



There's Little Enough Time
To Do a Service Job the First Time

And <u>No</u> Time To Do It Over!

SPENDING valuable man hours to do a job over because a replacement part has failed wastes your time and money, uses critical material and helps to hinder America's war effort.

Your service work can be only as good as the replacement parts you use. By using Mallory parts, you avoid the danger of failure and the necessity of re-doing a job. Whenever the repair calls for volume

controls, vibrators, capacitors, switches or resistors, use Mallory replacements and be safe.

Years of outstanding service and a reputation for long life and dependability in the replacement field make Mallory parts the right parts to do the job right the first time.

They're available through Mallory distributors from coast to coast.

P. R. MALLORY & CO., Inc., INDIANAPOLIS 6, INDIANA



MYE TECHNICAL MANUAL —408 pages of complete data on capacitors, noise suppression, receiving tubes, loud speakers vibrators, phono-radios, automatic tuning and other valuable information. Available from your Mallory distributor...Price, \$2.00.

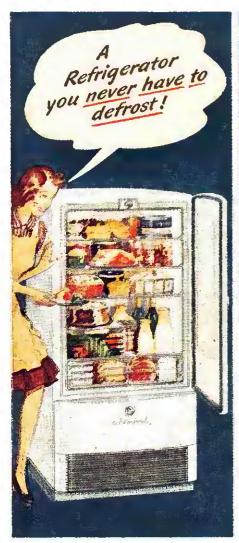
4TH EDITION RADIO SERVICE ENCYCLOPEDIA... Complete information on repairing any make or model of receiver. Circuit references, original part numbers and recommended replacements. Available from your Mallory distributor...





It's a postwar Promise ... from

Multal.







Predictions of good things to come ...from Admiral!

ADMIRAL RADIO America's Smart Set There'll be a completely new and better line of radios, too
—built by the world's largest manufacturer of radio-phonographs with automatic record



MEMO

Since I before,

operat produ

ever i

troni facilit

and-t prod

Adm

Here's the first "Blockbuster" Admiral's "Saturation" advertising campaign - over a half billion messages this year in major magazines and newspapers ... Ask your Admiral distributor about the profit possibilities with the Admiral line... also Flex-o-Plan store remodelling.

Get the facts and you'll GET ABOARD WITH ADMIRAL

creased ability to sent both a challenge and an oppor-

TUNE IN CBS 2:30 p.m. E.W.T. Sundays for Admiral "World News rough

Admiral Corporation CHICAGO 47, ILLINOIS



Farnsworth enquineers..

your sales staff



WRITE US to get advance notice of Farnsworth post-war plans and products, and a copy of our new illustrated book on television.

FARNSWO

Television · Radio · Phonographs

· Farnsworth Television & Radio Corporation, Fort Wayne 1, Indiana. Farnsworth Radio and Television Transmitters and Receivers; Aircraft Radio Equipment; Farnsworth Television Tubes; the Farnsworth Phonograph-Radio; the Capehart,

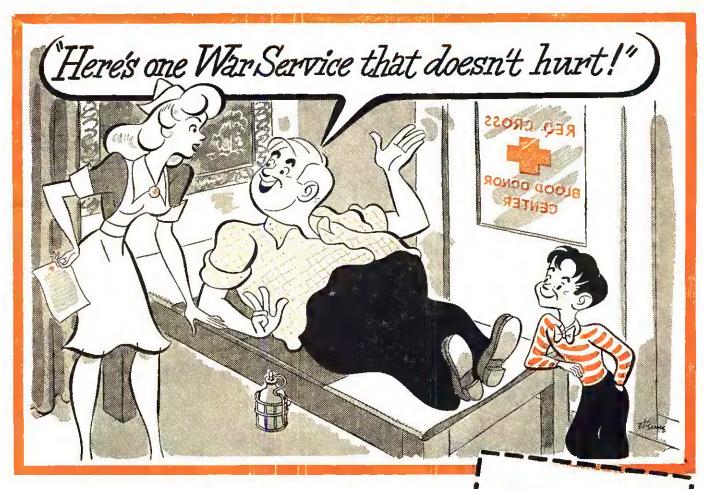
PARNSWORTH'S future is assured by this organization of technical specialists skilled in research and development in television . . . radio . . . Radar . . . phonograph reproduction . . . record-changers ... acoustics. Each is an expert in his field-today engaged in jobs of war, but for the peacetime tomorrow they assure Farnsworth dealers sound engineering and production craftsmanship - a guarantee of leadership in new products of the future.

Their objectives are outstanding quality, performance and workmanship. These Farnsworth technicians are ready to provide your sales staff with the finest possible phonographs, radio and television sets in every price range.

Any dealer who has ever sold prewar Farnsworth lines knows that Farnsworth engineering is sound and the products are right. The Farnsworth line you'll sell after the war will feature improved broadcast, shortwave and FM reception . . . fool-proof record-changers ... television perfected through 19 years of research and development . . . cabinets with distinct sales appeal.

Sounds mighty interesting, doesn't it? That's why you'll want to build your post-war sales around a quality program that will pay dividends.

RADIO & Television RETAILING . August, 1944



You lost your star salesman—that hurt. Your technicians were drafted—that hurt. Taxes skyrocketed—that hurt. Tubes and parts vanished—that hurt. Gasoline and food were rationed—that hurt. In fact, "War is hell."

But there is one war contribution that doesn't hurt at all; it takes only an hour. Phone your local Red Cross Chapter today. Make a date to give a pint of your blood. You can spare it, and the boys at the front need it—desperately.

HYTRON HYLIGHTS

During 1944, Hytron plans to reschedule (subject to revised WPB directives) the following BANTAM GT types which have been authorized for production by the WPB:

6CSGT 12SJ7GT 12SQ7GT/G 12SQ7GT/G 35L6GT/G 35Z4GT 35Z5GT/G 45Z5GT 50L6GT

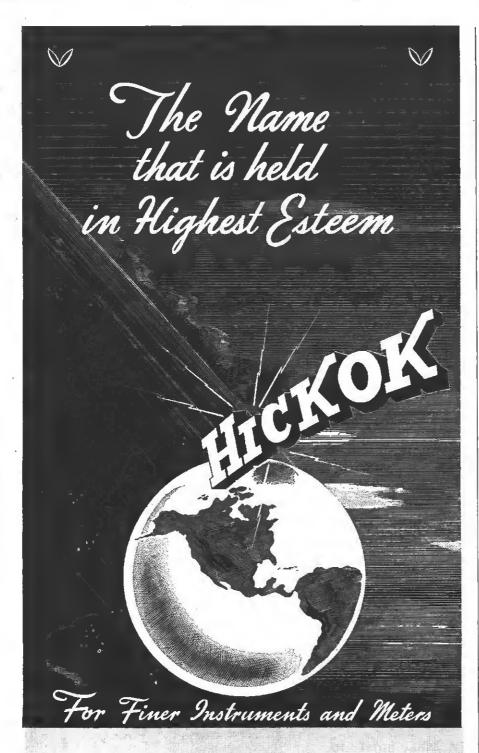
As they go into production, Hytron will be able to supply only these BANTAM GT types on rated priority orders. The listed types and additional receiving types available through exchange with other tube manufacturers, will be allocated for shipment against L-265 priority orders.

BUY ANOTHER WAR BOND

CORPORATION RECEIVING TUBES

CORPORATION RECEIVING TUBES

CORPORATION RECEIVING TUBES



AT all the Fighting Fronts on land, aboard ship and in the air, the Army, Navy, Signal Corps and Air Corps are using thousands of HICKOK tube testers, oscillographs, and other electronic service equipment with confidence in their utmost reliability. What greater tribute could be paid to a good name that has been symbolic of fine instruments for more than a third of a century?

THE HICKOK ELECTRICAL INSTRUMENT COMPANY
10523 DUPONT AVENUE CLEVELAND 8, ONIO

THE STANDARD OF QUALITY FOR A THIRD OF A CENTURY



MEMBER AUDIT BUREAU of CIRCULATIONS

AUGUST, 1944

COVER—Radio Hospital, Hartford, Conn. owned by Ernest C. Augsten (see story on page 24).

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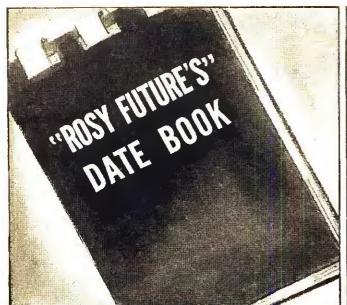
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Keep that date with ROSY FUTURE"





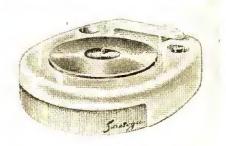
Mr. Dealer-Sell Now for Post War!

Nothing to sell? Don't kid yourself!

True—your business today is mostly service, your servicemen are busy calling on customers—folks are bringing defective appliances into your store for repair. That's good business.

It's also good business to ask your service customers what type radios, phonographs or appliances they will buy when the war ends. Jot it down in your notebook. Then—when "Delivery Day" comes, you'll have your own list of ready made customers.

We'll be glad to supply a "Rosy Future's Date Book" for each of your servicemen—free. Simply request them. Then—start post war selling—make every service call a sales call and, by this method, build for the future.





Will you be ready?

28% of all radios need repair, 15% won't work at all according to recent WPB report. Meck Radios and Phonographs will be beamed straight at this post-war market and they'll be "Built to Perform - Priced to Sell"!

WRITE FOR Free
"DATE BOOK" NOW

Pocket size, durable—get started on YOUR post-war plans now. Just write—it's free!

BUY MORE BONDS --- AND KEEP THEM!

Distributed Nationally Thru Radio Equipment Jobbers



JOHN MECK INDUSTRIES, PLYMOUTH, INDIANA, U. S. A.



History of Communications Number Seven of a Series

EARLY COMMUNICATIONS BY AIR



While electronics use the ether and other media, one of the most speedy methods of communications in the early days was through the air by carrier pigeon. With a finely printed note fastened to the leg, these birds faithfully reached home to bring in the latest news events and stock market reports.

Today news commentary reaches into your homes in a flash of a second via electronic voice communications making use of the various types of Universal broadcast microphones. This being a modern age, the battle front is brought into the homes of the informed peoples of the democracies via military microphones such as those now being manufactured by Universal for the Allied Armed Forces.

(Model 1700-UB, illustrated at left, is but one of several military type microphones now available to priority users through local radio jobbers.

UNIVERSAL MICROPHONE COMPANY

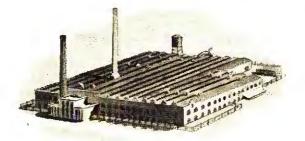


FOREIGN DIVISION: 301 CLAY STREET, SAN FRANCISCO 11, CALIFORNIA .. CANADIAN DIVISION: 560 KING STREET WEST, TORONTO 1, ONTARIO, CANADA RADIO & Television RETAILING . August, 1944



SYMBOL OF QUALITY

In the peacetime era to come, the Temple trademark will identify the finest line of radios the minds and hands of Man have ever produced—radios engineered and constructed to attain new performance standards—radios styled and cabineted to new measures of beauty—radios valued and priced to make money for you. In brief, radios your customers will want to buy, radios you will want to sell. It will pay you to "team up with Temple".

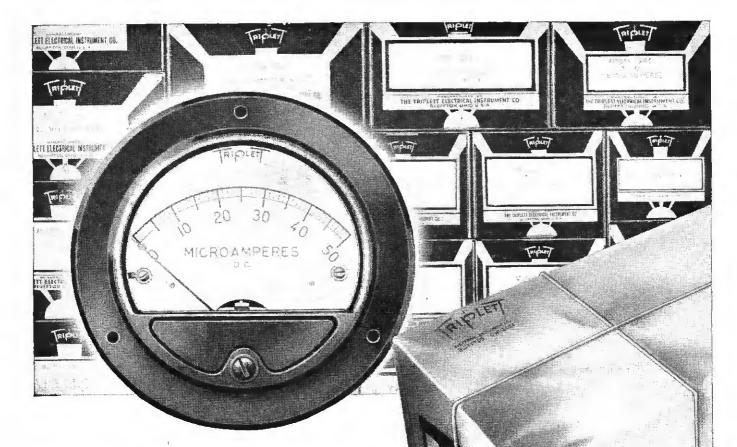


WHERE FM WILL ALSO MEAN FINEST MADE

TEMPLETONE RADIO COMPANY, MYSTIC, CONN.

FM... TELEVISION... RADIO-PHONO' COMBINATIONS

Licensed under Armstrong and RCA patents



INSTRUMENT DELIVERIES!

American Instrument production is catching up with the needs of our armed forces—closing the gap between too little and enough. Caring for those needs has expanded Triplett production lines unbelievably far beyond previous capacities. And the experiences of war, added to more than forty years of instrument manufacturing, have bettered the products coming off those lines,

Now—instruments—better than ever before—are ready for general use. Better place your orders, at once, with Triplett—headquarters for a complete line of instruments made to one fine standard of engineering.

D'Arsonval Moving Coil D.C. Instruments Electrodynamometer A:C.-D.C.
Double Iron Repulsion A.C. Instruments R.F. and Rectifier Types; Sizes 2" through 7"

EIECTRICAL STANDARDS ARE SET BY INSTRUMENT CO. BILLEFTON OHIO * * *

- ★ Greater Production
 Capacity
 - ★ Better Instrument Quality
- ★ Complete Line of Instruments
- ★ One Source of Supply
- * Prompt Deliveries
- * SEND YOUR ORDERS TO TRIPLETT NOW

Ear-marked for greater profits to you!



JEWELRY COURTESY OF BLACK, STARR AND GORHAM, INC.

Lend your ear and you shall hear . . . the magic name: PHILHARMONIC Radio-Phonograph.

And if you are one of the country's 300 leading music and radio dealers, then the PHILHARMONIC is car-marked for you...

EAR-MARKED for a new high level of prestige and leadership for you in your community.

EAR-MARKED by exceptional performance standards.

EAR-MARKED by cabinet design and craftsmanship of rare artistry and distinction.

EAR-MARKED by highly selective distribution and a four-square credo for your protection and profit.

EAR-MARKED by continuous national advertising of distinguished character, coupled with unusually elaborate promotional and display material.

You will be visited shortly by a PHILHARMONIC representative to discuss our postwar plans and exclusive franchise distribution. Inquiries are solicited, from those who would like preliminary information.

PHILITARMONIC RADIO CORPORATION 524 EAST SEVENTY-SECOND STREET, NEW YORK





Talk is Important, here

Transmitting orders, reporting results, exchanging information . . . even words of encouragement and commendation . . . that's the service that Communication is performing in every phase of our military operations, and under the most adverse and difficult conditions.

At the front, Communication . . . or just plain talk . . . is helping win battles, but at home talk could be fighting on the side of the enemy. That's why we must heed the warning, "Let the man with the 'mike' do your talking". He knows just what to say.

THE ROLA COMPANY, INC., • 2530 SUPERIOR AVENUE • CLEVELAND 14, OHIO Makers of Transformers, Coils, Head Sets and other Electronic Parts for Military Communications Systems



April 8th a Star was added



to Rola's Army-Navy "E" flag.



PLACE
YOUR FAITH
IN THE

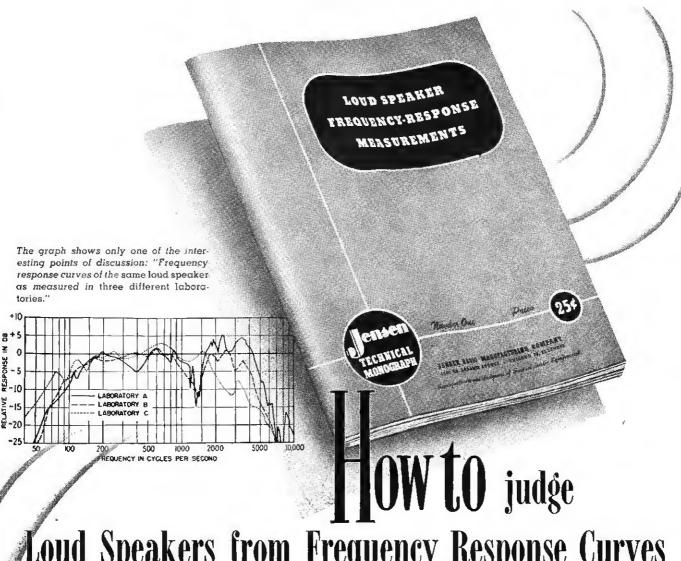
Radio

OF THE FUTURE

Famous Since Broadcasting Began!

The tools of war have no place in a soldier's picture of peace. And yet, the perfections that have made his battle equipment the finest in the world will have an immediate and practical application to the postwar way of life for which he is fighting. Radio, especially, will reflect the amazing advances made to meet the precise and varied requirements of modern warfare. From these exciting and expanded frontiers, FADA engineers already are planning the radio and television sets of tomorrow. These expert technicians will be responsible for creations that you will appreciate. You can safely place your faith in the FADA of the future.

FADA RADIO AND ELECTRIC COMPANY, INC., LONG ISLAND CITY, N. Y.



Loud Speakers from Frequency Response Curves ${f F}$ or years we at Jensen have keenly felt the need of dependable and useful information to

quide both the professional and the layman in their selection, purchase, installation and use of loud speakers. Now we are going to meet that need by a series of informative technical Monographs prepared by the Jensen Technical Service Department. ¶ The first Monograph in the series deals with one of the most interesting and controversial subjects in the field of acoustics, "LOUD SPEAKER FREQUENCY RESPONSE MEASUREMENTS." It discusses thoroughly the practical aspects of this subject in such a way that the material is unhesitatingly recommended to the whole profession: the engineer, the trade, the student, and even the layman. The first Monograph is

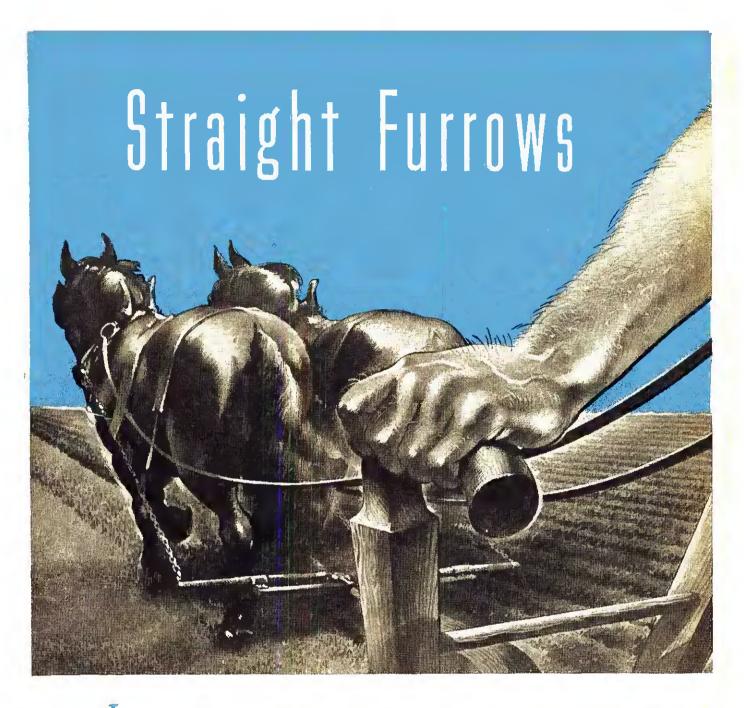
ready now. Copies are available from Jensen jobbers and dealers everywhere, or fill out the coupon

below and send it with 25c to

Watch for the rest of the series to be announced later. Other Monographs will deal with equally important and interesting subjects.

FREE to men to the Military Services, to Military Technical Training Centers, and to Technical Schools and Libraries. Just write and request a copy.





It takes a steady, knowing hand to plow a straight furrow. And a good plowman is never satisfied with anything short of perfection. It takes men of experience and judgment—men imbued with quality ideals—to build quality products. The skilled direction the NEW DETROLA management now applies to the manufacture of precision war equipment will one day guide the making of fine electronic products for home and industry. Hasten The Day Of Victory By Buying More And MORE War Bonds.

DIVISION OF INTERNATIONAL DETROLA CORPORATION . BEARD AT CHATFIELD, DETROIT 9, MICH

C. RUSSELL FELDMANN



Quality that serves the war shall serve the peace

SYLVANIA

ELECTRIC PRODUCTS INC.

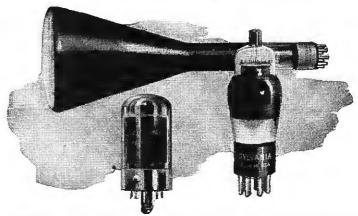


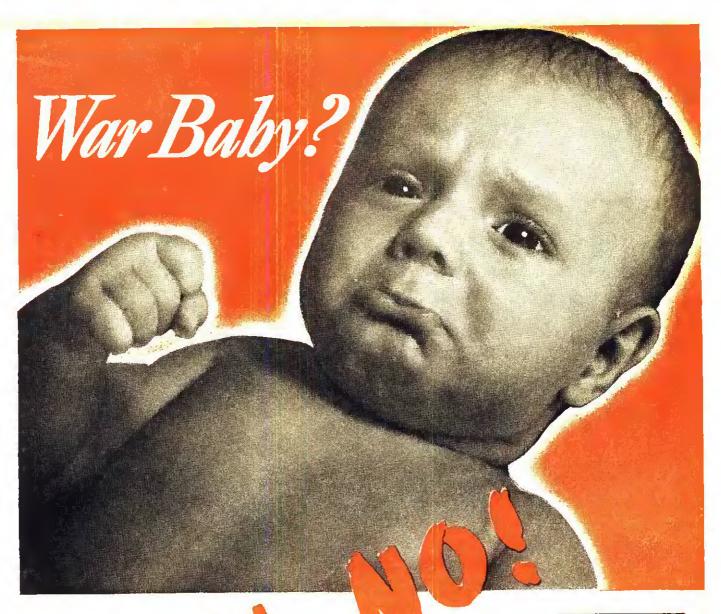
Marines leap to the attack. News cameramen advance with them, recording the action. And, in short hours, those precious pictures taken under fire are telling their thrilling story to American newspaper readers.

Short-wave radio makes possible the transmission of news pictures direct to any part of the world. The blacks, grays and whites of a photograph are broadcast as an audible signal, varying in strength according to the shading of the picture. Thousands of land- and sea-miles away, the electronic facsimile recording tube "hears" the picture and reproduces it, line by line, on sensitized paper.

More and more news pictures of this war are recorded by Sylvania recorder tubes manufactured to one standard—the highest anywhere known. This Sylvania electron tube bears the same marked superiority you have long expected of Sylvania radio tubes. The Sylvania recorder tube is vital to quicker transmission than was formerly possible over news-cluttered commercial radio circuits, and it records clearer pictures that are more faithful to the original.

A reputation for radio tube manufacture, attained by serving you, brought Sylvania important wartime assignments in electronics. The recorder tube is one of many electron tubes other than radio that Sylvania now produces. This wide wartime experience will bring you ever finer radio tubes and cathode ray tubes to help you develop your postwar opportunities in the radio and television field.





War brought RADAR . . . and Radar multiplied Hamilton's growth. But don't let that mislead you . . . for Hamilton is in



was possible . . . only because there was a solid foundation of engineering development, ready for it. That foundation—broadened and strengthened-will be ready . . . when the post-war OLYMPIC scramble comes . . . to provide selected outlets with vital competitive and delivery advantages.

Radio...by HAMILTON Radio Corporation • New York

NO sense a "war baby." Spectacular expansion





It was a great day for radio communication when National Union engineers developed the technique of gold plating certain tube parts. For by this ingenious

means they measurably extended the life of power tubes.

The object, here, was not to make power tubes structurally stronger—or even more durable. Already these tubes were sound enough mechanically to do a bang-up job. What the N. U. process of gold plating did, was to make the electrons behave. N. U. engineers demonstrated that by gold-plating the grid wire, they automatically eliminated a very disturbing factor in power tube performance, known as

grid emission. The source of this undesirable primary emission was imprisoned within the gold. No longer could it interfere with the planned and controlled electron flow within the tube. Result—power tubes of a higher performance level and longer life.

In the post-war period of competitive selling—radio service men will be tremendously assisted by National Union's great electronic research program. For many such improved tubes to sell post-war customers, at a profit—count on National Union.

NATIONAL UNION RADIO CORPORATION, NEWARK, N. J. Factories: Newark and Maplewood, N. J.; Lansdale and Robesonia, Pa.

NATIONAL UNION RADIO AND ELECTRONIC TUBES

Transmitting, Cathode Ray, Receiving, Special Purpose Tubes . Condensers . Volume Controls . Photo Electric Cells . Panel Lamps . Flasolight Bulbs



GAROD RADIO CORPORATION . 70 WASHINGTON STREET . BROOKLYN I, N. Y.

PROPHECIES About Radio You Can't Afford to Believe



• No sir, if your thinking, or reading, has led you into either of these camps, please change your thinking fast! You can't afford to live with it.

During the past two years the facile pens of the paper prophets have far outstripped the *practical* inventions of the hard-working engineers and research men, who nevertheless *have* wrought new and concrete wonders!

So the truth, as usual, lies in between.

Zenith, always famed for greatly advanced thinking, will not guarantee to produce miracle radios for you. Nor, on the other hand, will Zenith return to pre-war methods.

The great Zenith organization...numbering thousands, sharing tremendously in secret radionic war work, originating new radionic war developments...will apply its intensely practical war experience to every phase of its post-war home radios.

Past Zenith policies, past lines, past performance—you know them well! With them, you and we went ahead together—and successfully.

Planning for the future, at Zenith, consists right

now of much more than mere words. Planning is being translated into action every day, is being crystallized into developments, models, features, and designs that will make you glad you are a Zenith dealer. You'll get a real lift when you see those first post-war Radionic Zeniths on your floor.

WATCH ZENITH!

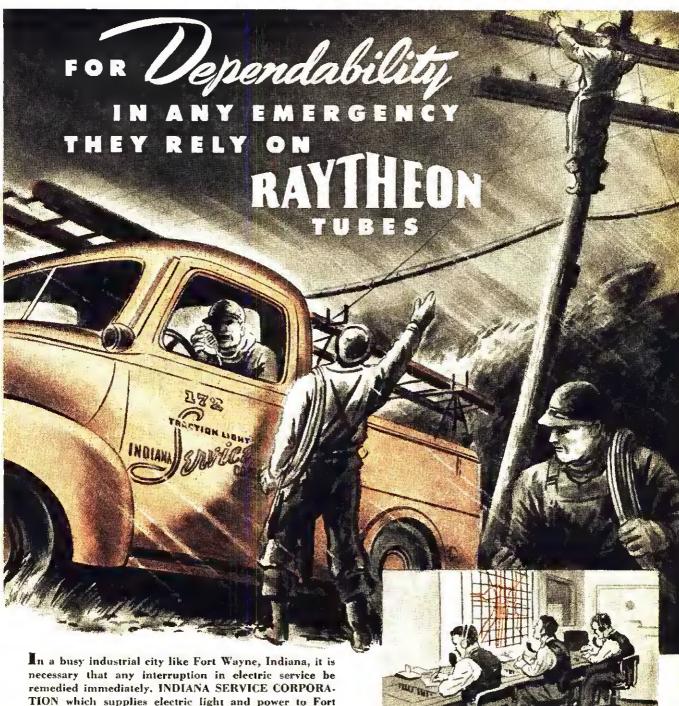
Keep in touch with your Zenith Distributor. Zenith is all set to move forward along the lines of its proven and successful distribution methods with "war-advanced" ideas as soon as the signal is given. Zenith Distributors are being kept informed of latest factory developments.



RADIONIC PRODUCTS EXCLUSIVELY—WORLD'S LEADING MANUFACTURER

ZENITH RADIO CORPORATION . CHICAGO, ILLINOIS

R454



In a busy industrial city like Fort Wayne, Indiana, it is necessary that any interruption in electric service be remedied immediately. INDIANA SERVICE CORPORATION which supplies electric light and power to Fort Wayne's war plants, has found that two-way radio between the dispatcher's office and service, patrol and repair trucks assures the quickest and most reliable means of communication in any emergency. To assure even greater reliability, this electronic communication system is equipped with RAYTHEON high fidelity tubes.

That "Plus-Extra" quality that proved RAYTHEON the best tube in the past, will be enhanced with all the knowledge that is being gained from manufacturing advanced electronic equipment for the war effort. This wartime

experience will doubly guarantee that you will be able to offer your customers the best engineered and precision-made eletronic tubes for all applications. In the mean-time, RAYTHEON will continue to supply you with all the MR tubes that WPB allows, for you to pass on to those who need them most.

Raytheon Manufacturing Company

RADIO RECEIVING TUBE DIVISION

Newton, Massachusetts . Los Angeles . New York . Chicago . Atlanta



RAYTHEON

High Fidelity
RADIO AND ELECTRONIC TUBES



DEVOTED TO RESEARCH AND MANUFACTURE OF TUBES FOR THE NEW ERA OF ELECTRONICS

You know where you stand

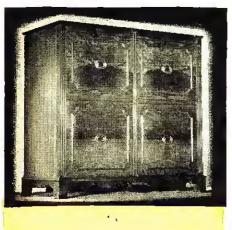
First, you have the firm foundation of Stromberg-Carlson's widely recognized pre-war superiority. The quality of its FM and AM reception. The fidelity of its phonograph reproduction. Its pioneering effort in the development of television.

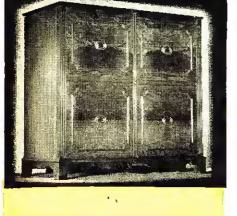
But Stromberg-Carlson has already gone far beyond this - and will offer you a post-war line essentially pretested in all its aspects.

Pre-tested in its appeal to dealers. For an exhaustive survey among the trade has developed clearly the features that our dealers are looking for at war's close.

And pre-tested in its appeal to the public. For a correspondingly widespread study of the post-war wants and desires of our prospects has permitted our engineers in collaboration with some of the country's leading industrial designers — to create a line of new Stromberg-Carlson instruments that will set even higher standards of leadership in appearance and in performance.

with the post-war STROMBERG-**CARLSON!**





sales story in a nutshell! We will have soon after Victory a fine line of Stromberg-Carlson FM and AM radios, phono-

STROMBERG-

CARLSON'S

- graph combinations, and television receivers in a wide range of prices.
- We will have a policy of distribution planned to give every Authorized Dealer a good profit opportunity on the Stromberg-Carlson line.
- And the Stromberg-Carlson name will be even more widely and favorably known than ever before.

RADIOS, TELEVISION. TELEPHONES AND SOUND EQUIPMENT

O. H. CALDWELL, EDITOR
480 LEXINGTON AVE.



M. CLEMENTS, PUBLISHER NEW YORK 17, N. Y.

Washington News-

The Tube Situation

 Distribution of radio tubes and parts continues to vex government agencies, wholesalers and retailers.

