service

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# SYLVANIA TRIPLET! TUNG-SOL

TELEVISION . ELECTRONICS . RADIO . AUDIO

Volume 2 Number 10

July 1953



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SERVICE MANAGEMENT

# "A man is known by the company he keeps"

(and so is his work)





BURGESS BATTERIES





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Centralab CERAMIC CAPACITORS

CAPACITORS VIBRATORS

CLAROSTAT

CONTROLS



RESISTORS

PHONO NEEDLES

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SYLVANIA

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TRANSFORMERS



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#### ASK FOR THESE FINE PRODUCTS

they safeguard your work and reputation



PICTURE TUBES RECEIVING TUBES

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#### UHF-5 & UHF-6 **FEATURES**

- Factory Pre-Assembled
- Hi-Tensil Aluminum Bows
- Universal U-Clamps; All-Welded Steel Screens; All-Weather Zinc Plated

Unfold - Tighten - Erect

SNYDER MFE.CO

BELLEVUE TUBE MILL, INC., PHILADELPHIA, A GALDE AFFILIATE SNYDER ANTENN-GINEERS LTD., TORONTO, CANADA, A Guyden AFFILIATE WORLD EXPORT: ROBURN AGENCIES, INC., NEW YORK 7, N.Y.



#### **NEWS BRIEFS**

(Continued from page 36)

RCA and RCA Victor products. . . . NORTH SHORE NAMEPLATE CO. has announced new identification markers on fine adhesive stock. . . . ORTHO ENGINEERING CORP. has acquired assets and manufacturing facilities of Rey Products Co.; has announced four new representatives for its filters, transformers and toroidal windings. . . . BURT C. PORTER CO. of Seattle has been appointed representative for G & H. Wood Products of Brooklyn, N. Y.... WM. J. PURDY CO. of San Francisco has been appointed representative for Granco Products, Inc. . . RADIO APPARATUS CORP. of Indianapolis supplied the two-way communications used in the forty-four vehicles in General Motors' "Parade of Progress" now on nation-wide tour. . .

RADIO CITY PRODUCTS CO., INC. has introduced a new distributor plan for financing adequate stock. . . . RAYTHEON recently announced its new "Tele-Jar Rotor" designed for service-dealers; it has 48 transparent plastic jars for storage of components. . . . RCA VICTOR DIVISION is



First RCA UHF Mobile Transceiver

distributing a new booklet pointing out that TV Servicemen study up to four years, must take constant refresher courses and must invest up to \$10,000 before entering business; has announced a mobile uhf transceiver with dual vibrator power supply for use on 80 new uhf communications channels, by taxicab, industrial fleets, police and fire departments and public service operators (see cut); Home Instrument Department has sold 2000 TV sets to the Schine Hotels, to be used with master antenna systems; Engineering Products Department has announced a new 16-mm arc motion picture projector for 3-D industrial and business films. . . . J. H. ROSE & CO. of Chicago is the new representative of Jersey Specialty Co., Inc. . . SAFFRO & GETTLEMAN CO. of Chicago has been named representative for G & H Wood Products. . . . HENRY P. SEGEL CO. of Boston has been appointed New England representative for T-V

Products Co. . . . SIMPSON ELECTRIC COMPANY has announced advertising expenditures of \$250,000 for the next twelve months. . . . SKYLINE MFG. CO. of Cleveland, O. has announced a major plant expansion for their precision mass-produced antennas. . . . SNYDER MANUFACTURING CO. has announced a new directronic portable antenna for UHF and VHF reception, channels 2 to 83. . . . SOUND WORK-SHOP of New York City has announced a new low-priced hi fi table model phonograph, designed to utilize its housing as a speaker baffle. . . . SYL-VANIA ELECTRIC has announced tetrode and pentode transistors that should result in simplified circuits. . . . FRANK W. TAYLOR CO. of De-Witt, N. Y. has been appointed representative for Aerolite Electronics Corporation. . . . TECHNICAL APPLI-ANCE CORPORATION recently sponsored a preview on UHF TV reception techniques in the Allendale Theater, Buffalo, N. Y. which included talks by Taco and WBUF officials. . . . THE TELEVISION ACCESSORY HOUSE of Providence, R. I. has been named distributor for Westinghouse tubes. . . . THOMPSON RADIO SUPPLIES of Zanesville, O. recently cooperated with Radio Merchandise Sales, Inc. so that a technical discussion with 125 dealers could be telecast over WHIZ. . . . JOHN G. TWIST CO. of Chicago has been appointed representative for Granco Products, Inc. . . . L. F. WAELTERMAN CO. of St. Louis has been appointed representative for the National Union Radio Corporation. . . . WESTINGHOUSE ELECTRIC Electronic Tube Division. has announced a new premium promotion, for distributors and dealers, with a complete line of sales-incentive items from large outdoor signs to a full year's direct mail campaign. . . . ROB-ERT C. WHITESELL & ASSOCIATES of Indianapolis have been appointed regional sales representatives for the General Instrument & Appliance Corp.

#### SALES TIPS

(Continued from page 8)

them had to sell to make real bonuses. He emphasized that the firm needed more sales of service and products.

Now the boys are really on the job. The tactics of the friendly competitor have been adapted to the business. The men check future service opportunities and systematically follow up. A record is kept in the form of a "tickler" system. Now they never fail to contact a potential customer at the right time. The dealer states that the boys are all going to get real good bonuses. Why? Because service business has more than doubled in a short period.

#### REFERENCE FILES

(Continued from page 26)

tions be sure to clip the articles after the magazine has served its other purposes. If you see ideas in magazines of other people just make a note of the publication, issue and page. File your memo on a 5 x 7 card. It will remind you to review the article at your local library when it touches on a business-building problem.

A similar procedure should be followed when you come upon books or book reviews that appear to have a bearing on your business. You cannot file the books conveniently so make a note on a card and file it for future reference.

Do not develop this good habit all alone. Encourage your associates to get it. Show them why they should keep alert. Show them how it pays off through your business-building reference. They can help it to pay increased "interest."

In this way you will find that you are becoming a better manager because you are keeping constantly alert for the future. Any effective business-building program has a long range aspect. It should help make you better able to weather the storm, the storm of seasonal trends, the storm of competition, the storm that comes with the need for expansion or contraction of the various factors that add-up to a well-managed business.

#### **PEOPLE**

(Continued from page 34)

Manufacturing Co. . . . J. EARL SMITH of Dallas, Texas, has been appointed representative for T-V Products Co. . . . THEODORE A. SMITH has been elected vice-president in charge of the engineering products department of the RCA Victor Division. . . . DR. CAR-STEN C. STEFFENS has returned to the Stanford Research Institute as technical coordinator of the research divisions. . . . RALPH T. SULLIVAN has been named Chicago representative for Aerolite Electronics. . . . JOHN L. THOMPSON has been appointed district sales manager for Raytheon's television and radio division. . . . L. F. WAELTERMAN of St. Louis has been appointed regional sales representative for the General Instrument & Appliance Corp. . . . W. WALTER WATTS has been elected vice-president in charge of technical products for the RCA Victor Division. . . . EDWARD WERSHEY is now chief engineer for the electrolytic department of the Aerovox Corporation. . . . VICTOR WILLIAMS of Margate, N. J., has been appointed representative for T-V Products Co.



#### **NEWS BRIEFS**

(Continued from page 13)

CO. of St Paul is now representing Halldorson in Minnesota, Northern Wisconsin and South Dakota. . . . ESPEY MANUFACTURING CO., INC., has marked its 25th anniversary with the introduction of the Trophy Line of AM-FM receivers, tuners and amplifiers (see cut). . . GENERAL ELECTRIC spokesman recently stated that color TV will be a factor in merchandising by the Fall of 1954; to acquaint sales agencies with the facts, the G. E. tube department is making wide distribution of a 17-page pamphlet: "Quick Facts About Color TV"; has announced completion of a \$325,000 addition to its electronic tube warehouse at 200 Main Ave., Clifton, N. J.; has announced production of a new 24-inch aluminized glass rectangular picture tube, type 24CP4-A; is using



General Electric says Nix to Mr. Fixit

a sticker on all replacement picture tubes and cartons to encourage replacement by technically qualified personnel (see cut); has announced a new orange, blue and white outdoor sign (see cut); Carboloy Department has licensed Philips Laboratories, Inc. to manufacture its barium-oxide-iron magnet material and has announced a 10 per cent increase in permanent magnet prices; Telechron Department



General Instrument management beams at their products during Annual Stockholders' Meeting

has announced double spread ads in national magazines to run until December; has determined, by survey, that more than 16 million wired homes have no electric clock. . . . GENERAL INSTRUMENT CORPORATION top

brass examined Company products at a recent annual stockholder's meeting (see cut); has reported net profits for the first quarter of 1953, four times those of the corresponding 1952 period. . . . GERBER SALES CO. of Boston has been named representative for Granco Products, Inc. . . . GRAYBAR ELECTRIC CO., INC. of San Diego has been appointed distributor for Raytheon television sets. . . . A. SIDNEY HARDY ASSOCIATES of Atlanta, Ga., have been appointed representatives for the Rohn Manufacturing Co. . . . L. H. HARRIS CO. of San Francisco has become representative for Radio Merchandise Sales, Inc. . . .



Addie Chandler and New General Electric Sian

HERLEC CORPORATION a subsidiary of Sprague Electric Co., has moved into its new plant at Grafton, Wisconsin... HIGGINS DISTRIBUTING CO. of Baltimore has been appointed distributor for Raytheon television sets.... SAMUEL HOOKER CO. has been appointed New England representative for the Brach Manufacturing Corp. ... HOPKINS EQUIPMENT CO. of Atlanta, Ga. recently originated and conducted a Raytheon TV Contest that awarded a new Ford to Mrs. S. C. Adamson (see cut).... KAELBER & MACK of New York City have been named represen-

tatives for the Perma-Power Co. of Chicago. . . . KAY SALES COMPANY of Kansas City, Mo., has been appointed to represent Halldorson transformers and components. . . . KIERULFF SOUND CORPORATION of Los Angeles has been appointed distributor of RCA renewal products. . . . LaPOINTE ELECTRONICS, INC., has purchased a major-



Mrs. S. C. Adamson of Atlanta beams as she wins new Ford in Raytheon Contest

ity interest in Circuitron, Inc., manufacturer of printed circuits. . . . LEADER ELECTRONICS, INC., of Cleveland, O., has announced plans to manufacture and sell television equipment. . . . DEAN LEWIS ASSOCIATES of San Francisco have been named representatives for the National Union Radio Corporation. . . . LOGAN SALES CO. of San Francisco has been appointed to represent the Rohn Manufacturing Co. . . . JACK F. McKINNEY SALES CO. of Dallas, Texas has been named sales representative for Granco Products, Inc. . . . LEO J. MEYBERG CO. of Los Angeles has been appointed distributor for AM-TEL Equipment Co. . . . MILLER'S RAYTHEON TV of Modesto, Cal. uses Model T Ford as traveling billboard (see cut). . . . L. L. MINTHORNE CO.



Carroll Miller, new Raytheon TV sets and old Model T Ford

of Portland, Ore. has been appointed representative for Granco Products, Inc. . . . MAURY S. MITTLEMAN & ASSOCIATES of Los Angeles have been appointed to the sales staff of Snyder Manufacturing Co. . . . THE NORTH PACIFIC SUPPLY CO. of Portland, Ore. has been appointed distributor for (Continued on page 38)

# New Television

# 5" CATHODE RAY Oscilloscope

\$129.50



MODEL 665

# TUBE Complement

1 5UP1 Cathode Ray Tube

1 1V2 High Voltage Rectifier

1 6X4 Low Rectifier

3 12AT7 (Vert. Cathode — Follower— (Vert. Amplifler (Vert. Push-Pull Output

(Horiz. Push-Pull Output

1 6AB4 1st Horizontal Amplifier

1 6J6 Sweep Circuit Oscillator

This new HICKOK 5" Scope has all the needed characteristics for accurate TV alignment and service work. Designed, built and guaranteed by HICKOK, the Model 665 will perform every function required of it and give long, trouble-free service within the range of its technical characteristics.

### Technical SPECIFICATIONS

- Frequency Range: 0.5 cycles to 700KC, down 3 db.
- Accelerating Potential: 1775 Volts (high intensity), provides very sharp facus.
- Square Wave Response: Flat, 60 cps. to 100KC, with less than 1% tilt, less than 2% overshoot.
- Dual Fuse: B+ is fused and the line is fused.
   Fused B+ provides protection against transformer damage. This is another HICKOK exclusive feature.
- Amplifier: Push-pull, vertical sensitivity 20 MV RMS per inch.

Horizontal, 30 MV RMS per inch.

Vertical Input Impedance: 15 MMF, 2.2 Megohms.

Horizontal Input Impedance: 52 MMF, 0.1 Megohms.

- Sweep Oscillator Range: 18 cps. to 50KC.
- Withstands shock, vibration, and humidity. CRT is shock-mounted, and external connections to CR Tube are provided.
- Blue hammertex steel case.
- 13" H., 171/4" D., 95/8" W. 23 lbs. net.

Write for detailed information or see your HICKOK jobber today.

#### THE HICKOK ELECTRICAL INSTRUMENT COMPANY

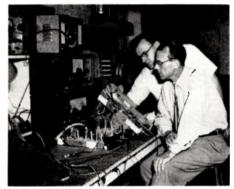
10535 DUPONT AVENUE

CLEVELAND 8, OHIO

#### SERVICE CENTER

(Continued from page 33)

gram is flexible enough to maintain a balance between the volume of business required by dealer clients and that developed from direct set owner contacts.



Feiler Studio Photo

R. M. Traviss, manager of TV Service, points to possible component trouble for Mr. Robbins.

#### THE PARAMOUNT FAMILY

When a business gets bigger than a one-man operation it becomes an organization. But regardless of how large it becomes as an organization it will usually be judged by its average customer from his reaction to some one individual in the Company with whom the customer has dealt.

Paramount Television and Car Radio Service is Harold Robbins, Inc. Every employee of Harold Robbins, Inc., comes, in time, to own a part of the Company. So Paramount's customers will likely be dealing with one of the owners regardless of which employee tices have been employed in the conduct of its affairs ever since its inception. Perhaps by brushing aside the details that are the mechanics of management we can crystalize the elements of success in these four points:

- A selling plan that provides ample volume to keep the basic staff regularly employed.
- Technical competence kept abreast of developments through continual training.
- 3. The best equipment available to facilitate top quality service.
- Management that keeps on top of business trends from daily summaries of work accomplished and business income and is prepared to act when business slumps are indicated.

And perhaps we might add a fifth point in the tangible benefits of ownership participation that are a reward for the teamwork necessary for the continuing success of any organization.

#### LETTERS

(Continued from page 25)

goal. These things should be very apparent to a person "in the business" such as Mrs. B. D. F. claims to be.

There are men and leaders in any industry who will lend their efforts to the principles and aims set forth by the associations whom they represent only as long as the activities of these organizations follow the purposes for which they were founded. If they are men of principle they should and would resign from their respective organiza-

won't play ball."

Our association has rigid qualifications for membership and I wish to assure Mrs. B. D. F. that if her husband is sincere and can meet the qualifications required by our association, we would be very happy to have him attend our meetings and eventually join us. . . .

Louis J. Smith, president Television Service Dealers Assn. Philadelphia, Pa.

#### SELLING

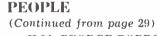
(Continued from page 15)

#### TRADE ASSOCIATION CHALLENGE

It is up to the trade association to courageously fight off the clamor of its members for government aid and protection. It is in their power to bring America into socialism or by their own brand of blood, sweat and tears — and loss of membership revenue, I might add — to keep it open for freedom of choice.

The association which denies government aid; which refuses to lobby for protective, subsidy legislation, which turns its back on the siren call of the political demagog out looking for "small business" votes is the necessity of right now — and the certainty of tomorrow.

Ask yourself, today, what you will do when times get really tough; when a fair facsimile of the thirties returns. What will you do? Will you meet the challenge through your own abilities and your own readiness and your own sweat and sacrifices or will you, too, run to government and to socialism?



... ILIA GEORGE POPPOFF. formerly a member of the U.S. Radiological Defense Laboratory in San Francisco, is now an associate physicist in the air research section of the Stanford Research Institute. . . . DONALD G. REIK has been appointed Washington, D. C., district sales manager for General Electric's tube department replacement sales. . . . HOWARD L. RICHARDSON is now vice-president in charge of engineering operations for Sylvania Electric Products, Inc. . . . WALTER C. ROSE has been named vice-president in charge of RCA Victor Distributing Corp. divisions at Buffalo and Rochester, N. Y. ... OTTO H. SCHADE, engineer for the tube department of the RCA Victor Division, was recently invested with an honorary degree of doctor of engineering by Rensselaer Polytechnic Institute. . . . JOHN J. SCHWEIGHAUSER of Plymouth Valley, Pa., has been appointed to the sales staff of Snyder

(Continued on page 38)



Feiler Studio Photo

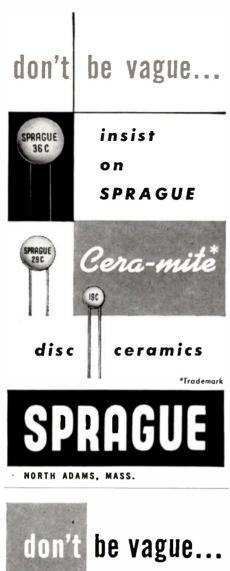
Service positions in the car radio department are equipped with necessary tools and test instruments for efficient work. Paramount personnel shown above, left to right: Dean Garland, Ralph Green, Harold Robbins, Jack Wallace, department manager, and John Ash, Jr.

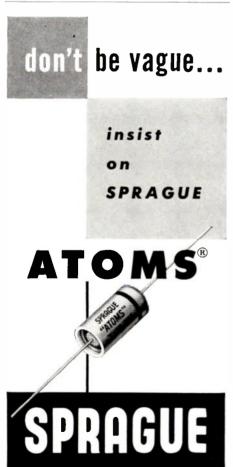
they deal with in buying the Company's service.

The late Charles M. Schwab once said: "There is no difference in the problems of managing a peanut stand or in the management of a million dollar corporation." He referred, of course, to principles and not to detailed problems.

Like every other successful electronic service business, Paramount has prospered because sound management practions if the said groups no longer adhered to the activities set forth in their aims and purposes.

The members of the Television Service Dealers Association are a democratic group of individuals who have just elected new officers. The writer has been elected President for the coming year. This fact disproves Mrs. B. D. F's statement that the associations are headed by men "who must be leaders or





#### SERVICE CENTER

(Continued from page 32)

tion of the job regardless of how complex the transaction may be.

#### SERVICE BUSINESS CONTROL

Paramount uses a system that is designed specifically for their type of operation. Since they handle both dealer service and direct set owner service they use color differentiation in work cards to identify the various types of jobs. All service control cards provide for continuing entries of services performed on the individual sets they identify.

When you need Televisian Service Paramount Television and Radio 1437 Walnut - Phone 8-7955 Will give you havest and reliable service at a reasonable rute We have one of the most modern shape in the midwest, and we point with pride to our 22 years serving the electronic field in this area Karald R. Ralbins, Manager Martin Tolomo Some Marie Clar

Perhaps one of the first truisms Mr. Robbins learned when he started his early auto radio service business was that when servicing things you have to deal with people and if you can get along with people, please them, you will get a goodly share of things to service.

Everything that falls in the realm of customer contact has been carefully studied to avoid reason for friction.

Every Paramount customer gets an itemized bill for the charges on the repair job accomplished, with service charges and parts charged separately identified. An itemized listing of all parts used is included.

We wish to thank you for the courtery extended our service man when he called at your home.

It is our earnest desire to give you the best in honest, reliable service. Il for any reason you are not satisfied please call our office.

Paramount Television and Car Radio Service Harold R. Robbins

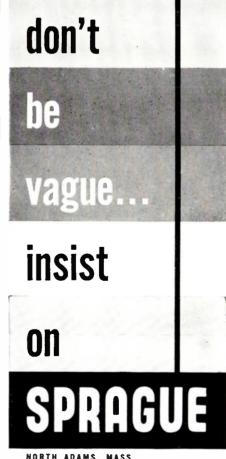
1437 Walnut Street - Phone 8-7255 . Des Moines, Jours Our 22nd Your Serving Dos Maines in the Field of Electronics

To forestall loss of business from disgruntled customers who nurse their real or fancied wrongs and take their business elsewhere, every home service call is followed up by a visit from the postman who leaves a neat card. (See Fig. 1). About every twelve months customers who have not called for service receive a reminder of the service facilities available at Paramount TV. (See Fig. 2).

