Is Radio a "Shell Game"?

To Every Radio Man in America:

Dummy tubes! Counterfeit consoles! Fake prices!

Read the startling facts exposed on pages 12-14.

Is that your idea of the way radio should be sold?

Is radio to be just a "shell game"? Or do we want to see it a decent business — whose merchandise the public can buy with confidence?

Which way do you vote? I'd like to hear from you.

And if you have such evils in your vicinity, send me the evidence.

Caldwell-Clements, Inc.,
480 Lexington Ave., New York, N.Y.

O. H. Crumel
Editor RADIO TODAY
FADA Radio

... PRESENTS TWO SENSATIONAL NEW MODELS THAT WILL STIMULATE SALES

AUTOMATIC TUNING

To Sell for Only $49.95

THE LOWEST PRICE IN RADIO!

Featuring the Amazing New

FLASHOMATIC Tuning

And The New Fada-Golden "GLO-DIAL"

Now ready for immediately delivery! Two new Fada models, for AC and AC-DC operation, that smashes all previous conception of radio value. They feature real Automatic Tuning in its most effective form. No motors, no buttons to hunt or push, no dials to spin. A single knob tunes in 6 different stations in a split second ... Accurately! Instantly! Effectively! Receives Broadcast, State Police and Foreign, including all popular International short wave bands 16, 19, 25, 31, and 49 meters. The beauty of the cabinet will win immediate consumer acceptance. Ask your Fada jobber to demonstrate these two models ... or write direct for complete data ... prepare now for your greatest holiday business by featuring these two outstanding Fada Automatic Tuning radios.

FADA RADIO & ELECTRIC CO., LONG ISLAND CITY, N. Y.
 Consistent Leadership by
AMPERITE
achieves another new development...

THE ACOUSTIC COMPENSATOR

An exclusive Amperite feature, available in new Models RBHk (High Impedance) and RBMk (200 ohms)

NEW! AMPERITE CONTACT MICROPHONE

A contact mike without distortion. Ideal for use on all string instruments. Flatters on ordinary tuning by giving it the volume and depth of a "Strad" makes a small piano sound like a "Grand". Unusual high output—can be used on radio sets.

No string changes, no drilling. Attached without tools. Operates with either high or low gain amplifiers. Frequency response, 40 to 3000 cps. Output, 40 db 17 of cable.

MODEL KTH (Hi-imp.): ETL (200 ohms).............$22.00 LIST
KTH or ETL with foot-operated volume control....$20.00 LIST

NEW! AMPERITE "HAND-1-MIKE"

The smallest velocity made... but has an output equal to larger types—68 db. Frequency range 60 to 7000 cps. Excellent for close talking, and can be used on hand, desk, or stand microphone. Unusually rugged. Size of head, 1" x 1/4" x 1/4".

MODELS HDH (Hi-imp.): HLD (200 ohms) with switch, $22.00 LIST

AN EXCELLENT VELOCITY AT $22.00 LIST

P.A. Men, you do not have to sacrifice quality on a "low-cost" job. This fine velocity, built to Amperite standards, is excellent for both speech and music. Gives flat response without peaks over entire audible range. Reduces feedback. Frequency range 60 to 7000 cps. Output—68 db. Unusually rugged, not affected by temperature, pressure or humidity. Triple shielded, fitted with shock absorber and swivel bracket.

MODEL RAN (Hi-imp.) with 12' of cable; MODEL RAL (200 ohms) with 10' of cable........ONLY $22.00 LIST

BROADCASTING STUDIOS, please note:

New Output, —56 db.

The new Amperite Studio Velocity, model SR80n, has—36 db. output, highest in studio velocities available today. The SR80n is now accepted as the finest microphone for studio and recording; (Two weeks' free trial) to established studios. Frequency range 40 to 15000 CPS. Triple shielded, fitted with switch (optional), cable connector, and 25' of cable. MODEL SR80n (Hi-imp.): SR80m (200 ohms). . $80.00 LIST

3 IMPORTANT USES

1. The Acoustic Compensator enables you to lower or raise the response of the microphone by the mere flip of the switch. Not a volume control—operation is similar in principle to the sliding panels in broadcast studios.

2. Makes the Velocity immediately adjustable to close talking or distant pickup.

3. Immediately adjustable to any room condition... or any kind of job or occasion.

Increasing the quality, without increasing the price, is the keynote of the Amperite sales policy. In the new Amperite Velocity, with the Acoustic Compensator, the P.A. Industry has the last word in microphone perfection at a competitive price.

MODELS RBHk, RBMk, with acoustic compensator. Frequency range 40 to 11,000 CPS. Output—65 db. Complete with switch, cable connector and 25' of cable. $42.00 LIST

MODELS RBHm, RBMn, without acoustic compensator $42.00 LIST

SALES AIDS FOR THE P.A. MAN

Amperite offers the following co-operation to P.A. Men

1. FREE: Window Display advertising your Sound Service.
   Size 5 1/2x3 1/8, finished in 3 striking colors.

2. FREE: Window Display, 11x17.

3. Special Sound Equipment Letterheads. Samples and prices on request.

"Better Systems Specify Amperite"

AMPERITE CO. 561 BROADWAY, N.Y. U.S.A.

THE BIG NEWS IS OUT!

EXTRA!

26%

More

Far-reaching Improvements Built Around Patented

Conservador Give Greatest

Sales-clinching Features Ever Offered!

No cramming. No crowding. No wasted space because of cluttering. That's why the new Fairbanks-Morse refrigerator with its patented CONSERVADOR holds more food than other refrigerators of the same size—that is why 26% more quickly usable space can be proved. You can instantly show why this refrigerator saves time, work, and money, too. Any man or woman can see why there is no hunting, no shifting, no spilling, no stooping. Frequently used items are kept instantly at hand in its exclusive CONSERVADOR—a shelf-lined inner door. No other refrigerator can match the 26% more quickly usable space it creates—none can equal its convenience!

In addition to the F-M patented CONSERVADOR—the feature that makes this refrigerator the only outstandingly different refrigerator on the market—this one has every other desirable feature. Big, roomy, automatically lighted main food compartment. Lower operating cost that you can back with nation-wide proof of Penny Meter economy. Self-sealing Crisper. Sliding Fruit Drawer. Instant Ice Cube Expeller. Surplus power eliminates all heat wave complaints and service. Illuminated radio-type Temperature Control Dial. Reserve storage compartment for extra supplies. These, plus the Fairbanks-Morse name and reputation, are all reasons why you can close more sales with this new line.

