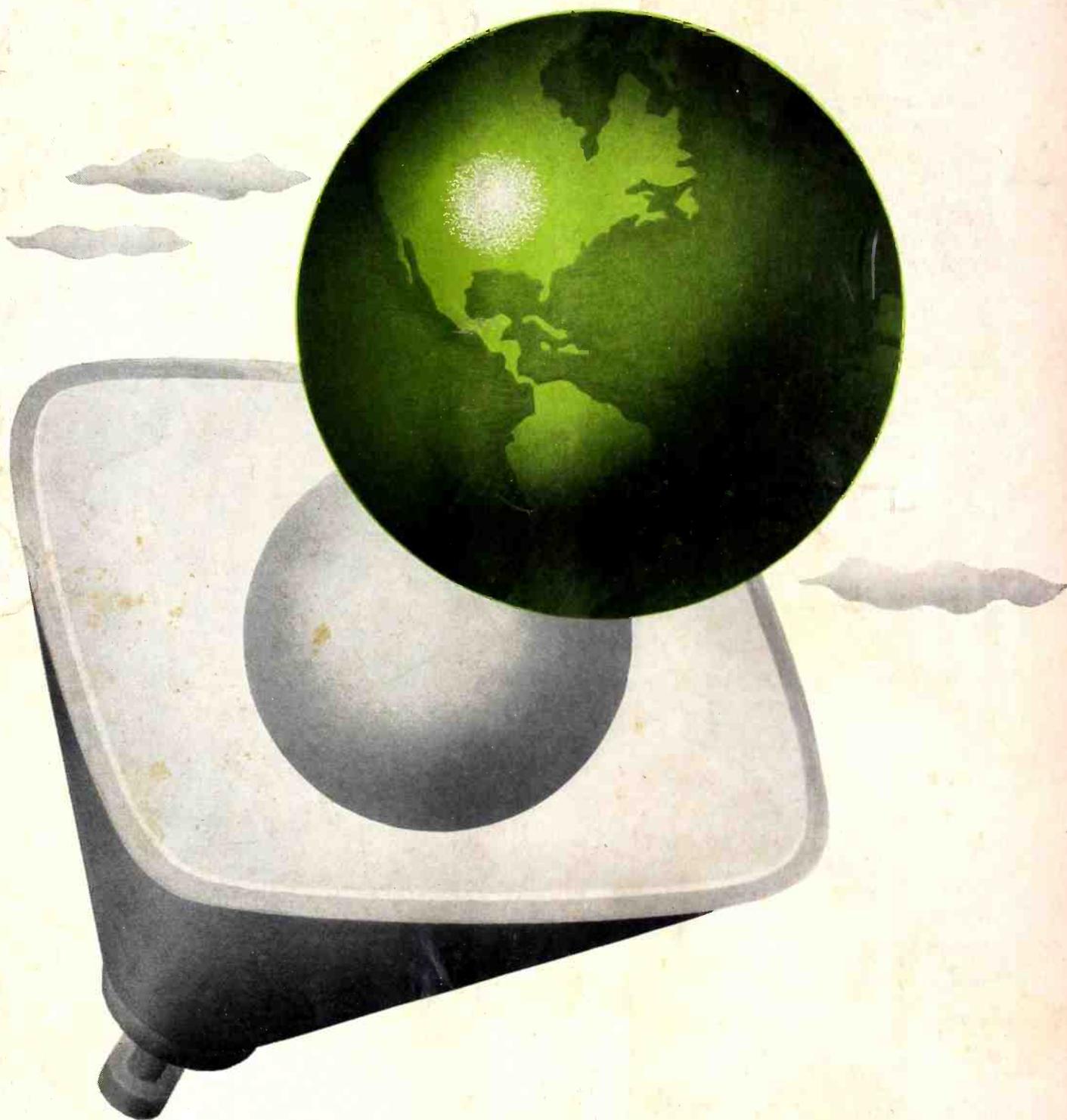


# RTJ

*Radio & Television JOURNAL*



**JANUARY 1952**

*the world's mirror*

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Division of Radio Corporation of America



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BOTH ADVANCEMENTS YOURS —  
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UNHAMPERED AND FORWARD  
THINKING ENGINEERING.

## PICTURE TUBES



The magazine dedicated  
to the business of television,  
radio, sound, servicing, phonographs  
and records

**RTJ** *Radio & Television JOURNAL*



Union-Frank

the world's mirror

JANUARY 1952

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Vol. 69

No. 1

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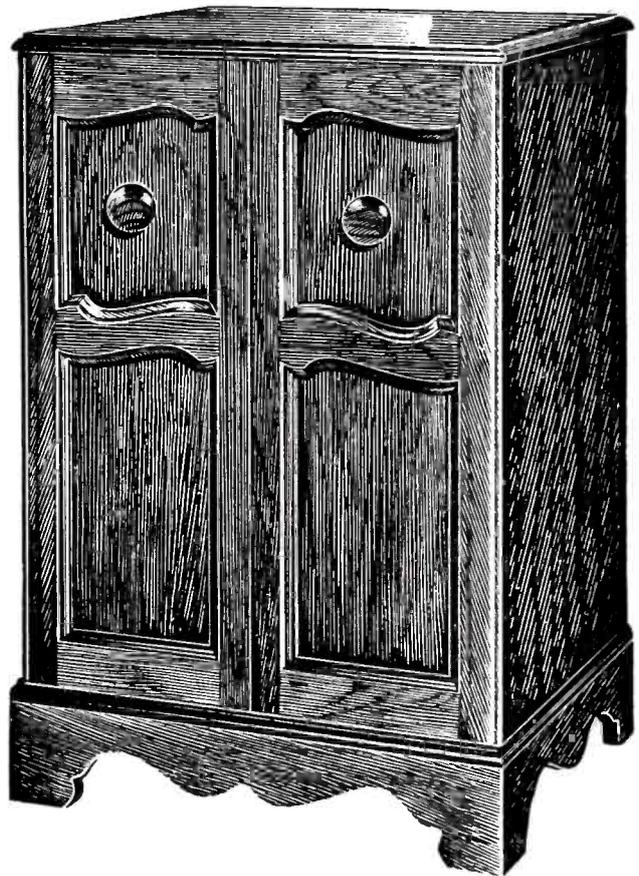


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'52 marks the 25th anniversary of the first Farnsworth inventions that made today's television possible. The mind that created them has improved, refined, brought them to perfection in only one instrument—the incomparable Capehart.



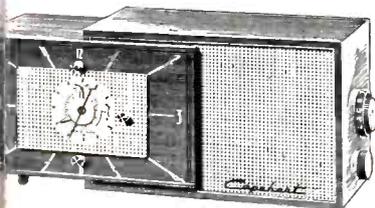
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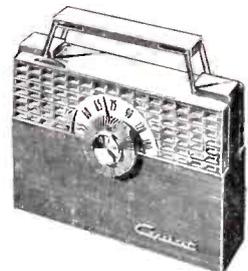


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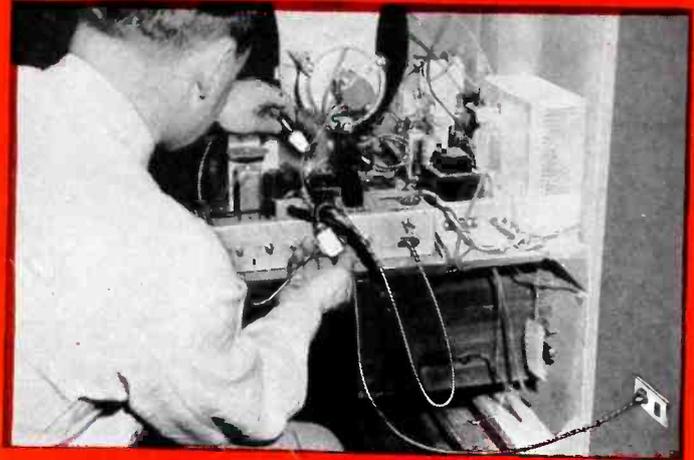
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Replaces those bulky and seldom-at-hand charts and booklets formerly necessary to find correct replacements. Merely dial the type to be replaced—presto! there's the correct Teletron replacement. Also electrical and mechanical characteristics for those profitable conversion jobs!



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Colorful decal easily transferred to store window, doors, inside displays, or on your truck or car. Immediately marks you as a quality-wise service organization. Ties right in with Du Mont fame!



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# DUMONT



CATHODE-RAY TUBE DIVISION ALLEN B. DU MONT LABORATORIES, INC., CLIFTON, N.J.

\*Trade-mark

JANUARY . . . . . 1952

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*Special*  
**RTJ**  
*Section*  
**ON**  
**PICTURE**  
**TUBES**



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**T**HROUGHOUT the year 1951, although the television industry itself suffered some rather serious setbacks, from a commercial standpoint, it can be said that the year just past continued to witness bigger and better picture tubes at lower costs. In characteristic American fashion, the TV picture tube, which only a short while ago had been a bottleneck because there were not enough of them to go around, became available in profusion so that tube producers were vying with each other for business.

When this situation happened, the tube manufacturers, again in characteristic American style, began to pour a great deal of money into research, constantly improving the tube and making a bigger, more efficient picture available to the customer at a lower cost.

In the year ahead, the size and quality of the picture will remain as one of the basic influences affecting the set buyer. With the magnetic selffocus tube which has a cylindrical face, with 17 and 20-inch tubes now standard throughout the trade, with 24, 27 and 30-inch picture tubes coming into increasing use, it is certain that television picture research will continue to make the TV tube the true mirror of the world in 1952 and the years ahead.

The TV  
picture tube  
. . . . the heart  
of the  
television set  
continues  
to get bigger  
and better all  
the time!

# How the Newest Industry... Television One of the Oldest Arts... Metal Spinning

**T**HE television industry is largely responsible for reviving metal spinning, and the development of combined spinning and drawing methods to obtain a maximum strength from a minimum of material. In its effort to reduce the cost of television receivers and bring the public a larger, clearer picture, the engineers developed the cathode-ray tube having a stainless steel shell or body.

This metal shell made it possible to produce a stronger picture tube of larger size, less weight and less danger of implosions during manufacturing or installation. At the same time, it brought about great savings in shipping and storage, and made it possible to evacuate a tube in about one third the time required for an all-glass tube.

## *Process Expansion*

Development of versatile automatic spinning equipment at the Chicago plant of the United Specialties Company has greatly expanded this new process. The tooling engineers, who keep about 140 blanking and drawing presses humming, are now devoting a great deal of time to the new art of combining spinning and drawing. They are credited with having developed the

***The demand for bigger and bigger TV pictures compelled engineers to develop a picture tube with a stainless steel shell as a solution to breakage, economy and endurance***



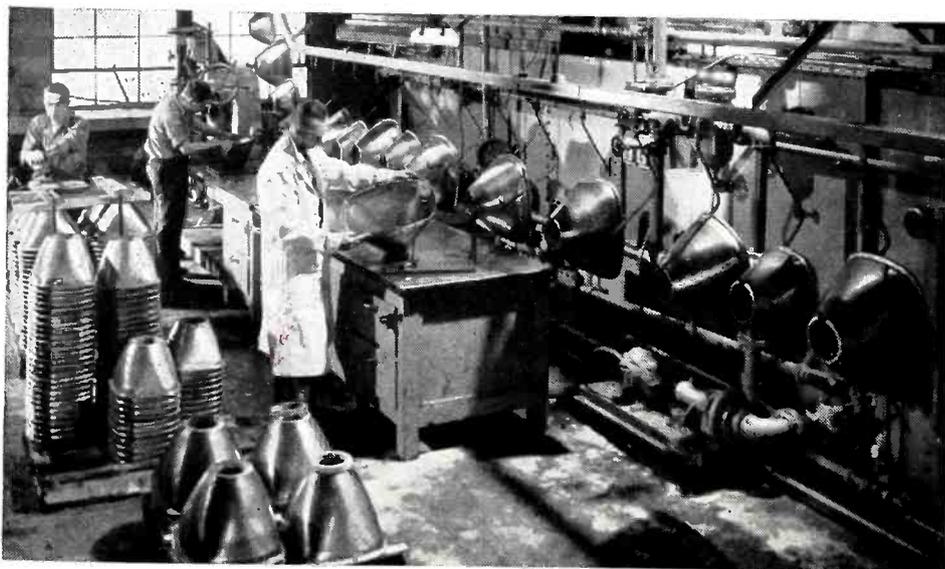
spinning techniques to the point where a minimum degree of work hardening takes place. This eliminates the costly annealing operations normally required

in the production of these metal shells or other items fabricated from stainless steels or materials which work harden readily.

Metal spinning, as done by the hand method, has become an almost lost art. Now it is generally used only for making samples or small quantity runs. Hand spinning, one of the oldest metal forming techniques, was rapidly replaced by draw presses in order to meet mass production standards of the automotive and appliance industries.

## *Advantages*

In the past year more and more management men and design engineers became conscious of the saving to be realized through this modern, economical production method. The pictures show how the new large 27 inch shells, used in TV picture tubes, are manufactured at the Chicago Plant of



• *Automatic spinning equipment used by United Specialties has stepped up production of metal shells for TV picture tubes.*

# vived inning



the United Specialties Company. Apart from high productivity, a major advantage of the process lies in the ability to produce selective changes in wall thickness automatically. Thus, it is possible to produce work with reduced section along the elements of the cone and yet have the nose and flange come out with the original blank thickness.

By this thinning process, greater savings are realized in material over any other method known. The shell affords much greater strength to be built into the picture tube and yet the weight of the finished tube is only approximately half as much as an all-glass tube. It appears metal shells will be the solution to many of the problems connected with producing the larger color tubes of the future.

### *Refined Operations*

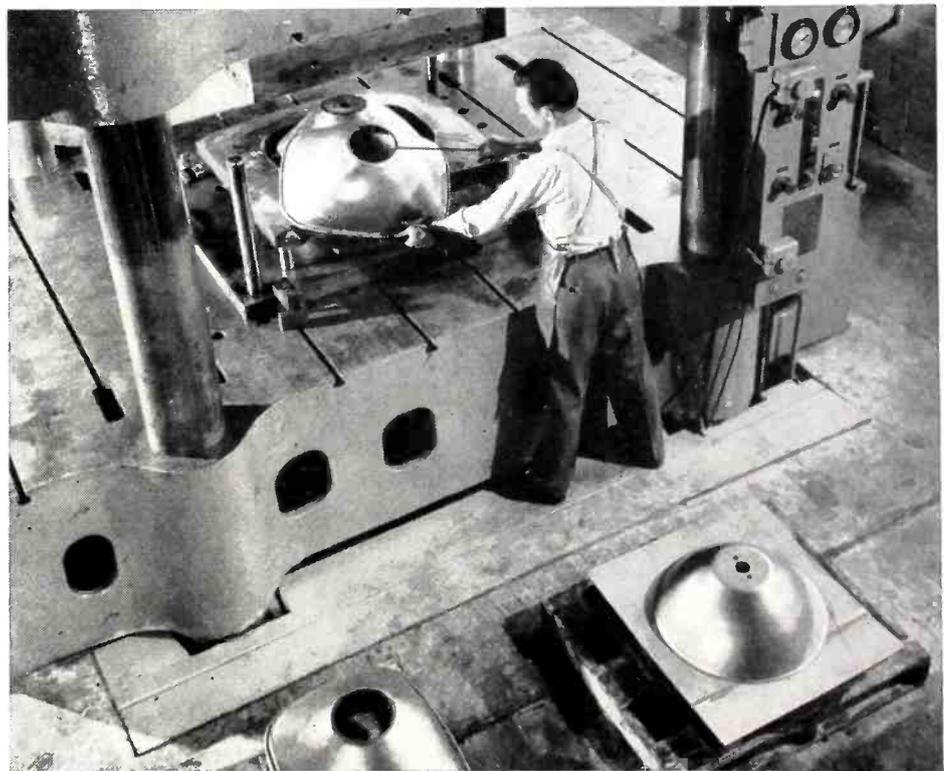
The design of the spinning machine makes possible the development of any kind of configuration of the work, simply by providing suitable dies and movement of the work ram. Although the process was initiated to meet the

needs of the television industry, other items which are now being fabricated by more costly methods will soon be in

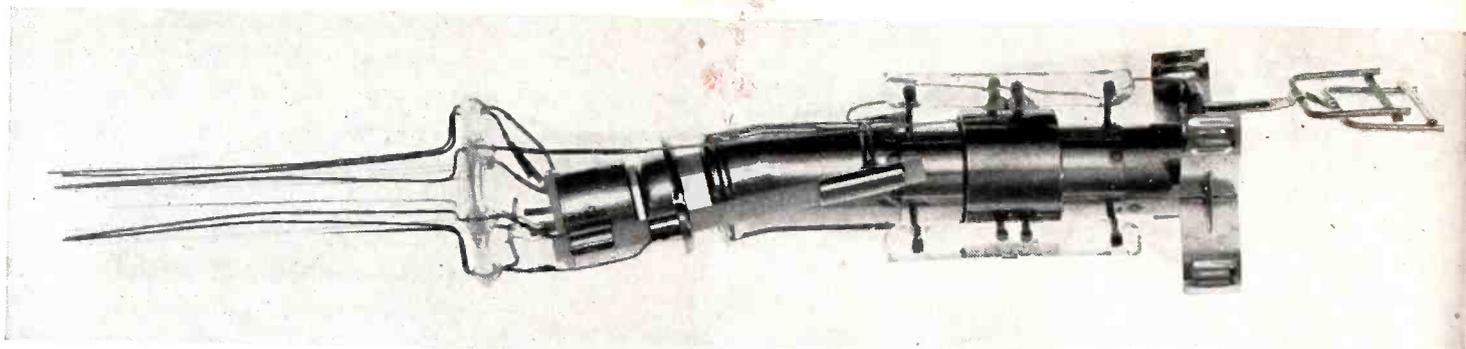
production. In each case, considerable saving in material and labor will be realized.

By spinning the metal back into a conical shape in one pass of the tool, the metal thins down and spreads out over the larger area of the spinning block or mandrel. The metal, at both ends, however, is maintained at original thickness. Any flanging done on round shells is done automatically as a part of the spinning cycle, without depending on the skill of the operator. Each unit is an exact duplicate of the others and very close tolerances are maintained.

In the case of rectangular or odd shaped shells, the flange is later formed in a draw die operation. To produce a metal cone of similar strength properties by the use of draw dies alone would be much more costly from the standpoint of material, dies and equipment required. Although the cost of spinning tools and equipment is only a small fraction of that required to produce similar shells by other methods, the most important saving is in material. Due to the thinning action, which takes place in spinning, the material savings in a 27 inch stainless rectangular cathode ray shell amounts to several dollars per unit.



• Above, a workman operating the 1000-ton hydraulic press which forms a 27-inch rectangular spun blank.



• The electron gun reduced focus circuitry cost to a minimum, improved set performance.

## Development of Selfocus Tube Spearheaded TV Picture Advance in 1951

**Electrostatic focusing, cylindrical face plate glass, and continued research on a tri-color tube all marked steady progress of picture tube industry**

**I**N spite of a comparatively slow year in TV set manufacturing, 1951 has seen a number of developments in the television picture tube field. Probably the most important of these was the development of electrostatic focus rectangular glass picture tubes.

With the funneling of more and more material into defense work, it

became necessary for set manufacturers to find substitutes or methods of eliminating the need for these materials entirely. In line with this, picture tube manufacturers began a development program with an eye to elimination of focus coils and PM focusing units on TV sets. The first step in this development was the advent of the high

voltage electrostatic focus picture tube, which required approximately 22 per cent of the anode voltage on the focus electrode. This eliminated the need for the focus coil but required additional components to produce this focus voltage so that the total cost to receiver manufacturers remained approximately the same.

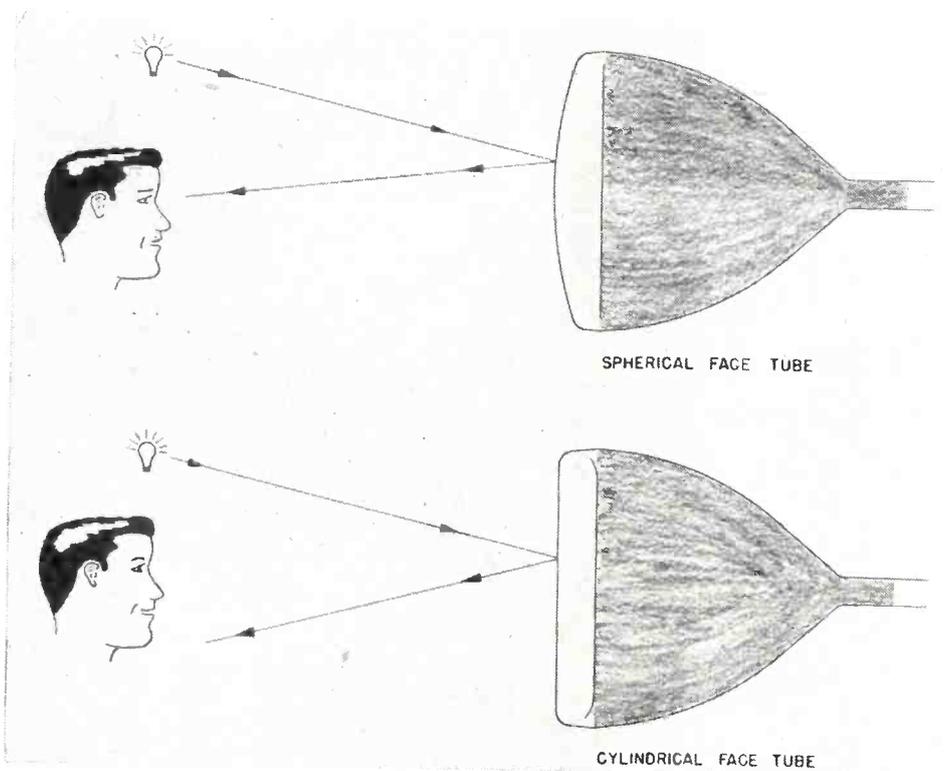
### Forward Step

The next step forward in this program was the low voltage electrostatic tube which saved the manufacturer a considerable amount of money, as well as eliminating critical materials.

The logical climax of this electrostatic focus program was the Selfocus tube. Figure I is a photograph of the electron gun used in Selfocus picture tubes. This eliminated all focus circuits and controls from the television chassis, thus reducing focus circuitry cost to an absolute minimum. At the same time the performance of a set was improved since focus does not vary with line voltage or during set warm-up. The viewer is assured of optimum focus at all times.

The next most significant advance in picture tubes during 1951 was the development of the cylindrical face plate by the glass companies. This unique construction enables set manufacturers to present their customers with a picture free from reflection and yet maintaining as high a degree of definition and contrast as was possible on the non-frosted spherical face plate tubes. The drawings in Figure II illustrate the operation of this feature. The drawing marked "A" shows how reflections of lights from a conventional spherical face tube shine in the eyes of viewers thus detracting from the picture. Drawing "B" shows how

(Continued on Page 16)



Illustrations Courtesy Allen B. DuMont Labs., Inc.

• Top, light reflections from a conventional spherical face tube shine in the eyes of the viewer, while, below, light from the cylindrical face tube is reflected below eye level.



*How come you  
sell so many  
picture  
tubes,  
Sam?*



"I'm using the CBS-Hytron Easy Budget Plan, Joe. My CBS-Hytron distributor gave it to me."



"Tell me more."

"Well, CBS-Hytron's Plan helps me sell TV picture tubes and service to many a customer who just doesn't have \$50 cash. My customer now pays for the job painlessly a few dollars a month. Yet I get my cash right away."

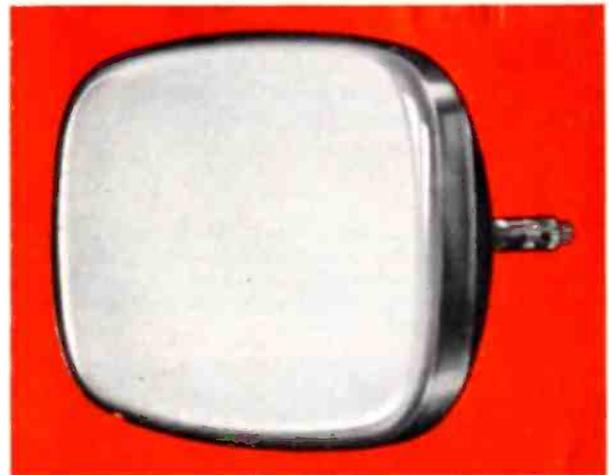


"Fine! How does it work, Sam?"

"Simple. I introduce my customer to the finance company authorized by CBS-Hytron. The finance company does the rest . . . acts as my credit department . . . arranges all details. My customer gets his tube and I get my cash — at once."



"That's swell, Sam! I've sure been losing sales I shouldn't. I need that CBS-Hytron Easy Budget Plan. CBS-Hytron tubes are tops, too. Thanks for the tip. I'll see my CBS-Hytron distributor today."



**SAVE THE SALE** No need for you to miss a single profitable picture-tube sale . . . just because your customer does not have the cash. Get the details on this original CBS-Hytron service for you. See *your* CBS-Hytron jobber . . . or mail this coupon . . . today!



MAIN OFFICE: SALEM, MASSACHUSETTS

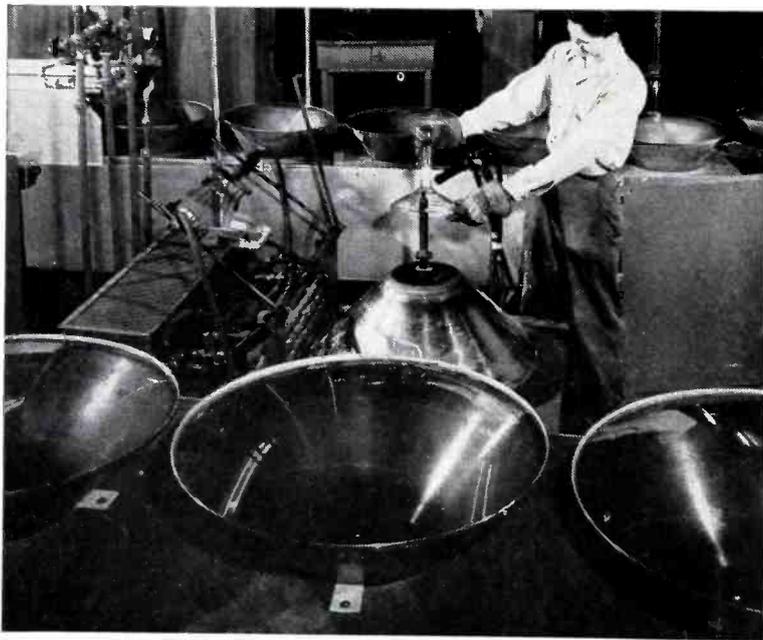
HYTRON RADIO & ELECTRONICS CO.  
SALEM, MASSACHUSETTS

Please rush me details on the CBS-Hytron Easy Budget Plan.

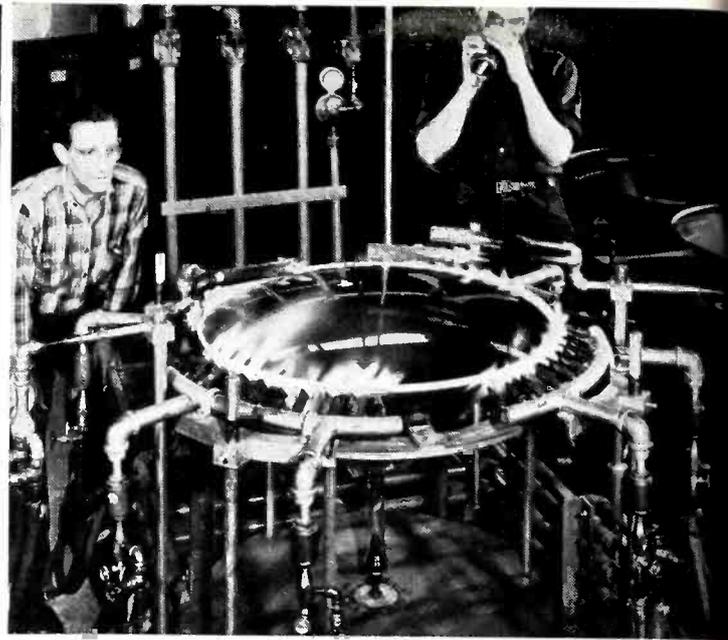
NAME .....  
(Please print)

STREET .....

CITY ..... STATE .....



**1.** A vital step in the production of the 30-inch tube is the sealing of the glass funnel to the metal cone. The funnel is placed on the metal cone and both units rotated while gas jets (left) swing into position and play against the units at the joining point of the glass and metal.



**2.** A careful check of the face plate sealing operation by which the glass tube face is "welded" onto the metal cone of the giant 30-inch tube. Because the glass becomes soft under intense heat, it is held in position by air pressure being applied through the jet inserted in the neck of the tube.

TELEVISION picture tubes have been getting larger all the time because the public demands a screen which gives them a real picture rather than an enlarged postage stamp. Pictured on these pages are various steps in the manufacture of the 30-inch tube, the world's largest, at the Allen B. DuMont cathode ray tube plant in Clifton, N. J.