War Production Board is receiving complaints from consumers and retailers, though it was disclosed that at a meeting of the Electronics Distributors Industry Advisory Committee with WPB officials, most members of the committee believed that the system of allocations from manufacturers to distributors is working as well as can be expected in view of the shortage of tubes. An official statement from WPB says that "distributors in general feel that the situation is improving."

The point was made, however, that in metropolitan areas consumers are not receiving fair treatment because dealers are holding tubes to use in repair work rather than selling them separately for replacement purposes.

Emphasis was laid on the fact that the greatest complaint in rural areas has to do with the lack of battery tubes, production of which was stopped by L-76.

Loudest Complaints

Other complaints, however, are not always so well justified, according to an official statement, since "the loudest protests often come from those who were not in the radio business in 1941 or from dealers who are unwilling to take any stock except the most critical types of tubes."

Since the practice on the part of some jobbers is to insist that dealers in order to get critically needed tubes and parts, take "assortments"-sometimes made up of items that are of no use to them, the editors of this magazine asked John Creutz, Chief, Domestic & Foreign Branch, Radio and Radar Division, WPB, who presided at the meeting mentioned above, for comment on this situation, Mr. Creutz answered as follows: "There is no WPB regulation covering the sale of 'assortments' of tubes. We understand that there are OPA regulations regarding the so-called 'Package Deals' which are sometimes used by the Trade in disposing of their less desirable items."

Commenting further upon tube distribution, Mr. Creutz said:

"Under War Production Board regulations a supplier cannot actually refuse a rated order for any article he may have for sale. It is illegal for a supplier who has parts to insist on a AA-r rating. He must accept a AA-5 rating and deliver the parts if he has them in stock, even though he may intend to hold them for later sale on AA-1 ratings.

Can't Force Purchase

"War Production Board regulations, of course, prohibit the sale of tubes marked 'MR' on rated orders; therefore, these regulations do not apply to 'MR' tubes. There is no WPB regulation that would require a dealer to sell to a serviceman or a private individual 'MR' tubes. Likewise, there is no regulation that would compel a dealer to purchase any tubes he did not want."

How the present tube situation appears is seen in the following statement issued by the Industry Advisory Committee:

"On the basis of a yearly requirement

of 18,000,000 tubes, virtually all civilian requirements should be produced during the third quarter. Since the going rate of the first 5 months has been only 16,000,000 a year, the situation is improving.

"While the Division has given the producers 100 percent of their material requirements and has not attempted to hold back production in any way, overall production has decreased by reason of attempts to switch from one type of tube to another. Moreover, even a yearly requirement of 18,000,000 tubes will not satisfy the demand, since 1941 shipments of carton-packed tubes were 33,000,000.

"An industry representative estimated that the normal demand for the last few years has been as much as 65,000,000 or 70,000,000. Although the figures published by the RCA license bureau for 1941 were only 36,000,000, he believed that many tubes purchased in bulk have been used for replacements rather than for original equipment.

"The fact that no new radio sets have been made since 1941 means that demand for tubes has substantially increased."



"I see you've finally persuaded a repairman to come fix our radio, dear!"

RADIO, Appliances, Music,

HOME RADIOS BY FEBRUARY OR MARCH seem well within possibilities if Germany collapses before snow falls, as Russians promise. Small sets should be ready within 30 to 45 days after WPB go-ahead is given; consoles will take 2 to 3 months. Console cabinets will be bottleneck.

WOODEN MODELS of six suggested post-war automatic toasters and six automatic irons, were exhibited by Proctor Electric Co. during recent Housewares Show at Hotel Pennsylvania, New York City. Visiting dealers were asked to vote on favorite designs. Here's an idea radio manufacturers could adopt immediately.



25 MILLION TELEVISION HOMES are envisioned within a decade by Edgar Kobak, executive vice-president of the Blue Network. This video audience, he predicts, will be served by a thousand television transmitting stations, connected to three or perhaps four networks.

WIRE RECORDERS will get big play in post-war quality sets, particularly combinations selling above \$750. Several manufacturers even plan to concentrate on recorders exclusively. New "turnover" record-players are also on the post-war horizon.

FOOD APPLIANCES are to be specialized in by General Mills, latest recruit to electrical appliance field. R. E. Imhoff, formerly of Westinghouse and later of Proctor, who is new sales manager of home-appliance division of General Mills, declares there is no intention to use these appliances as premiums.

ICE PEOPLE plan to invade the electric-refrigeration field post-war. The Coolerator Corp. expects to continue making ice-boxes but will add to its line electric refrigerators as well as a home-freezer unit.

MAJOR APPLIANCES installed in the home at the time of its construction and paid for as part of the mortgage payments, was a plan proposed by your Editor years ago in addressing electrical men. Now the idea is being advocated by "Architectural Forum" and by several manufacturers, as post-war device to make the purchase of refrigerators, ranges and laundry equipment easier for the customer.

SMALL-APPLIANCE FIELD will soon be entered by Sperti Electric Co. of Cincinnati. Pre-war this company had a sun-lamp and also introduced into drug field a remedy for burns.

20 MILLION TUBES for civilian users are promised the last six months of 1944. This is at the rate of 40 million tubes per year, the replacement rate needed for present 60 million sets, in the absence of new receivers. Besides new production, 7 million tubes have been reclaimed from

Television and FM Plans of Principal Home-Radio Manufacturers

Manufacturer's Name	Television			Radio		Recording				Television	Radio		Recording		
	Do you expect to make television sets?	Estimated retail	Will you make projection type sets?	Will broadcast sets include FM?	Will you manufacture auto sets?	Will you manufacture recording equipment?	Professional or home recording	Manufacturer's Name	Do you expect to make television sets?	Estimated retail price range	Will you make projection type sets?	Will broadcast sets i notude FM?	Will you manufacture suto sets?	Will you manufacture recording equipment?	Professional or home recording
Admiral Corp.	yes	\$175-\$450	yes	yes	no	yes	pro.	Electronic Corp. of America				yes	no	yes	home
Air King Products Co., Inc.	yes	\$250~\$750	yes	yes	no	yes	home	Emerson R. & Phono, Corp.	yes		yes	yes	no	yes	both
Andrea Radio Corp.	yea	\$79-\$700	yes	yes	no	no		Espey Manufacturing Co.	yes	\$200-\$500		yes	no.	yes.	home
Ansley Radio Corp.	yea			yes	no	no		Fada Radio & Electric Co.	yes	\$300-\$1000	yes	3	πo	4	4
Automatic Radio Mfg. Co.	yes			yes	yes			Farnsworth Tele, & R. Corp.	yes		yes	yes	yes	prob-	
Belmont Radio Corp.	yes			yes	yes	768	home	Freed-Eisemann Radio						-	
Browning Laboratories, Inc.				yes	no	no		rreed-kiemean Kadid	yes	phono comb.	yes	yes	no	yes	home
Colonial Radio Corp.	yes		yes	yes	yes	Aea	home	Galvin Mfg. Corp.	yes			yes	yes	yes	home
The Crosley Corp.	yes	\$125 \$200 ¹	yes	some	по	yes	home	Gared Radio Corp.			2000	_		-	_
Delco-Radio				yes	yes				yes		yes	y'es	110	yes	home
DeWald Radio Mfg. Corp.	yes		prob- ably	yes	no.	yes	home	General Electric Co. General Tele: & R. Corp.*	yes	\$200 up	yea	yes	no	yes	both
Allen B. DuMont Labs. Inc.	yes		yes	2	no	BO		Gilfillan Bros., Inc.	yes	\$375-\$750	yes	yes	ng	Aca	home
Eckstein R. & Tele. Co.	Tho			some	yes	yes	home	Hallicrafters Co.	yes	in the second	по	yes	no	no	·······
Electrical Research Labs.	yes			yes	по			Hamilton Radio Corp.	nossibly	\$400~\$600	yes.	yes	5		

^{*}Indicates that no reply to questionnalre was received at the time of going to press. 1-, and up; 2-, FM in Television Sets; 3-, Special FM Sets; 4-, Only as required for Combination units; 5-, On contract basis; 6-, Table Models; 7-, for Manufacturers only.

and Television TODAY

Army and handed over to Defense Supplies Corporation, which will issue them to tube manufacturers for distribution through trade channels.

STANDARDIZED COMPONENTS and parts may figure in those coming 1945 sets. Parts manufacturers figure they can reduce a thousand varieties to 40, reducing costs and increasing quality. Time to start is now, as 1945 sets are being planned and launched. Simplification proposed would be invaluable to distributors and repairmen in reducing inventories and assuring available repair parts.

ARMY SURPLUSES will be disposed of through radio manufacturers, according to U. S. Defense Supplies Corporation which is vigorously opposing the distribution of radio-electronic communication equipment through jobbers or other civilian outlets.



FARMERS, now enjoying top prosperity, are seen as future major market for radios and even television sets. Where tele broadcasts are available, video will mean much to isolated farm homes, bringing newsreels, drama and comedy. Even walkie-talkies have been proposed for quick communication between farmhouse, cowbarns and the "southwest forty".

MFRS' POST-WAR SCHEDULES have just been surveyed by your editors, to learn about individual company plans for bringing out television sets, FM, automobile radios, and recorders. Details of official answers to RADIO & Television RETAILING'S questionnaire are tabulated across the bottom of these pages.

OLD ABUSES of radio merchandising field probably will put in their appearance after new sets get plentiful—we groan to learn! Cruises, prizes, spiffs, premiums, kickbacks, etc., already are beginning to figure in some merchandisers' plans for the brave new post-war world!

RE-CHARGEABLE PORTABLE that feeds from automobile electric system, is new development by Louis Pacent, radio pioneer. Idea is that as you motor to beach or mountains, the set-battery recharges, so as to be all ready for separate operation in cabana or cabin.

300,000,000 RECORDS—that's figure for annual sales of discs which Willard Ray of Times Appliance, New York, sees coming into being soon after post-war record production gets going. This would mean only 2 to 2½ times current record sales; certainly not unlikely by 194X!

AUTOMATIC WASHERS will doubtless play big part in Westinghouse's plans for the post-war appliance selling field. Their "Laundromat," a post-war product, was shown for the first time on the Pacific Coast, displayed at the Western Merchandise Mart Fall Market, San Francisco, July 24 to 29.

Also Automobile-Radio and Recorders, As Reported to Radio & Television Retailing

	Television			Radio		Recording		The second secon		Television	Radio		Recording		
Manufacturer's Name	Do you expect to make television sets?	Estimated retail price range	Will you make projection type sets?	Will broadcast sets include FM?	Will you manufacture auto sets?	Will you manufacture recording equipment?	Professional or home recording	Manufacturer's Name	Do you expect to make television sets?	Estimated retail price range	Will you make projection type sets?	Will broadcast sets include FM?	Will you manufacture auto sets?	Will you manufacture recording equipment?	Professional or home recording
Hammarlund Mfg. Co.*								Remler Co. Ltd.	yes	\$150-\$300	yes	yes	no	yea	home
Hoffman Radio Corp.	yea	· · · · · · · · · · · · · · · · · · ·		yes	no	yes	hoine	Setchell-Carlson Co.	yes			yes	yes	yes	
Howard Radio Co.	yes			yes	no	yes	home	Sonora R. & Tele, Corp.				yes	yes	yes	home
International-Detrola Corp.	yes	\$150-\$300		some	yes			Sparks-Withington Co.	yes			yes	kes	yes	home
Magnavox Co., Ltd.	yes			yes	no	yes	both	Stewart-Warner Corp.	yes			yes	no	yes	home
Majestic R. & Tele, Corp.	yes	\$200 up		Yes	ti.o	yes	home	Stromberg-Carlson Co.	yes		yes	some	no	yes	home
Meissner Mfg. Co.	yes		yes	yes	no	yes	home	Templetone Radio Co.	Nes	\$125~\$495	yes	yes	no	yes	both
National Co. Inc.*								Trav-Ler Karenola R. & T. Co.				yes	yes	yes	home
Noblitt-Sparks Industries	yes			yes	no	tio		Warwick Mfg. Corp.	tio			yes	no	no	
Packard-Bell Co.	yes	\$200~\$500	yes	yes	no	yes	home	Watterson Radio Mfg. Co.	yes			some	no	yes	both
Philo Corp.	yes	\$125-\$150	yes	yes	yes	yes	bome	Westinghouse Elec. & Mfg.	yes			yes			
Philharmonic Radio Corp.	yes			yes	no	yes		Wilcox-Gay Corp.				yes	110	yes	both
Pilot Radio Corp.	yes	\$500	yes	yes	ne	no	no	Zenith Radio Corp.	yes						
RCA Victor Div., R.C.A.	yes	\$200-\$400	yes	yes	7	yes	pro.								

^{*}Indicates that no reply to questionnaire was received at the time of going to press. 1-, and up; 2-, FM in Television Sets; 3-, Special FM Sets; 4-, Only as required for Combination units; 5-, On contract basis; 6-, Table Models; 7-, for Manufacturers only.

Showmanship In

Hartford, Conn., Dealer Diagnoses and Cures Sick Sets. Backs Business-Getting Publicity Ideas with Practical Application. Adds Electronic Maintenance

• "The only kind of hospital that a patient enters dead and comes out alive!" is Ernest C. Augsten's claim and he is proud of his outstanding setup at his Radio Hospital, 714 Maple Ave., Hartford, Conn. (See front cover).

Dealer-technician Augsten has built a unique service in curing sets suffering from laryngitis and other ailments ranging from ruptured appendix (condenser trouble) to high blood pressure (high current drain).

His present staff consists of one nurse and two internes and himself, the doctor. Mrs. Augsten, who is the nurse, receives the "patients" and keeps their "records." Two radio technicians, Cliff Islieb and Russ Johnston, assist "Doctor" Augsten, who officiates at all major operations.

The stethoscope is actually used in connection with Chanalyst checkups, the scalpel in fine cutting—such as on a speaker cone, the hypodermic syringe is filled with carbon tetrachloride and is used to clean small sections of receivers.

In the good days—when gas wasn't rationed—the delivery truck, which

TABLE TARREST OF THE

is still painted white and blue and resembles an ambulance, called for sets, and the two internes carried the receiver out on a bona fide stretcher. Needless to say, crowds gathered at such events, and it was not at all unusual to have four or five persons in the crowd announce then and there that they, too, had a radio set to be fixed, and would the Hospital please call for it.

"Dr." Augsten has been in his present locality for the past six years. When he entered the radio repair business he felt there were so many others in the field that he had to make himself outstanding. He gave a new angle to the repair business, and his showmanship brought him many customers. During his first year he repaired 4,653 sets and installed 2,881 new car radios. This averages 90 and 55 receivers weekly.

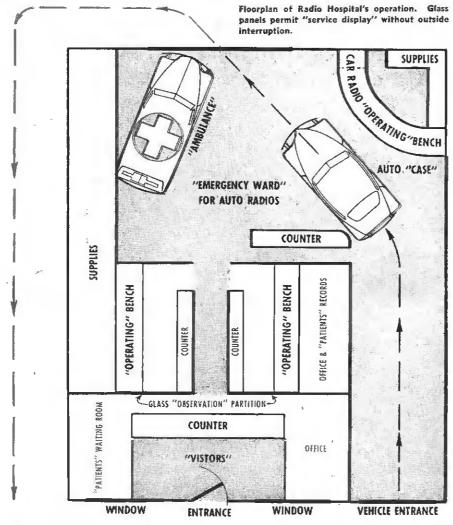
Today, without radios to sell, the service end of the business has increased approximately 200 per cent. The defense plant area surrounding Hartford provides money and priority for the use of cars and about one-half of this business is in car radio repair.

Augsten does rewiring, conversions, uses adaptors, rewires stages to fit substitute tubes.

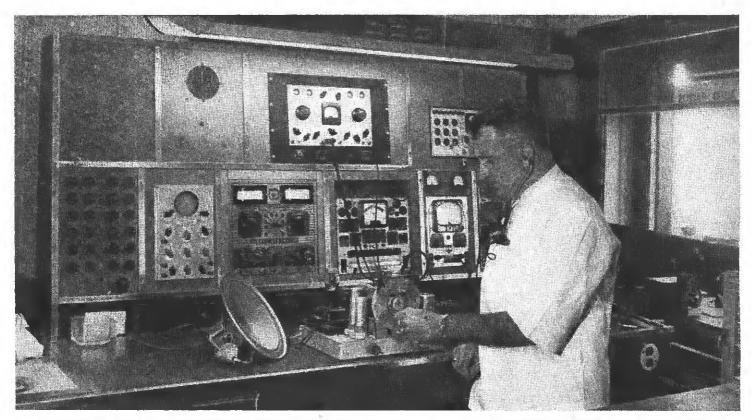
Electronic Specialist

Much work has been done by Augsten in defense plants on electronic equipment, as well. This includes work on amplifiers, public address systems, surface gauges, automatic armatures, electronic checkers of texture and density of nylon parachutes, and factory men bring in electronic meters and parts for repair.

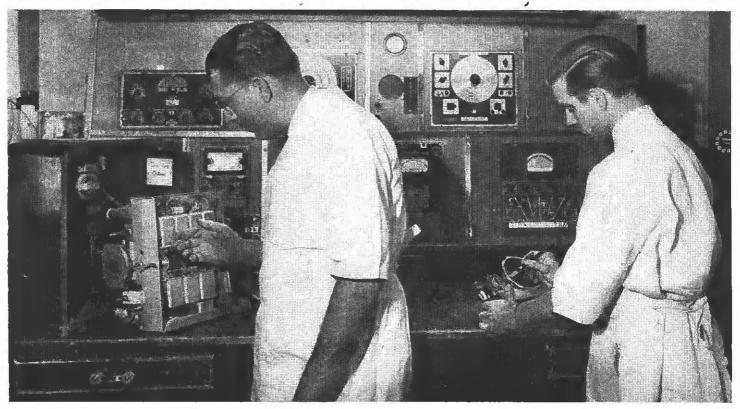
Far from viewing the present electronic maintenance jobs as temporary work, Augsten sees a future for the radio technician in America's electronically controlled plants of the future. Many of the devices operated in today's war plants will be turned to the production of peacetime needs, is his belief; and the work he is doing today will provide for after-the-war business.



The Radio Business



"Dr." Augsten is shown above using the stethoscope chanalyst check. Below, assistants Islieb and Johnston demonstrate the use of the hypodermic syringe in cleaning delicate parts, and the "scalpel method" of speaker cone cutting. (See also front cover picture.)



RADIO & Television RETAILING • August, 1944

INDEPENDENT JOBBER'S PLACE

Features of Wholesale Distribution by in the Most Widely Used Method

Jobbers Stress Features in Describing Distribution Advantages Offered by "Independents":

"Operating under present conditions definitely proves that the independent jobber gives better service.
... Goverage results in more sales.
... in position to watch local conditions more closely and to move faster on promotions, advertising, etc."
—C. C. Howard, Cleveland Radiolectric, Inc., Cleveland, Ohio.

"... The jobber's salesman will work the smaller towns ... harder than the factory will ... also believe most dealers would rather buy from such distributor as latter is usually more centrally located."—B. J. Dr. JARNATT, FRESNO, CAL.

"... Certain manufacturers may feel that they can do without the jobber, but they will learn that other methods are too expensive. The retailer wants to deal with someone he knows; someone he can talk to and 'squawk' to—and get some service...."—LARRY ARNOLD, THE ARNOLD CO., RICHMOND, VA.

"Adequate warehousing at central locations... more than ever necessary in modern merchandising. The 'independent' will handle this in the most economical manner... Territory coverage, sales training, service problems, credit control, merchandising management, educational work and sales promotion entail costs regardless of how you approach each problem. The independent distributor... will do these ... at the lowest cost ... far more dependably and thoroughly...."—WM. F. SEEMUTH, ELECTRO-PLIANCE DISTRIBUTORS, INC., MILWAUKEE, WIS.

"In ordinary times, average dealer cannot buy in sufficient volume to justify doing business with manufacturer . . . retailer depends upon the jobber to 'see him through' . . . dealer may spend an average of \$100 a month, split up perhaps over two or three hundred items . . . sales made direct from manufacturer to dealer . . would be limited."—Louis M. Herman, The Louis M. Herman Co., Boston, Mass.

• Personalized service, knowledge of the territory, familiarity with out-ofthe-ordinary dealer-financing problems, and the possession of executive authority all under one roof are some of the potent features making up the independent distributor's stock in trade.

Proponents of more direct methods of getting radios, parts and household appliances into the hands of the retailer would eliminate the independent jobber as an unnecessary "middleman"; as a sort of "fifth-wheel" in merchandising. But a careful examination of the subject reveals that any such bypassing of the independent jobber would work hardships on countless numbers of retailers whose business volume is not large, and who are frequently not in high enough credit brackets to justify having the "factory branch" or the manufacturer do business with them.

Trading Area Coverage

In many cases, the dealer having a limited business operation, finds that he is unable to make small purchases from any source other than the independent distributor. Such a dealer finds too that the "independent," concentrating upon a comparatively small trading area, is often more familiar with his territory as a result of this concentration of effort, and can separate the "goats" from the "sheep" in merchandise. In other words, the independent jobber is in a unique position to know in advance

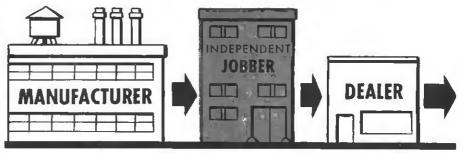
what will sell and what will not sell.

Because his organization is compact, and his departments closely interwoven, the independent jobber's credit man can often deviate from established rules in his financial relations with the dealer. He is often able to keep a deserving dealer, whose credit statement would be unacceptable elsewhere, in business.

While it is true that certain factory-branches and wholly-owned subsidiary wholesale firms distributing merchandise sell other makes in addition to those of the parent company, the choice does not often lie with the branch manager, say the champions of the independent jobber, who point out that the latter is better qualified to choose makes and models more suited to sales in his respective territory. He can move faster in discarding makes which do not sell fast, or do not perform satisfactorily, which, it is pointed out, is not often easy, and frequently impossible for the factory branch manager to do, since the latter in most cases must consult superior officials.

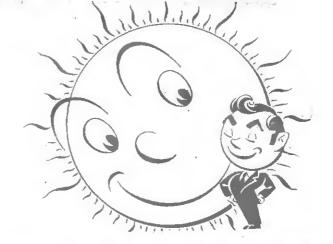
Convenient Location

Location often plays an important part in the merchant's choice of a desirable wholesaler. Often, the independent distributor, since he is frequently a specialist in making a profitable business out of a number of relatively small accounts, can locate his business in what larger operatives would term "isolated" territory.



IN THE SUN

Privately Owned Firms — Specialists of Supplying the Retailer.



Naturally, when the jobber is situated some distance from the centers of big business, he provides a convenient source of supply center for the merchants in this territory, and is able to make speedy deliveries of even small orders, usually via one carrier. In such cases, too, many transactions may be carried out over the telephone.

Rusiness Volume Factor

Thus, we see that the independent jobber is often able to maintain a place of business where the potential sales are entirely too low to warrant the opening of a "factory-branch" or wholly-owned subsidiary establishment of a manufacturer.

This location-near-the-trade feature possible to many independent distributors has other advantages also. It permits personal contact with the dealer, resulting in a better understanding between the supplier and the merchant, and it affords the opportunity for the merchant to go and select his merchandise, and, often, where rush orders are concerned, to pick up the purchases and take them to his store. Many dealers prefer to transact all of their business in the jobber's showroom, and this is particularly true of radio and refrigerator repairers, who combine such business with pleasure in visiting the distributor who "talks their language."

All of these things do not mean that the independent distributor carries on his business, nationwide, on a small scale, since, as a matter of actual fact, he leads in sales of radios, radio parts and home appliances, but it does show that whether or not it is economically sound for him to operate as a "middleman" in the large centers of trade, he is absolutely essential to the retailer who is in an out of the way location or whose volume of business and credit standing is relatively small.

One student of distribution makes this comparison:

"The independent distributor's relationship to the independent retailer is comparable to the independent retailer's relationship to the ultimate consumer.

"The factory-branch or factoryowned subsidiary firm's relationship with the independent retailer is comparable to the relationship of the chain-store, mail-order house or department store to the ultimate consumer."

Close Dealer Contact

The above, very broad statements do not mean that many factory branches do not maintain close dealer contacts and render service comparable in every way to the service rendered by the independent distributor, but they serve to break the subject, roughly into two general categories, and justify the existence of both kinds of distributor in the complex problem of shuttling-merchandise from the factory to the ultimate consumer.

The fact that so many dealers buy at the same time from the "independent," the factory branch and direct from the manufacturer proves that each has certain advantages, and each has its niche to fill in the distribution pattern.

"Facts about the Factory Branch" will appear in next month's issue, and will be followed by other articles, to complete a series on all phases of merchandise distribution.

Some "Independents" Point Out How Their Services Benefit Retailer and Manufacturer:

"The independent radio jobber gives his dealers quicker deliveries, faster service on parts and repairs, and establishes, trains, frequently contacts and continuously promotes the sales of many profitable dealers whom the factory would never even discover, and would not grant them the necessary credit if they did."—FRANK BURKE, 555, INC., LITTLE ROCK, ARK.

"The independent radio jobber offers to the manufacturer his business and territorial knowledge; his finances as well as his localized territory efforts. . . He offers the dealer technical and financial assistance, a speedy and efficient service . . an understanding of the dealer's local problems."—Tom Brown, Tom Brown RADIO CO., St. LOUIS, MO.

"Almost all manufacturers, also retailers of all sizes, in both large and small communities, have found the independent jobber vital to their continued success. Most large concerns, both manufacturers and retailers, were once small. The independent jobber . . . played a great part in the growth and ultimate success of many of the large manufacturers and retailers in existence today."—E. B. INGRAHAM, TIMES APPLIANCE CO. INC., NEW YORK, N. Y.

"The independent jobber . . . performs the following functions more efficiently and more economically than any other agency: He stocks the products of hundreds of different manufacturers, making these related products available to his many customers from one source, in relatively small quantities . . . extends credit based on close and often personal knowledge . . provides technical service and advice . . . aggressively merchandises items he feels have merit."—R. C. HALL, R. C. & L. F. HALL, HOUSTON, TEX.

CONSUMER A

ULTIMATE

APPLIANCE DISPLAY MAKES NEW LINES

Radio-Appliance Dealer Diversifies
Tells His Customers With Signs

• An appliance and radio shop that is coming through with flying colors is the Hannan Appliance Company, 707 East Lake St., Minneapolis, Minnesota. "We want to be in the appliance business when the war is over," said J. W. Hannan, owner of the business, "so we've had to diversify our efforts to help pay our overhead, the while we have given more attention than ever before to the service end of our business."

"Diversifying," with the Hannan Company has meant just that. Furniture has been an important new line which has proved so good that, "We plan always to have a furniture spot in the store," said Mr. Hannan.

One side of the shop is given over

to furniture, some reconditioned, some new. Near the main entrance is a display of unfinished pieces for home painting and waxing. Advertising pieces near them give color schemes, show model kitchens and nooks in which the furniture is appropriate, and thereby create interest in the personalizing of one's rooms by decorating furniture as one wishes.

Display Switches

Toward the rear of the store, at the entrance to the service section, is a display of Coolerators and other ice-cooled refrigerators, which have sold well as substitutes for unavailable electrical units. The store has really pushed them through advertising and good display. Frequently, they are shown in window displays. "We also often give them a spot toward the front of the store," said Mr. Hannan. "We believe that

HIGHLIGHTS IN

Advertising is kept up

High school boys help solve labor problem

Displays are changed frequently

Dealer Hannan, left, in the service department, where completed jobs are included in the store display.



moving them about in location brings new interest from customers."

By picking up parts for washing machines and for vacuum cleaners, wherever they could be found, the shop established a reputation for being able to supply most needs in these items. These are displayed in a long counter case, on top of which are small items of general interest to householders, such as touch-up kits to use for small jobs that can be easily done at home.

Customer Kits

The shop recommends these kits to customers who inquire about small jobs, with the result that frequently the customer buys a kit and does his own simple repair instead of bringing the broken-down item to the shop—a service that the shop appreciates, since time and help are at

PAY

a premium and shop labor and hours are needed for the more difficult jobs requiring expert attention.

In the repair shop all kinds of appliances are serviced and reconditioned. The larger units, such as

HANNAN'S PLAN

Scarce parts sought

Used appliances are bought for resale

Repair packages sold to customers

washing machines, vacuum cleaners, radios, are picked up and delivered, but customers are urged to bring in small repair work and to call for it at appointed time.

Clock Repair

A good business has been done on repairing alarm clocks and electric irons. "Just let the public know that repair service is done at your shop," said Mr. Hannan, "and the work flows in. We use lots of signs in our shop windows, and since we are on a big traffic street, the signs bring us business from many parts of the city from other than our regular customers."

The signs have colorful backgrounds with large lettering that stands out well. There are no general statements. Instead mention is made of itemized repair work; for ex-



Appliances combine with radio to attract customers at Hannan Appliance Co.

ample: "Have Your Old Washer Fixed for the Duration NOW."
"We service all makes of appliances and RADIOS." "We service all makes of washing machines and vacuum cleaners." "RADIO SERVICE—Prompt." "We repair electric irons, lamps, alarm clocks." "Radios, gas and electric ranges serviced."

Rebuilds Used Items

Like numerous other live shops during this period, Hannan's buys used items to be reconditioned and placed on sale. The business has become extensive. Newcomers to the city and longtime residents whose appliances have gone beyond repair keep this reconditioned merchandise moving rapidly. The shop is careful to buy nothing which cannot be repaired to give good service. High school boys help solve the labor problem. These boys who are mechanically inclined work part time during the school year and give full time during vacation periods. Older men who are expert repairmen make up the remainder of the force. Mr. Hannan works actively on some of the repair work and spends much time hunting for repair parts, Girls handle customer trade.

Although the load of repair work the shop has is about as much as can be carried, the shop keeps up its advertising in order to keep its name alive and familiar to all. It uses newspaper advertisements not forgetting small neighborhood papers; it has also found listing in the classified directory of the telephone company valuable.

The large expanse of windows that comprise the front of the store are filled at all times with merchandise. Displays are built low, however, so that a full view is given of the interior of the shop. Displays within the store are arranged with an eye to drawing in customers who can see the merchandise from the

Service Utilized in Display

The repair section of the shop is at the rear on the same floor. A partition separates it from the main shop, yet is low enough so that the shop is seen as a part of the main floor plan. A wide ledge across the top of the dividing wall holds repaired radios-ready for delivery. They add to the interest of the shop and advertise the radio repair section because customers can see them from any part of the main shop. On the inside of the partition shelves hold other radios to be repaired or which are ready for delivery. These shelves also serve to hold parts and tools which are used for checking of radios on the board at the back.

