmira NY	66	Deming Indicator Co 1016 Acorn Dr Dayton 9 Ohio	11
Rhein Sound Systems Inc 133 Hamilton St New Haven 5 Conn	56	Westrex Corp 111 8 Ave New York 11 NY	44-46	Dressen-Barnes Corp 250 N Vinedo Ave Pasadena Calif	6
RME Div Electro Voice Inc Buchanan Mich	46	Wheelock Signals Inc Long Branch NJ	57-58	Dukane Corp St Charles Ill	8
Safetee Glass Co 4717 Stenton Ave Philadelphia 44 Pa	50	Whitley Electronics Inc 411 S Chauncey St Columbia City Ind	46	DuMont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	8
Schulmerich Electronics Inc Sellersville Pa	44-46	Wickes Eng'g & Construction Co 12 St & Ferry Ave Camden 4 NJ	17-20-25	Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ	3
Scientific Radio Products Inc 215 S 11 St Omaha Nebr	34	Wind Turbine Co E Market St & P R R W Chester Pa	65	Edko Electronic Eng'g Co 202 Grand St Brooklyn 11 NY	6
Shrader Sound Inc 2803 M St NW Washington 7 DC	26-27	Winstonelectronics Inc 4312 Main St Philadelphia 27 Pa	25	Electronics Corp of America 1 Memorial Dr Cambridge 42 Mass	3
Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill	25-40	Wollensak Optical Co 850 Hudson Ave Rochester 2 NY	9-41-42	Elzee Metal Products Co 775 39 St Brooklyn 32 NY	8
Simpson Mfg Co Mark 32-48 49 St Long Island City 3 NY	46	Woodwelding Inc 355 N Newport Blvd Newport Beach Calif	56	Emerson-Sack-Warner Corp 85 Washington St Somerville 43 Mass	7-8-9
Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	1-2-15-16-19-20-21-22-23-24- 25-33-35-38-39-10-43-60	Wright Electronics Inc 1519 McGee St Kansas City 5 Mo	34	Empire Electronics Co 166 River St Paterson 1 NJ	4
Smith-Meeker Eng'g Co 157 Chambers St New York 7 NY	26-27-28-29			Engineered Electronics Co 506 E 1 St Santa Ana Calif	5
Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	46			Factory Service Co 4615 N 21 St Milwaukee 9 Wisc	8
Sonex Inc 73 S State Rd Upper Darby Pa	46			Falstrom Co Falstrom Court Passaic NJ	7-8-9-10
Spartan Control Systems Div Sparks-Withington Co 2301 E Michigan Ave Jackson Mich	32			Feiner & Sons P 522 W 45 St New York 36 NY	7-8
Specialties Inc Skunks Misery Rd Syosset LI NY	30			Foto-Video Labs Inc 25 Amity St Little Falls NJ	6-11
Stancil-Hoffman Corp 921 N Highland Ave Hollywood 38 Calif	41-46			Gary Wells Co 361 Rockaway Ave Valley Stream NY	8
Standard Crystal Co 1714 Locust St Kansas City Mo	34			Gates Radio Co 123 Hampshire St Quincy Ill	6-8
Standard Electronics Div Radio Eng'g Labs 30 & Borden Sts Long Island City NY	5-12-13-17-23-30-31			General Metal Products Co 1010 Centre St Easton Pa	9
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	27-46			General Precision Lab Inc 63 Bedford Rd Pleasantville NY	5-6
Strong Electric Corp 87 City Park Ave Toledo 1 Ohio	51-52			Golden Co 1054 38 St Brooklyn 19 NY	9
				Goslin Electric Mfg Co 2921 W Olive Ave Burbank Calif	6

90—STUDIO ACCESSORIES

Clocks	1
Color accessories, miscellaneous	2
Fire detection & fighting equipment	3
Patch cords	4
Patch panels	5
Power supplies	6
Racks, disc storage	7
Racks, equipment	8
Racks, film storage	9
Racks, tape storage	10
Test equipment	11
Watches, stop	12

Industrial Systems Co 32 Main St Matawan NJ	8	Solartron Electronic Group Ltd Queens Rd Thames Ditton Surrey England	7-8	Aircorn Inc 1209 E Grand St Elizabeth NJ	48
Insuline Corp of America 186 Granite St Manchester NH	5-8	Stackbin Corp 1079 Main St Pawtucket RI	8	Airflyte Electronics Co 535 Ave A Bayonne NJ	4-30-31
Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Okio	3	Standard Electric Time Co 89 Logan St Springfield 2 Mass	1-5	Airmec Ltd High Wycombe Buckinghamshire England	9-40
Kane Mfg Corp PO Box 641 Kane Pa	8	Standard Electronics Corp Sub Dynamics Corp of America 285 Emmett St Newark 5 NJ	4-5	Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	1
Kepeco Labs 131-38 Sanford Ave Flushing NY	6	Standard Electronics Div Radio Eng'g Labs 30th & Borden Sts Long Island City NY	6	Airtron Inc 1101 W Elizabeth Ave Linden NJ	20-48
Keystone Electronics Corp 423 Broome St New York 13 NY	5	Stromberg Time Corp 135 S Main St Thomaston Conn	1	A-K Mfg Co 115 S Northwest Hwy Barrington Ill	4
Kidde & Co Walter 1156 Main St Belleville 9 NJ	3	Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	8	Alden Electronic & Impulse Recording Equip Co P O Box 125 Westboro Mass	5-21-24
Kluge Electronics 5 & Main Sts Albion Nebr	3	Tarc Electronics Inc 48 Urban Ave Westbury LI NY	5-6-11	Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wisc	1-2-10-12-17-23-24 28-29-32-35-40-41
Lab-Tronics Inc 3656 N Lincoln Ave Chicago 13 Ill	4	Tarjanz Inc Sarkes E Hillside Drive Bloomington Ind	6	Allied Allegri Co 141 River Rd Nutley 10 NJ	25
Lambda Electronics Corp 11-11 131 St College Point 56 NY	6	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	2-11	American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va	7-8-9
Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY	6	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	4-5-6-10	Anchor Products Co 2712 W Montrose Ave Chicago 18 Ill	29
Leach Corp Inet-Palmer Div 4441 S Santa Fe Ave Los Angeles 58 Calif	6	Tel-Instrument Electronics Corp 728 Garden St Carlstadt NJ	11	Andrew Antenna Corp 606 Beach St Whitby Ontario Can	3
Lee Electric & Mfg Co 2806 Clearwater St Los Angeles 39 Calif	6	Temperature Eng'g Corp U S Hwy 130 Riverton NJ	7-8	Andrew California Corp 941 E Marylind Ave Claremont Calif	3
Lord-Taber Co 40 Ontario St Canandaigua NY	3	Tranonic Inc 808 16 St Bakersfield Calif	6	Andrew Corp 363 E 75 St Chicago 19 Ill	3
Lowell Mfg Co 3030 Laclede Station Rd St Louis 17 Mo	8	Vapor Heating Corp 80 E Jackson Blvd Chicago 4 Ill	3	Ansley Mfg Co Arthur New Hope Pa	25
Malkin-Illion St 400 Coit St Irvington NJ	8	Walsham Watch Co 221 Crescent St Waltham 54 Mass	1-12	Applied Science Corp of Princeton P O Box 44 Princeton NJ	4-31-38
Martindale Electric Co Box 617 Edgewater Branch Cleveland 7 Ohio	12	Walton Tool & Die Co 2707 Empire Ave Burbank Calif	8	Arch Gear Works 97 Holmes St N Quincy Mass	17
Mathis Co G E 6100 S Oak Park Ave Chicago 38 Ill	8	Wickes Eng'g & Construction Co 12 St & Ferry Ave Camden 4 NJ	1-2	Arch Instrument Co 101 Holmes St N Quincy Mass	17
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	8	91—SWITCHES			
Mercury Electronic Co Box 450 B Red Bank NJ	6	Contactors	1	Acro Div Robertshaw-Fulton Controls Co Box 449 Columbus 16 Ohio	17-28-35-36
Metal Specialty Products Corp 27-01 Brooklyn Queens Expressway W Woodside 77 NY	7-8-9-10	Switches, circuit breaker	2	Ark-Les Switch Corp 51 Water St Watertown 72 Mass	5-28
Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	5	Switches, coaxial	3	Arrow-Hart & Hegemann Electric Co 103 Hawthorn St Hartford 3 Conn	1-10-11-12-15-17 18-28-29-35-41
Mid-West Conveyor Co Metal Products Div 7 & Sunshine Rd Kansas City 15 Kan	20	Switches, commutator	4	Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio	35
Mil Case Corp 35-18 37 St Long Island City NY	7-8-9-10	Switches, contact	5	Atlas Electric Products Co P O Box 1591 Erie Pa	13-18-37-39-40
Mine Safety Appliances Co 201 N Braddock Ave Pittsburgh 8 Pa	3	Switches, crossbar	6	Auth Electric Co 34-20 45 St Long Island City 1 NY	28
Muckle Mfg Co US Hwy 14 Owatonna Minn	9-10	Switches, decade	7	Automatic Control Co 995 University Ave St Paul 4 Minn	10-17-24-38
Munsell Color Co 10 E Franklin St Baltimore 2 Md	2-11	Switches, duplex	8	Automatic Electric Co 1033 W Van Buren St Chicago 7 Ill	14-15-17-26-27-28-29-36
Nagag Associates Inc Littleton Mass	11	Switches, electronic	9	Automatic Metal Products Corp 323 Berry St Brooklyn 11 NY	3
Neumade Products Corp 250 W 57 St New York 19 NY	7-8-9-10	Switches, float	10	Automatic & Precision Mfg Co 252 Hawthorne Ave Yonkers NY	13
Neutronic Associates 87-16 116 St Richmond Hill 18 NY	6	Switches, fluorescent lamp starter	11	Automatic Switch Co Hanover Rd Florham Park NJ	9-20-29-40
N J E Corp 345 Carnegie Ave Kenilworth NJ	6	Switches, foot	12	Autron Eng'g Inc 1254 W 6 St Los Angeles 17 Calif	9-31
Norma Hoffman Bearings Corp Walker Div Hamilton Ave Stamford Conn	6	Switches, hermetically sealed	13	Avionics Ltd PO Box 200 Niagara-on-the-Lake Ontario Canada	25-31-38
Northeastern Eng'g Inc 25 S Bedford St Manchester NH	8	Switches, jack	14	Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	3-9
O'Brien Electric Corp 6514 Santa Monica Blvd Hollywood 38 Calif	8	Switches, key	15	Bayside Timers 45-25 162 St Flushing 58 NY	26
Panellit Inc 7401 N Hamlin Ave Skokie Ill	1	Switches, knife	16	Beckman Instruments Inc Process Instruments Div 2500 Fullerton Rd Fullerton Calif	29-31
P B R Mfg Co H & Luzerne Sts Philadelphia 24 Pa	8	Switches, limit	17	Beck's Inc 298 E 5 St St Paul 1 Minn	4-5-25-30-31-32-34-37-38
Penrwood Numechron Co 7249 Frankstown Ave Pittsburgh 8 Pa	1	Switches, mercury	18	Belock Instrument Corp 111-01 14 Ave College Point 56 NY	9-29
Photographic Analysis Inc 13273 Ventura Blvd N Hollywood Calif	3	Switches, microphone	19	Bendix Aviation Corp Red Bank Div Semiconductor Dept 201 Westwood Ave Long Branch NJ	43
Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	11	Switches, microwave	20	Bird Electronic Corp 1800 E 38th St Cleveland 14 Ohio	3
Pomona Electronics Co 1126 W 5 Ave Pomona Calif	5	Switches, miniature	21	Birnbach Radio Co 145 Hudson St New York 13 NY	16-28-34-41
Power Designs Inc 89-25 130 St Richmond Hill 18 NY	6	Switches, oil immersed	22	Bircher Corp Industrial Div 4371 Valley Blvd Los Angeles 32 Calif	12
Power Supplies Inc 1005 Olive St Highland Ill	6	Switches, plunger	23	B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif	4
Production Research Corp Thornwood NY	3	Switches, pressure	24	Black & Webster Inc 445 Watertown St Newton 58 Mass	12
Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	5-6-10-11	Switches, printed circuit	25	Bogart Mfg Corp 315 Seigel St Brooklyn 6 NY	3-20-48
Pyrene C-O-Two Div US Hwy 1 Newark 1 NJ	3	Switches, programmer	26	Bristol Co P O Box 1790 EITT Waterbury 20 Conn	4-10-24-32-38-45
Radio City Products Co Centre & Glendale Sts Easton Pa	11	Switches, pulse	27	British Electronic Sales Box 132 Oakland Gardens 64 NY	13-21-28-32- 33-35-36-41
Radio Corp of America Commercial Electronic Products Camden 2 NJ	2-6	Switches, push-button	28	Burling Instrument Co 16 River Rd Chatham NJ	39
REF Mfg Corp 393 Jericho Turnpike Mineola NY	8	Switches, remote control	29	Burrhoughs Corp 6071 2 Ave Detroit 32 Mich	9
Reiner Electronics Co Centre & Glendale Sts Easton Pa	9	Switches, rotary chopper	30	B/W Controller Corp 2200 E Maple Birmingham Mich	1
Rosco Labs 29 Moore St Brooklyn 6 NY	2	Switches, rotary sampling	31	Cable Electric Products 234 Daboll St Providence 7 RI	2-8-16-18-21-23- 28-29-34-35-39-41
Schirmer-National Alarm Co 20 Westside Ave Bergenfield NJ	3	Switches, rotary selector	32		
Servo Corp of America 2020 Jericho Turnpike New Hyde Park NY	3	Switches, safety-interlock	33		
		Switches, slide	34		
		Switches, snap action	35		
		Switches, stepping	36		
		Switches, subminiature	37		
		Switches, telemetering	38		
		Switches, thermal	39		
		Switches, time delay	40		
		Switches, toggle	41		
		Switches, transformer	42		
		Switches, transistor	43		
		Switches, turret	44		
		Switches, vacuum	45		
		Switches, wave change receiver	46		
		Switches, wave change, transmitter	47		
		Switches, waveguide	48		
		Aero Div Robertshaw-Fulton Controls Co Box 449 Columbus 16 Ohio	17-28-35-36		
		Admittance Namco Corp Marine St Farmingdale LI NY	3-20-48		
		Aero Instrument Co 11423 Vanowen St N Hollywood Calif	24-25		

Cado Mfg Co Div Electromation Co 1646 18 St Santa Monica Calif	3	Edcliff Instruments 1711 S Mountain Ave Monrovia Calif	24	Grigsby-Allison Co 407 N Salem Ave	9-23-25-28-29-31
Capitol Machine Co 36 Balmforth Ave Danbury Conn	15-28	Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ	39-40	Arlington Heights Ill	32-34-35-37-46-47
Carling Electric Inc 505 New Park Ave W Hartford 10 Conn	12-23-28-31-35-41	Eitel-McCullough Inc 798 San Mateo Ave San Bruno Calif	45	Guardian Electric Mfg Co 1621 W Walnut St Chicago 12 Ill	35
Carter Parts Co 3401 W Madison St Skokie Ill	14-15-23-28-35	Electra Mfg Co 4051 Broadway Kansas City Mo	28-29-35-41	Guenther Willy K G 1138 Massachusetts Ave Arlington Mass	18-40
Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wisc	7-9-21-34-35-37-46-17	Electrical Communications Inc 765 Clementina St San Francisco 3 Calif	38	Gulton Industries Inc 212 Durham Ave Metuchen NJ	24
Central Electronic Mfrs Inc Sub Nuclear Corp of America 2 Richwood Pl Denville NJ	45	Electrical & Physical Instrument Corp 42-19 27 St Long Island City 1 NY	3-18-19	G-V Controls Inc 45 Hollywood Plaza E Orange NJ	39
Century Electronics & Instruments Inc 1333 N Utica Ave Tulsa 10 Okla	24	Electrola Inc 7517 N Clark St Chicago 26 Ill	12	Gyro Electronics Co 325 Canal St New York 13 NY	29
Chatham Electronics Div Gera Corp W Mt Pleasant Ave Livingston NJ	9-45	Electro-Miniatures Corp 1060 Elm Ave Ridgefield NJ	4-5-26-27-30-31-38	Halax Corp P O Box 425 Los Gatos Calif	24
Cherry Electrical Products Corp 1650 Deerfield Rd Highland Park Ill	2-5-17-21-23-33-35-37	Electronic Instrument Co 84 Withers St Brooklyn 11 NY	9	Hamlin Inc 1316 Sherman Ave Evanston Ill	18
Chicago Telephone Supply Corp 1142 W Beardsley Ave Elkhart Ind	21-25-35-43	Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	9-13	Hart Mfg Co 128 Bartholomew Ave Hartford 1 Conn	3-13-28-35-37-41
Cinema Eng'g Div Aerovox Corp 1100 Chestnut St Burbank Calif	32	Electro Snap Switch & Mfg Co 4218 W Lake St Chicago 24 Ill	13-17-21-23-28	Haydon Co A W 232 N Elm St Waterbury 20 Conn	26-29-38-40
Clare & Co P 3101 Pratt Blvd Chicago 45 Ill	15-36	Electro Switch Corp King Ave Weymouth 88 Mass	32-33-35-37-41	Haydon Switch Inc 536 S Leonard St Waterbury Conn	2-5-9-13-17-19-21
Clark Controller Co 1146 E 152 St Cleveland 10 Ohio	5-10-12-17-22-28-29-33-35-39-40	Electro Tec Corp 4 Romanelli Ave S Hackensack NJ	4-21-26-30-31-32	Hays Mfg Co 12 & Liberty Sts Erie Pa	24
Clarostat Mfg Co Washington St Dover NH	32-35	Electro-Serv Co 480 Johnson Ave Brooklyn 37 NY	4-25-31-38	Healy-Ruff Co 2255 University Ave St Paul 14 Minn	10
Comar Electric Co 3349 Addison St Chicago 18 Ill	9	Elfa Instrument Center 55 Reade St New York 7 NY	39	Heath Co 305 Territorial Rd Benton Harbor Mich	9
Computer Instruments Corp 92 Madison Ave Hempstead NY	4-27-31	Endevco Corp 161 E California St Pasadena Calif	34-36-37-38	Hetherington Inc 1200 Elmwood Ave	5-8-10-12-13-15-16-17-19
Conn Telephone & Electric Corp 70 Britannia St Meriden Conn	15-19-28-41	Engineered Electronics 506 E 1 St Santa Ana Calif	13-36	Sharon Hill Pa	21-23-28-31-32-33-34-35-37-41
Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla	9-29	Epsco Inc 588 Commonwealth Ave Boston 15 Mass	9	High Vacuum Equipment Corp 2 Churchhill Rd Hingham Mass	45
Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY	3	Essex Wire Corp 1601 Wall St Ft Wayne 6 Ind	1	Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	9-27-38
Control Products Inc 306 Sussex St Harrison NJ	17-28-35-39-40	Farnsworth Electronic Co Pacific Div 815 S San Antonio Rd Palo Alto Calif	21	Hubbard Scientific Labs 1292 E 3 St Pomona Calif	26-27-34-40
Cook Electric Co 2700 Southport Ave Chicago 14 Ill	1-10-13-21-24-36-37-39-40-45	Farnsworth Electronics Co Div I T & T 3702 E Pontiac St Ft Wayne Ind	13	Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	29-38
Cornelius Co 550 39 Ave N E Minneapolis 21 Minn	13-24	Federal Anti Capacity Switch Corp 72 Kingsley St Buffalo 8 NY	15-45	Illinois Tool Works Iacon Div 2501 N Keeler Ave Chicago 39 Ill	13-17-21-35-37-41
Corona Eng'g Service 94-52 Corona Ave Elmhurst 73 NY	18	Federal Screw Products Inc 3919 N Kedzie Ave Chicago 18 Ill	31-41	Industrial Instruments Inc 89 Commerce Rd Cedar Grove NJ	7
Cramer Controls Corp Centerbrook Conn	40	Federal Telephone & Radio Co Div I T & T 100 Kingsland Rd Clifton NJ	15-29-32-36	Industrial Products Co Div Danbury- Knudsen Box 148 Danbury Conn	3
Cunningham Son & Co James 33 Litchfield St Rochester 8 NY	6-38	Fenwal Inc Pleasant St Ashland Mass	39	Industrial Timer Corp 1407 McCarter Hwy Newark 4 NJ	40
Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wisc	2-5-9-10-13-15-16-17-22-24-28-29-32-33-34-35-36-40-41	Fisher Co R H 40 Gough St San Francisco 3 Calif	12	Instrument Development Labs Inc 67 Mechanic St Attleboro Mass	4-13-26-30-31-38-40
Dale Hosen Co 2928 Nebraska Ave Santa Monica Calif	25-31	Fries Instrument Div Bendix Aviation Corp 1400 Taylor Ave Baltimore 4 Md	24	Insuline Corp of America 186 Granite St Manchester NH	14-16-23-28-41
Daven Co Route 10 Livingston NJ	4-5-7-9-13-21-25-26-27-29-30-31-36-37-38	F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY	20-48	Intelix Systems Inc 22 Thames St New York 6 NY	6-28-32-36
Defender Instrument & Regulator Co Body III	21-39-45	Furnas Electric Co 1000 McKee St Batavia Ill	10-12-17-24-28	International Instruments Inc Box 2954 New Haven 15 Conn	21-32
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	20-48	Gates & Co Geo W Hempstead Tpke & Lucille Ave Franklin Square LI NY	45	I-T-E Circuit Breaker Co Special Products Div 601 E Erie Ave Philadelphia 34 Pa	48
Denson Electronics Corp P O Box 122 Rockville Conn	9	Gates Radio Co 123 Hampshire St Quincy Ill	1	Jaidinger Mfg Co 1921 W Hubbard St Chicago 22 Ill	6-17-28-35-39
Detroit Controls Corp 800 Union Ave Bridgeport 1 Conn	17-21-28-35	G-C Electronics Div General Cement-Textron 400 S Wyman St Rockford Ill	9	James Vibrapop Co 4050 N Rockwell St Chicago 18 Ill	3
Detroit Controls Corp Norwood Controls Unit 934 Washington St Norwood Mass	4-18-30-31	Gee-Lar Mfg Co 418 S Wyman St Rockford Ill	2-3-5-9-28-29-31-34-35-41	Janco Corp 3111 Winona Ave Burbank Calif	17-32
Dialight Corp 600 Stewart Ave Brooklyn 37 NY	28	General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	9-32-34-41	Javex P O Box 646 Redlands Calif	3-9-32
Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	3-48	General Communication Co 677 Beacon St Boston 15 Mass	3-4-8-20-48	J-B-L Instrument Co Sycamore & Mill Rd Clifton Heights Pa	5-7-32-42
Dielectric Products Eng'g Co Raymond Me	3-20	General Control Co 1200 Soldiers Field Rd Boston 34 Mass	5-9-12-15-17-23	Jennings Radio Mfg Corp 970 McLaughlin Ave San Jose 8 Calif	2-27-45
Dietz Co Henry G 12-16 Astoria Blvd Long Island City 2 NY	24-36-40-45	General Controls Co 801 Allen Ave Glendale 1 Calif	24-26	Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	3-9
Dimco-Gray Co 207 E 6 St Dayton 2 Ohio	40	General Devices Inc P O Box 253 Princeton NJ	3-13-30-31-38	JFD Mfg Co 6101-16 Ave Brooklyn 4 NY	16
Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wisc	29-30-31-32	General Electric Co Construction Materials Div 1285 Boston Ave Bridgeport 2 Conn	11-15-18-21-28-29-32-35-41	Jo-Bell Products Inc 5456 W 111 St Oak Lawn Ill	10-35
D & M Products 12144 W McNichols Rd Detroit 35 Mich	32	General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	1-2-10-16-17-28-29-40	Johnson Co E F Waseca Minn	9-29
Douglas Microwave Co 252 E 3 St Mt Vernon NY	3-8-20-48	General Electric Co Electric Components Div 1 River Rd Schenectady 5 NY	45	J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	3-20-48
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	9	General Electric Co Ltd of England c/o IMTRA Corp 58 Charles St Cambridge 41 Mass	36	Kahl Scientific Instrument Corp P O Box 1166 El Cajon Calif	18
Dunlap Electronics 764 9 St DesMoines 14 Iowa	25	General Radio Co 275 Massachusetts Ave Cambridge 39 Mass	7	Kellogg Switchboard & Supply Co Div I T & T 79 W Monroe St Chicago 3 Ill	15
Dynamics Instrumentation Co Div Alberhill Corp 1118 Mission St S Pasadena Calif	9	Giannini & Co G M 918 Green St Pasadena Calif	4-13-24-31-36-38-45	Kinney Mfg Div Vacuum Equip Div NY Air Brake Co 3529 Washington St Boston 30 Mass	45
Eagle Electric Mfg Co 23-10 Bridge Plaza S Long Island City 1 NY	8-16-41	G M Mfg Co 134 W 26 St New York 1 NY	18	Kirkland Co H R 8 King St Morristown 4 NJ	28
Eastern Specialty Co 3617 N 8 St Philadelphia 40 Pa	32	Good Electric Corp Natick Mass	26-43	Kolton Electric Mfg Co 123 NJ Railroad Ave Newark 5 NJ	16
Eastman Pacific Co 2320 E 8 St Los Angeles 21 Calif	28-35-39-41	Gordos Corp 250 Glenwood Ave Bloomfield NJ	18	Kulka Electric Mfg Co 633 S Fulton Ave Mt Vernon NY	11-41
Ebert Electronics Corp 212-26 Jamaica Ave Queens Village 28 NY	1	Gorn Electric Co Stamford Conn	10-17-18-24	Lewis Eng'g Co 339 Church St Naugatuck Conn	31
		Granhik Circuits Div Cineh Mfg Corp 200 S Turnbull Canyon Rd La Puente Calif	25	Lieco Inc 3610 Oceanside Rd Oceanside LI NY	20-21-37-41-48
		Grason-Stadler Co W Concord Mass	9		
		Grayhill Inc 561 Hillgrove Ave La Grange Ill	21-28-37		
		Gray Instrument Co 200 E Church Lane Philadelphia 44 Pa	7		

Linlar Inc 4101 San Fernando Rd Glendale 4 Calif	12	Penta Laboratories Inc 312 N Nopal St Santa Barbara Calif	45	Techniques Inc 52 Jackson Ave Hackensack NJ	25
Luhrs & Co C H 297 Hudson St Hackensack NJ	20	Pentron Corp 777 S Tripp Ave Chicago 24 Ill	13-24-45	Teledrome Mfg Corp 28 Ranick Dr Amityville L.I NY	9
Lumenite Electronic Co 407 S Dearborn St Chicago 5 Ill	9-10-40	Pemolux Products Co 4101 San Fernando Rd Glendale 4 Calif	12	Telemeter Magnetics Inc 245 Pontius Ave Los Angeles 64 Calif	9-27-43
Luxor Lighting Products Inc 350 5 Ave New York 1 NY	11	Peschel Electronics Inc 13 Garden St New Rochelle NY	9	Teletronics Lab Inc 54 Kinkel St Westbury NY	9
Lysco Mfg Co 1401 Clinton St Hoboken NJ	3	Philadelphia Scientific Glass Co Box 46C Paletton Rd Quakertown Pa	18-23-45	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	12-13-26-31-40
Lytel Eng'g & Mfg Co 1404 San Mateo Blvd SE Albuquerque New Mexico	26-31	Photocircuits Corp 31 Sea Cliff Ave Glen Cove NY	25	Tenistron Inc Pine Hill Harvard Mass	18
McGill Mfg Co Electrical Div 909 N Lafayette St Valparaiso Ind	28-33-35-41	Pioneer Patents & Products Co 3720 N New England Ave Chicago 34 Ill	5-8-9-12-23-28-35	Thompson Products Inc Electronics Div 2196 Clarkwood Rd Cleveland 3 Ohio	3-20-48
McQuay-Norris Mfg Co 2320 Marconi St St Louis 10 Mo	24	Pollak Corp Joseph 81 Freeport St Boston 22 Mass	5-29-31-32-34-35-41	Time-O-Matic Inc P O Box 850 Danville Ill	1
Mack Electric Devices Inc 48 Glenside Ave Wyncote Pa	1-18	Potter Aeronautical Corp P O Box 542 Union NJ	9	Torsion Balance Co 35 Monhegan St Clifton NJ	37-41
Mack Electronics Div Mack Trucks Inc 40 Leon St Boston 15 Mass	9	Powers Regulator Co 3400 Oakton St Skokie Ill	29-39	Touch-Plate Mfg Corp P O Box 1970 Long Beach 1 Calif	28-29
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	7-9-23-25-28-32-34-35-37	Premier Instrument Corp 52 W Houston St New York 12 NY	20-48	Trad Electronics Corp 1001 1 Ave Asbury Park NJ	3
Manning Maxwell & Moore Inc Shelter Rock Lane Danbury Conn	24-39-45	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	17-28-45-46	Tranco Products Inc 12210 Nebraska Ave Los Angeles 25 Calif	3-20
Mason Electric Corp 3839 Verdugo Rd Los Angeles 65 Calif	2	Pye Telecommunications Ltd Newmarket Rd Cambridge England	20-46-47	Transitron Inc 186 Granite St Manchester NH	41
Master Appliance Mfg Co 530 4 St Racine Wisc	35-41	Pyle-National Co 1334 N Kostner Ave Chicago 51 Ill	33	Transval Eng'g Corp 10401 W Jefferson Blvd Culver City Calif	18
Mechanical Products Inc 1824 River St Jackson Mich	2	Pyramid Instrument Corp 630 Merrick Rd Lynbrook LI NY	29	Tripl-T Electronics Co Box 5352 Pasadena Calif	43
Mercoird Corp 4201 Belmont Ave Chicago 41 Ill	10-13-18-24	Radiation Inc PO Box 37 Melbourne Fla	9-38	Tuttle & Kift Inc 1823 N Monitor Ave Chicago 39 Ill	30-32
Mercury Contacts Inc PO Box 615-E Far Hills Sta Dayton 9 Ohio	18	Radio Eng'g Products Ltd 1080 University St Montreal 3 Quebec Canada	15	Ucinite Co Div United-Carr Fastener Corp 459 Watertown St Newtonville 60 Mass	21-25-28-32-35
Metals & Controls Corp Spencer Thermostat Div 48 Forest St Attleboro Mass	2-13-17-21-28-35-39	Ransom Research 323 W 7 St San Pedro Calif	9	Ulanet Co George 413 Market St Newark 5 NJ	39-40
Micro Switch Div Minneapolis-Honeywell Regulator Co Chicago & Spring Sts	9-12-13-17-18-21-23-28-32-33-31-35-37-39-41	Reliance Automatic Lighting Co 1922 Mead St Racine 3 Wisc	40	Unimax Switch Div W L Maxson Corp Ives Rd Wallingford Conn	13-17-21-23-28-33-35-37
Miller-Robinson Co 7007 Avalon Blvd Los Angeles 3 Calif	24	Resitron Labs Inc 2908 Nebraska Ave Santa Monica Calif	18-45	United-Carr Fastener Corp Cambridge 42 Mass	35
Milli-Switch Corp 1742 Berkeley St Santa Monica Calif	13-17-21-22-28-35-37-41	Revere Corp of America Wallingford Conn	10-13-37	United Control Corp 4540 Union Bay Pl Seattle 5 Wash	9-10-39
Milwaukee Gas Specialty Co 730 N Jackson St Milwaukee 1 Wisc	39	Richards Electrocraft Inc 3739 N Kedzie Ave Chicago 18 Ill	5-28-41	United Electric Controls Co 85 School St Watertown 72 Mass	2-24-35-39-45
Minn-Honeywell Regulator Co 2753 4 Ave S Minneapolis 8 Minn	13-17-18-21-23-24-28-35-41-45	Roanwell Corp 662 Pacific St Brooklyn 17 NY	28	United Transformer Corp Pacific Div 4008 W Jefferson Blvd Los Angeles 16 Calif	13-26-36
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	15-17-32	Robertshaw-Fulton Controls Co Aeronautical Div Santa Ana Freeway at Euclid Ave Anaheim Calif	10	Universal Circuit Controls Corp 3610 Oakton St Skokie Ill	5-14-15-18-21-25-28-32-34-35-44
Modern Industries Inc 2601 Colorado Ave Santa Monica Calif	43	Radale Mfg Co 6 & Minor Sts Emmaus Pa	17-29	Uniwave Inc 2 Marine St Farmingdale NY	1-3-48
Molded Insulation Co 335 E Price St Philadelphia 44 Pa	28	Roflan Co Topsfield Mass	5-9-16-19-28	U S Gauge Div American Machine & Metals Sellersville Pa	24
Monroe Calculating Machine Co Electronics Div Morris Plains NJ	9	Rogers Corp Rogers Conn	25	US Instrument Corp PO Box 33E Charlottesville Va	14-28-29-32-36
Montgomery Mfg Co 206 S Main St Owensville Ind	26	Sage Labs Inc 30 Guinan St Waltham 54 Mass	20-48	Vacudent Mfg Co 915 E 5 St S Salt Lake City 2 Utah	9
Mossman Inc Donald P P O Box 265 Brewster NY	15-28	Sampson Chemical & Pigment Corp 2830 W Lake St Chicago 12 Ill	9-13-18-21-25-37-45	Vacuum Tube Products Co 506 S Cleveland St Oceanside Calif	9-45
Muirhead & Co Ltd Beckenham Kent England	7-15	Sangamo Electric Co Springfield Ill	39	Vapor Heating Corp 80 E Jackson Blvd Chicago 4 Ill	1-9-13-18-32-37-39
Muirhead Instruments Inc 677 5 Ave New York 22 NY	7-15-32	Sarco Co 350 Fifth Ave New York 1 NY	17	Vapor Recovery Systems Co 2820 N Alameda St Compton Calif	26-29-38
Muter Co 1255 S Michigan Ave Chicago 5 Ill	34-35	Scaico Controls Inc Market St Palmyra NJ	9-10-13-21-24-29-35-37-39-40	Vemaline Products Co PO Box 222 Hawthorne NJ	12
Myalex Corp of America 125 Clifton Blvd Clifton NJ	4-38	Schack Electrical Sales Corp 45 W 81 St New York 24 NY	1-2-5-17-28-29-33-35-36-40-42	Victory Eng'g Corp 117 Springfield Rd Union NJ	38-39-40
Nemeth Inc 2223 S Carmelina Ave Los Angeles 64 Calif	24-26-30-31-32-36-40	Sealectric Switch & Relay Corp 6025 N Keystone Ave Chicago 30 Ill	5-13-17-32-35-36	Wade Electric Products Co Box 271 Sturgis Mich	23-28-34
Network Mfg Corp 213 W 5 St Bayonne NJ	32-41	Sensory Inc Pleasantville Rd New Vernon NJ	26	Walkirt Co 141 W Hazel St Inglewood 3 Calif	9
Newark Controls Co 15 Ward St Bloomfield NJ	10-24-45	Shallcross Mfg Co Jackson & Pusey Aves Collingdale Pa	5-7-9-21-28-32-37	Walco Electronics Mfg Co 100 W Green St Rockford Ill	16-28-34-35-41
North Electric Co 553 S Market St Galion Ohio	6-15-28-31-32-36	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	9	Waveguide Inc 14837 Oxnard St Van Nuys Calif	48
Northern Plastics Corp 2nd Market St LaCrosse Wisc	25	Sherman Industrial Electronics Co 505 Washington Ave Belleville NJ	12	Wavelinc Inc Passaic Ave Caldwell NJ	20-21
Notnac Mfg Co 1410 2 St SW Canton 2 Ohio	32	Slater Electric & Mfg Co 45 Sea Cliff Ave Glen Cove NY	5-8-13-28-35-41	Weltronic Co 19500 W 8 Mile Rd Detroit 19 Mich	9
NRC Equipment Corp Sub National Research Corp 160 Charlemont St Newton Highlands 61 Mass	45	Slip King Co of America 3612 W Jefferson Blvd Los Angeles 16 Calif	25-38-40	Western Int'l Co 45 Vesey St New York 7 NY	41
N R K Mfg & Eng'g Co 4601 W Addison St Chicago 41 Ill	20-48	Smith Inc Herman H 2326 Nostrand Ave Brooklyn 10 NY	9-15-16-28-34-35-41	White Electron Devices Inc Rozar 92 4 Ave Haskell NJ	9
Oak Mfg Co 1260 N Clybourn Ave Chicago 10 Ill	21-28-32-34-36-37	Spectrol Electronics Div Carrier Corp 1704 S Del Mar Ave San Gabriel Calif	4-25-32	Wilcolator Co 1001 Newark Ave Elizabeth NJ	2-35-40
Ohmite Mfg Co 3601 Howard St Skokie Ill	5-32	Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	3-20-48	Wind Turbine Co E Market St & P R R W Chester Pa	32
Painton & Co Ltd c/o British Electronic Sales Co Box 132 Oakland Gardens 64 NY	21-28-32-35-41	Stackpole Carbon Co St Marys Pa	25-34-35	Winterburn Mfg Co 11 Whittemore St Putnam Conn	29-33
Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	32-36-37	Star-A Electric Mfg Co 269 Meserole St Brooklyn 6 NY	11-41	Wirt Co Continental Carbon Div 5221 Greene St Philadelphia 44 Pa	34
Parker Metal Goods Co 85 Prescott St Worcester 5 Mass	9	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	15-28-36	Zenith Electric Co 152 W Walton St Chicago 10 Ill	1

92—TESTERS

Testers, Battery	1
Testers, cable	2
Testers, capacitor	3
Testers, cathode ray tube	4

Testers, circuit	5	Booth Co Arthur E		Fox Products Co	
Testers, coil	6	265 S Alexandria Ave		4720 N 18 St Philadelphia 41 Pa	1
Testers, computer	7	Los Angeles 4 Calif	18	Franklin Electronics Inc	7-16
Testers, continuity	8	Briggs Associates		Box 113 Bridgeport Pa	
Testers, crystal	9	10 DeKalb St Norristown Pa	10-21-22	Freed Transformer Co	
Testers, diode	10	Bright Star Industries		1718-36 Weirfield St Brooklyn 27 NY	6-11-13
Testers, distortion	11	600 Getty Ave Clifton NJ	8	F-R Machine Works Inc	
Testers, guided missile	12	British Industries Corp		Electronic & X-Ray Div 26-12 Borough Pl	14-17
Testers, insulation	13	80 Shore Rd Port Washington NY	16	Woodside 77 NY	
Testers, microwave	14	Browning Labs Inc		Fretco Inc	
Testers, motor	15	750 Main St Winchester Mass	14	406 N Craig St Pittsburgh 13 Pa	21
Testers, multifester	16	Burr-Brown Research Corp		General Cement Mfg Co Div Textron Inc	5
Testers, radar	17	Route 4 Box 139 Tucson Ariz	3	400 S Wyman St Rockford Ill	
Testers, relay	18	Burroughs Corp		General Communication Co	
Testers, synchro error	19	6071 2 Ave Detroit 32 Mich	7-12-17	677 Beacon St Boston 15 Mass	12-14-17
Testers, thickness, ultrasonic	20	Cable Electric Products		General Electric Co Apparatus Sales Div	
Testers, transistor	21	234 Daboll St Providence 7 RI	1-2	1 River Rd Schenectady 5 NY	13
Testers, tube, automatic	22	Calidyne Co 120 Cross St Winchester Mass	24	General Kinetics Inc	
Testers, tube socket	23	Calif Technical Industries		555 23 St S Arlington 2 Va	7
Testers, vibration	24	1421 Old County Rd		General Radio Co	
		Belmont 10 Calif	2-5-8-13-14	275 Massachusetts Ave	13
		Canoga Corp		Cambridge 39 Mass	
Admiral Corp		5955 Sepulveda Blvd Van Nuys Calif	12	General Scientific Equipment Co	
3800 W Cortland St Chicago 47 Ill	17	Central Electronics Inc		7516 Limekiln Pike Philadelphia 50 Pa	1
Admittance Namco Corp		1247 W Belmont Ave Chicago 13 Ill	4	General Transistor Corp	
Marine St Farmingdale LI NY	14	Central Research Labs Red Wing Minn	13	91-27 138 Place Jamaica 35 NY	21
Advanced Electronics Inc		Century Engineers		Genisco Inc	
94 Silas Deane Hwy		2741 N Naomi St Burbank Calif	5-7-8	2233 Federal Ave Los Angeles 64 Calif	12
Rocky Hill 9 Conn	24	CG Electronics Corp		Giannini & Co G M	7-12
Advance Instrument Corp		305 Dallas St		918 E Green St Pasadena Calif	
1709 F St Belmar NJ	19	N E Albuquerque New Mex	21	Goodyear Aircraft Corp	
Aero Electronics Co		Chicago Industrial Instrument Co		1210 Massillon Rd Akron 15 Ohio	12-17
1512 N Wells St Chicago 10 Ill	19	865 N Sangamon St		Gotham Audio Development Corp	
Airmec Ltd		Chicago 22 Ill	1-3-4-5-6-8-10-16-21	2 W 46 St New York 36 NY	15
High Wycombe		Christie Electric Corp		Gray Instrument Co	
Buckinghamshire England	13	3410 W 67 St Los Angeles 43 Calif	1	200 E Church Lane	19
Alear Instruments Inc		Chromatic Television Laboratories		Philadelphia 44 Pa	
17 Industrial Ave Little Ferry NJ	20	1501 Broadway New York 36 NY	17	Grem Eng Co	
All American Tool & Mfg Co		Cinema-Television Ltd		488 1 St Brooklyn 15 NY	14-17
8027 Lawndale Ave Skokie Ill	24	Worsley Bridge Rd Lower Sydenham	4-22	Gulton Industries Inc	
Alpha Instrument Co		London S E 26 England		212 Durham Ave Metuchen NJ	20-21-24
43 Hempstead St New London Conn	22	Clifton Precision Products Co		Hauman Instruments Co	
Alto Scientific Co		Marple at Broadway Clifton Heights Pa	19	70 Coolidge Hill Rd Watertown 72 Mass	10
855 Commercial St Palo Alto Calif	7-12	Clough-Brengle Co		Heath Co	
Amerac Inc		6014 Broadway Chicago 40 Ill	3-6	305 Territorial Rd	
116 Topsfield Rd Wenham Mass	14	Computer Instruments Corp		Benton Harbor Mich	1-3-4-11-16
American Electronic Laboratories		92 Madison Ave Hempstead NY	19	Hewlett-Packard Co	
121 N 7 St Philadelphia 6 Pa	21	Consolidated Avionics Corp		275 Page Mill Rd Palo Alto Calif	14
American Machine & Foundry Co		66 Brooklyn Ave Westbury NY	7-12-21	Hewson Co	
Electronics Div		Consolidated Electrodynamics Corp		443 Broad St Newark 2 NJ	2-4-8-12-13-15
1085 Commonwealth Ave Boston 15 Mass	12	300 N Sierra Madre Villa		Hickock Electrical Instrument Co	
American Machine & Foundry Co		Pasadena Calif	12-24	10514 Dupont Ave	
Defense Products Group		Cornell-Dubilier Electric Corp		Cleveland 8 Ohio	1-3-4-5-6-16-22
1101 N Royal St	7-8-10-12-15-17-19-20-21	333 Hamilton Blvd S Plainfield NJ	3	Holtzer Cabot Div Nat'l Pneumatic Co	
American Scientific Development		Craft Labs 209 Ayliffe Ave Westfield NJ	5	125 Amory St Boston 19 Mass	13
336 S Main St Fort Atkinson Wisc	22	Custom Scientific Instruments Inc		Hoover Electronics Co	
Anchor Products Co		541 Devon St Kearny NJ	13	3640 Woodland Ave	
2712 W Montrose Ave		Dallons Labs		Baltimore 7 Md	7-12-14-17
Chicago 18 Ill	4	5066 Santa Monica Blvd	9-20	Hycon Mfg Co	
Anchor Specialty Mfg Co		Los Angeles 29 Calif		707 S Raymond Ave Pasadena Calif	12
Hollister Rd Teterboro NJ	2-5-6-8-21-24	Dante Electric Mfg Co Bantam Conn	8	Ideal Industries Inc	
Anko Mfg Co		Daven Co Route 10 Livingston NJ	10-11	5127 Park Ave Sycamore Ill	5-8
5042 W State St Milwaukee 8 Wisc	22-23	Davenport Mfg Co		Impact-O-Graph Corp	
Apparatus Development Co		1713 E Ashland Ave		1900 Euclid Ave Cleveland 15 Ohio	24
115 Main St Wethersfield 9 Conn	16	Chicago 22 Ill	2-5-6-8-13	Industrial Research Labs	
Associated Research Inc		DeMornay-Bonardi Corp		Div Aeronca Mfg Corp	
3758 W Belmont Ave Chicago 18 Ill	2-13-15	780 S Arroyo Pkwy Pasadena Calif	14	Hilltop & Frederick Rds	1-2-3-4-5-6-7-8-9
Associated Testing Labs		Dice Co J W		Baltimore 28 Md	12-14-16-17-19
409 Clinton Rd Caldwell NJ	24	16 Highwood Ave Englewood NJ	20	Industrial Test Equipment Co	
Audio Accessories		Dit-Mco Inc Electronics Div		55 E 11 St New York 3 NY	3-5-6-7-19
Amityville NY	2	911 Broadway Kansas City Mo	5-8-12	Industrial Transformer Corp	
Authorized Mfrs Service Co		Dunn Eng'g Associates		Gouldsboro Pa	13
919 Wyckoff Ave Brooklyn 27 NY	4	186 Massachusetts Ave	9-21	Industrial Winding Machinery Co	
Avionics Ltd		Cambridge 39 Mass		120 Wall St New York 5 NY	6
PO Box 200 Niagara-on-the-Lake		Durson Co		Instrument Labs	
Ont Canada	11-21	10416 National Blvd Los Angeles 34 Calif	21	315 W Walton Pl Chicago 10 Ill	5-16
Avtron Mfg Inc		Eastern Specialty Co		International Business Machines Corp	
10409 Meech Ave Cleveland 5 Ohio	12	3617 N 8 St Philadelphia 40 Pa	13-18	590 Madison Ave New York 23 NY	22
Baird-Atomic Inc		Elco Corp		International Research Associates	
33 University Rd Cambridge 38 Mass	14-21	M St below Erie Ave		2221 Warwick Ave Santa Monica Calif	21
Baldwin-Lima-Hamilton Corp		Philadelphia 24 Pa	23	International Research & Development Corp	
Electronics & Instrumentation Div		Electric Storage Battery Co		797 Thomas Lane Columbus 16 Ohio	24
42 4 Ave Waltham 54 Mass	2	Exide Battery Div 42 S 15 St		Jackson Electrical Instrument Co	
Barker & Williamson Inc		Philadelphia 2 Pa	1	18 S Patterson Blvd Dayton 2 Ohio	4-22
Canal & Beaver Sts Bristol Pa	11	Electro Impulse Lab Inc		Johnson Aircraft Eng'g Co M J	
Bassett Inc Rex		208 River St Red Bank NJ	14	Box 10 Morrisown Airport	2-5
1314 NE 17 Ct		Electro-Mechanical Div General Riveters Inc		Morristown NJ	
Ft Lauderdale Fla	9	785 Hertel Ave Buffalo 7 NY	15	J-V-M Eng'g Co	
Beckman Instruments Inc Data & Control		Electro-Mec Lab Inc		4633 S Lawndale Ave Lyons Ill	14-17
Systems Scientific Instrument Div		47-51 33 St Long Island City 1 NY	19	Kaiser Aircraft & Electronics Corp	
325 N Muller Ave		Electronic Brazing Co		Toledo Electronics Div	
Anaheim Calif	7-8	140 Glenridge Ave Montclair NJ	5	P O Box 437 Toledo Ohio	12
Bendix Aviation Corp Bendix Radio Div		Electronic Designs Inc		Kartron	
East Joppa Rd Towson 4 Md	7-17	28 School St Yonkers NY	5-8-16	P O Box 472 Huntington Beach Calif	6
Bendix Aviation Corp		Electronic Instrument Co		Kay Electric Co	
1104 Fisher Bldg Detroit 2 Mich	12-17	84 Withers St Brooklyn 11 NY	1-21-22	14 Maple Ave Pine Brook NJ	5-6-9-10-24
Bernco Engineering Corp		Electronic Measurements Corp		Kearfott Inc Western Div	
2320 S Tibbs Ave Indianapolis 41 Ind	8-16	625 Broadway New York 12 NY	1-16-21-22	1484 Oxnard St Van Nuys Calif	17
Biddle Co James G		Electronic Research Associates		Keystone Electronics Corp	
1316 Arch St Philadelphia 7 Pa	2-13-15	67 E Centre St Nutley 10 NJ	21	423 Broome St New York 13 NY	5
B & K Mfg Co		Electronic Specialty Co		King Electric Equipment Co	
3726 N Southport Chicago Ill	4-6-21-22	5121 San Fernando Rd		9123 Inman Ave Cleveland 5 Ohio	1-6-15
Bliss Electronic Corp		Los Angeles 39 Calif	12-18	Kit-Tronics	
Box 366 Sussex NJ	2-5-8-13	El-Tronics Inc		2315 Hendola Dr	
Bogue Electric Mfg Co		Penn Ave Mayfield Pa	9-10-21-22	N E Albuquerque New Mex	21
Iowa Ave Paterson 3 NJ	1	Epo Electronics Inc		Lab Corp E Onondage Skaneateles NY	15-24
Bolton Labs Inc		140 Liberty St New York 6 NY	4-5-13-16	Land-Air Inc	
W Main St Bolton Mass	14-18	Erwood Inc		7444 W Wilson Ave Chicago 31 Ill	24
		1770 W Berteau Ave Chicago 13 Ill	24	Land-Air Inc Instrument & Electronic Div	
		Farrand Controls Inc		2133 Adams Ave San Leandro Calif	24
		4401 Bronx Blvd New York 70 NY	19	Lavoie Labs Inc	
		Fecker Inc J W		Matawan-Freehold Rd	
		6592 Hamilton Ave Pittsburgh 6 Pa	12	Morganville NJ	2-8
		Feiler Eng'g & Mfg Co		Lieco Inc	
		8026 N Monticello Ave Skokie Ill	4-5-8	3610 Oceanside Rd Oceanside LI NY	14
		First Electronics Corp		Line Material Industries	
		117 Blue Hill Ave Boston 19 Mass	2	700 W Michigan Milwaukee Wisc	13

AMP Inc Harrisburg Pa	35	Hayward Scientific Glass Corp	15	Pacific Universal Products Corp	18
Anchor Products Co		217 N Magnolia Ave Whittier 1 Calif		168 Vista Ave Pasadena 8 Calif	
2712 W Montrose Ave Chicago 18 Ill	32	Hexacon Electric Co		Perkin-Elmer Corp	15
Annis Co R B		161 W Clay Ave	29-30-31-32	Main Ave Norwalk Conn	
1101 N Delaware St Indianapolis 2 Ind	10	Roselle Park NJ		PIC Design Corp	38
Arro Expansion Bolt Co		High Speed Hammer Co	12-40	477 Atlantic Ave E Rockaway LI NY	
North Boone Ave Marion Ohio	8	313 Norton St Rochester 21 NY		Pittsburgh Coil Co	32
Artos Eng'g Co	40	Holub Industries Inc	40	Box 700 Carnegie P	
2757 S 28 St Milwaukee 46 Wisc		413 De Kalb Ave Sycamore Ill		Poole Instruments Inc	17
Atlantic & Pacific Wire & Cable Co	40	Huck Mfg Co	22	150 Express St Dallas 21 Texas	
112-01 Northern Blvd E Elmhurst LI NY		2480 Bellevue Ave Detroit 7 Mich		Porter-Cable Machine Co	6-23
Bache & Co Semon	18	Hunter Tools	1-26	17414 N Salina St Syracuse 8 NY	
636 Greenwich St New York 14 NY		9851 Alburts Ave Whittier Calif		Porter Inc H K	5
Bausch & Lomb Optical Co	18	Ideal Industries Inc	10-40	74 Foley St Somerville 43 Mass	
628 St Paul St Rochester 2 NY		5127 Park Ave Sycamore Ill		Precision Supply Co	8
Belden Mfg Co	40	iE Mfg	1-20-35	292 Belmont Ave Paterson 2 NJ	
4647 W Van Buren St Chicago 44 Ill		325 N Hoyne Ave Chicago 12 Ill		Preis Engraving Machine Co HP	10
Black & Decker Mfg Co	6-23-41	Insuline Corp of America	37	651 U S Hwy 22 Hillside NJ	
E Panna Ave Towson 4 Md		186 Granite St Manchester NH		Quality Control Corp	8
Blaco Mfg Co	8	Jones Electronics Hiram	35	401 Broadway New York 13 NY	
6541 Euclid Ave Cleveland 3 Ohio		2313 W Olive St Burbank Calif		Radial Cutter Mfg Corp	23
Blonder-Tongue Laboratories	5	Kedman Co	26	831 Bond St Elizabeth 4 NJ	
9-25 Alling St Newark 2 NJ		233 S 5 W Salt Lake City 1 Utah		Reid Mfg Co A	28
British Electronics Sales	36-37	Keller Tool Div Gardner-Denver Co	26	80 Shore Rd Port Washington NY	
Box 132 Oakland Gardens 64 NY		1333 Fulton St Grand Haven Mich		Revere Corp of America	24
Brush Nail Expansion Bolt Co	7	Kelnor Mfg Corp	31-32	Wallingford Conn	
Greenwich Conn		1355 Market St San Francisco 3 Calif		Richmont Inc	26
Buchanan Electrical Products Corp	19-23	Kemode Mfg Co	32	922 S Myrtle Ave Monrovia Calif	
225 Route 22 Hillside NJ		161 W 18 St New York 11 NY		Rogan Bros	14-16
Buhl Optical Co	15	Keystone Electronics Corp	1	8031 N Monticello Ave Skokie Ill	
1009 Beech Ave Pittsburgh 33 Pa		423 Broome St New York 13 NY		Safetee Glass Co	18
Cable Electric Products	2	King Electric Equipment Co	10	4717 Stenton Ave Philadelphia 44 Pa	
234 Daboll St Providence 7 RI		9123 Inman Ave Cleveland 5 Ohio		Schmidt Inc Geo T	16
Cambridge Thermionic Corp	35	Klein & Sons Mathias	19-25-41	4100 N Ravenswood Ave Chicago 13 Ill	
445 Concord Ave Cambridge 38 Mass		7200 McCormick Rd Chicago 45 Ill		Scientific Glass Apparatus Co	15-17-38
Cerro De Pasco Sales Corp	2	Kraeuter & Co		100 Lakewood Terrace	
300 Park Ave New York 22 NY		585 18 Ave	19-20-21-26-27-38-41	Bloomfield NJ	
Chase Brass & Copper Co	32	Newark 3 NJ		Sensory Inc	17
236 Grand St Waterbury 20 Conn		Krengel Mfg Co	16	Pleasantville Rd New Vernon NJ	
Clauss Cutlery Co	25-27-38	227 Fulton St New York 7 NY		Shakeproof Div Illinois Tool Works	26
223 Prospect St Fremont Ohio		Kwikheat Mfg Co	31-32	St Charles Rd Elgin Ill	
Cole Radio Works	29-30-31-32	3732 San Fernando Rd		Simonds Saw & Steel Co	2-11-23
86 Westville Ave Caldwell NJ		Glendale 4 Calif		470 Main St Fitchburg Mass	
Contact Inc Maynard Mass	29-40	Lenk Mfg Co	29-31-32	Skil Corp	6-23-26
Corry-Jamestown Mfg Corp	11	30 Cummington St Boston 15 Mass		5033 Elston Ave Chicago 30 Ill	
48 N Center St Corry Pa		Lerco Electronics Inc	35	Skyway Precision Tool Co	26-41
Crescent Eng'g & Research Co	17	501 S Varney St Burbank Calif		825 E Broadway San Gabriel Calif	
5440 N Peck Rd El Monte Calif		Liberty Mirror Div	18	Smith Inc Herman H	36-37
Dee Electric Co	28	Libbey Owens Ford Glass Co		2326 Nostrand Ave Brooklyn 10 NY	
1101 N Paulina St Chicago 22 Ill		Brackenridge Pa		Snap-on Tools Corp	6-8-12-19-20-21-41
Dittmore-Freimuth Corp	28	Linde Air Products Div	32	Kenosha Wisc	
2517 E Norwich St Milwaukee 7 Wisc		Union Carbide & Carbon		Sta-Warm Electric Co	28
Dry Screen Process Inc	10	30 E 42 St New York 17 NY		553 N Chestnut St Ravenna Ohio	
1016 Madison Ave Pittsburgh 12 Pa		Link Aviation Inc	17	Stevens Walden Inc	
Du Mont Labs Inc Allen B	6	Binghamton NY		Shrewsbury St	1-21-26-41
760 Bloomfield Ave Clifton NJ		Liton Industries of Calif	35	Worcester 4 Mass	
Duro Specialty Co	36	336 N Foothill Rd Beverly Hills Calif		Studebaker Hydraulic Products Co	12
811 Boston St Lynn Mass		Liton Industries Components Div	35	1733 N 33 Ave Melrose Park Ill	
Ed-Berl Products Inc	1-26	5873 Rodeo Rd Los Angeles 16 Calif		Stueck Inc W Whitney	23
87 Merrick Rd Baldwin NY		Lufkin Rule Co	17	Box 355 Old Saybrook Conn	
Edmund Scientific Co	15-18	1730 Hess St Saginaw Mich		Starvertant Co P A Addison Ill	41
101 E Gloucester Pike Barrington NJ		Luma Electric Equipment Co	10	Taffet Radio & TV	1
Eitel-McCullough Inc	37	PO Box 132 Toledo 1 Ohio		27-05 Brooklyn-Queens Expressway	
798 San Mateo Ave San Bruno Calif		Magnetic Devices Corp	34	W Woodside 77 NY	
Electric Soldering Iron Co	28-29-31-32	103 S Van Brunt St Englewood NJ		Technical Devices Co	40
W Elm St Deep River Conn		Martindale Electric Co	10-23	2340 Centinela Ave Los Angeles 64 Calif	
Electric Terminals Corp	35	Box 617 Edgewater Branch		Technicraft Co	32
2019 Center St Cleveland 13 Ohio		Cleveland 7 Ohio		1156 Commonwealth Ave	
Elgin National Watch Co	8	Matthews & Co Jas H	16	Boston 34 Mass	
107 National St Elgin Ill		3956 Forbes St Pittsburgh 13 Pa		Terris Div Consolidated Siphon Supply Co	15
Elm Labs	13	Maymer Corp	24	22 Wooster St New York 13 NY	
10 Washington Ave		1961 W 112 St Cleveland 2 Ohio		Thomas & Betts Co	35
Hastings-on-Hudson NY		Midget Louver Co	23	36 Butler St Elizabeth NJ	
Engineering Developments Inc	15	6-8 Wall St Norwalk Conn		Thomas Instrument Co Phoenix NY	40
Forest Ave Middletown RI		Mil Case Corp	13	Tinsley Labs Inc	15
Enthoven Solders Ltd	28-31-32	35-18 37 St Long Island City NY		2526 Grove St Berkeley 4 Calif	
113 N Water St Rochester 4 NY		Millers Falls Co	39	Tipco Mfg Co	41
Eraser Co 1068 S Clinton St Syracuse 4 NY	40	57 Wells St		14760 Calvert Van Nuys Calif	
Ercona Corp 551 5 Ave New York 17 NY	15	Greenfield Mass	2-6-7-12-17-19-20-26-41	TV Hardware Mfg Co Div Textron Inc	18
Erikson Specialized Tool Co	1-5-7-19-21-26	Minneapolis-Honeywell Regulator Co		400 S Wyman St Rockford Ill	
1902 S Lexington Rd		Industrial Div		Ungar Electric Tools Inc	31-32
Pico 1 Calif		Wayne & Windrim Aves	39	4101 Redwood Ave	
Exact Weight Scale Co	24	Philadelphia 44 Pa		Los Angeles 66 Calif	
944 W 5 Ave Columbus 8 Ohio		Mitchell Industries Inc		United Shoe Machinery Corp	34
Feay Co Neal	24	PO Box 17 F M		140 Federal St Boston 7 Mass	
427 Olive St Santa Barbara Calif		1195 Municipal Airport	29-31-32	Utica Drop Forge & Tool Div Kelsey-Hayes Co	19-41
Federal Products Corp	17	Mineral Wells Texas		2415 Whitesboro St Utica 4 NY	
1144 Eddy St Providence RI		Moody Machine Products Co	7-26	Vaco Products Co	
Forsberg Mfg Co	24	40 Dudley St Providence 5 RI		317 E Ontario St	5-19-26-35-41
125 Seaview Ave Bridgeport 1 Conn	2-7-23-26	Morris Co J I	8	Chicago 11 Ill	
Gaertner Scientific Corp	24	390 Elm St Southbridge Mass		Vulcan Electric Co	28-30-31-32
1250 Wrightwood Ave Chicago 14 Ill		Multicoore Solders Ltd	33	88 Holten St Danvers Mass	
Gee-Lar Mfg Co	14-31-36-37	Maylands Ave		Waage Electric Inc	28
418 S Wyman St Rockford Ill		Hemel Hempstead		720 Colfax Ave Kenilworth NJ	
General Cement Mfg Co Div Textron Inc	3-5-26	Hartfordshire England		Wall Mfg Co P Grove City Pa	29-30-31-32
400 S Wyman St Rockford Ill		National Cine Equipment Inc	15	Walsco Electronics Mfg Co	1-5-18-36
General Components Inc	35	209 W 48 St New York 36 NY		100 W Green St Rockford Ill	
225 E 144 St Bronx 51 NY		New York Mfg & General Supply Co	15	Wassco Electric Products Corp	31-32
General Electric Co Apparatus Sales Div	28-32	10-38 Jackson Ave Long Island City 1 NY		204 S Larkin Ave Joliet Ill	
1 River Rd Schenectady 5 NY		Numberall Stamp & Tool Co	16	Weller Electric Corp	29-31-32
Goe Eng'g Co	35	Huguenot Park Staten Island 12 NY		601 Stone's Crossing Rd	
219 S Mednik Ave Los Angeles 22 Calif		Ohaus Scale Corp	24	Easton Pa	
Gordon Enterprises	15	1050 Commerce Ave Union NJ		Wen Products Inc	
5362 N Cahuenga Blvd		Vashon Wash	24	5806 Northwest Highway	6-23-29
N Hollywood Calif		Opto Eng'g Co	15	Chicago 31 Ill	
Greenlee Tool Co	20-26	3524 W Washington Blvd		Wenzel Projector Co	20
2136 12 St Rockford Ill		Los Angeles 18 Calif		2505 S State St Chicago 16 Ill	
Gries Reproducer Corp	16	Orbit Industries	38	White & Son James L	1
125 Beechwood Ave New Rochelle NY		Box 666 Reseda Calif		374 Verona Ave Newark 4 NJ	
Griffin Co John	16	Oryx Co	32	Whitney Metal Tool Co	20
2157 James Ave St Paul 5 Minn		9015 Wiltshire Blvd Beverly Hills Calif		110 Forbes St Rockford Ill	
Hal-Hen Co	6	Pacific Optical Corp	15	Wilder Mfg Co	30
36-14 11 St Long Island City 6 NY		120 Glasgow Ave Inglewood 1 Calif		Mechanic St & Erie RR Port Jervis NY	
Hamilton Glass Co	18			Wire Stripper Co	40
2750 W Grand Ave Chicago 12 Ill				1721 Eastham Ave E Cleveland 12 Ohio	
				Wybar Electronics Inc	40
				P O Box 388 Auburn NY	

Wyzenbeek & Staff Inc
233 N California Ave Chicago 12 Ill 3-23
Xcelite Inc Bank Orchard Park NY 19-36-41

94—TRANSFORMERS

Transformers, antenna matching 1
Transformers, audio 2
Transformers, audio, very low frequency 3
Transformers, autotransformer.. 4
Transformers, bias 5
Transformers, current 6
Transformers, filament 7
Transformers, flyback 8
Transformers, 400 cycle 9
Transformers, HV 10
Transformers, instrument 11
Transformers, insulation 12
Transformers, isolation 13
Transformers, microwave 14
Transformers, modulation 15
Transformers, plate 16
Transformers, plug-in 17
Transformers, power receiving.. 18
Transformers, power transmitting 19
Transformers, precision matched 20
Transformers, precision TV deflection 21
Transformers, precision voltage dividing 22
Transformers, pulse 23
Transformers, RF-IF 24
Transformers, toroidal 25
Transformers, transistor 26
Transformers, ultrasonic 27
Transformers, vibrator 28
Transformers, voltage, regulating 29
Transformer laminations 30
Transformer windings 31

Accurate Eng'g Co
2005 Blue Island Ave
Chicago 8 Ill 4-7-12-13-16

Ace Coil & Electronics Co
916 Lincoln Hwy Metuchen NJ 24

Acme Electric Corp
Water St 4-9-10-11-12-13-14-15-16-17
Cuba NY 18-19-20-21-23-25-26-27-28-29

Acro Products Co
369 Shurs Lane Philadelphia 28 Pa 2-4-9-18-23
A C Transformer Corp
89 Madison St
Newark 5 NY 4-7-10-12-13-16-18-19

Adler Electronics Inc
1 LeFevre Lane New Rochelle NY 24

Admittance Namco Corp
Marine St Farmingdale LI NY 11

Aerovox Corp Pacific Coast Div
2724 S Peck Rd 1-2-5-6-7-9-12
Monrovia Calif 15-16-18-24-25

Airmec Ltd
High Wycombe
Buckinghamshire England 29

Airpax Products Co
Middle River 2-3-4-5-6-7-9-10-15
Baltimore 20 Md 16-17-18-19-23-26-28

Airtron Inc
1101 W Elizabeth Ave Linden NJ 11

Aladdin Electronics
100 Blanton Ave Nashville 10 Tenn 23-21

Allied Engraving & Stamping Co
17 Elm St Buffalo 3 NY 30

Allis-Chalmers Mfg Co
Milwaukee 1 Wisc 4-11-18-19-29

Altec Lansing Corp
1515 S Manchester Ave 2-3-4-5-6-7-8-9-11
Anaheim Calif 13-15-16-17-23-25-27-29

Alto Scientific Co
855 Commercial St Palo Alto Calif 23

American Coil Inc
21-28 45 Rd Long Island City 1 NY 24

American Rectifier Corp
95 Lafayette St New York 13 NY 4-9-29

American Research & Mfg Corp
920 Halpine Ave Rockville Md 25

American Transformer Co
Div Standard Electronics 1-2-3-4-5-6-7-8-9-10
285 Emmett St 11-12-13-14-15-16-17-18-19-20
Newark 5 NJ 21-22-23-24-25-26-27-28-29

AMP Inc Chemicals Dielectrics Div
155 Park St Elizabethtown Pa 7-9-10-23

Anchor Products Co
2712 W Montrose Ave Chicago 18 Ill 7-29

Anderson Controls Inc
2777 Mannheim Rd
Des Plaines Ill 4-6-7-9-18-19

Annis Co R B
1101 N Delaware St Indianapolis 2 Ind 6-11

Applied Radiation Corp
2404 N Main St Walnut Creek Calif 23

A P W Co 72 W Main St Rockaway NJ 26

Arco Transformer & Electric Corp
1602 S Hanna St 1-2-3-4-5-6-7-9-10-11
Ft Wayne 5 Ind 12-13-14-16-17-24-26-28

Arnold Eng'g Co
P O Box G Marengo Ill 30

Arnold Magnetics Corp
4615 W Jefferson Blvd
Los Angeles 16 Calif 9-20-22-25-29-31

Arted Co
367 Worthington St Springfield 3 Mass 24

Associated Research Inc
3758 W Belmont Ave Chicago 18 Ill 6

Atlas Eng'g Co
176 Blue Hill Ave 2-3-4-5-6-7-8-9-10-11
Roxbury 19 12-13-14-15-16-17-18-19
Mass 20-21-22-23-24-25-26-27-28

Audio Development Co,
2833 13 Ave S 1-2-3-4-5-6-7-9-11-13-15
Minneapolis Minn 16-17-20-23-25-26-27-29

Automatic Coil Co
415 Bedford Ave Brooklyn 11 NY 24-26

Avion Div ACF Industries Inc
11 Park Pl 1-9-10-11-20
Paramus NJ 23-24-25-26-29

Avionics Ltd
P O Box 200 Niagara-on-the-Lake
Ont Canada 14

Ballastran Corp
1701 N Calhoun St 2-3-4-5-6-7-9-10-13-15
Ft Wayne Ind 16-17-20-23-25-26-28

Barker & Williamson Inc
Canal & Beaver Sts Bristol Pa 1-23-24-25-26

Barwood Electronics Inc
921 E Broadway
Glendale 5 Calif 2-3-4-7-9-10-16-17-26

Basler Electric Co
601 5 St 3-4-5-6-7-9-10-11-12-13-14-15-16-17
Highland Ill 18-19-20-22-23-25-26-27-28-29-31

Berkshire Labs
586 Bank Village Greenville NH 17-23

Better Coil & Transformer Corp
Goodland 2-3-4-6-7-9-10-11-12-13
Ind 16-18-19-20-26-28-31

Bitterman Electric Co
Barlow St Canaan Conn 4-6-11-25

Blackburn Electronic Corp
55 W 7 St Wyoming Pa 25

Blonder-Tongue Laboratories
9-25 Alling St Newark 2 NJ 1

Bogue Electric Mfg Co
Iowa Ave Paterson 3 NJ 6-9-19

Brew & Co Richard D
90 Airport Rd Concord NH 23

Bristol Co
P O Box 1790 EITT Waterbury 20 Conn 11

Brubaker Electronics Inc
3652 Eastham Dr Culver City Calif 23

Budd Stanley Co
43-01 22 St Long Island City 1 NY 14

Burrroughs Corp Electronic Instruments Div
1209 Vine St Philadelphia 7 Pa 23

Cable Electric Products
234 Daboll St Providence 7 RI 6-17-19

Caddell-Burns Mfg Co
40 E 2 St Mineola NY 24

Calbest Electronics Co
4801 Exposition Blvd Los Angeles 16 Calif 24

Caledonia Electronics & Transformer Corp
P O Box 298 2-4-7-9-10-11
Caledonia NY 15-16-22-23-25

Calif Magnetic Control Corp
11922 Valerio St 2-3-4-5-6-7-9-10-11
N Hollywood 12-13-15-16-17-18-19
Calif 20-21-22-23-25-26-27-28-29

Cambridge Thermionic Corp
445 Concord Ave Cambridge 38 Mass 24-26

Campbell Co Colin
Westville Ave Ext 2-4-6-7-9-11-12
Danbury Conn 13-18-19-23-25-29

Campbell X-Ray Corp
110 Cummington St 4-6-7-9-10-12-13
Boston 15 Mass 16-17-18-19-23

Carad Corp
2850 Bay Rd
Redwood City Calif 9-10-15-23-25

Carol Electronics Corp
315 W Stephen St
Martinsburg W Va 2-4-7-19-28

C B C Electronics Co
2601 N Howard St Philadelphia 33 Pa 4-23

CELCO Constantine Eng'g Labs Co
P O Box 555 2-3-4-5-6-7-8-9-10-11-12-13
Mahwah NJ 15-17-20-21-22-23-24-25-26-27-28

Central Coil Co
1720 N Luett St 1-2-3-4-5-6-7-9-11-13-16-17
Indianapolis 22 Ind 18-20-21-22-23-24-26-28

Central Transformer Co
910 W Jackson Blvd 2-3-4-5-6-7-9-10-12-13-14
Chicago 7 Ill 15-16-18-19-23-29

Century Coil Corp
1534 N Clybourn Ave
Chicago 10 Ill 4-9-12-13-16-19

Chicago Electronic Eng'g Co
3223 W Armitage Ave Chicago 47 Ill 2-7-9-19

Chicago Magnetic Control
1616 N Damen Ave Chicago 47 Ill 2-9

Chicago Standard Transformer Corp
3501 W Addison St 2-4-5-7-8-9-10-13-15
Chicago 31 Ill 16-18-19-21-23-26-28-29

Chicago Telephone of Calif
105 Pasadena Ave S Pasadena Calif 29

Cinema-Television Ltd
Worsley Bridge Rd Lower Sydenham
London SE 26 England 21

Coil Company of America
207 Washington St 2-3-4-5-7-9-10-12
Northvale NJ 13-15-16-17-18
19-22-25-26-28

Coil Eng'g & Mfg Co
Roanoke Ind 2-4-6-7-16-18-26-28

Coil Winders Inc
New York Ave 1-2-3-4-5-6-7-9
Westbury LI NY 10-24-25-26-28-29

Columbus Process Co
2850 Southeastern Ave 2-3-4-6-7-9-13-15
Columbus Ind 16-17-18-19-21-22-26-28

Communication Accessories Co
110 St & 71 Hwy 4-5-6-7-9-10
Hickman Mills Mo 11-12-13-15-16-17
18-19-20-22-23-24
25-26-27-28-29

Consolidated Productions Inc
Broward Int'l Airport Ft Lauderdale Fla 8

Control Corp
718 Central Ave NE 7-12-13
Minneapolis 14 Minn

Crescent Eng'g & Research Co
5440 N Peck Rd El Monte Calif 11

Crest Transformer Corp
1834 W North Ave 2-3-4-5-7-9-10-11
Chicago 22 Ill 13-15-16-18-19-26-28

Crittenden Transformer Works
1220 Nadeau St 4-6-7-9-10-12-13-16
Los Angeles 1 Calif

Cycle Transformer Corp
356 Glenwood Ave 2-3-4-5-7-9-12
E Orange 11 NJ 13-15-16-22-26-27

Dallons Labs
5066 Santa Monica Blvd 27
Los Angeles 29 Calif

Dane Electronic Labs Inc
P O Box 209 Salem Mass 1

Davenport Mfg Co
1713 N Ashland Ave Chicago 22 Ill 6

Del Electronics Corp
41 N MacQuesten Pkwy 4-6-7-9-10
Mt Vernon NY 11-12-13-16-17-18-19

Delevan Electronics Corp
Roycroft Campus E Aurora NY 24

DeMornay-Bonardi Corp
780 S Arroyo Pkwy Pasadena Calif 14

Delta Radio Co
115 Worth St New York 13 NY 1

Dietz Design & Mfg Co 2-3-4-9-10-11-15-16
Grandview 13 Mo 17-18-19-20-23-24-25-31

Digitronics Corp
35-10 36 Ave Long Island City 6 NY 23

Dilectron Div Gudeman Co
2669 S Myrtle Ave 2-3-17-23
Monrovia Calif 2-4-7-9-10-11-13-15-16

Dinion Coil Co 17-18-19-22-23-25-26-28
Caledonia NY

Dittmore-Freimuth Corp
2517 E Norwich St Milwaukee 7 Wis 25

Dormeyer Industries
3418 Milwaukee Ave Chicago 41 Ill 18-19

D & M Products
13144 W McNichols Rd Detroit 35 Mich 28

D & R Ltd
402 E Gutierrez St Santa Barbara Calif 25

Dyna Co
5142 Master St Philadelphia 31 Pa 2-18

Edko Electronics Eng'g Co 2-3-4-5-6-7-9
202 Grand St 10-11-12-13-15-16-17-18
Brooklyn 11 NY 19-20-25-26-27-28-29

Electran Mfg Co
1901 Clybourn Ave 2-4-5-6-7-9-10-11
Chicago 14 Ill 12-13-15-16-19-28

Electrical Specialty Co
158 11 St San Francisco 3 Calif 30

Electrical Windings Inc
2015 N Kolmar Ave 2-3-4-6-7-9-10-13
Chicago 39 Ill 16-17-18-19-28-31

Electro Eng'g Works
401 Preda St 2-4-6-7-9-10-11-12
San Leandro Calif 13-14-15-16-19-24-29

Electronic Coil Co
2506 N Ontario St Burbank Calif 10-24

Electronic Computer Co
6191 Ridge Ave Philadelphia 28 Pa 23

Electronic Transformer Co
70 Washington St 2-3-4-5-6-7-9-10-11-12-13-15-16-18-19-23-25-27
Brooklyn 1 NY

Electrosolids Corp
7436 Varna Ave 2-4-9-26
N Hollywood Calif

El-Rad Mfg Co
2800 W Gullom Ave 1-8-23-24-25-26-27
Chicago 18 Ill

Engineered Magnetics Div
Gulton Industries Inc 26
13030 Cerise Ave Hawthorne Calif

Entron Inc
4902 Lawrence St Bladensburg Md 1-24

Epco Products Inc
2500 Atlantic Ave 2-3-4-5-7-9-10-13-15-16-17-18-19-20-21-22-23-24-25-26-27-28
Brooklyn 7 NY

Epso Inc
588 Commonwealth Ave Boston 15 Mass 23

Erie Resistor Corp
644 W 12 St Erie 6 Pa 23-25

ESC Corp
534 Bergen Blvd Palisades Park NJ 23

Espey Mfg Co 4-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28
Congress & Ballston Ave 16-17-18-19-20-21-22-23-24-25-26-27-28
Saratoga Springs NY

Essex Electronics Div NYT
Electronics Inc 23-24-25
7303 Atoll Ave N Hollywood Calif

Essex Electronics
550 Springfield Ave
Berkeley Heights NJ 23-24

Ferranti Electric Inc
30 Rockefeller Plaza 2-3-4-5-7-9-10-12-13-15-16-17-18-19-26-27-28
New York 20 NY

Filtron Co 131-15 Fowler Ave Flushing 55 NY 2-7-8-9-10-16-23-24-25	King Electric Equipment Co 9123 Inman Ave Cleveland 5 Ohio 29	New England Transformer Co 47 McGrath Hwy 1-2-4-5-6-9-10-11-12-14-15 Somerville 43 Mass 17-18-19-20-21-22-23
Fisher Eng'g Inc PO Box 327 Huntington Ind 2-3-4-5-6-7-9-10-12- 13-15-16-17-23-26	Knopp Inc 4224 Holden St Oakland 8 Calif 6-7-9-11-16	New York Coil Co 40 2 Ave Phoenixville Pa 3-3-6-7-18-19-24-29-31
Forbes & Wagner Inc 343 Central Ave Silver Creek NY 8-23-24-25	Kobzy Tool Co 1535 N Dayton St Chicago 22 Ill 30	New York Transformer Co 3 Ave Alpha NJ 2-4-5-6-7-9-10-13-14-15 16-17-18-23-25-26
Foster Transformer Co 3820 Colerain Ave Cincinnati 23 Ohio 4-7-9-13-15- 16-18-23-28	K-V Transformer Corp 20 E Franklin St Danbury Conn 11-13-15-16-17-18 19-20-23-26-27-28	N J E Corp 345 Carnegie Ave Kenilworth NJ 4-5-7-9-10-13-16-18-19-23-29
Fox Products Co 4720 N 18 St Philadelphia 41 Pa 6	Laboratory for Electronics Inc 75 Pitts St Boston 14 Mass 7-9-10-16-23-24-25	Noel Mfg Co 3 W 18 St New York 11 NY 7
Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY 2-3-4-5-7-9-10-11-12- 13-14-15-16-17-18-19- 20-22-23-25-26-27-28	Laminations Co 300 Main St Stamford Conn 30	Northern Plastics Corp 2nd Market St LaCrosse Wis 30
Fugle-Miller Labs Inc 301 Central Ave Clark NJ 1-10-24	Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY 13-15-16-17-18-19-20-22 23-25-26-28-29	North Hills Electric Co 402 Sagamore Ave Mineola LI NY 23-24-27
General Bronze Corp 711 Stewart Ave Garden City NY 14	Lee Electric Inc 566 52 St W New York NJ 4-12-28-29-31	Nothelfer Winding Labs Inc 106 Albemarle Ave Trenton 8 NJ 4-6-7-9-10-11-12 13-16-18-19-25
General Coil Products Corp 43 Roselle St Mineola NY 1-2-24-26	Lee Electric & Mfg Co 2806 Clearwater St Los Angeles 39 Calif 4-6-7-9-11-13-25-28	N R K Mfg & Eng'g Co 4601 W Addison St Chicago 41 Ill 14
General Controls Co 801 Allen Ave Glendale 1 Calif 6	Leonard Electric Products Co 67 34 St Brooklyn 32 NY 1-8-21-24-25	NYT Electronics Inc 2979 N Ontario St Burbank Calif 13-14-15-16-17-18-19 20-23-24-25-26-27-28
General Electric Co Apparatus Sales Div 1 Rivor Rd Schenectady 5 NY 2-5-7-9-11-13-14-15- 16-18-19-23-28-29	Lindberg Eng'g Co 2450 W Hubbard St Chicago 12 Ill 17	Ogden Coil & Transformer Co 3323 W Cermak Rd Chicago 23 Ill 4-6-7-9-10-11-12-13 16-17-18-23-26-28
General Electric Co X-Ray Dept 4855 Electric Ave Milwaukee 1 Wisc 10	Linlar Inc 4101 San Fernando Rd Glendale 4 Calif 2-4-7-9-13-18-26-28	Ohmie Mfg Co 3601 Howard St Skokie Ill 4-29
General Instrument Corp F W Sickles Div Chicopee Mass 8-21-22-25	Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif 2-3-4-5-6-7-8-9-10-11-12 13-14-15-16-17-18-19-23 25-26-27-28-29	Ortho Filter Corp 196 Albion Ave Paterson 2 NJ 1-2-3-4-5-6-7-9-10-11-12 13-14-15-16-17-18-23-25
General Instrument Corp Automatic Mfg Div 65 Gouverneur St Newark NJ 24-26	Luther Electronic Mfg Co 5728 W Washington Blvd Los Angeles 16 Calif 23	Osborne Electronic Corp 712 S E Hawthorne Blvd Portland 14 Ore 2-3-4-5-6-7-9-10-11 11-13-15-16-18-19 20-22-23-24-25-26-28
General Radio Co 275 Massachusetts Ave Cambridge 39 Mass 2-4-9-25	Lynmar Engineers Inc 1432 N Carlisle St Philadelphia 21 Pa 1-24	Osborne Transformer Corp 948 E Lafayette Ave Detroit 7 Mich 4-6-7-9-10-12 13-16-19-22-25-27
General Transformer Co 18240 Harwood Ave Homewood Ill 2-3-4-5-6-7-9-10-11- 12-13-15-16-17- 18-19-20-22-26-28	Macarr Inc 2543 Boston Rd New York 67 NY 4	Oxford Electric Corp 3911 S Michigan Ave Chicago 15 Ill 2-4-7-8-13-21-26-28
Geotronic Labs Inc 1314 Cedar Hill Ave Dallas 8 Texas 3-4-7-9-10-16-23-25-26	McDowell Electronics Inc 105 Forrest St Metuchen NJ 6	Packard Bell Electronics Corp 12333 W Olympic Blvd Los Angeles 64 Calif 23
Gertsch Products Inc 11846 Mississippi Ave Los Angeles 25 Calif 4-11-22	McGregor Electronic Industries Inc 132 1 St McGregor Iowa 2	Palo Alto Eng'g Co 620 Page Mill Rd Palo Alto Calif 2-3-4-5-7-9-10-11-12-13 16-17-18-19-23-26-28-31
Good-All Electric Mfg Co Good-All Bldg Ogallala Nebr 9	Magnatran Inc Box 211 Kearny NJ 4-7-10-12-13-15-16-19	Partridge Transformers Ltd Roebuck Rd Tolworth Surrey England 10-11-12-13-14-15 16-17-18-19-23-26
Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif 9-10-11-13-14-15-16-17-18 19-20-22-23-25-26-27-28-29	Magnetic Amplifiers Inc 632 Finton Ave New York 55 NY 4-9-25-29	PCA Electronics Inc 16799 Schoenborn St Sepulveda Calif 23-25
Gramer-Halldorson Transformer Corp 2734 N Pulaski Rd Chicago 39 Ill 15-16-17-18-19-23-25-26-28	Magnetic Metals Co Hayes Ave & 21 St Camden 1 NJ 30	Pearson Electronics 1200 Bryant St Palo Alto Calif 23
Grand Ra-Tronics Inc 17360 Hayes Rd Grand Haven Mich 2-4-6-7-10-11 13-18-19-27	Magnetic Research Corp 3160 W El Segundo Blvd Hawthorne Calif 23	Peerless Electrical Products 1515 S Manchester Ave Anaheim Calif 2-3-4-5-6-7-9-10 13-15-16-17-20-22
Grand Transformers Inc Beechtree & Marion Sts Grand Haven Mich 2-3-4-5-7-9-12-13 15-16-18-19-20-22-28	Magnetics Inc Box 391 Butler Pa 30	Penn-East Eng'g Corp Willow St Kutztown Pa 2-4-5-7-16
Gray & Kuhn 20 Railroad Ave Roslrvn Heights NY 1-24	Melco Products Inc 301 5 Ave S Minneapolis 15 Minn 12-13-14-15-16-17-18 19-22-23-25-26-28-29	Penn Transformer Corp E Bishop St Ext Bellefonte Pa 8-21
Hall Mfg Co 3901 Wesley Terrace Schiller Park Ill 25	Merit Coil & Transformer Corp 4427 N Clark St Chicago 40 Ill 15-16-18-24-26-28	Permoflux Products Co 4101 San Fernando Rd Glendale 4 Calif 2-3-6-9-16-17-26
Harder Co Donald C 3710 Midway Dr San Diego 10 Calif 2-9-23-24-25-26-31	Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass 20-25	Perma-Power Co 3102 N Elston Ave Chicago 18 Ill 7
Heath Co 305 Territorial Rd Benton Harbor Mich 13	Microlab Okner Pkwy Livingston NJ 14	Pittsburgh Coil Co Box 700 Carnegie Pa 7-16-18-19-28-31
Hermetic Seal Transformer Co P O Box 277 Garland Texas 2-3-4-7-9-13-15 16-19-20-23-25-28	Microtran Co 145 E Mineola Ave Valley Stream NY 16-17-19-20-22-23-26-28-31	Polypash Instrument Co E 4 St Bridgeport Pa 9-17-23-24-25-26
Hevi-Duty Electric Co 4212 W Highland Blvd Milwaukee 1 Wis 4-6-7-12-13	Millen Mfg Co James 150 Exchange St Malden 48 Mass 24	Power Transformer Co 91 Edison Pl Newark 5 NJ 2-3-4-5-6-7-8-9-10 12-13-16-18-22-28-29
Highland Eng'g Co 90 Magnolia St Westbury NY 2-3-4-5-6-7-9-10-12 13-15-16-17-18-19-28	Miller Co J W 5917 S Main St Los Angeles 3 Calif 1-10-23-24-26	Pulse Eng'g Inc 2657 Spring St Redwood City Calif 9-15-20-22-23-25-26
Hindle Transformer Co Woods Church Rd Flemington NJ 4-7-9-10-11-12-13 15-16-17-18-19-23	Milwaukee Transformer Co 5231 N Hopkins St Milwaukee 12 Wis 13-16-17-18-23-25-26	Pye Canada Ltd 82 Northline Rd Toronto 16 Ont Canada 2-3-4-7
Inductor Eng'g Inc 117 Schley Ave Lewes Dela 2-4-7-9-16-18-19-23 25-26-27-28-31	Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa 11	Q L C Corp Flocktown Rd Long Valley NJ 24
Industrial Transformer Corp Gouldsboro Pa 10-11-12-13-14-15-16-17-18 19-20-22-23-25-26-27-28-29	Modern Industries Inc 2601 Colorado Ave Santa Monica Calif 16-22-23-25-26-29	Quam-Nichols Co 234 E Marquette Rd Chicago 37 Ill 2
Insulation Mfrs Corp 565 W Washington Blvd Chicago 39 Ill 30	Mohawk Business Machines Corp 944 Halsey St Brooklyn 33 NY 9-10-11-12-13-14-15-16-17 18-19-20-22-25-26-28-29	Quar Associates Canton Mass 11-22
Interelectronics 2432 Grand Concourse New York 58 NY 5-9-16-18-19-26-29	Molded Fiber Glass Co 4801 Benefit Ave Ashtabula Ohio 12	Radar Design Corp 210 5 Ave New York 16 NY 14
Islip Transformer & Metal Co Beech St Islip NY 1-2-3-4-5-7-9-13 15-16-18-19-24-28	Moloney Electric Co 5390 Bircher Blvd St Louis 20 Mo 7-9-10-15-16-23	Radio Corp of America Commercial Electronic Products Camden 2 NJ 2-4-8-13-17-21
Jack & Heintz Inc 17600 Broadway Cleveland 1 Ohio 6-9	Muirhead Instruments Inc 677 5 Ave New York 22 NY 2-11-27	Radio Industries Inc 5225 N Ravenswood Ave Chicago 25 Ill 23-24-26
Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14 Md 23	Multi-Amp Corp 465 Lehigh Ave Union NJ 4-9-10-11-13	Ram Electronics Inc 600 Industrial Ave Paramus NJ 2-4-8-10-21-23-24
Jensen Mfg Co 6601 S Laramie Ave Chicago 38 Ill 2-4	Mystic Transformers Inc 63 Swanton St Winchester Mass 2-3-4-5-7-9-10 12-13-16-23-27	Ransom Research 323 W 7 St San Pedro Calif 29-33
Johnson Co E F Waseca Minn 24	Narda Corp 160 Herricks Rd Mineola NY 14	Ratigan Electronics Inc 3614 Maple Ave Los Angeles 11 Calif 24
Johnson Electronics Inc 521 Elwell St Orlando Fla 1-2-3-9-20-23-24-25-26-31	National Aircraft Corp Electronics Div 3411 Tulare Ave Burbank Calif 16-18-19-23-24-25-26-28-29	Rayco Electronic Mfg Inc 11116 Cumpston St N Hollywood Calif 25
Johns-Manville 22 E 40 St New York 16 NY 12	National Coil Co P O Box 1237 Sheridan Wyo 1-2-3-5-7-9-21-24-26-27-31	Raypar Inc 7800 W Addison St Chicago 34 Ill 4-7-8-10
Kenyon Transformer Co 840 Barry St New York 59 NY 20-23-26-27-28-29	National Company Inc 61 Sherman St Malden 48 Mass 24	Raytheon Mfg Co 100 River St Waltham 54 Mass 2-6-7-9-10-14-15-16 23-24-25-26-27-29
Keystone Products Co 904 23 St Union City NJ 2-3-5-9-10-13-15-16-18 19-20-23-25-26-28-29	Nems-Clarke Inc 919 Jesup-Blair Dr Silver Spring Md 1	Raytheon Mfg Co Commercial Equip Div 100 River St Waltham 54 Mass 13
	Newcomb Audio Products Co 6824 Lexington Ave Los Angeles 38 Calif 17	Redman Electronics Corp 92 Prospect St Thompsonville Conn 23-24