During 1952, the most popular tube sizes will be the 21-inch and 17-inch cylindrical-faced rectangular sizes. There will be considerable production of 24-

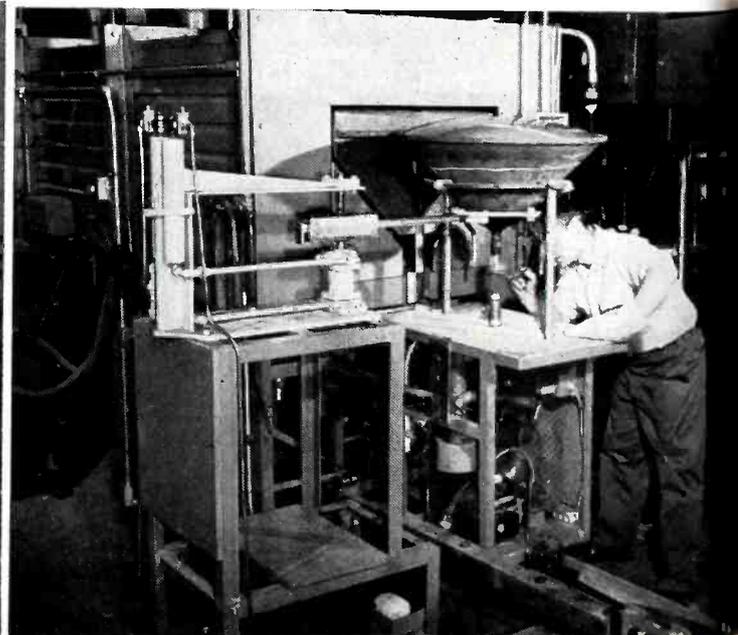
## Big Replacement Market On Big Tubes

inch and 30-inch tubes, and it is known that several tube manufacturers plan to introduce a 27-inch rectangular

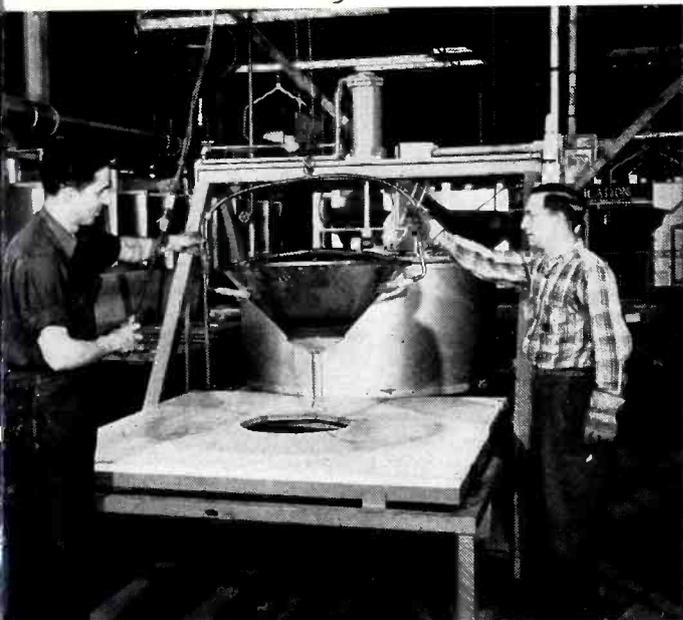
tube with a metal cone before mid-year.

Unquestionably, the perfection of

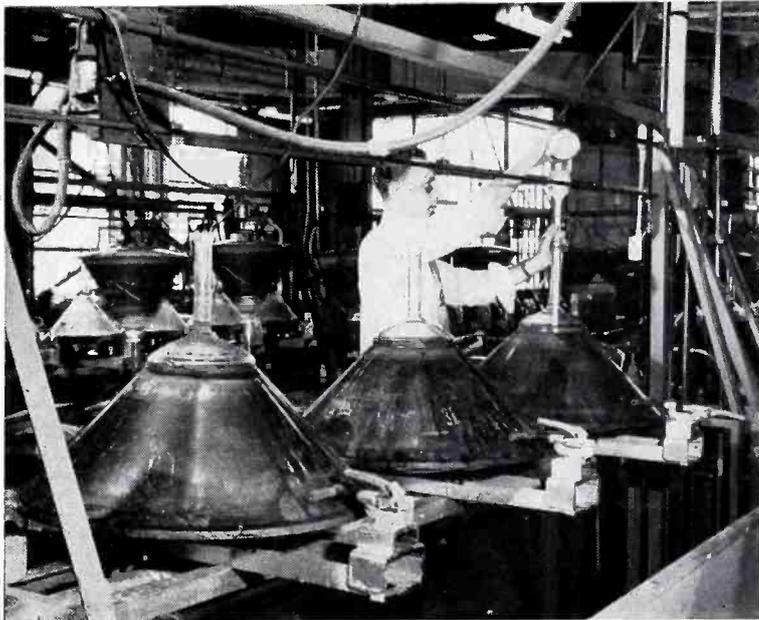
**5.** After the glass tube neck has been "welded" to the metal cone, the bent gun mount, which shoots electrons against the screen where they are converted into the form of television pictures, is sealed to the glass neck.



**6.** When the bent gun mount has been sealed into the glass neck of the TV tube, the tube is passed through an oven (left) on a "train" where air is pumped out to create a high vacuum. This vacuum permits the passage of electrons from the gun to the screen.



**3.** When the tube has had the glass face sealed in place, it is placed by this "lift" onto the holed platform shown here. The platform is then slid under the cylindrical oven (background) to anneal and temper the tube.



**4.** In coating the tube, a mixture of fluorescent chemicals in water is applied to the inner side of the glass face plate. The chemicals settle in an even coat on the face plate and the remaining solution is gradually drained off by tilting.

**The much talked-about replacement market for picture tubes will really come into its own in 1952. Is your service department geared to profit from this lucrative business?**

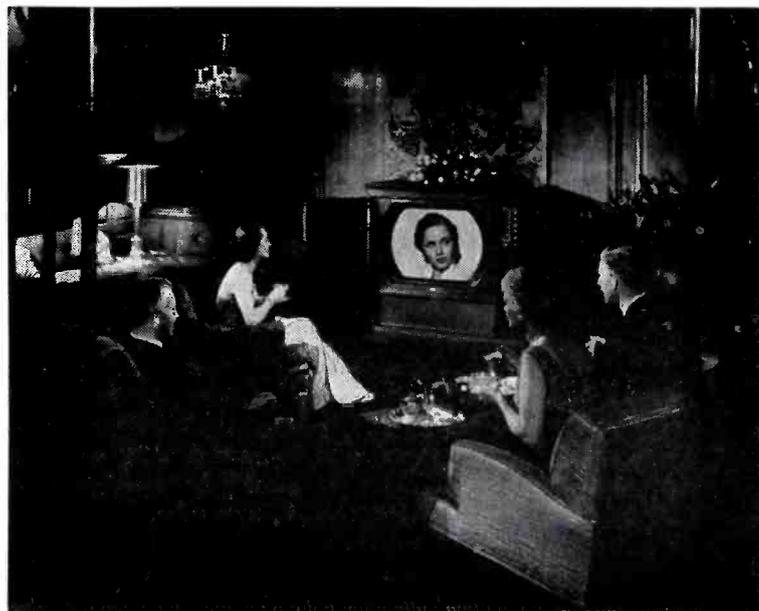
the selfocus tube was the outstanding picture tube development of 1951. Through the development of an elec-

trostatic lens system, engineers attained a degree of focus almost entirely independent of reasonable variations in the

**7.** When the 30-inch tube has completed the various stages of its manufacture, it is given a series of electrical tests to make sure it gives a proper picture. "Justifying" characteristics must fall within rigid tolerance set by the Cathode-Ray Tube Division.



**8.** The end result of all the complicated planning and production: the televiewer is able to enjoy a BIG picture in his own home with all the thrill of a movie screen. Quite a cry from the tiny 7-inch and 10-inch screen which were the industry standard only a few years ago.



The ROYAL SOVEREIGN by Du Mon

## New National Video Tube Conserves Copper



Asher J. Cole, left, president, National Video Corp., beams his approval of his firm's new tube, which is designed to save four and one-half thousand tons of copper a year. Holding the tube are co-inventors Edgar W. Morse and C. V. Fogelberg, center and right. The new tube permits focusing without the use of a focus coil.

### Cleaning of Picture Tube May Eliminate Many Troubles Which Look Serious

During the past year, a field problem has developed as a result of using certain low-grade rubber anode caps on picture tubes. Under the relatively high electrostatic stress present at the anode button, these caps gradually become conductive, due to a chemical decomposition of the rubber. This leads to a reduction in the leakage path across the insulated area of the glass around the anode button and often results in corona or arcing problems. Ordinary wiping or cleaning of the glass under the rubber cap does not remove the surface contamination that results from the breaking down of the rubber. This has led service men to believe that the picture tube itself was defective and they have consequently replaced the tube, only to find that in a few weeks the new tube was in exactly the same condition.

The suggested cure for this

situation is to remove the rubber cap and replace it with a new one of plastic or synthetic rubber, not containing lamp black (carbon) as a vulcanizing agent. If such a cap is not available, the complete elimination of the cap will in no way harm the set or the picture tube. Some manufacturers are already leaving the cap off on new production since it is no longer required by Underwriters Laboratories.

The cleaning of the picture tube can be accomplished quite easily if ordinary water and a scouring compound are used with a little bit of "elbow grease." The area around the anode button should be so cleaned and then thoroughly dried and polished with a clean, dry cloth so that no residue remains.

If the above instructions are carried out, no further trouble will be experienced with the picture tube.

## Tube Progress in 1951

(Continued from Page 12)

the light is reflected below the eye level of the viewer giving him an undisturbed view of the screen.

It should be pointed out that the 21-inch all glass rectangular tube with such a face plate also results in an increase in picture area of approximately 15 square inches over the metal glass tube of the same numerical size. The picture on a cylindrical face tube does have some pin cushioning but this can be eliminated through the use of simple pin cushion correction magnets located properly on the funnel.

### Larger Tube Trend

As was anticipated, the trend toward larger and larger picture tubes continued through the past year. The year started off with a 17-inch and 19-inch type in greatest demand, but as months went by, the 20-inch became the leader. Toward the end of the year, the 21-inch tubes, as well as the 24- and 30-inch round tubes started moving to the fore. It is obvious that the public will buy sets with the largest tube possible at a reasonable price.

Direct view sets completely monopolized the home receiver market although projection sets are finding increasing popularity in theaters.

Continued progress was made in dot-phosphor tubes for use in compatible systems of color television. The freeze order on commercial color television has not affected these development programs although a scarcity of engineers has slowed them somewhat.

### Constant Work

The announcement of a line phosphor color tube by E. O. Lawrence aroused the public for a short time. It is obvious, however, that considerable work is yet to be done before this tube reaches the degree of perfection necessary for commercial acceptance.

Next year, we will probably see the 21-inch tube becoming the most popular among set manufacturers for console sets although the 17-inch tube may hang on quite sometime in table models. Considerable work is being done by tube manufacturers on large metal glass rectangular types with the 27-inch due to arrive sometime during the first half of the next year. This tube, like the 30-inch round, will feature a 90° deflection angle so that its over-all length will be under 24 inches. Glass companies are believed to be working on an all glass counterpart to this type, but as yet have delivered no samples to tube manufacturers.

During 1952 the television industry can continue to depend upon picture tube manufacturers for improvements which will result in superior set performance.

# UNITED SPECIALTIES

**latest in  
television  
shells**

**27-INCH  
RECTANGULAR**



Within the past year United Specialties Company has kept its shell designs right in step with the latest in picture tube requirements. Early in 1950 United produced deep-drawn, 16-inch round shells in quantity. This was followed by shallow 16-inch round shells and 17-inch rectangular shells. Now United is producing 21-inch rectangular shells and is ready to produce a newly developed 27-inch shell and answer new demands as developments unfold.

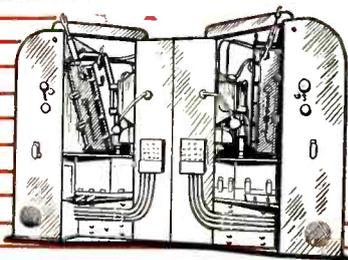
Equipped with the very latest in spinning machines, United's television shells meet the most rigid specifications of the industry.

## **UNITED SPECIALTIES COMPANY**

Chicago 28, Illinois

### **NEW SPINNING MACHINES EXPAND PLANT FACILITIES**

With the installation of the most advanced spinning machines available, United has facilities for manufacturing heavy gauge spun products for defense needs. Utilized for television shell production now, these machines can be allocated for military needs whenever necessary.



# Some Predictions About Cathode-Ray Tubes in 1952

By Charles Penk

**P**REDICTIONS and forecasts of developments in the television picture tube industry for 1952 are basically "crystal gazing." Nevertheless, there is a big portion of "solid stuff"—definite information on which to put one's finger—to arrive at opinions that, more often than not, come to pass.

Reviewing what we said just one year ago, we discovered that many of our predictions are now here. For one thing, we hazarded the opinion that tube sizes would go much larger, and that they might even reach a 48-inch size . . . a prediction made at the time when a 16-inch rectangular was the "newest" size. During the year, we

saw the introduction of the 30-inch round and 27-inch rectangular CR tubes. During the year, 90 per cent of the tubes sold were over 16-inch in size. In our opinion, the majority of tubes to be bought in 1952 will be at least 20-inch or better. Further, it is our opinion that the industry can look forward to even larger tubes than the 30-inch, possibly 48-inch or even beyond.

## Steady Advances

It is likewise our considered opinion here at Sheldon that there will be a major development during '52 in the phosphors used for screen making for the purpose of getting uniform screen quality. We can look forward to further advancements in the techniques of screen settling to the end that cross-burns will be eliminated, particularly at the higher voltages.

We can, furthermore, look to more development work on automatic focus of picture tubes. Actually, development has proceeded to the point where general focusing conditions are better than electro magnetic. And, should the defense program continue in its present or accelerated form, we feel that there will only be low voltage and automatic focus.

The use of the Single Field Magnet became generally accepted in 1951. The use of a slash field gun with a double magnet is now practically obsolete. With this development, ion burns are virtually nil.

## Production Strides

The year has also seen a drastic change in the actual manufacturing processes involved in CR tube making. Production in plants the size of Sheldon have switched to production line exhausting equipment thereby assuring more uniform quality in the finished product. No longer is quality at this stage of manufacture left to the skill of the individual operator.

Seasoning of tubes is now done on an automatic conveyor system, rather than by the less efficient manual method. New testing devices, new techniques and a continuous life testing program not only provide quality control but supply valuable data on what we can expect from any tube when it is installed in a TV set. Even the packaging of picture tubes is on an automatic basis. All of these developments and advancements in tube manufacturing techniques at Sheldon were instituted to secure better quality picture tubes at price levels about one-third less than they were a year ago.

During 1952, we feel that there will be still further advancements in techniques, the ultimate purpose of which will be an even better picture tube than has ever been made previously.

**EUREKA**

**A DELIGHT TO YOUR Sight!**

For television viewing you desire the best possible picture . . . bright—clear—perfect in detail . . . You want Eureka because Eureka picture Tubes are built to the most exacting standards . . . checked and rechecked to give you nothing but the finest!

For immediate delivery the new 21EP4 and 21FP4  
Write or phone for complete information...

**EUREKA TELEVISION and TUBE CORPORATION**  
Manufacturers of Cathode-Ray Tubes and Electronic Products  
60 Fifth Avenue, Hawthorne, New Jersey • Telephone Hawthorne 7-3007

Life-like window displays and counter cards!



Bright exciting streamers!



Personalized postal cards. Giant mailers! Radio announcements and reminder stickers!

# STOP! DON'T PASS THIS PAGE

...until you've read about SYLVANIA'S power-packed Service-Dealer Campaign

Talk about an exciting, sales-building Radio-TV Service Dealer campaign! Mister, this is it! Featuring personal endorsements of some of the most glamorous and newsworthy people in the entire country, this campaign ties you in with big-space ads in *Life*, *The Saturday Evening Post*, *Collier's* and *Better Homes and Gardens*.

Just see what you get: . . . brilliant life-like cut-outs of the celebrated stars . . . counter cards, streamers, appealing mailers . . . also radio spot announcements, and reminder stickers. You pay only two cents per prospect per month for the mailers. The rest is FREE. Don't delay! Call your Sylvania distributor or mail coupon N-O-W!

SEND COUPON NOW FOR DETAILS ON THIS BIG CAMPAIGN



Sylvania Electric Products Inc. Dept. R- 2201 Emporium, Pa.

I'd like full details about Sylvania's big 1952 Campaign for Service Dealers.

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

# SYLVANIA

RADIO TUBES; TELEVISION PICTURE TUBES; ELECTRONIC PRODUCTS; ELECTRONIC TEST EQUIPMENT; FLUORESCENT TUBES, FIXTURES, SIGN TUBING, WIRING DEVICES; LIGHT BULBS; PHOTOLAMPS; TELEVISION SETS

# Troubleshooting th

**Knowing how to properly service the cathode-ray tube can save the dealer and his servicemen a great deal of time and money. This timely article by Marvin Kaplan, chief engineer of Oak Ridge Products, Long Island City, N. Y.,**

A cathode-ray tube may be compared to an ad in a newspaper. It can tell you so much and then again so little and its picture could be very misleading.

In television servicing the guess work and doubt associated with the solution of cathode-ray tube and CRT circuit troubles can be reduced to a minimum by the use of a practical and proven method of testing the CR tubes while operating under the actual voltages used in the TV receiver.

## Gun Testing

To properly test the CRT it must be considered as divided into two parts. One part representing the electron gun with its filament, cathode, control grid and screen grid and, in electrostatic focus tubes, the focus grid. In the other part we have the High Voltage Anode. In order to properly test the various elements in the electron gun a simple procedure is followed.

First, the filament of the tube is checked for continuity in order to determine if the CRT fails to light because of an open filament or because of an abnormal supply voltage. Second, a voltage is measured between the cathode and control grid to determine if there are normal supply voltages to each element. Third, if the voltages are proper then a test is made to measure the conductance between these two elements. To make this test the receiver Control Grid voltage is removed leaving the control grid "floating." If there is no short or leakage present, the amount of cathode emission reaching the control grid can be measured and evaluated as GOOD or BAD. Fourth, in the next test the receiver voltages supplied to the control and screen grids are measured to determine if they are normal before proceeding to test these two elements in the tube. The potential difference between the control grid and screen grid of a normal CRT circuit can be pre-calibrated on a voltmeter.

If there is a normal emission from the cathode reaching and passing through the control grid to the screen grid then the potential measured will determine the actual conductance between the elements. If a short or leakage is present the potential difference will read abnormal on the voltmeter.

The above described tests will have indicated, without guesswork or doubt, the actual conditions existing in the electron gun of the cathode ray tube under test. Any poor emission or conductance, short or leakage will show up as bad on a pre-calibrated voltage

It's a shame ...



Yes, sir, it's a downright shame and pity that every service technician and dealer in the country can't sit in on the rigid, comprehensive tests we conduct on TARZIAN Tubes.

You could see first-hand how the high standards of quality control in TARZIAN production assures customer satisfaction . . . always.

Qualitywise . . . performancewise . . . and pricewise, there is no better tube than the TARZIAN Illuminized Tube with the metalized screen. TARZIAN Tubes are available all sizes—round and rectangular—for original use or replacements. Write for technical information.

**SARKES TARZIAN, Inc., Sales Division, Bloomington, Ind.**

**TARZIAN MADE PRODUCTS**

Tuners      Air Trimmers      Selenium Rectifiers      Cathode-Ray and Receiving Tubes

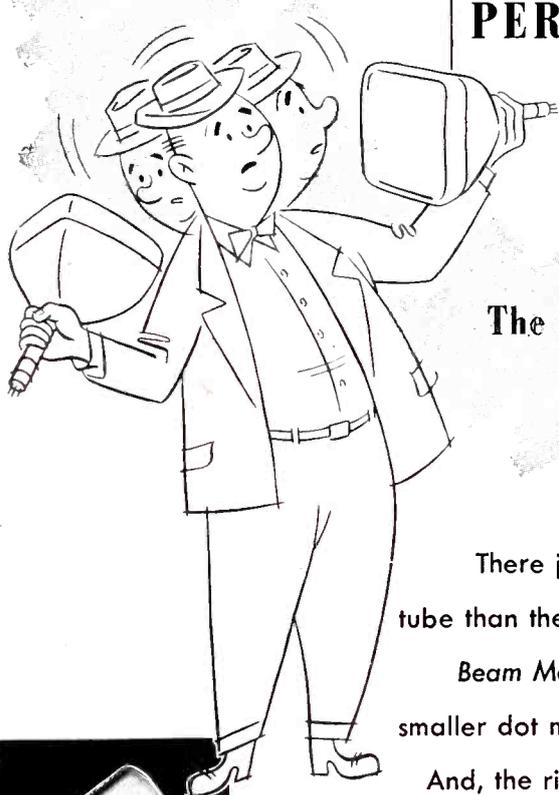
STATIONS WTTT (5000 WATTS) AND WTTV (CHANNEL 10)  
OWNED AND OPERATED BY SARKES TARZIAN IN BLOOMINGTON

# Cathode-Ray Tube

shows how, with the proper checking of the picture tube and its associated circuit voltages, most of the uncertainty of CRT testing can be eliminated, thereby accomplishing a real feat in the TV service part of picture tubes.

By any standard of comparison, whether it be

**PRICE—  
QUALITY—  
PERFORMANCE...**



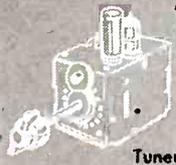
**You can't beat  
The TARZIAN TUBE**

There just isn't any better picture tube than the TARZIAN Tube. "The Fine Beam Means Fine Screen." Yes, the smaller dot makes for a better picture. And, the rigid quality control assures complete customer satisfaction.

Want to know how greater profits await you in the replacement field? Write—Wire—Call

**SARKES TARZIAN, Inc., Tuner Div., Bloomington, Ind.**

## TARZIAN MADE PRODUCTS



STATIONS WTTT (5000 WATTS) AND WTTV (CHANNEL 10)  
OWNED AND OPERATED BY SARKES TARZIAN IN BLOOMINGTON

scale and all normal voltages will read GOOD.

### Anode Testing

In the second part of the CRT we have the high voltage anode. With this anode four different tests can be made. First, as before, a voltage measurement is made of the CRT circuit potential supplied to the anode. This is accomplished by means of a high voltage multiplier with a sensitive meter. If the reading is abnormal a second reading should be taken with the anode now disconnected from the CRT. This is necessary in order to determine if the CRT has a H.V. breakdown from the anode or if the receiver high voltage supply is defective. If the anode voltage and anode is considered normal then the second step is to measure the beam current between the anode and the electron gun. This can be done by applying a low D.C. voltage to the anode in series with a very sensitive voltmeter. The result will be a reading on the voltmeter proportional to the amount of beam current in the tube. This test is of particular importance because it can indicate a high resistance on open anode connection within the tube which has no bearing on the electron gun. The gun could check normal and the CRT may still be bad. The general CRT test of the gun, used by many test equipment manufacturers will not always indicate the true anode or beam current condition in the tube, thus causing many CR tubes to read GOOD, although they are BAD when tried in a receiver. In the third test, with the same set-up as the second, a check can be made on the ion-trap in the tube. A known good magnet is placed around the neck of the tube, and oriented along and around the 1/2 tube. As the magnet is moved a variation will be noticed in the beam current reading with a very noticeable dip at one particular spot. This variation and dip indicate a normal ion-trap. In the fourth and last test the set-up is the same as in the second and third test. This time a check can be made on the ion-trap magnet itself. By placing the magnet under test around the neck of the tube and orienting it if the sharp dip is not noticed then the magnet will unquestionably be defective.

With the proper checking of the cathode-ray tube and its associated circuit voltages all the uncertainty of CRT testing can be eliminated once and for all, placing this technique alongside of the other great feats in the TV servicing field.



# DON FERRARO

*This is another in RTJ's series of articles about leading personalities in radio and television who are contributing significantly to the development of the industry.*  
—Editor

**D**ON J. FERRARO who is president of Jewel Radio Corporation and also is majority stockholder of the Fidelity Tube Corporation, a firm which manufactures television picture tubes is, like many of the top executives in the radio and television industry, a man of infinite interests and abilities. Recently, during a two-hour stretch while a visitor observed him at work in his handsome, panelled office in the Jewel radio plant in Long Island City, Ferraro was never off the phone for more than five minutes at a time and the range of his conversations covered such diverse subjects as: racing and jumping horses (The National Horse Show was then in progress); a rush order for 500 clock radios from a Chicago firm; plans for a new line of television receivers; charitable activities; production statistics on cathode ray tubes and a number of other subjects which were handled so quickly that his visitor didn't have time to record them.

Ferraro is a big man, built like a wrestler and exuding strength and force in every movement. Yet, like so many men who are physically powerful, his voice, by contrast is surprisingly soft and mellow. Not long ago, when Ferraro's voice was mentioned to a man who has known him for many years and who is himself one of the leading figures in the electronics business, the friend said: "Don't let Don's quiet voice fool you . . . he doesn't need to yell in order to get things accomplished . . . a soft word from Don will do more than a loud speech from someone else."

Ferraro's company, Jewel Radio Corporation is today one of the leading radio manufacturers in the nation and its growth and prosperity is proof that one man's faith in the radio business' ability to survive was based on sound thinking. At a time when every manufacturer was rushing like mad to climb on the television bandwagon, Jewel remained aloof from the glamor of TV and stuck to its guns, continuing to design and produce the best possible table, portable and clock radio sets. Events have proven this strategy to be

correct, with the result that Jewel is today making not only its own complete line of radios but is also producing radios for some of the leading companies in the industry.

Ferraro first entered the radio field in 1938, when he began as a sub-contractor for Brewster Aeronautical Corporation. Prior to this, he had been in the transportation field and still retains active interests in several bus and trucking companies. But once he had made the plunge into radio, he began devoting his full energies to the fascinating business. He also founded the Ray Energy Company and did work as a sub-contractor for Fada, Sperry Gyroscope and Link Radio.

Soon after V-J Day, he founded Jewel Radio and opened a small loft on 6th Avenue in New York City with less than 5,000 feet of manufacturing space. By contrast, the Jewel plant in Long Island City now has over 20,000 square feet of space. And in Newark, New Jersey, Ferraro's Fidelity Tube plant has 80,000 square feet, with additional space available for expansion.

One of Ferraro's major characteristics is that although he has always been able to move fast whenever the situation called for quick action, he has not moved just for the sake of being active and will not venture, in a business sense, unless he has first convinced himself that the odds look good.

That is why Jewel refrained from entering the television set business for a number of years although every manufacturer in radio took the plunge years ago. Recently, when asked about this, Ferraro was quite frank and said that he had thought seriously about television but had waited until all the 'bugs' were out until he went in. Now, he is entering the TV set field with both feet and will concentrate on producing 17 and 21-inch receivers in simple cabinets at the lowest possible price consistent with quality.

*(Continued on Page 62)*

Stromberg-Carlson

celebrates

30 YEARS -

in RADIO

and

TELEVISION

*THIRTY YEARS* is a long, long time in radio. Only three other radio-TV set manufacturers who produced in 1922 are in the industry today. No one has more experience in producing quality instruments than Stromberg-Carlson.

In 1922, Stromberg-Carlson already had 28 successful years of experience in the telephone business.

This background of telephone know-how has been invaluable, enabling Stromberg-Carlson, right from the start, to do things just a little bit better . . . to keep several strides in front . . . to be the quality leader.

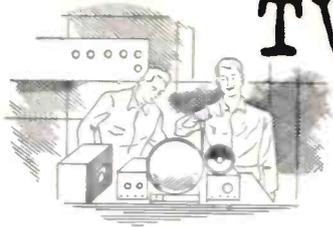
In 30 years Stromberg-Carlson has pioneered many important firsts—developments that are fundamental to the radio and television we know today. But what we are most proud of is this: Over the years Stromberg-Carlson has consistently created instruments of such dependability and beauty that today millions agree, "There is nothing finer than a Stromberg-Carlson."



*"There is nothing finer  
than a*

**STROMBERG-CARLSON®**

Stromberg-Carlson Company, Rochester 3, N. Y. — In Canada, Stromberg-Carlson Co., Ltd., Toronto



# TV service report

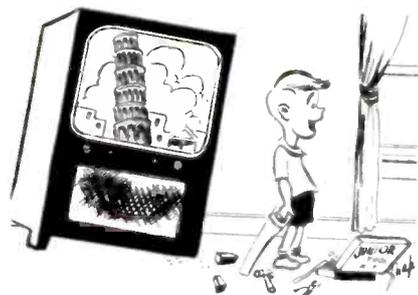
## About TV Antennas

In a current issue of "TV Servicing," house organ of RCA's Tube Department, John R. Meagher, TV specialist in RCA renewal sales, raises the question, "Why does there appear to be so much contradictory information about television antennas?"

He promptly points out that, in the first place, varied opinions spring from different individual experiences under different conditions. If technician "A" in a strong signal area and technician "B" in a weak signal area use the same antenna, Meagher points out, the response in each case differs.