The Company's service selling pro-(Continued on page 34)



NORTH ADAMS, MASS.



NORTH ADAMS, MASS.

NORTH ADAMS, MASS.

#### OUR OPINION

(Continued from page 6)

you do something with it. You have to put it to work for you. It can be one of the most useful management tools you have in your place of business.

Sometime this month regular subscribers of Service Management will receive a filing folder filled with literature prepared by manufacturers who are cooperating in this project. This is FILE 50, the first of such files of important information Service Management subscribers will receive at regular intervals.

And practically every month you will find an article in Service Management that will deal with some particular phase of the INDEX for MANAGEMENT INFORMATION. The editors will work constantly to keep you informed on the most useful and practical information available to help you in the management of your business.

#### BOX OFFICE TV

(Continued from page 13)

cuits for whichever channel is desired. One interesting application is for community system operators, who may, in effect, operate their own television broadcast stations on a local basis at extremely small cost and without any requirement for FCC license. Many of these communities are of considerable size and represent a profitable advertising potential for local merchants. The system operator may purchase one or possibly two camera chains of the inexpensive industrial type, plus a simple audio panel and a couple of microphones. Signals from these are fed to the Picturecaster and the output of the latter fed into the main TV distribution system, allowing any viewer on the system to tune in.

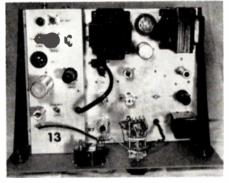


Fig. 5. Top view of Picturecaster showing controls, switches and channel assembly.

Typical program material may include local performers, school events, athletics, and all other program types which have supported small local radio stations and increase greatly in appeal when presented visually.

#### SERVICE CENTER

(Continued from page 10)

in collections of many followers of the

#### **BACK IN 1930**

It was back in 1930 that Harold Robbins established the first exclusive auto radio service shop west of the Mississippi River. He had started tinkering in the mysteries of radio as a boy during the first world war, ecquired a ham license (9EIB and 9FCS) during the earliest days of licensing amateur radio stations, graduated from college in engineering in 1925.

He finished his first experimental venture in television in 1928. At that time he completed a transmitter-receiver combination of the Baird perforated scanning disc type. His studies of and experiments with electronic scanning commenced at the time Philo Farnsworth first released the technical details of his early experiments in electronic image dissection.

If you are familiar with the history of the radio industry you will recall that the first major transition period in radio started in 1929 when the Philadelphia Storage Battery Company began making radio sets with some new ideas about cabinet styling and an ambitious consumer sales program. Within a short time Philco revolutionized the radio distribution pattern and became the dominant company in the field. The trend toward change, toward making everything in radio smaller got well underway and the auto radio became a commercial reality.

#### ANCIENT AUTO RADIOS

The factory-installed auto radios that are commonplace today were a visionary dream of the future in those days. It required mechanical skill of a high order to install the early auto radios and almost electronic genius to keep the noise level below the signal level in some cars. The early auto radio specialists who possessed this combination of skills were "in like Flynn." They did, however, have to have a flair for selling. Many car dealers shied away from pushing car radios as an accessory on a new car in those days. A high percentage of those bought were supplementary sales made by the installation company. Mr. Robbins' auto radio service shop prospered and grew along with the expanding public interest in radios in cars.

Despite the tremendous impact of television, starting in 1949 when Des Moines became a far fringe area for stations in Omaha and St. Paul, the auto radio service department has continued as the stable backbone of the Paramount Television business. The magnitude of this operation can be visualized from the fact that about 12,000 car

radios per year are serviced by the staff of five technicians normally assigned to this department.

#### DEVELOPMENT OF SERVICE BUSINESS

How do you develop that kind of service business volume?

The owners of the quarter of a million car radios that have passed through the Paramount shop during the last decade or so, are a potent sales force for their car radio service department. And dealers scattered over the wide area they serve say this: "If you want it, Robbins has it."

Purchasers of factory-installed or separately purchased car radios are invited to register their sets with Paramount. There is no charge for this registration. Paramount will handle any service necessary during the warranty period without charge, collecting from the selling agency for labor and getting parts replaced by the guaranteeing organization. This builds customer goodwill.

The car radio department is managed by Jack Wallace, a graduate of Drake University and former Navy Radar instructor, who is recognized as one of the top men in this field.

#### TV SERVICE DEPARTMENT

Three key factors in successful television service management are (1) Competent technical direction of all service activities, (2) Efficient planning and organization of work, and (3) A service selling program geared to the individual needs of the business.

Technical management of Paramount's TV Service department is the responsibility of R. M. Traviss, a World War II marine veteran who completed his training in electrical engineering at Chicago Tech after finishing his stint in the service. Operating in a shop that is equipped with every possible aid to expedite service of the most contrary sets that have to be brought in for attention, Mr. Traviss is able to apply a keen, electronically trained mind to the continuing technician training programs that are a fundamental part of Paramount's management direction. His is the responsibility for carrying out Mr. Robbins' credo of, select, train, supervise, retrain, for helping technicians to become and stay top-flight craftsmen in this swiftly-changing phase of the electronic art.

Efficient planning and organization of work routines in a service business are tools of management that must be "built into" the business. There is no other servicing activity that can degenerate into a confused mess comparable to a TV service business that lacks a complete business control system that works smoothly from the reception of a service call or installation order to the comple-

(Continued on page 33)



5-inch High Gain Oscilloscope

Model S-8202. This outstanding scope is built to the very highest standards of test instruments... It features the highest gain 10 millivolts inch, and widest frequency range at its popular price. Wide sweep ranges allow extreme flexibility in sweep circuit trouble shooting.



3-inch TV Oscilloscope

Model S-8200. The most practical portable unit available for bench or field servicing. Preset horizontal and vertical sweep rates take the guesswork out of trouble shooting, aligning and measuring. Ideal for television because of its high sensitivity and wide response.



Philco Circuit Tester

Model 8102. A general purpose voltohmeter that challenges comparison. Utilizes 1% resistors throughout to insure maximum accuracy. Tests AC voltage ranges of audio and high impedance AC circuits where a vacuum type voltmeter would normally be required.



Philco Circuit Master

Model 8100. Designed to the most rigid of engineering specifications, this rugged metal-cased vacuum tube voltmeter is by far the finest in its price class. Provides unmatched accuracy for measuring and aligning where plus and minus indications are required.



**UHF Auto-Level Sweep Generator** 

Model G-8002. The most modern, most inexpensive UHF sweep generator on the market. Checks sweep alignment with any test oscilloscope. Its output is controllable and leakage is negligible ... makes possible over-all trouble shooting and testing of low level units.



Cathode Ray Tube Checker

Model 7053. Will accurately test all picture tubes used in home TV receivers. Special cathode-ray tubes are easily checked by using plug-in adapters. Eliminates trouble shooting guesswork. Neon lamp indicates shorts and open elements in the electrodes of the gun.



Visual Alignment Generator

Model 7008. Combines in one economical instrument functions that can be approached only in a cumbersome collection of costly devices. No special scope connections are required for the most accurate visual alignment and calibration that is possible to achieve.



#### Appliance Tester

Model 5007. The ultimate in versatility. A one package, all purpose, portable appliance service unit. Permits over-all analysis of refrigerators, ranges, air conditioners and household appliances. With "pick-up" elements to determine temperature and built-in voltmeter.

# FREE BOOKLET or see your Philco Distributor

#### PHILCO CORPORATION

**Accessory Division** 

Allegheny Ave. & "A" St., Phila. 34, Pa.

I am interested in the Philco Test Equipment shown here. Please send me details of your SPE-CIAL PURCHASE PLAN for obtaining these units.



Please send FREE copy of your new booklet on Philco Test Equipment.

NAME	, .										-	-	-					
ADDRESS				,			٠							4			,	
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# Servicemen!





Field Strength Meter

Model M-8104. More new features than any other unit at this popular price. Reads signal strength directly from the dial from 10 to 100,000 microvolts. A serviceman's time saver to measure actual TV picture signal strength.

#### Cross Dot Linearity Pattern

Model G-8004. Philco's new unit for the finest possible linearity adjustments when a station pattern is not available. It provides extreme versatility of performance and design at amazing economy of operation. Light, rugged and portable it's the new leader in test equipment.



#### CHECK THESE

# PHILCO

### TEST EQUIPMENT **FEATURES**

 $\nu$  New Low Prices  $\nu$  New Ruggedness

u New Circuitry u New Versatility

u New Styling u New Accuracy

### NOW YOURS ON NEW EASY PAYMENT PLAN



VHF to UHF Signal Generator Adapter

Model G-8000. The most economical system yet designed to produce UHF signals for TV receiver tests. Through a conversion process using any VHF meter this unit produces from an input VHF signal, UHF signals having the same characteristics as the VHF signal.



Mutual Conductance Tube Checker

Model 7052. Tests more different type tubes than any unit on the market, from subminiature to acorn low power transmitting tubes. Shorts on tube elements can be easily determined, employs roll chart instead of cards, for use as a portable or counter top unit.



Dynamic Signal Tracer

Model 7031. An extremely versatile instrument . . . this unit is designed for fast diagnosis of radio trouble by audibly monitoring RF and AF circuits. Can be used to accurately check P.A. systems, microphones and phonograph pick-up circuits, also localizes distortion.

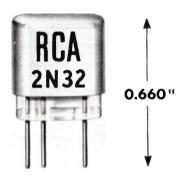
barrier and its unique directional characteristics permit transistor operation.

When a negative potential is applied to the collector the holes in the p-type insert are attracted toward the collector and the electron to the base. Since there are few holes in the n-type and few electrons in the p-type little current can cross the barrier between the two types. Inasmuch as there will be few carriers between the p and n types no



CBS-Hytron Junction Transistor appreciable reverse current can flow because of the high resistance presented at the barrier.

When a positive potential is applied to the emitter it attracts the negative electrons of the n-type while the holes of the p-type could be attracted by the base. Thus the electron and holes are

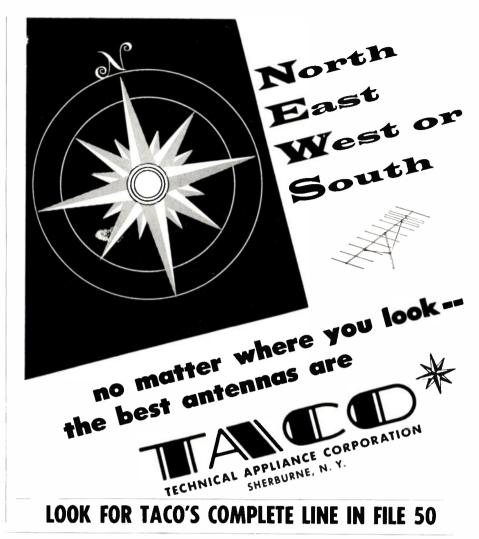


RCA Point-Contact Transistor attracted past the p-n junction and the barrier is broken down, permitting a high forward current.

However, more than the above occurs when both contacts have the above potentials applied to them simultaneously—plus to emitter and negative to collector. The holes (positive particles) diffuse through the emitter barrier and move toward the collector where they assist in breaking down the collector barrier, permitting a higher collector flow—holes want to penetrate barrier because of the positive particle pull of collector.

These additional carriers cause a substantial increase in collector current. The ratio of collector to emitter current charge is referred to as alpha or current gain of the transistor. A stage voltage amplification is possible, of course, because in the collector circuit a higher current variation exists across a higher resistance as compared to a lower current variation in the lower resistance emitter circuit.

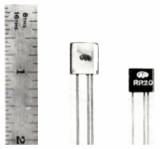
A second transistor type is the junction type, Fig. 6, which employs non-rectifying contacts that are firmly attached to the three germanium regions.



In the center of the n-type germanium block is a thin layer of p-type germanium to which the base connection is made. For a junction transistor or n-p-n type a negative potential is supplied to the emitter; positive to the collector. In operation, though, the transistor activity is quite the same. The positive collector and its attraction for electrons still cannot pull the p-layer holes free and through the p-n barrier area. Thus collector current is lower than in a point contact type because of the much higher reverse resistance of the bulk barrier as compared to the small close barriers of point contact.

Emitter current is higher because negative collector does permit some current flow through the barrier because of its pull on the p-type holes. In fact, the diffused electrons from emitter n-area pass through both p-n barriers into the collector n-area. Thus there are carriers crossing the barrier and collector current increases correspondingly. Although there is no current again, (alpha approaches unity) the much higher ratio of collector impedance to emitter impedance (better rectifier action) permits a higher voltage gain as compared to point contact type.

In general, the junction types have



Radio Receptor Switching Transistors

higher gain, higher power output, and lower noise level as compared to point contact unit while point contact types operate at higher frequencies and can be made very tiny physically. Junction transistors of p-n-p are available using p-type germanium block and thin n layer.

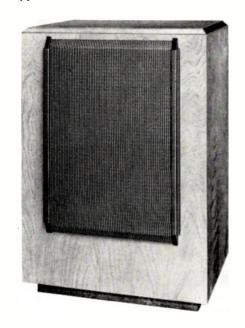
#### **PEOPLE**

(Continued from page 8)
appointed to the sales staff of Snyder Manufacturing Co. . . . FRANK J.
PERNA has been appointed mid-Atlantic representative for the Brach Manufacturing Corp. . . . J. K. POFF has been appointed sales manager for the jobber division of the Pyramid Electric Co. (Continued on page 34)



#### CBS-Hytron Transistors

CBS-Hytron Division, Columbia Broadcasting System, Salem, Mass. has announced three types of hermetically sealed junction transistors for applications in hearing aids and other personalized equipments. Type 2N36 is for high gain applications; 2N37 for moderate gain operation; and 2N38 for economical performance in low-gain applications.



#### Loudspeaker Enclosures

Beam Instruments Corporation, 350 Fifth Ave., New York 1, N. Y. has announced reflex loudspeaker enclosures in Wall and corner types that are said to provide maximum acoustical loading and balance for twevel and fifteen inch speakers. These enclosures are constructed of selected ¾" lumber with all joints close battened, screwed and glued. Interiors are insulated to absorb internal standing waves and sound reflections. "Throated ports" are used for natural audio reproduction.

#### TV Overload Device

Vidaire Electronics Mfg., Co., Llybrook, N. Y. is marketing a new device that is designed to eliminate overloading of TV receivers due to strong signals. This device is also reported to reduce the buzz in intercarrier sets and to reduce most cross-modulation effects. The unit measures 3% x 2% x  $1\frac{1}{4}$ " for wall or set mounting.

#### CBS-Hytron 24" Picture Tube

CBS-Hytron Division, Columbia Broadcasting Ssytem, Danvers, Mass has announced a 24" rectangular, all-glass, picture tube with magnetic focus that provides an effective screen area of more than 370 square inches. Other features of the 24TP4 include: alumnized screen, spherical filter-glass face plate, single ion trap gun design and external conductive coating which serves as a filter capacitor.



#### **Audio Amplifiers**

Mark Simpson Mfg. Co., 32-28 49th St., Long Island City 3. N. Y. has announced a series of high-powered audio amplifiers suitable for football stadia, indoor arenas, airports, shipyards, beaches and civil defense systems. A typical unit is a 125-watt amplifier that will deliver a peak of 175 watts. It has four input channels, separate control for each input, stabilized inverse feedback, constant voltage output, oil-filled filters, safety interlocks and other features.



#### RCA Coupling Device

Tube Department, RCA Victor Division, Harrison, N. J. has announced a coupling devicee for quick, inexpensive installation of secondary TV sets in the home by means of a small coupling device—for simultaneous operation of two TV sets from the same antenna. Installation of the coupler requires only a screwdriver. Connections are made by attaching coupler to antenna line and running separate transmission line from coupler to the second TV set.

#### TECHNICAL TOPICS

(Continued from page 27)

there is a distribution of holes in the germanium atom as removed by the entrance of impurity into the lattice. This deficiency of one negative charge (absence of an electron in the outer ring) means that the atom has a positive charge because of the holes in its construction.

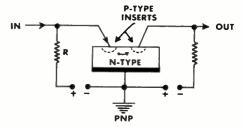


Fig. 5. N-Type Point Contact Transistor

In effect, the hole becomes a positive charge and is in effect a moving positive particle in the germanium. The impurity in this case is called an acceptor and we refer to a semi-conductor in which the majority carriers of current are positive charges or holes a p-type germanium.

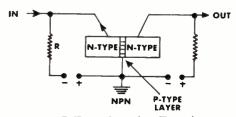


Fig. 6. P-Type Junction Transistor

#### TRANSISTOR THEORY

There are two basic types of transistors, Figs. 5 and 6, point contact and junction. The point contact transistor consists of an n-type germanium block, metal base, and two point contacts (catwhiskers). At point of contact for both the emitter and collector there is a small p-type insert, forming a p-n barrier. Thus point contact transistor is referred to as a p-n-p type. This p-n



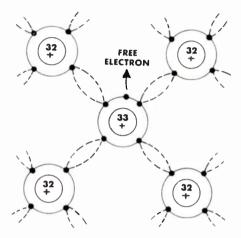


General Electric Junction Transistors

Specify Electronic Parts by Brand Name

bonding and under proper conditions there can be current flow. In fact, just a small amount of impurity, one part in millions and millions, permits germanium to become a semi-conductor. If the germanium impurity is an element having five valence electrons, electron conduction is encouraged.

The impurity atom, Fig. 4, also joins in valence bond with the germanium atom. However, if the impurity has



N-TYPE ELECTRON CARRIER

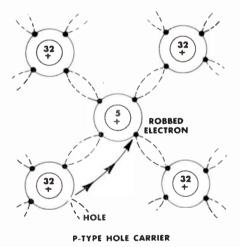


Fig. 4. Electron and Hole Carriers in Germanium

five valence electrons there will always be an electron free from bond which will be a free electron and act as a carrier. This type of impurity which contributes free electrons is referred to as a donor and since the majority carriers are negative particles or electrons, it is called an n-type semi-conductor material.

It is also possible to have a dominating impurity which has three valence electrons. It attempts to set up valence bond with the germanium atom lattice. However, in so doing, it continues to remove one of the germanium atoms to set up the four atom valence condition. Thus throughout the germanium block (Continued on page 28)



#### SELL HI-FI

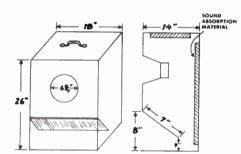
(Continued from page 17)

of "presence" is conveyed to the viewer by being able to hear the presentation with a new rich full-bodiedness and to detect off-stage movements which make one feel as though the screen were in the front row orchestra of the theater.

With the steady improvement of TV fare and the obviously greater attention to the quality of musical presentations — set up a moderate hi fi system and connect to it a TV set so that it can be cut in or cut out of the set. Include a phono player. Invite your customers to ask for a demonstration of how their home sets can be converted into a three-way system comparable to custom sets that sell for \$800 to \$1000 — but at very nominal cost.

If your men visit the homes of prospects, an opportunity exists to survey the customer's situation, tastes, apparent buying power and interests. In many cases, calls for service will uncover hi fi prospects for demonstration. Why not apply the very successful vacuum cleaner salesman's technique? He doesn't always know whether you have or need a cleaner when he comes knocking at your door—nor does he know whether you've just cleaned the rug. He simply throws a little dust on the rug and then confidently cleans it up to prove his point.

Similarly, a small portable demonstrator can be assembled comprising a hi fi type 10-watt power amplifier, a small 45 rpm changer, a hi fi type 8" speaker in a reasonably sized bass reflex enclosure. The components can be wired to an adapter and switch assembly so that it can be plugged into



Efficient enclosure for portable Diffusicone 8" speaker made of ½" or 5%" plywood, braced for greatest rigidity.

the first audio stage of a TV set without affecting the set's performance.

A compelling demonstration can be made by switching from the original to the hi fi audio system to prove the effectiveness of the conversion. The record player can be used to illustrate how much more such a system has to offer and, if possible, one of the prospect's own records with which he is familiar should be played.

# REFERENCE FILES

Initial distribution of Service Management material provides basis for establishing a progressive, business-building system.

By E. C. TOMPSON, Managing Editor Service Management

In our August issue we outlined the need, use and arrangement of service reference file cabinets. On page 7 we published a comprehensive *TV Service Reference Index*. The index was compiled by the editors of Service Management as a practical guide for establishing a business-building reference.

This guide incorporates the advantages of a numerical system and a descriptive system. The numerical arrangement makes it easy to classify material but it eliminates the inefficient aspects of file-systems that depend on subject description. In this way it eliminates guesswork on the part of the executive or his clerk.