Reed & Reese Inc
717 N Lake Ave
Pasadena 6 Calif 2-9-11-20-23-31

Repath Pacific Div Arnold Eng'g Co
641 E 61 St Los Angeles 1 Calif 30

Rich Electronics Inc
212 NW 8 Ave Miami 36 Fla 1

RK Mfg Co
P O Box 112 2-4-5-6-7-13-15-16
Marion Ill 17-19-23-26-28

Rogers Electronic Corp
49 Bleecker St New York 12 NY 8

Rollan Electric Co
8233 S Princeton Ave Chicago 20 Ill 24-31

Safetee Glass Co
4717 Stenton Ave Philadelphia 44 Pa 30

Sage Labs Inc
30 Guinan St Waltham 54 Mass 14-24

Sankamo Electric Co 2-3-4-5-6-7-9-10-11-15
Springfield Ill 16-17-18-19-20-25-26-27

Sardtoga Industries 2-4-6-7-9-10-11-13
Congress & Ballston Ave 14-15-17-19-20-21

Saratoga Springs NY 22-23-24-25-28-29-31

Schraack Electrical Sales Corp
45 W 81 St New York 24 NY 4

Servo Corp of America
2020 Jericho Turnpike
New Hyde Park NY 10

Servomechanisms Inc
12500 Aviation Blvd
Hawthorne Calif 17-26

Sierra Electronic Corp
3885 Bohannon Dr Menlo Park Calif 11

Sigmadyne of Conn
P O Box 869
Port Chester NY 2-3-4-9-23-25-29

Signal Transformer Co 2-3-4-5-6-7-9-10-11
902 Coney Island Ave 12-13-15-16-17-18

Brooklyn 18 NY 19-20-22-23-26-27-28

Skysweeper Inc
P O Box 92 2-3-4-5-6-7-9-10
McHenry Ill 11-12-13-15-16-18-19-26-28

SNC Mfg Co
P O Box 277 2-3-4-5-6-7-9-10
Oshkosh Wis 13-15-16-18-19-28

Sola Electric Co
4633 W 16 St Chicago 50 Ill 29

Sorensen & Co Richards Ave
Norwalk Conn 29

Southwestern Industrial Electronics Co
2831 Post Oak Rd
Houston 19 Texas 2-3-9-11-20-25-27

Specialties Inc
Skunks Misery Rd Syosset LI NY 2-6-9-23

Sperry Gyroscope Co Div Sperry Rand Corp
Great Neck NY 14

Sprague Electric Co
Marshall St North Adams Mass 23

Standard Electrical Products Co
2240 E 3 St 2-3-4-5-6-7-9-10-11-12-13
Dayton 3 Ohio 15-16-18-19-25-26-28-29

Standard Electronics Div Radio Eng'g Labs
30th & Borden Sts 2-3-4-5-6-7-9-10-13-15-16
Long Island City NY 19-20-23-25-29

Standard Winding Co
44 Johns St Newburgh NY 8-24-25

Sterling Transformer Corp
297 N 7 St 2-3-4-5-7-9-10-12-13
Brooklyn 11 NY 15-16-17-18-26-27-28

Strong Electric Corp
87 City Park Ave Toledo 1 Ohio 9-30

Summit Coil Co
4 Claremont Rd Bernardville NJ 24

Summit Electronic Products
14706 Arminta St
Van Nuys Calif 7-9-11-15-20-25

Superior Electric Co
83 Laurel St Bristol Conn 4-9-29

Taylor Fibre Co
Norristown Pa 12

Technicraft Labs Inc
Thomaston-Waterbury Rd
Thomaston Conn 14

Technitrol Eng'g Co
1952 E Allegheny Ave Philadelphia 34 Pa 23

Tele-Coil Co
2733 Saunders St Camden 5 NJ 24

Telectro Industries Corp
35-18 37 St
Long Island City 1 NY 1-2-3-9-10-15-18

Telectron Co Div Elliot & Evans
Bldg 9 Broward International Airport
Ft Lauderdale Fla 8

Teleradio Eng'g Corp
Shannon & Barrett Sts
Wilkes-Barre Pa 1-8-24-26

Telex
1633 Eustis St
St Paul 1 Minn 23-25-26

Telkor Inc
N Murray Ridge Rd Elyria Ohio 1

Tel-Rad Electronics Corp
73-20 Trotting Course Lane
Glendale LI 27 NY 1

Tempel Mfg Co
1939 Bryn Mawr Ave Chicago 26 Ill 30

Tensor Electric Development Co
1873 Eastern Pkwy 1-2-3-4-5-6-7-9-10-12
Brooklyn 33 NY 13-15-16-17-18-19-20
21-22-23-24-26-27-28-29

Texas Instruments Inc
6000 Lemmon Ave
Dallas 9 Tex 2-3-6-9-11-18-19-23-26-27

Thomas & Skinner Inc
1120 E 23 St Indianapolis 7 Ind 30

Thermador Electronics Div Norris-
Thermador Corp
2000 S Camfield Ave 2-3-4-6-7-9
Los Angeles 22 Calif 10-13-25-26-28

Todd Products Co 1-2-3-4-5-6-7-8-10-11
156 Gramatan Ave 12-13-14-15-16-17-18
Mt Vernon NY 19-20-21-22-25-26-27-28

Torwico Electronics Inc
1090 Morris Ave
Union NJ 2-4-5-7-9-13-16-25

Transformers Inc 2-3-4-5-6-7-9
200 Stage Rd 10-11-13-15-16-17-18
Vestal NY 19-20-22-23-25-26-27-28

Transformer Technicians Inc 2-3-4-5-6-7-8-9
2608 N Cicero Ave 10-11-12-13-14-15-16-17
Chicago 39 Ill 18-19-20-23-25-26-27-28-29

Transonic Inc 2-3-4-5-6-7-9-10-11-12
808 16 St 13-15-16-17-18-19-20
Bakersfield Calif 22-23-25-26-27-28

Trenton Transformer Corp
P O Box 568 EI 2-3-4-6-7-9
Trenton NJ 10-11-12-13-15-16-18-19

Tresco Inc
3824 Terrace St
Philadelphia 28 Pa 2-7-10-13-15-23-27

Triad Transformer Corp 2-3-4-5-6-7-8-9-10
4055 Redwood Ave 11-12-13-15-16-17-18-19
Venice Calif 20-23-25-26-27-28

Underwood Corp Electronic Computer Div
35-10 36 Ave Long Island City 6 NY 23

Union Electric Products Co
24 Edison Pl 2-3-4-5-6-7-8-9-10-11-12
Newark 2 NY 13-14-15-16-17-18-19-20
21-22-23-25-26-27-28-29

United Transformer Corp
Pacific Div 2-3-4-5-6-7-9-10-11
4008 W Jefferson Blvd 12-13-15-16-18-19
Los Angeles 16 Calif 22-23-25-26-27-28

United Transformer Corp 2-3-4-5-6-7-9-10
150 Varick St 11-12-13-14-15-16-17-18
New York 13 NY 19-20-23-25-26-27-28-29

U S Electronics Corp 1-2-3-5-6-7-8-9-10
278 Warren St 11-12-13-15-16-17-18
Lyndhurst NJ 19-23-24-25-26-27-28-29

Utah Radio Products Corp
1124 E Franklin St Huntington Ind 2-26

Utrad Corp
305 N Briant St 6-7-8-9-10-11-12-13
Huntington Ind 15-16-17-20-23-26-28

Valor Electronic Components Co
5808 Marilyn Ave
Culver City Calif 23-24-25

Vanguard Electronics Co
3384 Motor Ave Los Angeles 34 Calif 24

Varo Mfg Co
2201 Walnut St Garland Tex 9-25

Vibration Research Labs
97 Lake Ave Tuckahoe NY 9-18-19-28-29

Virginia Electronics Co
River Rd & B & O R R 2-3-4-5-6-7-9-10
Washington 16 DC 11-13-15-16-17-18
19-20-23-24-25-26-27-28-29-31

Vokar Corp
7300 Huron River Dr Dexter Mich 24-26

Waco Inc
2032 Broadway
Santa Monica Calif 4-5-6-7-9-10-11-13-16

Waveguide Inc
14837 Oxnard St Van Nuys Calif 14

Waveline Inc
Passaic Ave Caldwell NJ 14

Westbury Electronics Inc
300 Shames Dr Westbury NY 1

Western Coil Products Co
969 Commercial St Palo Alto Calif 24-26

Westinghouse Electric Corp
P O Box 868 2-3-4-5-6-7-9-10-11
Pittsburgh 30 Pa 12-13-15-16-19-23-25

Weston Electrical Instrument Corp
Sub Daystrom Inc 614 Frelinghuysen Ave
Newark 12 NJ 11

Wheeler Insulated Wire Co
150 E Aurora St 2-3-7-9-10-11-12
Waterbury 20 Conn 13-16-17-23-25-26-28

95—TRANSMITTERS

Radiosondes 1

Transmission monitoring equip-
ment 2

Transmitters, amateur 3

Transmitters, aviation 4

Transmitters, broadcast AM.... 5

Transmitters, broadcast FM.... 6

Transmitters, broadcast UHF-TV 7

Transmitters, broadcast VHF-TV 8

Transmitters, citizens radio... 9

Transmitters, code 10

Transmitters, color TV..... 11

Transmitters, direction finding.. 12

Transmitters, facsimile 13

Transmitters, fixed frequency... 14

Transmitters, fixed station comm. 15

Transmitters, loran 16

Transmitters, marine 17

Transmitters, microwave 18

Transmitters, mobile 19

Transmitters, pulse time
modulation 20

Transmitters, radar 21

Transmitters, radio range 22

Transmitters, railroad 23

Transmitters, single sideband.. 24

Transmitters, sonar 25

Transmitters, telemetering 26

Transmitters, UHF 27

Transmitters, VHF 28

Adler Electronics Inc
1 LeFevre Lane
New Rochelle NY 7-8-11-27-28

Advance Industries Inc
640 Memorial Dr
Cambridge 39 Mass 20-21-26

Aeronautical Comm Equip Co
3090 Douglas Rd Miami 33 Fla 28

Aeronautical Electronics Inc
P O Box 6527 Raleigh NC 4-14-15-19-28

Aircraft Radio Corp
Boonton NJ 27-28

Airtron Inc
1101 W Elizabeth Ave Linden NJ 18-21

Alden Electronic & Impulse Recording
Equip Co P O Box 125
Westboro Mass 13

Alto Scientific Co
855 Commercial St Palo Alto Calif 21

Amerac Inc
116 Topsfield Rd Wenham Mass 18-21

American Electronics Co
1203 Bryant Ave New York 59 NY 3

American Machine & Foundry Co
Defense Products Group 2-12-14-15-18
1101 N Royal St Alexandria Va 20-21-22-26

American Microwave Corp
11754 Vose St N Hollywood Calif 18

Applied Electronics Co
213 E Grand Ave
S San Francisco Calif 14-15-17-19

Avia Products Co
7266 Beverly Blvd
Los Angeles 36 Calif 5-9-19-27-28

Babcock Radio Eng'g Inc
7942 Woodley Ave Van Nuys Calif 27

Bailey Meter Co
1050 Ivanhoe Rd Cleveland 10 Ohio 26

Barker Sales Co
996 Edgewater Ave Ridgefield NJ 1

Barker & Williamson Inc
Canal & Beaver Sts
Bristol Pa 3-10-12-14-15-20-24-26

Bassett Inc Rex
1314 N E 17 Ct Ft Lauderdale Fla 15-17

Bell Aircraft Corp
P O Box 1 4-12-15-16-18-19-20
Buffalo 5 NY 21-22-24-25-26-27-28

Bendix Aviation Corp Bendix Radio Div
East Joppa Rd
Towson 4 Md 4-12-14-15-19-21-23-26-27-28

Bendix Aviation Corp
1104 Fisher Bldg
Detroit 2 Mich 1-4-12-19-21-22
23-25-26-27-28

Bristol Co
P O Box 1790 EITT
Waterbury 20 Conn 26

Brush Electronics Co
3405 Perkins Ave Cleveland 14 Ohio 2

Budelman Radio Corp
375 Fairfield Ave
Stamford Conn 14-15-18-27-28

Calif Technical Industries
1421 Old County Rd Belmont 10 Calif 18

Canadian Aviation Electronics Ltd
6214 Cote de Liesse Rd
St Laurent Quebec Canada 4

Canoza Corp
5955 Sepulveda Blvd
Van Nuys Calif 18-20-21

Central Electronics Inc
1247 W Belmont Ave
Chicago 113 Ill 3-4-14-15-24

CG Electronics Corp
305 Dallas St N E Albuquerque New Mex 26

Chattin Eng'g Associates
1401 Middle Harbor Rd Oakland 20 Calif 24

Clegg Labs Div Clegg Inc
Ridgedale Ave
Morristown NJ 1-3-14-15-24-27-28

Collins Radio Co
855 35 St 3-4-5-14-15-17
N E Cedar Rapids Iowa 18-24-27-28

Comac Instrument Co
66-11 99 St Forest Hills 74 NY 3

Communications Co
Coral Gables Fla 14-15-19-28

Consolidated Productions Inc
Broward Int'l Airport
Ft Lauderdale Fla 14-19-27

Continental Electronics Mfg Co
4212 S Buckner Blvd
Dallas 27 Texas 5-7-10-14-15-18-24-27-28

Corbin Corp
5419 56 Pl Riverdale Md 13-24

Cossor (Canada) Ltd
301 Windsor St
Halifax Nova Scotia Canada 28

Crosby Labs Inc
Box 233 Robbins Lane Hicksville NY 24

Dayton Aviation Radio & Equipment Corp
R R 3 Troy Ohio 4-21

Deltone Inc 608 Fayette Ave Mamaroneck NY	18-20	Lysco Mfg Co 1401 Clinton St Hoboken NJ	3-9-14-15-17-19	Scantlin Electronics Inc 11624 W Pico Blvd Los Angeles 64 Calif	8-9
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	18	Mackay Radio & Telegraph Co Marine Div 133 Terminal Ave Clark NJ	12-16-17-28	Seismograph Service Corp 6200 E 41 St Tulsa Okla	22
Dollar Co Robert Communications Equip Div 50 Drumm St San Francisco 11 Calif	15	Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	4-27	Sierra Electronic Corp 3885 Bohannon Dr Menlo Park Calif	18
Edo Corp 13-10 111 St College Point 56 LI NY	25	Manson Laboratories Inc 207 Greenwich Ave Stamford Conn	27	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	12-13-20-21
Electronic Measurements Co Lewis St & Maple Ave Eatontown NJ	13	Maryland Electronic Mfg Corp 5009 Calvert Rd College Park Md	14-22-28	Sonar Radio Corp 3050 W 21 St Brooklyn 24 NY	17
Electronics Development Co 3743 N Cahuenga Blvd N Hollywood Calif	7-8-26-27-28	Maxxon Corp W L 475 10 Ave New York 18 NY	21	Sorenson Industrial Electronic Co R #10 Dover NJ	3
Endeco Eng'g Development Co of Los Angeles 922 E Anaheim St Wilmington Calif	17	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	14-15-17	Springer Aircraft Radio Co Earl W Route 11 Box 330 Indianapolis Ind	4-27
Erco Radio Labs Inc 637 Stewart Ave Garden City NY	4-12-14-15-17-19-24-27-28	Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	14	Standard Electronics Div Radio Eng'g Labs 30th & Borden Sts Long Island City NY	3-5-6-7-8-11 15-17-24-27-28
Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch LI NY	21	Millen Mfg Co James 150 Exchange St Malden 48 Mass	3	Stavid Eng'g Inc U S Route 22 Plainfield NJ	18-21-26
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	20-21-22-23-24-27-28	Minn-Honeywell Regulator Co Ordnance Div Hopkins Minn	25	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	4-9-12-13-17-18-19-20 21-23-24-26-27-28
Foto-Video Labs Inc 25 Amity St Little Falls NJ	11	Mitchell Industries Inc P O Box 17 F M 1195 Municipal Airport Mineral Wells Texas	4-28	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	9-14
Fries Instrument Div Bendix Aviation Corp 1400 Taylor Ave Baltimore 4 Md	1	Model Eng'g & Mfg Inc 50 Frederick St Huntington Ind	1-4-12-14-15-19-27-28	Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	12
Gates Radio Co 123 Hampshire St Quincy Ill	2-5-6-8	Morrow Radio Mfg Co 2794 Market St Salem Ore	3-4-14-15-19	Taller & Cooper 75 Front St Brooklyn 1 NY	26
General Communication Co 677 Beacon St Boston 15 Mass	18-21-26	Mosler Research Products Inc 3 Keeler St Danbury Conn	19	Tarzan Inc Sarkes E Hillside Drive Bloomington Ind	7-8-11-18-28
G & M Equipment Co 7315 Varna Ave N Hollywood Calif	17	Motorola Communications & Electronics Inc 4501 W Augusta Blvd Chicago 51 Ill	9-14-15-18 19-23-27-28	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	2-8-11-20-24-26-27-28
Gray Radio Co 501 Forest Hill Blvd W Palm Beach Fla	17	Muirhead & Co Ltd Beckenham Kent England	13	Tele Communications Inc 41 E 42 St New York NY	5
Grem Eng'g Co 488 1 St Brooklyn 15 NY	18-21	Muirhead Instruments Inc 677 5 Ave New York 22 NY	13	Telecommunications Ltd Newmarket Rd Cambridge England	4
Gyro Electronics Co 325 Canal St New York 13 NY	9-14	Multi-Products Co 21470 Coolidge Hwy Oak Park 37 Mich	3-19-28	Telectron Co Div of Elliot & Evans Bldg 9 Broward International Airport Ft Lauderdale Fla	14
Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	3-4-18-21-26	National Aeronautical Corp Ft Washington Industrial Park Ft Washington Pa	4	Tele-Dynamics Inc 32 & Walnut Sts Philadelphia 4 Pa	18-26
Harvistahl Laboratories 474 E 2 St Brooklyn 18 NY	3-9-11-24	Nevada Air Products Co P O Box 2472 Reno Nev	4-18-20-21-26-27	Telemarine Communications Co 3040 W 21 St Brooklyn 24 NY	4-14-15-17-19
Harvey-Wells Electronics Inc North St Southbridge Mass	3-9-16	Northern Radio Co 143 W 22 St New York 11 NY	26	Telemetering Associates 6419 Indigo St Houston Texas	26-28
Heath Co 305 Territorial Rd Benton Harbor Mich	3	Nuclear-Electronics Corp 2632 W Cumberland St Philadelphia 32 Pa	14-15-17	Telephonics Corp Park Ave Huntington LI NY	18-21-27-28
Hogan Labs Inc 155 Perry St New York 14 NY	13	Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	21-24	Texas Instruments Inc 6000 Lemmon Ave Dallas 9 Texas	21-25
Hoover Electronics Co 3640 Woodland Ave Baltimore 7 Md	1-26	Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	24	Times Facsimile Corp 540 W 58 St New York 19 NY	13
Hudson American Div 25 W 43 St New York 36 NY	17	Parsons Co Ralph M Electronics Div 151 S De Lacey Ave Pasadena Calif	26	Topp Industries Inc 5255 W 102 St Los Angeles 45 Calif	4
Industrial Radio Corp 428 N Parkside Ave Chicago 44 Ill	2-19-23-28	Pearce Simpson Inc 3023 Coral Way Miami 34 Fla	17	Transitron Inc 186 Granite St Manchester NH	3-15-19
Intelix Systems Inc 22 Thames St New York 6 NY	15-18-20-24	Perma-Power Co 3102 N Elston Ave Chicago 18 Ill	9	TV Utilities Corp 112-33 Colonial Ave Corona 68 NY	2
International Research Associates 2221 Warwick Ave Santa Monica Calif	8-28	Phileo Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	18	United Electrodynamics 1200 S Marengo Ave Pasadena Calif	26
Industrial Research Labs Div Aeronca Mfg Corp Hilltop & Frederick Rds Baltimore 28 Md	26	Philmore Mfg Co 113 University Pl New York 3 NY	9-10	Uniwave Inc 2 Marine St Farmingdale NY	27-28
Inland Electronics Corp 500 Rathbone Ave Aurora Ill	14	Planet Service Corp 88-02 88-06 102 St Richmond Hill 18 NY	17	Vapor Recovery Systems Co 2820 N Alameda St Compton Calif	26
I-T-E Circuit Breaker Co Special Products Div 601 E Erie Ave Philadelphia 34 Pa	18	Pratt Albert 114 W Lake View Ave Milwaukee 17 Wis	14-19-28	Varo Mfg Co 2201 Walnut St Garland Texas	28
Jarvis Electronics Corp 1140 Cherry St Winnetka Ill	4	Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	13-15	Victory Eng'g Corp 117 Springfield Rd Union NJ	1
Jerrold Electronics Corp 23 & Chestnut Sts Philadelphia 3 Pa	28	Production Research Corp Thornwood NY	19-20-21-26-28	Virginia Electronics Co River Rd & B & O R R Washington 16 DC	14-15-17
Johnson Aircraft Eng'g Co M J Morristown Airport Box 10 Morristown NJ	26	Pye Canada Ltd 82 Northline Rd Toronto 16 Ontario Canada	7-8-11-15 19-25-27-28	Voron & Co George 835 N 19 St Philadelphia 30 Pa	5-15-26-27-28
Johnson Co E F Waseca Minn	19-24	Pye Corp of America 1149 Raritan Ave Highland Park NJ	14-15-17 19-28	Waldorf Instrument Co Div F C Huyck & Sons Park Ave Huntington Station NY	1
J-V-M Eng'g Co 4633 S Lawndale Ave Lyons Ill	18	Pye Telecommunications Ltd Newmarket Rd Cambridge England	4-12-14-15-17-18 19-20-22-23-28	Waveline Inc Passaic Ave Caldwell NJ	18
Kaar Eng'g Corp 2995 Middlefield Rd Palo Alto Calif	2-9-14-15-17-19-27-28	Radiation Inc P O Box 37 Melbourne Fla	26	Wells-Gardner & Co 2701 N Kildare Ave Chicago 39 Ill	21-22
Kahn Research Labs 22 Pine St Freeport NY	5-24	Radio Corp of America Commercial Electronic Products Camden 2 NJ	5-6-7-8-10 11-15-17-18-19-21	Westinghouse Electric Corp P O Box 868 Pittsburgh 30 Pa	15-17-18-21-24-27-28
Kay Electric Co 14 Maple Ave Pine Brook NJ	7-8-11	Radio Eng'g Labs 36-40 37 St Long Island City 1 NY	15-18-27-28	Westrex Corp 111 8 Ave New York 11 NY	15-24
Laboratory For Electronics Inc 75 Pitts St Boston 14 Mass	21	Radio Frequency Labs Inc Boonton NJ	26	Williams Ship-Radio Co 4366 Mentone St San Diego 7 Calif	17
Lambda-Pacific Eng'g Inc 14725 Arminta St Van Nuys Calif	18	Radio Kits Inc 120 Cedar St New York 6 NY	5	WRL Electronics Inc 3415 W Broadway Council Bluffs Iowa	3
Lane Electronics Mfg Corp 7254 Atoll Ave N Hollywood Calif	4	Raytheon Mfg Co 100 River St Waltham 54 Mass	17-18-21		
Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ	21	Reeves Instrument Corp 215 E 91 St New York 28 NY	18-21-24		
Lear Inc 3171 S Bundy Drive Santa Monica Calif	4-14-28	Resdel Eng'g Corp 330 S Fair Oaks Ave Pasadena Calif	18-27-28		
Lettine Radio Mfg Co 62 Berkeley St Valley Stream NY	3-14-15-28	Rhein Sound Systems Inc 133 Hamilton St New Haven 5 Conn	4-10-14-15-24		
Levinthal Electronic Products Inc 3180 Hanover St Palo Alto Calif	18-21-24-27	Rich Electronics Inc 212 NW 8 Ave Miami 36 Fla	26		
Link-Radio Corp 110 Jericho Turnpike New Hyde Park LI NY	9-14-15-17-19 24-27-28	Rixon Electronics Inc 2414 Reedie Dr Silver Spring Md	2-14-15		
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	4-12-16-20 21-25-26	Royal Communication Systems 11462 Euclid Ave Cleveland 6 Ohio	3-9-14-15-19 27-28		
Lynmar Engineers Inc 1432 N Carlisle St Philadelphia 21 Pa	3-14	Sanders Associates 95 Canal St Nashua NH	18-21		
		Sangamo Electric Co Springfield Ill	25		

96—TRANSMITTER ACCESSORIES

Blowers	1
Conelrad alarms	2
Control consoles	3
Couplers	4
Diplexers	5
Keyers	6
Keys	7
Power supplies	8
Adler Electronics Inc 1 LeFevre Lane New Rochelle NY	3-4
Air-Marine Motors Inc 369 Bayview Ave Amityville NY	1

Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	3	Lambda Electronics Corp 11-11 131 St College Point 56 NY	8	Tubes, klystron	16
Airtron Inc 1101 W Elizabeth Ave Linden NJ	5	Levinthal Electronic Products Inc 3180 Hanover St Palo Alto Calif	8	Tubes, magnetron	17
Alden Products Co 123A N Main St Brockton Mass	7	Lyseo Mfg Co 1401 Clinton St Houoken NJ	8	Tubes, miniature	18
Alford Mfg Co 299 Atlantic Ave Boston 10 Mass	5	Mack Electronics Div Inc Sub Mack Trucks Inc 1120 S 2 St Plainfield NJ	8	Tubes, noise	19
Alto Scientific Co 855 Commercial St Palo Alto Calif	8	Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	3	Tubes, photo	20
Amco Eng'g Co 7333 W Ainslie St Chicago 31 Ill	3	Mercury Electronic Co Box 450 E Red Bank NJ	8	Tubes, priani	21
American Electronics Co 1203 Bryant Ave New York 59 NY	2-4	Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill	2	Tubes, power amplifier	22
Amtron Corp 17 Felton St Waltham 54 Mass	1	Mil Case Corp 35-18 37 St Long Island City NY	3	Tubes, projection	23
Andrew Antenna Corp 606 Beach St Whitby Ontario Can	5	Mobil Electronics Mfg Co 1111 State Rd 67 E Anderson Ind	2	Tubes, receiving	24
Andrew California Corp 941 E Marylind Ave Claremont Calif	5	Multi-Products Co 21470 Coolidge Hwy Oak Park 37 Mich	2-8	Tubes, rectifying, industrial	25
Barker & Williamson Inc Canal & Beaver Sts Bristol Pa	4-6	Nems-Clarke Inc 919 Jesup-Blair Dr Silver Spring Md	6	Tubes, rectifying, receiving	26
Bell Aircraft Corp P O Box 1 Buffalo 5 NY	3-8	Otis Elevator Co Electronic Div 35 Ryerson St Brooklyn 5 NY	6-8	Tubes, rectifying, transmitting	27
Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif	5	Pampa Electronics Corp 7351 Frankford Ave Philadelphia 36 Pa	2	Tubes, scintillation	28
Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md	8	Peer Inc 1200 Milton St Benton Harbor Mich	3	Tubes, spark gap	29
Boehme Inc H O 915 Broadway New York 10 NY	6-7	Peerless Electric Co 1401 W Market St Warren Ohio	1	Tubes, special purpose	30
Bolton Labs Inc W Main St Bolton Mass	2-5	Power Supplies Inc 1005 Olive St Highland Ill	8	Tubes, strobe	31
Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	3	Premier Instrument Corp 52 W Houston St New York 12 NY	5	Tubes, subminiature	32
Buss-Clement-Doughten & Associates 201 B Studio Hill Chester Springs Pa	3	Press Wireless Labs Inc 25 Prospect Pl W Newton 65 Mass	6-8	Tubes, switching	33
Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada	4-6	Production Research Corp Thornwood NY	6	Tubes, thyatron	34
CG Electronics Corp 305 Dallas St NE Albuquerque New Mex	4	Pye Telecommunications Ltd Newmarket Rd Cambridge England	3-4-6	Tubes, TR	35
CGS Laboratories Inc 391 Ludlow St Stamford Conn	4	Radiation Inc PO Box 37 Melbourne Fla	4	Tubes, transducer	36
Clegg Labs Div Clegg Inc Ridgedale Ave Morristown NJ	8	Radio Corp of America Commercial Electronic Products Camden 2 NJ	3	Tubes, transmitting-receiving	37
Collins Radio Co 855 35 St N E Cedar Rapids Iowa	8	Regency Div Idea Inc 7900 Pendleton Pike Indianapolis 26 Ind	2	Tubes, transmitting	38
Continental Electronics Mfg Co 4212 S Buckner Blvd Dallas 27 Texas	8	Ripley Co 1 Factory St Middletown Conn	1	Tubes, traveling wave	39
Craig Systems Inc 90 Holten St Danvers Mass	3	Rotating Components Inc 267 Green St Brooklyn 22 NY	1	Tubes, TV camera iconoscopes	40
Defiance Eng'g & Microwave Corp Beverly Airport Beverly Mass	4-5	Rotron Mfg Co Schoonmaker Lane Woodstock NY	1	Tubes, TV camera image orthicons	41
Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass	5	Sage Labs Inc 30 Guinan St Waltham 54 Mass	5	Tubes, TV picture	42
Diatron Co 3327 Dixie Dr Houston 21 Texas	2	Smith-Meeker Eng'g Co 157 Chambers St New York 7 NY	3	Tubes, TV picture, rebuilt	43
Dressen-Barnes Corp 250 N Vinedo Ave Pasadena Calif	8	Spivey Inc James S 4908 Hampden Lane Washington 14 DC	6	Tubes, ultra violet	44
Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	1	Standard Electronics Div Radio Eng'g Labs 30th & Borden Sts Long Island City NY	5-8	Tubes, voltage regulators	45
Dunlap Electronics 764 9 St Des Moines 14 Iowa	2	Stewart Warner Electronics Div 1300 N Kostner Ave Chicago 51 Ill	8	Tubes, X-ray	46
Dynamic Air Eng'g Inc 7412 Maie Ave Los Angeles 1 Calif	1	Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn	5	Accurate Eng'g Co 2005 Blue Island Ave Chicago 8 Ill	4-25
Eicor Inc 4235 W North Ave Chicago 39 Ill	8	Telechrome Mfg Corp 28 Ranick Dr Amityville LI NY	5-8	Aerolux Light Corp 653 11 Ave New York 36 NY	4-8-11-12-13 15-30-31-44-45
Electric Trading Co 313 Canal St New York 13 NY	1	Telectro Industries Corp 35-18 37 St Long Island City 1 NY	6-8	Allen Electronics Corp 92 Branch St Pontiac Mich	5
Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif	4-5	Tel-Instrument Electronics Corp 728 Garden St Carlstadt NJ	5	Allyn Inc Welch Skaneteles Falls NY	12
Electronics Development Co 3743 N Cahuenga Blvd N Hollywood Calif	5	Topatron Inc 942 E Ojai Ave Ojai Calif	3	American Elite Inc 7 Park Ave New York 16 NY	22-24-26-32
Erco Radio Labs Inc 637 Stewart Ave Garden City NY	3	Tranicon Inc 808 16 St Bakersfield Calif	8	American Lava Corp Subs Minn Mining & Mfr Cherokee Blvd & Mfrs Rd Chattanooga 5 Tenn	6
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	7	Universal Atomics Corp 50 Bond St Westbury LI NY	8	Amglo Corp 4333 Ravenswood Ave Chicago 13 Ill	11-13-20-30-31-44
Gates Radio Co 123 Hampshire St Quincy Ill	3-4-8	US Dynamics Corp 1250 Columbus Ave Boston 20 Mass	8	Amperex Electronic Corp 230 Duffy Ave Hicksville LI NY	8-10-11-12-14-16-17- 18-24-25-26-27-30- 32-34-37-38-45-46
General Bronze Corp 711 Stewart Ave Garden City NY	3-5	Virginia Electronics Co River Rd & B & O RR Washington 16 DC	3-6	Amperite Co 561 Broadway New York 12 NY	3
Guild Electronics Inc 388 Broadway New York 13 NY	8	Warren Mfg Co Newtown Rd Littleton Mass	6	Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	10-12-45
Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	5	Waveline Inc Passaic Ave Caldwell NJ	6	Baird-Atomic Inc 33 University Rd Cambridge 38 Mass	8-10-12-13
Harvey-Wells Electronics Inc North St Southbridge Mass	6-8	Wickes Eng'g & Construction Co 12 St & Ferry Ave Camden 4 NJ	3	Barker Sales Co 996 Edgewater Ave Ridgefield NJ	5
Heath Co 305 Territorial Rd Benton Harbor Mich	2	Wincharger Corp E 7 & Division St Sioux City 2 Iowa	8	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	1-16-18-19-29-30-35
Highland Eng'g Co 90 Magnolia St Westbury NY	8	97—TUBES		Bendix Aviation Corp Red Bank Div Eatontown NJ	11-16-18-19-22-24- 26-29-30-32-34-45
Homelite Div Textron Inc 67 Riverdale Ave Port Chester NY	8	Tubes, ATR	1	Black Light Corp of America 5114 Walnut Grove Ave San Gabriel Calif	44
Industrial Development Eng'g Assoc 7900 Pendleton Pike Indianapolis Ind	2	Tubes, backward wave	2	Black Light Eastern Corp 33-00 Northern Blvd Long Island City 1 NY	44
JaMac Products Co 8845 N E Sandy Blvd Portland 20 Ore	5	Tubes, ballast	3	Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ	4
Johnson Co E F Waseca Minn	4-7	Tubes, battery charger	4	Bomac Labs Inc Salem Rd Beverly Mass	1-2-16-17-29-30-31- 33-34-35-37-39
Joy Mfg Co 333 Oliver Bldg Pittsburgh 22 Pa	1	Tubes, cathode-ray	5	Bristol Co PO Box 1790 EITT Waterbury 20 Conn	6
Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio	8	Tubes, ceramic	6	Burroughs Corp 6071 2 Ave Detroit 32 Mich	17
Kennedy & Co D S 155 King St Cohasset Mass	5	Tubes, color TV picture	7	Burroughs Corp Electronic Tube Div Box 1226 Plainfield NJ	8-30
Kepeco Labs 131-38 Sanford Ave Flushing NY	8	Tubes, counting	8	Calvideo Tube Corp 5222 W 104 St Los Angeles 45 Calif	5-7-42-43
Kluge Electronics Inc 5 & Main Sts Albion Nebr	2	Tubes, electron multiplier	9	CBS Hytron Div Columbia Broadcasting System 100 Endicott St Danvers Mass	5-7-18-22-24-26- 30-37-38-42-45
Kuss Industries Inc Tacony & Lewis Sts Philadelphia 24 Pa	3	Tubes, gamma ray	10	Centralab Div Globe Union Inc 900 E Keefe Ave Milwaukee 1 Wisc	6
		Tubes, gas	11	Central Electronic Mfrs Inc Sub Nuclear Corp of America 2 Richwood Pl Denville NJ	1-20-22-25-27-29-30-34-35
		Tubes, geiger counter	12	Century Lighting Inc 521 W 43 St New York 36 NY	34
		Tubes, glow or discharge	13	Chatham Electronics Div Gera Corp W Mt Pleasant Ave Livingston NJ	3-8-11-22-24-25-26- 27-30-34-37-45
		Tubes, ignitron	14		
		Tubes, infra-red	15		

Chromatic Television Laboratories 1501 Broadway New York 36 NY	7-30-42	Intellex Systems Inc 22 Thames St New York 6 NY	8-11-12-18-24-26-30-33	Skiatron Electronics & TV Corp 180 Varick St New York 14 NY	30
Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London SE 26 England	5-8-9-20	Isolanite Mfg Corp Warren Ave Stirling NJ	6	Sperry-Gyroscopic Co Div Sperry Rand Corp Great Neck NY	16-39
Claremont Tube Corp 36-02 35 Ave Long Island City 6 NY	5	Isotopes Specialties Co 703 S Main St Burbank Calif	10-12-28	State Labs Inc 649 Broadway New York 12 NY	4-12-13-16-18-20
Clarostat Mfg Co Washington St Dover NH	3	JFD Mfg Co 6101-16 Ave Brooklyn 4 NY	3	Steward Mfg Co D M Chattanooga Tenn	6
Clowes Ceramic Corp 3711 Calhoun Ave Chattanooga 7 Tenn	6	Kemlite Labs Inc 1819 W Grand Ave Chicago 22 Ill	10-11-13-15-31-44	Stroblite Co 75 W 45 St New York 36 NY	44
Consolidated Electrodynamics Corp Rochester Div 1775 Mt Read Blvd Rochester 4 NY	21	Kip Electronics Corp 29 Holly Pl Stamford Conn	3-8-11-13-18-29-30-32-34-45	Stromberg-Carlson Div General Dynamics Corp 1895 Hancock St San Diego 12 Calif	5
Continental Electric Co Taylor Tubes Inc 6 N Michigan Ave Chicago 2 Ill	4-15-20-25-27-30-31	Kirchberger & Co H 83 W Forest Ave Englewood NJ	6	Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	5
Cossor (Canada) Ltd 301 Windsor St Halifax Nova Scotia Canada	5	Kriss Electronics Inc 191 Oraton St Newark 4 NJ	5-7	Stupakoff Div Carborundum Co Latrobe Pa	6
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	44	Kuthe Labs 730 S 13 St Newark 3 NJ	27-33-34	Superior Steatite & Ceramic Corp 91 W Forest Ave Englewood NJ	6
DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif	2-16-19-39	Lansdale Tube Co Div Philco Corp Church Rd Lansdale Pa	5-7-11-13-18-19-23 24-26-30-32-42-44-45	Sylvania Electric Products Inc 1-2-3-4-6-8-9-11- 1740 Broadway 13-16-17-18-19-20-22-24-25-26- New York 19 NY	30-31-32-33-35-37-39-42-45
Diamond Power Specialty Corp Lancaster Ohio	42	Lansverk Electrometer Co 550 W Garfield Ave Glendale 4 Calif	8-10-12	Televideo Corp of America 3317 Exposition Pl Los Angeles 18 Calif	42-43
Dudek & Co R C 407 N Maple Dr Beverly Hills Calif	8-10-12-14-28-45	Lewis & Kaufman Ltd Div of Int'l Glass Corp P O Box 337 Los Gatos Calif	22-25-27-30-37-38	Thomas Electronics Inc 118 9 St Passaic NJ	5-12
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	5-9	Liton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	2-7-16-17-38-39	Tracerlab Inc 1601 Trapelo Rd Waltham 54 Mass	10-12
Dumont Labs Allen B Industrial Tube Sales 2 Main Ave Passaic NJ	5-20	Liton Industries Electronic Display Lab 1476 66 St Emeryville Calif	5-7-30-42	Transitron Inc 186 Granite St Manchester NH	25
Dunlee Corp 4558 W Congress St Chicago 24 Ill	25-46	Liton Industries Electron Tube Div 960 Industrial Rd San Carlos Calif	2-16-17-39	Triplet & Barton 831 N Lake St Burbank Calif	46
Edgerton, Germeshausen & Grier 160 Brookline Ave Boston 15 Mass	5-29-34	Louthan Mfg Co Harvey Ave E Liverpool Ohio	6	Tung-Sol Electric Inc 95 8 Ave Newark 4 NJ	3-5-18-22-24-26-30-32-37-42
Eitel-McCullough Inc 798 San Mateo Ave San Bruno Calif	6-16-18-22-24-25-27-34-38	Machlett Labs Inc 1063 Hope St Springdale Conn	22-25-27-30-38-41-46	Ultra-Violet Products Inc 5114 Walnut Grove Ave San Gabriel Calif	44
Electrical Refractories Co E Clark St E Palestine Ohio	6	MacKay Research Labs R R 2 Box 401 McHenry Ill	9-11-13-15-17-20	United Electronics Co 42 Spring St Newark 4 NJ	11-25-27-30-34-38
Electronic Enterprises Inc 65 7 Ave Newark NJ	25-27-34-38	Marconi Instruments Ltd 44 New St New York 4 NY	39-41	US Dynamics Corp 1250 Columbus Ave Boston 20 Mass	25-26-27
Electronic Products Co 111 E 3 St Mt Vernon NY	9-10-11-12-13-30-32-45	Mica Fabricating Co Rochelle Park NJ	18	US Stoneware Co Alite Div Orville Ohio	6
Electronic Tube Corp 1200 E Mermaid Lane Philadelphia 18 Pa	5	Microwave Associates Inc Burlington Mass	1-17-35	Vacuum Tube Products Co 506 S Cleveland St Oceanside Calif	5-21-25-30-33-34
Electron-Radar Products Co 4806 W Chicago Ave Chicago 51 Ill	20	Mitronics Inc 1290 Central Ave Hillside NJ	6	Varian Associates 611 Hansen Way Palo Alto Calif	2-16-22
Electrons Inc 127 Sussex Ave Newark 3 NJ	25-34	Mullard Overseas Ltd Century House Shaftsbury Ave London England	24	Victoreen Instrument Co 5806 Hough Ave Cleveland 3 Ohio	3-8-10-12-13-18-30-32-45
Engineering Co 27 Wright St Newark 5 NJ	22-27-34	National Electronics Inc 628 North St Geneva Ill	4-11-14-25-30-34	Waterman Products Co 2445 Emerald St Philadelphia 25 Pa	5
Eureka X-Ray Tube Corp 3250 N Kilpatrick Ave Chicago 41 Ill	46	National Union Electric Corp 1201 E Bell St Bloomington Ill	5-11-13-22-30-45	Westinghouse Electric Corp 1-5-7-9-11-14-17-18- Box 284	21-22-24-25-26-27- 29-30-34-37-41-42
Farnsworth Electronics Co Div IT&T 3702 E Pontiac St Ft Wayne Ind	5-9-15-20-23-30	Nevada Air Products Co P O Box 2472 Reno Nev	15	White Electron Devices Inc Roger 92 4 Ave Haskell NJ	2-11-13-19-30-33-35-39
Federal Telecommunication Labs Div IT&T 500 Washington Ave Nutley NJ	39	New York Mfg & General Supply 10-38 Jackson Ave Long Island City 1 NY	46	Wood Counter Lab N 1525 E 53 St Chicago 15 Ill	10-12-28
Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ	17-22-25-27-38-39	NRD Instrument Co 6425 Etzel Ave St Louis 14 Mo	10-12-28	Workman TV Inc 309 Queen Anne Rd Teaneck NJ	30
Fish-Schurman Corp 70 Portman Rd New Rochelle NY	6	Nuclear-Chicago Corp 223 W Erie St Chicago 10 Ill	8-10-12-28		
Forro Scientific Co 833 Lincoln St Evanston Ill	10-12	Nuclear Corp of America Empire State Bldg New York NY	1-12-22-30-34 35-37-38-39-45		
Freeland Products Co 706 Dryades St New Orleans 12 La	38-43	Nuclear Development Lab P O Box 7034 Kansas City 13 Mo	10-12		
Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ	6	Nucleonic Corp of America 196 Degraw St Brooklyn 31 NY	10-12-28		
Gates & Co Geo W Hempstead Tpke & Lucille Ave Franklin Square LI NY	44	Nucleonic Products Co 1601 Grande Vista Ave Los Angeles 23 Calif	31		
Geisler Labs P O Box 252 Menlo Park Calif	2-39	OK Electronics Corp 7 Hunt Pl Nutley NJ	24		
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	4	Penta Laboratories Inc 312 N Nopal St Santa Barbara Calif	22-27-30-34-38-39		
General Electric Co Electric Components Div	1-2-3-5-6-7-9-11 13-14-16-17-18-20-22-24 25-26-27-30-32-33-34-35 37-38-39-40-41-42-45	Philco Corp Accessory Div "A" & Allegheny Ave Philadelphia 34 Pa	24-42		
General Electric Co Ltd of England 80 Shore Rd	5-17-18-19-22-24 26-27-30-37-38-45	Philco Corp Govt & Industrial Div 4700 Wissahickon Ave Philadelphia 44 Pa	5		
General Electric Co X-Ray Dept 4855 Electric Ave Milwaukee 1 Wisc	12-25-46	Philips Electronics Inc 750 S Fulton Ave Mt Vernon NY	12-28-46		
Gordos Corp 250 Glenwood Ave Bloomfield NJ	4-20-25-44	Photobell Co 43 Vesey St New York 7 NY	20		
Hanovia Chemical & Mfg Co 100 Chestnut St Newark 5 NJ	44	Photo Crystals Inc 15 S 1 St Geneva Ill	20		
Hanson-Gorrill-Brian 85 Hazel St Glen Cove NY	30	Polarad Electronics Corp 43-20 34 St Long Island City 1 NY	16		
Hill & Co E Vernon P O Box 189 Lake Geneva Wisc	30	Pye Canada Ltd 82 Northline Rd Toronto 16 Ont Canada	8-33-41		
Huggins Labs Inc 711 Hamilton Ave Menlo Park Calif	2-39	"Q" Glass Co 470 Broad St Bloomfield NJ	6-12-14-17-29-30-34-39-46		
Hughes Aircraft Co Florence & Teale Sts Culver City Calif	30-39	Radio Corp of America 415 S 5 St 5-7-9-16-17-18-20-22-23-24-25-26-27 Harrison NJ	28-30-33-34-37-38-39-40-41-42-45		
Hughes Products Hughes Aircraft Co 5340 W 104 St Int'l Airport Sta Los Angeles 45 Calif	2-5-30-39	Raytheon Mfg Co Receiving & Cathode Ray Tube Operations 55 Chapel St Newton 58 Mass	5-7-11-12-13-18-22-24-26- 29-30-32-34-37-42-45		
Hupp Electronics Co Div Hupp Corp 743 Circle Ave Forest Park Ill	20	Raytheon Mfg Co Ceramic Sales Foundry Ave Waltham Mass	6		
Industrial Tubes Inc 321 Stevens St Geneva Ill	27-30-34	Raytheon Mfg Co Microwave & Power Tube Operations Foundry Ave Waltham Mass	2-16-17-22-25-27-39		
Instruments Inc 122 N Madison St Tulsa Okla	12	Resitron Labs Inc 2908 Nebraska Ave Santa Monica Calif	5-6-10-11-12-20-21-25- 27-29-30-41-42-44-46		

98—TUBE PARTS

Adapters	1
Anodes, graphite	2
Anodes, metal	3
Base pins	4
Bases	5
Bellows	6
Bulbs	7
Button stems	8
Caps	9
Cathode ray, deflection plates	10
Cathode ray, electrodes	11
Cathode ray, electron guns	12
Cathodes	13
Cavities	14
Ceramic parts	15
Coatings, CRT	16
Cones, Metal	17
Faceplates, CRT	18
Focusing magnets	19
Fused quartz parts	20
Getters	21
Grid frames	22
Grids	23
Heat dissipators	24
Ion traps	25
Magnets, permanent	26
Masks, aperture	27
Masks, picture tube	28
Metal shells	29
Mica parts	30
Picture tube revitalizers	31
Plating, precious metal	32
Rare gases	33

Stamped parts	34
Supports	35
Tube seal leads	36
Tube shields	37
Tube sleeves	38
Water jackets	39
Wire parts	40

Accurate Electronics Corp 169 S Abbe Rd W Elyria Ohio	5
Accurate Eng'g Co 2005 Blue Island Ave Chicago 8 Ill	7
Accurate Spring Mfg Co 3811 W Lake St Chicago 24 Ill	34
Acheson Colloids Co 1635 Washington Ave Port Huron Mich	16
Advanced Vacuum Products Inc 430 Fairfield Ave Stamford Conn	15
Aerovox Corp Crowley Div 1 Central Ave W Orange NJ	19-26
Air Reduction Sales Co Div Air Reduction Co 150 E 42 St New York 17 NY	33
Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif	5-29-37
Alden Products Co 123A N Main St Brockton Mass	1-9
Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	2-3
Alpha Metals Inc 56 Water St Jersey City 4 NJ	3
Aluminum Co of America Alcoa Bldg Pittsburgh 19 Pa	3
Amerac Inc 116 Topsfield Rd Wenham Mass	14
American Lava Corp Subs Minn Mining & Mfg Cherokee Blvd & Mfrs Rd Chattanooga 5 Tenn	5-15-34-38
American Metal Co 61 Broadway New York 6 NY	3
American Mica Insulation Co 235 Parker Ave Manasquan NJ	30
American Mica Radio Corp 235 Parker Ave Manasquan NJ	30
American Oxygen Service Corp 600 Essex St Harrison NJ	33
American Printed Circuits Co 104 Forrest St Metuchen NJ	32
Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 NY	33
Arnold Eng'g Co P O Box G Marengo Ill	19-26
Art Wire & Stamping Co 227 High St Newark 2 NJ	40
Asheville-Schoonmaker Mica Co 900 Jefferson Ave Newport News Va	30
Associated Eng'g & Mfg Corp 210 Stonehouse Rd Glen Ridge NJ	5-12-14-40
Associated Production Co 162 N Clinton St Chicago 6 Ill	34
Atlantic & Pacific Wire & Cable Co 112-01 Northern Blvd E Elmhurst LI NY	40
Atlas E-E Corp 47 Prospect St Woburn Mass	37-38
Audiokersh Corp 514 Broadway New York 12 NY	5
Augat Bros 33 Perry Ave Attleboro Mass	37
Baker & Co 113 Astor St Newark 2 NJ	32
Barker Sales Co 996 Edgewater Ave Ridgefield NJ	26
Bead Chain Mfg Co 110 Mountain Grove St Bridgeport 5 Conn	4
Belfab Corp 11 Ramah Circle Agawam Mass	6
Belmont Smelting & Refining Works 330 Belmont Ave Brooklyn 7 NY	3-13
Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	6
Bios Labs Inc 17 W 60 St New York 23 NY	3-13
Birnback Radio Co 145 Hudson St New York 13 NY	15-28
Bircher Corp Industrial Div 4371 Valley Blvd Los Angeles 32 Calif	37
Black Light Corp of America 5114 Walnut Grove Ave San Gabriel Calif	20
Boonton Molding Co 326 Myrtle Ave Boonton NJ	6
Bram Chemical Co Metals & Minerals Div 820 65 Ave Philadelphia 26 Pa	3-21
Brand & Co William 41 North St Willimantic Conn	38
Briggs Associates 10 DeKalb St Norristown Pa	21
Bristol Co P O Box 1790 EITT Waterbury 20 Conn	6
Brooklyn Paint & Varnish Co 50 Jay St Brooklyn 1 NY	16
Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich	17-24
Buckbee Mears Co Toni Bldg St Paul 1 Minn	28
Cambridge Thermionic Corp 445 Concord Ave Cambridge 38 Mass	15
Carborundum Metals Co Div Carborundum Co P O Box 32 Akron NY	21
Centralab Div Glove Union Inc 900 E Keefe Ave Milwaukee 1 Wisc	15
Central Electronics Inc 1247 W Belmont Ave Chicago 13 Ill	31
Century Plating Co 229 Ferris Ave White Plains NY	32

Chicago Gasket Co 1271 W North Ave Chicago 22 Ill	6
Chicago Miniature Lamp Works 1500 N Ogden Ave Chicago 10 Ill	7
Cinch Mfg Corp 1026 S Homan Ave Chicago 24 Ill	37
Clowes Ceramic Corp 3711 Calhoun Ave Chattanooga 7 Tenn	15
Communication Accessories Co 110 St & 71 Hy Hickman Mills Mo	37
Constantin & Co L L Route 46 Lodi NJ	32
Continental-Diamond Fibre Corp Newark Dela	30
Cook Electric Co 2700 Southport Ave Chicago 14 Ill	15
Corning Glass Works Corning NY	7
Crane Packing Co 6400 Oakton St Morton Grove Ill	6
Croname Inc 3701 Ravenswood Ave Chicago 13 Ill	28
Crucible Steel Co of America Henry W Oliver Bldg Pittsburgh 22 Pa	19-26
Dale Boisen Co 2928 Nebraska Ave Santa Monica Calif	32
Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif	20
Darco Industries Inc Gyro Dynamics Div 2151 E Rosecrans Ave El Segundo Calif	6
Davis-K-Products Co 135 W 29 St New York 1 NY	32
Defance Printed Circuit Corp Moulton & Munroe Sts Georgetown Mass	32
Delta Chemical Works 23 W 60 St New York 23 NY	3-13
Deltime Inc 608 Fayette Ave Mamaroneck NY	6
Diamonite Products Mfg Co 217 4 St NE Canton 2 Ohio	15
Dixon Crucible Co Joseph 167 Wayne St Jersey City 3 NJ	16
Du-Co Ceramics Co Box 278 Saxonburg Pa	15
Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ	1
Elco Corp M St below Erie Ave Philadelphia 24 Pa	34
Electrical Refractories Co E Clark St E Palestine Ohio	15
Electrical Specialty Co 158 11 St San Francisco 3 Calif	15-30
Electro Eng'g Works 401 Preda St San Leandro Calif	19
Electro Impulse Lab Inc 208 River St Red Bank NJ	24
Electronic Parts Mfg Co 508 25 St Union City NJ	36
Ellis & Sons George D 4028 N American St Philadelphia 40 Pa	37
Elm Labs 10 Washington Ave Hastings-on-Hudson NY	5
Elzee Metal Products Co 775 39 St Brooklyn 32 NY	5-17-29-31
Emerson Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY	6
Emerson-Sack-Warner Corp 85 Washington St Somerville 43 Mass	3-6-17-31
Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ	6
Engineering Co 27 Wright St Newark 5 NJ	5-9-20-26-36-40
Erca Tool Die & Stamping Co 19 Ash St Brooklyn 22 NY	34
Erie Resistor Corp 644 W 12 St Erie 6 Pa	15-34
Falstrom Co Falstrom Court Passaic NJ	17-34
Federal Telephone & Radio Co Div IT&T 100 Kinsland Rd Clifton NJ	5
Federated Metals Div American Smelting & Refining Co 120 Broadway New York 5 NY	3
Finn & Co T R 200 Central Ave Hawthorne NJ	5
Fish-Schurman Corp 70 Portman Rd New Rochelle NY	18-20
Fluorocarbon Products Inc Div US Gasket Co 602 N 10 St Camden 1 NJ	6
Ford Radio & Mica Corp 536 63 St Brooklyn 20 NY	30
Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ	15
General Ceramics Corp Crows Mill Rd Keasbey NJ	15
General Electric Co Box 237 Roosevelt Park Annex Detroit 32 Mich	26
General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY	3-10-15-22-23-34-35-37-38-40
General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY	26
General Magnetic Corp 10001 Erwin Ave Detroit 34 Mich	26
General Plastics Corp 165 3 Ave Paterson 4 NJ	38

Glaser-Steers Corp 20 Main St Belleville 9 NJ	25
Goat Co Fred 314 Dean St Brooklyn 17 NY	10-23-29-37
Golden Co 1054 38 St Brooklyn 19 NY	34
Gordon Enterprises 5362 N Cahuenga Blvd N Hollywood Calif	6
Hallcrafters Co 4401 W 5 Ave Chicago 24 Ill	24
Handy & Harman 82 Fulton St New York 38 NY	3
Harper-Leader Inc 1046 S Main St Waterbury 20 Conn	32
Harwood Electronics Co 466 W Superior St Chicago 10 Ill	9
Heppner Mfg Co Box 608 Round Lake Ill	25
Hi Grade Alloy Corp 1236 S Talman Chicago 8 Ill	3
Hunter Spring Co 1 Spring Ave Lansdale Pa	29-34
Huse Liberty Mica Co Peabody Industrial Center Peabody Mass	30
Indiana Steel Products Co Valparaiso Ind	15-26
iE Mfg 325 N Hoyne Ave Chicago 12 Ill	34-37
Insulation Mfrs Corp 565 W Washington Blvd Chicago 39 Ill	30-38
Insuline Corp of America 186 Granite St Manchester NH	5-9
International Electronic Research Corp 145 W Magnolia Blvd Burbank Calif	37
Investment Casting Co 60 Brown Ave Springfield NJ	29
Isolantite Mfg Corp Warren Ave Stirling NJ	5-15
James Plating Works Inc 720 W Schubert Ave Chicago 14 Ill	32
Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY	37
Johnson Co E F Waseca Minn	15
Johnson & Hoffman Mfg Corp 31 E 2 St Mineola NY	3-34
Jones Electronics Hiram 2313 W Olive St Burbank Calif	15
Kemet Co Div Union Carbide & Carbon Corp PO Box 6087 Cleveland 1 Ohio	21-23
Kimble Glass Co Sub Owens-Ill Glass Co P O Box 1035 Toledo 1 Ohio	7
Kine-Lab 3250 Kenilworth Ave Berwyn Ill	12
King Labs Inc 127 Solar St Syracuse 3 NY	21-34-40
Kirchberger & Co M 83 W Forest Ave Englewood NJ	15
Kling Metal Spinning & Stamping Co 245 Centre St New York 13 NY	29-34
Kost Products Co 2335 N Cicero Ave Chicago 39 Ill	25
Krautter Electric Machine Co 360 Grove St Newark 3 NJ	23
Krueger & Hudspohl 1041 Evans St Cincinnati 4 Ohio	34
Laminated Sheet Products Corp 449 Neponset St Norwood Mass	34
Lancaster Glass Corp Lancaster Ohio Lapp Insulator Co Radio Specialties Div 24 Summer St LeRoy NY	7
Leach & Garner Co Industrial Div Leach & Garner Bldg Attleboro Mass	3-32
Lee Chemical Corp Walter Seabury Ave & Butler Pl Bronx 61 NY	6
Lithium Corp of America 2500 Rand Tower Minneapolis 2 Minn	15
Litton Industries of Calif 336 N Foothill Rd Beverly Hills Calif	19
Lorentzen Inc H K 391 W Broadway New York 12 NY	5-29
Louthan Mfg Co Harvey Ave E Liverpool Ohio	15
Mackay Inc A D 198 Broadway New York 38 NY	3-21
Magnetics Inc Box 391 Butler Pa	37
Malkin-Illion St 400 Coit St Irvington 11 NJ	5
Mandel Chemical Products Co 207 Astor St Newark 5 NJ	16
Mayfair Molded Products Corp 3700 N Rose St Franklin Park Ill	5
Mel-Rain Corp 2100 E Fletcher Ave Indianapolis 3 Ind	25
Merit Plating Co 218 E 141 St New York 51 NY	32
Metal Fabricators Corp 73 Pond St Waltham 54 Mass	17-29
Metals & Controls Corp General Plate Div 48 Forest St Attleboro Mass	3
Metal Specialty Products Corp 27-01 Brooklyn Queens Expressway W Woodside 77 NY	34
Metal Textile Corp 647 E First Ave Roselle NJ	37
Methode Mfg Corp 7447 W Wilson Ave Chicago 31 Ill	37
Metpro Inc R I 230 Toronto Ave Providence 5 RI	38
Metz Refining Co 369 Mulberry St Newark 2 NJ	32
Micraircraft Products Inc 701 McCarter Hwy Newark 5 NJ	30
Micro-Circuits Co New Buffalo Mich	16

Rauland-Borg Corp 3515 W Addison St Chicago 18 Ill	2	Wire, metal shielded	45	Apex Wire & Cable Corp 237 37 St Brooklyn 32 NY	9
Sage Labs Inc 30 Guinan St Waltham 54 Mass	6	Wire, molybdenum	46	Apparatus Development Co 115 Main St Wethersfield 9 Conn	19
Sargent-Raymont Co 4926 E 12 St Oakland 1 Calif	2	Wire, monel	47	Art Wire & Stamping Co 227 High St Newark 2 NJ	24-33
Scott Inc H H 385 Putnam Ave Cambridge 39 Mass	2-4	Wire, nickel-clad copper	48	Artisan Electronics Corp 171 Ridgedale Ave Norristown NJ	4
Sherwood Electronic Labs Inc 2802 W Cullom Ave Chicago 18 Ill	2-4	Wire, phosphor bronze	49	Armo Steel Corp 703 Curtis St Middletown Ohio	57
Sierra Electronic Corp 3885 Bohannon Dr Menlo Park Calif	6-9	Wire, plastic insulated	50	Asco Wire & Cable Co 2 Burroughs St Bridgeport 8 Conn	29-31-41
Simpson Mfg Co Mark 32-28 49 St Long Island City 3 NY	2	Wire, shielded	54	Associated American Trading Div 750 St Ann's Ave New York 56 NY	29-31-41
Sperry Gyroscope Co Div Sperry Rand Corp Great Neck NY	5-6	Wire, silicon bronze	55	Associated Eng'g Corp 65 Kent St Brookline 46 Mass	19
Spivey Inc James S 4908 Hampden Lane Washington 14 DC	1	Wire, silver plated	56	Associated Eng'g & Mfg Corp 210 Stonehouse Rd Glen Ridge NJ	28-32-35-46-48-63
Standard Coil Products Co 2085 N Hawthorne Ave Melrose Park Ill	1-2-4-8-9	Wire, resistance	53	Atlantic & Pacific Wire & Cable Co 112-01 Northern Blvd 21-22-23-24-25-27-28-29	
Stromberg-Carlson Div General Dynamics Corp 100 Carlson Rd Rochester 3 NY	2	Wire, stainless steel	57	E Elmhurst 30-31-32-33-34-35-36-37-38-39-40	
Tarzian Inc Sarkes E Hillside Drive Bloomington Ind	8-9	Wire, steel	58	LJ 41-42-43-44-45-46-47-48-49-50-51-52-53	
Tech-Master Corp 75 Front St Brooklyn 1 NY	1-4-8-9	Wire, tantalum	59	NY 54-55-56-57-58-59-60-61-62-63-64	
Technicraft Labs Inc Thomaston-Waterbury Rd Thomaston Conn	6	Wire, teflon insulated	60	Atlas E-E Corp 47 Prospect St Woburn Mass	16
Techtron Electronics Ltd 583 Gramatan Ave Mt Vernon NY	2-4	Wire, thermocouple	61	Audio Sears Corp Shepard Hill Rd Roxbury NY	4
Telematic Industries Inc 16 Howard Ave Brooklyn 7 NY	1-2-9	Wire, titanium	62	Baker & Co 113 Astor St Newark 2 NJ	51-61
Trutone Electronics Inc 812 N Highland Ave Los Angeles 38 Calif	1-2-4	Wire, tungsten	63	Barber-Colman Co Rock St Rockford Ill	61
Valandy Electronics Corp 61-35 166 St Flushing 68 NY	1	Wire, zirconium	64	Beckman Instruments Inc Process Instruments Div 2500 Fullerton Rd Fullerton Calif	4
Vectron Inc 1611 Trapelo Rd Waltham 54 Mass	5-6	Accurate Electronics Corp 169 S Abbe Rd W Elyria Ohio	16	Belden Mfg Co 4647 W Van Buren St Chicago 44	2-3-5-7-8-9-10-11 12-13-15-17-21-29-30 31-34-38-39-40-41-54
Voron & Co George 835 N 19 St Philadelphia 30 Pa	1-2-4	Accurate Insulated Wire Corp 25 Fox St New Haven 1 Conn	2-5-8-9-11-12-14-17-22 29-30-34-38-39-50-54	Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich	8
Warren Mfg Co Newton Rd Littleton Mass	6	Acme Wire Co 1255 Dixwell Ave New Haven 14 Conn	29-31-34-41	Bergen Wire Rope Co 455 Gregg St Lodi NJ	4
Wheeler Labs Inc 122 Cutter Mill Rd Great Neck NY	6	Acromark Co 443 Morrell St Elizabeth 4 NJ	43	Bernco Engineering Corp 2320 S 11bbs Ave Indianapolis 41 Ind	4
Woodwelding Inc 355 N Newport Blvd Newport Beach Calif	9	Adel Precision Products Div General Metals Corp 1444 Washington Ave Huntingdon 4 W Va	16	Bertrac Products Co 626 Broadway New York 12 N Y	26
		Advanced Electronics Inc 94 Silas Deane Hwy Rocky Hill 9 Conn	4	Bethlehem Steel Co Bethlehem Pa	58
		Aerolite Electronics Corp 507 26 St Union City NJ	4-16-19	Bios Laus Inc 17 W 60 St New York 23 N Y	23-35-46-47-49-51-55-56 57-58-59-61-62-63-64
		Aeronautical Electronics Inc P O Box 6527 Raleigh NC	37	Birnboch Radio Co 1-2-3-5-8-9-10-11-12-13-14	
		Aero Research Instrument Co 315 N Aberdeen St Chicago 7 Ill	25-61	145 Hudson St New York 13 N Y	15-16-18-19-21-22-28-29-31 32-34-36-37-38-39-41-49-50 53-54-55-60
		Airborne Electronics Co 6813 Troost Ave N Hollywood Calif	4	Bishop & Co Platinum Works J Malvern Pa	28-48-51-61
		Air Craft & Electronic Specialties 22 S Green St Brownsburg Ind	4-35	Bliss Electronic Corp Box 366 Sussex N J	37
		Airflyte Electronics Co 535 Avenue A Bayonne NJ	4	B & M Electric Corp 838 4 Ave Brooklyn 32 N Y	17-29-30
		Airtron Inc 1101 W Elizabeth Ave Linden NJ	4-5	Booth Co Arthur E 265 S Alexandria Ave Los Angeles 4 Calif	19
		A-K Mfg Co 115 S Northwest Hwy 4-5-9-11-12-14-17-18-19	29-34-37-38-39-50-54	Boston Insulated Wire & Cable Co 65 Bay St Dorchester 25 Mass	5-9-12-29
		Alden Products Co 123A N Main St Broekton Mass	12-17-19-29-37-45	Brach Mfg Corp 200 Central Ave Newark 3 N J	4
		Allegheny Ludlum Steel Corp Oliver Bldg Pittsburgh 22 Pa	57	Brady Co W H 727 W Glendale Ave Milwaukee 9 Wisc	43
		Allied Allegri Co 141 River Rd Nutley 10 NJ	4	Bram Chemical Co Metals & Minerals Div 820 65 Ave Philadelphia 26 Pa	23-27-28-29-35 46-47-48-49-51 56-59-62-63-64
		All-State Welding Alloys Co 249 Ferris Ave White Plains NY	21	Brand & Co William 41 North St Willimantic Conn	2-3-4-5-9-10-11-12-13-15 29-30-34-37-38-39-50-54
		Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo	21-62-63-64	Bridgeport Brass Co 30 Grand St Bridgeport 2 Conn	1
		Alphaduct Wire & Cable Co 25 Van Dyke Ave New Brunswick NJ	29-50	Bristol Co P O Box 1790 EITT Waterbury 20 Conn	61
		Alpha Metals Inc 56 Water St Jersey City 4 NJ	12-33-45	Brys Instrument Co 7026 6 Ave Brooklyn 9 N Y	53
		Alpha Wire Corp 200 Varick St New York 14	5-7-8-9-10-11-12-14-27 29-30-31-34-38-39-41 45-49-50-54-55-56-60	Buffalo Electronics Corp 37 Franklin St Buffalo 2 N Y	37
		Aluminum Co of America Alcoa Bldg Pittsburgh 19 Pa	1-16-21	Buggie Inc H H P O Box 817 Toledo 1 Ohio	4
		American Communications Corp 280 Broadway New York 17 NY	4-5-9-10-11-12-14-15-29	Bundy Electronics Corp 171 Fabyan Pl Newark 12 N J	4
		American Electric Cable Co 181 Appleton St 2-3-5-7-8-9-10-11-12-13-14-15	46-47-48-49-51 54-56-60-61	Burndy Corp Omanton Div Norwalk Conn	16
		Holyoke Mass 29-34-37-38-39-50-54-56-60-61		Cable Electric Products 234 Daboll St Providence 7 R I	4-16-20-37
		American Leonic Mfg Co 3001 Walnut St Philadelphia 4 Pa	21-27-35-44-47 53-56-57-58	Cable & Wire Products Co Chicago Rd Swanton Ohio	17-37
		American Platinum Works 231 NJ RR Ave Newark 5 NJ	51	Calcon Mfg Co 100 Oakland Ave Washington Pa	27-29-30-38-39-43-50
		American Super-Temperatures Wires Inc West Canal St Winoski Vt	5-9-10-12-13-29-30-34 37-38-39-41-54-60-61	Cal-Connector Co 7360 Varna Ave N Hollywood Calif	16
		Amphenol Electronics Corp 1830 S 54 Ave Chicago 50 Ill	2-3-5-9-10-11-12 13-15-16-37-39-60	Caltron Products Co 3518 W Pico Blvd Los Angeles 19 Calif	19
		Anaconda Wire & Cable Co 25 Broadway New York 4 NY	2-3-5-8-14-15-21 27-29-31-38-41-50	Carborundum Metals Co Div Carborundum Co P O Box 32 Akron N Y	64
		Anchor Metal Co 966 Meeker Ave Brooklyn 22 NY	21-35-56	Carpenter Steel Co Webb Wire Div 17 Liberty St New Brunswick N J	57
		Anchor Products Co 2712 W Montrose Ave Chicago 18 Ill	4-30-38	Carpenter Steel Co Front & Bern Sts Reading Pa	57
		Anchor Specialty Mfg Co Hollister Rd Teterboro NJ	4	C B C Electronics Co 2601 N Howard St Philadelphia 33 Pa	4-9
		Andrew Antenna Corp 606 Beech St Whitby Ontario Can	2-3-5-15	Century Plating Co 229 Ferriss Ave White Plains N Y	44
		Andrew California Corp 941 E Maryland Ave Claremont Calif	2-3-4-5-6-12-13-15	Channel Master Corp Ellenville N Y	20-21-36
		Andrew Corp 363 E 75 St Chicago 19 Ill	2-3-5	Chase Brass & Copper Co 236 Grand St Waterbury 20 Conn	1-9-14-26-27 29-34-41-49-57
		Ansonia Wire & Cable Co 111 Martin St Ashton RI	5-9-10-11-12 14-29-39-50-54		

100—WIRE & CABLE

Bus bar	1
Cable, antenna transmission, receiving	2
Cable, antenna transmission, transmitting	3
Cable, assemblies	4
Cable, coaxial	5
Cable, delay	6
Cable, flat woven	7
Cable, ignition	8
Cable, insulated	9
Cable, low capacitance	10
Cable, microphone	11
Cable, shielded	12
Cable, solid dielectric	13
Cable, telephone	14
Cable, UHF	15
Clamps, cable	16
Cords, attachment	17
Cords, resistance	18
Test Leads	19
Transmission line	20
Wire, aluminum	21
Wire, asbestos insulated	22
Wire, beryllium copper	23
Wire, cat whiskers for transistors	24
Wire, ceramic insulated	25
Wire cloth	26
Wire, copper, bare	27
Wire, copper clad	28
Wire, copper, insulated	29
Wire, cut & stripped	30
Wire, enameled	31
Wire filament	32
Wire, forms	33
Wire, glass insulated	34
Wire, gold plated	35
Wire, guy	36
Wire, harnesses	37
Wire, high voltage	38
Wire, hookup	39
Wire, litz	40
Wire, magnet	41
Wire, magnetic recording	42
Wire, marking	43
Wire, metal plated	44

Leonard Electric Products Co 67 34 St Brooklyn 32 NY	4	Paraplegics Mfg 10068 Franklyn Ave Franklyn Park III	4	Secor Metals Corp 7 Intervale St	21-23-25-27-31-32
Lewis Eng'g Co 339 Church St Naugatuck Conn	9-22-29-34-53-60-61	Permoflux Products Co 4101 San Fernando Rd Glendale 4 Calif	11	White Plains NY	35-41-49-51-53-61
Lintlar Inc 4101 San Fernando Rd Glendale 4 Calif	4	Permo Inc 6415 N Ravenswood Ave Chicago 26 Ill	42	Seismograph Service Corp 6200 E 41 St Tulsa 1 Okla	4
Lysco Mfg Co 1401 Clinton St Hoboken NJ	19	Permonite Mfg Co 444 Lake Shore Dr Chicago 11 Ill	4-37-39	Serrow Products Co 4317 N Ravenswood Ave Chicago 13 Ill	26
Mackay Inc A D 198 Broadway New York 38 NY	21-23-24-27-32-46-47-49 51-57-59-62-63-64	Peschel Electronics Inc 13 Garden St New Rochelle NY	4	Sensory Inc Pleasantville Rd New Vernon NJ	37
Mallory & Co Inc P R 42 S Gray St Indianapolis 6 Ind	23-46-49-62	Petroff Corp Peter A 127 Water St New York 5 NY	4	Sequoia Wire 2201 Bay Rd	5-9-10-11-12-14 29-39-50-54-60
Markwik Mfg Co 31 Sexton Rd Plainview LI NY	43	Phalo Plastics Corp 25 Foster St	2-4-5-9-11-12-13-14	Seymour Mfg Co 15 Franklin St Seymour Conn	49
Mayfair Molded Products Corp 3700 N Rose St Franklin Park Ill	4	Worcester 8 Mass	15-17-36-37-38-50-54	Simplex Wire & Cable Co 1203 Fidelity-Phila Trust	2-3-5-9-10-11 12-13-14-15-29
Measurement Eng'g Ltd 232 John St Arnprior Ontario Can	4	Phaostrom Instrument & Electronic Co 151 Pasadena Ave S Pasadena Calif	19	Bldg Philadelphia 9 Pa	38-39-50-54-60-61
Mercury Eng'g Corp 339 E Cottage Pl York Pa	30-37	Phelps Dodge Copper Corp Inca Mfg Div	1-9-27-29-31-41	Simpson Electric Co 5200 W Kinzie St Chicago 44 Ill	19
Metals & Controls Corp General Plate Div 48 Forest St Attleboro Mass	29-35-44-51-56	Phelps Dodge Copper Corp 300 Park Ave	1-2-3-5-9-12-13-14-22-27-29	Sittler Corp 18 N Ada St Chicago 7 Ill	4-19-37
Metal Specialty Products Corp 27-01 Brooklyn Queens Expressway W Woodside 77 NY	16	New York 22 NY	31-31-38-41-45-50-54	Slepien & Co Arthur 2 Burroughs St Bridgeport Conn	31-40-41
Metal Textile Corp 647 E First Ave Roselle NJ	26	Philadelphia Insulated Wire Co 200 N 3 St	4-9-10-11-12 13-29-30-31-34-37	Smith Inc Herman H 2326 Nostrand Ave Brooklyn 10 NY	16-17-19
Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 10 Ill	37	Philadelphina 43 Pa	39-40-41-50-51-60	South River Metal Prods Co 377 Turnpike South River NJ	21-36
Microdot Inc 220 Pasadena Ave S Pasadena Calif	4-5-10	Pix Mfg Co 75 Hudson St Newark 3 NJ	33	Spaulding Fibre Co 310 Wheeler St Tonawanda NY	1
Mid-West Spring Mfg Co Etna St Mentone Ind	33	Plastic Wire & Cable Corp Box 486	5-8-9-10-11-12-14 29-37-38-39-50-54	Spencer-Kennedy Labs Inc 1320 Soldiers Field Rd Boston 35 Mass	2-5
Millen Mfg Co James 150 Exchange St Malden 48 Mass	6	Jewett City Conn	29-37-38-39-50-54	Sprague Electric Co Marshall St North Adams Mass	25-41-60
Minn-Honeywell Regulator Co Aero Div 1433 Stinson Blvd Minneapolis Minn	23	Plastoid Corp 42-61 24 St	2-3-5-9-11-12-14	Stamford Metal Specialty Co 427 W Broadway New York 12 NY	4
Minneapolis-Honeywell Regulator Co Industrial Div Wayne & Windrim Aves Philadelphia 44 Pa	61	Long Island City 1 NY	15-22-29-39-50-60	Standards Metals Corp 262 Broad St N Attleboro Mass	28-35-39-44-56
Missileonics Inc P O Box 716 Melbourne Fla	4	Precise Development Corp 2 Neil Ct Oceanside NY	19	Standard Wire & Cable Co 3440 Overland Ave	2-3-5-6-7-8-9-10-11 12-13-14-15-17-22
Modelectric Products Corp Asbury Park NJ	4	Precision Apparatus Co 70-31 84 St Glendale 27 LI NY	19	Los Angeles 34 Calif	25-27-28-29-30-31-38 39-40-41-47-48-49-50-51-53-54-55-56-57-60-61
Model Eng'g & Mfg Co 50 Frederick St Huntington Ind	4	Precision Tube Co Church Rd & Wissahickon Ave North Wales Pa	3-9-10-12-45-51	Star-A Electric Mfg Co 269 Meserole St Brooklyn 6 NY	17
Modern Adhesives & Electronics Inc 148 Greene St New York 12 NY	25-41	Pres Industrial Equipment Ltd Box 302 Putt Corners Rd N New Paltz NY	9	Stone City Machine & Tool Co 1206 7 St Bedford Ind	16-33
Mohawk Wire & Cable Corp 320 River St	2-5-8-9-10-11-12-13-14	Prodell Inc 307 Bergen Ave Kearny NJ	2-3-5-13	Superex Electronics Corp 4 Radford Pl Yonkers NY	4
Fitchburg Mass	15-29-30-39-45-50-54	Progress Electronics Co 296 Broadway New York 7 NY	5	Superior Insulated Wire Co Route 9W	5-15-27-29-30-39-50-51
Motiongraph Inc 4441 W Lake St Chicago 24 Ill	4	Radio City Products Co Centre & Glendale Sts Easton Pa	19	Surprenant Mfg Co 172 Sterling St	2-3-5-9-10-11-12-13-14 15-29-38-39-50-54-60
Murex Ltd Rainham Essex England	46-59-63-64	Radio Corp of America Commercial Electronic Products Camden 2 NJ	12	Swift & Sons M 10 Love Lane Hartford 1 Conn	43
Mutual Electronic Industries Corp 85 Beechwood Ave New Rochelle NY	9-10-11-12-14-17	Radix Wire Co 26260 Lakeland Blvd	2-8-9-11-12-15-22-28 29-30-31-39-48-50-51	Sylvania Electric Products Inc 1740 Broadway	28-33-38-44-46 48-56-57-58-63
National Aircraft Corp 3411 Tulare Ave Burbank Calif	4	Ram Electronics Inc 600 Industrial Ave Paramus NJ	60	Taffet Radio & TV Co 27-05 Brooklyn-Queens Expressway W Woodside 77 NY	4-19
National Lock Washer Co 40 Hermon St Newark 5 NJ	58	Rea Magnet Wire Co E Pontiac St Ft Wayne Ind	27-29-31-41	TA Mfg Corp 4607 Alger St Los Angeles 39 Calif	1
National-Standard Co Niles Mich	21-26-28-42-44-47-48-57-58-62	Reed & Reese Inc 717 N Lake Ave Pasadena 6 Calif	1-4	Techalloy Co Rains Pa	32-36-42-46-47-48-53-57-62
National Tel-Tronics Corp 52 St Casimir Ave Yonkers NY	19	Reliable Spring & Wire Forms Co 3167 Fulton Rd Cleveland 9 Ohio	33	Techniques Inc 52 Jackson Ave Hackensack NJ	9-13
Naylor Laboratories Inc E V 2 Yennicoek Ave Fort Washington NY	4	Rembar Co 147 Main St Dobbs Ferry NY	46-63-64	Telchrome Mfg Corp 28 Ranick Dr Amityville LI NY	6
Nesor Alloy Products Co 282 Halsey St	21-23-24-27-28-35-44-45-47	Rem-Cru Titanium Inc Midland Pa Republic Steel Corp	62	Telectro Industries Corp 34-18 37 St Long Island City 1 NY	4
Newark NJ	48-49-51-54-55-56-57-58	Reverie Bldg Cleveland 1 Ohio	57-58	Telematic Industries Inc 16 Howard Ave Brooklyn 7 NY	4-19-37
Network Mfg Corp 213 W 5 St Bayonne NJ	4-19	Revere Corp of America Wallingford Conn	34-37-39-50-60-61	Teletronic Labs Inc 1835 W Rosecrans Ave Gardena Calif	37-43
Newark Wire Cloth Co 351 Verona Ave Newark 4 NJ	26	Rhodes & Sons Co M M Box 627 Taunton Mass	16	Tenna Mfg Co 7580 Garfield Blvd Cleveland 25 Ohio	2-5
Newcomb Spring Corp 177 E Hawthorne Ave Valley Stream NY	24-33	Richards Co Arklay S 35 Winchester St	61	Tensolite Insulated Wire Co 198 Main St	Tarrytown NY 4-5-7-8-9-10-12-13-15-29-39-41
New England Cable Co 22 Bridge St Concord NH	29 39	Riverside-Alloy Metal Div Porter Co H K 1 Pavilion Ave	23-47-48-49-57	Terris Div Consolidated Siphon Supply Co 22 Wooster St New York 13 NY	26
New England Electrical Works 365 Main St	7-9-27-29-31-39-40-41-61	Riverside NJ	5-9-10-12-13-15	Teveco Insulated Wire 108 E Prospect Ave	2-5-9-11-12-29
New England Tape Co 30 Tower St Hudson Mass	37-39-50	Rockbestos Products Corp Nicoll & Canner Sts	22-25-29-34-38-39	Thermo Electric Co 109 5 St Saddle Brook NJ	61
Ney Co J M P O Box 990 Hartford 1 Conn	51	New Haven 4 Conn	41-45-50-54-60-61	Times Wire & Cable Co Aff Int'l Silver Co	2-3-5-6-7-8-9-10 11-12-13-14-15-29
Nichols Wire & Aluminum Co 1725 Rockingham Rd Davenport Iowa	21-36	Roebling's Sons Corp John A 640 S Broad St	21-22-27-29-31 34-41-44-57-58	358 Hall Ave Wallingford Conn	33-34-37-38-39-44 45-48-50-54-56-60
Noel Mfg Co 3 W 18 St New York 11 NY	30	Rohn Mfg Co 116 Limestone Bellevue Peoria 5 Ill	16	Tinnerman Products Inc Department 16 P O Box 6688 Cleveland 1 Ohio	16
Nonotuck Mfg Co Holyoke Mass	27	Rome Cable Corp Ridge St Rome NY	9-10-11-12-13-14-20-21	Titan Metal Mfg Co Bellefonte Pa	23
North American Philips Co Elmet Div Lisbon Rd	29-31-32-35-41-44-46-56-63	Rosenau Harris & Co Ontario & I Sts Philadelphia 34 Pa	4-17-37	Titchener & Co E H 67 Clinton St Binghamton NY	33
Lewiston Me	29-31-32-35-41-44-46-56-63	Rowe Industries 1702 Wayne St Toledo 9 Ohio	4	Topp Industries Inc 5255 W 102 St Los Angeles 54 Calif	4
North Electric Co 553 S Market St Galion Ohio	4	Sanders Associates 95 Canal St Nashua NH	7	Touch-Plate Mfg Corp P O Box 1970 Long Beach 1 Calif	29
North Shore Nameplate Inc 214-227 Northern Blvd Bayside 61 NY	43	Santa Monica Bay Sheltered Workshop 2521 5 St Santa Monica Calif	30-37-43	Transdyne Corp 7337 Grand Ave Maspeth 78 NY	37
Okonite Co 220 Passaic St	3-5-8-9-10-11	Saxon Products Inc 1661 Boone Ave	2-3-5-9-10-11-12-13 14-15-20-21-27-28-29	Transradio Ltd 138A Cromwell Rd London SW 7 England	5
Passaic NJ	12-13-14-15-21-22-27-29-54-60	New York 60 NY	31-36-38-39-41-54-58	Trico Fuse Mfg Co 2948 N 5 St Milwaukee 12 Wis	16
Organic Development Corp 8841 Orangewood Ave Anaheim Calif	9-10-12-14-15-29-37-39-41	Schaffer Air Industries 290 N Henry St Brooklyn 22 NY	37	Tricon Mfg Co 8012 Wallace St Chicago 20 Ill	51
Pace Electrical Instruments Co 70-31 84 St Glendale 27 LI NY	19	Scientific Coil Co 6619 Broadway Chicago 40 Ill	29	Tri-Dex Electronics P O Box 1207 Lindsay Calif	4
Pacific Automation Products 1000 Air Way Glendale 1 Calif	4-14	Scientific Glass Apparatus Co 100 Lakewood Terrace Bloomfield NJ	21-22-26-27	TV Hardware Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill	2-16
Pacific Electricord Co 3217 Exposition Pl Los Angeles 13 Calif	4-10-17-19-29-30-37-50	Scovill Mfg Co 99 Mill St Waterbury 20 Conn	49	Uniform Tubes Inc Level Rd Colleeville 2 Pa	45
Palmer Inc M V 4002 Fruit Valley Rd Vancouver Wash	14				

Union Plastics Corp Wire & Cable Div 1627 Paterson Plank Rd Secaucus NJ	2-3-5-9-10-11 12-13-14-15-27-29 38-39-45-50-54-56-60	Wade Electric Products Co Box 271 Sturgis Mich	4-37	Whitaker Cable Corp 1301 Burlington St N Kansas City Mo	7-8-9-10-16-27 28-29-30-37-39
United Wire & Supply Corp 1497 Elmwood Ave Providence	7 RI 21-27	Waldom Electronics Inc 4625 W 53 St Chicago 32 Ill	16	Wildberg Bros Smelting & Refining Co 742 Market St San Francisco 2 Calif	51
Univox Corp 102 Warren St New York 7 NY	2-5-10	Walco Electronics Mfg Co 100 W Green St Rockford Ill	19	Willard Storage Battery 246 E 131 St Cleveland 1 Ohio	8
Utilities Service Co 1 Pine St Allentown Pa	16-36	Walton Tool & Die Co 2707 Empire Ave Burbank Calif	1	Wilmar Mfg Co 1110 Truman Rd Kansas City Mo	4
Utility Brass & Copper Corp 255 Conover St Brooklyn 31 NY	1-27-49	Warren Wire Co Pownal Vt	5-9-10-12-27-29-31 38-39-44-15-54-60	Winder Aircraft Corp of Florida P O Box 2397 Drane Field Lakeland Fla	1-4-6-37
United Mineral & Chemical Corp 16 Hudson St New York 13 NY	21-46-53-62-63	Weckesser Co 5701 Northwest Hwy Chicago 30 Ill	16	Wind Turbine Co E Market St & PRR W Chester Pa	36
U S Plastic Rope Inc 2581 Spring St Redwood City Calif	17	Werner Co R D 295 5 Ave New York 16 NY	1	Wire Co of America Inc P O Box 516 Santa Barbara Calif	4-9-12-29-38-39-45-50
Vacuum Metals Corp Div Crucible Steel Co P O Box 977 Syracuse 1 NY	57-58	Western Insulated Wire Co 2425 E 30 St Los Angeles 58 Calif	9-11-12-29-38-54	Wirecraft Products Inc 10 Lake St W Brookfield Mass	60
Varflex Corp 511 W Court St Rome NY	34	Western Int'l Co 45 Vesey St New York 7 NY	5-11-12-60	Wright Steel & Wire Co G F 243 Stafford St Worcester 3 Mass	36
Victor Electric Wire & Cable Corp 618 Main St W Warwick RI	2-3-5-9-10-11-12-15 17-29-30-38-39-50-54	West Instrument Corp 4363 W Montrose Ave Chicago 41 Ill	61	Wyeth Eng'g Inc 9911 Walden Pkwy Chicago 43 Ill	4
Virginia Electronics Co River Rd & B&O RR Washington 16 DC	37	Weston Electrical Instrument Corp Sub Daystrom Inc 614 Frelinghuysen Ave Newark 12 NJ	19	Zierick Mfg Corp Beechwood & Rockdale Ave New Rochelle NY	16
Voron & Co George 835 N 19 St Philadelphia 30 Pa	37	Wheeler Insulated Wire Co 150 E Aurora St Waterbury 20 Conn	29-37-40-41		

CONSULTING ENGINEERS

ELECTRONIC INDUSTRIES DIRECTORY

Consulting Engineers

An alphabetical listing of individual engineers and engineering companies specializing in consulting services for the radio-TV-electronic and allied fields. The particular specialty of each engineer is indicated by a code letter following his name and address.