DEALER SERVICE

Radiomen Recondition Sets and Other Appliances-Double Up on Deliveries

HAGERSTOWN, Md. — Bohman-Warner, Inc., 35 W. Franklin St., is producing a steady flow in servicing volume, according to Robert P. Hussey, service director. For the past 18 years this firm has ably serviced the community, selling radios, refrigerators, electric ranges and laundry equipment, but for the duration depends upon its repair department to keep its radio-appliance picture alive.

Service Now for Sales Tomorrow

Its present success formula is found in the motto: "Give service today to create sales tomorrow." One of the ways this motto is made effective is the insistence on the part of the management that all sets be thoroughly tested before any repair is made.

Bohman and Warner are the principal owners, but employees own stock in the company, thus insuring service cooperation and greater interest in the firm's welfare.

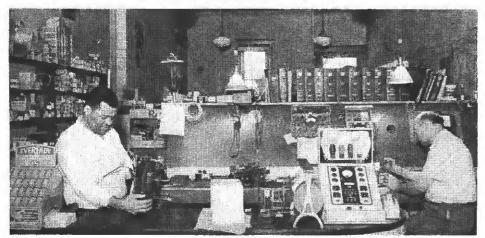
PHOENIX, Ariz. — Ramsey Radio, 3703 N. 7th St., conducted by Clay and Floyd Ramsey, father and son, has operated in the same neighborhood for 11 years. The present shop was built in June, 1943. It is equipped, and the business is organized for service in radio exclusively. They run between 300 and 400 sets every month.

Located in a district served by one of the main transportation stems, business comes from various resident groups, a large proportion of which are home owners. The range is broad, from modest income brackets through higher medium classifications in newer subdivisions centered around the huge new North High School, and up into the wealthier classes occupying the de luxe country club mansions. The Ramsey neighborhood selection demonstrated sound foresight on the part of the firm members. Service has developed a good will, assuring stability and growth.

"Now," reports Floyd Ramsey,

SPRINGFIELD, MASS.—Paul D. Beckley, right, owner of Rae Radio Co., 911 State St., and his assistant Alvin Herbert, both are graduates of the National Radio Institute of Washington, D. C. Note visual tube-tester in right foreground, which lets the customer "see for himself"! Formerly a radio shop owner for many years in a nearby state, Paul Beckley, after a session at war plant work, decided to reopen in his original field, this time in Springfield, and has been in business there for the past year. Up until just recently, he has been repairing, renting and building sound systems, but lack of obtainable equipment has curtailed his activities along these lines.

At present he is specializing in radio repair and the rebuilding of old receivers for resale. An accurate card system is kept in connection with this work which lists the customer's name and address, model receiver, remarks, credit, circuit changeovers, and any other work done. A guarantee of 90 days on all work and new tubes is made.



"the main thing is being able to substitute and to use things in radio that we never had thought about before. We have trained ourselves in this to such an extent that in reading of substitutions devised by others we often find that many of them duplicate ideas we have already worked out for ourselves.

"We get some very helpful ideas from RADIO AND Televison RETAIL-

CHICAGO, III.—Carey's Radio & Record Shop, 5534 W. North Ave., specializing in popular and classical records joins the ranks of newly-opened shops here. Bill W. Ward, who works in a local warplant during the day, has opened a shop at 3140 N. Austin Ave., and takes care of radio repair work evenings.

WATERTOWN, N. Y.—Radio Hospital ties in with a local feed mill. Farmers bring their defective radios to the mill, and the mill truck transports the sets to the repairer. Each receiver is tagged with an individual bill, and the mill truck picks them up a week later. The set owner pays the mill dealer, who in turn pays Radio Hospital.

BALTIMORE, Md.—An interesting addition to the retail field has been made here by the opening of Thurlow's Music Bar by Carroll Thurlow at 2300 E. Monument St.

This shop will feature a comprehensive line of records, both classics and popular numbers, featuring well known makes of recordings and sheet

Thurlow has been identified with the music field for many years. He became identified with the business more than a decade ago, when he and Sam Hornstein operated a radio parts and radio servicing business.

Several years ago, Thurlow opened a business for himself, trading as the Thurlow Electric Service Co., at McElderry and Rose Sts., where, in addition to featuring records, he operated a complete service on radios and appliances.

SPANS THE NATION

-Record Sales Hit New High

BIRMINGHAM. Ala.—The Home-wood Radio & Electric Co., has been opened at 1801 Montgomery Highway by Eugene Childress, who for 12 years operated an electric shop in Evansville, Ind. His new place of business is in a service station which he took over on account of its prominent location and drive-in facility.

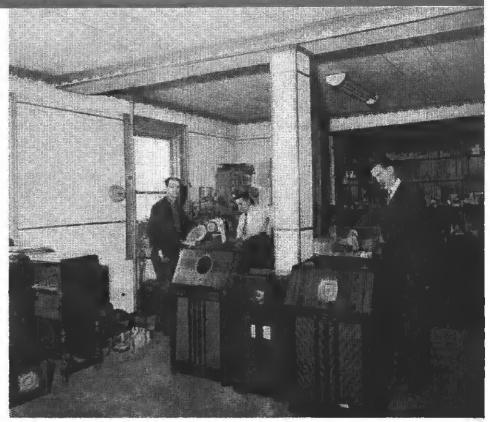
MANKATO, Minn.—The Schwickert Hardware Co. has gone in for service of used appliances in a big way. George Schwickert, owner, travels about Minnesota buying used radios and other appliances, reconditioning them and reselling locally. The firm has a separate radio repair department, staffed by a full-time man. Last year more than 290 radios were bought, reconditioned and resold, in addition to many other appliances.

Reconditions Appliances

Newspaper ads are run twice weekly for used appliances of any kind, and radio announcements on a local station are also employed. A sign outside the store also stresses that the store buys used appliances.

This store maintains a service staff of from 10 to 15 men to handle all appliance repairs, tin shop work, furnace cleaning, industrial roofing and domestic jobs. Milking machines and cream separators are reconditioned and resold also. A fine profit has been made through such operations within wartime ceilings to date.

HOUSTON, Tex .- "We can't get nearly enough tubes, and even the use of adapters and rewiring has its limitations," says Horace B. Matthews, owner of the Texas Radio & Television Service, 3707 Jensen Drive. "We have some welded tubes, but we don't sell these as new ones. We tell the customer that these tubes are rebuilt and repaired, and that they may last 5 minutes, five hours, five weeks or five months, and we don't get new tube prices for them. We take our customers into our confidence and tell them the truth about parts and repairs.'



Former seller of radios and appliances, J. Jordan Baldwin of Martinsburg currently specializes in repair (see item below).

MARTINSBURG, W. Vo .- Dealer J. Gordan Baldwin, at right in above photo, 328 W. King St., launched his business in 1930. "I had a hunch," he says, "that with the prospects of many dealers going out of business it was the right time for me to go into business." Through advertising and improved business methods, Mr. Baldwin found his business growing by leaps and bounds. He sold Philco radio, Kelvinators, Bendix and Thor laundry equipment. Today, repair work of the better sort is the store's chief activity. Frank B. Troup, the service manager, assisted by Joseph A. Brunk, turns out about 8 sets a day.

ANTIOCH. III.—Burt Anderson is a busy radioman in this northern Illinois town of 2000 population. In addition to servicing sets for the townspeople and the nearby farmers, Anderson has gone into the sales of records to offset some of the revenue lost by lack of electrical merchandise.

NEW YORK, N. Y.—Haynes-Griffin, one of New York's finest radiorecord shops, which has been operating for some years at 373 Madison Ave., moved on Aug. 1 to larger quarters at 391 Madison Ave., a block north. Extensive remodeling has been done at the new location, where a much larger store will give the firm increased display and customer facilities.

AUGUSTA, Ga.—David M. Johnson, owner of Johnson' Radio Repair Service, 1163 Broad St., is employed in a war plant but his wife takes care of radio repairs, with his assistance at night on jobs she is not able to do alone. Through this method the shop has managed to keep customers satisfied. When the war started Johnson began to buy all the second-hand radios he could find for sale, and stored them away. As a result he now has tubes and parts which come in handy repairing sets which he offers for sale.

Paintings Boost Disc

Warren Radio, Salt Lake City, Finds Art Gives "Atmosphere" to Store—Increases Record Sales and Radio Repair

• "What lovely paintings!" is an exclamation heard many times a day from people who stop before the windows of the Warren Radio Store on the busy main street of Salt Lake City, Utah, or who enter this live radio store, on the walls of which are dozens of bright canvasses adding interest and a certain cheerfulness to the store's interior.

But the paintings are not merely for decoration; they are for sale. When the war came along and it was hard to get radios, the store put in a line of pictures by Robert Harsh, one of the West's best known landscape painters. Manager Frank Warren pointed to a particularly fine mountain scene: "That," he said, "sells for \$50. The pictures range in price from \$15 to \$75, and bring in a nice type of buyer, who is exposed to the other merchandise we carry, specifically records.

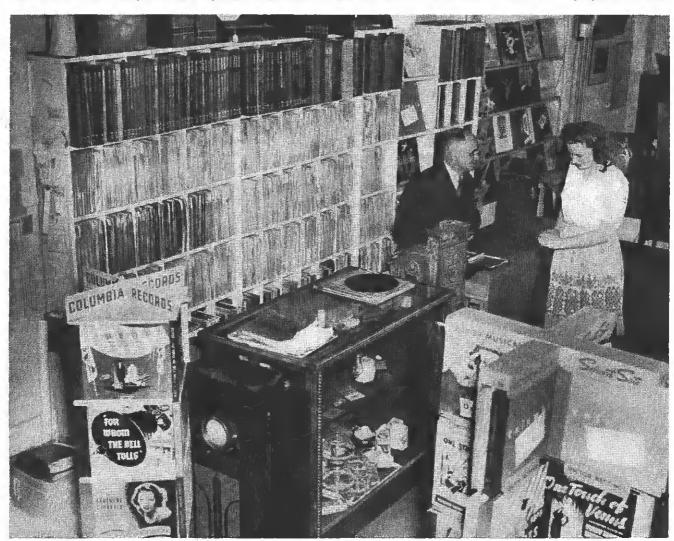
Stock Increase

"Before the war," Mr. Warren continued, "we carried only about 200 records, but right now I have over 2000 records in stock."

Whenever a customer shows interest in records, Mr. Warren is on the spot with a suggestion. For instance, "Do you ever listen to hit parades played over the radio?" we heard him ask a couple of young women who had entered the shop and were examining the record display. "You do? Then you'll want to hear 'Milk Man Keep Those Bottles Quiet.' It ranked high on the hit parade this week . . . why, it's the most popular record we have on hand."

Before the prospective customers

North wall of Warren Radio, 28 S. Main St., holds extensive stock of discs and albums. Mr. Warren is shown with a prospective customer.



Sales

could object, the lively strains of the "Milk Man" record filled the room and manager Warren in his pleasant and enthusiastic manner, sold the visitors a record album and three records, including the "Milk Man" rendition.

Located for Traffic

Frank Warren came to Salt Lake City eight years ago from Canada. He chose a location at 28 So. Main St., for his radio store, within a half block of the famous Mormon temple and tabernacle and right across the street from the city's oldest and most respected department store: Zions Cooperative Mercantile Institution, originated by the Mormon church in Pioneer days.

Music Specialist

When the war hit and radios disappeared from the market, Warren turned to records in a large way and today, the entire north wall of his store is devoted to albums and records.

Knowing the value of good sales women, manager Warren selected two personable young women, Marian Spratt and Margaret Holgerson, who know their business and have had much to do with the store's steady increase in record sales.

"Gallery" Successful

"Usually," said Miss Spratt, "people come in either to look at the pictures, or to inquire as to what we have in the way of records. They are of two classes—the older generation, to whom we sell more albums and old favorites, and the younger generation who prefer 'hot music,' and who keep up on the hit parades. By next Fall we expect to have the best record stock in Salt Lake City."

Not only are Miss Spratt and Miss Holgerson topnotch saleswomen, but they have learned all angles of the business during their three years of



Marian Spratt, record sales assistant, is also trained in radio service work. Photo shows "gallery technique" used in painting display.

service. They know how to test radio tubes, and are familiar with radio service problems.

When manager Warren found that the draft and high salaried warplant jobs made it impossible for him to keep a repairman for 8 hours at a time, he tried keeping 3 repairmen on the job each three hours daily. The plan has worked like a charm. Radio service men, drawing big wages on warplant jobs, are always glad to pick up extra money, and Mr. Warren has found that 3 men on part time work out even better than one steady man employed a full day.

Commission Basis

The beautiful paintings previously referred to are not stocked particularly for their money-making value, as they are sold on a commission basis for the artist, but they do at-

tract attention to the window and bring people into the store resulting in higher record sales.

Besides, the pictures create new friends and customers and cause folks to discuss the radio store in highly favorable terms. The paintings also give an artistic atmosphere to the store and put record and radio service selling on a "new high."

Display Uses

While the Warren Radio store space is limited, manager Warren makes every inch count. He has only 2 record-playing booths, but has ample space along the walls for his complete assortment of records and albums. He has placed his office above his service department at the rear of the store, and maintains good looking windows with the aid of the high quality oil paintings.



Dorothy Lamour, movieland's Sarong Girl, has signed with Decca who is scheduling her album of romantic Hawaiian songs for near-future release. Dottie is currently appearing in the film "And the Angels Sing."

Vacations-at-Home Build Big Sales in Records for Relaxation

• The roving eye of the summer record purchaser has wandered to the lighter side of music during the vacation period.

Selections tendered retailers by the recording companies cater to the summer mood, and many of this year's "home-vacationers" are still interested in this type music.

Eye-catching display possibilities are envisioned from the summer group of songsters on August discs.

Among Decca's current releases are: Hildegarde's rendition of "Lili Marlene" and "My Heart Sings" (No. 23348); Dick Haymes and (No. 23348); Dick Haymes and Helen Forrest singing "It Had to Be You" and "Together" (No. 23349); Jimmy Dorsey on disc 18616, "An Hour Never Passes" and his own composition "Two Again"; and No. 18617 "Together" backed by "Come With Me My Honey," Calypsotype song treated by Guy Lombardo and his Pagal Canadiana. and his Royal Canadians.

Dinah Shore, who ranks as one of the highest in demand by the fighting forces and is now singing in England, made a new record (mixed chorus) for Victor before she left: "Together" and "I Learned a Lesson I'll Never Forget," No. 20-1594, for release August 18th. "Together," an old favorite, is revived in the popular MGM film "Since You Went Away.'

Included in the 118 Victor reissues scheduled for August and September release to dealers are two discs by the glamorous Dinah Shore: Bluebird



11204, "I'm Through with Love," and Bluebird 10592, "I've Got My Eyes on You" and "Watching the Clock."

Other reissues included in this group are recorded by artists Tommy Dorsey, Artie Shaw, Duke Ellington, Freddy Martin, Sammy Kaye, Tony Pastor, Benny Goodman and others.

No. 20-592 is Victor's version of "Lili Marlene" sung by popular Perry Como. Flipover is "First Class Private Mary Brown." Note: Check with your Victor distributor regard-



Decca's Helen Forrest is now on the radio, and making guest appearances on the West Coast.

Victor's Dinah Shore, currently in England to sing for the boys, made one new recording before leaving, is featured in Victor's list of 118 reissues, ready for August-September distribution.

Chopin's Nocturnes Stravinsky's "Firebird Suite"
Sibelius' First Symphony E Minors
Red Army Chorus

on SUMMER DISCS

Columbia's Ginny Simms, popular radio thrush, helps build servicemen's morale over NBC on the Phillip Morris program "Johnny Presents," is included in Columbia's August releases.





Blonde Bombshell Betty Hutton scored a direct hit with her first disc for Capitol, "His Rocking Horse Ran Away," No. 155, with more to come! Now a drawing card in films, the little girl from Lansing will soon be seen in "Here Come the Waves."

ing release date of the twenty-minute film telling the story of "Lili Marlene," recently previewed to motion picture critics.

Victor offers its dealers a new single disc display piece with interchangeable title space, practical for frequently altered display windows and on counters inside the store. The display piece is accompanied by a kit of 50 colored title strips.

Further along the line of store display material are the frames for Red Seal Portraits now available.

Columbia continues to release populars weekly and to average at least one classical album monthly. Their current releases:

"Fry Me Cookie with a Can of Lard" and "Request for Rhumba," No. 36719, Will Bradley, Aug. 7th. "Sylvia" and "This Side of Heaven," No. 36730, The Charioteers, Aug. 14th.

"Operetta Potpourri," Set C-100, Marek Weber, Aug. 14th.

"I'm Glad There Is You" and "Chinese Lullaby," No. 36731, Ginny Simms, Aug. 21st.

"The Warfaring Stranger," Set C-103, Burl Ives, Sept. 5th.

Definitely planned for tie-up promotion with Jimmy Durante's current film "Two Girls and A Sailor" (MGM), is his recording for Columbia of "Inka Dinka Doo" backed by "Hot Patatta," No. 36732, for release August 14th.

True to its promise, Capitol is ready with its new album "New American Jazz," No. 3-A, which features 18 outstanding artists.

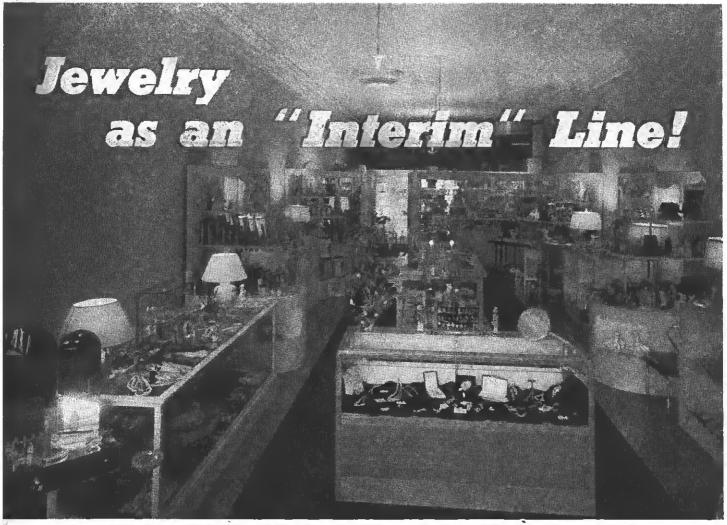
Newest Capitol single disc, No. 166, features Stan Kenton's Orchestra in "Her Tears Flowed Like Wine," and "How Many Hearts Have You Broken."

The Johnny Mercer "Music Shop" program over NBC has been renewed for another 13 weeks.

Musicraft has signed Joan Brooks of radio fame. Her first discs are "Someday Somewhere" and "What A Difference A Day Made"; "If You Were the Only Girl in the World" and "Seven Days a Week." Musicraft's album release "Amer-

ican Waltz Memories," No 62, stars Paul Lavalle and his String Orchestra and includes such easy listening as "A Kiss in the Dark," "Remember," and "Always."

Continental Music Co., Chicago, Ill., has readied three new record cabinets of period design, interestingly priced and affording plenty of sales appeal to record library collectors.



Bright, modern interior of "converted" appliance store helps owner Lynn Lyon sell his wartime alternate merchandise.

Ohio Radio-Appliance Dealer Converted Business to Beat Shortages—Holds Former Customers with a "Jeweled" Link. Radio Service Retained.

• You can't keep a good man down—nor a rugged individualist—nor a resourceful and determined man who has a plan and has decided he will carry it out.

Lynn A. Lyon, head of the firm bearing his name, is that sort of individual. Down in the west central part of Ohio is Findlay, the county seat of Hancock county. Here nearly everyone knows Lynn, and he is acquainted with many of the inhabitants of the city and the countryside, for he has conducted an appliance store in Findlay for more than 13 years.

Sold Radios & Appliances

In a year his refrigerator sales averaged more than one a day, which isn't "hay" for a community of 35,000. Besides he sold hundreds of radios, ironers, washers and small appliances.

He built his business on quality, featuring such nationally known merchandise as Frigidaire, General Electric, Philco, Hoover, Bendix, Thor, Maytag, Silex, etc.

Contacts Public

Before engaging in business for himself, he had been district salesrepresentative for a leading washing machine manufacturer, had managed appliance departments, and had otherwise enhanced his experience through years of contact with the public.

He was always ready and willing to help his fellow man. This friendly spirit, however, nearly cost his life.

Years back, he gave a wayfarer a ride. The hitch-hiker in return shot Lynn in the neck, and threw him into a ditch for dead.

The life and experiences of Lynn Lyon read like a story from "The Arabian Nights." Recovering, he decided to engage in business for himself. Consequently he started in the depression year of 1930 to sell washers and refrigerators from his home. Eventually he acquired his own up to date appliance shop.

When the war left him without appliances, he went about converting his appliance business into a gift-novelty shop, featuring a wide variety of jewelry.

Will Reconvert to Former Lines

Mr. Lyon expects to return to the appliance business when the war is ended. Meanwhile he is maintaining contacts with his old friends and customers through his present store and is giving Findlay a new type of enterprise.

His service department, one of the largest in this section of the state, continues to serve the community.



RADIO & Television RETAILING • August, 1944



Record Shop's window, with something different to say to customers twice weekly, invites patronage

day the Record Shop is now located on Washington St., and carries over

\$14,000 in stock."

Concerning postwar planning, owner Ranald West declares, "the Record Shop will always be one step ahead. First, postwar radios will take precedence. Novelties will disappear and the Record Shop will major in radio combinations.

Records in Education

"We radio dealers are convinced that war has given radio such an impetus that in tomorrow's world we will face a new era. Radio and recordings will take first place as educational factors. They will be even utilized as textbooks. The musical

Discs Hold Combination

Frequent Display Changes Create Customer Interest

• Remunerative retailing today depends a great deal on effective window displays. This intrinsic rule has been strictly followed by Ranald West, owner of the "Record Shop" of Hagerstown, Md.

Twice a week the Record Shop changes its windows and finds its attractive displays create customers and

are a business booster.

For the duration, the Record Shop will cater to music and book lovers and its attractive interior is blueprinted to tie in records, music and books as the pathway to postwar radio business.

Front-of-store space is divided between a rental library and best sellers on one side, while music and record albums present a gay display on the other.

Combinations Featured

In the background radio-combinations are shown. Here customers tarry and a great volume of business in records and albums is conducted.

The store opens daily at nine and remains open nightly for the convenience of its customers. Firmly convinced that "music upholds morale," its owner encourages the service men from nearby Camp Ritchie to make themselves at home in the comfortable "Record Lounge" in the rear of the shop. Here, day and night, in their off hours, uniformed men gather as Bing Crosby and the Mills Brothers

Lively display arranged for customer convenience induces a "buying mood"!

recordings make homesickness taboo. With no radios on the market, the Record Shop upholds its trade name as its major commodity. Records rank first and albums run a close second in sales. The "buy-lines," sheet music and books, ably play their part as sales promoters.

The Record Shop is always well equipped with best-seller stock.

The Record Shop opened only a few years ago. "Then," quaintly described its owner, "it was a hole in the wall, carrying a few thousands in stock. The business soon outgrew its second-rate surroundings, and to-

portrait idea* will grow, and by this novel and interesting method, school children will have a keener insight into the spirit and character of the men that symbolize America."

*Two years ago Andre Kostelanetz commissioned various American composers to write a series of musical portraits of great Americans. "Abraham Lincoln" by Aaron Copland, "Mark Twain" by Jerome Kern, and 2 portraits by Virgil Thomson, "Dorothy Thompson" and "Mayor LaGuardia" have been written. Only one of these has been recorded: "Mark Twain," Columbia set X-227.



Crosley Is Solving

Its Own Postwar Employment Problem

W HEN WAR CAME, we at Croslev converted immediately and totally to production of war materials. We did this with the help of thousands of new employees. The postwar future of these employees and of former Crosley employees now serving their country is not a national problem or a community problem. It is a Crosley problem.

This fact has been clearly recognized by everyone at

Crosley, It has been the joint concern of Management and Labor. A postwar employment plan is in operation. The seven members of the Executive Committee of the International Brotherhood of Electrical Workers Local No. B-1061 and four responsible representatives of Crosley Management have agreed on a pian for safeguarding the economic security of all Crosley people.

THIS PLAN PROVIDES

I - For a survey to determine how many Crosley employees in the Armed Forces plan to come back to their old jobs or to other work at Crosley more suited to their new capabilities and interests

2 -- For an accurate check of the number of our present employees who plan to resume their pre-war occupations as housewives, salesmen, or other peacetime activities,

3 —For a careful estimate of our post-

war markets and the number of employees who could be utilized in an aggressive new product program and expanding postwar sales of home appliances.

4 —For the establishment of a Crosley Employee Readjustment Board whose sole responsibility is to find employment for surplus employees through cooperation with the United States Employment Service and direct contact with other possible employers.

All the details of the Crosley plan will appear in a little booklet now being prepared for distribution to our organization of more than 9,000 people. If you would like to have a copy, just write the Crosley Employee Readjustment Board, The Crosley Corporation, Cincinnati, Obio.





THE CROSLEY CORPORATION CINCINNATI, OHIO

BEFORE THE WAR-PHILCO

LED THE INDUSTRY IN

FM SALES!

AFTER THE WAR—
PHILCO LEADERSHIP

WILL CONTINUE WITH A SENSATIONAL NEW

FM SYSTEM

Since the introduction of FM as a new kind of radio service to the listening public, it was Philco engineering and Philco merchandising that pointed the way to making FM a source of substantial volume and genuine profit to the radio dealer. The record speaks for itself... of all FM sales before the war, of all FM radios in use today, Philco leads the industry by an overwhelming margin!

After the war, as FM spreads to the large and small population centers, Philco leadership in engineering and merchandising will bring the radio dealer again his greatest and most profitable sales opportunity. A sensational, new FM System will give the listening public the utmost in tone, performance and value...and will enable Philco dealers to meet the demand for FM receivers in every price bracket!

Yes, as FM grows in Public Demand you can depend on PHILCO for your greatest Sales and Profits



Dealer Erickson among his substitute merchandise and remaining appliances

Holds Appliance Prospects

With No Servicers, Wisconsin Firm Owners "Pitch In"—Sell Sidelines

• A large number of profitable sidelines, plus a continuation of regular lines, has helped the Laehn-Erickson Co., Fond du Lac, Wis., get along during the war period, despite some very vexing problems.

D. O. Erickson states that he and his partner, A. H. Laehn, realized early in the war that they would have to add new lines to help them see the business through, and so con-

siderable stocks were added. The result is a store which is full of merchandise of various sorts. Some of the most profitable lines will be retained after the war. Others will have to go to make room for appliances.

Paint Line Well Displayed

A paint department was installed in the store and placed right up at the front. A nationally advertised line was chosen, and displayed in neat, specially constructed shelves.

While stove sales are down during the war period, due to restrictions, the firm is now selling cooking stoves and space heaters from time to time on ration applications. The two partners offer help to prospects in filling out such applications.

Other new lines include kitchen tables and chairs, a line of dishes and glassware, cleaning supplies, lamps, pictures, wall placques, has-

socks, end tables, pottery and kitchen gadgets.

"Our new lines have really helped increase our store traffic," says Mr. Erickson. "This is very valuable to us in increasing our contacts, for we can sell appliances to many such folks in the postwar era. Our repair department was hit hard during this war period. Mr. Laehn and I did mostly sales work in the pre-war days and were kept very busy. Our repair man has left us and we have not been able to replace him. We do some of the minor servicing ourselves, including testing of tubes, but the major repair work is sent to another shop, which has taken on this work for us for the duration.

"This is a fine arrangement, because the radio sets still come into our store, and we continue to maintain contacts with our own customers. It's the best we can do under the circumstances. When refrigerators and washers we sold come in for repairs, we send them to the same shop that handles our radio business."

Used Pianos

The Laehn-Erickson Co. also dealt in pianos for many years, and still does a fine business in used ones during wartime. The secret formula of success here has been an active buying campaign on used pianos, dat-

ing back to the first days of the war period, as well as paying satisfactory prices for them. This firm pays as high as \$35 for used pianos, depending on their condition, while roving piano buyers from other, larger cities rarely pay over \$10 to \$15.

Gain Stock Pile

As a result, folks in this area and nearby towns and cities, hold their pianos to sell to Laehn-Erickson. This enables the firm to have a stock of more than 100 pianos on hand at all times. These pianos are reconditioned and resold. They often bring as high as \$200, according to Mr. Erickson.

This firm also calls for and delivers its own pianos, sometimes traveling considerable distances. The reason for this is that pianos can be damaged in transit, says Mr. Erickson, and his company does not want to have any additional repairs to make on them than is absolutely necessary.

"With our various lines, we manage to keep very busy during wartime," says Mr. Erickson. "We really didn't think we could solve our problem so well. We aren't making a fortune by any means, but we are holding our own and preparing for the postwar days when everyone seems to think appliance men will make many profitable sales."

America's Oldest Radio Manufacturer





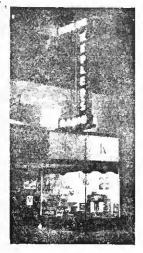


In supplying our armed forces with a continuous flow of the world's finest communications equipment, it has been Howard's privilege to utilize the most advanced principles in radio design and development.

All of the skills acquired through this 100 percent "Production for Victory" program will be reflected in Howard Radio Receivers and Radio-Phonograph-Recorder Combinations for peace. As always, you can count on Howard for the finest.

HOWARD RADIO COMPANY, 1731-35 Belmont Ave. CHICAGO 13

Packs Sales Wallop in Ad



Once Again We Can Give You IMMEDIATE Service

Suppressfully averegating the exigencies of were we are proad to be obtained to be obtained to give you IMMEDIATE, advance on your regime.

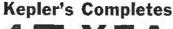
you live in the city while your ewn code is being paired which in loan You one so that you need not as the notice this was a important, or your law gitte programs.

NOW Is the Time to Have Your Radio Checked

The is the body is the vite when we greated as an interest being in a the ment time beginn to have the place with place with place with a real or place saint must be a real or place and beginn a saint with the place.