All material is keyed and filed by number. All you have to know is how to count up to 100. This numerical index system also permits orderly expansion or contraction of the file to meet current or future needs.

#### "FILE 50"

Within a few weeks, readers of Service Management will receive the first material for their business-building reference file. The material will be supplied in a standard letter-size folder marked "File 50." It will provide an excellent opportunity to initiate your business-building reference file system. Here is what you should do:

#### **PROCEDURE**

Examine each piece in the folder and classify it according to the index numbers given on page 7 of our August issue. Just mark the proper index number in the upper left hand corner. Although the heading for File 50 material is indicated as Service Selling Programs you may find some of the material should be filed under other heads or subheads. Identify each piece by number — as you conceive it in relation to your business-building program.

You will then have a small stack of classified material and you will need facility for handling several subjects. To take care of this requirement, obtain a supply of letter-size folders and a roll of gummed labels. We suggest that you specify "fifth cut tab" folders because their shorter tabs provide maximum visibility for each file folder.

While you are at it, why not type up labels for all heads and subheads indicated in the TV Service Reference Index? The use of the fifth cut tabs will

permit two labels from the same amount of label required for other types of file folders. The labels should be typed with the index number on top, the description on the line below—since your filing system is essentially a numerical system. Simply use the right side of the label and the left side to make two labels which may be cut apart to fit the fifth cut tabs after typing.

Of course, you can skip the heading File 50 because Service Management has supplied you with a suitable folder. In time you will receive a similar folder for other headings but the ones that you prepare now can be reused for subheads as gummed labels may be pasted over the tabs you make at first.

If this is done in one fell swoop you will reduce time required to establish filing facility and you will have a file for immediate operations. You can use it right away to file any ideas that may be needed for the future planning of your business.

#### OTHER SOURCE MATERIAL

The source of business-building material should not be limited to selections supplied by Service Management or those supplied by manufacturers through distributors. Aggressive service managements know that you can't predict where you may find valuable ideas. Learn to keep an eye peeled for them. Learn to record the source of them for record in your business-building reference file.

A good source is frequently found in general magazines. Take the September issue of the *Reader's Digest*, for example. It contains short articles with good ideas including those about health and accident insurance policies (file 10) and the art of paying a compliment (file 50.4). In the September issue of *Esquire* there are some good ideas in an article entitled the lowdown on high fidelity (file 60.5).

Any one of these three general magazine articles might be the source of a good business-building idea for you. There are thousands of others all over the place. Develop the good habit of making a note of published ideas that should be associated with your business-building reference.

If you see them in your own publica-(Continued on page 38)

#### **TECHNICAL TOPICS**

(Continued from page 17)

action can be obtained by a study of atomic structure in the solid. In the crystalline structure of germanium, each atom has 32 electrons that move in a continuous and probable orbital motion about its nucleus. We represent this atom symbolically with concentric rings as illustrated in Fig. 2. Each con-

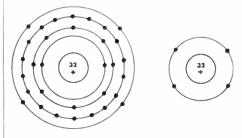


Fig. 2. Symbolic Representation of Germanium Atom

centric ring is said to be complete if it contains a particular number of electrons — first ring, 2; second, 8; and third, 18. The fourth ring has only four electrons and is said to be unfilled. The four electrons of the unfilled ring are more unstable than those electrons of the filled rings since the probability of activity by the electrons of the unfilled ring is always much greater than those electrons of the filled rings. They are referred to as the valence electrons and the germanium atom can thus be represented by the second symbol as illustrated.

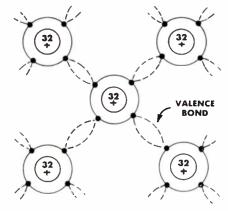


Fig. 3. Partial Arrangement of Germanium Atoms

Now in the crystalline atomic structure of germanium the four outer electrons match with the four electrons of nearby atoms, Fig. 3. This germanium atom lattice is also symmetrical and the electrons of the outer ring are said to be "valence bound" with respect to the other atoms of the lattice. When electrons are valence bound there are no free electrons available for conduction and the material is a non-conductor.

In the case of germanium, however, a slight impurity upsets the valence

individually and pass on what other organizations are doing in each line so that you may compare your accomplishments with those of others in the same field. Meanwhile, send your remarks to:

> Penny Martin Association News Editor P. O. Box 283 Brackenridge, Pa.

#### HOW TO INSPIRE

(Continued from page 14)

men. You are their boss. They must be proud of you - they must respect your

Do you spend a reasonable amount of time each week improving your "know-how?" You expect your salesmen to improve. Therefore you should set the pattern of improvement.

To inspire a sales force, you must certainly work at your business. One of the greatest deficiencies found at retail level is the lack of hard work. Thomas Edison once said "Genius is 90% perspiration and 10% inspiration." This certainly applies to supplying leadership and inspiration for a group of salesmen.

#### SET THE CRITERION

To get other men to work - your work pattern must set the criterion. Remember, when you ask a salesman to cast his lot with you -- you are asking him to commit himself, his future to your pattern of doing things. Unless your attitude and activity supply the element of example and he loses the desire to pattern his future after yours - he loses the elements of hope and imagination so necessary in the make-up of a successful retail salesman.

#### YOU MUST EXPAND

To inspire a sales force, you must expand your business. This does not mean many stores — this means healthy growth within the limitations of your capital structure. It has been said many times that no business enterprise can stand still. It goes forward or it shrinks. That is certainly true in our business.

Next to stability and good working conditions, both of which are necessary elements in your relationship with your salesmen, is the opportunity of advancement. An expanding business carries this challenge to your salesmen and good men always look to the future.

Expansion in essence is competition with the future! The expected rewards are your incentives and inspiration to like, work and know more about your business. Competition, incentives, and recognition are indispensable ingredients when inspiring men. An incentive plan in the form of a contest builds competition that in turn builds protection. You can't make men work. You must make them want to work.

#### PROVIDE INCENTIVES

Competition and incentives will make

your sales force want to work and provide inspiration that will bring forth the perspiration. Incentives make salesmen want to work when people are not buying, make more calls when it takes more calls to develop a volume of sales, to earn additional compensation, prizes, trips, etc.

Incentives are the motivating force in the free enterprise system. My experience and what success I have enjoyed in this business are the direct results of a never-ending series of contests and incentives to motivate my sales force to their maximum effort.

#### GIVE PROPER RECOGNITION

All the foregoing could be futile unless you give your men the proper recognition. It may be just a pat on the back for a job well done. It may be acknowledgment before his fellow salesmen. It could be a trophy or a plaque to hang on his wall. It matters not how great or small, it's the thrill of recognition that brings forth the best a man has to give.

Just be sure the men responsible for the job done gets the credit. Don't make the mistake of taking all the glory yourself. It's recognition that makes a salesman proud of his boss; proud of his organization; proud of his products; proud of his associates; proud of his profession!

If you are to inspire your sales force, you must LIKE your business, KNOW your business, WORK at your business, and EXPAND your business.

The future of this great industry is in the hands of our sales forces who depend on us for inspiration. Don't let your men, your industry, and yes, your country's prosperity falter because you failed to meet a challenge.

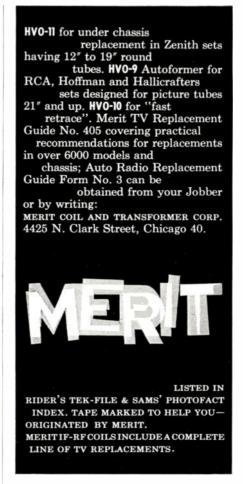
#### **LETTERS**

(Continued from page 4)

- 1-NEDA, and NARDA, and the Electrical Ass'n are not servicing associations.
- 2 Joint Electronics and Radio Committee on Service is an association which is only partially represented by service technicians.
- 3 There are 4 basic groups in Phila.; PRSMA is a technicians' group whose aims are basically educational. TCA is composed of large contractor organizations. TSDA and NTDA (an area association) are individual shop owners, business men concerned with public relations programs and service merchandising programs.

It can be seen, therefore, that each of these autonomous groups have their aims and purposes and only in a very broad sense operate toward a common

(Continued on page 34)





Des Plaines, III.

#### SELLING SERVICE By HAROLD CHASE

The television service industry could well take a lesson from the old Mormon



family. In the Mormon family a man had four, five, or six wives, among the wives was a spirit of competition for their mutual husband's favor but all worked together for the common

good of the family.

We of the television service industry even though competitors should work for the good of the "family," true cooperation and clean competition is the greatest element necessary to put up on a professional plane. Did you even hear one doctor down another? Did you ever hear one dentist speak ill of another? In Michigan they have cooperated to the extent that it is against the law for dentists to advertise or even have more than their name on the signs outside their offices. They are professional because they have through their associations adopted a professional attitude in performance and business ethics alike. Certainly to try to undercut your competitors is anything but professional.

The only weapon a customer has towards getting his money's worth is his resistance to price. It's a part of his bargaining power but the strange part is if properly presented, the resistance is not any greater on a \$30 bill than a \$20 bill. However, first you must give him a reason for spending his money. To be considered professional, you must charge professional rates—not wheelbarrow pusher's wages.

Cut-rate selling of either merchandise or service is employed only by those who have disregarded salesmanship. When you start advertising cutrate prices, you immediately classify yourself as non-professional. Use salesmanship to sell your profession and only then will you be engaged in a profession. Remember the customer looking for a deal doesn't expect much.

#### NEW INTER-INDUSTRY COORDINATING GROUP ORGANIZED FROM ELECTRICAL INDUSTRY SALES AND PROMOTIONAL PROGRAMS

A new group, to be known as the Conference Group on Coordination of Electrical Industry Sales and Promotional Programs, has been formed to fill

#### YAKIMA, WASHINGTON

The Radio-Television Service Association of Yakima, Washington, has em-



barked on an extensive public relations program by having weekly TV shows to build up public confidence in the service profession. This is, inciden-

tally, also making it the benefit of every service man to become a member of the Association.

The show, The TV Clinic, has a panel of six men, one from the station and the rest members of the RTSA. It opens with a short discussion of some topic they feel is of interest to the average set owner. One member of the panel stands by on the phone and receives questions from the public which are in turn turned over to the panel for discussion and answering.

They ordered a quantity of the little booklet put out by RCA that I told you about last fall, and they are offered to the public over the show. The public can get them only by going to the shop of one of the members. "When interest in this one item falls off, we will try something else," says president, C. O. Bishop. "As you see, the idea is to get them into members' shops. Our association emblem is used as a sign on and off card for the show and it is also on the doors of the member's shop. We work a 'look for the store with this sign' angle."

All members carry cards to show when making service calls. These cards are dated and issued monthly. They are good for only one month. New ones are issued when dues are paid in order to have valid proof that each member has his dues up-to-date. Currently the dues are \$5.00 per month.

Mr. Bishop says it is too early yet to tell just what the results will be from this far-reaching program, but so far they do look promising. He agreed to keep me informed . . . and as he does, I'll pass the good word along to you.

a long existing gap in coordinating the overall sales efforts of the several national electrical industry associations.

Members presently include Edison Electric Institute, International Association of Electrical Leagues, National Association of Electrical Distributors, National Electrical Contractors Association, National Electrical Manufacturers Association and National Appliance and Radio-TV Dealers Association.

### \* EXTRA \*

# NEW IMPROVED JSC WIRE STRIPS EASILY!

Secret Process Plus Pure Polyethylene Guarantees Quality of 300 Ohm Cable

No more complaints when you use newly improved JSC wire. JSC's secret process plus the use of only pure Polyethylene makes this wire the most easy to strip. Compare it with any other on the market; you'll find none better.

#### Compare J.S.C. Quality With Any Higher Price Make

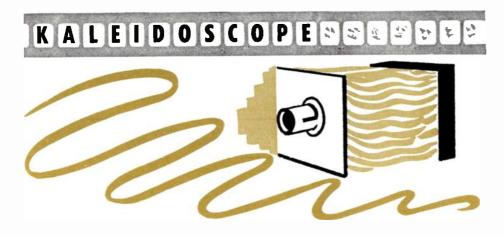
Choose any other make at any price, J.S.C. wire will stand comparison. Quality-wise and very low in price, J.S.C. wire will win hands down. You be the judge.

- Installers Wild About New J.S.C. 300 Ohm Wire
- Send for Your Free Sample
- See It at the Chicago Parts Show
   . . . Booth No. 101.

Always look for the Orange and Blue Disc of Quality.



HV0-11 for under chassis replacement in Zenith sets having 12" to 19" round tubes. **HV0-9** Autoformer for RCA, Hoffman and Hallicrafters sets designed for picture tubes 21" and up. HVO-10 for "fast retrace". Merit TV Replacement Guide No. 405 covering practical recommendations for replacements in over 6000 models and chassis; Auto Radio Replacement Guide Form No. 3 can be obtained from your Jobber or by writing: MERIT COIL AND TRANSFORMER CORP. 4425 N. Clark Street, Chicago 40. RIDER'S TEK-FILE & SAMS' PHOTOFACT INDEX. TAPE MARKED TO HELP YOU-ORIGINATED BY MERIT. MERITIF-RECOILS INCLUDE A COMPLETE LINE OF TV REPLACEMENTS.



The first color we see on our Kaleidoscope this month is gold, commemorating the 50th anniversaries of two of the industry's most respected manufacturers—the TRIPLETT ELECTRICAL INSTRUMENT CO. of Bluffton, Ohio, and TUNG-SOL ELECTRIC, INC., of Newark, N. J. Interestingly enough, these two companies have grown and prospered through the years through making quality products and not through spectacular merchandising . . . More than 400 attended the banquet in Philadelphia in connection with the EASTERN TELEVISION SERVICE **CONFERENCE** last month.... **SNYDER** MANUFACTURING CO. are appointing A. H. Patton Co. as a new representative. . . . Seemed-like-old-times in the reminiscing that went on at the annual reunion of RADIO OLD TIMERS at the May Trades Show. . . . GEORGE J. DESPOSITO joins the executive staff of PYRAMID ELECTRIC CO. as administrative assistant to the executive vicepresident. . . . TRIO MFG. CO. has purchased FALCON ELECTRONICS CO. of Quincy, Ill. and its entire line of antennas; the whole operation will be moved to the Trio plant at Griggsville,



DESPOSITO . . . appointed by Pyramid.

Ill.... VIRGIL M. GRAHAM is now in charge of the RETMA Engineering Dept.; he succeeds Ralph Batcher—resigned after nearly four years....



WILLIAM E. McFadden, Sec. of the Radio Old Timers, gets a little help in pre-shindig planning.

MERIT COIL & TRANSFORMER CORP. announces the appointment of HAROLD C. ANDERSON as the new purchasing agent. . . . ABRAHAM HY-MAN is new head of recently expanded TV antenna development section of the BEACH MFG. CORP. . . . Newly added participants for the HOWARD W. SAMS & CO. are: CBS-HYTRON, FED-ERAL TELEPHONE AND RADIO CORPORATION, and INTERNATION-AL RECTIFIER CORP; this brings the number of participants in the Sams service to 36, representing a total of 49 product listings. . . . RETMA is pushing a training program to build a pool of trained TV technicians by holding a seminar for vocational teachers at Oswego State Teachers College in Batavia, N. Y. this summer. . . . First sessions of RCA's Color TV Clinics have

national attendance records of over 27,000 television service men; similar clinics are scheduled in 65 other major cities for servicemen-dealer customers of RCA. . . . BELLEVUE TUBE MILL, INC., affiliate of Snyder Mfg. Co., has just issued a revised catalog of its products. . . . LYNN C. WIMMER is newly appointed director of public relations for BURTON BROWNE AD-VERTISING. . . . "Automatic Record Changer Manual" is fifth in a series of Photofact coverage on record changers and tape recorders published by HOW-ARD W. SAMS & CO., INC. . . . RCA has launched a promotional campaign designed to promote the use of factory replacement parts in RCA Victor television sets and phonographs by dealers and TV technicians. . . . A Cross-Reference Guide, covering radio and television components through the use of manufacturers' part numbers, is a new publication of P. R. MALLORY & CO., INC. . . . Just off the press of JOHN F. RIDER, PUBLISHER, INC., are three recent publications: "Highlights of Color Television," "Introduction To Color TV," and their "Spring 1954 Book Catalog." . . . ASTRON CORP. has announced the availability of a new capacitor manual, AC-4, containing detailed engineering data and specification information on their complete line of capacitors and filters for radio, television and electronic application. . . . A good give-away-gimmick for servicemen, called the "Miller Press-Test Card" for checking the condition of phonograph needles without removing them, is being offered for free by the MILLER CO., Libertyville, Ill. This enables the public to take an impression of their own needle and send it to the Miller Laboratory for inspection.



WIMMER... of Burton Browne Advertising.

#### **EVERY SERVICE BUSINESSMAN KNOWS THAT:**

#### HANDLING THE CUSTOMER IS AS IMPORTANT AS

### REPAIRING THE TV SET

Here are a few customer questions and problems. Do your servicemen know the best answers?

Customer invites you to have a drink with her.

"Why are the test patterns good, but the pictures poor?"

You do some damage to the customer's furniture.

"Are you sure my set will work after you fixed it?"

You have some screws left over after repairing the set.

Customer insists on keeping an old CRT which you replaced.

"Did I buy a lemon?"

"What kind of set do you have in your home?"

Customer ask; you to stay for lunch.

"Why is my neighbor's picture better than mine, when I paid more for my set?"

Children interfere with your tools.

"This is the same trouble that you fixed last week, I am not going to pay again."

Customer tells you which parts need replacing even before you look at the set.

"My credit is good, charge it."

Fierce dog is in the room, which makes you nervous.

"Why is it my set never acts up when the serviceman is here?"

"How long will my picture tube last?"

Customer asks you how much money you make.

You call at the house and find the customer in a negligee.

THE RIGHT ANSWERS ARE FOUND IN THIS VERY VALUABLE BOOK. RIGHT FOR THE SERVICEMAN; RIGHT FOR YOUR COMPANY; AND RIGHT FOR THE CUSTOMER TOO.



- Compiled by the 150 working supervisors and technicians of Central Television Service, Inc., largest independent TV service company.
- Written with the assistance of a psychologist on the staff of Chicago University.
- Forward by Milton S. Kiver.
- Cartoons and sketches make it entertaining as well.
- Over 90 pages crammed with vital do's and don't's in the customers' homes.
- 50 question true-false test included for servicemen to test themselves.
- Distributed by Service Management magazine as a service to the entire television industry.

QUANTITY LIMITED ON THIS PRINTING. ORDER YOUR COPY RIGHT NOW FOR QUICK DELIVERY.

	MANAGE Street, N.V Ga.		
Relations'	me ' handbook each copy.	for technic	f your "Customer cians. Enclosed is
NAME			
ADDRESS			
			STATE



`an internal Technical` Training Program for

# SERVICE COMPANIES and DEALER SERVICE DEPARTMENTS'

The Television Technician's

Lecture Bureau Proudly Presents...

# NOLL'S ELECTRONIC STUDY GUIDE



Here is the Bureau's timely service to provide Service Companies of all sizes and Dealers' Service Departments with factual, timely, practical, down-to-earth technical information on all phases of the fast-growing electronic

art that is of vital interest to independent service and dealer organizations.

The study guide is in the form of a series of monthly discussions, presented in a carefully planned sequence, aimed to present electronic developments in a manner that is understandable by and practical for the technician and field engineer.

It covers Color TV, UHF developments, VHF advancing techniques, Transistors, Antennas, Applications in Circuitry by Set Manufacturers and Testing Techniques.

#### SAVE TIME

NOLL'S ELECTRONIC STUDY GUIDE will save study time because it avoids superfluous information and impractical applications of theory.

#### KEEP AHEAD OF THE TECHNICAL PARADE

The Guide will provide information on practical developments far ahead of its availability from any other source.

All information will be based on exact knowledge of service needs because it will be proven out in the Bureau's Laboratories.

#### TOPICS YOU HAVE MISSED

A few of the topics you have missed in the first four study guides (still available if you enroll) as follows:

- Four discussions of color television including details of NTSC system.
- 2. New "One Meg" marker generator producing one megacycle markers over entire IF and VHF ranges. Schematic, parts values, and construction data.
- 3. Transistor radio detector, transistor phonooscillator, and transistor scope probe.
- 4. How to test and compare antennas.

,       	EDWARD M. NOLL TTLB EDUCATION SECTION BOX 94 HATBORO, PA.
	Here is one (\$1.00) dollar. Please send me a sample issue of NOLL'S ELECTRONIC STUDY GUIDE.
	Name
 	Street
<u> </u>	City State

# Your Business Problem?

#### By LAWRENCE KANOVER Management Consultant

QUESTION: From a West Coast service company who requested that the



lication. "We operate our ten service man organization on a

twenty - four hour schedule and would like to know the best way to schedule and dispatch our

force."