BroadcastA
CommunicationsB
Component ManufacturingC
Electronic Control SystemsD
Equipment ManufacturingE
Industrial ElectronicsF
Recording, AudioH

Adair G P 1610 Eye St N W Washington 6 D C EX
3-1230 A,B,D,F
 Adler Comm Labs 1 LeFevre Lane New Rochelle 1
N Y 6-1620 A,B,H
 Alford A 299 Atlantic Ave Boston 10 Mass HA
6-2338 A,B,C,E
 Alvarado TV Co 122 Tulane S E Albuquerque New
Mex A
 Amoo L R Granger Hill Valley City N D 136 A
 Amy Aceves & King 11 W 42 St New York N Y
LO 5-6622 A,B
 Anderson-Nichols 150 Causeway St Boston 14 Mass
RI 2-3400 B,D,E
 Andrews Inc L W 1927 College Ave Davenport Iowa
2-8683 A,B,E
 Antin Joseph 137-21 85 Ave Jamaica 55 N Y L I
4-5810 B,C,D,E,F
 Ark Eng'g Co 431 W Tabor Rd Philadelphia 20 Pa
Automation Management Inc Adams St Westboro Mass
WE 377 D,E,F
 Bacon J W 2001 Bay View Dr Hermosa Beach Calif
FR 2-5739 C
 Bailey Corp Arnold B Main St St Francestown N H
NE 100 B,E
 Bailter Leslie M 880 Bergen Ave Jersey City 6 N J
JO 3-2777 B,D,F,H
 Barnes Eng'g Co 30 Commerce Rd Stamford Conn
FI 8-5381 C,D,F

Behar M F 245 Melwood Ave Pittsburgh 13 Pa
SC 1-1100
 Bennett S D c/o Linfield Research Institute McMinn-
ville Ore 8712 A
 Bennis Jr W E 3802 Military Rd N W Washington
D C EM 2-8071 A,B
 Bernard Associates 237 E 39 St New York 16 N Y
MU 6-7445 A,B,D,F,H
 Bieker H G 12009 Burbank Blvd N Hollywood Calif
SU 3-6921
 Bird J R 4850 E Cornell Fresno 3 Calif CL 5-6875
 Bitter A R 3721 Douglas Rd Toledo 13 Ohio KI
5159 A,B,F
 Bixby Assoc H O 238 Main St Cambridge 42 Mass
EL 4-0404 B,C,D,E,F
 Bjorksten Research P O Box 265 Madison 1 Wisc
5-7291
 Bolz Recording Co 238 Hamilton St Allentown Pa
HE 2-0142 H
 Brennan & Assoc C E 2035 E Tripoli Ave Milwaukee
7 Wisc HU 1-0790 A
 Briggs & Assoc 10 DeKalb St Norristown Pa BR
9-2120 D,E,F
 Brown Duncan & Porter P O Box 9296 Raleigh N Car
8892 A
 Brown R A 619 Sugar Creek Dr Joliet Ill JO 2-2201
A,B,D,E,F
 Brubaker P M 100 Essex Ave Glen Ridge N J PI
3-5748 B,D,F,H
 Bumstead R W 624 Maple St Westfield N J WE
2-0628M D,F,H
 Burnett W W L 4814 Idaho St San Diego 16 Calif
AT 2-2740 A,B,D,E
 Burwen R S 17 Sheffield Rd Melrose 76 Mass ME
4-4526 D,H
 Byrd Eng'g Co P O Box 101 W Memphis Ark 404
B,D,F
 Carney & Assoc Jack 905 Knott Bldg Dayton Ohio
FU 3943
 Carr Assoc L H 1001 Conn Ave N W Washington 6
D C ST 3-2550
 Chapp S 39 Maple Ave Upper Darby Pa SU 9-7498
B,D,F

Cisin Harry G Amagansett N Y AM 7-3852
 Clark & Co Wallace 521 5 Ave New York 17 N Y
MU 2-3281 C,D,E,F
 Clarke & Hartman 408 Summit Ave Jersey City 6 N J
JO 2-0012 B,F
 Collins Jack 9025 N Pelham Pkwy Milwaukee 17 Wisc
FL 2-7520
 Commercial Radio Equip 1319 F St N W Washington
D C 7-1319 A
 Consultant's & Designers 650 11 Ave New York 36
N Y PL 7-6700 D,F
 Craig & Assoc P H 1042 Catalonia Ave Coral Gables
34 Fla MI 83-6361 D,F
 Cresap, McCormick & Paget 342 Madison Ave New
York 17 N Y MU 7-5450
 Crosby Labs Box 233 Hicksville N Y WE 1-3191 A,B
 Cullum Jr A Earl Inwood P O Dallas 9 Tex LA 8-6108
A,B
 Culver L R Box 607 Melbourne Fla 214-W C
 Munsey George C 504 Munsey Bldg Washington 4 D C
ST 3-0111 A
 Day George 697 Sterling Pl Brooklyn 16 N Y MA
2-0699 H
 Decker Consultants 125 White Rd Mineola N Y PI
2-7084 B,C,E,F
 Delta Electronics 1803 Louisiana Ave New Orleans
15 La TW 5-2091 A,B,D,F,H
 DeMent Labs 5919 SE 72 Ave Portland 6 Ore
 DeRyder H 610 Bloomfield Ave Bloomfield N J BL
2-2665 E
 Designers for Industry 4241 Fulton Pkwy Cleveland 9
Ohio SH 9-0700 A,B,C,D,E,F,H
 Douglas Eng'g Co 28 Taylortown Rd Montville N J
DE 4-2430 C
 Draco Inc Box 6648 Washington 9 D C DU 7-2550
B,D,F
 Dumleavy F S 2660 North Ave Bridgeport 4 Conn
FO 7-1708 C,D,E,F
 duTreil & Assoc L J N 202 Homedale Ave New
Orleans 24 La AU 3525 A
 Edgerton Gernshausen & Grier 160 Brookline Ave
Boston 15 Mass CO 7-3520 D,E,F
 Elcar Eng'g 623 Crandell Rd Tiverton R I 4-8553 B
 Electro-Mech Eng'g 1124 E 3 St Minneapolis 15 Minn
FE 3-4728 D,E,F,H
 Electronic Equipment Supply 249 N 48 St Lincoln 10
Nebr 6-2444 B,D,E,F
 Electronics Eng'g 6518 N Bouvier St Phila 26 Pa
 Electronics Research 221 Angelique St Weehauken N J
UN 3-5136 D
 Engineering Service 621 Jones Way Sacramento 18
Calif GL 3-1400 D,E
 Engleman C L 2480 16 St N W Washington 9 D C
AD 4-6830 A,B,C,D,E,F,H
 Espy Dawkins Box 933 Beverly Hills Calif CR 4-7111
A,B,E,H
 Ewald E R 1202 James St Geneva Ill 2022 C,E,F
 Fein Mitchell 202 Saddlewood Drive Hillsdale N J
WE 5-2055 C,D,E
 Foss Wm L Inc 927 15 St N W Washington 5 D C
RE 7-3883
 Frazer Co Bob 978 Kent St Altadena Calif SY 4-0512
D,E,F
 Frese G M RT 3 Box 3276 Wenatchee Wash NO
3-5864
 Friedman T B 235 Quadro Vecchio Dr Pacific Palis-
ades Calif GL 4-2837
 Frommer J C 1525 Teakwood Ave Cincinnati 24 Ohio
KI 8730 D,F

CONSULTING ENGINEERS

- Gallay Labs 60 Perry St Belleville 9 N J PL 9-4237 B,D
- Gautney & Jones 1052 Warner Bldg Washington 4 D C NA 8-7757 A,B
- General Kinetics Inc 555 23 St S Arlington 2 Va OT 4-7555 B,D,F
- Gerst Co Paul E 4868 N Clark St Chicago 40 Ill LO 1-5897 C,E
- Godley Co Paul P O Box J Upper Montclair N J MO 3-3000 A,B,F
- Goldsmith A N 597 5 Ave New York 17 N Y PL 3-4150 A,D,F
- Gordon H L Warner Bldg Washington 4 D C NA 8-2497 C,D,E,F,H
- Gordon-Obriq Assoc Inc 7 E 48 St New York 17 N Y PL 3-1642
- Gottschalk Eng'g Box 335 Rt 3 Tucson Ariz 4-3288 D,E,F,H
- Graf Rudolph 215 W 92 St New York 25 N Y TR 7-1977 B,E
- Gray C M P O Box 602 Birmingham 1 Ala TR 1-3570 A
- Greer P A Rt 1 White Horse Rd Greenville S C 5-7175 A
- Grimwood Assoc S C 5402 Cabanne St Louis 1 Mo FO 7-5640
- Haigler E D North York Rd Hatboro Pa OS 5-3562 D,E
- Haller Raymond & Brown 124 N Albertson St State College Pa AD 7-7611 B,D,E,F
- Hammett Robert L 821 Market St San Francisco 3 Calif SU 1-7545 A,B
- Hare Co D G C 30 Burtis Ave New Canaan Conn WO 6-9569 E
- Hartman R E Rt 2 Box 189A Tiffin Ohio 4174-W D,F
- Hartong J C Box 465 Beckley W Va 5633 B,D,E,F,H
- Hatfield J B 906 36 Ave Seattle 22 Wash FR 7860 A
- Hayes R R 151 North St San Antonio 5 Tex CA 4-7292 B,C,D,E
- Hecht Bernard 5410 Wilshire Blvd Los Angeles 36 Calif WE 0121 B,C
- Heffelfinger J B 8401 Cherry Kansas City Mo HI 4-7010 A,B
- Hildebrand J G 45 Brighton St Belmont 78 Mass IV 4-3434 C
- Hoberman Max 11 Godwin Ave Fair Lawn N J FA 4-5654 B,C,D,E,F
- Hogan A W Box 1082 Brownsville Tex LI 2-5394 D
- Hogan Labs 155 Perry St New York 14 N Y CH 2-7855
- Hoisington D B 150 Ford Rd Carmel Valley Calif LO 9279 B,D,E,F
- Holdaway & Assoc L M 369 Romany Rd Lexington Ky 4-9889 B,D,F
- Holey W J 1146 Briarcliff Pl N E Atlanta Ga TR 4-3326
- Holland Electronics 2133 Central Drive S East Meadow N Y IV 9-0956 A,B,D,E,F
- Hollmann Dr H E 13026 Woodbridge St Studio City Calif ST 9-7353
- Hutcheson G C Box 32 Arlington Texas CR 4-8721 A,B
- Industrial Res Products 9400 Belmont Ave Franklin Park Ill GL 5-3600
- Instruments for Industry 150 Glen Cove Rd Mineola N Y PL 2-5300 B,E
- Irco Corp 16 Hudson St New York 13 N Y RE 2-2996 D,E,F
- Isberg R A 2001 Barbara Drive Palo Alto Calif DA 3-1237 A,B,D,E,F,H
- Jacker E W 860 Lincoln Blvd Manitowoc Wisc MU 2-5358 A,B,F,H
- Jansky & Bailey Inc 1339 Wisconsin Ave N W Washington 7 D C FE 3-4800 A,B,D,E
- Johnson J K 184 South Ave New Canaan Conn WO 6-2827 A,B,C,D,E,F
- Kahn Research Labs 22 Pine St Freeport N Y B
- Kahlfell Electronix 3434 Midway Dr San Diego 6 Calif AC 3-7156 D
- Kallmann H E 417 Riverside Dr New York 25 N Y AC 2-1713 E,F,H
- Katzin Martin 711 14 St N W Washington 5 D C ME 8-5818 B,C,D,E,F
- Kean Walter F 1 Riverside Rd Riverside Ill RI 7-2153 A
- Kear & Kennedy 1302 18 St N W Washington 6 D C HU 3-9000 A,B
- Keel J J 1121 E Capitol St Washington D C LI 4-5131 A,B
- Kelburn Eng'g Co 3136 Clarence Ave Berwyn Ill ST 8-6485 D,E,F
- Kelton M R 4350 Sherbrooke St W Montreal Canada FI 5442 A,B
- Kinn T P 7007 Lancaster Rd Baltimore Md HU 6-8988 B,C,D,F
- Kip Electronics 29 Holly Pl Stamford Conn DA 3-5116
- Kirk W C 2114 Griffith Pl E Owensboro Ky MU 3-4144 C,D,E
- Kohlhagen Walter 818 Oakley Ave Elgin Ill SH 1-8913 F
- Korn G A & T M General Delivery Sun Valley Calif B,D
- Kunins M K 1730 Popham Ave New York 53 N Y LU 7-0024 D,F
- La Forge Jr L H 764 Marion Ave Palo Alto Calif DA 5-3775 C
- Lappas & Lindberg Co 141 W Jackson Blvd Chicago 25 Ill WA 2-4123 A,B
- Lehr O A 643 W Shawnee Dr Montgomery 7 Ala 2-0350 A,B,D,F
- Levey Labs H A 8127 Oleander St New Orleans 18 La GA 1501
- Little Inc A D 30 Memorial Dr Cambridge Mass UN 4-9370 D,F
- Lohnes & Culver Munsey Bldg Washington 4 D C DI 7-8215 A
- Loupee & Co N A 120 Broadway New York 5 N Y RE 2-8515 B,D,F
- Lubcke Harry R 2443 Creston Way Hollywood 28 Calif HO 9-3266 A,B,D,F
- Lyon H H 4004 Jefferson St Hyattsville Md WA 7-2044 A,B
- Magnuson Eng'r's 509 Emory St San Jose Calif CY 2-3657 E,F
- Marchand Electronic Labs 311 Riversville Rd Greenwich Conn
- Mast Development Co 2212 E 12 St Davenport Iowa 3-9729 F
- Mathematical Computing Service 67-24 211 St Bay-side 64 N Y BA 4-6184 B,C,D,E,F,H
- May Eng'g Co 6055 Lankershim Blvd N Hollywood Calif
- May Russell P 711 14 St N W Washington 5 D C RE 7-3984 A,B
- McIntosh F H 777 14 St N W Washington 5 D C ME 8-4477 A,B,F
- McNary J C 906 National Press Bldg Washington D C DI 7-1205 A,B
- McNeal J D 794 Quinipiac Ave New Haven Conn HO 7-7012 D,E,F
- Meyers J G 1056 Sheridan Ave New York 56 N Y WY 2-0138 H
- Metro-Goldwyn-Mayer Culver City Calif TE 0-3311 H
- Midwest Eng'g Co 5437 N Santa Monica Blvd Milwaukee 17 Wisc WO 2-5172 A
- Mills J V Rm 1065 National Press Bldg Washington 4 D C ST 3-1065 B,C,D,E
- Mittelman Eugene 549 W Washington Blvd Chicago 6 Ill ST 2-3171 D,F
- Morecroft J M 2637 Pickens St Montrose Calif CH 9-6418 A,B,D,E,F,H
- Morefield John A 441 N 25 St Camp Hill Pa RE 7-3416 B,D,F,H
- Morris Jr F W 11600 Fairway Dr Los Altos Calif WH 8-3928 B,D
- Morrissey T G 5700 W 28 Ave Denver 14 Colo BE 3-5320 A,B,D
- Moulic Specialties 1005 W Washington St Bloomington Ill 6-1235 D,F
- MSI Communications 1475 Broadway New York 36 N Y BR 9-8517 B,D,F
- Mullaney John H 2000 P St N W Washington 6 D C CO 5-4666 A,B,D
- Murray A F 4900 Hillbrook Lane Washington 16 D C EM 2-4841 A,B
- Myse & Assoc D A 1411 Pennsylvania Ave N W Washington 4 D C RE 7-7040 A,B
- Nat'l Scientific Labs 2010 Mass Ave N W Washington 6 D C HU 3-4030 B,D,F
- Nicholson Emmett 256 Scotland St Dunedin Fla 81-3191 F
- North Hills Electric 203-18 35 Ave Bayside 61 N Y BA 4-0540 C,E
- Norton Electronics 10 Addison Rd Fairfax Va CR 3-0850 D,F
- Pape Cruetz Garrison & Waldschmitt 710 14 St N W Washington 5 D C EX 3-5670 A
- Penfield Paul 752 Lakeside Birmingham Mich
- Pfeiffer G S 4529 W Parker Ave Chicago 39 Ill BE 5-9377 F
- Pickles Sidney P O Box 1126 Tonopah Nev 1386
- Plotts Ellery L 209 Jason St Arlington 74 Mass MI 3-8220 A,B
- Pollack Dale 751 Main St Waltham Mass TW 4-6043
- Polydoroff W J 927 15 St N W Washington 5 D C NA 7-6724 C,E
- Polytechnical Consultants 425 W 263 St Riverdale 71 N Y KT 9-7394
- Pooley R R 3153 N E 83 Ave Portland 20 Ore AL 3-7450 A,B
- Preisman A 616 St Andrews Lane Silver Spring Md JU 5-6307 A,B,H
- Pressman Assoc 7803 Farnsworth St Philadelphia 15 Pa DE 3-8064 D,E,F
- Prestwood F H 342 Lincoln Ave Val Paraiso Fla 2547 A,D
- Rabinow Eng'g Co 7212 New Hampshire Ave Washington 12 D C JU 9-3555 C,D,F
- Radio Eng'g Co 1355 Market St San Francisco Calif MA 1-8171 A,H
- Raesler J L 93 Philips Rd Manchester Conn MI 9-0949 D,E,F
- Richardson Assoc W E 1017 S W Washington Portland Ore CA 8-7777
- Ring & Co A D 1032 Pennsylvania Bldg Washington 4 D C RE 7-2347 A,B
- Rochester Electrical & Radio 462 Plymouth Ave N Rochester 6 N Y LO 6696 A,B,D
- Rosen Co Milton 43 Winthrop Rd Hillsdale N J WE 5-0961 C,D,E,F
- Rosenberg Assoc P 100 Stevens Ave Mt Vernon N Y MO 7-8040 B,C,D,E,F
- Rountree J G 5622 Dyer St Dallas 6 Texas EM 3266 A,B
- Saxon Merl P O Box 575 Lufkin Texas 3-4242 A
- Schultz Co 503 N Pine St Indianapolis 2 Ind ME 6-5461 D,F
- Selby H E 619 68 St Brooklyn 20 N Y SH 5-5332 C,E,H
- Shelkofsky C I RT No 1 Foley Ala WH 3-6269 A,B
- Shepard Labs 480 Morris Ave Summit N J CR 3-5255 D,F
- Silliman & Assoc R M 1405 G St N W Washington 5 D C RE 7-6646 A,B,D,F
- Singleton Harold C 4488 S W Council Crest Dr Portland 1 Ore CA 3-1201 A
- Smeyl L 4806 Montgomery Lane Washington 14 D C OL 2-8520 A
- Smith Carl E 4900 Euclid Ave Cleveland 3 Ohio HE 2-3177 A,B,D,F
- Smith G D 136 Liberty St New York 6 N Y RE 2-6688 E
- Snow W B 1011 Georgia Ave Santa Monica Calif EX 4-8345 H
- Spencer M C 28 Green St Lebanon N H LE 457 D,F
- Stone C G 304 S 1 Ave Mt Vernon N Y MO 8-8167 E,F
- Strain Eng'g 4556 Northside Dr N W Atlanta 5 Ga CE 3-0389 A
- Street C 610 S San Vicente Blvd Los Angeles 48 Calif WE 1-0055 B,D,E,F,H
- Sunstein Eng'g Co 464 Conshohocken State Rd Bala-Cynwyd Pa
- Swanson E M 15 Cleveland Ave Glen Head N Y GL 4-6324 B,E
- Swantek J J 3132 Glacier Way Ann Arbor Mich NO 2-9608 A,B
- Swarthe Eric P O Box 212 El Segundo Calif FR 4-1757 D,E,F
- Tammen & Denison 650 S Clark St Chicago 5 Ill HA 7-3955 C,D,E,F,H
- Tannenbaum Jerome 5240 S Harper Ave Chicago 15 Ill FA 4-9556 D,F, H
- Town & Hughes Box 112 Station A Ames Iowa CE 2-5754 A,B,D
- T & T Radio Measurements 2557 Atlantic Ave Long Beach 6 Calif GA 4-2015 A
- Uglove Kenneth M 7961 Eastern Ave Silver Spring Md JU 9-2603 B
- Vandiver Cohen & Wearn Evans Bldg Washington 5 D C NA 8-2698 A,B
- Vaughan Assoc C B Box 441 Union City N J D
- Wagner & Assoc G O 931 Groton Dr Burbank Calif TH 4-1692 C,D,F
- Walsh Eng'g 34 DeHart Pl Elizabeth 2 N J EL 4-5120 C,D,E
- Watson Jr R C P O Box 1435 Anniston Ala AD 6-4503 A,F
- Weldon & Carr 1001 Conn Ave N W Washington 6 D C ST 3-2550 A,B,H
- Westlabs Inc P O Box 1111 Palo Alto Calif DA 4-0514 F
- Whalley W B 201-10 28 Ave Bayside 60 N Y BA 9-9049 F
- Wheeler Labs 122 Cutter Mill Rd Great Neck N Y HU 2-7876 B
- Whiteford Lab 587 Washington St Lynn Mass LY 8-9119 B,D,E
- Whitney Philip 200 Shawnee Ave Winchester Va
- Williams B M 1805 Westway Ave Garland Texas 6-3443 C,D,E,F
- Williams E M 415 Maple Ave Pittsburgh 18 Pa PE 1-8083 B,D,F
- Williams M R 7401 E 14 St Indianapolis 19 Ind FL 6-0388 A,B,F,H
- Williams N 20 Algoma Blvd Oshkosh Wisc BL 885
- Wilmotte Inc R M P O Box 397 Kendall Br Post Office Miami Fla PE 7-7531
- Winkler Labs 5225 N 20 St Phoenix Ariz AM 6-5952 E
- Winfield Scott McCachren & Assoc 2404 Columbia Pike Arlington 4 Va JA 8-800 A
- Wortman L A 75 Charles St New York 14 N Y WA 9-3622 A,B
- Wrathall G R Aptos Calif MU 8-3352 A,E
- Wright Eng'g Co 7941 McNulty Ave Canoga Park Calif DI 7-6843 A,B,D,F,H
- Wright L R Munsey Bldg Washington 4 D C DI 7-1740 A
- Wyeth Eng'g 1336 W 89 St Chicago 20 Ill HI 5-1447 D,F

ELECTRONIC INDUSTRIES DIRECTORY of

Representatives ("Reps")

This section of the 1956 Electronic Industries Directory lists those representatives operating as independent "reps" who handle two or more lines. They do not include factory staff salesmen. "Reps" are listed alphabetically under states and cities. Asterisks (*) indicate membership in "The Representatives" of Electronic Product Manufacturers, Inc. Telephone numbers are given to speed contacts.

Alabama

BIRMINGHAM

Emory Design & Equip 404 Dexter Ave TR 1-1369
Hayden Associates Paul Hqrs E Point Ga

Arizona

PHOENIX

Bernstein & Co 39 W Adams AL 2-4371
Circle Sales Co 9151 N 9 St WI 3-3925
Marsh Co J W 1011 W Whittan AM 6-9124
McDonald Tom 4656 N Central CR 4-5416
Maydwell & Hartzell 324 S 2 Ave
Moore Sales Co Harry A Box 7245 AM 5-4662
Neely Enterprises Hqrs N Hollywood
Sheffer Co H P O Box 1587 AL 8-7893

TUCSON

Jewett Co Samuel O 1025 S Van Buren St
Marshall Co G S Hqrs Pasadena
Miller Co Gerald B Terminal Bldg TU 4-4255

California

LOS ANGELES AREA

*Alderson Co Wes 10422 National Blvd TE 0-1030
Ames Eng'g Co 613 Nethany Rd (Burbank) TH 2-8937
*Appleton Harry N 136 San Fernando Rd CA 5-5611
*Barron Co W J 817 S Hoover St DU 7-5258
*Barstow & Doran 1406 S Grand Ave RI 8-6191
Bassett Co William E 12045 Magnolia Blvd (N Hollywood) PO 6-2217
*Becker Co Herb 1140 Crenshaw Blvd WE 1-1257
Berman Co J 1141 S La Cienega Blvd BR 2-9138
Bray & Carter 2234 W 11 St DU 9-3173
Charrett Co 1409 Wilshire Blvd (Santa Monica) TE 0-8489
*Cochrane-Barron Co 544 S Mariposa DU 5-0095
Cohn Sales Co S H 1769 S Holt Ave TE 0-4398
Components Sales Corp 4714 Van Nuys Blvd (Sherman Oaks) ST 9-9641
Corman Walter W 7432 W 80 St OR 4-5833
*Costello & Co 3406 W Washington Blvd RE 3-9175
Davidson & Assoc Joe 2803 Los Flores Blvd (Lynwood) NE 6-2245
*Davis Sales Co Geo W 5432 E Beverly Blvd RA 3-3594
Dudek & Co Richard C 407 N Maple Dr (Beverly Hills) BR 2-8097
*Ealy Co M D Box 238 (Northridge) ST 3-1775
*Edwards Jackson 6047 Hollywood Blvd HO 5-1141
Elecnair Co 3903 Warner Blvd (Burbank) VI 9-2874
Ellis Co David 919-D E California St (Pasadena) RI 1-9108
*Emmet Frank A 2837 W Pico Blvd RE 1-8211
*Erlanger Sales Co 4217 Jefferson Blvd RE 1-2238
Falck Co Fred W 2311 W Burbank Blvd (Burbank) VI 9-4298
*Feldman Co Henry 1244 S Grand Ave RI 9-8803
Geist Co Wm K 3177 Glendale Blvd NO 5-8910
Gilbert Co M B 1608 W Centinefa Blvd (Inglewood) DR 8-5767
Graham Sales Co 1200 N Sycamore Ave (Hollywood) HO 2-3552
Hachten Co J E 8413 E Las Tunas Dr (San Gabriel) CU 3-3869
*Hansen & Brazan 1406 S Grand Ave RI 8-6191
Harmon Co W S 121 N Robertson Blvd (Beverly Hills) BR 2-3321
Heim & Scheer 11168 Santa Monica Blvd BR 2-5133
*Hill Sales Co J T 420 So Pine (San Gabriel) CU 3-6555
Holmes Co Carl F 107 N Ave 64 CL 6-2255
Jewett Samuel O 13537 Addison St (Sherman Oaks) ST 9-6027
Jurin Co Syd 4853 Oakwood Ave HO 5-5507
Key Enterprises 15131 Gilmore St (Van Nuys) ST 0-6187
King-Moon Co P O Box 1245 (Sherman Oaks) ST 4-5404
*Kittleson Co 416 N La Brea Ave WE 3-7371
*Knight Co W Bert 10373 W Pico Blvd BR 2-5647
Koessler Sales Co 818 N Fairfax Ave OL 3-1605
Luscombe Eng'g Sales 17 W California St (Pasadena) SY 5-6463
Lynch & Son C R 3307 Glendale Blvd NO 3-8236

*Mann Assoc Martin 14751 Keswick St (Van Nuys) ST 3-2850
Marchuk Co F J 261 E Colorado St (Pasadena)
*Marsh Co J W 4216 W Jefferson Blvd RE 2-0145
*Marshall Co G S 2065 Huntington Ave (San Marino) RY 1-6781
*Marshank Sales Co 7422 Melrose Ave WE 8-2591
Maydwell & Hartzell 427 W 5 St MU 7245
McCarthy Assoc 16 N Marengo Ave (Pasadena) RY 1-8810
*Miller Co Gerald B 1550 N Highland Ave (Hollywood) HO 2-1195
Miller Assoc 742 S Hill St
Mitchell Co C H 9015 Wilshire Blvd (Beverly Hills) BR 2-6635
Moxon Sales G E (Culver City) Hqrs San Mateo
Nash Co A W 2112 S Atlantic Blvd AN 9-7304
*Neely Enterprises 3939 Lankershim Blvd (N Hollywood) ST 7-0721
Olander & Co Roland 7225 Beverly Blvd WE 5-1211
Osborne R E 1757 Garfield Ave (S Pasadena) RY 1-3175
*Owens Co L H 2331 W Washington Blvd RE 5-0203
Paules & Co E G 1762 W Vernon Ave AX 3-6265
Perlmuth Electronics Assoc 2419 S Grand Ave RI 7-4321
Possner Co 1223 Venice Blvd DU 8-0508
Renz Roy E 3310 W 6 St DU 8-6545
*Rissi A J 2724 S Peck Rd (Monrovia) RY 1-5621
*Roberts & Assoc E V 5068 W Washington Blvd WE 8-2541
Ross & Co Malcolm 6119 Longridge Ave (Van Nuys)
*Rupp Co V T 307 Parkman Ave DU 7-8224
Rush & Assoc C B 3757 Wilshire Blvd DU 8-7585
*Saul & Assoc H M 5015 San Vicente Blvd WE 8-3591
Shepherd-Winters Co 7559 Melrose Ave WE 8-2996
Shoemaker & Assoc 1127 Wilshire Blvd MI 1304
*Siegel Co S 1133 S La Cienega Blvd OL 5-8870
Skahill E A 933 N Kenmore Ave MO 3-4453
*Snitzer T L 5354 Pico Blvd WE 8-2074
*Snyder Co Lee Grant 1418 N Highland Ave (Hollywood) HO 9-6278
Sodaro Co Joseph F 3895 Main St (Culver City) TE 0-3213
Starr Edwin E 4101 Rhodes Ave (N Hollywood) ST 7-5879
Stern & Co I R 4109 Burbank Blvd (Burbank) VI 9-1195
Stevens Co Thomas L 5333 S Sepulveda (Culver City) EX 8-5768
Stolaroff Co M A 4622 W Slauson Ave AX 3-6226
*Stone Assoc C A 1102 S Western Ave RE 2-8103
*Stone Sales Co R L 8971 National Blvd TE 0-5972
*Strassner Co Conrad R 1865 N Western Ave HO 2-0916
Thorson Co 7361 Melrose Ave WE 4-1191
*Tubergen Assoc 2232 W 11 St DU 9-3173
Van Groos Co 14515 Dickens St (Sherman Oaks) ST 7-9615
Vaughn Co G H 15 N Euclid Ave (Pasadena) SY 5-4420
*Wallace & Wallace 1206 Maple Ave RI 7-0401
*Weber Co Wedge 1217 Venice Blvd DU 7-2111
*Weightman & Assoc H G 4101 Burbank Blvd (Burbank) VI 9-2435
Wespre Corp 2022 S Sepulveda Blvd BR 2-3757
West Co Lloyd E 557 E Walnut St (Pasadena) RY 1-5281
Western Control Equip Co 14615 Ventura Blvd (Sherman Oaks) ST 7-0447
*Westron Sales & Eng'g Co 7407 W Melrose Ave WE 3-7276
Wilcox Co E A 6436 E Corvette St RA 3-6436
*Wiley Co Paul F 1632 Silver Lake Blvd NO 3-8028
*Wood Co Ash M 11938 E Garvey Ave (El Monte) CU 3-1201
Yarborough Sales Co 2636 Mission St (San Marino) RY 1-3331
Zimmerman Co W E 407 N Maple Dr (Beverly Hills) RE 2-1181

SACRAMENTO

Neely Enterprises Hqrs N Hollywood

SAN DIEGO

Hildebrand Gorman 3132 Tarragona Dr JU 2-4677

*Hill Co J T 1864 Bacon St AC 3-7133
Marshall Co G S 3525 S Ave CY 8-8234
Miller Co Gerald B 1263 Rosecrans Blvd AC 2-1121
Neely Enterprises Hqrs N Hollywood
SAN FRANCISCO AREA
*Ault C E 906 Willow Rd (Menlo Park) DA 6-1760
*Belchamber & French 1485 Bayshore Blvd JU 6-0406
Belfer William 926 Howard St SU 1-2633
Belilove Co 420 Market St YU 2-3713
*Berman Co E L 780 Natoma St UN 3-0317
Brainard W V 1010 Grosvenor PI (Oakland) TE 2-8378
*Brandt E W 1355 Market St HE 1-0484
Cady J F 1485 Bayshore Blvd JU 5-4108
Cochrane-Barron (Palo Alto) Hqrs Los Angeles
Dalton C R 132 El Camino Real (San Carlos) LY 1-2654
Deere Co Jerry 1809 Virginia Ave (Redwood City)
*Eichorn & Melchior 749 Bryant St DO 2-1038
Frazar & Hansen 301 Clay St EX 2-5112
*French Sherwood P 141 Walter Hays Dr (Palo Alto) DA 3-0597
*Harriss-Koetke Sales Co 383 Brannan St YU 6-1084
Heaton James S 3525 Alameda Dr Las Pulgas (San Mateo)
Held Herman E 147 10 St UN 3-4250
*Hill Co J T 1682 Laurel St (San Carlos) LY 3-7693
*Hodges & Glomb 921 Bryan St UN 1-2367
Johnson Assoc 129C Hillsdale Blvd (San Mateo) FI 5-5084
Kittleson Co Hqrs Los Angeles
Koessler Industriens 2830 Geary Blvd JO 7-0622
Kolans & Co Bill 3589 St MI 7-6686
*Lebell Co Frank 988 Market St GR 4-1069
*Lewis Assoc Dean 4385 Piedmont (Oakland) OL 4-0613
*Logan Sales Co 150 8 St HE 1-0692
Marsh Co J W Hqrs Los Angeles
Marshall Co G S (Redwood City) Hqrs Pasadena
Mauldin Co C W 441 W California Ave (Palo Alto) DA 4-2135
McCarthy Assoc 441 W California Ave (Palo Alto) DA 3-3270
McKnight Co 400 Monterey St EX 2-2552
*Meyer & Ross 113 10 St HE 1-0652
*Mouthrop Co F W 575 10 St MA 1-0722
*Mouthrop & Hunter 165 11 St HE 1-2625
Moxon Sales G E 422 LaJolla Ave (San Mateo) FI 5-2866
Neely Enterprises (San Carlos) Hqrs N Hollywood
*Newman Co H L 420 Market St YU 6-3897
*Nickerson & Rudat 381 Brannan St YU 2-2982
*Nott & Co L A 1061 Howard St HE 1-4738
Peninsula Assoc 2857 El Camino Real (Redwood City) EM 9-1226
Pfieger Co R L 1652 Laurel St (San Carlos) LY 1-0396
*Purdy Co W J 312 7 St UN 3-4321
*Roberts & Assoc E V Renato Court (Redwood City) EM 8-7125
*Ross Co D H 534 El Camino Real (San Carlos) LY 3-8224
Salisbury & Assoc C M 1453 7 Ave LO 6-8160
Schwarzchild Bert 105 Lake St SK 2-0846
*Sinai A A 65 9 St UN 1-6259
Striker Co John E 1047 Cherry St (San Carlos) LY 1-0736
Strassner C R (Redwood City) Hqrs Los Angeles
Theisner W G 11161 Samedra (Cupertino) CH 3-5142
*Tompkins & Co W W 941 Newell Rd (Palo Alto) DA 3-3270
*Weightman Assoc 1436 El Camino Real (Menlo Park) DA 6-3797
White & Co 788 Mayview Ave (Palo Alto) DA 3-4455
Wilcox Co E A 277 7 St HE 1-6670

Colorado

ARVADA

Barnhill Assoc 6520 W 62 Ave HA 4-7733

ASPEN

Ketterberg Charles V P O Box 172 5281

BOULDER

*Golfier W B 1003 Grandview Ave HI 2-7899

COLORADO SPRINGS

*Peysor & Co 1501 N Weber St ME 4-3401

DENVER

*Bowen Co 721 S Broadway RA 2-4641

CFL Co 375 S Pearl St SP 7-4381

*Cluphif & Assoc Stan 7825 W Colfax Ave BE 3-6025

*Connors Co W H 375 Birch St DE 3-7628

Franklin Sales Co 1219 California St AM 6-1552

*Hyde Sales Co 1341 Cherokee St CH 4-7471

Hytronic Measurements 1295 S Bannock PE 3-3701

Kittleson Co Hqrs Los Angeles Calif

*Koether-Cox Co 120 W 13 Ave MA 3-3544

*McLoud & Raymond 5528 E Colfax Ave FL 5-3525

*Nelson Co A J P O Box 5502 KE 4-6751

*Pearson & Co Mel 1011 S Josephine St SP 7-7878

Pease Fred A P O Box 1566 FR 7-2336

Richards & Assoc 2415 15 St GL 5-3651

Swan Co Edward C 232 Dahlia St EA 2-4718

*Williams Co Allen I 126 W 12 Ave MA 3-0343

FORT COLLINS

*Leeper & Assoc Wilson Box 324 3044

GREELEY

*Mass Gordan G P O Box 428 GR-770

REPRESENTATIVES ("REPS")

Connecticut

ANDOVER
 *Seyd E K Long Hill Rd PI 2-6604

BRIDGEPORT AREA
 Perron & Co Ray (Turnbull) Hdqrs Boston
 Sales Engineering Co 211 State St ED 5-9634

CANAAN
 Hathaway Electronics Glenn M P O Box 797 TA
 4-7215

Jacobson Co Leo Bellevue Rd

HARTFORD AREA
 Caldwell Co Michael S 289 Fairfield Ave JA 2-5832
 Gates Alexander W 46 1/2 Summer St (Manchester)
 MI 9-7761

*Hutton & Co Arthur T 1000 Farmington Ave (W
 Hartford) AD 3-3613

Kahn & Assoc Irving 541 Windsor St CH 6-7431

Pettigrew & Co R S 62 La Salle Rd (W Hartford)
 AD 2-8533

Stockwell Technical Sales Co 121 Loomis Dr (West
 Hartford) AD 3-5069

White Sales Co 36 Milldrum Rd (Berlin) BA 4-
 0423

NEW HAVEN AREA
 Broger Instr Sales 42 Church St SP 7-6279

Feldman & Assoc Geo 523 Norton Pkwy SP 6-9823

Gerber Sales Co Hdqrs Brookline Mass

Kirschner Edward M 28 Hamistow Ave (Hamden)
 CH 8-1816

*Lavin Assoc Henry P O Box 196 (Meriden) BE
 7-5527

Whitehead Jr R H 57 Whitfield St (Guilford) GL
 3-3762

STAMFORD
 Daggon J J 80 Westcott Rd
 EAI 200 S St DA 4-7300

WESTPORT
 *Neif Assoc Paul S 15 Oak St CA 7-3834

District of Columbia

WASHINGTON
 Brimberg Assoc 312 Investment Bldg DE 2-8000

Burlingame Assoc Hdqrs New York City

Harbison & Masi 734 15 St N W

Horman Assoc 2017 S St N W

F R Jodon Inc 8510 Beech Tree Rd OL 2-4406

MacDonald Samuel K Hdqrs Philadelphia Pa

Massey Assoc Hdqrs Narberth Pa

Mathias R T 4602 Overbrook Dr OL 6-3371

Peel Sales Agency 3433 Conn Ave N W EM 2-2022

Whitfield James W 6006 Onondago Rd EX 3-6640

Florida

BRADENTON BEACH
 Hayden Assoc Paul E Point GA

CASSELBERRY
 Acheson & Adams Hdqrs Greensboro NC

CLEARWATER
 Wimberly Ben 39 N Pine Circle CL 3-7072

CORAL GABLES
 Kimball & Twichell 209 Alhambra Circle

FORT MYERS
 Lynch & Assoc A H 35 North Shore Ave ED 4-
 4431

JACKSONVILLE
 *Cole H A P O Box 852

Ward Engineering Co 2727 Phyllis St

LUTZ
 *Wallace Assoc SK P O Box 67 WE 9-3241

MIAMI
 Gibbons Electron Sales R J 3051 N W 4 St NE
 4-6256

Hemming W F 619 N E 78 St PL 9-0300

Hollingsworth & Still Hdqrs Atlanta

Murphy & Cota Hdqrs Atlanta

Repco Sales Co 401 N W 71 St PI 4-2087

Ward Eng'g Co P O Box 11 Gratiuity Br

Williams Norman P O Box 671 Buena Vista Sta

MIAMI BEACH
 Gaertner Co Jack 823 86 St UN 6-6664

ORLANDO
 Holmes & Assoc E G 56 W Columbia OR 3-3524

ORMOND BEACH
 Smith Co Maitland K 322 Riverside Dr CL 3-5853

TAMPA
 Cartwright & Bean 4525 Lois Ave 62-0111

Minthorne Co L L Hdqrs Portland Ore

Wallace Assoc Stanley Hdqrs Lutz

WINTER HAVEN
 *Taylor Co Morris P 940 Lake Elbert Dr 2-2684

Georgia

ATLANTA
 Bivins & Caldwell Hdqrs High Point NC

Buchanan D B 206 Underwood Dr W CH-0689

*Burwell Co Henry W 422 Ponce de Leon Ave N E
 TR 4-2127

Cartwright & Bean Hdqrs Memphis

*Duckett Sales Co Grady 26 E Andrews Dr N E
 CE 3-5308

*Fausett Floyd & Co 777 Pinehurst Terr S W PL
 5-5781

Hart Eng'g & Sales 651 W 10 St N W Atlanta 18
 GA AL 9854

*Hollingsworth & Still 508 Whitehead Bldg MU
 8-5878

Holmes & Assoc E G 309 Pharr Rd N E CE 7-7801

*Joiner & Assoc J E Box 341 Sta A PL 5-4336

*Millar Assoc James 1036 Peachtree St N E TR
 6-0919

Mills & Assoc W H Box 143 Northside Sta

*Murphy & Cota 2110 Peachtree Rd N W TR
 6-3020

*Nickerson Co F C 1150 Zonolite Rd N E TR
 5-8908

*Pepper & Assoc J B 1429 Peachtree St N E TR
 4-8266

*Smith Co Maitland K 208 14 St N W TR 5-8031

*Southeast Eng'g Corp 3223 Cain's Hill PI N W
 CE 7-2233

Taylor Co Morris F Hdqrs Silver Spring Md

Thornwell Inc E A 1537 Howell Mill Rd N W
 WA 3548

Wallace Assoc Stanley Hdqrs Lutz Fla

Woodman Inc B S 1570 Northside Dr N W TR
 2-5595

DECATUR
 *McCorvey Co V Avis 215 Church St DR 7-6167

E POINT
 *Haydon Assoc Paul P O Box 331 PO 6-0261

*Little W T 2395 Connally Dr P O Box 308 PO
 1-5323

Illinois

CHICAGO AREA
 *Angel & Co Jay C 2743 W Peterson Ave UP
 8-0653

*Arnold Co A W 1321 Rosedale Ave ED 4-6457

Bauman & Bluzat 2753 W North Ave

*Bauman Sales Co Robt H 210 S Lodge Lane
 (Lombard) LO 18

*Beier Leroy W 6518 W North Ave BE 7-2420

*Bierhaus J J 4804 W Madison St AU 7-2089

Blaker Co S C 2353 N Calif Ave AM 2-3727

*Bluzat Co Rene 3035 N Larime Ave PE 6-2238

*Booth & Assoc Claude 4000 W North Ave CA 7-
 2810

*Brouillette & Assoc 5049 Quincy St MA 6-0499

*Bruning Co 2215 W Wilson Ave ED 4-0989

*Burgoyne W E 7001 N Clark St HO 5-2112

*Caine Sales Co 3020 N Cicero Ave SP 7-4022

Cappels-Rhodes & Assoc 1214 W Madison St TA
 9-1818

Chambers Co Larry A 5906 W North Ave TU 9-
 4884

Clears Co Gene T 435 Indianwood Blvd (Park
 Forest) SK 5-8359

Cole Sales Co G McL 6514 W Higgins Rd SP
 4-3535

*Cozzens Co Warren B 845 Chicago Ave (Evanston)
 DA 8-4800

*Crossley & Assoc Alfred 4501 N Ravenswood UP
 8-1141

*Cumming & Assoc Bruce 6029 W Belmont Ave
 ME 7-3770

Cunningham Assoc W L 435 Addison Ave (Elm-
 hurst) TE 2-0905

Cushing Co L G 5832 No Rockwell St LO 1-1281

*Diether Co Russ 2030 W Montrose Ave LO 1-6831

*Dolin Sales D 3553 Peterson JU 8-3738

*Doyle Co W J 7002 N Western Ave RO 1-3130

*Ellinger Sales Corp 6540 Northwest Hwy RO 3-
 1570

*Ellinger Sales Co W H 6571 N Olmstead RO 3-
 4154

Ellis Co Arthur J 1607 Howard St AM 2-2708

*Engineered Sales Co 3592 Milwaukee Ave PE 6-
 0555

*Engle Co K D 4724 N Sheridan Rd UP 8-6363

*Everett Assoc 6744 N California Ave AM 2-3702

Parnsworth Assoc 228 N LaSalle St ST 2-6673

*Felleisen & Assoc 5841 W Montrose Ave SP 7-
 1060

Ferguson Hille & Assoc 542 S Dearborn St WA
 2-1824

*Fitzsimmons Assoc Inc 6124 Milwaukee Ave NE
 1-7660

Friedman Co Morton I 2814 W Balmoral Ave LO
 1-4257

*Gassner & Clark Co 6644 N Western Ave RO 4-
 6121

*Gebhard Co H W 5129 W Devon Ave RO 3-3636

*Gianaras Sales Co 2345 W Devon Ave AM 2-2100

Golten Co Jerry 2750 W North Ave EV 4-5959

*Green & Assoc Loren F 5218 W Diversey Ave NA
 2-2370

Haines E Ralph 949 Lake St (Oak Park) EU 6-
 4476

*Halinton Harry Engineers 5500 W Devon Ave RO
 3-2132

Haskell Assoc 202 N Marion (Oak Park) EU 6-
 5741

*Hausten D R 607 E Willow Ave (Wheaton) WH
 8-7312

*Higgins Co Royal J 10105 S Western Ave CE 3-
 7388

*Hill-Gray Inc 41 1/2 Harrison St (Oak Park) EU
 3-0373

Hower & Pretat 4 N Cicero Ave CO 1-3146

*Hunter Associates T B 4441 W Irving Park Rd
 SP 7-2500

*Hutmacher Assoc R R 6647 N Oliphant NE 1-
 3248

Jensen & Associates Fred A 510 N Dearborn St
 SU 7-3809

*Jones Mel 2800 Milwaukee Ave EV 4-2646

Ka Dell Sales Assoc 5875 N Lincoln Ave LO 1-
 3042

*Karet-Margolin 13 W Hubbard St WH 4-6345

Kelburn Eng'g 3136 S Clarence Ave (Berwyn) ST
 8-6485

*Kleker Co Jerome H 177 Sunset Ave GL 2297

*Knaggs Co H W 7503 Melba Lane (Belleville) EX
 7-2398

Knoblock & Malone 4000 W North Ave SP 2-9892

Kopetzky K A 13 W Hubbard St MI 2-2679

*Krueger R 5306 W Lawrence Ave PE 6-3107

Lang Robert L 6677 Northwest Hwy SP 4-3610

*Langhaus-Levy Assoc 2215 S St Louis Ave RO 2-
 6321

Levin Sacks & Assoc 2949 W Touhy Ave RO 4-7082

Lewis & Trimble 5420 W Fullerton Ave NA 2-0706

*Linz Wm M 6322 N Cicero Ave MU 5-2022

*Lombard Vernon PO Box 355 (Grays Lake) K116-
 1760

*Lund-Hansen Co 1900 W Montrose Ave LO 1-
 2551

*Magnuson Assoc 3347 Irving Pk Rd KE 9-7555

*Magnuson Co Edward 3349 W Irving Pk Rd JU 8-
 2613

Maier Eng'g Co 4335 W Peterson Ave PE 6-8747

Marsland & Co H W 6405 N Calif AM 2-1555

*McBride Sales Co J J 328 E Burlington St
 (Riverside) RI 7-8131

*McCarthy L C 7117 W Addison St KI 5-7976

Memac Sales 4740 N Austin Ave AN 3-5728

Meyers Kenneth W I S Norwest Hwy (Park Ridge)

*Mulay Sales 4000 W North BE 5-7411

Murphy & Dickey 537 S Dearborn St

Newman-Krause Co 5306 W Lawrence Ave PE 6-
 6776

Peterson Arthur H 3647 E 62 St RE 5-0846

*George C Pettit Co 349 Ashland Ave (River For-
 est) FO 9-8940

*Pivan Eng'g Co 2820 Peterson Ave BR 4-9135

Proctor Sales Co 3401 W Diversey Ave

Quackenbush Al 605 N Michigan Ave MO 4-1904

Quick Howard L 1241 W Loyola Ave RO 1-0960

Ridgeway Eng'g Inc 6100 W North Ave SP 7-4526

*Ridley Assoc 1551 N Austin Blvd TU 9-2940

*Ritter Sales Co 5839 W Montrose Ave MU 5-7440

*Rose & Co J K 2323 W Devon Ave AM 2-5584

*Saffro & Gettleman Co 5209 N Kimball Ave JU
 8-0905

*Sarkis & Co 5608 North Western Ave AR 1-3774

*Schubert A J 8044 Kildare Ave (Skokie) OR 3-
 7823

*Smith Co Oren W 221 W Huron St SU 7-7919

*Stemm R Edward 5681 W Lake St ES 9-2700

*Stemm Royal A 21 E Van Buren St WE 9-4840

*Sullivan R T 1551 N Austin Blvd NA 2-4074

*Swinke & Co W F 541 Diversey Pkwy BI 8-4343

*Tatro & Assoc F B 6022 N Rogers Ave KE 9-4535

*Taylor Co R F 308 W Washington St AN 3-1808

Twintronic Sales Co 2114 Carroll CH 3-5242

*Twist Co John G 5232 W Diversey SP 7-2250

*Victoria Sales Co 1413 Howard St BR 4-5400

*Warner Co D L 15423 Honore Ave (Harvey) ED
 1-6247

West Jack 6747 N Octavia Ave RO 3-3500

*Whitmore & Assoc R C 605 N Michigan Ave MO
 4-1904

Wiley Co S J 2353 N Calif Ave BR 8-1220

*Withers & Ropek 5439 W Division St AU 7-7292

Indiana

ANGOLA
 Benz Sales Co P O Box 217

*Clancy & Co Joe P O Box 269 AN 793

Law Instrument Co P O Box 95 217

FORT WAYNE
 *Bieberich W W 2817 Plaza KE 2928

Central Sales Co 255 Central Bldg EA 4635

*Hoemig Sales Co Butler Court AN 2083

*Homsber Burt F 2018 Jessie Ave EA 4920

Meily Co William A 4017 S Harrison Blvd KE 2461

Paul Sales Co 2212 S Calhoun St HA 0589

*Southern CD 1605 Lincoln Tower AN 5278

*Valentine Inc Forrest C 511 Ft Wayne Bank Bldg
 AN 9122

INDIANAPOLIS
 Baatz Sales Co 5934 Shimer Ave FL 6-0026

*Blind & Co H J 1508 Winton Ave BE 0191

Bernis Clancy 5750 N Ewing GL-7669

*Crandall & Assoc R M 6220 E 56th St LI 6-8373

*De Voe Co L M 4014 Washington Blvd AT 3-1395

*Fishman Assoc 4440 N Campbell Ave LI 6-5477

Grantland James L 4221 N Lesley LI 7-2220

Law Instrument Co P O Box 6562 ST 7-0099

*MacNabb Co Vernon C 820 E 64 St CL 5-6770

*MacPherson-Thomas Inc 5226 N Keystone Ave CL
 1-6915

Marsland & Co Hugh Hdr Chicago

*Morris Cunningham & Mitchell 6101 College Ave
 CL 1-3222

Murphy Joseph 202 Pam Rd VI 6-0359

Neff J R 3502 N Riley Ave LI 6-5824

O'Connell Co R D 4515 Berkshire Rd LI 7-7600

*Reinhardt K G R R 10 Box 319L UN 2-4001

Ridgeway Eng'g Assoc Hdqrs Chicago

*Schulz Co Edwin A 721 Sherwood Dr CL 5-1993

*Whitesell & Assoc R O 6620 E Washington St
 FL 9-5374

Wright Eng'g 4241 Melbourne Rd WA 3-8888

SOUTH BEND
 Karet-Margolin Inc Hdqrs Chicago

SOUTH WHITNEY
 Warner Assoc Richard P O Box 338

WARSAW
 Turnbull R C 1650 E Smith St

Iowa

CEDAR RAPIDS
 Bettis Co M E 1575 Henderson I694

Harris & Co G E Merchants Nat'l Bank Bldg 2-6302

*Vrbik Jerry 615 Guaranty Bldg EM 4-0833

REPRESENTATIVES ("REPS")

DAVENPORT

Midwest Equipment Co P O Box 532
 Kay Sales Co Hqrs Kansas City Mo
DES MOINES
 Midwest Equipment Co 842 5 Ave

Kansas

KANSAS CITY AREA

*Koenig Sales Co 6359 Antioch Ave (Merriam)
 HE 2-3166
 *Zimmer Sales 5620 Woodward (Merriam) HE
 2-1121
 *Terwilliger Sales Co 7143 W 80 St (Overland
 Park) NI 2-2421

MISSION

Inland Assoc 6047 Howe Dr RA 5-1736

WICHITA

Harris Co George E 3241 E Douglas M 3-9226
 Industrial Assoc Electronics Hqrs Ft Worth
 Kemco Inc P O Box 2552 Hillside Sta
 Perry Tom G 508 N Belmont MU 6-7441

Kentucky

LOUISVILLE

Bilray Organization 3615 Brownsboro Rd TW 5-6339
 Cobb Sales Co 1629 Portland Ave CL 9406

Louisiana

NEW ORLEANS

Bornemann Walter E 4719 Cartier Ave FA 2504
 Cartwright & Bean Hqrs Memphis
 Long & Wallick Associates 1544 Wakefield PI FA
 2-3657
 Maquire Co J P 3144 Paris Ave BY 2751
 Moore Co Earle K 5864 Louisville St AU 2407
 Redmann S M 2322 Valmont St UP 3767
 Texport Co Hqrs Dallas

Maryland

BALTIMORE

Cerf & Co Art Hqrs Newark NJ
 Brown & Assoc W A Hqrs Alexandria Va
 Daniels Inc L J Box 6864 PL 2-7694
 Drew & Co Wm Hqrs Narberth Pa
 Goodman & Assoc George 103 E 25 St BE 5-5570
 Goodman Co S W 32 W Biddle St RO 4-2471
 Jones William 1917 Redwood Ave NO 5-5060
 Lee Assoc S S 630 Warwick Rd AR 3742
 MacDonald Inc S K Hqrs Philadelphia
 Randall Co Hqrs Philadelphia
 Taylor Thomas L 2100 St Paul St BE 5-9126

BETHESDA

Snow C E 6218 Wisconsin Ave OL 4-1767

ROCKVILLE

Ansell Eng'g Co 920 Halpine Ave HA 7-7370
 Rosen & Assoc Gene 4402 Bayne St WH 6-6769

SILVER SPRING

Gawler-Knoop Hqrs Roseland NJ
 *Lienau & Co C W 9427 Georgia Ave JU 7-5888
 MacLen Corp 8616 Georgia Ave
 *Taylor Co Morris F 9431 Georgia Ave JU 9-4002
 White & Co L G 8416 Georgia Ave JU 5-3141

TOWSON

*Barnhill & Assoc R B 19 W Penna Ave VA 5-3431
 Closs Co Thomas H 21 W Pennsylvania Ave VA
 5-4445
 Habco Electronic Sales 603 Allegheny Ave
 *J-H Electronic Sales Co P O Box 6844 VA 5-4441
 Jones William P O Box 6880 NO 5-5060
 Maquire & Co Hqrs Camden NJ
 Valley Electronics 1735 E Joppa Rd VA 5-7820
 *Wilkinson Inc R L 707 Stevenson Lane VA 3-7800

Massachusetts

BOSTON AREA

*Abbett & Hustus 16A Eaton Square (Needham)
 NE 3-5470
 *Akercyd A E John Hancock Bldg HA 6-2433
 *Anderson Sales Co 177 State St CA 7-2989
 Bell Dudley 669 South Ave (Weston) Mass WE
 5-2165
 *Boeing J E P O Box 186 (Arlington) MI 8-2900
 Bordewieck Eng'g Sales Co 221 Grove St (S Brain-
 tree) VI 3-0845
 Bridge Co Ray 100 Memorial Dr (Cambridge) UN
 4-3696
 *Broger Instrument Sales 48 Pearl St (Brookline)
 BE 2-4804
 *Brown Kenneth L 54 Atherton Rd (Brookline)
 BE 2-3969
 Burlingame Assoc (Waltham) Hqrs New York City
 *Chamberlin H A Civilian Air Terminal CR 4-0044
 *Coakley Tim 148 Needham St (Newton Highland)
 DE 2-4800
 Cowperthwait & Brodhead 131 Clarendon St CO
 6-1825
 EAI (Hatick) Hqrs Stamford
 *Eastern Electronics Sales 145 University Rd
 (Brookline) AS 7-5675
 Electrical Apparatus Co 1200 Soldiers Field Rd
 ST 2-7440
 Eltron Eng'g 246 Walnut St (Newtonville) DE
 2-6975
 *Gerber Sales Co 48 Pearl Street (Brookline) BE
 2-2425
 Goode Assoc J J 211 Eliot St (Ashland) TE 2-4485
 *Goss Co Jack 99 Highland Ave (Somerville) PR
 6-2262

*Gray Inc R W 572 Washington St (Wellesley WE
 5-5296

*Greene Dan P O Box 124 (Cambridge) UN 4-2220
 Hankins Don T 161 Massachusetts Ave CO 6-4041
 *Harris Co Stanley A 317 Chestnut St (Needham)
 NE 3-4780
 Hatton & Co A T (Newtonville) Hqrs Hartford
 *Hathaway Electronic Glenn M 238 Main St (Cam-
 bridge) KI 7-0380

Hendrickson W A 291 First Parish Rd (Scituate)
 SC 652

*Hooker Inc S C 397 Highland Ave (Winchester)
 WI 6-2745

How Inc J Statler Office Bldg HU 2-4638

Instrument Associates 1315 Mass Ave (Arlington)
 MI 8-0756

Instrument Dynamics Inc 6 Abbott Rd (Wellesley
 Hills) 5-6892

Kaelber & Mack (Natick) Hqrs Manhasset NY
 Kelly & Co W T 77 Lovett St (Beverly) WA 2-0065

Lavin Assoc H (Needham) Hqrs Meriden Conn
 Limani Co Michael A 3 Fulton St TR 6-5115

MacArthur Robt S 211 Beech St (Belmont) IV
 4-4613

MacDonald-Wadman Co 457 Stuart St CO 6-2337

MacDowell Co R F 124 W Emerson St (Melrose)
 ME 4-8893

*Moshier & Peyser 945 Gr Plain Ave (Needham)
 NE 3-5060

Muddle John V 509 Worcester Rd (Framingham)
 *Perron & Co Ray 1870 Centre St FA 3-1008

Pierce Stanley B 506 Washington St (Norwood)
 Pettingill Assoc J M 201 Devonshire St LI 2-7013

*Pray Sales Co W P 44 Washington St (Wellesley
 Hills) WE 5-3199

*Purinton R M 43 Leon St GA 7-6006

*Reynolds Co Harrison 313 Washington St (New-
 ton) DE 2-4620

Sales Eng'g (Chelmsford) Hqrs Bridgeport
 Schaal Assoc 4 Waltham St (Lexington) VO 2-5378

Schuff Co Howard J 815 Washington St (Newton-
 ville) LA 7-5304

*Scott Michael 90 Edmunds Rd (Wellesley Hills)
 WE 5-0102

Segel Co Charles 1262 Commonwealth Ave BE
 2-2555

*Segel Co Henry P 386 Washington St (Brookline)
 BE 2-7525

Smith & Purdy 944 Main St (Walpole) MO 8-2460

*Stevens & Co K C 235 Bedford St (Lexington)
 VO 2-1812

*Sturgeon Inc Paul R 25 Huntington Ave CO 6-7705

Technical Instruments Inc 971 Main St (Waltham)
 TW 3-1400

*Waters & Drew P O Box 208 (Arlington) MI
 8-3510

*Waters Inc R A 4 Gordon St (Waltham) TW
 3-6900

*White Sales Co 945 Great Plain Ave (Needham)
 NE 3-3676

*Willson Jack E 4 Arrowhead Rd (Marblehead)
 NE 8-4016

*Yewell Assoc Middlesex Tpk (Burlington) BU
 7-2561

PITTSFIELD

McKenzie & Co P O Box 604 PI 6255

SPRINGFIELD

*Rodgers Assoc 199 Old Farm Rd RE 3-8428

Michigan

DETROIT AREA

A B M Sales Co 10116 Puritan Ave UN 2-1300

Barnum Co H H 12201 Merriman Rd (Livonia)
 KE 1-7504

Basic Service Corp 16544 Plymouth Rd VE 7-8820

*Beitel Co Wayne 13209 Fenkel St VE 8-9100

*Burcaw & Co K C 22128 Grand River KE 3-7700

*Butchard R D 11327 Stockwell Ave LA 6-6551

Cawthorne Co T S 16697 James Couzens Hwy
 Clark Nelson J 3850 Kensington Rd TU 5-1723

Dannemiller Assoc J R Hqrs Cleveland
 Electro-Mec Assoc 109 E Nine Mile Rd (Ferndale)
 LI 7-1422

*Fitzner Inc B J 8803 Michigan Ave LU 4-0180

Goodman C H 191 W Fort St TA 5-8088

Great Lakes Mfrs Reps 5770 Artesian LU 4-2918

*Haggerty-Ludwig Co 23525 Woodward Ave (Fern-
 dale) LI 7-4771

*Hyschen Jensen & Co 2842 W Grand Blvd TR
 1-0308

Hill Co Buryl R 19481 James Couzens Hwy VE
 8-3460

Kelly D R 15853 Cherrylawn DI 1-1690

*Koehler-Pasmore Co 11833 Hamilton St TO 8-3322

*Kurtz Co 7457 Fenkel Ave UN 3-2135

*Liddle E F 18925 Grand River Ave VE 7-5310

Lohmann Co Sid 13331 Livernois WE 3-1128

*Merchant & Co R C 18411 W McNichols St KE
 5-6000

*Milsik Co Robt 19371 James Couzens Hwy BR
 3-3652

Moore Sales Co 401 Margaret W TU 3-0218

Morrow Sales Co James 85 Louise Ave (Highland
 Park)

*Nordstrom & Co R C 580 N Woodward Ave (Birm-
 ingham) MI 4-1110

Odell Co M P Hqrs Cleveland

Pierce Co J L 16666 James Couzens UN 2-2571

Pranek Eric O 2832 E Grand Blvd TR 2-5703

*Rathsburg Jack 4140 Van Dyke Ave WA 1-3932

Rubin Ben Z 16222 Cheyenne Ave UN 4-4958

Satullo Co 4512 N Woodward (Royal Oak) JO
 6-2376

*Scott T T 10116 Puritan UN 1-4434

*Shaffer Co Grant 14241 Fenkel Ave BR 3-5390

Spenser Co Willard 20358 Santa Rosa Dr UN
 3-5189

Sterling Co S 15310 W McNichols Rd BR 3-2500

Tant Enterprises 16254 Meyers Rd UN 4-0738

*Thorpe J M 640 Hidden Lane TU 4-4360

Vogt Martin 1328 Maxwell Ave (Royal Oak) LI
 1-1192

*Zaffina L F 7351 Gratiot Ave WA 1-2885

FLINT

Robbins Inc Sam 230 E 1 St CE 5-7310

JACKSON

Jordan E H 2024 Glen Drive 2-0694

Minnesota

MINNEAPOLIS

Aaron & Assoc I I Hqrs Milwaukee

Anderson & Assoc 3825 York Ave N JU 2523

Bartleson Co Bill 330 Oak Grove St AT 6709

Electrical Jobbers Equip Co 619 Fourth Ave So
 FE 6-6321

Elstad Sales Co Lester L 6012 Wayzata Blvd
 Foster Mel 2402 Hennepin Ave FE 6-5622

Franklin Merrill K 338 E Franklin Ave GE 1805

Gibb Clark R 1409 Hennepin Ave LI 2550

Hagestad & Assoc E O 3121 Girard Ave S Apt 5
 LO 4-4835

Hamilton & Co Don V 2718 W 43 St WA 6-2749

Hammond Co 311 W Minnehaha Pkwy RE 2069

Heimann Co 1711 Hawthorne Ave FE 2-5457

Heyda Bonamet 6101 Auto Club Rd TU 1-9166

Hill Co Fred B 6110 Excelsior Blvd WE 9-6727

Kirkeby M H 1300 France Ave S FR 7-3239

Laub Co Nick J 4713 Quail Ave No Or 7-7000

Marshall Robert W 6106 Excelsior Blvd VE 9-6444

Marsland & Co Hugh Hqrs Chicago

Northern States Sales 1400 Park Ave FE 6-4808

Ozmann E W 12 E 25 St

Peterson Co Fred 2431 Hennepin Ave FR 7-3025

Pinkney & Hine 1925 Nicollet Ave LI 0523

Richardson & Co H M 9 E 22nd St GE 4078

Ripley Ray 6937 Penn Ave S

Schultz Co D A 801 S E 8 St FI 7701

Volco Co 831 S 6 St FE 6-3373

Vore Fred D 6446 Xerxes Ave So WA 2-1293

Warner Co A J 5022 29 Ave S PA 9-7371

ST PAUL

Benson Co E R 2651 University Ave MI 4-5197

Crossley Assoc Hqrs Chicago

Engelbretson W J 906 Ottawa Ave CA 2-2338

Gilbertson Co Dave 1953 University Ave MI 4-3329

Hoffman Edward 1641 Scheffer Ave MI 9-3371

Northport Inc R 186 N Fairview MI 4-7884

Ragon Eng'g G 1406 W Idaho Ave MI 6-6937

Missouri

KANSAS CITY

Automatic General SLS 6550 B Troost Ave DE
 3-8206

*Bettis Co M E 406 W 34th St LO 1-0772

*Clemenson Co R F 436 E 79 St JA 3-3005

Collins-Havercamp Assoc 6217 W 77 St NI 2-6153

Economy Sales Co Broadway at 34th St

*Elliott Co Arthur K 211 Westport Rd LO 1-9594

Eng'g Services Co 4550 Main St EN 2-8862

*Farris Co R W 406 W 34 St LO 1-7495

*Florence Co L F 406 W 34 St LO 1-7282

*Forristal-Young Sales Co 4057 Broadway VA
 1-5330

*Fry W E 406 W 34 St JE 1-5236

Harris & Co George E 701 E 63 St DE 9600

Harris-Hanson Co 7916 Paseo Ave

Kathrinus & Co N W Hqrs St Louis

*Kay Sales Co 2600 Grand Ave BA 1-3800

Kelly Co W G 5934 Prospect Ave EM 3-1207

*Larabee Co F H 4638 Nichols Pkwy LO 1-2520

Lee Mark Assoc P O Box 8467 JA 3-9299

*Maynard Co L W 139 Central Ave PA 5-3723

McDowell-Redlingshafer Sales 1103 E Armour WE
 1-5622

*McGrade E W 4528 Main St LO 1-3709

Morse Sales Co 1103 E 47 St VA 1-4442

*Myers & Assoc Zell S 4538 Main St JE 1-7271

*Roes & Co H A 2601 Cherry St BA 1-0866

*Schmitz Co J O 406 W 34 St LO 1-9824

*Scholz Co P G 210 W 8 St HA 1-7111

*Schryver Sls Co C H 4550 Main St LO 1-4826

Schwerin E B 4210 Main St WE 7564

*Somers & Co F C 1805 Grand Ave GR 1-1355

*Thibau Co A R 210 W E St VI 2-7057

Wells-White Co 3937 Main St JE 1-6400

ST LOUIS AREA

Carmine-Paden Assoc Box 569 (Jefferson City)
 5-1023

Ellis Co Arthur J 1110 S Brentwood Blvd VO
 1-3005

Eng'g Services Co 6635 Delmar Blvd VO 3-3661

Fixman Eng'g Gordon 8160 Stanford Ave PA
 5-5219

*Forristal-Young Sales Co 8147 Delmar PA 5-7701

Fry & Co W E Hqrs Kansas City

Harris-Hanson Co 2814 S Brentwood Blvd MI
 7-4350

Instrument Eng'g Labs 5508 Lillian Ave

*Kathrinus & Co N W 4356 Duncan Ave OL 2-7005

Knaggs Co H W 106 Lucas St CE 1-1853

Lee Mark Assoc 1500 Big Bend Blvd

REPRESENTATIVES ("REPS")

McGrade Co E W 1110 S Brentwood PA 5-6550
 Miller Co E B 6636 Clayton Rd MI 7-4252
 Murty Edwin H 3505 Ridgedale Ave EV 5-7728
 Roes & Co H A Hdrs Kansas City
 *Sebright & Co Russ D 7120 W Florissant EV
 2-8258
 Taylor Emmett P I Craig Lane (Creve Coeur) HE
 2-6001
 Wells-White Co 6625 Delmar Blvd PA 7-7622
 Winkeler & Assoc H F 3938 Lindell Blvd OL
 2-6455

New Hampshire

SALEM
 Limmani Co Michael A Box 391 TW 8-3588

New Jersey

NORTHERN N J (See New York N Y Area)
SOUTHERN N J (See Philadelphia Pa Area)

New Mexico

ALBUQUERQUE
 Bowen Co R G P O Box 3177 Sta D 5-4603
 C G Electronics Corp 305 Dallas St N E 6-6121
 Gates Co Hdrs Salt Lake City
 Hyde Sales Co 2229 Utah St N E 8-5360
 Industrial Assoc Electronics Hdrs Ft Worth
 Kittleson Co Hdrs Los Angeles
 McClendon R E 3907 Central Ave E 6-4983
 Miller Gerald B Hdrs Hollywood
 Neely Enterprises Hdrs N Hollywood
 Rupp Co V T Hdrs Los Angeles
 Sheffer Co H G Hdrs Phoenix
 Williams & Assoc Hdrs Denver

New York State

ALBANY
 Carse Electric Corp 1044 Broadway AL 3-3628
 Ossman & Assoc Ed A 28C Weis Rd AL 8-5833
 Reagan Co J A 242 Hackett Blvd AL 8-5155

BINGHAMTON
 Allen Inc Ned P O Box 575
 Ball Assoc Hdrs Orchard Park
 Holiday-Hathaway Hdrs New York City
 Johnson Agencies Inc H C 9 Ivan Lane 3-5889

BUFFALO
 Allen Inc Leonard D 128 Knox Ave WO 1500
 Automation & Control Co 1807 Elmwood Ave BE
 3882
 Costello J V 547 Ellicott Sq Bldg MA 2351
 *Farber Assoc Maury 70 W Chippewa St MO 3543
 Hanson Gunnar 180 Merrimac St
 *Jackson Co R W 833 Ellicott Sq Bdg MA 3306
 Johnson Agencies H E 422 Niagara Falls Blvd
 WI 1431

DEWITT
 Lamb Co Robert F 1807 Elmwood Ave BE 3757
 Mitscher Co R W 487 Ellicott Sq Bldg WA 2517
 Wall Assoc 19 University Ave PA 0730

FAYETTEVILLE
 Andrews M P 319 Mott Rd NE 7-6405
 Johnson Agencies H C Hdrs Rochester
 MacNeill Paul 100 Wellwood Dr

LIVERPOOL
 *Wadsworth Mfg Assoc 509 Balsam St OL 2-7043

NEW YORK CITY & METROPOLITAN AREA, In-
 cluding Northern New Jersey. "Reps" having
 no city name following local address are in
 New York City proper.