In the second place, practical information on antennas, including a) impedance, b) gain from the use of a reflector, c) change of impedance due to the reflector, and d) the directivity pattern, all apply to the resonant frequency. Yet all these characteristics become different when the antenna is used to receive channels at other than the resonant frequency, something which Meagher feels is the case in about 80 per cent of all TV installations because a single antenna is used to receive two or more stations on different frequencies.

In the third place, according to Meagher, considering the "gain" of an antenna without considering the loss in the transmission line is pointless, since interest is in the voltage at the input terminals of the receiver not in that at the antenna terminals.



"Never mind calling the serviceman, Mom, I fixed it!"

Further contradictions come from disagreements between those actually conducting field antenna measurements and those who are textbook experts. Meagher believes that "Comparison of TV antenna characteristics over all the TV channels requires a carefully chosen location, special set-up, special signal generators, special loads, and special measuring equipment; plus special knowledge and experience."

## Top Tube Performance

Seven basic circuit and component requirements which determine the over-all performance of television picture tubes were reported to a meeting of the New York Chapter of the American Institute of Electrical Engineers recently by W. B. Whalley of the Physics Laboratories, Sylvania Electric Products, Inc.

"A normally good picture tube," Whalley said, "is so good in its inherent performance, that the over-all performance of an industrial or home television receiver depends on the associated components and circuits." In explaining good performance, Whalley discussed these seven basic criteria:

Resolution; synchronization; contrast and gamma; control of black level; noise and interference contrast; picture area stability, and brightness. During a detailed analysis of each of these criteria, he stressed the importance of synchronization, stating, "if synchronization circuits are of inferior quality, all other qualities are of no consequence, since no observer can watch an unsteady picture."

Detailed considerations of synchronization, Whalley said, should include: the synchronization amplifier and separation filter; the noise pulse reduction characteristics of the video amplifier; the influence of horizontal automatic gain control; ripple voltages, and undesirable a-c magnetic fields.

## Tube Faults

The great majority of television receiver troubles spring from faulty tubes. Servicemen may do well to check im-



"Beautiful Pattern!"

mediately for some of the following common troubles: 1) Poor fringe area reception due to low B plus voltage; 2) poor fringe area reception due to low sensitivity; 3) picture and sound separated due to IF oscillation; 4) picture bending caused by leakage between tube elements; 5) poor sync stability, usually more noticeable in vertical, and 6) washed out picture due to negative grid current.

## Case Restated

To spike some prevalent thinking about the decline of the television service contractor and the expected rise of the old radio service business, Paul V. Forte, executive secretary, Television Service Contractors Association, points out some logical arguments on the service contractor's behalf.

By nature the TV receiver requires considerable test equipment, which is costly, delicate, sensitive, even too bulky to carry around like the old radio serviceman's screwdriver. A service shop is therefore imperative.

A panel truck or specially fitted car with tools, equipment and spare parts is also essential.

A complete library of diagrams, schematics and service notes is necessary to service the different makes and models of television.

Records, a routing system for service calls, and dispatching all add to the intricate service set-up, costing money which the former radio serviceman could not always invest.

Equipment and facilities for installing sets and erecting antennas is another necessity.

Insurance coverage for the entire service operation is a final imperative for a properly operated department.

## Section **RJT**...

2

### MAGNETIC RECORDING

January 1952



# The Staggering Truth about the Magnetic Recorder Business....

By Nat Boolhack

**A**NOTHER year has rolled around, and with it the realization that in 1952, the dealer will have to broaden his sales scope beyond TV if he is to enjoy a dollar volume equal to 1951, the dealer is rapidly outgrowing his ability to depend almost entirely on television to give him the gross sales volume which he must have if he is to stay in business.

In his search for additional sales, we are suggesting to the dealer that he had better begin at once to look into the magnetic recorder market. The magnetic recorder was developed during World War II and is one of the few wartime devices that is fast becoming a widely used consumer product. Although it is only six years old, magnetic recording as a business did \$25 million in 1951 and is slated to rise to more than \$100 million within the next few years.

Here is a business to spur the imagination and whet the sales appetite of every merchant with enough initiative to recognize a market when he sees

one. What is the appeal of the recorder? First and foremost, magnetic recording does for sound what the camera did for the image. This is a fact of the greatest importance because it opens a vast new sales appeal to an almost limitless number of customers. Who wouldn't be happy to have a permanent record of the voices of his parents who may no longer be with him; or of his children as they are growing up? Birthday parties, graduations, weddings, baby's first words... these are sound memories which assume even greater importance than a photograph because they are alive. As an instrument for home entertainment, the recorder is unique.

Then there is the infinite field of business and industry which will use magnetic recorders with as much facility as a telephone is used today. Doctors, lawyers, ministers, conventions, schools, business conferences—all of these will use recorders and are buying them in greater volume with each passing week.

The staggering truth about the mag-

(Continued on Page 36)





• Senior Armour physicist Marvin Camras as he worked 10 years ago on the first production model of modern magnetic recorder. Camras now holds 75 patents in the field.

## ***Magnetic Recording Has a Short Past . . . But a Brilliant Future***

**I**N 1939, an electrical engineering student at Illinois Institute of Technology named Marvin Camras decided to build a magnetic recorder. His cousin, who was taking singing lessons, wanted to hear his voice. Starting from scratch, Camras built a revolutionary device that worked.

Today, some 75 patents later, Camras is still building magnetic recorders. They're a far cry from that first rather crude model, for he's putting new ideas into them that will someday appear on dealers' shelves as new products.

After he graduated from Illinois Tech Camras joined the staff of Armour Research Foundation of Illinois Institute of Technology. His work at the Foundation has helped create an industry which grosses millions of dollars each year.

Foundation discoveries in the field of magnetic recording have revealed new possibilities in realistic reproduction of sound, facilitated the work of secretaries through improved dictation machines, provided an important tool for radio stations and motion picture

producers, and opened a new field for amateur movie-makers.

### ***Steady Progress***

Camras and other magnetic recording experts in the United States have pushed the science ahead fast. Armour Research Foundation licenses 55 companies to use its patents. Instrumentation applications, high fidelity instruments (phonograph record companies



• An interior view of a pocket-size magnetic recorder built by Armour Research Foundation scientists. It is the only one of its kind.

put master recordings on tape), and increasingly useful low-cost recorders for home, educational, or business use are being developed. Component parts are getting better, including recording heads, drive systems, and recording media such as wire or tape.

A Danish scientist, Valdemar Poulsen, invented the first magnetic recorder back in 1898. Because electronics was in its pre-infancy, however, the playback was feeble; and the phonograph (invented about the same time) became popular. It took Camras and others to bring magnetic recording to practicality.

The chief advantage of magnetic recording is that it can be erased and used over and over again. If it's not erased, however, it will last indefinitely. Recordings have been played hundreds of thousands of times without appreciable loss of fidelity.

The recording of radio programs on magnetic tape, with subsequent editing for perfect performance, is well known. The motion picture industry uses magnetic recorders for "takes." Industrial control mechanisms are being developed which use the principle of magnetic recording.

### ***Stereophonic Sound***

One of Camras' more interesting developments is stereophonic sound. The effect of three-dimensional sound has been achieved by recording on several sound tracks simultaneously and playing all these recordings back in synchronization.

As developed at the Foundation, the method is to record several sound tracks on the same tape. Microphones placed around the source of sound pick up the sound from different directions. On playback, loudspeakers replace the microphones, thus simulating live conditions.

Another development of the Foundation's work is magnetic sound on motion picture film. Just now reaching the market are sound-on-film projectors which employ a magnetic sound track bonded on the edge of the film. Last year Camras accepted, on behalf of the Foundation, the U. S. Camera Achievement Award for developing sound-on-film.

Income derived from the Foundation's licensing program is used for basic research in magnetic recording. Licensees receive their information on the field from the Foundation which

*(Continued on Page 32)*



•Lyon & Healy's Bill Parks finds the "Electronic Memory" feature of a recorder appeals to music students.

## How One Dealer Is Building a Growing and Profitable Recorder Business

AT Lyon & Healy, Chicago, tape and wire recorders are not just another item on which an occasional sale is made. In this successful retailer's operation, recorders represent a substantial source of volume and profit, carrying their full share of the store's overhead and showing a steady month-to-month increase that promises to make them even more important as time goes on.

Lyon & Healy is one of the country's best known and most successful television and music retailers and one of Chicago's major outlets for phonographs, radios, television sets and related merchandise. This firm saw the possibilities of the magnetic recorder early and were one of the first to promote the recorder when this instrument was introduced in 1947.

Lyon & Healy has become the largest Chicago dealer in recorder products by applying to these products the same merchandising methods that have worked so well on other lines during the firm's long history. Fundamental among these is the conviction that steady, consistent selling effort, week after week and month after month, pays off better in the long pull than

### Chicago's Lyon & Healy finds that an alert and consistent recorder sales program really pays off

even the most spectacular one-shot promotion, though these, too, have been used with good results on occasion.

#### Educate on Use

First step in such a program, as Lyon & Healy sees it, is to educate the public in the use of the things you sell and to teach them to associate the name of your store with the products featured. In the case of magnetic recorders, this is being accomplished by consistent newspaper advertising, direct mail, continuous store and frequent window displays and tie-ins with the store's other promotional activities, such as the work of its educational director in the schools and the store's own studios.

For several years good-sized newspaper space has been used on a weekly or oftener schedule to feature tape and wire recorders. Each of these copy ads, most of them based on copy

and illustrations furnished by the manufacturers of the units, plays up the advantages of a magnetic recorder for students, business men, professional men or the public generally, and all carry an invitation to come in for a demonstration.

#### The Demonstrating Way

Jerry Ward, who heads the radio-TV-recorder departments at Lyon & Healy, says that prospects brought to the store as a result of this advertising are not too price conscious, but that a complete demonstration is absolutely necessary if their interest is to be converted into a sale.

"Very few people are familiar with the operation of a recorder, or with the uses they can make of it," he explained. "That's why we make sure that every one of our sales people is able to explain the uses of the recorder and to make an easy, effortless demonstration of its operation. People shy away from a new device if they get the idea its operation is complicated or difficult."

At Lyon & Healy, tape and wire recorders are kept on display and ready to operate in the second floor radio-  
(Continued on Page 28)

# Announcing

**ADVANCED**

# SERIES 400

**RECORDERS**

**MODEL 400-A**

with  
Half-Track Head

**MODEL 401-A**

with  
Full-Track Head

15 & 7 1/2  
Inches Per Sec.

**Full REMOTE CONTROL**

Solenoid operated mechanisms for all mechanical motions.



also *Featuring*

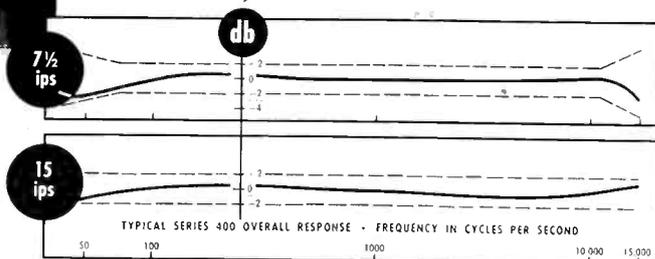
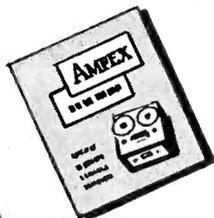
- **UNIFORM RESPONSE** . . . to 15,000 cps at 7 1/2 ins. per sec.
- **LOW NOISE & DISTORTION LEVEL** . . . signal-to-noise ratio over 55 db at either tape speed (as defined by NARTB).
- **PUSH BUTTON OPERATION**
- **LONG LIFE** . . . precision built.
- **LOW MAINTENANCE** . . . even with continuous use.



**4 to 1 TAPE SAVING**

The valuable tape saving ability of Series 400 Recorders is clearly illustrated above — the young lady holds four reels which contain the identical program formerly requiring the sixteen reels shown on table. No other recorder can give this remarkable tape saving because no other recorder is capable of 15,000 cycle performance at 7 1/2 ins. per sec., on but half the width of the tape!

**PORTABLE IN SINGLE CASE or for RACK MOUNTING**



**PERFORMANCE . . . beyond comparison!**

Published specifications of Ampex Recorders are conservative as these typical check-out graphs on Series 400 show. Ampex check-outs always exceed guaranteed performance but even the guaranteed performance is sufficient to make Ampex the world's finest recorder!

**INTERCHANGEABILITY OF TAPES** . . . another unrivalled superiority of Ampex. This means that recordings made on any Ampex can be played back on any other Ampex (of like speed) with identical high fidelity and timing.

ASK FOR BULLETIN A-211

. . . gives complete description and specifications of the Series 400 Ampex Magnetic Tape Recorders.

## Growing A Profitable Recorder Business

(Continued from Page 27)

television department, and in the band instrument department and studios for the benefit of music students. But the major display and the one that accounts for a large part of their sales is in the small radio and phonograph section on the first floor. This is a high traffic location, just inside the main entrance and adjacent to the elevator, that catches many customers bound for other departments as well as those specifically interested in recorders.

Ward suggests that combining tape and wire recorders with small radios and phonographs has probably had a lot to do with their success in selling recorders.

### Tie-in Selling

"The salesmen in that section are particularly interested in recorders," he said. "They make especially good demonstrations because they understand radio and recorded music and of course the \$150 to \$200 sales ticket for a recorder looks good to them in comparison with their usual \$25 to \$50 sale."

Such men also do a good job of selling tape, wire, accessories and other plus business, he noted.

One sales technique often used by Lyon & Healy, when a customer shows interest in a recorder, is to unobtrusively record the entire demonstration from the beginning, including the customer's questions and comments. When this is played back a little later, the customer gets a second explanation from the recording and in addition hears his own voice. Nearly everyone finds this a fascinating experience and begins, unconsciously, to identify himself with the instrument he has helped to demonstrate.

This store has found magnetic recorders to be steady year-round sellers, with the business getting an extra boost at Christmas time and when students are leaving for school in the fall. In the beginning, most sales were made to business men, doctors, lawyers, ministers and others who wanted them primarily for use in connection with their work. Being in the music business, Lyon & Healy also has capitalized the "Electronic Memory" method of music instruction, in which the music student's progress has been found to be greatly accelerated by recording the teacher's lessons for playback during the subsequent practice periods.

### Educational Market

Harry Kennard, the store's educational director, records the progress of

(Continued on Page 32)

# AMPEX

Magnetic RECORDERS



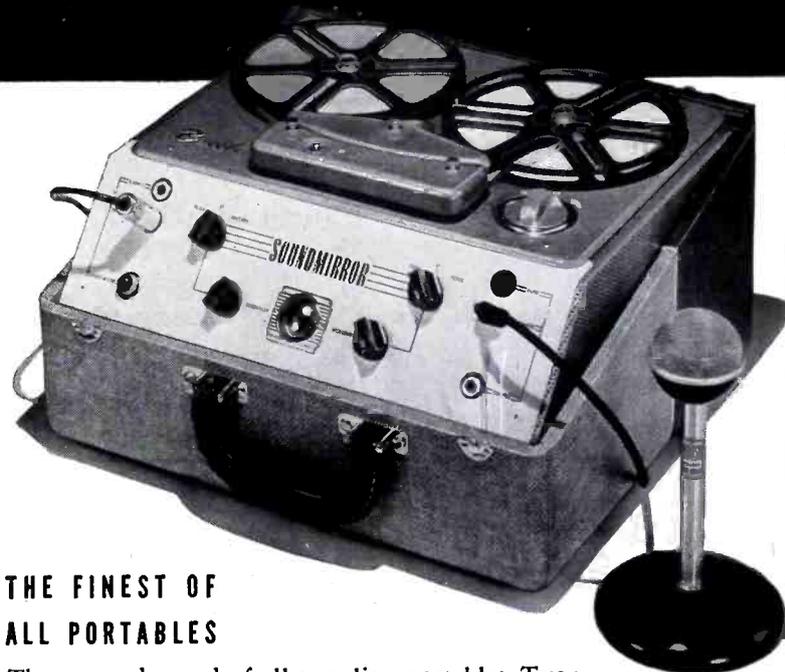
**AMPEX ELECTRIC CORPORATION**  
Redwood City, California  
Distributors in Principal Cities

*...for profits today and tomorrow*

# sell **SOUNDMIRROR**®

**Y**OU NEED PROFITS TODAY, certainly. You also want to build reputation that will assure expanding business and profits for tomorrow. That means you want to sell quality. Among tape recorders **SOUNDMIRROR** means high uniform quality. Quality that will please your customers. Quality that means no service problems.

**SOUNDMIRROR** is the professional quality tape recorder that amateurs find easy to use. **SOUNDMIRROR** is engineered, both mechanically and electrically, for top performance. It does a better job because it is built of reliable parts, most of which are designed and manufactured only for **SOUNDMIRROR**.



## THE FINEST OF ALL PORTABLES

The most advanced of all traveling portables. Two-tone tan case that looks and wears like fine luggage. Available in half hour and one hour recording time.

Model BK-443-P . . . . . (½ hr.) . . . . . \$279.50  
 Model BK-443-PS . . . . . (1 hr.) . . . . . \$289.50



## THE ONLY TABLE MODEL TAPE RECORDER ON THE MARKET

Engineered for true sound reproduction. Cabinet in hand-rubbed mahogany with matching handles, making it easy to carry.

Model BK-442 . . . . (mahogany) . . . . \$259.50

## 10 OUTSTANDING FEATURES

- New silent tape transport controls
- Improved amplifier for all models
- High quality Brush microphone
- Single-channel tape for better sound quality
- Wide frequency range
- Lighter weight-attractive design
- True reproduction of all sound
- "Magic Eye" record volume indicator
- Full precaution against erasure through the use of two controls to prevent mistakes
- Provision for setting volume record level in advance of recording

## WHO BUYS AND USES SOUNDMIRRORS?

- |                             |                               |
|-----------------------------|-------------------------------|
| Home users                  | Business and industrial users |
| Schools                     | Advertising agencies          |
| Music and language teachers | Radio stations                |
| Professional men            | Churches                      |

**FIND OUT HOW YOU CAN PROFIT FROM SOUNDMIRROR FRANCHISE**

THE BRUSH DEVELOPMENT COMPANY, Dept. RJ-1  
 3405 Perkins Avenue, Cleveland 14, Ohio

Please send full information about the profitable **SOUNDMIRROR** dealer franchise.

Name .....

Firm Name .....

Street .....

City ..... Zone ..... State .....

# *There Is More Profit In Magnetic Recorders Than The Average Dealer Realizes*

**Some dealers have already sensed that there is a magic sales appeal in recorders. How about you?**

**T**HERE is a tremendous market in your area for magnetic recorders. The more progressive dealers, having sensed the magic sales appeal of these comparatively new instruments of pleasure and utility, are already cashing in not only on the initial sale of the recorder itself, but also on the repeat business in sound recording tape and wire. Like the phonograph and television, magnetic recorders are here to stay, and if you don't get your share of this lucrative market, don't blame anyone but yourself.

And, important to dealers, is the fact that there is more profit in magnetic tape recording than the average dealer realizes. Compare the net profits on tape and wire recorders with those on other items sold in the radio and appliance store, and you're in for a pleasant surprise.

The potential market for magnetic tape recording is the average traffic walking by and through your store. The uses for magnetic recorders are many—in the home, as well as for commercial and professional uses. The family man with children is a definite prospect, plus those individuals who are music lovers and are interested in a library of music.

### **How to Sell**

There are dozens of uses for business men, sales managers, the clergy, doctors, lawyers, authors, educators and others. There's no question about the usefulness of magnetic recorders. However, the dealer should prepare himself and

his staff for properly merchandising recorders.

First and foremost, the dealer and sales clerks must familiarize themselves with the operation and application of the wire and tape recorders. Each sales person in the store should take a recorder home, learn to operate it, hook it up to the radio and record a half hour of music (single track exclusive of commercials) to be used for playing in the store.

Dealer's own commercials should be recorded selling the magnetic recorders as well as other merchandise in the store to be spliced in between musical selections on the demonstration reel. Some of the "commercials" a few of our dealers use run something like this:

"The blank company is presenting music to you from a blank recorder. We invite you to see this recorder in operation." Another; "Ever hear of a 'tape' or 'wire album'?" It's almost like a picture album. Listen, here's what I mean—"children's voices for 10-15 seconds." Still another: "Imagine having a wire or tape album of this little fellow; your little boy or girl. Capture a few precious moments when he talks about his games; when your little girl tells you about the dolly she wants for her birthday. These recordings of precious memories are as easy to take as snapshots. We'll be happy to show you."

### **How to Display**

The location of the magnetic rec-

orders in the store is important. The recorders used for playing the pre-recorded music should be placed in a prominent location where the store traffic is heavy; another recorder should be placed alongside, loaded with blank tape or wire for on-the-spot recording demonstration purposes. It has been convincingly demonstrated by many dealers that tape and wire recorders can be sold to store traffic.

Recorders should be kept running at moderate to low volume. It should be borne in mind that the clerks like to hear the reels that they have recorded so if several demonstration reels are made, it will break the monotony of re-playing the same reel.

Customers should be questioned to find their field of interest and they should then be sold uses fitting into that pattern. For instance, if the customer has young children, the "recorder album" approach has been a very successful use in selling tape or wire recording to the family. The tape or wire "album" is a series of candid recordings of children taken every few months, such as birthdays, Easter, Christmas and parties. Customers should be reminded that if an event in their family is important enough to photograph—then they should record the sound, too . . . for a lifetime of Precious Memories.

Yes, there is a magic sales appeal in magnetic recorders. Take advantage of it!

# Here's How to Make That Recorder Market Grow... and GROW... and GROW

THE market for magnetic tape and wire recorders is just over four years old but in that short time it has grown so large that no dealer can afford to overlook it in making his plans for 1952.

Armour Research Foundation of Chicago, which developed the basic magnetic recording principle and which licenses all wire and tape recorder manufacturers, reports that in 1950 approximately 120,000 of these units were produced. Including sales of wire, tape and accessories this represents a retail volume of something over \$20,000,000. Final figures for 1951 are not yet available, but Armour Research estimates the total will run 10 to 15 per cent higher than in 1950.

## New Market

The magnetic recorder is an excellent example of a wartime product that has found widespread civilian applications. Its principle was known in the early 1940's but it was first put to use by the Armed Forces during World War II. Wartime applications included the recording of test flights of airplanes under development, bringing back to troops in training the sounds of battle, on-the-spot comments of combat troops and other uses, including some that are still cloaked in military secrecy.

With the coming of peace, firms that had built magnetic recorders for military use turned to possible civilian uses of the device but most of them visualized only a limited market, since the only equipment then available was so elaborate and expensive that only a few large industries, broadcasting stations and perhaps a limited number of professional musicians could be considered logical prospects.

One manufacturer, Webster-Chicago Corporation, had a different idea. They were among the first and largest producers of magnetic recorders for military use and had also established a reputation as a leading manufacturer of

phonographs, record changers and other components for the radio television industry. They were convinced that there was a much broader market for the magnetic recorder if a mass produced, moderately priced unit could be designed.

When this firm introduced the first commercial wire recorder in 1947, it marked the birth of a new industry that has already contributed substantially to the sales volume and profits of many retailers and offers even greater possibilities for the future.

The tremendous expansion of television business during the same period has led some retailers to overlook the really important part that magnetic recorders can play in their business. Now that television sales are leveling off in most markets, with rising prices and material limitations threatening further curtailment in the months ahead, a closer look at the recorder market seems logical for the dealer who is seeking ways to maintain his volume and profits.

## More Than a Gadget

The first thing the dealer will discover is that this market has been undergoing some changes that have greatly broadened its potential. In the beginning, the public bought the recorder as an interesting gadget. They used it to have fun at parties or to record radio programs. They soon found it had other uses, such as providing sound for home movies or building a library of memorable persons and events in the manner of the popular "I Can Hear It Now" albums.

They found that the easily mailed spools of wire or tape made possible spoken correspondence with family and friends that has a warmth and intimacy impossible with written communications. This hobby has an especial appeal to shut-ins and the blind. Its growth has led one manufacturer to set up, as a public service, the

(Continued on Page 34)



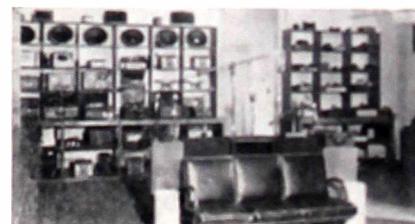
• The A. F. Milliron Co. at 346 South LaBrea Ave. in Los Angeles is one of the outstanding magnetic recording dealers supplied by Kierulff & Co., Los Angeles magnetic recording distributor. Notice the elaborate window concentration on magnetic recording equipment.



• Above is a view of the elaborate facilities which Kierulff & Co. makes available to magnetic recording dealers. Disc, wire, tape, recording equipment and supplies comprise the distributor's stock in trade.



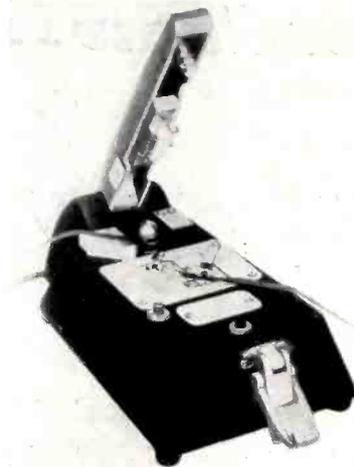
• Dealers from all over Southern California are welcomed to the sound and magnetic recording division of Kierulff where some seven salesmen and three servicemen are available to assist them with their magnetic recording needs and problems.



• Specialized equipment like that on the wall racks above is maintained in stock at all times for dealer demonstrations. Fifteen outside territory salesmen are working with dealers constantly to stimulate recording business and to iron out major stumbling blocks to increased dealer sales.

## Unique Device Makes Tape Splicing Easy

The MT-1 Presto-Splicer, made by Prestoseal Mfg. Co., N. Y., is designed to cut and splice 3/4-inch magnetic recording tape without scraping, cementing, use of adhesives or loss of tape material. It is based on a combination of electrically produced heat and precise pressure, for strong, diagonal splices, without adding to the thickness of the tape or using any of the tape material to the resultant plastic weld. Splice does not affect the tape properties and is inaudible with playback amplifier at maximum gain. Equipment is self-timing, and operates on 115V, 50/60 cycle AC, with automatic line voltage compensation.



## How This Chicago Dealer Builds Growing and Profitable Recorder Business



• A salesman is recording a prospect's voice on a portable wire recorder. Later he lets customer play-back recording, demonstrating instrument's features.

(Continued from Page 28)

class piano groups he helps to set up in numerous schools, as well as adult music classes in the store's own studios. He also finds many opportunities to demonstrate a tape or wire recorder before parent-teacher and similar groups. Such demonstrations have resulted in a gratifying number of immediate sales and a larger number of good prospects, he reports.

These and similar specialized markets for recorders are still growing, but, according to Ward, the general public now accounts for more than half of Lyon & Healy's steadily increasing recorder volume. People still want recorders for fun at parties, to record radio programs and for "wiresponding"

with friends or relatives in other cities by exchanging recorded spools.

In addition, an increasing number of people are building permanent "sound albums" of historic radio broadcasts and of precious memories in the life of their families much as they have long kept snapshot photo albums. Growth of this hobby, along with the ever expanding list of business and professional applications for the magnetic recorder, makes nearly everyone a prospect.

That's why any dealer can hope to duplicate Lyon & Healy's success in selling these machines, if he applies the same sort of sustained effort and sound planning to selling them that he uses on other lines of merchandise.

## Tape Recording Center

The tape recorder is responsible for a unique education and information service offered by Cornell University, which has established what is known as the Cornell Tape Recording Center. This is a library which presents the voices and words of leading authorities in varied fields.

The Center is operated by the Radio Services of Cornell's Department of Extension Teaching and Information. A 43-page catalog already lists some 450 titles available to schools, extension workers and other community groups.

Service is free, except that user must pay for tape on which program is dubbed. Subjects range from radar contact with the moon to how to kill cabbage patch bugs.

## Magnetic Recording's Brilliant Future

(Continued from Page 26)

strives to develop marketable applications for magnetic recording.

During World War II, magnetic recorders were used to record battle sounds and bomber crew conversations. Camras designed the Model 50 recorder in 1942. It was rugged, compact, and practical, and the armed services used hundreds of its type.

One example of the use of magnetic recording in industry is in checking the performance of high voltage transformers and thus locating trouble spots on power lines. Another application has been in police work to record interrogations.

### Bright Future

The future of magnetic recording in the instrumentation field is bright. It is tremendously flexible. A recorder can be portable, especially rugged, long playing, or otherwise adapted to the need. It is an ideal method of storing information compactly, and research laboratories are using it often.

But the average consumer will meet magnetic recording in many places. He may not recognize its part in the movie he's seeing, the radio program he's hearing, or the phonograph record he's playing, but it's there anyhow. Consumer items, such as the new sound-on-film projectors, dictation machines, and home entertainment recorders, are readily available.

In 1951, the manufacturers of magnetic recorders had a market for 200,000 machines. Cost of each unit ran from about \$100 to several thousands of dollars. This market has been developed in only six years, and magnetic recording is expected to find increasing use. One conservative estimate says it's potentially a \$100 million industry!