#### ANSWER:

"This particular function is probably the most important operation in your entire procedure because it touches on public relations. Let's take this problem step by step and exploit all the various required operations.

- 1. "When a customer phones in a complaint, the service operator should have at her fingertips the customer's case history to enable the clerk to answer the customer's questions with some knowledge of past service performance.
- 2. "After the complaint has been registered on the service order, the customer should be given the promised service date.
- 3. "The service order should then be placed in a schedule rack with sections for each day of the week.
- 4. "The number of service calls to be promised will be related to the number of outside service men available to perform such service. For example: your ten men may be capable of completing eight calls per day, total promised calls would be eighty promised daily, less 10% to be set aside for hot calls on dead sets where same day service is usually demanded by the
- 5. "When the number of promises are reached, the dispatcher should remove all the calls from the rack and break them up into ten routes.
  - 6. "When the service men return

from their previous appointed rounds they can then be given their next day's work

7. "Just before the service men are given their new work, the dispatcher should head up a route sheet for each man with the customer's names in the order in which they will be serviced. This will help to locate a man during the day if necessary. (Some paper control systems will give the routing information to the dispatcher automatically without making it necessary for him to write them at all.) The control copy of the service order will also enable the dispatcher to control the incoming monies on C. O. D. calls and dispel any ideas of withholding monies from management.

"I have mailed, to the service company in question, some photographs of routing and dispatching sections of various servicing organizations that I have personally set up."

Send your questions to the writer at 145 Hudson Street, New York 13, N. Y.

#### **BRAND NAMES MEAN SALES**

Advertising will not pay unless you do quality work and feature nationally advertised brand name products. The introduction to a course in advertising given by Ken Davis, assistant professor of marketing, University of North Carolina, indirectly impresses this cold fact on the minds of retail executives who attend his sessions. He points out:

"The most effective advertising will not move poorly selected merchandise. You can be successful with poor advertising and good merchandising, but you won't show profits with good advertising and poor merchandising. Advertising is an investment. Instead of buying capital equipment, your money buys consumer knowledge of your store, its policies and merchandising. Of the consumer knowledge developed, a small portion is going to be converted into consumer purchase immediately. And, like most investments, advertising takes time to develop its true value."

#### TV TUBE LOCATION GUIDE

A new manual in the TGL series has been published by Howard W. Sams & Co., Inc., 2201 East 46th Street, Indianapolis 5, Indiana. TGL-4 covers TV receivers made in 1952 and 1953 and includes a combined index of all receivers depicted in the three preceding guides.

Features of the new guide include: Tube location, tube function, major component placement, fuse location, fused circuit designation, indicator showing tube socket orientation, tube



complement variations used in different production runs and a tube failure chart.

#### What's In A Name

(Continued from page 7)

must be manufactured to merit the praise of these large expenditures . . . otherwise they would soon fall by the wayside.

"The public has learned through experience to trust these brands. They have also found that these famous brands are handled by merchants or dealers who can be trusted. When you, as a dealer, handle name brands, you build your reputation by association. It automatically makes your job easier, because the big job of product acceptance is done for you. All that is left for you to do is point out the features and make delivery or service commitments. I am not foolish enough to expect you to believe it is easy in these days of stiff competition to do business, but all the more reason to tie your kite to a star. Nationally advertised brands are the dealer's ace-in-thehole."



# Those Who Value Profits Value Markem Service Systems

The successful men in the television and appliance service field recognize the value of an efficient paper control system. To them, the paper control system is the medium by which their service business op-

Follow those who have learned that Markem means reduced cost for service and increased operating efficiency. What Markem did for them . . . MARKEM CAN DO FOR YOU.

- Will reduce the number of telephone operators required to service a given number of accounts.
- Will give service technicians a complete case history on each receiver being repaired.
- Will give your telephone operator a complete case history enabling her to speak authoritatively to customer requesting service.
- 4. Will eliminate the possibility of sending a service technician to a wrong address.
- Will enable you to set up all the required service records at one typing or writing merely by inserting the proper number of units.
- 6. Will reduce paper work and papers and require less space.
- 7. Will eliminate individual customers' folders and files.
- 8. Will reduce the time required to route service calls by any pre-designated areas.
- Will enable telephone operators to do all of the following operations without leaving seat or phone:
  - a. Catch duplicate service calls
  - b. Catch nuisance calls
  - c. Stop service to delinquent accounts
  - d. Identify type of service to be rendered immediately
  - e. Receive, post, and schedule all incoming service requests.

For "An Analysis of a Markem Paper Control System" send just 25¢ to:

## MARKEM SERVICE SYSTEMS

145 Hudson Street, New York 13, N. Y.

# OUACHITA SERVICE PHILOSOPHER



Rides the Brandwagon at Radio Ranch By JACK DARR

Well, sir, you can see by glancing over the pages of this excellent periodical that the subject for this session is Brand Names, and stuff like that.

What do we mean by 'Brands'? What did a brand mean to the old cowboys out West, at roundup time? Meant that he could leap on th' middle of his favorite cuttin' hoss and ride into the herd of assorted sirloin on th' hoof and gather out his critters, and his only, by the identifyin' brands stamped somewhat indelibly on their behinds. (O' course, he had to be careful to only separate his, whilst he was doin' it: people back in them days had a tendency to air-condition folks they caught tryin' to separate too many of other folks' caows). But, he could tell, right away, which ones he wanted, without too much trouble.

We can do th' same thing, nowadays, if we do just what Wild Bill did: Take to pickin' out our merchandise by Brand Names, instead of just orderin' a 'condenser' or a 'tube.' Get in th' habit of orderin' by Brand-Names. Ask for a 'Sprague' condenser, or a 'Sylvania' tube, and get what you order. 'Course there ain't no one outfit got a monopoly on makin' good parts, or tubes, or the like, but there is some that you, yourself, like better 'n others. This might be due to personal preference, formed through past experience with said product, which is a dang good way, if you ask me. It might be through the word of another, whose judgment you respect. Whatever it is, if you do select a good product, and it gives you good results, dependability, quality, etc., why, by golly, take to orderin' that brand from then on.

#### FOR BETTER OR WORSE

The business life of any firm is only determined by the quantity of business you give 'em! In other words, if we don't like their products, if there is something out of line about it, whether in quality, price, guarantees, or any-

thing else—that firm is not long for the American scene.

The people who make honest, quality products, advertise them honestly, guarantee them to perform as advertised, back up that guarantee to the limit and sell 'em at a fair price are going to be the ones who remain in business! That's always been my contention about radio and TV business, whether it's buyin', sellin or fixin'. If you give your customer a square deal, and keep on givin' it to him, each and every time you do business with him, why, you'll remain in business. The Gyp artist may stay around for a little while, but in the long run, the feller who makes it his business to deal honestly with the public will still have the business!

Well, let's git back on th' subject. We have got a bigger herd to cut out from than the cowboy had, when you think of all the many and varied products that are competing for our dollar. Jist think of how many tube manufacturers, condenser makers, resistor builders, coil-winders, setmakers, test-equipment makers, and on and on all night, there are.

How can you tell which one's the best? Best way, look at their brand! There it is, right on the front panel of whatever it is they're makin'. They're proud of it; they want it to be seen and recognized wherever it's seen, as the mark of a quality product.

If they've been giving you good service and quality merchandise in the past, it means that here is another item of the same quality; if there's anything wrong with it, the man who made it'll stand back of it, and see that you do get what you paid for; a high-quality item! That's what that brand says to

#### GOT NO NAME?

Lots of times, although it don't seem to be quite as prevalent as it used to be a few years ago, you'll find the man who made some unit ashamed to put his name on the thing. We used to have a good deal of trouble with that, seems like right after the war. (Th' last war. that is: the one where ever'body was fightin', and not just Joe McCarthy and Adlai an' Harry!)

There was quite a rash of radio sets come out about then, made by some fly-by-nights all over the country, with names like 'High-Qaulity,' 'Super-Tone,' 'Bestinthewest,' and all that, but never a factory number or name anywhere on 'em. After spendin' some several days tryin' to get one of 'em to work, you agreed with the man. If you'd built such a pile of junk, you wouldn't put your name on it either!

#### **BUY PROTECTION**

There's another angle to this here Brand-Name deal that's overlooked by lots of us. To some of us, the Brand Name is just a handy way to order. Take a think at this thought: that Brand Name is protection, just as much as an insurance policy! You order a couple dozen 'filter condensers' from the Gyppum All-the-time Radio Supply Co., absolutely money-back guaranteed if they don't work (it was there!), and do you know what you're gonna get? If you do, you're a better soothsayer than you are a radio-electronics technician, and you better go to playin' the horses . . . you'll make more money.

The chances are highly in favor of you receiving an assortment of 'filter condensers which were made up for some manufacturer anywhere from five to ten years ago and which were left over when he finished a run on some particular model. He kept 'em for three or four years, then sold the whole bunch to Gyppum All-the-time for about five cents apiece. Gyppum, in turn, puts out a fancy catalogue, describing these units of uncertain age but doubtful capacity as 'Brand-new, fresh stock, popular-sized capacitors at an excruciatingly low price of fifteen cents apiece (or a markup of somethin' like 300%), and sells 'em out. In th' first place, they're so old that half of 'em are dried out, the rest have lost their power factor and filtering efficiency, and the life in your customer's sets is eggs-stremely doubtful!

In case you're wonderin' where I got my information about this procedure with th' condensers, I'll tell you. I got it right straight from th' horse's mouth, so to speak. I learned these interestin' facts from a lecturin' representative of a leadin' manufacturer of condensers, one time when he gave a right interestin' demonstration of his company's products up at Fort Smith. T'weren't no secret, I reckon; he told th' whole bunch of us, right out in meetin'. I believed him, too.

Well, I gotta go. Done talked too much already. Y'all come to see us.

#### Letters

(Continued from page 4)

ture, service hints, management ideas,

We, therefore, are much interested in your Monthly Service Selling Programs and are planning to tie in our activities with each of your proposed programs. However, if possible, we would appreciate your advice as to the next month's programs, a little while in advance of publication, so that we may better plan our tie-in efforts.

We would like to extend our efforts to you and your efforts to be of service to the Electronic Service Industry.

MARVIN M. SPAHA, Gen. Mgr. Hughes-Peters, Inc.

Dayton 2, Ohio.

Late again (with subscription). Sorry-can't pass up a magazine like this. Sure is helpful.

> WILLIAM NICHOLS, Nichols TV

Grand Rapids, Mich.

I can honestly say that I like your magazine-It's tops with me.

J. M. FRANCIS

Lakewood, Ohio.

#### Our Opinion

(Continued from page 6)

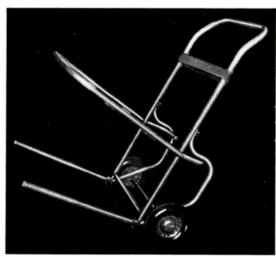
pleasant sound reproduction from their record players and less A/C hum and raspy volume adjustments from their radio sets.

As you read the story about the GMP Quality Service Dealers in northern California, think about it in terms of your own community-how you could work with your fellow service dealers to establish identification of dependable service businesses for the common good of electronic service as a business in your section. Accomplish those two basic requirements and a plan for service business promotion will come as a natural development.

# Now-One Man Can Do the Work of Two

With The **USP** TV Truck

- something new in hand trucks for moving all types of television sets.
- compact truck especially designed to save you time and money.
- light-weight yet can carry your largest sets.
- makes your home demonstrations and service easier—can be used as a work table.





The USP Superior TV Hand Truck is equipped with semi-pneumatic ball bearing wheels and other features which aid step ! climbing, facilitate move- 1

Fill out the couponsend for information on this high-value TV Truck, U. S. Products, Inc. Columbus, Indiana.

Please send your new Catalog. Send name of nearest T V hand truck dealer.

Name. Address ....

City... Zone .... State



hand trucks

FOR FLOOR MODELS



FOR TABLE MODELS

U S PRODUCTS INCORPORATED • COLUMBUS, INDIANA

# GET THESE STANDARD TV LABOR CHARGES CHARTS

Here are the labor charges charts that should be posted in every shop that sells TV Service to the general public.

TVL-1 gives you a cross-check on adequate changes by specific service operations. TVL-2 will help you estimate TV service charges quickly and accurately.

Compiled by the editors of SERVICE MANAGEMENT with the cooperation of the Television Service Association of Michigan, they have been welcomed by service operators everywhere for their value as service pricing reference guides.

The Standard TV Labor Charges Charts are printed on bristol board, 11" x 14", and are suitable for use as desk or wall charts.

Send one (\$1.00) dollar for a pair of these charts — TVL-1 and TVL-2 — for reference in estimating TV service jobs and for checking over-all service charges against individual operations charges.

SERVICE MANAGEMENT Circulation Dept., 161 Luckie Street, N.W., Atlanta 3, Ga.

Enclosed is one (\$1.00) dollar. Please send me a copy each of the Standard TV Labor Charges Charts — TVL-1 and TVL-2.

Name
Address
City
State

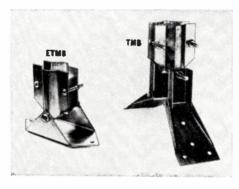




#### RADIO-TV TEST SOCKET ADAPTERS

Three new service aids have just been announced by Pomona Electronics Company, 524 West Fifth Ave., Pomona, Cal. They are the 7 and 9 pin miniature test socket adapters and the 8 pin octal test socket adapter. These adapters are ideal for making measurements of voltage, resistance, audio and video from the top of the chassis while the set is in full operation.

They are inserted between the tube base and its socket. This completes the circuit and makes all connections readily accessible without removing the chassis from the cabinet or without turning the set upside down on the work bench.



#### NEW ROHN ROOF MOUNTS AND BASES

The Rohn Manufacturing Company, 116 Limestone, Belevue, Peoria, Illinois, has just announced their Models TMB (de luxe) roof mounts, ETMB (standard) roof mounts and the GTMB drivein type ground base mount.

Rohn roof mounts accommodate all masts from 1" to 2¼" diameter including the popular ETM and TM telescoping mast series. Both de luxe and standard models feature versatility—can be successfully installed on peak roofs, flat roofs or surfaces, side walls or any horizontal surface.

#### NEW PRODUCTS REVIEWS CBS-HYTRON SOLDER DISPENSER

A new Solder-Dispenser that does away with haywire coils of solder is now available from CBS-Hytron Tube Distributors. A one-hand tool, the Dispenser eliminates time out to unroll and straighten solder. The operator's thumb on the knurled control wheel of this unique unit feeds solder and retracts it neatly when the job is done—without waste or mess. It holds 72 inches of solder (a normal month's supply) and is compact, light, convenient and pencil-like with a handy pocket clip.

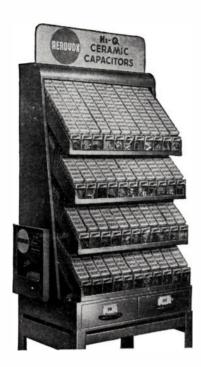


#### LITTELFUSE IMPROVES TV SNAP-ON MOUNTING

A marked improvement in the design of the TV snap-on mounting that will save servicemen further work, time and customer's money has just been introduced by Littelfuse, Inc., of Deep Plaines, Ill. The innovation consists of substantial cut-outs on each side of the holder, facilitating quick and easy replacement of fuses. With the new model, the blown pigtail fuse can be readily snapped on one side; the regular replacement fuse inserted on the other. Further information on this new unit. Part No. 350130, may be had from: Littelfuse, Inc., 1865-M Miner Street, Des Plaines, Ill.



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#### **DISPENSER CABINET**

Finger-tip selection of correct ceramic capacitors for given applications, is provided by the "Ceramic Center" dispenser cabinet now appearing in the stores of distributors, who handle the Aerovox Hi-Q Ceramic Capacitor Line.

"The Ceramic Center" displays some 700 window cartons, each containing five pieces of the given type and value. Cartons are on inclined channeled shelves to accommodate either the individual cartons or the ten-carton display sleeve. The dispenser also has drawers for slug type or "cartwheel" capacitors, and again for plate assemblies. At the cabinet sides are literature racks dispensing the latest catalog and other data.

The "Ceramic Center" is supplied by Aerovox Corporation of New Bedford, Mass.

(Editor's Note: This product, which appeared in our January issue, inadvertently had the wrong photo shown with it.)

#### JFD's New "Rotenna"

With an eye focused on the accuracy of antenna position for top



reception of UHF and color TV signals, JFD Manufacturing Co., of Brooklyn, N. Y., introduced their new "Rotenna" at the May Trade Show with the sales theme, "Stop-Watch Tuning Accuracy."

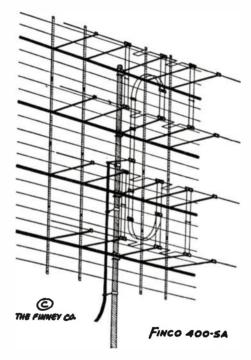
They stressed five main features of the "Rotenna" as (1) Stop-Watch tuning accuracy, (2) Cartridge type removable drive unit, (3) "Inline" mast collar construction, (4) 390 degree traverse and (5) Finger-tip piano control console.

#### FRINGE AREA ANTENNA

The Finney Company, Manufacturers of the famed 400-A fringe area antenna and the Finco series 500 UHF antennas is now on the market with the Finco 400-SA "Fro-Bac."

The Finco 400-SA features the Fro-Bac screen designed to deliver the highest front-to-back ratio yet produced by fringe area antennas. Model 400-SA does not replace Model No. 400-A, but auguments some in "front-to-back" area problems.

Except for the "Fro-Bac" screen the 400-SA is in every detail exactly the same of the 400-A. None of the tremendous reception power has been sacrificed.



The screen comes completely preassembled with the antenna. Can be installed in minutes and is of weatherproof all almuinum construction.

For the present owners of the Finco 400-A (VHF-UHF), and Finco 400 (VHF) kit No. 14S is available for adding the "Fro-Bac" screen to make the 400-SA. Servicemen and dealers located in an area with a front-to-back problem should write the Finney Company, 4612 St. Clair Ave., for complete information.

# New RIDER Books Make Servicing Easy!

#### INTRODUCTION TO COLOR TV

by Kaufman & Thomas

Here is the complete story about color television—all types of receivers—all types of picture tubes—all types of circuits—written in a clear, understandable language without mathematics. The most complete book on the subject. Easy to understand! A "must" for all technicians, engineers and students.

Over 140 (51/2 x 81/2") pages, illus...\$2.10

#### HIGHLIGHTS OF COLOR TELEVISION

by J. R. Locke, Jr.

A right-to-the-point explanation of the highlights of the NTSC color television system—such as colorimetry—matrixing—the color sub-carrier—synchronous detection—etc. A "quickie" on color TV.

48 (51/2 x 81/2") pages, illus.... Only \$.99

# HOW TO INSTALL AND SERVICE AUTO RADIO RECEIVERS

by Jack Darr

An expert gives practical, detailed instructions on how to install and service all types of automobile radios. Not a schematic book. Shows where to run lead-ins, how to install antennas, eliminate noise and gives methods for vibrator testing. Furnishes a complete list of tools, spare parts and other equipment and how to set up an auto radio service business.

128  $(5\frac{1}{2} \times 8\frac{1}{2})$  pages, illus......\$1.80

#### SERVICING TV VERTICAL AND HORIZONTAL OUTPUT SYSTEMS

by Harry Thomas

Complete. Easy-to-understand. Discusses all types of vertical and horizontal output circuits used in TV receivers — recognition of trouble — how to locate faults and their repairs. No other book in print offers equivalent coverage of the subject or explains details as clearly.

176 (5½ x 8½") pages, illus.....\$2.40

#### TV FIELD SERVICE MANUAL, VOLUME 1

Edited by Harold Alsberg

The finest practical data service for in-the-home servicing. Tube layouts; picture tube adjustments; rear and front controls; tube compliment; tuner and horizontal oscillator adjustments; tube complement; key voltages; tuner dial stringing; trouble symptoms; chart with tubes and parts to check; series filament wiring. Book lies flat, spiral binding. Covers 1947 through 1953. Volume 1 covers: Admiral Affiliated Retailers (Artone), Aimcee (AMC), Air King, Air Marshal, Allied Purchasing, Andrea, Arvin and Automatic.