*Aaron Paul D Professional Bldg (Port Washing-
 ton NY) 7-5670
 Adelman Co Leon L 25 Chittenden Ave TD 7-1145
 Agrest C M 891 Fulton St (Valley Stream NY)
 VA 5-8955

Aironic Accessory Co 151 Orinoco Dr (Brightwaters
 NY)
 *Baum & Co Sidney H 70-15 Fleet St (Forest Hills
 NY) BO 3-8101

Baume Electronic Sales 44 Cranberry Lane (Beth-
 page NY) WE 1-7769
 Be-Esco Assoc 45 S Broadway (Yonkers NY) YO
 3-1709

Bettan Sales Marty 167-16 73 Ave (Flushing NY)
 OL 7-6659
 Bialek Assoc Samuel 205 E 42 St MU 4-1655
 *Bittan Co R R 104 S Central Ave (Valley Stream
 NY) LD 1-2444

Bittan-Shafer Sales 120 E 32 St MU 4-2229
 *Blair-Steinberg Co 45 S Broadway (Yonkers NY)
 YO 3-0150
 *Border & Co Barrett 10 Highwood St (Tenafly NJ)
 EN 3-2354

Brede Co H W 75 Glen Cove Rd (Greenvale NY)
 RO 3-4700
 *Brennan Co F X 180 Glenridge Ave (Montclair
 NJ) MO 3-2461

*Bressler Jules J 4808 Bergenline Ave (Union
 City NJ) UN 4-9577
 Bresson Assoc Jerry 75 Paterson St (New Brun-
 swick NJ) CH 9-8787

*Breuer Co R E 250 W 57 St CO 5-0440
 *Brown Co Irving 1500 Carroll St (Brooklyn NY)
 HY 3-1379

Burlingame Assoc 103 Lafayette St DI 9-1240
 *Camber Marty 1700 York Ave EN 9-4222
 *Cardoner Sales Corp 80 Shore Rd (Port Wash-
 ington NY) 7-7712

*Cerf & Co Art 744 Broad St (Newark NJ) MI
 2-6734
 Components Sales Corp 218 E Hartsdale Ave (Harts-
 dale NY) SC 5-1050

*Cooper-DiBlasi 90 Main St (Port Washington
 NY) 7-0470
 Crofton Assoc T J 30 Rockefeller Plaza CI 7-5782
 Director Assoc Murray 115-62 237 St (Elmont NY)
 CU 5-6823

*Drexler Chester 509 Lombardy Blvd (Brightwaters
 NY) BA 7-1576
 *Egert Co S S 97 Reade St WO 4-0996
 Electrical Mfrs Service 1784 Fulton Ave (E Meadow
 NY) IV 3-2424

*Electro Tech Assoc 187-61 Hollis Ave (Hollis
 NY) AX 7-3525
 Ellis & Assoc Harold R 217-27 47 Rd (Bayside
 NY) BA 9-3622

Engel & Assoc G Curtis 75 N Maple Ave (Ridge-
 wood NJ) GI 4-1400
 *ERA Inc 340 Great Neck Rd (Great Neck NY)
 HU 2-9320

Faber & Assoc Inc R L 1246 Broad St (Bloomfield
 NJ) ED 8-6900
 Fields Sales Co Jack 5 Howard St (Verona NJ)
 PI 6-6717

*Finlay Robert 307 Lincoln Bldg (Ridgewood NJ)
 OL 2-0088
 Fogelberg John P O Box 115 (Baldwin NY) 3-9351
 *Forrest B J 102 Warren St CO 7-1712

*Forshay Sales Co 27 Park Pl BA 7-4977
 Frazer & Hansen Ltd 120 Broadway WO 4-3454
 *Freed & Co Leo 420 Lexington Ave LE 2-4771
 Friedman Co Adolph 519 S 57 Ave (Mt Vernon
 NY) MO 4-4856

Freudenberg Inc B 240 W 98 St UN 5-8075
 *Galasso D P 921 Bergen Ave (Jersey City NJ)
 JO 4-7277

Garten & Assoc Louis A 645 Eagle Rock Ave
 (W Orange NJ) RE 1-1800
 Gawler-Knoop Inc 178 Eagle Rock Ave (Roseland
 NJ) CA 6-4545

Glass Assoc ED 250 W 57 St JU 6-8440
 Gramercy Sound Assoc 175 S Ave AL 4-0986
 Gray Assoc Harold 21-10 33 Rd (Long Island City
 NY) YE 2-3825

Greenberg Jerry 29 Woodmere Blvd (Woodmere NY)
 FR 4-3748
 *Gross Assoc Adolph L 23 Park Pl WO 4-8585
 Gutzeit & Assoc J M 50 E 42 St MU 2-6770

*Hacker Morris 217-18 48 Ave (Bayside NY) BA
 4-5361
 Harris Arthur M 42-34 195 St (Flushing NY)
 FL 7-7350

Hess Assoc Art 62-07 68 Ave (Glendale NY) HY
 7-7498
 *Hicks W M 4 Srruce Dr (Roslyn NY) MA 7-6150
 *Hoffman H L 804 Newbridge Ave (Westbury NY)
 ED 4-5600

Holliday-Hathaway Co 120 E 56 St MU 8-5858
 *Hughes Co Kenneth E 4808 Bergenline Ave (Union
 City NJ) UN 7-3204

Hunter & Salisbury 87 Broadway (Hicksville NY)
 WE 8-1080
 *Hy-Art Co 53 N Park Ave (Rockville Center NY)
 6-6500

Jackson Jim 9 Lincoln Ave (Port Chester NY) WE
 9-4218
 Joseph Assoc Ben 43 S Middleneck Rd (Great Neck
 N Y) HU 7-9395

*Kaelber & Mack 1 Park Ave (Manhasset NY) MA
 7-1459
 Kahant Assoc 11 Park Pl CO 7-5326

*Kahgan J J 1261 Broadway MU 4-7772
 Karns Co Sam 36 Oak Ave (Tuckahoe NY) WO
 1-9391

Kee Enterprises 97 Reade St WO 4-0996
 *Koople Assoc 9 W Prospect Ave (Mt Vernon NY)
 MO 4-5577

Kubrick-Yurman 200 W 34 St BR 9-6517
 *Land-C Air Sales Co 140 Marbledale Rd (Tucka-
 hoe NY) WO 1-4700

*Landis Sales Co Cliff B 81-11 Roosevelt Ave
 (Jackson Heights NY) IL 8-7900
 Leeds Co Gerald G 12 Crampton Lane (Great
 Neck NY) HU 2-7784

*Levinson Sales Co 545 S Ave MU 2-8834
 *Lichter Co Wm 26 Teakwood Lane (Roslyn NY)
 RO 3-2636

Livera & Assoc A L 4 Green Village Rd (Madison
 NJ) FR 7-3220
 L & M Assoc P O Box 641 (Fair Lawn NJ) FA
 4-7050

Luce & Co R P 7 Beechwood Pl (Summit NJ) CR
 3-9250
 Masin Co O F 1 Wolf Lane (Pelham NY) PE
 8-4510

Merican Co J C 1 Christopher St AL 5-6387
 *Miller Ben P O Box 72 (Little Neck NY) BA
 4-4673
 *Miller Co Harry 27 Mechanic St (Red Bank NJ)
 SH 1-9300

*Mingins-Shaw Sales 107-37 71 Ave (Forest Hills
 NY) BO 3-1643
 M & N Assoc 1776 Broadway CI 5-7802
 *Morse Sales Irving 150 Broadway CO 7-2913

Murray R T & W A 604 Central Ave (E Orange
 NJ) OR 5-9038
 Mydans & Steiner 1865 Morris Ave (Union NJ)
 MU 6-0977

*Newhope Corp 6 E 39 St LE 2-7372
 *Pickett James M 205 E 66 St TR 9-9520

Puleo R S 5 Whittier St (Lynbrook NY) LY
 9-4875
 Reizes H N 1473 Sylvia Lane (E Meadow N Y)
 Richardt Co John W 234 N 18 St (E Orange NJ)
 OR 6-7719

RMC Assoc 236 E 75 St
 *Rockbar Corp 650 Halstead Ave (Mamaroneck NY)
 MA 9-7300

R & S Electronic Sales P O Box 217 (Hempstead
 NY) PR 5-7852
 *Saffler Assoc Corp 157 W 57 St CI 7-3855
 Scheffer Co Charles 1124 Oouglas Rd (Seaford
 NY) SU 1-4656

*Schmitt Co F E 136 Liberty St WO 2-6550
 *Schwartz Adolph 15 Exchange Pl (Jersey City NJ)
 DE 3-2424

Schwartz Mel 39-16 Tierney Pl (Fair Lawn NJ)
 4-3435
 Scott Co Geo G 6 Stuart Dr W (Glen Cove NY)
 OR 6-2088

*Shaw Co S A 444 Kneeland Ave (Yonkers NY)
 YO 3-5700
 *Shulan & Co Wally 880 Bergen Ave (Jersey City
 NJ) SW 5-2220

*Simbelkoff Sales Co 68 Hudson St (Hoboken NJ)
 OL 6-5211
 Smith Co J F 16 Northfield Ave (W Orange NJ)
 OR 6-6818

*Smith Howard F 259 W 14 St CH 2-2398
 Snyder Co V A P O Box 184 (Union NJ) MU
 8-6100

*Sonkin Assoc David 10 Fiske Pl (Mt Vernon NY)
 MO 8-9809
 *Spellman Co Fred 200 Plandome Rd (Manhasset
 NY) MA 7-3399

*Sprung Assoc Joseph 254 W 31 St LO 5-1820
 *Stang Sales Co 1 Crestwood Lane (New Rochelle
 NY) NE 6-6622

Stollmack Michael W 67 Dorchester Rd (Emerson
 NJ) CO 1-2313
 *Sussman Jules 130 Lafayette St WO 2-7765

*Taylor Corp B B 241 Sunrise Hwy (Rockville
 Centre NY) RO 4-6000
 Technical Reps Inc 69-10 140 St (Flushing NY)
 LI 4-5058

*Tobias & Co D F 30 Church St CO 7-4349
 Turney & Beale 214-27 Northern Blvd (Bayside
 NY) 4-4000
 Tylnski Frank 73-63 Bell Blvd (Bayside NY) HO
 4-8927

Verter Sales Co Sol 1195 Sherman Ave (Bronx NY)
 CY 3-0211
 Weber Assoc Jack Route 18 (Old Bridge NJ)
 *Weiland Geo H 76-49 168 St (Flushing NY)
 OL 8-4061

*Weiss & Assoc W W 1780 Broadway CI 6-5777
 *Willgold Electronic Sales 100 N Village Ave
 (Rockville Centre NY) RO 4-4022

*Woolf Assoc Irving W 1860 Broadway CI 6-0120

ORCHARD PARK
 *Ball Associates Inc 58 E Quaker Rd ID 4416

PHELPS
 Le Roy & McGuire R D 1 KI 8-4891

ROCHESTER
 Electro-Rep Sales Co 187 Culver Rd GR 7398
 Gislason Sales Inc 617 Case Bldg
 Johnson Agencies Inc H C 111 Mt Hope Ave HA
 6-1090

Kaufman Warren 90 Norton St
 Kennedy Co R P 182 Mayflower Dr
 Ossmann & Assoc E A 830 Linden Ave CU 7635

Reed-Tollefson Corp 2815 Monroe Ave HI 0450
 Richter Co William 650 Linden Ave HI 5-0580
 Ritkenhouse Co H J 311 Alexander St BA 2340
 Schmitz A W 82 St Paul St HA 6-3090

*Wolfe-Marsee Sales 74 Park Ave GR 9088
 Young Assoc 520 East Ave HI 4468

SCHENECTADY
 Redford Corp Box 1067 EX 3-3061

SODUS
 Decew Agcy Alan E 13 High St 3261

SYRACUSE
 *Allen Inc Leonard D 2401 S State St 4-4195
 Bouton Jerry 327 Wellsley Rd 4-8314
 Burlingame Assoc Hdrs New York City
 Callahan W J 156 S Edwards Ave 73-2151

Donohue Dillon 105 Smith Lane
 Franklin Co W A 3 Holly Rd 54-3383
 Hotze I A 753 James St 9-7387

Johnson Agencies ! C 205 Harrison St 74-8504
 Naylor Electric Co 1115 Hills Bldg SY 2-3894
 Ossmann & Assoc E A 308 Merritt Ave SY 9-3825

Paston-Hunter Co 609 Demong Drive 72-0656
 Ryerson Assoc Inc J D 412 E Genesee St 76-8344
 *Stone J L 221 Dorchester Ave 73-4280
 *Swank Wally B 2310 Bellevue Ave GR 8-2141

*Wolf O C 15 Centennial Dr 4-7723
 Wulfetange Jr J F State Tower Bldg SY 3-8013
 *Zimmerman W H 647 Warren St 74-4889

UTICA
 Romano & Kroeger 1604 Lincoln Ave 5-6484
 Servatius John 910 Shaw St UT 2-8177

North Carolina

CHARLOTTE
 Cartwright & Bean Hdrs Memphis
 Furman & Assoc C M 1228 Harding Pl ED 4-7855
 Glenn & Larson 1043 A Providence Rd ED 4-3994

REPRESENTATIVES ("REPS")

Haney & Co Howard R 3236 Draper Ave FR 5-6546
 Henry Jr W E P O Box 6073 ED 5-8958
 Highsmith & Co James L 100 Altondale Ave FR 5-6436
 *Howard & Co F M 2908 Avondale Ave FR 5-6646
 Larco Eng'g Inc 123 Brevard St
 Murphy & Cota Hdqrs Atlanta
 Wallace Assoc S K Hdqrs Lutz Fla

GREENSBORO
 *Atcheson & Adams 601 N Elm St BR 2-6838
 Hollingsworth & Still Hdqrs Atlanta
 Tonkin Shiffer Co 1039 Westside Dr

RALEIGH
 Hanner Co John C 2817 Kittrell Dr TE 4-8924

WILMINGTON
 *Mfrs Sales Agency 4924 Oleander Dr WI 5749

WINSTON-SALEM
 Hiker Co 421 28 St N E 4-2084
 Holliday-Hathaway Hdqrs New York City
 Murphy & Cota Hdqrs Atlanta
 White & Co L G P O Box 2356 5-3612

Ohio

CINCINNATI
 Baehr Greenleaf & Assoc Hdqrs Cleveland
 Gallagher Co 15 Ritchie Ave PO 1-1288
 Murray James W 5673 Green Acres Court HU 1-9726
 Olsen Co John O 7870 Jolain Dr TW 1-6140
 Satullo Co Hdqrs Royal Oak Mich
 Sheridan Assoc Roselawn Center Bldg ME 1-2460
 Wahl Co A C 416 W Benson St W VA-3270
 Whitesell & Assoc R O P O Box 2717 ME 1-9210

CLEVELAND AREA
 Ambos-Jones Co 3951 Lee Rd SK 2-3030
 *Baehr-Greenleaf & Assoc 14700 Detroit Ave LA 1-8486
 *Baier Co A H 12429 Cedar Rd FA 1-5644
 Blocki Assoc Bill 3843 Darrow Rd (Stow) OV 8-4277
 *Brauer J 15631 Lakewood Hts Blvd LA 1-7268
 Clark Sales Co Box 708 PR 1-2241
 Dannemiller Assoc J R 3955 Lee Rd LO 1-4567
 *Daugherty Co F A 1120 Croyned Rd HI 2-3311
 Deunk & Assoc Robert K 14820 Detroit Ave AC 1-2561
 *Dolfuss & Co C H 2108 Payne Ave PR 1-1270
 *Edwards-Lohse & Co 2123 9 St TO 1-5753
 Electro Sales Assoc 281 E 216 St (Euclid) RE 2-7444
 Elliott Co Howard E 2637 E 130 St FA 1-4463
 *Goory Sales Co 19555 Henry Rd CL 1-1500
 Greenleaf R R 8905 Lake Ave AT 1-1060
 Henger-Fairfield Co 1812 Columbus Rd CH 1-1018
 Herrick Co George L 15326 Lorain Ave 1-4406
 *Landfear Co J M 12429 Cedar Rd Rm 8 FA 1-4533
 *Levin & Assoc Sid 6252 Mayfield Rd HI 2-8340
 *Midwest Sales Co 3219 W 117th St WI 1-2700
 *Morrow Co Leslie A 3123 W 117 St CL 1-5700
 *Nace Co Allen 7601 Parkview Rd (Brecksville) JA 6-4323
 Odell Co M P 26614 Center Ridge Rd (Westlake) TR 1-8000
 *Olson Co John D 16201 Shaker Blvd WY 1-2624
 Oros Sales Co E G 1194 Croyned Rd HI 2-5024
 *Rauer Frank W 4144 Marvin Ave ME 1-8350
 Robinson C A 4143 Mayfield Rd EV 1-9049
 Rosenwasser Fred A 13769 Cedar Rd FA 1-0463
 Roth Sales Co Mike 13947 Cedar Rd YE 2-4262
 Satullo Co Hdqrs Royal Oak Mich
 Schroeder Sales Co 2309 Prospect Ave MA 1-5075
 *Scott & Steffen 1836 Euclid Ave TO 1-2626
 Service Equipment Electronics 4500 Euclid Ave HE 1-7030
 Sharp Co Fred R 2138 Lee Rd FA 1-4200
 Sterlino Co S 4311 Mayfield Rd EV 2-4114
 Stofer & Bro Gordon F 2400 Superior Viaduct SU 1-3535
 Teplitz & Co Harvey 27190 Forestview Rd RE 1-5676
 Thomas Eng'g Co Ellendale Rd (Chagrin Falls) CH 7-7786
 Wagner-Green Co 1935 Euclid Ave MA 1-6382

COLUMBUS
 *Derr Co N F 937 S Ashburton Rd BE 1-2603
 *Lehner Co J W 367 Brynhild Rd AM 8-5260
 *MCFadden Co Wm E 150 E Broad St CA 1-3363
 *Pugh Co C L 2144 Riverside Dr HU 8-4855
 Schenck Assoc P O Box 223 (London) LO 1555
 Seay Co H H 1035 Grandon Ave BE 1-3043

DAYTON
 Baehr Greenleaf & Assoc Hdqrs Cleveland
 Bek Assoc Box 53 Dayton View Sta
 Bucher & Assoc J G 205 E 1 St
 Carney & Assoc Jack 905 Knott Bldg FU 3943
 Crossley Assoc Hdqrs Chicago Ill
 Dannemiller Assoc J R Hdqrs Cleveland
 Epps & Fedotin 1434 Vancouver Dr TA 9345
 Klein Bill 1472 Earlharm Dr
 Kohler Assoc Ernie 2600 Far Hills Ave OX 2813
 Magee & Co Ed 2600 Far Hills Ave
 *Michaelson Barnard L 321 N Monroe St (Xenia) Scott & Steffen Hdqrs Cleveland
 Siff & Assoc Robert G 341 N Robert Blvd
 Teplitz & Co Harvey 3543 Cornell Dr QR 9178
 Tetelbaum Stan 1517 Benson Dr HE 7128
 Thomco Electronic Co P O Box 181 N D Sta HE-4734
 Whitty Co H W 25 Main Bldg South FU 6377

TOLEDO
 Chilcote Jim 636 Nesselwood Ave CH 1-3826

Sallade A 3683 River Rd
WEST RICHFIELD
 *Baer Corp Neal 3435 Streethoro Rd OL 9-3331
WORTHINGTON
 *Weller-Rahe Co P O Box 212 TU 5-1819

Oregon

PORTLAND
 *Burcham Co Don H 510 W 19 Ave CA 7-3830
 Carlson Fred W 935 Northwest 12 Ave AT 3798
 Donal Co P O Box 7013 CA 2-4343
 Eckersley James W 3150 S W Hamilton St CA 8-0308
 Hawthorne Electronics 700 S E Hawthorne Blvd BE 4-9375
 Kearns Co James L 6055 N E Glisan St
 Lee Co Dave M Hdqrs Seattle
 *Legg Co R R 1633 W 21 Ave CA 3-9720
 McMillan Co A C 10111 S W 62 Ave CH 4-1311
 *Minthorne Co L L 7521 N E Glisan St AL 3-0010
 Northwestern Agencies Hdqrs Seattle
 Porter Co Burt C Hdqrs Seattle
 Tudor Associates J A 1004 S E Belmont St BE 2-1188
 *Weber Co Dale G 234 Sherlock Blvd CA 8-5403

Pennsylvania

LANCASTER
 Hatfield R E 165 E King St

LEWISBERG
 Eberle Wm P R D 1 PO 6-3995

PHILADELPHIA AREA including Southern New Jersey. "Reps" having no city following local address are located in Philadelphia.
 *Andco Sales-Eng'g 5823 Greene St VI 4-9100
 *Anson-Sloan Assoc (Moorestown NJ) BE 9-1900
 Arnold Assoc 2202 Tyson Ave DE 3-5345
 Bancroft & Co 209 Cooper St (Collingswood NJ) CO 5-5210
 Barnhill & Assoc R B (Camden NJ) Hdqrs Towson Md
 *Biggs & Co J Alan Box 450 (Doylestown Pa) FI 8-9457
 Blumenstein Assoc 14 Trent Rd MI 9-9523
 *Boenecke Assoc 638 Penn St (Camden NJ) WO 4-8650
 Braddock Edward P O Box 305 (Haddonfield NJ) HA 9-0087
 *Brookfield & Co 53 Cricket Ave (Ardmore Pa) MI 2-6911
 Bryans W Robt 2634 Kirk Ave (Broomall Pa) EL 6-1359
 Burlingame Assoc (Upper Darby Pa) Hdqrs New York City
 *Cooper Richard J 3507 Wellington St MA 4-5486
 *Corday Sales Co W H 18 W Chelton Ave VI 8-0447
 Danco Corp (Fairview Village Pa) BR 5-2600
 Dienes Co Herbert L 1505 Pacer Mill Rd (Erdensheim Pa) CH 7-3454
 Drew & Co Wm 104 Essex Ave (Narberth Pa) MO 4-5766
 Duncan & Assoc Wm I 5452 Charles St CU 9-7525
 *Edmunds E J 101 Lexington Ave (Havertown Pa) HI 6-6472
 Estersohn Harry 424 E Allens Lane CH 7-9345
 *Fairbanks Co H J 1615 Darby Rd (Havertown Pa) GR 2-2467
 *Foley A A 640 Federal St (Camden NJ) WO 6-2550
 *Friedman & Assoc Martin 1006 W Savings Fund Bldg PE 5-4778
 Gatty Sidney H 1177 Clermont Ave (Marlton NJ) AT 3-1361
 Gauder-Knoob Co (Wyncote Pa) Hdqrs Roseland NJ
 Gerry & Co M E 228 Long Lane (Upper Darby Pa) GR 6-2540
 Glaser Co J L 33 E Wynnewood Rd (Wynnewood Pa) MI 2-9242
 Hautenschied Geo 950 Marcella St JE 5-1768
 Hile Co Charles R Hillview Rd Box 144 (Paoli Pa) EL 6-2266
 Hilliard Assoc 1125 Old York Rd (Abington Pa) TU 4-6100
 *Jeffries Samuel A 105 Forrest Ave (Narberth Pa) MO 8-8500
 *Keefe Electronic Sales 228 E Kings Hwy (Haddonfield NJ) MA 7-3454
 *Leban & Graham 1421 Manoa Rd MI 2-0668
 *Lewis Co Herman 1622 68 Ave LI 8-1281
 *Lowery Inc L D 50 E Wynnewood Rd (Wynnewood Pa) MI 2-9100
 *MacDonald Inc Samuel K 1531 Spruce St KI 5-1205
 *Maguire James A 116 N 7 St (Camden NJ) WO 6-3118
 Malta Co Victor S 1135 Slocum St WA 4-8688
 Massey Assoc 529 Brookhurst Ave (Narberth Pa) MO 4-4200
 *Moyer Co H A P O Box 14 (Haddonfield NJ) HA 9-6347
 *Muckenfuss T E 8 Tannen St (Haddonfield NJ) HA 9-8533
 Mustico John 312 Bewley Rd (Havertown Pa) HI 6-1961
 *Naudain L Parker 846 Suburban Sta Bldg RI 6-3185
 *Newson & Assoc C H 150 Terminal Ave CH 8-0282
 *Nolan & Assoc J J 314 W Sprarks St WA 4-1595
 *Paranon Sales 111 S 22 St RI 6-5699
 Park & Goodman 401 W Mt Airy Ave CH 7-7116

*Pearson Sales R T 1125 York Rd (Abington Pa) TU 7-0185
 Penn-Del Instrument Sales Co P O Box 4361 CH 7-7389
 *Perna & Assoc Frank J 1029 Drexel Ave (Drexel Hill Pa) SU 9-9045
 Powell Co H H 2102 Market St LO 7-5285
 *Quinlan D G 4700 Frankford Ave JE 3-6767
 *Randall Co Kenneth W 121 N Broad St LO 4-2151
 Robinson Co I E 7404 W Chester Pike (Upper Darby Pa) FL 2-7017
 Satterthwaite W F P O Box 664 (Havertown Pa) SU 9-9600
 Sheliga & Co N A 4546 N Colo St GL 5-1409
 Slubin & Co Lewis 2305 Fairmount Ave ST 7-2072
 *Stinson Co J T 219 Sagamore St (Havertown Pa) HI 7-0922
 *Stobart A J 56-14 Revere Rd (Drexel Hill) CL 9-3881
 *Stratton Co C H 514 E Wadsworth St CH 7-7869
 *Technical Representation 25 S Easton Rd (Glen-side Pa) TU 7-1325
 *Trinkle Sales P O Box 40A (Hatfield Pa) 3-9425
 Wcber-Linz Assoc 238 Shelmire St CH 3161J
 Whiddett Co John C 3850 Garrett Rd (Drexel Hill Pa) CL 9-3636
 *White Co H J 1839 W Albanus St MI 4-1880
 White & Co L G 134 N Narberth Ave (Narberth Pa) MO 4-6505
 Williams Assoc W W 1100 White Horse Pike (Oaklyn NJ) CO 5-6332

PITTSBURGH
 Clark & Noe 2 Old Clairton Rd
 Fuhrman Jr John T 6822 Thomas Blvd MO 1-3838
 Levine Albert 11 Jonquil Pl LO 1-7027
 Lowry-Dietrich Co 1404 Swantek St MA 1-2959
 MacDonald Inc S K Hdqrs Philadelphia
 Mates Hy 5510 Hobart St HA 1-8998
 Morrow Co H J Hdqrs Cleveland
 Odell Co M P Hdqrs Cleveland
 Olsen Co John O 3552 Wallace Dr TU 4-0472
 *Podolny Co J H 4716 Coleridge St HI 1-0800
 Ransford Co H E 2601 Grant Bldg GR 1-1880
 Scott & Steffen Hdqrs Cleveland
 Stover & Co S H 5495 Penn Ave EM 1-7533
 Tanner & Covert 300 Mt Lebanon Blvd LO 1-5067
 Taylor Co Morris F Hdqrs Silver Spring Md
 Whitaker Co E E Box 8837 FR 1-6220

READING
 Beil Thomas H 3623 Jacksonwald Ave 5-6837
 Loose Co Warren L 646 Gordon St 2-7094

Tennessee

CHATTANOOGA
 Johnson Jesse P 413 Dome Bldg AM 5-3463

MEMPHIS
 Cartwright & Bean 1336 Madison Ave BR 5-1914
 *Engleman Co AI 3205 Crump Ave GL 8-6263
 Winn Lyman 1677 E Beard Pl ME 36-2317

NASHVILLE
 Atcheson & Adams Hdqrs Greensboro NC
 Collins T J 319 5 Ave S
 Griffin J R 1989 Lavergne Ct
 Wallace Assoc S K Hdqrs Lutz Fla

Texas

DALLAS
 Allied Components Inc 3918 Henry Hines Blvd LA 8-4943
 Ammon & Woods Assoc 5604 E Mockingbird Lane TA 3-1191
 Amos Bob P O Box 13505 WH 8-9848
 *Anderson Co Geo E 1901 Griffin St RI 1-5931
 *Antle-Smith Sales 9305 Addis St FL 7-7279
 *Aymond Co E F 4312 Maple Ave LO 5233
 Barnes Co Arnold 5526 Dyer St EM 6716
 *Berthold Sales Co 4411 Maple Ave LA 6-8329
 *Branum Co P O Box 10204 RI 1-4995
 *Campion Sales Co 9002 Chancellor Row FL 7-4095
 Communications Eng'g Co 900 Dragon St PR 7508
 *Corry Co Half 6335 Hillcrest Ave LA 8-9172
 *Crockett-Lund & Co 2205 Griffin St RI 2-5777
 Dancybo Co Robt W 5526 Dyer St EM 1-4535
 *Detzell-Maynard Sales 2013 Cedar Springs RI 2-2027
 General Power Equip Co 5623 Dyer St FO 8-4655
 Green Co John A 6835 Orilde Dr FL 2-9918
 Gross Co Fred P O Box 1926 CH 7-5424
 *Guenther John B 4533 N Central Expwy LA 8-6286
 Hamilton & Assoc R F 4515 Prentice St
 Hays Jr W R P O Box 12204 EM 3-3991
 *Heidenreich Co Max N 6115 Denton Dr FL 2-3389
 Kemp Charles 10582 Spangler Rd CH 7-5031
 Klicperca Co M F Hdqrs Houston
 Lawrence Sales Co P O Box 13026 FL 2-7484
 Lieberman Co Hark 534 Fidelity Union Life Bldg RI 7-2225
 Lipscomb & Assoc Earl P O Box 7084
 Lucas Sales Co Charles H 1247 Georgia Ave
 Maas Jr Harry A 4219 Normandy LA 6-2209
 *McKinney J F 1330 N Industrial Blvd ST 1997
 Nesbitt Robert E 1925 Cedar Springs RI 7-5824
 Norvell Assoc 6522 Dyer St EM 8-4180
 Packard Assoc 5526 Dyer St EM 8-6461
 Scanlon Co P J 3911 Oak Lawn Ave LA 6-8681
 *Schoonmaker Co J Y 5328 Redfield Ave LA 6-7238
 Sinks Robt M Box 11726
 *Smith J Earl 6211 Denton Dr FL 7-1727

REPRESENTATIVES ("REPS")

Southwest Electronic Industries 4515 Prentice St
 FO 8-8336
 Tate & Scanlon 3911 Oak Lawn Ave LA 3793
 *Texport Co 2147 Farrington RI 7-6886
 Thomson Eng'g Service 2712 W Rockingbird Lane
 Ward Co L R 3009 Canton St RI 6279
 Weinreich & Assoc George 1210 Old Gate Lane FA
 2800
 White Co R F 2519 Carlisle St RA 3603
 *Wilks Co Ernest L 1212 Camp St RI 7-2637
 Willison-Hart & Co Hqrs Houston
 Wright Industrial Prods 5738 N Central Expwy TA
 4-2571
 *Yount Co Jack 1431 Pleasant Dr EX 1-0988
EL PASO
 Markowitz Co Herman 1132 Texas St 3-8231
FORT WORTH
 Engineering Associates 2912 Stanley WA 3-7386
 Industrial Associated Electronics 5911 E Lancaster
 Ave JE 5-2056
 Spears Co Mitchell 3801 Westcliff Rd S WA 6-
 4444
GRAND PRAIRIE
 Tex-O-Koma Sales P O Box 747 AN 2-0866
HOUSTON
 Brice Co Wm E 303 Bastrop Ave CA 2-7321
 Delzell-Maynard Sales Hqrs Dallas
 Gray Sales Co 420 Sul Ross St JA 9-3479
 Green Co John A Hqrs Dallas
 Klipera Co M F P O Box 3113 JA 2-8459
 Laco Co 2204 Clinton Dr (Galena Park) OR 2-
 9774
 Packard Assoc Hqrs Dallas
 Salter R E 208 Sidney St WA 3-8720
 Schoonmaker Co J Y Hqrs Dallas
 Smith J Earl Hqrs Dallas
 Ward Co L R 1814 Texas Ave BL 0356
 *Willison-Hart & Co 1821 W Ala St JA 8-1634

Utah
SALT LAKE CITY
 Bush Co Leon S 439 Redondo Ave IN 7-5359
 *Gates Co Franklin Y 200 S Main St EL 9-1101

Virginia

ALEXANDRIA
 Anderson Co J F 1023 10 St SO 8-7153
 Brown & Assoc W A 3610 Mt Vernon Ave TE 6-
 1800
FALLS CHURCH
 Lee Assoc S S 1107 W Broad St JE 4-3500
HIGHLAND SPRINGS
 Martin & Co Ed 102 E Beal St FA 2503
RICHMOND
 Simpson & Son P M 717 Byrd Park Ct CT 4-0287

Washington

SEATTLE
 ARVA 120 W Thomas MU 7337
 Associated Industries 1752 Ranier Ave MI 4400
 Avionics Liaison Box 15 Boeing Field LA 7602
 *Backer Co James J 221 W Galer St AL 6470
 Carlson Co Fred W 1201 Dexter Ave EL 6630
 *Dooley Co J K 3215 Western Ave MU 8313
 Drake Assoc Rush S 1806 Bush Pl CA 8545
 *Haight Co F H 3212 Eastlake St EA 1818
 Harris & Co G E 444 Dexter Horton Bldg SE 1673
 Hawthorne Electronics Hqrs Portland Ore
 Howell Sales 1206 19 Ave N EA 3209
 Jensen Co Verner D 2616 2 Ave MU 2929
 Johnston Co Ray 11009 Evanston Ave EM 0956
 *Langhear Co William R 2823 35th St W AL
 5979
 *Lee Co Dave M 2517 2 Ave MA 5512
 Levinson Co Harry 1117 2 Ave MA 5317
 *Marsh Agencies 2601 1 Ave MA 8761
 *Merritt Ron 120 W Thomas MU 7337
 Miller Co Gerald B Hqrs Hollywood Calif
 Norwest Co 330 2 Ave W AL 8442
 *Northwestern Agencies 4130 1 Ave S EL 8882
 Paramount Agencies Hqrs Spokane
 *Parsons & Co C B 3028 1 Ave MU 3933
 *Porter Co Burt C 4310 Roosevelt Way ME 6828
 Ryland Sales Co W R 5510 29 St N E PL 8147
 Schultz Co N R 639 2 Ave SE 6396
 Seatronics Inc 911 Western Ave MA 5046

Shaffer & Nelson 312 Occidental Ave
 Slater & Assoc Al C 9311 15 Ave N E MA 3860
 Smith Sales Co Don 2204 N 45 St EV 3160
 *Stoum Co S N 2401 Smith Tower MU 7833
 Testco Boeing Field Rm 105 MO 4895
 *Widdekind Co M K 222 1st Ave N EL 6981
SPOKANE
 Paramount Agencies 121 Monroe St TE 8-2287
 *Quinn James P O Box 7051 EM 6621

Wisconsin

MILWAUKEE
 Aaron & Assoc Irvin I 829 N Marshall St BR
 6-8515
 Dickinson & Assoc E A 744 N Fourth St BR 2-
 0517
 Heimann Co Hqrs Minneapolis
 Honkamp Sales Co 2223 N 70 St SP 4-6258
 Laub Co Nick J Hqrs Minneapolis
 Loeb Co Eugene R 5052 N Shoreland Ave WO 4-
 2155
 Polachek Assoc C S 1500 E Fairy Chasm FL 2-
 8650

Canada

MONTREAL
 *Pound H 5093 Randall Ave WA 3402
TORONTO
 *Armstrong Allen Jr 700 Weston Rd RO 2-7535
 *Pointon C G 6 Alcina Ave OL 7984
PORT CREDIT
 Finkler Len 1505 Park Royale Blvd CR 8-7583
VANCOUVER
 *McLennen Ltd D Eldon 2191 W 1 Ave BA 2898

Hawaii
HONOLULU
 *Brenna & Browne 211 Honolulu Mdse Mart 26-
 2575
 Dougherty Enterprises 149 Kaimi St
 Piety Gene 2030 Home Rules ST 8-3105

ENGINEERING SOCIETIES

Engineering Societies

Alphabetical listing of professional societies, industry associations and technical organizations serving the radio-TV-electronic and allied fields

Acoustical Society of America 57 E 55 St New York
 22 N Y
 Aircraft Industries Ass'n of America 610 Shoreham
 Bldg Washington 5 D C
 American Assoc of Engineers 8 S Michigan Ave Chi-
 cago 3 Ill
 American Electroplaters Society 445 Broad St New-
 ark 2 N J
 American Institute of Electrical Engineers 33 W 39
 St New York 18 N Y
 American Institute of Physics 57 E 55 St New York
 22 N Y
 American Management Ass'n 1515 Broadway New
 York 36 N Y
 American Physical Society Columbia Univ Broadway
 & 116 St New York N Y
 American Radio Relay League 38 LaSalle Rd W
 Hartford Conn
 American Society for Mechanical Engrs 29 W 39 St
 New York 18 N Y
 American Society for Quality Control 161 W Wiscon-
 sin Ave Milwaukee 3 Wisc
 American Society for Testing Materials 1916 Race St
 Philadelphia 3 Pa
 American Society of Tool Engineers 10700 Puritan
 Ave Detroit 38 Mich
 American Standards Ass'n 70 E 45 St New York 17
 N Y
 American Women in Radio & TV 501 Madison Ave
 New York 22 N Y
 Armed Forces Communications & Electronics Ass'n
 1624 Eye St N W Washington 6 D C
 Armstrong Memorial Research Foundation Rm 209
 Philosophy Hall 117 St & Amsterdam Ave New
 York 27 N Y
 Associated Police Communication Officers 528 Tully
 Rd San Jose Calif
 Ass'n for Applied Solar Energy 3424 N Central Ave
 Phoenix Ariz
 Ass'n for Computing Machinery 2 E 63 St New York
 21 N Y

Ass'n of Electronic Parts & Equip Mfrs 11 S LaSalle
 St Chicago 3 Ill
 Ass'n of Federal Communications Consulting Engrs
 c/o John Cruz Sec'y 710 14 St N W Washington
 5 D C
 Audio Eng'g Society Box 12 Old Chelsea Sta New York
 11 N Y
 Electrochemical Society 216 W 102 St New York 25
 N Y
 Electronics Mfrs Ass'n 55 W 42 St New York 36 N Y
 Electronic Parts Mfrs Ass'n 430 Wyatt Bldg Wash-
 ington 5 D C
 Engineers Joint Council 29 W 39 St New York 18
 N Y
 Federal Communications Bar Ass'n 514 Wyatt Bldg
 Washington 5 D C
 FM Development Ass'n c/o Edwards Agency 915 N
 LaCienega Blvd Los Angeles 46 Calif
 Hi-Fidelity Institute Inc 1 N LaSalle St Chicago 2 Ill
 Industrial Communications Ass'n c/o Bethlehem Steel
 701 E 3 St Bethlehem Pa
 Institute of Aeronautical Sciences 2 E 64 St New
 York 21 N Y
 Institute of High Fidelity Mfrs 25 Broad St New York
 4 N Y
 Institute of Radio Engineers 1 E 79 St New York
 21 N Y
 Instrument Society of America 313 6 Ave Pittsburgh
 22 Pa
 Int'l Municipal Signal Ass'n 130 W 42 St New York
 36 N Y
 Joint Electron Tube Eng'g Council of RETMA &
 NEMA 155 E 44 St New York 17 N Y
 Joint Technical Advisory Committee 1 E 79 St New
 York 21 N Y
 Magnetic Recording Industry Ass'n 274 Madison Ave
 New York 16 N Y
 Metal Powder Ass'n 130 W 42 St New York 36 N Y
 Mfrs Aircraft Ass'n 45 Rockefeller Plaza New York
 20 N Y
 Nat'l Alliance of TV & Electronics Service Ass'ns
 5908 S Troy Ave Chicago 29 Ill

Nat'l Appliance & Radio-TV Dealers Ass'n 1141 Mer-
 chandise Mart Chicago 54 Ill
 Nat'l Ass'n of Electrical Distrs 290 Madison Ave New
 York 17 N Y
 Nat'l Ass'n of Music Merchants 25 E Jackson Blvd
 Chicago 4 Ill
 Nat'l Ass'n of Radio & TV Broadcasters 1771 N St
 N W Washington 6 D C
 Nat'l Audio-Visual Ass'n Fairfax Va
 Nat'l Community TV Ass'n 710 14 St N W Washing-
 ton 5 D C
 Nat'l Conference on Aeronautical Electronics P O Box
 621 Far Hills Br Dayton 9 Ohio
 Nat'l Electrical Mfrs Ass'n 155 E 44 St New York
 17 N Y
 Nat'l Electronics Distrs Ass'n 343 S Dearborn St
 Chicago 4 Ill
 Nat'l Electronics Conference 84 E Randolph Chicago 1
 Ill
 Nat'l Society of Prof Engrs 2029 K St N W Washing-
 ton 6 D C
 Operational Fixed Microwave Council c/o Ass'n of
 American Railroads 59 E Van Buren St Chicago 5
 Ill
 Phonograph Mfrs Ass'n 562 5 Ave New York 36 N Y
 Purchasing Agents of the Radio & TV Industry 282
 22 St Brooklyn 15 N Y
 Radar-Radio Industries of Chicago 1 N LaSalle St
 Chicago 2 Ill
 Radio Club of America 11 W 42 St New York 36 N Y
 Radio-Electronics-TV Mfrs Ass'n 1721 De Sales St
 N W Washington 6 D C
 Radio Pioneers 589 5 Ave New York 17 N Y
 Radio Technical Commission for Aeronautics Rm 1072
 Bldg T-5 Washington 25 D C
 Radio & TV Executives Society The Biltmore New
 York 17 N Y
 Record Industry Ass'n of America 1 E 57 St New
 York 22 N Y
 Representatives of Electronic Products Mfrs 600 S
 Michigan Ave Chicago 5 Ill
 Scientific Apparatus Makers Ass'n 20 N Wacker Dr
 Chicago 6 Ill
 Society of Motion Picture & TV Engrs 55 W 42 St
 New York 36 N Y
 Society of Plastic Engrs 34 E Putnam Ave Greenwich
 Conn
 Standards Engrs Society P O Box 281 Camden 1 N J
 Ultra-High Frequency TV Ass'n 1012 14 St N W
 Washington 5 D C
 Ultrasonic Mfrs Ass'n P O Box 555 W Chester Pa
 Veteran Wireless Operators Ass'n 149 President St
 Lynbrook L I N Y
 West Coast Electronic Mfrs Ass'n 342 N LaBrea Ave
 Los Angeles 36 Calif

1957 ELECTRONIC INDUSTRIES DIRECTORY

Brand & Trade Name Index

The brand names of the products, equipment, and instruments in the radio-TV-electronic and related industries are listed alphabetically, with the name of the manufacturer.

The address of the manufacturer whose brand or trade name is listed may be obtained by referring to the Alphabetical Listing of Manufacturers, beginning on page 389.

- A**
- Absorb-a-Shock—Federal Shock-mount
 AccuRay—Industrial Nucleonics
 Accur-ohm—GC Electronics Cement
 Accuwire—Acurate Insulated Wire
 A-Clip—Goldak Co
 Acepot—Ace Electronics Assoc
 Acetrim—Ace Electronics Assoc
 Acme Mold—Acme Wire
 ACO—General Control Co
 Acoustic Baton—University Loud-speakers
 Acoustigate—Altec-Lansing
 Acragage—Norden-Ketay
 Acrasplit—Entron Inc
 Acrax C—Glyco Products
 Acroboss—Acromark Co
 Acroleaf—Acromark Co
 Acropal—Acromark Co
 Acroprinter—Acromark Co
 Acrosound—Acra Products
 Acrostam—Acromark Co
 Adashaft—Centralab
 Ad-A-Switch—Clarostat Mfg
 Addaplug—Assoc Eng'g Corp
 Add-A-Tier—Bernard Franklin
 Addaverter—Epsco Inc
 Add-tractor—Victor Adding Mch
 Adello—Advance Electronics
 Adjust-A-Cone—Quam-Nichols
 Adjust-A-Volt—Std Electr Prods
 Adjusta-Vue—Advance Electronics
 Adjutoroid—Burnell & Co
 Adlake—Adams & Westlake
 ADT—Amer Dist Telegraph
 Advac—Maclead & Hanopol
 Advac—Gen'l Ceramics Corp
 Advance—Acme Battery
 Advance—Elgin Nat'l Watch
 Adventurer—Johnson Co E F
 AE16—Bow Solder Prods
 Aeco—Amer Elec Cable
 Aerocon—Aerovox Corp
 Aerofilm—Aerovox Corp
 Aeroflex—Anchor Plastics
 Aerohead—Lenz Elec Mfg
 Aerohead—Giamini Co
 Aerohm—Waters Mfg
 Aerolene—Aerovox Corp
 Aerolite—Aerovox Corp
 Aerolog—Link Aviation
 Aeromac—Seely Instr
 Aero-Magnetite—Heinmann Elec
 Aeronautical—Cox & Co
 Aerotemp—Aerovox Corp
 Aerotron—Aeronautical Electr
 Aerothead—Apex Coated Fab
 AG—Bio-Rad-Labs
 Agualex—Luxor Lt'g Prod
 Airacoustic—Johns-Manville
 Aircoy—Mitchell Industries
 Air Dux—Illumintron Eng'g
 Airflex—Lemert Eng'g
 Airoymetric—Milton Roy Co
 Airpure—Flanders Mill
 Airpump—Aires Lab
 Airvane—Joy Mfg Co
 Akra-Ohm—Shallcross Mfg
 Akroline—Electronic Eng'g
 Alathon—DuPont de Nemours
 Alcermet—Santal Aircraft
 Alchrome—Driver Co W B
 Alcojet—Alconox Inc
 Alctral—Gen'l Cable
 Alcco—Auburn Mfg
 Alite—U S Stoneware
 Alka-Deox—Enthone Inc
 Alkamvar—Acme Wire
 Alkor—Atlas Mineral Prods
 All Anal—Barry Controls
 Allen Head—Allen Mfg
 All-Metl—Barry Controls
 Almag—Alrha Wire
 Almanox—Frenchtown Porcelain
 Alnico—Gen'l Magnetic
 Alphatron—Can Radium
 Alphatron—NRC Equip
 Alphex—Alpha Wire Corp
 Altemp—Alpha Wire Corp
 Alti-Temp—Winchager Corp
 Alum-A-Mast—Mech Steel Tubing
 Alumaweld—Johnson Mfg Co
 Aluman—Enthone Inc
 Alundum—Norton Co
 Aluzoom—JFD Mfg
- Alvo Pak—Alvo Nut & Bolt**
Alynomik—Poole Instrument
Amco—American Solder & Flux
Amcon—American Condenser
Amecco—American Electronics
Amercode—Amer Communications
Amer-Dial—Amerac Inc
Amerglas—American AirFilter
American—Elgin Nat'l Watch
American—Manning Maxwell & Moore
American Beauty—Amer Elec Heater
Amerite—American Tower
Amerplastic—American Elec Cable
Aminco—American Instrument
Aminco-Aire—American Instrument
Ampec—Centralab
Amphos—American Metal
Amplet—Devol Research
Amplical—Rauland-Borg Corp
Amplifilm—AMP Inc
Ampli-Speed—Electric Mch Mfg
Ampli-Vision—Int'l Telemeter
Amprobe—Pyramid Instrument
Amp-trap—Chase-Shawmut
Amrac—American Mica Radio
Amrecon—Ohmite Mfg Co
Analac—Anaconda Wire & Cable
Analyst—Eastman Kodak Co
Analyzer—Waters Mfg
Anastar—Eastman Kodak Co
Anaston—Eastman Kodak Co
Anderometer—Micrometrical Mfg
Anets—Anetsberger Bros
Ankoseal—Ansonia Wire & Cable
Anofax—Feay Co Neal
Antioch—Beam & Co Morris
APCO—Aurora Pump
Apcor—Geartronics Corp
Apcco Auto-Stat—Amer Photocopy
Arelco—Applied Electronics
APW—Amer Platinum Works
Aquadag—Acheson Colloids
Aquaseal—Gen'l Cable
Aquatel—Isotope Products
Aquathene—Gen'l Cable
Araldite—Ciba Co
Arcco—Borden Co
Arc-essent—Luxor Lt'g Prods
Arkay—Radio Kits Inc
Armature—Johns-Manville
Ar-Mets—Brooks Rotameter
Armite—Spaulding Fibre
Arrestone—Armstrong Cork
Artisan—Electronic Organ
Asbestos Ebony—Johns-Manville
Asco—Automatic Switch
Ascior—American Speedlight
Ashcroft—Manning Maxwell & Moore
Astomix—Oberline Inc
Astramatic—Electronic Control Sys
Atbee—Radiation Research
Atlas—SKF Industries
Atlee—Atlas E-E
Atom-At—Central Electronic Mfrs
Atomic Jewel—Robbins Industries
Atomotron—Atomic Labs
ATR—American TV & Radio
Atten-U-Card—Elektro-Serv Co
Aubeston—Auburn Mfg
Audet—Centralab
Audigage—Branson Instrument
Audikon—James Inst Lab
Audio-Aid—Ansley Mfg Arthur
Audio Aid—Greene Charlton L
Audio Chief—Audio Equip Co
Audio Director—Audio Equip Co
Audioldiscs—Audio Devices Co
Audiofilm—Audio Devices Co
Audio Guider—Audio Equip Co
Audio Hailer—Audio Equip Co
Audiom—Rockbar Corp
Audiopoints—Audio Devices
Audioscope—Audio Master
Audiotope—Audio Devices
Audiotorium—Jensen Mfg Co
Audiplex—Electronics Delv
Auricon—Bernad-Bach Inc
Autex—Flight Research
Auto-Dine—Simplex Equip
- Autograf—Moseley Co F L**
Autopeal—Deagan Inc J C
Autopositioner—Collins Radio
Autopower—Safe Flight Inst Corp
AutoRef—Thermo Electric
Autosweep—Audio Instrument
Autosyn—Eclipse-Pioneer
Auto-Tap—Automatic Methods
Autotune—Collins Radio
Autovac—Cons Electrodynamics
Auto-Zoom—Perkin-Elmer Corp
Avcom—Avco Mfg Corp
Avigator—Mitchell Industries
Axiom—Rockbar Corp
Axivane—Joy Mfg Co
- B**
- Bac—Brunner Mfg Co
 Badger—Reliance Automatic Lt'g
 Balanced TV—Camera Equip
 Balco—Driver Co Wilbur B
 Baline—JFD Mfg Co
 Ballast—Driver Co Wilbur B
 BallyHoo—Simpson Mfg Co Mark
 Baltograph—Balteau Elect Corp
 Baltospot—Balteau Elect Corp
 Baltex—X—Balteau Elect Corp
 Band-Scanner—Webster Mfg Co
 Banj-O-Seal—Wolfe Co F C
 Banshee—JFD Mfg Co
 Bantam—Serox Corp
 Bantam—Barnstead Still & Demineralizer
 Bantam—Small Motors Inc
 Barex—King Labs Inc
 Barrymount—Barron Controls
 Baseball—Antenna Specialists
 Bass Ultraflex—Jensen Mfg Co
 Bat's Eye—Kennedy D S
 Battery Scope—Christie Electric
 BCI Nylons—Belding Corticella Indust
 BD Meters—Reede Electrical Inst
 Beam Power Rotaries—Telrex Labs
 Becho—Beck Bros
 Behler—Cosa Corp
 Behr Cat—Behr-Manning
 Bel-Clear—St Cecilia Co
 Belcon—Bogue Electric Mfg
 Ben Har—Bentley Harris Mfg
 Berg-Erikson Specialized Tool
 Beryloy—Driver Co Wilbur B
 Beryllium—Beryllium Corp
 BH—Bentley Harris Mfg
 Bi—Multicore Solders Ltd
 Bih—Bentley Harris Mfg
 Big Jack—Kay-Townes Antenna
 Bimet—Moeller Instrument
 Bi-Net—Johnson Co E F
 Bin-Eye—Jeffrey Mfg
 Biraco—Birnbach Radio
 Birflene—Birnbach Radio Co
 Birflex—Birnbach Radio Co
 Birflon—Birnbach Radio Co
 Bironic—Dynamu Magnetics
 Bitungstic—Koppers Co
 Bitunastic—Koppers Co
 BTW—Boston Insulated Wire
 Blak-Ray—Black Light Corp of Amer
 Blind Rivet—Huck Mfg Co
 Blue Diamond—Pioneer Gen-E-Motor Corp
 Blue Point—Astron Corp
 Blue Shaft—Centralab
 Blu-Mol—Millers Falls Co
 Blu-Rod—Assoc Amer Trading Div
 Blutex—Paul F H & Stein Bros
 Boardmaster—Graphic Systems
 Boffle—Hartley Products Co
 Bolab—Bolton Labs
 Bold Daylight—Lawter Chemicals
 Bolta-Grav—Bolta Prod Div
 Boltron—Bolta Prod Div
 Bondeze—Phelps Dodge Copper Prod
 Bondmaster—Rubber & Asbestos
 Boost-A-Volt—Workman TV Inc
 Borofilm—Aerovox Corp
 Boronol—Allied Resinous Prod
 Boscar—Benson-Lehner
 Bosit—Workman TV Inc
 Bostomatic—Magnetic Devices
 Bow-Flector—JFD Mfg
 BPW—Bradford Components
 Boy-Mar—Electrical Service
- Bralay—Brainin Co C S**
Bramtlex—Bram Chemical
Brandes—Cannon C O F
Brasslyte—Logo Inc
Brazaloy—All-State Welding Alloys
Breeze Mark—Breeze Corp
BRC—Budelman Radio Corp
Brick-Phoenix—Phoenix Precision Inst Co
Bridger—Audio Inst
Bright Gold—Sel-Rex Corp
Brimsto—Electro-Chemical Eng'g
Bristol—Vocaline Co
Broadband—Topatron Inc
Brown Devil—Ohmite Mfg Co
Brunt—Parr Mfg Corp
Buss-Bussmann Mfg Co
Butarone—General Cable
Button—Erie Resistor
B & W—Babcock & Wilcox Co
B & W—Barker & Williams
ByPass—Brooks Rotameter
- C**
- CAE—L-Tite—Dakota Eng'g
 CAE—Controlled Atmosphere Enclosures
 Cailoux—Stoelting Co C H
 Cal-Conn—Cal-Connector Co
 Califilm—Shamban Eng'g Co
 Calivolt—Calidyne Co
 Calmag—Calif Magnetic
 Caltron—Caltron Prods
 Camtran—Campbell X-Ray
 Canada—Lenz Elec Mfg
 Candoc—Cudner & O'Connor Co
 Candohm—Muter Co
 Cannon-Ball—Cannon Co C F
 Cannon Plugs—Cannon Electric
 Canseal—Cannon Electric
 Canto-Chime—Deagan Co J C
 Capacitester—Telecast Inst
 Capadine—Mullenbach Div
 Capaswitch—Mullenbach Electrical
 Capillary—Air & Refrigeration Corp
 Captron—AMP Inc
 Captain—Medal Mfg Co
 Carcamp—Bendix Red
 Carbolim—Aerovox Corp
 Carb-Ohm—Phaoston Instrument
 Carbo-Korez—Atlas Mineral Prod
 Carbomastic—Carbolite Co
 Carbomite—Continental Carbon
 Car Call-Hy-Gain Antenna Prods
 Car Call—Seely Electronics
 Cardatron—Electrodata/Burroughs Corp
 Carfone—Radio Corp of Amer
 Carilonic Bell—Schulmerich Electronics
 Cartri-J—Pyramid Elec
 Cartwheel—Aerovox Corp
 Carry-home—Union Switch & Signal
 Cary—Applied Physics
 Casco—Borden Co
 Cascade—JFD Mfg Co
 Cash-Acme—Cash Valve Mfg
 Castiplast—Nat'l Eng'g Prods
 Castohm—Shallcross Mfg Co
 Castordag—Acheson Colloids
 Cathaloy—Superior Tube Co
 Cathode Nickel—Driver Co Wilbur B
 Cathodeon—Pye Telecommunications
 Cathovisor—Cinema-Television
 Cavimeter—Poole Instrument
 Ceco—Community Eng'g Corp
 Ceco—Sweep—Community Eng'g Corp
 Ceeco—Communication Equip & Eng'g
 Celab—Clark Electronic Labs
 Celesta-Chime—Deagan J C
 Celoron—Continental-Diamond Fibre
 Cenco—Central Scientific Co
 Center-Line—Topatron Inc
 Centi-Lo—Chicago Industrial Inst
 Centathene—Centralab
 Centrex—Century Projector
 Cen-Tri-Core—Alpha Metals
- Centroid—Tensor Elec Development**
Cerafil—Di-Q Div Aerovox
CerAlloy—New Process Metals
Ceramag—Stackpole Carbon
Ceramagnet—Stackpole Carbon
Ceramic Flamespray—Montaine Corp
Ceramicon—Erie Resistor
Ceramo—Thermo Elec Co
Cer-Ohm—Bradford Components
Cerrobase—Cerro De Pasco Sales
Cerrobend—Cerro De Pasco Sales
Cerrocast—Cerro De Pasco Sales
Cerrolow—Cerro De Pasco Sales
Cerromatrix—Cerro De Pasco Sales
Cerrosafe—Cerro De Pasco Sales
Cerro-Bussmann Mfg Co
Cerrolu—Cerro De Pasco Sales
Central—Continental Elec Co
Challenger—Bogen David
Challenger—Da-Lite Screen
Challenger—Rek-O-Kut Co
Change-A-Cycle—Carter Motor
Change-A-Volt—Carter Motor
Channel-Duct—Glastic Corp
Character—Stromberg - Carlson-San Diego
Check Master—Standard Gage Co
Checkster—Bolton Labs
Chemalloy—Kahl—Chemalloy-Elect
Chemelec—U S Gasket
Chemiflex—Technicraft Co
Chemiglas—Technicraft Co
Chemion—Crane Packing Co
Chem-o-sol—Chemical Products
Chemo-Tape—Chemo-Textiles
Chemo-Tec—Polymer Industries
Chemrock—Richardson Co
Chilico—Chicago Miniature Lamp
Chlorolux—Luxor Lighting Prod
Chromalox—Wiegand Co Edwin L
Chromatap—Spencer - Kennedy Labs
Chromatron—Chromatic TV Labs
Chromatron—Litton Industries
Chromel—Hoskins Mfg Co
Chronom—Bendix Red Bank
Chromonol—Audiamation Labs
Chronotron—Bendix Red Bank
Cineglo—Tarc Electronics
Cintel—Cinema-Television Ltd
Circle Ess—Stewart Corp F W
Circle Seal—James Pond & Clark
Circuit—Univ Circuit Control
CLX—Farmer Electric
C-L Board—Century Lighting
Clampique—Mueller Electric
Clarkstan—Pacific Tranducer
Clear—Clarostat Mfg Co
Clear-Print—Phillips Process Co
Clearstone—Amer Sound Products
C-Lector—Century Lighting
Cleelite—Cleveland Container
Climaster—Clegg Labs
C Line—Clarostat Mfg Co
Clipper—Johns-Manville
Clipper—Sterling Transformer
Clock-Timer—Int'l Register Co
Coaxitube—Precision Tube Co
Cobanic—Driver Co Wilbur B
Cobreflex - 2—University Loud-speakers
C O C—Hammarlund Mfg Co
CoHrastic—Conn Hard Rubber
Colittena—Electrend Products
Colac—Lenz Elec Mfg
Collar—Rockbar Corp
Colbeam—Tennalab
Colorbot—Musical Inc
Color Cord—Pacific Electricord
Color-Eye—Instrument Devel Labs
Colorscope—Tarc Electronics
Color View—Welco Mfg Co
Comet—Astron Corp
Comet—Da-Lite Screen
Comco—Communications Co
Commando—Shure Bros
Compack—General Cable
Control—Centralab
Comp-U-Trim—Eastern Precision Resistor Corp
Comtel—Radio Frequency Labs
Comvor—Radio Frequency Labs
Conalert—Kaar Eng'g Corp

BRAND and TRADE NAME INDEX

- Concentrikrit—Int'l Resistance
 Concert—Jansen Mfg Co
 Concerfaster—Audimation Labs
 Concerto—Jensen Mfg Co
 Condoor—Raybestos-Manhattan
 Co-Netic—Perfection Mica
 Con-Fer-Phone—Simpson Mfg Co
 Mark
 Confessionaire—Audio Equip Co
 Confidencer—Roanwell Corp
 Conical-V-Beam—Telrex Labs
 Connecticut—Stueck Inc W Whitney
 Connect - O - Matic—Wiggins Oil
 Tool Co E B
 Conn Organs—Conn Ltd C G
 Constametric—Millon Roy Co
 Constellation—JFD Mfg Co
 Contemporary—Jensen Mfg Co
 Continental—Continental Carbon
 Div
 Control-A-Matic—Rockwell Eng'g
 Div
 Control Guards—D & M Products
 Convector—Bendix Red Bank
 Copperoid Process—Bigelow Met-
 allizing Chem
 Coprox—Bradley Labs
 Corner-Helix—JFD Mfg Co
 Corona—Peschel Electronics
 Corrh—Ohmite Mfg Co
 Cortherm—Lindberg Eng'g Co
 Corsair—Hudson American Corp
 Corvick—JaMac Prod Co
 Corvette—JFD Mfg Co
 Cor-Vox—Stanley Webster Labs
 Co-Therm—Hopkins Eng'g Co
 Cottonite—Acme Wire
 Counterpoise—Cook Electric Co
 Couplate—Centralab
 C Q T—Chase-Shawmut
 Craftsmen—Precision Radiation
 Instruments
 Craig—Carbide & Carbon Chem-
 icals
 Cramolin—Caig Labs
 Crestbrite—Crest Transformer
 Crestone—Armstrong Cork
 CRL—Centralab
 Crodon—Chromium Corp of Amer
 Croflex—Waldom Electronics
 Croloy—Aerovox Corp
 Cromag—Babcock & Wilcox Co
 Cromag—Aerovox Corp
 Cromax—Crowley Div Aerovox
 Cro-Mesh—Croname Inc
 Cromin D—Driver Co Wilbur B
 CroRoto—Croname Inc
 Cro-Roto—Waldom Electronics
 Crosby—Amer Hoist & Derrick
 Co-Weave—Croname Inc
 Crown—Int'l Radio & Electronics
 CRT-400—B & K Mfg Co
 Crusader—Hudson American Corp
 CTS—Chicago Telephone S
 Crystolon—Norton Co
 Crusader—Transitron Inc
 Crescent—Warwick Mfg
 Crown—Trimont Inst Co
 Cro-Art—Croname Inc
 Croloy—Crowley Div Aerovox
 Cuprochrome—Driver Co Wilbur
 B
 Cupron—Driver Co Wilbur B
 C S F—Chicago Steel Furnace
 CTS—Chicago Telephone of Calif
 Cyraline—Cascade Research Corp
 Cyclo-X—Baiteau Elect Corp
 Cycrom-X—Baiteau Elect Corp
 Cushiontone—Armstrong Cork
 Cycloptic—Amer Optical Co
 Custom Ten—Simpson Mfg Co
 Mark
 Cupro—Riverside - Alloy Metal
 H K Porter Co
 Cryotainer—Ronan & Kunz
 Current Governor—North Hills
 Elec Co
 Cyclocac—Marbon Chem / Borg-
 Warner
 Customode—Jensen Mfg Co
 Cy-an-in—Infium Corp of Amer
- D**
- Dag—Acheson Colloids
 Daglas—Acme Wire
 Douglas—Phelps Dodge Copper
 Prod
 Daisy Rivet—Huck Mfg Co
 Daka-Ware—Davies Molding Co
 H
 Dalohm—Dale Products
 Dandee—Aerovox Corp
 Darb—Ryan Co S C
 Dare—Dayton Aviation Radio
 Darex—Dewey & Almy
 Data Gage—Texas Instrument
 Datafile—Electrodata / Burroughs
 Corp
 Datagraph—Consolidated Electro-
 dynamics
 Data Logger—Kybernetes Corp
 Datamaster—Cons Electrodynamic
 ics
- Data-Master—Hanson-Gorrill-
 Brian
 DATAmatic 1000—DATAmatic
 Corp
 Datatape—Consolidated Electro-
 dynamics
 Datatron—ElectroData Corp
 Datrac—Epsco Inc
 Dauntless—Defiance Eng'g & Mi-
 crowave
 Davohm—Daven Co
 Dazic—Winterburn Mfg
 DC—Dinion Coil Co
 DeArmond—Rowe Inc
 Decasal—Decimeter Products
 Decker—Cosa Corp
 Decetograph—Stoelting Co C H
 Defiance—All Star Prods
 Dehydra—Wapler Inc
 Dekaboxes—Electro-Measurements
 Dekapots—Electro-Measurements
 Dekastats—Electro-Measurements
 DeltaSwitch—Detroit Controls
 Delta Unit—Decler Aviation
 Den-El—Electric Cord
 Densite—W Va Pulp & Paper
 Densitimer—Lectra Labs
 Densitrol—Precision Thermom-
 eter
 Densitron—Instruments Inc
 Densomke—Poole Instrument
 Depolaray—Saine Equip Lab
 Depolatron—Saine Equip Lab
 Derbylite—Luminous Resins
 Desco—Dietz Design
 Detect-A-Fire—Fenwal Inc
 Determohm—Ohmite Mfg Co
 Detetolab—B J Electronics
 Develco—Developmental Electr
 Di-Acro—O'Neil-Trwin
 Diagnyzer—Apparatus Devel
 Dial-A-Matic—Amer Photocopy
 Equip
 Dialco—Dialight Corp
 Dialglo—Ackerman Engravers
 Diall—Mesa Plastics
 Dialmatic—JFD Mfg Co
 "Diamond H"—Hart Mfg
 Diamond Vulcanized Fibre—Con-
 tinental-Diamond Fibre
 Diamond Weave—Gen'l Instru-
 ment
 DIC—Cannon Electric Co
 Di-Caps—Diletron Div / Gude-
 man
 Dico—Diamond Microwave Corp
 Dictabelt—Dictaphone Corp
 Diexex—Insulation Mfrs
 Diagraf—Grafo Colloids
 Difaxial—University Loudspeak-
 ers
 Diffuscone—University Loud-
 speakers
 Digicoder—Fischer & Porter
 Digicon—Endevco Corp
 Digimatic—Electronic Control
 Systems
 Digiplot—Endevco Corp
 Digistepper—Endevco Corp
 Digitape—Benson-Lehner Corp
 Digitizers—Coleman Eng'g Co
 Digitizers—Electro-Mec Lab
 Digit-matics—Victor Adding Ma-
 chine Co
 Di-Jell I—Sonneborn Sons L
 Dileto—Continental Diamond Fi-
 bre Co
 Dimco—Dimco-Gray
 Dimetcoat—Amercoat Corp
 Dion—Chemical Process
 Dipot—Servonics Inc
 Dip-Pak—Fidelity Chemical
 Direct-A-Call—Conn Telephone
 Director—Infra Electronic
 Director—Miller Co Sanford
 Diectronic—Snyder Mfg Co
 Dispatcher—Shure Bros
 Divasil—Merk & Co Inc
 Divatel—Westrex Corp
 Dividohm—Ohmite Mfg Co
 Dixonac—Dixon Crucible Co Jos
 Doc Alloys Kit—All-State Weld-
 ing Alloys
 Do-Do—JFD Mfg Co
 DO-T—United Transformer
 Double-Duty—Sel-Rex Corp
 Drake—Nat'l Screw & Mfg Co
 Dri-Ink—Filoqui Products
 Dri Stat—Peerless Photo Prod
 Driwynd—Republic Foil & Metal
 Dual—Hartley Products Co
 Dual Chronotrol—Audimation
 Labs
 Dualex—Bell & Gossett
 Dual-Lock—Simmons Fastener
 Duax—Jensen Mfg Co
 Duco—Du Pont de Nemours
 Duette—Jensen Mfg Co
 Du-Lite—Du Pont de Nemours
 Dulux—Du Pont de Nemours
 Duocarb—Driver Co Wilbur B
 Duodial—Helipot Corp
 Duodisc—DuPont Co
 Duofonic—Paraplegics Mfg Co
 Duo-Kap—Centralab
- Duo Mount—South River Metal
 Prods
 Duop—General Control Co
 Duo Seal—Welch Mfg Co W M
 Duo-tronic—Wapler Inc
 DuoVolt—Carter Motor Co
 Duplex—Alfex Lansing Corp
 Duplication—Can Radium & Uran-
 ium
 Durable—Seager Standard Carbon
 Durabon—Co-operative Industries
 Duraflex—Co-operative Ind
 Duralex—Durallith Corp
 Duranickel—Int'l Nickel Co
 Duranyl—Durallith Corp
 Duramic—Aerovox Corp
 Duranite—Aerovox Corp
 Durakote—Electro-Chemical Eng'g
 Duron—Electro-Chemical Eng'g
 Durogrene—Electro-Chemical
 Eng'g
 Duro XXX—Electro-Chemical
 Eng'g
 Durpoint—Duotone Co
 Dustronic—Radex Corp
 Dutch Brand—Johns-Manville
 Duxseal—John-Manville
 Duz-All—CBC Electronics
 D & W—Dolinko & Wilkens
 Dylan Polyethylene—Koppers Co
 Dylite—Koppers Co
 Dynagraph—Annis Co R B
 Dynaco—Dyna Co
 Dynaco—Dynamic Gear Co
 Dynagage—Photocon Research
 Prod
 Dynakit—Dyna Co
 Dynamag—Dynamics Research
 Dynamaster—Bristol Co
 DynaMatic—TeleTest Inst Corp
 Dynamic—Jackson Elect Inst
 Dyna-Pak—Bendix Red Bank
 Dynarobe—Bristol Co
 Dyna-Q—K-W Eng'g Works
 Dyna-Quik—B & K Mfg Co
 Dyna-Scan—B & K Mfg Co
 Dynasert—United Shoe Machinery
 Dynaset—Telex
 Dynateq—Dynamics Research
 Dyna-Therm—Guild Electronics
 Dyn-Aut-Ronic—Gisholt Machine
 Co
 Dynaual—Scott Inc H H
 Dynograph—Offner Electronics
 Dyno-Mite—Millers Falls Co
- E**
- EAAF—Modern Adhesives &
 Electronics
 Eagle—Felters Co
 Ease—Berkeley Div Beckman
 Inst
 Easy—Waldom Electronics
 Easy-Flow—Handy & Harman
 Easy-Vision—Hoffman Elec-
 tronics
 Earsset—Telex
 Ebonol—Enthone Inc
 EC—Electric Coil Co
 Ecofoam—Emerson & Cuming
 Eccoreflexor—Emerson & Cuming
 ECI—Electronic Contractors
 Echo—Fort Wayne Metals
 Eckco—Eckstein Radio & TV
 Econicom—Simpson Mfg Co Mark
 Econofone—Simpson Mfg Co
 Mark
 Econohm—Tri-Ohm Div
 Econo-Switch—Centralab
 Econo-Watt—Redmond Co
 Edicam—Buss-Clement-Doughten
 Edscorp—Edmund Scientific Corp
 Ecco—Electronic Eng'g Co of
 Calif
 EF—Electric Furnace Co
 Efcron—Electronic Fabricators
 Emen—British Radio Electronics
 EIC—Gary Wells Co
 Eico—Electronic Instrument
 Eimac—Eitel-McCullough
 Edotape—Webster Electric
 Ektar—Eastman Kodak Co
 Flac—Audiogersh Corp
 Elasticabl—Sightmaster Corp
 Flecrom—Underwood Corp
 Flectrod—Pacific Electricrod
 Flectenna—Electrend Products
 Flectone—Electron Enterprises
 Flectrite—W Va Pulp & Paper
 Electro Acto Glass—Electro-
 Technical Prods
 Electro Bi-Glas—Electro-Techni-
 cal Prod/Sun Chemical
 Electro-Cell—Amer Air Filter
 Electrocraft—Richards Electro-
 craft
 Electrocut—Black & Webster
 Electro Eitex—Electro-Technical
 Prods
 Electro Glas-Var—Electro-
 Technical Prods
 Electro-Glow—Industrial Devices
 Electroflo—Hays Mfg
 Electrol—Da-Lite Screen
- Electromanganese—Foote Mineral
 Electro-Matic—Amer Air Filter
 Electromax—Leeds & Northrup
 Electromaze—Air-Maze Corp
 Electro-measurflo—Hays Mfg
 Electromet—Electro Metallurgical
 Electromite—Hays Mfg
 Electronamic—Precision Appara-
 tus Co
 Electronheat—Resdel Eng'g
 Electropad—Saine Equip Lab
 Electropath—Century Engrs
 Electro-Plate—Pyramid Scheen
 Corp
 Electropoint—Century Engrs
 Electro-O-Probe—Instruments Inc
 Electropunch—Black & Webster
 Electro Sil-Thin-Glas—Electro-
 Technical Prods
 Electrostroke—Black & Webster
 Electro-Stick-Glass—Electro-
 Technical Prods
 Electro Stick-Var—Electro-
 Technical Prods
 Electroosyn—Detroit Controls
 Electrotable—Black & Webster
 Electrovac Atlas—Atlas Elec
 Electro-Wipe—Duotone Co
 Elinox—Schauer Mfg
 Electromatic—Brooks Rotameter
 Electrumite—Republic Steel
 Elephant—Seymour Mfg Co
 Elinco—Electric Indicator
 E-Lite—Eldema Corp
 Elix—El Products
 Ellisco—Ellis & Sons George D
 Elmer's—Bordens Co
 Elmet—North American Philips
 Elghco—Electro-Physics Co
 Embassy—All Channel Prods
 Em-Bed-It—Electronic Plastic
 EMC—Electronic Measurements
 Emico—Electro-Mechanical Inst
 EMP—Electronic Machine Parts
 Empire—Tri-Ex Tower
 Enamel G—General Cable
 Enamelite—Acme Wire
 Enbond—Enthone Inc
 Erduro—Republic Steel
 Enflo—Enflo Corp
 Engravograph—New Hermes
 Engraving
 Enns—Electronic Contractors
 Enns—Oregon Electronic Mfg
 Engo—Piqua Machine & Mfg Co
 Enstrip—Enthone Inc
 Enterite—General Cable
 Enthol—Enthone Inc
 Enthox—Enthone Inc
 Envoy—Ansley Mfg Arthur
 Eribon—Furane Plastics Inc
 Epic—Electrical & Physical Instr
 Epicon—Electron Products
 Epinate—Amer Printed Circuits
 Epixaw—Electron Products
 Epocast—Furane Plastics Inc
 Epoglas—New England Laminates
 Eposal—Hardman Co H V
 Eput—Berkeley Div Beckman
 Instr
 Equaline—Entron Inc
 Equatrol—Entron Inc
 Erectohm—Workman TV Inc
 Ersin—Multicore Sales
 Esco—Cosa Corp
 Esco—Electric Specialty
 Esco—Electro-Switch Corp
 Escon—Electro-Switch & Controls
 Esico—Electric Soldering Co
 Escoluger—Electric Soldering
 ESL—Electro-Sonic Labs
 ETC—Electric Terminals
 EthoLoc—Weckesser Co
 Eureka—Bache & Co Semon
 Eureka—Du Pont de Nemours
 Evabrite—Bache & Co Semon
 Evalast—Bache & Co Semon
 Evanohm—Driver Co Wilbur B
 Evapo-Ion—Cons ElectroDynamics
 Evapograph—Baird-Atomic Inc
 Eveready—Nat'l Carbon Co
 Everlock—Thompson-Bremer & Co
 Exact-Fax—General Photo Prods
 Exactohm—Workman TV Inc
 Exide—Elec Storage Battery
 Exploro-Former—Geotronic Labs
 E-Z Code—Westline Products
 Ez Lifts—Crown Controls Co
 E-Z Talk—Simpson Mfg Co Mark
- F**
- Fabrikoid—Du Pont de Nemours
 & Co
 Fabrilite—Du Pont de Nemours
 Fairprene—Du Pont de Nemours
 Famco Fibers—Amer Air Filter
 Faratron—Luhrs & Co C H
 Farlite—Farley & Loetscher
 Fastatch—Centralab
 Fastee—Entron Inc
 Fault-Finder—Radar Engineers
 Faximile—Hogan Labs
 Faxkote—Hogan Labs
 Faxpaper—Hogan Labs
 F & B—Florman & Babb
 FC—General Riveters
 Featherweight Miniature—Chicago
 Ind Instrument
 Fel-Pro—Felt Mfg Co
 Fenswire—Saxton Products
 Fenetic—Perfection Mica
 Ferrac—Airpax Products
 Ferramic—General Ceramics
 Ferramite—National Moldite
 Ferri-Chokes—Suprex Electronics
 Corp
 Ferricore—Nat'l Moldite Co
 Ferristor—Berkeley Div Beckman
 Instrument
 Ferro-Cell—Topatron Inc
 Fibertuff Polystyrene—Koppers Co
 Fidebit—Johns-Manville
 Fideitone—Permo Inc
 Fidelivox—Audimation Labs
 Fideil-Fone—Industrial Radio
 Fil-Car—Filtron-Co
 Filmagnetic—Berndt-Bach Inc
 Filmosound—Bell & Howell
 Film Pot—Fairchild Controls
 Film-X—Goodall Electric
 Filrec—Centralab Div
 Filplate—Centralab Div
 Filt-A-Cor—Magnetic Core Corp
 Filterette—Deutschmann Corp
 Filterized—Deutschmann Corp
 Tobe
 Filtermite—Deutschmann Corp
 Tobe
 Filter Point—Duotone Co
 Filtorgak—Torocoil Co
 Filtron—Richardson Labs
 Finco—Finney Co
 Finflex—Finn & Co T R
 Fireball—JFD Mfg Co
 Firerod—Watlow Electric
 Firewall—Rockbestos Prods
 Firezone—Rockbestos Prods
 Fischersine—Fischer & Co R A
 Fischertherm—Fischer & Co R A
 Fischer-Tone—Fischer & Co R A
 Fischerquartz—Fischer & Co R A
 Fiske—Advanced Instruments
 Five-Star Tubes—General Electric
 Co
 5-Way—Superior Electric
 Flaxtohm—Claroast Mfg Co
 Flame Rock—Montaine Corp
 Flash-Flow—Ewald Instruments
 Flathom—Centralab
 Flawmaster—Biggs Co Carl H
 Fleetcom—Communications Co
 Fleetwood—Conrac Inc
 FlexALL—Rome Cable Corp
 Flexaquad—Airtron Inc
 Flexaust—Flexaust Co
 Flexifone—Dukane Corp
 Flex-i-liner—Vantone Pump &
 Equip
 Flexite—Markel & Sons L
 Flexiab—Standard Electric Time
 Flexlife—Columbia Wire &
 Supply
 Flexo—Art Specialty
 Flexohm—Claroast Mfg Co
 Flexon—Flexonics Corp
 Flexoprene—Standard Wire &
 Cable
 Flexowax C—Glyco Products
 Flex-Pak—Bogen Co David
 Flexshield—Amer Elec Cable
 Flightcom—Communications Co
 Flightweight—Good-All Elec Co
 Flite Sound—Jack Scientific
 Instrument
 FloGard—Brooks Rotameter
 Flo-Iron—Vari-L Co
 Flo-Mizer—Brooks Rotameter
 Flo-Paque—Filonqui Products
 Flowrator—Fischer & Porter
 Fluorotol—Menlo Research Lab
 Fluorofilm—Dietrich Corp
 Fluoroflex—Resistaflex Corp
 Fluoropy—Int'l Resistance
 Flux—Eastman Kodak Co
 Flux Gate—Eclipse-Pioneer
 Fluxvalve—Pickering & Co
 FM—General Riveters
 FME—Federal Mfg & Eng'g
 FM/Q—Apparatus Dev Co
 Foamline—Plastoid Corp
 Foamtube—Plastoid Corp
 Focalray—Black Light Prods
 Focalizer—Quan-Nichols Co
 Focical—Miller Dial & Name-
 plate
 Folded Unipole—Andrew Calif
 Corp
 Fonex—Transelectric Mfg
 Fonolluid—Ronette Acoustical
 Corp
 Forsatite—Reichhold Chemicals
 Formze—General Cable Corp
 Formbond—Acme Wire
 Formlon—General Cable
 Formvar—Acme Wire
 Formvar—Anaconda Wire & Cable
 F O S—Seamless Rubber Co

BRAND and TRADE NAME INDEX

Fotoelectric—Worner Electronic Devices
 Foto-FLO—Haloid Co
 Foto-fail—Miller Dial & Nameplate
 Fotolux—Amer Speedlight
 400 Series—Du Mont Labs A B
 Fralim—Biddle Co J G
 Frako—Gary Wells Co
 Franklin—Bernard Franklin Co
 Free-Vane—Bristol Co
 Freon—Du Pont de Nemours
 Fresnels—General Lighting
 Fretaray—Fretco Inc
 Fretline—Fretco Inc
 Friden Tape Reader—Commercial Controls
 Friden Flexewriter—Commercial Controls
 Fringe-count—Link Aviation Inc
 Full-View—Brooks Rotameter
 Function Programmer—Hubbard Scientific Labs
 Fusebar—Workman TV Inc
 Fuse-Lite—Alden Products
 Fuse-tron—Bussmann Mfg Co
 Fusionweld—Avon Tube Div
 Fusistor—Bradford Components
 Fuz-Lox—D & M Products
 Fuzohm—Clarostat Mfg Co
 FXR—F R Machine Works
 Fyberoid—Wilmington Fibre Specialty
 Fyberglass—Eraser Co
 Fybr-Tech—Technical Ply-Woods Sales
 Fyre-Freeze—Kidd & Co Walter

G

G-A—Grigsby-Allison Co
 GA&F—Antara Chemicals
 Gagnetron—Instruments Inc
 Galv-O-Mast—Mech Steel Tubing
 Galv-O-Weld—Mech Steel Tubing
 Gap/R—Philbrick Researches
 Garceau—Electro-Medical Lab
 Gar-Forming—Gar Precision Parts
 Gask-O-Seal—Wolfe Co F C
 GB—Goldsmith Bros Co S & R
 GB Jet—Workman TV Inc
 G-C—Gen Cement Mfg
 Gearmotor—Foote Bros
 GenCalloy-A—General Cable
 Gencaseal—General Cable
 Gencathene—General Cable
 Gencatrol—General Cable
 Genco—Gen'l Photo Products
 Gencorone—Gen'l Cable
 General—Medal Mfg Co
 Geon—Goodrich Chem Co B F
 Geotech—Geotechnical Corp
 Geotron—Geotronic Labs
 Gescor—General Crystal Co
 GH—Girard-Honkins
 Giant Meters—Dittmore-Freimuth Corp
 Gibsily—Gibson Electric Co
 Gibson Girl—Robins Industries
 Glas-Bond—Polymer Industries
 Glasohm—Clarostat Mfg Co
 Glasmod—Honeycomb Co of Amer
 Glastite—Warren Wire
 Glaswitch—Revere Corp of Amer
 Glennite—Gulton Mfg Corp
 Globar—Carborundum Co
 Globe Chamoion—WRL Electronics
 Globe Chief—WRL Electronics
 Globe King—World Radio Labs
 Globe Scout—World Radio Labs
 Globe Spanner—WRL Electronics
 Glo-Drop—Workman TV Inc
 Glo-Melt—Wassco Elec Prod
 Glo-n-Glo—Can Radium & Uranium
 Glydag—Acheson Colloids
 Gnome—Carter Parts Co
 Gobo Projector—Century Lighting
 Goerler—Gary Wells Co
 Goetze—Johns-Manville
 Gold Crown—Pioneer Gen-E-Motor
 Gold Cup—Carboneau Industries
 Gold Seal—Corn Electric Co
 Golden Wand—Peerless Prods Ind
 Go-No-GO—Assoc Missile Prods
 Goodline—Wire Co of Amer
 Goodmans—Rockbar Corp
 Gotham—Hartford City Paper Co
 GP—Erie Resistor
 Grafalube—Grafo Colloids
 Grafalux—Grafo Colloids
 Gra-Lab—Dimco-Gray Co
 Gramer—Gramer-Halldorson Transf
 Gramix—U S Graphite
 Grampan System—Gotham Audio
 Grand—Hartley Products Co
 Graphilm—Pettinos Inc Charles
 Gravalum—Hermes Plastics
 Greenbilt—Equipment & Service Co

Greenohm—Clarostat Mfg
 Greibach—Gulton Industries
 Gridaloy—Driver Co Wilbur B
 Grip-eze—Pheps Dodge Copper Prod
 Grippit—Tru-Lock Fasteners
 Grip-Spintite—Stevens Walden Inc
 Groundometer—Johnson Aircraft Eng'g Co M J
 Growlers—Crown Industrial Prod Co
 Grundig-Majestic—Majestic Int'l Corp
 GS—Gen'l Scientific Equip
 GSI—Geatronics Corp
 Guardian—Gen'l Cable
 Guardian MK I—G & M Equip
 Guideline—Airtron Inc
 Gyromatic—Reflectone Corp
 Gyrosyn—Sperry Gyroscope
 Gyrotron—Sperry Gyroscope

H

Hailer Jr—Audio Equip Co
 Halldorson—Gramer-Halldorson Transf
 Hallowell—Standard Pressed Steel
 Halohlight—Sylvania Electric Prods
 Ham-Tenna—Illumitronic Eng'g
 Handie-Micro-Talkie—Motorola Com'n & Electronics
 Handie-Talkie—Motorola
 Handy Flux—Handy & Harman
 Harbot—Unimatic Corp
 Harmon—Goodrich Chem Co B F
 Haxalin—Du Pont de Nemours
 Hazegage—Ess Instrument Co
 Heatex—Acme Wire
 Heathkits—Heath Co
 Heatzone—Rockbestos Products
 Hedin—Gen'l Automatic Corp
 Heemco—Hill Electronic Eng'g
 Helecon—U S Radium
 Heliax—Andrew Corp
 Helical—Foote Bros
 Heli-Coil—Premcco Inc
 Heli-Coil—Trop Industries
 Helicop-Hut—Craig Systems Inc
 Helidid—Helipat Corp
 Hercules—Bache & Co Semon
 Hercules—Shure Bros
 Herman Nelson—Amer Air Filter
 Hess-Bright—SKF Industries
 Hetrion—Durez Plastics
 Hexclad—Hexacon Elec Co
 Hex Seal—Automatic & Precision
 Heyco—Heyman Mfg Co
 Hi-Ball—Radiant Corp
 Hi-Brite—Shannon Luminous Materials
 Hico-Lite—Hauman Instrument
 Hi-Cor—Alpha Metals
 Hi-D—Penberthy Instrument
 Hi-D—United Aircraft Prods
 Hi-Farad—Aerovox Corp
 Hi-Flux—Annis Co R B
 Hi-g—General Controls Co
 High-Volt—Industrial Devices
 Hi-K—Erie Resistor
 Hi-Kap—Centralab Div
 Hilger—Jarrell-Ash
 Hilo—Da-Lite Screen
 Hi-Pressure—Brooks Rotameter
 Hi-Q—Aerovox Corp
 Hi-Q—Johnson Co E F
 Hi-Stab—Erie Resistor Corp
 Hi-Trim—Aerovox Corp
 Hitronic—Bliss Electronic
 Hi-V-Kaps—Centralab Div
 Hi-Vo-Discs—Centralab
 Hi-Lab—Harrison Labs
 Hobbs—Gould-Nat'l Batteries
 HoistPhone—Mine Safety Appliances
 Homo—Leeds & Northrup
 Homocarb—Leeds & Northrup
 Honeywell—Micro Switch Div
 Hookswitch—Corona Eng'g Service
 Hornet—New York Transformer
 Horton—Becker Electronics
 Hotip—Contact Inc
 House of Resistors—Clarostat Mfg Co
 Hoyt Meters—Burton-Rogers
 HP—Aerovox Corp
 HRU-60—Nat'l Company
 H20—Milton Roy Co
 Huckbolt—Huck Mfg Co
 Hun-A-Plug—Page-Fogwell
 Humdinger—Clarostat Mfg Co
 Humidigraph—Bristol Co
 Humidistat—Friez Instrument
 Humistat—Amer Instrument
 Hurlertron—Electric Eye Equip
 Hushed—Volkers & Schaffer
 Husite—Huse Liberty Mica Co
 Husky—Price Electric Corp
 HVC—United Transformer
 Hyam—Lindberg Eng'g Co
 Hy-A-Sil—Miller Co Sanford
 Hycar—Goodrich Chem Co B F
 Hycor—Lindberg Eng'g Co

Hycot—Lenz Elec Mfg
 Hydramotor—General Controls
 Hydra-Trol—Trimount Instrument
 Hydrocide SX—Sonneborn Sons L
 Hydrografo—Grafo Colloids
 Hydroretector—Amer Instrument
 Hydrotol—Cook Electric Co
 Hyen—Lindberg Eng'g Co
 Hyex—Lindberg Eng'g Co
 Hyflux—Indiana Steel Products
 Hyfor—Lenz Elec Mfg
 Hy-G-300—Bendix Red Bank
 Hyge—Cons Electrodynamics
 Hygee—Lenz Elec Mfg
 Hyglas—Lenz Elec Mfg
 Hygrade—Foote Bros
 Hygrade—Markel & Sons
 Hygro Dial—Friez Instrument
 Hypropak—Photo Crystals
 Hy/Low—Stevens Products
 Hy-Met—Astron Corp
 Hygervac—Central Scientific
 Hypex—Jensen Mfg Co
 Hypot—Associated Research
 Hyrad—Sequoia Process Corp
 Hyray—Lenz Elec Mfg
 Hysol—Houghton Labs
 Hyspar—Midland Paint & Varnish
 Hytall—General Electric Co
 Hytem—Lenz Elec Mfg
 Hy-Temp—Andrew Calif Corp
 Hy-Therm—Hockings Eng'g Co
 Hytrol—Du Pont de Nemours & Co E I
 Hyvac—Central Scientific Co
 Hyvol—Aerovox Corp

I

Iatron—Farnsworth Electronics
 IBM—Int'l Business Machines
 ICA—Insuline Corp of America
 ICI—Instrument Cases Inc
 Iconumerator—Du Mont Labs B
 Ideal—Melody Master Mfg
 Idealarc—Lincoln Elec Co
 Ideco—Dresser-Ideco
 Identalevee—General Plastics
 Identichart—Royson Eng'g
 Identron—Union Switch & Signal
 Idesco—Identification Serv
 IERS—Int'l Electronic Res
 II-TV—General Precision Labs
 Illinois—Illinois Condenser Labs
 Imcor—Insulation Mfrs
 Imhof—Gary Wells Co
 Imp—Carter Parts Co
 Imp—Kaaz Eng'g Corp
 Imperial—Jensen Mfg Co
 Imperial—Rek-O-Kut Co
 Imperial-Vokar Corp
 Im-Plast—Richardson Co
 Impulse Sequence—Bristol Co
 IMR—Intelligent Mach Research
 IMS—Injection Molders Surply
 In-a-grip—Stevens Walden Inc
 Incelead—Amer Products Mfg
 Inconel—Int'l Nickel Co
 Incredutor—CGS Laboratories
 Indalloys—Indium Corp of Amer
 Indeco—Industrial Eng'g & Equip
 Indeli-Dent—Markwik Mfg Co
 Inditron—Nat'l Union Elec
 Induct-O-Ring—Lindberg Eng'g Co
 Inductosyn—Farrand Optical Co
 Indulux—Irwin Labs
 Industravox—Electronic Eng'g
 Industro—State Labs
 In-Line—JFD Mfg Co
 Inmanco—Insulation Mfrs
 Inonel X—Riverside—Alloy Metal
 Inspectopage—Alcar Instruments
 Inspector—Black Light Prod Inc
 Instant-Form—TelAutograph Corp
 InstoChange—Bethlehem Apparatus
 Inst-O-Matic—Wiggins Oil Tool Co E B
 Instansolder—Cole Radio
 Instrulux—Lenz Elec Mfg
 Insulink—Burndy Engineering Co
 Insulite—Extruders Inc
 Insulup—Burndy Engineering Co
 Insurok—Richardson Co
 Interadiocom—Stratford Corp
 Inter-Joint—Scientific Glass Apparatus
 Interlock—Hubbell Inc Harvey
 Intermatic—Int'l Register Co
 Invader—Ward Products
 Invertor—Behlman Eng'g
 Ionotron—U S Radium
 I Q Eye—Basic Controls
 I Q Eye—I Q Industries
 IRD—Int'l Research & Devel
 Irish—Orradio Industries
 IRL—Research Labs/Aeronca Mfg
 IRN—Williams & Co C K
 Isoglas—Natvar Corp
 Iso-Kaps—Centralab
 Isolite—Schenectady Varnish Co
 Isomelt—Schenectady Varnish Co
 Isonel—Acme Wire
 Isonel—Schenectady Varnish Co

Isophase—Pickering & Co
 ITC—Technology Instrument
 ITV Zoomar—Zoomar Inc

J

Jaco—Jarrell-Ash
 Jagabi—Biddle Co James G
 Jairo—Jaidinger Mfg
 Jaincomp—Jacobs Instrument Co
 Jan—Bell & Howell
 JBL—Lansing Sound James B
 J-E—Jacks-Evans Mfg
 Jeco—Jarvis Electronics
 Jensen—Whitney Metal Tool
 Jetcal—B & H Instrument
 Jetenna—JFD Mfg Co
 Jet Flux—All-State Welding Alloys
 Jet Stream—King-Seeley Corp
 JeTonic—JFD Mfg Co
 Jetube—Tuttle & Kift
 Jervis—Land-Air Inc
 Jiffy—Campro Prods
 Jolta—Jan Hdw Mfg Co
 Jomanco—Johns-Manville
 JSC—Jersey Specialty Co
 JSP—Instruments Inc
 Jung—Hacker & Co Wm J
 Junior-Helix—JFD Mfg Co
 J-W—Johnson Williams

K

Kalotron—Thermosen Inc
 Kalwood—Keller Prod Inc
 Kanigen—General Amer Transportation
 Kantark—Trico Fuse Mfg
 Karadio—Eckstein Radio TV
 Karak—Ohio Carbon Co
 Kasil—Philadelphia Quartz
 Kathabar—Surface Combustion
 Kaylock—Kaynor Co
 Kel-F—Kellogg Co M W
 Kelon—Shamban & Co W S
 Kennett—Nat'l Vulcanized Fibre
 Kepru—Keil Eng'g Prod Co
 Keps—Shakeproof Co
 K & H—Krueger & Hudepohl
 Kic—Kemet Co
 Kidde-Atmo—Kidde & Co Walter
 Kilotrol—Cook Electric Co
 Kinplex—Collins Radio
 Kinney—New York Air Brake
 Kintel—Kay Lab
 KL—Kenlite Labs Inc
 Kleenrol—DuPont de Nemours
 KleeNeedle—Robins Industries
 Kler Kote—Crown Industrial Prods
 Klieglights—Kliegl Bros
 Kliplok—Trico Fuse Mfg
 Klipschorn—Klipsch & Associates
 Klixon—Metals & Controls Corp
 K-Lok—Erie Resistor
 Klosure—Garlock Packing
 K & M—Keasbey & Mattison
 Knight—Allied Radio Corp
 Kodachrome—Eastman Kodak Co
 Kodacolor—Eastman Kodak Co
 Kodar—Eastman Kodak Co
 Kodet—Eastman Kodak Co
 Korda—Chicago Gasket
 Korda-Flex—Chicago Gasket
 Kostreel—Kost Prods
 Kool Klamps—Birther Corp
 Kool Sel—Pyramid Elec
 Krisher—Lektra Labs
 Kristel—Kris Electronics
 Kromover—All-State Welding Alloys
 K Series—Kay-Townes Antenna
 Kum-Kleen—Avery Adhesive Label
 K-Tran—General Instrument Corp
 Kurmelec—Kurman Electric
 Kwik—Dunton Co M W
 Kwik-Kall—LogeSound Engineers J M
 Kwikits—University Loudspeaker
 Kwik Klip—South River Metal Prods

L

Labcase—Berkshire Labs
 Labmarker—Berkshire Labs
 Labmaster—Gen'l Nuclear Corp
 Labohm—Berkshire Labs
 Labrect—Berkshire Labs
 Labstroke—Berkshire Labs
 Lab-Line—Dunlap Electronics
 Labtrans—Berkshire Labs
 Lab-Volt—Buck Eng'g Co
 Lackon—Sun Dial
 Ladder Line—Illumitronic Eng'g
 Lanator—Lamaco Inc
 Lamco—Laminations Co
 Lamitex—Franklin Fibre
 Lansing—Altec Lansing
 Laqua—Fidelity Chemical
 Lazy-X—Radiant Corp
 Lead-Bender—Design Tool
 Lead-Former—Design Tool
 Leagner—Antenna Specialists
 Leatheroid—Nat'l Vulcanized Fibre

Lecite—Electro-Chemical Eng'g
 Lectalite—Electric Auto-Lite
 Lectrodryer—Pittsburgh Lectro-dryer Co
 Lectroscope—Ronar Inc
 Ledex—Leland Inc G H
 Leeson—Universal Winding Co
 Leko's—Century Lighting
 Lektron—Electronic Rectifiers
 Lektratron—Conn Ltd C G
 Level Master—Jo-Bell Prods
 Levolver—McGill Mfg Co
 Lewis—Western Coil & Electrical
 Lewis Vertical—Universal Prods
 LF—Switchcraft Inc
 LGP-30—Librascope Inc
 LGP-30—Royal Precision Corp
 Lidco—Assembley Products
 Liberty—Amer Communications
 Lico—Life Instrument
 Licon—Illinois Tool
 Lifetone—Duotone Co
 Light Warden—Electric Corp
 Lignophol—Sonneborn Sons L
 Limpander—Electric Systems Eng'g
 Linde Sapphire—Linde Air Products
 Line-O-Life—Carter Motor Co
 Line-O-Power—Foote Bros
 Lineweld—Lincoln Elec Co
 Linklock—Simmons Fastener
 Linvar—Muirhead & Co Ltd
 Lion—Southco/South Chester
 Lipstik—Altec Lansing
 Lira—Nine Safety Appliance
 Litemaster—Art Specialty
 Litemaster—Flexo Int'l Corp
 Lithaloid—Haloid Co
 Littel—Switchcraft
 Little Devil—Ohmite Mfg Co
 Little Giant—JFD Mfg Co
 Little Wonder—Trans-Lux Corp
 Livermont—Richmont Inc
 Living Presense—Melody Master Mfg
 Lloyd's—Johnson Mfg Co
 Localities—Fostoria Pressed Steel
 Lock-O-Seal—Wolfe Co F C
 Locrite—Amer Sealants
 Loge Lectern—Loge Sound Engrs J M
 Logger—Audio Instrument
 Logoquatt—Logo Inc
 Lok-Thred—Nat'l Screw & Mfg
 Lokuts—Shakeproof Corp
 Long Life—EMC Recordings
 Lo-Ohm—Bradford Components
 Lo-Ohm—Workman TV Inc
 Loopstick—Supertex Electronics
 Lorac-Seismograph Service Corp
 Lotan—Assoc Amer Trading Div
 Lotemp—Mico Instrument
 Lo Torq—Waters Mfg
 Lo-Volt—Industrial Devices
 Lubr-Lo—Permo Inc
 Lucite—DuPont de Nemours
 Lumatrol—Micro Balancing Lu-menized—Eastman Kodak Co
 Lumetron—Photovolt Corp
 Luna-Lite—Lawter Chemicals
 Lusterized—Amer Elec Cable
 Lusterlac—Amer Elec Cable
 Luxtral—Superior Electric
 Lyn-A-Syn—Minatron Corp
 Lyon's Chronometric—Boulin Instrument
 Lyticap—Planet Mfg