**NEW TRAFFIC!**

**NEW VOLUME!**

**NEW PROFITS!**

with the dynamic new

**Revere**

*De Luxe* **LONG PLAY  
TAPE RECORDER**

*Smart dealers everywhere have been quick to recognize the advantages of adding Revere Tape Recorders to their line. But now with the introduction of this sensational new Long Play recorder, an even greater source of new store traffic sales volume and extra profits is assured.*



### A Demonstration Natural!

One demonstration is often all that is needed to clinch a sale! Customers marvel at Revere's ease of operation and true-as-life sound. Set up a demonstration display and watch the phenomenal results.

## A MIRACLE OF ELECTRONIC ACHIEVEMENT

**A**T last! Developed after years of electronic research, the sensational new Revere DeLuxe Long Play Tape Recorder is truly a brilliant engineering triumph. Note these outstanding features combined in this exciting new model:

**ULTRA-LIGHTWEIGHT**— Compact design and engineering skill make it the lightest-weight and most portable of any automatic long-play recorder.

**EXCEPTIONAL FIDELITY**— Superb

tonal quality, particularly on difficult musical passages has won the praise of leading musicians, singers and critics.

**EXTRA-ECONOMICAL**— Records two full hours of voice or music on a 5-inch reel—using only one-half the ordinary amount of tape.

Add to these, all the regular Revere sales-clinching advantages and you'll agree there is nothing like it anywhere! Write for complete information today.

REVERE CAMERA CO. • CHICAGO 16

**MODEL T-500 DeLuxe, 2-hour play**  
—Complete with microphone, radio attachment cord, 2 reels (one with tape), and carrying case. **\$179.50**

**MODEL TR-600 DeLuxe, with built-in radio, \$219.50**



**MODEL T-100 Standard, 1-hour play.** With microphone, radio attachment cord, 2 reels (one with tape), and carrying case. **\$169.50**

**MODEL TR-200 Standard, with built-in radio, \$209.50**

**Revere** **TAPE RECORDER**

WORLD'S LARGEST SELLING TAPE RECORDER

## How to Make Recorder Market Grow

(Continued from Page 31)

"Wiresponse Club" that lists and distributes the addresses and interests of several thousand wiresponse in all parts of the world.

### Precious Memories

Along with these other uses, the public has discovered that with a recorder they can preserve a sound record of precious memories and important events in the lives of their families, just as they have long kept photo snapshot albums of similar events. The voice of a beloved parent who may not be here much longer, baby's first at-

tempts to speak, the happy family chatter at Christmas or Thanksgiving, weddings, graduations, and similar milestones—these have a fundamental emotional appeal that makes nearly everyone a prospect for a magnetic recorder and can put it in the same class as the camera as an accepted item of equipment for every family.

Promotion of the "Precious Memories" idea, coupled with extension of the time payment terms offered by nearly every store on items in the \$150-and-up price brackets, opens a market for magnetic recorders that is

literally unlimited. At the same time, the various specialized uses for recorders that have provided a large part of the market since the first novelty phase was passed are being constantly expanded. Even a little study of these specialized uses—new uses are being discovered every week to add to the hundreds already known—will give the dealer who wants to increase his recorder sales a list of "hot" prospects that will keep his salesmen busy for months.

### The Sales Program

He might begin by listing every business firm, large or small, in the area he reaches. Business men are always on the lookout for anything that will save time or money and there are hundreds of ways in which a magnetic recorder can help accomplish this.

Biggest of the business uses of the recorder, and the one Armour Research Foundation says offers the greatest potential future growth of any single field, is for dictation of correspondence or anything that needs to be typed. Portable recorders had been marketed only a short time when reports began to come in that they were being used extensively for dictation.

The dictation recorder puts the retailer in a position to profit by business that until now has been monopolized by office specialty sales people. While soliciting recorder business from business firms he will also be establishing new contacts for the store that might well be prospects for other lines of merchandise he carries.

### Varied Uses

Businessmen use recorders for many purposes besides dictation. Executives record important conferences and programs to be put into effect. Sales meetings and sales training courses are recorded so they can be presented as often as desired without the presence of high salaried supervisors. Salesmen and engineers use them to transmit reports and customers' problems.

Recorders speed inventory taking for many firms. Research laboratories use them to record work in progress and time and motion engineers record their studies right on the job. Some retailers have used them to provide coin-in-the-slot order service when the store is closed or to provide voice and music in connection with displays or parade floats. Hundreds of other business uses range all the way from an exterminator who records the squeals of rats for use in his work to a scientific poultry farmer who records the productivity of his hens.

### Preferred Prospects

Professional men in the dealer's area are another big addition to his list of preferred prospects. Physicians record  
(Continued on Page 44)

# RECOTON

## MAGNETIC RECORDING TAPE



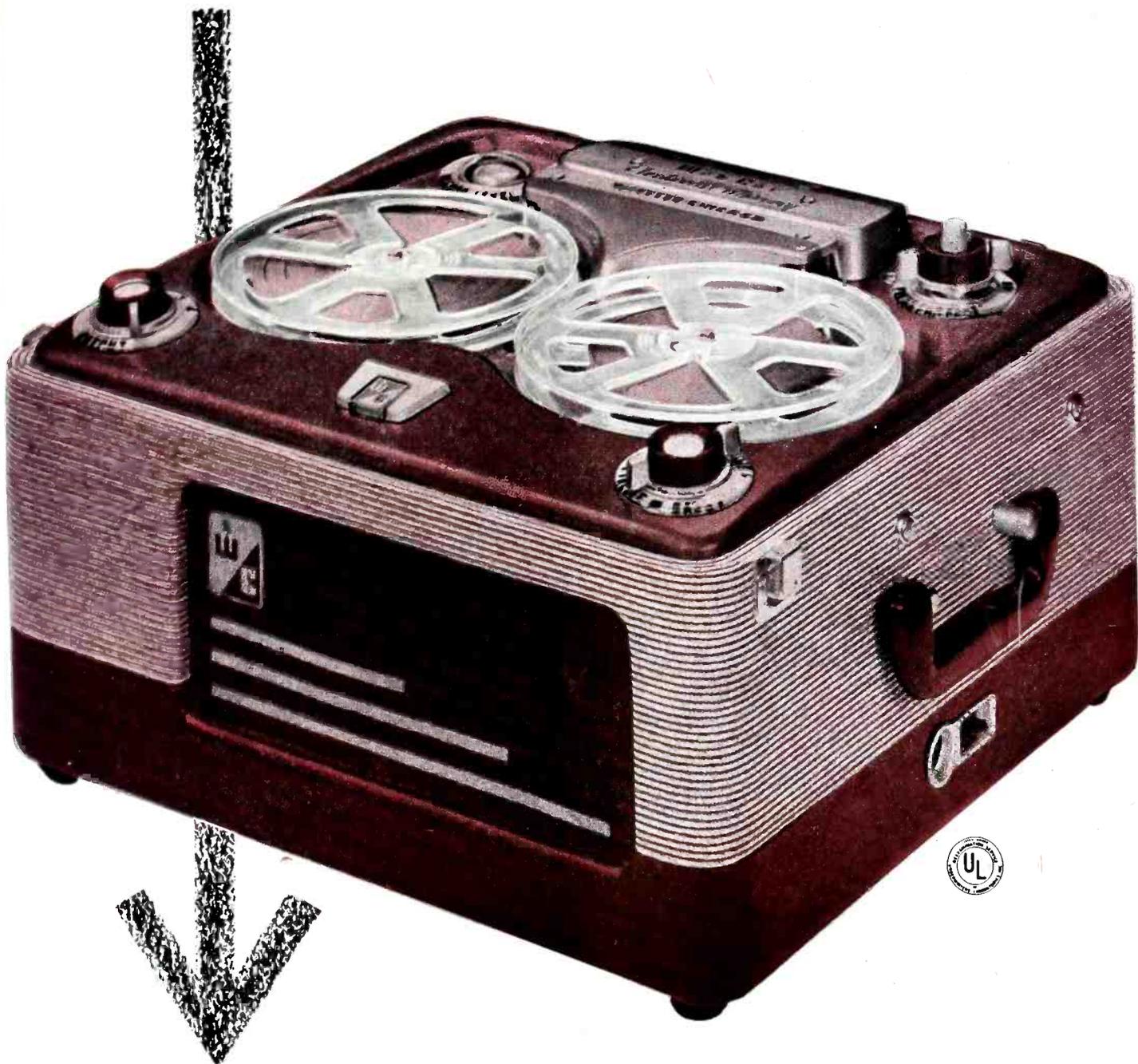
 **FOR HOME,  
EDUCATIONAL,  
and PROFESSIONAL USE**

Sturdy six-spoke reels for true turning—Warp resisting. Recoton Magnetic Recording Tape is constant output controlled, 65 DB Dynamic Range with minimum background noise. Wide bias latitude results in high uniform output without bias adjustment.

Another RECOTON product for the recording field by the makers of Famous RECOTON RECORDING DISCS and CUTTING STYL.

## RECOTON CORPORATION

147 West 22nd Street • New York 11, N. Y.



The most wanted home tape recorder in America

# Webcor<sup>®</sup>

**Electronic Memory Tape Recorder**

There are many good reasons why so many people want only a Webcor tape recorder—and, in many cases, they are willing to wait for one.

Consumers recognize the quality in products made by Webster-Chicago. It is this acceptance that makes Webcor products sales leaders in their field.

Ask your Webcor distributor to tell you about the exciting "Precious Memories" promotion—the national campaign that *sells* more and more magnetic recorders.



**WEBSTER-CHICAGO**

5610 W. Bloomingdale, Chicago 39

# THERE'S *Fun* AND *Profit* IN Magnetic Recording



A complete guide  
to better  
recording for  
higher fidelity  
reproduction

by S. J. Begun  
300 pages, 6 x 9,  
130 illustrations  
Price only \$5

## A HOW-TO-DO-IT BOOK FOR REAL RESULTS!

Beginning with the history and theory of the art, this fascinating book, MAGNETIC RECORDING, brings you accurate data on every detail of modern magnetic recording equipment and how to use it for best results. From home entertainment to motion pictures, broadcasting, professional and amateur radio to special applications such as secret communications (speech scrambling) you get the latest, most comprehensive data on all phases of recording by magnetic methods.

## ALL ABOUT FUNDAMENTALS COMPONENTS and EQUIPMENT

Whether you do recording as a hobby or as a business, this great book will prove invaluable. Included are clear explanations of acoustic and magnetic factors, reproducing heads, drive mechanisms, recording media and the methods of recording, reproduction and erasing.

Standard equipment is fully discussed along with instruments needed to evaluate recording performance. Subjects covered include:

- |   |  |
|---|--|
| 1—History of Magnetic Recording             | 6—Magnetic Recording Equipment               |
| 2—Acoustic Factors                          | 7—Applications of Magnetic Recording         |
| 3—Magnetism                                 | 8—Instrumentation and Recording Measurements |
| 4—Theory of Magnetic Recording              | 9—The Magnetic Phonograph                    |
| 5—Components of a Magnetic Recording System | 10—General Glossary                          |

### CLIP HERE

Dept. RJ-22, RINEHART BOOKS, INC.  
Technical Division  
232 Madison Ave., New York 16, N. Y.

Send ..... copies Magnetic Recording at regular dealer discount.

[ ] Send catalog on complete line of electrical, radio and TV books.

Name .....

Title .....

Company .....

Street .....

City ..... Zone ..... State .....

## The Staggering Truth About The Magnetic Recording Business . . . .

(Continued from Page 25)

netic recorder business is that it has developed so rapidly that the majority of dealers simply do not have a clear perspective about its potential meaning to them. There is a story told about two dealers located in the same eastern city, one of which bought nearly \$100,000 worth of recorders last year, while the other, a much smaller outlet, was buying at the rate of \$3,000 per month. In the same city several of the biggest stores were selling fewer recorders in a year than these smaller stores sold in a month.

The answer is that the dealer who is

doing a successful job on recorders is doing an integrated merchandising job which takes in advertising, window displays and specially trained salesmen who know how to demonstrate this wonderful product which seems complex but is really simpler than a camera to operate.

There is no mystery or basic difficulty about selling magnetic recorders. Nearly everybody is a prospective customer and all that is needed is for the dealer to climb on a bandwagon which is going to make quite a bit of cash-register music in the years ahead.

## Why Some Dealers Succeed in Selling Magnetic Recorders

By Don Halsey, Kierulff & Co., Los Angeles, California

In calling on those dealers who stock and sell magnetic recorders, I find that the most successful ones are those who are constantly taking advantage of every opportunity to let the buying public know that "Sound is Our Business."

These dealers make it their business to become acquainted with those customers who could use a magnetic recorder in their daily life or business—folks such as doctors, ministers, lawyers and musicians.

It is not merely a case of knowing and selling—it is really a process of making people feel that you are interested in their problems and business requirements, and that you are at their service to help them make their work a bit easier or more profitable.

One very successful dealer has told me that much of his success with magnetic recorders is due to the fact that he follows through on every sale. He states that this is very important because it creates an air of confidence which is priceless. The recorder business is not a "once around business"—it takes work and continuous promotion—but it will be with you as long as you care to nurture it.

As a salesman calling upon dealers, I can readily see why some dealers are going ahead; continually showing gains while



This photo shows Kierulff's crack sales crew. Other Kierulff pictures on page 31.

others remain static and wonder why business is a "bit slow" for them.

I have found that those dealers are busiest with recorders who are continually searching for new uses and outlets for this wonderful product. These good dealers always carry a complete stock of magnetic recorders for both home and professional use. Their stock is always clean, on display and ready for demonstration. Most important—their salesmen are trained to do the job.

This is a new business—practically in its infancy, and the field is wide open to those who realize its great potentialities. Above all, it is a profitable business, and a most interesting one which will not easily become saturated.

A New Year is with us; it will be a successful one for those dealers who learn to "Show Them — Sell Them — Follow Through." Of course it's work — but it's fun too!

**2 famous names  
paired for profit**

**WILCOX-GAY  
RECORDIO**



**Lowest priced**

**AUTOMATIC PUSH-BUTTON  
TAPE RECORDER**

A 4-minute demonstration SELLS the new Wilcox-Gay push-button tape recorder. Push-button recording means faster turn-over . . . and increased profits. Recording experts praise the ease of operation . . . push buttons make all adjustments from recording to playback . . . automatically. The new "2A10" is tops in tape recorders . . . Wilcox-Gay's crowning achievement. Smart appearance, smooth operation, increased power, high fidelity . . . and weighs less than 20 pounds. Handsome maroon and grey leatherette case.

ONLY  
**\$149<sup>95</sup>**

*slightly higher  
west of the Rockies*

Model 2A10 records at 3¾ and 7½.  
Model 2A11 records at 3¾ and 1½.

**Majestic**  
MIGHTY MONARCH OF THE AIR

**NOW MIGHTIER THAN EVER**

**Finest in view for '52 . . .**

Television's greatest values for television's greatest year. In keeping with Majestic's outstanding record through the years . . . this year, 1952, Majestic is first and foremost with the finest television in view. The 1952 Majestic line starts as low as \$179.95 for a 17" table model . . . with terrific step-up numbers for added profit. There's a Majestic model for every purse . . . and every purpose. See your Majestic distributor today . . . or write for complete literature.

20" CONSOLE MODEL 20C82



**MAJESTIC RADIO & TELEVISION, division of THE WILCOX-GAY CORP. • 385 Fourth Ave. • New York 16, N. Y.**

# announcing *Jewel*



Model 17T8-W1  
17 Inch  
Mahogany Veneer  
Table Model



Model 21T9-1  
21 Inch  
Mahogany Veneer  
Table Model

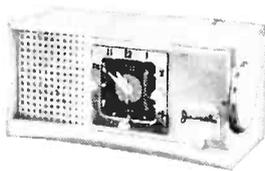
**5 Beautiful Models  
Available Immediately  
for  
Profitable Fast Turnover**

**SEE US AT THE  
HOTEL BLACKSTONE  
CHICAGO  
JANUARY 7 TO 11, 1952**

Right...  
Model 21C9-2  
21 Inch  
Mahogany Veneer  
Console



## **FAMOUS JEWEL RADIO LINE ADDS NEW MODELS**



In addition to a complete line of smartly styled table models; AC-DC-Battery portables; clock radios and radio-phono combinations... the Jewel Radio line now includes a smart new bed lamp-radio, a new clock radio and an effective "2 band" table model for short wave listeners. Write today for catalogue of complete Jewel Radio and TV lines.

# *Jewel*

# ... "Nu-Day" TV with "power vision"

... that moves fringe areas back into town!



Model 17T9-1  
17 Inch  
Mahogany Veneer  
Table Model



Right...  
Model 17C9-2  
17 Inch  
Mahogany Veneer  
Console

• Now... into *your* profit picture... comes the brilliant Jewel "Nu-Day" Television line. Years of experience in radio and electronics... combined with the very latest technical advances in television... made it possible for Jewel to perfect "Nu-Day" TV with "Power Vision"... *developed expressly for strongest reception in fringe areas!*

## IT'S JEWEL "NU-DAY" TV

...for **PICTURE PERFECTION!** Big, clear, non-fading, non-glaring image... in the popular 17 and 21 inch rectangular black tubes.

...for **ULTRA-ADVANCED CHASSIS DESIGN!** With provision for ultimate installation of UHF and color.

...for **DISTINCTIVELY SMART STYLING!** Striking cabinet designs in the Jewel tradition, created to blend with smart, decorator interiors.

...for **POPULAR PRICE RANGE!** Thorough analysis of TV market data determined our price range... aimed at widest popular acceptance.

...for **NEW PROFITS!** Alert dealers will take advantage of the "value-received" sales power of this new and profitable "Nu-Day" TV line.

"Nu-Day" TV—with "Power Vision"... moves fringe areas back into town!

# RADIO CORPORATION

10-40 45th AVENUE, LONG ISLAND CITY 1, NEW YORK

For professional splicing and cutting of magnetic recording tape . . . utilizing a method never before available

**Check these features**

THEY TELL YOU WHY IT WILL PAY YOU TO USE THE AMAZING "PRESTO-SPLICER"

- ✓ Makes a permanent splice which is not audible and requires no adhesive or cement
- ✓ Makes a clean 'butt-welded' splice, permitting critical, efficient splicing, without scraping or loss of tape material
- ✓ Can be used for a variety of fields—including radio, television and motion pictures
- ✓ Eliminates the need for re-recording after editing and splicing
- ✓ Permits the most critical synchronization of tape sound track with film
- ✓ Used by leading broadcasting stations throughout the nation

The revolutionary MT-1 Presto-Splicer can build plus profits for your magnetic recording department. Write today for additional information, instruction manual and other pertinent data to:

**PRESTOSEAL MFG. CORP.**

38-01 Queens Blvd., Long Island City, N.Y.

**SELLS ON DEMONSTRATION**  
**DUKANE**  
**MAGNETIC TAPE RECORDER**



**THE FINEST IN HIGH FIDELITY RECORDING**

*at LOW COST!*

**DEALERSHIPS AVAILABLE NOW!**  
**MAIL COUPON FOR INFORMATION TODAY!**

DUKANE CORP. Dept. RTJ-12 St. Charles, Ill.

Please send information on the Dukane Magnetic Tape Recorder.

I am interested in a dealership.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

ESTABLISHED AS "OPERADIO" 1922

## An Expert Reveals Some Magnetic Recording Sales "Secrets"

**A**FTER pioneering for over six years in the sale of magnetic recorders in the metropolitan New York and New England areas, Herbert Borschardt, president of Sonocraft Corp., feels that there is a vast untapped recorder sales market not only in the area which his distributing firm covers but throughout the country.

"Sonocraft specializes in the distribution of recording equipment," Mr. Borschardt points out, "and over the years we have built up a group of some 250 to 300 active dealers." He referred to dealers in metropolitan New York and Westchester, and others reaching up into New England. Among these active dealers the sales volume runs from as low as \$3,000 to as high as \$50,000.

"Successful selling of magnetic recorders," claims Mr. Borschardt, "is limited only by a dealer's willingness to go out and develop the market and then clinch sales in that market."

What the president of Sonocraft suggests to dealers is not beneath his own merchandising efforts. Sonocraft was started in 1945, operating out of modest headquarters, concentrating offices, showrooms, shipping and service under one roof. At that time fully trained engineers, who specialize in studio and broadcast equipment, gave the chief direction to the firm. But with the advent of tape and wire recording the emphasis at Sonocraft shifted to the sale of tape and wire home recorders.

Because few dealers had aggressively promoted recorders, Sonocraft had to do considerable spade work, pioneering in the metropolitan New York and hinterland markets. It nourished educational, industrial and religious markets down through the years. As dealers stepped forward to do their own promoting of magnetic recorders, Sonocraft gladly relinquished its role as salesman to ultimate consumers, taking over its preferred role of distributor. In time the distributing firm built up a dealer mailing, related to all phases of the specialized recording field, of some 1500 names.

Today two service engineers are maintained at the new location of the firm at 115 West 45th St., where the entire floor has been occupied by Sonocraft since it expanded to the new quarters in 1950. Forming the hard core of an elaborate and extensive service department, these engineers are

able to tackle any recorder service problem of any of the firm's many active dealers. This concentration on all major makes of recorders now on the market—both from the standpoint of dealer sales and dealer service—has been largely responsible for Sonocraft's rise to the pinnacle of eastern distributors in magnetic recorders.

The man who guides the destinies of Sonocraft, Herbert Borschardt, has a long and varied history of experience with the sound reproduction field. Back as far as 1926, he was with British Brunswick, Ltd. and Brunswick Records, in England. Later he was associated with the German Gramophone Co. in Berlin. In time he was with the French Polydor Co., Paris, which he managed until 1941, the year he came to the United States. There followed three years of operation of his own recording studio, until, in 1945 he took over the management of Recoton Corp., manufacturer of phonograph needles, recording tape and recording blanks.

The firm still operates its special sales department for schools, religious and industrial markets, which came into being under Borschardt's guidance. He points out that practically no school in his distributing area is without a recorder and that these schools need more. Universities, advertising agencies and industrial firms are swinging more and more to recorders. It remains for dealers to swing along with these needs and to sell to this specialized but widening market.

**Audio-Master Corp.**  
341 MADISON AVE., N. Y. 17, N. Y.

*Brings you a great new savings opportunity!*

**Mastertape**

Professional Broadcast Magnetic Tape, Plastic Base, 1200 ft. reel

**50% plus 10% OFF LIST PRICE**

Brown Oxide Tape.....(List Price \$5.50)  
NET TO YOU = \$2.48

In multiples of 10's only  
F. O. B. N. Y.



Special: Extra discounts for dealers ordering at once!

*Announcing* THE NEW AND TRULY BEAUTIFUL . . .

# Arvin Sleepytimer

Velvet Voice  Clock-Radio

With the New and Exclusive Arvin "Magnetenna"

- A stand-out in clean-lined, fine-style beauty
- World-famous Telechron clock movement
- Telechron Automatic Timer
- Handy outlet for small electrical appliances
- Arvin Radio superhet AC/DC circuit (clock in AC 60 cycle only)
- Five tubes including rectifier
- Exclusive "Magnetenna"—the built-in ferrite core rod-type antenna for finest reception from stations near or far
- Automatic volume control
- Magna-Bass amplifier
- Heavy duty permanent magnet type 5-inch speaker

*Radio and Television Division*

Arvin Industries, Inc., Columbus, Indiana

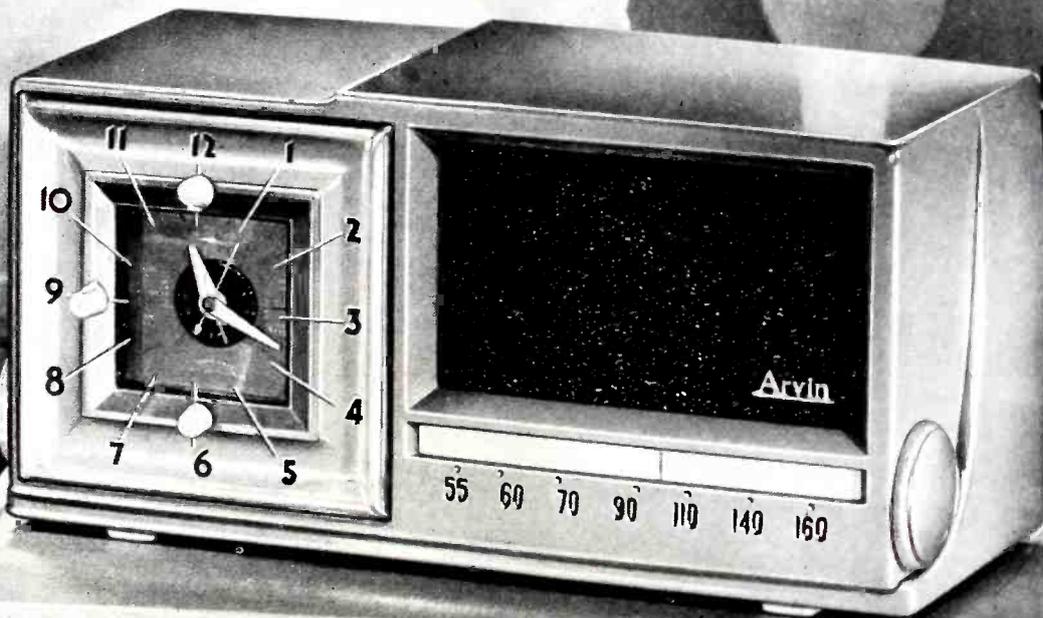
**\$39<sup>95</sup>**

Model 657-T,

Willow Green or Ivory

ABSOLUTE TOPS IN EVERYTHING BUT PRICE

All prices subject to change in accordance with OPS regulations



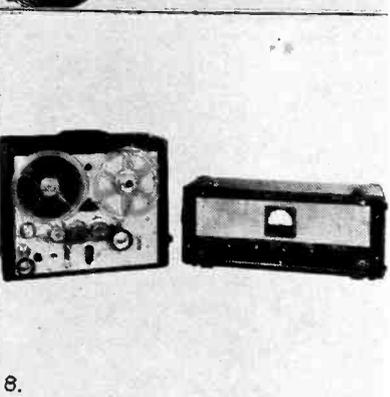
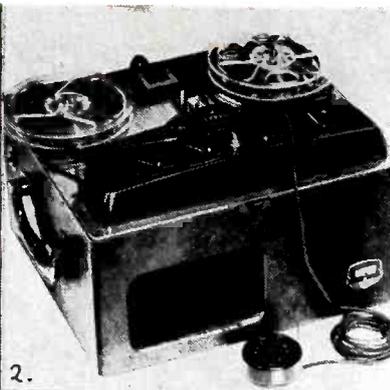
**Arvin:** AMERICA'S MOST COMPLETE RADIO LINE

16 Models: \$15.95 • \$16.95 • \$17.95 • \$18.95 • \$19.95 • \$22.95 • \$24.95 • \$27.95 • \$37.95 • \$39.95 • \$49.95 • \$59.95 • \$159.95 • \$169.95 • \$179.95

SEE THEM AT THE SHOW! Space 441-2 American Furniture Mart, January 7-18

# ROUNDUP OF MA

**There's a recorder for every need and purse being manufactured today**



## 1. PAMPA ELECTRONICS SALES CORP.

Weighing 34 pounds, this portable recorder has revers-a-matic feature. Standard 7-inch and 5-inch diameter reel operate with lid closed. Has crystal type microphone. Speaker impedance is 3.2 ohms.

## 2. AMPRO CORP.

Portable, dual-track recorder with 3¾-inch tape speed gives two hours playing time on 7-inch reel. Input channel for microphone, radio or phone connection. Microphone, 5" by 7" PM speaker, and jack.

## 3. BRUSH DEVELOPMENT CO.

Thirty to 60 minutes recording time on this portable, single-track unit. Available with 7½ or 3¾-inch tape speeds. Inputs for microphone, radio-phonio. Includes 6-inch PM speaker and crystal microphone.

## 4. CRESCENT INDUSTRIES

The 'Recordit' records up to one full hour and is push-button controlled. Has its own amplifier and 5¼-inch Alnico V speaker; 3-position tone control; output plugs for amplifier or input to radio-phonio combination.

## 5. WILCOX-GAY CORP.

Portable, single-track, dual-speed recorder with choice of 3¾ and 7½-inch or 1⅞ and 3¾-inch tape speeds. Records from mike, external radio or other source. Five by 7-inch speaker and jack for external speaker.

## 6. BELL SOUND SYSTEMS, INC.

This portable, dual-track recorder has tape speeds of 1⅞, 3¾ and 7½-inches per second. Includes crystal microphone, 6-inch PM speaker, inputs for microphone and radio-phonio, and headphone monitoring jack.

## 7. REVERE CAMERA CO.

Providing two hours of recording time on a 5-inch reel, this long-playing portable, dual-track recorder has a microphone and a 5 by 7-inch speaker. Instant start and stop lever for editing. Outputs for external speaker.

## 8. PRESTO RECORDING CORP.

Transport mechanism and amplifier which comprise this firm's PT-920 tape recorder. Former has 3-motor drive and separate recording and reproducing heads. Output, 10 watts. Two speakers mounted in amplifier for playback.

## 9. EICOR, INC.

Portable, dual-track recorder with tape speed of 7½-inches per second. Removable capstan permits conversion to 3¾-inches per second. Rewind speed, six to one. Crystal microphone and speaker included.

