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Volume 3 Number 9

June 1954



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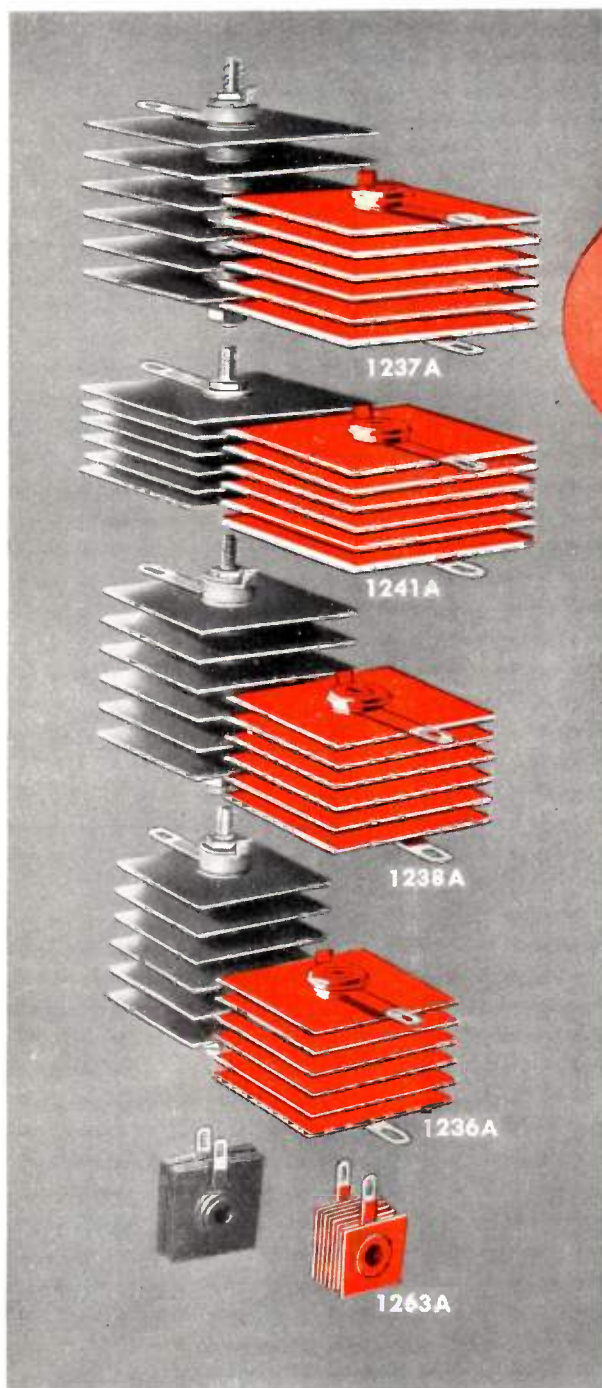
## Federal

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1236A	300	1-3/8" ± 1/32"	1-5/8" Sq.
1238A	350	1-3/8" ± 1/32"	1-3/4" Sq.
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GERMANIUM  
DIODES!**

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most useful  
PACKAGE LINE!  
Ask your  
Distributor!**



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 asks 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.

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## SERVICE MANAGEMENT

161 Luckie Street, N.W.  
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Mail me \_\_\_\_\_ copies of your "Customer Relations" handbook for technicians. Enclosed is \$1.00 for each copy.

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# Service Management

PAUL H. WENDEL, Editor and Publisher

VOLUME 3, NUMBER 9

JUNE, 1954

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**JEROME LINDER, President**  
AAA Installation & Maintenance Co., Inc.

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## Letters to the Editor

### SUCKER BAIT?

12 The Seattle Times  
Wednesday, April 28, 1954

**GUARANTEED  
TV SERVICE CALLS**

**39¢**

**Tubes Tested FREE**

**TV SERVICE CO.**

Wanted: Serviceman to work on commission—no experience necessary, must have a car. Earn while you learn . . .

. . . or is it the actual worth for  
this person's knowledge and skill?

W. W. DEAN

\* \* \*

### LICENSING?

We feel the listings for the TTLB Directory should be for established license paying firms who are suffering from boys operating at no cost or responsibility to themselves. I know of several men operating two jobs; some are auto mechanic full time, TV after hours at cut prices. Some are men working for Electronic Distributing firms—wholesale, no service dept.—just clerks behind the parts counter. They require no city license or other obligations suffered by tax paying stores. Is there any reason why this does not contribute to unemployment in the electronic field?

H. W. WAGNER, Mgr.

Wagner's Radio & Television.

Portland, Oregon.

\* \* \*

### SELLING MAINTENANCE

Your article "Selling Antenna Maintenance" interests us very much. We have spent several hours discussing such a service but have never tried to sell it for the reason that each antenna is an individual problem—as to height, roof conditions, etc.—and we have not been able to work out a flat price to advertise.

ED MARR,

Marr Radio & TV

Salem, Oregon.

\* \* \*

### MARKEM SYSTEM

Your issue of Oct., 1952, contained in-  
(Continued on page 11)

Here's the most terrific Time and  
Trouble saver you've ever seen  
the **CLASSY CHASSIS CARRIER!**

**\$19.95**  
A VALUE...  
YOURS **FREE** WHEN  
YOU BUY SYLVANIA  
TUBES

**THE GREATEST  
WORK-SAVER EVER  
OFFERED TO SERVICE  
DEALERS!**

**TAKES MOST OF  
THE LIFT AND LUG FROM  
TV REPAIR WORK!**

Carries up to 27" tube  
and chassis easily!

**SEE HOW IT SAVES!**

1. Saves effort and energy... a breeze to wheel... a snap to carry!
2. Saves extra steps and extra labor. Carries your TNT Kit... everything all at once.
3. Saves valuable service time... permits more calls per day... you make more money.
4. Prevents damage to tubes, wiring and set.
5. Prevents damage to customers' furniture, woodwork and floors.

You'll say it's stupendous... the greatest and most valuable helper a TV Serviceman ever had!

An easy-wheeling, aluminum carrier that lets you move a heavy TV chassis (up to 27-inch tube) anywhere... with no lugging, no straining, no bumping. And no risk to tubes, floors, or polished surfaces. You save time, save money, save effort, and win renewed confidence from your customers.

**Yours FREE!**

This sensational work-saver now yours FREE with your purchases of Sylvania Tubes.

But don't delay! Offer expires August 31st. So, order your Sylvania Tubes and get your carrier reservation in NOW! Call your Sylvania Distributor for full details today!

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"TV Test Instruments".....	3.00
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"Making Money in TV Servicing".....	1.25
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# Editorial

## "OUR OPINION"

You will find that something new has been added in this issue of your



business magazine. **SERVICE MANAGEMENT** is broadening the scope of its coverage and month - by - month will bring you factual information on new sources of service business that are adding

or will add, important dollars to the over-all income of electronic service businesses.

In expanding our coverage of the business of service your editors feel that the inclusion of the installation and maintenance of home air conditioners will provide vital information for those electronic service businesses that have entered this fast-growing field. To them it offers the opportunity to level off their average volume of service income. It will also alert presently non-participating service companies to the income possibilities of this comparatively new, mass market product that fits in so nicely with the normal operating schedules of TV service companies.

The increasing size and broadening scope of service as a business is changing the complexion of the service industry and increasing its importance as a vital factor in the distribution of electronic and associated products. While service businesses have been increasing slowly in number they have grown rapidly in average size. This development has added a number of new factors to the problems of management of a service business and is placing new and serious obstacles in the path of the very small operator in his fight for business survival.

The one thing that continues to keep the independent service industry from getting the recognition it should have from other industry elements is the lack of cohesiveness that can be accomplished only through effective Associations. Eighty per cent of the present Service Associations are made up of men who are primarily technicians, interested in the technical aspects of the business and not in the advancement of service as a business.

The larger service businesses have, in the main, stayed aloof from Association participation with the result that there is no real force in operation with a dynamic program to establish the position of independent service as a business entity of vital importance both to the over-all industry and to the country's general economy.

The analysis of the registrations that have been received for the TTLB National Electronics Service Directory has revealed some interesting and important facts about the present structure and character of the servicing industry. For instance, the average service business employs 4.3 technicians and does an average annual volume of \$33,463.41.

A separate analysis was made of Set Dealers who operate general service departments. This survey revealed that when a dealer goes into the service business he builds it into a substantial, income producing department. The average dealer covered in this analysis employs 9.4 technicians.

The average technician in full-time, legitimate service business handles about \$7,750.00 worth of service work per year. This is equivalent to the volume of business that would be accomplished by 20 part-time technicians who handle service work evenings and on week-ends. In effect, it would take a half million part-time technicians to handle the volume of business that is now being taken care of by the 25,000 legitimate service businesses that receive **SERVICE MANAGEMENT** regularly.

Everyone accepts the fact that electronic service today is big business. They also agree that it will be tremendously bigger business when color television really gets rolling. (See Russell C. Hansen's forecast of color TV service volume on Page 18, May issue, **SERVICE MANAGEMENT**.)

Yet there is no widely accepted organization at work with established objectives to weld the independent servicing industry into the ruggedly strong force it could be, to win over-all industry support in stabilizing the activity of service as a business enterprise.

The need of the hour is for the bigger than average service businesses, the organizations that have a substantial stake in the building of service  
(Continued on page 30)



By Lawrence Kanover  
Business Systems Consultant



it's a

Breeze

## for TV Service Companies to handle air conditioning installation

This new kind of air conditioning, the room cooler, has become the most talked-about major appliance since the advent of black and white television. Its market potential is tremendous and in spite of this, the installation and servicing of these units are still being kicked about from manufacturer to distributor, to self servicing dealer to refrigeration service companies, to utilities and even to plumbers and electricians. Everybody has gotten into the act except the television service contractor.



It should be understood that even though the window unit room cooler comes under the heading of refrigeration, the refrigeration service companies reach the service peak in the servicing of their products during the summer and this comes about at the time room coolers are being installed and serviced on a volume basis. Hence, it is economically unwise for the refrigeration companies to attempt to grab off this business. The dealer must sell his room coolers during a very short space of time and, many times, the difference of one day delay in installing units in customer's homes can result in an incompletable sale. Dealers look to this business for their summer income and will go along with the company who can do a good, clean and quick job of cooling a customer off.

The television service contractor whose business usually drops off during the summer months faces the problem of what to do with their help. The lay-off in the service industry usually comes during the summer months and so the problem is how to subsidize the firm's income during this time and keep the help on the payroll. The answer is another product, which product? The only other product marketed during the lull summer months, the room cooler.

As compared to television, the room cooler is a trouble-free appliance. Most units are sealed and under the warranty can only be cut or opened to be re-charged by the manufacturer. Aside from this, the most common type of repair is an inoperative electrical switch, thermostat or a change of filter. Insufficient current to run the cooler with is not the responsibility of the service contractor. This problem is worked out between the customer and a licensed electrician. The service contractor merely mechanically fits the unit into the window and that's it.

The writer is not going to attempt to give the readers of Service Management this story via editorial but has arranged to interview top management of one of the most successful television service contractors in New York City who entered this air conditioning field three years ago and has since become the show case for the television service industry in the New York metropolitan area.

The following answers have been given the writer by the top brass of:

AAA Installation and Maintenance Co., Inc.  
568 Rockaway Avenue  
Brooklyn, N. Y.

**QUESTION:** Mr. Posoff, who does the contractor contact to develop air conditioning installation and service business?

**ANSWER:** This is the smallest problem the contractor will encounter. He is best off by first contacting the local unit distributor and then contacting every dealer in his service area. The contractor must be prepared to offer the distributor and dealer on organiza-

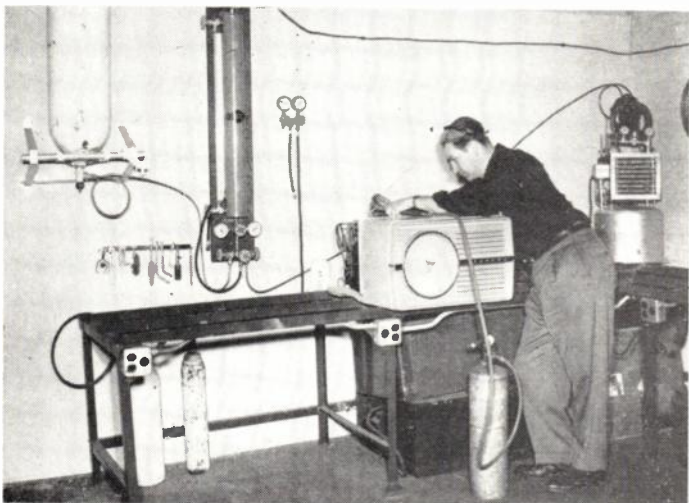
tion tailored to their needs. The contractor must also be able to guarantee the distributor and dealer a small profit to enable him to cover his paper and billing costs. It is always advantageous to offer a package deal to include storage, delivery, installation and maintenance at so much per unit.

**QUESTION:** Just what kind of a charge do you make to the dealer or distributor for a standard double-hung installation?