Act Now

Here is the best-looking and easiest-selling line of refrigerators available. It is backed by different promotion and advertising plans that will close more sales. There is real profit in it for you. Write, phone, or wire now for the complete story.

Fairbanks, Morse & Co., Home Appliance Division, 2060 Northwestern Ave., Indianapolis, Indiana.

It's a Balanced Program

The Fairbanks-Morse Home Appliance franchise can include refrigerators, radios, and home laundry equipment. You may qualify for one or all in your territory. Investigate now.
EXTRA! QUICKLY USABLE SPACE!

"MORE SALES-CLINCHING NEW FEATURES"

"SAVES TIME, WORK, MONEY"

"TWO-FIFTHS OF ENTIRE CONTENTS CAN BE REMOVED AND REPLACED WITHOUT OPENING MAIN FOOD COMPARTMENT AND EXPOSING ITS CONTENTS TO WARM AIR"

"NEW ICE CUBE EXPELLER SNAPS ICE CUBES OUT INSTANTLY"

"THE ONLY REFRIGERATOR THAT OFFERS PROSPECTS SOMETHING DIFFERENT!"

"NEW, STREAMLINED BEAUTY THAT SELLS ON SIGHT"

"26% MORE QUICKLY USABLE SPACE BECAUSE OF THE CONSERVADOR"

"DIFFERENT PROMOTION AND ADVERTISING PLANS THAT WILL CLOSE MORE SALES"

"TWICE AS MANY THINGS AT YOUR FINGER TIPS"

"LOWER OPERATING COST PROVED IN PENNIES BY PENNY METER TEST"

"TWICE AS MANY TEMPERATURE CONTROL DIAL"

"RESERVE STORAGE COMPARTMENT (NONREFRIGERATED) IN ADDITION TO THE 26%"

"BACKED BY 108 YEARS OF ENGINEERING EXPERIENCE"

FAIRBANKS-MORSE REFRIGERATOR WITH Conservador

November, 1937
A large percentage of the people you want to sell radios to have done business with me before. They are the people who buy on the time-payment plan.

I've helped them in their purchases of automobiles, refrigerators, washing machines and other electric appliances. They are friendly to me because I've handled their financing courteously and without friction.

The dealer who offers them my service is going to be a step ahead of the competitor who hasn't my help in building the customer-confidence that helps close sales.

You will find my cooperation valuable in other ways too.

I know people and conditions in your territory. I know how to investigate the credit of your prospects so as to eliminate the bad risks. I remit your money to you promptly and take the problems of collections entirely off your hands.

I am the local manager of a Commercial Credit office. I operate from 195 offices in principal cities of United States and Canada. Adopt Commercial Credit Company financing service for your time-payment sales, and let me work with you to get you the maximum profit.

COMMERCIAL CREDIT COMPANY

COMMERCIAL BANKERS CONSOLIDATED CAPITAL

HEADQUARTERS: BALTIMORE AND SURPLUS $65,000,000

SERVING MANUFACTURERS, DISTRIBUTORS AND DEALERS THROUGH 195 OFFICES IN THE UNITED STATES AND CANADA
THOSE popular Philco Mystery Contest Programs . . . broadcast weekly over 240 stations . . . are pulling thousands of prospects into Philco Tube dealers' stores. They come in for contest details and Official Entry Blanks . . . and a surprisingly large percentage go out with new Philco Tubes under their arms!

This $50,000 Radio Mystery Contest is clicking! And the way to cash-in is to tie-up in every way possible. Most important, be sure you have sufficient Philco Mystery Tabloids (which contain the rules and Entry Blanks). The next issue is now ready. Are you all set to get the extra tube sales this Philco Contest is creating?
As a smashing climax to the introduction of the greatest radio line in its history, Crosley presents these spectacular Prestotune Electric Press Button Tuning radio models. Combining as no other radio on the market does, such outstanding selling features as advanced electric tuning, smart cabinet styling by the world's foremost design authority, and sensational low price—the Crosley Prestotune has met with instant dealer and customer acceptance, wherever shown. Until you have seen and heard these marvelous new radios you can never appreciate either their remarkable performance or amazing value. Have your Crosley Distributor demonstrate the new Prestotune for you today and put this sure-fire salesman on your floor now for the coming buying season.

**The Crosley Radio Corporation - Cincinnati**

POWEL CROSLEY, Jr., President

Home of "the Nation's Station"—WLW—500,000 watts—70 on your dial.

**YOU'RE THERE WITH A CROSLEY**
Table Models cover every need from "price" models to fine musical instruments.

Arm-Chair Models meet radio's latest style trend—and add new convenience in tuning.

Console Styles in rare woods and the latest designs cover every price range.

... Magic Keyboard Models surpass anything known before in radio value and superb performance.

Every Day Adds Proof That It's RADIO'S HEADLINE NEWS

A LANDSLIDE of approval has greeted Stewart-Warner's sensational Magic Keyboard everywhere—because it leads in...

SPEED... goes direct to the station instantly! FLEXIBILITY... takes any 15 stations in any order! SIMPLICITY... adjusts from the front, without tools! QUIETNESS... no hum or buzz! EASY OPERATION... no hand switches to forget! ACCURACY... no big errors to require excessive A.F.C.!

Add the complete range of models and prices—the exclusive Stewart-Warner-C.I.T. Sales Finance Plans—Horace Heidt's hard-selling Coast-to-Coast broadcasts—and you'll see why it will pay to get the whole story now!

STEWART-WARNER MAGIC KEYBOARD
NEVER before has any radio manufacturer remotely approached the ten million mark. Now Philco has done it... and it's an event that calls for a real celebration!

And that's just what Philco, its distributors and dealers are doing. From coast to coast, replicas of the Ten Millionth Philco occupy the place of honor in special commemorative window displays. All the weight of Philco advertising... stepped up to double page space in the great national weeklies... plussed by tremendous added space in the newspapers... has been thrown behind this gigantic promotion.

It's the greatest concentrated effort ever put behind a single radio... the greatest selling drive ever devoted to boosting your unit sales to new high levels!