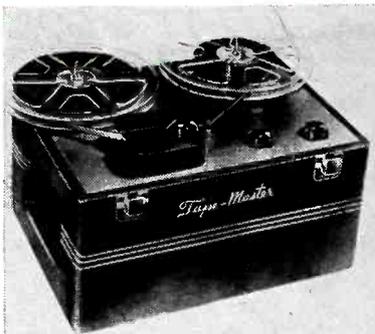
## 10. MARK SIMPSON MFG. CO., INC.

Portable, dual-track, dual-speed recorder arranged for instant change from 7½ to 3¾ inches per second. Up to two hours recording time on 7-inch reel. Six-inch PM speaker, microphone and radio-phonio inputs, external speaker.

# MAGNETIC RECORDERS

## 11. AUDIO-MASTER CORP.

This new "Tape-Master" is available either as a self-contained unit with its own 5¼-inch speaker and 4-tube amplifier, or with a preamplifier only, ready to plug into any amplifier, radio or television set.

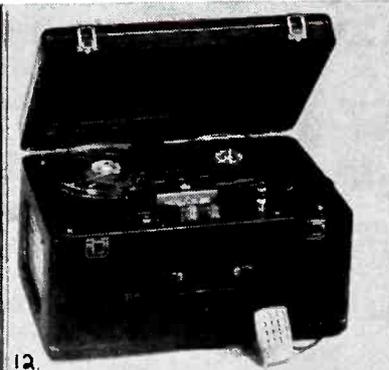


11.

## 12. CRESTWOOD RECORDER CORP.

A portable, dual-track recorder with 7½-inch tape speed and rewind time of less than two minutes. Microphone and radio-phonograph input channels. Includes crystal microphone and 6 by 9-inch speaker.

12.



## 13. WEBSTER-CHICAGO CORP.

This Webcor combination includes a magnetic recorder, either wire or tape, a portable amplifier, and a portable diskchanger, which plays all three speeds, all three record sizes.



13.



14.

## 14. AMPEX ELECTRIC CORP.

Either half-track or full-track recordings can be played back on this portable, dual-track recorder without changes in adjustment. Separate record and playback heads. Speeds of 15 and 1½ inches per second.

## 15. WEBSTER ELECTRIC CO.

Portable, dual-track recorder with 3¾ or 7½ inch tape speed, giving two or one hour recording time respectively on 7-inch reel. Input jacks for microphone and radio-phonograph. Output jack for external speaker.



15.



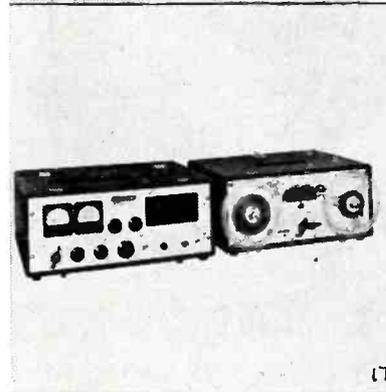
16.

## 16. DUKANE CORP.

One hour recording on a 7-inch reel with this portable tape recorder. Rewinds complete 7-inch reel in 80 seconds. Has automatic erasing. Seven watts of audio power. Is adaptable for rack mounting.

## 17. MAGNECORD, INC.

Portable, single-track recorder, 115 and 7½-inch tape speeds. Record playback amplifier. Low impedance mike input, bridging input, monitor speaker, 0-level output terminal, VU meter, terminal for external speaker.



17.



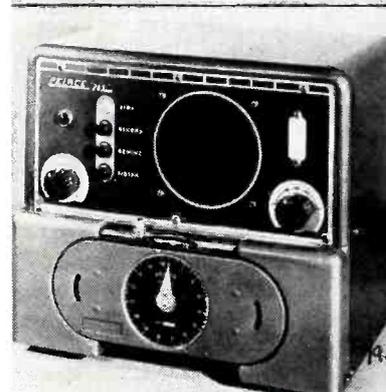
18.

## 18. BERLANT ASSOCIATES

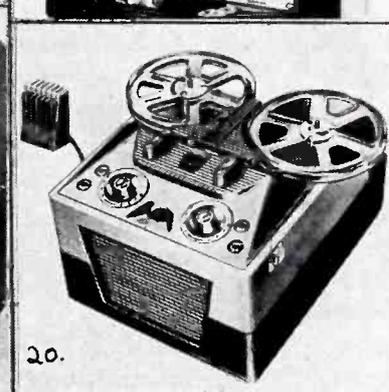
This "Concertone" network recorder operates completely from remote push button control stations. Has provision for installation of up to five magnetic heads. Drive mechanism, amplifier and microphone mixed engineered for complete interchangeability.

## 19. PEIRCE WIRE RECORDER CORP.

This executive dictation is designed for error-free dictation. Push button controls enable dictation to change any unwanted dictation merely by redictating. Can record up to one hour without change of media.



19.



20.

## 20. THE PENTRON CORP.

Portable, dual-track, dual-speed unit, providing two hours recording on 7-inch reel. Fast forward and rewind ratio, 20 to one. Outputs for headphones, external speaker and PA system. Six-inch PM speaker, crystal mike.

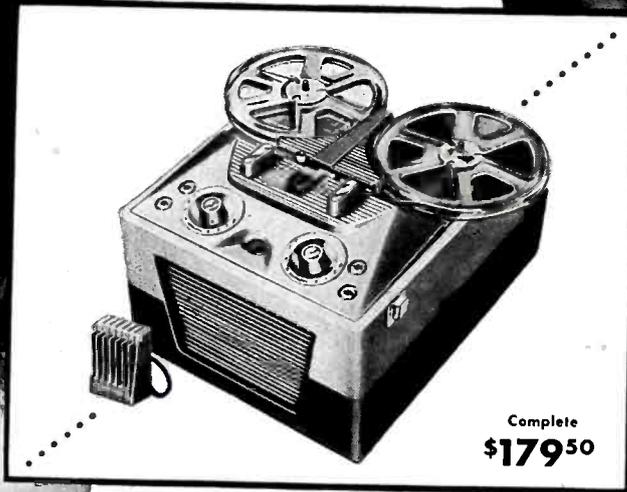
## RECORDING TIME FOR VARIOUS TAPE SPEEDS AND REEL SIZES

| REEL SIZE       |              | 3"  | 4"           | 5"           | 7"            | 10½"          | 14"            |
|-----------------|--------------|---|--------------|--------------|---------------|---------------|----------------|
| LENGTH IN FEET  |              |   |              |              |               |               |                |
| Audiotape       |              | 150   | 300          | 600          | 1250          | 2500          | 5000           |
| Other Types     |              | 150   | 300          | 600          | 1200          | 2400          | 4800           |
| RECORDING SPEED |              | TOTAL RECORDING TIME (Based on Audiotape footage) |              |              |               |               |                |
| 17/8" per sec.  | Single Track | 16 min.   | 32 min.      | 1 hr. 4 min. | 2 hr. 13 min. | 4 hr. 26 min. | 8 hr. 52 min.  |
|                 | Dual Track   | 32 min.   | 1 hr. 4 min. | 2 hr. 8 min. | 4 hr. 26 min. | 8 hr. 52 min. | 17 hr. 44 min. |
| 3¾" per sec.    | Single Track | 8 min.  | 16 min.      | 32 min.      | 1 hr. 6½ min. | 2 hr. 13 min. | 4 hr. 26 min.  |
|                 | Dual Track   | 16 min.   | 32 min.      | 1 hr. 4 min. | 2 hr. 13 min. | 4 hr. 26 min. | 8 hr. 52 min.  |
| 7½" per sec.    | Single Track | 4 min.  | 8 min.       | 16 min.      | 33⅓ min.      | 1 hr. 6½ min. | 2 hr. 13 min.  |
|                 | Dual Track   | 8 min.  | 16 min.      | 32 min.      | 1 hr. 6½ min. | 2 hr. 13 min. | 4 hr. 26 min.  |
| 15" per sec.    | Single Track | 2 min.  | 4 min.       | 8 min.       | 16½ min.      | 33⅓ min.      | 1 hr. 6½ min.  |
|                 | Dual Track   | 4 min.  | 8 min.       | 16 min.      | 33⅓ min.      | 1 hr. 6½ min. | 2 hr. 13 min.  |
| 30" per sec.    | Single Track | 1 min.  | 2 min.       | 4 min.       | 8¼ min.       | 16½ min.      | 33⅓ min.       |
|                 | Dual Track   | 2 min.  | 4 min.       | 8 min.       | 16½ min.      | 33⅓ min.      | 1 hr. 6½ min.  |

*Chart Reproduced through Courtesy of Audio Devices, Inc.*

# tops!

## IN EYE APPEAL IN EAR APPEAL



## ALL *NEW* PENTRON TAPE RECORDER

The Smartly Styled New MULTI-SPEED combines beauty with incomparable performance... the finest in portable recorders. Records anything, plays back instantly with a tone quality equal to the finest FM radio. Big market in homes, schools, churches and business. *Hurry! Be first to Profit... Send for Details Today!*

*Weights Only 27 lbs. • 2 Hours Continuous Recording or Playback • Editing Key Corrects while Playing • Push-Button 3¾ and 7½" Speeds Plus Super-Speed Rewind and Forward • Automatic Amplifier Equalization in Either Speed • Available with Dual Track or Single Track Heads*

**MULTI-SPEED  
PENTRON  
TAPE RECORDER**

THE PENTRON CORP. 221-RJ EAST CULLERTON ST., CHICAGO-16, ILL.

*Send me complete information and literature.*

Name..... Street.....  
Firm..... City..... State.....

### How to Make That Recorder Market Grow

*(Continued from Page 34)*

case histories and laboratory findings and dictate the treatment prescribed during office calls for later transfer to office records.

Lawyers and law enforcement officers record interviews and case histories. Recordings have been admitted as evidence in trials. Referees in bankruptcy and masters in chancery find the recorders useful to keep a record of their hearings.

Professional musicians and many amateur musical groups use recordings of their rehearsals to polish their performance. Preachers and lecturers use recorders to improve their delivery. Churches record sermons or entire services to take to the homes of shut-ins or to send services to churches that have no minister.

Schools are another large and only slightly developed market for magnetic recorders. Teachers of languages, public speaking and many other courses have found that pupils are more interested and learn much faster if they can hear their efforts. Music teachers, both school and private, have found that the "electronic memory" method of instruction, in which the lessons are recorded and played back during practice, speeds pupils' progress as much as 30 to 50 per cent.

All of these and many more specialized applications, plus the vast market offered by the general public, add up to sales possibilities so great that doubling the current annual sale of 20 to 25 million dollars in magnetic recorders is expected within a few years. As more dealers recognize the business to be done in this field and gear themselves to go after it intelligently and persistently, the long-range potential of this war product turned to civilian use is almost unlimited.

**discs or tape**  
 it's **audio** for  
 consistent, uniform  
 quality



**audiodiscs\*** For more than 12 years, Audiodiscs have consistently set the standards for the finest professional performance in instantaneous and master disc recording. Their flawless perfection, wide-range frequency response, extremely low surface noise at all diameters and complete freedom from humidity effects are just a few of the reasons why Audiodiscs are first choice with professional recordists from coast to coast. They know from long experience that they can depend on Audio for the *consistent, uniform quality* that is so essential in modern sound recording work.

**audiotape\*** Wherever professional-quality magnetic recordings are made, the trend is to Audiotape. That's because Audiotape is made *by* audio engineers *for* audio engineers — with the right combination of properties for finest performance in any tape recorder. Produced on Audio's highly specialized precision coating machines, Audiotape has achieved unequalled *uniformity* of output — plus maximum output with minimum distortion at practical bias range. What's more, it's less sensitive to bias changes, has no audible low-frequency modulation noise, and is guaranteed *splice-free* in both 1250 and 2500 ft. sizes, plastic base. In every respect, Audiotape meets the exacting standards of quality and performance which have characterized Audiodiscs for more than a decade.

**audiofilm\*** extends the advantages of finest quality magnetic recording to motion picture and TV applications. Available in 16mm, 17½mm and 35mm sizes.

**audiopoints\*** are precision matched recording and reproducing styli available in types and sizes to meet the precise requirements for every phase of disc recording work.

**NEW** Free  
 Handbook on  
 The Fundamentals  
 of Magnetic Recording



This completely new and up-to-the-minute technical manual contains 50 pages of valuable information on basic magnetic principles and tape performance. Professional recordists will find it extremely interesting and helpful — an important addition to their reference files. A request on your business letterhead will bring you a free copy by return mail.

Write to Audio Devices, Dept. J3.



\*Trade Mark

**AUDIO DEVICES, Inc.**

444 MADISON AVE., NEW YORK 22, N. Y.

Export Dept.: 13 East 40th St., New York 16, N. Y., Cables "ARLAB"

*Audiodiscs are manufactured in the U.S.A. under exclusive license from PYRAL, S. A. R. L., Paris*



**From one of television's**



*Greatest TV set in TV history. Can now demonstrate on indoor rabbit ear antenna. It's another RCA year.*

**F. K. Barch,  
Columbia, Pa.**

*The top TV set for 1952. Quality and performance superior to all competition.*

**McLaren's,  
Mahanoy City, Pa.**

*Oh Brother, it's terrific, haven't lost a sale against competition, best TV yet.*

**Radio Servicenter,  
Harrisburg, Pa.**



*Very well pleased—picture quality best of all. Audio Superior.*

**Garden Spot Appl.,  
Lititz, Pa.**

# *Dealers report* **on RCA VICTOR** *Super Sets with* **Picture Power**

FROM HARRISBURG, PA., where television is challenged to its utmost performance by every receiving problem in the book, come these dealers' reports that Super Sets with Picture Power proved to give the strongest, sharpest picture in TV history.

Picture Power is selling fast . . . opening a new market in these areas where good reception was formerly thought impossible. Here is the startling improvement you've been waiting for to sell the television "hold-out" buyers on your list.

And remember—these enthusiastic reports from poor reception areas mean Super Sets will naturally deliver the ultimate in picture perfection in good areas.

**RCA VICTOR—World Leader**

# toughest testing grounds



*Finest picture I have ever seen on a 17-inch set. It is perfect.*

**Jac. B. Fisher,  
Elizabethtown, Pa.**



*This is the finest TV set on the market. Have yet to lose a sale to any competition.*

**R. W. McCreary,  
Denver, Pa.**

*Superior to competitive sets in picture-hold and noise rejection.*

**Carl Arnold,  
Middletown, Pa.**

*For picture and tone as well as power—RCA is in a class by itself.*

**Leader's Music House,  
Dallastown, Pa.**

*It's one swell set. It's the best on the market.*

**Longenecker  
Pharmacy,  
Christinna, Pa.**



*RCA Victor Super Set television with Picture Power is tops in every way in our area.*

**Hostetter's Radio  
& TV Service,  
Annville, Pa.**



*A wonderful line—works without booster, only set that gives satisfactory performances in our area.*

**Gettysburg Appl.,  
Gettysburg, Pa.**



*We at Freed's think the new RCA Victor Super Sets with Picture Power are tops in the industry.*

**Freed Motor Co.,  
Pottsville, Pa.**

Visit the RCA Showroom, space 540-A at the Chicago Mid-Winter Furniture and Home Furnishings Market—January 7-18... or visit your RCA Distributor.

**RCA VICTOR**    
DIVISION OF RADIO CORPORATION OF AMERICA

*in Radio... First in Recorded Music... First in Television*

# New Products for 1952 Business

Radios  
Television

Consoles  
Recorders

Phonographs  
TV Accessories

## New Motorola TV

Manufactured by Motorola, Inc.,  
4545 Augusta Blvd., Chicago 51, Ill.

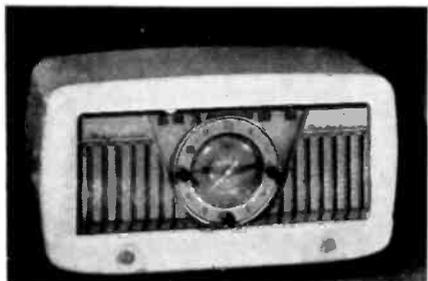


One of the latest in this firm's line of new 1952 television models, this TV receiver features a full-sized, 17-inch rectangular picture tube. Optical and electrical features include a glare-free picture screen, instantaneous tuning, and improved distance reception. Provision for all-channel Ultra High Frequency tuner at extra cost.

Say you saw it in *Radio & Television Journal*, January, 1952

## Majestic "Radalarm"

Mfd. by Majestic Radio & Television, Div.  
of the Wilcox-Gay Corp., Brooklyn, N. Y.

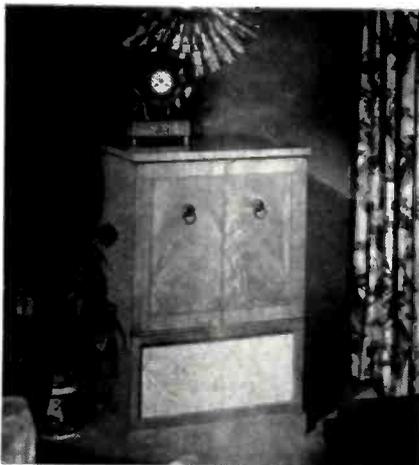


This new clock-radio not only serves as a musical alarm but also becomes a turn-on device for electric appliances. It has a "Sleep-O-Matic night switch, permitting up to 60 minutes of music before retiring with an automatic shut-off. Front face of gold plastic. Radio is 5-tube type. Cabinet in ivory or walnut plastic.

Say you saw it in *Radio & Television Journal*, January, 1952

## Crosley's "David Garrick"

Manufactured by Crosley Division,  
Avco Mfg. Corp., Cincinnati, Ohio

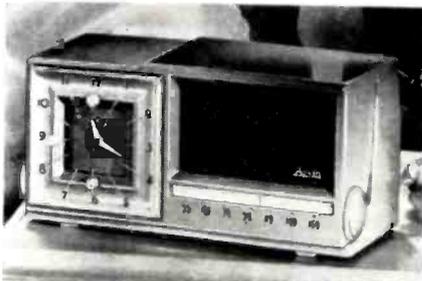


The "David Garrick" is one of some 21 models in the new 1952 line of Duo-Frequency television receivers made by this firm. Features cabinetry executed in 18th Century design, which is made available in either blond finish or mahogany veneer. It has a 20-inch picture tube.

Say you saw it in *Radio & Television Journal*, January, 1952

## Arvin's "Sleepytimer"

Manufactured by Arvin Industries, Inc.,  
Columbus, Indiana



This five-tube radio, including rectifier, features a Telechron electric clock with automatic timer. "Sleep switch" automatically turns off radio up to one hour after setting and turns set on automatically at pre-set time. Has "magnetenna," a built-in red antenna with ferrite core. Also has appliance outlet on rear panel.

Say you saw it in *Radio & Television Journal*, January, 1952

## RCA's "Caldwell"

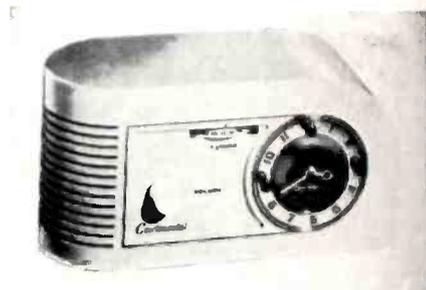
Manufactured by RCA Victor Division,  
Radio Corp. of America, Camden, N. J.



An open-faced television console featuring a 17-inch rectangular picture tube, the "Caldwell" is powered by the 'Super Set' chassis. Intercarrier sound system tunes pictures and sound simultaneously. Cabinet is of contemporary styling and is designed to harmonize with any time decor. Comes in mahogany, walnut, or lined oak.

## Continental Radio-Clock

Distributed by Al Middleman,  
55 West 42nd St., New York



Featured in this new radio-clock combination are a Sessions Automatic clock unit, a 5-tube superheterodyne circuit, and Alnico 5 permanent magnet speaker. Plastic cabinet comes in either ebony or ivory finish. Measures 12 inches by 6 inches by 4½ inches, and weighs five pounds.

Say you saw it in *Radio & Television Journal*, January, 1952

THEIR CHOICE IS

*Regency*

WILLIAM E. CARROLL  
PRESIDENT SIMPSON ELECTRIC COMPANY  
SIMPSON  
CHAIRMAN OF THE BOARD  
PHOTOGRAPHED IN MR. CARROLL'S HOME



**LARGEST SELLING BOOSTER AT ANY PRICE**

## Stromberg-C's "Newcastle"

Manufactured by Stromberg-Carlson Co.,  
Rochester, N. Y.

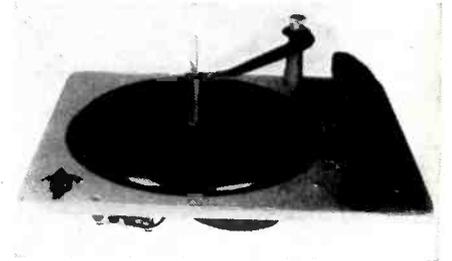
Featuring a 24-inch picture tube, this television console has the firm's top tuning development, whereby controls are concealed by fall board at top front edge of cabinet. Uses a 12-inch permanent magnet speaker. Has full-length doors. Swirl mahogany veneers are hand-rubbed. Phono jack in rear of chassis.

Say you saw it in *Radio & Television Journal*, January, 1952



## New Collaro Changer

Distributed by Rockbar Corp.,  
13 E. 40th St., New York 16, N. Y.



This new three-speed record changer uses a 4-pole motor, for reduction of magnetic hum pick-up and turntable rumble. Turntable sits on ball race, to insure constant speed. Positive drive and special finish on motor pulley reduces slipping. New muting device employed during changing cycle. Spring-lock drive used during changing cycle makes changer jam-proof.

Say you saw it in *Radio & Television Journal*, January, 1952

**MORE TV  
OUTLETS  
PER  
DOLLAR!**

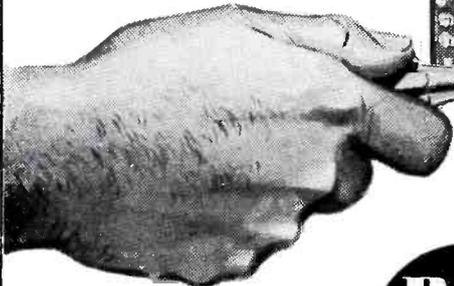
# AMPLIFIED, ALL-CHANNEL MASTER ANTENNA SYSTEMS FOR 2 TO 2000 TV SETS

**NO** Special connectors  
**NO** Matching transformers  
**NO** Engineers  
**NO** Individual channel equipment

**INSTALLED WITH THE  
TURN OF  
A SCREW**

**BLONDER-TONGUE** systems are based on the use of "no loss" Distribution Amplifiers which split the signal from the antenna into the desired number of outlets... all having the same signal level and picture quality as though each TV set used the antenna alone.

The B-T Automatic, All-Channel systems, using three basic units in any desired number and combination, can be easily installed by any TV service man.



**DISTRIBUTION AMPLIFIER, MODEL DA8-1-M**  
8 TV Outlets  
Amplified and Isolated  
List Price \$87.50

Combine these B-T units to serve up to 2,000 sets from 1 antenna.



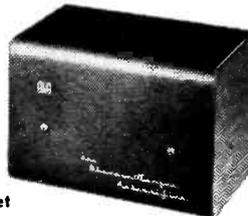
**B-T HOME ANTENSIFIER MODEL HA-2-M**



**Model #CA-1-M**  
Commercial Antensifier  
(30 Times Gain)  
Use As Pre-Amplifier, Line Amplifier or de-luxe Booster  
List Price \$77.50



**MODEL #DA2-1-M**  
Distribution Amplifier  
2 TV Set Outlets  
List Price \$39.50



**Finest All-Channel TV Booster. Fully Automatic, 16 Times Gain. In Metal Cabinet**  
List Price \$57.50

**FREE INSTRUCTION BROCHURE ON MASTER ANTENNA SYSTEMS..Write Today. Dept. J-2**

**Blonder-Tongue Labs., Inc. Mt. Vernon, N. Y.**

## Hudson's New Kiddie Phono

Mfd. by Hudson Electronics Corp.,  
110 E. 3rd St., Mt. Vernon, N. Y.



The latest addition to this firm's Junior Juke kiddie phonograph line is Model 312 pictured above. It lights up when turned on and is finished in ivory lacquer. It has three speeds, a Navy blue turntable and pick-up. Phono comes with convenient cover. It is decorated with fuzzy-wuzzy decals.

Say you saw it in *Radio & Television Journal*, January, 1952

# the *Tele King* story for '52

## Faster Sales and Bigger Profits!

**PRICED** to give you greater net profits!

Tele King gives you the biggest markup in the industry! With this tremendous margin you can beat local competitive prices, attract more customers and increase your volume. With Tele King you make the big net profits that can't be matched by any other line!

**ENGINEERED** for outstanding performance!

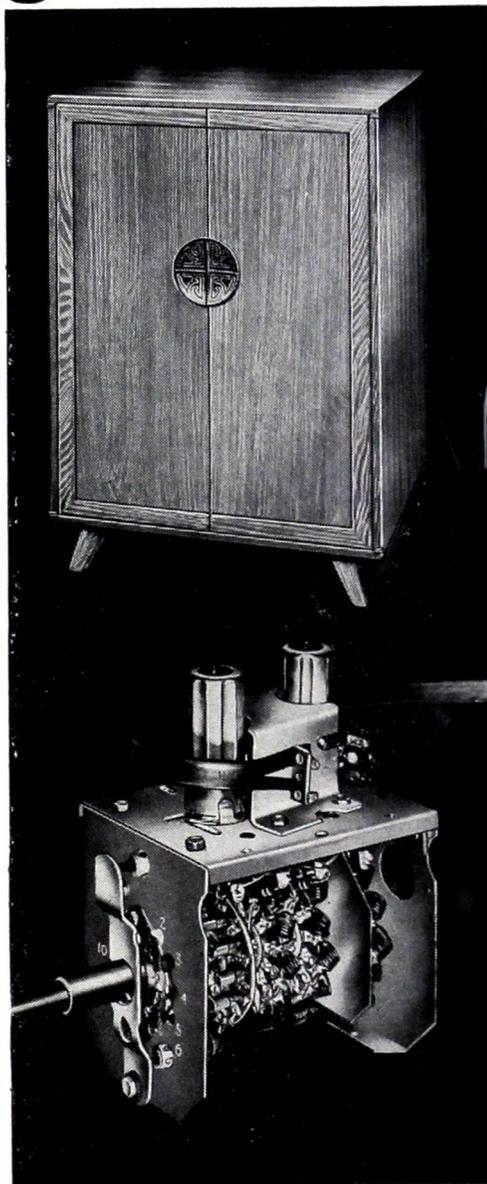
The new Tele King "Clear Channel Tuner" is the greatest advance in television history! Engineered to bring in the sharpest, clearest, steadiest pictures in "difficult" and "fringe" areas! When your customers compare the sensational Tele King picture, they'll quickly agree that Tele King is television at its best!

**STYLED** to attract quick sales!

A group of America's leading furniture designers and decorators have styled Tele King cabinets with incomparable "sales appeal". Each model is a superb example of luxurious cabinetry and magnificent craftsmanship. Tele King is styled to catch the eye and sell fast!

## SALEABILITY THAT CAN'T BE BEAT!

Tele King gives you more than markup alone. We back you up with sets that have outstanding "buy-appeal". We know when sets don't move off your floor and you have to make costly repair trips — profits go down the drain! With Tele King you're selling America's No. 1 profit line! Tele King is styled for the greatest consumer acceptance, engineered for service-free performance and priced for quick sales. This unbeatable combination adds up to greater customer satisfaction and more actual net profits for you!



**DEALERS:**

For information about a Tele King franchise, see your local distributor or write direct to the factory.

**DISTRIBUTORS:**

A number of distributor franchises are available in choice areas. Write today for complete details.

# Tele King

601 West 26th Street, New York 1, N. Y.

WE BEST IN TELEVISION — AT ANY PRICE!

See the new 1952 TELE KING Line at Chicago Furniture Show, January 7 to 17th, 1952 • The Stevens Hotel, Chicago, Illinois

## New Equipment for Television Service and Installation

The efficient use of the latest equipment in the installation and servicing of television receivers is one of the major factors in deciding whether the service operation will be profitable. Each month, Radio and Television JOURNAL carries a large volume of advertisements from manufactures of TV picture tubes, boosters, antennas, rotators, and all types of service accessory equipment which can help you in your business. We suggest that you study these advertisements carefully, cut out those which are of interest to you, and write directly to the manufacturer. The intensive use of our advertising columns is the key to operating in the black.