A Few Additional Features of Kepler Service

- Fig. Etailogy Sites—Society of Abelly a



OF SERVICE TO RADIO LISTENERS

Fifteen years ago radio was something to be enjoyed occasionally. Today it is a vital factor in almost every minute of our daily lives—and to meet your radio needs during those historic months, Kepler's has assembled the largest and mast imposing array of top-notch radio technicians and service men ever employed by or radio service organization anywhere in the Dominion, with their combined experience reaching the amazing tard of 105 years of experience in locating and curing radio troubles of all kinds

Every Man Who Works on Your Set Is a

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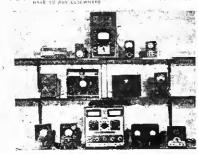


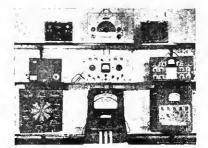












Send or Bring Us Your Radio Set

Or PHONE \$43338, and for a small charge our driver will call for your set immedi-

LETHBRIDGE: 322A Seventh Street South Phone 4338



411a 8TH AVENUE WEST PHONES: M3338 - M4338

RADIO SERVICE

"HAVE KEPLER'S FIX YOUR RADIO TO STAY FIXED"

Customer Confidence Gained through Straightforward Appeal

• The reproduction, shown at left, of an advertisement appearing last month in "The Calgary Herald," Calgary, Canada, shows how Don Kepler, owner of Kepler's Radio Service,

keeps his name in front of the public. Stating that "every man who works on your set is a qualified radio technician, first class," the advertisement runs illustrations of Mr. Kepler and his staff, and outlines the respective qualifications of each person. Attention is also called to the fact that each staff member has not only passed the rigid examinations of the government of the Province of Alberta, but that each has also obtained the highest certificate the department awards-that of Radio Technician, First Class. Pictures of male and female office workers are also included in the ad.

Store Picture a Booster!

An illustration of the Kepler store interior is shown upper left on the advertisement, and two views of the modern testing equipment used in the repair shop, are placed near the bottom.

Some of the features offered:

". . . We can pick up your set one day; give you an estimate on the cost of repairs the next; and two days later have your radio fixed and back in your home, even should complete overhaul be necessary." An offer is also made to lend the customer a set while his own receiver is being repaired. Readers are also told that repairs here cost no more than they do elsewhere.

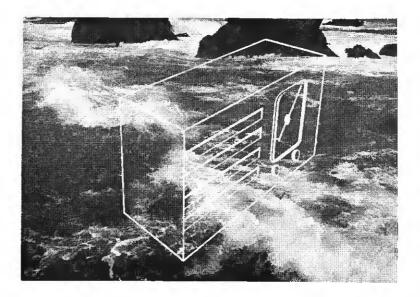
"Case Histories"

The advertisement also states that the firm keeps a "history sheet system of analysis" on each job, gives a written guarantee and an itemized bill, and returns to customer all parts removed from his radio.

The Kepler advertisement when analyzed, shows that it is designed to make a number of separate appeals, all of which add up favorably in the customer's mind, since it is stressed that only the most skilled radiomen are employed; the finest equipment is used and that guarantees and itemized bills go with the repairs. Other features emphasized include rapid service, reasonable price and delivery.

engineering ideas in small packages...

compact,
efficient,
fine



THE OCEAN COMES TO EMERSON

Sea water was urgently needed recently by our research laboratories to simulate actual combat conditions for a serious test-check on an important Emerson Radio-Electronic device...a unit that plunges through the surf on many a hard-fought beachhead.

This is but one of many unusual, practical tests constantly performed in the famous Emerson "Brain Cell". Ingenious discoveries and improvements on war equipment are today enabling Emerson Radio engineers to pile up invaluable experience that will assure outstanding precision-built radio receivers tomorrow.

Emerson's great engineering ideas...coupled with Emerson's advanced styling, merchandising and advertising will win new millions of customers for radios that bear the name Emerson. The post-war Emerson franchise will be more profitable than ever before to the dealer interested in faster turnover, greater profit, increased volume.

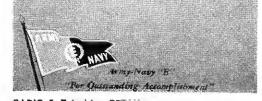
Ask Your Emerson Distributor for Details of the P. D. Q. Plan

FOR TOMORROW... A THEATRE IN EVERY HOME WITH EMERSON RADIO TELEVISION



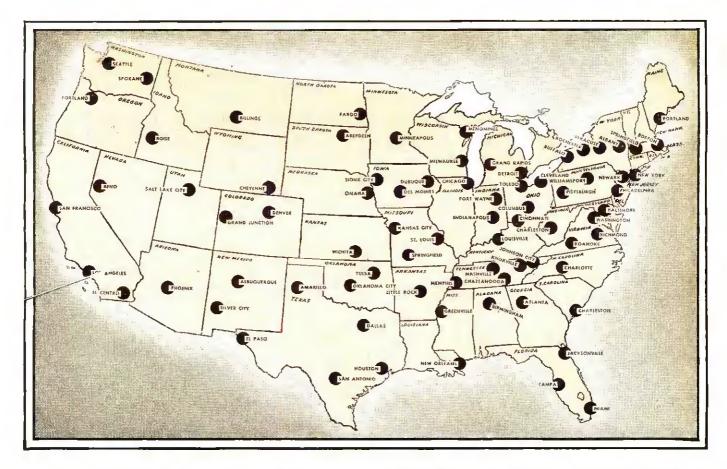
EMERSON RADIO & PHONOGRAPH CORPORATION, NEW YORK II, N.Y.

EMERSON'S PLATFORM:
Good Product - Dealer Acceptance - Consumer Acceptance



HERE'S HOW NORGE DEALERS
BENEFIT FROM THIS NATIONAL
NETWORK OF
INDEPENDENT DISTRIBUTORS...





Your Norge distributor is an independent business man who knows every detail of every model of every line of Norge household appliances. And, like you, he backs his judgment with his own money. This assures his continuous personal interest in your problems, which he will often solve for you by his authority to make final decisions on the spot, cutting red tape and saving you days, even weeks.

Since 1941 there has been a 37% increase in the number

of Norge distributors. No matter where you do business today, an aggressive, progressive Norge distributor (carefully selected for his ability to keep you in a sound competitive position) is your neighbor.

The sincere, helpful, profit-producing service rendered to dealers by sound, seasoned Norge distributors is another reason why today so many men in the know are saying, You have a great future with Norge.

NORGE DIVISION, BORG-WARNER CORPORATION, DETROIT 26, MICHIGAN



BATTLE on the SALES FRONT!

Practice Selling in the "Seller's Market"

• Now is the time for all good salesmen to come to the aid of themselves.

The salesman who allows himself to use the "there's a war going on" alibi to his current customers should remember that "there's a postwar coming on," and that it is necessary for him to keep his hand in if he wants to be able to use the modern selling weapons needed in tomorrow's battle for sales.

The efficient salesman champs at the bit nowadays when he's forced to sell "pushovers," because there's much more satisfaction in engaging in a battle of wits with the customer, and a deep feeling of having done a good job well when the customer finally signs on the dotted line.

Not long ago we visited one of Philadelphia's largest home appliance stores, where the postwar sales force, unusually enough, is virtually intact. The stock on display is typical of the merchandise in many other similar places. Substitute lines, gadgets, geegaws and a few rebuilt appliances, plus phonograph records, is about all there is to offer the customer.

Since the store is unable to fill about half of the requests customers make due to merchandise shortages, and since it is no trick at all to get them to purchase what is available, we were interested to find out the attitude of one of the organization's star salesman—a fellow with a fine pre-war selling record—and a man who is sticking with his firm because he sees a great opportunity here when the war is over.

Sales Effort

This salesman's attitude was enlightening. "What am I doing now to keep myself in the groove?" he said in answer to a question. "I'm doing just this. I practice salesmanship on every customer. I pretend that the record I sell them, or the fifty-cent gadget is a high-priced radio-phonograph combination or a two-hundred-dollar refrigerator. I realize that the one way I can ruin my chances in the postwar selling picture is to become negative, uninter-

One way to test yourself is to see whether you subscribe to the thoughts in the following poem which appeared in a recent issue of "Printer's Ink."

"SUNK SALESMAN
Bring back the old 'lip-service'
days

Of quotas too ambitious, Of alibis and matinees,

Of call reports fictitious, When every salesman had to SELL

To earn a fat commission check, When earnings hinged upon how well

He beat his competition. Heck!—

Receptive buyers are the bunk
This SELLER'S MARKET
has me sunk.

-Orville E. Reed."

ested or excuse-ridden in my sales presentations today. Believe me, Mister, I'm going to keep on being a salesman, come hell or high-water!"

That's the spirit which salesmen, who're in the game because they want to make it a permanent career, should take today, and enhance and nurture at all costs.

Tomorrow's Good Will

Employers who let their salespeople follow the lines of least resistance in today's market, and who allow them to give slip-shod, hackneyed excuses to customers, are not only damaging the morale of the salespeople—many of whom are new in the game today, but are seriously injuring their own goodwill through antagonizing customers they (the employers) will be more than glad to have tomorrow.

The excuse nowadays, on the part of the employer, manager or other responsible person, is that the help situation is so acute that it's dangerous to attempt to correct salespeople's methods because they may quit.

The above argument has lots in its favor. That's obvious. But the smart merchant must realize that he isn't

going to do business in a seller's market very long. Above all, today, he should realize that many of the customers his clerks antagonize now are going to remember the treatment they got.

Profits in Courtesy

In many cases, therefore, it is better to operate short-handed than it is to employ rude, inefficient salespeople, who are only performing the job "temporarily."

Sell your salespeople—even your "temporary" workers—salesmanship, and maybe you'll develop them into valuable postwar employees.

We know a radio dealer who maintains a one-man shop. In this place of business he sells records and giftware. He also repairs receivers, and it is unnecessary to tell our readers that he is as busy as the proverbial paper-hanger. No sooner does this man sit down at his bench to work on a set, than the door opens and he is obliged to jump up and wait on a customer.

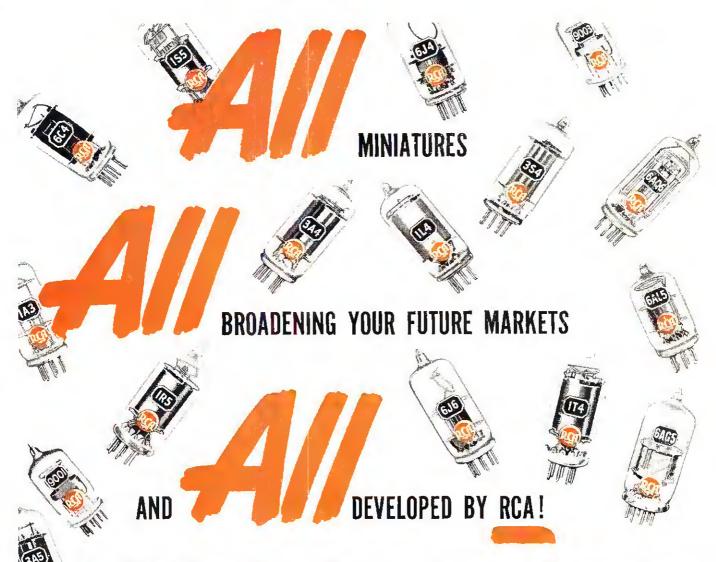
"I never laugh at a customer who comes in my place with a hopeful look on his face and a 12SA7 or a 50L6 tube in his hand," the above dealer writes us from an area where tubes are extremely hard to get. "The position might be reversed," he says, "and I might be that customer anxiously trying to get his set in an operating condition again."

"I am never impatient or rude to a customer bringing in a repair job," says a Texas dealer, "no matter how unreasonable his request may be, because I remember many days in the past when not one single set came in for repair."

Nothing today is more important than skillful customer contact. The present-day merchandising maelstrom is but a flash in the pan. A storm to weather out! Tomorrow is what will really count, and the merchant's every move should be predicated upon this tomorrow.

During World War I the workers who sank all their money in silk

(Continued on page 58)



The 17 RCA Miniatures shown on this page—all of them destined to build a bigger business for you in the future—are:

1A3-H-F diode

11.4 - R-F amplifier pentode

185 - pentagrid converter

155 — diode-pentode

174 — R-F amplifier pentode

3A4 -power amplifier pentode

354 — power amplifier pentode

3A5 -H-F twin triode

6AG5 - R-F amplifier pentade

6ALS - twin diode

6AQ6 — Duplex-diade High-Mu triade

6C4 - H-F power triode

6J4 - U-H-F amplifier triode

6J6 — twin triode

9001 - Sharp cut-off U-H-F pentode

9002 - U-H-F triode

9003 - Super-control U-H-F pentode

INY tubes like these ... every single one of them developed by RCA...were first picked up by the spotlight when the "Personal Radio" was announced in June, 1940. That history-making "super-portable" was designed around RCA's staunch little quartet, Miniatures 1R5, 1S4, 1S5 and 1T4.

Thus, before Pearl Harbor, these Miniatures were already building an entirely new market for you. For they made possible the new type of radio which John Public wanted... not as a replacement for his conventional radio, but as an additional set. And Miniature sets meant profitable battery replacements. too.

War found RCA Miniatures instantly available for overseas

service in equipment such as the paratrooper's air-borne "Handie-Talkie."

Once Victory is won, radios using Miniature tubes will return to your line...better than ever, and more popular than ever. For wartime advances in RCA tube engineering have already led to the development of many new Miniature. types and even better Miniature performance.

We look forward to that day, and to the continued broadening of your markets through RCA tube pioneering.

Don't forget, the Magic Brain of all electronic equipment is a Tube...and the fountain-head of modern Tube development is RCA!





It picks out a whisper from the roar of a crowd!

Scientists see an extraordinary future for this new microphone. When attached to a television camera, for instance, it can be aimed precisely in any direction, thus singling out only the desired sound or voice, just as the camera "shoots" only the desired scene.



HOME TELEVISION RECEIVERS priced within the reach of millions will be a tremendous factor in the speed and growth of postwar television. RCA will produce them at surprisingly low cost, assuring you of early and profitable participation in the nation's "next great industry."

LISTEN TO RCA's radio program, "The Music America Loves Best"... every Saturday, 7:30 p.m., EWT, Blue Network.

YOU'LL NEVER GARRY THIS IN YOUR STOCK. . .

yet it points the way to more postwar sales for you!

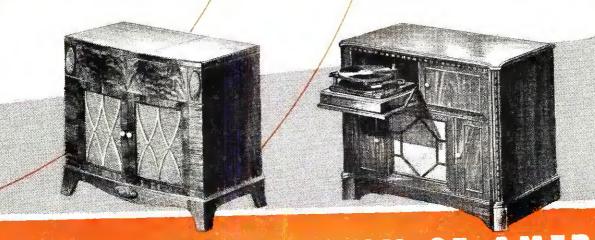
In the illustration at the left you're looking at another of the many striking RCA accomplishments in electronics—the RCA Ultra-Directional Microphone. With the precision of a beam of a light, it focuses on one person across a city street, brings one voice to life, completely "blacking out" all the other voices of a crowd.

The RCA Ultra-Directional Microphone isn't something your customers will ask for. But they will want radio-phonographs and television receivers incorporating the last

word in electronic advancements. RCA has them now—in war radios built for planes, tanks, ships, liteboats, in the dozens of electronic tubes and devices designed to outwit our enemies on battlefronts all over the world.

Through RCA advertising millions are hearing about these achievements now. Thus RCA is paving the way for RCA dealers to become the greatest source of radio, phonograph and television instruments after the war—and in the quickest possible time.

BLEORE the war millions made these fine RCA radio-phonographs their choice. Millions will again be attracted to RCA not only for instruments of surpassing beauty but for the last word in engineering achievement. . the superb tone reproduction and static-free reception made possible by the RCA Super FM radio circuit.



RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION . CAMDEN, N. J.

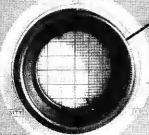
LEADS THE WAY . . In Radio . . Television . . Tubes . . Phonographs , . Records . . Electronics

Establifications

OR, WHAT MAKES THE 155-C DIFFERENT FROM OTHER 3" OSCILLOSCOPES?



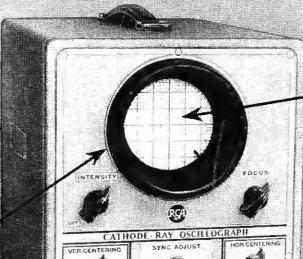
"direct deflector connections"-For observations at radio frequencies when such are desirable.

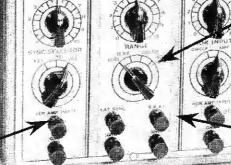


2 "built-in light shield"—The front of the tube is recessed; you can see transients even in bright light.



3 "binding jacks"—Can be used with removable binding posts or with locking pin plugs.



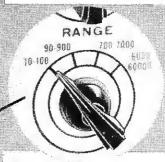


to Test and Measuring Equipment Section, Radio Corporation of America, Camden, N.

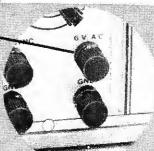




4 "removable graph screen" to permit special observations—Place or replace it with a twist of the wrist.



5 "improved timing axis oscilfator "-Range extended to 60 kilocycles - more linear sweep.



6 "6-volt AC terminals"—For obtaining a handy sine wave ordinate for calibrating purposes.

BUY MORE WAR BONDS

RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION . CAMDEN, N. J.

LEADS THE WAY .. In Radio .. Television .. Tubes .. Phonographs .. Records .. Electronics



Tom Delrup's location at a busy corner in Oakland has, of itself, brought many new customers.

Tom Deirup, Oakland, Cal., Specializes in Electronic Maintenance now, and Will Build Tailor-made Sets in Postwar

busy. We also pick up and deliver, so home business is good. After less than a year in this spot, I'm up to my neck in work."

In spite of the business-like, forward-looking firm he has established, Tom Deirup is still "riding" his hobby. Building radios fascinates him as much now as it did before radios became his career. He pointed this out by indicating a streamlined, bleached mahogany cabinet in the window of his store.

"Before the war, when materials were available, I built those radiophonograph combinations to order. This is my own model, kept there as a sort of promise for later on.

"Luxury" Sets to Service

• Like so many radio technicians, Tom Deirup, owner of Electronic Engineers, in Oakland, Cal., started fooling around with a crystal set when he was a boy. After building radios for himself for a number of years, he began rebuilding them for others as a natural consequence. His new shop, located at 2900 Telegraph Ave., is an example of what a hobby can develop into, if you let it get into your blood.

All through engineering school at the University of California, Deirup carried on his home repair business, and found himself with a ready-made vocation at graduation.

Electronic Engineer

So in October of last year, Electronic Engineers was born. In choosing the name, Tom Deirup considered tomorrow, when the country will move forward in a relatively new, endlessly promising field. His particular interest is in that most speculated about, talked about, and

written about of all postwar development fields—electronics.

Deirup is equipped to handle special electronic work now.

Activity in this line has been going on for some time, and will continue. But it's the dazzling prospect of future electronic expansion which is the hope of this shop. It is a good world to look forward to, and one which Tom Deirup will be prepared for.

Repairs Medical Units

Just now, institutional work is keeping Electronic Engineers very busy. Hospitals are plentiful in the area, and diathermy machines, other medical equipment, and multiple-outlet radio systems are constantly in need of repair. With one hard working assistant, Deirup handles as many of these orders as he can, in addition to family radio repair jobs.

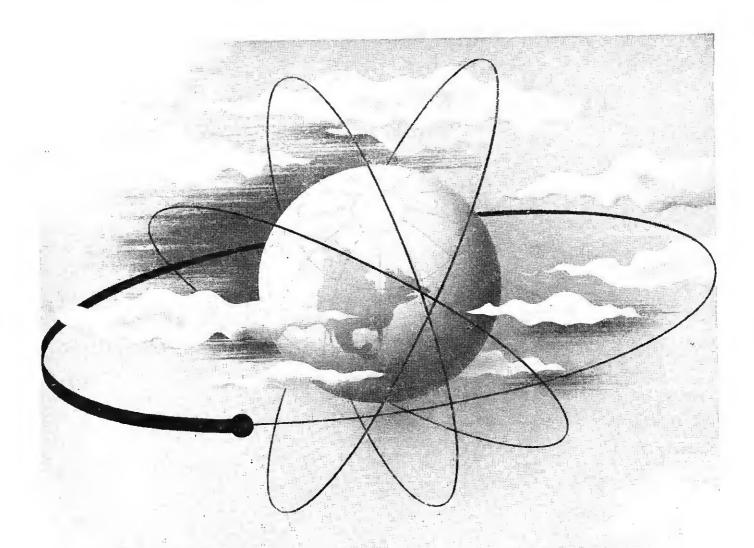
"We're in a fine location, here on the main drag," he explains. "Casual business, alone, keeps us We'll be back to turning out those sets as soon as we're able."

Deirup did his own cabinet work, to the specifications of the customer, and built them with a liberal imagination and a luxurious touch. Naturally, these custom-built jobs can't compete with mass-produced sets, nor does he intend them to. They are for the man who wants his home furnished in complete harmony, and who can afford tailor-made ideas. It's creative work, interesting work. And it's to be a part of the future of Electronic Engineers when materials are again available.

Custom-made Sets for Postwar

Thus, from the first crystal set put together for himself, to the last custom built instrument he completed before priorities stopped him, Tom Deirup has allowed his hobby to guide him along an extremely profitable road.

Deirup looks forward to the day when the science of electronics will come into its own.



elco Radio Products Mean Uniform Quality

Delco Radio products—wherever in use—are of uniformly fine quality.

For two reasons . . . First, capable engineering by Delco Radio's laboratories . . . Second, advanced techniques in mass production. It is through this combination of engineering vision and manufacturing precision that Delco Radio meets the demands of war, the needs of peace.

Put Your Dollars In Action
BUY MORE WAR BONDS

ट्यान्त्रात्तात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्रात्त्



THERE IS NOTHING TO DO ABOUT A WAR EXCEPT WIN IT!

The purpose of this advertisement is NOT to brag about Thordarson's part in the war effort. While patriotism in a person or company may be something to be proud of, our own feeling is that it should not be exploited. Expressing patriotism in America is not even a duty; rather, it is a privilege . . . happily one that is understood and appreciated by the majority.

That is why, for nearly 3 years, Thordarson has talked little about the war and war production . . . except to make the bare statement that we were busy supplying materials for the armed forces.

Regardless of all this, we do think the time is now propitious to give a few more details as to what we are thinking and doing.

When war came, we were one of the first companies to be chosen for front-line production duty. The need was urgent . . . the demands were great. As Americans, we were glad whole-heartedly to tackle the job assigned to us.

Early and late . . . day and night . . . Sundays and holidays, we have continued to devote all of our efforts, 100% to winning the war. We have kept "eyes front" on this one task. We have had to forget, for the moment, personal considerations of "good business" . . . on occasion we have even had to turn down old and good friends who needed this or that which, under ordinary conditions, we would have been tickled to death to supply.

The time will come . . . it's coming shortly, we feel . . . when we again can think first and foremost of supplying civilian needs. That will be a far happier day for us than it could possibly be for you, no matter how much you have needed material you were unable to secure.

But meantime, the war goes on . . . and we, in our small way, must continue to stand guard at our appointed post until the "at ease" command is given. As we said in the beginning: THERE IS NOTHING TO DO ABOUT A WAR EXCEPT WIN IT!



Transformer Specialists Since 1895

. ORIGINATORS OF TRU-FIDELITY AMPLIFIERS

DOLLARS AND SENSE in FINANCING

Importance of "Credit Service" vs. "Money-Lending"

• Because there are so many obvious ramifications to any discussion upon the subject of attempting to compare the merits of the various lending agencies, no effort to treat this angle is made. Dealer situations vary as to size of operation, financial ability, etc., and each must view the entire scene carefully and make his own choice, predicated upon which lending agency seems the most logical, from all angles, to be his financial mentor.

Line Up Essentials

Here are the things desired and needed in the dealer's financial set-

- The dealer should be able to stock enough merchandise to properly demonstrate and display, without tying up too much of his capital, and with installment payment terms for his merchandise fitted to his financial situation.
- 2. He should endeavor to secure contracts which permit him to put an appliance into a customer's home for a reasonable length of time for demonstration purposes, despite the fact that he himself has not yet paid for it.
- He should be able to offer the customer the same attractions, such as low down-payments, etc., as his competitor is able to offer.
- 4. His customer-installment contracts must be intelligently, courteously and promptly administered by the lending agen-
- 5. He must deal with an agency willing to consult him (the dealer) in payment delinquency situations, suits for repossession, improper performance claims, etc. In other words, the dealer, knowing more about the customer than anyone else involved, should always be consulted first.
- The dealer must arrange to secure a contract between the lending company and the customer which will protect the

This is the concluding installment of an article on financing for dealers. (See July issue, p. 22-23.)

Thus far we have probed into the postwar picture of "financing," and have used this word with respect to the dealer to describe the only two phases he is actually interested in, and these two phases are:

- The dealer must have means of financing his own purchases which he offers then for resale.
- The dealer must have means of financing his customers' purchases.

What methods of carrying on the above phases are available to the dealer?

- The independent finance company.
- pany.

 2. The manufacturer-operated finance company.
- 3. The local banking institution.
- FHA plan in collaboration with financial institutions. (Note: Be sure to check what articles may be financed under FHA.)

dealer as much as possible in cases of repossession, etc.

Like everything else in this world, the man with the most money is always able to secure the most favorable credit terms. Some dealers are able to finance themselves and their customers. Others are high enough in credit ratings to make favorable deals with jobbers and with manufacturers, but here's something to think about -with every indication pointing toward increased competition between lending agencies in the postwar period, no dealer is too small financially not to be able to tie in with a financing organization which will take care of his needs.

Square Dealing

If the dealer has a reasonably good business, and if he's a square shooter, and not a sharpshooter, the lending organization will do business with him.

Before taking a quick look at

things to avoid in installment selling, it is interesting to know why people buy "on time." The answer most likely to pop up in our minds is that they do so because they haven't the ready cash. This answer, however, applies to some of your customers only.

Doubtless, more people buy via the spaced-payment plan because they haven't the money, and want to pay out of income. But there are many wealthy folk who buy on time because they feel that this method gives them a club to hold over the dealer's head in case the article purchased fails to function properly.

As far as the actual financing transaction between the dealer and his customers goes, there are a number of hard-and-fast rules the dealer should observe. Some of these follow:

Centralize Credits

Don't let your salespeople "editthe-credit" information on the prospective customer's contract. If your contract is "with recourse," your salesman, in "editing" out some information he considers might prevent the contract from going through, is betting your money that the deleted information is not an indication that the customer won't pay.

Of vital importance to the dealer is the warranty or guarantee, and the verbal claims relating to the article

sold

If you "oversell" an appliance a television receiver, for instance, and make verbal claims that it will do certain things, and perform in a manner which you know is impossible, you're sticking your neck out.

How? How, since there is a clause in the contract signed by the purchaser in which he agrees that the contract and the contract alone is binding upon both parties, and that no other understanding, either written or verbal, figures in the transaction?

Here's what may happen, despite that seemingly iron-clad agreement: The "oversold" customer finds, for example, that the television set which the seller told him, over and

(Continued on page 58)

POLKA TIME





A new album of polka music with Stanislaw Mroczek and his Orchestra

Ask the kids in your community

—they'll tell you how this exciting old-world rhythm has swept the country like an epidemic. Polka music is that infectious.

It fascinates young and old alike. And here is SONORA, out in front again, with a collection of Polka tunes that will make sweet music on your cash register.

Waving the baton is that master of Polka rhythm, Stanislaw Mroczek. Add the brilliant bell-like quality of tone that is strictly SONORA'S own and you have a combination that means good listening, good dancing, GOOD SELLING!

The Polka Time Album is a brilliant addition to the fast-moving Series E of "Melodies That Will Live Forever," now being released by SONORA, and nationally advertised in a big list of potent publications. Be sure to get the complete line of SONORA Albums from your SONORA Record Jobber.

8 POLKA TIME RECORDS

Mother Goose Polka

Ruhy Polka

Pennsylvania Polka

Clarinet Polka

• Victory Polka

Saturday Night Polka

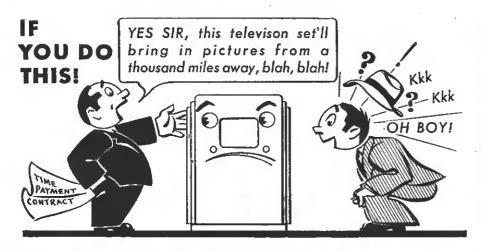
• Helena Polka

Blackberry Polka



SONORA RADIO & TELEVISION CORP. 325 N. Hoyle Ave. • Chicago 12, Illinois





THE SET MAY "BOUNCE" BACK



Don't let this happen to you!

(Continued from page 56) over, would bring in images from a distant city,—fails to do this.

The irate customer calls the dealer and tells the latter that he will not pay the next installment when due, nor any of the others. The dealer reminds the customer that the matter is out of his hands, and that the finance company merely loaned him (the customer) money, and that he, the customer, agreed to pay this money back.

Avoid Losses!

So far, so good. But, suppose the set "bounces" back to the dealer through a repossession action? Then the dealer finds that he may be confronted with a serious loss, to say nothing of losing the goodwill of the customer and, importantly, the loss of the goodwill of the customer's friends and neighbors.

In addition to this, and prior to the actual repossessing, the lending agency justly makes demands upon the dealer to attempt to satisfy the customer, and this may entail the rendering of a lot of free service in attempting to do the impossible.

The free service you must maintain during guarantee periods is tied right in with your finances. Rendering quick, efficient service voluntarily

is one of the greatest ways to keep the customer paying promptly. Despite arrangements you may have with the jobber and/or the factory, you must anticipate the possibility of having, in many instances, to render service alone. The time element entering this picture is often vitally connected with the reasons why you must assume this service. The manufacturer and the jobber may be perfectly willing, and even anxious to perform their duties in respect to the guarantee, but may be unable to render such service within a reasonable time. Prompt service invariably insures prompt installment paying by the customer.

What can you do now to get yourself set to finance the big business that's on the way here?

Prepare NOW

For one thing, and perhaps the first step, you can sit down with a paper and pencil and figure out your present financial resources.

You can explore your potential market with a view toward determining how much money you will need to operate successfully in such a market.

You can determine whether your resources are adequate, or whether

you will need additional working capital.

And, above all, NOW is the time to line up with your financing agency, be your choice a local bank, a finance company, a jobber or a manufacturer.

The dealer who puts his financial affairs in proper order and gets them ready for the firing line right now, is going to have more time to do his job, which is not financing, but is merchandising.

Sales Battle

(Continued from page 48)

shirts, expensive cars and other available luxuries, found, that in a few years they didn't even have a shirt. So it is with the merchant who allows his life-blood—his good will—to be contaminated with wartime alibis and reprehensible selling methods. He's quite likely to lose his shirt in the coming competitive market.

Chains Watch It!

We saw this happen in a crowded "cut-rate" streamlined drug store the other day. The place was packed with customers, and one clerk had shown a woman a number of items. The woman left without making a purchase, and no sooner had she gotten out of earshot than the manager came right over to the clerk, and wanted to know why it all happened, and having received the answer, he pulled some other items from under the counter, and suggested that the next time such a thing took place, he, the clerk, was to make every endeavor to sell the customer. Maybe this example shows one of the reasons for the success of this type store.

Contrast the above episode with this one. In another drug store a man went in and asked a clerk if he had any "metal safety razors." "Don't make me laugh, mister," replied the clerk languidly "Everything's plastic. Metal's gone to war." The employer pays such a clerk wages to insult the store's customers!