(Continued on page 14)

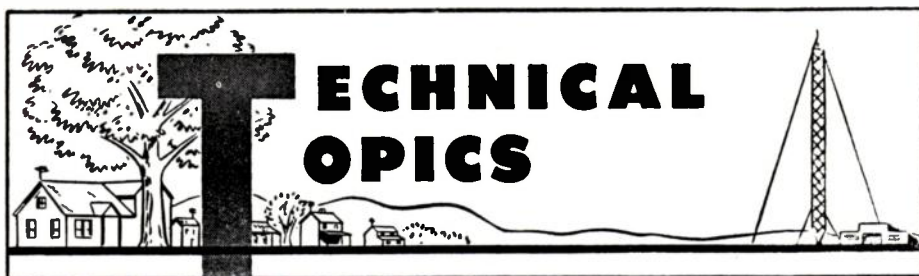


Allan Posoff, Vice President, and Jerome Linder, President of the AAA Installation and Maintenance Co., Inc., work very closely together on company problems.



Three pieces of equipment used in air-conditioning maintenance are shown here. They are: a charging board for replacing the refrigerants, welding equipment for sealing the open units and a suction pump for removing the old refrigerants.





## Closed-Circuit Television Camera for \$150

By EDWARD M. NOLL

Our latest low-priced camera, figure 1, built and designed here at the lab, has a total tube complement of eight. It uses the inexpensive 5527 iconoscope and can be constructed at very low cost. For daylight pick-up and for any pick-up with high ambient brightness it is excellent.

Some of the design features permit maximum rejection of hum and minimization of interference between horizontal and vertical signal components. Camera tube and video amplifiers are mounted on the top deck and are, therefore, isolated thoroughly from all pulse and power circuits. When hum is blocked from the video circuits, raster squareness and stability as well as very good resolution are obtainable.

Another innovation and simplification is the use of high voltage selenium rectifiers in the formation of the 900 volt d. c. anode potential for the iconoscope.

Sync stability has been so improved that with proper setting of horizontal frequency, the camera can be made to stay in interlace. Sync is formed from signals derived in the sweep amplifiers. This buffer-like technique prevents cross-talk between blocking-tube oscillators, minimizing amplitude or frequency modulation of one oscillator by signal components from the second oscillator.

Camera does an excellent job too in the transmission of charts and would do fine work when operated with a slide projector—slide projector focused on iconoscope mosaic directly. Thus it could be used to send test pattern and/or program information over a community antenna system.

For additional information write to ye editor in care of Educational Section, Box 94, Hatboro, Pa.

### Calibration of Response Curves

As another example of the experimental work that continues in our corner, refer to the photographs of our crystal-controlled marker generator. This unit develops one megacycle markers over entire IF and VHF television bands—in fact, we now have a

unit producing  $\frac{1}{2}$  megacycle markers for precise video i. f. alignment.

The display of multiple-markers of superior accuracy will be of particular help in the alignment of color receivers. In color receivers the alignment criticalness at the chrominance end of the video i. f. response imposes severe tolerances or marker accuracy. Thus crystal-controlled or crystal-calibrated markers are a necessity. A sequential display of markers is also helpful—it eliminates the need for returning and re-calibrating as required by many continuously tunable marker generators.

In system developed here, a harmonic mixing technique is employed using just two crystals. Their direct harmonics and different-frequency harmonics are used to produce a continuous display of accurate markers. Marker accuracy is automatic and does not depend on how well you read a dial. Again further information is yours for the asking.

Various other projects are under test and we will keep you posted. One encouraging project has been a transistor probe that can be used to build up the very weak alignment signal present at VHF tuners and UHF converters.

### Peaking of Two or Three UHF Stations

With weak UHF signals in many locations of a UHF area, it has been found helpful to stub the transmission line near the antenna terminals of the UHF unit. We have mentioned to you previously how a two-inch piece of aluminum foil can be used as a stub, figure 3.

However, I have had a number of inquiries as to what to do when two or three UHF stations are to be peaked. Actually, the same technique can be used only a more careful search must be made. Inasmuch as the positions which introduce maximum signal to input of UHF unit recur every half-wavelength there are many suitable locations for the foil stub along a short section of line. Likewise each station has its own wavelength and the maxima are separated by differing lengths. Thus it is possible to find one position

(Continued on page 19)



FIG. 1

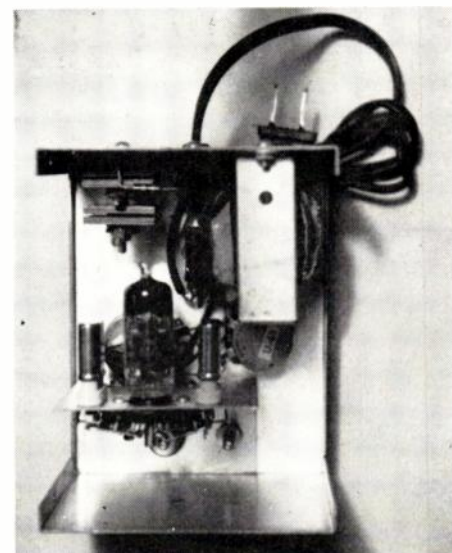


FIG. 2A

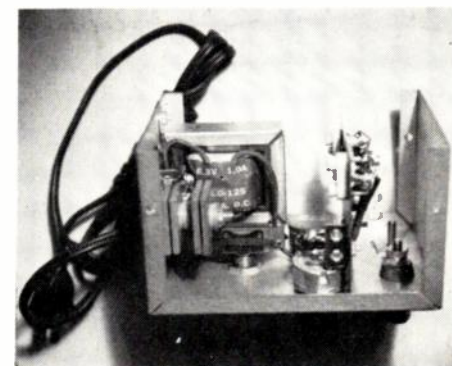


FIG. 2B

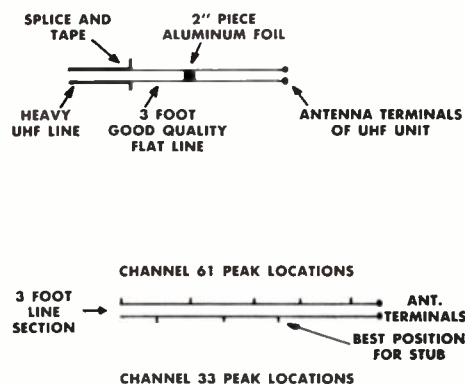
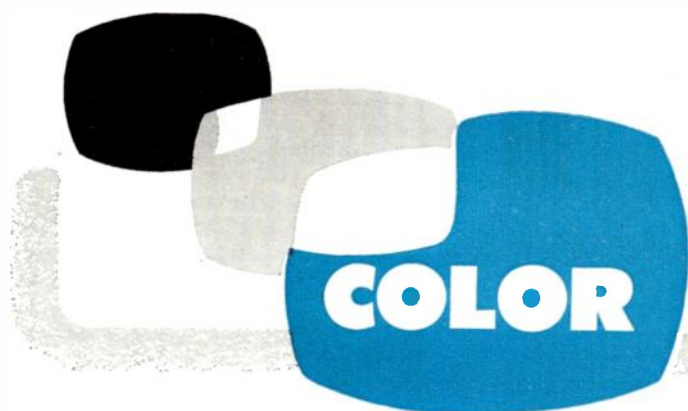


FIG. 3





## SERVICE PROBLEMS

By Harold J. Schulman, Chairman  
RETMA Service Committee

One indeed becomes humble when he studies the NTSC Color System. The 5-foot shelf of NTSC documents and reports presented to the FCC will stand forever as a monument to the labor, thoroughness, and remarkable ingenuity of the many men who created the Color Television System which, in the years to come, will give so much added pleasure to so many.

We should consider it a privilege to sell the receivers based on their original work. We must also consider it our responsibility to see that these receivers are serviced properly.

In my opinion, the acceptance and expansion of color television will depend on the confidence our customers will have in their ability to get reliable service when needed.

Yes color raises new service problems—but aren't these problems nothing more than variations of an old theme? First, the need for training of service technicians; and second, the need for the education of the customer.

Let me digress for a moment and talk about another industry. When an airplane is developed which uses new principles, such as jet propulsion as against propeller drives, the aircraft industry indeed has a service problem. They have a tremendous training job that is never quite caught up with. Would you ever travel in an airplane if you didn't have confidence in the service job being done by the airline's technicians? Sloppy service by aircraft mechanics would result in more than just dead receivers!

As a result the aircraft industry takes new developments in stride. They go about the serious job of training technicians as a part of their normal routine. A completely new development merely quickens the pace.

### Preparation Training

Isn't that more or less true of our own industry? The confidence of our customers rests in the ability of our service technicians to keep their television sets from being grounded. A conscientious serviceman never really has a chance to rest on his laurels. There are always new circuits, appli-

cations and layouts he must learn. A major development merely quickens the pace of learning. This occurred a year and a half ago with the introduction of UHF, and it's happening again with color. There is no better insurance for tomorrow's profits than today's study of color fundamentals. I have participated in a pilot color course for field men—and I'm glad to report that the color system, when understood, is simple.

As Dr. Baker said in a recent speech, "Color television will come as an evolution, not a revolution." Color sets won't be available immediately for sale to your customers for good and sufficient technical and procurement reasons. Instead of being a major sales year in color, this should indeed be the Year of Preparation—preparation for opportunity ahead.

If you aren't going to sell sets immediately you might be inclined to delay or neglect the training of your service people. People never seem to want to buy umbrellas until it is raining. By that time we sometimes find we are all wet.

How can you go about training your people? First encourage them — even give them time off if necessary to attend the color clinic and lectures that will be available shortly.

Most manufacturers are preparing for the widest dissemination of information in an orderly planned fashion. First comes the training of factory service personnel. Then Distributor groups, and then the dealer and service groups. Manufacturers' service personnel have for the most part been grounded in color fundamentals. Many companies have already scheduled or are about to schedule schools for distributor personnel. I believe that color lectures and schools for dealers and service men will be available on a growing scale from now on.

### Coordinated Information

In the Service Committee of the RETMA we started planning an authentic presentation of color fundamentals to the service industry even before the FCC approved the NTSC system.

We have in mind a simple, easy to understand booklet to be used as a basis for a series of lectures by individual manufacturers. Since the basic information will be uniform—your men will be able to attend as many meetings as they want, and each time they will be able to pick up additional pointers and reinforce their understanding.

This should help to eliminate the confusion and helplessness arising from obscure and often contradictory information that sometimes arises in presenting complex subjects. Plan to have your men attend service meetings when they are given in your city. If you can participate in a school given back at the factory, by all means spend the money to send your key men. You should also encourage your men to choose carefully the reading matter they spend their time on. An author who took the time and trouble to explain his ideas so they can be understood can be spotted quickly. It's worthwhile searching the available books and magazines for them.

In the meantime, most manufacturers will have published material shortly that will help you get started in color training. For instance we at Du Mont started our Color Course with the January issue of our Service News. Have your men learn as much theory as they can absorb. Don't underestimate the need for a good background in fundamentals.

### Customer Education

The second item I mentioned earlier, that of educating the customer, will present some problems of its own. The color receiver, by its very make-up, will be subject to more service calls than black and white sets. I estimate the average number of service calls per year will fall between six and ten. A number of factors enter into this estimate.

First, the simple numerical increase in resistors, capacitors and small tubes. Second, the use of some new components with which we have little experience in production models. Third, the

*(Continued on page 12)*

# ROOM AIR-CONDITIONERS

*Super Service Shops of tomorrow will feature one-call service for all home electric and electronic devices. Fast-growing air conditioning field is a natural for TV service companies. Here are some of the brands that will be aggressively promoted by dealers this year.*

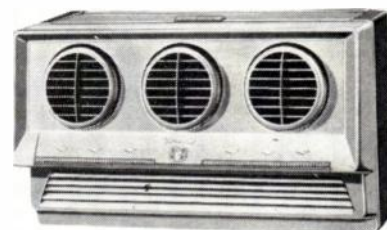
## Kelvinator Model RAC 104S

This one ton window unit is capable of cooling a room approximately 600 square feet in size. It is one of six models being featured by the Kelvinator Div. of the recently formed American Motors Corp. The Kelvinator Div. address: 14250 Plymouth Rd., Detroit 32, Mich.



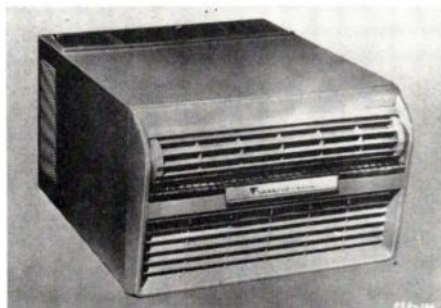
## Vornado Model 150 WAC

This 1½ H. P. self-contained window-unit, capable of cooling an area up to 1,000 sq. feet is one of seven Vornado models ranging in capacity from ½ ton to 1½ ton to be featured by Vornado dealers this season. The manufacturer is the O. A. Sutton Corp., 1812 W. 2nd St., Wichita 1, Kan.



## usAIRco 1954 Room Air-Conditioners

The United States Air-Conditioning Corp. of 3300 Como Ave., S. E., Minneapolis 14, Minn., is featuring the fiberglas construction inside and out in the three models of room air-conditioners they are producing this year.



## Westinghouse Heat Pump

The Westinghouse Heat Pump is a completely self-contained system that without water or flame provides warm filtered air in the winter and cool dehumidified air in the summer.

A complete explanation of the heating and cooling cycles of the unit is presented in the bulletin including schematic flow diagrams of the refrigerant and air.