# STOP

### MR. "Q" CAN ASSURE YOU OF A SUBSTANTIAL SUPPLY OF CATHODE RAY TUBES



| Type   | Description   |
|--------|---|
| 10BP4A | .....Gray Face  |
| 12LP4A | .....Gray Face  |
| 14CP4  | .....Rectangular, Gray Face   |
| 16AP4A | .....Metal-Glass, Gray Face   |
| 16CP4A | .....Gray Face  |
| 16DP4A | .....Gray Face  |
| 16JP4A | .....Gray Face  |
| 16KP4A | .....Rectangular, Gray Face   |
| 16GP4A | .....Metal-Glass, Gray Face   |
| 16ACP4 | .....Rectangular, Gray Face, Low Voltage Electrostatic              |
| 17BP4  | .....Rectangular, Gray Face   |
| 17KP4  | .....Rectangular, Gray Face, Low Voltage Electrostatic              |
| 17UP4  | .....Rectangular, Gray Cylindrical Face                             |
| 17SP4  | .....Rectangular, Gray Cylindrical Face, Low Voltage, Electrostatic |
| 19AP4B | .....Metal-Glass, Gray Face   |
| 19BP4A | .....Glass, Gray Face   |
| 20CP4A | .....Rectangular, Gray Face   |
| 20JP4  | .....Rectangular, Gray Face, Low Voltage, Electrostatic             |
| 21EP4  | .....Rectangular, Gray Cylindrical Face                             |
| 21KP4  | .....Rectangular, Gray Cylindrical Face, Low Voltage, Electrostatic |

Write For "TV-Q"'s New Picture Tube "Savings Plan" That Means More Dollars For You!

A FEW TERRITORIES OPEN FOR MANUFACTURER'S REPRESENTATIVES & DISTRIBUTORS

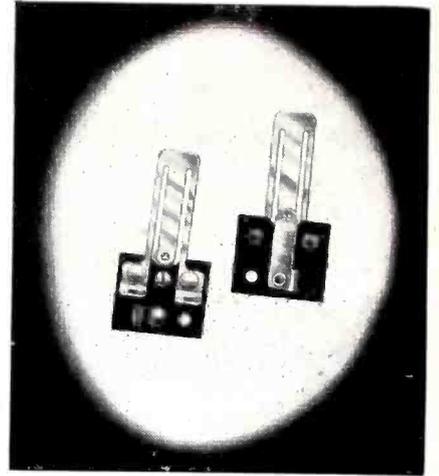
**TV-Q**

## RECEIVING TUBES TV-Q MASKS

THERE'S NO SUBSTITUTE FOR "QUALITY"

**Custombilt Corp., Tube Division**  
170 Fifth Avenue, Hawthorne, New Jersey

**LaPointe's Thermal Switch**  
Mfd. by LaPointe Plascomold Corp., Windsor Locks, Conn.

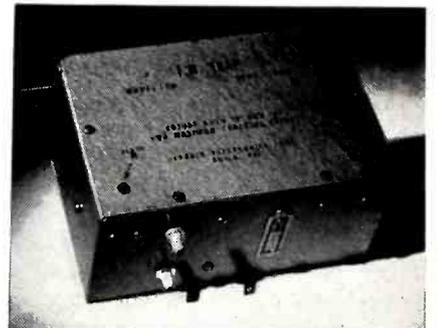


For remote on-off control of auxiliary electrical circuits, this thermal switch permits switching without manual aid of such circuits as that of a TV booster. Eliminates special wiring and switching equipment. Small, compact, easily installed, pure silver-to-silver contact, mechanical stability.

Say you saw it in Radio & Television Journal, January, 1952

### Jerrold High "Q" Trap

Manufactured by Jerrold Electronics Corp., Philadelphia, Pa.



Designed to eliminate FM interference from television reception, this High "Q" Trap is one of four new ones developed by the firm. Model TFM, shown, eliminates FM signals; TLB traps out adjacent-channel low band TV signals; THB for high-band TV, and "T Special" is custom built to eliminate interfering frequencies other than FM and VHF television.

Say you saw it in Radio & Television Journal, January, 1952

**DOMESTIC SERVICE**  
 Check the class of service desired; otherwise this message will be sent as a full rate telegram

|                    |              |
|--------------------|--------------|
| FULL RATE TELEGRAM | SERIAL       |
| DAY LETTER         | NIGHT LETTER |

**WESTERN UNION**

|                |                 |
|----------------|-----------------|
| FULL RATE      | LETTER TELEGRAM |
| VICTORY LETTER | DAY LETTER      |

W. P. MARSHALL, PRESIDENT

|                      |              |           |                          |            |
|----------------------|--------------|-----------|--------------------------|------------|
| PO. NO. & L. OF SVC. | PD. OR COLL. | CATH. NO. | CHARGE TO THE ACCOUNT OF | TIME FILED |
|                      |              |           |                          |            |

**GET SET**

**FOR THE MOST DRAMATIC**

**FEATURE PACKED**

**VALUE PACKED**

**PROFIT PACKED**

**PRODUCTS IN APPLIANCE HISTORY...**

# It's PHILCO Again in 1952

- ★ ADVANCED DESIGN REFRIGERATORS
- ★ AIR CONDITIONERS ★ ELECTRIC RANGES
- ★ BALANCED BEAM TELEVISION
- ★ RADIOS AND RADIO-PHONOGRAPHS

ENTHUSIASTIC Philco distributors throughout the nation are now raising the curtain on the most revolutionary advances in the appliance industry. New in engineering concepts... new in designs... new in features... and, again, unmatched in quality, performance and consumer appeal.

Yes, once again, Philco offers the very finest of products, and the *greatest merchandising and profit opportunities* in the industry.

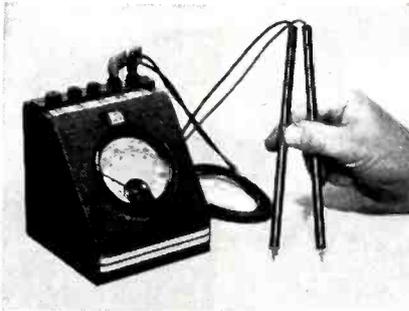
Get set for the big news of 1952. See for yourself why Philco for '52 is the most profitable, all-year-round franchise in the appliance business.



### New Insuline Test Leads

Mfd. by Insuline Corp of America,  
3602 35th Ave., Long Island City I, N. Y.

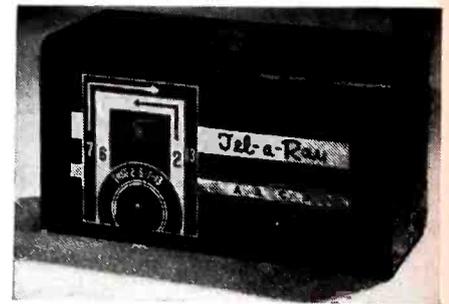
Eight inches long and made of polished hard rubber, this pair of extra long handled test leads is designed to speed up and simplify circuit probing in complicated radio and television chassis. Handles are fitted with short, sharp-pointed tips to avoid short-circuiting. Flexible, 48-inch leads, with standard phone tips, can be used with most types of test equipment.



Say you saw it in *Radio & Television Journal*, January, 1952

### Tel-A-Ray Booster

Manufactured by Tel-A-Ray Enterprises, Inc.,  
Henderson, Kentucky



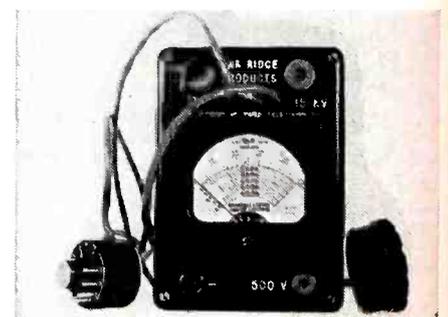
This new antenna switching booster receives signals from four antennas and can be switched from one to another. Equipped with four input terminals for four separate antennas, and four sets of terminals for operation of up to four antenna-mounted preamplifiers. Automatic switch turns set on and off with receiver. Case is all-metal type.

Say you saw it in *Radio & Television Journal*, January, 1952



### Oak Ridge's "Cathette"

Manufactured by Oak Ridge Products,  
Long Island City I, N. Y.



A picture tube tester, the Cathette 106 tests tubes right in the TV set. Checks both magnetic and electrostatic tubes. Tester provides for high voltage breakdown, beam current measurement, electron gun conductance, shorts between elements. Measures 5½ inches by 3¾ inches by 2¼ inches.

Say you saw it in *Radio & Television Journal*, January, 1952

FOR  
perfection

IN

reception

IN

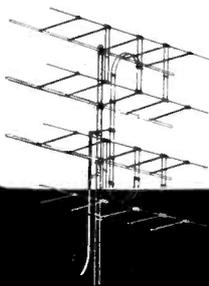
fringe areas

INSTALL

**FINCO** 20 in 1

## TV ANTENNA

- Clear pictures up to 120 miles and more from station!
- 12 driven elements on high band!
- High gain — low noise!
- 8 driven elements on low band!
- One antenna—one transmission line!
- Total weight only 8 lbs.!



The new patented FINCO Model # 400 20-in-1 Co-Lateral Antenna is constructed on an entirely different principle than any other unit in the market today. Thousands of FINCO installations are giving TV owners perfect reception in fringe areas over 100 miles away from broadcasting stations. To provide complete TV satisfaction to customers in fringe areas, use FINCO every time!

**THE FINNEY COMPANY**

4612 ST. CLAIR AVE. • CLEVELAND 3, OHIO

260  
260  
260  
260  
260  
260  
260  
260  
260  
260



The Simpson volt-ohm-milliammeter that outsells all others combined.

# Now! EXTRA POWER!

FOR SINGLE CHANNEL RECEPTION . . .



**GIVES EQUAL GAIN  
TO A  
DOUBLE-STACKED  
5 ELEMENT  
YAGI ARRAY**

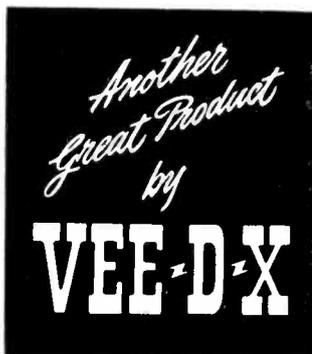
VEE-D-X engineers have perfected this entirely new 8 element Yagi to meet the increasing demands throughout the trade for a single bay antenna that produces as much gain as a stacked Yagi array, yet lower in cost, easier to install, and better in appearance. Long John is the answer.

*at lower cost!*

**ONLY 12<sup>50</sup> LIST**

CHANNEL 7-13

- Costs less than a double-stacked array
- Higher front-to-back ratio eliminates co-channel interference
- Faster, easier to install than stacked arrays
- Full 6 megacycle band width
- Better roof-top appearance
- Rugged pre-assembled construction



**THE LA POINTE - PLASCOMOLD CORP.**  
*Windsor Locks, Connecticut*

Gentlemen:

Send me complete information on Long John

NAME .....

COMPANY NAME .....

STREET .....

CITY .....ZONE.....STATE.....

JOBBER'S NAME .....

## A. I. E. E. Meeting Features Color TV

The A. I. E. E. Subcommittee on Electronic Tubes has organized two technical sessions for the A. I. E. E. Winter General Meeting at the Hotel Statler, New York City, Jan. 21-26, 1952. It is believed that both should attract large engineer audiences because of the timely subjects to be covered.

A session on "Color Tubes for Television" will include papers on both the R. C. A. and Lawrence color tubes for television receivers. Not only will technical papers describing the two tubes be presented, but there will be a demonstration in connection with the delivery of the R. C. A. color tube paper. The Lawrence tube will also be exhibited.

In addition to the two papers describing these two types of color picture tubes, the session will include two more papers on color television subjects, one dealing with colorimetry and one on the subject of color phosphors for television picture tubes.

A session on recent developments in electron emitters for tubes will be held. Authorities on the subject of emitters will present four papers on the subject.

## Bright TV Year

Signs of what lies ahead in 1952 for the television industry continue to crop up in the form of a pervading optimism among television set manufacturers.

At a recent semi-annual distributors' convention, William Balderston, president, Philco Corp., highlighted his remarks by predicting that "1952 can be Philco's greatest year."

The Philco president felt that the buying public would buy more and more in terms of top quality products, viewing their purchases as long-term ones. He estimated that total receiver production for 1952 may hover around 5 million; compared to 7½ million in 1950 and 5,300,000 in 1951. But stepped-up sales plus Government contracts would set new records for the years.

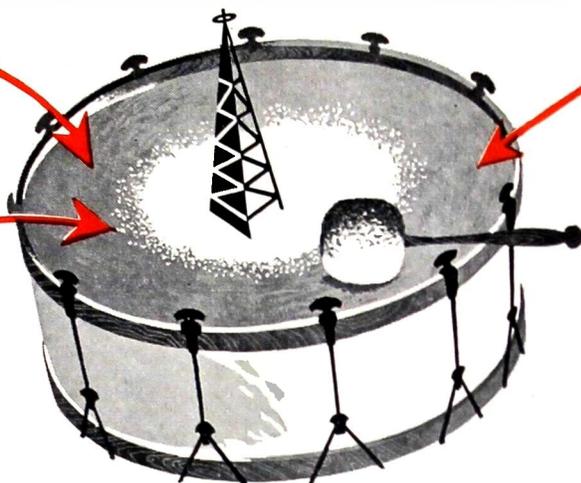
In reviewing the business conditions encountered in 1951, Mr. Balderston felt that the summer slump gave management an opportunity to meet the challenge and to season and harden its organization. After attaining its second greatest sales year with sales exceeding \$310,000,000, Philco looked ahead to greater 1952 sales.

# Get Out! Out! Out! and you'll make money

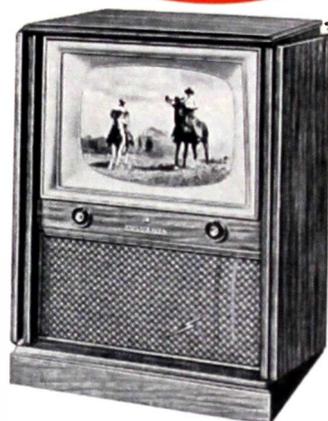
## with SYLVANIA TV

TRIPLE  
YOUR TERRITORY  
HERE IN THE  
FRINGE AREAS

ALL THIS,  
AND THE TERRITORIES  
YOU SHARE WITH  
COMPETITION TOO!



IT'S ANOTHER  
TELEVISION  
BOOM!



## HOW FAR ARE YOU WILLING TO GO TO MAKE REAL MONEY NOW?

PEOPLE won't buy television sets right now? What people? The ones that came in and bought them off the floor without a demonstration? People that lived where most any receiver would do so that even though you sold plenty of them you still got a lot of hard competition? Those were great days to be selling any TV line.

And the great days and big profits are coming back again for Sylvania dealers. We know that *it will be sooner than you think* with Sylvania.

But why wait a minute? *Right now* there are rich profits to be made, as large as there ever were in the business, if you sell the tremendous new market that is wide open in the "fringe area."

The Sylvania line is the one line that guarantees you can offer clear "fringe area" reception. These people haven't bought, or aren't satisfied, but they want TV. What a sales opportunity!

## AND SYLVANIA IS THE BEST BUILT SET ANYWHERE

Look at these Features:

Movie-Clear\*  
Pictures

Studio-Clear\*  
Sound



Picture—Sylvania picture tube—the finest black tube made—sharp from edge to edge with sharp, clear definition from black to white . . . Chassis—Bigger, runs cooler, lasts longer. A minimum of 20 tubes, plus picture tube and four rectifiers . . . Interference Eliminated—Exclusive Sylvania "Triple-Lock" keeps picture in, interference out . . . Perfect Interlace . . . No high voltage shorts—Picture tube high voltage is *barrier-insulated* . . . Big speakers, fool-proof controls—Built-in Antenna . . . No-glare tilt face plate . . . Equipped for quick conversion to UHF . . . Cabinets—A luxury line of cabinets with eye-appeal that starts to sell them from the window and on the floor before you demonstrate.



Ask your service man about Sylvania. It's the service man's line.

A complete line—Television Combinations, Consoles, Table Models and Radios.

\*Sylvania Trademark

### Read what an Allentown, Pa. woman said:



"I just had to write and tell you how pleased we are with our 1951, 17-inch Sylvania.

"Living in a 'fringe area' we hesitated buying a set until something could be done about eliminating this trouble, but with the possibility of not being able to buy a set until after the crisis—we plunged and am I happy we did.

"We are envied by our neighbors for our excellent reception. Our neighbors represent 10 to 15 different television companies and it is necessary for them to use boosters, in order for them to get some likeness of a picture on Channel 10. Our Sylvania *without* a booster brings Channel 10 in so sharp. One

gets Channels 3 and 6 so sharp and clear one imagines they are sitting in a movie theatre.

"My neighbor informed me today he was going to turn his set in for a Sylvania . . ."

*And we get letters like this from every "fringe area"*

Get *OUT* Now. Hit that "canvas" and come back like a champion. Those people are just waiting to be shown. One set on a street will sell a neighborhood. Get out where there's no real competition for Sylvania. You'll make yourself some real money and you'll make yourself some real friends.

**DISTRIBUTORS**, You Triple your Market with Sylvania TV.

**"FRINGE AREA" DEALERS**, forget those Main Street moans—there's gold in those suburbs.

# SYLVANIA

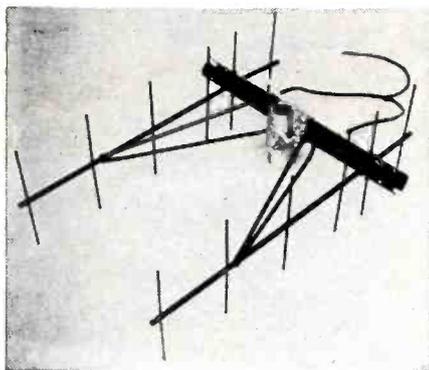
RADIO & TELEVISION DIVISION  
254 RANO ST., BUFFALO, N. Y.  
VICTORIA 2450

Write, Wire or Phone TODAY!  
CASH IN ON THIS MARKET  
Get Out and Get it in!

Television Sets; Radios; Radio Tubes; Television Picture Tubes; Electronic Products; Electronic Test Equipment; Fluorescent Lamps, Fixtures, Sign Tubing, Wiring Devices; Light Bulbs; Photolamps.

## New Ward Antenna

Manufactured by Ward Products Corp.,  
1523 E. 45th St., Cleveland 3, Ohio



High gain is a feature of this new 12-element Yagi antenna with a gain of 11 db. Of copper plated steel construction, it is a directional antenna for the 450-470 mc. band. Vertically polarized for commercial communications. Handles up to 250 watts of power. Shipped pre-assembled.

Say you saw it in *Radio & Television Journal*, January, 1952

## RMS' Two-Set Coupler

Mfd. by Radio Merchandise Sales, Inc.,  
1165 Southern Blvd., N. Y.



Simultaneous reception on two television sets without interference from either set is provided TV viewers owning an extra TV set by this two-set TV coupler. Equal signals are provided from one antenna through use of the coupler.

Say you saw it in *Radio & Television Journal*, January, 1952

## 5 Million TV Sets Produced in 1951

Eleven-month totals for television receiver production rose to 4,798,056 sets, according to a recent Radio-Television Manufacturers Association report, assuring production for 1951 of more than five million TV sets. The November total for TV sets was 415,332 compared to 738,800 in 1950.

Radio production for November came to 747,914, boosting the eleven-month total of radios to 11,701,115. This compared with 1,215,600 radios made in the corresponding 1950 month. Radios with FM facilities produced during November were estimated at 40,092. In addition 16,873 TV sets containing FM circuits were manufactured.

Following is a table showing radio-TV production in November and the first 11 months of 1951:

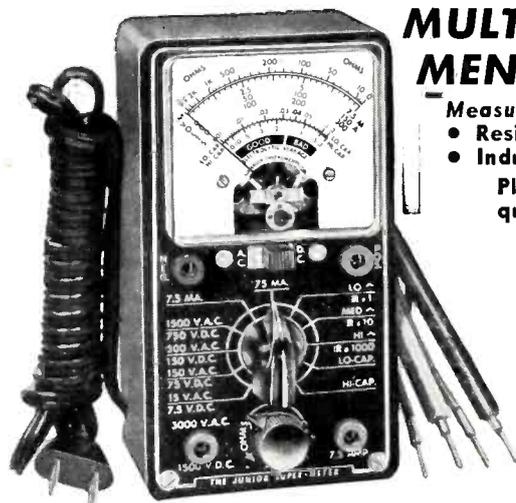
|                        | TV      | Home Radios |
|------------------------|---------|-------------|
| January                | 645,716 | 750,289     |
| February               | 679,319 | 764,679     |
| March (Five Weeks)     | 874,634 | 988,078     |
| April                  | 469,157 | 619,651     |
| May                    | 339,132 | 581,557     |
| June (Five Weeks)      | 326,547 | 346,135     |
| July                   | 152,306 | 184,002     |
| August                 | 146,705 | 295,587     |
| September (Five Weeks) | 337,341 | 603,055     |
| October                | 411,867 | 513,609     |
| November               | 415,332 | 477,734     |

TOTAL ..... 4,798,056 6,124,376

|                        | Portables | Auto Sets |
|------------------------|-----------|-----------|
| January                | 75,294    | 346,799   |
| February               | 79,859    | 437,779   |
| March (Five Weeks)     | 147,037   | 545,297   |
| April                  | 150,494   | 542,021   |
| May                    | 164,171   | 603,534   |
| June (Five Weeks)      | 228,454   | 494,202   |
| July                   | 70,538    | 293,955   |
| August                 | 77,568    | 190,252   |
| September (Five Weeks) | 103,355   | 393,836   |
| October                | 94,053    | 267,061   |
| November               | 64,111    | 206,069   |

TOTAL ..... 1,255,934 4,320,805

## THE JUNIOR SUPER-METER THE MOST COMPLETE AND COMPACT MULTI-SERVICE INSTRUMENT EVER DESIGNED!



Measures: • Voltage • Current  
• Resistance • Capacity • Reactance  
• Inductance • Decibels

Plus Good-Bad scale for checking the quality of electrolytic condensers.

### Specifications:

D.C. Volts: 0-7.5/75/150/750/1500 Volts.  
A.C. Volts: 0-15/150/300/1500/3000 Volts.

Resistance: 0-10,000/100,000 ohms. 0-10 Meg-ohms.

D.C. Current: 0-7.5/75 Ma. 0-7.5 amperes.  
Capacity: .001 Mfd.—2Mfd. .1Mfd.—20 Mfd.

Electrolytic Leakage: Reads quality of electrolytics at 150 Volt test potential.

Decibels: - 10 Db. to + 18 Db.  
+ 10 Db. to + 38 Db. .... 38 Db. to 10 Db. to + 38 Db. + 38 Db. to

Reactance: 15 ohms—25 K ohms 15 K ohms—2.5 Megohms.

Inductance: .5 Henry—50 Henries 30 Henries—10 K Henries.

Handsome round cornered molded bakelite case 3 1/8" x 5 7/8" x 2 1/4" complete with all test leads and instructions.

\$2140

## SOLD ON EASY PAYMENTS AT THE NET CASH PRICE

No interest or carrying charges added. Simply remit \$5.40 with order, pay balance \$4.00 per month for four months.

MOSS ELECTRONIC DIST. CO., INC.  
Dept B-12, 38 Murray St., New York 7, N. Y.

### GENUINE TWIN LEAD

## 300 OHM Wire and 4-6 Rotor Wire

BUY DIRECT FROM MANUFACTURER  
Immediate Delivery—Any Quantity  
Rock Bottom Prices

- 7 STRAND
- 20 GAUGE COPPER
- VIRGIN POLYETHYLENE CLEAR OR BROWN

Also Several Other Grades of Wire  
1000 ft. Reels—Individually Boxed  
We Make Various Types Rotor Wire  
Write For Samples And Prices

—T-E-L-E-W-I-R-E—  
MANUFACTURING CO., INC.  
250 West 57th Street, New York 19, N. Y.  
Phone: Circle 6-0244

Looking for a Happy Marriage?

1952

Westinghouse



TELEVISION and RADIO

So Easy to Live with!

Its streamlined TV line adds up to sound year-round profits. No other line consistently provides many plusses to the dealer.

Superior performance resulting from new sensitivity—ideal for fringe dealers.

More saleable features than ever before claimed by any line.

The outstanding record for freedom from service.

Consumer acceptance that speeds sales for you.

Your distributor has now scheduled early showings of new style models featuring 16, 17, 21 and 25 inch picture—sagdtable, clock and portable radios.



The Westmore, MODEL 676T21  
Has all the new Westinghouse features including dual glare elimination you can convincingly demonstrate. Plus new, improved Electronic Clarifier and Famous Single Dial Tuning.

INITIAL SHOWING  
FURNITURE MART  
ROOM 542B, CHICAGO  
JANUARY 7 TO 18

PLUG-IN UHF RECEPTION

It's a Westinghouse exclusive. No one can touch it. Plug it in and there is UHF... right on the Single Dial... no extras... no lost channels!



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

Sponsors of WESTINGHOUSE STUDIO ONE, America's top television dramatic show.

WESTINGHOUSE ELECTRIC CORP. • TELEVISION-RADIO DIVISION • SUNBURY, PA.

# Predicts 1952 Will Be A Good Year for Television Industry

There is no reason why the television industry can not sell about 4,500,000 sets to the public in 1952, if there are no major economic upsets, according to Frank W. Mansfield, director of sales research for Sylvania Electric Products, Inc., who recently reported that the trend now points to a larger and larger percentage of sales for replacement and a smaller and smaller percentage for initial installation.

"The change in the trend of tele-

vision sales is due to the fact that the television market is rapidly approaching saturation. At the end of 1950, it was approximately 38% saturated on a national basis, although 35% of the population was located where television progress was slow. At the end of 1951 practically 40% of the country had attained an average saturation of 70%," says Mansfield.

Mansfield also reports that the demand for television sets by the public

during 1951 had been consistently good, ranging from an annual rate corrected for seasonal trends, of 5,100,000 during the first quarter to 5,290,000 toward the end of the year.

"If the television station freeze is lifted, as is expected during 1952," says Mansfield, "good television signals, now within reach of about 65% of the population, will ultimately be extended to approximately 90% of the population."

Commenting on the concern, in some quarters, over television's rapid approach to a saturated market condition, Mansfield said that the assumption had been made that a saturated market is an exhausted market, and that nothing is farther from the truth.

"Market saturation will merely mean," Mansfield continued, "that the number of sets sold for replacement will increase and initial installations will decrease. We have estimated that there is a long term potential for initial and replacement sales ranging from 4,500,000 to 6,500,000 sets per year for many years to come."

## Only the **OAK BOOSTER** GIVES YOU ALL THESE FEATURES:



- Highest gain of any booster.
- Dual input and output.
- Gain adjustable from front knob.
- Automatic On-Off.
- Variable bandwidth, controllable from front panel.
- New "Q" multiplier circuit increases gain.
- Mallory inductuner controls interference and reduces noise to a minimum.

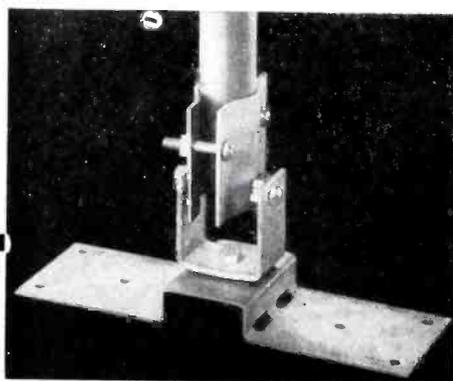
Lists for only **\$39.95**

Write for information, discounts and name of nearest jobber

**OAK ELECTRONICS**

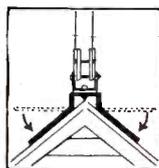
150 Oak Street

Buffalo, N. Y.



Pat. applied for

## A ONE-MAN JOB



### Do it the Easy, Low Cost Way!

USE THE

# WAMCO

#177

# UNI-BASE

Real one-man mounting—fits any surface—flat, gable or ridge—only 3 parts and 4 bolts—360° rotation—Full hinge action for raising mast and guying—strong, durable, rust-resistant. Packed—in carton. List Price, \$3.25. Single sample \$1.95 postpaid. See your local distributor or use coupon below.

Walnut Machine Co.  
1525 South Walnut St.  
South Bend 14, Ind.

Kindly send me ..... (state how many)  
WAMCO #177 UNI-BASES, at \$1.95.

Name .....

Street .....

City ..... Zone ..... State .....

**WALNUT MACHINE CO.**

1525 South Walnut Street

South Bend 14, Indiana

### Eureka Readies Delivery of 21" Tubes

Mr. Thomas Stave, general manager of Eureka Television and Tube Corporation, announced recently that the Hawthorne, New Jersey firm is now ready to deliver the new 21-inch rectangular cathode-ray tube in quantity lots. These tubes are the cylindrical type and have been widely acclaimed by the industry as a new sales stimulus.

"At the present time," Mr. Stave said, "the trend is for the glass suppliers of the television industry to stick to one type of television bulb whenever possible. However, we have been advised that a new type 21-inch cylindrical tube, which will be in no way different as far as shape or size, but will be much lighter in weight, will be ready within 30 days for the approval of the industry. Our firm will be ready to deliver this type also, when this happens."

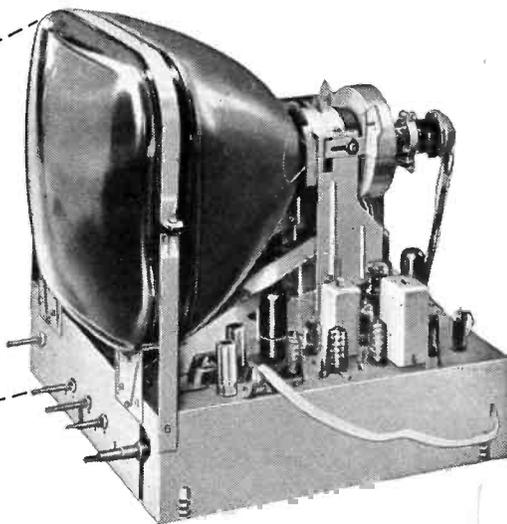
Mr. Stave also stated that his firm has received a great many queries in regard to this new development in the industry and said that, "It is evident the 21-inch rectangular tube will be a popular seller in the near future."