M

Mag—Assoc Amer Trading
 Magdelay—Automation Inc
 Magic Genie—JFD Mfg Co
 Magiscro—Crowley Div Aerovox
 Magic-Tip—Hunter Tools
 Magi-Mix—Technical Appliance
 Magmeter—Airfax Products
 Magmotor—Carter Motor Co
 Mag-Nac—Magnetic Devices
 Magnadyne—Richardson Labs
 Magnalarm—Brooks Rotameter
 Magnalarm—Rea Magnet Wire
 Magnarhonic—Magnasyn Mfg
 Magnaprobe—Eng'g Developments
 Magnatest—Magnaflex Corp
 Magnatone—Magna Electronics
 Magnator—Hansen Mfg Co
 Magnatrol—Century Lighting
 Magnavue—Brooks Rotameter
 MagnaDisc—Texas Instrument
 Magneline—Fpsco Inc
 Magneloc—Amplifier Corp of America
 Magnemite Portable—Amplifier Corp of America
 MagneMusic—Magnecord Inc
 Magnepulse—Magnetic Resch
 Magneraser—Amplifier Corp
 Mammesin—Eclipse-Pioneer Bendix Aviation
 Magne-Sreed—Magnetic Amplifiers
 Magnestats—Magnetic Research
 Magnette—Heinemann Electric
 Magneticom—Magnetic Recording
 Magnorite—Norton Co

BRAND and TRADE NAME INDEX

- Magnumatic—Brooks Rotameter
 Magohm—Electric Regulator
 Majorette—Major Electronics
 Major-X—Baiteau Electric
 Mallard—Eltrend Products
 Maltese—Bache & Co Semon
 Mamco—Master Appliance Mfg
 Manganin—Driver Co Wilbur B
 Mangelsdorf—Stein Labs
 Mangrid—Driver Co Wilbur B
 Manhattan—Raybestos-Manhattan
 Mani-Choke—Superec Electronics
 Mapico—Columbian Carbon Co
 Maraset—Marbette Corp
 Marbelite—Good-All Electric
 Mariner—Hudson American Corp
 Mark II—Technical Devices
 Marker-Pulser—Brubaker Electronics
 Markmaster—Floquid Prods
 Markman—West Instrument
 Mark VIII—Warren Corp J C
 Marvelte—C B C Electronics
 Marvelwire—Sonneborn Sons L
 Masco—Simpson Mfg Mark
 Mascofone—Simpson Mfg Co
 Mark
 MA Simulator—Miller Assoc
 Masterline—Blonder-Tongue Labs
 MasterMet—Cannon-Muskegon
 Mastertape—Audio-Master Corp
 Mastertapes—Magnetic Sound Inc
 Masterrol—Emmett Mach & Mfg
 Match Box—Johnson Co E F
 Mathieson—Olin Mathieson Chemical
 Matchstick—Johnson Co E F
 Mauer—Niagara Electron Labs
 Maximag—Adler Electronics
 Mechanipak—Garlock Packing
 Medalist—Marion Elec Instrument
 Medal-Line—Medal Mfg Co
 Medi-Quartz—Dallons Labs
 Medi-Sine—Dallons Labs
 Medi-Sonar—Dallons Labs
 Medi-Therm—Dallons Labs
 Megalume—Nems-Clarke Inc
 Mega-Node—Kay Electric Co
 Megavox—Central Scientific Co
 Megger—Biddle Co J G
 Melacon—Photocircuit Corp
 Melotone—Electron Enterprises
 Melody Mike—Audio Equip Co
 Memotron—Hughes Aircraft Co
 MenLoLab—Menlo Research Lab
 Meritrol—Emmett Mach & Mfg
 Merl-Miller—Electro Research
 Mersemetric—Milton Roy Co
 Mesh-Tech—Technical Ply Woods
 Message Repeater—Mohawk Bus Machines
 Mesurflo—Hays Mfg
 Metagraphic—Bristol Co
 Metafastic—Metal Textile Corp
 Metalbraid—Hitemp Wires
 Metal-Cell—Topatron Inc
 Metalite—Astron Corp
 Metapox—Metaplast Corp
 Metameter—Bristol Co
 Metavane—Bristol Co
 Meteor—Assoc Amer Trad Div
 Meteor—Astron Corp
 Meteor—Warwick Mfg
 Meter-Matic—Int'l Register Co
 Meter-Matic—Leitch Eng'g Corp
 Metex—Metal Textile Corp
 Methac—Borden Co
 Met-L-Flex—Robinson Aviation
 Metloh—Painton & Co
 Metrix—American Metrix Corp
 Metropolitan—Radion Corp
 Metrascope—Photocor Research Prods
 MF—Micarta Fabricators
 Micabond—Continental - Diamond Fibre
 Micali—Cosa Corp
 Micafush—Mica Corp
 Micaply—Mica Corp
 Mica-Ramic—Farnam Mfg Co
 Microal—Ebert Electronics
 Microact—Bristol Co
 Microcon—Painton & Co
 Microdials—Borg Equip George
 Microlet—Solar Aircraft
 Microline—Sperry Gyroscop Co
 Microlite—L O F Glass Fibers
 Microtron—DeMurray-Robardi
 Microlytic—Pyramint Elec
 Micromaps—Magnetic Research
 Micromatch—Jones Electronics Co M C
 Micromtron—Optionic Research
 Micro-Miniature—General Electric Co
 Micromotor—Redmond Co
 Micro-Namic—Micro Balancing
 Micropaints—Micro-Circuits Co
 Micropot—Borg Equip George
 Micro-Quartz—L O F Glass Fibers
 Microsen—Manning Maxwell & Moore
 Microstar—Amer Optical Co
 MicroStrip—Premier Instrument
 Microtorque—Giannini Co
 Midgetalk—Simpson Mfg Co Mark
 Midgetape—Mohawk Bus Machines
 Midg-O-Matic—Hays Mfg Co
 Mid-Rip—General Cable
 Midway—Simpson Mfg Co Mark
 Millisadic—Cons Electrodynamic
 Milliseck—Stevens-Arnold
 Millivac—Bristol Co
 Mil-Wrot—Wrought Washer Mfg
 Minatone—Armstrong Cork
 MinePhone—Mine Safety Appliances
 Mineralight—Black Light Corp of Amer
 Mineralight—Ultra-Violet Prods
 Mini Air—Milton Roy Co
 Mini-Breaker—Mechanical Prods
 Minicon - X—Robinson M a c h Works
 Minicube—Sanders Associates
 Minifix—Lenz Elec Mfg
 Mini-Gator—Mueller Electric
 Mini-Mike—Telex Inc
 Minimate—Astron Corp
 MiniMite—Thermo Elec Co
 Mininoise—Microdot Inc
 Minipak—Radio Specialty Mfg
 Mini Pump—Milton Roy Co
 Minirelay—Ebert Electronics
 Mini-Shield—Staver Co
 Mini-Space—Alden Products
 Mini-Springs—Staver Co
 Minitape—Stancil-Hoffman
 Minitorque—Giannini Co
 Minitor—Radio Eng'g Co
 Mini Volt—Industrial Devices
 Miracord—Audiogersh Corp
 Miraloy—Texas Instrument
 Miraphon—Audiogersh Corp
 Miratwin—Audiogersh Corp
 Miro-Point—Duotone Co
 Mi Tee Ray—Fretco Inc
 Mo-Bil-Ac—Star-Kimble Motor
 Mobile-Dyn-Com—Bendix Radio
 Mobilfone—Mobil Electronics
 Mobiltone—Mobil Electronics
 Modac—Airborne Instrument
 Modelec—Modelectric Prods
 Modernlab—Modern Lab Equip
 Modified Hilo—Driver Co Wilbur B
 Moducell—Tortron Inc
 Modules—Hi-Q Div Aerovox
 Moduile—Berndt-Bach Inc
 Modu-Rak—Premier Metal Prods
 ModuWave—Sciaky Bros
 MoisturMeter—Parks Lab Henry Francis
 Molcote—Frenchtown Porcelain
 Moldite—National Moldite Co
 Mold-Kap—Centralab
 Molecule—Robinette Co W C
 Molykote—Alpha Molykote
 Monastrip EP—Mona Industries
 Monatel—Westrex Corp
 Monel—Int'l Nickel Co
 Monitoradio—Regency Div IDEA
 Monomagic—Pentron Corp
 Monomotor—Redmond Co
 Monoplex—Shure Bros
 Monoset—Telex
 Monotem—Lenz Elec Mfg
 Monotron—Wappler Inc
 Montube—Tuttle & Kift
 Monrobot—Monroe Calculating Machine Co
 Moody-Kit—Moody Mach Prods
 Moto-Mite—Globe Industries
 Motorelay—Corona Eng'g Service
 Motorotor—Apparatus Dev Co
 Motron—Robinette Co W C
 Movno—Robbins & Myers
 M-R-C—Marlin-Rockwell Corp
 M-S-A—Mine Safety Appliances
 MTEL—Warren Corp J C
 Mufax—Murhead & Co
 Multicon—Painton & Co
 Multidata—Fliht Research
 Multi-Elmac—Multi Products Co
 Multifone—Simpson Mfg Co Mark
 Multimeters—Rawson Elec Instr
 Multi-Mount—Sterling Electric Motors
 Multinlex—Chicago Industrial Inst
 Multipot—Davstrom Pacific Corp
 Multipot—Ford Eng'g Co
 Multi-Swane—Bead Chain Mfg Co
 Multi - Talk—Simpson Mfg Co Mark
 Murasonde—Whitley Electronics
 Musical Master—Greene Co L Charlton
 Muted Stylus—Shure Bros
 Mykroy—Electronics Mechanics
 Mykroy—Mica Fabricating Co
 Mylined—Thomson Industries
 Nadar—Autonetics Div N American Avia
 Nagapak—Nagoc Assoc
 Nagogator—Nagoc Assoc
 Naico—North American Elec Lamp
 Namettes—Swenson Co V H
 Narco—National Aeronautical
 Narcoil—NRC Equipment
 National—Gould-Nat'l Batteries
 National—Valco Mfg Co
 National Kantling—Nat'l Lock Washer
 Nautilus—Hudson Amer Div
 N-Cap—Eastern Precision Resistor Corp
 Nebroc—Hitemp Wires
 Negator—Hunter Spring Co
 Nelco—New England Laminates
 Nemcoite—New England Mica
 Neo Flow—Peerless Photo
 Neotel—General Cable
 Nepco—National Electric Prods
 Netco—New England Tape
 Netcosol—New England Tape
 Netic—Perfection Mica
 Neucork—Auburn Mfg
 Neuron—Astron Eng'g
 Neuro—Dunton Co M W
 Never-Stain—Nichols Wire
 New World—Deagan Inc J C
 Nicad—Nickel Cadmium Battery
 Nicoloid Process—Bigelow Metalizing Chem
 Nielsen Electronics—Endeco Eng'g Devel
 Nigrite—Johns-Manville
 Nitrohal—Kanthal Corp
 Nistalan—Driver Co Wilbur B
 Nitelighter—Fisher-Pierce Co
 Nitrelmang—Foote Mineral
 Nitro-Dur—Elect-Chemical Eng'g
 Nitro—Burrhoughs Corp
 NL—Nat'l Electronics
 NO-Batt—Bristol Co
 Nobelay—Continental Carbon
 Nobleite—Continental Carbon
 Nobl-Ohm—Fairchild Controls
 Nodrsael—Johns-Manville
 Noiseraser—Librascope Inc
 Nokorode—Dunton Co M W
 Norbide—Norton Co
 Norleco—Phylics Electronics
 Norplex—Northern Plastics
 Norsem—Erikson Specialized Tool
 Northam—N American Instrument
 Nox-Tarnish—Daubert Chemical
 NPC—Nucleonic Prod Co
 NRD—Nuclear Corp of Amer
 NTT—Nat'l Tel-Tronics Corp
 Nucor—Central Electronic Mfrs
 Nucor—Nuclear Corp of Amer
 Numer—Perkin-Elmer Corp
 Numechron—Pennwood Numechron
 Nu-Tronic—Nuclear-Electronics
 Nu-Way—Marshall Assoc John
 NUL—Nöthelfer Winding Labs
 NYCO—New York Coil Co
 NyGrip—Wackeser Corp
 Nylaflo—Polymer Corp
 Nylaron—Polymer Corp
 Nylasint—Polymer Corp
 Nyoil—Nye Inc Wm F
 Nytran—New York Transformer
 Nyvar—Acme Wire
 O-B—Ohio Brass Co
 Obel—Gary Wells Co
 Observer—Blonder-Tongue Labs
 Occo—Ohio Crankshaft Co
 Oeco—Osborne Electronic
 OFHC—American Metal
 OFHC—Phila Bronze & Brass
 Dhiomd—Ohio Carbon Co
 Ohmoid—Wilmington Fibre
 Ohmstone—Johns-Manville
 Oildag—Arheson Colloids
 OilMite—Deutschmann Corp Tobe Corp
 DK—General Cable
 Old Style Pitch—Koppers Co
 Oliver—Rea Co J B
 Omni Glow—Industrial Devices
 150 Series—Sanborn Co
 DPCO—Orondage Pottery
 Dratron—DMCO
 Drlon—DuPont De Nemours
 Orthonal—Magnetics Inc
 Oscar—Benson-Lehner Corp
 Oscillator—Saine Equip Lab
 Oscilloclast—Saine Equip Lab
 Oscillo-Record—Fairchild Camera & Instrument Corp
 Duncers—United Transformer
 Ovaltube—Plastoid Corp
 Oxley—BR Radio Electronics
 O-Z—Zernickow Co D
 Pace—Electronic Assoc
 Pace—Precision Apparatus
 Pacemaker—Johnson Co E F
 Pace-Setter—JFD Mfg Co
 Pacitron—Simmonds Aerocessories
 Packmaster—Radio Specialty
 Pad-Kaging—Peters-Dalton Inc
 Paintgrip—Armco Steel
 Pak-Fone—Industrial Radio Corp
 Pal—JFD Mfg Co
 PAKCO—Paraplegics Mfg Co
 Panacoustic—U S Recording
 Panalarm—Panellit Inc
 Panalog—Panellit Inc
 Panascan—Panellit Inc
 Panclimatic—Welwyn Int'l
 Pandux—Pacific Transducer
 Pan-El—Pan-Electronics
 Paneloc—Scovill Mfg
 Panelscopes—Waterman Prods
 Pan-i-Lite—Alden Products
 Panto—Preis Engraving H P
 Panto Drill—Du Mont Labs B
 Paraform—Paramount Paper Tube
 Parami—Parsons Co Ralph M
 Partek—Magnaflux Corp
 Paulite—Luminous Resins
 Paxar—Pacific Optical
 Paxon—Pacific Optical
 P & B—Potter & Brumfield
 PEC—Centralab
 Peco—Pacific Electriccord Co
 Peco—Panama Electronics
 Pee-Cee—Printed Cellophane Tape
 Peerless—Altec Lansing Corp
 Peerless—General Cable
 Peerless—National Vulcanized Fibre Co
 Peerless Rh—Peerless Film Processing
 Peerless Treatment—Peerless Film Processing
 Peer-Renu—Peerless Film Processing
 Pem—Dudek & Co R C
 Pemco—Practical Electronics
 Penacelite—Koppers Co
 Pendet—Centralab
 Penelgraph—Panellit Inc
 Penylene—St Regis Paper
 Pengraf—Grafo Colloids
 Penntrol—Penn Precision Prod
 Penn-Tran—Penn Transformer
 Perlene—Du Pont de Nemours
 Perreo—Pereny Equipment
 Perfetone—Audiomation Labs
 Periscope—JFD Mfg Co
 Perm-A-Caps—Chicago Condenser Works
 Perma-Code—Brady Co W H
 Permacode—Revere Corp of Amer
 Permagrid—Driver Co Wilbur B
 Perma - Grip—Avery Adhesive Label
 Permannickel—Int'l Nickel Co
 Permapaper—Sanborn Co
 Permaplast—Richardson Co
 Perma-Torq—Cambridge Thermionic
 Perma-Tube—Jones & Laughlin
 Peter Pan—Electronic Creations
 Peter Pan—Teleton Co of Amer
 P & H—Peck & Harvey
 PhalaCom—Phalo Plastics
 PhaloCord—Phalo Plastics
 Phalen—Phalo Plastics
 Phalo Tel—Phalo Plastics
 Phalo Tran—Phalo Plastics
 Phantomette—Fretco Inc
 Phazor—Industrial Test Equip
 Phenoline—Carbolite Co
 Phenolite—National Vulcanized Fibre Co
 Phenoweld #7—Hardman Co H V
 Phillips—Harper Co M
 Phil-Tral—Phillips Control
 Phono-Cushion—Robins Industries
 Phonostrobe—Berkshire Labs
 Phoson—United Wire & Supply
 Photofinish #4—Photocircuits Corp
 Photom-X—Baiteau Elect Corp
 Photogrobe—Electro-Physics Co
 Photo-Sphere—Basic Controls
 Photo-Sphere—I Q Industries
 Phototron—Thomas Electronics
 Pi-Caps—Chicago Condenser
 PicBoost—C B C Electronics
 P-I-A-Shaft—Claroastat Mfg Co
 Picture King—Da-Lite Screen
 Picturephone—McClure Talking Pictures O J
 Pig-Tailor—Bruno-NY Industries
 Pip-A-Roo—JFD Mfg Co
 Pip-Jet—JFD Mfg Co
 Pironette—Presto Recording
 Pisto-Grip—Wall Mfg Co P
 Pitchlight—Rcller Bearing Co
 Pittcomatic—Roman & Kunz
 Pitco—Pittsburgh Coil
 PIV—Link-Belt Co
 Pixie—Cook Electric Co
 P-K—Parker-Kalon
 Place—Nat'l Screw & Mfg Co
 Placel—Lenz Elec Mfg
 Planetaire—Planet Service Corp
 Planofax—Times Facsimile
 Plasco—Lenz Elec Mfg
 Plasglas—Lenz Elec Mfg
 Plaste—Lenz Elec Mfg
 Plaskon—Barrett Div
 Plastacele—Du Pont de Nemours
 Plastibond—Nat'l Eng'g Prod Inc
 Plaston—Condenser Products
 Plasticord—Chester Cable Corp
 Plasticote—Chester Cable Corp
 Plastok—Richardson Co
 Plasturbo—Master Appliance Mfg
 Playmaster—Markel Electric
 Plica—Flexaut Co
 Plugline—Jacobs Instrument
 Plus Module—Anslay Mfg Co Arthur
 Plyacyn—Reichhold Chemicals
 Plyamine—Reichhold Chemicals
 Plyanul—Reichhold Chemicals
 Plymaster—Rubber & Asbestos
 Plyophen—Reichhold Chemicals
 PM—General Riveters
 PMP—Precision Metal Products
 PNR—Rockbestos Prods
 Pocket Power—Cook Co Frank R
 Pocketscopes—Waterman Prods
 Polar Path—Eclipse Pioneer Bendix Aviation
 Polex—Union Plastics
 Polibar—Driver Co Wilbur B
 Polisignal—A R F Products
 Polybond—Polymer Industries
 Polycoupler—CGS Laboratories
 Polyclad—Carbolite Co
 Polycro—Borden Co
 Polyiron—Crowley Div Aerovox
 Polyken—Kendall Co
 Polyken—Pres Industrial Prods
 Polykite—Reichhold Chemicals
 Polymix—Bethlehem Apparatus
 Polyohm—Polytechnic Res & Dev
 Polyoxy—Reichhold Chemicals
 Polypenco—Polymer Corp
 Polypylene—Sturup Co
 Polylam—Lenz Elec Mfg
 Polylar—Acme Wire
 Polyline—Olympic Plastics
 Pomendae—Presto Recording
 Ponnco—Ponn Mach Cutting
 Ponometer—Acton Labs
 Porta-Kall—Loge Sound Engineers
 Portalex—Chicago Industrial Inst
 Port-O-Rcel—Industrial Elec Works
 Potpot—Claroastat Mfg
 Pottermeter—Potter Aeronautical
 Power Fireball—JFD Mfg Co
 Power Helix—JFD Mfg Co
 Powasert—United Shoe Mchry
 Powerel—Industrial Elec Works
 Power House—Black Light Prods
 Power Lab—Precise Development
 Powerload—Guardian Elec Mfg
 Powermaster—Hupp Electronics
 Power Pak—Black Light Prods
 Powerstat—Superior Electric
 Powerstreak—Amer Elec Cable
 Powpage—University Loudspeakers
 Powr-Rib—Ohmite Mfg Co
 Precision—Ohm—Precision Inc
 Precision—Lincoln Elec Co
 Precision-Built—Pratt Albert
 Precision-Made—G-L Electronics
 Press-Fit—Sealestra Corp
 Pressive—W Va Pulp & Paper
 Pressovac—Central Scientific
 Pressure Blast—Cro-Plate Co
 Presto—Prestoseal Mfg
 Printco—Precision Thermometer
 Printometer—Electro-Physics
 Private Eye—TV Utilities
 Privateer—Hudson American
 Private Line—Conn Telephone & Elec
 Prodag—Acheson Colloids
 Productimeters—Durant Mfg
 Professional JR—Camera Equip Co
 Profilmeter—Micrometric Mfg
 Progress Line—General Electric Co
 Project-o-rama—Century Lighting
 Pick-A-Shaft—Claroastat Mfg Co
 Protomaka—Printed Electronics
 Psychron—Friez Instrument
 Pulsescopes—Waterman Products
 Pulsional—A R F Products Inc
 Pultec—Pulse Techniques
 Pushnut—Palnut Co
 PVZ—General Electric Co
 Pyle-Star-Line—Pyle Nat'l Co
 Pylets—The Pyle Nat'l Co
 Pyralin—Du Pont de Nemours
 Pyro—Pyrometer Instrument
 Pyro-couple—Rayco Inst
 Pyrohm—Aerovox Corp
 Pyromaster—Bristol Co

BRAND and TRADE NAME INDEX

- Pyrolol—Bristol Co
 Pyrovor—Bristol Co
- Q
- Q-Beston—Auburn Mfg
 Q D I—Quamtmetric Devices
 Q-Tran—Johnson Electronics
 Quad Ring—Minn Rubber & Gasket
 Quadriphase—General Electric Co
 Quad-tronic—Wappler Inc
 Quality—Vokar Corp
 Quick-Hot—Wen Products
 Quick Lock—Simmons Fastener
 Quickset—Hull-Standard Corp
 Quick-Wedge—Kedman Co
 Quik-Rig—JFD Mfg Co
 Quik-Shot—Kemede Mfg Co
 Quinargo—Johns-Manville
 Quinorgobord—Johns-Manville
 Quintera—Johns-Manville
 Quinterbord—Johns Manville
- R
- Rad-A-Cor—Magnetic Core Corp
 Radast—Bolton Labs
 Radat—Skiatron Electronic & TV
 Radector—Jordan Electronics
 Radelin—U S Radium
 Radi-Aire—Reynolds Electric Co
 Radialead—Design Tool
 Radialloy—Radial Cutter Mfg
 Radicom—Crosby Labs
 Radio Alloy—Driver Co Wilbur B
 Radiocarb A—Driver Co Wilbur B
 Radio-Com—Trans-Tel Corp
 Radiocraft—Technicraft Co
 Radiodyne—Western Coil
 Radior—Myers & Sons E A
 Radiohm—Centralab
 Radiotron—Radio Corp of Amer
 Rafax—Haller Raymond & Brown
 Rakscopes—Waterman Prods
 Raluc—Radium Chemical
 Ranarex—Permutit Co
 Rancho—Western Insulated Wire
 Ranchoprene—Western Insulated Wire
 Randolph—Northern Metal Prod
 Ranger—Johnson Co E F
 Ranger—Pye Telecommunications
 Ranger—Shure Bros
 Rareox—Davison Chemical
 Ratiotran—Gertsch Products
 Ratotimer—Farmer Electric
 Ray-Actor—Atomic Labs
 Raydist—Hastings-Raydist Inc
 Raylac—Lenz Elec Mfg
 Raymaster—Atomic Labs
 Raymaster—Gates & Co G W
 Raymeter—Atomic Labs
 Raytron—Atomic Labs
 Raytube—Leeds & Northrup
 Raytector—Miller Assoc
 R B C—Roller Bearing Co
 RCA—Radio Corp of Philip
 RCE Solution—Hunt Co Philip A
 RCI—Rotating Components Inc
 R D—Lirascope Inc
 RdF Stikon—Ruge Assoc Arthur C
 Reac—Reeves Instr Co
 Readix—Rea Co J B
 Ready—Rolab Studios
 Reapak—Rea Magnet Wire
 Rear Guards—Kay-Townes Antenna
 Re-Cirk-It—Heinemann Elec
 Reco—Rectifier Engineering
 Reco—Reynolds Electric Co
 Recordall—Miles Reproducer
 Recordak—Eastman Kodak Co
 Record-Flow—Watson Mfg Co
 Recordoscope—Aremac Assoc
 Recotan—Goldring—Recotan Corp
 Rectagraph—Haloid Co
 Rectifier—Texas Instrument
 Rectodyne—Christie Electric
 Redcap—Michigan Electronics
 Red Center—Simonds Saw & Steel
 Red End—Simonds Saw & Steel
 Red Seal—Radiart Corp
 Red Streak—Brown-Bridge Mills
 Red Streak—Simonds Saw & Steel
 Red Tanq—Simonds Saw & Steel
 Red-Wood—JFD Mfg
 Reevelec—Reeve Electronics
 Regatrone—Electronic Measurements Co
 Regency—Industrial Dev Eng'g Assoc
 Regohin—Electric Regulator
 Reg-O-Matic—CBC Electronics
 Regular—Paramount Paper Tube
 Reichert—Hacker & Co Wm J
 Refajax—Popper & Sons
 Rejuvater—TeleTest Instrument
 Rel—Radio Eng'g Labs
 Reliable Mailer—Corrugated Paper Prod
 Reliacap—Sanders Associates
 Reliatron—Westinghouse Electric
- Reloid—Guardian Elec Mfg
 Rembrandt—All Channel Antenna
 Remcon—Pyramid Instrument
 Remotomike—Poole Instrument
 REN—Nebel Lab R E
 Repeater Records—Talking Devices Co
 Reporter—Pye Telecommunications
 Residential—Northern Industrial Chemical
 Resinite—Borden Co
 Resinol—Allied Resinous Prods
 Resotron—General Electric Co
 Reswax—Borden Co
 Retep—Hitemp Wires
 Rex—Air Controls Inc
 Rex—Astron Corp
 RFC—Radio Frequency Co
 RFI—Ace Eng'g & Mach Co
 Rhodex—Sel-Rex Corp
 Ribbon Heat—Cox & Co
 Ricap—Radio Industries
 Richelain—Richardson Co
 Rigid-Rig—Medal Mfg Co
 Riteohm—Ohmite Mfg Co
 RI-Trans—Radio Inds
 Rivnuts—Goodrich Aviation Prod
 R-M—Raybestos-Manhattan
 R&M—Robbins & Myers
 R M C—Radio Materials Corp
 RMS—Radio Merchandise Sales
 R-95—Raytheon Mfg Co
 Robotrol—Reliance Automatic Lighting
 Robotron—Emmet Mach & Mfg
 Rodar—Driver Co Wilbur B
 Rollex—Rome Cable Corp
 Roger—Rolab Studios
 Rol-Dex—Watson Mfg Co
 Rolene—Rome Cable Corp
 Rolotron—Amer Air Filter
 Rollpin—Elastic Stop Nut Corp
 Romarine—Rome Cable Corp
 Romex—General Cable
 Rondine—Rek-O-Kut Co
 Roprene—Rome Cable Corp
 RosinX—Dunton Co M W
 Rotary Ratiotran—Gertsch Products
 Roto Brake—Hy-Gain Antenna
 Roto Prod Co
 Rotobridge—Comm Measurements
 Rotofold—Reflectone Corp
 Roto-King—JFD Mfg Co
 Roto Lock—Simmons Fastener
 Rotomatic—Johnson Co E F
 Roto-Merc—General Bronze
 Roto Mold—Linear Inc
 Rotoroid—Burnell & Co
 Rotosol—Roto Mfg Co
 Rotostepper—Giannini Co
 Roto-Tork—Haydon Co A W
 Roto-Trols—Healy-Ruff Co
 Rov-A-Lite—Terrado Co
 Rovalitic—Industrial Condenser
 RoZone—Rome Cable Corp
 RPI—Resistance Products
 RSCD—Research Specialties
 RTV—Claroat Mfg
 Rub-Erok—Richardson Co
 Rubyluid—Rubv Chemical Co
 Ruby's—Ruby Chemical Co
 Rugged—Hi-G Inc
 Rulan—DuPont de Nemours & Co EI
 Ruralay—General Cable
 Rurax—Palmer Inc M V
 Rush—Eraser Co
 Rustbond Primer—Carboline Co
 Rycom—Railway Communications
- S
- Sadic—Consolidated Electrodynamic
 Safety m i—Gen'l Cable
 Safety-Plus—Chicago Screw Co
 Salvage Kraft—Floquil Products
 Sapphire—National Aeronautical
 Sarah—Simmonds Aerocessories
 Sassi—Assoc Amer Trading Div
 Saucerline—Fretco Inc
 Sav-A-Step—First Electronics
 Scenic Roller—Da-Lite Screen
 Scomato—Stone City Mch & Tool
 SCE Solution—Hunt Co Philip A
 Schenck—Cosa Corp
 Schweppe—Pheoll Mfg Co
 Scintillator—Precision Radiation Inst
 Scotch—Minn Mining & Mfg
 Scotchcast—Minn Mining & Mfg
 Scottie—Remler Co
 Scribecote—Floquil Products
 Sealant—Amer Sealants
 Sealink—Burndy Corp
 Seal-Strip—Babbitt Chemical Co
 Sealed Brilliance—Safetee Glass Co
 Sealnut—Radio Frequency Labs
 Sec—Southern Electronics
 Secnde—Electrical Communications Corp
- Sector—Jensen Mfg Co
 Seelbitt—Automatic & Precision Mfg
 Seelskrew—Automatic & Precision Mfg
 Seep-O-Mike—Poole Instrument
 SeeZak—U M & F Mfg Corp
 SeisMac—Texas Instrument
 Seismatron—Texas Instrument
 Selectofon—Audio-Master Corp
 Selectohm—Chicago Industrial Inst
 Selectronics—Electrical Communications
 Selektta—Assoc Amer Trading Div
 Selenibrake—Amer Rectifier
 Selenifier—Amer Rectifier
 Sems—Shakerproof Corp
 Sencore—Service Instrument
 Sensory Signalling—Sturtevant Co P A
 Sentinel—Photobell Co
 Sepvospeed—Electro-Devices
 Sequetrol—Emmett Mach & Mfg
 Seramelite—Good-All Electric
 Servicespool—Alpha Wire
 Servoflex—Servo Corp of Amer
 Servoflight—Servo Corp of Amer
 Servofrax—Servo Corp of Amer
 Servo-Graphic—Stoeling Co C H
 Servoscope—Servo Corp of Amer
 Servotherm—Servo Corp of Amer
 Seven Leagues Ahead—Thermador Electronics
 777 Series—Warren Corp J C S F—Switchcraft
 Shadograrh—Exact Weight Scale
 Shakespeare—Columbia Products
 Shannon-Glow—Shannon Luminous Materials
 Shannon Line—Shannon Luminous Materials
 Shawmut One-Time—Chase-Shawmut
 Ship Shape—Bemis Bro Bag
 Shock Bilt Mailer—Corrugated Paper Prod
 Sho-Rate—Brooks Rotameter
 Shorthorn—Klipsch & Assoc
 Shurflo—Amrhor Metal Co
 Shur-Flu—Hays Mfg
 Shuvee—Entron Inc
 Sico—Sherman Industrial Electronics Co
 SIE—Southwestern Industrial Electronics Co
 Sightmaster—Art Specialty
 Sightmaster—Flexo Int'l Corp
 Sigmatron—Intercontinental Dynamics
 Signa-flo—Buffalo Electronics
 Signa-Glow—Industrial Devel
 Signal Sentry—Johnson Co E F
 Silastic—Dow Corning Corp
 Sil Bond—United Wire & Supply
 Silcad—Yardney Electric
 Silcobest—Silicone Insulation
 Silertex—Erie Resistor Corn
 Sil Flux—United Wire & Supply
 Sil-Fos—Handy & Harman
 Silicohm—Sage Electronics
 Silic-O-Netic—Heinemann Elec
 Silkone—Ed-Berl Products
 Silkenite—Acer Wire
 Silotex—Anacoda Wire & Cable
 Silube—Ed-Berl Products
 Silvaloy—Amer Platinum Works
 Silveramic—Ward Products
 Silver Arrow—Fretco Inc
 Silvercel—Yardney Electric
 Silver King—Da-Lite Screen
 Silver Label—Dunton Co M W
 Silver-Packets—Bigelow Metallizing Chem
 Silver-Q—Decimeter Products
 Silvertone—Warwick Mfn
 Silver Wind—Peerless Prods Inc
 Silvrx—Sel-Rex Corp
 Silvsteel—Emerson-Sark-Warner
 Silwynd—Republic Foil & Metal
 Simplex—Chicago Industrial Inst
 Simplex—Weco Mfg Co
 Sinclair-Phoenix—Phoenix Precision Instrument
 Sincomax—Maurex Ltd
 Sindak—Southern Instr Computer
 Sintilon—National Radiac
 60 Case—Thomson Industries
 SK—Skottie Electronics
 SKL—Spencer-Kennedy Labs
 Sky-Hi—Thomas Mold & Die
 Sky-Lok—JFD Mfg Co
 SL—Mallinckrodt Chem Works
 Slendine—Shure Bros
 Slideohm—Aerovox Corp
 Slikwynd—Republic Foil & Metal
 Slimtrim—Littlon Ind of Md
 Slo-Speed—Sterling Electric Motors
 Slumbertone—ElectroSound Corp
 SM Safety Marin—Astron Corn
 Small Talk—Simpson Mfg Co
 SMC—St Marys Carbon Co
- Smitty—Hunter Tools
 Smog-Free—Radex Corp
 Smokegag—Ess Instrument Co
 Smoothie—Resistors Inc
 Snaco—Schirmer-Nat'l Alarm S N Alarm—Schirmer - Nat'l Alarm
 Snagit—Cable Electric Products
 Snapper—Curtiss-Wright Corp
 Snap-Tite—Centralab
 Sniffer—Johnson-Williams Inc
 Snorkel—Radion Corp
 Snowwhite—Luxor Lighting Prods
 Sodereze—Pheolls Dodge Copper Prod
 Sola-Flex—Solar Aircraft Co
 Solaramic—Solar Aircraft Co
 SolaVolt—Sola Electric Co
 Soldermaster—Hexacon Elec Co
 Solderux—Mico Instrument
 Solerall—Brach Mfg
 Solite—Solar Aircraft
 Sol-Rex—Herzog Miniature Lamp Works
 Sonata—Beam Industries
 Sonicaid—Gen'l Ultrasonics
 Sonisystem—Gen'l Ultrasonics
 Sonite—Smooth-On Mfg
 Sonizon—Magnaflex Corp
 Sonodyne—Shure Bros
 Sonogen—Branson Instrument
 Sono-Kleen—Sonneborn Sons L
 SonoMar—Sonneborn Sons L
 Sono-Probe—Advanced Electronics
 Soundasorb—Jack Scientific Co
 Soundcraft—Reeves Soundcraft
 Soundscope—Mine Safety Appliances
 Span—Sensory Inc
 Spar—Video Accessory Mfg
 Spauldite—Spaulding Fibre
 Spauldo—Spaulding Fibre
 Spec-Power—Nat'l Spectrographic
 Spectra—Photo Research
 Spectra-Stric—Organic Devel
 Spectrolux—Luxor Lighting Prods
 Spectromet—Baird Assoc
 Spectrum—Fretco Inc
 Speech Master—Jensen Mfg Co
 Speed Bin—Speedassembly Equip
 Speed Chassis—Specific Prods
 Speed Clamps—Tinnerman Prods
 Speed Clips—Tinnerman Prods
 Speed Control—Safe Flight Instrument
 Speedcraft—Wire Stripper
 Speed Grips—Tinnerman Prods
 Speedmaster—Accurate Eng'g Co
 Speed Nuts—Tinnerman Prods
 Speedomax—Leeds & Northrup Co
 Speed-Trol—Sterling Elect Motors
 Speed-X—Johnson Co E F
 Speedy-Cal—North Shore Nameplate Inc
 Speedy-Marx—North Shore Nameplate Inc
 Speggee—Brooks Rotameter
 Speer PAC—Jeffers Electronics
 Spencer—American Optical Co
 Spico—Spirling Products Co
 Spider—Camera Equip Co
 Spiglas—Lenz Elec Mfg
 Spincoustic—Johns-Manville
 Spinlab—Special Instruments
 Spin-Lock—Russell Burdall & Ward
 Spin-Pin—Bruno-N Y Industries
 Spintite—Stevens-Walden
 Spirafix—Saxton Products
 Spiralpot—Giannini & Co
 Spiral-Tenna—Hi-Lo TV Antenna
 Spiral Wrap—Illumitronic Eng'g
 Spirator—Hunter Spring Co
 Spirolax—Thompson Prods
 Spirotallic—Johns-Manville
 Splac—Westline Products Div
 Spngex—Goodrich Sponge Prods B F
 Spotcheck—Magnaflex Corp
 Spraint—Waldom Electronics
 Spring-Cork—Spring Packing
 Spring-Felt—Spring Packing
 Spring-Kate—Spring Packing
 Springlock—Simmons Fastener
 Spring-O-Matic—Industrial Elec Works
 Spring-Tape—Spring Packing
 Square-Ohm—Bradford Components
 Square-Ohm—Workman TV Inc
 SRC—Br Radio Electronics
 SRP—Sonneborn Sons L
 Stabelex—Industrial Condenser
 Stabiline—Superior Electric
 Stabilvolt—Magnetic Research
 Staco—Standard Electrical Prods
 Stancor—Chi Std Transformer
 Stancote—Standard Wire & Cable
 Standard—Hull-Standard Corn
 Standard—New York Solder Co
 Standard Fireball—Standard Coil Prod
- Standard Neutrode—Standard Coil Prod
 Standede—Clarostat Mfg
 Standholm—Tru-Ohm Products
 Stanoen—General Cable
 Stanlex—Standard Wire & Cable
 Stanomatic—Standard Register
 Star-Helix—JFD Mfg Co
 Starlight—Metzner Eng'g
 Star Line—Duotone Co
 Statorator—Hewson Co
 Statiflux—Magnaflex Corp
 Stat-O-Seal—Wolfe Co F C
 Stat-Trans—Pulse Eng'g
 Stavolt—Christie Electric
 Steel Age—Corry-Jamestown Mfg
 Stealcar—All-State Welding
 Steinlite—Stein Labs
 Stein Mill—Stein Labs
 Stemco—Stevens Mfg Co
 Step-Servo—Bergen Labs
 Stereo-Magnetite—Amplifier Corp of Amer
 Sterilize—Black Light Corp
 Sterilize—Ultra-Violet Prods
 Stero-magic—Pentron Corp
 Stewart-Translux—Trans-Lux Corp
 Stokes PVC—Stokes Molded Prods
 Stokolite—Stokes Molded Prods
 Stokotherm—Stokes Molded Prods
 StoraWay—Birdair Structures
 Strain-ez—Wappler Inc
 Straifilo—Hays Mfg
 Strato—Sprauling Prod Co
 Strat-O-Lite—Stratoseal Mfg
 Stress Coat—Magnaflex Corp
 String-A-Lite—Joy Mfg
 Strip-O-Seal—Wolfe Co F C
 Strubac—Kenlite Labs Inc
 Stroboselector—Califone Corp
 Strobocon—Conn Ltd C G
 Strobonar—Heiland Div Honeywell
 Strobo-Sync—Winkler Labs
 Strobotac—General Radio Co
 Strobutron—Conn Ltd C G
 Strobe Zoomar—Zoomar Inc
 Sturges—Electronic Batteries
 Stycast—Emerson & Cuming
 Styroflex—Natvar Corp
 Suburban—Radion Corp
 Sunswitch—Ripley Co
 Supera—Amer Super-Tem Wires
 Super-Beam—JFD Mfg Co
 Supercable-A—Amer Super-Tem Wires
 Super Cap—United Electronic Mfg
 Super-Davohm—Daven Co
 Super-Dodo—JFD Mfg Co
 Super Dylan—Koppers Co
 Superex—Amer Super-Tem Wires
 Super Fine—L O F Glass Fibers
 Superflake—Superior Graphite
 Surer Katy—Kay-Townes Antenna
 Superlead—Amer Super-Tem Wires
 Superline—Superior Insulated Wire
 Supermin—Amer Super-Tem Wires
 Super Power-Helix—JFD Mfg Co
 Super-Power-Jet—JFD Mfg Co
 Super Service—General Cable
 Supersheath—General Cable
 Superspeed—Enthoven Solders
 Super Star-Helix—JFD Mfg Co
 Supertef—Amer Super-Tem Wires
 Supertel—General Cable Corp
 Supertemp—Modern Lab Equip
 Supertennas—Tennalab
 Supertester—Calif Tech Industries
 Supertube—Amer Super-Tem Wires
 Supervac—Central Scientific
 Supramira—Mycalex Corp
 Su-Pr-Circuits—Cleveland Metal
 Supreme—Oxford Electric
 Supro—Valco Mfg Co
 Surco—Surrenrant Mfg
 SurEcho—White & Sons W O
 Sure Flux—New York Solder Co
 Surface Barrier—Lansdale Tube Co
 Surfline—Surprenant Mfg
 Surgelite—Kenlite Labs
 Surgyltherm—Wappler Inc
 SW—Stevens Walden
 Swaged Mgo—Aero Res Instrument
 Swiftol—Southwest Products
 Swing Ring—Video Industries
 Sylkyd—Dow Corning Corp
 Syl-O-White—Mayer Corp
 Sylphon—Robertshaw-Fulton
 Sylvalay—Driver Co Wilbur B

BRAND and TRADE NAME INDEX

- Symbostamp—Griffin Co John
 Synchron—Hansen Mfg
 Synchronote—Magnetic Recording Inc
 Synchro Tuner—Woodwelding Inc
 Synchro-Valve—Bristol Co
 Syncregear—U S Elec Motors
 Syncoverter—Bristol Co
 Synkote—Plastoid Corp
 Synthamica—Mycalex Corp
 Synthesizer—Amer Scientific
 Syntho—Electr-Chemical Eng'g
- T**
- Tackmaster—Rubber & Asbestos
 Taco—Technical Appliance
 Takcal—B & H Instrument
 Takk—Hewson Co
 Takktron—Hewson Co
 Talkie Tapes—Talking Devices Co
 Talkmaster—Dalmotron Co
 Tally Pac—Barkley & Dexter
 Tan-O-Mite—Ohmite Mfg Co
 Tantalytic—General Electric Co
 Tapek—Broadcast Equip Spec
 Tape-Stripper—Design Tool
 Tap-Lok—Groov-Pin Corp
 Tappes—Saxton Products
 Tap Welders—Ewald Instruments
 Target—S & A Electronics
 Tarrytron—Cook Electric Co
 Tattelite—Sittler Corp
 Tau Bolt—Huck Mfg Co
 Taylor—Continental Elec
 TCC—Telegraph Condenser
 TCC—Transistor Components
 TDI—Tele-Dynamics Inc
 TD Renewable—Chase-Shawmut
 Technigraph—Technicraft Co
 Teeco—Trutone Electronic
 Tefex—Union Plastics
 Tefglass—Amer Super-Tem Wires
 Teflon—Audio Master
 Teflex—Chicago Gasket
 Teflex—Boston Insulated Wire & Cable
 Teflon—DuPont de Nemours
 Teftube—Amer Super-Tem Wires
 TEI—Thomas Electronics Inc
 Tektolog—Fielden Instruments
 Tektor—Fielden Inst Robertshaw-Fulton Controls
 Tel-A-Cor—Magnetic Core Corp
 Tela-Ear—Telex Inc
 Tel-A-Pipe Westline Products
 Telco—TV Hardware Mfg
 Telcolor—Amer Super-Tem Wires
 Telector—Musicolor Inc
 Telecon—Teletenna Co
 Tele-Flex—Teledad Mfg
 Telefunken—American Elite
 Tele-Guide—Teledad Mfg
 Telemark—Leupold & Stevens
 Telemike—Miles Reproducer
 Telemusic—Crawford's of Beverly Hills
 TelePlex—JFD Mfg Co
 Tele Process—Trans-Lux Corp
 Telering—Telkor Inc
 Teleset—DuMont Labs A B
 Tele-Set—Telex Inc
 Telesyn—Ford Instrument
 Teletalk—Webster Electric
 Teletone—Electronic Creations
 Tele-Troc—Teletronic Labs
 Tele-Twin—JFD Mfg Co
 Telector—Gray Research & Devel
 Teler—Gray Research & Devel
 Telstar—Fielden Instrument
 Tel-Tru—Hil & Co E V
 Tempall—Deutschmann Corp
 Tembe
 Tempband—Hitemp Wires
 Tempcal—B & H Instrument
 Tempclad—Hitemp Wires Inc
 Tempcor—Temperature Eng'g
 Temp-Eye-Trol—Basic Controls
 Temp-eye-trol—I Q Industries
 Tempilaq—Tempil Corp
 Tempilistik—Tempil Corp
 Tempo—Clear Beam Antenna
 Temprene—Hitemp Wires Inc
 Temprex—Hitemp Wires Inc
 Temprite—Hitemp Wires Inc
 Temprobe—Victory Eng'g
 Temp-R-Tape T—Conn Hard Rubber
 Tempseal—Nat'l Eng'g Prods
 Tempswitch—Scaico Controls Inc
 Temptube—Hitemp Wires Inc
 Tenn-A-Liner—Crown Controls Co
 Tenna-Pak—JFD Mfg Co
 Tenneyzere—Tenney Eng'g Inc
 Tensite—Driver Co Wilbur B
 Tensitok—General Cable Corp
 Tensolex—Tensolite Insulated Wire Co
 Tensolon—Tensolite Insul Wire
 Terrier—Conway Pomona
 Tesadur—United Mineral & Chemical
- Tesaflex—United Mineral & Chemical
 Tesamol—United Mineral & Chemical
 Tesco—Eastern Specialty
 Testlite-Fuspul—Dante Electric Mfg
 Test Master—Precision Apparatus
 Test-O-Lite—Brach Mfg
 Tetrafilm—Shamban & Co W S
 Tex-Cap—Texas Capacitor Co
 Textolite—General Electric Co
 TG—Leitch Eng'g Corp
 The Listener—Otarion Inc
 Theremin—ElectroSound Corp
 Thermacal—North Shore Namplate
 Thermahedding—New Rochelle Tool
 Thermalize—Phelps Dodge Copper Prods
 Thermalton—Hitemp Wires Inc
 Thermoatol—N Rochelle Tool
 Thermax—General Cable
 Thermax—Girdler Co
 Thermostat—Workman TV Co
 Thermocap—Niagara Electron Labs
 Thermodyne—Modern Lab Equip
 Thermo-Humidograph—Bristol Co
 Thermolastic—Cox & Co
 Ther-monic—Induction Heating Co
 Thermoratch—Cox & Co
 Thermosheet—Cox & Co
 Thermostatic Brain—Wall Mfg Co
 Thermoswitch—Fenwal Inc
 Thermo-Tic—Ideal Industries
 Thermoverter—Bristol Co
 Thermowire—Cox & Co
 Thin Strip—Somer's Brass Co
 Thorey—Ohio Brass Co
 3C-Bloc—Computer Control Co
 3C-Pac—Computer Control Co
 3D-Dimension—Fretco Inc
 Thriftmaster—Thomson Industries
 Three-Phase—Sciaky Bros
 Thru-Con—General Electric Co
 Thyra-Line—Hanson-Gorrill-Brian
 T-I—Transformers Inc
 Ti-Co—Thomas Inst Co
 Time-All—Int'l Register Co
 Time-Fax—Times Facsimile Corp
 Time-Master—Dictaphone Corp
 Time-Minder—Int'l Register Co
 Tim-O-Weld—First Electronics
 Tini—Switchcraft Co
 Tiny-Flow—Industrial Devices
 Tynmax—Torwick Electronics
 Tynmite—Renbrandt Inc
 Tionode—Walkirt Co
 Tip—Tippco Mfg Co
 Tip-Switch—Gorn Electric Co
 Tip-Tap—General Cable
 Title Grip—Dante Electric Mfg
 TM—Page-Fogwell Corp
 TM—Tepro Electric Corp
 TM's—General B F Fittings
 TMJ—Thermo Materials Inc
 TNC's—General R F Fittings
 Tohemite—Deutschmann Corp
 Toco—Ohio Crankshaft Co
 Tok-A-Vox—Cooper Electronics
 Tomahawk—Stevens-Walden
 Tom Thumb—Automatic Radio
 Tonepak—Lee Electric
 Tong Test—Columbia Electric Mfg
 Tonotron—Hunhes Aircraft Co
 Top Hats—Times Facsimile
 Tophet—Driver Co Wilbur B
 Topliner—Technical Appliance
 Top Master—Calcon Mfg Co
 Top Tainers—Birther Corp
 Torbal—Torsion Balance Co
 Toray—Universal Corp
 Torque Watch—Waters Mfg Inc
 Torsynator—Air-Marine Motors
 Totelite—Parker Metal Foods
 T P Melody Mic—Audio Equip Co
 Trailertenna—Clear Beam TV Antenna Corp
 Trak—CGS Labs
 Trancell—Johns-Manville
 Transolseal—Johns-Manville
 Transaloid—Haloid Co
 Transamp—Electronic Research
 Trans-citer—Multi Products Co
 Transdyne—Remler Co
 Transense—Johnson Research
 Trans-Flite—Int'l Research Assoc
 Transhailer—Pye Communications
 Trans-Horizon—Kennedy & Co
 Transidyne—Nader Mfg Co
 Transi-Mag—Magnetic Amplifiers
 Transi-Pak—Bendix Red Bank
 TransistAR—Mallinckrodt Chem Works
- Transistometer—Dunson Co
 Transite—Johns-Manville
 Translucance—Remler Co
 Transmag—Calif Magnetic Control Corp
 Transpac—Electronic Research
 Trapper—Technical Appliance
 Trav-Electric—Terado Co
 Travertone—Armstrong Cork
 Traxcavator—Caterpillar Tractor
 TrCo—Richardson Co
 Treasure Chest—Jensen Mfg Co
 Treloco—Transitron Electronic
 Trenchlay—General Cable
 Triakon—Sieler Design Products
 Trialhire—Mechaners Inc
 Triaxial—Jensen Mfg Co
 Triclene—DuPont de Nemours & Co E I
 Tri-Flux—Redmond Co
 Trig-R-Heat—Wall Mfg Co P
 Trig Towers—Rostan Corp
 Tri-Ind-X—Triplet & Barton
 Triini-Temp—Scaico Controls
 Trinset—Tri-Point Plastics
 Tri-O-Matic—V-M Corp
 Trionet—Chase-Shawmut
 Trionix—Chase-Shawmut
 Tri-Plate—Sanders Associates
 Tri-Plex—Jensen Mfg Co
 Triplex—Rome Cable Corp
 Tri-tronic—Wapler Inc
 Trojan—Hexacon Elec Co
 Tromphone—Femco Inc
 Trombone—Ward Products
 Tru-Match—Quam-Nichols Co
 Tru-Fix—Tru-Ohm Products
 Truscop—Scovill Mfg
 Tru Stat—Peerless Photo Prod
 Trufest—Valandy Electronics
 Trutone—Valandy Electronics
 Trutrong—Airdraulics Eng'g
 Tru-Vac—Continental Electric
 Trylon—Wind Turbine Co
 TS—Terra Electric Corp
 TSC 4000—TV Specialty
 TST—Tri-Point Plastics
 Tubeohms—Muter Co
 Tube Master—Precision Apparatus
 Tube-R-Cap—Centralah
 Tufcote—DuPont de Nemours
 Tunetone—Miller Electronics
 Turbostat—Baird-Atomic Inc
 Turbo-Brand & Co Wm
 Turbonlas—Brand & Co Wm
 Turbulence—Brand & Co Wm
 Turbolux—Brand & Co Wm
 Turbosil—Brand & Co Wm
 Turbotemp—Brand & Co William
 Turbotherm—Brand & Co Wm
 Turbofans—Brand & Co Wm
 Turbotuf—Brand & Co Wm
 Turbo Tufflex—Brand & Co Wm
 Turbzone—Brand & Co Wm
 TV Duette—Jensen Mfg Co
 Twin—Bogen Co David
 Twin-Lever—Shure Bros
 Twinset—Telex
 Tynee-Drv—Pyramid Elec
 Tynech—DuPont de Nemours
 Tynewich—Detroit Controls
 Ty-Piv—Marbon Chem
 Typotron—Hughes Aircraft Co
- U**
- UAP—United Aircraft Prod
 U-Ask-It—Electronic Eng'g
 U-Line—Ilumitronic Eng'g
 Ultra Linear—Acro Products
 UltraMet—Cannon-Muskegon Corp
 Ultramicrowave—DeMornay-Bonardi
 Ultra-Telcon—Teletenna Co
 Ultratube—Plastoid Corp
 Ultra-Viscoson—Bendix Cincinnati
 Unax—Jensen Mfg Co
 Unbrako—Standard Pressed Steel
 Une Cap—United Electronic Mfg
 Uni-Bus—Electric Machinery Mfg
 Uni-Cast—Redmond Co
 Uniclosed—U S Electrical Motors
 Uni-Core—Alpha Metals Inc
 Unidial—Chicago Industrial Inst
 Unidyne—Shure Bros
 Unilevel—Reflectone Corp
 Uniline—Cascade Research Corp
 Unilok—Burndy Corp
 Unimagic—Pentron Corp
 Unimation—Deyel Research Co
 Uniplug—Angelegate & Co C J
 Unipoint—Shure Bros
 Unipoise—Pickering & Co
 Unipole—Andrew Corn
 Uniprene—General Cable Corp
 Unirep—Universal Electronics
 Uniring—Burndy Corp
 Uniseal—Johns-Manville
 Unisorb—Felters Co
 Uniterm—Cook Electric Co
 Unit-ized TV—Setchell-Carlson
 Unitone—Duotone Co
 UniVac—Remington Rand Univac
 Universal—K-W Eng'g Works
- Universal—Mueller Electric
 Universal TV Zoomar—Zoomar Inc
 USD—U S Dynamics Corp
 USE—U S Electronics Corp
 Useco—Littion Industries
 USG—U S Graphite Co
 Us-kon—U S Rubber Co
 Utiliscope—Diamond Power
 Utilivue—Diamond Power
 Utone—Utah Radio Prods
- V**
- Vac-Air—Ingersoll-Rand Co
 Vaf-Brooks—Brooks Rotameter
 Vagabond—Int'l Research Assoc
 Val 90—Valverde Labs
 Valiant—Johnson Co E F
 Valvseal—Richardson Co
 Vam—Video Accessory Mfg
 Van de Graaff—High Voltage Eng'g
 Vaporite—Bergen Wire Rope
 Vaporlux—Luxor Lighting Prods
 Var-Area—Cinematic Developments
 Varblok—Deutschmann Corp Tobe
 Varec—Vapor Recovery Systems
 Variac—General Radio Co
 Varicell—Superior Electric
 Vari-Chokes—Suprex Electronics
 Varidrive—U S Elect Motors
 Vari-Flex—Hammer Electronics
 Variogon—Nielsen Mfg Co
 Vari-Ohm—Norden-Ketay
 Vari-Ply—Cons Resistance Co
 Vari-Sweep—Kay Electric Co
 Vari-Tronic—Aviation Electronic
 Varpak—Deutschmann Corp Tobe
 Varsil—N J Wood Finishing
 Varslot—N J Wood Finishing
 Vartex—N J Wood Finishing
 Vary Tape—Audiomation Labs
 Vasco—Mitchell Industries
 Vawmeter—Fluke Mfg Co John
 Vcon—Carbide & Carbon Chemicals
 Veco—Victory Eng'g
 Vectorlyzer—Advance Electronics Lab
 Vectrohm—Vectron Inc
 Vectromatic—Vectron Inc
 Vectronic—Vectron Inc
 Vee-Beam—JFD Mfg Co
 Vee-co—Vought Co
 Vee-D-X—LaPointe Inc
 Velac—Union Switch & Signal
 Velco—Virginia Electronics
 Ventilair—Electric Trading
 Venus—JFD Mfg Co
 Veritell—West Instrument Corp
 Verniertemp—Modern Lab Equip
 Verni-Pot—Research Instrument
 Vernistat—Perkin-Elmer Corp
 Versa-Dial—Standard Gage
 Versamid—General Mills
 Versa-Mil—Dumore Co
 Versatol—Da-Lite Screen
 Versatrol—Assembly Products
 Vertar—Par Products
 Vesta—Gould-Nat'l Batteries
 VHS—Assembly Products
 Vibratest—Assoc Research
 Vibratron—Edko Electronics Eng'g
 Vibrometer—Televico Corp
 Vibron—Central Electronics Mfrs
 Vibrotrol—BJ Electronic Div Borg Warner Corp
 Vic—United Transformer
 Vico—Video Industries
 Vicon—Hancock Electronics
 Viscol—Enthoven Solders
 Victoria—Fretco Inc
 Vidigage—Branson Instruments
 Viewpak—Benson-Lehner Corp
 Viking—Hansen Co Wm
 Viking—Jensen Mfg Co
 Viking—Johnson Co E F
 Vinapex—Apex Coated Fabrics
 Vinex—Union Plastics
 Vipower—Radiart Corp
 Viscofilm—Industrial Condenser
 Viscorder—Heiland Div Honeywell
 Visi-Mag—Magnetics
 Visutac—Boulin Instrument
 Vitresil—Thermal American
 Fused Quartz Co
 Vitronbond—Atlas Mineral Prods
 Vitroplast—Atlas Mineral Prods
 Vitrox—Anacoda Wire & Cable
 VKing—Forsberg Mfg Co
 VM—Harmon Lichtenstein & Co
 Vocatron—Vocaline Co of America
 Voice-Master—Magnetic Recording Ind
 Voice of Music—V-M Corp
 Voice of the Theatre—Altec Lansing Corp
 Voicon—Radio Frequency Labs
 Vol-Flex—Vultube Corp
 Volseal—Johns-Manville
 Voltbox—Superior Electric
- Volter—Electro-Physics
 Volt-Omatic—Bergen Labs
 Voltohmyst—Radio Corp of Amer
 Voltverter—Quantum Electronics Inc
 Vorlac—Vorac Co
 Vo-Tron—Vokar Corp
 Vu-Graph—Beseler Co Charles
 Vulcoid—Continental-Diamond Fibre
 Vul-Coat—Nat'l Vulcanized Fibre
 Vu Magnemite—Amplifier Corp of America
- W**
- Wac—Winder Aircraft Corp of Fla
 Waco—Calcon Mfg Co
 Wac Tac—WacLine Inc
 Wahliquet—Nisslon Electrical Lab
 Walco—Electrovox Co
 Walden—Stevens Walden
 Wales-Way—Wales-Stripit
 Walkiephone—Pye Telecommunications
 Walkie-Recordall—Miles Reproducer Co
 Walton—Abbeon Supply
 Ware 8 Ball—Ward Products
 Warner Red Cap—Warner Ventilator
 Warrenite—Warren Wire Co
 Warrenite—Warren Wire Co
 Waterwite—Bache & Co Semon
 Watterson—Davis & Co J W
 Waytrol—Jeffrey Mfg Co
 Weathermaker—Carrier Corp
 Webb Wire—Carpenter Steel Co
 Web-Whip—Webster Mfg Co
 Welchcaps—General Electric Co
 Welch Allyn—Allyn Inc Welch
 Weldrawn—Superior Tube
 Weldwood—U S Plywood
 Welmeg—Welwyn Int'l
 Welmet—Welwyn Int'l
 Wempy—Westfield Metal Prods
 Wesco—West Coast Electronics
 Wesgo—Western Gold & Platinum
 Westach—Westberg Mfg
 West-cap—San Fernando Electric
 Whale—Forsberg Mfg Co
 Whicload—Johnson Co E F
 Whirlint—Polymer Corp
 Whitney-Jensen—Whitney Metal Tool
 Whiz-Saw—Forsberg Mfg Co
 Wicoa—Wire Co of Amer
 Wide-Range—Afton Industries
 Wide Strip—Bristol Co
 Wilkor—Aerovox Corp
 Winco—Wincharger Corp
 Win-Tronix—Winston Electronics
 Wire-Less-Com—Simpson Mfg Co Mark
 Wirelesphone—Simpson Mfg Co Mark
 Wireless-Talk—Simpson Mfg Co Mark
 Wirenut—Ideal Industries
 Wireswat—Ohmite Mfg Co
 Wissi—Workman TV Inc
 Wissi-Jet—Workman TV Inc
 Woelke—Gary Wells Co
 Wonderod—Columbia Products
 Wood-Ray—Woodwelding Inc
 Wood-Welder—Cavitron Electron Oscillator
 Worometer—Stewart Instrument
 Wyco—Wyzenbeek & Staff
- X**
- Xela—Klein & Sons Mathias
 Xelon—Times Wire & Cable
 Xtradur—Hexacon Elec Co
 X-R-M—X-Ray Mfg Corp of Amer
 X-Var—Fidelity Chemical
- Y**
- Y—Wybar Electronics
 Yagi-Helix—JFD Mfg Co
- Z**
- Zachaloy—Precision Electroplating
 Zee-Beam—Welco Mfg Co
 Zee-X—Welco Mfg Co
 Zerhr—Trio Mfg Co
 Zerphyr—Trio Mfg Co
 Zephry Royal—Trin Mfg Co
 Zoro-Max—Revo Inc
 Zim—Permo Inc
 Zincgrip—Armcoc Steel Corp
 Zinktron—Constat Labs
 ZIP—JFD Mfg Co
 Zipohms—Muter Co
 Zifertubing—Plummer Co Walter A
 Zip-Strap—Western Coil & Elec
 Zimeter—Foote Mineral Co
 Zoomar 1C—Zoomar Inc
 Z T Sealer—Plummer Co Walter A
 Zynlo—Mannafux Corp
 Zytel—DuPont de Nemours

Alphabetical Listing of Manufacturers

WITH THE EXCLUSIVE

LOCALIZER INDEX

A listing of the names and addresses of manufacturers in the electronic and allied industries. In the LOCALIZER INDEX, many manufacturers have listed home office telephone numbers, executive personnel, brand names, products, branch and regional offices as well as local reps. The LOCALIZER

INDEX provides you with the shortest means of contacting a manufacturer. Symbols show type of representation: BO signifies branch office; D distributor; DS distributor sales; GV government sales; IDS industrial & distributor sales; R rep; SE sales engineer.

- AA Metal Products Inc 154 Elliot St Brattleboro Vt AL 4-4333
 Abalon Precision Mfg Corp 540 Casanova St New York 59 N Y LU 9-5682
 Abbeon Supply Co 179-15 Jamaica Ave Jamaica 32 N Y AX 7-5600
 Abrams Instrument Corp 606 E Shiawassee St Lansing 1 Mich IV 4-9441
 Accurate Electronics Corp 169 S Abbe Rd W Elyria Ohio 67-925
 Accurate Eng'g Co 2095 Blue Island Ave Chicago 8 Ill MO 6-5600
 Accurate Insulated Wire Corp 25 Fox St New Haven 1 Conn ST 7-2194
 Accurate Mfg Co 44 Hepworth Pl Garfield N J GR 3-2900
 Accurate Paper Tube Co 805 N Peoria St Chicago 22 Ill CH 3-2166
 Accurate Spring Mfg Co 3811 W Lake St Chicago 24 Ill VA 6-5900
 Ace Coil & Electronics Co 916 Lincoln Hwy Metuchen N J LI 8-3580
 Ace Electronics Associates 99 Dover St Somerville 44 Mass SM 6-5130
 Ace Eng'g & Machine Co 3644 N Lawrence St Philadelphia 40 Pa GA 6-9800
 Ace Plastic Co 91-30 VanWyck Expwy Jamaica 35 N Y JA 3-5509
 Ace Spring Mfg Co 78 W Houston St New York 12 N Y
 A C Electronics Div General Motors Corp Toledo Ohio HE 4627
 ACF Industries Nuclear Profs-Erco Div 48 Lafayette St Riverdale Md WA 7-4444
 ACF Electronics Co Div ACF Industries 800 N Pitt St Alexandria Va KI 8-4400
 Acheson Colloids Co 1635 Washington Ave Port Huron Mich YU 4-4171
 Ackerman Engravers 458 Broadway New York 13 N Y BA 7-1479
 Ackerman-Gould Co 92 Bleecker St New York 12 N Y AL 4-2538
 Acme Battery Corp 200 Henry St Stamford Conn DA 4-4125
 Acme Electric Corp Water St Cuba NY CU4
 Acme Electric Heating Co 1217 Washington St Boston 18 Mass HA 6-1569
 Acme Mfg & Gasket Co 738 N 41 St Philadelphia 4 Pa EV 6-8622
 Acme Scientific Co 1450 W Randolph St Chicago 7 Ill MO 6-1834
 Acme Wire Co 1255 Dixwell Ave New Haven 14 Conn LO 2-2171
 Acme Wire Machine Co 232 E 3 St New York 9 N Y OR 7-8290
 Acoustica Associates Shore Rd Glenwood Landing L I N Y OR 6-0730
 Acro Div Robertshaw-Fulton Controls Co Box 449 Columbus 16 Ohio CL 3-8531
 Acromark Co 443 Morrell St Elizabeth 4 N J EL 2-6500
 Acro Products Co 369 Shurs Lane Philadelphia 28 Pa I' 3-5969
 Acro Tool & Die Works 4554 Broadway Chicago 40 Ill LO 1-1807
 Acton Laboratories 533 Main St Acton Mass CO 3-7756
 A C Transformer Corp 89 Madison St Newark 5 N J MI 2-7574
 Acus Pictures Corp 165 W 46 St New York 36 N Y PL 7-2265
 Adams Lighting Inc 10 1 St Pelham N Y PE 8-4493
 Adams & Westlake Co 1025 N Michigan Elkhart Ind 2-0550
 Adlake Mercury Relays and Controls BOSTON 11—Lea C Pelkus & Co 683 Atlantic Avenue CHICAGO 2—The Adams & Westlake Co 319 W Ontario St
- CLEVELAND 15—The Wagner-Green Company 1935 Euclid Avenue
 HOUSTON 3—The William E Brice Company 303 Bostrap Avenue
 LOS ANGELES 22—The A W Nash Co 2112 South Atlantic Blvd
 NEW YORK 6—E W Rowland Associates 110 Washington Street
 PHILADELPHIA 44—W Henry Cardray 18 West Chelton Avenue
 PITTSBURGH 22—Russell F Clark Company Clark Building
 ST LOUIS 5—Wells-White Company 301 Cannor Bldg 6625 Delmar Boulevard
 BURLINGAME CALIF—The TR Routh Company 1209 Copuchino
 SEATTLE 1—C B Parsons & Company 3028 First Avenue
 SYRACUSE 4—Wally B Swank 2310 Bellevue Avenue
- Adcola Products Ltd Gauden Rd Clapham High St London S W 4 England
 Addressograph-Multigraph Corp 1200 Babbitt Rd Cleveland 17 Ohio RE 1-8900
 Adel Precision Products Div General Metals Corp 1444 Washington Ave Huntington 4 W Va
 Adler Electronics Inc 1 LeFevre Lane New Rochelle N Y NE 6-1620
 Admiral Corp 3800 W Cortland St Chicago 47 Ill SP 2-0100
 Admittance Namco Corp Marine St Farmingdale L I N Y CH 9-8080
 Advance Electronics Co 8510 North End Ave Oak Park 37 Mich LI 6-0248
 Advance Electronics Lab Inc 249 Terhune Ave Passaic N J GR 2-5622
 Advance Industries Inc 640 Memorial Dr Cambridge 39 Mass UN 4-6800
 Advance Instrument Corp 1709 F St Belmar N J MU 1-3800
 Advanced Electronics Inc 94 Silas Deane Hwy Rocky Hill 9 Conn JA 9-6882
 Advanced Instruments Inc 21 Oakcrest Rd Needham 92 Mass NE 3-2325
 Advanced Products Co 59 Broadway North Haven Conn CE 9-1664
 Advanced Vacuum Products Inc 430 Fairfield Ave Stamford Conn Davis 4-2148
 Aemco Inc 10 State St Mankato Minn 5153
 Aerocoil Inc 24 Cliff St Jersey City 6 N J DL 3-7446
 Aero Electronics Co 1512 N Wells St Chicago 10 Ill WH 3-0401
 Aeroflex Labs 34-06 Skillman Ave Long Island City 1 N Y LT 4-7009
 Aero Instrument Co 11423 Vanowen St N Hollywood Calif ST 7-5433
 Aerojet-General Corp 6352 N Irwindale Ave Azusa Calif CU 3-6111
 Aerolite Electronics Corp 507 26 St Union City N J UN 3-2955
 Aerolux Light Corp 653 11 Ave New York 36 N Y CI 6-5324
 Aeronautical Comm Equip Co 3090 Douglas Rd Miami 33 Fla
 Aeronautical Electric Co 5656 Northwest Hwy Chicago 30 Ill SP 4-5203
 Aeronautical Electronics Inc P O Box 6527 Raleigh N C TE 4-6209
 Aerophysicals Development Corp Sub Curtiss-Wright Corp P O Box 689 Santa Barbara Calif WO 2-9135
 Aero Research Instrument Co 315 N Aberdeen St Chicago 7 Ill TA 9-6400
 Aerotec Corp Pemberwick Rd Greenwich Conn JE 1-8403
 Aerotest Laboratories 129-11 18 Ave College Point 56 N Y IN 1-7272
 Aerotron Supply Co 8504 S Normandie Ave Los Angeles 44 Calif PL 3-3453
 Aerovox Corp Pacific Coast Div 2724 S Peck Rd Monrovia Calif RY 1-5621
- Aerovox Corp 740 Belleville Ave New Bedford Mass WY 4-9661
 Aerovox Corp Crowley Div 1 Central Ave W Orange N J OR 3-7660
 Aetna Felt Co 204 Centre St New York 13 N Y CA 6-6676
 Affiliated Photographic Co 21 W 45 St New York 36 N Y JU 2-0522-3
 Affton Industries 406 St Louis Ave Valley Park Mo VA 5-2132
 A'G'A Div Elastic Stop Nut Corp 1027 Newark Ave Elizabeth 3 N J EL 2-2900
 Ainslie Corp 312 Quincy Ave Quincy 69 Mass GR 2-8855
 Airborne Accessories Corp 1414 Chestnut Ave Hillside 5 N J WA 6-1700
 Airborne Electronics Co 6813 Troost Ave N Hollywood Calif PO 5-1351
 Airborne Instruments Lab Modiac Div 864 Franklin Ave Thornwood N Y RO 9-5656
 Aircom Inc 1209 E Grand St Elizabeth N J EL 3-0633
 Air Controls Inc 2310 Superior Ave Cleveland 14 Ohio CH 1-4043
 Aircraft & Electronic Specialties 22 S Green St Brownsburg Ind UL 2-2218
 Aircraft Radio Corp Boonton N J DE 4-1800
 Airdraulics Eng'g Inc 250 Park Ave New York 17 N Y
 Aireco Inc 2323 2 Ave Schenectady 3 N Y EX 3-3673
 Air & Refrigeration Corp 439 Madison Ave New York 22 N Y PL 1-0660
 AirResearch Mfg Co Div Garrett Corp 9851 Sepulveda Blvd Los Angeles 45 Calif OR 2-0131
 Airflo Instrument Co 53 Addison Rd Glastonbury Conn ME 3-9455
 Airflyte Electronics Co 535 Avenue A Bayonne N J HE 6-2230
 Air-Marine Motors Inc 369 Bayview Ave Amityville N Y AM 4-3700
 Airmatic Valve Inc 7314 Associate Ave Cleveland 9 Ohio WO 1-5320
 Air-Maze Corp 25000 Miles Rd Cleveland 28 Ohio MO 2-8000
 Airmec Ltd High Wycombe Buckinghamshire England
 Airpax Products Co Middle River Baltimore 2 Md MU 6-9100
 Air Reduction Sales Co Div Air Reduction Co 150 E 42 St New York 17 N Y MU 2-6700
 Air Transport Mfg Co 1114 N Sycamore Ave Los Angeles 38 Calif HO 7-5175
 Airtron Inc 1101 W Elizabeth Ave Linden N J HU 6-1000
 Airtronix Development Corp 4902 Church Ave Brooklyn 3 N Y DI 5-3435
 Ajax Condenser Co 932 W Wrightwood Ave Chicago 14 Ill GR 7-0660
 A-K Mfg Co 115 S Northwest Hwy Barrington Ill 58
 Akron Rubber Co 53 Warren St New York 7 N Y DI 9-3636
 Aladdin Electronics 100 Blanton Ave Nashville 10 Tenn CH 2-3411
 Alcar Instruments Inc 17 Industrial Ave Little Ferry N J HU 9-3043
 Alconox Inc 853 Broadway New York 3 N Y GR 3-1300
 Alden Electronic & Impulse Recording Equip Co P O Box 125 Westboro Mass 467
 Alden Products Co 123A N Main St Brockton Mass 160
 Alfax Paper & Eng'g Co Washington St Westboro Mass 467
 Alford Mfg Co 299 Atlantic Ave Boston 10 Mass HA 6-2150
 Alfred Electronics 897 Commercial St Palo Alto Calif DA 4-4368
 All American Eng'g Co DuPont Airport Box USS 2668 Wilmington 5 Dela WY 4-0951
 All American Tool & Mfg Co 8027 Lawndale Ave Skokie Ill OR 3-7084
 Allard Instrument Corp 146 E 2 St Mineola L I N Y PI 6-5895

Indented listings are advertisements

ALPHABETICAL LISTING of MANUFACTURERS with LOCALIZER INDEX

- All Channel Products Corp 47-39 49 St Woodside 77 N Y EX 2-1336
- Allegany Instrument Co 1091 Wills Mountain Cumberland Md PA 4-1200
- Allegheny Ludlum Steel Corp Oliver Bldg Pittsburgh 22 Pa CO 1-5300
- Allen-Bradley Co 136 W Greenfield Ave Milwaukee 4 Wisc OR 1-2000
- Allen Electronics Corp 92 Branch St Pontiac Mich FE 2-6662
- Allen Mfg Co 133 Sheldon St Hartford 2 Conn JA 2-6131
- Allen Organ Co Locust St Macungie Pa WO 5-9831
- Alliance Mfg Co Lake Park Blvd Alliance Ohio 1-5361
- Allied Allegri Co 141 River Rd Nutley 10 N J NU 2-3910
- Allied Control Co 2 East End Ave New York 21 N Y BU 8-7403
- Allied Electronic Equip Co 868 San Mateo Ave San Bruno Calif JU 8-4042
- Allied Eng'g & Production Corp 2421 Blanding Ave Alameda Calif LA 3-6556
- Allied Engraving & Stamping Co 17 Elm St Buffalo 3 N Y CL-3725
- Allied Fabricating Corp 1538 N Clybourn Ave Chicago 10 Ill MO 4-0876
- Allied Industries Inc 2500 Woodland Ave Louisville 10 Ky SP 6-4649
- Allied Radio Corp 100 N Western Ave Chicago 80 Ill HA 1-6800
- Allied Recording Products Co 32-32 Greenpoint Ave Long Island City 1 N Y ST 4-2318
- Allied Resinous Products Inc Whitney Rd & Clark St Conneaut Ohio 91-001
- Allies' Products Corp P O Box 188 Kendall Station Miami Fla PE 7-4431
- Allis-Chalmers Mfg Co Milwaukee 1 Wisc SP 4-3600
- Allis Co Louis 427 E Stewart St Milwaukee 1 Wisc HU 1-6000
- Allison Labs Inc 14185 Skyline Dr La Puente Calif OX 4-4056
- Allmetal Screw Products Co 821 Stewart Ave Garden City N Y PI 1-1200
- Alloy Metalsmiths Inc 89 Commerce Rd Cedar Grove N J CE 9-2424
- All Star Products Inc Squire Ave Defiance Ohio 2-1065
- All-State Welding Alloys Co 249 Ferris Ave White Plains N Y WH 8-4646
- All-Tronics Inc 45 Bond St Westbury N Y ED 3-3090
- Allyn Inc Welch Skaneteies Falls N Y 882
- Aloe Scientific 5655 Kingsbury Blvd St Louis 12 Mo Aloinge Products Inc 163 W 23 St New York 11 N Y WA 4-2815
- Alpar Mfg Corp 2910 Spring St Redwood City Calif EM 8-4701
- Alphaduct Wire & Cable Co 25 Van Dyke Ave New Brunswick N J CH 9-8090
- Alpha Erection Corp 210 E Main St W Branch Iowa 220
- Alpha Instrument Co 43 Hempstead St New London Conn GI 2-2141
- Alpha Metals Inc 56 Water St Jersey City 4 N J HE 4-6778
- Alpha Molykote Corp 65 Harvard Ave Stamford Conn FI 8-3724
- Alpha Wire Corp 200 Varick St New York 14 N Y AL 5-5400
- Alprodox Inc P O Box 4974 Memphis Tenn JA 7-7534
- Altec Lansing Corp 1515 S Manchester Ave Anaheim Calif PR 4-2900
- Alto Scientific Co 855 Commercial St Palo Alto Calif DA 4-4733
- Aluminum Co of America Alcoa Bldg Pittsburgh 19 Pa AT 1-4545
- Alvo Nut & Bolt Co 1601 Grande Vista Ave Los Angeles 23 Calif AN 2-5131
- Alwac Corp 13040 S Cerise Hawthorne Calif OR 8-7108
- Ambroid Co Box 30 Weymouth 88 Mass ED 5-6658
- Amco Eng'g Co 7333 W Ainslie St Chicago 31 Ill UN 7-8500
- Ameco 2949 W Osborn Rd Phoenix Ariz. AL 4-5511
- Ameico Inc 2040 Colo Ave Santa Monica Calif
- Amerac Inc 116 Tansfield Rd Wenham Mass Ham 730
- Ameray Corp Route 46 Kenvil N J FO 6-4100
- Amercoat Corp 4809 Firestone Blvd South Gate Calif LO 4-2581
- American Air Filter Co 215 Central Ave Louisville 8 Ky ME 7-3611
- American Coil Inc 21-28 45 Rd Long Island City 1 N Y RA 9-0744
- American Communications Corp 280 Broadway New York 17 N Y RE 2-0319
- American Condenser Corp 4410 N Ravenswood Ave Chicago 40 Ill LO 1-1386
- American Decalcomania Co 4334 5 Ave Chicago 24 Ill KE 3-8144
- American District Telegraph Co 155 6 Ave New York 13 N Y AL 5-0200
- American Electric Cable Co 181 Appleton St Holyoke Mass JE 9-9893
- American Electric Fusion Corp 2600 Diversey Ave Chicago 47 Ill BR 8-1640
- American Electrical Heater Co 6110 Cass Ave Detroit 2 Mich TR 5-2055
- American Electronics Laboratories 121 N 7th St Philadelphia 6 Pa WA 5-8780
- American Electronics Co 1203 Bryant Ave New York 59 N Y DA 9-4815
- American Electronics Inc Instrument Div 9503 W Jefferson Blvd Culver City Calif TE 0-5581
- American Electronics Inc 655 W Washington Blvd Los Angeles 15 Calif KI 9-7671
- American Elite Inc 7 Park Ave New York 16 N Y MU 3-8490
- American Gas Furnace Co 140 Spring St Elizabeth 1 N J EL 2-2120
- American Gyro Corp 3030 Nebraska Ave Santa Monica Calif
- American Hinge Corp 206 Wallabout St Brooklyn 6 N Y UL 5-0680
- American Hoist & Derrick Co 63 S Robert St St Paul 1 Minn CA 2-0541
- American Instrument Co 8030 Georgia Ave Silver Spring Md JU 9-1727
- American Insulator Corp New Freedom Pa GL 4211
- American Lava Corp Chattanooga 5 Tenn AM 5-3411
- American Leonic Mfg Co 3001 Walnut St Philadelphia 4 Pa BA 2-4452
- American Machine & Foundry Co Electronics Div 1085 Commonwealth Ave Boston 15 Mass AL 4-4234
- American Machine & Foundry Co Defense Products Group 1101 N Royal St Alexandria Va KI 9-9110
- American Metal Co 61 Broadway New York 6 N Y BO 9-1800
- American Metrix Corp 40 Haddon Ave Camden 3 N J WO 4-2940
- American Mica Insulation Co 235 Parker Ave Manassquan N J CA 3-3100
- American Mica Radio Corp 235 Parker Ave Manassquan N J CA 3-3100
- American Microwave Corp 11754 Vose St N Hollywood Calif PD 5-9041
- American Molded Products Co 2727 W Chicago Ave Chicago 22 Ill AR 6-3235
- American Optical Co Instrument Div Box A Buffalo 15 N Y FI-4000
- American Oxygen Service Corp 600 Essex St Harrison N J HU 3-0100
- American Photocopy Equip Co 1920 W Peterson Ave Chicago 26 Ill RO 1-1600
- American Platinum Works 231 N J R R Ave Newark 5 N J MA 2-8935
- American Printed Circuits Co 104 Forrest St Metuchen N J LI 8-5777
- American Products Mfg Co 8127 Oleander St New Orleans 18 La GA-1501
- American Radar Components Inc Rt 10 Whippany N J TU 7-1840
- American Rectifier Corp 95 Lafayette St New York 13 N Y WO 6-3350
- American Research Corp Route 6 Farmington Conn OR 7-2693
- American Research & Mfg Corp 920 Halpine Ave Rockville Md HA 7-7116
- American Scientific Co 1295 Grand Concourse New York 52 N Y
- American Scientific Development 336 S Main St Fort Atkinson Wisc JO 3-4865
- American Screw Co Willimantic Conn HA 3-6331
- American Sealants Co 103 Woodbine St Hartford 6 Conn JA 2-1188
- American Silver Co 3607 Prince St Flushing 54 N Y FL 3-8012
- American Solder & Flux Co 19 & Willard Sts Philadelphia 40 Pa BA 6-1800
- American Sound Products Inc 404 S Wells St Chicago 7 Ill WA 2-4050
- American Speedlight Corp 63-01 Metropolitan Ave Middle Village 79 N Y EV 1-2000
- American-Standard Atomic Energy Div 1682 Broadway Redwood City Calif EM 9-0311
- American Super-Temperatures Wires Inc West Canal St Winooski Vt BU 2-9536
- American Television & Radio Co 300 E 4 St St Paul 1 Minn CA 2-3791
- American Thermo Electric Co 7269 Santa Monica Blvd Los Angeles 46 Calif HO 4-1632
- American Time Products Inc 580 S Ave New York 36 N Y PL 7-1430
- American Tower Co RFD 2 Box 29 Shelby Ohio 42481
- American Tradrail Corp 3401 30 St Long Island City 6 N Y RA 8-0401
- American Transformer Co Div Standard Electronics 285 Emmett St Newark 5 N J
- American Window Glass Co Farmers Bank Bldg Pittsburgh 22 Pa EX 1-1745
- Amersil Co 685 Ramsey Ave Hillside N J MJ 8-4500
- Anglo Corp 4333 Ravenswood Ave Chicago 13 Ill BU 1-2727
- AMI Inc 1500 Union Ave Grand Rapids 2 Mich CH 3-3633
- AMP Inc Chemical Dielectrics Div 155 Park St Elizabethtown Pa 7-1105
- AMP Inc Harrisburg Pa CE 4-0101
- Amperex Electronic Corp 230 Duffy Ave Hicksville L I N Y WE 1-6200
- Amperite Co 561 Broadway New York 12 N Y CA 6-1446
- Amper Corp 934 Charter St Redwood City Calif EM 8-1471
- Amphenol Electronics Corp 1830 So 54th Ave Chicago 50 Ill
- Phone Bishop 2-1000
Cable Address AMPHENOL
President—Arthur J Schmitt
Vice President-Sales—William H Rous
Vice President-Engineering—Rodolfo M Soria
Vice President & Controller—John L Woods
VP & Director of Manufacturing—J. F. Leach
Plant Superintendent—Cable & Wire Division—Daniel H Spiess
Advertising Manager—K F Boldt
- Chief Engineer—Curt W Klostermann
Director of Purchases—John B Leahy
Distributor Sales Manager—Robert E Svoboda
General Sales Manager—Richard E Hall
Field Office Sales Manager—Roy J Gallagher
Chicago District Sales Manager—W B Wason
Research & Development Manager—Charles F. Valach
General Products Manager—C F Miki
Export Sales Manager—Miles V Masek
Secretary—F G Pace
Treasurer—Albert Dushek
ATLANTA 3 GA—Hollingsworth & Still 508 Whitehead Bldg Murray 8-5878
BOSTON 15 MASS—Richard Purinton Inc 11 Muzzey St (Lexington) Volunteer 2-8300
CAMDEN 2 N J—Boenecke Associates 638 Penn Street Woodlawn 4-8650
CHICAGO 50 ILL—Amphenol Electronics Corp Walter B Wasson 1830 S 54th Ave Bishop 2-1000
CLEVELAND 15 OHIO—Amphenol Electronics Corp H P Brontsema 320 Hanna Bldg
DALLAS 2 TEXAS—J F McKinney Sales Co. 1330 Industrial Blvd Riverside 1368
DAYTON 2 OHIO—Amphenol Electronics Corp John E Wilkinson 410 West First St Michigan 3212
DENVER 23 COLO—Ronald G Bowen Co 721 S Broadway Race 2-4641
DETROIT MICH—R C Nordstrom & Co 580 N Woodward Ave (Birmingham) Jordan 4-6129
GREENSBORO N C—Tonkin-Schiffer Co 1013 Huffman Street Greensboro 3-5578
INDIANAPOLIS 5 IND—Leslie M DeVoe Co 4014 Washington Blvd Humboldt 1395
KANSAS CITY 8 MO—H A Roess & Co 2601 Cherry Street Baltimore 1-0866
LOS ANGELES 19 CAL—Amphenol Electronics Corp James H Schaefer (Industrial Sales Office) 5356 W Pico Blvd Webster 8-2761
LOS ANGELES 46 CAL—Marshank Sales Co (Distributor Sales Office) 7422 Melrose Ave Webster 8-2591
MINNEAPOLIS 16 MINN—Fred B Hill Co 6110 Excelsior Blvd West 9-6727
NEW YORK 1 N Y—Amphenol Electronics Corp Herbert Motz (Industrial Sales Office) 350 Fifth Ave Langacre 3-6085
NEW YORK N Y—D R Britton Co (Distributor Sales Office) 104 S Central Ave (Valley Stream L I) Locust 1-2444
PITTSBURGH 34 PA—Tanner and Covert (Distributor Sales Office) 300 Mt Lebanon Blvd Locust 1-5067
PORTLAND 9 ORE—Don H Burcham Co (Distributor Sales Office) 510 N W 19th Ave Capital 7-3830
ST LOUIS MO—John N McCune Co 1310 St Bernadette (Florissant) Temple 7-3188
SAN FRANCISCO CALIF—G B Ellis Sales Co 3241 El Camino Real (Atherton) Emerson 8-3819
SEATTLE WASH—Amphenol Electronics Corp Raymond R Over (Industrial Sales Office) Smith Towers Building Seneca 1446
SYRACUSE 2 N Y—Amphenol Electronics Corp George L Glatz Empire Bldg Granite 1-1311
WASHINGTON 5 D C—Amphenol Electronics Corp Carl E Palmer 625 Investment Bldg Executive 3-6223
- CANADA
- CALGARY ALTA—Radiavision Sales Ltd 325 Tenth Ave W 2-3294
MONTREAL 28 QUE—Amphenol Canada Ltd 5890 Monkland Ave Hu 8-0806
OTTAWA ONT—Amphenol Canada Ltd 492 Somerset Street West 6-2113
TORONTO 9 ONT—Amphenol Canada Ltd 300 Campbell Ave Lennox 7-1257
Amplex Div Chrysler Corp P O Box 2718 Detroit 31 Mich WA 1-6733
Amplifier Corp of America 398 Broadway New York 13 N Y WO 6-2929
Amplitel Inc 342 W 40 St New York 18 N Y BI 9-0710
Amelivox Ltd 2 Bentiner St London W I England WE-2591
Amthor Testing Instrument Co 45 Van Sinderen Ave Brooklyn 7 N Y BI 6-8841
Amtron Corp 17 Felton St Waltham 54 Mass TW 4-5020
Anaconda Wire & Cable Co 25 Broadway New York 4 N Y TE 6-5256
Analogue Controls Inc 39 Roselle St Mineola N Y PI 2-8901
Anchor Metal Co 966 Meeker Ave Brooklyn 22 N Y ST 2-7090
Anchor Plastics Co 36-36 36 St Long Island City 6 N Y PA 91494
Anchor Products Co 2712 W Montrose Ave Chicago 18 Ill IN 3-4858
Anchor Specialty Mfg Co Hollister Rd Teterboro N J AT 8-1939
Andersen Labs Inc 39 Talcott Rd W Hartford Conn AD 3-4491
Anderson & Sons N Elm St Westfield Mass L0 2-9671
Anderson Associates H V 233 Broad St Summit N J CR 3-1840