Even in these jumbled times, salesmen and their employers should keep their feet on the ground

Nothing is as usual now. A sign in a New York picture frame store reads: "Sorry, no picture framing." One restaurant owner is reputed to have put the following sign in his window: "Waitress wanted. Will marry her, if necessary." Everything is topsy-turvy, but . . a genuine salesman can still be a salesman. He can influence people and make friends while so doing.

When the Blackout of Radio Sales is over Note Spotlight will be on

One of these days war work will give
way to peacetime production—business
will resume its flow in normal channels—and
radios will be released for sale to civilians.

Radio dealers will then find CLARION in the spotlight, because we have been developing good consumer markets for you during the long months of preparation—invasion—and today's march to victory.

We'll be glad to give you facts that will help you get your full share of the CLARION harvest that is coming after the war.

WARWICK MANUFACTURING CORPORATION

4640 West Harrison Street • • • Chicago 44, Illinois



Servicing L. F. Amplifiers

Fundamentals of Audio Amplifier Stages. Frequency Response Characteristics and Gain Calculations

· Low frequency amplifiers are designed to increase small voltages in the audible frequency range of approximately 16 to 18,000 cycles per second, obtained from microphones, electric phonograph pickups, the detector stage of a radio receiver, and other devices. In communication work these low frequency amplifiers are called audio amplifiers and these

problem as to the best coupling method to use.

The conditions for perfect transfer of signal current from one stage to the next are: Faithful reproduction of all frequencies present in the original signal, without altering the wave shape; Magnification of the amplitude of the signal in a linear manner. The principal types of au-

is a practical means for getting a simple voltage amplifier at lower cost and weight, and under usual conditions, with less frequency distortion, than those using transformers for coupling. A typical circuit in Fig. 1 shows a capacitor for coupling the plate of one tube to the grid of the next, and high-value resistors for plate and grid circuits. The coupling capacitor, Ce, is sometimes called a blocking capacitor since it offers a very high impedance to D.C. This coupling system is often designated simply resistance coupling.

Since the alternating voltage must appear across the following grid resistor R_G, there is provided a coupling capacitor Ce which offers low impedance to signal current through the grid resistor R_G. The following tube also has an input capacitance which is in shunt with its own grid resistor. This input capacitance, Cr, is a parallel combination of the interelectrode grid-cathode capacitance and the Miller effect capacitance. Thus the effective load on the first tube consists of a combination of the tube's own internal plate resistance Rp, the plate load resistor RL, the grid resistor Rg, the coupling capacitor C_c and the next tube's input capacitance C_T . The equivalent cir-

cuit is shown in Fig 2. The voltage gain of a resistance-capacitance coupled amplifier stage is The use of tetrodes and pentodes never equal to the "\mu" or amplifica-

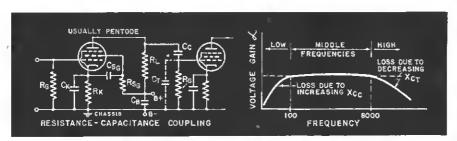


Fig. 1. Typical resistance-capacitance coupled amplifier showing frequency response and effect of circuit components. \mathbf{C}_{T} is stray wiring and Miller effect capacitances.

two terms will be used interchangeably. The amplified voltage is usually applied to a loudspeaker or other device to convert electrical energy into mechanical energy.

Low frequency amplifiers usually must be capable of uniform gain over all or some portion of the 16-18,000 cycle band. The uniformity of gain with frequency is primarily a function of the type of coupling between the stages of tubes.

One essential detail that must be accomplished by any system used in coupling the output of one tube to the input of another is that of preventing the direct plate voltage of one tube from disturbing the grid bias of the next tube, and yet it must pass the signal current with a minimum of modification of amplitude and phase as the frequency changes. The positive plate voltage on the first tube, possibly several hundred volts, must not be applied to the successive grid which is essentially negative, both being measured with respect to the B— or "ground."

Audio stage coupling systems include iron core transformers, resistorcapacitor combinations, and inductorcapacitor combinations. All of these will ordinarily produce frequency distortion of the signal to some degree. It is necessary to study each dio coupling methods and their general frequency response characteristics are shown in Fig. 1, Fig. 3 and

In some problems, there is a need to not only amplify the signal but to modify it in some pre-arranged manner, giving another problem to the design of vacuum tube amplifiers.

R-C Coupled Voltage Amplifier

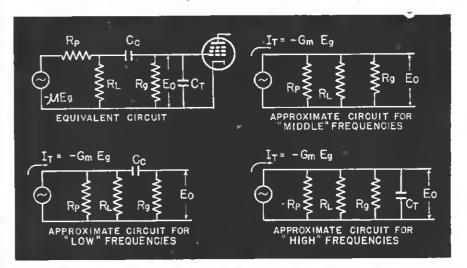


Fig. 2. Equivalent circuits for resistance coupled amplifiers at middle, low and high frequencies showing active components.

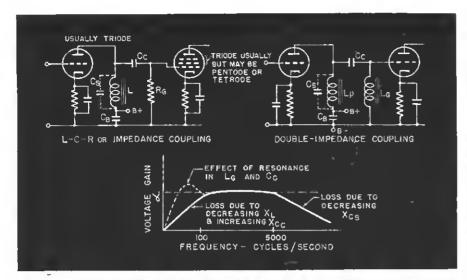


Fig. 3. Impedance coupling gives frequency response similar to resistance coupling except where grid choke is used. Resonance in \mathbf{C}_{C} and \mathbf{L}_{G} give low frequency rise in amplification. Rise may be controlled by shunting resistor across \mathbf{L}_{G} .

tion constant of the tube. The plate-circuit alternating voltage is divided between two impedances in series. One of these is the plate resistance, R_p , of the tube itself. The other is the combination of the load resistance R_L , the grid resistor R_G , the coupling capacitor C_c and shunt capacitor C_T .

At medium and low audio frequencies the tube's input capacitance C_T is not important, since its reactance is usually greater than R_G , while C_e can readily be chosen of such a size that the voltage drop through it is small. The load is then nearly pure resistive and the gain calculation becomes:

$$\label{eq:continuous} \alpha = \text{Voltage gain} = \frac{G_\text{m}}{G_\text{p} + G_\text{L} + G_\text{g}}$$

Where G_m is the mutual conductance of the tube in mhos (this value is usually listed in micromhos which is 10^{-6} mho.), G_p is the tube's plate conductance ($1/R_p$), G_L is the conductance of the plate-load resistor ($1/R_L$), G_g is the conductance of the grid resistor ($1/R_G$).

At low audio frequencies (say below 100 cycles) the reactance of the coupling capacitor C_c begins to cause a considerable voltage drop, since it is in series with R_c . The equivalent circuit is shown in Fig. 2. For example at 60 cycles, with a coupling capacitor of 0.011 μ f and a grid resistor of one-half megohm only 90% of the voltage is effective between grid and cathode. If the same percentage is to apply at 30 cycles, C_c must have twice the capacitance. It is not desirable to increase C_c much beyond the actual low frequency re-

sponse requirement for three reasons, (1) the amplifier stability becomes less, (2) a physically larger capacitor increases "hum" and noise pickup and (3) the leakage of DC to the grid increases. However, if several stages are to be used it may be nec-

 $(0.8)^3 = 51\%$ of middle frequency

The gain at low frequencies is calculated by the process of applying correction factors to the gain calculated for the medium frequencies. These factors may be found in a number of standard texts.*

number of standard texts.*

At high frequencies C_c may be ignored because of the decreasing reactance but C_T assumes increasing importance and eventually becomes the dominant factor so that a plain resistance-coupled amplifier gives little gain above approximately 50,000 cycles. The lower gain is due to the decreasing reactance of the input capacitor C_T which is shunted across R_G . The equivalent circuit is shown in Fig. 2. For any tube, the input capacitance does not have only the small value listed as the grid-cathode capacitance but instead:

Input
$$C_T = G_{gk} + C_{gp} (1 + \infty)$$

For a typical amplifier using a 6F5 high μ triode,
Input $C_T = 5.5 + 2.3 (1 + 70) =$

160 μμf (maximum).

While tetrodes and pentodes have
Cgp values of about 1/1000 that of

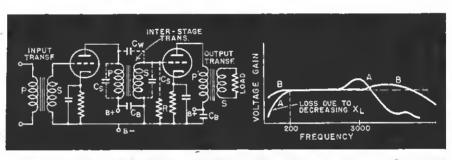


Fig. 4. Transformer coupling showing stray inter-winding capacitances. Curve A is typical of cheap transformer while B is for high grade type.

essary to go farther in the matter of securing "flatness" in the frequency response curve since the deficiencies of the stages are multiplied by cascading. Thus if a stage gain drops 20% at 60 cycles (response 0.8) then three such stages will respond

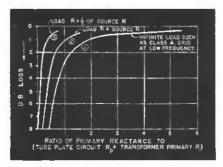


Fig. 5. Low frequency response characteristics of transformer for various plate loads.

similar sized triodes, the stage gain ∞ is greater also. In general the total input capacitance $C_{\mathbf{T}}$ will be lower than for triodes.

The gain of the resistance-capacitance amplifier is less at low frequencies (under 200 cycles) and at high frequencies (over about 8000 cycles) than at middle frequencies (1000 to 4000 cycles).

The voltage gain of an amplifier stage is best shown by example. The problem is to determine the amplification of a 6J7 pentode with resistance-capacitance coupling. The tube's $G_m = 1200$ micromhos, plate resistance $R_p = 1$ megohm, (these are found from a tube data book). The coupling device consists of a plate-

(Continued on page 62)

^{*}The Electronic Engineering Handbook—Caldwell-Clements
Radio Engineering—McGraw-Hill

Servicing L.F. Amplifiers

(Continued from page 61)

load resistor $R_L = 250,000$ ohms, a grid resistor of 500,000 ohms and a coupling capacitor of 0.01 µf.

The next step in using equation (1) is to determine the corresponding conductance. The plate resistance of 1,000,000 ohms (108) has a conductance of 1/106 or 10-6 mhos. The plate-load resistor value of 250,000 ohms gives 1/250,000 or 4 x 10-6 mhos and the one-half megohm rethe use of load resistors costly since a large power supply voltage would

be required.

If both plate and grid resistors are replaced by chokes, "double impedance" coupling results as shown in Fig. 3. Since two chokes are then in parallel (for AC) the high frequency decrease is accentuated but a low-frequency rise can be produced by choosing the two chokes and the coupling capacitor to produce series resonance at the low end of the desired range. A desirable type of low

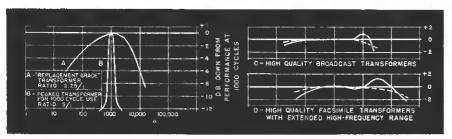


Fig. 6. Response characteristics of several types of audio counling transformers. Design of unit is major factor in high fidelity equipment.

sistor R_g, a conductance of 1/500,000 or 2 x 10-6 mho. These conductances are in parallel (see Fig. 2) hence adding them gives the total conductance of 7 x 10-6 mho. To find the middle-frequency voltage gain it is now only necessary to divide the tube trans-conductance ($G_m = 1200$ micro-mhos = 1200 x 10⁻⁶ mhos) by the sum of the circuit conductance (7 x 10-6 mhos).

$$\alpha = \frac{1200 \text{ x 10}^{-6} \text{ mhos}}{7 \text{ x 10}^{-6} \text{ mhos}} = 171$$

Impedance-coupled Amplifier

An obvious way to avoid the direct voltage drops in the resistors of an R-C coupled amplifier is to replace them by iron-cored inductors. Usually only the plate resistor is so replaced and the arrangement may be called an impedance-capacitance-resistance coupling or simply an impedance coupling. The frequency response is inferior to that of resistance-coupled amplifiers. Typical circuits and response curves are shown in Fig. 3. The decrease in gain at high frequencies is greater because chokes have more distributed shunt capacitance than resistors. The decrease in gain at low frequencies is greater because the inductive reactance falls with frequency while resistance does not. The arrangement is used less since tubes suited to resistance coupling have become available. Impedance coupling is used primarily with triodes where the relatively high plate current makes frequency rise results if the coils are chosen so that their O is between I and 2 at the resonant frequency. The gain at the resonant frequency over and above the ordinary middle frequency gain of the stage is about I DB for Q = 1; 3 DB for Q = 1.4and 6 DB for O = 2. It is necessary that the plate-circuit coil have a reactance 3 or 4 times as great as the plate resistance for good response.

Transformer Coupling

There are several advantages in audio transformer coupling. There is a negligible drop in plate supply voltage through the transformer windings, hence the "B" supply voltage may be moderate. The DC grid circuit resistance can be very small where an input transformer is used. This is an advantage with certain classes of power amplifier operation, particularly Class B. Since such coupling devices can be purchased ready-made the frequency response in considerable part depends upon the observation of general transformer design principles. A typical transformer coupled amplifier is shown in

Using a well-designed transformer for the medium frequency range the Class A gain of a transformer-coupled stage is nearly:

(sec. turns) gain $\alpha = \mu$ (primary turns) i.e. the tube gain multiplied by the transformer gain. It is correct only

if the primary reactance is large as

compared to its resistance and to the plate resistance of the tube. Consequently equation (3) holds true for medium frequencies but fails at low frequencies because the transformer's primary reactance falls. The decrease in amplification is related to the resistances just mentioned, and the transformer's low frequency response curve can be predicted if there is known: the tube's plate resistance (tube data book) and the resistance (R₁) of the transformer primary, and its inductance (L) with the secondary open such as might be measured on a bridge. It is to be noted in Fig. 5 that the effect is most pronounced in a transformer (Curve 1) whose secondary is unloaded, or connects to an extremely high resistance such as a Class A grid circuit. If the load resistance (as R in Fig. 4) equals the source resistance, Rp + primary R₁, (Curve 2) the low frequency loss is less. Finally with a load whose resistance is much less than that of the source (Curve 3) the low frequency loss is small. This is observed in a practical way in the relative small size and cheapness of Class A output transformers feeding low impedance loads. Conversely, if two transformers be equally well designed, one as a "plate-to-grid" transformer, shown as solid curves C and D of Fig. 6, it will produce a curve dropping off more at the low end than the corresponding "plate-to-line" or "line-to-line" transformers shown by the dashed curves

This situation is aggravated if the transformer is made too small, as in the case of the curves for a cheap example, Fig. 6, Curve A. Occasionally this kind of thing is done deliberately to create a transformer which is peaked at some particular frequency that must be amplified. Curve B, Fig. 6, is for a transformer exactly like that with curve A except that a trifle over one-half of the primary has been removed, the primary reactance thus dropping to about one-fifth of its former value. Lack of amplification at low frequencies is now very apparent. The transformer becomes a very poor load for the tube except for that frequency to which it is tuned by its own inductance and the capacitances in the circuit and that of the transformer itself.

in Fig. 6.

The high frequency drooping of the gain curve is due to the shunting effect of the capacitances within the transformer and in the circuit. The user of the transformer can do very (Continued on page 100)

Who'll be your best customer?



Mrs. War Worker will be home again—on a full time shift! She'll want to re-live small leisure pleasures sacrificed during work-rushed war years... like sleeping a bit later... listening to her favorite radio programs during kitchen hours. She'll especially want a good radio for her very own to keep alive outside interests she became accustomed to in war work. Tray-Ler Karenola will be ready for the post-war demand... with the finest radios that equipment and skill can provide.



1028-34 W. Van Buren Street, Chicago 7, Illinois MANUFACTURERS OF QUALITY RADIO AND COMMUNICATION EQUIPMENT

Television Talk

Tracey Says Majestic Is Ready With Television

E. A. Tracey, president Majestic Radio & Television Corp., Chicago, in a statement announcing the appointment of the Colen-Gruhn Co., New York City, as exclusive distributors of Majestic radio for the metropolitan New York area, also disclosed what Majestic's position will be in the postwar period.

Mr. Tracey pointed out that the company's peacetime line would incorporate radio-phonograph models, employing automatic record changers, the finest versions of the new FM circuit designs, and said that the company's "television research and engineering was advanced to the point that would assure Majestic of being confidently competitive during the initial peacetime period."

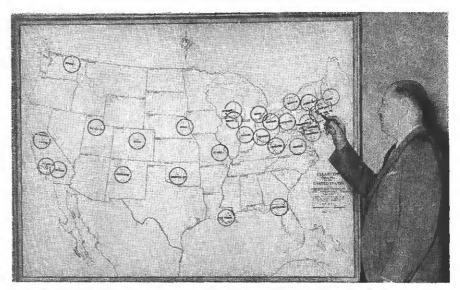
Sees Television a Potent Sales Medium

Merchants viewing the potential postwar market for the sale of television sets are vitally concerned with the "coverage" situation, which itself is directly connected with the question of financial returns for those who put their money into relay stations or other means of "spreading out" programs.

Revenue from television advertising seems promising since such advertising appears certain to have the utmost appeal to the prospective advertiser.

Walter L. Lawrence, a field engineer of the RCA Service Company, recently said: "It can be a sales medium of unparal-

TELEVISION ACROSS THE NATION:



Allen B. DuMont, television pioneer, studies map upon which is indicated locations for new commercial video stations. 65 applications for transmitters in 24 states and District of Columbia are pending.

goods. The advertiser can present his wares visually—while they are being used or consumed, if that will enhance their consumer appeal—in the intimacy of the prospects' homes. Trade marks can continually be kept before the public eye under attention-compelling conditions.

"So potent a sales medium, intelligently used, with its consequent stimulation of the market for the output of our industrial system, can have a most salutary effect on that largest of our postwar problems—unemployment."

TELEVISION:

- A living-breathing encyclopedia of entertainment and education.
- A magic window opening on the world we live in.
- A view of history at the moment of its happening.
- The alchemist, the million-armed servant that brings to our eyes and ears living entertainers and art, science, literature, the wisdom of all time.



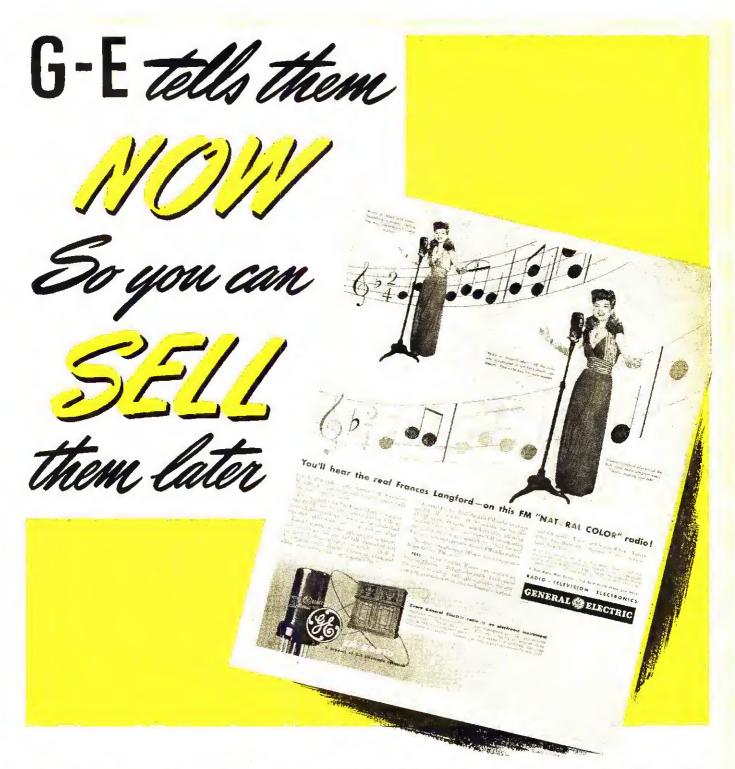
"Don't trade him anything for that antiquated set. Television is all the rage nowadays!"

Ready to Make Projectors

At a meeting of the Radio Executives Club in New York, Arthur Levey, president of Scophony Television, said his company's television projectors for home and theatre would be "put into mass production as soon as war production permits."

Allow Experiment Models

The War Production Board has eased its ban on restricted materials to permit the building of experimental models where neither labor nor machinery is diverted from war work. This easement applies to television equipment, radios, refrigerators, vacuum cleaners, etc.



General Electric brings you the benefits of the biggest radio advertising campaign sponsored by any radio manufacturer!

General Electric advertisements—full color, full page — like the colorful one shown above—are reaching 38,000,000 readers in 18 national magazines every month.

This outstanding series is backed by the G-E radio news program — "The World Today"—broadcast every weeknight over the CBS network — 128 stations with an estimated audience of 19,000,000 listeners per week.

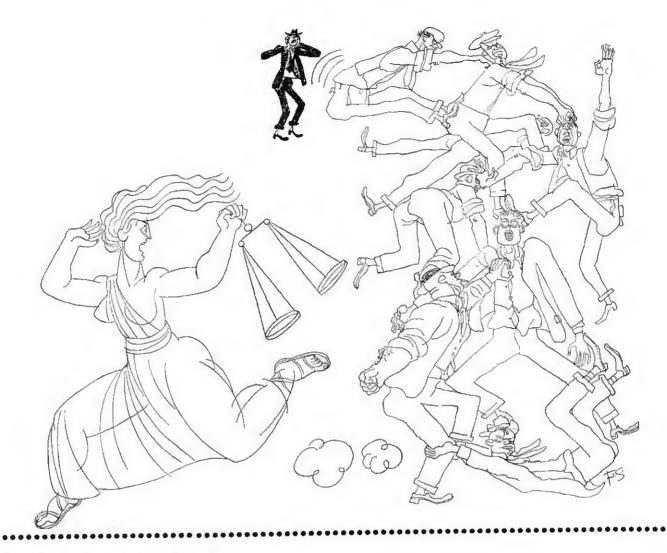
In addition, the new G-E booklet, "Your Coming Radio as Forecast by General Electric"—an exclusive pre-

view of tomorrow's radio — is being distributed in large volume to your prospective future customers.

All this adds up to a smashing, preselling job being done for you — NOW—to increase your opportunity for greater profits—SOONER—on your post-war radio sales. Electronics Dept., General Electric, Bridgeport, Conn.

GENERAL ELECTRIC IS BUILDING MORE MILITARY RADIO EQUIPMENT THAN ANY OTHER HOME-RADIO MANUFACTURER





WHAT'S YOUR CHOICE ...

Free-for-all or Fair-for-all?

A free-for-all—that's what radio retailing becomes for the dealer who finds himself competing, on the same line, with price-cutters, auctioneers, parlor-dealers, and all the other fast operators who make it impossible for a legitimate radio dealer to make a legitimate profit. All too familiar, under the pressure of such competition, is a selling formula that looks about like this:

Selling Price		\$100.00
Cost (40% off list)	٠	60.00
Margin		\$40.00
Trade-in Allowance		22.50
Margin after Trade-in		
Re-sale Value (Maybe!) of Trade-in		6.00
Profit on Transaction		

A \$23.50 profit on a \$100 sale—when studies show that average overhead expenses alone amount to \$31.50 per \$100 of gross volume!

But fair-for-all are the conditions made possible for dealers who qualify for the Majestic franchise. A more-than-fair share of the potential radio business in any area, thanks to Majestic's right products, right pricing, right timing, right promotion. Even more important . . . a fair opportunity for a fair profit on every sale, thanks to Majestic's unique Controlled Distribution Plan.

Looking ahead to the time when you'll be selling once again -

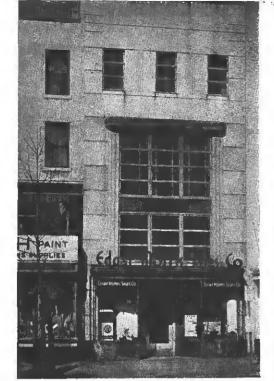
Are you reluctant to go back to the old free-for-all on the line you depend on for your profits? Do you vote instead for a method of operation that's fair-for-all—because it permits a fair net profit for every dealer franchised to handle the line? Then let's hear from you! We'd like to show you what Controlled Distribution can mean to you...like to show you why...

Majestic Means Business ... and lots of it!



be selling once again - RADIO TELEVISION ELECTRONICS





Attractive storefront of Edgar Morris Sales Co., progressive Washington Wholesaler.

Edgar Morris Sales Co. In Business for 25 Years

The Edgar Morris Sales Co., 712 Thirteenth St., N.W., Washington, D. C., one of the city's prominent radio and appliance distributors recently observed its 25th anniversary.

The business was organized by Edgar Morris immediately upon his return to Washington after World War 1. It was a modest beginning. There were only 5 employees, and they had but one merchandise line. Today there are 50 employees, over 400 wholesale customers, and appliances sold by the firm are installed in over 75,000 homes in the metropolitan area.

Concentrated Territory

The firm wholesales Westinghouse refrigerators, laundry equipment, ranges and all other Westinghouse appliances and Zenith radio and Hearing Aids in addition to stokers, space heaters, gas ranges, etc.

For many years the company engaged in both retailing and wholesaling, but in 1918 discontinued retail selling.

During the quarter of a century of its existence the Edgar Morris Sales Company has adhered to the policy of restricting its efforts to a small number of nationally known lines. With a concentrated territory and a few selected lines, the company's customers receive superior service and its manufacturers are assured the most efficient distribution of their products.

Ray Thomas Co. Named

Ray Thomas Co., 1601 So. Hope St., Los Angeles, has been appointed southern California distributor for Majestic radios.

JOBBER NEWS

Distributors Keep Pace With the Times

Wilson Heads Sales

Holcomb Gunn Co., 310-12-14 E. Third St., Little Rock, Ark., announces that it has appointed C. B. Wilson as sales manager and buyer. The firm distributes radio, home appliances, floor coverings, heating equipment and furniture.

Coast Radio Supply Co. Now in New Quarters

The Coast Radio Supply Company has moved from 85 So. Van Ness Ave., San Francisco, to its new quarters at 826 Van Ness Avenue. Products distributed by the firm include Emerson radio, washers, ironers, radio tubes and parts, refrigerators, table appliances, health lamps, freezing units, lamps, wiring devices, hardware, tools, kitchen utensils, sewing machines, cutlery, ranges, giftware, etc.

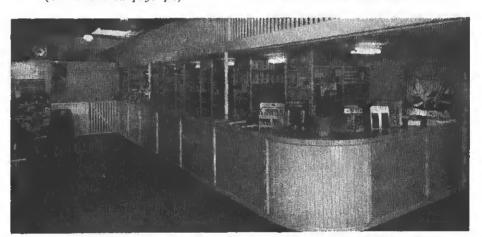
In a circular sent out to its dealers, Coast Radio Supply Co. lists the items it usually stocks and prints the following message about merchandise:

"Most of the above products are still (Continued on page 72)

Streamlined Store



A. R. Beyer & Co. gets set for postwar in its new location at 1318 Polk St., Houston, Texas.

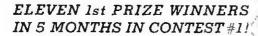


Above, view of Beyer's store interior. Below, technician enjoys Beyer's free reference library.



68





Yes sir, guys, the hundreds of letters received were so swell that double first prize winners had to be awarded each of the first four months and there were triple first prize winners the fifth and last month . . .

SO-HERE WE GO AGAIN!

Get in on this NEW letter contest -

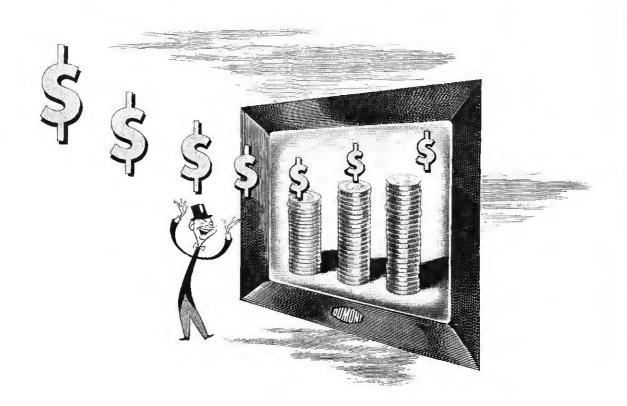
write and tell us your first hand experiences with all types of Radio Communications equipment built by Hallicrafters including the famous SCR-299!

RULES FOR THE CONTEST

Hallicrafters will give \$100.00 for the best letter received during each of the five months of April, May, June, July and August. (Deadline: Received by midnight, the last day of each month.) . . . For every serious letter received Hallicrafters will send \$1.00 so even if you do not win a big prize your time will not be in vain. . . . Your letter will become the property of Hallicrafters and they will have the right to reproduce it in a Hallicrafters advertisement. Write as many letters as you wish. V-mail letters will do. . . . Military regulations prohibit the publication of winners' names and photos at present . . . monthly winners will be notified immediately upon judging.



BUY A WAR BOND TODAY



THE FIRST CLEAR PICTURE OF TELEVISION PROFITS!

Just as Allen B. DuMont, by his development of the Cathode-ray Tube, created the first clear image on the television screen... so DuMont now offers you the first clear picture of your coming television profits.

Commercial television will begin, shortly after victory, very much like radio. There will be many assemblers of television sets in the lower price brackets. There will be various manufacturers of television instruments at medium prices. And there will be DuMont

...definitely building to an engineering ideal, rather than to price.

If you are in a position to sell this highest market level...already being intensively cultivated by DuMont national advertising... then you will want to feature the postwar DuMont Television-Radio Receivers.

That's the way the Television picture is shaping up...brought into ever sharper focus under the leadership of Allen B. DuMont. Keep your eye on it...watch DuMont!

Copyright, 1944, Allen B. DuMont Laboratories, Inc.



ALLEN B, DUMONT LABORATORIES, INC., GENERAL OFFICES AND PLANT, 2 MAIN AVENUE, PASSAIC, N. J. TELEVISION STUDIOS AND STATION WABD, 515 MADISON AVENUE, NEW YORK 22, NEW YORK



RAY-O-VAC LEAKPROOFS till after Victory Those Ray-O-Vac LEAKPROOF Batter-

Sorry, but no more

ies that your customers want are all going to our fighting men. They furnish the heartbeat of communication systems, handie-talkie, bazookas, flashlights and other instruments of war.

RAY-0-VAC LEAKPROOF

is bound to be the Post-War Leader

It's the battery that STAYS FRESH because its sealedin-steel construction prevents power leakage. It is guaranteed not to harm the flashlight by swelling or corrosion. Millions of men are learning the reliability of Ray-O-Vac LEAKPROOFS under life-and-death conditions. It's the cell they're going to insist upon when they return from the fighting fronts.





at war to help speed victory. We do have some material on hand and expect more from time to time. We solicit your inquiries or better yet, a visit to our new quarters. Through our dealer bulletins we will keep you advised as to what is available as well as any other information of interest to the trade."

New Arvin Distributors

Everybody's Supply Corp., 810 Arch St., Philadelphia, headed by Samuel Fingrutd, president, has been appointed Arvin radio distributor.

Lincoln Sales Takes On Norge and Farnsworth

Lincoln Sales Corp., for over 17 years distributor in the Baltimore and Washington trade markets, has become distributor for the Baltimore area for Farnsworth radios and Norge refrigerators.