# Made to Order for Today's Market

## The Line with the Two-Fisted Sales Wallop



### Magic Interlace



ROBERTA QUINLAN TV STAR



## 1. The Industry's Longest Range

The Bendix\* Long-Range chassis is *first in fringe area reception!* In many instances when other sets have produced snow-obscured pictures that flutter, fade and fuzz, Bendix Long-Range Television has pulled in a sharp, clear, consistent picture. A set that can do this opens vast new market potentials for you. *All that is needed is a demonstration of Long-Range Bendix Television. It's like seeing television for the first time!* We can prove it, too! See the line and get the facts at the Winter Show. If you can't make it, write for details of this great new line.

## 2. The Industry's Most Compelling Demonstration



**20K2**—This high-quality model has a 20" rectangular, inclined non-reflecting picture tube with Magic Interlace and easy tuning.



**C-182**—This sophisticated model features a 17" chassis with automatic gain control . . . Magic Interlace . . . long range reception.



**T-171**—This 17" set is housed in a hand-rubbed mahogany veneer cabinet. Features full-scope built-in antenna and Magic Interlace.



**20C2**—The big 20" picture and magnificent cabinetry of this model will appeal to the most discriminating buyers.



**C-172**—All the charm and beauty of an original French Provincial together with Magic Interlace on its 17" rectangular tube.



**17K2**—This 17" console features the life-like pictures of Magic Interlace and the ability to bring in clear pictures in fringe areas.

### See them at—

Space 545D—American Furniture Market  
January 7th—18th  
Chicago, Illinois

Space 466—Western Furniture Market  
February 4th—8th  
San Francisco, California

3rd Floor—Southern Furniture Market  
January 21st—February 2nd  
High Point, North Carolina

\*REG. U. S. PAT. OFF.

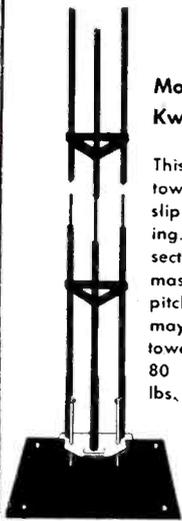


### THE PICTURE WITH THE BILLION DOLLAR BACKGROUND

AVIATION CORPORATION HAS DESIGNED AND BUILT BILLIONS OF DOLLARS WORTH OF RADIO, TELEVISION, AUTOMOTIVE, RAILROAD, MARINE, AVIATION, AND INDUSTRIAL EQUIPMENT, INCLUDING ELECTRONIC DEVICES FOR SUCH ADVANCED FIELDS AS RADAR AND GUIDED MISSILES. FAMOUS FOR RELIABILITY IN EVERY MAJOR INDUSTRY, THE BENDIX NAME GIVES YOU THE FINEST PLEDGE OF QUALITY IN TELEVISION.

BENDIX RADIO TELEVISION AND BROADCAST RECEIVER DIVISION • BALTIMORE 4, MARYLAND

**STEEL TOWERS and MASTS**  
**Tubing - Roof Mounts - Guy Rings**  
**PRODUCTS**  
**for T-V and ELECTRONICS**



**Model 100 —**  
**Kwick Climb Tower**

This light weight tubular steel tower comes in 10' sections with slip joints that require no bolting. Safe and easy to climb. Top section has sleeves for up to 2 1/4" mast. Base adaptable to any pitch roof. Additional sections may be added to 100 feet. 30' tower complete with base weighs 80 lbs. Additional sections 22 lbs. each.

**MODELS 130 and 140, 30 foot and 40 foot**  
**Manually Telescoping Masts. Priced for that**  
**inexpensive installation.**



**Model 115 —**  
**Krank Up Mast**

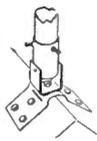
27' telescoping crank up mast complete with all hardware. Cranks to any positive position from 10' to 27'. Made of sturdy 2", 1 1/2" and 1 1/4" tubing. Easily installed.

**Model 125 —**  
**Krank Up Mast**

47' telescoping crank up mast complete with all hardware. Same as Model 115 in construction. Will telescope to any positive position from 20' to 47'. Weight 45 lbs. A locking device on both of the above models removes all the strain from the cable.

Pat. Pending

**ROOF MOUNTS**



**Model A-5 — Apex Roof Mount**  
 A sturdily constructed Roof Mount with 4-way swivel. Fully adaptable to any type of mounting. Will take up to 2 1/2 inch tubing.

ALSO

**MODEL S, Rotary 4-way T-V mast base mount**  
**MODEL P, 2-way swivel T-V mast base mount**  
**RUGGEDLY CONSTRUCTED MOUNTS - LOW PRICED**

**QUALITY PRODUCTS SOLD THRU**  
**RECOGNIZED JOBBERS**

**JOBBERS and DISTRIBUTORS**  
**WRITE FOR PRICES AND LITERATURE**

**JONTZ MANUFACTURING CO.**  
 1101 E. MCKINLEY AVE.  
 MISHAWAKA, INDIANA

**Don Ferraro**

(Continued from Page 22)

Today, believes Ferraro, he can make better quality sets with fewer tubes and practically trouble-free performance than it was possible for any manufacturer to do during TV's developmental period of 1947-1950. "Besides," he told a visitor a short time ago, "most of the 'water' is out of TV pricing and this will induce the public to switch from their small screen sets to larger screens at a cost which represents real value."

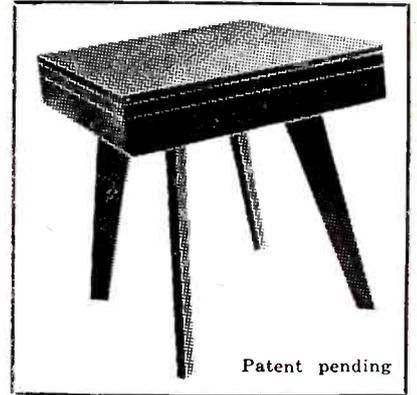
Originally, Ferraro entered the cathode ray tube field when he organized the National Video Corporation, a mid-west tube company which is still very active in the picture tube industry. When Ferraro was recently asked why he, a small radio producer, entered the picture tube field, his answer was characteristic of the man and his multiplicity of interests as well as his philosophy of business. "I went into picture tubes because at the time it presented a challenge. Every manufacturer was clamoring for more and more tubes and this was the great bottleneck of television. I've always liked breaking bottlenecks, no matter where they arise, and so started manufacturing picture tubes. Later, when I sold my interests in National Video and started Fidelity Tube, we really began from scratch, installing all the machinery and much of it was custom-made just for us. Now that we're finally making the jump into TV, we'll be in a position to supply our own tubes for our sets and be responsible for our quality control at every phase of production."

Ferraro is of the opinion that radio business will be terrific in 1952 with the replacement market for clock-radios bigger than ever before. And now that he is going down the long path into television, he is even more enthusiastic about the prospects for television in the years ahead. "TV is just first coming into its own—eventually we'll have as many TV sets as we now have radio—so its only the beginning."

Notwithstanding his many business interests, Ferraro still finds time for many philanthropic, Church and sports activities. His famous horse, "Black Watch" was recently donated by him to the U. S. Olympic Army Team after winning a number of prizes at the Horse Show. Ferraro's approach to industry is similar to his method of developing prize-winning mounts: first, the breed must be right (product must be well designed); second, training must be strict (quality control) and lastly, everything must be shaped for the performance (merchandising is the thing which makes the first two pay off!

**TV Table by Goodenow**

Mfd. by Goodenow Manufacturing Co.,  
 1406 E. 28th St., Erie, Pa.



Patent pending

This television table features patented bearing to provide a stable support in 360-degree turn. Designed for style and comfort, it is shipped knocked down and is assembled by fastening one bolt. Available in brown mahogany, bleached mahogany, lime oak and brown walnut.

Say you saw it in *Radio & Television Journal*, January, 1952

**The Largest Selling**  
**LIGHTNING ARRESTER**  
**At Any Price!**

**NO. AT102**  
**APPROVED**

**JUMBO**

Protects Home and TV Set Against Lightning Hazards **\$225 LIST**  
 U.S. Patent No. D-4664

- Installs anywhere
- No wire stripping, cutting or splicing

(Complete with strap and ground wire.)  
**OVER 1,000,000 IN USE TODAY!**  
 See Your Jobber or Write for Form No. 84

**JFD MANUFACTURING CO., Inc.**  
 6113M 16th AVENUE, BROOKLYN 4, N. Y.  
 FIRST in Television Antennas and Accessories

# TELEVISION ROUNDUP

## Forecast For 1952

**Benjamin Abrams, President,  
Emerson Radio & Phonograph Corp.**

"Although production of television and radio receivers in 1952 will be limited because of shortages in steel, copper, aluminum and cobalt, this will be more than offset at the manufacturer level by greatly increased defense production. Therefore, there is good reason to feel that billings in 1952 will exceed those of 1951. With inventories in the hands of the trade rapidly diminishing, a much healthier situation will result. Dealers, distributors and manufacturers will thereby attain greater liquidity, the lack of which was most disturbing during 1951 . . ."

"I am convinced that all television and radio sets produced in 1952 under the strict allocation program will find a ready market. This belief is further strengthened by the fact that some new telecasting stations may be added during 1952 if the Federal Communications Commission lifts the freeze order in the near future. . ."

**Brig. General David Sarnoff,  
Chairman of Board, RCA**

"By election day there will be approximately 18 million television sets in the United States, with a potential audience of more than 60 million persons—exceeding the total population of the United States when Grover Cleveland campaigned for the presidency in 1884. . ."

"The year 1952 . . . for the field of electronics—of which radio and television are a vital part—is on the threshold of many new developments. These include the harnessing of electrons in solids for useful work, instead of subjecting them to incandescent heat inside a vacuum tube. . ."

"Today, communication is only one facet of the future of electronics, the roots of which are imbedded in radio and television. There are limitless possibilities also for electronic inventions in new and broader fields, especially in the field of home appliance. . ."

**Leonard Ashbach, President,  
Majestic Radio & Television**

"Competition in the TV industry is getting keener day by day with the retailer holding the upper hand, an advantage which he gained during the dark days of the slow summer season. Competition is still keen because sales have not kept pace with current limited output.

## When Picking Starts Can May Be Far Behind?



December winds howled outside the Hotel New Yorker, N. Y., last December 14th, but these member-exhibitor representatives were looking ahead to the balmy days when the 1952 Electronic Parts Show rolls around. Kenneth Prince, Show Manager, center, with mike, supervises "Show" space drawing.

"Due to CMP allocations, Majestic as well as other members of the industry will be forced to further curtail the production of TV receivers in 1952, which will result in a shortage on the market. In spite of this impending shortage it will be necessary to apply maximum selling effort to move even this limited set production. . ."

"In the long run, careful buying at the wholesale end will serve to stabilize the industry as a whole. If the retailer starts getting cautious the manufacturer will adopt more careful practices in production, pricing and styling. The TV manufacturer in 1952 will be forced to produce only those models incorporating a maximum amount of television enjoyment, and a well designed cabinet at a fairly reasonable retail price. The end result can only be progress in TV design and retail pricing. . ."

**Dr. Allen B. DuMont, President,  
Allen B. DuMont Laboratories, Inc.**

"In 1952, we will see television playing an even more important role in our lives than it did in 1951 as it takes on increased civic responsibilities and an expanded role in American business and industry. . ."

"With electronics playing an increasingly important role in the blueprints of our military and naval planners, electronics, next to steel and aircraft,

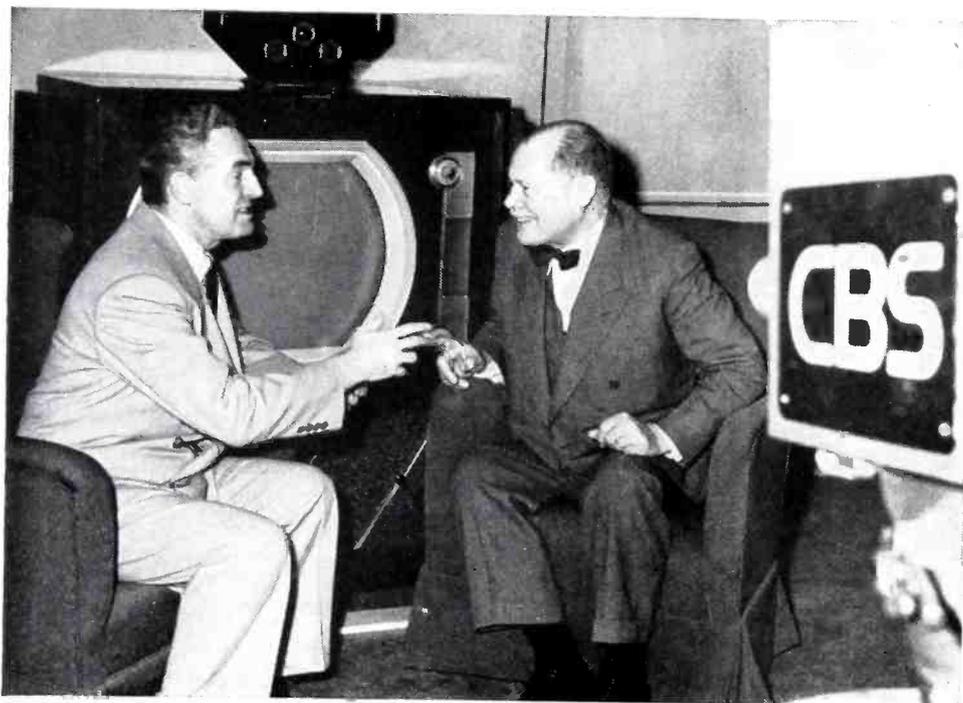
will play industry's most important role in our national rearmament program. By the end of 1952, the electronics industry will be producing at the annual rate of \$4,500,000,000, which equals the peak industry production figure in World War II.

"Because of this tremendous manufacturing effort for the national defense, the production of television receivers will, of necessity, have to be curtailed. The industry which manufactured upwards of 5,000,000 receivers in 1951, following an unprecedented seven and a half million figure in 1950, will produce approximately 4,000,000 sets, due to shortages of critical materials. . ."

**Richard A. Graver,  
Vice-President-Electronics,  
Admiral Corp.**

"Prices have firmed in the past six months and any change in prices is bound to be upward since costs of raw materials and practically every phase of operation are increasing constantly. We anticipate a sizable sales volume of large screen television receivers replacing 10- and 12-inch models next year. The expected granting of new TV station licenses by the Federal Communications Commission early in 1952 will open a great new market, and the televising of both national political conventions from Chicago also will heighten interest in television. . ."

## Scientist and Performer Discuss Television



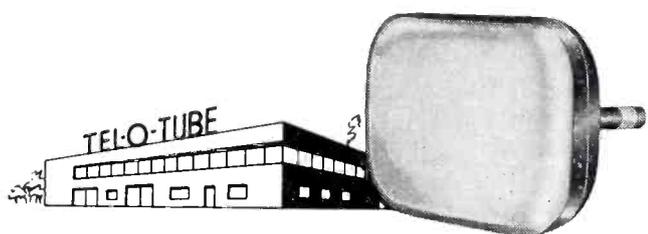
Dr. E. F. W. Alexanderson, right, appeared for the first time before the television cameras during a recent Sunday night visit with Fred Waring on his show over CBS. The picture above was taken 25 years after Dr. Alexanderson announced that the transmission of moving pictures by radio was possible. With General Electric, the scientist has contributed significantly to perfection of the television medium and holds some 300 patents in the electronics and allied fields. Sitting atop the GE 24-inch console, above, is a 3-inch octagonal receiver, early experimental model.

## New Walsco Antenna Is First To Use Magnesium Alloy

A new "Model M" antenna has been introduced by the Walter L. Schott Company of Los Angeles, California. The new Walsco antenna is of particular interest because it makes use of chromate-coated magnesium, thereby resulting in an antenna which is said to be sturdier, longer-lasting and providing improved signal reception.

This is the first antenna to use a magnesium alloy employing a structural strength almost equal to steel, although it is one third lighter than aluminum. The factors of added strength and decreased weight makes for easier and more satisfactory installations.

Other features of the Walsco Model "M" are the signal "director" which improves the gain on high band channels and eliminates "ghosts" and a patented insulator which is guaranteed unbreakable under all operating conditions.



# TEL-O-TUBE

The World's Finest Television Picture Tube

10 to 20 inches Round and Rectangular

## Electrostatic Focus Tubes

Send Today For Complete Specifications

**TEL-O-TUBE CORPORATION OF AMERICA**

E. PATERSON NEW JERSEY

Sales Office: Tel-O-Tube Sales Corporation  
580 5th Ave. New York 19, N. Y.

For Special  
**PROMOTIONS....**

See... *Al Middleman*

55 W. 42nd St., New York 36, N. Y.

..... phone LOngacre 5-3270

4 and 5 tube clock-radio receivers

Three-Speed Phonographs

**FINEST QUALITY - LOWEST PRICES**

*We Cater to Distributors,  
Jobbers and Chains*

**SEE US FOR ALL OF YOUR PROMOTIONS**

# 7,000,000

**new customers for  
America's TV dealers  
delivered by**

Get your share of  
**7 million extra customers  
for the first time brought  
within telecast range by  
Emerson Area Engineering**



**THEY'RE NEW CUSTOMERS! EXTRA CUSTOMERS!** Emerson Area Engineering — which makes possible television *special-ly engineered for each and every viewing area* — gives you added miles of customers in every direction.

See and compare for yourself the performance of the new super-powered Emerson TV. Emerson's Area Engineered Television loves 'show-me' businessmen. Call your Emerson distributor

this minute and he'll put into action what we can only put into words here.

He'll show you how Emerson field engineers thoroughly check performance in each viewing area . . . how design engineers take every special field condition into consideration . . . and how Emerson television is individually adjusted for absolutely best reception *right in each viewing area.*

Call your Emerson distributor now!



### 17-INCH TV

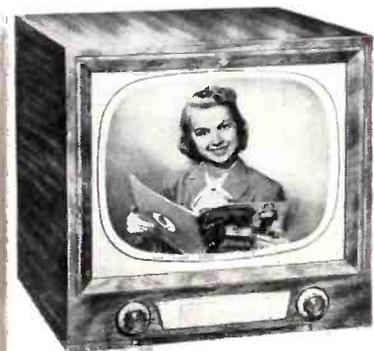
Emerson model 700. Fringe area performer with exclusive Emerson long-distance circuit. Built-in antenna. Removable front bezel for cleaning picture tube and glass. Available in hand-rubbed mahogany veneer or blonde modern cabinet.

### 17-INCH CONSOLE ▶

Emerson model 701. Super-powered Emerson long-distance circuit for better fringe area and strong-signal area performance. Built-in antenna. Front bezel removable for cleaning picture tube. Mahogany veneer cabinet.

### ◀ 20-INCH TV

Emerson model 709. Super-powered long-distance circuit specially engineered for fringe and high-signal area reception. Built-in *Super-Fringe Compensator* for peak performance in any location. Mahogany veneer cabinet.



# Emerson LIFE-TESTED Television and Radio

EMERSON RADIO AND PHONOGRAPH CORPORATION, NEW YORK 11, N. Y.

TV Field Engineers Wanted by leading manufacturer of Master Television Antenna Systems. Electrical engineers (B. S. in E. E.) or graduates of recognized electronic institutes preferred, but experience will count heavily in place of degree. Good salary, traveling expenses, free insurance, incentive program, other employee benefits. Most territories in East.

**Write fully or telephone**

Mr. Caywood C. Cooley  
**JERROLD ELECTRONICS CORPORATION**  
 26th & Dickinson Sts. Philadelphia 46, Pa.  
 Phone: Howard 5-9200

## GOODENOW TURNSTILE TV TABLE



Makes all previous TV Tables obsolete because it gives full support on 360 degree turns!

### Jobber Territory Open

- Unique, patented, lifetime bearings provide NON TILT support all around.
- Shipped knock-down—individual cartons; ONE bolt completes assembly . . . in 1 minute!
- Finished with hot lacquer
- In Mahogany; Blonde; Lined Oak; Walnut. 23" high; 21", 24", 26" square tops.
- The 21" retails profitably

**\$19.95**

See your jobber or write direct

**GOODENOW MANUFACTURING COMPANY**  
 1405 E. 28th STREET  
 ERIE, PA.

## Thanks a Million!!!

To all our Distributors, Dealers and Friends for their continued confidence in the high quality and performance of the products manufactured by Hudson Electronics.

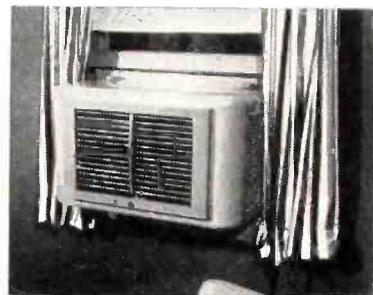
You have our assurance of this same high quality and superb styling and you can look forward to new models and modern designs.

Thanks again—and we anticipate with you a bigger and better New Year.

### HUDSON ELECTRONICS CORPORATION

Mfrs. of the Junior Juke line & portable phonographs.  
 110 East Third Street Mount Vernon, N. Y.

## New RCA Air Conditioner Makes Debut



Pictured above is one of the new RCA line of room air-conditioners, which is being introduced to the public this month. All models will be finished in two colors—the cabinets in polar beige and the grilles in arctic tan. This model weighs 198 pounds and has a capacity of 8,100 BTU per hour for rooms up to 485 square feet. The suggested retail price is \$99.50.

## Platco Issues Brochure on Military Electronic Facilities

A new brochure which describes in detail the complete plant facilities of the Platt Electronics Corp., 489 Broome Street, New York City, has been prepared by the company and is available to those who write in for it, according to Murray Platt, president of the company. The brochure lists all plant facilities now available for military electronic production.

• Herman S. Sacks has been appointed to the new post of Assistant General Sales Manager for **Bendix Television**, according to an announcement by R. W. Fordyce, General Sales Manager of the Bendix Television and Broadcast Receiver Division of Bendix Aviation Corporation. For the past 13 years Mr. Sacks was affiliated with Hudson-Ross of Chicago, one of the country's most prominent chain of retail stores specializing in television, radio and phonograph record sales. In his new post, Mr. Sacks will be responsible for developing a program integrating all sales promotion and sales training activities.



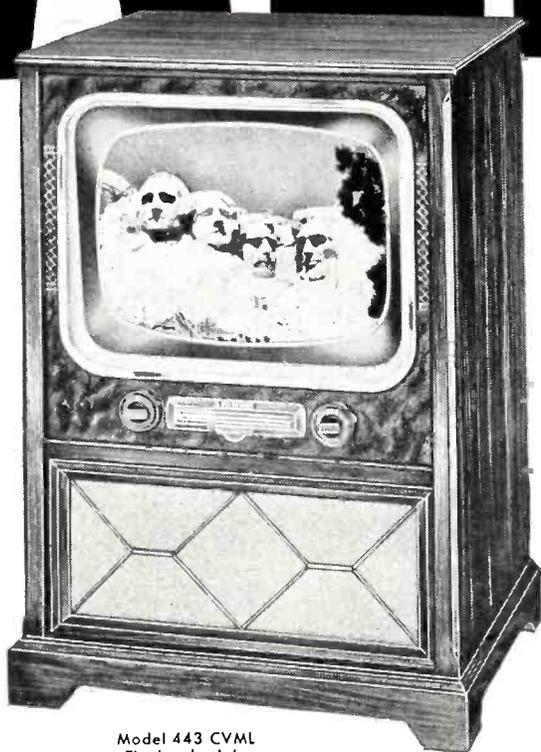
**Herman S. Sacks**

Model 438 TVM  
The Deerfield  
17" Screen



New Sentinel  
**LP\* TV SETS**  
that are

# ALL LIVE!



Model 443 CVML  
The Lauderdale  
21" Screen



**LP MEANS:**  
**LIVING PICTURES**  
**LIVE PROMOTIONS**  
**LOW PRICE**

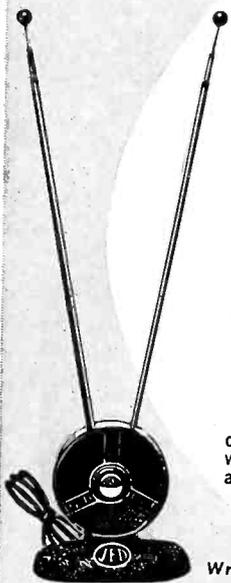
Yes, sir! And most important of all *Sentinel* LP\*-TV—means *Lively Profits* for you! Exciting cabinetwork of superb styling and craftsmanship to set feminine hearts a-flutter; *Living Pictures* that bring in TV personalities as they live and breathe; prices that are highly competitive yet definitely profitable and free from the "footbaling" so common in this industry today. All this plus traffic-building promotions that pull prospects in so you can prove in side-by-side comparisons that *Sentinel* tops 'em all. Need to know more? Call your *Sentinel* distributor or write *Sentinel* direct—much hurry!

# Sentinel

**RADIO AND TELEVISION**  
Evanston, Illinois

IT'S A SALES NATURAL  
Because It's

# TIP-PROOF



## Tip-Proof

Model No. TA 135

## INDOOR TV ANTENNA

Complete with  
twin lead.

Closes TV set sales  
on-the-spot. One reason  
why over 1,000,000 have  
already been sold!

See Your Jobber or  
Write for Brochure No. 16



**MANUFACTURING CO., INC.**

6129 16th Ave. Brooklyn 4, New York

FIRST In Television Antennas and Accessories

## THE RIGHT WAY...



- 1/10 THE LOSS
- LONGER LIFE
- MORE PROFITS
- BETTER PICTURES

Fretline is the best in transmission line because of its low loss and its ability to withstand atmospheric conditions permanently. In remote signal areas Fretline has been the answer to installation problems. Ask anyone using Fretline.

Immediate Delivery from Your Jobber or  
Write for Information, Dept. J-1.

# FRETCO

TELEVISION CO., INC.  
1041 Forbes Street  
Pittsburgh 19, Penna.

## 'No-Loss' Master Antenna System Can Help Find New Sales



• L. to r., Joe Kerner, sales mgr., Blonder-Tongue, George Weingart of AAA TV Maintenance, and Ben Weitzner, Benray Distributors discuss the merits of the B-T Distribution Amplifier in the Benray showroom, Brooklyn, N. Y.

The possibilities for sales and installation of flexible, easy to install master antenna systems are virtually unlimited. First, there are the cities and towns where multiple dwellings are defaced by the forest of antennas on the roof. Not only can the landlords benefit by correcting these eyesores and hazards, but the individual tenant can enjoy better TV from one well placed master antenna supplying signal through an all-channel amplified distribution system. This is also applicable to the two-set home.

Second, there are the many valleys and difficult signal areas where fortunes are spent to secure adequate TV reception. One master antenna, perhaps using a tower on a hill-top, and thereby providing comparatively inexpensive TV pleasure to the homes in the community and valley, can be a boon to such areas.

Third, there are TV showrooms, service departments, clubs and entertainment halls.

Last but not least, are the hotels (for TV rental service), hospitals and other large institutions.

For these many purposes, Blonder-Tongue Labs., Inc. have designed the 2-outlet and the 8-outlet distribution amplifiers which may be used in any required combination to supply from 2 to 2000 TV sets from a

single antenna. In addition to the afore-mentioned units, there is the commercial antensifier. This unit, designated as model CA-1-M, is a TV amplifier. It can be used as a pre-amplifier or line amplifier in large systems to overcome transmission line losses. It has an all-channel gain of 30 times (30 db.)

The 2-outlet and 8-outlet units are most unusual, since they isolate each TV set from others in the system and yet provide for no loss of signal on any channel at each outlet. This is possible since they are essentially all-channel amplifiers. The line insertion loss of these units is negligible. For instance, the 8-outlet units have a surprisingly low loss averaging only 1 db from the line input to the line output terminals supplying the nearest distribution unit.