128 (5 $\frac{1}{2}$  x 8 $\frac{1}{2}$ ") pages, illus....only \$2.10

COMING IN JUNE Rider TV MANUAL, VOL. 13

Write for information on all RIDER books. Buy these books now from your jobber . . .

bookstore . . . If not available from these sources, write to:







#### **ASSOCIATION** NEWS

#### TRANSCRIPTS FROM SERVICE MANAGEMENT'S PARTY LINE.

BY PENNY MARTIN

During the past year I have received a number of requests for addresses of television service associations so I have compiled a list of all the active associations known to me. There are more being organized continually, so if your association is not listed, won't you please send me the exact name, address and list of officers, so that it will appear in a future issue?

NATIONAL ASSOCIATIONS
National Alliance of Television & Electonic Service Assn's., 5908 S. Troy St., Chicago 29, Ill. Frank J. Moch, Pres.
National Appliance & Radio-TV Dealers Assn., 1141 Merchandise Mart, Chicago 54, Ill. A. W. Bernsohn, Mgr. Dir.
National Electronic Distributors Assn., 228 N. LaSalle St., Chicago 1, Ill. L. B. Calamaras, Exec. V-Pres.
National Electronic Technicians & Service Dealers Assn., 165 E. Broadway, New York, N. Y. Roger K. Haines, Pres.

REGIONAL ASSOCIATIONS
Eastern TV Service Conference, 45
Church St., Paterson 1, N. J. Harold
Rhodes, Chm.; J. Palmer Murphy, Exec.

ARIZONA

ARIZONA
Radio Servicemen's Assn. of Phoenix, 514
N. 4th St., Phoenix, Ariz. R. C. Null.
Mr. Peter Scrivano, 234-a W. Maryland
Ave., Phoenix, Ariz.
Electronic Assn. of Tucson, 2616 E.
Broadway, Tucson, Ariz. Arthur Wheeler,

Pres.
Radio Service Assn. of Tucson, 2216 S.
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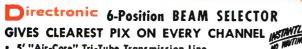


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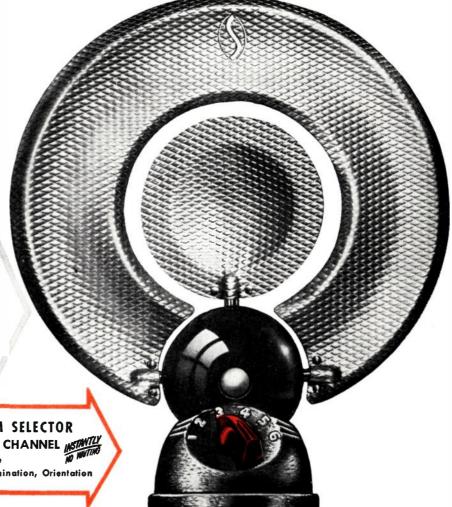
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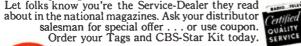
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CQS Tags are available: 250 for \$2.25, 500 for \$3.50, 1000 for \$6.00, with your 3-line imprint. Ask your distributor salesman for special offer . . . or use coupon to order direct.

#### GET YOUR CQS CBS-STAR KIT

Contains 6 smashing, big, colorful, magnetic CBS-Star streamers. Each features a different CBS-TV star: Benny Burns and Allen . . . Gleason . . . Godfrey . . . Murrow . . . and Marie Wilson. Each is a different size and shape. Each sells the Star Performance of your Certified Quality Service. Kit also includes a new inside/outside CQS decal and a Business Builder's

Catalog showing the many sales aids available to you. CBS-Star Kit is free with CQS Tags . . . Kit alone, 25¢





CBS-HYTRON Main Office: Danvers, Mass.

A Division of Columbia Broadcasting System, Inc.

A member of the CBS family: CBS Radio - CBS Television Columbia Records, Inc. • CBS Laboratories • CBS-Columbia • and CBS-Hytron



#### CBS-HYTRON, Danvers, Mass.

Please rush me:

A CBS-Star Kit free with . . . CQS Tags @ \$2.25, 250; \$3.50, 500; \$6.00, 1000

A CBS-Star Kit only

@ 25¢ (for handling and mailing)

I enclose \$.... to cover Tags and/or Kit. (Please send cash, check, m.o...no C.O.D.'s.) HERE IS MY 3-LINE IMPRINT FOR TAGS

Name	• • •
Street	• •
CityState	• •
Signed	٠.

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161 Luckie St., N.W. Atlanta 3, Georgia

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Mr. R. B. Montgomery 344 Van Emburgh Avenue Ridgewood, N. J. Sec. 34.66 P.L.&R. U. S. POSTAGE PAID

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VICKIE HAYES ... points out a good idea for all TV Service Organizations.



September, 1953

Volume 2 Number 12

TELEVISION . ELECTRONICS . RADIO . AUDIO

**32**€ 32€





# **MINIATURE** SELENIUM RECTIFIERS

FEDERAL—the original miniature—is saying goodbye to gray. The new bloom is "Rectifier Red" . . . a striking color that instantly tells servicemen they're getting the rectifier efficiency and long life that created tens of millions of profit opportunities for radio-TV servicing . . . tells them they're getting the quality that keeps Federal miniatures the best-seller in America's vast and growing rectifier replacement market!

Look for "Rectifier Red"...get the performance that clicks . . . the replacement profit that sticks! See your Federal Distributor for Federal miniatures in handy 8-unit kits . . . in quantity lots . . . or in individual packages sold through Federal's self-service rectifier dispenser... on hundreds of counters! See your "FTR" Distributor now, or write to Dept. F-75.

"America's first and largest manufacturer of selenium rectifiers"



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In Canada: Federal Electric Manufacturing Company, Ltd., Montreal, P. Q. Export Distributors: International Standard Electric Corp., 67 Broad St., N. Y.

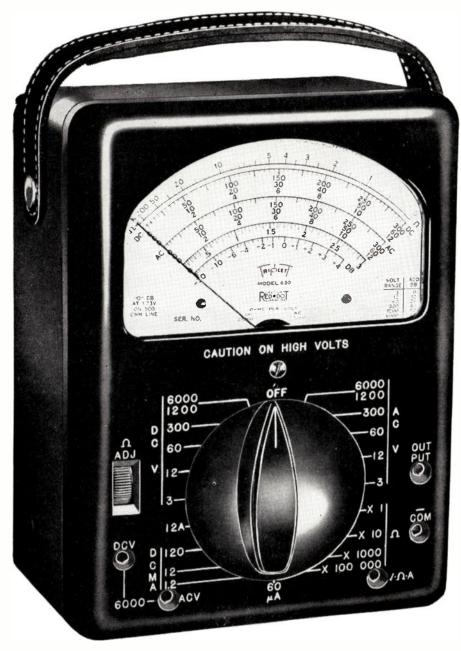
PERENNIAL

PERFORMER

\_year after year after

year after year ...!

# 630 Volt-Ohm-Mil-Ammeter "speaks" for itself in any company



RIPLETT 630 Volt - Ohm - Mil - Ammeter has many significant advantages and features that make it stand distinctly apart from similar instruments in its price class. Actually in components, in engineering, in minutely accurate performance, Triplett 630 closely approaches laboratory standards.

Since the scales of any VOM comprise the means by which it makes its multiple services most valuable, the legibility and easy-read-ability are of prime importance. Triplett engineers have created in Triplett 630 the longest scales available in this size tester. (The upper arc by actual measurement is four and three-eighth inches.)

This long-scale factor accounts for the ease with which precise readings are easily made. Further legibility is gained by use of black and red scale markings. D.C. and D.B. are black and white. A.C. and Ohm markings are red on white. Ohms from one hundred million to one-tenth ohm mark the range of this amazing scale. On low ohms, center scale reading is 4.5 ohms.

#### The Single Switch

Futher indication of the practical skill and engineering "know-how" behind Triplett 630 is the Single Switch. Its simplicity of operation assures no burn-outs thru momentary memory lapses. There is instant switch-

ing to desired circuit thru a single  $2\frac{1}{2}$ " knob flush with the face panel. The molded switch itself embodies the most advanced engineering practices. Fully enclosed, the silvered contacts are kept permanently clean. Its rugged construction means stronger performance and longer life.

These two factors are but samples of the many ways in which on-the-job needs have been anticipated and provided for in a beautiful streamlined tester. It provides A.D-D.C. Volts, D.C. Micro-amperes, Milliamperes, Amperes, Ohms, Megohms, Decibel and Out Put readings in a no-short design embodying interior construction with all direct connections; no harness cabling. Its fool-proof unit switch construction houses precision resistors in insulated recesses in direct connection with switch contacts.

Study the following Ranges and descriptions and compare them point by point with any similar instrument for conclusive proof that Triplett 630 "speaks" for itself in any company.

#### Ranges

D.C. Volts: 0.3-12-60-300-1200—at 20,000 Ohms/Volt (For Greater Accuracy on TV and other High Resistance Circuits.)
A.C. Volts: 0.3-12-60-300-1200-6000—at 5,000 Ohms/Volt (For Greater Accuracy in Audio and other High Impedance A.C. Circuits.)
Decibels: —30, +4, +16, +30, +44, +56, +70. (For Direct Reading of Output Levels.)
D.C. Microamperes: 0.60—at 250 Millivolts.
D.C. Milliamperes: 0.12-12-120—at 250 Millivolts.
D.C. Amperes: 0.12-12-120—at 250 Millivolts.
\*Ohms: 0.1.000-10,000—(4,404-44 at center scale).
\*Megohms: 0.1-100—(4,404-44)000 center scale).
Output: Condenser in series with A.C. Volt ranges.

\*Resistance ranges are compensated for greatest accuracy over wide battery voltage variations. Series Ohmmeter circuits for all ranges to eliminate possibility of battery drain when leaving switch in Ohms position.

Get a Triplett 630 into your own hands at your distributor. U.S.A. Dealer Net \$3950

TRIPLETT ELECTRICAL INSTRUMENT COMPANY
BLUFFTON, OHIO





**VOLUME 2, NUMBER 12** 

SEPTEMBER, 1953

# COVER PICTURE VICKIE HAYES

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#### Letters to the Editor

#### SERVICE FORMS

In your May issue, you describe a system of service forms (page 17). Would it be possible to secure further information or a sample set of these forms?

We are in the process of revising our service forms and are very much interested in something similar.

L. G. Dearing The Radio Hospital Oklahoma City, Okla.

#### TECHNICAL TOPICS

Please send me information on the pix-eye and test pulse generator, and prices and where I can get one.

Fred Jenner

Jenner Radio TV Service Wessington Springs, S. Dak.

I have read your article with reference to closed circuit TV with great interest.

I am interested in building a Camera Chain around the 5527 camera tube, along with the oscillator RF Generator, so it may be fed to a conventional TV receiver.

Would you please send data and diagrams along with the information regarding a special Industrial TV course?

A. F. Bruck

Bruck Radio Service

Hamilton, O.

#### LABOR CHARGES

Would you please send me your Standard TV Labor Chart? We think SERVICE MANAGEMENT a terrific magazine.

J & B Radio TV Service

St. Louis, Mo.

#### NARDA

Your article "NARDA, the Dynamic Trade Association," very interesting, and just the type of organization we have been trying to locate. We would appreciate any information you can furnish us about it. Can we become a member, and what is the membership fee?

Daniel S. Mercer Appliance Center Gold Beach, Oregon

#### PHILADELPHIA ASSOCIATIONS

Many members in our association have expressed their doubts as to the existence of such a letter signed by Mrs. B. D. F. of Philadelphia, which you claimed you received and which you reproduced in condensed form in your column in Service Management of June 1953. These doubts existed because of the seeming misinformation as expressed in the text of Mrs. B. D. F's

(Continued on page 25)

**PRODUCT PREVIEWS** 

28

# 12 reasons why it pays to replace with NIA PICTURE '

# Independent laboratory tests show these 12 outstanding qualities of Sylvania Picture Tubes

- No tube failures (after 1500 hours).
- 2. No trend toward slumping emission or low light output.
- 3. No excessive leakage.
- No excessive gas present.
- 5. Excellent grid control.
- **b.** Excellent emission characteristics.

- 1. No stray emission.
- 8. Low electrical breakdown.
- 9. Very good color control.
- 10. Excellent spot centering.
- 11. Low screen burning (no rejections).
- 12. Excellent physical conditions.

Only Sylvania showed

Here is proof that Sylvania Picture Tubes are first in long life and finest in all around performance of all tubes tested.

The above record was established in comparison tests of the tubes of 9 different manufacturers. All tests were conducted under identical conditions by an outside testing agency.

Set owners everywhere are being told again and again about Sylvania's superiority on the big, nationwide TV show "Beat the Clock."

#### The Picture Tube for Reliable Replacement

Of course, the name Sylvania has always stood for highest quality. Now, more than ever before, Sylvania Picture Tubes mean better business for jobbers and servicedealers alike. If you would like the full story of these recent tests to show your customers how Sylvania Picture Tubes won over all others tested, simply mail the coupon now.



Dept. 3R-1309, 1740 Broadway, N.Y. 19, N.Y.

Please send me the official report of the tests made on Sylvania Picture Tubes in competition with other makes.

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Company			
Street			
City	Zone	State	



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# Editorial-

# "OUR OPINION"

A LL of the service businesses that we have studied in the past several years have one thing in common—the managers of these businesses know what they are doing and where their businesses are going.

In every one of these successful businesses, management knows from day to day whether the business is making progress. They all have carefully planned programs ready to be put in effect whenever business starts to take a downward trend. They are prepared to expand cautiously, and sometimes temporarily, when the volume of business consistently exceeds the ability of regular personnel and equipment to handle it.

This had led us to the conclusion that the secret of success in radio-television service is organized thinking, organized planning and organized information.

One of the most difficult problems of service management during these postwar years has been that of handling the great mass of literature that is a natural part of such a fast-growing, swiftly changing industry. It has been doubly confusing because of the great variety of new devices that are being developed — each with its own peculiar installation and maintenance requirements.

Not long ago Jack Keith, vice president and sales manager for Howard W. Sams & Company — a man who has had a wealth of experience in the development of rapid reference indexes for the famous PHOTOFACT Folders and Counter Facts, made this observation:

"One of the biggest problems that confronts electronic distributing and service executives is to be able to find needed information quickly. The tremendous volume of printed material that is a necessary part of a fast-growing industry like ours, presents a 'finding' problem that can be solved only with a simple, effective system of reference filing."

It is quite evident that in the months and years ahead this volume of printed material will increase. As the coverage of UHF expands printed material will reflect the types of equipment, installation procedures and servicing techniques that are proving most successful in varying terrain conditions and at various levels of the UHF spectrum. Every successful service business man will want to accumulate a file of this

6

practical data even though there is no UHF station serving his area. He will want to gather information especially significant on those channels that sooner or later will be in operation in his territory. He doesn't have to guess about those channels. He knows what they will be from the FCC channel allocation tables.

From the solid industry front that is behind the NTSC system for compatible color television it is quite safe to assume that the standards for a color TV system will soon be approved by the FCC. Not long after that factories will be tooling up like mad to produce first the components and then receivers for color TV. It is apparent, too, that broadcasters will be putting color TV programs on the air long before they have an appreciable audience of owners of color sets. When that happens service operators will have to be working with color TV broadcast programs on monochrome receivers.

Alert service company executives will start to build their files of information on color television now so they will have all available practical information at their fingertips when they need it.

Then there's the real "sleeper" in the electronics field — closed circuit television. Considered by industry leaders as potentially the biggest phase of television, it will provide competent, wellmanaged, independent service businesses with the best opportunities they have yet had for stable, substantial, long-range operations.

A great deal of important information is being released on closed circuit TV installations which should be carefully preserved by every progressive service company. When this phase of TV starts to expand it will grow fast. Only those companies that keep apprised of its progress will be able to share in its opportunities.

To help you to organize and file the mass of information you must have at your fingertips, the editors of Service Management developed the FILING INDEX for MANAGEMENT INFORMATION in radio-electronic-television services businesses. The August issue of Service Management carried the complete basic index in connection with a story about how it could be employed.

It is obvious, of course, that such an index is of no particular value unless (Continued on page 32)

# **SELLING SERVICE**By HAROLD CHASE

Do you make it your business to insist that your customers get those extra services — such as thoroughly cleaning



the chassis, proper adjustment of the dial, or making sure the safety glass is spotless? Do you spend the extra five minutes for the complete job? — Or do you rush out, leaving the customer feeling he paid you

\$5.00 for fifteen minutes' work? Those extra five minutes mean a whale of a difference in customer satisfaction. Selling Service builds confidence. This is the part of the job customers can see and understand

Not long ago Paul Wendel, Publisher of Service Management, told me of a homely experience he had that reflects how good customer relations can be profitably applied in even the humblest of businesses. Paul said:

"Often when I drive East for a series of TTLB lectures in Pennsylvania and for business in New York City, I park my car in a garage near the Pennsylvania Railroad Station in Harrisburg and travel to New York by train.

"On one such occasion I found myself with thirty minutes to wait for train time, so I climbed into a seat for a shoeshine.

"Being the lone customer, the shine boy immediately tackled the job with a great deal of gusto. He did a very good job. As he turned to lay down the cloth that normally indicates the end of a shine, I started to step down.

'Just a minute, sir,' he said, 'I haven't finished yet.'

"So I settled back in my seat. As he worked he said, 'We never allow a customer to leave without a complete shine. Not long ago we made a survey of shoe shining practices in Philadelphia and found that nine out of every ten customers there are given incomplete shines. We won't allow that to happen in our shop.'

"This made a deep and lasting impression on me. On two occasions since, when I have been in that vicinity, I have gone out of my way to get my shoes shined in that shop."

Selling Service can be accomplished in many ways. A fine sales talk will often be wasted—if after getting the OK—you fail to do the little things that complete the sale.





HARRY R. ASHLEY, president of the Electronic Instrument Co., Inc., reports excellent fishing off the Bahamas during a recent vacation aboard the yacht "Hurricane." . . . DR. W. R. G. BAKER, vice-president of General Electric, has been awarded the 1953 Medal of Honor by the Radio-Television Manufacturers Association. . . . JACK BERMAN of Los Angeles has been appointed representative for G & H Wood Products of Brooklyn, N. Y. . . . RALPH BLOOM has been appointed district sales manager for Raytheon's television and radio division. . . . AARON BOWSER is now district sales manager for Sylvania's radio and television division. ... ROBERT O. BULLARD has been appointed general manager of General Electric's industrial and transmitting tube sub-department. . . . BOB CAMPION of Dallas, Texas, has been appointed representative for Aerolite Electronics Corporation. . . . E. FINLEY CARTER has been advanced to vice-president and technical director for Sylvania Electric Products, Inc. . . . JOE CLANCY of Angola, Indiana, has been named representative for Aerolite Electronics. . . . DICK COOPER of Philadelphia has been appointed representative for Aerolite Electronics. . . . PAUL J. CRITTENDEN has been appointed assistant treasurer for Sprague Electric Co. ... EDWARD DIAMANT of Cleveland, O., has been appointed representative for the Rohn Manufacturing Co. of Peoria, Ill. . . . RICHARD H. DORF has been appointed editorial director for the Electronics Handbook Company. . . . WILLIAM DUNN, vice-president of Raytheon's television and radio division, says "We do not see how there can be serious doubt as to the continuation of the good business which we enjoyed last year." . . . VERNON A. DUPY has been appointed general sales manager of United Motors Service Division of General Motors Corporation. . . . A. S. ENGELMAN of Kansas City, Mo., has been appointed regional sales representative for the General Instrument & Appliance Corp. . . . MAX FINK has resigned from the Hi-Lo TV Antenna Corporation. . . . THOMAS M. FITZ-GERALD, JR., has joined P. R. Mallory & Co., Inc., as sales manager for the capacitor division. . . . GEORGE B. FRASER has been elected president of the Astatic Corporation. . . . HARRY GOODSTEIN has been appointed manager of the precision control division of Clarostat. . . . IRWIN GREEN has been elected secretary of Granco Products, Inc. . . . JIM HALL has been appointed associate antenna test engineer for the JFD Manufacturing Co. . . . E'LISE HARMON is the new lady-head of Aerovox printed-circuit activities. . . . JAMES L. VON HARZ is in charge of the new Elkhorn, Wisconsin, plant of the Oak Manufacturing Co. ... DR. HOWARD T. HOVDE, vice-president of The Econometric Institute, Inc., was a speaker at the fourth annual NEDA convention and manufacturers' conference. . . . E. A. JANSE of Wellesley Hills, Mass., has been named for the New England territory of Aerolite Electronics. . . . MAURY R. JUNGMAN has been appointed distributor sales manager for the Brach Manufacturing Corp. . . . JEROME J. KAHN, founder and president of the Standard Transformer Corp.. has announced his withdrawal from active management of the Chicago Standard Transformer Corporation. . . . FRED KANTOR of New York City has been appointed representative for G & H Wood Products. . . . ROBERT L. KLABIN, controller of the General Instrument Corp., has been elected manager of its new Sickles Division plant at Danielson, Conn. . . . DR. WILBUR A. LAZIER is the new vice-president and technical director of the Sprague Electric Co. . . . WIL-LIAM LINZ of Chicago has been appointed regional sales representative for the General Instrument & Appliance Corp. . . . EUGENE LOEB of Milwaukee has been appointed regional sales representative for the General Instrument & Appliance Corp. . . . CLARENCE MALIN is now sales manager in RCA Victor Distributing Corp., home instrument department, in Detroit. . . . THOMAS W. MASSOTH has been appointed operations control manager of the engineering products department of the RCA Victor Division. . . . EDWARD J. MEEHAN, JR., has rejoined the broadcast marketing division of the RCA Victor Division, as home sales coordinator of AM and FM radio transmitters and broadcast audio equipment. . . . C. H. MITCHELL of Los Angeles has been appointed representative for Aerolite Electronics. . . . ROY E. NELSON has been promoted to manager of semi-conductor equipment sales for the tube department of RCA Victor Division. . . . JAMES J. OCH of Philadelphia has been (Continued on page 29)

# September Sales 7ips

#### By CHARLES R. TIGHE

The second of a series of guest editorials by distinguished sales executives.