Ten million buyers know what a marvelous radio Philco builds! Thousands of new enthusiasts join that enormous army of Philco owners daily. And this Ten Millionth promotion is going to speed up enlistments in that Philco army!
DULL AUTUMN ADDS UP TO BRILLIANT CHRISTMAS

* Listening carefully, we've heard veteran merchandisers point out in firm syllables that Christmas buying is always a dependable quantity. Even during the dismal years of the 1929-33 depression, the Christmas period could be depended upon to furnish peak sales of the year. In fact, all the faltering sales during the year are counteracted by an appropriate leap during the Yule session.

While radio has lacked the proper totals this Fall, many merchandisers sense that this is merely delayed business, and that 1937 purchases held up during September and October will be released soon, to add an extra thump to the customary rush in November and December. Thus, the makings of the merriest radio Christmas the trade has ever had.

NOW TALK MARCH FOR "RADIO CHECK-UP MONTH"

* Plans for a national radio check-up month, to be conducted cooperatively by radio manufacturers, radio dealers and servicemen, and the electrical utilities, were discussed at conferences of interested parties held at Philadelphia and New York during October and November.

Earlier proposals that January be adopted as National Radio Month by the utilities were opposed by reason of the shortness of time for preparation, and March was suggested as the earliest possible month.

George R. Conover of the Electrical Association of Philadelphia is committee chairman in charge of planning National Radio Check-up Month.

Under the plan, radio manufacturers would be expected to cooperate in producing printed matter to be mailed out with the utilities, customers' bills during March. The electric companies have similar promotions on other appliances, but have overlooked radio which, as now pointed out, contributes some $150,000,000 annually to the utilities' income.

INSTALLMENT SALES GROW

* With farm income this year reaching nine billion dollars—up 14 per cent compared with last year, and only 12 per cent under the 1929 peak—and industrial labor generally enjoying a 10 to 15 per cent increase over 1936 earnings, installment buying has also been going up to new high levels.

In 1929, 13 per cent of total retail purchases were made on credit. By 1936 this class of business had again risen to 12 per cent of total retail buying.

Figures for 1937 installment-buying are not yet available even as estimates, but President Roosevelt has appointed Malcolm Morrison, formerly of Brookings Institute, to a special berth in the Department of Commerce to report on installment volume.

WIRELESS' REMOTE CONTROL FOR RADIOS

* A new carrier-wave method for remote control of radio receivers, which eliminates troublesome extension cords, was demonstrated during the Rochester, N. Y., I.R.E. convention, Nov. 10.

A small control box fitted only with an attachment-plug can be plugged in at any outlet in the room or house, and then from it, by pushing buttons, the remote set can be turned on or off, volume up or down, or any of six stations tuned in. Turning on the set is accomplished without any tubes burning in the receiver or controls. For this purpose, a new cold, gas tube is used. The carrier frequency develops an emf of a volt or more, which when fed into a reactive circuit, is stepped up to 30 volts, enough to break down the gas tube and allow the power current to flow.

The new system was developed in the RCA License Laboratories, and is known as "teledynamic control by selective ionization." The demon-
and color are without a radio client—

crily aloof from radio as is. They

say that radio sets could do with less

bulk, more attention to tuning knobs,

further use of circular forms, more

tooling, simple identification of radio

as a musical instrument.

The problem gets more tangled as

we notice inclined panels, chairsid

effects and remote control as impon-

ant radio modes. More material for

the art boys to grumble about, or

even to improve.

**SERVICEMEN'S ASSOCIATION

ELECTS OFFICERS,

DEFINE POLICIES**

* The first Board meeting of the

new RSA (Radio Servicemen's Asso-
ciation) was held in Chicago, Oct. 11,

and elected the following officers:

T. P. Robinson, Dallas, Tex., Presi-
dent; Albert C. W. Saunders, Boston,

Mass., Vice-President; Ingvar Paul-

sen, Boston, Mass., Secretary; Lee

Taylor, Chicago, Ill., Treasurer.

Purposes of the RSA are thus de-
defined in the Association by-laws: "Its

object shall be the promotion of radio

service engineering and salesmanship;

the furtherance of national relations;

the advancement of the theory and

practice of radio servicing; representa-
tion of radio servicemen in legisla-
tive affairs; the maintenance of fra-
ternalism and a high standard of

professional conduct and living

amongst its members; and the pro-
motion of such other activities as

are allied thereto."

An example of democratic control

is seen in the jurisdiction granted

local chapters with respect to mem-

berships from in their immediate lo-

cality. The national division cannot

accept a member without the approval

of the local chapter, as well as any

recommendations that may be made

from other sources.

Through the anticipated support

and cooperation of the manufacturers

it is planned to have this new orga-

nization distribute to its members ad-
cance circuit diagrams, instruction

material and product information.

This service, plus a monthly organ

and advertising material, as well as

membership decalcomania and cer-

tificates, are among the RSA ad-

vantages offered servicemen.

Servicemen and independent ser-
vices organizations are invited to write

to Radio Servicemen of America,

Inc., 304 South Dearborn Street,

Chicago, Ill., for membership blanks.

**45% OF RADIOS NEED SERVICING**

* The public utilities have an ob-

ligation to their customers and to

themselves, to see to it that the radio

receivers operating from their lines

are in the best possible condition, com-

ments H. C. Bonäg, RCA, Cam-
den.

"Fifteen per cent of all radios less

than five years old are inoperative,

and 30 per cent are in only fair or

poor operating condition, which of

course results in less use. It is esti-
mated that losses in listening time
due to conditions that may be rem-
edied may be said to be costing the
electric light and power companies

approximately $15,000,000 in annual

revenue."

Jack Hoffman, Trav-ler president, has

added a night shift at Chicago plant.

trator equipment will be shown to

radio manufacturers, with the idea

of having it incorporated in 1939

models. This carrier-frequency re-

mote control is expected to add about

$30 to the price of the set.

**ATTACK OF ART**

* It would be a great pity if all

the super-engineered sets in the 1938

lines were not satisfactorily cased.

Technical luxury of the new receiv-

ers makes them the No. 1 item of the

modern household, if they are oth-

erwise OK. Plenty of smart designers

say they are not.