ALPHABETICAL LISTING of MANUFACTURERS with LOCALIZER INDEX

- Anderson Controls Inc 2777 Mannheim Rd Des Plaines Ill
 Anderton Electronic Lab 129 E 1800 S St Bountiful Utah AX 5-5113
 Andrea Radio Corp 27-01 Bridge Plaza N Long Island City 1 N Y St 4-5411
 Andrew Antenna Corp 606 Beech St Whitby Ontario Can MO 8-3348
 Andrew California Corp 941 E Marylind Ave Claremont Calif LY 5-3505
 Andrew Corp 363 E 75 St Chicago 19 III Triangle 4-4400
 Chairman of Bd—Dr V J Andrew
 Dir of Marketing—Robert P Lamons
 Sales Mgr—Robert C Bickel
 Sales Eng'g Sup—Henry Miller
 Adv Mgr—Ernest Heitsch
 RIDGEWOOD N J—P O Box 416 Harold J Dettels
 WESTWOOD Mass—P O Box 155 Charles R Lane Eastern Regional Mgr
 CLAREMONT Calif—ANDREW California Corporation 941 E Marylind Ave Phone Lycoming 6-3505
 CANADA—Mfg & Sales—ANDREW Antenna Corporation Ltd 606 Beech St Whitby Ontario—Phone Mohawk 8-3348 John W McLeod Genl Mgr R P Matthews Sales Mgr
 ANelex Corp 150 Causeway St Boston 14 Mass RI 2-3400
 Anetsberger Bros Northbrook Ill CR 2-0770
 Anko Mfg Co 5042 W State St Milwaukee 8 Wisc GR 6-6623
 Annis Co R B 1101 N Delaware St Indianapolis 2 Ind ME 5-2838
 Anslay Mfg Co Arthur New Hope Pa SU 2711
 Ansonia Wire & Cable Co 111 Martin St Ashton R I PA 6-6300
 Antara Chemicals Div General Aniline & Film Corp 435 Hudson St New York 14 N Y WA 4-0600
 Antenna Specialists Co 12435 Euclid Ave Cleveland 6 Ohio SW 1-7878
 Anti-Corrosive Metal Products Co Castleton-On-Hudson N Y CA-2831
 Antlab Inc 4950 N High St Columbus 14 Ohio AM 7-5404
 Anton Electronic Labs 1226 Flushing Ave Brooklyn 6 N Y EV 6-5715
 Apex Coated Fabrics Co 12 E 22 St New York 10 N Y SP 7-3140
 Apex Wire & Cable Corp 237 37 St Brooklyn 32 N Y SD 8-4004
 Apparatus Development Co 115 Main St Wethersfield 9 Conn JA 9-5186
 Apple Frequency Measuring Service H L 409 Union Ave Burlington N C CA 6-0964
 Applegate & Co C J 1840 24 St Boulder Colo HI 2-8750
 Applied Electronics Co 213 E Grand Ave S San Francisco Calif PL 6-4100
 Applied Physics Corp 362 W Colorado St Pasadena 1 Calif SY 6-0197
 Applied Radiation Corp 2404 N Main St Walnut Creek Calif YE 5-2250
 Applied Research Inc 163-07 Depot Rd Flushing 58 N Y FL 3-5144
 Applied Science Corp of Princeton P O Box 44 Princeton N J PL 3-4141
 Apollo Metal Works 6651 S Oak Park Ave Chicago 38 Ill PO 7-6161
 APW Co 72 W Main St Rockaway N J RO 9-0643
 Arch Gear Works 97 Holmes St N Quincy Mass PR 3-8801
 Arch Instrument Co 101 Holmes St N Quincy Mass PR 3-5007
 Arco Co 7301 Bessemer Ave Cleveland 27 Ohio MI 1-1170
 Arco Transformer & Electric Corp 1602 S Hanna St Ft Wayne 5 Ind H-4113
 Aremac Associates 50 S San Gabriel Blvd Pasadena Calif SY 5-5938
 Arenberg Ultrasonic Laboratory 94 Green St Jamaica Plain 30 Mass JA 2-8640
 Arens Controls Inc 2017 Greenleaf St Evanston Ill DA 8-4700
 A R F Products Inc 7627 Lake St River Forest Ill FO 9-6000
 Argos Products Co Main St Genoa Ill 4-5118
 Aries Labs Inc 45-33 Davis St Long Island City 1 N Y RA 9-9001
 Ark Eng'g Co 431 W Tabor Rd Philadelphia 20 Pa LI 8-4100
 Arkay Co 605 1 Ave S W Rochester Minn 4821
 Ark-Les Switch Corp 51 Water St Watertown 72 Mass WA 4-2330
 Arlin Products Inc 13541 Auburn Ave Detroit 23 Mich VE 8-4473
 Arma Div American Bosch Arma Corp Garden City N Y PI 2-2000
 Armo Steel Corp 703 Curtis St Middletown Ohio GA 2-2711
 Arnel Electronics Inc 840 5 Ave Brooklyn 32 N Y ST 8-0422
 Armstrong Cork Co W Liberty St Lancaster Pa EX 7-5151
 Arnold Engineering Co Marengo Ill Chicago Phone: ANdover 3-6300
 Teletype Marengo Ill 1931
 President—Robert M Arnold
 Ch Engr—Charles S Brand
 Cred Mgr—B M Emerson
 Sales Manager—8 Falk
 Asst to President—H H Friend
 BOSTON-BO—J Richard Hensen R Nichols Arnold Eng'g Co 200 Berkley St HANcock 6-8270 Covers New England
 BUFFALO-RO—Broce-Mueller-Huntley Inc 1807 Elmwood Ave Phone Victorio 8700 Covers West NY State
 CHICAGO-BO—R E Arnold and R Bernstein Arnold Eng'g Co ANdover 3-6300 Covers Mid-West
 CLEVELAND-R—Ernie Kohler Assoc 8905 Lake Ave Olympic 1-1242 Covers Ohio and SW Po
 DALLAS-R—Southwest Electronic Industries 4515 Prentice St FOrest 8-8306
 DAYTON-R—Ernie Kohler Assoc 2600 Far Hills Ave OXmoor 2813 Covers Ohio and SW Pa
 FORT MYERS FLA-R—Arthur H Lynch 34 W North Shore Ave Edison 4-4431 Covers Florida
 JACKSON MICH-BO—M J Parshall 414 Sulgrave State 4-5663 Covers Lower Mich and N Ind
 KANSAS CITY MO-R—A E Dawson 5546 Troost Ave Hilland 4-7839 Covers Missouri and Kansas
 LOS ANGELES-BO—T S Trzyna Charles Martin and R C Tetherow Arnold Engr Co 3450 Wilshire Blvd DUnkirk 8-0361 Covers Calif-N Mex-Ariz
 MILWAUKEE-R—Frank W Ladky Assoc 4604 North Wilson Drive WOODruff 2-2940 Covers Wis
 MINNEAPOLIS-R—Frank 8 Elom 6524 W Walker St Phone WEst 9-5161 Covers Minnesota
 NEW YORK CITY-BO—A C Brown D P O'Brien J Kavanagh and Burton Kromer Arnold Eng'g Co 350 Fifth Ave OXFord 5-1685 Covers Mef NY-LI-No NJ-Conn
 PHILADELPHIA-R—W R Murphey 520 E Moreland Ave WYndmoor CHEstnut Hill 7-0831 Covers So NJ-E Po
 ROCHESTER-R—Broce-Mueller-Huntley Inc 315 Hollenbeck St COngress 6560 Covers Central NY State
 SEATTLE-R—The National Company Inc 903 Western Ave SEattle I Wosh MUtual 2450 Covers Ore-Wash
 SYRACUSE-R—Broce-Mueller-Huntley Inc 625 James St Phone Syracuse 73-3341 Covers East NY State
 WASHINGTON DC-BO—A L Snyder 1001-15th St NW Executive 3-4232 Covers Del-Wash DC-Md-Va-NC-SC-Ga and W Va
 Export Representative—Sylvan Ginsburg Ltd 8 West 40 St LOnacre 4-7585 New York City
 Arnold Magnetics Corp 4615 W Jefferson Blvd Los Angeles 16 Calif RE 1-6344
 Arnoux Corp 11924 W Washington Blvd Los Angeles 66 Calif TE 0-6756
 Arro Expansion Bolt Co North Boone Ave Marion, Ohio 3-1154
 Arrow-Hart & Hegeman Electric Co 103 Hawthorn St Hartford 3 Conn
 Arrow Radio Co 1829 Davenport Rd Toronto Ontario Canada
 Art Decorating Co 4201 Hudson Blvd N Bergen N J UN 5-0452
 A R & T Electronics Box 370 N Little Rock Ark FR 5-6441
 Artisan Electronics Corp 171 Ridgedale Ave Morris-town N J JE 8-8500
 Artisan Metal Works Co 11400 Madison Ave Cleve-land 2 Ohio LA 1-6173
 Artos Eng'g Co 2757 S 28 St Milwaukee 46 Wisc MI 5-6010
 Art Specialty Co 3245 W Lake St Chicago 24 Ill KE 3-3255
 Artted Co 367 Worthington St Springfield 3 Mass RE 3-3944
 Art Wire & Stamping Co 227 High St Newark 2 N J HU 4-2100
 Arvey Corp Fibre Forming Div 202 Franklin St Olean N Y 4176
 Arvin Industries Inc Columbus Ind 5521
 Asco Wire & Cable Co 2 Burroughs St Bridgeport 8 Conn ED 6-1864
 Asheville-Schoonmaker Mica Co 900 Jefferson Ave Newport News Va 7-1251
 Askania Regulator Co 240 E Ontario St Chicago 11 Ill WH 4-3700
 Assembly Products Inc Wilson Mills Rd Chesterland 1 Ohio HA 3-4436
 Associated American Trading Div 750 St Ann's Ave New York 56 N Y CY 2-5050
 Associated Commodity Corp Woolworth Bldg New York 7 N Y WO 4-4192
 Associated Eng'g Corp 65 Kent St Brookline 46 Mass AS 7-4664
 Associated Eng'g & Mfg Corp 210 Stonehouse Rd Glen Ridge N J PI 3-8899
 Associated Mfg Co 4755 N Rockwell St Chicago 25 Ill LO 1-8365
 Associated Missile Products Sub American Mch & Fdry 2709 N Garey Ave Pomona Calif LY 4-2811
 Associated Production Co 162 N Clinton St Chicago 6 Ill RA 6-1880
 Associated Research Inc 3758 W Belmont Ave Chi-cago 18 Ill CO 7-4940
 Associated Specialties Co 1751 Main St Orefield Pa EX 5-1275
 Associated Spring Co 1800 Clybourn Ave Chicago 14 Ill
 Associated Testing Labs 409 Clinton Rd Caldwell N J CA 6-7407
 Astatic Corp 250 Harbor St Conneaut Ohio 2-2656
 Astron Corp 255 Grant Ave E Newark N J HU 2-7800
 Atkomatic Valve Co 545 W Abbott St Indianapolis 25 Ind ME 8-6545
 Atlantic Metal Hose Co 308 Dyckman St New York 34 N Y LO 9-5400
 Atlantic Research Corp 901 N Columbus St Alex-andria Va KI 9-7500
 Atlantic & Pacific Wire & Cable Co 112-01 Northern Blvd E Elmhurst L I N Y HI 6-1080
 Atlas E-E Corp 47 Prospect St Woburn Mass WO 2-5390
 Atlas Electric Products Co PO Box 1591 Erie Pa 469-76
 Atlas Eng'g Co 176 Blue Hill Ave Roxbury 19 Mass HI 5-7100
 Atlas Film Corp 1111 S Blvd Oak Park Ill AU 7-8620
 Atlas Mineral Products Co Mertztown Pa OV 2-7171
 Atlas Precision Products Co 3801 Castor Ave Phila-delphia 24 Pa JE 5-3700
 Atlas Resistor Co 1128 Madison St Chester Pa CH 3-3341
 Atlas Screw & Specialty Co 450 Broome St New York 13 N Y WO 6-9600
 Atlas Sound Corp 1449 39 St Brooklyn 18 N Y GE 8-5500
 Atmosphere Control Co 5315 Chester Ave Philadel-phia 43 Pa SA 9-1388
 Attleboro Refining Co 36 Union St Attleboro Mass 1-3705
 Atomic Labs Inc 3086 Claremont Ave Berkeley 5 Calif OL 5-1353
 Auburn Mfg Co Stack St Middletown Conn DI 6-6631
 Auburn Spark Plug Co 89 York St Auburn N Y 2-9501
 Audio Accessories Amityville N Y AM 4-7080
 Audio Development Co 2833 13 Ave S Minneapolis Minn PA 9-7386
 Audio Devices Inc 444 Madison Ave New York 22 N Y PL 3-0973
 Audio Electronics 15858 35 Ave N E Seattle 55 Wash GL 1613
 Audio Equipment Co 805 Middle Neck Rd Great Neck N Y HU 2-8480
 Audiogersch Corp 514 Broadway New York 12 N Y WO 6-0800
 Audio Instrument Co 133 W 14 St New York 11 N Y OR 5-7820
 Audio-Master Corp 17 E 45 St New York 17 N Y OX 7-0725
 Audiomation Labs 7230 Clinton Rd Upper Darby 14 Pa MA 6-6041
 Audio Sears Corp Shepard Hill Rd Roxbury N Y 2261
 Audio-Video Recording Co 730 5 Ave New York 19 N Y JU 6-5095
 Audivox Inc 123 Worcester St Boston 18 Mass KE 6-6207
 Augat Bros 33 Perry Ave Attleboro Mass 1-2202
 Aurex Corp 1117 N Franklin St Chicago 10 Ill WH 4-1117
 Austin Co Special Devices Div 76 9 Ave New York 11 N Y WA 4-3630
 Autel Electronics Co P O Box 225 Linden N J HU 6-6920
 Auth Electric Co 34-20 45 St Long Island City 1 N Y AS 8-7000
 Authorized Mfrs Service Co 919 Wyckoff Ave Brooklyn 27 N Y
 Autocrat Electronics Co 5024 Elm St Skokie Ill OR 3-8033
 Automatic Coil Co 415 Bedford Ave Brooklyn 11 N Y ST 2-3333
 Automatic Control Co 995 University Ave St Paul 4 Minn MI 6-1801
 Automatic Electric Co 1033 W Van Buren St Chicago 7 Ill HA 1-4300
 Automatic Metal Products Corp 323 Berry St Brooklyn 11 N Y EV 8-0364
 Automatic Methods Inc 965 W Grand St Elizabeth N J EL 4-4666
 Automatic & Precision Mfg Co 252 Hawthorne Ave Yonkers N Y YO 8-2010
 Automatic Radio Mfg Co 122 Brookline Ave Boston 15 Mass CO 6-1420
 Automatic Switch Co Hanover Rd Florham Park N J FR 7-4630
 Automation Components Inc 875 Hickory St Peckville Pa HU 9-3213
 Automation Electronics Inc 231 W Olive St Burbank Calif
 Automation Inc 212 Worcester St Wellesley Hills 82 Mass WE 5-6621
 Automation Management Inc Adams St Westboro Mass 377
 Autometrics Div North American Aviation 9150 E Im-perial Hwy Downey Calif LU 3-6111
 Autoscrew Co 216 W 18 St New York 11 N Y WA 9-3137
 Autotron Inc 3629 N Vermilion St Danville Ill 287
 Autron Eng'g Inc 1254 W 6 St Los Angeles 17 Calif MU 3237
 Autronics Inc Rt 1 Box 812 Florissant Mo TE 7-3565

ALPHABETICAL LISTING of MANUFACTURERS with LOCALIZER INDEX

- Avco Manufacturing Corp Crosley Div 1329 Arlington St Cincinnati 25 Ohio KI 1-6500
- Avery Adhesive Label Corp 1615 S California Ave Monrovia Calif EL 8-2524
- Avia Products Co 7266 Beverly Blvd Los Angeles 36 Calif WE 6-7295
- Aviation Electronic Service N 12 St Wheeling III WH 405
- Avion Div ACF Industries Inc 11 Park Pl Paramus N J CO 1-4100
- Avionics Ltd P O Box 200 Niagara-on-the-Lake Ontario Canada 598
- Avon Tube Div Highbie Mfg Co Barrett Rd Rochester Mich OL 2-9871
- Avtron Mfg Inc 10409 Meech Ave Cleveland 5 Ohio MI 1-8310
- Axel Electronics 134-20 Jamaica Ave Jamaica 18 N Y RE 9-1700
- Axler Associates Inc 102-42 43 Ave Corona 68 N Y HA 9-7718
- Babbitt Chemical Co 38 Prospect St New Bedford Mass WY 4-0024
- Babcock Radio Eng'g Inc 7942 Woodley Ave Van Nuys Calif ST 5-8548
- Babcock Relays Inc 14743 Lull St Van Nuys Calif ST 6-8001
- Babcock & Wilcox Co Tubular Products Div Beaver Falls Pa 2100
- Barbe & Co Semon 636 Greenwich St New York 14 N Y WA 4-2121
- Bacon Industries 192 Pleasant St Watertown 72 Mass WA 4-5000
- Baer Co N S 1-11 Montgomery St Hillside 5 N J MU 8-2250
- Bailey Meter Co 1050 Ivanhoe Rd Cleveland 10 Ohio GL 1-4600
- Baird-Atomic Inc 33 University Rd Cambridge 38 Mass UN 4-0101
- Bakelite Co Div Union Carbide & Carbon Corp 30 E 42 St New York 17 N Y MJ 7-8900
- Baker Bros Post & Harleau Sts Toledo 10 Ohio CH 4-9511
- Baker & Co 113 Astor St Newark 2 N J BI 3-0030
- Baker Chemical Co J T Phillipsburg N J 5-2151
- Balco Research Labs 49 Edison Place Newark 2 N J MI 3-5200
- Baldwin-Lima-Hamilton Corp Electronics & Instrumentation Div 4? 4 Ave Waltham 54 Mass TW 4-6700
- Baldwin Piano Co 1801 Gilbert Ave Cincinnati 2 Ohio MA 1-4300
- Baldwin Products Corp 432 E Valley Blvd San Gabriel Calif AT 6-0988
- Ballantine Labs Inc Boonton N J DE 4-1432
- Ballastran Corp 1701 N Calhoun St Ft Wayne Ind E 2285
- Balteau Electric Corp New and Meadow Sts Stamford Conn DA 4-6118
- Baltic Metal Products 126 Sutton St Brooklyn 22 N Y
- Barber-Colman Co Rock St Rockford III 8-6833
- Barber & Howard Co East Ave Westerly R I 2363
- Barco Chemical Products Co 701 S LaSalle St Chicago 5 III HA 7-2916
- Barium & Chemicals Inc Willoughby Ohio WH 2-5151
- Barker Sales Co 996 Edgewater Ave Ridgefield N J
- Barker & Williamson Inc Canal & Beaver Sts Bristol Pa ST 8-5581
- Barkley & Dexter Laboratories 50 Frankfort St Fitchburg Mass FI 2-5906
- Barlowe Television 402 N Wantagh Ave Bethpage N Y WE 1-5612
- Barnes Co Wallace Div Associated Spring Corp Bristol Conn LU 2-9581
- Barnes Development Co 213 W Baltimore Pike Lansdowne Pa MA 6-3294
- Barnes & Reinecke 230 E Ohio St Chicago 11 III DE 7-6350
- Barnstead Still & Demineralizer Co 253 Lanesville Terrace Boston 31 Mass JA 4-3100
- Barrett Co Leon J P O Box 378 Worcester 1 Mass PL 5-4306
- Barrett Div Allied Chemical & Dye Corp 40 Rector St New York 6 N Y HA 2-7300
- Barrett Varnish Co 1532 S 50 Court Cicero 50 III BI 2-2462
- Barry Controls Inc 700 Pleasant St Watertown 72 Mass WA 3-1150
- Bart Mfg Corp 227 Main St Belleville N J PL 9-0200
- Barton Electronics Inc 1000 Farmington Ave W Hartford 7 Conn AD 3-7709
- Barwood Electronics Inc 921 E Broadway Glendale 5 Calif CH 5-4963
- Basic Controls Co 1714 Westwood Blvd Los Angeles 24 Calif GR 3-4310
- Basler Electric Co 601 5 St Highland III 2123
- Bassett Inc Rex 1314 N E 17 Ct Ft Lauderdale Fla LO 4-3028
- Baughman Co E J 1914 N Cogswell Rd El Monte Calif GI 4-7586
- Bausch & Lomb Optical Co 628 St Paul St Rochester 2 N Y LO 2-3000
- Bayside Timers 45-25 162 St Flushing 58 N Y IN 3-8935
- B & C Insulation Products Inc 490 Lincoln Hwy Isefin N J LI 8-0815
- Beach-Russ Co 50 Church St New York 7 N Y CO 7-1115
- Bead Chain Mfg Co 110 Mountain Grove St Bridgeport 5 Conn ED 4-4124
- Beam Industries Inc 624 S Michigan Chicago 5 III WA 2-2118
- Bean & Co Morris Hyde Rd Yellow Springs Ohio 7-7302
- Beaver Gear Works 1025 Parmele St Rockford III 3-9691
- Beck Bros 421 W Sedgley Ave Philadelphia 40 Pa NE 4-3548
- Becker Electronics Mfg Corp 1091 Rockaway Ave Valley Stream N Y LO 1-2510
- Becker Productions V S 551 5 Ave New York 17 N Y MU 2-0777
- Beckman/Berkeley Div Beckman Instruments Inc 2200 Wright Ave Richmond 3 Calif LA 6-7730
- Beckman/Helipot Corp Newport Beach Calif LI 8-9361
- Beckman Instruments Inc Data & Control Systems Scientific Instruments Div 325 N Muller Ave Anaheim Calif PR 4-5430
- Beckman Instruments Inc Process Instruments Div 2500 Fullerton Rd Fullerton Calif OW 7-1771
- Beckman Instruments Inc Scientific Instruments Div 2500 Fullerton Rd Fullerton 1 Calif LA 5-8241
- Beckman & Whitley 973 E San Carlos Ave San Carlos Calif LY 3-7824
- Beck's Inc 298 E 5 St St Paul 1 Minn CA 4-6455
- Beede Electrical Instrument Co Penacook N H PL 3-6362
- Behlman Eng'g Co 114 S Hollywood Way Burbank Calif VI 9-4475
- Behr-Manning Co 3057 Howe St Troy N Y AR 3-0100
- Bekey Electric Co 1327 S Main St Los Angeles 15 Calif RI 9-0830
- Belden Mfg Co 4647 W Van Buren St Chicago 44 III ES 8-1000
- Belding Corticelli Industries Inc Putnam Conn WA 8-2747
- Belfab Corp 11 Ramah Circle Agawam Mass ST 8-6247
- Bel Fuse Inc 311 Mountain Rd Union City N J UN 6-5416
- Bell Aircraft Corp P O Box 1 Buffalo 5 N Y NF 7851
- Bell & Gossett Co 8200 Austin Ave Morton Grove III IN 3-4040
- Bell & Howell 7100 McCormick Rd Chicago 45 III AM 2-1600
- Bell Sound Systems Inc 555 Marion Rd Columbus 7 Ohio HI 4-1193
- Bell Telephone Labs 463 West St New York 14 N Y CH 3-1000
- Belltron Mfg Co 400 Hoover Ave Bloomfield N J PI 8-1121
- Belmont Smelting & Refining Works 330 Belmont Ave Brooklyn 7 N Y DI 2-4900
- Belock Instrument Corp 111-01 14 Ave College Point 56 N Y HI 5-4200
- Beltone Hearing Aid Co 2900 W 36 St Chicago 32 III LA 3-7984
- Bemis Bro Bag Co 408 Pine St St Louis 2 Mo CH 1-0900
- Bendix Aviation Corp Bendix Computer Div 5630 Arbor Vitae St Los Angeles 45 Calif OR 8-2128
- Bendix Aviation Corp Pacific Div 11600 Sherman Way N Hollywood Calif ST 7-2881
- Bendix Aviation Corp Pioneer-Central Div 2734 Hickory Grove Rd Davenport Iowa 7-9101
- Bendix Aviation Corp Bendix Radio Div East Joppa Rd Towson 4 Md VA 3-2200
- Bendix Aviation Corp 1104 Fisher Bldg Detroit 2 Mich TR 5-5000
- Bendix Aviation Corp Red Bank Div Eatontown N J EA 3-2000
- Bendix Aviation Corp Red Bank Div Semiconductor Dept 201 Westwood Ave Long Branch N J CA 2-6220
- Bendix Aviation Corp Foundries Div Teterboro N J AT 8-2000
- Bendix Aviation Corp Cincinnati Div 3130 Wasson Rd Cincinnati 8 Ohio EL 1-2323
- Bennett & Co Paul 230 E Ohio St Chicago 11 III DE 7-4858
- Bennett Co R P 43 S Carroll St Frederick Md MO 3-6104
- Bennett Labs Inc 2700 Bay Rd Redwood City Calif EM 6-6845
- Bennett Mfg Co Railroad St Aiden N Y AL 3711
- Benson-Lehner Corp 11930 W Olympic Blvd Los Angeles 64 Calif BR 2-3484
- Bentley Harris Mfg Co Conshohocken 30 Pa TA 8-0634
- Berg Mfg Corp 142 Reno St New Cumberland Pa CE 8-9394
- Bergen Labs 247 Crooks Ave Clifton N J GR 3-1883
- Bergen Wire Rope Co 455 Gregg St Lodi N J HU 7-3521
- Berger Communications 109-01 72 Rd Forest Hills L I N Y
- Berkeley Crystal Co 1740 University Ave Berkeley 3 Calif TH 5-4409
- Berkshire Labs 586 Bank Village Greenville N H 111
- Berman Labs 112-03 Rockaway Blvd Ozone Park 20 N Y VI 3-1045
- Bernard Franklin Co 4155 E Hedley St Philadelphia 37 Pa JE 3-4500
- Bernco Engineering Corp 2320 S Tibbs Ave Indianapolis 41 Ind CH 1-2871
- Berndt-Bach Inc Auricon Div 6900 Romaine St Hollywood 38 Calif HO 2-0931
- Beryllium Corp Tuckerton Rd Reading Pa 9-0781
- Beseler Co Charles 219 S 18 St E Orange N J OR 6-6500
- Bestcraft Products Co 626 Broadway New York 12 N Y AL 4-7920
- Beta Electric Div Sorensen Co 333 E 103 St New York 29 N Y EN 9-7550
- Bethlehem Apparatus Co Front & Depot Sts Hellertown Pa TE 8-8221
- Bethlehem Steel Co Bethlehem Pa UN 7-2424
- Better Coil & Transformer Corp Goodland Ind 15
- Beva Laboratory 1640 N Olden Ave Ext Trenton 8 NJ EX 4-4074
- B & F Instruments Inc 4732 N Broad St Philadelphia 41 Pa MT 4-2828
- B & H Instrument Co 3479 W Vickery Blvd Ft Worth 7 Texas ED 6-7243
- Biddle Co James G 1316 Arch St Philadelphia 7 Pa LO 4-1620
- Bigelow Metallizing Chemicals Co 98 Bigelow St Quincy 69 Mass GR 2-9621
- Biggs Co Carl H 2255 Barry Ave Los Angeles 64 Calif GR 9-6732
- Biophysical Instruments Inc 20 Herman St Philadelphia 44 Pa GE 8-5260
- Bio-Rad Labs 800 Delaware St Berkeley Calif TH 3-0923
- Bios Labs Inc 17 W 60 St New York 23 NY PL 7-8171
- Bird & Co Richard H 1 Spruce St Waltham 54 Mass TW 4-0160
- Bird Electronic Corp 1800 E 38 St Cleveland 14 Ohio EX 1-3535
- Birdair Structures Inc 290 Larkin St Buffalo 10 NY MO 6520
- Birnbach Radio Co 145 Hudson St New York 13 NY WA 5-6980
- Birtcher Corp Industrial Div 4371 Valley Blvd Los Angeles 32 Calif CA 2-9101
- Bishop & Co Platinum Works J Malvern Pa MA 3100
- Bittermann Electric Co Barlow St Canaan Conn TA 4-7345
- Biwax Corp 3445 Howard St Skokie III OR 3-1050
- B J Electronics Borg-Warner Corp 3300 Newport Ave Santa Ana Calif KI 5-5581
- B & K Mfg Co 3726 N Southport Chicago III EA 7-9480
- Blackburn Electronic Corp 55 W 7 St Wyoming Pa WY 1190
- Black & Decker Mfg Co E Penna Ave Towson 4 Md VA 3-4400
- Black Light Corp of America 5114 Walnut Grove Ave San Gabriel Calif CU 3-3193
- Black Light Eastern Corp 33-00 Northern Blvd Long Island City 1 NY ST 4-4729
- Black Light Products Inc 53 W Jackson Blvd Chicago 4 III HA 7-8965
- Black & Webster Inc 445 Watertown St Newton 58 Mass BI 4-6370
- Blaco Mfg Co 6541 Euclid Ave Cleveland 3 Ohio EX 1-0497
- Blaine Electronics Inc 14757 Keswick St Van Nuys Calif ST 2-6303
- Blaw-Knox Co 300 6 Ave Pittsburgh 22 Pa EX 1-1244
- Bliley Electric Company Union Station Building Erie Pennsylvania 2-2287
- LOS ANGELES 19 CALIF—Herb Becker Company Inc 1140 Crenshaw Blvd Webster 1-1257 California Arizona and Reno Nevada
- DALLAS 1 TEXAS—Crockett-Lund & Company 2204 Griffin Street Riverside 2-5764 Arkansas Louisiana Oklahoma and Texas
- OAK PARK ILLINOIS—Hill-Gray Inc 41 1/2 Morrison Street Estebrock 8-7050 North Illinois and Eastern Wisconsin
- DENVER 4 COLORADO—Dick Hyde Company 1341 Cherokee St Cherry 4-7471 Colorado Utah New Mexico Wyoming Eastern Idaho and Eastern Montana
- ORLANDO FLA.—Johnson Associates 521 Elwell Street 5-1546 Florida
- COLUMBUS 15 OHIO—William E McFadden 150 E Broad Street Room 510 Capitol 1-3363 Indiana Kentucky and Ohio
- BUFFALO 3 N Y—R W Mitscher Inc Ellicott Square Building Washington 2517 New York State (except New York City)
- WINNIPEG MANITOBA CANADA—C M Robinson Co 207 Scott Block Winnipeg 96-789 Alberta Manitoba British Columbia and Saskatchewan (Canada)
- NEW YORK 6 N Y—F Edwin Schmitt Company 136 Liberty Street Worth 2-6550 New York City Washington D C Maryland New Jersey Delaware Eastern Pennsylvania
- KANSAS CITY II MISS—Clyde H Schryver Sales Co 4550 Main Street Logan 1-4826 Missouri Nebraska Kansas Southern Illinois
- PITTSBURGH 34 PA—Tanner & Covert 300 Mount Lebanon Blvd Room 216 Locust 1-5067 Western Pennsylvania West Virginia
- CEDAR RAPIDS IOWA—Jerry Vrbik 615 Guaranty Bldg Empire 40833 Iowa Minnesota North Dakota South Dakota Western Wisconsin
- EXPORT AGENTS
- NEW YORK 4 N Y—Ad Auriema Inc 85 Broad St
- SAN FRANCISCO II CAL—Frazier & Hansen Ltd 301 Clay Street
- Bliss Electronic Corp Box 366 Sussex NJ SU 2-3000
- Blonder-Tongue Laboratories 9-25 Ailing St Newark 2 NJ MA 2-8151
- Bloomington Rubber Co 1 Flower St Chester Pa 3-6158
- Blue M Electric Co 138 & Chatham St Blue Island III FI 5-9000

ALPHABETICAL LISTING of MANUFACTURERS with LOCALIZER INDEX

- B & M Electric Corp 838 4 Ave Brooklyn 32 NY NY 9-5945
- Bodde Screen & Projector Co 11541 Bradley Ave San Fernando Calif EM 5-2551
- Bodine Electric Co 2254 W Ohio St Chicago 12 Ill SE 3-6410
- Bodnar Industries 238 Huguenot St New Rochelle NY NE 6-4654
- Boehme Inc H O 915 Broadway New York 10 NY SP 7-2208
- Boeing Airplane Co Missiles Div Seattle Wash
- Boesch Mfg Co 45 River St Danbury Conn PI 3-5571
- Bogart Mfg Co 315 Seigel St Brooklyn 6 NY HY 7-4972
- Bogen Co David P O Box 500 Paramus NJ DI 3-5700
- Bogue Electric Mfg Co Iowa Ave Paterson 3 NJ LA 5-2200
- Bolling Industries Inc 1117 N Main Ave P O Box 981 Scranton 2 Pa DI 6-1588
- Bolta Products Div General Tire & Rubber Co 70 Garden St Lawrence Mass MU 3-7121
- Bolton Labs Inc W Main St Bolton Mass SP 9-2201
- Bomac Labs Inc Salem Rd Beverly Mass WA 2-6000
- Bond Electronics Corp 60 Springfield Ave Springfield NJ MU 8-3838
- Boonton Electronics Corp 738 Speedwell Ave Morris Plains NJ JE 8-5110
- Boonton Molding Co 326 Myrtle Ave Boonton NJ DE 4-4400
- Boonton Radio Corp Intervale Rd Boonton NJ DE 4-3200
- Booth Co Arthur E 265 S Alexandria Ave Los Angeles 4 Calif DU 9-4863
- Boots Aircraft Nut Corp Newton Turnpike Norwalk Conn
- Borden Co Chemical Div Resinite Dept P O Box 1589 Santa Barbara Calif 3134
- Borden Co Chemical Div 350 Madison Ave New York 17 NY MU 7-4100
- Borg Equip Div George W Borg Corp 120 S Main St Janesville Wisc PL 4-6516
- Borthig Co George C P O Box 115 E Rutherford NJ WE 9-9260
- Bosch Inc M Ten 80 Wheeler Ave Pleasantville NY RO 9-3000
- Boston Insulated Wire & Cable Co 65 Bay St Dorchester 25 Mass CO 5-2104
- Boston Woven Hose & Rubber Co P O Box 1071 Boston 3 Mass TR 6-6000
- Boulevard Recording Studio 25 E Jackson Blvd Chicago 4 Ill WE 9-7288
- Boulin Instrument Corp 10 1 St Pelham NY PE 8-3966
- Bourns Labs Inc 6135 Magnolia Ave Riverside Calif Bowers Battery & Spark Plug Co P O Box 1262 Reading Pa 9-0771
- Bowmar Instrument Corp 2415 Pennsylvania St Ft Wayne Ind AN 1463
- Bowser Technical Refrigeration Div Bowser Inc Terryville Conn LU 2-7471
- Box Solder Products Co 251 Freeman St Brooklyn 22 NY EV 9-4863
- Brach Mfg Corp 200 Central Ave Newark 3 NJ HU 2-1500
- Bradford Components Inc 33-35 Bishop St Bradford Pa BR 3652
- Bradley Associates 1650 N Damen Ave Chicago 47 Ill AR 6-8197
- Bradley Labs Inc 168 Columbus Ave New Haven Conn MA 4-3123
- Bradley Mining Co 660 Market St San Francisco 4 Calif EX 2-7005
- Brady Co W H 727 W Glendale Ave Milwaukee 9 Wisc ED 2-8100
- Brailsford & Co 670 Milton Rd Rye NY 1-1820
- Brainin Co C S 320 Washington St Mt Vernon NY MO 8-5500
- Bram Chemical Co Metals & Minerals Div 820 65 Ave Philadelphia 26 Pa WA 4-2121
- Brand & Co William 41 North St Willimantic Conn HA 3-6301
- Brand Dielectrics Inc 57 North St Willimantic Conn HA 3-6321
- Branson Corp S Jefferson Rd Whippany NJ TU 7-1100
- Branson Instruments Inc 37 Brown House Rd Stamford Conn DA 4-6721
- Bray Studios Inc 729 7 Ave New York 19 NY CI 5-4582
- Breeze Corp 700 Liberty Ave Union NJ MU 6-4000
- Breon Labs 1520 Evergreen Rd Williamsport Pa 7426
- Breuer Electric Mfg Co 5100 N Ravenswood Ave Chicago 40 Ill LO 1-6162
- Brew & Co Richard D 90 Airport Rd Concord NH CA 5-6606
- Bridgeport Brass Co 30 Grand St Bridgeport 2 Conn ED 4-1182
- Briggs Associates 10 DeKalb St Norristown Pa BR 9-2120
- Bright Star Industries 600 Getty Ave Clifton NJ GR 1-3200
- Brillhart Plastics Corp Old Country Rd Mineola NY PI 6-0425
- Brilmayer Laboratories E W 86 Fulton St New York 38 NY BE 3-7914
- Bristol Co P O Box 1790 EITT Waterbury 20 Conn PL 6-4451
- British Electronics Sales Box 132 Oakland Gardens 64 NY MU 2-5844
- British Industries Corp 80 Shore Rd Part Washington NY PO 7-7700
- British Radio Electronics Ltd 1833 Jefferson PI NW Washington 6 D C ME 8-6564
- Broadcast Equipment Specialties Corp P O Box 149 Beacon NY BE 9-4587
- Bron-Shoe Co 269 E Broad St Columbus 15 Ohio CA 1-5886
- Brooke Eng'g Co 4517 Wayne Ave Philadelphia 44 Pa MI 4-8822
- Brooklyn Paint & Varnish Co 50 Jay St Brooklyn 1 NY MA 5-2950
- Brooks & Perkins Inc 1950 W Fort St Detroit 16 Mich TA 5-5900
- Brooks Rotameter Co P O Box 432 Lansdale Pa 5-4602
- Brown-Bridge Mills E Water St Troy Ohio FE 2-1266
- Browning Labs Inc 750 Main St Winchester Mass WI 6-3700
- Brubaker Electronics Inc 3652 Eastham Dr Culver City Calif TE 0-6441
- Brunner Mfg Co 1821 Broad St Utica 1 NY 5-6161
- Bruno-New York Industries Corp 460 W 34 St New York 1 NY LO 4-5930
- Brunswick Instruments P O Box 813 New Brunswick NJ CH 7-5919
- Brush Beryllium Co 4301 Perkins Ave Cleveland 3 Ohio EN 1-5400
- Brush Electronics Co Div Clevite Corp 3405 Perkins Ave Cleveland 14 Ohio EN 1-3315
- Brush Electronics Co Texas Div 3732 Westheimer Rd Houston 6 Texas MO 7-2425
- Brush Nail Expansion Bolt Co Greenwich Conn GR 8-3190
- Bryant Gage & Spindle Div Box 620-R Springfield Vt TU 5-2141
- Brys Instrument Co 7026 6 Ave Brooklyn 9 NY PI 2-0278
- Buchanan Electrical Products Corp 225 Route 22 Hillside NJ WA 3-7474
- Buck Eng'g Co 37 Marcy St Freehold NJ 8-1111
- Buckbee Mears Co Toni Bldg St Paul 1 Minn
- Buckeye Bobbin Co 12200 Sprecher Ave Cleveland 11 Ohio OR 1-5200
- Bucks County Enterprises Quakertown Pa KE 6-2620
- Budd Stanley Co 43-01 22 St Long Island City 1 NY ST 6-1706
- Budelman Radio Corp 375 Fairfield Ave Stamford Conn FI 8-9231
- Buffalo Electronics Corp 37 Franklin St Buffalo 2 NY MO 5855
- Buffalo Instrument Corp 1780 Elmwood Ave Buffalo 7 NY RI 3640
- Buggie Inc H P O Box 817 Toledo 1 Ohio TA 2461
- Buhl Optical Co 1009 Beech Ave Pittsburgh 33 Pa FA 1-0076
- Bulova Watch Co Electronics Div 40-01 61 St Woodside 77 NY NE 9-5700
- Bundy Electronics Corp 171 Fabyan PI Newark 12 NJ ES 2-1872
- Burdick Corp 635 Plumb St Milton Wisc 501
- Burgess Battery Co Freeport Ill MA 3300
- Burling Instrument Co 16 River Rd Chatham NJ ME 5-9481
- Burndy Corp Omaton Div Norwalk Conn TE 8-4711
- Burnell & Co Inc 45 Warburton Ave Yankers NY After July 1 1957 New Address Perham Manor New York Phone PEIham B-5002
- Phone: Yonkers 5-6800-01-02-03-04-05
- Administration—Norman Burnell
- Chief Eng—Lewis G Burnell
- Purchaser—Vincent Triwedi
- Sales Mgr—Leo Schwartz
- BUFFALO NY—Holliday-Hathaway P O Box 75 Buffalo NY Phone Spring 6828
- CAMBRIDGE MASS—Glenn M Hathaway Electronics Inc 238 Main St Elliott 4-1751 Covers N Eng
- CANAAN CONN—Glenn M Hathaway Electronics Inc P O Box 797 Covers Conn Taylor 4-7215
- CHICAGO ILL—Caine Sales Co 3020 North Cicero Ave S'pring 2-4022 Covers Ill-Ind-Iowa-Wis-Minn
- CINCINNATI 37 OHIO—Sheridan Associates Roselindown Center Bldg Cincinnati 37 Ohio Melrose 1-2460 covers Ohio Western Pa-Sharon
- CLEVELAND OHIO—Sheridan Associates 5480 Queen's Highway Tuxedo 4-8060
- DALLAS TEX—Edward F Aymond Co P O Box 6595 Logan 5233 Covers Ark-La-Tex-Okla
- DAYTON O—Myron P Roebuck 1300 E Dorothy Lane Dayton Ohio Covers Wright-Patterson Air Force Base
- DETROIT MICH—Jim Morrow Sales 85 Louise Ave Highland Park Mich TOWnsend 8-0649 Covers Mich
- FORT MONMOUTH N J—Philip Treston 1114 Pamere Ave Wanamassa N J Phone Dunkirk 9-3054
- FORT MYERS FLA—Arthur H Lynch & Associates P O Box 466 Edison 4-4431 Covers Florida
- KANSAS CITY MO—Engineering Services Co 4550 Main St Jefferson 1-7765 Covers Western Mo-Kansas
- LONG ISLAND R—Holliday-Hathaway Co Inc 11 Northern Blvd Great Neck LI Hunter 2-6750
- NEW YORK CITY—Holliday-Hathaway Inc 270 Park Ave Suite 61-A Murray Hill 8-5858 Covers Met NY
- NORTHERN CALIFORNIA—C R Dalton 108 Ware Rd Redwood Ulmar 1-7129 Covers Northern Calif
- NORTHERN NJ—Holliday-Hathaway Co Inc 4808 Bergenline Ave Union City NJ Webster 9-7217
- PASADENA CALIF—Arvin Bell Co 385 E Green St Ryan 1-5492 Covers Southern Calif
- PHILADELPHIA PA—Massey Assoc Inc 529 Brookhurst Ave Narberth Pa Mohawk 4-4200
- ST LOUIS MO—Engineering Services Company 6635 Delmar Blvd Covers So Ill-E Mo
- SCHENECTADY NY—Holliday-Hathaway Co Inc P O Box 1172 Loudonville NY Union 9-7551
- SYRACUSE 6 NY—Holliday-Hathaway Co Inc P O Box 156-Eastwood Station Syracuse 73-0006 Covers Syracuse Ithaca Elmira
- UTICA NY—Holliday-Hathaway Co Inc P O Box 296 New Hartford NY covers Utica-Poughkeepsie-Rome
- WASHINGTON DC—Massey Assoc Inc 1 Thomas Circle N W National 8-1957 Covers Washington-Md-Va
- WINSTON-SALEM NC—Holliday-Hathaway Co Inc Wachovia Bank & Trust Co Bldg Room 831 Winston-Salem 4-7252
- Burnett Radio Lab W W L 4814 Idaho St San Diego 16 Calif AT 2-2740
- Burnley Battery & Mfg Co 103 Clay St North East Pa 185 R
- Burr-Brown Research Corp Route 4 Box 139 Tucson Ariz AX 8-0772
- Burroughs Corp 6071 2 Ave Detroit 32 Mich TR 5-2260
- Burroughs Corp Electronic Instruments Div 1209 Vine St Philadelphia 7 Pa
- General Manager—Lawrence T LaPatka
- Telephone LOcust 7-1401
- BELMONT CALIF—Gerald B Miller Co 1334 Old County Rd Lytell I-0365
- DETROIT 35—Tiby Engineering Co 18222 James Couzens Highway University 4-9298
- CLEVELAND 18—Tiby Engineering Co 3115 Derbyshire Rd
- FORT MYERS FLA—Arthur H Lynch Assoc PO Box 466 Phone Edison 4-4431
- HOLLYWOOD CALIF—Gerald B Miller Co 1550 N Highland Ave Hollywood 2-1195
- KANSAS CITY—Harris Hanson Co 7916 Paseo Avenue Victo: 0610
- PITTSBURGH 26—H E Ransford Co 5400 Clairton Blvd Tuxedo 4-3425
- SAN DIEGO CALIF—Gerald B Miller Co 1263 Roscars Blvd A'cademy 2-1121
- ST LOUIS MO—Harris Hanson Co 2814 S Brentwood Blvd Mission 7-4350
- SEATTLE—Gerald B Miller Co King County Airport Room 101 Lander 3320
- TUCKAHOE NY—Land-C-Air Sales Co 140 Marbledale Rd Woodbine 1-4700
- Burroughs Corp Electronic Tube Div Box 1226 Plainfield NJ PL 6-0876
- Burton-Rogers Co 42 Carleton St Cambridge 42 Mass EL 4-1643
- Buss-Clement-Daughten & Associates 201 B Studio Hill Chester Springs Pa TA 7-2081
- Bussmann Mfg Co University at Jefferson St Louis 7 Mo GA 1-1740
- B/W Controller Corp 2200 E Maple Birmingham Mich MI 4-5940
- Cabinart Div G & H Wood Products 99 N 11 St Brooklyn 11 NY EV 4-3516
- Cable Electric Products 234 Daboll St Providence 7 RI ST 1-5400
- Cable & Wire Products Co Chicago Rd Swanton Ohio 4676
- Caddell-Burns Mfg Co 40 E 2 St Mineola NY PI 6-2310
- Cado Mfg Co Div Electromation Co 1646 18 St Santa Monica Calif
- Caig Labs 46 Stanwood Rd New Hyde Park NY PI 2-0278
- Calbest Electronics Co 4801 Exposition Blvd Los Angeles 16 Calif RE 1-7291
- Calcon Mfg Co 100 Oakland Ave Washington Pa BA 2-1890
- Cal-Connector Co 7360 Varna Ave N Hollywood Calif ST 7-2623
- Caleonia Electronics & Transformer Corp P O Box 298 Caleonia NY CA-271
- Calidyne Co 120 Cross St Winchester Mass WI 6-3810
- Califone Corp 1041 N Sycamore Ave Hollywood 38 Calif HO 2-2353
- Calif Chassis Co 5445 E Century Blvd Lynwood Calif NR 6-7777
- Calif Electronic Services P O Box 2 Woodland Hills Calif DI 7-1558
- Calif Magnetic Control Corp 11922 Valerio St N Hollywood Calif ST 7-1104
- Calif Technical Industries 1421 Old County Rd Belmont 10 Calif LY 3-8466
- Cal-Met Electronics 5860 Spring Oak Dr Hollywood 28 Calif HO 7-5332
- Caltron Products Co 3518 W Pico Blvd Los Angeles 19 Calif RE 4-2420
- Calvideo Tube Corp 5222 W 104 St Los Angeles 45 Calif OR 8-3995
- Cambridge Instrument Co Grand Central Terminal New York 17 NY MU 6-0335
- Cambridge Pattern Works 55 1 St Cambridge 41 Mass RI 7-8191
- Cambridge Thermionic Corp 445 Concord Ave Cambridge 38 Mass TR 6-2800

ALPHABETICAL LISTING of MANUFACTURERS with LOCALIZER INDEX

- Camcar Screw & Mfg Co Div Textron Inc 600 18 Ave Rockford Ill 5-9451
 Camera Equipment Co 315 W 43 St New York 36 NY JU 6-1420
 Cameralex Corp 1947 Broadway New York 23 NY TR 3-4022
 Camera Mart Inc 1845 Broadway New York 23 NY PL 7-6977
 Camloc Fastener Corp 22 Spring Valley Rd Paramus NJ HU 9-4900
 Campbell Co Colin Westville Ave Ext Danbury Conn PI 3-6701
 Camobell X-Ray Corp 110 Cunningham St Boston 15 Mass KE 6-1611
 Campro Products Inc 3131 Alliance Rd N E Canton 1 Ohio GL 5-0334
 Canadian Aviation Electronics Ltd 6214 Cote de Liesse Rd St Laurent Quebec Canada ME 1-6781
 Canadian Radium & Uranium Corp 630 5 Ave New York 20 NY CI 6-0469
 Cannon Co C F Springwater NY 531
 Cannon Electric Co 3208 Humboldt St Los Angeles 31 Calif CA 5-1251
 Cannon Electric Co Eastern Div Pingree & Leavitt Sls Salem Mass PI 5-0700
 Cannon-Muskegon Corp Box 506 Muskegon Mich 51676 Canoga Corp 5955 Sepulveda Blvd Van Nuys Calif ST 6-9010
 Capital Film Service 224 Abbott Rd E Lansing Mich ED 2-3544
 Capitol Machine Co 36 Balmforth Ave Danbury Conn PI 3-2758
 Capitol Transcription Service 1120-A Conn Ave N W Washington 6 D C EX 3-0161
 Capps & Co 20 Addison Pl Valley Stream L I NY VA 5-4413
 Carad Corp 2850 Bay Rd Redwood City Calif EM 8-2969
 Carbide & Carbon Chemicals Co Div Union Carbide & Carbon 30 E 42 St New York 17 NY MU 7-8000
 Carboline Co 331 Thornton Ave St Louis 19 Mo WO 2-7771
 Carboneau Industries Inc 100 Lexington Ave S W Grand Rapids 4 Mich GL 6-9528
 Carborundum Co Globar Div Hyde Park Blvd Niagara Falls NY 5715
 Carborundum Metals Co Div Carborundum Co P O Box 32 Akron NY 9454
 Cardwell Co Allen D 97 Whiting St Plainville Conn SH 7-2741
 Carling Electric Inc 505 New Park Ave W Hartford 10 Conn AD 2-4461
 Carnf Co Box 554 Brookhaven Miss 1998
 Carol Electronics Corp 315 W Stephen St Martinsburg W Va 8911
 Carpenter Steel Co Webb Wire Div 17 Liberty St New Brunswick NJ CH 7-4668
 Carpenter Steel Co Alloy Tube Div Springfield Rd Union NJ MU 6-7230
 Carpenter Steel Co Front & Bern Sts Reading Pa 4-8211
 Carrier Corp 300 S Geddes St Syracuse 1 NY SY 76-9911
 Carstedt Research Inc 2501 E 68 St Long Beach 5 Calif NE 6-9364
 Carter Mfg Corp 23 Washington St Hudson Mass HU 1309
 Carter Motor Co 2711 W George St Chicago 18 III JU 8-7700
 Carter Parts Co 3401 W Madison St Skokie III OR 4-0340
 Cartriseal Corp 3515 W Touhy Ave Chicago 45 III OR 3-7505
 Cascade Research Corp 53 Victory Lane Los Gatos Calif EL 4-9900
 Cash Valve Mfg Corp A W 666 E Wabash Ave Decatur Ill 2-8574
 Caterpillar Tractor Co Peoria Ill
 Cavitron Electron Oscillator Co Div Short Wave Plastic Forming 355 N Newport Blvd Newport Beach Calif LI 8-6123
 C B C Electronics Co 2601 N Howard St Philadelphia 33 Pa GA 3-2797
 CBS-Hytron Div Columbia Broadcasting System 100 Endicott St Danvers Mass SP 4-2360
 Cedar Eng'g Inc 5806 W 36 St Minneapolis 16 Minn WE 9-7858
 CELCO Constantine Eng'g Labs Co P O Box 555 Mahwah NJ DA 7-1123
 Centaur Studios 7657 Melrose Ave Hollywood 46 Calif WE 1-8154
Centralab Div Globe-Union 938Y E Keefe Milwaukee 1 Wis WO 2-9200
 President Wm S Parsons
 General Sls Mgr—Walter Peek
 Sls Mgr—(capacitors)—Douglas E Thatcher
 Sls Mgr—Distributor Div—Bruce E Vinckemulder
 Assistant Sls Mgrs—
 Variable Resistors—James A Hannon
 Switches—Robert Ceary
 Capacitors—John Lefebber
 Steatite Ceramics—Harvey Schmit
 Packaged Electronic Circuits—Joe Fothergill
 Export Mgr—Paul H Lamboley
 Adv Mgr—Frank Apple
CANADA—Centralab Canada Ltd 804 Mt Pleasant Road Toronto
CALIFORNIA—San Francisco—IDS—Logan Sales Co 154 Eighth St Hemlock 1-5127
 Beverly Hills—IDS—Walter S. Harmon Co P O Box 1380 Oleander 5-6340 Olympia 2-5616
 Beverly Hills—IDS—Richard L Stone Sales Co 9015 Wilshire Blvd Broadshaw 2-4916
COLORADO—Denver—IDS—McCloud & Raymond Co 5528 E Colfax Ave Florida 5-3525
GEORGIA—Atlanta—IDS—Frank Nickerson 1150 Zonolite Rd NE Trinity 5-8908
ILLINOIS—Chicago—BO—IDS—F L Tiegns and A A MacDonald 5308 W Diversey Palisade 5-5366
 Chicago—IDS—Earl T Champion 6459 N Sheridan Road Ambassador 2-3565
INDIANA—Indianapolis—IDS—L M DeVoe Co 4010 Washington Blvd Atwater 3-1395
IOWA—Cedar Rapids—IDS—Jerry Vrbik 615 Guaranty Bldg 4-0833
MASSACHUSETTS—Needham — IDS — Stanley A Harris Co 317 Chestnut St Needham 3-4780 3-4781
MICHIGAN—Detroit—IDS—R C Merchant 18411 W McNichols Rd Kenwood 5-6000
MINNESOTA—Minneapolis—IDS—Merrill K Franklin 338 E Franklin Federal 6-2315—6-1805
MISSOURI—St Louis—IDS—Theodore R Lowell 8021 N Normandy Evergreen 5-7803 Sterling 1-6290
NEW JERSEY—Jersey City—IDS—D P Golasso 971 Bergen Ave Coldfield 9-7277 Digby 4-1763
 New Brunswick—IDS—Jerome Bresson 75 Paterson St Charter 9-8787—9-8788
NEW YORK—New York City—IDS—James M Pickett 205 E 66th St Trafalgar 9-9520
 Dewitt—IDS—George P Marron The Kallusch Bldg 4455 E Genesee St Syracuse Phone 75-1686-7
 Phelps & Amsterdam—DS—LeRoy & McGuire Inc R D #1 Phelps Kingswood 8-4891 and R D #4 Amsterdam Victor 2-5979
OHIO—Brecksville—IDS—Allen Nace Co 7601 Parkview Road Jackson 6-4323
 Cleveland—DS—F A Daugherty & Co 1120 Croyden Road Hillcrest 2-3311
PENNSYLVANIA—Philadelphia—IDS—Except Phila S K Macdonald Inc 1531 Spruce St Kingsley 5-1205
 Philadelphia—IDS—Jerome Bresson—See New Jersey
TENNESSEE—Memphis—IDS—Al E Engelman 3205 Crump Ave Glendale 8-6263
TEXAS—Dallas—IDS—Robert E Nesbitt 1925 Cedar Springs Riverside 7-5824
WASHINGTON—Seattle—IDS—J J Bocker Co 221 W Galer P O Box 9077 Alder 6470
CANADA—Toronto—IDS—P J Heenan Co 804 Mt Pleasant Road Hudson 1-2291
 Toronto—DS—R C Kahrner 73 Crockford Blvd Redfern 7078
 Redfern 7078
 Vancouver—IDS—D E McLennan 1624 W Third Ave Bayview 2898
HAWAII—Honolulu—IDS—Brenna & Browne P O Box 2098 Honolulu 5 TH Phone 262575
 Central Coil Co 1720 N Luett St Indianapolis 22 Ind ME 2-6344
 Central Electronic Mfrs Inc Sub Nuclear Corp of America 2 Richmond Pl Denville NJ RO 9-4200
 Central Electronics Inc 1247 W Belmont Ave Chicago 13 III FA 7-7460
 Central Porcelain Co 511 Railroad St Columbiana Ohio IV 2-3313
 Central Research Labs Red Wing Minn DU 8-3566
 Central Scientific Co 1700 Irving Park Rd Chicago 13 III WE 5-8600
 Central Scientific Co of Calif 1040 Martin Ave Santa Clara Calif CH 8-1600
 Central Screw Co 3501 Shields Ave Chicago 9 III Central Transformer Co 910 W Jackson Blvd Chicago 7 III TA 9-1936
 Century Cnr 1534 N Clyburn Ave Chicago 10 III Century Electric Co 1806 Pine St St Louis 3 Mo CE 1-4920
 Century Electronics Co 34 Oleander St Cnoea Fla 2040
 Century Electronics & Instruments Inc 1333 N Utica Ave Tulsa 10 Okla LU 4-7111
 Century Engineers 2741 N Naomi St Burbank Calif VI 9-2114
 Century Lighting Inc 521 W 43 St New York 36 NY CH 4-7050
 Century Plating Co 229 Ferris Ave White Plains NY WH 8-3777
 Century Protector Corp 729 7 Ave New York 19 NY CI 5-7048
 Ceramaseal Inc P O Box 25 New Lebanon Center NY WL 3-5851
 Cerro De Pasco Sales Corp 300 Park Ave New York 22 NY MU 8-8822
 Certified Radio Labs 5507 13 Ave Brooklyn 19 NY GE 8-8080
 CG Electronics Corp 305 Dallas St N E Albuquerque New Mex 6-6121
 CGS Laboratories Inc 391 Ludlow St Stamford Conn DA 4-9508
 Chace Co W M 1600 Beard Ave Detroit 9 Mich VI 2-7400
 Chance Vought Aircraft Inc Dallas Texas
 Channel Master Corp Ellenville NY 1300
 Chase Brass & Copper Co 236 Grand St Waterbury 20 Conn PL 6-9444
 Chase-Shawmut Co 374 Merrimac St Newburyport Mass HO 2-6662
 Chase & Sons 26 Spruce St N Quincy Mass PR 3-5100
 Chassis Trak Inc 525 S Webster Ave Indianapolis 19 Ind FL 9-5407
 Chatham Electronics Div Gera Corp W Mt Pleasant Ave Livingston NJ LI 6-1100
 Chaffin Eng'g Associates 1401 Middle Harbor Rd Oakland 20 Calif HI 4-4209
 Chemalloy Electronics Corp Gillespie Airport Santee Calif HI 4-7661
 Chemical Commerce 166 Clifford St Newark 5 NJ MI 2-1457
 Chemical Process Co 1901 Spring St Redwood City Calif EM 9-0071
 Chemical Products Coro King Philip Rd E Providence 14 R I GE 4-1770
 Chemo-Textiles Inc P O Box 169 W Warwick R I VA 1-4121
 Cherry Electrical Products Corp 1650 Deerfield Rd Highland Park Ill ID 2-8182
 Chesapeake Instrument Corp Shadyside Md UN 7-2151
 Chester Cable Corp 1000 Ton St Chester NY CH-2221
 Chester Morton Electronics Corp 10 St & Morton Ave Chester Pa CH 3-8584
 Chicago Aerial Industries Inc 1980 N Hawthorne Ave Melrose Park Ill ES 9-1322
 Chicago-Allis Mfg Corp 113 N Green St Chicago 7 III MO 6-5050
 Chicago Condenser Corp 3255 W Armitage Ave Chicago 47 III CA 7-7070
 Chicago Electronic Eng'g Co 3223 W Armitage Ave Chicago 47 III CA 7-3130
 Chicago Electronic Labs 1222 W Madison St Chicago 7 III TA 9-1818
 Chicago Gasket Co 1271 W North Ave Chicago 22 III HU 6-3060
 Chicago Industrial Instrument Co 865 N Sangamon St Chicago 22 III TA 9-0234
 Chicago Magnetic Control 1616 N Damen Ave Chicago 47 III AR 6-7409
 Chicago Miniature Lamp Works 1500 N Ogden Ave Chicago 10 III MO 4-1741
 Chicago Rivet & Machine Co 950 S 25 Ave Bellwood III LI 4-5100
 Chicago Screw Co Div Standard Screw Co 2701 Washington Blvd Bellwood III ES 8-7400
 Chicago Standard Transformer Corp 3501 W Addison St Chicago 31 III IN 3-7400
 Chicago Steel Furnace Co 9326 S Anthony Ave Chicago 28 III RE 1-0280
 Chicago Telephone of Calif 105 Pasadena Ave S Pasadena Calif CL 5-7186
 Chicago Telephone Supply Corp 1142 W Beardsley Ave Elkhart Ind B-0310
 Christiansen Co C B 164 Pennington St Newark 5 NJ MA 3-4979
 Christie Electric Corp 3410 W 67 St Los Angeles 43 Calif PL 3-2607
 Chromatic TV Labs West Coast Devel Lab 1476 66 St Emeryville 9L 8-3831
 Chromatic TV Labs 1501 Broadway New York 36 NY BR 9-8700
 Chromium Corp of America P O Box 1229 Waterbury 20 Conn PL 4-3141
 Chrysler Corp Missile Div P O Box 2628 Detroit 31 Mich
 Chu Associates 634 Waverly St Framingham Mass TR 2-0006
 Churchill Lighting Corp 344 Franklin St Melrose 76 Mass ME 4-4700
 Ciba Co Plastics Div Kimberton Pa WE 3-5886
 Cinch Mfg Corp 1026 S Homan Ave Chicago 24 III NE 2-2000
 Cinch-Jones Sls Div Cinch Mfg 1026 S Homan Chicago III Nevada 2-2000
 President—Lester W Tarr
 VP & Gen Mgr—E J Pool
 VP Sales—S Pfannstiel
 VP & Dev Engr—S M Del Comp
 Vice Pres—B. F. Butts
 VP Finance—E L Hvale
 Purch Agt—A Hopkins
 Adv Mgr—C W Nelson
 Export Mgr—Carrington H Stone
 Traffic Mgr—T A Hopkins
 Sls Mgr—C W Nelson
 Plastics Engr—G F Mangin
ATLANTA—Cartwright & Bean 3223 Cain's Hill Place N W Cedar 7-2273
BOSTON—Ray Perron & Co 1870 Centre St Fairview 3-1008
CHICAGO—B F Becker covers Wisc—P G Tomy covers Iow-Minn
CLEVELAND—Scott & Steffen Inc 1836 Euclid Ave Tower 1-2626
DETROIT—Cinch-Jones Sales Div 2832 E Grand Blvd Trinity 3-9500
KALAMAZOO—Cinch-Jones Sales Div 5006 Lake Forest Dr Phone Fireside 5-5686
LOS ANGELES—Cinch-Jones Sales Div 1709 W Eighth St Dunkirk 8-9691
MEMPHIS—Cortwright & Bean 1336 Madison Ave Phone Broadway 5-1914
NEW YORK—J S Giampiccolo 475 Fifth Ave Murray Hill 3-8529
PITTSBURGH—Office moved to Baltimore
PHILADELPHIA—S K MacDonald Inc 1531 Spruce St Kingsley 5-1205
BALTIMORE—S K MacDonald Inc 2016 Winford Rd Baltimore 14
WASHINGTON DC—S K MacDonald Inc 3308 14th St N W Columbia 3938
HAMILTON ONT—Cinch-Jones Sales Div Gage Ave & Beach Rd Liberty 4-5791
Cincinnati Molding Co 2037 Florence Ave Cincinnati 6 Ohio WO 1-4380
Cincinnati Sub-Zero Products 3932 Reading Rd Cincinnati 29 Ohio PL 1-8810

ALPHABETICAL LISTING of MANUFACTURERS with LOCALIZER INDEX

- Cincinnati Time Recorder Co 1733 Central Ave Cincinnati 14 Ohio CH 1-1995
- Cinema Eng'g Div Aerovox Corp 1100 Chestnut St Burbank Calif VI 9-5511
- Cinema-Television Ltd Worsley Bridge Rd Lower Sydenham London S E 26 England Hither Green 4600
- Cinematic Developments 2125 32 Ave San Francisco 16 Calif MO 4-2435
- Circon Component Co Santa Barbara Municipal Airport Goleta Calif WO 8-2011
- Circuit Instruments Inc P O Box 1438 St Petersburg 1 Fla DI 2-8051
- Cir-Pak Co 32-44 Francis Lewis Blvd Flushing 58 NY City Chemical Corp 132 W 22 St New York 11 NY WA 9-2723
- Clairex Corp 50 W 26 St New York 10 NY WA 9-1668
- Clarage Fan Co Kalamazoo Mich FI 9-1541
- Clare & Co C P 3101 Pratt Blvd Chicago 45 III AM 2-7700
- Claremont Tube Corp 36-02 35 Ave Long Island City 6 N Y
- Clark Controller Co 1146 E 152 St Cleveland 10 Ohio WL 1-2000
- Clark Crystal Co 2 Farm Rd Marlboro Mass 1411
- Clark Electronic Labs Box 165 Palm Springs Calif 8-3011
- Clarostat Mfg Co Washington St Dover N H 975
- Clary Corp 408 Junipero St San Gabriel Calif AT 7-6111
- Clauss Cutlery Co 223 Prospect St Fremont Ohio FE 2-7344
- Clear Beam Antenna Corp 21341 Roscoe Blvd Canoga Park Calif DI 7-2255
- Clearprint Paper Co 1482 67 St Eremyville Calif OL 2-4762
- Clearview Co 172 Stanton St New York 2 N Y OR 3-0758
- Clegg Labs Div Clegg Inc Ridgedale Ave Morristown N J JE 8-7214
- Cleveland Container Co 6201 Barberton Ave Cleveland 2 Ohio OL 1-4500
- Cleveland Instrument Co 735 Carnegie Ave Cleveland 15 Ohio PR 1-7070
- Cleveland Metal Specialties Co 1783 E 21 St Cleveland 14 Ohio PR 1-4186
- Cleveland Wire Cloth & Mfg Co 3573 E 78 St Cleveland 5 Ohio DI 1-1832
- Clevite Harris Products Inc 6545 Carnegie Ave Cleveland 3 Ohio EN 1-3200
- Clevite Transistor Products 241 Crescent St Waltham 54 Mass TW 4-9330
- Clifton Precision Products Co Marole at Broadway Clifton Heights Pa MA 6-2101
- Clippard Instrument Lab 7374 Colerain Rd Cincinnati 24 Ohio
- Clough-Brenne Co 6014 Broadway Chicago 40 III AM 2-2200
- Clowes Ceramic Corn 3711 Calhoun Ave Chattanooga 7 Tenn TA 13571
- Coaxial Connector Co 37 N 2 Ave Mt Vernon N Y MO 8-6417
- Cobehrn Inc 18-24 Passaic Ave Caldwell N J CA 6-6675
- Cohan Egner Co 142 W 14 St New York 11 N Y CH 3-3411
- Cohn Coro Sigmond 121 S Columbus Ave Mount Vernon N Y MO 4-5300
- Coil Company of America 207 Washington St Northvale N J CL 5-3434
- Coilcraft Inc Cary III ME 9-2361
- Coil Eng'g & Mfg Co Roanoke Ind
- Coil Winders Inc New York Ave Westbury LI NY ED 4-3170
- Coil Winding Equipment Co 19 Maxwell Ave Oyster Bay NY OY 6-1285
- Colber Corp 26 Buffington St Irvington 11 NJ ES 5-3004
- Coleman Eng'g Co 6040 W Jefferson Blvd Los Angeles 16 Calif TE 0-6931
- Coleman Instruments Inc 318 Madison St Maywood III FI 3-8574
- Cole Radio Works 86 Westville Ave Caldwell NJ Collectron Corp 216 E 45 St New York 17 NY MU 2-8975
- Collins Electronics Mfg Corp Stevensville Md MI 3-4661
- Collins Radio Co 855 35 St N E Cedar Rapids Iowa EM 3-0281
- Colman Tool & Machine So 1017 N E 3 Ave Amarillo Texas DR 2-7422
- Colonial Alloys Co Ridge Ave & Crawford St Philadelphia 29 Pa GE 8-2272
- Colonial Insulator Co 945 Grant St Akron 11 Ohio PR 3-6611
- Colorado Research Corp 4697 E Evans Ave Denver 22 Colo SK 6-8327
- Columbia Electric Mfg Co 4519 Hamilton Ave Cleveland 14 Ohio EN 1-8060
- Columbia Metal Box Co 260 E 143 St New York 51 NY LU 5-2525
- Columbia Products Co 6625 Shakespeare Rd Columbia SC 3-7031
- Columbia Records Div Columbia Broadcasting System 799 7 Ave New York NY CI 5-7300
- Columbia Tape Mills Bank St E Greenville Pa
- Columbia Technical Corp 61-02 31 Ave Woodside 77 NY AS 8-7401
- Columbia Wire & Supply Co 2850 Irving Park Rd Chicago 18 III CO 7-3160
- Columbian Carbon Co Mapico Color Unit 380 Madison Ave New York 17 NY MU 7-2300
- Columbus Process Co 2850 Southeastern Ave Columbus Ind 2-4419
- Column Machine Co 87 State St Lynn Mass LY 3-0775
- Colvin Labs Inc 364 Glenwood Ave E Orange NJ OR 7-1221
- Comac Instrument Co 66-11 99 St Forest Hills 74 NY II 9-6941
- Comar Electric Co 3349 Addison St Chicago 18 III JU 8-2410
- Commercial Controls Corn Sub Friden Calculatinn Mach 1 Leighton Ave Rochester 2 NY BU 8-1600
- Commercial Radio Monitoring Co P O Box 7037 Kansas City 13 Mo KA 3-5302
- Commercial Radio Sound Cora 652 1 Ave New York 16 NY OR 9-0400
- Communication Accessories Co 110 St & 71 Hwy Hickman Mills Mo BR 1-1700
- Communication Equipment & Eng'g Co 5646 W Race Ave Chicago 44 III ES 8-3109
- Communication Measurements Labs 350 Leland Ave Plainfield NJ PL 4-5502
- Communication Products Co Marlboro NJ FE 8-1880
- Communications Co Coral Gables Fla HI 6-0846
- Community Eng'g Corp Box 824 State College Pa AD 7-7221
- Computer Control Co 92 Broad St Wellesley 57 Mass WE 5-6220
- Computer Eng'g Associates 350 N Halstead St Pasadena 8 Calif EL 5-7121
- Computer Instruments Corp 92 Madison Ave Hempstead NY IV 3-8200
- Computer Measurements Corp 5528 Vineland Ave N Hollywood Calif ST 7-0401
- Computing Devices of Canada Ltd P O Box 508 Ottawa Ontario Can PA 8-1761
- Conant Labs 6500 O St Lincoln 5 Nebr 2-5774
- Concert Hall Society 71 5 Ave New York 3 NY AL 5-5156
- Condenser Machinery Co 28 Harbor St Stamford Conn FI 8-5394
- Condenser Products Inc 1018 Pearl St Nashville Tenn AL 6-1429
- Condenser Products Div New Haven Clock & Watch Co 140 Hamilton St New Haven 4 Conn MA 4-1174
- Con-Elco 1711 S Mountain Ave Monrovia Calif
- Conn Hard Rubber Co P O Box 1911 New Haven 9 Conn SP 7-7631
- Conn Ltd C G 1101 E Beardsley Ave Elkhart Ind 3-3350
- Conn Marine Instrument Co Essex Conn SO 7-8960
- Conn Telephone & Electric Corp 70 Britannia St Meriden Conn RE 5-7941
- Connector Corp 6025 N Keystone Ave Chicago 30 III KE 9-3108
- Connector Corp of America 3223 Burton Ave Burbank Calif VI 9-2129
- Conoff Corp 2100 Arch St Philadelphia 3 Pa LO 7-7560
- Conrad Inc 19217 E Foothill Blvd Glendora Calif EV 5-1241
- Conrad Inc 141 Jefferson St Holland Mich 3161
- Conrad & Moser 2 Borden Ave Long Island City 1 NY ST 4-3616
- Consolidated Avionics 66 Brooklyn Ave Westbury NY ED 4-8400
- Consolidated Electrodynamics Corp 300 N Sierra Madre Villa Pasadena Calif SY 6-9381
- Consolidated Electrodynamics Corp Rochester Div 1775 Mt Read Blvd Rochester 4 NY GL 3-7972
- Consolidated Electronic Industries 100 E 42 St New York 17 NY
- Consolidated Productions Inc Broward Int'l Airport Ft Lauderdale Fla JA 2-8551
- Consolidated Resistance Co of America 44 Prospect St Yonkers 1 NY YO 3-5900
- Consolidated Vacuum Corp 1775 Mt Read Blvd Rochester 3 NY
- Consolidated Wire & Associated Cos 1635 S Clinton St Chicago 16 III HA 1-4441
- Constad Labs 85-02 162 St Jamaica NY JA 6-5555
- Constantin & Co C L Route 46 Lodi NJ Gr 1-0100
- Consumer Industrial Products P O Box 128 Cuyahoga Falls Ohio WA 8-0113
- Contact Inc Maynard Mass TW 7-2642
- Continental Connector Corp 34-63 56 St Woodside 77 NY TW 9-4422
- Continental-Diamond Fibre Corp Newark Dela EN 8-8531
- Continental Electric Co Taylor Tubes Inc 6 N Michigan Ave Chicago 2 III FI 6-1433
- Continental Electric Co 325 Ferry St Newark 5 NJ MI 2-4050
- Continental Electronics Ltd 302 Oakland St Brooklyn 22 NY EV 3-3331
- Continental Electronics Mfn Co 4212 S Buckner Blvd Dallas 77 Texas EV 1-1137
- Continental Screw Co New Bedford Mass
- Continental Wire Corp Box 363 Wallingford Conn CO 9-7718
- Continental X-Ray Corp 1536 N Clybourn Ave Chicago 10 III MI 7-3711
- Control Circuits Inc 103 Court St Middletown Conn Control Corp 77 1/2 Central Ave N E Minneapolis 14 Minn FE 5-7893
- Control Div Magnetics Inc Box 391 Butler Pa 7-3787
- Control Products Inc 306 Sussex St Harrison NJ HU 2-0213
- Controlled Atmosphere Enclosures Corp 239-11 141 Ave Springfield Gardens 13 LI NY LA 8-7811
- Control Specialists Inc 115 E Arbor Vitae St Inglewood 1 Calif OR 8-4688
- Control Specialty Corp 1515 Spring Houston 5 Texas CA 5-5200
- Convaiv Pomona Div General Dynamics Corp P O Box 1011 Pomona Calif LY 9-5111
- Cook Ceramic Mfg Co Prospect St Trenton NJ EX 3-4135
- Cook Electric Co 2700 Southport Ave Chicago 14 III DI 8-6700
- Cook Co Frank R 36 S Santa Fe Dr Denver 23 Colo SH 4-1753
- Cook Labs Inc 101 2 St Stamford Conn FI 8-7578
- Co-operative Industries Inc 100 Oakdale Rd Chester NJ CH-255
- Cooper Co D C 1467 S Michigan Ave Chicago 5 III HA 7-8046
- Cooper Electronics Inc 5637 Tulip St Philadelphia 24 Pa JE 5-7792
- Copperwell Steel Co Wire and Cable Div Glassport Pa MO 4-7131
- Corbett Science Labs F W 3117 Venice Blvd Los Angeles 19 Calif RE 3-5251
- Corbin Corp 5419 56 Pl Riverdale Md AP 7-7676
- Cords Limited Div Essex Wire Corp 221 Dodge Ave DeKalb III 6-2721
- Cornelius Co 550 39 Ave N E Minneapolis 21 Minn SU 8-8613
- Cornell-Dubilier Electric Corp 333 Hamilton Blvd S Plainfield NJ PL 6-9000
- Corning Glass Works Corning NY 2-5011
- Sales Manager—Charles Harwood
- Glass Electronic Components
- NEW YORK-SE—M R Berell 718 Fifth Avenue Circle 6-9224
- CHICAGO-SE—Jack Beck Merchandise Mart Delaware 7-6400
- LOS ANGELES-SE—H B Gumbart 1125 W Sixth St Phone Michigan 8091
- Cornish Wire Co 50 Church St New York 7 NY BA 7-5140
- Corona Eng'g Service 94-52 Corona Ave Elmhurst 73 NY IL 7-2777
- Corrugated Paper Products 2233 Utica Ave Brooklyn 34 NY ES 7-6112
- Corry Jamestown Mfg Corp 43 N Center St Corry Pa 2-8221
- Corson Electric Mfg Corp 540 39 St Union City NJ UN 6-4227
- Cosa Corp 405 Lexington Ave New York 17 NY OR 9-3560
- Cosmic Condenser Co 853 Whittier St Bronx NY LU 9-3360
- Cosmic Radiation Labs 247 Blue Point Ave Blue Point LI NY EM 3-6130
- Coscor (Canada) Ltd 301 Windsor St Halifax Nova Scotia Canada
- Coto-Cole Co 65 Pavilion Ave Providence 5 RI WI 1-3355
- Couch Ordnance Inc 3 Arlington St N Quincy 71 Mass PR 3-0074
- Cox & Co 115 E 23 St New York 10 NY OR 4-4727
- Crafting Mfg Co 1615 Collamer Ave Cleveland 10 Ohio GL 1-1225
- Craft Labs 209 Ayliffe Ave Westfield NJ WE 2-5464
- Craig Systems Inc 90 Holten St Danvers Mass SP 4-1870
- Cramer Controls Corp Centerbrook Conn SO 7-8255
- Crane Packing Co 6400 Oakton St Morton Grove III OR 4-0100
- Crawford's of Beverly Hills 456 N Rodeo Dr Beverly Hills Calif BR 2-3231
- Crescent Co 20 Central Ave Pawtucket RI PA 2-3100
- Crescent Eng'g & Research Co 5440 N Peck Rd El Monte Calif GI 4-0528
- Crescent Industries Inc 5900 W Touhy Ave Chicago III RD 3-6464
- Crest Transformer Corp 1834 W North Ave Chicago 22 III EV 4-1609
- Crittenden Transformer Works 1220 Nadeau St Los Angeles 1 Calif LU 8-6173
- Croname Inc 3701 Ravenswood Ave Chicago 13 III BT 8-7500
- Cro-Plate Co 747 Windsor St Hartford 1 Conn JA 7-8273
- Crosby Labs Inc Box 233 Robbins Lane Hicksville NY WE 1-3191
- Cross Co H 15 Beekman St New York 38 NY WO 2-2044
- Crown Controls Co 40 S Washington St New Bremen Ohio 2311
- Crown Industrial Products Co 713 Amsterdam Woodstock III 1900
- Crucible Steel Co of America Henry W Oliver Bldg Pittsburgh 22 Pa AT 1-3800
- Cryco Inc 1138 Mission St S Pasadena Calif SY 9-7674
- Crystal-Westlake Corp Lenni Rd Lenni Mills Pa ME 6-5170
- C-Thru Ruler Co 827 Windsor St Hartford Conn CH 7-0182
- Cudner & O'Connor Co 4035 W Kinzie St Chicago 24 III VA 6-0200
- Cunningham Son & Co James 33 Litchfield St Rochester 8 NY BA 5-7240
- Curtis Development & Mfg Co 3266 N 33 St Milwaukee 16 Wisc HI 5-1817
- Curtiss-Wright Corp Electronics Div 631 Central Ave Carlstadt NJ GE 8-4000
- Custom Comments Inc P O Box 248 Caldwell NJ CA 6-3403
- Custom Gear Co 648 College St South Bend 28 Ind CE 4-5188
- Custom Scientific Instruments Inc 541 Devon St Kearny NJ KE 2-6403
- Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wisc BR 1-7800
- Cycle Transformer Corp 356 Glenwood Ave E Orange 11 NJ OR 4-0731
- Cyclotron Specialties Co P O Box 1000 Moraga Calif DR 6-4712