"Business engineering means the application of sound engineering principles to the management of business—research, study, measure, record, plan, control. The application of engineering principles to the management of business means better management — better systems, better methods, better organizations, better equipment, better markets. Better management means better business—better sales, better production, better wages, better profits."

The above is a terse statement made by the George S. May Company, the largest firm of business engineers in the world, which has straightened out the problems of more than 26,000 clients, ranging from multiple manufacturing enterprises to distributors and all types of retail and service businesses.

#### DOUBLED SERVICE INCOME

A service dealer on the Pacific Coast discovered that he was losing potential profits because of inefficient business engineering. He and his men were fairly busy. He thought that he was making a substantial net profit — until he talked to another dealer and discovered that his friendly competitor was getting twice as much, on average, out of every job.

To make a long story short, he set out to find what was wrong. He spent time at the business of his friend, just looking around and chatting with the men. When he returned to his place of business he did some comparative checking. This is what he discovered:

- 1. His customer follow-up system was practically worthless.
- 2. His men were taking orders instead of selling.
- 3. They were missing chances all along the line. Plenty of additional service jobs were available and could be obtained with proper direction of men to explore sales opportunities.

The dealer called a meeting with his boys after doing some figuring to find out what he was losing. First, he explained the average profit on jobs and pointed out that the income was just about enough to cover rent, salaries, light, heat, insurance and other fixed costs. He explained how much all of

(Continued on page 38)

# SERVICE SALESMANSHIP

Five simple points to remember while selling your customers and prospects

By JOHN T. THOMPSON, Sales Manager Replacement Tube Sales General Electric Company

There are some very obvious and simple points to remember in selling yourself and your service. Most of you know them but I think that they bear repeating.

#### FIRST IMPRESSIONS

First is the initial contact with the customer. A good impression can be made by neatness, quiet, confident deportment in the customer's presence. This first contact — and this is extremely important — sets up an impression which is hard to change, in the customer's mind, about you or your technician. Even though the technician may be operating in a customer's home, he can still maintain what has been called a "clean shop." Attention to these simple details is the first step in creating customer confidence — the first step on the road to a permanent sale.

#### PRIDE IN PRODUCT

Second is your attitude in handling customers. You have all seen the simple hand iron displayed in a velvet cloth. This indicated pride in that product. The fact that a customer has purchased a television set indicates his pride of ownership. Respect that pride. Begin your diagnosis with a few simple questions directed to the owner.

Everyone likes to talk. It accomplishes two purposes: It gives the customer a chance to tell you his troubles and supply information which may simplify the servicing of the receiver. An attentive manner is extremely important at this time, since service is a very important problem to Mr. and Mrs. Jones.

You or your technicians may have handled many receivers that day, but remember — this is probably the first service problem that this particular customer has had in many months.

#### DESCRIBE YOUR COMMODITY

Third — describe your commodity to the customer. Your commodity is "Service." If the set can't be repaired in the home, describe the difficulties inherent in servicing television equipment. This can be simply accomplished by tilting the chassis so the customer can see the wiring and the large number of components. It is very elementary, but a mystery to the customer.

#### **ELIMINATE CUSTOMER WORRIES**

Fourth — Lack of understanding or uncertainty is the source of most



worries. Eliminate them from the customer's mind. If rather extensive repairs are involved, don't frighten your customer—tell him why it is normal for any product to require some maintenance. He accepts it in his automobile—let him accept it in his television receiver. This leads to what is probably the most delicate relationship with any customer.

#### PRESENTING THE BILL

Five — Presenting the bill. The natural reaction is, "This is preposterous — this man is a robber!" But, if each item is presented, the total seems very reasonable. One method which may be used is to leave a prepared booklet, such as "Facts About Television Service" which describes the difficulty involved in servicing a television set very simply but "gets the point across."

I can't overemphasize the importance of this relationship, since it is at this point that a decision is made: whether you will receive the next order for service—or whether the customer will seek another source. Do you know how many customers you have lost for just that simple omission?

#### HANDLING OF FURNITURE

One more point — and this is a rather odd one to talk about in any discussion of service salesmanship. I call it "Handling the Furniture." To most wives the television set is just that — a piece of furniture. The best technician can nullify the value of his efficient work by

careless handling of the receiver, rugs, upholstery, or drapes which may be subjected to dirt by careless handling of tools.

I would like to examine some rather general recommendations that apply to your relationships with others associated in your industry.

#### **DEMONSTRATE YOUR INTEGRITY**

This is probably the most controversial subject which has been provoked in the television service industry. I think you will agree that over 90% of the people in any business or profession are honest. But there are always a few whose reputations tarnish the reputation of a reputable industry group.

One positive way to counteract such feeling is by demonstrating real integrity, honesty and forthrightness in your dealings with customers. Most of the complaints about television service have been based on misunderstandings on the part of customers. If you will tell them the "why" of a repair, tell them the reason for your bill, these complaints will evaporate in thin air.

#### **UNDER-CHARGING**

I know that service dealers and service technicians have a reputation, within the industry, of under-charging rather than over-charging. We have only to look at the record of business failures, before and after the war, to see that this must be a fact.

Conduct your operations in a business-like manner. Remember that you are in a large industry, which represents a tremendous annual expenditure by the consuming public. It is only right that your customers should thoroughly understand that their service dollars are being spent with a group who are not only sound technicians, but capable businessmen, giving them real value for a dollar.

#### **COMMUNITY ACTIVITIES**

Become a part of your community. Show an active interest in civic groups which are a part of your community life. People with whom you are associated will gain new confidence in you and your organization — by the very simple mechanism of getting to know your better.

Do you realize that you are the **only** type of retail dealer in the appliance, television and radio industry who is (Continued on page 19)





In western Iowa the Paramount Television and Car Radio Service organization is a highly respected business institution with a back-log of more than 20 years of successful operation behind it. With operating headquarters in Des Moines, Paramount Television installation and field service trucks and cars operate throughout the State of Iowa handling TV installations and service for dealers who rely on this highly competent organization to handle this work for them.

Back of every successful business operation in a field as complex and confusing as electronic servicing you will always find an unusual individual. The man back of Paramount Television and Car Radio Service is Harold Robbins.

products has provided an opportunity to many exceptionally capable and technically versatile men to explore a wide range of scientific subjects financed by the income derived from their servicing activities. Even during pre-war days when radio service was considered a fringe or sub-marginal business, there were men engaged in it who built substantial companies that provided them with better than average incomes. This is one such business.

Gifted by nature with a wide range of aptitudes, Mr. Robbins has found time to employ his talents in many directions while managing his service business. He is an accomplished pianist and organist. He relaxes at the console of the Hammond organ built into the home that he designed and constructed.

The business of servicing electronics home that he designed and constructed. Possessing an avid curiosity about

Paramount

HAROLD ROBBINS, Inc.

Feiler Studio Photo

Paramount's building provides entrance of cars for radio service thru door at right; exit thru door at left. Offices are in building shown above; TV Service department is in right wing. Part of staff, left to right: R. M. Traviss, Phyllis Wade, office manager, Edith Mason, Dean Garland, Ralph Green, Jack Wallace, John Ash, Jr., Jim Russell and Harold Robbins.

the "why" of the Universe, Mr. Robbins delved into astronomy and built his own telescopes to probe the mysteries of the heavens. Turning from the incomprehensible vastness of the celestial cosmos he has become expert in microscopic organisms through his studies of bacteriology. Then, for a more mundane pursuit and one which could, in an emergency, provide an assist in his electronic studies and experiments, he became an expert glass blower. His artistic creations in blown glass are (Continued on page 32)

#### Dealer Form Used By Paramount TV

This form provides all of the information and authorizations necessary to take care of any type of installation. It also provides for only the registration of the purchaser's TV receiver by Paramount. This system of registration, if properly followed up by the service company, will channel a high percentage of the subsequent service on the set to the registering company.

The upper half of the form provides for registration of the customer's receiver in those cases where the dealer has delivered the set and it is operating with an indoor antenna.

The lower half of the form provides complete information for a variety of types of antenna installations, like the following:

- The charges to be paid for Zone "A", residential antenna installations, which cover those in the primary signal area of the station, or for TV service outside of the zoned residential area, must be written in by the selling dealer in the space provided for it.
- The charges for special antenna installations outside of the residential primary signal area, Zone A, must be written in the space provided for it by the selling dealer.
  - Where special conditions prevail in either case and the dealer does not want to assume the responsibility for quoting a price, the dealer checks the proper space for Paramount to give a quotation before proceeding with the installation.
- Provision is also made for test installations where the final sale hinges on satisfactory reception in the customer's home.
- The form includes the necessary authorization from the landlord where an installation is to be made on rented property.

The set purchaser receives a copy of this completely filled out form from the selling dealer which eliminates later arguments about conditions of the sale and installation costs.

#### REQUEST FOR INSTALLATION OR REGISTRATION

## **TELEVISION RECEIVER**

Ьу PARAMOUNT TELEVISION 1437 Walnut Street, Des Molaes, Iowa No 11192

FILL IN FOR INSTALLATION OR REGISTRATION				
TELEVISION RECEIVER MODEL	SERIAL			
TELEVISION RECEIVER  WILL BE DELIVER WAS DELIVER PICK UP & DELIVER PICK UP & DELIVER	RED Dealer (Please Print)			
On	Addressto:			
	CityState			
Mr., Mrs., Miss	Phone Date			
No. and Street				
City				
County				
•				
TV ZoneTel. No				
Floor No				
INFORMATION BELOW NEC	ESSARY FOR TELEVISION OWNER CONTRACT			
CUSTOMER OWNS BUILDING  RENTS	OWNER CONTRACT CHARGE, ZONE "A"			
CLASS OF BUILDING:   ROOF. COMP.	It is understood that the Owner Contract rate for a special			
☐ PRIVATE RESIDENCE ☐ TAVERN	antenna installation or for a non-residential customer is higher than the Zone "A" residential rate, as indicated in your rate sheets. If it is found that this sale involves either of the above:			
APARTMENT OFFICE	B 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
HOTEL OTHER	charges not to exceed \$			
NO. OF STORIES  Is standard 120 Volt, 60 Cycle power available at the propose location	Quote extra charges before proceeding with installation			
Will customer permit an indoor antenna if results are satisfac Yes	Sale of the instrument indicated has been made contingent upon a test and demonstration for the customer.			
Landlord's Permission to Install Antenna				
As owner, or authorized agents of the owner, of above-described premises, permission is he	reby Proceed with installation involving total charges not to exceed \$			
granted to the Paramount Television, to instal supervise the installation of a conventional televi	or Ouote extra charges before proceeding			
receiving antenna on the above-described built or premises, provided that such installation confo	ding with installation			
with good engineering or mechanical practices, is in compliance with local fire and safety of nances.	and made for the test and demonstration, in the event that results			
	Signed			
Owner or Authorised Agent	Date			
Date	Date			
NOTICE  If municipal ordinances require a permit for this installation, the permit must be submitted with the original of this form. The dealer				
is expected to unpack and inspect the instrument prior to delivery, to assure that all parts are intact, and no damage has been sustained during shipment. The dealer is also expected to clean and polish the cabinet.				
AVOID DELAY — FILL OUT ACCURATELY AND COMPLETELY.				

Dealer Form used by Paramount TV

Blue—Dealer.
Pink—Customer.

White and Yellow-Mail to Paramount Television.

## **BOX OFFICE TV FOR CLOSED CIRCUITS**

#### By IRA KAMEN

The industry has been carefully watching the activity of the proponents of pay-as-you-go television. Several successful systems have been demonstrated, but all have been waiting for FCC approval of techniques of trans-



Fig. 1. TV Picturecaster for broadcasting coded and uncoded pictures and sound on VHF channels.

mission and reception, and the principle of asking the public to pay for material, transmitted over the air.

Today one of these systems is actually going into commercial operation despite the fact that the FCC has not yet acted. The reason is that the system is being used without on-the-air transmission; and therefore anticipates no violation of existing federal regulations. The system was developed by Box office Television, one of the newcomers to the field. It will be used in hotels, community systems, and apartment houses. — wherever there is a closed circuit antenna distribution system.

#### WHY PAY-AS-YOU-GO?

The FCC has been deterred from acting on over-the-air pay-as-you-watch systems, Phonevision, suscribervision, and Telemeter, thus far, not only on the score of system evaluation, but because a matter of principle is involved: whether broadcast channels should be used for transmission of programs restricted to viewers who have paid a fee. The tradition of American broadcasting has been opposed to this for many years. It is not going to be easy to win adherents of free broadcasting over to the idea of appropriating a public channel, for however small a time segment for programs denied to those who do not care to pay.

There is general agreement, however, on the need, as a matter of practical necessity. Before the boom in commercial TV many people in and out of the industry doubted that advertisers could afford to pay for high-quality programs, air time, performers with rehearsal time much increased over sound broadcasting practice, scenery, costuming, and all the other trappings that go with visual presentation.

Now, with program costs mounting to the point where even the largest advertisers are sharing sponsorship, the answer is becoming obvious. Not only are programs trending toward cheaper types — panel discussions and quiz programs, for example — but TV never has been able to present some of the really first rate entertainment such as first-run motion pictures, full-scale opera and the top sporting events. The money simply

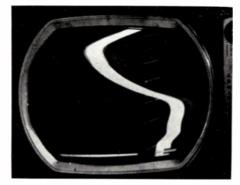


Fig. 2. Scrambled picture transmitted by Box office TV System.

isn't there.

The answer is a system which allows the viewer to pay for his entertainment, just as he would at the box office of a theatre, concert hall, or stadium. But the objection such a system usually encounters is the the frequency channel such paid transmission must use is public, one of a very small number of available spots which by law must be used for the benefit of the public at large. When the question will be settled is anybody's guess.

Box office television has developed and is operating a very simple pay-asyou-watch system which is offered for use wherever master antenna systems are available. The equipment is inexpensive and easily installed and operated.

#### HOW BOX OFFICE OPERATES

The sequence of operations in a typical night's running of the Box office system begins with the live program. This may be a championship fight, or a special film-projection studio where a first-run picture is being shown. Audio and

video are piped by a common carrier such as the telephone company to each master antenna system which is part of the network. These may be in hotels, apartment houses or communities. Transmission to these points may be by coaxial line or microwave relay, at the discretion of the carrier.

Up to this point the audio and video signals are standard in every way. Part of the network may be a chain of TV theatres which will use the signals in their original form.

At each master antenna system is located the TV Picturecaster shown in Fig. 1. This unit is a compact television transmitter and coder into which the audio and video signals are fed. The output of the Picturecaster is r-f at the frequency of a regular TV channel which is not normally occupied in the particular location.

In New York, for example, Channel 13 is used for the Box office transmission. The Picturecaster output is fed, not to an antenna, but to the input of the master antenna system, through which it is distributed to every receiver on the system. The signals can be received



Fig. 3. Decoding scrambled TV picture by inserting Decoder Key.

on an ordinary receiver simply by tuning in the appropriate channel; and they do not interfere with normal reception of any other channel.

When used for pay-as-you-watch programs, however, the video transmitted by the Picturecaster is coded or "scrambled" in such a way that, while the program can be tuned in the usual way, the picture is unwatchable — as shown in Fig. 2.

Decoding depends on the installation

in the receiver of a special decoder unit with a compact, inexpensive vacuumtube circuit which may, in most cases, be inserted in one of the receiver's tube sockets, plus a box with a keyhole. Once the decoder unit has been installed in the set, the viewer may decode his picture by inserting a key in the keyhole and turning it. In hotels the key is rented for the evening from the desk clerk; in apartment houses and communities comparable systems are used. The key rental is the fee paid for watching the program, a fee which varies with the type of program material. The key cannot be removed without returning the special program picture to its scrambled state.

Fig. 3 shows how the simple decoding operation is carried out. Max Genodman is shown inserting the key in the lock on the back of the receiver. Fig. 4 shows a demonstration setup with the Picturecaster and a viewing receiver. Lee Bunting, treasurer of Bell Television, Inc., is holding one of the receiver adapters in his hands. Mr. Genodman is president of United Elco, an electrical contracting organization which has installed the majority of hotel master antenna systems in the New York area and has participated in much of the initial installation work attending development of the Box office system, Bell Television is the operator of more than 500 master antenna installations and is considering the adoption of the Box office system for many of these locations.

#### OTHER APPLICATIONS

Introduction of the Box office Television system primarily as a pay-as-youwatch network has brought about other interesting uses for the system and the equipment. The TV picturecaster, for instance, may be used for closed-circuit work of all types, since it can feed a transmission system with either a normal or a coded picture on any one of the 12 normal VHF channels. Fig. 5 is a top-chassis view of the Picturecaster, showing the special r-f chassis in place atop the left of the main chassis. The



Fig. 4. The two tube decoder unit and key assembly.

chassis proper is basic and is a part of each Picture-caster; the r-f chassis is supplied with appropriate tuned cir-(Continued on page 32)



ABM SALES CO.: of Highland Park, Mich. has been appointed sales representative for Granco Products, Inc. . . . ACROLITE-INTERNATIONAL of Hillside, N. J. has announced an acrylic plastic spray for Radio-TV Service and other electronic applications. . . . ALLIED RADIO CORPORATION has moved into its new home at 100 N. Western Ave., Chicago, said to be the world's largest plant for the distribution of electronic equipment (see cut).



Allied Radio Corp.'s New Plant

. . . AMERICAN PHENOLIC CORPO-RATION reports net sales for the first six months of 1953 amounting to \$17.-563,992. . . . ANTLE & SMITH of Dallas, Texas have been appointed representatives for G & H Wood Products of Brooklyn, N. Y. and the National Union Radio Corporation of Hatboro, Pa. . . . BARSTOW & DORAN of Los Angeles have been appointed representatives for the National Union Radio Corporation. . . . BILL BARTLESON COMPANY of Minneapolis has been appointed representative for the National Union Radio Corporation. . . . WALTER J. BRAUER & ASSOCIATES of Cleveland, O. have been named representatives for G & H Wood Products of Brooklyn, N. Y. . . . BURGESS BATTERY CO. has introduced a new 75-volt "B" battery for 1953 portable radios. . . CART-WRIGHT & BEAN of Memphis have been appointed representatives for The Radell Corporation and Granco Products, Inc. . . . C-B-C ELECTRONICS CO. INC. of Philadelphia is now producing its new Picboost Television Picture Tube Extension Cord. . . . CENTRALAB has announced a color code calculator for capacitors and resistors that will be sold through distributors. . . . CHIEF ELECTRONICS INC. of Poughkeepsie and Newburgh, N. Y. report that they have acquired 15,500 square feet of space for expansion . . . CITY ELECTRIC CO. of Syracuse, N. Y. has been appointed distributor for Raytheon television and radio sets. . . . CORNELL-DUBILIER ELECTRIC CORPORATION has declared a regular quarterly dividend of 30¢ per share on its common stock and a regular quarterly dividend of \$1.311/4 per share on its \$5.25 cumulative preferred stock. . . . DAYBERT MANUFACTURING CO. of Detroit has been appointed distributor for Raytheon television. . . . THE DETROIT PUBLIC LIBRARY has reported a falling off of readers when TV was new, but that people are now asking for books on subjects brought to their attention of TV screens. . . . EARL S. DIETRICH CO. of Cleveland, O. has been appointed representative for Granco Products, Inc. . . . GRADY M. DUCKETT SALES CO. has become representative for Radio Merchandise Sales, Inc. . . . DU-LANEY'S OF TEXAS, INC. has been appointed distributor for RCA and RCA Victor products.... **ELECTRONIC** CHEMICAL CORP. of Jersey City. N. J. has announced a new product for cleaning and lubricating volume controls. . . . ELECTRONIC INSTRU-



President Nathan Pinsley of Espey beams at new Trophy Line AM-FM receiver

MENT CO., INC. has announced a new roll chart for its tube testers, price: \$1.00. . . . ELECTRONIC SALES CO. of New York City has been named representative for Granco Products, Inc. . . . W. H. ELLINGER SALES CO. of Chicago has been appointed representative for the National Union Radio Corporation. . . FRANK A. EMMET CO. of Los Angeles has become representative for Radio Merchandise Sales, Inc. . . WILLIAM ENGELBRETSON (Continued on page 36)

# how to inspire a sales force

by H. B. PRICE, JR., president Price's Inc., Norfolk, Va.