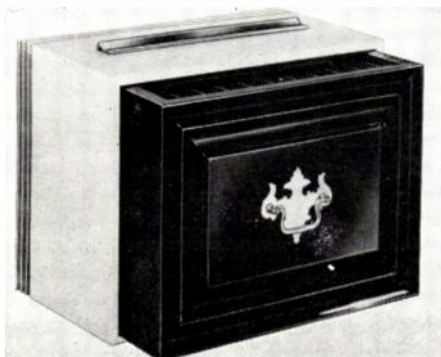
For a copy of this Heat Pump bulletin, write Westinghouse Air Conditioning Div., Dept. T-557, 200 Readville St., Hyde Park, Boston 36, Mass.



## Servel Reverse-Cycle Room Cooler

Servel, Inc. of Evansville, Ind., are promoting their four models of room air-conditioners as heating as well as cooling units.

They say this climate miracle is brought about by what refrigeration and air-conditioning engineers call a "reverse cycle." In summer, the conditioner cools the inside air by pumping out some of the heat. Now the same Servel unit can be used to provide warmth in chilly weather by pumping heat back into the room from the outside.



## Fresh'nd-aire's Push-Button Automatic Air-Conditioner

The six models that are featured in the Fresh'nd-aire line for 1954 are familiar to many radio and TV service operators from seeing them on display in parts jobbers display rooms. This unit is manufactured by the Fresh'nd-aire Co., a division of the Cory Corp., 221 N. LaSalle St., Chicago 1, Ill.





#### Raytheon's Electrostatic Air Cleaner

Pure air, free from dust, smoke, pollen, lint, and other impurities, is available through the use of this new "Micronaire" electrostatic air cleaner, made by Raytheon.

The device requires no installation, being merely plugged into a wall outlet. It immediately goes to work removing all impurities, including even some types of germs, from the air in a room. Victims of hay fever, asthma, and other allergies have experienced great relief through use of this machine.

#### Nash Air-Conditioned Cars

Nash Motors, a companion company to Kelvinator, recently announced an All-Weather Eye air-conditioning system for its passenger cars—claiming it will "obsolete" all air cooling units now available in the industry.

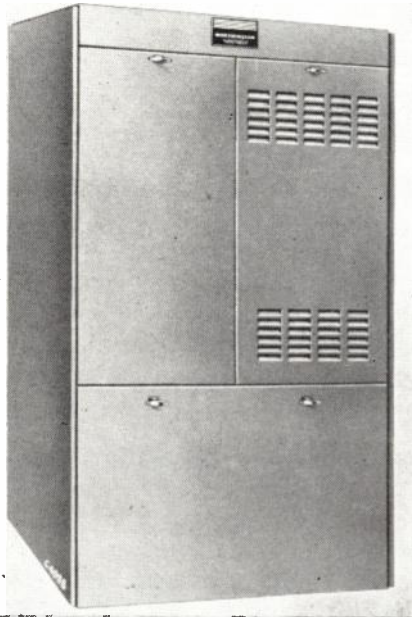
For the first time, cooling, heating and ventilating have been combined into a single integrated air-condition-

ing unit, according to H. C. Doss, vice-president in charge of Nash sales.

"The All-Weather Eye air-conditioning system is so new and revolutionary that every existing system on the market today is made obsolete," Doss said. "Never before has there been a single, compact unit which automatically cools, heats and ventilates the entire passenger compartment all year round with one simple thermostatic control."

#### Worthington Year-Round Air-Conditioner

Worthington Corp. of Harrison, N. J., recently introduced a new home air-conditioner design with both heating and cooling in one compact unit. Worthington's new unit will provide



heating, cooling, dehumidification, filtering, ventilation and air circulation. Year-round control of the unit will be accomplished by one-point control, from a centrally located thermostat.

The year-round home air conditioner will be offered in 2 and 3 HP sizes with either a gas-fired or oil-fired furnace. The entire unit is thermally and acoustically insulated with aluminum-faced fiberglass.



#### New Remington Air Fresh'ner Sweetens Room Air—Kills Odors

The Remington Corp. of Auburn, N. Y., is pushing its six models of room air-conditioners with special emphasis on exclusive air freshener device containing chlorophyll, which sweetens room air and kills odors in a jiffy.

### Letters

(Continued from page 4)

formation pertaining to the "Markem" master and job card system; this system was pictured on page 21 of the Oct., 1952, issue. Will you please supply details as to where I may obtain the papers used in this system?

FRANK J. ROHR,  
Newark Branch Mgr.,  
RCA Service Co., Inc.

Camden, N. J.

\* \* \*

#### ALL ABOUT US

I have been receiving copies of your excellent magazine, SERVICE MANAGEMENT, for some three or four months now. Has someone sent in a subscription for me or are you just trying to bait me? Well, you have succeeded, gentlemen!

I have enjoyed each and every issue sent me and you can look for my subscription shortly, and an order for some of those booklets you publish.

In closing I again wish to express my appreciation and I must congratulate you on the excellence of your magazine.

W. WM. CARR.

Seattle, Washington.

\* \* \*

I enjoy very much reading SERVICE MANAGEMENT — specially sales articles.

ANTHOY K. KVEDER.

Milwaukee, Wis.

\* \* \*

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

J. M. FRANCIS.

Lakewood, Ohio.

I look forward to receiving your magazine each month, and would like to take this opportunity to thank you for the good work you are doing.

JOHN METCALF,  
Flactem Radio & TV

Brooklyn, N. Y.

\* \* \*

We find your magazine very useful. It fills a much needed function in our industry.

JOHN W. MASSECAR,  
At-Home TV Service.

Los Angeles, Calif.

TEXAS ELECTRONIC ASSN. officials report an unusual state-wide interest in the 2nd annual TV clinic to be held at the Adolphus Hotel, Dallas, Texas, on Aug. 27, 28 and 29.

## SELLING SERVICE By HAROLD CHASE

"Credit means more business and more loyal customers"—"As in any



business if you operate strictly on a cash basis, you will either (1) spend your time waiting until prospects get money and come in to pick up

the merchandise, or (2) You won't get any business at all." "Credit requires more office force than we can afford." These are statements of three Detroit service dealers. Let's analyze each statement.

"Credit means more business and more loyal customers." This service dealer is amply financed. He has a method of checking credit and carries his own accounts for up to ninety days with a very small percentage of losses. He feels like your large department stores, that open accounts have a tendency to increase sales. Likewise, if your customer is short at the time he needs service, he is more apt to call you.

Dealer number two states "That you spend time waiting for prospects to get money or you don't get any business at all." This would depend entirely on the class of the customers and the volume you consider business. There is always a certain amount of cash business. Finally, dealer number three: "Credit means more office force than we can afford." It is understandable that in a one- or two-man shop to add the duties of a credit man seems quite a chore, but it is amazing the small amount of time it takes on credit deals. Yes, perhaps twenty minutes or so on each deal, but this can be added to the time spent on the set so the customer pays the bill.

Whether you feature credit plans in your business or use it to save business is a matter of individual policy coupled with the class of trade for that individual service dealer. A combination deal that is successful for still another Detroit service dealer is credit carried by the firm if the customer pays one-half down and balance in thirty days on a six- to twelve-month finance plan for longer terms. This particular firm finds it necessary to quote terms in less than 3 per cent of the estimates given and of this small percentage over half accept the one-half down and the balance in thirty days.

This same service dealer reports that in three months only two estimates were turned down. These two were sets not worth repairing and their owners were told so.

In conclusion the factors to decide the question of cash or credit in TV service are: (1) Finances of the service dealer, (2) Class of customers, (3) Efficiency of office force, and though not mentioned, is a large factor of any service job, salesmanship. An old saying seems to fit right here, "A good salesman can get blood out of a turnip."

## Color Problems

(Continued from page 9)

inexperience of servicemen with the new type of receiver. Fourth, transmission difficulties that may be interpreted as receiver troubles. Fifth, the repeat instructions some consumers will require before they know how to tune a set perfectly.

In addition to the usual controls, we can expect to see a chroma control, to vary the saturation or intensity of the colors. Also, a phasing control to adjust the hue or tint. Many customers even today don't know their brightness from their contrast control. Now we want them to adjust all this and color too. It's a job that will take patience—but there is no reason why a customer can't be shown how to tune properly.

I also believe it shouldn't be too difficult to explain to a customer the service expectations of a color receiver. To deny the need for service at the time of sale will undermine confidence in our industry. Certainly at this stage of the game customers should be told to expect that service will be required on color sets from time to time. As a matter of fact, I believe that color receivers should be sold with one year service contracts, at least during the early stages of manufacture.



LITTELFUSE employees get 3-dimensional view of their work through scientific application of color dynamics. Jack Hughes, Vice-Pres., and Thomas M. Blake, Exec.-Pres., observe it in action.

## Factual Training

We'll know more about the cost and other vital statistics regarding service requirements as soon as production line receivers are made in quantity and warranty policies are set. As you know, only lab models, put together by engineers are available at this time. We won't really know what our problems will be like until the color production lines are rolling and statistical sampling of commercial sets are subjected to life tests. These are tests in Quality control labs which enable studies to be made of probable breakdowns.

Antenna installations should present no new problems. Most present-day broad band antennas should prove satisfactory. The installers will probably be called on to insert the picture tube into the cabinet. Present plans seem to call for the picture tubes to be shipped in separate cartons. A whole series of adjustments will have to be made—these needn't be learned by large numbers of servicemen until commercial designs are frozen.

If you have good test equipment for servicing black and white sets you shouldn't have to add much equipment for color. Probably a color bar and dot generator is all you will have to buy. If the color set is more complex, it also has within itself more clues for tracking down troubles. Essentially, it is a black and white television receiver with color circuits added.

Hence, normal trouble shooting techniques should detect any irregularities in the sections we are already familiar with in black and white. In the color sections we have distinct color and sync signals to help track down the trouble. As usual the picture, itself, will be the single biggest helper in analyzing and localizing trouble. This is predicated, of course, on an adequate knowledge of system fundamentals. Which brings us back to where we started.

So, to sum up: Color installation will present no new problem except that set-up time will take longer due to the additional adjustments needed and the installation of the picture tube. Average service calls per year may double. Color service will be taken in stride by the average serviceman with proper training. The industry will soon start a large scale training program at the local level.

Have patience — participate actively in the gradual growth of color—prepare for a color training program—don't neglect black and white sales, and be happy you are in such a dynamic industry. It has its rewards.

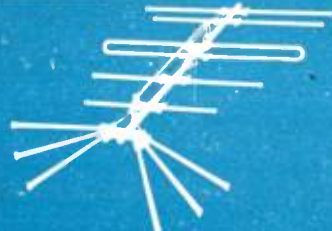




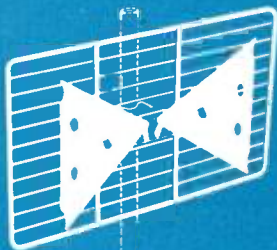
YAGI



DELTA MATCH



CON-YAGI COMBINATION



UHF



LINE-UP



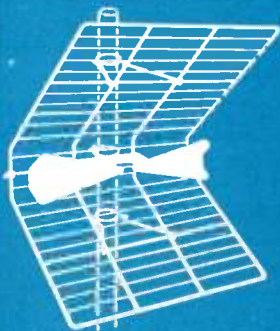
SNAP-UP



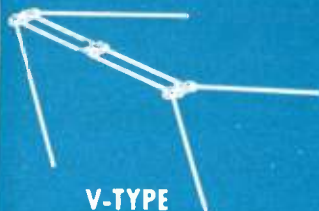
CONICAL



Directronic



UHF



V-TYPE

**Snyder**  
PHILADELPHIA

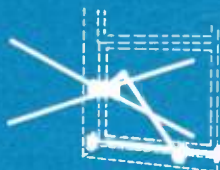
*The Only*  
*Complete*  
**TV ANTENNA**  
**LINE**



\*BELLEVUE  
TV MASTS



INDOORS



WINDOW



Directronic

**SNYDER MFG. CO.**

**ANTENN-GINEERS\*  
PHILADELPHIA, U.S.A.**

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

**MANUFACTURERS ..... START TO FINISH**



## It's A Breeze

(Continued from page 7)



Lift Trucks makes loading easy for the vehicles going out the next day with deliveries and installations.

Control Center of an efficiently managed service company.



**ANSWER:** The charge will vary between \$28.50 and \$30.00 depending upon how far out in the service area covered, the customer is located.

**QUESTION:** What is the normal charge to the dealer or distributor for the picking up and delivering of the unit prior to the installation?

**ANSWER:** The delivery charge is always \$4.00 per unit in addition to the installation price. The pick up charge however will vary. In single lots the pick up charge is \$2.00 per unit, however in multiples the price might readily be reduced to \$1.50 per unit.

**QUESTION:** Can you describe the different types of cooler installations for the readers?

**ANSWER:** 1. Standard double hung . . . this is an installation made in a standard width up and down opening. This type is most prevalent in old homes, apartment houses and business establishments.

2. Open casement . . . the unit will usually fit an opening made by removing the two bottom panes and cutting away the center post at the bottom. Then by moving the window handles up, the window can be opened and closed while the air conditioner is fitted. Of course, the crank handle must be disconnected also. Many people request this kind of installation.

3. Closed casement . . . this installation makes the windows inoperative. We usually bolt the two halves together rather than weld them.