Many of these aristocrats of line

Featuring three Admiral execs on an outing, left to right, Ross Siragusa,

president, Ken Turner, chief engineer, and Lynn Park, treasurer.
OPERATING COSTS OF G.E. RADIO DEALERS

* After noting averages of retail operating costs from Radio Today’s surveys of radio dealers, C. H. Bell of the radio sales division of General Electric Company, Bridgeport, Conn., sends us the following average of operating statements of dealers handling General Electric radio.

Per Cent
Gross Margin .......... 46
Operating Expenses
  Store Management, Buying & Sales Direction .......... 4.0
  Rent, Light, Heat & Janitor Service .......... 5.4
  Salaries, Salaries & Commissions .......... 6.0
  Advertising & Sales Promotion .......... 5.0
  Delivery & Installation .......... 2.5
  Accounting & Collection .......... 3.5
  Misc. and Reserves (Bad Debt & Depreciation) .......... 3.0
Total Operating Expenses .......... 29.4
Gross Profit .......... 16.6
Other Expenses
  Service .......... 2.5
  Min. Trade-ins and Other Allowances .......... 10.0
Total Other Expenses .......... 12.5
Total Operating & Other Expenses .......... 41.9
NET PROFIT .......... 4.1

Comparing these figures, with the Radio Today averages reported in recent issues, Mr. Bell comments: “You will note that we project 10 per cent roughly for salaries, wages and commissions, whereas you project 19.4 per cent. However, we have 12.5 per cent covering service, minimum trade-ins and other allowances, whereas your breakdown does not show this detail.

NEW YORK RADIO GYPPING GIVEN THE WORKS

* Seven radio dealers in New York City convicted of out-and-out misrepresentation of radio to the public have been hauled into court and penalized with sentences ranging from 20 days in jail to $250 fine. Arrests were made June 29, cases came to trial Oct. 4, sentences were imposed Oct. 16.

Charges under which these dealers were prosecuted were (1) false and misleading advertising, (2) sale of merchandise with intent to defraud, and (3) affixing false and counterfeit trademarks to merchandise. Penalized dealers include National Radio Stores, Inc., Gem Radio, Inc., Osear Nadel doing business under name of Cortlandt Radio & Television Co., Furst Radio Corp., Bell Radio, Inc., Martin Silvers doing business under name of Walters Radio & Television Co., and Holland Radio, Inc. Five of them pleaded guilty, two were tried and convicted.

Legitimate radio manufacturers who represented the mis-use of their trademarks were represented in the proceedings by the law firm of Scandrett, Tuttle & Chalair, 30 Pine St., New York City. Bernard Phillips of that firm declares that “We have every reason to believe that as a result of these convictions the radio industry both in New York and throughout the country will be considerably benefited by the eradication of the form of racketeering in which the defendants indulged.” Mr. Phillips is thus identified with a national movement to clean up the practice of “foisting upon an unsuspecting public shoddy merchandise and representing that it was manufactured by legitimate concerns.”

SIMPLE DESIGNS AT PREMIUM

* Check-up on metropolitan department-store furniture and radio departments indicates that store executives in that group prefer radios simple in line as fitting the demands of the greatest number of customers. Interest in consoles dominates this market. Most purchasers accept standard models and designs; about 10 per cent of prospects ask for special furniture models. A surprising number of inquiries for legs on consoles, was reported from women customers.

FIVE TIMES TO THE MOON

* Whilst we imagine radio to be a “wireless” arrangement, the trade is actually criss-crossed with miles of it. String five fine copper wires between here and the moon, and you’ll have about the length of wire that goes into radio sets in a year, at the current pace.

In the same period, about 2,000 carloads of steel and 4,700 of lumber are used in receivers.


John F. Ditzell, Stewart-Warner’s radio and refrig. sales mgr., in the news again as new “box” line is shown Nov. 11-12 at Chicago convention.
COUNTERFEIT SETS, FAKE WITH

Radio Today buys and tests a "14-tube" receiver. Finds 8 of the "tubes" are mere resistors! Industry must stamp out evils, set up real standards for buyers.

* NEW YORK CITY has just witnessed a clean-up of the false-name racket in radio. Half a dozen dealers who were found guilty of using standard names on stencilled sets, have gone to jail or paid fines, as the result of a searching investigation by the district attorney's office.

But there are other rackets besetting the radio buyers of New York and similar metropolitan centers. Examples are the flagrant counterfeiting of popular models, and the misleading advertising of "14-tube" and "11-tube" sets in which half the so-called "tubes" are inoperative in a radio sense.

Wake up!

When the public is hoodwinked into believing that a 14-tube console receiver can be sold for the sum of $69.95, Radio Today believes it's time to wake up the deceitful elements in the industry for their own protection. Particularly since, to the public the "14-tube" claim is synonymous with many such features as electric tuning, AFC, all-wave, and high-fidelity reception characteristics.

When this "14-tube" receiver—claimed as listing for $69.95—turns out to be not as good as an average six-tube receiver, it's time for Radio Today to acquaint the radio men of America with the facts.

When this bargain receiver has more ballast tubes than amplifying tubes, it's time to get the industry behind a campaign to eliminate the whole indefensible practice of using more than the necessary number of tubes, which preys on the gullible radio set buyer. And Radio Today for the protection of the public, the radio dealers, and radio manufacturers, is taking leadership in this clean-up.

What kind of a "value" this fake "14-tube" radio really is, the reader will find analyzed and described in these pages. Comparisons are made with legitimate receivers so that radio dealers everywhere can show their customers why they should buy quality receivers manufactured by repu-
The fake 14-tube set has an ordinary midget chassis and speaker, connected to a second chassis having 7 useless resistor tubes in series.

Table organizations and sold by reputable outlets.

Becoming curious about the newspaper advertisement at right, Radio Today investigated this set, to discover the secret of its tube components. And then purchased one of these fake "14-tube" receivers and had it measured by one of the outstanding engineering laboratories of the country. The results show unequivocally that the receiver is no better than an average 5-tube receiver manufactured by any of the reputable companies. The figures and charts given on these pages are accurate and backed by the reputation of a reputable laboratory which made the measurements.

First of all, the fake "14-tube" receiver has none of those extra features that are associated with sets employing upwards of 8 tubes. In fact in many respects the set is not even so good as many of the standard five and six-tube chassis.