For the most part since World War II, our industry had a primary problem of producing merchandise. The spotlight was on the factories and their capacities to turn out goods — goods wanted in quantity by a non-diminishing horde of customers.

The manufacturers, in their mad scramble for material and plant capacity, in many instances forgot the fundamentals that would promote stability at retail level. The ability to produce goods has been expanded to a point where the aggregate output is fantastic. In short, that primary goal has been reached — the demands met.

Later, the center of the stage was turned over to the distributors. They have been frantically franchising a dealer organization with the capacity to absorb the vast production potential. But at last they discovered you could not franchise enough dealers to get the job done — franchising is the wrong procedure — you have to BUILD dealers — merely giving them a franchise is not sufficient.

#### THE RETAILER'S RESPONSIBILITY

Recently, the torch and responsibility of progress was tossed to the retailers—you and I are now Mr. Big of this industry. The ability to move goods at retail—to sell goods to the ultimate consumer, is now the most important factor in business.

Where do we find ourselves? First, the manufacturers can produce far more than we can sell — the distributors have franchised too many dealers and our market has in the main been satisfied. Add to that the battle between the Titans of the industry and the present tightening policy with its resulting credit squeeze and you have both an interesting and challenging situation.

#### THE CHALLENGE

It is very easy to console ourselves with alibis and excuses based on the ills of our industry, but that would result in individual disaster. What are you going to do, Mr. Big, about this challenge? Quit? Go Broke? Or Go Places?

Your answer is certainly "Go Places." All right, Mr. Specialty Appliance Dealer, if you are serious, you can only "Go Places" with a sales force and how far you go depends on your ability to inspire that group.



I think this subject can be divided into four elements:

First — You must like your business

Second — You must know
your business

Third — You must work
at your business

Fourth — You must expand
your business.

#### LIKE YOUR BUSINESS

On the subject of "You must like your business"—to be able to inspire others, you must believe wholeheartedly in your endeavor. You must know what you want out of your business. You must enjoy every minute you spend on the most exasperating details. If there is any doubt in your mind as to whether you should be in this business, the chances are you shouldn't.

If you are thoroughly adjusted to this business, you will not tire easily and you will be able to put in the long hours. Keep yourself physically fit at all times.

#### LIKE YOUR PEOPLE

It is elementary that you like people, but you must receive a deep and sincere satisfaction from seeing other people prosper and get ahead. You must enjoy sharing — no selfish individual can develop and hold the respect of others. Your personal morals must be stable, your standing in your community above reproach. Otherwise men will hesitate to follow your leadership.

These pre-requisites often require sacrifices. If you like your business, such sacrifices will be no hardship.

You must develop a positive approach to your business problems, facing reality, yes, but striving constantly to find the greatest opportunity for your organization's growth and prosperity. No man ever succeeded with excessive doubts as to his ability or future. Liking your work breeds confidence and accomplishment.

#### **KNOW YOUR BUSINESS**

To inspire a sales force you must know your business. Upon your shoulders rests the responsibility to master the fundamentals of the science of selling. Please understand, selling is a science. The more you know about the elements and procedure in making a sale, the better equipped you will be to train others.

Your knowledge of and ability to demonstrate your products and service is a must. To inspire a salesman's confidence, you should have good products and service that you personally are thoroughly sold on. When you ask other men to follow your leadership, they have the right to expect you to know more than just how to sell.

## SET PATTERN OF IMPROVEMENT

You must understand finance, service and customer relations. Your attitude toward and treatment of your suppliers and their opinion of you in return helps to build stature for you. Remember, your stature is important to your sales-

(Continued on page 25)

Specify Electronic Parts by Brand Name



A government crutch will always give you a permanent ailment; there is no way to be a successful retailer except to buy and sell service better than your competitor

by J. T. Meek, president Illinois Federation of Retail Associations

There are thousands of merchants in the United States today who have more than a sneaking notion that if and when they get into serious difficulties the government will bail them out. These are the merchants who never believed the rigorous days of the thirties ever happened. They have turned a deaf ear to every effort made by men who remember when to get a person to buy was a distinct art - and a full time iob!

These merchants have never believed in trade associations; or, believing in them, they have treated them more as mutual admiration societies and given little heed to intelligent programs of self help which characterize the modern trade association.

To these merchants "tomorrow" is time to get set for the storms which seem so far off in the future. A trade association may be developing a program of expanding markets. It isn't for the fellow we're discussing! Or it may be scientifically approaching inventory controls or reviewing modern day credit volume and collections. It may be eagerly advising local members of its association to get to know other merchants; to work closely with local bankers, accountants, attorneys - even min-

But such things are often too dull for the merchant who finds it easy to get people to "buy" when they have the money, the need, the will to "keep up with the Joneses" and a world of magnificently thrilling merchandise from which they may select.

#### THERE WILL BE READJUSTMENT

But there is another tomorrow around the corner. Then the pipe lines will be filled up. The productive genius of this country will be in high gear but there will be readjustment. Some people will be out of work. Here and there goods won't move. They'll begin to pile

There'll be plenty of evasion of

agreements, of franchises, of some golden promises easy to make when the storm warnings seem so unrealistic. There'll be price cutting — plenty of it. There'll be all kinds of over-the-counter and under-the-counter competition from industrial selling, so-called wholesale



selling, direct selling, door-to-door selling - all the nightmares that come to men who do like to take a look at the future. What will happen then?

I'll tell you. The merchants who took no interest in trade association programs, the retailers who forgot the thirties, the business men who haven't really gotten down and sold in years, all are going to be in a jam. They will have forgotten the glorious procedure of standing in the doorway and greeting a customer. They will have long ago forgotten how to aid their own sales people in intelligent selling; in setting a pattern they can follow.

#### SUBSIDIES WILL BE SOUGHT

They'll come to the associations of America, and say "help us." Their idea of "help" will not be association programs. It will be government help. It will be government "subsidy," or

"hand-out" to keep the competitor from underselling. It will be government "protection" against franchise abuses. It will be government favoritism in securing loans to send good money after

It will be government to develop security rather than government staying out of business to permit that chaotic, exciting, penalizing and rewarding freedom of choice and of markets which IS America of today. A government crutch will always give you a permanent ailment. There is no way to be a successful retailer except to buy and sell and service better than your competitor.

Shall individual merchants be aided and advised by their own efforts and the efforts of their own friends and competitors? Or shall we turn it all over to the government to make a real socialistic state of the United States?

#### DON'T LAUGH THIS OFF!

Don't laugh this off as a "it never will happen" bit of forecasting. Today. men are concerned with the fact that the appliance manufacturers may try to get their distribution through perhaps thousands less outlets than they now use. There'll be less outlets, more productivity, less volume, less demand. more unemployment, more places for that spendable dollar to go.

The tax "take" will be terrific for years to come. We'll be living in a world where our governments will take thirty cents of our dollar for many decades. We can't police the world; we can't protect ourselves in a changing world without paying for it in taxes. They may not be as high as right now — but they'll continue to be substantial. They'll be so substantial that the slightest decrease in income on the part of millions of potential customers will mean the difference between buying that appliance or getting along without

(Continued on page 34)



TV Service organizations can increase sales through jobber assistance and TV conversions to Hi Fi audio systems

#### by LAWRENCE J. EPSTEIN, sales manager University Loudspeakers, Inc.

Some oldtimers will recall the days of the super TRF's and early neutrodynes when many a set was "converted" from the old magnetic and balanced armature type speaker to the then new "dynamic," and later, the "electrodynamic" type. You were selling the idea of high fidelity then. What happened?

Really avid interest in better sound reproduction occurred with the advent of commercial FM broadcasting just before World War II. Though there were other factors, the two which appeared to retard development of FM as a superior musical medium were the promotional over-emphasis of the "no static" feature which relegated the band change switch to the forgotten "other short wave bands;" and the almost concurrent development of practical television which compelled attention from almost everything else in our industry.

It is only in the postwar period that

"hi fi" has come into its own. TV has usurped the interest of the dealer and the serviceman. Now that TV has settled down to a normal state, there is an awakening to the fact that hi fi has become practically an industry in itself. Innumerable new products and techniques have been developed. A new merchandising channel has resulted to encourage and promote the sale of hi fi equipment.

#### YOU ARE THERE

Unless you're just looking for an excuse to stay out of the hi fi picture, your position in the distribution network is as strong and indispensable as ever. Remember . . . you are invited into the homes of people to service radios, TV and appliances. You are in the group that knows at first hand the individual's tastes, needs and financial capabilities.

In most cases you are Mr. Music to the buying public in your neighborhood and you have their confidence. This adds up to a highly encouraging position which should at least entice a fair share of prospects — if you set the stage and do a reasonable amount of promotion.

#### THE HOME SALES MARKET

I said that your position is strong and indispensable. That happens to be true, for the most part. While a good deal of hi fi sales are being made to the experimenter and the hobbyist, the bulk of complete system sales goes to the outand-out "music lover." He is interested in the result and not the cause. No one package is going to satisfy these "golden ears." These people require service and often want the system installed in a special way.

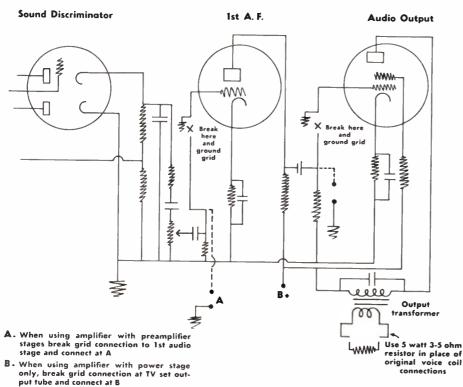
That's where you come in—service, that's you. You can "survey" a prospect's requirements, you can "engineer" the system. Consultation with the customer and your jobber will indicate what will be most suited to his needs. You can make the installation. You can provide future maintenance.

#### JOBBER ASSISTANCE

Despite competitive trends in marketing hi fi equipment, you will find that you can use your jobber to considerable advantage. Tell him of your plans. Convince him you are serious. You will find that he will begin to turn over follow-up leads that have come his way from the manufacturers of hi fi equipment. They receive hundreds of leads from individuals who write directly. The last thing a jobber wants is the burden of surveying the customer's needs. He has no inclination to do installations or follow up service calls.

Many jobbers have sound demonstration rooms or "salons." Most jobbers openly invite dealers to bring their customers to such studios, to use their facilities and the guidance of their sound specialists, and will protect the dealer in consummating the sale.

Access to such facilities is a valuable asset which you should attempt to exploit. It can be easily accomplished by merely an understanding with your jobber. This has been accomplished in many places so that even the "I can get it wholesale" customers will find it possible to work with you.



Typical Circuitry for connecting Hi Fi Amplifier to TV set

Bear in mind that your ability to do a job inexpensively is related to your fixed overhead. Working with a jobber makes it possible to start in the hi fi business and **remain in it profitably.** By having available the lines and stock of your jobber, your investment in components and parts is reduced to a simple working and turnover level.

What can be done to get started with a minimum of effort and expense? Your market lies with the consumer who has not yet experienced the thrill of high quality music reproduction. Your prospect has heard or read about hi fi but he has not yet been exposed to it. There are hundreds to thousands of homes in your community where individuals live who play a musical instrument of some kind, sing, or just like to listen to music well-played, be it Beethoven or Be-bop! In these homes there are radio-phono combinations from grand consoles to popular table models. Millions upon millions of dollars worth of phonograph records are purchased each year.

These people, your customers, already have an investment in music. Your job is simply to prove to them how much greater their pleasure will be with a few modifications to bring their music system up to date—on a par with "theater type" reproduction.

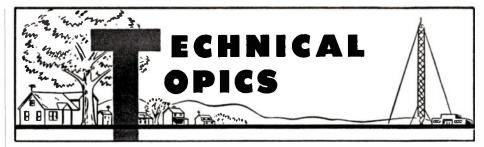
#### TELEVISION CONVERSIONS

The approach need not be different from the highly successful campaign by TV Service organizations on TV conversions from small screen to big screen television. This time let's talk up conversion from limited sound to high fidelity sound. TV employs frequency modulated sound. In some cases it is not the very best example of FM quality - but it is assuredly superior to most AM. The public has a fair idea about what FM is supposed to be and do - but few know that FM is used for the sound channel of TV reception. In many cases FM broadcast channels are an integral part of the TV tuner. In others, the TV set incorporates a phono input. All of the elements of a rather strong appeal to "conversion to high fidelity sound" are present and waiting for exploitation by enterprising TV Servicemen.

#### MAKE DEMONSTRATIONS

Hi fi cannot be adequately described by the written word, clever art or an inspired sales pitch. It must be heard by the prospect. It will sell itself by appealing to the emotional craving which has made the music enthusiast in the first place. Several opportunities exist to expose your customers to hi fi.

Have you ever heard a hi fi system on a TV set? Even the picture looks better! Sounds come through that have been completely missed before. A sense (Continued on page 27)



### The Effect of Technical Developments and Products Upon Your Present and Future Business Activities

By EDWARD M. NOLL

#### TRANSISTORS

The transistor has characteristics similar to those of a vacuum tube and can perform more efficiently many of the tasks of the vacuum tube. Its impedance parameters are somewhat different but it can be made to serve the same functions as grounded-grid, grounded-cathode, cathode follower and oscillator vacuum tube circuits. It can be made to

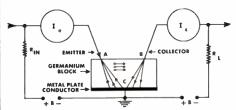


Fig. 1. Basic Transistor Circuit

perform all the video and pulse functions in a television receiver.

Features of the transistor are:

- a. Small physical size and lightweight permits small compact unit designs.
- b. Efficiencies are far above those of vacuum tubes, permitting higher voltage and power gains per supply total power.
- c. No filament supply is required. Supply voltages need only be a few volts up to a maximum of about 22½ volts with certain transistor types.
- d. Estimates of transistor life reach near the 100,000 hour point.

Here is a device that is destined to dominate new developments in the electronic industry.

The transistor is a semi-conductor solid having characteristics of both a conductor and insulator. A basic transistor, Fig. 1, has input and output circuits just as a vacuum tube. The usual transistor circuit has a low impedance input circuit and a high impedance output circuit and is basically a current device instead of a voltage amplifier as the vacuum tube.

Physically, the transistor is a small germanium block mounted on a

grounded metal plate. On top of the germanium block are two cat-whiskers spaced just a few thousandths of an inch apart. When a negative potential is supplied to the right cat-whisker, called a collector, there is a current flow through the germanium block to ground. This current, Ic, is really a reverse diode current and is flowing in the high resistance direction.

When a positive potential is applied to the left cat-whisker, called an emitter, a forward diode current flows from ground toward point A and the emitter. The low forward resistance means the same level of emitter current can be made to flow with a lower applied voltage level as compared to collector current.

The above current activity occurs when each side is operated separately. However, when both sides are operated simultaneously there results an increase in current flow in the right hand or collector side of the germanium block. This flow represents a current amplification and is the basic underlying condition



Bell Telephone Laboratories Transistor Compared to Miniature Vacuum Tube Size

that causes the transistor to function as an amplifier, oscillator, or generator.

It is also the underlying factor that is difficult to understand or, perhaps, just new, as compared to vacuum tube operations with which we are familiar. A small voltage change then at the input causes a substantial current change in the collector circuit.

#### SEMI-CONDUCTOR THEORY

A better understanding of transistor (Continued on page 26)

# OUACHITA SERVICE PHILOSOPHER



Decides to become a fairly high High-Powered Salesman By JACK DARR

Well, sir, the Colonel sent me a book the other day, several of 'em, in fact. I been readin' 'em pretty thoroughly. Y'know, the Col., he's a pretty smart boy about business and salesmanship and that sort of thing, and he's been preachin' to us a long time. You fellers who've attended his numerous lectures oughta know about how us radio an' TV Servicemen oughta sell our products more effectively.

Well, now, that demands a little bit of thinkin'. Ain't much we can sell, as a matter of fact. Condensers an' resistors an' tubes may be pretty handy articles, but shucks, they ain't in it for glamor alongside of a Bikini bathin' suit, say.

Nope; we're just like doctors an' lawyers. We're the forgotten men most of th' time, till we're **needed!** Remember that word **needed.** Customers forget we're even around, at all, especially around the first of the month, seems like, unless they **need** us and our service. Then they think of us, in a hurry.

#### ON A SHOESTRING

Smart feller that wrote one of them salesman books told one about a feller that broke a shoestring. Kept forgetting to buy any new ones till he got home at night, and then it was too late. Couple of days later, shoeshine boy says to him, "Got a busted shoestring there; how about puttin' in a new pair?" and made the sale right then and there.

Point he made out of all that was this: Salesman shine boy made his pitch right when the subject was in a buyin' mood! Needed them shoestrings right then, so he bought 'em. Q.E.D., as my old algebra teacher, Miss Figures, useta say. Place where this applies to the electronics maintenance business is for us to have some kind of advertising right there when the customer needs us.

Well, sir, now that brings up some more talk, as Uncle Cader used to say. How you gonna do that? Let's take the different forms of advertising, one at a time, and see how each form would apply.

#### HE MAY REMEMBER

F'rinstance newspapers. If you've got a little ad in the paper every day, he's apt to pick up the paper and look for a radioman. Or the back of the phone book: He's apt to look for one listed there, to call up. So there's two pretty good ways.

Now, take the direct mail advertising. If he had just that morning got one of your little postcards, he might think of you, but it might have come three or four days ago, and been throwed away, like you and me usually do with 'em! One valuable thing about direct mail, like the newspaper ad, if it's kept up long enough, he may remember your name and address from the constant repetition.

Kinda hate to say this, but a radio spot announcement is like direct mail: unless it's been repeated so many times he's memorized it, it ain't goin' to help. Besides if his radio's busted how's he gonna hear it?

#### IF HE LOOKS IN BACK

Let's look at another one: the little stickers you put on the back of the set last time you work on it. I kinda favor them. If he turns the set around to look in the back, like most folks do, just to see if there ain't a 'wire loose somewhere,' there's your name and address starin' him right in the face. That's about the best example I could think of of you bein' right there with a pair of new shoestrings!

#### A GOOD LOOKER

By the durned way, there's another method I forgot. Calendars. A right purty gal on a calendar, with your

name and address, might remind him of you, mightn't it? Of course, the dern thing might be hung up out in the kitchen, and he might call somebody else before he sees it, but that's a chance you just gotta take, I reckon.

Speakin' of advertisin,' I have thought of something you can use, and it don't cost much, if you use it right. Your mouth! Now, I know that no radioman could ever be accused of braggin,' or anything like that. Perish the thought!

But, you can do yourself a lot of good around town if you kinda keep droppin' hints that you're engaged in the radio business, or you're a TV expert, or something like that. Gct in conversation with a stranger, casually mention the fact that your radio shop is right around the corner and so on.

Talkin' to a group of your friends, tell 'em a funny story about some guy that come into your 'shop.' And so on. Don't let 'em forget it! If you've got a shop coat that says 'RADIO-TV SER-VICE' on the back, wear it when you go around for a cuppa coffee. Sure, you'll get kidded, but you'll get advertised, too!

#### ABOUT LOCAL COMMERCIALS

Feller can do himself a little good with a sound system, too. Not usin' it to ballyhoo his shop, but by loanin' it out to churches, school affairs, sport events, March of Dimes, Red Cross—anything that's a public affair. Let 'em know you've got a PA system and they're welcome to it, but see to it that your name is mentioned prominently some time durin' the proceedin's. I've sold lots of built-in sound systems with a coupla judicious loans.