4. Picture window . . . this kind of installation is made by removing all the glass and bars from the casement window and replacing it with a solid piece of glass which gives the effect of a picture window above the air conditioner.

5. Transom . . . this is a tough one and there aren't too many of them done. To install a unit in a transom requires much strength and lots of experience. I would suggest that the companies just starting to do installations try to stay away from this kind. AAA will answer any specific inquiries regarding this type of installation.

**QUESTION:** Would you release your price list to the readers for the special types of installations you have just described?

**ANSWER:** I will release this information to any interested companies who request this information in writing.

Thank you, Mr. Posoff, for the information you have given our readers.



AAA's TV Service Shop has all of its test equipment mounted on movable steel tables.

The Steam Jenny in operation. All air-conditioning units must be thoroughly cleaned before painting and delivery. Steam jennies cost roughly about \$700.00.



And now for some questions to be answered by Jerome Linder, President of the company and controller for the entire operation.

**QUESTION:** Mr. Linder, how did you train your TV technicians to handle the room cooler?

**ANSWER:** All my key men attended the various manufacturers' schools and we conducted our own school on our premises.

**QUESTION:** How many men are required to make an installation?

**ANSWER:** All our TV service men are lead men and we hire helpers for them. Normal installations require two men.

**QUESTION:** How many installations can a team do in an eight-hour day?

**ANSWER:** During the summer months, we operate up to twelve hours per day and a team will install from five to seven units depending upon the travel time between stops.

**QUESTION:** How many units do your men go out with in the morning?

**ANSWER:** We own a dozen trucks which will transport up to twelve units at one time. Our men will usually leave in the morning with a complete day's work.

**QUESTION:** What is the usual length of service that you render under the manufacturer's warranty?

**ANSWER:** All parts and service are guaranteed for one year from the date of installation. After that the sealed section runs an additional four years under warranty. However, after the first year, the customer pays for labor, parts and a fee for the exchanging of in warranty parts.

**QUESTION:** What are your charges for service work after the expiration of the warranty period?

**ANSWER:** I will release this information to any interested service company who requests this in writing.

**QUESTION:** Which parts do you stock for the servicing of window air conditioners?

**ANSWER:** Switches, relays, motors, fan blades, filters, knobs, thermostats, extra installation equipment, miscellaneous hardware, etc.



**QUESTION:** What kind of equipment is required to really get into the business of air conditioning service and installation?

**ANSWER:** I think we should break up the answer and list the requirements for installations and in warranty service first.

Under the first heading the company requires vehicles, man power and the willingness to work extremely long hours. Aside from this, the average television service company has all the tools he will require. If the company desires to go into the air conditioning business all the way, he must then set up shop. One of the major requirements is a steam jenny used for cleaning units thoroughly before painting and after it has been stored through the winter either in the window or in a basement.

Another required piece of equipment for out of warranty service is a charging board, welding equipment and a high-pressure suction pump. This is the gravy end of the business and warrants the investment.

**QUESTION:** What kind of equipment do you use for the loading and unloading the window units?

**ANSWER:** We use BUDA fork lift trucks which do the work of a dozen men. Our trucks are driven into our warehouse where they are loaded the night before dispatching. We use approximately seven thousand square feet for warehousing of air conditioning units only.

**QUESTION:** Where do you locate your television service department?

**ANSWER:** The television and air conditioning shops are side by side. The same men handle both appliances. Our service men might go into the field with their service calls split between the different appliances. All our lead men are combination service men who started as TV men exclusively.

**QUESTION:** How do you control this business through office procedure?

**ANSWER:** We employ eight people for various kinds of office work. Since we incorporated the use of the Markem Service System some years ago, our paper problems have virtually disappeared. All of our service records for both appliances are integrated and filed by customer code in The Mosler Revo-Files. The two telephone clerks will receive, post and schedule some 250 service calls per day. During peak periods, another clerk will pitch in.

**QUESTION:** How does your paper control deal with the heavy volume of billing and service records in order to expedite payments to you by your dealers and distributors?

**ANSWER:** Before we installed the Markem Service System, our paper control was a nightmare. It got to the point that our billing was two weeks backed up. The methods men at Markem Service Systems remedied the situation in the following manner:

They designed a form which contains the following parts:

1. Control copy.
2. Cross index alphabetical control.
3. Cross index numerical control.
4. Office Master.
5. Original invoice.
6. Duplicate invoice.
7. Master card with die cut tab.

**QUESTION:** How does your paper work coordinate all the pro-

cedures that must be followed for an installation and one-year service for a new window air conditioner?

**ANSWER:** Upon receiving an installation order from any dealer or distributor, we place the aforementioned master set into an electric typewriter and head all the forms up in one typing with:

1. Customer's name.
2. Customer's address.
3. Dealer's name.
4. Dealer's address.
5. Customer's telephone number.
6. Date of order to install.
7. Dealer's installation order number.
8. Warranty expiration date.
9. Type.
10. Make-model-size (capacity).
11. Type of installation ordered.
12. Who is delivering unit.
13. If our delivery, the unit serial number.

We then remove the first copy and schedule the remaining six copies, still intact, to be dispatched with the installation team to be filed in after installation is made and the customer signs all the copies in one writing.

When the form is returned to the office, the following procedure is followed:

1. The number 2 copy is removed and filed alphabetically.
2. The number 3 copy is removed and filed numerically.
3. The number 5 and 6 copies are removed, charges placed on the forms for the service and material rendered, the original is mailed to the dealer, the duplicate goes into an open order post binder to control the open accounts receivables.
4. Copies 4 and 7 are then coded by customer's name and address and inserted into the Revo-Files, ready for service work to be posted to. This is a functional master card system and there are no other forms needed for the rendering of service work to the customer, with the exception of a receipt on charge calls. When a receipt is required, the service man merely places one on top of the master card and in one writing transfers all information on to the master card.

**QUESTION:** Just how much good has the Markem Service System done you?

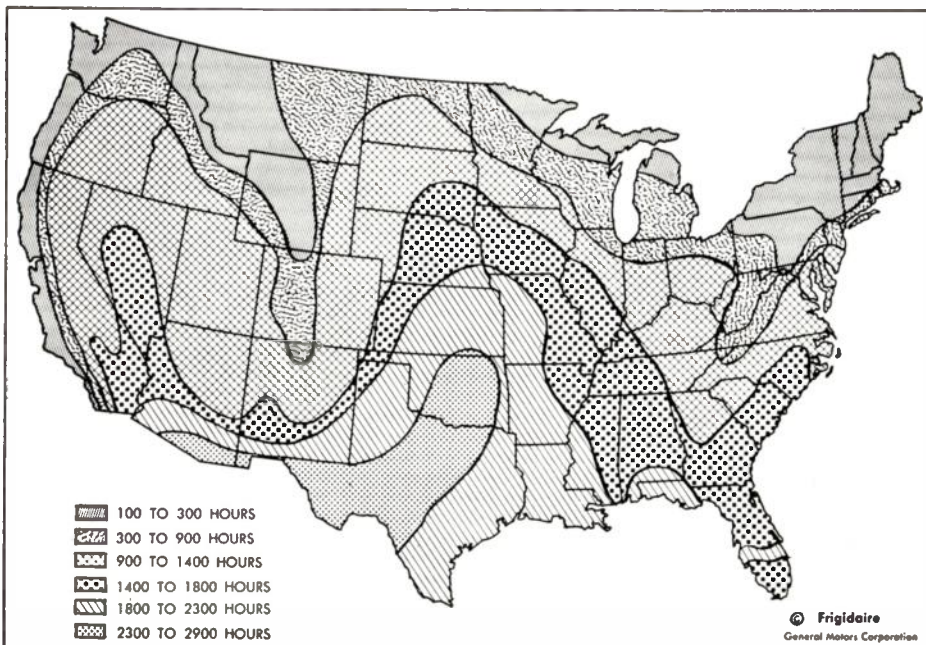
**ANSWER:** Without it, our administrative expense would be five times greater than it is presently and I doubt if we could remain in business very long without it.

**QUESTION:** Mr. Linder, is there anything you would care to inform the readers about concerning paper control in the service business?

**ANSWER:** In the early days of television service, the lack of paper control cost me some \$30,000.00. Since then I have come to respect it greatly. We are very proud of our Markem Service System and it has helped to sell dealers and distributors our services. Some of them are amazed at the sight of our office procedures and gaining their confidence is made simple by the very fact that we can so tightly control our service business. We found that by giving our service personnel the proper working tools plus case histories, he becomes a very effective service man in the field.

Thank you so much for the information you gave our readers concerning the new service market for the television service contractor.

**HOT WEATHER IS ON ITS WAY.** Here is a guide to air conditioning requirements throughout the United States, showing that there is a need for cooling practically everywhere. Frigidaire engineers base this map on the average number of hours the outside temperature exceeds 80° F. each cooling season.



## SALT LAKE CITY, UTAH

Preliminary conferences between officials of the Utah Association of Radio and Television Servicemen and the Business Men's Alliance of Salt Lake City, have resulted in a mutual working agreement to deal with deliberate frauds and misrepresentations in the radio and television service industry. The Business Men's Alliance is, in nature, a local Better Business Bureau. Complaint forms and other Association material have been provided them and the public will be informed they now have recourse on their grievances. Association officials and BMA will work together on complaints and in cases of specific fraud will recommend prosecution by law enforcement agencies.

The Utah Association is offering a new service to its members. For a contingent fee of 25%, the Association will collect accounts that are slow, or refuse to pay, announced J. F. Burns, president.





ONE WORRY A SERVICEMAN  
DOESN'T HAVE . . .

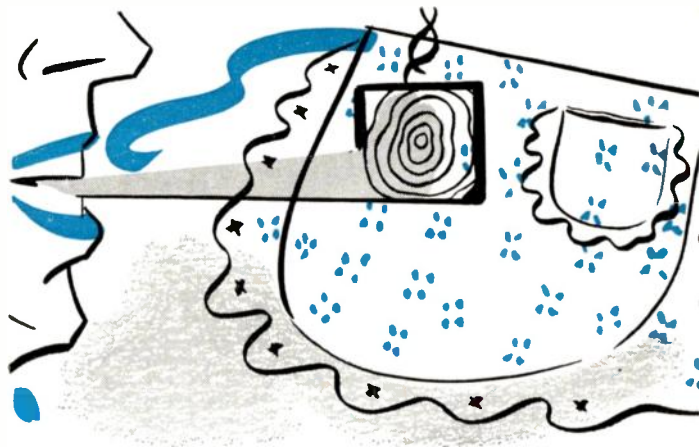


Tung-Sol makes the kind of tubes servicemen know they can rely on for profitable service work without callbacks.

**TUNG-SOL®**  
dependable  
**PICTURE TUBES**



TUNG-SOL ELECTRIC INC., Newark 4, N. J.  
Sales Offices: Atlanta, Chicago, Columbus,  
Culver City (Los Angeles), Dallas, Denver,  
Detroit, Newark, Seattle.



(Mrs. Theodore Suman, whose husband is a TV service man, has been a partner in helping him maintain his own service shop since 1947. Here she gives an insight on how they run the business—together.)

"The rich stay rich and the poor get poorer . . . In the meantime, In between time, Ain't we got fun!"

It would be wonderful to recline on a Southern sandy beach and write about our 20-man efficiency team in the service shop back home, but we are the owners of a one-man business of which I am married to . . . both of them: the man, and the business.

They say it's a wise man who learns from experience and a genius who learns from another's experience. We've learned the hard way and would like to share some of the ideas that might be helpful to other couples working together in a little business of their own. It can be rugged at times; but there are a great many satisfactions that come with making a go of it.

#### What's Your Line?

My line of work is just that—the one connected to the telephone. We use the business phone for incoming calls; home phone for outgoing.

Outside of trying to follow the famous cardinal rules of being sympathetic, friendly and informal, I plan the routing and get the names and addresses. My standard question is: "How has your set been acting?" This has avoided many a sharp reply like: "If I knew the trouble, I'd fix it myself!"

My personal ulcer-saver is a formulae I cooked up



Mr. and Mrs. Ted Suman "at home" in the shop addition of their house. They look forward to "possibly 40 more years of business together."



# hits and Mrs.

By Mrs. Theodore Suman

*Editor's Note: We need never fear the complete dominance of "big business" in our country so long as we maintain the freedom of opportunity for individuals to engage in business "on their own" and prosper from the application of their time, knowledge and ingenuity. We feel that the electronics industry will always provide many such opportunities . . . and we are delighted for this opportunity to bring you this story about one of them.*

for "price shoppers," "slow-bill payers" or people who have been unreasonable in their previous demands. I purposely set a date far ahead for a call and it's usually a relief to hear the customer snarl that he would rather take his business elsewhere than wait so long. So he makes the choice and I can still be pleasant.

If we cannot take care of a call within the time limit they set, I do not hesitate to recommend another TV shop—ever help the customer find the phone number. As a result customers usually call us first when they need service.

A big hunk of pay-out salary was saved when I took over as bookkeeper. Our books had been set up by a professional and we still have a public accountant audit them and make out our income and property tax returns at the year's end.

In the meantime I make out state tax forms, extra government forms, bank deposit slips, write checks, take back parts for replacement, help with inventory, do billing and filing and keep in constant touch with all of the financial problems.