To illustrate graphically the inferiority of the fake "14-tube" console, charts based on laboratory measurements are presented on opposite page. In each chart the left-hand bar represents a standard 14-tube set which was chosen as being typical of the lower-priced 14-tube models. (Had an expensive 14-tube job been measured, the superiority would have been even more marked.) The center bar in the charts represents the characteristics of a standard $69.95 console. The right-hand bar illustrates the fake "14-tube" receiver with its "list price" of $69.95.

Chart 1 tells the story about the tubes. The fake "14-tube" set has only five active tubes—less than in the standard $70 consoles made by several well-known manufacturers. In the faked set, eight ballast tubes in series are used, seven of which are mounted on a separate chassis connected to the main chassis by two wires, as shown in the accompanying photographs.

A summation of the measured char-

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acteristics of the three different receivers is shown in Chart 6. On this basis, the standard $69.95 set is more than twice as good as the fake “14-tube” set listing at $39.95. In other words, even if the sale price of $34.95 is considered, the fake “14-tube” receiver is a poor value—overlooking its deliberate misrepresentation as a 14-tube set.

**Face situation**

Thus, the reader has revealed to him another discouraging aspect of the deplorable situation which confronts radio, not only in New York City, but in many other American communities. Every radio man must face these facts.

At a time when other American industries are building constructively and instilling confidence in their products, radio stoops to the methods of the gyp and shell-game artist.

In a season when the great automobile industry is creating new purchasers, radio offers an advertising message whose only refrain is cut-prices and skimmed-merchandise.

It is time the radio industry policed itself against these evils. To cope with misleading claims radio will need standards and definitions. It will need the united front of engineering opinion, reflected in the IRE and RMA committees, as to what kind of an envelope legitimately constitutes a “tube” in defining a radio set—as to what standards are essential when setting up claims.

The industry must clean its own house.

Radio must do its own policing.

Business Bureaus, national and local, and radio’s own trade and industry organizations.

If instances of radio racketeering are going on in your community, send in the evidence to Radio Today. We’ll see that it is placed before the proper authorities who can help stamp out these vicious practices.

**LABORATORY TESTS OF FAKE “14-TUBE” SET**

In the matter of tone, the fake “14-tube” model is greatly inferior to either of the other two models, as shown by Chart 2. And because of the flimsy cabinet, the bass or low-frequency reproduction is marred by resonance effects that give a rattling nasal sound when certain notes are played.

Chart 5 gives a rather fair indication of the type of construction used in the various sets. Note first that the chassis alone in a typical 14-tube receiver weighs much less than the entire fake “14-tube” set, including chassis, speaker, and cabinet. In the standard $69.95 set there is an 11-inch speaker weighing approximately 4 pounds, yet the fake “14-tube” receiver has only an 8-inch speaker weighing less than 3 pounds, which is roughly one-fifth of what is expected in a standard 14-tube job.

The cabinets of the fake and standard 14-tube sets are so different that any comparison is almost absurd. Even the cabinet on the standard $69.95 set weighing 40 pounds is infinitely superior to the flimsy 25-pound cabinet supplied the fake set.

(Continued on page 45)

**SEVEN STEPS TO STOP THESE RACKETES**

1. The radio industry must clean its own house—must police itself.
2. Engineering committees must set up standards (“What constitutes a tube?”)
3. Radio Trade associations must recognize present evils, and stamp them out.
4. Federal Trade Commission should investigate cases and issue “Cease and Desist” orders.
5. Federal Communications Commission can properly study radio-trade evils as having profound effect on public’s listening satisfaction.
6. Radio Today is bringing present racketeers to attention of proper authorities.
7. Readers who know of similar evil practices in their own communities are urged to send in the evidence to Radio Today, which will lay the facts before the proper policing agencies.
Here's the Kadette Clockette which annexed a coveted award in the Modern Plastics Competition.

All in fun, George M. Cohan, center, appears as President Roosevelt in the NY hit musical revue, "I'd Rather Be Right." Here, the "Supreme Court" is burlesqued as FDR's radio echo. The nine old men are clutching Emerson receivers.

An Indiana dairy man records the fact that he gets more milk since he started contenting his cows with a Fairbanks-Morse radio—a new farm trend.

McMurdo Silver, right, had Douglas Fairbanks, Sr., as a first customer when British McMurdo Silver opened.

Networks offer play-by-play reports as football broadcast interest hits a peak this month. Haynes Log lists 58 big games between Nov. 20th and the 25th.
FLIP ON THE CHRISTMAS LIGHTS!

To promote the master idea of more radio sets per family

A trim used at Ward's in Niles, Mich.

*HOLIDAY HOPES* this year are based mainly on real snap in promotion.

Action is the keynote of the gift business in 1938. The radio industry is interested in special sales pressure to land several of the classy new receivers in each home.

Dealers are keenly conscious of the fact that they've never had their hands on finer merchandise. They report that some of it has already been sold as gifts, via pre-Christmas deposit plans. The rest of it depends upon unending effort with the tempo increased over last year.

What form this action will take is seen in actual reports from radio experts, speaking from experience on selling at Christmas.

**Wilmington, Del.**

MacAbee's Radio Co. circulates the idea that for the hundreds of gents who want to buy a radio as a gift for one of the opposite sex, the store has a woman advisor. Mrs. Thomas MacAbee agrees to give the men a satisfactory idea of what women are likely to prefer in the way of a receiver. She considers matters of style, taste, and price from what the male customer tells her, applies the woman's viewpoint and keeps him from buying the wrong thing. She has become an authority on radio preferences for women of all ages, has learned to use the information where it will do the most good.

Radio windows divided into panels and banked with a snow pattern—an idea from Lowe's, New Rochelle, New York.

**Scranton, Pa.**

Scranton Talking Machine Co. uses a trick in radio display which sets the radio holiday season apart from other buying periods. According to Bert Sachs, store executive, a "circular" theme in windows has netted excellent results. Instead of the conventional straight lines in squares and oblongs, a shift is made to circular effects in placards, background pieces and posters. Roundedness is accentuated in every unit of the display; shoppers find the change a pleasant and attractive one.

**Havre de Grace, Md.**

Eldon Leithiser goes after the male heads of families at Christmas time. He operates on the theory that new models are the ideal gift from Father to members of the family—the perfect "way out" of a gift problem which may be complicated for the busiest person in the household. Mr. Leithiser believes what it is easier to sell a donor on a gift which may be of some use to himself at times. Of course nothing is openly said about this angle in sales talks.