Lincoln Sales is headed by C. Howard Buchwald, president; Clarence Deikman, vice-president, and Lou Fox, sales manager.

Leach Is Sales Manager For New Jersey Firm

Krich-Radisco, Inc., Newark, N. J., radio and appliance distributor, announces the appointment of Andrew K. Leach as general sales manager of the company.

The Newark firm is exclusive distributor in New Jersey for RCA Victor records, Kelvinator, Bendix, Ironrite, New

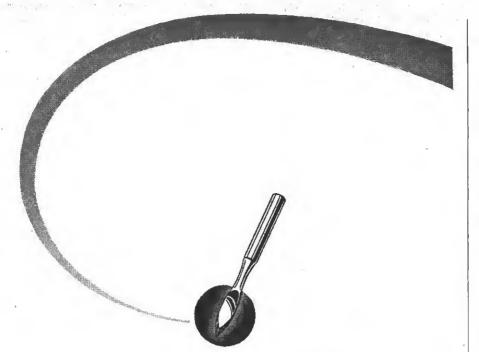


Andrew K. Leach

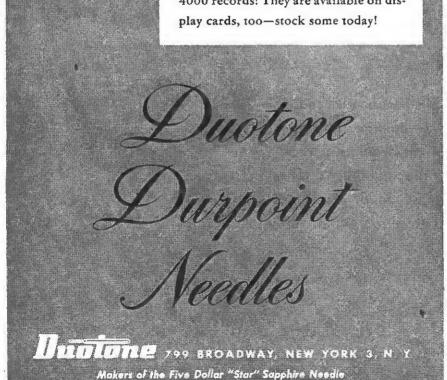
Home and Eureka products. They have recently augmented their lines and have added to the above, American All-Steel kitchens and Estate gas ranges and Heatrolas.

Mr. Leach, who has served Krich-Radisco in various sales capacities for the past 15 years, will be in charge of the overall activities of the separate sales divisions the distributing firm has set up for various products.

(Continued on page 74)



Dealers—demand for this needle is spreading as fast as butter on hot toast! The Durpoint needle sells for a dollar, which spells two things for you—volume and profit. And what a sales story: its precious alloy tip takes additional polish from the record groove thus minimizing record wear and greatly reducing surface noise: each needle is individually inspected before shipping and guaranteed to give perfect reproduction for about 4000 records! They are available on display cards, too—stock some today!



Victors in the Race with Time

1860

The Pony Express carried the mail from Missouri to California in the record breaking time of 10 days. In those days there was no faster, more reliable means of transportation than that of a trusted messenger on a fast horse.

1944

Today a soldier with his Handy-Talkie radio transmitter receiver can start the news of a battle and of victory around the world in a split second. Effortless, 2-way communication is within the reach of everyone!



Sentinel

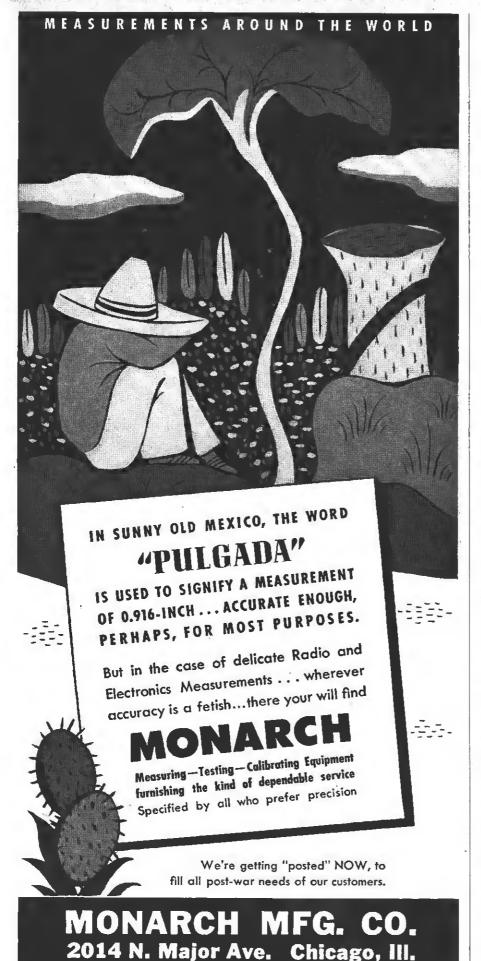
Though thousands of miles lie between the battle-fronts throughout the world, the forces of the widely separated United Nations are welded into a single victorious fighting unit through modern radio communications.

Sentinel Radio is proud to be playing an effective part in developing and producing this supremely important war communications equipment. Six Sentinel plants are translating the blueprints of Sentinel engineers into victory-winning equipment.

These wartime experiences will result in vastly improved new Sentinel products which will help Sentinel dealers translate postwar prospects into profitable sales.

SENTINEL RADIO CORPORATION
2020 Ridge Avenue, Evanston, III.





Will Distribute GE Sets In Metropolitan Area

The General Electric Supply Corp., 585 Hudson St., New York City, and the General Electric Supply Corp., 22r Frelinghuysen Ave., Newark, N. J., have been appointed wholesale distributors for General Electric radio receivers. The New York house assumes the responsibility for the sale and service of these products in the Metropolitan New York area, except for Richmond Borough (Staten Island). This latter territory, plus northern New Jersey, will be sold by the Newark house.

This was announced in letters to radio dealers from H. A. Crossland, manager of sales for the General Electric receiver division at Bridgeport, Conn.

All metropolitan dealer requests for General Electric radio receiver repair service and supply parts will be handled by Neil Laby of the General Electric Supply Corp., 585 Hudson St., New York City.

Bonfig Urges Jobbers to Get Ready for Postwar

Zenith Radio Corporation's program of future expansion in the sale of household radio has now reached the point where it is time for distributors to begin active work on adding strength to Zenith's already virile and aggressive dealer organization, H. C. Bonfig, vice-president in charge of household radio, told a group of Zenith distributors at an informal round table discussion in Philadelphia.

"Although our mailing list corrections indicate a dealer mortality of only 3 per cent since the shutdown of civilian production, a record of which we are very proud, neither you distributors nor the factory organization has been able to keep up an active program of field contacting during these war years," said Bonfig. "Now that the end is in sight, although it is months, perhaps even years, away, it is time to begin planning details of our future operations in the field."

Zenith's Policy

Bonfig said that, while there were a great many questions to which nobody has the answer today, Zenith has already decided on a number of fundamental policies.

"First," he said, "Zenith is committed to a policy of remaining in the radionics field exclusively. We are not going to diversify into other fields, such as refrigerators, washing machines, air conditioners, vacuum cleaners, etc, etc. These fields, we feel, are ably handled by specialists.

"We believe that the field of radionics is sufficiently large to hold and to occupy the entire attention of our organization, and by confining out efforts to the line of business we know, we will render infinitely better service to our distributors, to our dealers, and to the public.

"Zenith intends to continue its policy of distributing its merchandise through independent distributors and dealers."

(Continued on page 76)

SPRAGUE TRADING POST

A FREE Buy-Exchange-Sell Service for Radio Men





ASK FOR THEM BY NAME

If you appreciate the Trading Post Advertising Service—and hundreds of servicemen have told us that they do—we know we can count on you to ask for Sprague Atom midget dry electrolytic capacitors by name, and to insist on getting them whenever they are available. Atoms are smaller, less costly, and are fully as reliable as the big, old-fashioned condensers they replace. Use them universally on all of your jobs. They're more dependable—they speed up your work!

FOR SALE—Hickok crystal sig. generator #170X, \$60; Radio City multitester #1414, \$25; Solar capacitor analyzer .0001-800 mfd. OC-1-60, \$35; Tripiett tube tester #1213, \$25; National receiver NC-100, \$100, All A-1. ^A. Chevaller, P. O. Box 108, Preston, Wash.

FOR SALE OR TRADE—Brand new Airline recorder and play-back unit (less 2 tubes and mike) \$50. Want complete P.A. system. Walter J. Hotaling, P. O. Box 98, Sidney, N. Y.

WANTED FOR CASH—Three RK62 gas triode detector thyraton tubes. Wm. R. Thoes, 2939 Gaylor St., Denver, Colo.

FOR SALE OR TRADE—35—24A8s, 35—27's (used but in perfect condition) and 50—5738's, new. Want Precision \$920P tube and set tester, EV10 Precision multi-range tester, 3" oscilloscope. Vital Radio Service, 209 Linden St., Camden, N. J.

WANTED-V-0-M; sig. generator; analyzer, or other test eqpt. Charles Glatz, 850 Stebbins Ave., Bronx 59, N. Y.

FOR SALE—Hallicrafter SK-24, with matching speaker. Practically new, \$80 f.o.b. W. J. Hammend, Jr., Box 49, Wenham, Mass.

FOR SALE—Precision tube tester 912P; Solar capacitor analyzer CS-1-60; Triplett combination 1151A sig. generator; 1125B V-0-M. 1166C free point tester; large supply of radio parts including tubes, Meissner coils, trimmers, radio tools, etc. —also radio books. J. D. Curtice. P. O. Box 243, Boenton, N. J.

URGENTLY NEEDED—100 K.C. or 175 K.C. erystal, with or without crystal mount. Norman Lefcourt, 510 Robbins St., S.W., Atlanta, Ga.

The state of

FOR SALE—4000 radio tubes, meter and set tester. All guaranteed. Complete selection of types and numbers. Bonded Service, 27 West 170th St., New York, N. Y.

WANTED—Late model tube tester, reasonably priced. Charlie Allen, St. Charles Hotel, St. Joseph, Mo.

WANTED—Amplifier, 117v., 50-60 cycles A.C., with mike and two speakers. George A. Wise, Jr., 7 Wall St., Westerly, R. I.

WANTED-FM converter; also good crystal mike. Nick Walters, 203 North Terrace St., Atchison, Kans.

WANTED-35L6 tube for a 1942 Philorecord player. Donald Comer, S 2/c, 29 Sp. Co. B. Plat. 5, A.B.D., Port Hueneme, Calif.

WANTED FOR CASH—#1280 Superior tube tester. Louis Mackay, R.F.D. \$1, Box 19, Perth Amboy, N. J.

FOR SALE OR SWAP—G.E. standard watthour meter 110-220X—50 cy.—1-10-20 amp. \$2,610,113, chart and pendant switch; also Westinghouse \$5,484B serial 219,908—5-40 amp., 100-2007, 60 cy. Both instruments portable. Robert W. West, Parker, Arlzona.

WANTED FOR CASH—Tubes, any quantity, any types 12v or higher. Must be new and in boxes. Also want phone motors and erystals. Leading Radio Service, 114 East Third St., Mount Vernon, N. Y.

WANTED—DC-3 communication receiver in good shape, and 1A6 tube. Eugene T. Menkoff, 201 S. 36th W. Pl., Tulsa 6, 0kla.

FOR SALE—Brand new, in original cartons, 39/44 N.U. radio tubes, 40¢ ea. Also 2B7; 47; 232; 238; 2E5; 46; 336 tubes at 50% off list; Readrite tube checker, \$6; code practice oscillator and automatic code machine with practice tapes, \$12. Want to borrow calibrated chart for a Clough-Brengle OC sig. generator. Franz Radio Service, 1601 Plum St., Erie, Pa.

FOR SALE OR TRADE—Several brand new AC-DC 5-tube superhet kits and crystal kits. Want the following tubes: 25LS, 35L6, 50L6, 35Z5, 12SA7, 12SK7, 12SQ7, 6SA7, 50Y6, 1A7, 1H5, 1N5, 11T26, 80 6KS, and others. Melvin Okin, 315 Bryant Ave., Bronx 59, New York.

FOR SALE OR TRADE—Clough Brengle 3" oscilloscope, CRA serial 2386. Excelent condition. Joe's Radio, 2224 West Belden Ava., Chicago 47, Ill.

WANTES—Pickups and phono motors. What have you? Joe Sventek, 2224 W. Beiden Ave., Chicago 47, Ill.

FOR SALE—RCA test oscillator, 90 to 25,000 K.C., battery operated, case included, \$35; set of six RCA manuals, 1923 to 1936, \$25; used electric phonomotors with turntables, \$5 each; 1937 Philco automobile radio, \$25; 1940 Motorola automobile radio, \$35; used tubes and parts. Domestic Appliance Service, Bridgehampton 1, N. Y.

WANTED—Used Candler high speed radio code course—also used Teleplex or Instructograph. S. J. Connolly, Hingham, Mass. **Important Notice!**

We discourage offers to buy or sell anything beyond the O.P.A. ceiling prices, and will not knowingly accept such ads for the Sprague Trading Post.

FOR SALE—New 26-watt amplifier with 10" speaker, in case, \$47.50; new Turner mike, \$16.50; RCA record player, \$22.50, 2-616. Dixon Radio Lab., 2412 Strauss St., R, N.S. Pittsburgh 14, Pa.

WANTED—Supreme instruments. Paul Bernhardt, R.F.D. \$2, Lorain, Ohio.

WANTED — Vibrator tester, analyzer, vacuum tube meter and modulator. O.K. Radio Service, 8023 E. Sprague St., Spokane, Wash.

FOR SALE—New parts; synchronous vibrators, \$2.26; non-synchronous vibrators, \$1.50; new tubes; 1A6, 1T4, 184, 185, 687G, 2A7, 2B7, 6B7, 12A, 01A, 53, 55, 31, 68C7, 6G5, 6U5, 6A4, 6L5, 30, 31, 23, 39. N. J. Cooper, 4617 N. Damen Ave., Chicago, Illinois.

FOR SALE—Hallierafter \$\$-22R communication receiver, four bands. Will operate on AC-DC, 6 volts, bandspread turing, D. Jarden, 7149 Ardleigh St., Phila, 19, Pa.

WANTED—Precision E-200 in perfect condition and 12, 25, 35, 50, 70 and 117 tubes. Munroe Radio Service, 111 Shelby St., Kingsport, Tenn.

FOR SALE OR SWAP—The following tubes: 10-185; 10-174; 10-1246; 2-1285; 4-128N7; 5-68L7; 12-68N7. Also want window display material. S. P. Ashley, 2912 Glenwood Road, Brooklyn, N. Y.

WANTED—Master or standard Teleplex with oscillator, key, and course of instruction. Prt. Paul A. Sazon, Med. Det., Stat. Hosp., Camp Blanding, Fla.

FOR SALE OR TRADE—WE 633A and Astatic T3 microphones; WE & VTC transformers; connectors; meters; switches; ½, watt resistors, back issues Electromics, Radio Craft, Radio News and Service. S. Mayo, 372 E. 16th St., Brooklyn 26, N. Y.

URGENTLY NEEDED—Any commercial receiver in working condition. A/C Teddy Powell, C.A.P.C., Box 481, Belle - Glade, Fla.

WANTED FOR CASH—6N6 tube. Will trade GE midget portable for SE semi-professional recorder with cutter and pick-up. Charlton W. Cleveland, 35 North St., Genesee, N. Y.

FOR SALE OR TRADE—Crosley push button car radio; Underwood standard typewriter, and IBC resistance analyzer. Want Rider manuals 6 to 13; all-wave sig. generator; Solar CB-1-80 condenser checker. A. Mayfield, 3330 Lawrence, Denver 5, Colo.

WANTED—Electric or portable phonograph in good condition. Chas. Brown, 502 N. High, El Dorado, Kansas.

URGENTLY NEEDED—Tube tester, late model. Describe fully. Cash. George Murakami, 3303—B. Newell, Calif.

WANT TO SWAP—Have Conn Bb tenor sax (value \$85) to exchange for Rider manuals. El. Grimshaw, 174 Water St., N. Andover, Mass.

WANTED—Clough Brengle CRA oscilloscope or equal; Rider manuals 11, 12 and 13; Weston 772 or comb. tube and set tester, standard make. Have Clough Brengle OCA signal generator and other items. Exchange lists. Glenn Watt, Chanute, Kans.

FOR SALE—Hallicrafter Skyrider SX32, with crystal filter band spread, 500 K.C. to 42 M.C., earphones incl. Also 12" bass reflex speaker and Detrola wireless automatic record player for 10 or 12" records. R. J. Monson, P. O. Box 1411, Jucksonville 1, Fla.

WANTED—Sig. generator and tube checker, for modern tubes. Eustace Lee, Box 1707, Cristobal, Canal Zone.

WANTED—Late test equipment, incl. tube and set checker and sig generator. L. B. Mitchell, 1428 Queen Anne Are., Seattle 9, Wash.

URGENTLY NEEDED—Filament X-former for tube tester. Must supply secondary voltages for all receiver tubes. Lester Stiles 101 Pearl St., Schuylerville, N. T.

FOR SALE—Brand new automatic electric "Radio Service" sign. \$2. M. Levengood, Palmyra, Pa.

FOR SALE—Slightly used National NSA speech amplifier, and Meissner FM tuner, both complete with tubes and in A-1 condition; two almost new HK54's; also Standard instructograph with oscillator and tapes. R. W. Harwood, Crescent City, Ill.

WANTED—Supreme Veedolyzer—for each and some hard-to-get tubes. Walt's Radio and Electric Shop, Lyawood, Calif.

FOR SALE—Midwest 15-tube P.A. tuner; Midwest 15-tube radio complete with speaker. Continental P.A. tuner; 12tube Zenith radio chassis complete, 2-10" and 2 extra speakers. Joseph Harrison, 504 Third St., Albany, N. Y.

YOUR OWN AD RUN FREE!

This is Sprague's special wartime advertising service to help radio men get needed parts and equipment, or dispose of radio materials they do not need. Send your ad today. Write PLAINLY OR PRINT—hold it to 40 words or less. Due to the large number received, ads may be delayed a month or two, but will be published as rapidly as possible. Remember that "Equipment for Sale" ads bring best results. Sprague reserves the right to reject ads which do not fit in with the spirit of this service.

HARRY KALKER, Sales Manager

SPRAGUE PRODUCTS CO., Dept. RRT-84, North Adams, Mass.

(Jobbing distributing organization of products manufactured by SPRAGUE ELECTRIC COMPANY)

SPRAGUE CONDENSERS KOOLOHM RESISTORS

Obviously, Sprague cannot assume any responsibility, or guarantee goods, services, etc., which might be exchanged through the above advertisements

Thinking of after the War?

We want to make the acquaintance of dealers and distributors alert enough to do their post-war planning now; men and organizations who will recognize the sweeping post-war sales potentials of the high fidelity tape recorders bearing the Fonda name.

Here are a few Fonda features that will explain why our instruments will be in demand—high quality recordings at low cost; continuous recording for eight hours without supervision; automatic instantaneous playback; provides a permanent, indestructible record. The Fonda method of recording is based on our own exclusive patent which is the result of years of engineering and development effort.

Let's start getting acquainted today by dropping us a note requesting our free literature!

Fonda

FONDA CORPORATION

245 EAST 23RD STREET, NEW YORK 10, N. Y.

Designers and Manufacturers of Precision Recording Equipment



The Fonda Recorder



The Fonda Recorder for monitoring by Commercial Airlines and Radio Broadcast Stations



The Fonda Record for Industry

Jobber Praises Dealers For Staying in Business

The D'Elia Electric Co., Inc., 1330 Fairfield Ave., Bridgeport, Conn., one of the oldest radio and appliance wholesale firms in the state, is now holding "open house" for its dealers, who have been praised by Mr. D'Elia for their "ingenuity," to celebrate the company's 27th anniversary.

These dealers will see a complete new group of display and service rooms, covering 11,000 sq. ft. The D'Elia building, comprising 33,000 sq. ft., has been redecorated from top to bottom in a pastel motif, creating salesrooms of beauty and refinement.

Charles A. D'Elia, president, is receiving the congratulations of his many friends in the trade who have seen the new salesrooms. As Mr. D'Elia says, "It took a great deal of constructive thinking and careful planning to take this step at this particular time but, believing in the ultimate victory of our country and the great potential buying power of the people following the war, the step seems a forward one.

"In my travels around Connecticut, visiting dealers, I am amazed at the ingenuity displayed in their being able to stay in business and still make money at a time when everyone was counting ten over them, believing they would be forced out of business because of lack of merchandise due to the war. I find they are aware of the tremendous need for household appliances and are alert and ready for postwar business."

Crosley Wholesalers

The Southwestern Electrical Appliance Co., Amarillo, Texas, has been named distributor for the Crosley Corp. in northwestern Texas, has been announced by B. T. Roe, Crosley manager of distribution.

The Southwestern Electrical Appliance Co. is owned by Harvey Southworth, who started in business in 1935, and has built up a business with an annual sales volume of approximately \$1,000,000.

Named Emerson Jobbers

Announcement has been made by Charles Robbins, vice-president in charge of sales of Emerson Radio and Phonograph Corp., New York City, of the appointment of Western Mass. Distributors, Inc., Springfield, Mass., as distributors of Emerson Radio products in that territory.

This organization has been in business in that area for a number of years and has distributed well-known lines.

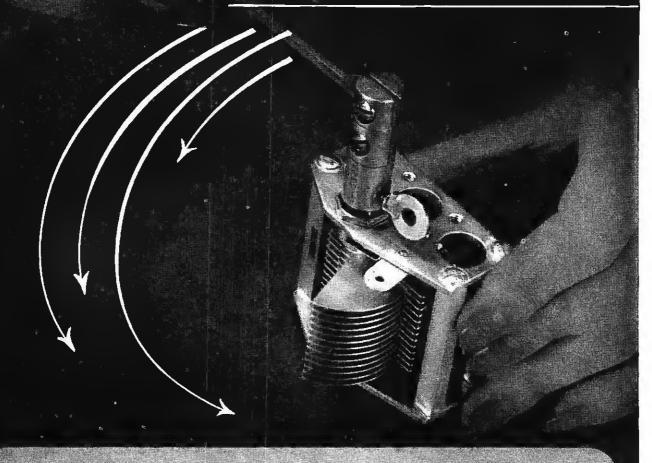
Bruce Dean Vice-President

Frank R. Elliott, Jr., president of the Elliott-Lewis Electrical Co., Inc., Philadelphia, Pa., announces the appointment of Bruce A. Dean, as vice-president.

"Although the company is best known as a distributor of electrical home appliances, its increasing war work necessitated the expansion and announcement at this time," said Mr. Elliott.

(Continued on page 79)

TARAUE



Hammarlund precision variable capacitors have just the right amount of TORQUE, to permit smooth and accurate adjustment. You don't have to fight rough and jumpy action when you tune with Hammarlund variables.



THE HAMMARLUND MFG. CO., INC., 460 W. 34TH ST., N. Y. C. MANUFACTURERS OF PRECISION COMMUNICATIONS EQUIPMENT



My pen stopped in mid-air ...

How Andre Kostelanetz Responded to the Glory of the Meissner

Call him a perfectionist, if you will, but Andre Kostelanetz likes to have a recording made of each major rehearsal. Then, before the actual performance, the record is played back while he jots down a variety of comments and suggestions.

Thus, pen in hand, he sat waiting to hear one of his rehearsal recordings played for the first time on the Meissner radio-phonograph. Casually at first... then, *intently*...he watched as this new kind of automatic record-changer gently selected the record from the stack, silently placed it on the turn-table.

"Remarkable," he said, and was about to make note of it, when . . .

Crescendo on crescendo, the tiny room had become a magnificent sounding board for the unseen orchestra. Here, indeed, was recorded music with all the soulstirring immensity of the instrumental range.

"There were tones that were com-

pletely superb," reported Andre Kostelanetz. "My pen actually stopped in mid-air at the first note!"

Andre Kostelanetz, one of the world's great conductors, had just heard the only Meissner radio-phonograph in existence—the final laboratory model perfected just before war turned all of Meissner's skill and knowledge to the manufacture of electronic war equipment. This priceless instrument is now on loan "for the duration" to the music department of Mt. Carmel High School, in Meissner's home community.

Many families, however, are now looking forward to the day when luxurious postwar counterparts of the Meissner masterpiece will be obtainable for their own homes. Like you, they've been longing for some way to bring all the brilliant realism of the concert hall into the intimacy of the fireside circle... some way to recapture the "missing elements" for which present-day phonograph listeners so often wait in vain.

And, like you, they'll welcome these other Meissner advantages:

AUTOMATIC RECORD CHANGER—plays both sides of a record in sequence, one side only, or repeats a record just played... avoids record breakage. Provides 2 hours or more of music without your touching a record.

FREQUENCY MODULATION—plus advanced electronic features for fidelity and tonal range greatly surpassing such qualities in home radio-phonographs now in use.

SUPER SHORTWAVE... DISTINGUISHED CABI-NETS... NEW IDEAS in a host of other advancements already being engineered into Meissner equipment for our armed forces.





In fine homes throughout America, people have long been reading about the new Meissner radio-phonograph. More, they have written by untold hundreds to learn how, when, and where it will be sold.

Rightly so, too, for the world's great musicians have placed Meissner reproduction in a world unto itself. Praises from such artists as Bruno Walter, Artur Rodzinski, Fritz Reiner, Rise Stevens, Andre Kostelanetz, and many more of like fame, have fed the bright flame of desire among countless music lovers.

This rich and ready market is now waiting for men of vision, of experience, of reputation—men who will dominate the Meissner distribution picture of postwar tomorrow. To find your own place in this picture, we suggest that you write at once to our Chicago Office. Plans will then be made for executive contact at the earliest possible date.



Please Address Your Inquiries to Chicago Office:

PALMOLIVE BUILDING, CHICAGO, ILLINOIS

Name Pennsylvania Firm

Appointment of the E. Keeler Co. as distributor of The Crosley Corp. in the central part of Pennsylvania has been announced by B. T. Roe, manager of distribution for Crosley.

Jobbers Plan for Postwar

Joseph Goldhamer, of Goldhamer, Inc., Cleveland, Ohio, distributors, and E. C. Wenger, well-known Pacific Coast distributor of Wilcox-Gay Recordio, and a member of the Electronics Distributors Industry Advisory Committee, have been discussing postwar plans with Wilcox-Gay officials at Charlotte, Mich.

New Wholesale Firm

A new firm under the name of of Kay-Stern Distributing Co., has been formed to handle Admiral products in Pittsburgh. The company will occupy an 8-story building at 808 Penn Ave. This building will have a showroom equipped to display Admiral products as well as to warehouse them when radios and appliances are manufactured.

Peel Issues Brochure

Peel Sales Engineering Co., 154 E. Erie St., Chicago, Ill., has issued a handsome brochure entitled "Planning Ahead in the Electronics Field." The company distributes some of the following equipment: United Electronics, Jackson, Shallcross, Sigma, Turner, B. & W., G. S. Thompson, Vasco, Radiotone Recorders and Temco transmitters.

Admiral Jobbers Named in Des Moines, St. Louis

Luthe Harware Co., Des Moines, Iowa, has been appointed distributor for Admiral radios and appliances, according to an announcement by J. H. Clippinger, Admiral vice-president in charge of sales. The Luthe organization will cover the central section of Iowa.

Graybar Electric Co., St. Louis, has been appointed to distribute Admiral products in southern Illinois and eastern Missouri.

New Wholesale Firm in Northern California

Earl M. Kemp has established a wholesale radio and electrical supply business at 1115 R St., Sacramento, Cal., known as the E. M. Kemp Company.

Mr. Kemp intends to serve Northern California territory, and is interested in hearing from business concerns offering supplies and distributorships.

Entering the radio and electrical engineering field in 1916, Mr. Kemp has been associated with three utility companies, and has been with the city of Sacramento for 10 years as radio inspector of interference. For the past two years he has been engaged in electronic work for the government.

Hans A. Soms Moves to White Plains, New York

Hans A. Soms, radio parts jobber, located for the past 7 years at 336 Fort Washington Ave., New York City, has moved to new and larger quarters at 333 Mamaroneck Ave., White Plains, N. Y., and henceforth will operate as Hans A. Soms, Westchester Electronic Supply Co.

Now situated in the county seat of Westchester county, Mr. Soms will be better able to serve his many customers in that territory, including radio repairers and dealers, schools, manufacturers, industrial laboratories, public utilities and police departments.

Appliance Group Head



Robert C. Hill, veteran sales official, appointed director Appliance division, National Electrical Wholesalers Assn.

Speed Queen Jobbers

Appointment of 3 distributors for Speed Queen washers and ironers in California has been announced by P. J. Daniels, general sales manager for Barlow & Seelig Mfg. Co., Ripon, Wis. The new distributors are Coast Radio Supply, San Francisco, for northern California; Century Distributing Co., Los Angeles, for the southern part of the state, and Lester Distributing Co., Sacramento, for the Sacramento valley area.

Adds Washers to Line,

The Henry O. Berman Company, Baltimore, for many years distributor for both the Baltimore and Washington markets for the Stromberg-Carlson line of radios and sound equipment, has been appointed distributor for the Baltimore trading area for the Blackstone line of home laundry equipment.

Ready for Chicago Meeting

The Representatives of Radio Parts Manufacturers, Inc., will hold its meeting along with the Electronic Parts and Equipment Industry Conference, at the Hotel Stevens, Chicago, October 19, 20 and 21

Sturdevant Leaves Zenith

L. W. Sturdevant, West Coast manager for Zenith Radio Corp. for the past 12 years, has resigned.

Mr. Sturdevant becomes associated with the Majestic Radio & Television Corp. in the capacity of western division manager.

Change at Fada Company

J. M. Marks, president of Fada Radio & Electric Co., Long Island City, N. Y., has issued the following statement: "This Company has severed its association with Mr. George H. Wilson, both as Vice-President and as an employee, effective July 12, 1944."

Frank Moore in Navy

Frank Moore, Jr., vice-president and sales manager of Southern Furniture Sales Co., Chattanooga, Tenn., Zenith distributors, has entered the Navy.

Sylvania Names McEvoy

E. Bruce McEvoy, Jr., has been appointed assistant to L. S. Raynor, radio tube equipment sales manager for the eastern division of Sylvania Electric Products Inc., it was announced by C. W. Shaw, general sales manager of the Radio Tube Division. Headquarters are in New York City.

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Philharmonic Announces Code of Selling Ethics

Launching an extensive consumer advertising campaign, Philharmonic Radio Corp., New York, is currently distributing a folder to the trade stressing its code of ethics, as follows: 1. To select as elements of our distribution system, only organizations or individuals qualified for the tests they are to perform. 2. To select, for our products, methods of distribution which will provide fair and reasonable profits for those who participate in this distribution, 3. To adhere strictly to those chosen channels of distribution without recourse to subterfuges or exceptions. 4. To extend to all who participate in the distribution of our merchandise and who occupy a similar place in this distribution structure identical terms and privileges. 5. To represent our products for what they are without recourse to unfavorable comparison, implication or exaggerated claims. 6. To enter into agreements relating to price maintenance and trade practices only with a sincere intention to conform with and to enforce the provisions of such agreements without favoritism or partiality.