All household expenses are listed under "drawing accounts;" medical and other tax exempt expenses are kept separately.

## Headquarters At Home

We tried having a little shop on a big highway, but found we could have the same volume of business at home without paying extras on rent, heat, light, livability insurance and extra help needed to keep the shop open.

So we added to the value of our home location by building the shop on the house. We have nearly four times as much floor space for our workshop, reception and show-room and very low overhead.

Our passenger car has been replaced by a Ford panel truck—wonderful for everything (even camping out on vacations). Most of its expense can be counted as business overhead since 95% of its use is for the service business.

Five uniforms are rented from a mechanic laundry; these are neat and presentable for work done anywhere from a dirty basement to a swanky city apartment and the laundry service can be charged to business expense, also. Dust cloths are rented from the same laundry and used to lay

(Continued on page 30)

## THE SET OWNER WHO USES TUNG-SOL TUBES!



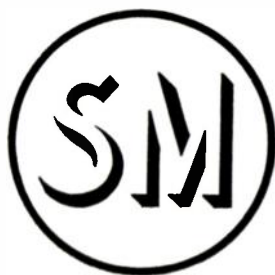
Tung-Sol Tubes have a long record of performance dependability. Servicemen can build a reputation on Tung-Sol quality.

**TUNG-SOL<sup>®</sup>**  
dependable  
**TUBES—DIAL LAMPS**

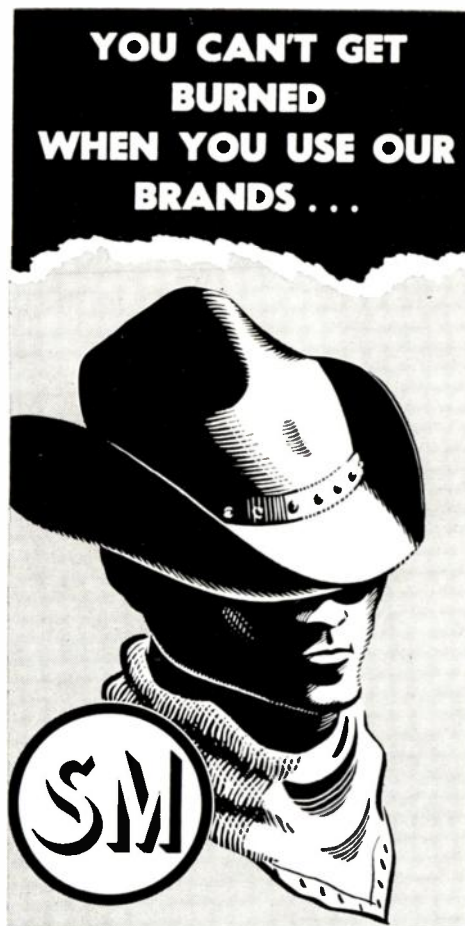
TUNG-SOL makes All-Glass Sealed Beam Lamps, Miniature Lamps, Signal Flashers, Picture Tubes, Radio, TV and Special Purpose Electron Tubes and Semiconductor Products.



... Because  
the Blank Service Co.  
repairs your TV or  
your radio set with  
standard, brand-  
name parts only!



DEMAND A BRAND!



### THE BLANK SERVICE COMPANY

600 Main Street  
PATTERSON, OHIO  
Phone: Service 0-0000

Stick with us . . .  
we're sticking to brands!

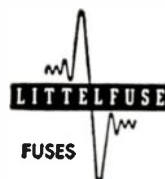


### What's in a Brand?

The very best that a manufacturer has to offer goes into the making of a brand-name replacement part for your radio or television set. When a manufacturer produces and promotes a brand-name radio or TV part, he's putting his best foot forward. His company's technical know-how, experience and expert equipment all play a vital role in turning out a product he is proud of.

Don't get burned. Non-branded items will cost you more in the long run. The confidence you feel when you buy a brand name cannot be bought at any price. And that confidence is fully deserved!

DEMAND A BRAND!



*Howard W. Sams*





## new color signal generator

Development of inexpensive equipment for use in television stations to expedite installation and performance checks of color television receivers in homes while black-and-white programs are on the air was announced today by the Radio Corporation of America.

The new device, called a color signal generator, was developed by engineers of the RCA Service Company. Use of this equipment by television stations will enable service technicians to check color set reception during normal servicing hours, without waiting for color signals which may not be available on a scheduled basis at convenient times.

E. C. Cahill, President of the RCA Service Company, described the development as a major step in the orderly introduction of color reception into American homes during the period when programs are still predominantly transmitted in black-and-white.

Pointing out that the device is of major importance to the television service industry, Mr. Cahill described it as the element that was vitally needed to furnish a complete service check from the station transmitter to the home receiver.

"While the RCA Service Company had already developed test equipment which is necessary for checking and adjusting the color set itself," said Mr. Cahill, "there was no way to determine whether color transmissions could be received at a particular home location.

"Equipment was needed which would

make possible checking such phases as the air path from the station transmitter to the home, proper orientation of the roof-top antenna, and whether



**TYPICAL NETWORK IDENTIFICATION pattern with the color stripe added. This picture was made from the screen of an RCA Color Receiver. The dark line at the right-hand edge of the picture is the color stripe which on the actual receiver screen appears as a greenish-yellow color. On a monochrome receiver this line is practically imperceptible.**

the transmission line from antenna to receiver is capable of carrying a color signal."

The new inexpensive color signal generator can be installed at low cost by stations already equipped to carry network color programs. It also can be easily installed at the time other stations modify equipment to permit transmission of color programs.

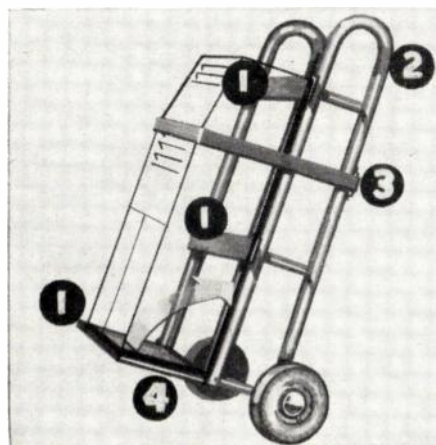
### Technical Topics

(Continued from page 8)

that represents a maximum for both stations. The same process can be used to locate the most suitable stub location for three or more stations.

For example in moving the stub along a three-foot length of line, mark off the locations of the maxima for the two stations to be peaked. In our example these were for channels 33 and 61. Position for stub is location at which both signals reach near a maximum. Notice the wider spacing between maxima for the lower frequency station.

## New Air Conditioning Trucks



**MODEL A-V**  
for Vertical Type Units

- 1 Protective Felt Pads
- 2 Sturdy Tubular Steel Construction
- 3 Strong Fastening Strap
- 4 Retractable Toe Plate



**MODEL A-H**  
for all Window Type Units

- 1 Folding Top
- 2 Folding Legs . . . Permit Compact Storage
- 3 8" Semi-pneumatic Ball Bearing Wheels
- 4 Rubber Tips Provide Stability

**another FIRST for USP . . . the people who designed the famous USP TV Truck!**

**UNITS CAN BE UNPACKED AT STORE—EASY ONE-MAN DELIVERY**

**USP** *hand trucks*  
SUPERIOR

ORDER TODAY—WRITE FOR DETAILS

**U S PRODUCTS INCORPORATED • COLUMBUS, INDIANA**



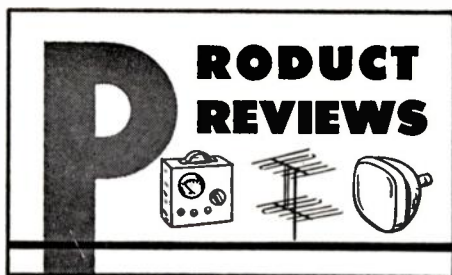
### A TRIPLE-FOLD MAILER FOR SALES MINDED SERVICE COMPANIES

Here is *your* Brand Name mailing piece complete with the brand logos of the manufacturers who are participating in and supporting these vitally important service selling programs.

To have this mailing piece reproduced as *your own* service selling mailer, simply take this page to a printer who can reproduce copy by photo-offset, have him insert your name, address and telephone number in the spaces shown as the Blank Service Co., and you will have a mailer or hand-out that is distinctly your own.

An alert printer in Toledo, Ohio, who reproduced the antenna mailing piece for H & H Video Service of Toledo, has made up offset plates for *all* of the SERVICE MANAGEMENT service selling mailing pieces.

You can have this or any of the other mailers made up in quantity, imprinted with your name, address and telephone number, by writing to:  
P. F. Whartenby,  
Litho Press,  
1318 Adams Street,  
Toledo 2, Ohio.



## MAGNETIC RECORDING TAPE SPLICES

Yale Industries Corp., 82-09 251st Street, Bellrose 26, New York, announces the YALE TS-4 cutter-splicer for magnetic recording tape. It cuts two rounded indentions in the tape splice giving the splice a "Gibson Girl" shape. This leaves the edges of the tape, which contact parts of the recorder, entirely free of adhesive. Adhesive deposited on critical parts of the recorder, while the tape is in motion, is a frequent cause of erratic operation, wow and flutter.



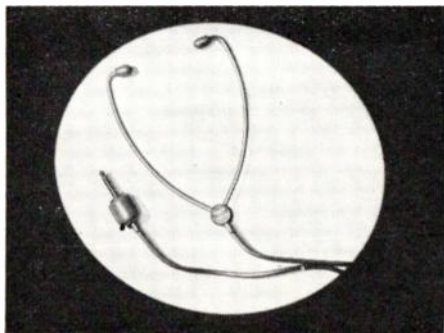
## TELEX HEADPHONE UNIT

High fidelity and light weight are features of the Dynaset, dynamic headphone unit developed by Telex, Inc.

The unit weighs only 1.25 ounces and is equipped with the world's smallest dynamic high fidelity speaker,  $\frac{3}{4}$ " in diameter.

Dynaset can be used with transcription machines, for radio monitoring and many other hearing applications, states the manufacturer. This under-the-chin headset, made of tough, sturdy Tenite, has exchangeable ear tips, anodized aluminum tone arms and durable, flexible tubing.

For literature and price information on the Telex Dynaset, write Dept. KP, Telex, Inc., Telex Park, St. Paul, Minn. Mention this publication.



## FORK TRUCKS ALLOW PALLETLESS HANDLING

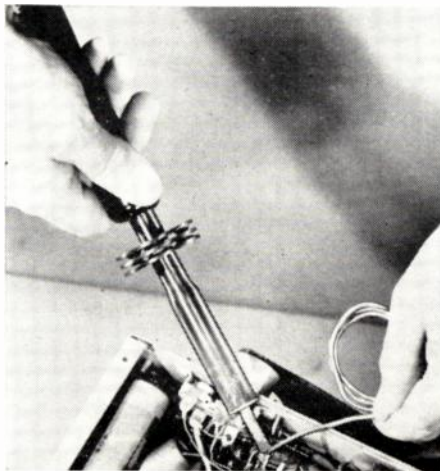
Industrial trucks equipped with a new type clamping device specifically engineered for palletless handling of wooden cases and similar loads has been announced by The Elwell-Parker Electric Company, 4205 St. Clair Ave., Cleveland 3, Ohio.

Complete information available from manufacturers.

## NEW SOLDERING IRON CAN BE CARRIED WHILE HOT

A new soldering iron that heats in 60 seconds, and is designed to be carried in a tool kit, while hot, has been announced by Drake Electric Works, Inc., Chicago.

Known as the Drake 403 Soldering Iron, this iron comes complete with an



asbestos and metal-lined container, and can be carried in a tool kit while hot. The fast-heating feature is meant to be of value to radio and TV servicemen, and to service mechanics in other fields where soldering may be required.

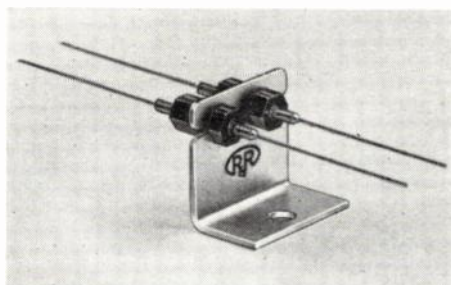
Rated at 80 watts, with a  $\frac{7}{32}$ -inch tip, the Drake 403 weighs only 8 ounces. It includes many desired features, such as radiating fins that keep the handle cool at all times.

For further information, contact Drake Electric Works, Inc., Dept. SMN, 3656 Lincoln Avenue, Chicago 13, Illinois.

## SIMPLIFIED MOUNTING BRACKET FOR MATCHED PAIR DIODES

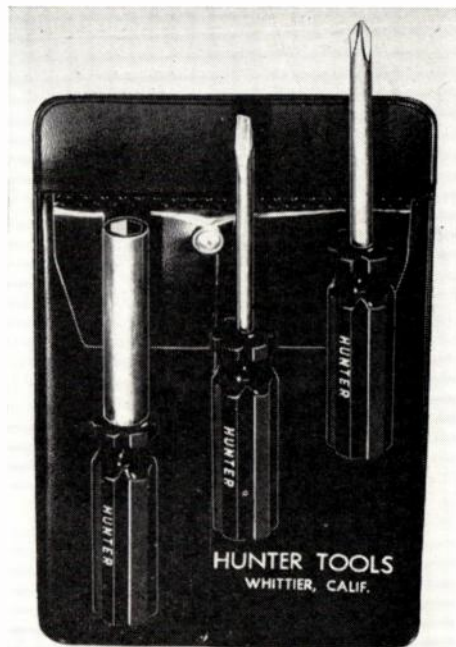
Seletron and Germanium Division, Radio Receptor Co., Inc., 251 West 19th Street, New York 11, is now supplying Type IN35, a matched pair of diodes, mounted in a single bracket. This improvement supersedes the common type of double bracket mount which is more difficult and costly to handle, and at the same time apt to cause undue strain on the diodes.