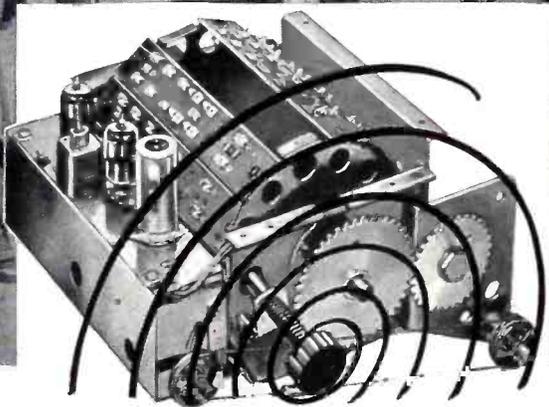
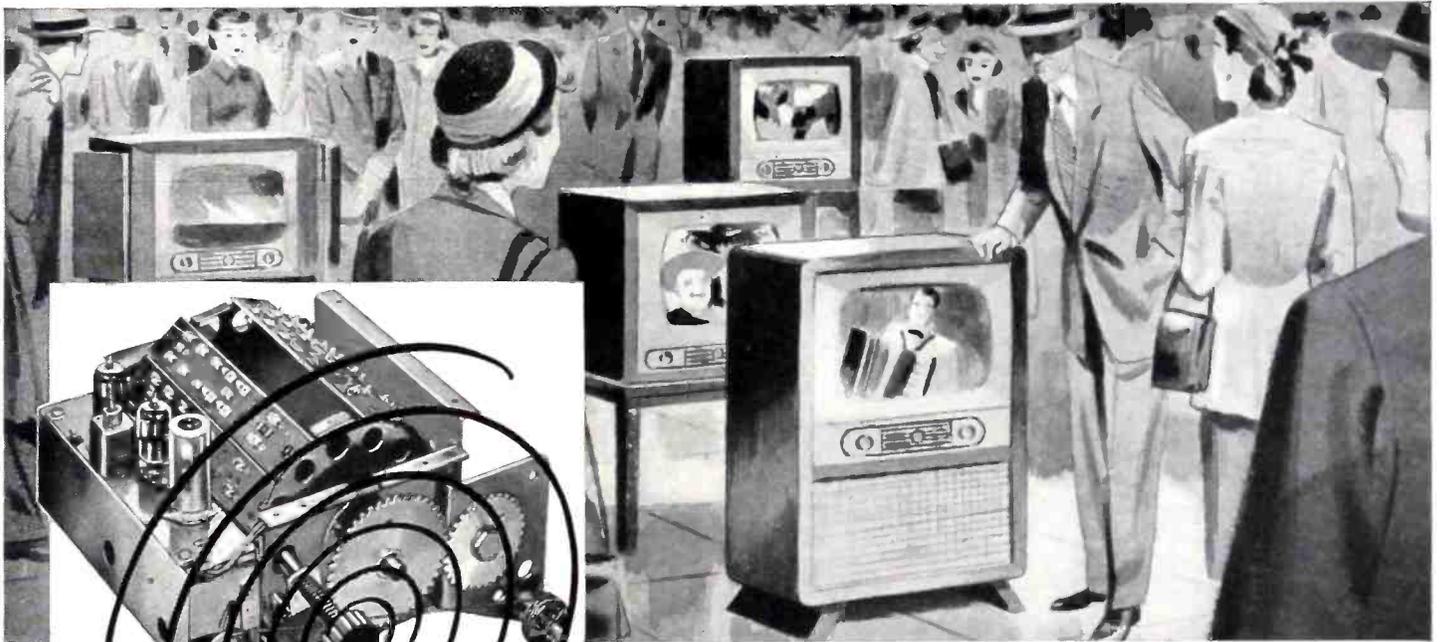
All these units have been designed with the TV service technician in mind. Simple screw terminals accommodate both 75 and 300 ohm transmission line, with the best possible line match. All units are fixed-tuned and all-channel.

The opportunities for sale of these units and systems, even in a saturated TV set market remain virtually unlimited, for dealers who can makes them real "sales makers."

# DOUBLE YOUR ZENITH SALES WITH JUST 10 MAGIC MINUTES!

*You Can,* WITH EXCLUSIVE **ZENITH**  
REG. U.S. PAT. OFF.

# Custom Tuning



*Only Zenith has it!*

and Zenith has it on every 1952 model. It's a Zenith exclusive that really means something to television prospects. Thanks to a special "Bulls Eye Tuner Knob"—built into Zenith's famous Miracle Turret Tuner—every 1952 Zenith can be custom tuned—on every individual station—for the customer's individual location!

And custom tuning is permanent—yet it's simple! You can do it—any of your men can do it—with just a few minutes' practice!

**Now you can get MORE sales—INSURE customer satisfaction—PROTECT your profits—with just 10 minutes installation time!**

Now—in 1952 Zenith television—comes a magic formula spelling far more business for you!

For Zenith—and Zenith alone—gives you this sales-packed, profit-packed provision for custom tuning. It's quick, simple, complete, convenient—*permanent!* Just 10 minutes of your time at installation gives your prospects a feature they'll buy on the spot. A feature that can *double* your Zenith sales—that saves you hour upon hour, dollar after dollar of the costly "callback" servicing you ordinarily waste for dissatisfied customers.

All that for just 10 minutes installation time? **RIGHT!** It's Zenith custom tuning—the ten magic minutes of television. See your Zenith distributor about it today!



Zenith Radio Corporation, Chicago 39, Illinois · Also Makers of Fine Hearing Aids

## New Appointments

**Bressler new LaPointe rep, Decker TV engineering chief of CBS-Columbia, E. W. Merriam in Sylvania service post, Bert Rice in new DuMont spot, Geartner sales manager of Emerson-New Jersey, Lyons in new Kaye-Halbert post**



**Jules Bressler**

Mr. Bressler has been appointed manufacturer's representative for Vee-D-X products of the **LaPointe Plascomold Corp.**, Windsor Locks, Conn. Mr. Bressler is a member of the Society of Motion Picture Engineers, Institute of Radio Engineers, Audio Engineering Society and The Representatives. He will cover the metropolitan New York territory.

• Jules J. Bressler has been appointed manufacturer's representative for Vee-D-X products of the **LaPointe Plascomold Corp.**, Windsor Locks, Conn. Mr. Bressler is a member of the Society of Motion Picture Engineers, Institute of Radio Engineers, Audio Engineering Society and The Representatives. He will cover the metropolitan New York territory.

• E. W. Merriam has been appointed service manager of the radio and television division of **Sylvania Electric Products, Inc.** Mr. Merriam was formerly affiliated with the Radio-Television Manufacturers Association as service manager, and for two years was chairman of the RTMA Service Committee. He was also formerly service manager with Allen B. DuMont Labs., Inc. At Sylvania he will take over responsibility for all service activities.



**E. W. Merriam**

• Jack Geartner has been appointed sales manager of **Emerson-New Jersey, Inc.**, headquarters at 985 Broad St., Newark, N. J. Mr. Geartner has been associated with the electronics industry since 1927, and was for several years connected with Emerson Radio & Phonograph Corp. as sales promotion manager. He was formerly vice-president of Beller Distributors, Inc., and of Electronic Corp. of America.



**Jack Geartner**



**Saul Decker**

Mr. Decker has been named chief television engineer of **CBS - Columbia, Inc.**, manufacturing subsidiary of the Columbia Broadcasting System. For the past 18 months, Mr. Decker has been assistant chief TV engineer, working on monochrome and color TV receivers, coordinating engineering and production. He will be responsible for design and development of all TV and radio chassis in his new post.

• Saul Decker has been named chief television engineer of **CBS - Columbia, Inc.**, manufacturing subsidiary of the Columbia Broadcasting System. For the past 18 months, Mr. Decker has been assistant chief TV engineer, working on monochrome and color TV receivers, coordinating engineering and production. He will be responsible for design and development of all TV and radio chassis in his new post.

• Bert Rice has been named manager of the New York factory distributorship of the receiver sales division, **Allen B. DuMont Laboratories, Inc.** Mr. Rice has several years of appliance merchandising and retailing background, at both distributor and dealer levels. For the past four years he has been one of the DuMont organization's outstanding retailers.



**Bert Rice**

• John L. Lyons has been named general sales manager for **Kaye-Halbert Corp.**, Los Angeles, Calif. Formerly associated with the Admiral distributor in Los Angeles, Mr. Lyons has been active in the appliance industry for many years.



**John L. Lyons**

## Saraceni & Gentile, Inc. MANUFACTURERS OF MAJESTIC PRODUCTS



Featuring the Widest Selection of Magnificent Television Cabinets in the Most Beautiful Woods and Hand Rubbed Finishes. Created by Masters of the Trade, in Modern, Chinese, and Traditional Styles. Available in All Sizes, including 24". Ranging from Consolettes to Large Consoles. Inquiries Invited.

Descriptive Literature on Request

Manufacturers Representative  
**TELEVISION COMPANY OF AMERICA**

Showrooms

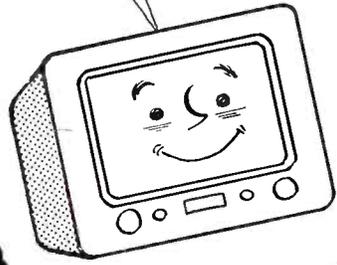
192 Lexington Ave.

MU 4-5347

New York, N. Y.



I work best with a Vee-D-X

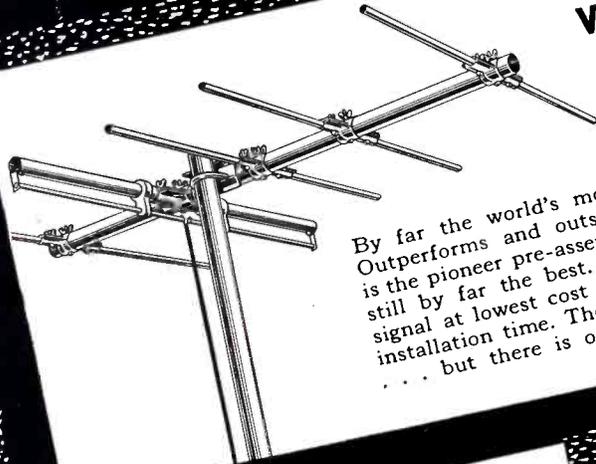


# For the SHARPEST CLEAREST PICTURES

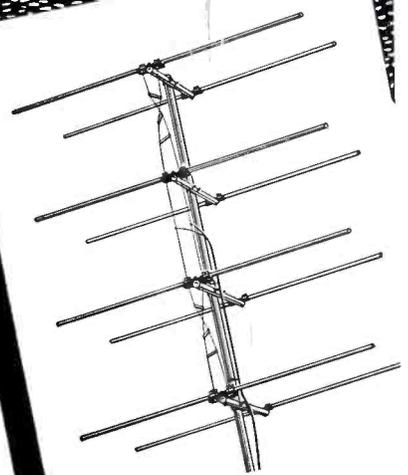
IN TELEVISION 

INSTALL  
*Genuine*  
**VEE-D-X**  
the world's most powerful  
**TV ANTENNAS**

## VEE-D-X JC



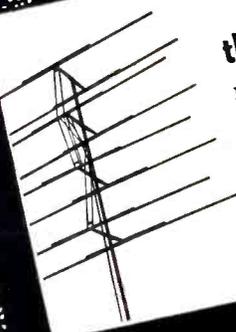
By far the world's most popular Yagi. Outperforms and outsells all others. It is the pioneer pre-assembled Yagi — and still by far the best. Provides powerful signal at lowest cost . . . with minimum installation time. There are many copies . . . but there is only one "JC" Yagi.



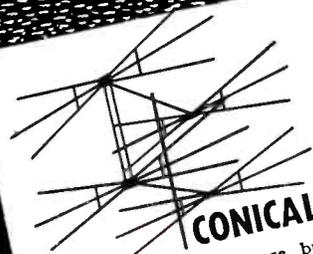
## COLINEAR

Here is the lowest priced 4-bay array ever manufactured. High gain all-channel performance. Pre-assembled construction. The ideal antenna where powerful multi-channel reception is required.

## the SUPER



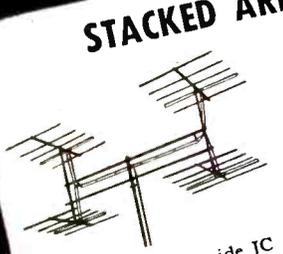
Highest gain and most powerful all-channel television antenna ever manufactured. Holds every record for long distance reception. The Super is a four-bay, full wave, 32 element stacked array of extra heavy construction. Sharp beam angle minimizes ghosts, noise and co-channel interference.



## CONICALS

VEE-D-X conicals are built up to a standard—not down to a price. They feature interchangeable elements and the VEE-D-X universal bracket, which makes possible 18 combinations to meet your specific area requirements.

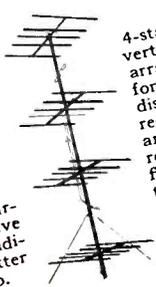
## STACKED ARRAYS for extra gain



4-stacked side-by-side JC array provides highest possible gain in hilly and mountainous terrain. Powerful long distance reception.



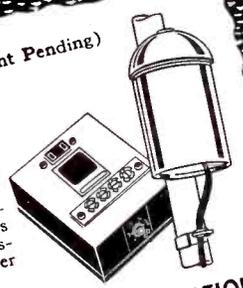
Double-stacked JC array with half-wave spacing. Provides additional gain and better signal-to-noise ratio.



4-stacked vertical JC array ideal for long distance reception areas with relatively flat terrain.

## ROCKET BOOSTER (Patent Pending)

A powerful single channel mast-mounted booster that delivers powerful gain. Easy to install and low in price. Amplifies signal at antenna height where most favorable signal-to-noise ratio exists. Uses single 300 ohm transmission line. No special power cable needed.



THE LAPOINTE-PLASCOMOLD CORPORATION  
Windsor Locks, Connecticut

# Good business is coming your way

Sales promotional plans must be flexible to meet changing market conditions — the market for television antennas, rotators, boosters, lightning arrestors, towers, etc. The intense consumer interest in television which began about 3½ years ago is now settling into normal levels and becoming a more stable business. Following the line of least sales resistance and being content to be mere order-takers is no longer going to be profitable for any of us. Many consumers have already had their first TV installation and are now looking more carefully for better televising. To put it briefly, competition has set in. Dealers handling quality products and reliable "names" are getting the jump on this

competition. Amphenol has always made **QUALITY** TV Antennas, Rotators, Lightning Arrestors, Lead-In, etc. So if you are an Amphenol Dealer, you have but to get your stock of Amphenol TV equipment ready for name-product business.

To help stimulate this consumer demand for Amphenol products, we have prepared a functional, useful and consumer appealing plan. A plan that will influence the consumer TV market and thereby create a more substantial sales opportunity for you and Amphenol alike.

The three ads reproduced on this page are going to appear in Popular Mechanics magazine telling the reader about Amphenol **QUALITY** TV products. It is estimated that 4,300,000 readers will see one or more of these ads. In the ads, the reader is asked to write for a new informative book which will counsel on all the various factors influencing better picture quality.

NOTE: The ads reproduced on this page do not include the current ad running in the December issue of Popular Mechanics.

**Better TV PICTURE Quality**

Actual laboratory and field tests have proven that the In-Line antenna is superior to any other broadband antenna system. The Amphenol In-Line Antenna not only features better picture quality, but also superior mechanical construction — a safe installation is important too! Amphenol Lightning Arrestors provide positive protection against damage to home or TV set from lightning striking the antenna and traveling through the transmission line. Underwriters' Laboratories Approved.

--- send 10¢  
for this valuable book — all factors influencing Better TV Picture Quality.

Address Dept. 65  
**AMPHENOL CORPORATION**  
1830 SOUTH 54TH AVENUE • CHICAGO 30, ILLINOIS

**Protect YOUR HOME and TV SET**

with an **AMPHENOL LIGHTNING ARRESTOR**

Send 10¢ and coupon below for complete information on safe antenna installation and better TV picture quality.

To prevent loss of life and property, the National Electric Code requires an approved lightning arrestor on every unshielded outdoor antenna lead-in. The Amphenol Lightning Arrestor is Underwriters' Laboratories Approved. It is small and simple to install — no cutting or splicing of the transmission line. For proper mounting and installation procedures, send the coupon below. Play safe, ask your TV service-man for an Amphenol Lightning Arrestor TODAY!

Send me this book on safe antenna installation and all factors influencing TV picture quality. 10¢ enclosed for postage and handling.

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_

**AMERICAN PHENOLIC CORPORATION**  
1830 SOUTH 54TH AVENUE  
CHICAGO 30, ILLINOIS

**Better Televising ON ALL CHANNELS!**

A strong signal is essential to a good TV picture. In most localities TV stations are situated at some distance from each other, and it is impossible to install a stationary antenna to receive from all directions. Even in some metropolitan areas TV stations are situated at widely divergent points. In some areas use of the rotator permits receiving same channel, the Amphenol "Auto-Dial" Rotator will literally "aim" your antenna at the sending station. So accurate is this rotator that the best setting for each channel can be "logged" and returned to by simply setting the dial at the "logged" position.

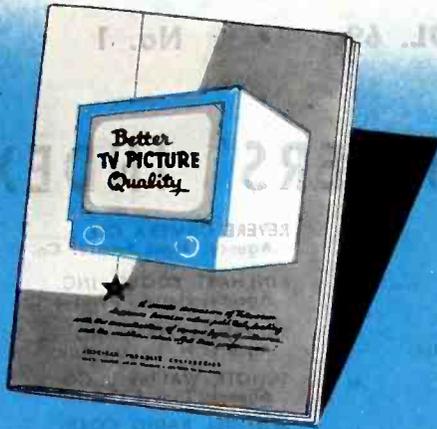
--- send 10¢  
for this valuable book — all factors influencing Better TV Picture Quality.

Address Dept. 67  
**AMERICAN PHENOLIC CORPORATION**  
1830 SOUTH 54TH AVENUE • CHICAGO 30, ILLINOIS

These ads will be placed before 4,300,000 readers

Stock **AMPHENOL** for customer preference...

# -BE READY



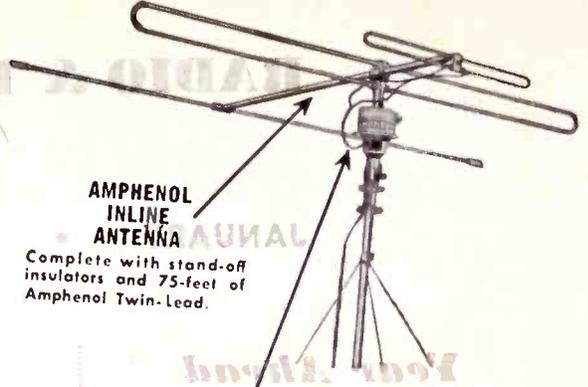
**This is the book your customers will send for . . . it will lead a greater volume of profitable business to your door**

For the first time, complete information on the various types of antennas and their various characteristics, how to mount them and where to mount them; the need of lightning arrestors, proper and improper methods of installing them; rotators and their purpose; television reception in the so-called "fringe" areas; and all other factors which contribute to, or influence better picture quality is available in a concise readable form. This 20-page book contains all the basic information that the reader will need to make a good TV installation. It emphasizes the importance of purchasing quality TV equipment. It points out that use of cheap, inferior equipment is not an economy, because it only necessitates expensive replacement. It also emphasizes the importance of a safe, secure installation. This book constitutes a real service to the investor in TV reception and will be a valuable aid to you in selling quality and performance to meet today's demand for better picture quality.

The Amphenol INLINE Antenna, "Auto-Dial" Rotator and Lightning Arrestor are packaged to give the investor a complete QUALITY installation and to give you sales tools commensurate with QUALITY products. The INLINE Antenna is packaged complete with everything needed for installation.



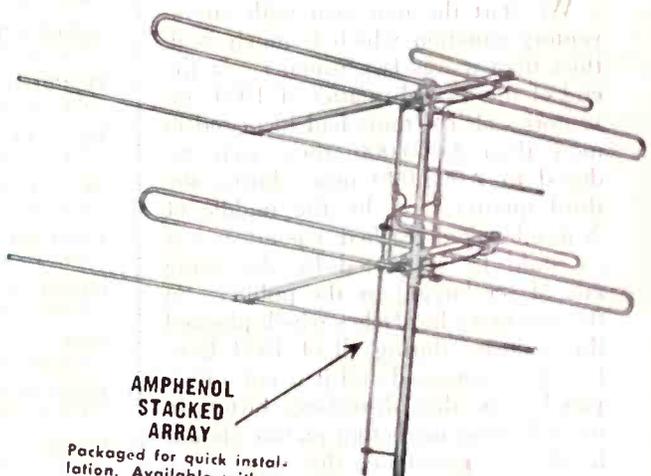
**AMERICAN PHENOLIC CORPORATION**  
1830 SOUTH 54TH AVENUE • CHICAGO 50, ILLINOIS



**AMPHENOL INLINE ANTENNA**  
Complete with stand-off insulators and 75-feet of Amphenol Twin-Lead.



**AMPHENOL "AUTO-DIAL" ROTATOR**  
Complete with Control Unit, Rotator with Cone Adapter, Mast Support and 100-feet of Amphenol Conductor Cable.



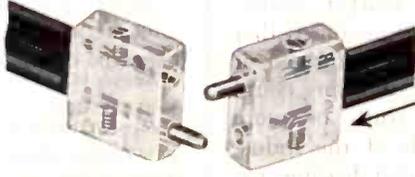
**AMPHENOL STACKED ARRAY**  
Packaged for quick installation. Available with or without Twin-lead.



**AMPHENOL LIGHTNING ARRESTORS**  
Supplied in a colorful counter box containing 12 individually boxed arrestors. Complete with mounting bolts and screws.



**AMPHENOL TWIN-LEAD**  
300 ohm transmission line.



**AMPHENOL TWIN-LEAD CONNECTOR**  
For solderless, low-loss splicing of 300 ohm transmission line.

**... See your AMPHENOL Distributor-NOW!**

### Year Ahead

Notwithstanding that 1951 was a year of ups and downs (mostly downs) for radio-television manufacturers, distributors and dealers, the industry itself emerged with more strength and stability than at the end of 1950 when an epidemic of scare buying followed on the heels of the Korean War.

We start the new year with an inventory situation which is much healthier than it was last Summer. At the end of the second quarter of 1951, inventories of TV units had increased to more than 2,600,000; these were reduced to 2,000,000 units during the third quarter, and by the middle of November had reached a point as low as could be supported by the going rate of set buying by the public. So the inventory headaches which plagued this industry during all of 1951 have largely disappeared and it is not anticipated that this disturbing factor in the television marketing picture should be of any importance this year.

Now, there are several facts of the greatest significance to everyone in the television business, which will affect the dollar volume in 1952. These are: (1) A lifting of the three-year old "freeze" on TV station construction (2) The opening of many UHF stations (3) The emergence of the television set replacement market, which, even at a very conservative estimate, will settle at about 12 per cent a year. This figure, which would add up to almost 650,000 receivers, is particularly conservative when one considers the known rate of replacement on such items as refrigerators, washing machines, radios, and many other appliances.

From every viewpoint, barring an all-out war, the year 1952 looks good for television. One more point, as we enter '52—throughout 1951 there was a lot of loose talk around about the bugaboo of television market saturation. These loose talkers assumed that when a market becomes saturated it also becomes exhausted. Nothing could be further from the truth or more damaging to the morale of the industry. The only thing that became exhausted last year was the initiative of some dealers who could never see further than their noses.

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without  
advertising



many of the products advertised  
in this paper might not  
have been developed!

# CBS-COLUMBIA



MODEL 20 M1  
Plus F. E. T. and  
warranty. Slightly  
higher South and  
West.

**\$199<sup>95</sup>\***

First with

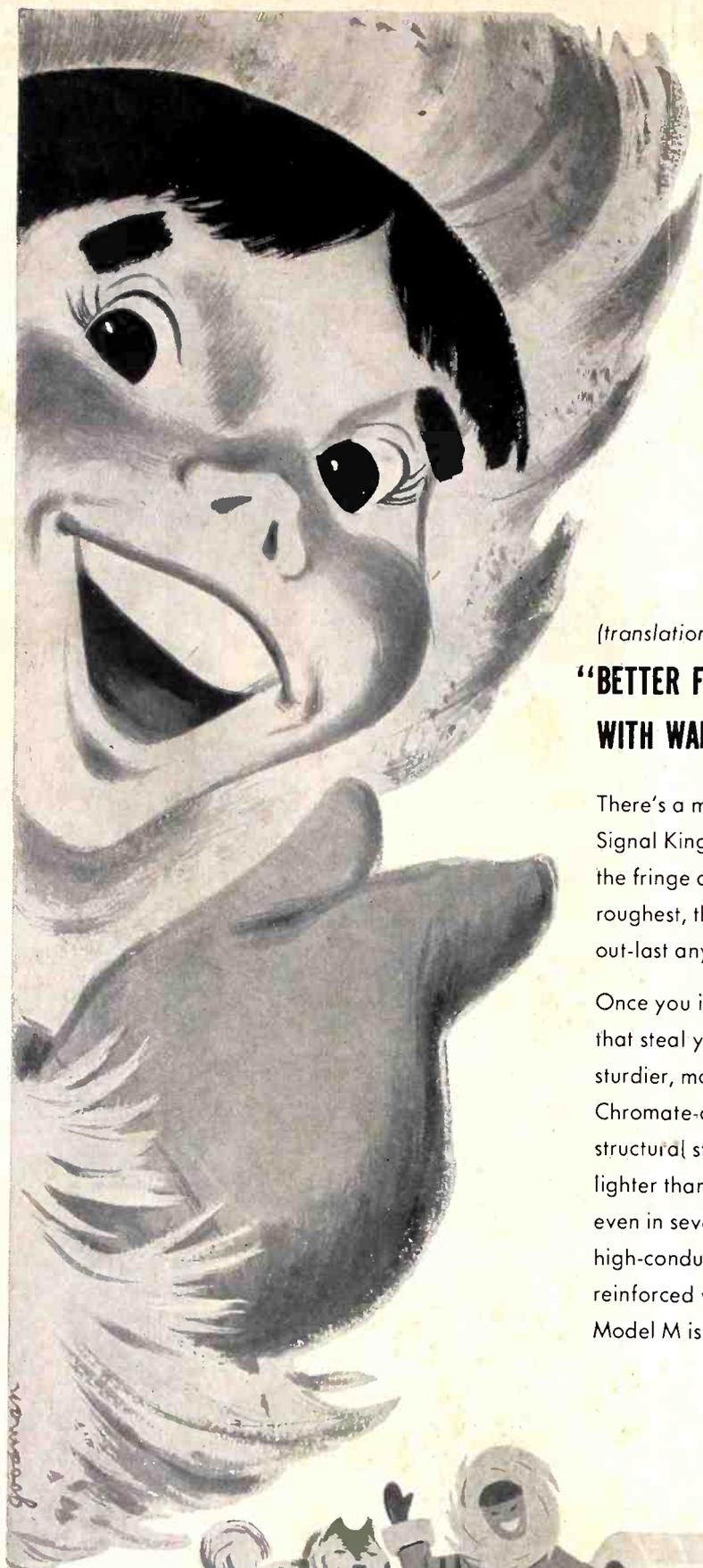
**CUSTOM TUNING<sup>®</sup>**

Model 20 M1, like *all* CBS-Columbia receivers can be  
"Custom-tuned"<sup>®</sup> for the neighborhood in which it is installed.

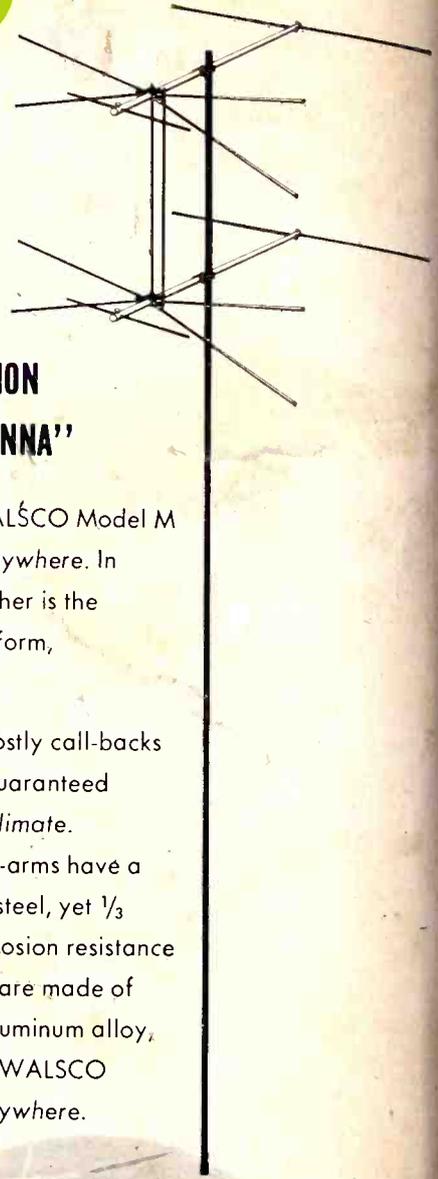
*CBS-Columbia*



CBS-COLUMBIA INC., 170-53RD STREET, BROOKLYN 32, N. Y.



# NANTOOK MOOK WALSCO ONKO



(translation)

## “BETTER FRINGE AREA RECEPTION WITH WALSCO MODEL M ANTENNA”

There's a magical difference in WALSCO Model M Signal King performance almost anywhere. In the fringe areas, or wherever weather is the roughest, the Model M will out-perform, out-last any competitive antenna.

Once you install... *that's all*. No costly call-backs that steal your profit. Model M is guaranteed sturdier, more dependable in *any climate*. Chromate-coated magnesium cross-arms have a structural strength almost equal to steel, yet  $\frac{1}{3}$  lighter than aluminum. Positive corrosion resistance even in severest weather. Elements are made of high-conductivity, super strength aluminum alloy, reinforced with Swiss "Permalum." WALSCO Model M is quality you can trust anywhere.



Walsco quality earned its reputation

**WALTER L. SCHOTT CO.**  
3225 Exposition Place, Los Angeles 18, Calif.  
Branch: Chicago 6, Illinois