Freed-Eisemann to Sell Direct to Retailers

According to an announcement made by Arthur Freed, vice-president, general manager of Freed Radio Corp., New York, the postwar sales plans of the Freed-Eisemann line have been formulated. The restricted dealership policy remains unchanged and distribution will be on a direct factory-to-dealer basis. In order to complete the web of national distribution in territories where full representation has not been established, a few quality-minded dealers will be added. Details of the Freed-Eisemann franchise plan will soon be available.

Philco Sales Manager

William E. Kress has been appointed sales manager of the Middle West for Philoo Corp., with headquarters in Chicago, it was announced by Thomas A. Kennally, vice-president in charge of sales. Kress succeeds John M. Otter, who was named sales manager for the home radio division.

Stromberg Sales Soar

War production at the Stromberg-Carlson Co., Rochester, N. Y., reached an alltime company high in the 6 months ending June 30, according to Dr. Ray H. Manson, company vice-president and general manager. The company delivered more than \$27,000,000 worth of radio, radar, and communications equipment to the armed forces in the first half of its fiftieth year of operation, Dr. Manson said, as compared to its previous production record of \$41,000,000 achieved during 1943.

For the extra measure of record-playing pleasure

GAROD PERMATONE PHONO NEEDLES



80

Hardy Tells What Radio Dealers Need Postwar

There is every reason to believe that the radio business after the war will be exceptionally good, according to Larry F. Hardy, vice-president in charge of the Home Radio Division of Philos Corporation.

"And because it will be good, the foresighted radio dealer will see a twofold opportunity ahead: First, for immediate profits; second, to build permanence, prestige and good will for his future business. For that quick profit, he will need a lot of merchandise in a hurry-merchandise backed with a name, reputation and styling that will move it quickly from his floors. To build permanence, prestige and good will for the future, the dealer will need, in addition to quality and value, those new radio developments which his customers have been promised from war research, as soon as these can be given peace-time applications."

Lines Dealers Want

As to the kind of radios dealers will need, Mr. Hardy predicted that they would want and need a full line of consoles, phonographs, table models, compacts, portables and, of course, farm sets for the rural markets. Of these very first models off the line, innovations will not be exactly sensational, but there will be many important improvements in design, engineering and performance.

Despite all the numerous and diverse improvements in console radios and phonograph combinations, it is probable that table model radios and compacts will show the most immediate effects of war developments, in Mr. Hardy's opinion. New and different kinds of components will give these small sets greater sensitivity, greater output and better performance and compacts will reflect the tremendous strides made in the past three years in the plastics field.

"While no one can predict when civilian radio production will be resumed, Philoo plans to be ready to provide Philoo dealers with what they need soon after the 'go' signal is given. Our manufacturing facilities are so organized that we can get back into civilian production with a minimum of lost motion."

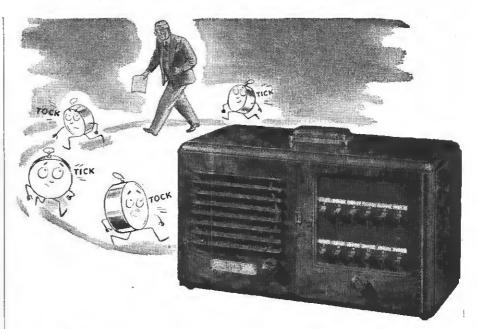
Smith Leaves Hotpoint

G. H. Smith has resigned as general sales manager, Edison General Electric (Hotpoint) Appliance Co., according to an announcement by R. W. Turnbull, president. A successor to Mr. Smith has not been named, the announcement said.

Hallierafters Booklet

The Hallicrafters Co., Chicago, is preparing its distributors and material suppliers for a distinctive postwar market.

Its latest move has been the publication of a brochure, featuring full color reproductions, in which the war service of company communications equipment is reviewed and the peacetime opportunities for Hallicrafters is emphasized.



Man-Hunting Executive stalks time . .

Radio dealers are finding Teletalk Amplified Intercommunication Systems an excellent source of extra profits in these war-busy days.

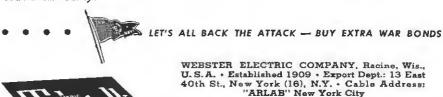
All that is necessary is to show executives of the offices and small plants in their community how Teletalk adds many precious minutes to their day's work... avoids those office man-hunts that lose so much time.

Whether their business is a small two-office suite or a large manufacturing plant, you can show them that the savings in time, energy and effort that Teletalk provides can easily pay for its installation in a few months' time.

These savings come when high-priced executives no longer lose many minutes trying to contact each other . . . from extra call-backs avoided by taking care of matters instantly with Teletalk . . . from fewer errors.

War orders almost always give the proper priority. Teletalk is easy to install, operates from the electric light circuit. It will operate for years on a minimum of maintenance.

If you are not now handling Teletalk in your community, get in touch with us at once. Learn the profit-building possibilities it can offer you. Write us today.



Licensed under U.S. Patents of Western Electric Company, Incorporated, and American Telephone and Telegraph Company

WEBSTER WELECTRIC



These are Victory Capacitors. Available in voltages and capacitances selected to meet a wide range of servicing requirements. Indeed, the numbers listed, used either singly or in groups, can service about 90% of the usual capacitor replacements, while much critical material and labor are being conserved for the urgent needs of our fighting men. Therefore, use these Aerovox Victory Capacitors for Victory!

• See Our Jobber . . .

Ask him about your wartime servicing capacitor requirements. Be sure to order a supply of these Victory capacitors. Ask for latest catalog—or write us direct.



Room Coolers Headed for 60 Million Dollar Years

One of the important and fast growing postwar industries is going to be single-room fractional horsepower air conditioners or room coolers, even though only 5 or 6 years ago practically nobody knew what they were, according to Harry Boyd Brown, manager of air conditioning for Philco Corp.

"The fact that very few people understood what a room cooler was, what it did or how it functioned was probably the chief reason the entire industry sold only 30,000 to 40,000 of these units a year before the war," Mr. Brown believes.

"But the performance, service and utility of single-room air conditioners have been so outstanding and so apparent to the user, that word of mouth advertising within the past few years has done a remarkable educational job in so far as the general public is concerned.

"The news about air conditioners has spread so rapidly that in the first postwar year three times as many units will be made and sold as ever before, and it is not too radical a prophecy to say that three or four years after the war, annual volume should increase to six, or eight times that of 1941. In that event the business might amount to \$60,000,000 a year."

Operadio Names Kingsbury

Appointment of Harold H. Kingsbury as production control manager for the Operadio Manufacturing Company's 3 plants in St. Charles, Ill., has been announced by G. R. Haase, vice-president and general manager of the company.

Enemy Can't Match It!



Spectators at Chicago war exhibit examine Hallicrafters' noted SCR-299, mobile communications unit, which, according to adjacent sign, has no enemy counterpart.

Survey Shows Huge Pent-Up Demand in Milwaukee

Figures based on the results of a survey made by "The Milwaukee Journal" reveal that:

62,000 Milwaukee families want new

Over 145,000 Milwaukee families want a quick-freezing unit in their refrigerator.

Over 70,000 families want to purchase a separate quick-freezer.

Forty-four per cent of all families want new automatic washers, and 35 per cent want an ironer.

Sees Some Postwar FM Sets Selling at 60 Dollars

More than 5 million FM home radio receivers, some of which may retail at \$60, will be on the market within 18 months after the war, with the total going as high as 20 million within 5 years, H. A. Crossland, manager of sales, receiver division, of the General Electric Co., predicted in an address before the National Association of Music Merchants in convention at the Palmer House, Chicago.

As soon as the government authorizes civilian production of radio equipment, he estimated that from 5 to 6 months will be required by the industry before it can begin large scale merchandise production.

Beginning with first production, Mr. Crossland said, FM will dominate General Electric's product design, merchandising and advertising programs.

Philco Sales Executives Receive Promotions

Promotion of four Philco sales executives to positions as division managers in the company's postwar distribution organization was announced by Thomas A. Kennally, vice-president in charge of sales for Philco Corp.

Joseph R. McCoy has been named manager of Philco's atlantic division, with headquarters in Philadelphia, Pa.; Joseph A. Bilheimer becomes manager of Philco's central division, with headquarters in Chicago, Ill.; John F. Leahy has been chosen to be manager of Philco's Yankee division, with headquarters in Boston, Mass.; and John E. Ramsey is the new manager of the company's southwest division, with headquarters in Kansas City.

New Universal Catalog

A condensed version of Universal's catalogs on major and small appliances has been published by Landers, Frary & Clark, New Britain, Conn., to present distributors and dealers with a brief description of the features of representative models in the various appliance lines produced prior to the termination of manufacturing.

Printed in maroon and blue, the 28page catalog is one of the first of many newly styled catalogs and printed matter being planned to describe and depict Universal appliances.







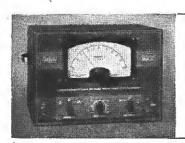
Doing an Outstanding Job

Jackson Service Labs provide custom-built appearance, but are comprised entirely of standard Jackson instruments—providing testing facilities to suit individual requirements.

New ones aren't available now, of course, but will be again—some day. But many of them are still performing—easing the work of service men everywhere, and contributing to the greater satisfaction of radio listeners.

The dependable performance of these pre-war Jackson instruments is more than matched by the stamina and accuracy of today's war-time models. Either or both, they demonstrate the INTEGRITY OF DESIGN that you'll want in your post-war instruments—by Jackson!

Buy War Bonds and Stamps Today



New Jackson Instruments, improved through war-time design and tested by war-time use, will be available to cope with the tremendous post-war radio rush. In the meantime, maintenance of Jackson instruments is an obligation that we honor as promptly as possible under war-time conditions.

Model 652 Audio Oscillator

JACKSON

Fine Electrical Testing Instruments

JACKSON ELECTRICAL INSTRUMENT COMPANY, DAYTON, OHIO

Magnavox Sales Head



George H. (Rock) Smith appointed sales manager of radio-phono division of the Magnavox Co., Fort Wayne, Ind.

Emerson Offers Dealers New Priority Sales Plan

The problem of supplying radios to consumers at a time when the manufacture of civilian radios is strictly prohibited, found partial solution in a "P.D.Q." plan, announced at a meeting of eastern distributors of the Emerson Radio and Phonograph Corp. in New York. Under this plan, outlined by Jack Geartner, advertising director, consumers are merely required to sign a register soon to be made available in radio stores, which entitles the registrar to a "Preference Delivery Quota" certificate. Effort will then be made to deliver radios when they become available to certificate holders.

The plan incurs no obligation to buy on the part of the consumer, but offers the promise that these certificates would expedite the delivery of the first postwar radios that roll off the assembly line.

In a keynote address, Benjamin Abrams, president of Emerson, estimated that the immediate postwar demands would absorb 25 million radios as soon as the government permitted production, while the industry's manufacturing potentiality represented between 15 and 17 million sets.

Mr. Abrams stated that even at the most accelerated rate of postwar production, it would take the industry years to fill the potential demand. He ventured the prediction that the demand for radios and allied products would result in an expansion of the industry into a 3 billion dollar volume as compared to its prewar volume of 3 to 4 hundred million.

Farnsworth Announces New Television Brochure

The Farnsworth Television & Radio Corp., Fort Wayne, Ind., has issued a brochure, "The Story of Electronic Television," in which the subject is reduced to everyday language and is profusely illustrated with color pictures used in Farnsworth national ads.

The brochure was published as the result of thousands of inquiries received by Farnsworth requesting "down to earth" information on the relatively new science of television.

Truesdell Sees Three Phases in Postwar Period

"The immediate postwar period is only one of three phases which should be considered by manufacturers and retail distribution outlets in planning for the future," declared Leonard C. Truesdell, assistant commercial manager, The Crosley Corp., when he addressed members of the Alabama Retail Furniture Assn., at their annual convention at Birmingham.

"These three phases are (1) the present period extending until the day when the first major appliances can be delivered to customers; (2) the immediate postwar period, with an abnormally high volume of sales continuing for some months after the war but probably not as long as some of us may expect; and (3) the long-range period, extending some years into the future," he said.

Truesdell pointed out that each period is closely interdependent on each of the others and that successful operation in one period will mean much for success in the others.

"During the present period, it goes without saying that the war effort must come first, in every respect," he declared. "However, it is part of a manufacturer's obligation to his wholesalers, his retail dealers, his retail salesmen and his consumers to utilize any time that is available in planning new products, planning manufacturing facilities and programs, analyzing markets, organizing the right kind of distribution organization and planning and preparing for the right kind of dealer organization."

While it is important for retailers to select established brands for postwar distribution, Truesdell pointed out that consumers of postwar goods will be primarily interested in products with the most attractive features that are available when they are ready to buy.

Stewart-Warner Will Remain in Radio Field

F. A. Hiter, senior vice-president of Stewart-Warner Corp., announces the appointment of Floyd Masters as manager of the radio division and at the same time disclosed the corporation's postwar program covering production of radio products.

Masters, since 1939 Midwest district manager for Stewart-Warner appliances, was formerly general sales manager for General Refrigeration Corp., Beloit, Wis. His experience in radio dates back to 1928, when he was sales manager of the radio division of Grigsby-Grunow Majestic Co. He is replacing L. L. Kelsey, who resigned to join Belmont Radio Corp.

Hiter's statement on the firm's postwar plans included the assertion that "Stewart-Warner definitely will remain in the radio business after the war, and will manufacture consumer sets to be merchandised through normal distribution channels. Our production will include AM and FM sets for both the general and farm markets in a wide variety of table and console cab-

Eight Makers Show War Products in Chicago

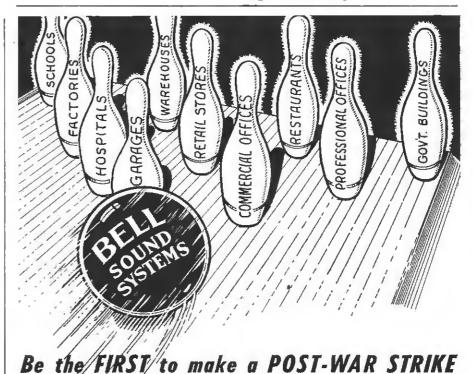
In one of the first major public showings, 8 leading wartime electronic manufacturers exhibited their radar and radio equipment in use on battlefronts throughout the world at a special four weeks' display at the Lyon & Healy loop store in Chicago.

Exhibitors were: Lyon & Healy, the Hallicrafters Co., and Galvin Manufacturing Corp., Chicago; Capehart Division of Farnsworth Television & Radio Corp., and Magnavox Corp., of Fort Wayne, Ind.; RCA Victor of Camden, N. J.; Sentinel Radio Manufacturing Co., Evanston, Ill., and C. G. Conn Ltd., Elkhart,

Hamilton Has Long-Range **Marketing Program Plan**

A. A. Juviler, president of Hamilton Radio Corp., New York, makers of "Olympic" radio, in announcing the appointment of Butler-Advertising, of the same city, as advertising counsel, said this move is part of a long-range marketing program, of which the first steps, including extensive consumer and engineering research, and an institutional series in domestic and export trade publications, are already

According to Mr. Juviler, the company expects to be in a good position to reconvert to civilian requirements rapidly, and is therefore in the process of readying its market set-up.



The wartime necessity for saving time has uncovered scores of new applications for sound equipment, and has multiplied the demand for it! This acceptance of sound as standard business and industrial equip-

ment will continue to grow in peace-times. Sound installations will be demanded in almost every type of building! So get ready now to start rolling as

soon as these

post-war markets open up. Be sure you get the first strike - with BELL Sound Systems. The complete BELL line puts every type of sound prospect right up your alley!

BELfone offers everything in "intercom" service. All the newest, most practical features - and many exclusive ones are available, including arrangements for private conversations between any two stations, simplified convenience of operation, and many others.

BELL Voice Paging Equipment provides for time-saving vocal paging . . , recorded music programs for workers . . . broadcasting of announcements or instructions to employees . . . auxiliary time or alarmsignaling. Its compact, rugged, "tamper-proof" units can be

used together in any combination, to fit needs of any type or



The complete BELL line also includes public address and phono-P. A. systems, amplifying equip-

ment, school radio-sound systems, recording and disc-playing equipment, and other sound needs - plus important new developments to be announced after Victory. Get lined up now for a perfect post-war sales score write for details!

BELL SOUND SYSTEMS, INC.

1186 Essex Ave.

Columbus 3, Ohio

Export Office: 4900 Euclid Avenue, Cleveland 3, Ohio



New Booklet Pictures Postwar Television Sets

In its new 28-page four-color booklet, "Your Coming Radio," the General Electric Company forecasts the innovations of postwar home radio and television equipment through illustrations.

The section of the booklet devoted to television shows drawings of "tomorrow's" models and includes consoles and table models, one of the former employing projection of images to a screen.

To gratify the wide-spread public interest in radio and television, "Your Coming Radio," which is sent free on receipt of a postcard request, is offered throughout the country on the General Electric sponsored news program, "The World Today."

Adds Baltimore to Its Territory



Frank M. Folsom, RCA Victor division head, and other company officials, greet Dave Schwab and Harry Spector, D & H Distributing Co., which has added Baltimore to its territory for RCA prod-

ucts. Left to right are Mr. Folsom, Dave Schwab, M. F. Blakeslee, RCA Victor's Eastern Regional Manager; Harry Spector, and T. F. Joyce, General Manager of RCA Victor's Radio, Phonograph and Television Activities.

J. H. Clippinger Resigns

Ross D. Siragusa, president of Admiral Corp., Chicago, made known at a board of directors' meeting the intention of J. H. Clippinger, vice-president in charge of sales, to resign from active participation in Admiral Corporation at the end of the war. Clippinger in his letter stated that he is resigning because of the health of his family which necessitates their moving from this locale. He also stated that he will remain with Admiral until all war contracts are terminated, after which he will rejoin his family.

Ditty of the Dealer

The daylight always follows night; From Adam's day we've known that's right.

We know clear skies will follow rain;

We know good times will come again.

We're fighting Hitler and the Jap.
What price the tiny little rap
That hits our business? Well we
know

It's not a solar plexus blow.

And when the new day dawns at

We'll more than make up for the past.

We'll have an ample stock of things

To sell. A stock that profit brings.

We'll do more business in a week Than in the days of which we speak,

The "Good Old Days" — why, they will be

The trade's prime joke, a mockery.

It's gloomy, raining now — well, then,

I know the sun will shine again!

W. T. DENNISTON



THE MEN AND WOMEN WORKERS OF THE ELECTRO-VOICE MANUFACTURING COMPANY WHO HAVE BEEN AWARDED THE "E" BY THE ARMY AND NAVY OF THE UNITED STATES.

PRESIDENT, ELECTRO-VOICE MANUFACTURING CO., INC.

albert Ko

Electro-Voice MICROPHONES-

ELECTRO-VOICE MANUFACTURING CO., INC. - 1239 SOUTH BEND AVENUE, SOUTH BEND 24, INDIANA

LETTERS TO THE EDITOR

Reader Complains of Unfair Distribution

Editor, Radio & Television Retailing:

Radiomen regret that there is no regulation to compel a radio distributor to prorate his allotments of materials. We know that there is no serious effort made by many manufacturers and distributors to allot materials to the professional radiomen of the country who are working hard and long to maintain civilian communications. We feel that the needs of this group of men should be met first, but our observations are, unfortunately, that equitable distribution of scarce radio tubes and batteries is made first to mail order houses, hardware stores, furniture stores and tire stores. The professional man (radio technician), who can make the best possible use of these vital necessities, does not seem to be considered at all.

300 Batteries

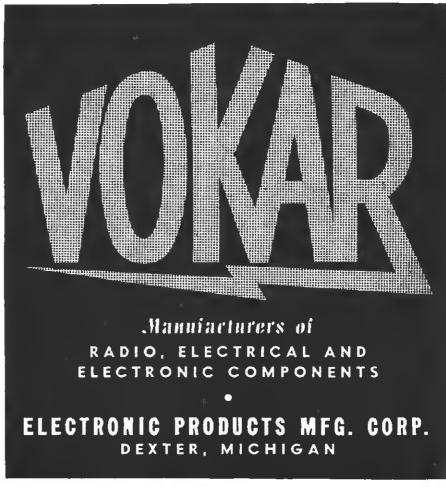
One mail order store recently received a two weeks allotment of three hundred batteries. The average professional radio shop, like our own, would not receive that many batteries in ten years under present allocations. This store in particular does not have, and never did have a radio service department. Does that sort of distribution seem fair?

We repair and maintain hundreds of radios bearing a well known, popular name. Yet, we learned today that an obscure hardware store received six times as many batteries in one shipment of this date as we have been able to beg in one year from that manufacturer's distributor. Obviously, this patriotic distributor, like many others of his kind, is planning for future sales. The motto "share what you have" to them applies only to waste paper and tin cans. Our credit rating is good, but we have been unable to convince this distributor that the men who are doing most to maintain his products should have a fair allocation of these scarce materials,

Search for Products

We recently approached a distributor who has been recommended to us by his manufacturer and asked for a share of his products. This concern is one of the combination wholesaler-retailer variety (a local auto parts store with absolutely no radio service department) and consequently, they can sell at retail all of the scarce articles which they receive for distribution. This distributor at first stated that he had not received any articles for distribution. When confronted with facts, regarding delivery dates and nature of products he had received for distribution, this big-hearted patriot stated that he had not sold any merchandise to us in 1941-42, and consequently, government regulations would not permit him to distribute to us. Well, chances are good that we did not buy anything from this concern in either 1941 or 1942, because at that time we were engaged in ducking torpedoes with the U. S. Merchant Marine fleets. We had (Continued on page 88)









OUT OF THE BLACK EARTH

NATURE has so planned it that out of black earth come beautiful flowers and the foods essential to our very sustenance. And so it is that from the darkness of the present hour... from the suffering and sacrifice of world war... will emerge a greater degree of understanding among men... more freedom for untold millions... and advanced ideas to make man's burdens lighter and life more enjoyable. Astatic, like so many other manufacturing concerns, has been broadened by the experience of war production, has employed its engineering skill and manufacturing facilities to create new products, the principles of which will be reflected in Astatic's commercial and civilian products of a new day.





HATRY & YOUNG



HARTFORD 3, CONNECTICUT

THE TUBE SITUATION

We get an allotment of roughly 1/5 the tubes you and we need. This allotment we distribute as fairly as we can. Spread thinly one allotment is not enough for ALL our customers but — when time enough has passed, all get some of all allotments.

★ SOME CUSTOMERS THREATEN

They say "we buy what else we need where we get tubes." Threats CAN'T stretch one tube into 5. We do not threaten nor do we insist on other purchases. Simple arithmetic tells us that a scarce system could not keep more than a fifth—it makes no sense. You have to find 4 more tubes somewhere else anyway.

* BLAME THE WAR

Humanly, some of you blame W.P.B. or the Government for the tube situation. What confusion exists can be laid equally well at the front-door of certain tube manufacturers. BUT, none of the problems that cause the practices at the root of the confusion—none of the problems!—would exist if WAR's life and death facts did not come FIRST.

★ BY THE TIME ? ? ? ? ? ?

By the time this is printed we hope PEACE has come. In any case, PEACE can begin at home if YOU will remember that we do NOT use the few tubes we get to lose customers.

Electronics Specialists



Consultants · Expeditors



temporarily suspended our business operation when it became apparent before and after Pearl Harbor that a shortage of ship radio officers existed. But, the fact still remains that many of these wholesaleretailer type of distributor are not distributing except to their own stores or service shops. They, together with the mail order houses, have an unfair tie-up with the manufacturer. Why not make an effort to break up this unholy alliance?

Shortage Is Acute

We know there is a serious shortage and none of us desire any course of action which will weaken the war effort. Scarce radio parts, tubes, and batteries can be most efficiently handled by professional radiomen. If the doctors or other professional groups found their much needed materials maldistributed, they would immediately and in unison start such a clamor that the ensuing noise would cause Hitler and Tojo to think a new front had started. Radiomen are not vocal and are not organized into protective groups, but why not make an effort to see that this group is treated more fairly?

Real Effort Asked

Our observations coincide with many others and are stated generally, because we are completely at the mercy of the manufacturer and his distributor. There is, as you know, no legal way in which we, ourselves, can manufacture these needed and scarce articles. Most of us feel that we are performing necessary work and are only asking the assistance and protection of the office responsible for efficient wartime use of scarce radio products. We are not in a position to make suggestions. All we are asking is that a more determined effort be made to place scarce radio parts, tubes, and batteries in the hands of professional radio shops.

SUBSCRIBER

Used Equipment Sale Without Priority Asked

Editor, Radio & Television Retailing:
Limitation Order L-265, (b) (2) provides "... no supplier ... shall transfer any electronic equipment to any consumer ... except ... to fill orders bearing a preference rating of A-1-a or higher

The interpretation put on this clause by the local Priority Division of the WPB, which contains the word ANY, is that it also includes USED, REBUILT or RE-CONDITIONED EQUIPMENT.

We cannot believe that this was the intent of the WPB when they issued this order. We believe their purpose was to prevent the promiscuous flow of NEW equipment; to compel the factories to restrict their manufacture to necessary defense and military uses and to limit the civilian purchase of electronic equipment to plants engaged in the production of necessary war materials,

It stands to reason that a war industry which feels the need of and which will make priority application to obtain this equipment, will not accept used or rebuilt equipment as long as they are able to obtain new equipment on their priority

rating. To save the few dollars which may be involved would not interest them. They would prefer the certainty of good performance which they would get from new equipment rather than the uncertainty which might result from old, repaired equipment.

Most of the USED equipment can only be sold for "second rate" purposes; those businesses which do not have, or cannot obtain a priority rating by virtue of the KIND of things they manufacture or sell, yet which in a measure contribute to the overall war effort. These are the logical outlet for this "recovered" merchandise.

Modify L-265

For the very larger part, this electronic equipment of which we speak, is the small inexpensive intercommunicating systems usable by the smaller manufacturers and distributors, whose money value in most instances will range from \$40 to \$75 and which would represent a small fraction of the overall electronic business.

Certainly no benefit can be obtained by excluding the sale of this used electronic equipment, and thereby letting it go to

waste and ruin.

We believe some action should be taken by an organized body within the "electronic group" which will seek to have modified Order L-265, so as to permit the sale of this used equipment WITHOUT PRIORITY . . . or at least, permit it to be sold under an MRO, as formerly obtained.

Jos. A. STIFFELMAN Radio Communications Co.,

St. Louis, Mo.

Don't Start Tele Off On "Wrong Foot," Asks Seldes

Gilbert Seldes, director of CBS television programs, in a talk before the Kiwanis Club of New York asked that a reasonable period be allowed after the war to adapt new electronic discoveries to television, before the new video art be launched as a full-fledged industry.

"At the moment," said Seldes, "everything depends on our having, after the war, a little time to consolidate the enormous technical advances in electronics under the grim pressure of necessity. Radar, and, we are told, other inventions even more spectacular, embody some of the same principles and variants of the same mechanisms as those used in television. If we take the time to put them together, we will know with certainty how good a television picture—and that means how good a television program—we will be able to create in the immediate future.

"If we rush in, without taking advantage of all the new discoveries, we may for the third time start television off on the wrong foot. And three strikes—as you know—is out," Mr. Seldes said in part.

New Booklet

Catalog of Pilot Light Assemblies No. 43 includes complete line jeweled pilot lights and lamps of Dial Light Company of America, 90 West Street, New York 6, N. Y.

Radio Sets Lead in Items Needing Repairs

Radios stand out as the item most in need of repair, according to the results of a survey based on replies from about 4,500 households, "geographically and economically representative of the nation as a whole," just completed by the Office of Civilian Requirements, War Production Board.

Among radio-owning households, 8 per cent have none in working order. The extent of need for service and repairs found in the survey ranged from 1 per cent for electric water heaters to 28 per cent for radios.

WPB said that more than half of the domestic radios in current use are 5 years old or more; that more than half of the people replying to the questions reported that they had no difficulty in obtaining repairs. In estimated number in households, radios lead the list of items, with more than 46 million in homes of the country, says the report.

Of the heavier household appliances, mechanical refrigerators stand first in estimated number in American households—about 2r million. The survey showed that owners reported that 98 per cent of refrigerators are in working order; 63 per cent of mechanical refrigerators are 5 years old or older.

Eighteen and a half million washing machines are estimated to be in house-holds; 95 per cent of these washers are in working order although 72 per cent of them are more than 5 years old, says the report.



The superiority of Ken-Rad "self-shielding" metal tubes is best exemplified by 10 years' successful manufacture of over sixty million Today millions more are demanded by the military This experience and capacity becomes available for civilian requirements postwar



Firms Honored for War **Production Increases**

Major General Harry C. Ingles, Chief Signal Officer, has telegraphed his thanks to workers in the acco-electronic plant of International Detrola Corp., Detroit, for producing an enormous quantity of sorely needed mine detectors, against a one-day deadline, for immediate combat

For the fourth time in less than 2 years Zenith Radio Corp., Chicago, has received the Army-Navy Production Award for outstanding achievement in producing materials essential to the war effort.

For outstanding achievement in producing materials essential to the war effort, the Philadelphia plants of Philco Corp. have been honored with their fourth Army-Navy "E" award.

in its history.

The Army and Navy "E" has been awarded to the Universal Microphone Co., Inglewood, Cal. The presentation and acceptance took place on the new paved parking area where specially constructed bandstand and bleachers were erected for the occasion.

To date Philco has received a total of thirteen "E" awards for its war production record, and the company's output of war materials is at the highest level

general sales manager of the corporation. Bill Kelley is well and favorably known to the radio trade, having been an important sales executive of RCA for a period of 20 years. He recently resigned

Paul V. Galvin, president of Galvin

Mfg. Corporation, makers of Motorola

Home and Car Radios, announces the ap-

pointment of Wm. H. (Bill) Kelley as

Kelley Named to Head

Sales for Motorola



William H. Kelley

as their regional manager of the San Francisco district, and will assume his new duties with Motorola Sept. 1.

Prior to his RCA association, Mr. Kelley spent 2 years in the sales department of Garod Radio.

Mr. Galvin states that the management of the Motorola sales and products organization is otherwise unchanged. Elmer H. Wavering will continue to head the Car Radio Division, Walter H. Stellner will continue as manager of the Home Radio Division, and N. E. Wunderlich remains sales manager of the Police Radio Division. Advertising and Sales Promotion activities will be handled by Victor A. Irvine.

Philco Sales Manager



William E. Kress, left, newly-appointed Philco sales manager for the middle west, congratulated by Thomas A. Kennally, Philco vicepresident in charge of sales.

A FAST SELLING "CASH & CARRY" PROFIT BOOSTER—This "Treasure Pack" of the



BACH-BEETHOVEN BRAHMS-TSCHALKOWSKY

> With biographies of the four immortal composers and portraitures suitable for framing.