The new single bracket mount takes advantage of Radio Receptor Co.'s hexagonal tapered case construction, which readily permits the diode to be mounted securely in the one bracket.



## TIME-SAVING POCKET KIT

Now the service man can carry three of his most useful tools right in his shirt pocket. Hunter Tools, Whittier, California, recently announced the development of the TV Executive Kit—which consists of a  $\frac{1}{4}$ " Nut Driver, a Small Regular Screwdriver, and a No. 1 Recess Driver. The tools come in an attractive plastic kit which fits snugly into the serviceman's shirt pocket. The tools are easily accessible and always handy, yet completely out of the way when not in use.





don't be vague...

insist  
on  
SPRAGUE

**ATOMS<sup>®</sup>**



**SPRAGUE**

NORTH ADAMS, MASS.

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insist on  
SPRAGUE

**Twist-Lok<sup>\*</sup>**  
'lytics



\*Trademark

**SPRAGUE**

NORTH ADAMS, MASS.



#### CONCEALED UHF CONVERTER

P. R. Mallory & Co., Inc., 3029 E. Washington St., Indianapolis, Ind., introduced a new concealed UHF converter. The new Mallory "188" is the first all-channel converter designed to fit completely inside a TV set. Installation requires no chassis or cabinet alterations. All that can be seen of the finished installation is the clear plastic selector dial and switch.

The entire job of installation can be done in a few minutes time, right in the TV set owner's home. No special tools are required and the cabinet is not marred or damaged in any way.

The Mallory concealed converter also offers a choice of mounting positions—at the left, right or top of the cabinet.



#### INTERMIXED INTERCOM

Mark Simpson Mfg. Co., Inc., 32-28 Forty-Ninth St., Long Island City 3, N. Y., announced a new Masco intermixed intercom system, "Multifone," which answers the need for versatility, low cost and economical installation.

The units, which are capable of 2½ watts of audio power, are designed for every type of intercom system including master-to-master, master-to-remote, and master-to-master-to-remote intermixed systems. The new cabinets are attractively styled and are made of unbreakable cast aluminum.

(Continued on page 28)

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SPRAGUE

**TEL-OHMIKE<sup>®</sup>**

CAPACITOR-  
RESISTOR  
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# ASSOCIATION NEWS

BY PENNY MARTIN

Philadelphia, the city of Brotherly Love, played host to 81 delegates from participating local organizations that gathered to form the EASTERN TELEVISION SERVICE CONFERENCE, INC., in April.



Harold B. Rhodes of Paterson, N. J., was elected chairman to head the Conference which will include organizations along the Eastern Seaboard from Maine to Florida. To date, 37 television service associations have joined the Conference.

This regional organization, in which all local, state and national groups retain their autonomy, was formed to "provide a closer liaison between segments of the television service industry in the eastern part of the United States, and with national service groups, so that we may eventually obtain a semblance of national unity for the television service industry."

The certificate of incorporation sets forth the purposes of the organization as to foster, develop and maintain high ethical and technical standards throughout the service and sales branches of the radio, television and electronic industries; to promote confidence by the general public in radio, television, and electronic industries; to sponsor and establish adequate and proper mechanical and electronics education for all persons, firms, and corporations engaged in the servicing, maintenance, and repair of radio, television, electronic and related devices, and in the management of such firms and corporations; and to educate the public in the proper use and care of such equipment.

Bert Bregenzer, Pittsburgh, Pa., was elected vice-chairman of the EASTERN TELEVISION SERVICE CONFERENCE; John Rader, Reading, Pa., treasurer, and Ferdinand J. Lynn, Buffalo, N. Y., secretary.

Trustees of the corporation will be Roger K. Haines, Haddonfield, N. J.; Albert M. Haas, Philadelphia, and Max Leibowitz of New York. Haines, Haas,

Leibowitz, Rhodes and Charles Pierce of Miami, Florida, are the incorporators of the group.

J. Palmer Murphy is serving as Executive Director of the Conference, with offices at 211 Market Street, Paterson 1, N. J.

## RESOLUTIONS OF THE EASTERN CONFERENCE

An organization with this wide scope would be useless to the serviceman unless it worked toward solving problems that are both local and regional. To find out just what the members wanted to accomplish through the Eastern Conference, committees met to discuss each phase of operation and came back to the general conference with some interesting resolutions.

The Public Relations committee urged a letter be written all Broadcasting Companies asking for a color test pattern to be telecast that won't interfere with black and white pictures.

2. Set up regional and national advertising programs.

3. Appoint a grievance committee to act as liaison officer with Better Business Bureaus and Chambers of Commerce.

4. Establish a central office for the correlation and dispersing of publicity to newspapers and trade publications; and to print a monthly mailing piece covering Conference members' news.

Sam Brenner (P.R.S.M.A. of Philadelphia), chairman of the Manufacturers' Relations Committee, asked for: 1. Standardization of picture tubes. 2. Standard 90-day parts warranty. 3. Fair trading of parts and accessories. 4. Manufacturers make available information on color TV. 5. Discontinue advertising of fantastic manufacturing claims that make the serviceman's job impossible to fulfill.

Vadya Stein of Paterson, N. J., gave the Minority Report asking the Conference to oppose the program of the manufacturers on service warranty on color TV. Also to ask the manufacturers to eliminate the price of service in advertising of television sets.

Charles D. Pierce (Radio and TV Guild of Florida, Inc.), as chairman of the Committee on Jobbers and Distributors, made a resolution that the Eastern Conference criticize trade pub-

lications, that are bought at newsstands, that carry advertising listing discount prices on parts.

Bert Bregenzer (Radio & TV Servicemen's Association of Pittsburgh), was chairman of the Committee on Service Problems. This committee proposed: 1. A National Maintenance Month be established no later than May 30th of each year, and that the Conference seek the cooperation of Manufacturers and Distributors in publicizing the month. 2. Establish an acceptable Code of Ethics for servicemen. 3. Members should keep in line with fair and reasonable pricing. 4. Establish a good color training program. 5. Practice the Golden Rule. Criticism of a competent serviceman becomes a two-headed snake . . . one that strikes the accuser as well as the accused.

\* \* \*

One of the gems from the Conference was a sign over a distributor's door: "We have no quarrel with our competitor's prices . . . he knows the value of his product."

## THE STAR OF WICHITA

Everyone likes to "shoot for the stars" . . . but the Wichita Appliance Dealers' Association, under the capable direction of its president, Emerson Dole, and its executive secretary, C. D. "Jack" Hughes, have made a "star to shoot at."

Recently they held their second annual education clinic at the Broadview Hotel, Wichita, Kansas. Mort Farr, Chairman of the Board of Directors of NARDA, stated from the platform that this was the largest meeting of appliance dealers held in the United States, outside of the National Convention in Chicago.

Ten topics of keenest interest to appliance-television retailers were selected as subjects for discussion by the industry leaders who made up the program.

"Appliance Credit & Financing," by Walter Y. Rahn, Commercial Credit Co.; "Business Controls," by Wallace Johnston (NARDA Past President); "Advertising—National & Local," by K. G. Gillespie, Jenkins Music Co., Kansas City, Mo.; "Selling Techniques," by Carroll Willis, Siebert & Willis, Inc.,

(Continued on page 24)



# ENOUGH VALUE FOR YOU TO KEEP PERMANENTLY!



Yes, sir, readers of Service Management are finding that every issue of Service Management contains information valuable enough to keep permanently.

Present and future issues will be a TREASURE of business management operation — with specific details as to forms, systems, methods, suggestions regarding customer relations — selection of equipment — financing — accounting — staff-training — taxes — credit — maintenance. One good idea put to use, can mean hundreds of dollars to you.

## Here's Why

Service Management is edited by men WHO KNOW THE PROBLEMS OF TV SERVICE BUSINESSMEN. They anticipate future difficulties and developments, and bring to you in simple condensed, easy to read format, the most modern innovations for successful TV Service Operations.

## And, if You're Overworked and Have Very Little Time to Read . . .

Service Management boils down TV Service problems to the essentials. With Service Management, you'll have the information you need for profitable management and technical developments.



## For Example . . .

Color Television, Home Air Conditioner Installation & Service, Major Appliance Servicing . . . these are new opportunities for Electronic Service businesses. Service Management will keep you informed about how to get your share of this business profitably.

## HERE'S MORE HELP!

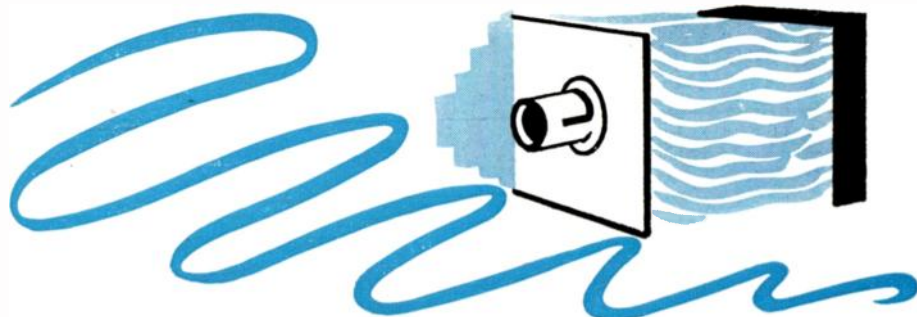
A pair of the popular Radio-Phono and TV Service Standard Labor Charges Wall Charts will be sent to you

# FREE!

AS A BONUS WITH YOUR SUBSCRIPTION  
TO SERVICE MANAGEMENT MAGAZINE

FILL IN THIS COUPON AND  
MAIL YOUR SUBSCRIPTION NOW

LECTURE BUREAU PUBLISHING CO. 161 Luckie Street, N. W. Atlanta, Georgia		TVL-2 RPS-1	F R E E
GENTLEMEN: PLEASE ENTER MY ORDER FOR A SUBSCRIPTION TO "SERVICE MANAGEMENT" AT \$3.00 A YEAR. (TWO YEARS, \$5.00)			
<input type="checkbox"/> CHECK <input type="checkbox"/> MONEY ORDER <input type="checkbox"/> CASH			
NAME _____		152	
(Please Print)			
ADDRESS _____			
CITY _____		STATE _____	
SIGNED BY _____		POSITION _____	
Type of Business: (Check Which)			
<input type="checkbox"/> Exclusively Service <input type="checkbox"/> Basically Service but Sell Sets <input type="checkbox"/> TV Dealer with General Service Department <input type="checkbox"/> Receiver Sales & Customer Service Only <input type="checkbox"/> Other			



C. CHANDLER COLE of Ward Prod.

**ROBERT C. SPRAGUE**, Chairman of the Radio-Electronics Television Manufacturers Association's Board of Directors, will be awarded the "Medal of Honor" for his outstanding contributions to the radio-electronics and television industry during the RETMA annual convention in Chicago, Ill., June 15-17. Mr. Sprague, long active in industry and Association activities, was chosen unanimously as recipient of the award by the RETMA Board of Directors . . . **GRAMER TRANSFORMER CORP.**, Chicago, will mark its entry into the distributor field with the introduction of a line of Gramer Tiny-formers, Charles A. Hanse, distributor manager, recently announced. . . . **C. CHANDLER COLE** was recently appointed general manager of the Ward Products Div. of Gabriel Co., Cleveland, Ohio. . . . **RALPH H. G. MATHEWS**, veteran radio and electronics engineer and sales engineering consultant, has joined Magnavox Co. as general sales counsel for the high fidelity division. . . . A recent issue of Coronet Magazine featured **PETER L. JENSEN**, President of Jensen Industries, Inc., as the "Forgotten Man of

Sound." The author said, "(Jensen's) inventions . . . have touched practically every human life, and granted them an abundant wealth of entertainment and knowledge, plus the safety of contact with the rest of the world whether at sea, in the clouds or on a mountain-top." . . .

The **RADIO-ELECTRONICS-TELEVISION MANUFACTURERS' ASSOCIATION** celebrated its 30th birthday at the Association's annual convention



JENSEN . . . "forgotten man of sound"

June 15-17 in Chicago. The trade association for the radio-TV and electronics industry, whose growth parallels that of the industry as it has expanded from radio to television to electronics, was founded in April, 1924, in Chicago, by a small group of what amounted to component manufacturers who foresaw some of the potentialities of the new industry and the need for cooperative action to guide it. . . . **ROBERT L. KLABIN** has been named Vice-Pres. and General Mgr. of the newly-created Elizabeth Div. of General Instrument Corp., major producer of television, radio and electronics compon-



NYLEN & TRIPLETT with God of Good Fortune.

ents. . . . The **1954 HIGH FIDELITY SHOW** is "over the top," both in number of participating companies and in rooms under contract at the Palmer House for the Show to be held Sept. 30-Oct. 1 and 2, the International Sight and Sound Exposition, Inc., sponsors of the event recently announced. . . . **RAY L. TRIPLETT**, president of the Triplett Electrical Instrument Co. of Bluffton, Ohio, while in Hawaii recently on a business trip, was presented with the Oriental "God of Good Fortune" in honor of the 50th anniversary of his company by W. L. Nylen, Sr., of Nylen Bros. & Co., Honolulu's oldest electronics jobber. . . . **FRANK MOCH**, Pres. of NATESA, says that a substantial number of space reservations have been received at the association's annual convention slated to take place in Chicago Sept. 24, 25 and 26. . . .