**Binghamton, N. Y.**

At Weeks & Dickinson, radio manager H. J. Darch has noticed that parents are increasingly interested in anything that will keep members of the family at home. Declaring that radio has the finest possible solution for this problem, Mr. Darch plugs the types of programs which interest the younger set, explains to parents exactly what a radio gift will do to keep the family together. He has ex-

Color for Christmas—Arvins, Fadas and Kadettes in many shades are grouped to advantage by "Radio Stylist" Erin Bradburn, just added to the staff of Bradburn Radio, Houston, Tex., to handle "fine models for fine homes."
amples to prove his argument, without revealing local names. He convinces prospects that new models are "naturals" as fireside magnets.

Sunbury, Pa.

While others are talking about the magnificence and the glory of radio as a gift, Guy Foltz of Bittner's store steadfastly believes that holiday shoppers are mainly interested in ease and simplicity in buying. He tells prospects that other selection have to pass a series of tests in the matter of appropriateness, but that radio is instantly OK because of its very nature. His argument fits well into the "rush" atmosphere of the wild buying period in December.

Wilmington, Del.

"A lot of bosses give gifts to employees and a lot of employees select things for their bosses," reports John Evans of Stern & Co. Indicating that here is a radio angle that may have been neglected, Mr. Evans points out that a lot of extra funds are lying around in pay envelopes at Christmas time. His experience has been that many such radio purchases are of the "last minute" kind, but there is an extra volume to be built up if radio dealers will watch the Christmas plans of firms where the payroll is extensive.

Scranton, Pa.

Modern Christmas merchandising in radio means consoles for men and table models for women, thinks Mr. Blatt of Stecher & Fister. This is due to the fact that men have become more interested in the new improvements in short wave reception and women have developed an appetite for second and third sets in bedrooms and kitchens. Mr. Blatt has hit on this method of specialized appeal after analyzing what he considers the major trends in 20th century preferences in radio homes.

Binghamton, N.Y.

Frankly W. H. Cargill reports that he has found many hesitant Christmas buyers of radio because of its "impersonal" nature. Acquaintances have told him "I sure wouldn't want anybody to give me a radio for Christmas—it doesn't seem like a personal thing to do and gifts are supposed to be personal!" Mr. Cargill gets around this by suggesting the use of an additional smaller gift to accompany the radio—some inexpensive item which fits in with what the prospect thinks is personal. He has a list of such items and finds it extremely useful in clinching radio gift sales.

New York City

Five methods to overcome price resistance by buyers were disclosed during a recent symposium held by the Sales Executives Club of New York:
1. Don't be ashamed of how much your product costs, but be proud of how much it is worth, and sell accordingly.
2. Quote price not as an outgo for the customer, but as an income, relating values in terms of his own experiences.
3. Dramatize and sell your prices just as you do your product.
4. Keep prices flexible in retail selling so as to be in a position to hit the psychological price.
5. Visualize the price in such a manner to the consumer that her purchase will be considered as replacing only minor expenditures.

Christmas Club

National release date for all those dollars to be forwarded to Christmas Club members throughout the nation is Dec. 1. It's a green light for radio merchandisers—a signal for set sellers to go out and promote—and re-promote until they cinch their share.

As an indication of what the affair amounts to, last year the Clubs released $355,000,000 to some 7,500,000 persons who had thriftily been saving up for the holidays. Estimated average amount per Club member was $46.50. It was fed back to the public via 5,500 banks.

A radio sales executive has remarked pointedly that, past all the tony appeal of new chairside models, in one respect the trend is unfortunate. Easy chairs are now a regular item in radio stores. Result: dealers have a tendency to sit!
RADIO AT N. Y. AUTO SHOW
— telesopic cowl antenna gains popularity
— average price up 15-20% over last year

* That auto radios are more popular than ever is emphasized this year by the exhibitors at the New York Auto Show, in that nearly every new car is shown equipped with radio and facilities for easy installation incorporated in the structure of the car when built at the factory. The most outstanding feature of this year's auto radio installations is electric push button tuning used by Chevrolet. In this set made by Crosley the push buttons are individually lighted by small bulbs, thus providing for easy selection of several stations. An electric motor for selection and temperature compensation of the tuned circuits provides stable operation. Another safety feature is that the controls are mounted higher up on the instrument panel where it is possible for the driver to operate the radio with the least danger to driving.

Rear seat speakers

Although radio is as yet not standard equipment on the popular and medium priced cars, optional plans for installation are provided for by every manufacturer. Header or "ear level" speakers are becoming more popular, as is shown by the increase in such installations by Buick, Cadillac, Nash and Pierce Arrow. Some of the other cars have provisions for the addition of such speakers at the option of the buyer. The convenience of the back-seat riders is being taken care of by the provision for rear-seat speakers. These speakers costing $5 to $8 are optional equipment with Chrysler, DeSoto, Plymouth and Dodge.

Advances have been made in the design of antennas. The old chicken-wire roof type has been superseded almost entirely by the running board or cowl types. Only four cars shown still cling to the roof type. There is a most decided increase in the popularity of the telesopic cowl type of antenna this year mounted on the left side near the radio set. Many of the manufacturers are showing these antennas in their installations. A few of the auto manufacturers who have provided for running board antennas have the running board insulated from the frame of the car so that the antenna may be fastened directly to the board without danger of grounding, or the running board itself may act as the antenna. Running board types are of the rigid-rod construction which are not likely to be damaged from road travel. In addition, such design prevents, to a large extent, danger of accidental grounding due to vibration or impact.

Newest widespread trend in auto-radio design is the placement of speaker unit behind a grille on the instrument panel.