ONLY \$

Yes! "A most amazing record value." Six superb symphonic recordings, the most demanded works of these four great composers, most loved, most popular in all classical music. There are 3 different packs, each presenting

a different program of favorite symphonies. Music of all four composers is included in each pack. Program notes explain and enhance the enjoyment of the familiar symphonies; intimate character stories and beautiful pictures bring to life again these great men of genius. Music lovers will want all three packs at once, at \$1.39 each, wrapped and ready to carry out. Limited quantity available. Send your order by return mail. Make a feature of these remarkable "Treasure Packs." Customary discount applies.

· Each Treasure Pack consists of three 10-inch double-faced records of symphonic treasures by the immortal Bach. Beethoven, Brahms and Tschaikowsky. Included are portraitures biographies and notes on selections.



MUSIC CONTINENTAL

630 S. Wabosh Avenue, Chicago, Ill. 251 Fourth Avenue, New York, N. Y. COMPANY,

569 Missian Street, San Francisco, Calif. 150 Marietta Street, N. W., Atlanta, Ga.

RADIO TUBE ADAPTORS

We manufacture Radio Tube Adaptors and sell at wholesale prices only. Any type adaptor made to order. All types in stock now. Here are some of the adaptors we have:

For	Use
80,5Z3,83	5040
12A8	7A8
12SQ7	706
125K7	14A7
3525	35Z3
125A7	14A7
125A7	7A8
1A7	1LA6
1A7	1LC6
35Z5	1235
1A5	1LA4
1A7	1C6
IA	ICO

Lots of twelve.....\$.54 each Smaller lots.....\$.60 each

Plus 10% Federal Tax All orders must be accompanied with Signed Limitation Order L-265.

Mail order business only.

Manor

Electric & Appliance Co. 3236 SOUTHPORT AVENUE CHICAGO 13, ILLINOIS



ROLLING ON TO



★ Clarosiat continues to be engaged 100% in the most important job of all—winning the war—on land, see and in the air.

But after victory has been won, Clarosiat promises the trade—servicemen, Jobbers and others—that Clarosiat products for initial and replacement uses alike, will once more be generally available for peacetime pursuits. Meanwhile, let's keep 'em rolling!





Treasury Offers Surplus Appliances for Sale Now

Companies desiring to be informed regarding surplus merchandise offered for sale by the Treasury Procurement Surplus War Property Division should write to the nearest regional office asking that their names be placed on the mailing list, and specifying merchandise lines interested in.

Some of the property to be sold by the Treasury, according to information received includes electric appliances, household and commercial; dry cell batteries, home type laundry equipment, home sewing machines, radio broadcast receivers, air conditioning and refrigeration equipment, household refrigeration controls, etc.

A list of the regional offices follows:

Park Square Bldg., Boston, 16, Mass.

1229 20th St., N. W. Washington, 25, D. C.

Room 300 209 S. LaSalle St., Chicago, 4, Ill.

10 Forsyth St. Bldg., Atlanta, 3, Ga.

2605 Walnut St., Kansas City, 2, Mo.

2005 Fifth Ave., Seattle, 1, Wash.

76 Ninth Ave., New York, 11, N. Y.

Faller Bldg., 8th & Walnut Sts., Cincinnati, 14, Ohio.

7th Fl., Exchange Bldg., 1030 15th St., Denver, 2, Col.

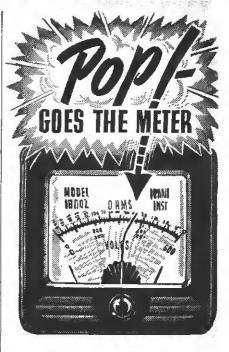
609 Neil P. Anderson Bldg. Fort Worth, 2, Texas

30 Van Ness Ave., San Francisco, 2, Cal.

Greet New Aero Official



Stevens S. Clark, new vice-president Aero Needle Co., Chicago, is welcomed by Burton Browne, president of the company and Fred Williamson, chief engineer.

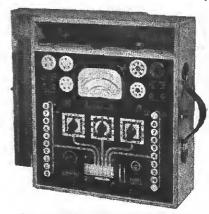


What happened to your meter when you made a miscue and slammed the pointer against the stops? Does the pointer above revive unpleasant memories?

Until Supreme started production of its own meters, the best general purpose meters available were secured for our test equipment. They were good. . as good as any general purpose meter can possibly be. Today, however, Supreme built meters are designed for one specific field...the electronic service man.

Think back over the past years. How many days and dollars have you lost because of a slammed meter? No meter is indestructible, but these Supreme Meters can take it, Accurate? Yes! And double-rugged!

Investigate when considering postwar service equipment.



Supreme 504-A Tube and Set Tester. One of many test instruments incorporating a Supreme Meter.



Electronic Products

Military requirements and limitations necessarily restrict our deliveries but our best efforts are being used to apportion production fairly among all distributors.

Appreciating your understanding cooperation, we look forward to again serving adequately the requirements of industry when victory is achieved and normal conditions once more prevail.

THO PRODUCTS LABORATORIES

\$49 West Randolph St. Chicago 6, III.

WARTIME RADIO SERVICE

SUPPLEMENT NUMBER ONE

Have thousands of satisfied users. Tube substitutions simplified. All data compiled from practical experience. No reference needed.

Over 1,200 substitutions contained in book and supplement. 58 full pages of valuable information.

Practical—Profitable—Tested Data, text and diagram for electrifying 1.4v and 2v battery radios.

Diagram and text for building a filament welder with which you can repair many tubes.

Best methods for making adaptors.

WARTIME RADIO SERVICE \$3.00

SUPPLEMENT NUMBER ONE \$1.00

Get them both from your distributor today or order from

CITY RADIO COMPANY

504-06 East Washington Street

PHOENIX

ARIZONA





2344 WEST ELM STREET, DEEP RIVER, CONN.

Show

XceLite Hollow Shaft Nut Drivers get into tight places

Seeing is believing! Display—explain the advantages of these XceLite tools. You find scores of quick-to-buy customers. On all types of radio panels, telephone and switchboards, XceLite Hollow Shaft Nut Drivers (shaft insulated if desired) speed up nut handling, even in awkward installa-tions. The hollow shaft slips over protruding studs; the accurately machined socket accommodates two nuts. Genuine shock-proof XceLite handle. Seven sizes, from 5/16" to 5/8" (nut sixes). Priorities required—delivery necessarily delayed by war conditions. Details and prices on request. Write Dept. M.



PARK METALWARE CO., INC. Orchard Park New York

XCELITE

Back the Attack — Keep the War Bonds You Buy

Former "Rep" in Army



Lt. Merrill K. Franklin, veteran factory representative, Minn.-St. Paul area, recently transferred to his old stamping ground from Seattle.

N. Y. Electronic Mfrs. Organize to Handle Production Problems

At a meeting of radio and electronic manufacturers operating in the New York metropolitan area, held at the Hotel Waldorf-Astoria, August 2, the formation of the Electronics Manufacturers Association, Inc., was completed by the election of officers and directors. Principal functions of the new association are to handle production problems, establish harmonious labor relations, and represent local electronic employers before U. S. agencies.

The New York association comprises manufacturers of radio sets, radio parts and other electronic products operating in the metropolitan and adjoining areas. Its officers are: I. Walter Wyckoff, Pilot Radio Corp., president; Arthur Freed, Freed Radio Corp., vice-president; Samuel J. Novick of Electronics Corp. of America, secretary-treasurer, all of whom are also directors. Other directors are David Wald, United Scientific Laboratories, Inc.; Jack M. Marks, Fada Radio & Electrical Co. Inc.; Percy Schoenen of Hamilton Radio Corp.; and Harold Shevers, Espey Mfg. Co., Inc.

Littelfuse Sales Head



R. G. Akin, who has been appointed sales manager, midwest division Littelfuse, Inc., Chicago.

ALLIANCE "Even-Speed" Phono-motors Good News!

ALLIANCE RESUMES PRODUCTION on One Standard Model

• We are now able to return to production of one standard variation of Alliance Model 80 Phono-motor, according to the following definite specifications and on the production plan explained below.

STANDARD SPECIFICATION No. 811—Turntable No. Y-278-S2; 110 Volt, 60 cycle, 9" Model 80 Production must be on the following practical basis under present conditions where there are no large volume priority orders—namely, by accumulating a sufficient quantity of small orders with necessary priority and making periodical single production runs at such time as the quantity of accumulated orders is enough to make this practical. Priority orders (currently only orders of AA-3 or higher, with GOVERNMENT CONTRACT NUMBER and MILITARY END USE, or where certified to be used in Sound Systems, Intercommunicating or Paging Systems, as exempted from order M-9-C) must allow delivery time required to obtain a minimum practical production run; to procure material for all orders in hand, and make one production run of the one type standard unit only, for shipment on the various accumulated orders. • Check the above against your requirements, and if you have proper priority, communicate with us.

REMEMBER ALLIANCE—Your Ally in War as in Peace!
AFTER THE WAR IS WON, WE WILL TELL YOU ABOUT SOME NEW AND STARTLING IDEAS IN PHONO-MOTORS

ALLIANCE MANUFACTURING COMPANY ALLIANCE, OHIO



Getting things done faster with AMPLICALL Paging and Two-Way Communications Systems is enabling thousands of industrial plants to save many man-hours daily ... actually multiplying their manpower! And the stand-out quality and flexible design of AMPLICALL equipment is enabling RAULAND jobbers to build up a profitable business right now. RAULAND national advertising, aimed at the nation's top-flight industrial executives, is also backing up jobber sales efforts, bringing them many new contacts.

THE RAULAND CORPORATION . CHICAGO 41, ILLINOIS

Electroneering is our business

BACK THE



BUY MORE WAR BONDS

RADIO - RADAR - SOUND - COMMUNICATIONS - TELEVISION

Speed Queen Sees Some Washers in November

In a statement appearing in its house organ, "Speed Queen Agitator," Barlow & Seelig Mfg. Co., Ripon, Wis., declare that the outlook for resumption of washing machine manufacture is brighter. A portion of the article follows:

"While the outlook for the resumption of washer and ironer production for the civilian market is much brighter than it has been, there is very little chance of any machines being available for delivery to dealers before 1945.

"The latest information we have is that the way will be open for our industry to begin building washers again, on a restricted basis, by November of the current year. Of course, when that 'go ahead' signal is actually given by the War Production Board, the manufacturer still faces the problem of securing his raw materials from whatever surpluses may be available, not needed by war industries.

"He must also set up his production lines, and recruit his help from those not already employed on war production jobs.

"Here at Barlow & Seelig we are setting our sights on the goal of being able to make some deliveries in January of 1945. Our plant is in order, and while we are handling a capacity production of war materials we are ready on short notice to swing into production of washers and ironers."

Playing "Postoffice"—Modern Version



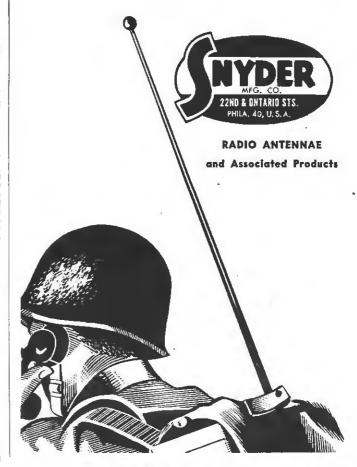
A Los Angeles talking mail box gets a break as actress Lynne Baggett discloses her address in order to discover the mail zone. You walk up, tell your address, and the box answers with the right number, all part of an effort to make Los Angeles mail zone conscious.

ELECTRICITY For Any Job — Anywhere

For a dependable source of electricity on projects remote from commercial power, Onan Electric Plants are proven leaders in the field. More than half of the armed Forces' total requirements for Power plants are built by Onan.

Gasoline driven. . . . Single-unit. compact design. . . . Sturdy construction. . . . Suitable for mobile, stationary or emergency service.





Heads Home Radio Sales



John M. Otter, new sales manager for Philco's home radio division.

Consider Manufacture Resumption, Asks Nance

The Zenith organization, from laboratory and factory to distributor and dealer, is stronger and in better shape today than ever before in the company's history, J. J. Nance, vice-president and director of sales, told a group of midwestern Zenith distributors at a round table conference in Chicago.

"The time is approaching when we can begin to consider the resumption of civilian manufacture," said Mr. Nance. "We must consider ourselves fortunate that we adopted, more than three years ago, a policy of confining our war production to the field we know so well: mass production of radionic equipment.

"Through the war years we have retained almost all of our key sales personnel by having these men devote their talents to expediting materials and to supervising war contracts. They have done an admirable job. During the same perriod we have maintained close ties with our dealer and distributor organizations, ties which will be strengthened in coming months."

Postwar Refrigerator



Here's a glimpse of Admiral's new refrigerator, with built-in freezer, developed by Stewart-Warner early this year.

May Ready for Postwar Distribution Avalanche

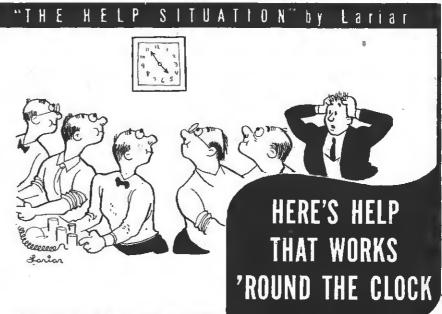
D. W. May, head of the newly-formed D. W. May Corp., 1 E. 42nd St., New York, has announced the scheduling of a postwar meeting and smoker for all metropolitan New York, northern New Jersey and Fairfield County, Conn., radio, television, refrigerator and home appliance retailers, Aug. 16, at the Hotel Commodore, New York.

Announced features of the meeting include the display of postwar models and the revealing of the plans of a number of manufacturers, as well as those of the May organization, which has been appointed distributor for a complete line of radio, television, recorders, refrigerators,

home freezers and also home laundry equipment, vacuum cleaners, electric and gas ranges, kitchen cabinets and a new hearing aid.

Galvin Postwar Plans

The sales management of the Galvin Mfg. Corporation is now developing complete plans for postwar radio distribution, many of which will soon be announced to the trade. The company will resume the civilian production of a complete line of AM and FM home radios, automatic phonographs, portable and personal radios, standard and specific automobile sets and 2-way radiotelephone systems immediately the green light has been given by the WPB.



Today you have to be patient with your employees. They are working hard and under great pressure. But you have to be sure that their working hours are as productive as possible — you must provide them with every kind of servicing aid. Such as Rider Manuals.

Never have these authoritative volumes been so widely used as today when speed in the tracing of circuits means not only additional profits, but the development and preservation of invaluable good will among employees and customers. Have all thirteen volumes of Rider Manual on each of your benches. Check the list to the right—order any missing volumes today.

Check, too, the list of Rider Books. They're chock-full of technical information that can further speed your repair work and enable you to make the most of your present opportunities to add to the volume and good will of your business.

PLACE YOUR ORDER TODAY!

RIDER MANUALS (13 VOLUMES)

Valumes XIII to VII.....\$11.00 each valume Valumes VI to III..... 8.25 each valume Abridged Manuals I to V [I valume]...\$12.50 Automatic Record Changers and Recorders 6.00

OTHER RIDER BOOKS YOU NEED

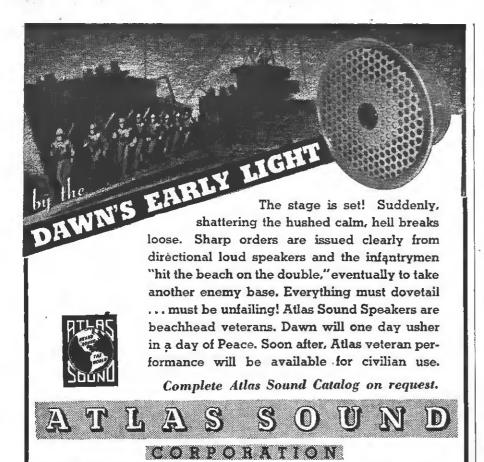
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Accepted outhority on subject	3.00
Frequency Modulation	
Gives principles of FM radio	1.50
Servicing by Signal Tracing	
Basic Method of radio servicing	3.00
The Meter at Work	
An elementary text on meters	1.50
The Oscillator at Work	
How to use, test and repair,	2.00
Vacuum Tube Voltmeters	
Both theory and practice	2.00
Automatic Frequency Control Systems	
-also automatic tuning systems	1.25
A-C Calculation Charts	
Two to five times as fast as slide rule,	7.50
Hour-A-Day-with-Rider Series-	
On "Alternating Currents in Radio Receivers"	
On "Resonance & Alignment"-	
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RIDER MANUALS
GIVE YOU THE HELP YOU NEED!





1451 39th Street



Brooklyn, N. Y.

Angle Issues Call to Radio-Minded Youth

A ringing call to the nation's radio engineering-minded youth in the armed forces or at school to assume their places in the profession "with the least possible delay" was sounded by Wesley M. Angle, president of the Stromberg-Carlson Co.

The Rochester, N. Y., communications executive, writing in the current issue of the official publication of the Institute of Radio Engineers, beamed his words in the specific direction of communications engineering "because that field promises to offer richer, fuller and more compelling interests than its sister fields in tomorrow's world."

In his article, entitled "Radio—Past and Present," Mr. Angle sketched the communications engineer's function since the science's early days as he saw it from his vantage point at the helm of the fifty year old radio manufacturing firm.

Emerson Launches "PDQ" Postwar Delivery Plan

Miss Frances Lessin of New York City does not have to worry about predictions that new radios will be scarce for more than a year after the war. She was put



Miss Frances Lessin is all set to enjoy a brandnew Emerson radio. She signs on the dottedline and will get receiver No. 1.

on the list to receive the first Emerson radio to roll off the assembly line when production is resumed.

Miss Lessin, shown in the picture, is filling out the first registration blank under the "preference delivery quota" program just launched by the Emerson Radio and Phonograph Corp. Shown with her is Perk R. Bowers, manager of The Rudolph Wurlitzer Co., well-known Emerson Radio dealer.

No Down Payment

Under the Emerson Radio "PDQ" plan, consumers throughout the country are invited to register now with any authorized Emerson Radio dealer, indicating what type of radio they will want to buy after the war. In return, they receive a "preference delivery quota" certificate. No down payment is required.

KATOLIGHT A.C. GENERATORS

Furnish Same Current as City Power Lines

Kato Engineering products are carrying out an important job in the War Effort.

A maneuvering fighting force cannot arrange for a power line hook-up. KATOLIGHT GENERATORS furnish electricity on the field of battle which permits equipping our fighting forces with the most modern electrical appliances.



"10 K.W. Revolving Field Generator"

Fighting forces need guns, planes, tanks, trucks, kitchens, emergency hospitals, lights, etc. To keep this equipment going, complete repair equipment such as drills, grinders, saws, air-compressors, etc., are needed. Standard A.C. electricity, the same as you get from the power line, must be had for operating these devices. Portable KATO-LIGHT GENERATORS supply this electricity. They also supply current for radio transmitters, beacons, landing field controls, etc.

Available in all standard voltages and sizes up through 25,000 watts. Also manufacturers of rotary converters, frequency changers, motor-generator sets, gas engine driven battery chargers, high frequency motor-generators and converters.

KATO ENGINEERING COMPANY

21 ROCK STREET

MANKATO, MINN., U.S.A.

Any difficulty obtaining PARTS?

Write for our latest catalog listing Condensers, Speakers, Volume Controls, Vibrators, Resistors, Transformers and hundreds of hard-to-get replacement parts at unbelievably low prices!

* IMMEDIATE DELIVERY



73-d EAST MILL ST., AKRON 8, OHIO

WANTED FOR CASH

for EXPORT ONLY

any quantity radio tubes, speakers, transformers, chokes, condensers, amplifiers, microphones, vibrators, of all types.

Write or wire what you have, with prices.

HARRY J. SCHEEL, EXPORTER

2654 Morse Ave., Chicago, III.



Dealers report steady increase in demand...

Good news travels fast. Fidelitone's nation-wide advertising and its many thousands of delighted users are spreading the news of Fidelitone superiority everywhere. Use Fidelitone counter and window displays, free literature and other sales helps to identify your store as one that recommends America's fastest selling long-life phonograph needle... Fidelitone Deluxe Floating Needle.

PERMO, Incorporated 6415 RAVENSWOOD AVENUE, CHICAGO 26; ILLINOIS

Radiant's SALES POLICY

FULL COOPERATION

Radiart's Sales Policy has been and will continue to be based on full cooperation with our jobbers and service men.

Our civilian production is divided equitably among our jobbers to give each his share.

Our catalog (a new one is now being printed) is designed to give the greatest possible help on all vibrator problems. It is the only catalog with complete cross index.

Radiart is a leader in the vibrator field. Our entire sales policy of full cooperation with our jobbers and service men is directed toward maintaining that leadership.

Radiart Corporation

3571 W. 62nd. St.

CLEVELAND 2, OHIO





 For long life in repairs for those expensive high-class service jobs on amplifiers, public address, police and school systems and all good electronics equipment.

All capacitors from .0001 to .25 from 600 volts to 2000 volts.

It is year duty to buy war bonds Literature and prices



Music Group Elects McCormack President

The forty-third annual convention and wartime educational council of the National Association of Music Merchants, held at the Palmer House, Chicago, July 24 to 26, was a well-attended event where a trade exhibit of musical merchandise was one of the features.

Dwight F. McCormack, vice-president of Sherman, Clay & Co., San Francisco, was elected president, succeeding Harry D. Griffith, of Newark, N. J.

The other officers elected were: Carl Wittich, head of Wittich's, Reading, Pa., whose firm's operation was featured in an article in the March issue of this magazine; L. G. La Mair, Lyon & Healy, Inc., Chicago; Russell B. Wells, vice-president Charles E. Wells Music Co., Denver, Col., and Ensign Paul E. Murphy, M. Steinert & Sons, Boston, vice-presidents.

List of Directors

William R. Steinway, of Steinway & Sons, New York, was elected secretary, and the following directors were named: George L. Byerly, Byerly Bros. Co., Peoria, Ill., Ray S. Erlandson, vice-president Wurlitzer Co., Cincinnati; Paul Jenkins, Jenkins Music Co., Kansas City; Parker M. Harris, president Philip Werlein, Ltd., New Orleans; Frank O. Wilking, Wilking Music Co., Indianapolis; Thomas Dahl, president Thayer Piano Co., Honolulu; Earl Campbell, Campbell Music Co., Washington, D. C., and Harry Callaway.

Many Exhibits

A number of well-known radio manufacturers reserved booths at the show, and these included Capehart, Garod, General Electric, Magnavox, Waters Conley, Meissner, Philharmonic, Wilcox-Gay and Admiral.

Phonograph record, needle and accessory manufacturers included Decca, RCA Victor, Duotone, Walco, Permo, Peerless Album, Columbia Recording, Musicraft, Capitol and Continental Music Co.

Joins Wilcox-Gay Staff



Gerald E. Murphy, formerly with Tung-Sol, has taken position on sales staff of the Wilcox-Gay Corp., Charlotte, Mich., according to announcement by Warren Hasemeier.



Electronics

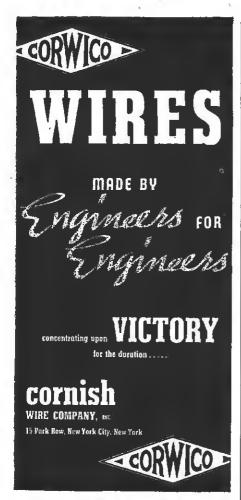
Operadio-built Electronic Interphone Systems link the members of a bomber crew into an effective fighting team...on the war production front the same system—Operadio FLEXIFONE—gives busy executives instant inter-office communication. Today we are using our quarter century of experience in precision and quality craftsmanship to plan better electronic equipment lines for you!

oPERADIO

Electronic Specialists

OPERADIO MANUFACTURING CO., ST. CHARLES, ILL.







UNIVERSAL STROBOSCOPE

This handy phonograph turntable speed indicator, complete with instructive folder, is now available gratis to all phonograph and recorder owners through their local dealers and jabbers. As a recorder aid the Universal Straboscope will assist in maintaining pre-war quality of recording and reproducing equipment in true pitch and tempo. Universal Microphone Co., pioneer manufacturers of microphones and hame recording components as well as Professional Recording Studio Equipment, takes this means of rendering a service to the owners of phonograph and recording equipment. After victory is ours—dealer shelves will again stack the many new Universal recording components you have been waiting for.



Named Postwar Planner



Lester L. Kelsey, above, has been appointed a member of the executive staff of Belmont Radio Corp., Chicago. He will assist in postwar plans.

War Council Meeting

Nearly 400 enthusiastic members and supporters of the Music War Council of America, attending the second annual meeting of the organization at the Palmer House, Chicago, July 24, applauded the annual report of Max Targ, retiring president, in which he reviewed the Council's achievements during the past year.

Ray S. Erlandson, Chicago, who was elected later on the program to succeed to the presidency, presented distinguished service citations to Mrs. Royden J. Keith, for 4 years president of the Illinois Federation of Music Clubs; Charles Schneider, promotional editor of the Cleveland Press; and Andy Arcari, internationally famous accordionist.

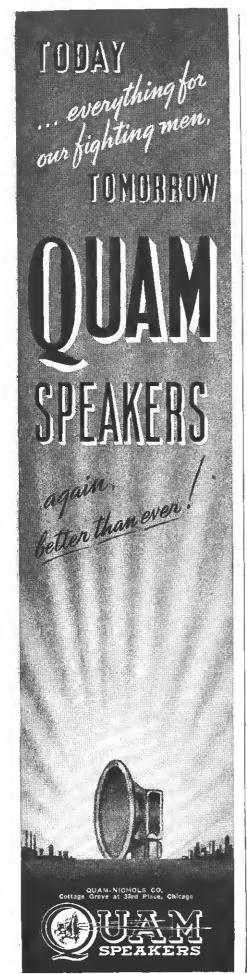
Distribution Pattern Changing, Robbins Says

"The pattern of retail distribution has changed like so many other things due to the war impact, and as a result necessitates a completely new analytical study," Charles Robbins, vice-president of Emerson Radio and Phonograph Corp., New York City, declared when he addressed a meeting of the company's eastern distributors.

Mr. Robbins pointed out that with greatly expanded production facilities, augmented by the drive to maintain in the postwar era a high degree of purchasing power, the distributor will be called upon to play an increasingly important part. Mr. Robbins said, "The distributor must perforce become a 'salesmanager' for his respective territory. He must survey and thoroughly analyze his area with a view towards achieving extensive, yet intensive, retail distribution.

"For this purpose, we have provided each Emerson Radio distributor with the material and basic ingredients to thoroughly dissect his territory, and thereby set a goal to accomplish the necessary objective."





Servicing L.F. Amplifiers

(Continued from page 62)

little about this, but the maker of the transformer can (and usually does in the case of high grade transformers). Thus in the solid curve C of Fig. 6, for the high-quality broadcast service transformer there is a resonance peak at 10,000 cycles, produced by tuning the transformer inductance with the capacitance of transformer and circuit to 10,000 cycles. Here the leakage inductance is referred to, obtained by measuring the primary's inductance on a bridge with its sec-ondary short-circuited. That this is the actual cause is shown by the dashed curve in C for a similar transformer working into 500 ohms. The 10,000 cycle rise by resonance, cannot take place with only a 500 ohm load. Similarly the solid curve D shows a resonance which has been moved out to 30,000 cycles by diminishing both the capacitance and the inductance of the transformer secondary. In the absence of this high frequency "bump" the curve simply droops in the permanent manner of the dashed curves.

NEW BOOKS

Shop Job Sheets in Radio, Book 1, Fundamentals

By Robert Neil Auble. Published by The Macmillan Co., 60 Fifth Avenue, New York City.

This handbook contains experiment or job sheets designed to assist the beginner in radio to obtain a practical working knowledge of the electrical fundamentals of radio. The book is designed for use in well-equipped radio work shops and offers 30 problems from electrical fundamentals to construction of simple receivers and simple test equipment.

Each job sheet is laid out stating the objectives of the experiment, references to text books, the procedure to follow plus other information required to do the jobs. Space is given to answer the questions printed on the sheets. The price of the Job Sheet Book is \$1.50.

How to Pass Radio License Examinations. Second Edition

By Charles E. Drew. Published by John Wiley & Sons, Inc., New York, N. Y.

This 320-page volume contains a series of questions and answers on basic radio regulations, theory and principles of radio-telephone and radiotelegraph equipment. An appendix includes rules governing commercial radio operators, extracts from radio laws, Q signals plus miscellaneous useful engineering data. The price of this book is \$3.00.

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CHOICE OF QUALITY

RADIO COMBINATION

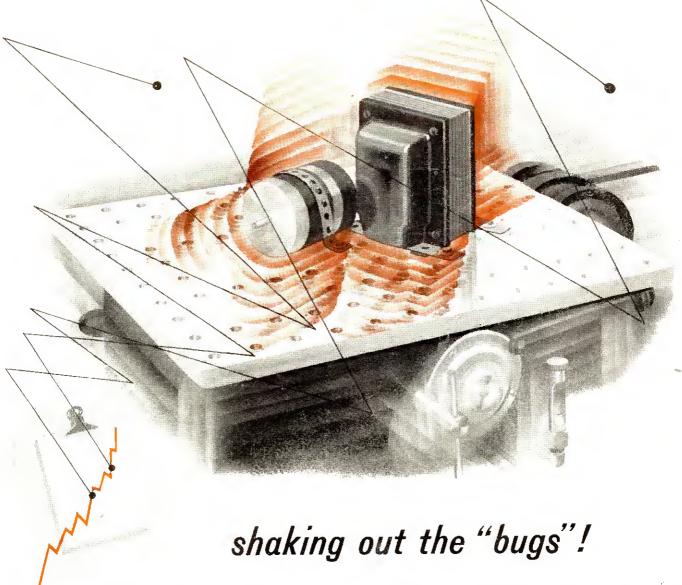
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AFTER VICTORY!





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Vibration is a deadly enemy. Unless equipment and parts can withstand its destructive force, irreparable damage results at crucial moments.

Parts tested on Utah's Vibration Lifetest Equipment have the "bugs" shaken out of them before they are ready for quantity production; are again proved by this "power dive" test of production runs...assuring unfailing performance. Equipment being tested is subject to vibration up to 25G.

As a result of this and other tests, many engineers' "brain children" grow up in the Utah Laboratories and on the production lines to play their parts in today's war effort. Tomorrow, these war-

created radio and electronic improvements will be adapted to peacetime needs—aided by these new and more comprehensive testing techniques.

Every Product Made for the Trade, by Utah, Is Thoroughly Tested and Approved





Keyed to "tomorrow's" demands: Utah transformers, speakers, vibrators, vitreous enamel resistors, wirewound controls, plugs, jacks, switches and small electric motors.



Utah Radio Products Company, 810 Orleans Street, Chicago 10, III.