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- Daco Instrument Co Tillary & Prince Sts Brooklyn 1 NY 1L 5-8350
- Dage Electric Co 67 N 2 St Beech Grove Ind ST 6-0458
- Dage TV Div Thompson Products W 10 St Michigan City Ind TR 2-1823
- Dahlstrom Metallic Door Co Buffalo & 2 Sts Jamestown NY 7991
- Dakota Eng'g Inc 6641 Crenshaw Blvd Los Angeles 43 Calif PL 8-6090
- Dale Boisen Co 2928 Nebraska Ave Santa Monica Calif EX 5-1087
- Dale Products Inc P O Box 136 Columbus Nebr
PHONE LOcust 4-3131
President—George Risk
Sec'y Treas—Roymond Arndt
Vice Pres—J Motejko
Sls Mgr—R H Engstrom
Branches—Albuquerque NM Burbank Calif
Bronx Nomes—Dole—Dolohm
- PRODUCTS
- Miniature Precision Power Resistors
Deposited Carbon Resistors Encapsulated
Resistors Multi-turn Sealed Potentiometers
Pressurized Potentiometers Trimmer
Potentiometers Knobs Diols Special Design
Electronic Components
- Da-Lite Screen Co Warsaw Ind DI 2-9200
- Dallons Labs 5066 Santa Monica Blvd Los Angeles 29 Calif No 4-1951
- Dalmator Co Div Dalmo Victor Co Div Textron Inc 1375 Clay St Santa Clara Calif CH 8-9415
- Dalmator Co 534 Laurel St San Carlos Calif LY 3-4180
- Dalmo Victor Co Div Textron Inc 1515 Industrial Way Belmont Calif LY 1-1414
- Damon Recording Studios 117 W 14 St Kansas City 5 Mo VI 2-2525
- Damp-Chaser Inc Box 520 Hendersonville NC HE 6084
- Dana Inc P A 233 Broadway New York 7 NY WO 4-5144
- Dane Electronic Labs Inc P O Box 209 Salem Mass
- Dano Electric Co Winsted Conn
- Dante Electric Mfg Co Bantam Conn JO 7-5307
- Darco Industries Inc Gyro Dynamics Div 2151 E Rosecrans Ave El Segundo Calif OS 5-3381
- DATAmatic Corp 151 Needham St Newton Highlands 61 Mass DE 2-6960
- Datex Div M Giannini & Co 1307 S Myrtle Ave Monrovia Calif EL 9-5381
- Datran Electronics 3615 Aviation Blvd Manhattan Beach Calif OS 5-7131
- Daubert Chemical Co 333 N Michigan Ave Chicago 1 III AN 3-4342
- Daven Co Route 10 Livingston NJ LI 6-4300
- Davenport Mfg Co 1713 N Ashland Ave Chicago 22 III DI 2-5620
- Davies Molding Co Harry 1428 N Wells St Chicago 10 III MI 2-7240
- Davis & Co J W 9212 Denton Dr Dallas 35 Texas FL 2-8405
- Davis-K-Products Co 135 W 29 St New York 1 NY LO 4-1978
- Davison Chemical Co Box 488 Pompton Plains NJ TE 5-3069
- Daystrom Instrument Div Daystrom Inc Archbald Pa JE 1100
- Daystrom Pacific Corp Potentiometer Div 11150 La Grange Ave Los Angeles 25 Calif GR 8-3796
- Daystrom Pacific Corp 3030 Nebraska Ave Santa Monica Calif EX 3-6755
- Dayton Aviation Radio & Equipment Corp R R 3 Troy Ohio FE 2-5513
- Daytronic Corp 216 S Main St Dayton 2 Ohio
- Dazor Mfg Corp 4481 Duncan Ave St Louis 10 Mo JE 2-2400
- Deagan Inc J C 1770 W Berteau Ave Chicago 13 III LA 5-4364
- Dearborn Electronic Labs Inc 1421 N Wells St Chicago 10 III WH 3-2412
- Dearborn Glass Co 6603 S Harlem Ave Bedford Park Argo III LI 5-0900
- Decatur Electronic Industries Corp 203 Orinoco Dr Brightwaters LI NY BA 7-6680
- Decimeter Products Co 730 Hooker St Denver 4 Colo MA 3-0726
- Decker Aviation Corp 1361 Frankford Ave Philadelphia 25 Pa GA 5-2300
- DeCoursey Eng'g Lab 11828 W Jefferson Blvd Culver City Calif EX 7-9668
- Dee Electric Co 1101 N Paulina St Chicago 22 III HU 6-7959
- Defender Instrument & Regulator Co Boody III EL 2519
- Defiance Eng'g & Microwave Corp Beverly Airport Beverly Mass WA 2-8100
- Defiance Printed Circuit Corp Moulton & Munroe Sts Georgetown Mass FL 2-2261
- Deitz Co S J 9 E Wesley St S Hackensack NJ HU 8-8516
- DeJur-Amsco Corp Electronic Sales Div 45-01 Northern Blvd Long Island City 1 NY AS 8-1040
- Delaware Products Co 300 Broadway Camden 3 NJ WO 6-2284
- Delco Radio Div General Motors Corp Kokomo Ind GL 7-8211
- Del Electronics Corp 41 N Mac Quisten Pkwy Mt Vernon N Y MO 7-8878
- Delevan Electronics Corp Roycroft Camous E Aurora NY CY 3620
- Delta Chemical Works 23 W 60 St New York 23 NY PL 7-6317
- Delta Co 333 W 24 Pl Chicago 16 III VI 2-7100
- Delta Coils Inc 1128 Madison Ave Paterson 3 NJ MU 4-5878
- Delta Radio Co 115 Worth St New York 13 NY RE 2-6649
- Deltime Inc 608 Fayette Ave Mamaroneck NY MA 9-5800
- Deltron Inc 2905 N Leithgow St Philadelphia 33 Pa RE 9-1559
- Deltron Corp 1507 Riverside Dr Los Angeles 31 Calif CA 2-0136
- Deming Indicator Co 1016 Acorn Dr Dayton 9 Ohio
- DeMornay-Bonardi Corp 780 S Arroyo Pkwy Pasadena Calif RY 1-7416
- Denison Eng'g Div American Brake Shoe 1160 Dublin Rd Columbus 16 Ohio Hu 8-1191
- Dennison Mfg Co 300 Howard St Framingham Mass TR 3-3511
- Denrad Mfg Co 310 W Woodard St Denison Texas HO 5-2336
- Denson Electronics Corp P O Box 122 Rockville Conn T 5-5198
- Denhoure Studios Inc 782 Commonwealth Ave Boston 15 Mass BE 2-5722
- Derivation & Tabulation Associates 67 Lawrence Ave W Orange NJ
- De Rochemont Associates Inc Louis 380 Madison Ave New York 17 NY OX 7-0350
- Design Tool Corp 80 Washington St New York 6 NY WH 3-7466
- Designers for Industry 4241 Fulton Pkwy Cleveland 9 Ohio
- Detroit Controls Corp 800 Union Ave Bridgeport 1 Conn ED 3-5106
- Detroit Controls Corp Norwood Controls Unit 934 Washington St Norwood Mass NO 7-4010
- Deutsch Co 7000 Avalon Blvd Los Angeles 3 Calif PL 1-4131
- Deutschmann Corp Tobe Norwood Mass NO 7-2620
- Devco Eng'g Inc P O Box 387 Caldwell NJ CA 6-0610
- Development Eng'g Co 9 Cross St Norwalk Conn VO 6-7720
- Devol Research Co Brookside Dr Greenwich Conn
- Devtronic Inc 1995 Spruce St Trenton 8 NJ LY 0-2543
- DeWald Radio Mfg Corp 35-15 37 Ave Long Island City 1 NY ST 4-9334
- Dewey & Almy Chemical Co 62 Whittemore Ave Cambridge 40 Mass TR 6-1400
- DeWitt Development Co 3008 W 127 St Blue Island III FU 8-2480
- Dialhnt Corp 60 Stewart Ave Brooklyn 37 NY HY 7-7670
- Diamond Antenna & Microwave Corp 7 North Ave Wakefield Mass CR 9-4650
- Diamond Coils Inc 540 39 St Union City NJ UN 7-6797
- Diamond Drill Carbon Co 244 Madison Ave New York 16 NY LE 2-3006
- Diamond Power Specialty Corp Lancaster Ohio OL 3-6540
- Diamond Tool Eng'g Co 108 Massachusetts Ave Boston 15 Mass CO 6-1630
- Diamonite Products Mfg Co 217 4 St N E Canton 2 Ohio GL 6-2446
- Diatron Co 3327 Dixie Dr Houston 21 Texas JA 2-4458
- Dice Co J W 16 Highwood Ave Englewood NJ LO 9-0471
- Dictaphone Corp 420 Lexington Ave New York 17 NY M 4-4470
- Die-FORM Circuits Inc 6045 W Ogden Ave Chicago 50 III OL 6-0211
- Diehl Mfg Co FINDERNE Ave Somerville NJ RA 5-2200
- Dialect Inc Cedar & Gross Sts Fords NJ VA 6-6636
- Dielectric Materials Co 5315 N Ravenswood Ave Chicago 40 III LO 1-5833
- Dielectric Products Eng'g Co Raymond Md CA 200
- Dietz Co Henry G 12-16 Astoria Blvd Long Island City 2 NY RA 6-3347
- Dietz Design & Mfg Co Grandview 13 Mo SO 1-7216
- Digitronics Corp 35-10 36 Ave Long Island City 6 NY EX 2-3405
- Dielectric Corp Allen Blvd Farmingdale LI NY CH 9-7999
- Dilectron Div Rudeman Co 2669 S Myrtle Ave Monrovia Calif RY 1-8631
- Dimco-Grav Co 207 E 6 St Dayton 2 Ohio HE 6703
- Dinion Coil Co Caledonia NY 88
- Dirigo Commass & Instrument Co Boeing Field Box 37 Seattle 8 Wash LA 5940
- Dit-Mco Inc Electronics Div 911 Broadway Kansas City Mo HA 1-8484
- Dittmore-Freimuth Corp 2517 E Norwich St Milwaukee 7 Wisc HU 3-7724
- Dixon Crucible Co Joseph 167 Wayne St Jersey City 3 NJ DE 3-3000
- Dmeter Mfg Co 22 Larkin Plaza Yonkers NY YO 9-1770
- D & M Products 13144 W McNichols Rd Detroit 35 Mich UN 1-0802
- Doelcam Div Minn-Honeywell 1400 Soldiers Field Rd Boston 35 Mass
- Dolinko & Wilkens Inc 1907 Summit Ave Union City NJ IIN 7-6630
- Dolin Metal Products Inc 315 Lexington Ave Brooklyn 16 NY NE 8-9472
- Dollar Co Robert Communications Equip Div 50 Drumm St San Francisco 11 Calif EX 2-8454
- Dollin Corp 636 S 21 St Irvington 11 NJ ES 4-3000
- Donnelly Mfg Co 580 Winter St Waltham 54 Mass TW 3-5700
- Donner Scientific Co 888 Galindo St Concord Calif MU 2-6161
- Dormeyer Industries 3418 Milwaukee Ave Chicago 41 III AV 3-4000
- Dorne & Margolin 29 New York Ave Westbury NY ED 4-3200
- Dossert Mfg Corp 249 Huron St Brooklyn 62 NY EV 9-9020
- Doty Acoustical Electronic Labs 431 Broome St New York 13 NY EL 1-0202
- Douglas Aircraft Co 3000 Ocean Park Blvd Santa Monica Calif EX 4-3241
- Douglas Instrument Labs 176 Norfolk Ave Boston 19 Mass HI 5-4836
- Douglas Microwave Co 252 E 3 St Mt Vernon NY MO 8-6900
- Douglas Radio Labs 176 Norfolk Ave Boston 19 Mass HI 5-4836
- Douglas Roesch Cable Div Hall-Scott Inc 2950 N Ontario St Burbank Calif VI 9-3231
- Doven Mach & Eng Inc 2706 W Van Buren St Chicago 12 III SA 7-3355
- Dow Chemical Co Midland Mich TE 2-2311
- Dow Corning Corp Midland Mich TE 2-2371
- Dow-Key Co P O Box 57 Warren Minn 2-7301
- Downing Crystal Co 191 Shaffer Ave Westminster Md WE 1192
- Drake Electric Works 3654 N Lincoln Ave Chicago 18 III LA 5-6883
- Drake Mfg Co 1713 W Hubbard St Chicago 22 III CH 3-4422
- Drakenfeld & Co B F 45 Park Pl New York 7 NY BA 7-6899
- Dressen-Barnes Corp 250 N Vinedo Ave Pasadena Calif RY 1-0643
- Dresser Electric Co 942 E Larned Detroit 7 Mich WO 2-9484
- Dresser-Ideda Co 875 Michigan Ave Columbus 8 Ohio AW 9-2123
- Driver Co Wilbur B 1875 McCarter Hwy Newark 4 NJ HU 2-5550
- Driver-Harris Co Harrison NJ HU 3-4800
- D & R Ltd 402 E Gutierrez St Santa Barbara Calif WO 5-4511
- Dry Screen Process Inc 1016 Madison Ave Pittsburgh 12 Pa FA 1-5255
- D & S Mfg Co 424 Burk Ave Ridley Park Pa
- Dubbings Sales Corp 226 Franklin Ave Hewlett NY FR 4-5600
- Du-Co Ceramics Co Box 278 Saxonburg Pa IL 2-1511
- Dudek & Co R C 407 N Maple Dr Beverly Hills Calif BR 2-8097
- DuKane Corp St Charles III ST-2300
- Dumont Airplane & Marine Instruments Inc 15 Wilham St New York 5 NY HA 2-6130
- Du Mont Labs Inc Allen B 760 Bloomfield Ave Clifton NJ MJ 4-7400
- Dumont Labs Allen B Industrial Tube Sales 2 Main Ave Passaic NJ MU 4-7400
- Dumore Co 1300 17 St Racine Wisc ME 3-8221
- Dunlap Electronics 764 9 St Des Moines 14 Iowa AT 8-0801
- Dunlee Corp 4558 W Congress St Chicago 24 III NE 2-3418
- Dunn Eng'g Associates 186 Massachusetts Ave Cambridge 39 Mass UN 4-0400
- Dunton Co M W 7 Goff St Providence RI DE 1-3600
- Duotone Co Locust St Keyport NJ KE 7-1501
- Du Pont De Nemours & Co E I Wilmington 98 Dela DL 4-5121
- Durable Rubber Products 609 W Lake St Chicago 6 III RA 6-3322
- Duralith Corp 1025 Race St Philadelphia 7 Pa WA 3-1900
- Duramark Inc P O Box 231 Port Washington NY PO 7-3232
- Durant Mfg Co 1950 N Buffum St Milwaukee 1 Wisc LO 2-5035
- Durez Plastics Div Hooker Electrochemical Co 1926 Walck Rd Niagara Falls NY LU-1863
- Duro Specialty Co 811 Boston St Lynn Mass LY 8-3479
- Durson Co 10416 National Blvd Los Angeles 34 Calif VE 7-1072
- Dwyer Eng'g Co Pine St Ext Nashua NH TU 3-3206
- Dyna Co 5142 Master St Philadelphia 31 Pa GR 7-5010
- Dyna-Empire Inc 1075 Stewart Ave Garden City LI NY PI 1-2700
- Dynalysis Development Labs Inc 11941 Wilshire Blvd Los Angeles 25 Calif ER 7-6786
- Dynamic Air Eng'g Inc 7412 Maie Ave Los Angeles 1 Calif LU 8-3292
- Dynamic Gear Co 20 Merrick Rd Amityville LI NY LI 1-3660
- Dynamics Instrumentation Co Div Alberhill Corp 1118 Mission St S Pasadena Calif RY 1-3318
- Dynamics Research Associates Div Universal Match Corp P O Box 5841 Ferguson 21 Mo JA 2-1620
- Dynamu Magnetronics Corp Div Maico Co 21 N 3 St Minneapolis 1 Minn FE 9-7041
- Dzus Fastener Co Box 185 Babylon NY MO 9-0494
- Eagle Electric Mfg Co 23-10 Bridge Plaza S Long Island City 1 NY ST 4-9200
- Eagle Electronics Corp P O Box 775 Meriden Conn BE 7-5528
- Eagle Pencil Co 703 E 13 St New York 9 NY CA 8-1000
- Eagle-Picher Co American Bldg Parkway & Walnut Cincinnati 2 Ohio PA 1-7010
- Eagle Signal Corp 202 20 St Moline III
- Eastern Air Devices Inc 385 Central Ave Dover NH
- Eastern Chemical Corp 34 Spring St Newark 4 NJ HU 2-6939
- Eastern Etching & Mfg Co Grape St Chicopee Mass

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- Eastern Industries Inc 100 Skiff St Hamden 14 Conn CH 8-3841
- Eastern Precision Resistor Corp 675 Barbey St Brooklyn 7 NY HY 5-0133
- Eastern Rolling Mills 1126 E 180 St New York 60 NY TA 3-2000
- Eastern Smelting & Refining Corp 109 W Brookline St Boston 18 Mass CO 6-7504
- Eastern Specialty Co 3617 N 8th St Philadelphia 40 Pa SA 2-0500
- Eastman Kodak Co 343 State St Rochester 4 NY 10 2-6000
- Eastman Pacific Co 2320 E 8 St Los Angeles 21 Calif TR 6317
- Eaton Electronics Corp Moodus Conn TR 3-8628
- Eaton Mfg Co Reliance Div 25 Charles Ave S E Massillon Ohio TE 2-1511
- Eberline Instrument Div Reynolds Electrical 805 Early St Santa Fe N Mexico 2-1881
- Ebert Electronics Corp 212-26 Jamaica Ave Queens Village 28 NY SP 6-1800
- Eckstein Radio & TV Co 2601 E Franklin Ave Minneapolis 6 Minn FE 9-7509
- Eclipse Fuel Eng'g Co 1100 Buchanan Rockford Ill 8-3751
- Eclipse-Pioneer Div Bendix Aviation Corp Teterboro NJ AT 8-2000
- Ed-Berl Products Inc 87 Merrick Rd Baldwin NY
- Edcliff Instruments 1711 S Mountain Ave Duarte Calif EL 8-4572
- Edcliff Instruments 205 W Duarte Rd Monrovia Calif EL 8-4574
- Edgerton, Germeshausen & Grier 160 Brookline Ave Boston 15 Mass CO 7-3520
- Edin Co 207 Main St Worcester 8 Mass PL 7-8394
- Edison Industries Thomas A Instrument Div 93 Lakeside Ave W Orange NJ OR 3-6800
- Edko Electronics Eng'g Co 202 Grand St Brooklyn 11 NY EV 4-2746
- Edo Corp 13-10 111 St College Point 56 LI NY FI 3-6000
- Edmund Scientific Co 101 E Gloucester Pike Barrington NJ LI 7-3488
- Egan Lab 107-56 113 St Richmond Hill 19 NY MI 1-0605
- Eicor Inc 4235 W North Ave Chicago 39 III HU 6-2060
- Eidson Electronic Co 1902 N 3 St Temple Texas PR 3-3901
- Eisler Eng'g Co 750 S 13 St Newark 3 NJ BI 3-5310
- Eitel-McCullough Inc (EIMAC) 798 San Mateo San Bruno Calif JU 8-1212
- Vice Pres—Manufacturing—G F Wunderlich
Vice Pres—Finance—E E McClaron
Dir of Marketing—O H Brown
Dir of Research—John S McCullough
Personnel Mgr—Robert S McMahan
Purch Agt—Donald Rogers
Adv Mgr—Berkley J Baker
- ATLANTA-R—J E Joyner Jr 2524 Jenny Wren Lane SW PO Box 341 Station A Plaza 8-4910
- BOSTON-R—Tim Coakley Sales Office 148 Needham St Newton Highlands DEcatur 2-4800
- CHICAGO-R—Royal J Higgins Co 10105 S Western Ave Cedarcrest 3-7388
- DENVER-R—McCloud & Raymond Co 5528 E Colfax Ave Florida 5-3525
- GRAND PRAIRIE TEXAS-R—Tex-O-Rama Sales Co PO Box 747 (Dallas) Andrew 2-0866 (Fort Worth) Crestview 4-4530
- JERSEY CITY-R—Adolph Schwartz 15 Exchange Place Room 919 Delaware 3-2424
- KANSAS CITY-R—Clyde H Schryver Sales Co 4550 Main St Room 224 Logan 1-4826-4827
- LOS ANGELES-R—Herb Becker 1140 Crenshaw Blvd Webster 1-1257
- SEATTLE-R—Rush Drake Associates 1806 Bush Place East 1737
- CANADA-R—Ahearn & Saper Ltd PO Box 715 Ottawa Ontario Phone Central 3-4088
- Elastic Stop Nut Corp of America 2330 Vauxhall Rd Union NJ MU 6-6000
- Elco Corp M St below Erie Ave Philadelphia 24 Pa CU 9-5500
- Elco Mfg Co 137 Herrick Rd New Hyde Park LI NY PI 6-0840
- Elcor Inc P O Box 354 McLean Va EL 6-4760
- Elco Tool & Screw Corp 1800 Broadway Rockford Ill 4-8611
- Eldema Corp 9844 Remer St El Monte Calif GI 4-7077
- Eldorado Electronics Co 1401 Middle Harbor Rd Oakland Calif GL 1-3210
- Electronic Mechanisms Inc P O Box 1156 Greenwich Conn GR 8-3564
- Electralab Inc "A" St Needham Heights 94 Mass NE 3-5000
- Electra Mfg Co 4051 Broadway Kansas City Mo WE 1-6864
- Electran Mfg Co 1901 Clybourn Ave Chicago 14 III BI 8-4596
- Electrend Products Corp Box 110 St Joseph Mich YU 3-5572
- Electric Auto-Lite Co Wire & Cable Div Port Huron Mich YU 5-6131
- Electric Coil Co 4911 S Marshfield Ave Chicago 9 III RE 7-0701
- Electric Cord Co 21 Spruce St New York 38 NY WO 2-2528
- Electric Design & Mfg Co Jefferson St Burlington Iowa PL 2-7685
- Electric Eye Equipment Co 1941 E Fairchild St Danville Ill 2000
- Electric Furnace Co W Wilson St Salem Ohio ED 2-4661
- Electric Hotpack Co Cottman Ave & Melrose St Philadelphia 35 Pa DE 3-1700
- Electric Indicator Co Camp Ave Stamford Conn DA 2-1671
- Electric Machinery Mfg Co 800 Central Ave Minneapolis 13 Minn FE 9-6751
- Electric Motors & Specialties King & Hampshire St Garrett Ind 613
- Electric Regulator Corp Pearl St Norwalk Conn VI 7-2401
- Electric Soldering Iron Co W Elm St Deep River Conn LA 6-5975
- Electric Specialty Co 211 South St Stamford 1 Conn FI 8-6203
- Electric Storage Battery Co Exide Automotive Div 42 S 15 St Philadelphia 2 Pa
- Electric Terminals Corp 2019 Center St Cleveland 13 Ohio MA 1-8062
- Electric Trading Co 313 Canal St New York 13 NY CA 6-0575
- Electrical Communications Inc 76 Clementina St San Francisco 3 Calif KL 2-1947
- Electrical Eng'g & Mfg Corp 4612 W Jefferson Blvd Los Angeles 16 Calif RE 3-0151
- Electrical Industries 691 Central Ave Murray Hill NJ CR 7-4300
- Electrical & Physical Instrument Corp 42-19 27 St Long Island City 1 NY ST 4-6389
- Electrical Products Research & Development Co 1206 Cherry St Toledo 4 Ohio CH 3-8107
- Electrical Refractories Co E Clark St E Palestine Ohio GA 6-433
- Electrical Service Co 1271 Mission St San Francisco 3 Calif UN 1-2245
- Electrical Specialty Co 158 11 St San Francisco 3 Calif HE 1-8450
- Electrical Testing Labs Inc 2 East End Ave New York 21 NY BU 8-2600
- Electrical Tower Service Inc 325 S Washington St Peoria Ill 3-9846
- Electrical Utilities Co 2427 St Vincent's Ave La Salle Ill 1732
- Electrical Windings Inc 2015 N Kolmar Ave Chicago 39 III BE 5-3360
- Electro Assemblies Inc 4444 N Kedzie Ave Chicago 25 III KE 9-3100
- Electro-Ceramics Inc 120 State St New Haven Conn LO 2-4134
- Electro-Chemical Eng'g & Mfg Co 750 Broad St Emmaus Pa WO 5-9061
- Electrochemical Industries Inc 35 Armory St Worcester 3 Mass PL 6-3846
- Electrodata Div Burroughs Corp 460 Sierra Madre Villa Pasadena Calif RY 1-0471
- Electro-Devices Inc 4 Godwin Ave Paterson 1 NJ AR 4-8989
- Electrodyn Co Endicott St Norwood Mass NO 7-3203
- Electro Eng'g Works 401 Preda St San Leandro Calif LO 9-3326
- Electro-Fabricators 44 Beacon Pl Pasadena Calif Conn CH 7-2401
- Electro Impulse Lab Inc 208 River St Red Bank NJ
- Electro Instruments Inc 3794 Rosecrans St San Diego 10 Calif CY 8-6144
- Electrola Inc 7517 N Clark St Chicago 26 III RO 4-5025
- Electromath Corp 42-14 Greenpoint Ave Long Island City 4 NY ST 4-3483
- Electro-Measurements Inc 7524 S W Macadam Ave Portland 1 Ore CH 6-3331
- Electro-Mec Lab Inc 47-51 33 St Long Island City 1 NY ST 6-3402
- Electro-Mechanical Div General Riveters Inc 785 Hertel Ave Buffalo 7 NY BE 9685
- Electro-Mechanical Instrument Co 8 & Chestnut St Perkasie Pa AL 7-6561
- Electro-Mechanical Specialties Co 1016 N Highland Ave Los Angeles 38 Calif HO 2-0793
- Electro-Medical Lab Inc S Woodstock 10 Vt 144M4
- Electro Metallurgical Co Div Union Carbide & Carbon 30 E 42 St New York 17 NY MU 7-8000
- Electro-Miniatures Corp 1060 Elm Ave Ridgefield NJ WH 3-7300
- Electromode Div Commercial Controls Corp 45 Crouch St Rochester 3 NY BU 8-1880
- Electro Motive Mfg Co Willimantic Conn HA 3-4551
- Electron Enterprises 6917 W Stanley Ave Berwyn Ill ST 8-2693
- Electronic Assembly Co 5 Prescott St Roxbury 19 Mass HI 5-7585
- Electronic Associates Inc Long Branch NJ CA 9-1100
- Electronic Batteries Inc 28-34 35 St Brooklyn 32 NY ST 8-3641
- Electronic Brazing Co 140 Glenridge Ave Montclair NJ PI 4-2160
- Electronic Coil Co 2506 N Ontario St Burbank Calif TH 2-9898
- Electronic Coil Engineers Inc 5830 Main St Hollydale Calif NE 6-4333
- Electronic Coils Inc P O Box 1665 Springfield Mass RE 6-6339
- Electronic Communication Equipment Co 1249 W Loyola Ave Chicago 26 III RO 1-1206
- Electronic Computer Co 6191 Ridge Ave Philadelphia 28 Pa IV 3-5226
- Electronic Contractors Inc 2101 SE 6 Ave Portland 14 Ore BE 4-3515
- Electronic Control Corp 1573 E Forest Ave Detroit 7 Mich TE 2-6625
- Electronic Control Systems 2136 Westwood Blvd Los Angeles 25 Calif GR 8-4266
- Electronic Creations Co 1178 E 180 St New York 60 NY SY 2-3510
- Electronic Designs Inc 28 School St Yonkers NY YO 9-4600
- Electronic Devices Inc 429 12 St Brooklyn 15 NY SO 8-3530
- Electronic Eng'g Co 362 W Bowery St Akron 7 Ohio FR 6-3191
- Electronic Eng'g Co of Calif 180 S Alvarado Los Angeles 57 Calif DU 2-7353
- Electronic Enterprises Inc 65 7 Ave Newark NJ HU 2-0630
- Electronic Fabricators Inc Efcron Div 682 Broadway New York 12 NY SP 7-4930
- ARLINGTON Mass-R—John E Boeing Co P O Box 186 Mission 8-2900 Covers New England
- CHICAGO-R R—Edward Stemm 5681 W Lake St Estebrook 9-2700 Covers Ill-Ind-Wis-Iowa-Minn
- CINCINNATI-R—Sheridan Associates Roselawn Center Bldg MEIrose 2460 Covers Cleveland-Ky-Pa W of Harrisburg
- CLEVELAND-R—Phil Johnson 5480 Queens Highway TXedo 4-8060 Covers Cleveland W Pa
- MIAMI FLA—Kimball & Twitchell Electronic Inc 2921 NW 6th Ave Franklin 1-0655
- DALLAS-R—George Weinreich & Associates 1210 Old Gate Lane Davis 1-2800 Covers Tex-La-Ark
- FERNDALE MICH-P—Electro Mec Assocos 109 E Nine Mile Rd Lincoln 7-1422 Covers Mich
- GREENVALE LI NY-R—H W Brede Co 75 Glen Cove Rd Roslyn 3-4700 Covers NY Staten-N-NJ Westchester
- KANSAS CITY MO-R—Maury E Bettis Co 406 W 34 St Logan 1-0772 Covers Nebr-Mo-W Kansas Tulsa
- PASADENA-R—Arvin Bell Co 385 E Green St Ryan 1-5492 Covers S Calif-Nev-New Mex-Ariz
- SAN FRANCISCO-R—E L Berman Co 780 Natoma St Underhill 3-0317 Covers N Calif-Hawaii
- SEATTLE-R—Ray Johnston Co 11009 Ewanston Ave Emerson 0956 Covers Wash-Ore-W Idaho-W Mont-Alaska
- TOWSON MD-R—Habcoc Electronic Sales Co 603 Aliethen Ave Valley 5-9637 Covers Pa-Del-Md-Va No Car-DC-So NJ
- TULSA-R—Cotton D Daniels P O Box 7122 Tulsa Okla Riverside 7-0234 (M E Bettis Co)
- EASTERN CANADA-R—J B Smyth 380 Craig St W Montreal Que Harbour 0729 Covers East Canada
- Electronic Instrument Co 84 Withers St Brooklyn 11 NY ST 2-2700
- Electronic Machine Parts Inc 204 Lafayette St New York 12 NY WA 5-9907
- Electronic Measurements Co Lewis St & Maple Ave Eatontown NJ EA 3-0300
- Electronic Measurements Corp 625 Broadway New York 12 NY GR 5-0610
- Electronics Mechanics Inc 101 Clifton Blvd Clifton NJ GR 3-4108
- Electronic Organ Arts 4878 Eagle Rock Blvd Los Angeles 14 Calif CL 6-6888
- Electronic Parts Mfg Co 508 25 St Union City NJ UN 5-4028
- Electronic Processes Corp of Calif 2190 Folsom St San Francisco 10 Calif UN 1-9595
- Electronic Products Co 111 E 3 St Mt Vernon NY MO 8-5368
- Electronic Products Div Post Machinery 140 Elliot St Beverly Mass WA 2-0811
- Electronic Rectifiers Inc 2102 Spann Ave Indianapolis 3 Ind ME 1-9566
- Electronic Research Associates 67 E Centre St Nutley 10 NJ NU 2-5410
- Electronics Corp of America 1 Memorial Dr Cambridge 42 Mass UN 4-8000
- Electronics Development Co 3743 N Cahuena Blvd N Hollywood Calif ST 7-3223
- Electronic Secretary Industries Inc 805 S 5 St Milwaukee 4 Wisc OR 2-0746
- Electronic Specialty Co 5121 San Fernando Rd Los Angeles 39 Calif CH 5-3771
- Electronic Systems Eng'g Co 903 Cravens Blvd Oklahoma City Okla
- Electronic Transformer Co 70 Washington St Brooklyn 1 NY MA 5-5123
- Electronic Tube Corp 1200 E Mermaid Lane Philadelphia 18 Pa CH 7-6800
- Electron Products Inc 430 N Halstead St Pasadena 8 Calif RY 1-0666
- Electron-Radar Products 4806 W Chicago Ave Chicago 51 III ES 9-1232
- Electrons Inc 127 Sussex Ave Newark 3 NJ HU 2-5977
- Electro-Physics Co 287 Broadway New York 7 NY WO 4-1290
- Electro Products Labs Inc 4501 N Ravenswood Ave Chicago 40 III LO 1-1707
- Electro-Pulse Inc 11861 Teale St Culver City Calif TE 0-8006
- Electro Snap Switch & Mfg Co 4218 W Lake St Chicago 24 III VA 6-3100
- Electrosolids Corp 7436 Varna Ave N Hollywood Calif PO 5-9716
- Electro-Sonic Labs 35-54 36 St Long Island City 6 NY RA 8-6370

ALPHABETICAL LISTING of MANUFACTURERS with LOCALIZER INDEX

- Electro Sound Corp 115 Halleck St Boston 15 Mass HI 2-7575
- Electro-Switch & Controls Inc 5755 Camille Ave Culver City Calif TE 0-4643
- Electro Switch Corp King Ave Weymouth 88 Mass ED 5-5200
- Electro Tec Corp 4 Romanelli Ave S Hackensack NJ HU 7-4940
- Electro-Technical Labs Div Mandrel Industries 5134 Glenmont Houston Texas MO 7-6561
- Electro-Technical Products Div Sun Chemical Corp 113 E Centre St Nutley 10 NJ NU 2-7070
- Electrovert Inc 489 5 Ave New York NY MU 2-2492
- Electro-Voice Inc Cecil & Carrol Sts Buchanan Mich OX 5-6831
- Electrovax Co 60 Franklin St E Orange NJ OR 4-1060
- Elektro Serv Co 480 Johnson Ave Brooklyn 37 NY NY 7-0053
- Elfa Instrument Center 55 Reade St New York 7 NY W0 4-1290
- Elgin National Watch Co Electronics Div 2435 N Naomi St Burbank Calif VI 9-1446
- Elgin National Watch Co 107 National St Elgin Ill SH 2-3300
- Ellanar Chemical Co 2308 Oakton St Evanston Ill BR 4-7168
- Ellis Associates 67 Lincoln Ave Pelham NY BE 8-3360
- Ellis & Sons George D 4028 N American St Philadelphia 40 Pa BA 3-3405
- Ellison Draft Gage Co 548 W Monroe St Chicago 6 Ill RA 6-2296
- Ellis & Watts Products Inc P O Box 33 Cincinnati 36 Ohio SY 1-1725
- Elm Labs 10 Washington Ave Hastings-on-Hudson NY DO 3-7770
- Elmes Eng'g Div American Steel Foundries 1150 Tennessee Ave Cincinnati 29 Ohio RE 1-9210
- El Products Corp P O B 41 New York 63 NY KI 8-3948
- El-Rad Mfg Co 2800 W Cullom Ave Chicago 18 Ill IR 8-7300
- El-Tronics Inc Penn Ave Mayfield Pa JE-1450
- Elzee Metal Products Co 775 39 St Brooklyn 32 NY GE 5-5000
- EMC Recordings Corp 806 E 7 St St Paul 6 Minn PR 6-2763
- Emeloid Co 1239 Central Ave Hillside 5 NJ EL 2-1944
- Emerson & Cuming Inc 869 Washington St Canton 1 Mass CA 6-1066
- Emerson Electric Mfg Co 8100 Florissant Ave St Louis 21 Mo CO 1-1800
- Emerson Plastics Corp Seabury Ave & Butler Pl Bronx 61 NY SY 2-4400
- Emerson Radio & Phonograph Corp 14 & Coles Sts Jersey City 2 NJ SW 5-3500
- Emerson-Sack-Warner Corp 85 Washington St Somerville 43 Mass MO 6-4450
- Emmett Machine & Mfg 445 E Turkeyfoot Lake Rd Akron 19 Ohio TY 6-2312
- Empire Devices Products Corp 38-15 Bell Blvd Bay-side 61 NY BA 4-8500
- Empire Electronics Co 166 River St Paterson 1 NJ AR 4-8282
- Endeca Eng'g Development Co of Los Angeles 922 E Anaheim St Wilmington Calif TE 5-1430
- Endevco Corp 161 E California St Pasadena Calif RY 1-5231
- Enflo Corp Rte 38 at Airport Circle Pennsauken 11 NJ ME 8-0485
- Engelhardt Eng'g Co 38 Burrill Ave S Norwalk Conn VO 6-9647
- Engineered Electronics Co 506 E 1 St Santa Ana Calif KI 3-9384
- Engineered Magnetics Div Gulton Industries Inc 13030 Cerise Ave Hawthorne Calif OS 5-0366
- Engineering Associates 434 Patterson Rd Dayton 9 Ohio WA 1662
- Engineering Co 27 Wright St Newark 5 NJ BI 3-0800
- Engineering Developments Inc Forest Ave Middletown RI VI 6-9100
- Engineering Enterprises Inc 1200 18 St N Washington 6 D C
- Enthone Inc 442 Elm St New Haven 8 Conn SP 7-5581
- Enthoven Solders Ltd 113 N Water St Rochester 4 NY BA 5-1876
- Entron Inc 4902 Lawrence St Bladensburg Md AP 7-9585
- Environmental Equipment Co 369 Linden St Brooklyn 27 NY HE 3-9872
- E O Electronics Inc Mountain Lakes NJ RO 9-3091
- Epco Electronics Inc 140 Liberty St New York 6 NY W0 2-1573
- Epco Products Inc 2500 Atlantic Ave Brooklyn 7 NY DI 5-7531
- Epoxy Products Inc Div Joseph Waldman & Sons 133 Coit St Irvington NJ ES 5-6000
- Epsco Inc 588 Commonwealth Ave Boston 15 Mass CO 7-8100
- Epsilon Sales & Services Ltd N Feltham Trading Estate Faggs Rd Bedford Feltham Middlesex England FE-5091
- Equip-A-Matic Eng'g Corp 6045 W Ogden Ave Chicago 50 Ill OL 6-0211
- Equipment & Service Co 6815 Oriole Dr Dallas 7 Texas FL 2-9918
- Equipto Div Aurora Equipment Co Aurora Ill 64641
- Eraser Co 1068 S Clinton St Syracuse 4 NY 76-7441
- Erca Tool Die & Stamping Co 19 Ash St Brooklyn 22 NY EV 9-1618
- Ercona Corp 551 5 Ave New York 17 NY MU 2-2577
- Erco Radio Labs Inc 637 Stewart Ave Garden City NY PI 1-0300
- Erdco Eng'g Corp Official & Westgate Addison Ill TE 4-1849
- Erie Resistor Corp 644 W 12 St Erie 6 Pa 2-1481
- President—G R Fryling
- First VP—W H Fryling
- VP—Gen Mgr—B B Minium
- VP & Treas—J E Dieteman
- VP Marketing—Allen K Shenk
- VP Res & Eng—J D Heibel
- Mgr Electronics Div Sales—W R Crotty
- Mgr Electro-Mechanical Div—E S Willis
- Gov't Sales & Spec—J C Van Arsdell
- Sls Mar Plastics Div—W C Conroy
- Mgr Distributor Div—R A Elliot
- Mgr Industrial Sales—R N Sisson
- Credit Mgr—J Farkas
- BOSTON-BOISGV—L Hague—Lowell St Carlisle Mass
- Me-NH-Vt-Conn-Mass-Rl
- BOSTON-DS—Jack Goss Co 99 Highland Ave Somerville Mass covers N England Prospect 6-2262
- CAMDEN-BOISGV—M Hollingsworth Broadway-Stevens Bldg 300 Broadway Rm 701 Covers Phil-S NJ-Md
- CAMDEN-BOISGV—C R Johnson Broadway-Stevens Bldg 300 Broadway Room 701 covers
- CHICAGO-DS—Lewis & Trimble Inc 5420 W Fullerton Ave Covers Ill & E Wis National 2-0706
- CHICAGO-BOISGV—J T Zuravleff 5809 W Diversey Ave National 26080-1-2 Covers Ill-Mich-Wis
- CHICAGO-BOISGV—G K Egelston 5809 W Diversey Ave National 26080-1-2 Covers Ill-Mich-Wis
- COLUMBUS-DS—J W Lehner 367 Brynhill Rd Ludlow 5260 Covers Ohio-W Pa-W Va
- DALLAS-IDS—J Y Schoonmaker 5328 Redfield Ave PO Box 35266 LAKeside 6-7238
- DETROIT-DS—Jack M Thorpe 640 Hidden Lane Covers Mich Tuxedo 4-4360
- DENVER-IDS—Allen I Williams & Co 124 W 12 St Main 3-0343 Covers Colo-N M-Utah & Wyo-Western Neb-El Paso County-Texas-Arizona
- ERIE-BOISGV—W M Fabian 644 W 12th St Phone 2-1481 Covers N Ohio-Upper N Y-N W Pa
- FT WAYNE-BOISGV—W J Wervy 4617 Euclid Ave Harrison 9669 Covers Ind-S Ohio
- GREENSBORO-IDS—Atcheson & Adams Inc 601 N Elm St 2-6838 Covers Ala-Fla-Ga-Miss-N C-S C-Tenn-Va
- INDIANAPOLIS-DS—E A Schulz 721 Sherwood Dr Broadway 1993 Covers Ind-Ky
- KANSAS City-DS—Collins Havercamp Ass 6217 W 77th St Covers Iowa-Miss-Kan-Neb NI-agara 2-6153
- LOS ANGELES-BOIS-GV—George H Osborn 12932 S Weber Way Hawthorne Calif Oregon 8-5418 Covers Ariz-S Calif-Nev
- LOS ANGELES-BOIS—P Champlain 12932 S Weber Way Hawthorne Calif Oregon 8-5418 Covers Ariz-S Calif-Nev
- LOS ANGELES-DS—R E Osborne 1044 S Parkview DUnkirk 81039 Covers S Calif
- MEXICO-IDS—Kenneth H Jones Apartado 2250 Rio Elba 32-104 Covers Mexico
- NEWARK-DS—Art Cerf & Co 744 Broad St Mitchell 2-6734 Covers N N J-N Y City & State N J
- PALISADES PARK N J-BOISGV—D N Sawtelle #6 State Highway #5 MORsemere 65100 Covers Metropolitan New York
- PALISADES PARK N J-BOISGV—M E Darrin #6 State Highway #5 MORsemere 65100 Covers Metropolitan New York
- PALISADES PARK N J-BOISGV—F J Rich #6 State Highway #5 MORsemere 65100 Covers Met N Y
- ROCHESTER MICH-IN—G K Rosenquist P O Box 68 Covers Mich
- ST PAUL-IDS—Edward Hoffman 635 S Cleveland Ave Covers Minn-N Dak-Western Wisconsin Midway 9-3371
- SAN CARLOS-IDS—David H Ross Co 534 El Camino Real LYtell 3-8224 Covers N Calif-Nev
- SEATTLE-IDS—Verner O Jensen 2616 2 Ave MUtual 2929 Covers Idaho-Mont-Ore-Wash
- TORONTO-IDS—Fred Eaton 4972 Dundas St West Belmont 1-1712 Covers Canada
- WYNNWOOD PA-DS—L D Lowery Inc 50 E Wynnwood Rd PO Box 255 Midway 2-9100 Covers DC-Del-E Pa-Va-S N J-Md
- Erikson Specialized Tool Co 4902 S Lexington Rd Pico 1 Calif OX 9-3719
- Ernst & Affiliates W Arthur 825 Hayes Ave Racine Wisc ME 2-2731
- Erwood Inc 1770 W Berteau Ave Chicago 13 Ill BI 8-0622
- ESC Corp 534 Bergen Blvd Palisades Park NJ WI 7-0400
- Essex Electronics Div NYT Electronics Inc 7303 Atoll Ave N Hollywood Calif ST 7-5451
- Essex Electronics 550 Springfield Ave Berkeley Heights NJ GR 3-9300
- Essex Wire Corp 1601 Wall St Ft Wayne 6 Ind E-4461
- Ess Instrument Co 96 S Washington Ave Bergenfield NJ DU 4-3411
- Espey Mfg Co Congress & Ballston Ave Saratoga Springs NY 4100
- Esterline-Angus Co P O Box 596 Indianapolis 6 Ind CH 4-3318
- Etched Products Corp 39-01 Queens Blvd Long Island City 4 NY ST 4-5900
- Eureka X-Ray Tube Corp 3250 N Kilpatrick Ave Chicago 41 Ill KI 5-3126
- Ewald Instruments Route 7E Kent Conn
- Exact Eng'g & Mfg Inc P O Box 668 Oceanside Calif SA 2-8503
- Exact Weight Scale Co 944 W 5 Ave Columbus 8 Ohio AX 1-4617
- Exacto Industries Inc 8730 Santa Monica Blvd Los Angeles 46 Calif OL 5-7470
- Exakta Camera Co 705 Bronx River Rd Bronxville 8 NY BE 7-5500
- Excellex Electronics Inc 475 Chestnut St Cedarhurst L I NY CE 9-8532
- Executione Inc 415 Lexington Ave New York 17 NY MU 7-7440
- Exide Industrial Div Electric Storage Battery Co 42 S 15 St Philadelphia 2 Pa LO 4-4030
- Extruders Inc 3233 W El Segundo Blvd Hawthorne Calif OR 8-4071
- E-Z-Hook Test Products 1536 Woodburn Ave Covington Ky CO 1-1495
- E-Z Way Towers Inc 5901 E Broadway Tampa 5 Fla 4-2171
- Factory Enterprises Inc 3431 Butler St Pittsburgh 1 Pa MU 1-1199
- Factory Service Co 4615 N 21 St Milwaukee 9 Wisc HI 5-2715
- Fairbir Bearing Co 37 Booth St New Britain Conn BA 9-0381
- Fairbanks Wire Co 2287 Hollers Ave New York 69 NY FA 4-1266
- Fairchild Camera and Instrument Corp Industrial Camera Div 88-06 Van Wyck Expressway Jamaica 1 NY JA 6-3800
- Fairchild Controls Corp Components Div 225 Park Ave Hicksville L I New York
- Phone Hicksville WE 8-5600
- H E Hale—Vice President & General Mgr
- A A Budde—Sales Manager
- Los Angeles Plant Fairchild Controls Corp 6111 E Washington Blvd Los Angeles California
- L M Griswald—West Coast Manager
- B C Rogers—West Coast Sales Manager
- Fairchild Electrical Products Div 110 Main St Burlington Vt 4-5786
- Fairchild Guided Missiles Div Fairchild Engine & Airplane Corp Straight Path Wyandanch L I NY MI 3-7171
- Fairchild Recording Equipment Co 10-40 45 Av Long Island City 1 NY ST 4-6163
- Fair-Rite Products Corp Commercial Row Wallkill NY WA 3-2632
- Falstrom Co Falstrom Court Passaic NJ PR 7-0013
- Fansteel Metallurgical Corp 2300 Sheridan Rd N Chicago Ill DE 6-4900
- Farley & Loetscher Mfg Co Plastics Div 7 & White Sts Dubuque Iowa 2-5451
- Farmer Electric Products Co 2300 Washington St Newton Lower Falls 62 Mass DE 2-4260
- Farnam Mfg Co 2000 Sweeten Creek Rd Asheville NC 3-5652
- Farnsworth Electronic Co Pacific Div 815 S San Antonio Rd Palo Alto Calif VO 7-7249
- Farnsworth Electronics Co Div I T & T 3702 E Pontiac St Ft Wayne Ind E-7175
- Farrand Controls Inc 4401 Bronx Blvd New York 70 NY FA 4-2200
- Fcay Co Neal 427 Olive St Santa Barbara Calif WO 2-0722
- Fecker Inc J W 6592 Hamilton Ave Pittsburgh 6 Pa
- Federal Anti Capacity Switch Corp 72 Kingsley St Buffalo 8 NY GA-1600
- Federal Cable Div Royal Electric Corp 95 Grand Ave Pawtucket R I 2-8600
- Federal Equipment Co 38 Brady St San Francisco 3 Calif UN 3-3607
- Federal Machine Co 807 Garfield Ave Jersey City 5 NJ HE 5-1500
- Federal Mfg & Eng'g Corp 1055 Stewart Ave Garden City NY PI 2-7400
- Federal Products Corp 1144 Eddy St Providence R I ST 1-9300
- Federal Screw Products Inc 3917 N Kedzie Ave Chicago 18 Ill IR 8-5744
- Federal Shockmount Corp 1060 Washington Ave New York 56 NY WY 3-0400
- Federal Telecommunication Labs Div IT&T 500 Washington Ave Nutley NJ NU 2-3600
- Federal Telephone & Radio Co Div IT&T 100 Kingsland Rd Clifton NJ NU 2-3600
- Federal Tool & Mfg Co 3600 Alabama Ave Minneapolis 16 Minn WE 9-7843
- Federated Metals Div American Smelting & Refining Co 120 Broadway New York 5 NY RE 2-9740
- Feedback Controls Inc 899 Main St Waltham 54 Mass TW 4-1020
- Feiler Eng'g & Mfg Co 8026 N Monticello Ave Skokie Ill 7987
- Feiner & Sons P 522 W 45 St New York 36 NY PL 7-6150
- Fellows Gear Shaper Co 78 River St Springfield Vt TU 5-2131
- Felters Co 210 South St Boston 11 Mass LI 2-7021
- Felthousen Audio Service 17615 Ludlow St Granada Hills Calif EM 3-1451

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- Felt Products Mfg Co 1504 Carroll Ave Chicago 7 Ill MO 6-6750
- Felt & Tarrant Mfg Co Comptometer Dictation Div Algonquin Ill OL 8-4548
- Femco Inc Irwin Pa UN 3-3200
- Fenwal Electronics Inc Mellen St Framingham Mass Fenwal Inc Pleasant St Ashland Mass TR 2-3577
- Ferranti Electric Inc 30 Rockefeller Plaza New York 20 NY CI 7-0911
- Ferroxcube Corp of America 35 E Bridge St Saugerties NY
- Fibre Containers Co 4700 District Blvd Los Angeles 58 Calif LU 3-2177
- Fidelity Amplifier Co 703 Willow St Chicago 14 Ill MO 4-2966
- Fidelity Chemical Products Corp 470 Frelinghausen Ave Newark 12 NJ BR 2-4110
- Fielden Instrument Div Robertshaw-Fulton Controls Co 2920 N 4 St Philadelphia 33 Pa GA 6-6750
- Filmack Studios 1327 S Wabash Ave Chicago 5 Ill HA 7-3395
- Film Arts Production 1032 N 6 St Milwaukee 3 Wisc BR 6-5670
- Film Associates 4600 S Dixie Hwy Dayton 9 Ohio WA 2164
- Film Capacitors Inc 3400 Park Ave New York 56 NY CY 2-5180
- Filmohm Corp 48 W 25 St New York 10 NY WA 4-9276
- Filtors Inc 30 Sagamore Hill Dr Port Washington NY PO 7-3850
- Filtrol Co 131-15 Fowler Ave Flushing 55 NY FL 9-8300
- Filtrol Co 10023 W Jefferson Blvd Culver City Calif FE 9-2206
- Finn & Co T R 200 Central Ave Hawthorne NJ HA 7-4100
- Finney Co 34 W Interstate St Bedford Ohio BE 2-6161
- Firestone Guided Missile Div Los Angeles 54 Calif First Electronics Corp 117 Blue Hill Ave Boston 19 Mass HI 5-1810
- Firth Sterling Inc 3113 Forbes St Pittsburgh 13 Pa MU 2-4600
- Fischer & Co H G 9451 W Belmont Ave Franklin Park Ill TU 9-0400
- Fischer & Co R A 517 Commercial St Glendale 3 Calif CH 5-2404
- Fischer & Porter Co 478 Warminster Rd Hatboro Pa OS 5-6000
- Fisher & Crome 109 N Camac St Philadelphia 7 Pa LO 4-5054
- Fisher Co R H 40 Gough St San Francisco 3 Calif UN 1-2569
- Fisher Eng'g Inc P O Box 327 Huntington Ind 315 Fisher Governor Co Marshalltown Iowa 5561
- Fisher-Pierce Co 170 Pearl St S Braintree 85 Mass VI 3-5000
- Fisher Radio Corp 21-21 44 Dr Long Island City 1 NY EX 2-2500
- Fisher Research Lab 1961 University Ave Palo Alto Calif DA 2-4646
- Fisher Scientific Co 711 Forbes St Pittsburgh 22 Pa EX 1-1330
- Fish-Schurman Corp 70 Portman Rd New Rochelle NY NE 6-1300
- Five Star Co W Main St Plantsville Conn MA 8-5561
- Flanders Mill Inc P O Box 718 Riverhead NY PA 7-2102
- Flexaust Co 100 Park Ave New York 7 NY OR 9-1300
- Flexo International Corp 3255 W Lake St Chicago 24 Ill KE 3-3257
- Flexonics Corp 1315 S 3 Ave Maywood Ill MA 6-3664
- Flexrock Co 3609 Filbert St Philadelphia 1 Pa BA 2-5500
- Flight Research Inc P O Box 1-F Richmond 1 Va FA-2506
- Flock Process Co 375 Main Ave Norwalk Conn VI 7-4586
- Floquil Products Inc Cobleskill NY 1260
- Florman & Babb 68 W 45 St New York 36 NY MU 2-2928
- Fluidyne Eng'g Corp 425 N 7 St Minneapolis 6 Minn FE 8-6905
- Fluke Mfg Co John 1111 W Nickerson St Seattle 99 Wash GA-5700
- Fluorocarbon Products Inc Div U S Gasket Co 602 N 10 St Camden 1 NJ WO 4-0370
- Flush Wall Radio Co 1012 Cleveland St Clearwater Fla 34-6061
- Foot Bros Gear & Machine Corp 4545 S Western Blvd Chicago 9 Ill VI 7-4200
- Foot Mineral Co 18 W Chelton Ave Philadelphia 44 Pa VI 8-4000
- Forbes & Wagner Inc 343 Central Ave Silver Creek NY 650
- Ford Eng'g Inc 3030 Nebraska Ave Santa Monica Calif EX 3-6755
- Ford Instrument Co Div Sperry Rand Corp 31-10 Thomson Ave Long Island City 1 NY ST 4-9000
- Ford Radio & Mica Corp 536 63 St Brooklyn 20 NY GE 9-8300
- Formica Corp 4614 Spring Grove Ave Cincinnati 32 Ohio KI 1-3670
- Formica Metal Products Co Corporation Way Medford 55 Mass MY 8-5656
- Forro Scientific Co 833 Lincoln St Evanston Ill DA 8-5729
- Forsberg Mfg Co 125 Seaview Ave Bridgeport 1 Conn ED 4-9469
- Forter-Teichmann Co 1212 Clark Bldg Pittsburgh 22 Pa EX 1-0820
- Fort Wayne Metals Inc 3211 MacArthur Dr Ft Wayne 6 Ind HA-3267
- Foster Eng'g Co 835 Lehigh Ave Union NJ MU 6-8800
- Foster Transformer Co 3820 Colerain Ave Cincinnati 23 Ohio MU 1-2420
- Fostoria Pressed Steel Corp N Main St Fostoria Ohio HE 5-7721
- Foto-Video Labs Inc 25 Amity St Little Falls NJ LI 4-2557
- Fox Products Co 4720 N 18 St Philadelphia 41 Pa MI 4-2700
- Frankel Connector Co 27 Vestry St New York 13 NY WA 5-3563
- Franklin A W 39 Broadway New York 6 N Y Franklin Electronics Inc Box 113 Bridgeport Pa BR 2-4800
- Franklin Fibre-Lamitex Corp Wilmington Dela OL 8-5269
- Frederick Recording Co 101 Townsend St Midland Mich TE 2-3757
- Frederick Tool & Eng'g Corp 414 Pine Ave Frederick Md MO 2-1802
- Freed Transformer Co 1718-36 Weirfield St Brooklyn 27 NY EV 6-1300
- Freeland Products Co 706 Dryades St New Orleans 12 La TU-5361
- Freeway Washer & Stamping Co 4911 Grant Ave Cleveland 5 Ohio BR 1-6262
- Frenchtown Porcelain Co Muirhead Ave Trenton 9 NJ EX 2-3154
- Frequency Standards P O Box 504 Asbury Park NJ PR 4-0500
- Fretco Inc 406 N Craig St Pittsburgh 13 Pa MU 1-8116
- Friez Instrument Div Bendix Aviation Corp 1400 Taylor Ave Baltimore 4 Md VA 3-4040
- F-R Machine Works Inc Electronic & X-Ray Div 26-12 Borough Pl Woodside 77 NY AS 8-2800
- Fugle-Miller Labs Inc 301 Central Ave Clark NJ FU 1-2727
- Fuller Co H B 181 W Kellogg Blvd St Paul 2 Minn Furane Plastics Inc 4516 Brazil St Los Angeles 32 Calif CH 5-1153
- Furnas Electric Co 1000 McKee St Batavia Ill 3410 Fusite Corp 6000 Fernview Ave Cincinnati 13 Ohio RE 1-2020
- Fuze-on Products Div Aetna Supply Inc 15 N Hickory St Arlington Heights Ill CL 5-5000
- Gabriel Electronics Div Gabriel Co 135 Crescent Rd Needham Heights 94 Mass NE 3-0005
- Antennas and Associate accessory equipment Complete Laboratory and Production Facilities Director of Sales & Engineering—Mr Steven Galagan Sales Manager—Dr H G Giuliani Telephone—Needham 3-3005 (thru Boston)
- Gaertner Scientific Corp 1250 Wrightwood Ave Chicago 14 Ill BU 1-5335
- Gahagan Inc Waterman Ave Esmond 17 RI CO 1-4000
- Gamewell Co 1238 Chestnut St Newton Upper Falls 64 Mass BI 4-1240
- Garde Mfg Co 588 Eddy St Providence 3 RI UN 1-0604
- ATLANTA GA—D B Buchanan 206 Underwood Drive N W
- LOS ANGELES 7 CALIF—Perlmuth Electronic Associates 2419 South Grand Avenue
- PHILADELPHIA PA—D G Quinlan Company 4700 Frankford Avenue
- PHOENIX ARIZONA—H Geo Shefler Company PO Box 1587
- CHICAGO 26 ILL—Arthur J Ellis Company 1607 Howard Street
- ST LOUIS MO—William F Dudzik 1110 S Brentwood Blvd St Louis 17 Mo
- BROOKLYN NY—Anthony P Mauceli 81 Irving Avenue
- NEW HARTFORD NY—Arthur F Schultz 96 Oxford Road
- BROOKLINE 46 MASS—Henry P Segel Company Inc 386 Washington St
- WILLOWDALE ONTARIO CANADA—Consolidated Electronic & Equipment Company 94 Sheppard Ave West
- HOUSTON 25 TEXAS—Packard Associates 4007 Bellaire Blvd
- *DALLAS TEXAS—Packard Associates 5526 Dyer Street Dallas 6 Texas
- RALEIGH N C—Jack L Truesdell 2372 McMullen Circle
- Gardiner Electronics Co 2545 E Indian School Rd Phoenix Ariz CR 4-9681
- Gardner Lab Inc P O Box 5728 Bethesda 14 Md DL 6-3600
- Gar Precision Parts Inc 703 Pacific St Stamford Conn FI 8-2671
- Garlock Packing Co 402 Main St Palmyra NY 480
- Garrard Sales Corp 80 Shore Rd Port Washington NY PO 7-7700
- Garrett Corp AirResearch Mfg Co Div 9851 Sepulveda Blvd Los Angeles 45 Calif OR 2-0131
- Gary Wells Co 361 Rockaway Ave Valley Stream NY LO 1-2914
- Gates & Co Geo W Hempstead Tpke & Lucille Ave Franklin Square LI NY FI 7-0787
- Gates Electronic Co 2090 Barnes Ave Bronx 62 NY TY 2-6490
- Gates Radio Co 123 Hampshire St Quincy Ill BA 2-8202
- Gavit Wire & Cable Co Central St Brookfield Mass VO 7-3600
- G-C Electronics Div General Cement Textron 400 S Wyman St Rockford Ill 2-6695
- Gear Specialties Inc 2635 W Medill Ave Chicago 47 Ill DI 2-3200
- Geartronics Corp 2514 Broadway Long Island City NY
- Gee-Lar Mfg Co 418 S Wyman St Rockford Ill 2-6695
- Geisler Labs P O Box 252 Menlo Park Calif EM 8-4127
- Gemex Corp 1200 Commerce Ave Union NJ MU 6-4100
- General American Transportation Corp 135 S LaSalle St Chicago 90 Ill FI 5-4100
- General Automatic Corp 12 Carlton Ave Mountain View NJ
- General Bronze Corp 711 Stewart Ave Garden City NY PI 1-4400
- General Cable Corp 420 Lexington Ave New York 17 NY LE 2-2920
- General Cement Mfg Co Div Textron Inc 400 S Wyman St Rockford Ill 2-6695
- General Ceramics Corp Keasbey NJ VA 6-5100
- General Chemical Div Allied Chemical & Dye Corp 40 Rector St New York 6 NY HA 2-7300
- General Coil Products Corp 43 Roselle St Mineola NY PI 6-4455
- General Communication Co 677 Beacon St Boston 15 Mass CO 7-6030
- General Components Inc 225 E 144 St Bronx 51 NY MO 5-0740
- General Control Co 1200 Soldiers Field Rd Boston 34 Mass ST 2-7440
- General Controls Co 801 Allen Ave Glendale 1 Calif VI 9-2181
- General Crystal Co P O Box 9 Burlington Wisc RO 3-2425
- General Devices Inc P O Box 253 Princeton NJ LY 9-4507
- General Electric Co Construction Materials Div 1285 Boston Ave Bridgeport 2 Conn ED 4-1012
- General Electric Co Ltd of England c/o IMTRA Corp 58 Charles St Cambridge 41 Mass UN 4-4350
- General Electric Co Chemical Materials Dept 1 Plastics Ave Pittsfield Mass 8223
- General Electric Co Box 237 Roosevelt Park Annex Detroit 32 Mich JE 6-9100
- General Electric Co Specialty Electronic Components Dept W Genesee St Auburn NY 3-7321
- General Electric Co Capacitor Dept John St Hudson Falls NY 4-3341
- General Electric Co Ltd of England 80 Shore Rd Port Washington NY PO 7-7700
- General Electric Co Apparatus Sales Div 1 River Rd Schenectady 5 NY FR 4-2211
- General Electric Co Electronic Components Div 1 River Rd Schenectady 5 NY FR 4-2211
- General Electric Co Communication Products Dept Syracuse NY 76-4411
- General Electric Co Light Military Electronic Equip Dept French Rd Utica NY 5-3311
- General Electric Co Silicone Products Dept Waterford NY AD 8-3330
- General Electric Co Lamp Wire & Phosphors Dept 1331 Chardon Rd Cleveland 17 Ohio KE 1-5050
- General Electric Co Coshocton Ohio 1914
- General Electric Co X-Ray Dept 4855 Electric Ave Milwaukee 1 Wisc EV 3-3211
- General Findings & Supply Co Industrial Div Leach & Garner Bldg Attleboro Mass 1-1155
- General Hermetic Sealing Corp 99 E Hawthorne Ave Valley Stream NY 5-6363
- General Industries Co Olive & Taylor Sts Elyria Ohio 2235
- General Instrument Corp Automatic Mfg Div 65 Gouverneur St Newark 4 NJ HU 5-2100
- General Instrument Corp F W Sickles Div Chicopee Mass SP 3-6621
- General Insulated Wire Works 69 Gordon Ave Providence 5 RI HO 1-2100
- General Kinetics Inc 555 23 St S Arlington 2 Va OT 4-7555
- General Machine & Instrument Co Clinton Rd & Rt 46 Caldwell NJ CA 6-7444
- General Magnetic Corp 10001 Erwin Ave Detroit 34 Mich WA 1-7558
- General Magnetics Inc 135 Bloomfield Ave Bloomfield NJ PI 8-2400
- General Metal Products Co 1010 Centre St Easton Pa 9122
- General Mills Inc Chemical Div South Kensington Rd Kankakee Ill 2-6751
- General Nuclear Corp 550 5 Ave New York 32 NY PL 7-3638
- General Photo Products Co 15 Summit Ave Chatham NJ ME 5-5200
- General Plastics Corp 165 3 Ave Paterson 4 NJ AR 4-4710
- General Precision Lab Inc 63 Bedford Rd Pleasantville NY RO 9-5000
- President—H G Place
- Executive Vice Pres & Technical Director—R L Gorman
- Executive Vice Pres & General Manager—J W Murray
- Vice Pres Industrial Sales—Blair Foulds
- Vice Pres Avionic Eng—R W Lee
- Vice Pres Avionic Sales—W J Tull
- Manager TV Sales—N M Marshall
- Manager Government Contracts—W C Cooper
- LA GRANGE ILL—23 W Cakudar Ave—R H Johnston
- PASADENA Calif—21 N Santa Anita Ave—R K Hunsicker
- JENKINTOWN Pa—The Benson—J W Mullen
- PLEASANTVILLE NY—63 Bedford Road—S L Thomas

ALPHABETICAL LISTING of MANUFACTURERS with LOCALIZER INDEX

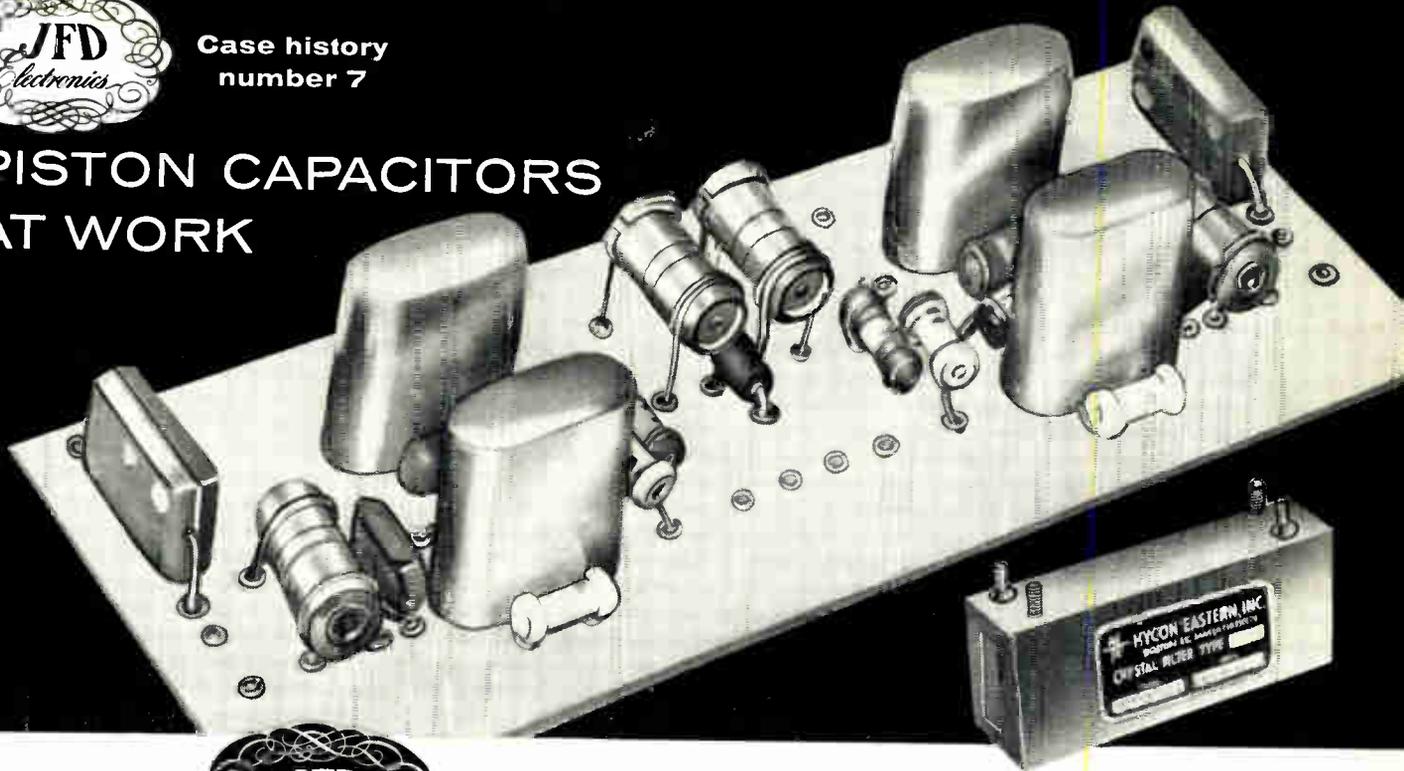
- General Radio Co 275 Massachusetts Ave Cambridge 39 Mass TR 6-4400
- General Research & Supply Co 572 S Division Ave Grand Rapids 3 Mich GL 9-7256
- General Resistance Inc 577 E 156 St New York 55 NY CY 2-1500
- General RF Fittings Inc 702 Beacon St Boston 15 Mass KE 6-229J
- General Scientific Equipment Co 7516 Limekiln Pike Philadelphia 50 Pa HA 4-1550
- General Testing Labs 227 W Chestnut Ave Monrovia Calif EL 8-0168
- General Transformer Co 18240 Harwood Ave Home-wood III 124
- General Transistor Corp 91-27 138 Pl Jamaica 35 NY OL 7-9700
- General Transistor Western Corp 6110 Venice Blvd Los Angeles 34 Calif WE 3-5867
- General Ultrasonics Co 67 Mulberry St Hartford 3 Conn JA 7-2161
- Genisco Inc 2233 Federal Ave Los Angeles 64 Calif GR 8-1276
- Geotechnical Corp 3712 Haggard Dr Dallas 9 Texas FL 7-1721
- Geotronic Labs Inc 1314 Cedar Hill Ave Dallas 8 Texas WH 6-9123
- Gerber Scientific Instrument Co 162 State St Hart-ford 3 Conn CH 6-8539
- Gerlynn Eng'g Co 2151 N Damen Ave Chicago 47 III HU 6-4054
- Gertsch Products Inc 11846 Mississippi Ave Los An-geles 25 Calif GR 8-7777
- Giannini & Co G M 918 E Green St Pasadena Calif RY 1-7152
- Gibson Electric Co 8317 Frankstown Ave Pittsburgh 21 Pa FR 1-6500
- Giffilian Bros 1815 Venice Blvd Los Angeles 6 Calif Gilmore Industries Inc 5713 Euclid Ave Cleveland 3 Ohio HE 2-2828
- Girard-Hopkins 1000 40 Ave Oakland 1 Calif KE 2-8477
- Gisholt Machine Co 1245 E Washington Ave Madison 10 Wisc
- Glaser Lead Co 31 Wyckoff Ave Brooklyn 37 NY EV 6-5100
- Glaser-Steers Corp 20 Main St Belleville 9 NJ PL 9-7474
- Glass & Bro Harry H 10 Van Cortlandt Ave E New York 68 NY LU 4-4570
- Glass Eng'g Labs Inc 601 O'Neill St Belmont Calif LY 3-8276
- Glass Products Co 6911 S South Chicago Ave Chicago 37 III FA 4-1050
- Glasic Corp 4321 Glenridge Rd Cleveland 21 Ohio IV 6-0100
- Gleason-Avery Inc 45 Aurelius Ave Auburn NY 3-6021
- G-L Electronics Co 2921 Admiral Wilson Blvd Camden 5 NJ WO 6-2780
- Glens Falls Lab Box 685 Glens Falls NY 2-5849
- Globe Electrical Mfg Co 1729 W 134 St Gardena Calif Globe Industries Inc 1784 Stanley Ave Dayton 4 Ohio HE-3741
- Glyco Products Co 350 5 Ave New York 1 NY OX 5-5140
- G & M Equipment Co 7315 Varna Ave N Hollywood Calif ST 7-1624
- G-M Laboratories Inc 4300 N Knox Ave Chicago 41 III PE 6-1800
- G M Mfg Co 134 W 26 St New York 1 NY WA 4-7965
- Goat Co Fred 314 Dean St Brooklyn 17 NY TR 5-0940
- Godfrey Mfg Co 1726 N Orchard St Chicago 14 III MO 4-1196
- Go Eng'g Co 219 S Mednik Ave Los Angeles 22 Calif AN 1-2183
- Goldak Co 1544 W Glenoaks Blvd Glendale 1 Calif CH 5-6571
- Golden Co 1054 38 St Brooklyn 19 NY GE 6-2476
- Goldsmith Bros Smelting & Refining Co 1300 W 59 St Chicago 36 III
- Good-All Electric Mfg Co Good-All Bldg Ogallala Nebr 900
- Good Electric Corp Natick Mass OL 3-0821
- Goodrich Aviation Products Div B F Goodrich Co 500 S Main St Akron 18 Ohio BL 3-1171
- Goodrich Chemical Co B F 3135 Euclid Ave Cleveland 15 Ohio UT 1-8200
- Goodrich Industrial Products Co B F 500 S Main St Akron 18 Ohio BL 3-1171
- Goodrich Industrial Products Co B F Marietta Ohio FR 3-6611
- Goodrich Sponge Products B F Div B F Goodrich Co Canale St Shelton Conn RE 5-4661
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- Gordos Corp 250 Glenwood Ave Bloomfield NJ PI 3-6800
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- Correll & Correll 336 Old Hook Rd Westwood NJ WE 5-1057
- Goslin Electric & Mfg Co 2921 W Olive Ave Burbank Calif TH 8-0776
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- Gould Corp Jerome F 200 Stewart Ave Brooklyn 37 NY EV 6-3795
- Gould-National Batteries Inc E-1201 First National Bank St Paul 1 Minn CA 2-7471
- Gow-Mac Instrument Co 100 Kings Rd Madison NJ FR 7-3450
- GPS Instrument Co 811 Boylston St Boston 16 Mass CO 7-7540
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- Grafton Eng'g Co 628 Vernon Rd Springfield Pa
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- Granco Products Inc 36-07 20 Ave Long Island City NY RA 1-0400
- Grand Ra-Tronics Inc 17360 Hayes Rd Grand Haven Mich 2496
- Grand Transformers Inc Beechtree & Marion Sts Grand Haven Mich 3106
- Grant Gear Works 154 W 2 St S Boston Mass AN 8-4403
- Grant Pulley & Hardware Corp 31-85 Whitestone Pkwy Flushing 54 NY FL 9-1900
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- Graphik Circuits Div Cinch Mfg Corp 200 S Turnbull Canyon Rd La Puente Calif ED 3-1201
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- Greene Co L Charlton 314 Washington St Newton 58 Mass BI 4-1560
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- Greer Hydraulics Inc N Y Inte'l Airport Jamaica 30 NY OL 9-9700
- Greer Stop Nut Co 2608 W Flounry St Chicago 12 III VA 6-1637
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- Gremer Mfg Co 7 North Ave Wakefield Mass CR 9-4580
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- Gulton Industries Inc 212 Durham Ave Metuchen NJ LI 8-2800
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- Gyro Electronics Co 325 Canal St New York 13 NY WO 6-1290
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- Hacker & Co Wm J 82 Beaver St New York 5 NY BO 9-8750
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- Hallcrafters Co 4401 W 5 Ave Chicago 24 III VA 6-6300
- Hallikainen Instruments 1341 7 St Berkeley 10 Calif LA 4-1757
- Hall Mfg Co 3901 Wesley Terrace Schiller Park III TU 9-7227
- Hall-Scott Electronics Div 2950 N Ontario St Burbank Calif VI 9-2341
- Hall Sonic Eng'g Co 2402 2 St Peru III 867
- Halm Instrument Co 100 Glen Head Rd Glen Head NY GL 4-6700
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- Hamilton Watch Co Allied Products Div Columbia Ave Lancaster Pa EX 4-7161
- Hamlin Inc 1316 Sherman Ave Evanston III GR 5-8244
- Hammarlund Mfg Co 460 W 34 St New York 1 NY LO 5-1300
- Hammond Organ Co 4200 W Diversey Ave Chicago 39 III AV 3-200
- Hammer Electronics Co Princeton NJ PE 7-1320
- Hancock Electronics Corp 2553 Middlefield Rd Red-wood City Calif EM 8-8468
- Handy & Harman 82 Fulton St New York 38 NY BE 3-2460
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- Hansen Co Wm 165 Silverbrook Ave Niles Mich
- Hansen Electronics Co 7117 Santa Monica Blvd Los Angeles 46 Calif HO 9-3052
- Hansen Mfg Co R R 1 Princeton Ind FU 5-3415
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- Hardwick Hindle Inc 40 Hermon St Newark 5 NJ MA 2-8200
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- Harmon Lichtenstein & Co 26 Broadway New York 4 NY HA 2-8395
- Harnischfeger Corp Crystal Lake III
- Harper Co H M 8200 Lehigh Ave Morton Grove III OR 4-3000
- Harper Electric Furnace Corp 56 River St Buffalo 2 NY MO-5366
- Harper-Leader Inc 1046 S Main St Waterbury 20 Conn PL 6-8164
- Harrison Labs 45 Industrial Rd Berkeley Heights NJ CR 3-9123
- Harristahl Laboratories 474 E 2 St Brooklyn 18 NY UL 3-2738
- Harris Transducer Corp Woodbury Conn CO 3-2116
- Harshaw Chemical Co 1945 E 97 St Cleveland 6 Ohio RA 1-8300
- Hartford City Paper Co South Spring Blvd Hartford City Ind 691
- Hartley Productions Inc 339 E 48 St New York 17 NY EL 5-7762
- Hartley Products Co 521 E 162 St New York 51 NY LU 5-4239
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- Hart Mfg Co 128 Bartholomew Ave Hartford 1 Conn JA 5-3491
- Harvey-Wells Electronics Inc North St Southbridge Mass PO 4-4361
- Harwood Electronics Co 465 W Superior St Chicago 10 III WH 3-0465
- Harworth Mfg Co 409 El Camino Real Menlo Park Calif DA 3-9965
- Hassall Inc John Cantiague Rd Westbury LI NY ED 4-6200
- Hastings-Raydist Inc Newcomb Ave Hampton Va 3-6531
- Hathaway Instrument Div Hamilton Watch Co 5800 E Jewell Ave Denver 22 Colo
- Hauman Instruments Co 70 Coolidge Hill Rd Water-town 72 Mass WA 4-8122
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- Hawley Products Co N 1 Ave St Charles III
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- Heli-Coil Corp Shelter Rock Lane Danbury Conn PI 3-3851
- Helko Products Co 243 W 55 St New York 19 NY PL 7-3050
- Helwin Co 2544 N 30 St Milwaukee 10 Wisc HI 2-7755
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(Continued on page 402)



Case history
number 7

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Crystal Filter Model 13MA

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3. Stability under conditions of vibration and shock.
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These are some of the reasons why JFD VC9GW Trimmers are specified in Hycon Eastern Crystal Filters noted for their high stability, extremely sharp cut off and linear transfer characteristic. Used in single side band communication systems, Hycon Eastern Crystal Filters are available to select either the lower or upper side band. In VHF and UHF receivers Hycon filters provide all the required selectivity at the first intermediate frequency, thereby eliminating the complexity of multiple conversions.

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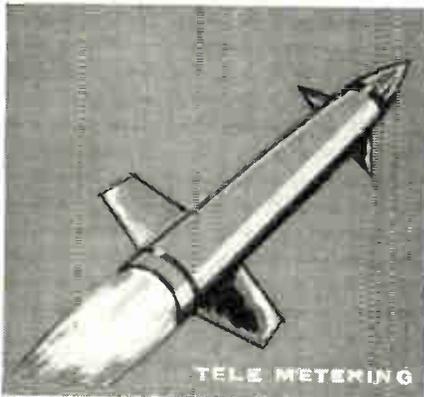
GO FORWARD WITH JFD ENGINEERING!

Circle 219 on Inquiry Card, page 201

actual size



MODEL VC9GW*
(0.3 to 8.5 mmf-glass
nickel-iron-invar rotor)
patent pending



TELE METERING



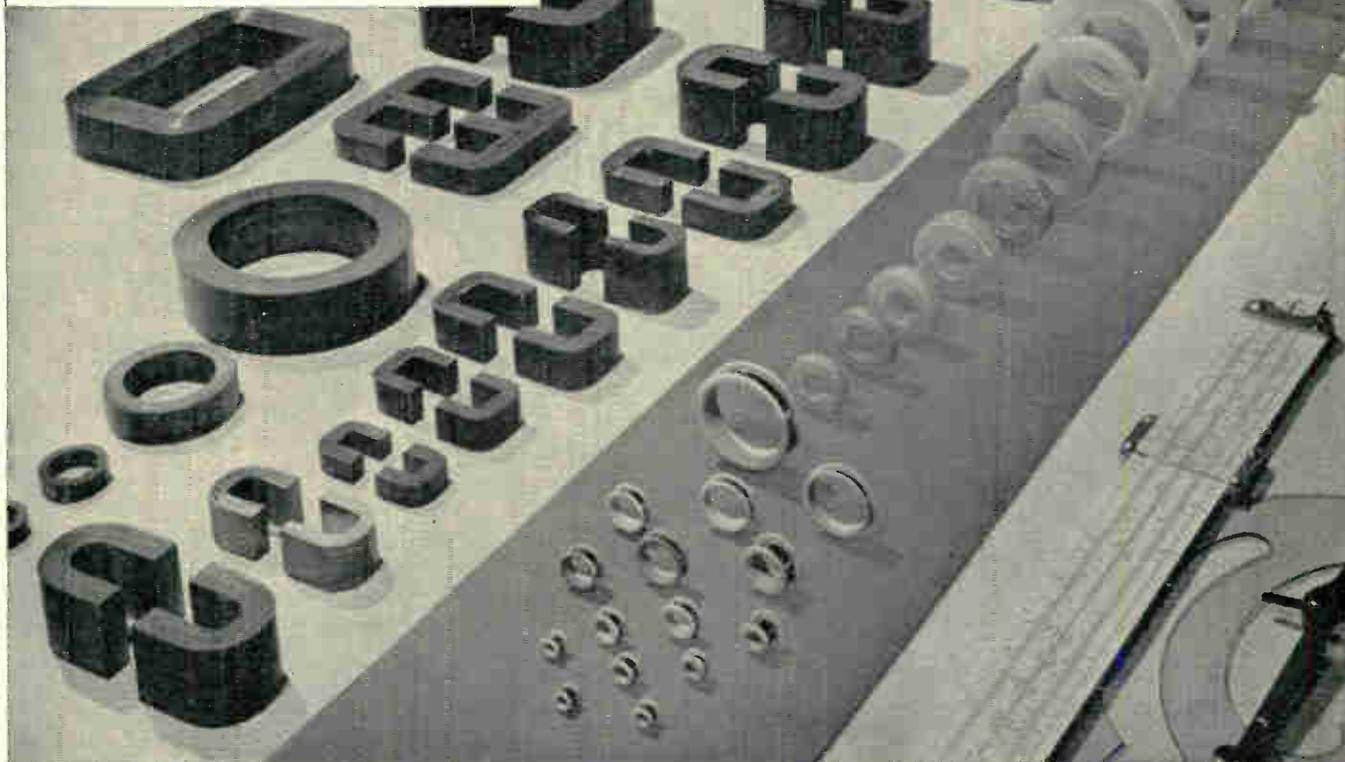
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- Hermaseal Co 1101 Lafayette St Elkhart Ind 2-3773
 Hermes Plastics Inc 13 University Pl New York 13 NY AL 4-6894
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 Illinois Testing Labs Inc 420 N LaSalle St Chicago 18 III WH 3-1331
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- ✓ SILECTRON CORES
Types C, E and O
- ✓ TOROIDAL CORES
Nylon and Aluminum cased
- ✓ BOBBIN CORES



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ENGINEERING DATA

For data on the various types of Arnold Tape Cores, write for these Bulletins:

SC-107—Silectron Cores, Types C, E and O

TC-101A—Toroidal Cores, nylon and aluminum cased

TC-108—Bobbin Cores

ADDRESS DEPT. T-76

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WSW6447

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District Sales Offices:

Boston: 200 Berkeley St.

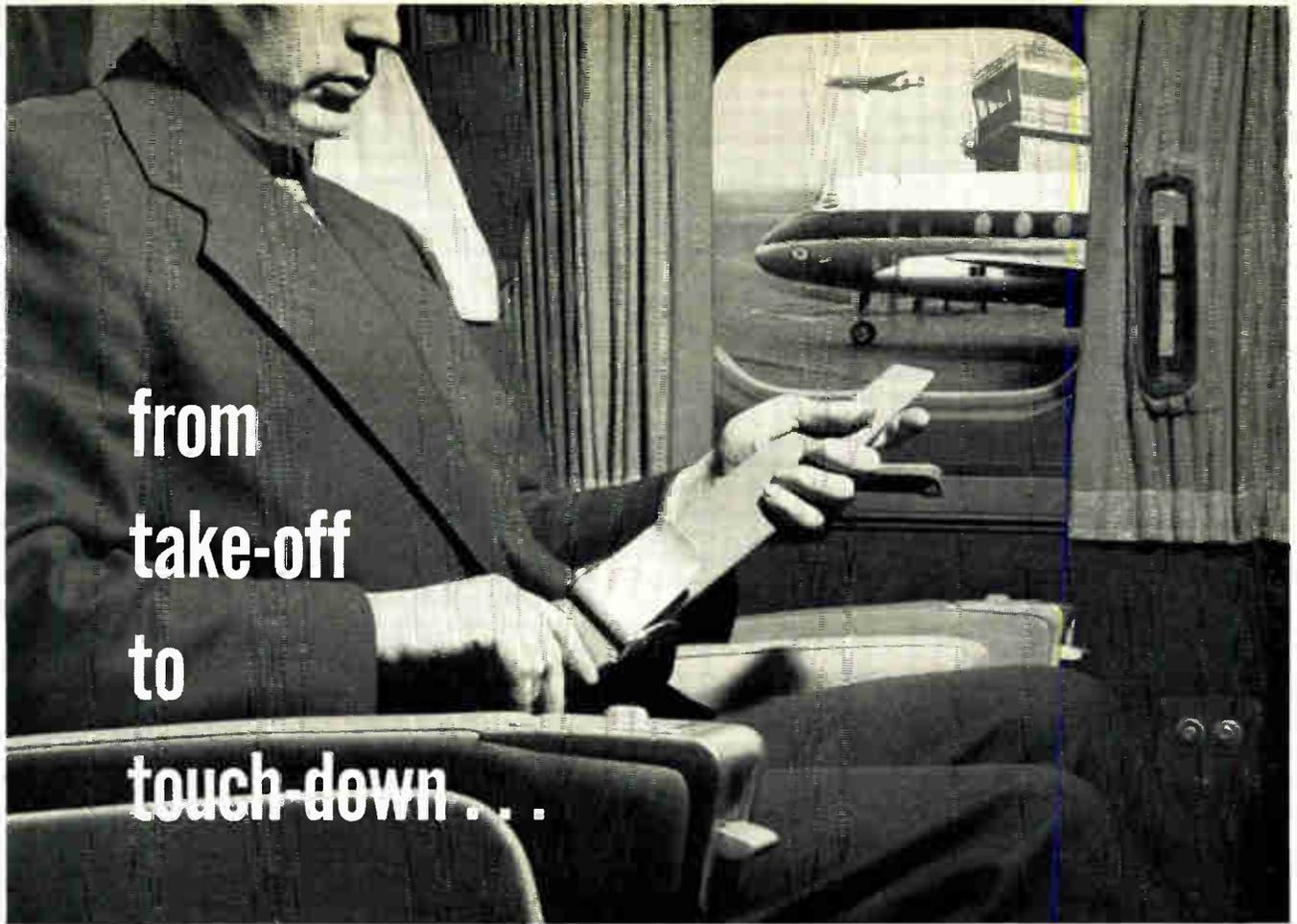
Los Angeles: 3450 Wilshire Blvd.

New York: 350 Fifth Ave. Washington, D.C.: 1001-15th St., N.W.