RADIO SETS IN 1938 CARS

<table>
<thead>
<tr>
<th>Make of Car</th>
<th>Make of Price</th>
<th>Type of</th>
<th>Antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buick</td>
<td>R.C.A.</td>
<td>$63.00</td>
<td>R.B. L &amp; R</td>
</tr>
<tr>
<td>Cadillac</td>
<td>R.C.A.</td>
<td>$73.00</td>
<td>R.B. L &amp; R</td>
</tr>
<tr>
<td>DeSoto</td>
<td>R.C.A.</td>
<td>$55.75</td>
<td>R.B. L &amp; R</td>
</tr>
<tr>
<td>Dodge</td>
<td>Ford</td>
<td>$57.30</td>
<td>R.B. L &amp; R</td>
</tr>
<tr>
<td>Ford</td>
<td>Nash</td>
<td>$54.95</td>
<td>R.B. L &amp; R</td>
</tr>
<tr>
<td>Hudson</td>
<td>Nash</td>
<td>$62.50</td>
<td>Cowl</td>
</tr>
<tr>
<td>Hupmobile</td>
<td>Nash</td>
<td>$79.50</td>
<td>Roof</td>
</tr>
<tr>
<td>Lafayette</td>
<td>Nash</td>
<td>$50.90</td>
<td>Cowl</td>
</tr>
<tr>
<td>Nash</td>
<td>Nash</td>
<td>$65.00</td>
<td>R.B. or Cowl</td>
</tr>
<tr>
<td>Lincoln</td>
<td>Nash</td>
<td>$56.00</td>
<td>R.B. L &amp; R</td>
</tr>
<tr>
<td>Lincoln Zephyr</td>
<td>Nash</td>
<td>$135.00</td>
<td>Roof</td>
</tr>
<tr>
<td>Oldsmobile</td>
<td>Nash</td>
<td>$56.00</td>
<td>Roof</td>
</tr>
<tr>
<td>Packard 6, 8, 12</td>
<td>Nash</td>
<td>$65.75</td>
<td>R.B. L &amp; R</td>
</tr>
<tr>
<td>Packard Super 8</td>
<td>Nash</td>
<td>$80.00</td>
<td>R.B. L &amp; R</td>
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<tr>
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<td>Nash</td>
<td>$90.00</td>
<td>Roof</td>
</tr>
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</tr>
<tr>
<td>Willys</td>
<td>Nash</td>
<td>$45.95</td>
<td>Cowl</td>
</tr>
</tbody>
</table>

*Electric push-button tuning. R.B.—Running board L—Left R—Right

Although many of the cars do not class radio as standard equipment, they are built for the installation of the radio or have it put in at the factory and charge extra for it. As a result, there are many designs of interesting control and panel layouts.

There is a strong tendency this year for instrument panel controls with the speaker behind a grille that extends on either side of the controls. Buick, Cadillac, Dodge, Graham, Hudson and Hupmobile have panels of this type. Many harmonious effects are gained which add to the beauty of the car. Probably the most outstanding feature of the new type of control design is that, being mounted high on the dash, ease of control while driving is assured, and a clear vision of the dial or drum is had at all times without the necessity of leaning forward or looking down and being forced to take the eyes from the road.

Price ranges this year are from $29.50 up. Most of the prices include sets installed with antenna. Averages this year are about $63.00 as against $55.00 of last year because of rising costs of labor and material. Custom built installations plus added advantages of beauty and ease of control should more than off-set the increase in price range. Large opportunity is still at hand for independent radio dealers to make any installations in those cars which are not sold with radio. Since the custom built sets are rather high in price, there is a great opportunity for the independent radio dealer to sell the auto owner a smaller or cheaper set than that provided by the manufacturer of the car. And of course custom controls for every car can be furnished by the local radio jobber.
TO RING THE REGISTER

Extra lines with a lively Christmas appeal

ORDERED in dozens are a series of trim items to stir Christmas selling for radio men.

These extra, smaller numbers glint effectively against radio displays and add a de luxe note which means traffic. Shoppers who believe that gifts should be limited to fewer dollars than may be found among radio prices are introduced to an elegant array of new models.

Smartly stocked with an attractive selection of supplementary lines, the radio dealer widens his acquaintance into all income groups, all ages, and all styles of gift-giving.

The added variety in merchandise simplifies the matter of holiday display and provides a new note of color for the radio store. Much of the merchandise is specially packaged as gifts and automatically supplies the dealer with a Santa Claus trim.

A batch of fast-selling merchandise also gives the dealer a chance to combine radio with other lower-priced jobs. He has a perfect chance to promote specials and to ring up important sales from customers whose gift problems are multiple.

Electric razors come in colors, including jade, ivory, blue, red, lava, lapis, black, some with embossed finishes. Packed in gift boxes, they are sold mostly on time and fit neatly into radio’s credit procedure.

Cameras and projectors have the special appeal of making “Christmas Last Forever,” because pictures form a unique record of family affairs.

Flashlights have the advantages of low prices, recent improvements in function and design.

“World time” clocks have been specially designed for radio sets, and boost popular interest in short wave.

Typewriters, electric heaters, toasters and dial thermometers, each with a special brand of Christmas appeal, complete the list.

“Humidiguides” by Taylor Instrument Co. Dial thermometer in walnut, an even $10.

A 1938 De Luxe Toastmaster Hospitality Tray set, from McGraw Elec. $25.50.

“Globetrotter” by Telechron, gives time at 30 foreign spots, for $7.50.

Portable typewriter with sealed action—an Underwood priced at $64.50.

Naturally linked to Xmas, new model flashlights ranging from $1.15 up.

Dozens of uses are named for Arvin’s new electric heater listing at $9.95.

November, 1937
TELEGRAMS TO DEALERS

Factory sales executives flash messages to retailers

* KEYNOTE ideas from the experts at radio headquarters are today being watched intently by the gentlemen on the shop floors.

There are a great many dramatic angles to the radio market right now, as the new models approach their holiday plugs. Herewith are these angles called by name.

For Radio Today, the top-notch executives were invited to wire radio dealers generally, via these columns. They have been asked to convey their most important advice—the biggest things to remember in radio selling at the moment.

They were limited to fifteen words each:

**Keep selling**

ENERGY, DETERMINATION AND THOROUGHNESS IMPORTANT IN DEALER ATTACK. PUBLIC WILL BUY IF DEALERS KEEP SELLING.

John F. Ditzell, Stewart-Warner Corp.

**Spirit OK**

STORMS, DEPRESSIONS, STOCK MARKET CRASHES HAVE NEVER DAMPENED AMERICA'S CHRISTMAS SPIRIT. SELL RADIO FOR CHRISTMAS.

Harry Alter, General Household Utilities Co.

**Automatics**

FEEL DEALERS OBTAIN BEST CHRISTMAS SALES THROUGH CONCENTRATION AUTOMATIC MODELS. MAKE CONSUMERS DISSATISFIED MANUAL TUNING.

Howard Briggs, Vice-president, Howard Radio Co.