ROBERT L. KLABIN—fills new position.



## OPEN SESAME!

Dealers in electrical equipment, including radio, TV, and electronics, can now attract new customers by a product once considered a high cost luxury item, but which now can be bought at "home appliance" prices—the automatic garage-door opener.

Because of Roy Walburg, originator of the Lectro Door Company, 3709 W. Jefferson in Los Angeles, California, prices in the previously expensive field of automatic garage doors have been cut so low—plus being FHA approved—as to be within the financial reach of everyone.

Ranged from \$64.50 to \$115.50 (the cost to dealers), Walburg's electric door mechanism is easily installed and can be operated by one of three methods. Most appealing of these—from the angle of low cost as well as convenience—is the pneumatic tube device which stretches across the driveway and responds to the pressure of car wheels. Compared to the rubber tube "bell ringers" in filling stations, its difference lies in its requirement of 500 pounds pressure before setting off the mechanism within the garage that gives you that electric magic of "Open Sesame!"

With the price of this tube device less than \$70 to the dealer, contractors and builders have endorsed its use in community developments within the Los Angeles and Long Beach areas.

Walburg's cheapest but most decora-



Lectro Door—gateway to new service profits.

tive device is his electric key method, operating from a residence lamp post along the driveway. For persons with homes already built without that lamp post, however, the cost of the post would be an extra.

For persons of the Buck Rogers "let's-press-a-magic-button" type of mind, Walburg's most expensive garage door is operated by a separate unit within the automobile, thus giving the driver the satisfaction of influencing an exterior object by means of radio control. This method once costing several hundred dollars in the pioneer field, is now reduced through Walburg's simplification of mechanism to slightly more than \$100 to dealers or new-home developers.

Among the luxury details included in all types, approved by Underwriters Laboratory, is a safety light that automatically turns on as the garage door opens.

### Association News

(Continued from page 22)

Wichita; "Our Manufacturers," by Vergal Bourland, Fort Worth, Texas (NARDA President); "Our Customers," by Al Robertson, Oklahoma City, Okla. (NARDA Director); "Television & the Appliance Business," Mort Farr, Upper Darby, Pa.; "When We Work Together," A. W. Bernsohn (NARDA Managing Director); "Our Collective Thinking," Emerson Dole, president of WADA, and banquet speaker, Harry B. Price, Jr., Norfolk, Va. (NARDA Vice-President), "You . . . Mr. Appliance Dealer."

Recently in one of my articles I quoted Jack Hughes as saying if you want large attendance at your meetings, you have to have a "bubble dancer." The above is proof of the pudding. But in response to my article I received a number of letters from organizations saying they obtained "bubble dancers" and still didn't get out the expected crowd. In answer to that, Mr. Hughes added, "... and you've got to let the public know it!"

In addition to sending out the usual fly sheets and bulletins that are standard procedure, Mr. Hughes obtained unusual support of local newspapers and broadcasting stations. The day of the meeting, the WICHITA BEACON, a 36-page newspaper, contained the following amounts of space devoted to the meeting:

1. About one 1-column picture, three 3-column pictures and one 4-column picture.
2. Eight separate news stories covering different phases of the meeting and an editorial by Vergal Bourland.
3. An approximate total of 4 full pages of advertising related to the distributor's convention.

Some of these articles, while not dealing directly with the Clinic, were lifted from speeches made by guests at previous WADA meetings. All totaled, they made the public as well as the appliance dealers conscious of the excellent program being offered by the Clinic. Needless to say, WADA signed up 25 new members during the Clinic. A job well done!

## INFORMATION on how to build this closed-circuit TELEVISION CAMERA

Cost of Parts

\$150

\$200



Technical Information You Have Missed in Current Issues of Noll's **ELECTRONIC STUDY GUIDE:**

### CONSTRUCTION DETAILS FOR

1. Closed-Circuit Television Camera
2. Transistor Probe
3. One Megacycle and One-Half Megacycle Marker Generators for IF and VHF Ranges

Sequential Studies of transistors, color television, antennas, and circuit mathematics

Write for literature or send one dollar for sample lesson (includes marker generator construction detail) of study guide. No obligation.

Edward M. Noll  
TTLB Educational Section  
Box 94, Hatboro, Pa.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

# OUACHITA SERVICE PHILOSOPHER



*Talks About Black,  
White and Gray*

By JACK DARR

Well, sir, I'm jist recently in receipt of a dang nice letter, from a Mr. Jack Watt, of Onontagon, Michigan, by way of the editor of this here periodical. Ye Ed sent it on to me, as Mr. Watt made a few comments on some things I said a few weeks back. Let me begin by sayin' that I agree with Mr. Watt 100%, in what he objected to, in my ramblin's of that date, in his interpretation of it, that is. He says, I say, "If the customer is unreasonable, tell him you've gotta get a part, or something, and set it aside for another day." That is a bare-faced lie, accordin' to him, and one of the things which is the main faults with radio-TV servicemen.

Well, as I said, I agree with him wholeheartedly on the idea of lyin' to your customers. You can't stay in business very long if you do. He says he's been in business twenty years, in a small town, where they ketch you quicker than they do in a city. Sec your twenty and raise you ten! I been in it dang nigh thirty, and in a smaller town!

This whole thing arises from the place where a lot of trouble starts; misinterpretation. I have never said that I recommended prevaricatin' to your customers, as a full-time practice, nor did I advocate any form of dishonesty. The kind of "lie" I meant was the "white-lie" variety: the kind you tell your wife when you don't want her to find out where you hid her anniversary present. (If you remembered to git one, that is!) More of a stall than an outright lie, if you get what I mean. Never said that I recommended this as a habit: even this was meant to be used only in cases of extreme emergency, like a spare fuse.

Got to readin', a while back, a very technical and abstruse discussion about the various kinds of logic. Ther's the Aristotelian logic, which is strictly two-valued: a thing either is, or it isn't. Then, there's the Non-Aristotelian log-

ic, which admits of the possibility of many different answers to the same problem; a multi-valued logic, with many shades of opinion, as it were.

By the Non-Aristotelian logic, any proposition can have any given number of solutions, depending upon circumstances: by strict Aristotelian logic, no proposition can have more than two answers: black or white. No gray at all. Point I was tryin' to bring out is that this question of "lying" to customers is not Aristotelian in nature, black or white, but distinctly multi-valued; there are many shades of gray in it. Accordin' to old Aristotle, every time you missed your estimate on a job, you'd be lyin' to the customer: you didn't tell them the exact truth; Every time you promised to pick up a set and have it back by noon, and then got tied up on something and didn't make it, you've told a whopper!

## "MISS MANAGEMENT"



*"But that's the way I file all my letters."*

I agree with you, Mr. Watt, all the way on the question of honesty in your work, and in all your relations with your customers. Honesty, to me, is doing your absolute level dangedest to see that each and every customer gets a full and honest dollar's worth of the best work you can do, for his dollar. If you tell him a mild fib, so that, in the end, you can get enough time to work on his set until you're satisfied with its performance, without him, or her, hecklin' you every minute, and then charge him for about one-fifth of the actual time used, like I do, and you do, and everybody else does, why you ain't hurtin' either him, nor your changes of goin' to Heaven, so far as I can see. It all depends on how you mean that 'lie, down deep inside of you. When you skimp on your work; when you do a sloppy job, or deliberately install a cheap, off-brand part, knowing full well it won't stand up, why then you're lying to him, and may the good Lord forgive you, 'cause I sure won't.

Jack Watt makes another fine point in his epistle that I'd like to holler Amen to, too. He mentions the "indiscriminate wholesaling of practically every well-known line of parts and equipment, TV and radio sets, etc., to just anybody and everybody." "Anybody who can write his name," says he, "can get on a mailing list of all these so-called wholesalers. They can get 'big-name' advertising, decals advertising 'Expert Radio-TV Service,' and apparently backed up by these same big-name companies." Well, sir, there he has just said a whole, big juicy mouthful. That, to me, is one of the major evils of the electronics business today, and one that should be eradicated, if it is within our power to do so.

It'd be plum impossible to ever git rid of it completely, human nature bein' what it is, but we can all do something about it, if we follow a suggestion that Jack (Watt, that is) makes a little later on. "If all the legitimate servicemen would buy only parts, tubes, etc., from companies that sell only to legitimate wholesalers who in turn deal only with legitimate retailers, we would go a long way toward raising our standards in the public eye." Bravo, Mr. Watt! That's a practice that the Ol' Philosopher has followed for lo, these many years and I only wish we could git a lot more fellers to follow suit. I've never bought a dime's worth from these gyp outfits that send "wholesale" catalogues to every Tom, Dick and Harry that can, as you said "write their name." I give every bit of my business to one legitimate wholesaler, near-

(Continued on page 29)





RECTIFIER DIVISION ...



...

SELENIUM *Centre-Kooled* RECTIFIER

PATENTS NO. 2618692 & 2620384

PHONES 2-1435-6-7 • 415 NORTH COLLEGE AVENUE • BLOOMINGTON, INDIANA

Precious Selenium

Dear Mr. Serviceman:

The President of the United States has recently stated that scarce materials vitally needed in time of emergency must be stockpiled.

Your cooperation is urgently needed in returning defective selenium rectifiers to your distributors so that selenium may be recovered and result in bringing you new rectifiers. Sarkes Tarzian, Inc. has authorized your distributor to pay you a fair scrap value price for your trouble. Thus you will profit by helping prevent a shortage of precious selenium.

Thank you again,

SARKES TARZIAN, INC.  
Rectifier Division

G. Eannarino  
Director

## 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.....

## Product Previews

(Continued from page 20)

### NEW CAPACITOR RESISTOR BRIDGE

Cornell-Dubilier Electric Corp., South Plainfield, N. J., recently introduced their new capacitor-Resistor Bridge BF-60 which quickly measures the important characteristics of substantially all types of Capacitors and Resistors and determines their quality.

It detects opens, shorts and intermit-tents; the capacity between wires and shieldings, transformer windings, wires in cables, etc.; makes it possible to measure the insulation resistance of Paper, Mica and Ceramic dielectric capacitors. A high sensitivity amplified bridge circuit permits accurate and definite readings. Capacity, power-factor leakage and insulation resistance measurements can be made rapidly. Adjustable d-c power supply and "eye" null indicator.



### TRANSISTOR TRANSFORMER

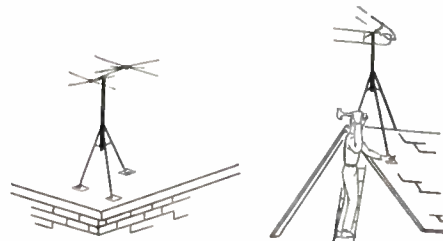
Design and production of a transistor transformer with a wide variety of industrial applications has been announced by Telex, Inc., of St. Paul, Minnesota.

Designed by Telex engineers for use with their transistor hearing aid and other audio devices, the tiny unit has



been made available for commercial transistorized circuitry use in audio amplifiers, hearing aids and control circuits. Only 1/2"x7/16"x3/8" in size, the transformer comes in input, inter-stage and output models — No. 8641 Transistor Input, No. 8642 Transistor Inter-Stage and No. 8643 Transistor Output.

For additional information and prices, write Dept. KP, Telex, Inc., Electro-Acoustic Division, Telex Park, St. Paul 1, Minnesota. Mention this publication.



### EZ TV ANTENNA MOUNT

Fretz, Gross Co., 22nd Street & Sedgely Ave., Philadelphia 32, Pa., recently introduced the EZ TV antenna mount. A self-supporting and pre-assembled roof mount, designed to save the installation time and improve the quality of installation.

It comes complete with all necessary parts, including mast, drive screws and a standoff. The unit is entirely self-supporting, no guy wires being required.



### WALDOM ELECTRONIC DUO-TENNA

Waldom Electronics, Inc., Chicago, recently announced its entry into the television major accessory field with the introduction of an electronic distribution amplifier which permits the use of two television sets from a single antenna and acts as a booster to improve the picture reception on both sets.

The new Waldom Electronic Duo-tenna eliminates the need for a separate antenna for the second TV set and boosts signal strength on both. It also minimizes noise and "snow" due to weak signals, according to Jay J. Greengard, executive vice president of Waldom.



### REAR-SEAT AUTO SPEAKER KIT

Quam-Nichols Company, Chicago, today introduced the Quam AS-3 Rear-Seat Auto Speaker Kit. A new 5x7-inch model with a 1.47 oz. Alnico V magnet, the AS-3 has a  $\frac{3}{4}$ -inch voice coil and will handle the complete undivided output of any conventional auto set.

Ford, Chrysler, Studebaker, Hudson and other models have baffle openings for the AS-3 size unit.

The AS-3 Rear-Seat Auto Speaker, a popular-priced unit, is ready for immediate delivery, according to Matt Little, president of Quam-Nichols.