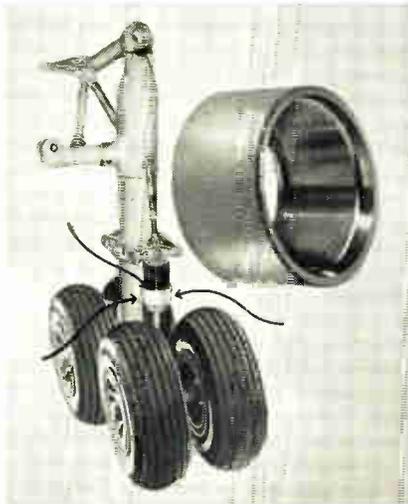
ALPHABETICAL LISTING of MANUFACTURERS with LOCALIZER INDEX

- OTTAWA—Martin J Howard 132 Crocus Ave
Ce 5-9931 Canada
- RALEIGH N C—John C Hanner Co 2817 Kit-
trell Drive Te 4-8924 No Carolina So Caro-
lina Florida Alabama Tennessee Mississippi
Louisiana Georgia
- SEATTLE—Benna Persitz 114 Garfield Alder 1-965
Oregon Washington Idaho Montana
- Inductor Eng'g Inc 117 Schley Ave Lewes Dela
LE-2341
- Industrial Accessories Inc Line Rd Matawan NJ MA
1-4448
- Industrial Acoustics Co 341 Jackson Ave New York
54 NY CV 2-0180
- Industrial Condenser Corp 3243 N California Ave
Chicago 18 III IN 3-2200
- Industrial Control Co 805 Albin Ave Lindenhurst L I
NY MO 1-6060
- Industrial Development Eng'g Assoc 7900 Pendleton
Pike Indianapolis Ind LI 7-3581
- Industrial Development Labs Inc 17 Pollock Ave
Jersey City 5 NJ HE 5-0100
- Industrial Devices Inc 982 River Rd Edgewater NJ
WH 3-4084
- Industrial Electrical Works 1509 Chicago St Omaha
2 Nebr RE-4600
- Industrial Electronic Engineers 3973 Lankershim Blvd
N Hollywood Calif ST 7-1484
- Industrial Electronics Inc 8060 Wheeler St Detroit 10
Mich TY 8-7600
- Industrial Eng'g & Equip Co 24 Hanley Industrial Ct
Brentwood St Louis 17 Mo MI 7-3380
- Industrial Engravers Inc 2212 McDonald Ave Brooklyn
23 NY HI 9-2030
- Industrial Hardware Mfg Co 109 Prince St New York
12 NY OR 7-1881
- Industrial Instruments Inc 89 Commerce Rd Cedar
Grove NJ PI 6-3300
- Industrial Nucleonics Corp 1205 Chesapeake Ave
Columbus 12 Ohio HU 8-0671
- Industrial Products Co Div Danbury-Knudsen Box 148
Danbury Conn SP 5-2521
- Industrial Radio Corp 428 N Parkside Ave Chicago
44 III AU 7-8888
- Industrial Research Labs Div Aeronica Mfg Corp Hill-
top & Frederick Rds Baltimore 28 Md RI 7-0200
- Industrial Retaining Ring Co 57 Cordier St Irvington
11 NJ WA 6-5000
- Industrial Systems Co 32 Main St Matawan NJ MA
1-4660
- Industrial Test Equipment Co 55 E 11 St New York
3 NY GR 3-4684
- Industrial Timer Corp 1407 McCarter Hwy Newark 4
NJ HU 2-4530
- Industrial Transformer Corp Gouldsboro Pa VI 2-2111
- Industrial Tubes Inc 321 Stevens St Geneva III
GE-806
- Industrial TV Inc 369 Lexington Ave Clifton NJ
GR 3-0900
- Industrial Winding Machinery Co 120 Wall St New
York 5 NY WH 3-1754
- Industrial Wiring & Cable Co 103 Foundry St Wake-
field Mass CR 9-3626
- Industronics P O Box 424 Arlington Hts III CL
3-5831
- Infra Electronic Corp 47 Factory Pl Cedar Grove NJ
CE 9-2000
- Ingersoll-Rand Co 11 Broadway New York 4 NY DI
4-6070
- Injection Molders Supply Co 3514 Lee Rd Cleveland
20 Ohio WY 1-1424
- Inland Electronics Corp 500 Rathbone Ave Aurora III
6-7744
- Insl-x Sales Co 26 Rittenhouse Pl Ardmore Pa
- Instrumentation Associates 17 W 60 St New York 23
NY CI 5-5590
- Instrument Cases Inc 510 W Garfield St Glendale 4
Calif CH 5-5767
- Instrument Development Labs Inc 67 Mechanic St
Attleboro Mass AT 1-3880
- Instrument Electronics Corp 90 Main St Port Wash-
ington NY PO 7-4242
- Instrument Labs 315 W Walton Pl Chicago 10 III
MI 2-0123
- Instrument Resistors Co 1036 Commerce Ave Union
NJ MU 6-4363
- Instruments for Industry Inc 150 Glen Cove Rd
Mineola NY PI 2-5300
- Instruments Inc 122 N Madison St Tulsa Okla CH
2-4151
- Insulating Fabricators Inc 150 Union Ave E Ruther-
ford NJ WE 9-7392
- Insulating Fabricators of N E Inc 69 Grove St
Watertown 72 Mass WA 3-9800
- Insulation Mfrs Corp 565 W Washington Blvd Chicago
39 III CE 6-7320
- Insulation & Wires Inc 1534 Swinney Ave Ft Wayne
Ind A-4115
- Insuline Corp of America 186 Granite St Manchester
NH NA 5-8511
- Integrated Mica Corp 202 Franklin Pl Woodmere
L I NY FR 4-2350
- Intex Systems Inc 22 Thames St New York 6 NY
BO 9-3800
- Intelligent Machines Research Corp 7019 Edsall Rd
Research Park Alexandria Va FL 4-5000
- Intercontinental Dynamics Corp 170 Coolidge Ave
Englewood NJ LO 7-3600
- Interelectronics 2432 Grand Concourse New York 58
NY LU 4-6200
- Interference Measurement Lab Inc 907 E 51 St
Brooklyn 3 NY IN 9-1765
- International Business Machines Corp 590 Madison
Ave New York 22 NY PL 3-1900
- International Crystal Mfg Co 18 N Lee Ave Oklahoma
City 1 Okla FO 5-1165
- International Electronic Industries P O Box 1368
Nashville 3 Tenn AL 4-8809
- International Electronic Research Corp 145 W Mag-
nolia Blvd Burbank Calif VI 9-2481
- International Eng'g Inc 1145 Bolander Ave Dayton 1
Ohio AD-7275
- International Instruments Inc Box 2954 New Haven
15 Conn FU 7-2515
- International Nickel Co 67 Wall St New York 5 NY
WH 4-1000
- International Powder Metallurgy Co 439 W Main St
Ridgway Pa 33-125
- International Radiant Corp 4 Manhasset Ave Port
Washington NY PO 7-3184
- International Radio & Electronics Corp R 4 Box 123
Elkhart Ind EL 2-8583
- International Rectifier Corp 1521 E Grand Ave El
Segundo Calif OR 8-6281
- International Register Co 2620 W Washington Blvd
Chicago 12 III VA 6-4242
- International Research Associates 2221 Warwick Ave
Santa Monica Calif TE 0-4415
- International Research & Development Corp 797
Thomas Lane Columbus 16 Ohio AM 8-8601
- INTERNATIONAL RESISTANCE 401 N Broad St Philadelphia
8 Pa
Phone WAInut 2-2166
Executive Vice Pres—Harry A Ehle
Vice Pres (Sls)—Charles H Griffith
Incl Sls Mgr—Harold G Beebe
Dist Sls Mgr—Robert D Ferree
Mgr Phila Sales Office—David R Bagenstose
Expt Sls Mgr—Hans Mannheims
ATLANTA-R—Hollingsworth & Still 508 White-
head Bldg Murray B-5878 covers Ala-Fla-Ga-
N & S Car-E Tenn (incl Nashville & Chat-
tanooga)
- BOSTON-R—Ray Perron & Co 1870 Centre St
FAirview 3-100B covers Me-NH-VI-Mass-RI-
Conn
- CHICAGO-BO—International Resistance Co
4300 N California Ave Juniper B-7100 covers
N III South to & including Henry, Bureau,
La Salle, Grundy, & Kankakee (Excl. Rock
Island Co.) Wis-(incl the 7 Southern coun-
ties)
- CLEVELAND-R—Boehr-Greenleaf & Assoc 14700
Detroit Ave Lakewood 1-8468
- DALLAS-R—George Anderson 1903 Griffin St
Riverside 5931 covers Tex-Ark-Okla-Miss-
La-Tenn (west of & excl Nashville)
- DENVER-R—Ronald G Bowen 721 S Broadway
Race 2-4641-2 covers Colo-Id (E of & excl
Boise) NM-Wyo-Utah-Mont (E of & excl
Judith Basin) & West Texas and West Ne-
braska
- DETROIT-R—Koehler-Pasmore 11833 Hamilton
Ave Townsend B-3322 covers Mich except
northern peninsula
- INDIANAPOLIS-R—Vernon C Macnabb 820 E
64th St Broadway 6770 covers Ind-Ky
- LOS ANGELES-R—Marshall Sales Co 7422 Mel-
rose Ave Webster B-2591 covers Cal (S of &
excl Fresno) Ariz-Nev (S of & incl Esme-
ralda-Nye & Lincoln cos)
- MINNEAPOLIS—The Jack Heimann Co 1711
Howthorne Ave MAIn 5457 covers E & W
Wisc (except the 7 Sothern counties) Ia-III
(Moline-Sterling-Rock Island)-Minn-N & S
Dak-Neb (E of & incl Custer Co) Northern
Mich
- NEW YORK-BO—International Resistance Co
165 Broadway Rm 2205 COurtland 7-5020
covers N NJ (excl Trenton)-NYC-NYS
(incl Rockland & Westchester cos)-Long
Island
- PHILADELPHIA (Home Office) International
Resistance Co 401 N Broad St Walnut 2-2166
covers Pa (E of Harrisburg) SNJ (incl
Trenton) Md (excl Cumberland) Va-Del-
Wash DC
- PITTSBURGH-R—Tanner & Covert 300 Mt Leba-
non Blvd LOcut 1-5067 covers Pa (W of
Harrisburg) W Va-Cumberland Md (only)
- SAN FRANCISCO-R—George B Ellis Sales
Co 3241 El Camino Real Atherton Calif
Emerson B-9100 covers N Cal from Fresno-
Nev (N of & excl Esmeralda-Nye & Lincoln
cos)
- SEATTLE-R—Dave M Lee Co Inc 2517 2nd Ave
MAIn 5512 covers Ore-Wash-Mont (W of &
incl Judith Basin)-Id (W of & incl Boise)
- ST LOUIS-R—Norman W Kathrinus 4356 Duncan
Ave Olive 2-7005 covers Mo-Kan-S III
divs of counties listed under Chicago
- SRACUSE-BO—International Resistance Co 112
Montgomery St HAarrison 2-0274 covers N
NY (excl Rockland & Westchester cos)
- International Scientific Industries Corp 2374 E Hiway
24 Colorado Springs Colo ME 2-5149
- International Telemeter Corp 2000 Stoner Ave Los
Angeles 25 Calif GR 8-7751
- International Telephone & Telegraph Corp 67 Broad
St New York 4 NY BO 9-3800
- Interstate Electronics Corp 875 S East St Anaheim
Calif PR 4-6740
- Investment Casting Co 60 Brown Ave Springfield NJ
DR 6-5260
- I Q Industries 1714 Westwood Blvd Los Angeles 24
Calif GR 3-4310
- Iron Fireman Mfg Co Electronics Div 2838 S E 9 Ave
Portland 2 Ore BE 4-6551
- Irvington Div Minn Mining & Mfg Co 11 Argyle
Terrace Irvington 11 NY
- Irwin Labs 1238 S Gerhart Ave Los Angeles 22 Calif
RA 3-1819
- Islip Transformer & Metal Co Beech St Islip NY JU
1-0960
- Isolanite Mfg Corp Warren Ave Stirling NJ MI
7-0385
- Isomet Corp 118 Union St Palisades Park NJ WI
4-3070
- Isotope Products 1711 Elmwood Ave Buffalo 7 NY
VI-2488
- Isotopes Specialties Co 703 S Main St Burbank
Calif VI 9-2273
- I-T-E Circuit Breaker Co Special Products Div 601 E
Erie Ave Philadelphia 34 Pa GA 6-5700
- Ivanhoe Electronic Labs 14238 S La Salle St Chicago
27 III RI-0456
- Jack & Heintz Inc 17600 Broadway Cleveland 1
Ohio MO 2-1000
- Jackes-Evans Mfg Co 4427 Geraldine Ave St Louis 15
Mo EV 5-8050
- Jack Scientific Instrument Co Bill 143 Cedros St
Solana Beach Calif SK 5-1551
- Jackson Electrical Instrument Co 18 S Patterson Blvd
Dayton 2 Ohio MI 0367
- Jackson Electronics Inc 23 Woodcrest Rd West Chester
Pa
Jacobs Instrument Co 4718 Bethesda Ave Bethesda 14
Md OL 4-8100
- Jacobson Nut Mfg Corp Box 177 Kenilworth NJ MU
6-0200
- Jaidinger Mfg Co 1921 W Hubbard St Chicago 22 III
HA 1-1090
- JaMac Products Co 8845 N E Sandy Blvd Portland
20 Ore AT 2-4418
- James Instrument Lab 9110 S 52 Ct Oak Lawn III
GA 4-3943
- James Plating Works Inc 720 W Schubert Ave Chi-
cago 14 III BU 1-2462
- James Pond & Clark 2181 E Foothill Blvd Pasadena
Calif SY 3-9195
- James Vibrapow Co 4050 N Rockwell St Chicago 18
III CO 7-6333
- Janco Corp 3111 Winona Ave Burbank Calif TH
8-5792
- Janette Electric Mfg Co 8350 Lehigh Ave Morton
Grove III OR 3-8300
- Jan Hardware Mfg Co 75 N 11 St Brooklyn 11 NY
EV 7-3541
- Jansa Woodworking Corp 350 Meserole St Brooklyn 6
NY EV 1-5521
- Jarrell-Ash Co 26 Farwell St Newtonville 60 Mass
DE 2-2130
- Jarvis Electronics Corp 1140 Cherry St Winnetka III
WI 6-1255
- Javex P O Box 646 Redlands Calif PY 3-5752
- J-B-L Instrument Co Sycamore & Mill Rd Clifton
Heights Pa MA 3-4377
- Jeffers Electronics Div Speer Carbon Co Hoover Ave
DuBois Pa 2100
- Jefferson Product Corp Pleasant Valley Rd Sutton
Mass UN 5-4447
- Jeffrey Mfg Co 803 N 4 St Columbus 16 Ohio AX
4-3331
- Jelliff Mfg Corp C O Southport Conn CL 9-1615
- Jennings Radio Mfg Corp 970 McLaughlin Ave San
Jose 8 Calif CV 2-4025
- Jensen Industries Inc 7333 Harrison St Forest Park
III FO 6-0180
- Jensen Mfg Co 6601 S Laramie Ave Chicago 38 III
PO 7-6000
- Jerrold Electronics Corp 23 & Chestnut Sts Phila-
delphia 3 Pa LO 4-0707
- Jersey Specialty Co Burgess Pl Mountainview NJ LI
4-0784
- JFD Mfg Co 6101 16 Ave Brooklyn 4 NY DE 1-1000
- Jo-Bell Products Inc 5456 W 111 St Oak Lawn III
GA 5-0240
- Jodee Plastics Co 213 Shepherd Ave Brooklyn 8 NY
AP 7-9276
- Johns-Manville 22 E 40 St New York 16 NY LE
2-7600
- Johns-Manville Dutch Brand Div 7800 Woodlawn Ave
Chicago 19 III SA 1-3000
- Johnson Aircraft Eng'g Co M J Box 10 Morristown
Airport Morristown NJ JE 8-9100
- Johnson Bronze Co S Mill St New Castle Pa OL
4-6531
- Johnson Co E F Waseca Minn 990
- Johnson Corp 805 Wood St Three Rivers Mich 2-1715
- Johnson Electronics Inc 521 Elwell St Orlando Fla
5-1546
- Johnson & Hoffman Mfg Corp 31 E 2 St Mineola NY
PI 2-3333
- Johnson Mfg Co Mt Vernon Iowa 3651
- Johnson Research Corp Bethpage L I NY WE 8-4600
- Johnson Service Co 507 E Michigan St Milwaukee 1
Wisc BR 6-9200
- Johnson-Williams Inc 2635 Park Blvd Palo Alto 15
Calif DA 3-4131
- Johnston Foil Mfg Co 6008 S Broadway St Louis 11
Mo HU 1-7000
- Johnston & Funk Titanium Corp W Kemrow Ave
Wooster Ohio
- Jones Div Howard B Cinch Mfg Co 1026 S Homan
Ave Chicago 24 III NE 2-2000
- Jones Electronics Co M C 185 N Main St Bristol
Conn LU 2-6388
- Jones Electronics Hiram 2313 W Olive St Burbank
Calif TH 8-6685

(Continued on page 406)



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Synthane (arrow) serves as bearing in landing gear shack struts.

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In communications equipment, Synthane is found in hundreds of insulating parts. In aircraft instruments, precision ball bearing retainers and innumerable other parts Synthane is at work. The airframe itself finds Synthane at work in a number of critical applications such as landing gear struts.

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Synthane is valued in electrical applications chiefly for its high dielectric strength, low moisture absorption and low dissipation factor. Synthane is available in over 30 standard grades in sheet, rods, tubes or you can avail yourself of our complete fabricating services.

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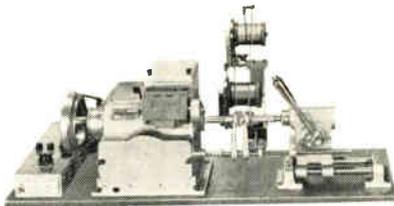
- Jones & Laughlin Steel Corp 3 Gateway Center Pittsburgh 30 Pa CO 1-7400
- Jordan Electronics Inc Sub Panellit Inc 3025 W Mission Rd Alhambra Calif AT 9-5075
- Joslyn-Hudson Inc Sub Amelco Inc 2040 Colorado Ave Santa Monica Calif
- Joy Mfg Co Electrical Products Div 1201 Macklind Ave St Louis 10 Mo MI 5-6670
- Joy Mfg Co 333 Oliver Bldg Pittsburgh 22 Pa GR 1-2140
- Julie Research Labs 556 W 168 St New York 32 NY LO 8-8700
- J-V-M Eng'g Co 4633 S Lawndale Ave Lyons III LY 3-7990
- Kaar Eng'g Corp 2995 Middlefield Rd Palo Alto Calif DA 3-9001
- Kahle Eng'g Co 1307 7 St N Bergen NJ UN 7-6500
- Kahlenberg Bros 1700 13 St Two Rivers Wisc 307
- Kahl Scientific Instrument Corp P O Box 1166 El Cajon Calif HI 4-5944
- Kahn & Co 541 Windsor St Hartford 1 Conn CH 6-7431
- Kahn Research Labs 22 Pine Freeport NY
Phone—Freeport 9-8800
Services—Research Staff for Communications and Television
Products—Single-Sideband Transmitter Adopter allows AM transmitter to operate twin channel single-sideband. Also Compatible Single-Sideband Transmitter Adapters for broadcast and communications services may be received on normal AM receivers
- Kaiser Aircraft & Electronics Corp Toledo Electronics Div P O Box 437 Toledo Ohio PO 1591
- Kaiser Aluminum & Chemical 919 N Michigan Ave Chicago III MO 4-6900
- Kane Mfg Corp P O Box 641 Kane Pa 1075
- Kanthal Corp Amelia Pl Stamford Conn FI 8-9251
- Katron P O Box 472 Huntington Beach Calif Le 9-4606
- Kato Eng'g Co 1415 1 Ave Mankato Minn 5031
- Katolight Corp 1415 1 Ave Mankato Minn 5031
- Katolight Corp Box 891 Mankato Minn
- Kay Electric Co 14 Maple Ave Pine Brook NJ CA 6-4000
- Kay Lab 5725 Kearny Villa Rd San Diego 12 Calif BR 7-6700
- Kaynar Co Box 2001 Terminal Annex Los Angeles 54 Calif RI 9-7691
- Kay-Townes Antenna Co 1511 Dean Ave Rome Ga 4-2631
- Kearfoot Co Western Div 14844 Oxnard St Van Nuys Calif
- Kearfoot Inc 1378 Main Ave Clifton NJ
- Keasbey & Mattison Co Ambler Pa
- Kedman Co 233 S W Salt Lake City 1 Utah EM 3-8869
- Kees Mfg Co F D 700 Park St Beatrice Nebr 761
- Keil Eng'g Products Co 4356 Duinac Ave St Louis 10 Mo OL 2-7005
- Keithley Instruments Inc 12415 Euclid Ave Cleveland 6 Ohio SW 5-2666
- Keller Products Inc 41 Union St Manchester NH NA 5-7887
- Keller Tool Div Gardner-Denver Co 1333 Fulton St Grand Haven Mich 551
- Kelley & Co O G 98 Taylor St Boston 22 Mass AV 2-3700
- Kellong Co M W P O Box 469 Jersey City 3 NJ DE 3-3100
- Kellong Switchboard & Supply Co Div I T & T 79 W Monroe St Chicago 3 III DE 2-0750
- Kelnor Mfg Corp 1355 Market St San Francisco 3 Calif MA 1-0881
- Kemet Co Div Union Carbide & Carbon Corp P O Box 6087 Cleveland 1 Ohio AC 6-3330
- Kenlite Labs Inc 1819 W Grand Ave Chicago 22 III TA 9-6950
- Kenode Mfg Co 161 W 18 St New York 11 NY
- Kentron Electron Products Inc 14 Prince Pl Newburyport Mass HO 2-4464
- Kendall Co Polyken Sales Div 309 W Jackson Blvd Chicago 20 III WE 9-7100
- Ken-del Productions 920 King St Wilmington 1 Dela OL 4-7771
- Kennedy & Co D S 155 King St Cohasset Mass CO 4-1200
- Kennedy Industries 6808 Vista Del Mar Playa del Rey Calif EX 1-4461
- Kent Co F C 64 Howard St Irvington 11 NJ ES 3-5500
- Kent Metal Mfg Co 500 Johnson Ave Brooklyn 37 NY HY 7-1820
- Kent TV Inc 505 Driggs Ave Brooklyn 11 NY EV 8-2272
- Kenwood Eng'g Co 265 Colfax Ave Kenilworth NJ CH 5-0100
- Kenyon Transformer Co 840 Barry St New York 59 NY KI 2-4500
- Kenco Labs 131-38 Sanford Ave Flushing NY IN 1-7000
- Kester Solder Co 4201 Wrightwood Ave Chicago 39 III BE 5-1601
- Key Electric Corp 287 Post Ave Westbury NY ED 4-6555
- Keystone Bolt & Nut Corp 125 Church St New York 7 NY WO 4-4600
- Keystone Carbon Co 1935 State St St Marys Pa 41-591
- Keystone Electronics Co 65 7 Ave Newark 4 NJ HU 2-0630
- Keystone Electronics Corp 423 Broome St New York 13 NY
- Keystone Products Co 904 23 St Union City NJ UN 6-5400
- K-F Development Co 2606 Spring St Redwood City Calif EM 8-5670
- Kidde & Co Walter 1156 Main St Belleville 9 NJ PL 9-5000
- Kimble Glass Co Sub Owens-Ill Glass Co P O Box 1035 Toledo 1 Ohio CH 2-6543
- Kine-Lab 3250 Kenilworth Ave Berwyn III GU 4-2677
- Kinetics Corp 2 Churchill Rd Hingham Mass HI 6-2433
- King Electric Equipment Co 9123 Inman Ave Cleveland 5 Ohio DI 1-1066
- Kinevox-Hallen Div Electromation Co 1646 18 St Santa Monica Calif TE 0-6401
- King Labs Inc 127 Solar St Syracuse 3 NY 74-3359
- King Lab Inc 2645 S 2 St W Salt Lake City 15 Utah
- King-Seelye Corp Signal Electric Div Menominee Mich Kinney Co Joseph Locust St Carnegie Pa WA 2-1226
- Kinney Mfg Div Vacuum Equip Div N Y Air Brake Co 3529 Washington St Boston 30 Mass JA 4-3220
- Kintel (Kay Lab) 5725 Kearny Villa Rd San Diego 12 Calif BR 7-6700
- Kip Electronics Corp 29 Holly Pl Stamford Conn DA 3-5116
- Kirchberger & Co M 83 W Forest Ave Englewood NJ EN 3-4555
- Kirkland Co H R 8 King St Morristown 4 NJ JE 8-2777
- Kistler Instrument Corp 15 Webster St N Tonawanda NY JA 2099
- Kit-Tronics 2315 Hendola Dr N E Albuquerque New Mex 9-1089
- Klein Electronics Co Leo 2404 S LaBrea Ave Los Angeles 16 Calif WE 5-3119
- Klein & Sons Mathias 7200 McCormick Rd Chicago 45 III JII 8-6820
- Klien Bros 321 W 50 St New York 19 NY CO 5-0130
- Klincher Locknut Corp 2153 Hillside Ave Indianapolis 18 Ind WA 5-9284
- Kling Metal Spinning & Stamping Co 245 Centre St New York 13 NY CA 6-5580
- Klipsch & Associates P O Drawer 96 Hope Ark PR 7-3395
- Klise Mfg Co 51 Cottage Grove St SW Grand Rapids 2 Mich CH 3-3664
- Kluge Electronics Inc 5 & Main Sts Albion Nebr 64
- Knights Co James Church & Wells Sts Sandwich III 2141
- Knorr Inc 4224 Holden St Oakland 8 Calif OL 3-1661
- Knowles Electronics Inc 9400 Belmont Franklin Park III OL 5-3600
- Kobay Tool Co 1535 N Dayton St Chicago 22 III MI 2-6709
- Koch & Sons H Box 127 Corte Madera Calif 1340
- Koiled Knobs Inc 1565 Dixwell Ave New Haven 14 Conn CH 8-5515
- Kollman Case Corp P O Box 180 Ft Wayne 1 Ind H 0919
- Kollman Instrument Corp Standard Coil Products Sub 80-08 45 Ave Elmhurst 73 NY NE 9-2900
- Kolton Electric Mfg Co 123 N J Railroad Ave Newark 5 NJ MI 2-4622
- Kontes Glass Co Vineland NJ OX 2-8500
- Kooltronic Fan Co Carter Rd at Rosedale Princeton NJ 1-5877W
- Koppers Co Koppers Bldg Pittsburgh 19 Pa EX 3-3300
- Kost Products Co 2335 N Cicero Ave Chicago 39 III BE 7-2764
- Krautter & Co 585 18 Ave Newark 3 NJ ES 3-4000
- Krautter Electric Machine Co 360 Grove St Newark 3 NJ ES 3-1613
- Krennel Mfg Co 227 Fulton St New York 7 NY CO 7-5712
- Kriss Electronics Inc 191 Oraton St Newark 4 NJ HU 4-3137
- Krohn-Hite Corp 580 Massachusetts Ave Cambridge 39 Mass UN 4-4272
- Kroker Eng'g & Devel Co 3022 N 77 Ct Elmwood Park 35 III GL 3-2544
- Krueger & Hudepohl 1041 Evans St Cincinnati 4 Ohio WA 1-6770
- Kruger Instruments Harold Box 164 San Gabriel Calif Krylon Inc 18 W Airy St Norristown Pa BR 9-1950
- Krystinel Corp P O Box 6 Port Chester NY WE 9-2261
- Kulite Tunsteng Co 1040 Hoyt Ave Ridgefield NJ WH 5-3000
- Kulka Electric Mfg Co 633 S Fulton Ave Mt Vernon NY MO 4-4024
- Kupfrian Mfg Corp 395 State St Binghamton NY 3-6426
- Kurman Electric Co 191 Newel St Brooklyn 22 NY EV 3-8000
- Kurz-Kasch Inc 1421 S Broadway Dayton 1 Ohio AD-8161
- Kuss Industries Inc Tacony & Lewis Sts Philadelphia 24 Pa CU 9-3115
- Kulhe Labs 730 S 13 St Newark 3 NJ BI 3-6000
- K-V Transformer Corp 20 E Franklin St Danbury Conn PI 3-5531
- K-W Eng'g Works 3145-A N 48 St Milwaukee 16 Wisc CU 3-2095
- Kwikheat Mfg Co 3732 San Fernando Rd Glendale 4 Calif CH 5-2376
- Kybernetes Corp 9 E 40 St New York 16 NY MU 3-6030
- Lab Corp E Onondaga Skaneateles NY SK 1161
- Labelon Tape Co 450 Atlantic Ave Rochester 9 NY HU 2-3460
- Labko Scientific Inc 111 W Elm Stillwater Okla 1167
- Labline Inc 3070 W Grand Ave Chicago 22 III SA 2-5151
- Laboratory Equipment Corp P O Box 151 St Joseph Mich HU 3-5534
- Laboratory for Electronics Inc 75 Pitts St Boston 14 Mass RI 2-3200
- Lab-Tronics Inc 3656 N Lincoln Ave Chicago 13 III GR 7-7900
- La Cesa Eng'g Corp 5614 W Grand Ave Chicago 39 III BE 7-0060
- Laine Electronics & Mfg Co 91 Industrial Ave Little Ferry NJ HU 9-4532
- Lamaco Inc 9230 W Grand Ave Franklin Park III GL 5-9020
- Lambda Electronics Corp 11-11 131 St College Point 56 NY IN 1-8500
- Lambda-Pacific Eng'g Inc 14725 Arminia St Van Nuys Calif ST 6-1801
- Laminated Sheet Products Corp 449 Neponset St Norwood Mass NO 7-3500
- Laminations Co 300 Main St Stamford Conn FI 8-7013
- La Moree C D 2433 Birkdale St Los Angeles 31 Calif CA 5-5666
- LaMotte Chemical Products Co Chestertown Md CH-1000
- Lampkin Labs Inc R F D 1 Bradenton Fla 3-9982
- Lamson Corp Lamson St Syracuse 1 NY 73-0221
- Lamtex Industries Inc 51 State St Westbury NY ED 3-2680
- Lancaster Glass Corp Lancaster Ohio OL 3-0311
- Land-Air Inc Instrument & Electronic Div 2133 Adams Ave San Leandro Calif LO 9-5841
- Land-Air Inc 7444 W Wilson Ave Chicago 31 III UN 7-7550
- Landis & Gyr 45 W 45 St New York 36 NY JU 6-4644
- Landsverk Electrometer Co 550 W Garfield Ave Glendale 4 Calif CI 1-2954
- Lane Electronics Mfg Corp 7254 Atoll Ave N Hollywood Calif ST 7-3267
- Langevin Mfg Corp 47-37 Austell Pl Long Island City 1 NY RA 9-1850
- Lansdale Tube Company Division of Philco Corporation Church Road Lansdale Pa
Telephone—Ulysses 5-4681
Vice President and General Manager—William J Peltz
General Sales Manager—C H Warshaw
Manager-Government Sales—W F Maher
Manager-Tube Sales—J J Grabiec
Products—Micro-Alloy Transistors Surface-Barrier Transistors Power Transistors Junction Transistors Crystal Diodes Receiving-Type Tubes Cathode Ray Tubes Special-Purpose Tubes Military-Type Tubes Subminiature Tubes
- Lansing Sound Inc James B 3249 Casitas Ave Los Angeles 39 Calif NO 3-3218
- LaPointe Industries Inc 155 W Main St Rockville Conn TR 5-3351
- Lapp Insulator Co Radio Specialties Div 24 Summer St LeRoy NY 385
- Larson Instrument Co 24 Orchard St Tarrytown NY ME 1-3419
- Las-Lab Inc 220 S Mt Olivet Lane Baltimore 29 Md RI 7-1044
- Lavoie Labs Inc Matawan-Freehold Rd Morganville NJ MA 1-2600
- Lawn Electronics Co E Freehold Rd Freehold NJ FR 8-0175
- Lawter Chemicals Inc 3550 Touhy Ave Chicago 45 III AM 2-8400
- Leach Corp Inet-Palmer Div 4441 S Santa Fe Ave Los Angeles 58 Calif LU 3-4771
- Leach Corp Leach Relay Div 5915 Avalon Blvd Los Angeles 3 Calif AD 2-8221
- Leach & Garner Co Industrial Div Leach & Garner Bldg Attleboro Mass 1-1155
- Learn Inc 3171 S Bundy Drive Santa Monica Calif EX 8-6211
- Lectrohm Inc 5560 Northwest Hwy Chicago 30 III RO 3-1700
- Lee Chemical Corp Walter Seabury Ave & Butler Pl Bronx 61 NY SY 2-4400
- Leeds & Northrup Co 4970 Stenton Ave Philadelphia 44 Pa MI 4-4900
- Lee Electric Inc 566 52 St W New York NJ UN 6-3656
- Lee Electric & Mfg Co 2806 Clearwater St Los Angeles 39 Calif NO 3-1295
- L E E Inc 625 N Y Ave N W Washington 1 D C NA 8-3225
- Leetronics Inc Lee Instrument Div 30 Main St Brooklyn 1 NY UL 5-7163
- Lehigh Valley Electronics Eng'g & Mfg Co 215 S 3 St Allentown Pa HE 5-3662
- Leighton Labs H W York Rd & Sunset Lane Hatboro Pa OS 5-3302
- Leiman Bros 146 Christie St Newark 5 NJ MA 3-7520
- Leitch Eng'g Corp 326 Lincoln St Manchester N H NA 3-4773
- Lektra Labs Inc 154 11 Ave New York 11 NY AL 5-2013
- Lel Inc 380 Oak St Copiague NY AM 4-2200
- Leland Electric Co Div American Machine & Foundry Co 1501 Webster St Dayton 1 Ohio MI 0701
- Leland Inc G H 123 Webster St Dayton 2 Ohio MI 9891
- Lemert Eng'g Co 201 E Jefferson St Plymouth Ind 3430
- Lenk Mfg Co 30 Cummington St Boston 15 Mass KE 6-9700

(Continued on page 408)

COMPACT HEAVY DUTY UNIVERSAL AUTOMATIC WINDER

No Need to Disturb Cam and Yoke for Gear Change

Shuttle mechanism divided by locating cam conveniently at machine's front and placing gears on top of winding head for instant accessibility when changing gears. Maintenance lessened by continuous automatic lubrication of cam, yoke and all high speed gears.



Winds self-supporting lattice wound universal coils (more than 2 may be wound simultaneously) and single or pi-wound R. F. chokes up to 3" OD and 1 1/4" wide. Maximum distance between winding centers is 8", wire sizes wound 20 to 44, winding speed up to 2000 RPM and output end of spindle 5/8", flattened shaft.

Supplied with 2 tensions with supporting rack, 1 winding set-up, cam, motor, automatic counter, magnetic brake, positive locking tailstock and gear chart. Pi-winding attachment available.

Increase production, lower costs, lessen down time with Model 700-AM. Only 38" L x 12" W x 12" H.

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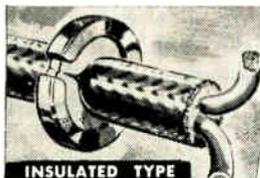
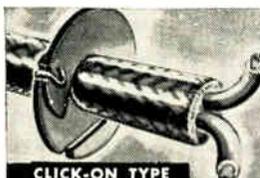
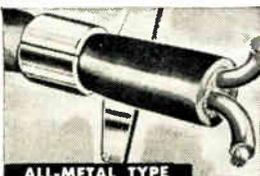
The Most Complete Line of Coil Winding Equipment Made
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4 WAYS TO END ALL CORD AND CABLE SERVICE FAILURES

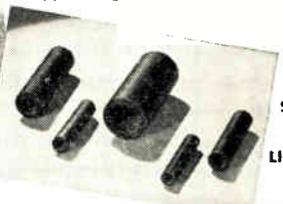
Economically

GRIPMASTER STRAIN RELIEFS

Interruptions due to cable and cord connection failures are eliminated because they anchor the cord to the product at the point of strain. GRIPMASTER Strain Reliefs can withstand pulls up to 100 lbs., and are acceptable to Underwriters Laboratories. All types Reg. U. S. Pat. Off.



WIRE BINDING SLEEVES—Preventing fraying of cord ends, these specially-treated rubber tubes are available in five sizes to fit wires to .790



WRITE FOR SAMPLES AND LITERATURE TODAY!

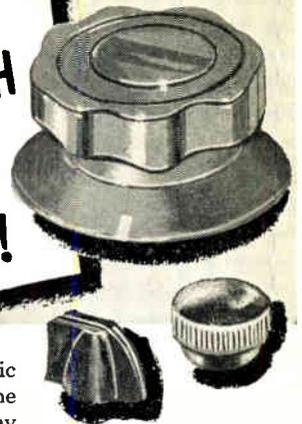
GEORGE WALKER COMPANY

STRAIN RELIEF SPECIALISTS

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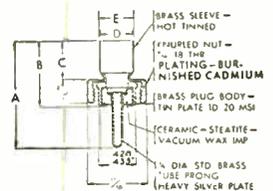
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SUPPLIED IN 1 & 2 CONTACT TYPES

JONES SHIELDED TYPE PLUGS & SOCKETS

LOW LOSS PLUGS AND SOCKETS FOR HIGH FREQUENCY CONNECTIONS

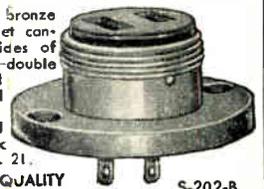
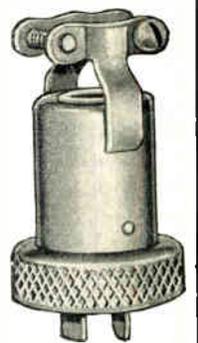
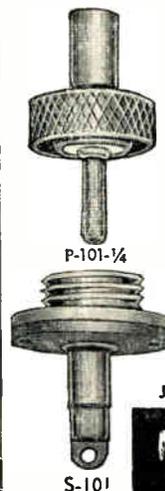
For quality construction thru-out, and fine finish, see diagram above.

101 Series furnished with 1/4", .290", 5/16", 3/8", or 1/2" ferrule for cable entrance. Knurled nut securely fastens unit together. Plugs have ceramic insulation; sockets bakelite. Assembly meets Navy specifications.

202 Series Phosphor bronze knife-switch type socket contacts engage both sides of flat plug contacts—double contact area. Plugs and sockets have molded bakelite insulation.

For full details and engineering data ask for Jones Catalog No. 21.

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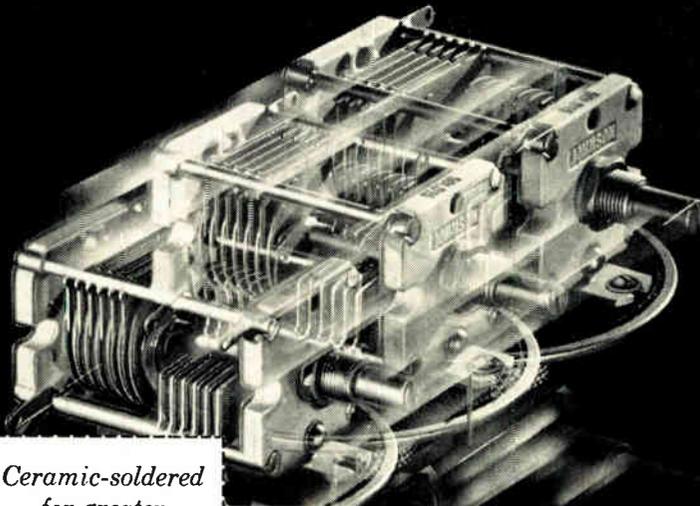
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- Lennard Co P M P O Box 56 Village Sta New York 14 NY ST 9-2420
- Lenox Instrument Co 2010 Chancellor St Philadelphia 3 Pa RI 6-6653
- Lenz Electric Mfg Co 1751 N Western Ave Chicago 47 III AR 6-4454
- Leonard Electric Products Co 67 34 St Brooklyn 32 NY ST 8-2023
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- Lercio Electronics Inc 501 S Varney St Burbank Calif VI 9-5556
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- Levey Labs Harold A 8127 Oleander St New Orleans 18 La GA 1501
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- Lewis Eng'g Co 339 Church St Naugatuck Conn PA 9-5253
- Lewis Sprng & Mfg Co 2652 W North Ave Chicago 47 III
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- Librascope Inc 808 Western Ave Glendale Calif CH 5-2677
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- Linde Air Products Co Div Union Carbide & Carbon Co 30 E 42 St New York 17 NY MU 7-8000
- Lindgren & Associates Erik A 4515 N Ravenswood Ave Chicago 40 III LO 1-0408
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- Lineac Inc State Rd & Levick St Philadelphia 35 Pa MA 4-4700
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- Line Material Industries 700 W Michigan Milwaukee Wis BR 2-8777
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- Link-Belt Co Prudential Plaza Chicago 1 III RA 6-7790
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- Linhar Inc 4101 San Fernando Rd Glendale 4 Calif CH 5-5135
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- Lisk Co G W Clifton Springs NY
- Liston-Becker Plant Beckman Instruments Inc 649 Hope St Springdale Conn FI 8-4281
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- Malayan Tin Bureau 1028 Conn Ave N W Washington 6 DC RE 7-6078
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- Mandel Chemical Products Co 207 Astor St Newark 5 NJ BI 3-0779
- Mandex Mfg Co 2608 W 16 St Chicago 8 III LA 1-2300
- Manning Maxwell & Moore Inc Shelter Rock Lane Danbury Conn PI 3-6721
- Manning Paper Co John A P O Drawer 328 Troy NY AR 3-6320
- Manostat Corp 20-26 N Moore St New York 13 NY DI 9-0660
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- Manufacturer's Lab 10610 Keswick St Sun Valley Calif
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- Marion Electrical Instrument Co Grenier Field Manchester NH NA 5-6971
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- Markel & Sons L Frank School Lane Norristown Pa BR 2-8960
- Markem Machine Co 150 Congress St Keene NH EL 2-1130
- Mark Products Co 6412 W Lincoln Ave Morton Grove III OR 5-4999
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- Marlin-Rockwell Corp 402 Chandler St Jamestown NY 61-541
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- Martin Co Glenn L Baltimore 3 Md MO 7-3800

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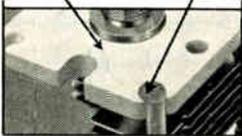
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- Marlab Co 249 Haverford Ave Swarthmore Pa
- Marvel-Schebler Products Div Borg-Warner Corp Box 863 Decatur Ill 8-4631
- Maryland Electronic Mfg Corp 5009 Calvert Rd College Park Md WA 7-9200
- Mason Electric Corp 3839 Verdugo Rd Los Angeles 65 Calif CL 5-1431
- Massa Laboratories Inc 5 Fottler Rd Hingham Mass HI 6-2360
- Master Appliance Mfg Co 530 4 St Racine Wisc ME 3-7791
- Master Electric Co 126 Davis Ave Dayton 1 Ohio KE-4131
- Master Engraving Studios 135 Liberty St New York 6 NY W0 2-3290
- Master Mobile Mounts Inc 1306 Bond St Los Angeles 15 Calif RI 7-0638
- Matchless Electric Co 1700 Washington Blvd Chicago 12 Ill Mo 6-3103
- Mathis Co G E 6100 S Oak Park Ave Chicago 38 Ill PO 7-3800
- Mathew Labs 146 Riverdale Ave Yonkers NY YO 9-5180
- Matthews & Co Jas H 3956 Forbes St Pittsburgh 13 Pa MU 1-8500
- Maurer Inc J A 37-01 31 St Long Island City 1 NY ST 4-4600
- Maurey Instrument Corp 7924 S Exchange Ave Chicago 17 Ill RE 1-1717
- Maxson Corp W L 475 10 Ave New York 18 NY LO 5-1900
- Maxson Instruments Div W L Maxson Corp 47-37 Austell Pl Long Island City 1 NY RA 9-1850
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- Mayfair Molded Products Corp 3700 N Rose St Franklin Park Ill GL 5-9440
- Maymer Corp 1961 W 112 St Cleveland 2 Ohio AC 1-3979
- M-B Communication Co 4626 Walnut St Philadelphia 39 Pa
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- Measurements Corp Boonton NJ DE 4-2131
- Measurement Eng'g Ltd 232 John St Annprior Ontario Can 400
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- Mechanical Products Inc 1824 River St Jackson Mich ST 2-0391
- Mechanical Steel Tubing Corp 500 Barry St New York 59 NY WY 1-1500
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- Medal Mfg Co P O Box 292 Sharon Pa DI 2-6839
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- Melco Products Inc 301 5 Ave S Minneapolis 15 Minn FE 9-2791
- Melody Master Mfg Co 2842 N Cicero Ave Chicago 41 Ill KI 5-5559
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- Menco Inc Abbott Ave Morristown NJ JE 9-2000
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- Mercoind Corp 4201 Belmont Ave Chicago 41 Ill PE 6-2100
- Mercury Contacts Inc P O Box 615-E Far Hills Sta Dayton 9 Ohio WE 3-4201
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- Mercury Eng'g Corp 339 E Cottage Pl York Pa 7788
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- Metal Specialty Products Corp 27-01 Brooklyn Queens Expressway W Woodside 7 NY RA 1-3500
- Metal Textile Corp 647 E First Ave Roselle NJ CH 5-3000
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- Metaplast Corp Davisville Rd at Pa Turnpike Harbor Pa OS 5-2416
- Metavac Inc 45-68 162 St Flushing 58 NY FL 9-8838
- Meters Inc 5353 N Keystone Ave Indianapolis 20 Ind CL 5-3570
- Methode Mfg Corp 7447 W Wilson Ave Chicago 31 Ill UN 7-9600
- Metpro Inc R I 230 Toronto Ave Providence 5 RI ST 1-3050
- Metron Instrument Co 432 Lincoln St Denver 3 Colo PE 3-3764
- Metronix Inc Mill Lane Waterford Conn GI 3-1886
- Metzner Eng'g Corp 1041 N Sycamore Ave Hollywood 38 Calif HO 2-2353
- Metz Refining Co 369 Mulberry St Newark 2 NJ MA 2-0866
- Meyercord Co 5323 W Lake St Chicago 44 Ill ES 8-3700
- Mica Corp 4031 Elenda St Culver City Calif TE 0-6861
- Micacraft Products Inc 701 McCarter Hwy Newark 5 NJ MA 3-6921
- Mica Fabricating Co Rochelle Park NJ HU 7-5717
- Mica Insulator Co 797 Broadway Schenectady 1 NY FR 4-4191
- Micamold Electronics Mfg Corp 1087 Flushing Ave Brooklyn 37 NY HY 7-5400
- Micarta Fabricators Inc 5324 N Ravenswood Ave Chicago 40 Ill LO 1-9700
- Michigan Electronics Inc 854 N Rockwell St Chicago 22 Ill HU 6-2726
- Mico Instrument Co 80 Trowbridge St Cambridge 38 Mass KI 7-8660
- Micro Balancing Inc 191 Herricks Rd Garden City Park NY PI 6-0851
- Micro-Circuits Co New Buffalo Mich 272W1
- Microdot Inc 220 Pasadena Ave S Pasadena Calif SY 9-6451
- Microlect Co 2300 S 25 St Salem Ore 2-3562
- Microlab Okner Pkwy Livingston NJ
- Micrometrical Mfg Co 345 S Main St Ann Arbor Mich NO 2-5626
- Micromold Products Corp 1 School St Yonkers NY YO 9-2850
- Micron Gear Mfg Co 73 Rushmore St Westbury LI NY ED 4-8280
- Microphase Corp Box 1166 Greenwich Conn NO 1-6200
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- Mid-Century Instrumental Corp 611 Broadway New York 12 NY SP 7-4016
- Midget Louver Co 6-8 Wall St Norwalk Conn VO 6-2342
- Midland Industrial Finishes Co Waukegan Ill
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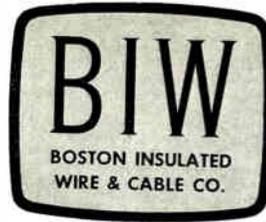
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Circle 229 on Inquiry Card, page 201

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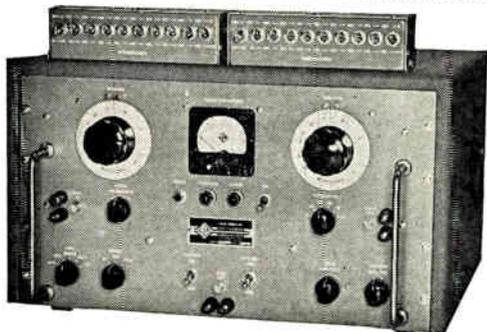
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 Chief Engineer—Doctor George J Mueller Manufacturing Mgr—Theodore G Eddy Vice-President—Commodore A J Spriggs
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 EAST COAST Engineering Liaison—Pierre Martin 124 Joliette Street Manchester New Hampshire Manchester 2-2973
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 Page-Fogwell Corp 1311 Riverside Dr Los Angeles 31 Calif CA 1-1166
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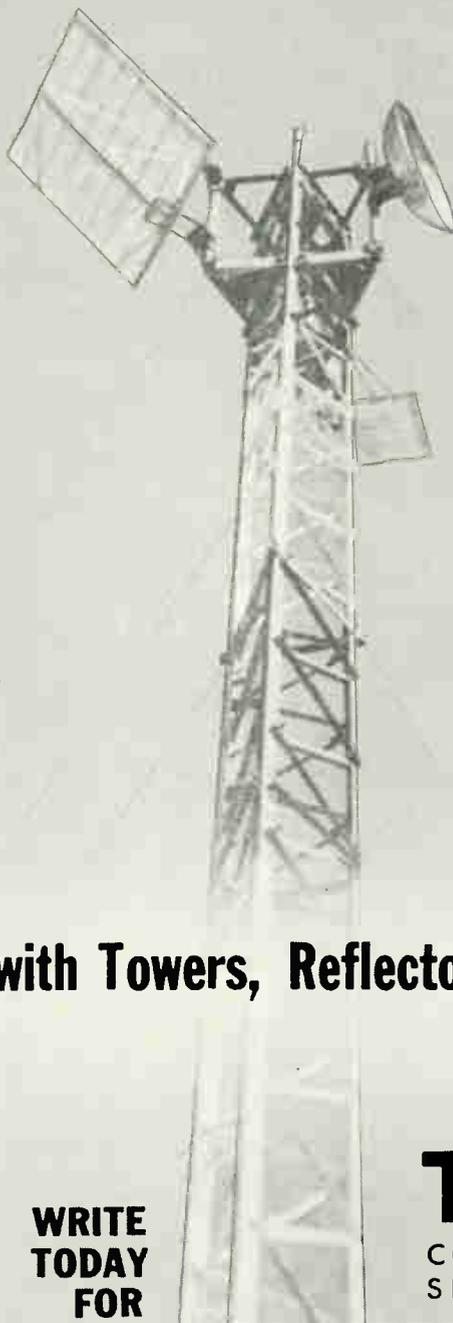
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Circle 293 on Inquiry Card, page 201

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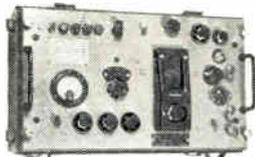
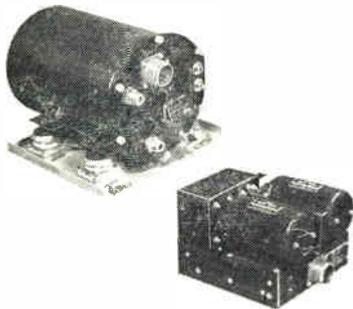
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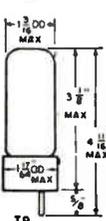
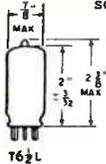
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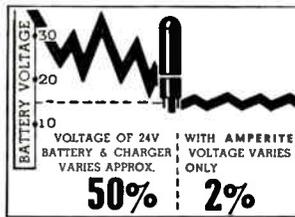
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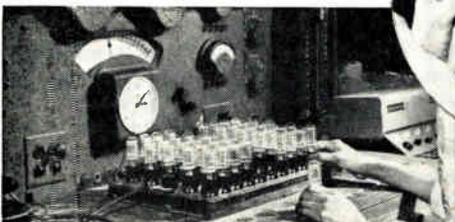


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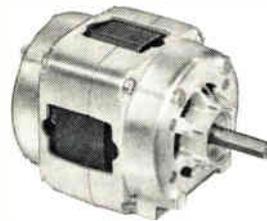
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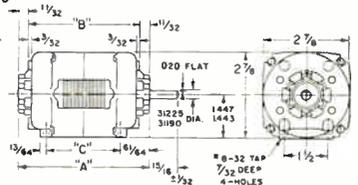


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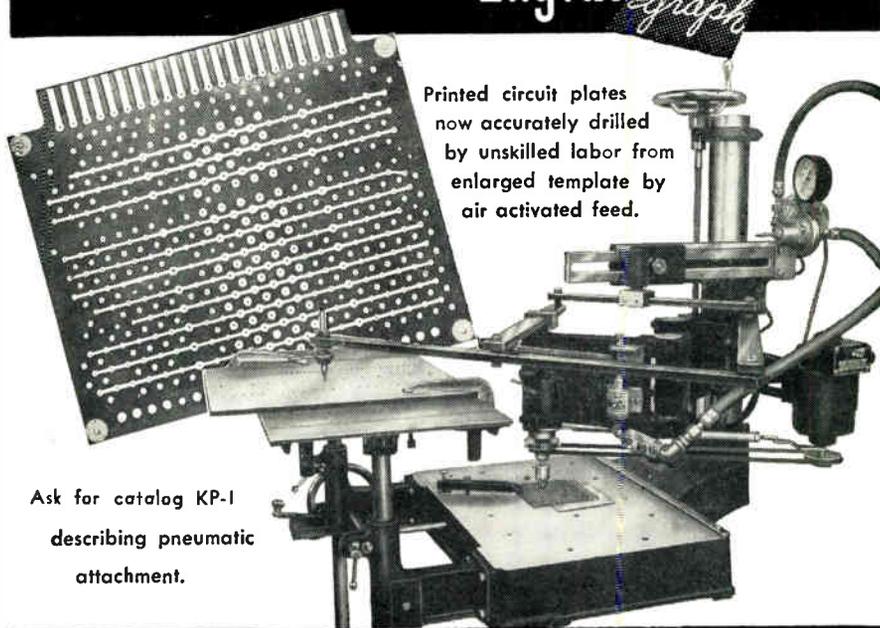


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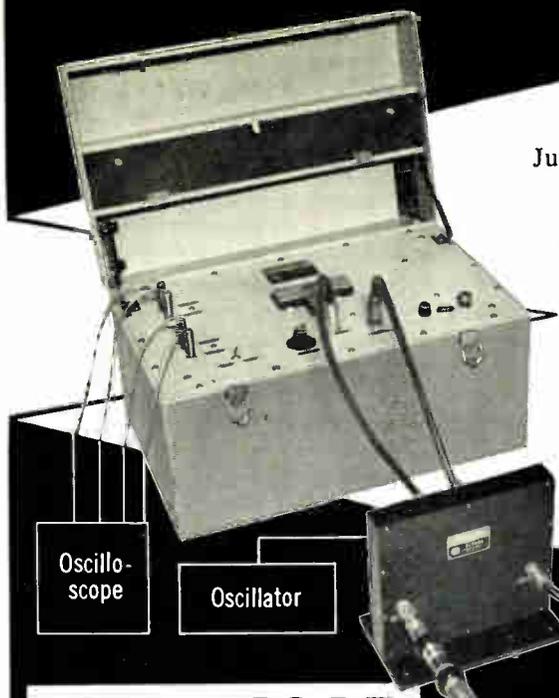
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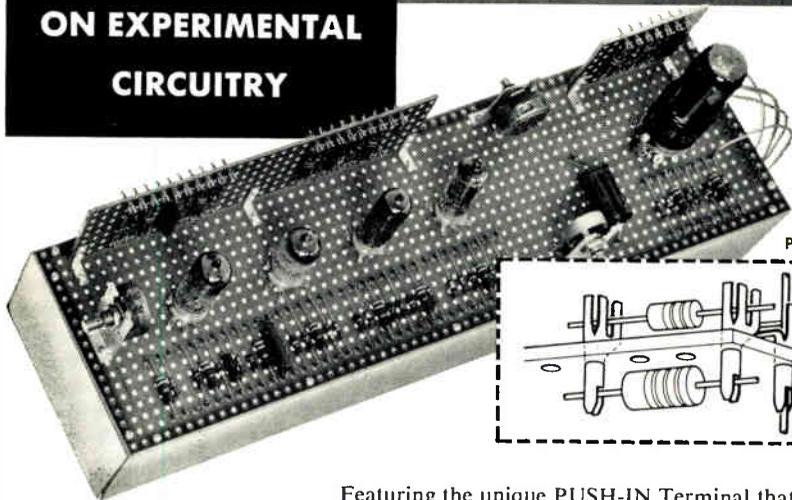
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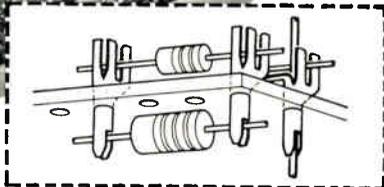
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Circle 255 on Inquiry Card, page 201

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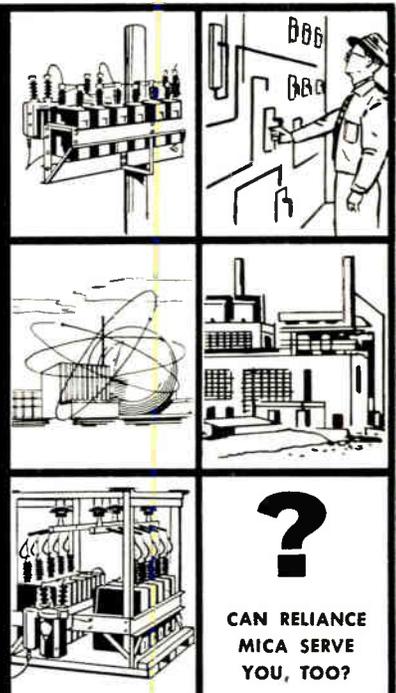
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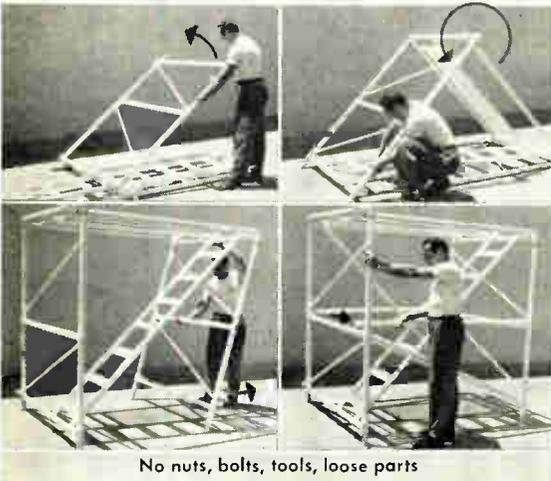


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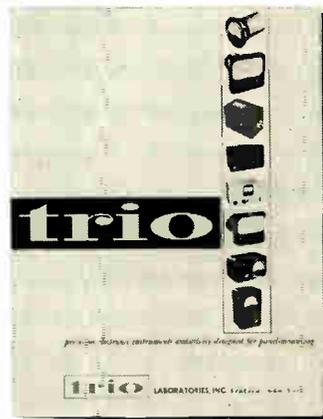
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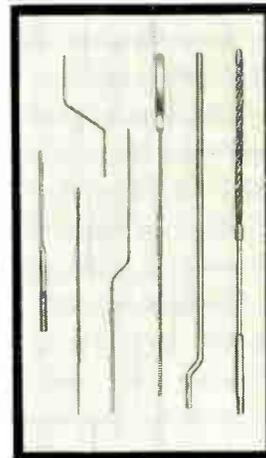
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 Waltham Watch Co 221 Crescent St Waltham 54 Mass TW 3-4000
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 Walworth Co 60 E 42 St New York 17 NY MU 2-7060
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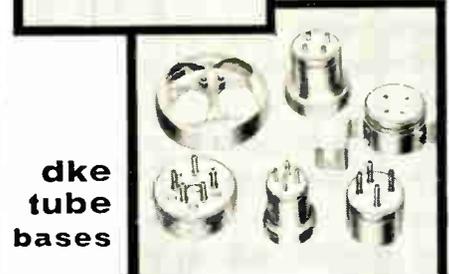
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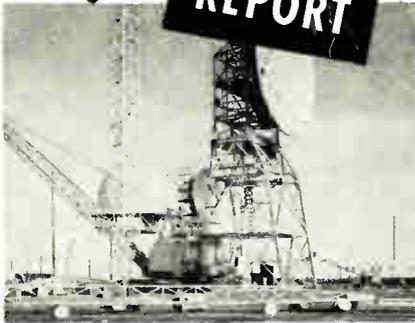


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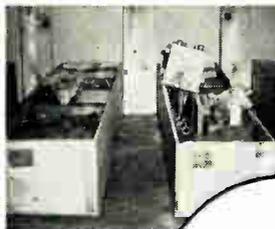


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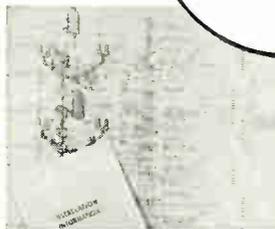
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Doppler Navigation

(Continued from page 122)

mine drift angle with a fixed 2-beam system by measuring the Doppler frequency shift associated with each antenna beam. However, the drift angle must be calculated from the data rather than coming directly from a null measurement.

It is suggested by the above discussion that there are many ways of measuring the desired quantities and that there are many pros and cons with respect to various proposed instrumentation. Of course, any individual or group interested in using Doppler radar equipment must obtain a satisfactory answer as to the merits of each of the several ways of performing the measurement.

Computers

We have limited our discussion to the basic sensing element of an autonavigator system, namely the Doppler radar drift angle and ground speed measurement equipment. If these measurements can be made, it is apparent that the information can be combined with heading information to provide continuous dead reckoning, thus presenting a continuous display of position in any desired coordinate system.

One interesting program which has made extensive use of the AN/APN-81 Doppler equipment is the USAF "Jet Stream Project," designed to explore the characteristics of very fast air currents high above the earth.

* * *

Avalanche Flow Lines

(Continued from page 102)

est are shown in Figs. 3, 4, and 5, and the pertinent results of the analyses are given below:

Case I

$$\left(I_E = 0, M_E = 1, \text{ and } V_C \ll -\frac{kT}{q} \right)$$

$$I_C = -(1 - \alpha_1 \alpha_N M_C) M_C I_{CS} = -M_C I_{CO} \quad (13)$$

Case II

$$\left(V_E = 0, M_E = 1, \text{ and } V_C \ll -\frac{kT}{q} \right)$$

$$I_C = -M_C I_{CS} = \frac{-M_C I_{CO}}{1 - \alpha_1 \alpha_N M_C} \quad (14)$$

Case III

$$\left(I_E = -I_C, M_E = 1, \text{ and } V_C \ll -\frac{kT}{q} \right)$$

$$I_C = \frac{-(1 - \alpha_1 \alpha_N M_C) M_C I_{CS}}{1 - \alpha_N M_C} = \frac{-M_C I_{CO}}{1 - \alpha_N M_C} \quad (15)$$

From the above three cases, it can be readily seen that progressively, as the emitter is first allowed to go negative, then held to zero, and then allowed to go positive (relative to the base), transistor action aids the avalanche mechanism causing lower and lower "breakdown" voltages (infinite currents). For example, if $V_{CA} = 50$ volts, $n = 3$, $\alpha_1 = 0.75$, and $\alpha_N = 0.95$, the breakdown voltages would approximately occur at—

(Continued on page 438)



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II	1.4	33 volts
III	1.05	18 volts

The particular "breakdown" treated have either appeared explicitly in the literature (Cases I and III) (see References 3 and 4) or have been implied (Case II) (see Reference 1). The object herein was but to illustrate the extension of flow line analysis to include avalanche multiplication, and it is evident that at least this one non-linearity does not invalidate the suggested analytical technique.

References

1. J. J. Ebers, J. L. Moll, "Large-Signal Behavior of Junction Transistors," *PROC. IRE*, December 1954, pp. 1761-72.
2. R. B. Hurley, "Flow Line Analysis," *ELECTRONIC INDUSTRIES*, April 1957, pp. 52-54.
3. M. C. Kidd, W. Hasenberg, & W. M. Webster, "Delayed Collector Conduction, A New Effect in Junction Transistors," *RCA REVIEW*, March 1955, pp. 16-33.
4. S. L. Miller & J. J. Ebers, "Alloyed Junction Avalanche Transistors," *BSTJ*, September 1955, pp. 833-902.

Pepperpot Tube

(Continued from page 107)

symmetrical pencil rays, the enveloping surface of which represents the full electron beam. The diaphragm is cleaned ultrasonically to avoid distortions of the pepperpot image due to blocking dust particles.

The base of the tube is fastened with an epoxy-resin, instead of the usual base cement, to avoid loosening due to repeated pushing-on of deflection yokes.

The set-up for pencil-ray testing,⁴ utilizing the pepperpot tube, is shown schematically in Fig. 4. It consists essentially of the variable high-and-low voltage supplies for the operation of the CRT, a saw-tooth generator for driving the deflection yoke, and a pulse generator. Most of this equipment is standard for CRT testing and does not require further description.

The actual testing of a deflection yoke is carried out as follows:

An unfocused, undeflected, low intensity, pulsed beam is used to determine whether the pepperpot diaphragm is completely flooded. If the cathode surface is fully activated, the Maxwellian current distribution in the beam may lead to prohibitively high current intensities (possibility of screen damage) at the normal operating voltages. Increasing the second grid voltage, leads to a larger beam divergence in the gun and reduces the current density for flooding. However, a large beam cross-section will be obtained at the deflection center. Thus, the deflection yoke performs for normal operating conditions slightly better than indicated by the tests described below. This fact serves, however, as a convenient quality safety factor.

Then, the scan is switched on and the dot-raster is displayed on the screen. Fig. 5 shows this condition. (For the sake of clarity some focusing has been utilized for the photograph.)

Next, the magnetic focus lens (preferably an elec-

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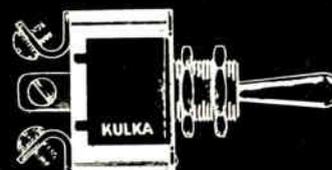
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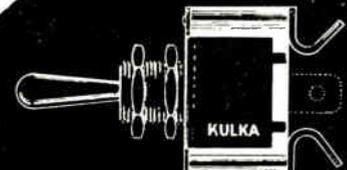
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tro-magnetic version) is adjusted for the circle of smallest confusion (optimum focus) of the pepperpot image in the screen center. (Fig. 1.) In the limiting case, all 7 dots should coincide. Due to possible aberrations in the electron-optical system caused by beam tilt, etc., this condition requires a very accurate gun construction. Often two, or more, partially overlapping dots will be visible. A quality figure, denoting the diameter of the disc of smallest confusion, is attributed to this image.

The same processes are repeated for the edges. In utilizing optimal focusing for the screen center and

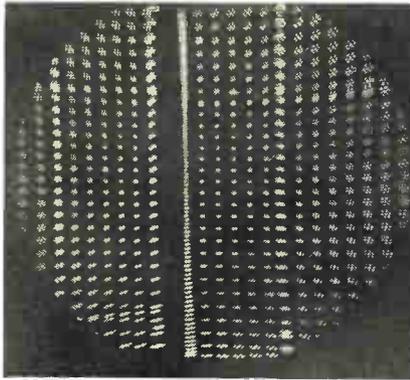


Fig. 5: The dot-raster before focusing.

the edges, the influence of the focusing unit on deflection errors is eliminated.

If deflection distortions due to the yoke are present, the diameter of the disc of smallest confusion is larger in the side areas and receives a lower quality figure. The influence of all types of deflection distortions caused by the yoke is expressed, simultaneously, by this figure.

Repeating this process for the circle of largest deflection permits the localization of dissimilarities and field distortions in the yoke. The advantage of this method over dc deflection lies in the possibility to judge rapidly, and with reliable reproducibility, the diameter of the disc of smallest confusion as the image consists of overlapping dots. Only with this system can ac effects due to capacities, core materials, etc., be studied. In a practical yoke, these ac spot distortions may exceed all dc spot defocusing.

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(Continued on page 440)

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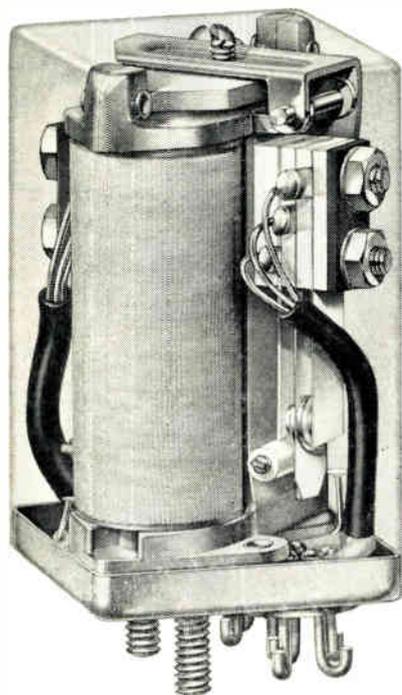
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(Continued from page 439)

orientation with respect to the yoke can be distinguished when the focus unit is adjusted for optimum focus in the screen center (Fig. 1).

Other Applications

The pepperpot tube may also be used to test external magnetic centering units. The circle of smallest confusion, in the screen center, is compared with and without centering unit.

Magnetic shunts, between the centering unit and the deflection yoke, can be investigated by comparing the circle of smallest confusion at the edges of the screen with and without the centering unit.

Special CRT's, such as the alpha-tube, sometimes require rotation free magnetic focusing. (Such focusing units consist of 2 consecutive focusing coils wound in a counter rotating manner.) It is possible to check this requirement by observing if rotation of the dot circle occurs as the focus current is varied.

An "apparent rotation" of the image in the side areas of the screen caused by astigmatism of the deflection yoke, may be observed. This effect may also be readily checked by comparing the tilt angle of the dots in the center and the edges.

Production Testing

The pepperpot tube is particularly suited for the development of deflection yokes as resulting errors can be displayed readily and traced back to field configurations. The simultaneous display of the distortions over the entire field of view is advantageous in this respect.

A further advantage of the pepperpot design is its adaptability to most CRT types. This enables the component designer to check the individual effect and inter-action of focusing unit, centering magnet, and deflection yoke. Thus, the overall performance can be evaluated under practical conditions.

For production control, the pepperpot tube permits the use of a standardized, simple, and fast test method. Field experience has shown that an inexperienced operator is able to test, with high reproducibility, approximately 10 to 15 times



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*Tuff-Tube with copper, nickel, silver or gold plated or bonded on ID or OD.

Send for descriptive brochure—design features, tech data, application notes.



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as many yokes with the pepperpot method as a skilled operator using the dc deflection method. The adjustments required for these test operations are at a minimum. The observations are carried out without a microscope or any lens arrangement and the price of the tube and the electronic equipment is relatively low.

References

1. G. Wendt, "Telefunken Rohre," 15 (1939); G. Wendt, Zs. f. Phys., 118, 593 (1942).
2. Hutter, J. Appl. Phys., 18, 740 (1947).
3. E. Sieminski, Electronics, 25, 10, 122 (1952).
4. C. S. Szegho, Tele-Tech, p. 35, May 1950.

* The variations of the image plane curvature due to axial shift of the deflection center are neglected here.

** It ought to be pointed out that the yoke may display additional distortions under ac operation.

Poles and Zeros

(Continued from page 115)

made, it is usually convenient and sufficient to make simplifying assumptions and study circuit performance with only one or two variables. In this case, the resistance of the inductor is neglected since it's effect was microscopic and the output resistor and capacitor are each assumed 10% high. The transfer function now becomes

$$\frac{e_o}{e_i} = \frac{1}{1.1 LC^2 R \left\{ p^3 + \frac{1.825}{RC} p^2 + p \left[\frac{1.91}{LC} + \frac{1}{1.21 R^2 C^2} \right] + \frac{1.735}{LC^2 R} \right\}}$$

In this case the denominator is not readily factorable as before and numerical values of R, C, and L must be substituted and the cubic solved. The resulting roots are: $p = -1834$ and $p = -904 \pm j1720$. These roots and the resulting response are shown on Figs. 6 and 5 respectively.

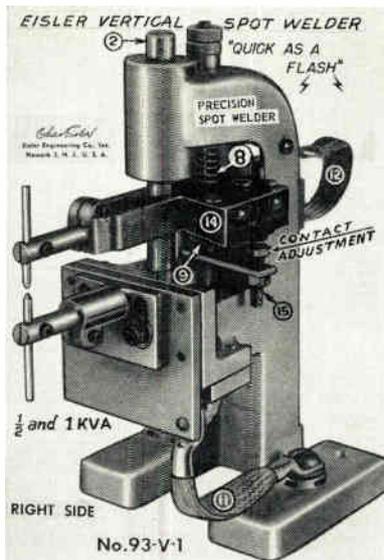
In some cases, it is inconvenient to plot the pole and zero distribution on linear paper. Examples are networks whose response is of interest over a range of three or four decades or a network similar to a double-tuned high Q filter where high accuracy is desired in the response measurement near a narrow pass band. Linear plots would furnish very little information of value in these cases. However, an algebraic solution can be found yielding $Z' = Z(1 + A)$ where Z'

(Continued on page 444)

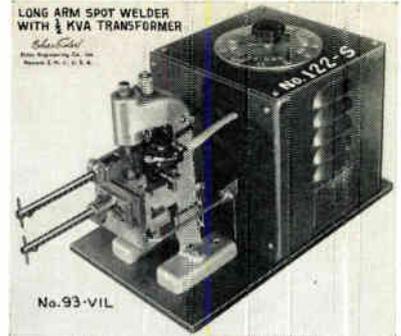
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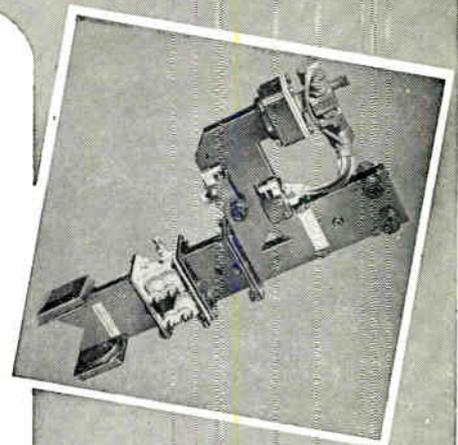
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			DBM	MA	MA	MA	pri.	sec.
PMA-1	✓	+8	0	0	50/200/500			60,000 center tapped
PMA-2	✓	+8	0	0	4/8			
PMA-3	✓	+8	0	0	50/200/500			
PMA-4	✓	+8	0	0	15,000			
PMA-5	✓	+8	2	2	15,000			
PMA-6	✓	+8	0	0	15,000			
PMA-7	✓	+8	2	2	15,000			
PMA-8	✓	+8	2	.25	30,000 ct			
PMA-9	✓	+8	0	0	60,000			
PMA-10	✓	+8	0	0	50/200			

All units ±2 DB 30 to 20,000Ω; PMA 5 and 7 ±2 DB 200 to 10,000Ω. Case size 15/16" D x 1 1/2" high, flanges 1 1/2" long.

TRANSISTOR TRANSFORMERS

Catalog No.	200 to 15,000		Unbalanced DC Current	Max. Power Out	Impedance Ohms	
	DB*	DB			MA	W.	pri.	sec.
TMA-1	±1		0	.25	500	500
TMA-2		±2	3	.25	50K	500
TMA-3		±2	3	.25	50K	6
TMA-4		±3	1	.25	100K	1.2K ct.
TMA-5	±2		3	.25	25K	1.2K ct.
TMA-6		±2	3	.25	50K	1.2K ct.
TMA-7	±1		4	.25	600/150	1.2K ct.
TMA-8	±2		3	.25	25K	600
TMA-9	±1		1	.25	4K ct.	600/150
TMA-10	±2		10	.25	2K	3.2
TMA-11	±1		1	.25	4K ct.	3.2
TMA-12		±2	4	.25	20K	50
TMA-13		±2	8	.25	1K	50
TMA-14		±2	0	.10	100K	1K
TMO-15		±2	1	.04	20K	50
TMO-16		±2	1	.04	20K	600
TMO-17		±2	3	.06	1K	50
TMO-18		±2	0	.10	100K	1K
TMA-19	±2		20	1.	1K	3.2

Case size 1"D x 1.5" high, flanges 1 3/8". Specify TMO for open, TMC for encapsulated units.

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Cat. No.	Ind. MHY	Cat. No.	Ind. MHY	Cat. No.	Ind. MHY	Cat. No.	Ind. MHY
to 15 KC		10 to 50 KC		30 to 75 KC		50 to 200 KC	
F2050	1. F2100	0.1 F2140	0.1 F2180	0.1 F2180	0.1 F2180	0.1 F2180	0.1 F2180
F2051	3. F2101	0.2 F2141	0.2 F2181	0.2 F2181	0.2 F2181	0.2 F2181	0.2 F2181
F2052	5. F2102	0.3 F2142	0.3 F2182	0.3 F2182	0.3 F2182	0.3 F2182	0.3 F2182
F2053	10. F2103	0.4 F2143	0.4 F2183	0.4 F2183	0.4 F2183	0.4 F2183	0.4 F2183
F2054	15. F2104	0.5 F2144	0.5 F2184	0.5 F2184	0.5 F2184	0.5 F2184	0.5 F2184
F2055	30. F2105	1.0 F2145	1.0 F2185	1.0 F2185	1.0 F2185	1.0 F2185	1.0 F2185
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F2057	75. F2107	3.0 F2147	3.0 F2187	3.0 F2187	3.0 F2187	3.0 F2187	3.0 F2187
F2058	100. F2108	4.0 F2148	4.0 F2188	4.0 F2188	4.0 F2188	4.0 F2188	4.0 F2188
F2059	150. F2109	5.0 F2149	5.0 F2189	5.0 F2189	5.0 F2189	5.0 F2189	5.0 F2189
F2060	200. F2110	7.5 F2150	7.5 F2190	7.5 F2190	7.5 F2190	7.5 F2190	7.5 F2190
F2061	300. F2111	10. F2151	10. F2191	10. F2191	10. F2191	10. F2191	10. F2191
F2062	400. F2112	15. F2152	15. F2192	15. F2192	15. F2192	15. F2192	15. F2192
F2063	500. F2113	20. F2153	20. F2193	20. F2193	20. F2193	20. F2193	20. F2193
F2064	750. F2114	30. F2154	30. F2194	30. F2194	30. F2194	30. F2194	30. F2194
F2065	1,000. F2115	50. F2155	50. F2195	50. F2195	50. F2195	50. F2195	50. F2195
F2066	1,250. F2116	75. F2156	75. F2196	75. F2196	75. F2196	75. F2196	75. F2196
F2067	1,500. F2117	100. F2157	100. F2197	100. F2197	100. F2197	100. F2197	100. F2197
F2068	1,750.	Encapsulated 1" dx 7/8" h. When ordering hermetically sealed units add H,					
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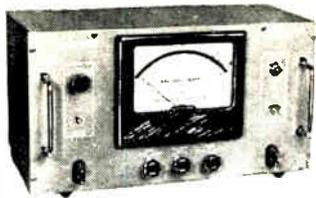
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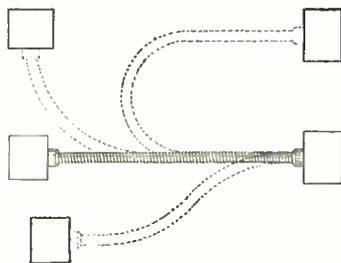
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is the new transfer function caused by a change in one or more of the network components and (A) is the normalized deviation in the components.

Fig. 7 represents a network with one pair of conjugate poles and a pole on the abscissa. The vectors drawn from the origin to the poles can be resolved into a real part (a) and an imaginary part (b). (c) is the distance to the pole on the abscissa. For variations in the components in the order of 10% or less, the expression for Z' is:

$$1) Z' = Z \left[1 - \frac{4(a - \omega) \Delta a - \Delta a^2}{4[(a - \omega)^2 + b^2]} \right] \cdot \left[1 - \frac{(a + \omega) \Delta a}{(a + \omega)^2 + b^2} \right] \cdot \left[1 - \frac{b \Delta b}{b^2 + (a - \omega)^2} \right] \cdot \left[1 - \frac{b \Delta b}{b^2 + (a + \omega)^2} \right] \cdot \left[1 - \frac{C \Delta C}{C^2 + \omega^2} \right]$$

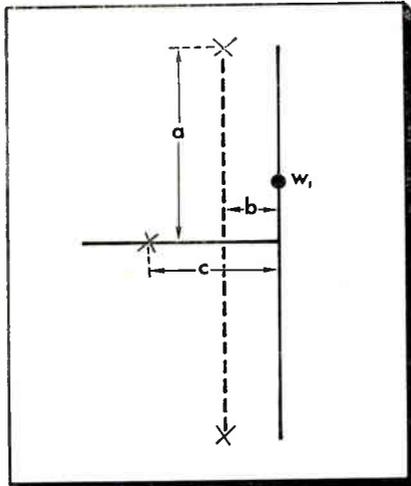


Fig. 7: Representation of a network with one pair of conjugate Poles and a Pole on the abscissa (see text)

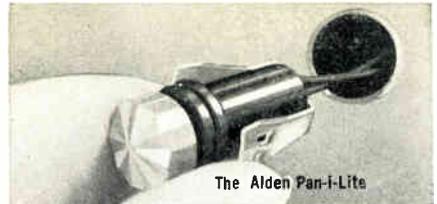
where ω is any real frequency multiplied by 2π , Δa is the variation in the imaginary component of the complex pole, Δb the variation in the real component of the complex pole, and Δc is the variation in the pole on the abscissa. Any number of complex poles may be included by multiplying the above expression by the appropriate pair of terms.

In many cases, inspection of the transfer function will give the observer a qualitative idea of how the poles and zeros will shift as component values are changed.

Reference

Radio Engineer's Handbook, F. E. Terman, p. 228.

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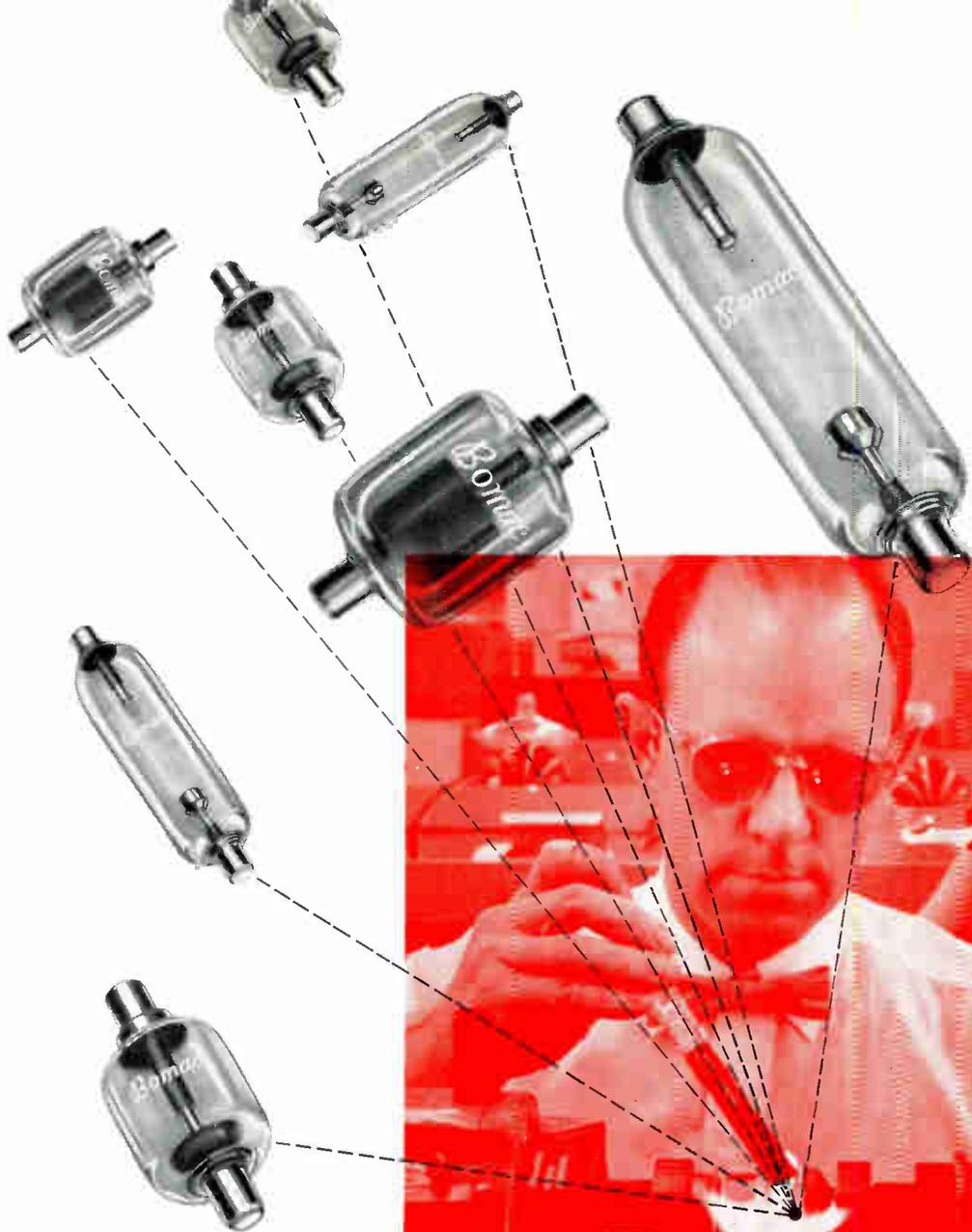
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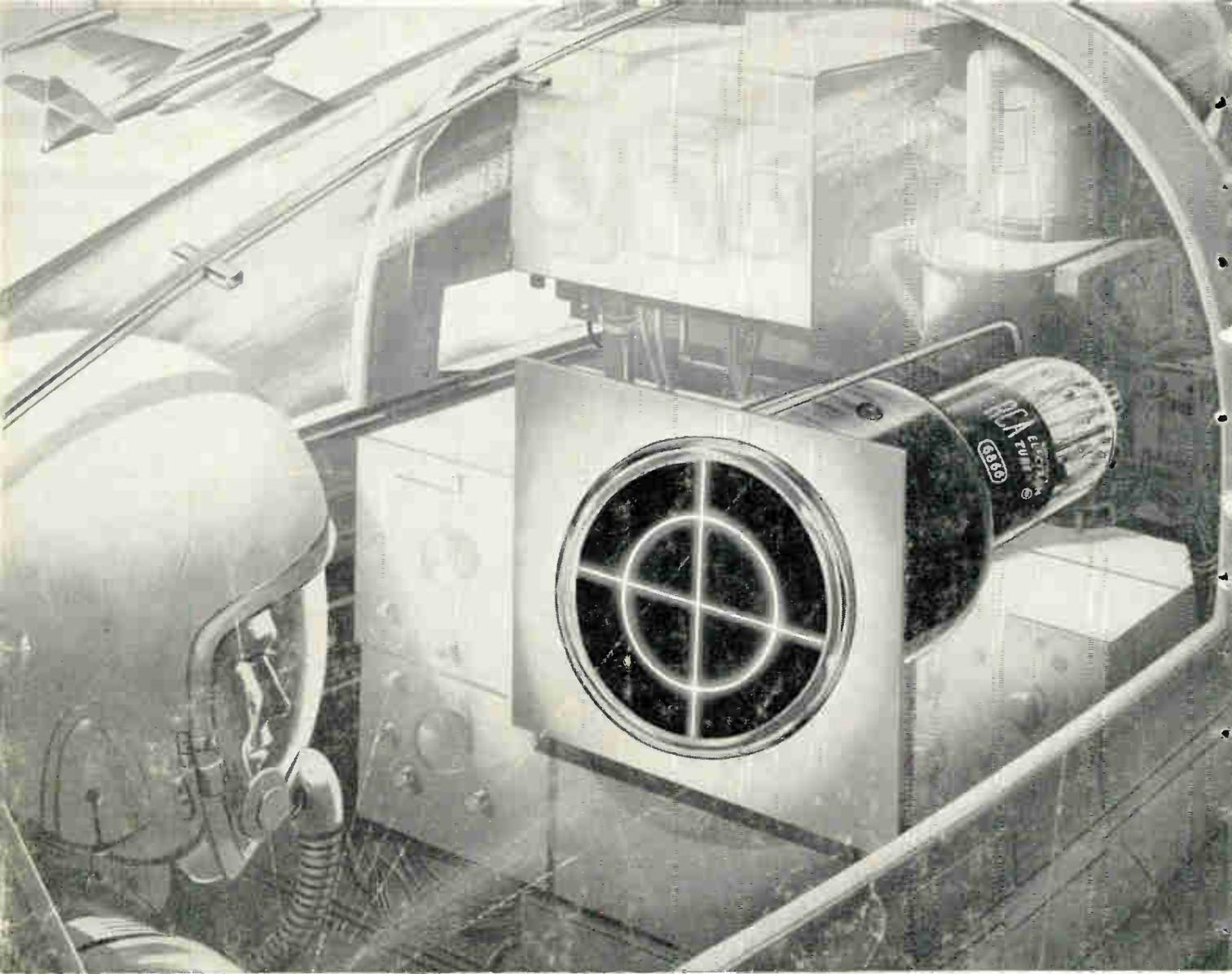
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