Might even donate the amplifier and your services to the high school to announce the football games! You can have a lot of fun and git into all the games free! You can learn to be a football announcer in a few easy lessons, by listenin' to the radio and watchin' the plays for a couple of weeks. If you turn out to be such a hopeless introvert that you can't face a hot mike, get one of the schoolboys to do the actual announcing for you, but see to it that you get a plug before the game's over! "The sound-equipment used at this game was furnished by John Serviceman's radio-TV Repair Shop, at 222 Tootle St., Phone 13," etc. Like I said, you can learn to be a football announcer in a

#### **CARRY THE BALL**

Of course, you gotta expect to run into a few things like I did. One game, I got excited when one of our backs got loose, an' hollered, "He's loose! He's across the 30, the 40, the 50, the 55, and he's finally brought down on the 60-yard line!!"

You will hear about that Saturday

morning in the coffee shop! That wasn't on no dern PA system, either! That happened on the radio at an out of town game! Don't pay no attention to them, though; that makes it all the better.

#### SHOP SHOWMANSHIP

There's a little bit you can do in the shop, too, when a set is brought in for repairs. Check it over in front of the customer, and kinda discuss it with him, in a non-technical way, if it's possible. Don't try to impress 'em with how smart you are, either; the way the set plays when you get done with it 'll tell 'em that! What I mean, if you've got an open filament in an AC-DC, you'll be pretty sure of it.

Don't tell 'em they've got a hiatus in the continuity, although they have: tell 'em this set's hooked like them old Christmas-tree lights; you remember, the little ones? One bulb burned out, the whole string went out? Well, Ma'am, your set's just like that. The juice goes in one end, through each of the tubes in succession, and out the other end. One of the tubes goes out, out goes the whole thing.

#### ESPECIALLY THE LADIES

Compare it with something familiar, then they'll know what you're talking about, and chances are they'll feel like you're a pretty smart cookie. If you can git 'em to say, especially the ladies, "Oh, my, yes! That nice young man down at the radio shop. Why, he told me all about my set last time I took it down there, and now I can almost fix it myself!" Well, you know and I know that she can't, but let's let her think so, shall we?

It'll make more business. If the symptoms are carefully described to her, next time she blows a 35Z5 she'll say, "I'll bet it's a bad tube!" and if it is, boy, is she flattered! That's applied psychology, and it'll work 99% of the time. She'll go home and tell her neighbors all about the nice radio shop she's found.

#### **CUM GRANO SALIS**

Now, right there is the best and cheapest advertising you can get: favorable word of mouth advertising. While the prospective customer might believe 100% of the statements made in your advertising, she'll be much more inclined to take them cum grano salis, because of the unfortunate tendency to make every advertisement a hodge-podge of extravagant statements and improbable claims about their product.

She's conditioned to disbelieve a certain percentage of what she reads or hears on radio or TV. A statement made by a neighbor or even a casual acquaintance, however, is accepted as gospel. Witness the number of times you've heard this: "My neighbor's boy is a Navy radioman, and he said the sound post was bad in that set. That's where

the trouble is, I know, and that's what I want fixed!" — pointing to an IF can!

#### SOUND POST REPAIR

Well, the best thing to do is agree with her, turn the set over, replace that leaky screen bypass, realign the IF where the neighbor screwed it down tight, and polish the IF can so she'll think she got a new one, and she goes on her happy way! Note: This is a true story! Sound-post and all!

Anyway, here's the conclusion I want to draw from all this: Make every effort to make your customers think highly of you. Treat them the best you know how. Be as friendly as possible with them, and they'll return the favors a thousand-fold. Always remember this: one word from a satisfied customer is worth more than five thousand of any other kind of advertising! Also, the reverse is true: one knock from a dissatisfied customer will hurt more than anything else you can imagine, so be careful!

You've gotta be diplomatic in dealing with the touchy ones, even though you'd like nothing better than to poke 'em in the nose! So, all foolishness aside, that's my idea of the best way to advertise: word-of-mouth, from your satisfied customers. It costs the least and is the most effective in the long run, but you've gotta work to get it! Work harder than you would at any other kind of advertising. The others have to be used too; we can't do without 'em yet, but they ain't nothing can beat the spoken word!

So, let's draw a few conclusions: you've gotta do everything you can to get the customer to call you in the first place, by telling him where you are and what you can do for him. Second, after you've got him in your shop, you've gotta satisfy him, so that he'll not only come back, but bring his friends with him. So far, from where I'm settin,' it looks about like this: the little stickers on the back of the set; the phone book, or the newspaper ads. Like I said, if you've bombarded him with ads of one kind or another until he's thoroughly familiar with the name and address, he'll think of you.

So, now what have we got? We've developed this fact: if you can find the right way to remind him of your name and address right when he needs it, you'll get the job. Now, as to the best way to do that particular job, I may be just as wrong as can be on all the things I've said about different methods of advertising, and probably am, but that one fact remains, as stated.

So, thing for you to do is set down right now, put on your thinkin' cap, and puzzle out what kind of advertisin' can do the best job for you for the

least money. Just figure out how you can remind the most people the most times about yourself and your services, and you'll be able to tell the difference in your cash-pocket next month, by golly!

Gotta go now. I just remembered that I'm about out of them little stickers for the back of the sets and I gotta go order some more. You-all come.

#### Philco Test Equipment Line Features "Complete Service Laboratory"

Combining new circuits, accuracy and versatility with low cost, the advanced design Philco line of test equipment offers the service technician a great variety of units that, when combined, can form a complete service laboratory to meet every VHF and UHF servicing requirement.

Among the Philco test equipments are completely re-designed versions of standard Philco test units, featuring highly expanded levels of efficiency. Entirely new models, among them the Model G-8000 VHF to UHF Signal Generator Adapter and Model G-8002 Auto-Level Sweep Generator, lend a new and revolutionary approach to UHF servicing by providing modern, suitable tools for this newest advance in servicing.

The test instruments that have been previewed and released during the past six months compose a Philco line that is a complete and available array of test equipments essential to fast and accurate servicing.

Philco Corporation engineers are continuing to design even newer and more reliable models to cover recent developments in the field of appliance servicing. As the future brings greater electronic advancements and more demanding requirements of servicing personnel, Philco Test Equipment will be available to meet the need.

Availability for purchase of new model test equipments will be announced by Philco through advertising in Service Management.

#### **SALESMANSHIP**

(Continued from page 9)

invited into the customer's home? Dealers who do nothing but sell appliances have to fight their way in to talk to the consumer. You, on the other hand, are invited to come in. You are welcomed as a "hero" by the children who witness the wonders of Howdy-Doody. Treat your customer's home as you would like to have your own treated. Keep it clean. Present a neat appearance. Maintain the dignity which your profession should reflect.



If you could advertise nationally, chances are you'd do just what CBS-Hytron

is doing for you. You'd tell the world in



Half-page advertisements will appear in LIFE Sept. 28, POST Oct. 3, LIFE Oct. 19, POST Oct. 31, LIFE Nov. 16, and POST Nov. 28. Reaching over 28,583,290 readers!

that you promise quality TV and Radio service, parts, and tubes . . . and

at fair charges. And that's just what CBS-Hytron is doing for you with

advertisements like these.



## You'd identify your service repair

These are just some of your Certified Quality Service advertisements. They sell you . . . and without a lot of sell for CBS-Hytron, although CBS-Hytron gladly pays the bill. Why? Because as we build public confidence in Certified Quality Service, we build greater faith in you and more business for you . . . our customers.

shop as the one people are reading about in the magazines. You'd use this

## Certified QUALITY SERVICE decalcomania on your door.

This Certified Quality Service decalcomania identifies you as a dealer with hard-earned technical knowledge and the latest in equipment. A dealer to whom the public can go for Certified Quality Service. It helps you cash in on your big Certified Quality Service plan.

this Certified QUALITY SERVICE window streamer.



You'd use



And

Let folks know you Certify the quality of your service, parts, and tubes... and at fair charges. Use all the Certified Quality Service sales material available to you. Be sure this window streamer is up during your consistent advertising campaign this Fall.



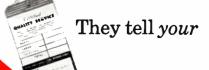
## CBS-HYTRON, Danvers, Massachusetts

A DIVISION OF COLUMBIA BROADCASTING SYSTEM, INC.

A member of the CBS family ... CBS Radio  $\circ$  CBS Television  $\circ$  Columbia Records, Inc.  $\circ$  CBS Laboratories  $\circ$  CBS-Columbia, Inc.  $\circ$  and CBS-Hytron

above all you'd use these Certified QUALITY SERVICE tags.

This plan goes all the way to do the job. When you use these Certified Quality Service tags you're putting right into your customer's hands convincing proof . . . Proof that Certified Quality Service means more for your customer's money.



customer he is getting more for his money when he calls your service repair

shop... because you Certify the quality of service, parts, and tubes... and

at fair charges. Yes, by using all this material, and more to come, you

cash in on your big Certified QUALITY SERVICE advertising campaign.

Get your kit.



#### It contains all the material

Make the most of your big Certified Quality Service advertising campaign. Be sure you have all the facts... and all the material you need. Get this sales promotion kit, today!

you need to identify you as a Certified QUALITY SERVICE dealer. Ask your

CBS-Hytron distributor for special deal. Or use coupon to order direct.

SEE YOUR
CBS-HYTRON
DISTRIBUTOR
... OR MAIL
COUPON
TODAY!

## CBS-HYTRON, Danvers, Mass.

Please rush me the *Certified* Quality Service promotion kit, containing:

- 1. 18- by 28-inch LIFE and POST easel display . . .
- 2. New Certified Quality Service decal...
- 3. 8- by 23-inch window streamer . . .
- AND 250 Certified Quality Service tags imprinted with MY name and address.

LIEDE	TO	_	
TERE	IS MY	3-LINE	IMPRINT
		~ 434441	TIMERINI

(please print)

State

Name\_\_\_\_

Street\_\_\_\_

I enclose \$2.00 to cover the cost of imprinting.

Signed:\_\_\_\_



## ASSOCIATION NEWS

TRANSCRIPTS FROM SERVICE MANAGEMENT'S PARTY LINE.

BY PENNY MARTIN

SEPTEMBER . . . the month anticipated as though a panacea of television ills

Vacation months are nearly over . . . better programs start coming back on the air . . . even new stations are making their initial bows . . . people are watching television more . . . more people want their television sets working properly . . . additional antennas are needed to receive the new stations . . . the sale of sets increases . . . business is again picking up!

When the momentum of business starts increasing . . . strangely enough, so do the outside activities. Maybe there is something to the old axiom, "If you want something done, ask the busiest man you know to do it." For September is also the month when clubs and organizations get into the swing again after the lull of the summer months.

Most associations realize the first fall

meeting must go over big in order to whet the appetites of their members. Almost without exception, the best speakers are obtained and elaborate programs planned. Many groups plan September banquet meetings to start off the fall season. Food and fellowship make a good Alpha.

Fall is also popular for conventions and regional meetings.

#### TEXAS RADIO & TV SERVICE CLINIC

Television service leaders from throughout the state of Texas gathered at the Texas Hotel, Fort Worth, for the Texas Radio & TV Service Clinic and Electronics Fair August 28 through 30, Leonard Smith, President of the Texas Electronics Association, announced.

Among participants in the three-day program were James D. Secrest, executive vice president of RTMA; Mort Farr, immediate past president of

NARDA; Al Robertson, Clinic Editor of ELECTRICAL DEALER; John Rider of the publishing company by the same name; William D. Renner, field technical sales head for Howard W. Sams Co.; Harold Chase, president of TSA of Michigan; Mr. Smith, and city councilman T. M. Carlton.

One of the features of the Clinic was a series of manufacturer's exhibits on the third and fourth floors of the hotel. Portions of each day were set aside to allow the service dealers time to tour these exhibits in detail.

Truett Kimzey, President of the Fort Worth Chapter, was chairman of the Clinic; Will A Shaw of 1610 Eighth Ave., Forth Worth, was executive secretary; J. W. Williams, Jr., publicity chairman; R. L. McDonald, Finance chairman; W. J. Inman of Dallas is TEA treasurer; Luther Bradley, secretary; Larry Peay was Houston member of the committee; and Ora Fretz represented San Antonio.

#### NEDA'S ANNUAL CONVENTION

"Building for Future Growth" was the dominant theme of the 1953 Convention-Conference sponsored by the National Electronic Distributors Association in St. Louis, Mo., September 14-16.

Lectures and open discussions were slanted to give an over-all coverage on: How to finance for future growth; How to provide proper and adequate physical facilities for expansion, and how to hire and train proper personnel for the highest executive position to the lowest employee level in a wholesaling operation.

R. B. Sampson, manager of Distributor Financial Services, Radio Corporation of America, covered all phases of financing; Donn Mason, the "Minute Man" of sales training as he is known throughout the country, having trained and counselled salesmen and management personnel of many companies, provided guests with the results of his research and personal contact with "inthe-field" and "over-the-counter" sales personnel; John T. Thompson, manager, replacement sales, General Elec-



Texas Radio & TV Service Clinic Planning Committee, left to right: W. J. Inman, Leonard Smith, Mose Branum; seated: R. M. MacDonald, Truett Kimzey and Luther Bradley.

tric Co., arranged a forum discussion on providing expansion facilities, comprised of several outstanding members of the Electronics Division of G-E.

Educational sessions were held each morning and the afternoons were devoted to the Manufacturer's Conference, when manufacturers had an opportunity to meet and confer with parts distributors from every marketing area in the country.

George Wedemeyer, chairman of the Battery Committee of NEDA reports that the new, 1953 edition of the NEDA Battery Index has accomplished two major purposes: It is a practical cross reference saving time and increasing sales at both wholesale and dealer levels, and also properly used over a period of time, it will eliminate confusion in the numbering system which has been seriously hampering the handling and sale of dry batteries.

#### PHILADELPHIA, PENNA.

The Northeast Television Dealers Association has a new billing plan to counteract customers' complaints against overcharges on service and replacements. The customer gets an itemized bill, and the replaced parts.

The group has also ruled that any new members will have to be in the business for at least five years and maintain a permanent business address and phone number, to prevent growth of "basement operators."

The first of a series of business education programs was presented at a recent meeting of The Television Service Dealers Association of Philadelphia. Mr. J. Preston, C. P. A., discussed, "Simplified Bookkeeping System and How to Watch for Hidden Costs."

Copies of this bookkeeping system were distributed by the educational committee who have arranged additional lectures on business management, advertising, service merchandising, legal facts about service business, insurance, and public relations.

The organization has decided to join The Federation of Radio Servicemen's Association of Pennsylvania, and delegates have been authorized for such presentation at the next Federation meeting.

Election of new officers include: president Louis J. Smith, vice president Charles Knoell, treasurer Harrison Neel, secretary Martin Bernoff.

A recent meeting of the Federation of Radio Servicemen's Associations of Pennsylvania was held in Maurice's Restaurant, Philadelphia. President Milan Krupa, Wilkes-Barre, presided.

One of the highlights of the meeting was the re-instatement of the Philadelphia Radio Servicemen's Association to membership. Representing PRSMA were Samuel Brenner, president, Al Haas and Stanley Meyers.

Plans were furthered in promoting TV educational broadcasts aimed at making a better understanding between the set owner and the organized technician.

#### BUFFALO, NEW YORK

The Radio Television Service Association of Buffalo has published a brochure that covers their association planning for UHF conversion in the Buffalo area.

The brochure was distributed at the local Better Homes and Garden Exhibit. At this exhibit, the Association in co-operation with WBUF-TV, manned two booths that contained UHF an-

tenna's, strips, translators, internal and external converters. The display included a cross section of various TV chassis and test equipment.

Purpose of the brochure and the exhibit was to develop UHF interest, advise prospective customers what is required for UHF conversion, and to reveal the many problems confronting the service industry.

To assist in sales of conversion equipment and antenna systems, the RTSA is co-operating with one of Buffalo's largest banks to set up a "Conversion Club" to offer to set owners a convenient payment plan at low interest rates, accord-





#### NEW JFD "3-in-1" LIGHTNING ARRESTER

1. for UHF or VHF tubular twin lead
2. for VHF flat twin lead
3. for VHF or UHF open wire



No. AT110 with hardware for wall or window sill mounting, \$1.50, list.

No. AT110S with stainless steel strap for pipe mounting, \$1.75, list.

Both feature the patented JFD strain-relief lips which prevent contact washers from ripping the lead-in wires apart!

JFD MANUFACTURING CO., INC.

World's largest manufacturer of
te antennas and accessories
Brooklyn 4, New York

ing to F. J. Lynn, president.

#### TULSA, OKLAHOMA

Organization of the Tulsa Radio and Television Association composed of service shop owners, service managers and technicians in 47 firms, has been announced by Jim Dunn, second vice president in charge of public relations.

Others elected were Harold Carter, president, Jim Robertson, vice president; Jack Schemet, secretary; and H. J. Hunter, treasurer. Board members are Earl Lindsey, Lee Ackley, Jim Knapp, R. A. Weaver and J. L. Wilson.

#### NEW ASSOCIATIONS

While well established associations such as TEA and NEDA were planning conventions and clinics, the idea of trade associations has been spreading like wild fire across the nation . . . and this is a healthy sign. The INFO, the Bulletin of the Electric Appliance Dealers Association, Minneapolis, Minn., stated: "The manufacturer, the distributor and the dealers hold an equal responsibility in putting business back on an even keel. Standing alone you have no voice. As a member of your association, you have the strongest voice in the industry. Support your association. You are lost trying to stand alone."

One of the newest servicemen's associations has taken birth in Salt Lake City, Utah.

## UTAH ASSOCIATION OF RADIO & TV SERVICEMEN

While this is the third attempt to form such an organization in Utah, the need is greater than ever. Under the leadership of President J. F. Burns, Murray, Utah; vice-president, James W. Neilsen, Midvale; Robert J. Magness, South Salt Lake, secretary-treasurer; and Dean Peiper, general manager, the Utah Association of Radio and Television Servicemen was officially "born" June 1st of this year. Over 25% of the service shops in the Salt Lake City area are registered as charter members.

They will be statewide in scope and endeavor, and membership will be open in various classifications:

HOUSE MEMBERSHIPS — covers shops actively engaged in the radio or television service field; (Dues \$10.00 per month).

INDIVIDUAL MEMBERSHIPS — covers employees of shops, or non-owner-managers, students and others; (Dues \$3.00 per month).

ASSOCIATE MEMBERSHIPS — covers those in fields closely allied with the radio and television service industry. (Dues \$10.00 per year).

The Utah Association will work toward improved working conditions . . . opportunities for better wages . . . insurance and hospitalization protection



J. F. Burns, president, Utah Association of Radio and TV Servicemen

. . . reduced uniform costs through wholesale buying power . . . educational and informational services . . . legislative representation . . . new social benefits . . . protection against fraud and misrepresentation . . . and more!

Their offices are at 418 Frick Bldg., 23 East 1st South, Salt Lake City 1, Utah. General Manager Dean Pieper would like to know what other associations are

doing in the way of securing finances. Also, what publicity, advertising and public relations activities are being undertaken to educate the public to the value of a trained technician.

What has your organization done along these lines? Let us hear from you.

#### OAKLAND COUNTY ELECTRONIC ASSOCIATION

Another new Service Association that has taken root is the Oakland County Electronic Association of Pontiac, Michigan. Organized last May, they have already signed up over 40 dealers engaged in TV servicing. Independent servicemen join as associate members. While the summer months have been used predominantly for social gatherings . . . the fall sessions will include outstanding speakers from all over the country, according to James Hampton, secretary.

They advertise weekly . . . listing their code of ethics and the names and addresses of their members.

## JOINT ELECTRONICS AND RADIO COMMITTEE ON SERVICE

The Joint Electronics and Radio Committee on Service of Philadelphi: has made one of the most unique proposals to raise funds. Paul V. Forte, public relations director, announced that the Joint Committee will conduct an industry sponsored variety show at the city's Convention Hall during November.

The purpose of the show is to obtain funds necessary for a consumer education and a public relations program during the season of 1953-54. The committee is soliciting television manufacturers and networks for star talent to headline the show.

#### PERSONAL NOTES

Recently I sent out questionnaires to dealer and service organizations across the country. At this writing I have received only a limited number of answers, but I'm hoping to receive many more. I have received so many requests for the names and addresses of other associations so that correspondence may be carried on between them, that I have decided to publish, in the near future, a list of all associations with their corresponding secretary's address. Help made this list complete by sending in information about your association.

Also, from the replies at hand, there is a number of requests for information about contents of constitutions and bylaws; due for membership; how to raise finances to support an organization; what is being done to promote better public relations; ways to increase membership; how to obtain interesting programs that will keep the members coming back.

Do you have the answer to any of these problems? If so, share your knowledge. Starting next month I am going to discuss each of these problems