### R.C.P. "DO-ALL" MODEL 657

An exciting, new model 657 electronic "Do-All" has been introduced by Radio City Products Co., Inc., Easton, Pa. This versatile measuring unit covers 62 individual electronic range measurements and combines a capacity meter; a high-range ohmmeter; as well as conventional and low ranges; a VT voltmeter; a peak to peak VT voltmeter; and is also an inductance meter with inductance measurements given by chart reference.



### CONDENSER MICROPHONE

Frank L. Capps & Co., Inc., 20 Addison Place, Valley Stream, N. Y., pioneers in audio reproduction, announces full scale production of the Capps condenser microphone, Model CM 2001. This microphone, a combination of the finest electronic, mechanical and acoustic engineering is designed specifically for high fidelity enthusiasts and professionals. It is basically the same as the Capps studio microphone which has been custom built for recording studios for several years.



### Quachita

(Continued from page 26)

by, who has never indulged in any of these practices. If everyone of us would do the same, it would cut down on the number of these fly-by-nights!

Speakin' of this, I know of one well-known brand of TV, of which there are seven sets in this town, all of which was bought wholesale! One of 'em was sold by the distributor's salesman, himself! You can imagine what I told this character when he come around wantin' me to handle 'em! Although this is a nationally-advertised brand, a good set, and a good seller, I told him "NO!" in a loud clear voice! Wouldn't have anything to do with any outfit that condoned such practices. This set, incidentally, now does not *have* a dealer here!

So, thanks very much, Mr. Watt, for the fine letter, and thanks for the ideals you so ably expressed in it. I like to believe that you and your kind are typical of the great body of American electronic servicemen, who will go to any lengths, even financial loss, to give their customers an honest hundred cent's worth of work for a dollar.

I'd like to close this here effusion with one more sentence from your letter, if you don't mind: "Too many people think that passing a law requiring licensing is all we need to make upstanding citizens out of crooks!" No comment on that; there ain't none necessary! You said it all, man. (Only wish I'd thought of it first!) Thanks again, Jack, and y'all come see us sometime.

## 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 operates.

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.

1. Will reduce the number of telephone operators required to service a given number of accounts.
2. Will give service technicians a complete case history on each receiver being repaired.
3. 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.
5. 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.
9. 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.

## hot wire salesman

A unique and forceful way to sell the public on adequate wiring is demonstrated above by H. C. Moses, Jr., division manager of The Thomas & Betts Co. on a recent women's TV program in Chicago. He shows its master of ceremonies, left,—and the listening audience—how an obsolete circuit can be overloaded with appliances commonly used in the average home. One after the other Moses plugs in the light bulb, toaster, mixer and iron; the last appliance blows the fuse which he points out on the panel. He then explains why the only answer to the problem is adequate wiring to supply enough current for all the modern appliances folks need in their homes.

Moses, who is chairman of the Chi-

cago Electric Association's adequate wiring committee, has appeared on numerous television and radio programs to tell this story. Since it is in the public interest, he feels that appropriate TV and radio shows throughout the country would be happy to give



time to local electrical groups for this purpose. The demonstration panel is inexpensive, portable and easily put together, he says.

### Our Opinion

(Continued from page 6)

into a stable, reliable business activity, to get actively interested in Associations on local, State and National levels. Service as a business will really start going places when Associations truly representative of all types of service businesses in all States, say to Industry generally through their national officers—"This is our program. It is good for us, it is good for you, it is good for the set-owning public. We want **your** support in putting it across."

PHW

### Hits and Mrs.

(Continued from page 17)

on tops of sets and on the floor before any tools or parts are laid out in the homes.

As a "TV widow" I have a lost social life, but keeping open-house for the customers (now mostly friends) who drop in at all hours of the day or night, more than makes up for it. We keep our schedule flexible and the coffee pot handy and it certainly has paid off. The milk man, the bread man, the mail man and the Fuller brush man all bring their sets to us.

Because of this friendly cup of coffee plus the best service we could offer, here is some tangible proof of the goodwill it has invoked . . .

A carpenter customer helped us with our shop roof—didn't want to charge us.

A block layer and his family laid the blocks for the shop walls for less than usual cost.

A cement man poured our floor—at low cost.

Relatives in the asphalt tile business gave us tag ends of tile and helped us lay it at a reduced rate; and we in turn fixed their TV set.

Our accountant left several radio sets with us for repairs while he audited the books.

And the lists of such nice people grows daily . . .

Surprisingly, our best source for incoming calls has been the passing word from friend to friend about jobs done satisfactorily. We did mail about 500 postal cards announcing the opening of our business and since then have advertised in the back pages of the phone book. We found it a big help to run my husband's picture beside this ad as many former customers remembered his face rather than his name; they looked him up when they learned he had left the large downtown company for a private practice.

#### Contract Labor

We aren't the executive type, and we've found that in a little business built upon one man's knowledge and skill, which can't be transferred, we couldn't both teach and make money on another's work at the same time. Nor could we talk personal customers (the basis of our business) into having work done by anyone else but Ted himself.

The slower, steadier pace of do-it-yourself method actually has been best in the long-run for us. It saves on workman's compensation costs, too.

TV aerial work or any other help we need we take care of on a contract labor basis. However, we don't regret try-

ing a larger business with three full-time employees . . . it was a good experience.

As a rule we do not sell sets; most of our contacts are made over the phone so it does not pay to stock sets. In the case of a customer pre-sold on a certain set he wants us to get for him, we will buy it through our supply houses with the understanding that he will not change his mind nor back out of the deal. When called upon to endorse a set, we first find out the customer's own choice then encourage him in it if we feel it is a good brand.

#### Customer Relationship

And here are some tips from Ted's viewpoint:

When called into the home, he first lets the customer have his say, then goes to work on the set. Further remarks can often be discouraged if they aren't answered readily while the diagnosing is being done.

The remedy for mothers lax in letting children crowd the serviceman and handle his tools is for Ted to say in a voice loud-enough-to-be-heard-in-the-next-room, "You'd better get back away from the set, children. If this picture tube should explode it might put your eyes out." Mothers usually snatch the young ones out fast.

After the set is repaired, the customer is told that the set is now in working order with as moderate amount of work done on it as possible. Then Ted prepares the set owner for future trouble by pointing out what tubes or parts seem weak and might be the next to go. As a result recalls will say "My set has gone out again. Must be that weak tube Mr. Suman told me about" instead of "Mr. Suman doesn't know what he is doing or my set would have played longer than this."

Invoices are itemized and all parts identified and listed. Old parts are returned in a paper bag so that they can be checked against the new parts listed. Customers seem appreciative of this and remark about our honest dealings.

On the *extra nice* side of servicing, Ted carries a kit of various colors of scratch remover polish to shine up the cabinet after accidental scratches and he even cleans the glass, too.

#### It Goes Like This

At least 85% of our business is from the service calls where sets are fixed in the home. When further research is needed we bring the sets into our shop for more tests. The other 15% of our business comes from the work done on sets brought to us by the people themselves.

Together we can say we are proud of our profession and our trade, and of being in it *together*.

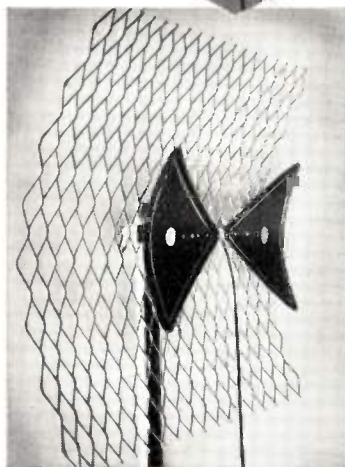
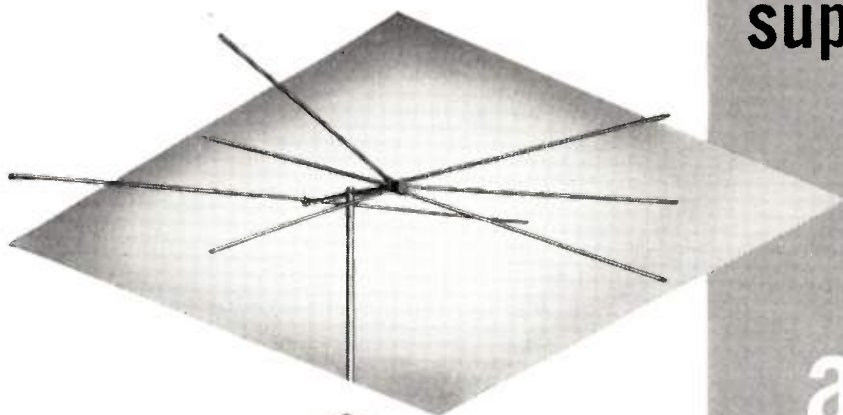


# PHILCO

announces  
**3 new**  
super-performance

# TV

# antennas



The finest TV antennas in their class... designed by the world famous Philco Laboratories after thorough research into receiver requirements in all types of locations... designed to give complete customer satisfaction... to meet competition on any level!

#### PHILCO SUPER CONICAL UHF-VHF ALL-CHANNEL ANTENNA

Full 45" dowelled aluminum antenna elements and full 53" dowelled aluminum reflector assure strong signal pickup on VHF channels 2 through 13... top quality performance on UHF channels 14 to 83.

Single or stacked array Super Conicals produce new balanced performance... super picture quality plus high gain. All-aluminum construction in the Super Conical... it's easy to erect. Part No. 45-3096.

#### PHILCO SUPER YAGI VHF ANTENNAS

Quick-rig model with ten elements gives top fringe-performance on VHF channels 2 through 13. Excellent front to back ratio (6 to 1). This Super Yagi eliminates ghosts in strong signal areas... selects signals

from adjacent weak area channels or co-channel stations. 10 db to 12 db gain depending on channel. Strong, all-aluminum: Part No. 45-3112. (Single channel 2 thru 13 and broadband 2 thru 6; 7 thru 13; 4, 5, 6).

#### PHILCO PARAFLECTOR ALL-CHANNEL UHF ANTENNA

Light weight pre-assembled all-channel UHF antenna. Outstanding performance in far-fringe areas. High gain... 8 to 10 db. Exceeds gain of corner reflector of like dimensions. Impedance matched to 300

ohm line. Completely assembled, all-aluminum construction... can be mounted on existing masts for immediate use... all-channel paraflector weighs only 1½ lbs: Part No. 45-3071.

See them today at your Philco Distributor



## PHILCO CORPORATION

### ACCESSORY DIVISION

"A" and Allegheny Ave., Philadelphia 34, Pa.

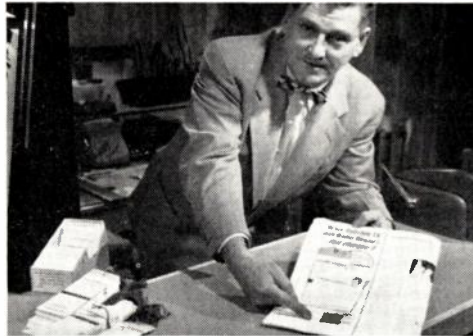
Order All Parts By Brand Name



**WILLIAM SCHOOLEY, owner**  
SCHOOLEY TELEVISION SALES & SERVICE  
3019 W. 111th Street  
Chicago, Illinois

# "Here's proof the CQS Plan can really help your business"

"SEE HOW IT WORKS FOR ME..."



"CBS-Hytron is running advertisements like these in LIFE. Maybe you've seen them and noticed they really do a selling job for us service-dealers. Well, I'm one service-dealer who is cashing in on a plan that's tailor-made for me."



"So, I'm using the CQS Tags on *every* job. Many of my customers now ask for them. They like the Tag's lay-it-on-the-line certification. Since December, I've ordered three lots of Tags... 500, 1000 and 2000."



"I like my customers to know I'm the dependable CQS service-dealer they read about in the big magazines like LIFE and the POST. So I make sure they do... by using the CQS Clocks, Signs, Decals, etc., available to *any* service-dealer."



"Take my word for it. Here's a plan that's so simple... so sound that *any* service-dealer is missing a real bet, if he doesn't tie in... and cash in. The boost that CQS has given my business proves it."



"Look at the 'sell' of these new CQS Streamers! Get aboard this CQS plan. It can do just as fine a job for you as it is doing for me. Take a tip. Find out today the facts about CQS. *Prove* to yourself that CQS can build up *your* business, too."

**GET YOUR *Certified* QUALITY SERVICE TAGS...**imprinted with *your* name and address. Use them on every job. Get your big, new CQS CBS-Star Kit. It contains:

- A.** Six smashing, colorful CBS-Star streamers. Each features a different CBS-TV star: Benny... Burns and Allen... Gleason... Godfrey... Murrow... and Marie Wilson. Each streamer is a different size and shape. Each one sells the Star Performance of your Certified Quality Service.
- B.** New colorful inside/outside CQS decal.
- C.** Business Builders Catalog showing the many hard-hitting sales aids available to you.

**CBS-STAR KIT IS FREE** with your order for CQS Tags... Kit alone, 25¢.

**Ask your distributor salesman for special offer. Or use coupon:**



Manufacturers of  
Receiving Tubes Since 1921

**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  
(quantity)  
@ \$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  
(please print name and address)

Name.....  
Street.....  
City..... State.....  
Signed.....