**All-over demo**

CONSUMERS AGAIN DEMANDING RADIO VALUES. GET BUSINESS BY DEMONSTRATING VALUE FRONT, BACK, INSIDE AND OUT.

W. Paul Jones, Fairbanks, Morse & Co.

**Profit**

DEALERS FIND REAL PROFIT IN HANDLING ONLY FEW PROTECTED LINES. QUALITY PHONOGRAPH AND COMBINATIONS ESSENTIAL.

Arthur C. Ansley, President, Ansley Radio Corp.

**Easy sales**

CLARION ELECTRIC AUTOMATIC TUNING IS INSTANTANEOUS, PRECISE AND TROUBLE-PROOF SPELLS EASY SALES—PERMANENT PROFITS.

R. B. Lacey, Clarion Corp.

**Table models**

SMALL ELECTRIC TUNING TABLE MODEL RECEIVERS PROPERLY PRICED WILL BE THE SALES LEADERS OF THIS SEASON.

W. L. Hasemeier, Wilcox-Gay Corp.

**Moderne**

DEALERS TAKE HEED. SELLING RADIOS WITHOUT ELECTRIC TUNING IS LIKE SELLING AUTOMOBILES WITHOUT SELF-STARTERS.

H. H. Skillman, Director of Sales, Detrola Corp.

**Peak**

THIS CHRISTMAS WILL, IN MY OPINION, PROVE MOST PROFITABLE PEAK OF ENTIRE YEAR FOR PHILCO DEALERS.

Larry E. Gubb, President, Philco Radio & Television Corp.

**Gifts**

THERE'S A TRAVELER GIFT MODEL SUITABLE FOR EVERYBODY. TELL YOUR CUSTOMERS TO "TRAVEL WITH TRAVELER."

A. Maybrun, Traveler Radio & Television Corp.

**Price tags**

THE RADIO MARKET FROM NOW ON IS A "PRICE" MARKET. KADETT LEADS IN THIS FIELD.

W. Keene Jackson, International Radio Corp.

**Start work**

HAVE YOU GOT WHAT IT TAKES TO START SENTINEL? HAS STOP QUIT WORKING START WORKING.

George Russell, Sentinel Radio Corp.

**Best bet**

ADMIRAL TILT-TUNING PLUS FOOL-PROOF ELECTRIC TOUCH-O-MATIC TUNING YOUR BEST BET TO ATTRACT CHRISTMAS RADIO BUSINESS.

J. H. Clippinger, Continental Radio & Television Corp.

**Plus volume**

FADA DEALERS' NOVEMBER-DECEMBER PROGRAM WILL ZOOM UPWARD WITH PLUS SALES. FLASH-O-MATIC TUNING IS THE REASON.

J. M. Marks, Fada Radio & Electric Co.

THIS CHRISTMAS, SELL..."A Radio for Each Member of the Family"

For Mother
— a boudoir set

For Father
— a console

For Big Brother
— an auto set

For high-school
Daughter
— a "color" radio

For the Little Folks
— a nursery radio

For Grandpa
— an all-wave job

For Grandmother
— a record-player

For the Whole Family
— a phonograph-radio combination
RADIO RECEPTION IN YOUR VICINITY

Suggestions on station tuning, to be passed along to customers

* MANY radio dealers and servicemen have questions to ask about reception conditions in their own communities. There are many curious reception "freaks" experienced by listeners as well as dealers and servicemen, and local radio men are called upon to explain these strange caprices in radio reception.

Unsatisfactory reception from a desired broadcasting station is almost invariably blamed upon the receiving set itself by uninformed listeners. The characteristics of radio transmission are but little understood by the average listener. Frequently resentment is expressed toward a radio dealer, who is blamed for selling an inferior set, when upon investigation, the cause of the difficulty is found to be fading or interference.

Coast-to-coast survey

Radio Today has, therefore, arranged with Edgar Felix, consultant on radio reception conditions for advertisers, and publisher of Radio Coverage Reports, to answer questions from our readers. With his measuring cars and crews, Mr. Felix has made field-intensity measurements in all sections of the United States and in all important cities from coast to coast.

It is believed that dealers may have questions to which they seek answers as explanations to their customers. The purpose of the following is to aid dealers in handling questions dealing with the broadcasting service available in their areas. Your questions are invited, and will be answered in later issues.

The following are actual questions which have been put to Mr. Felix's field crews making measurements. They indicate the type of information which the dealer must have in order to meet the situations which may arise with purchasers of receiving sets.

Central New York

"The president of a manufacturing concern located in Amsterdam, N. Y., purchased a radio receiver in order to hear the program which his company is broadcasting through the Columbia Broadcasting System. Reception of WABC is quite unsatisfactory because of rapid fading at this distance. CBS programs are available on average receivers here through numerous stations, but what station would you recommend for greatest reliability and all-around satisfaction to meet this particular situation?" J. K., Amsterdam, N. Y.

Answer: While some regional stations, radiating CBS programs, may be entirely satisfactory near sunset and sunrise hours, you should invariably suggest clear channel stations to the attention of a listener who wishes to listen to a particular network program because no regional station's service is usable at all hours at Amsterdam. WABC and WCAU are both at the intermediate distances which frequently make their fading rather objectionable. High power stations 400 miles or more distant, though weaker, are more likely to be stable and free of distortion, but the direction from which the strongest signals come varies from night to night according to atmospheric conditions. The simplest recommendation is to try WBT and WBEM; if both of these should at any time prove unsatisfactory, WJR and WILAS; and finally, KMOX and WCCO.

Maine

"I get excellent service from WOR during the day, but it is rarely good at night. Sometimes there is a whistle on it; at other times it is clear for a while and then it just goes to pieces." A. D., Ogunquit, Me.

Answer: Excellent reception of WOR in Ogunquit, Me., indicates that you have a sensitive receiver. The whistle occurs when WLW reaches high peaks as WOR fades out. The automatic volume control increases the sensitivity of the receiver during WOR lows, bringing in a very high whistle from WLW. When WOR reaches normal levels, the automatic volume control reduces the sensitivity of the receiver, with the result that WLW's whistle disappears. If the receiver is well lined up, there is no satisfactory cure because WOR tends to fade more than moderately at the distance involved. A hundred miles further from the transmitter, the "fadeouts" are not so complete and less trouble from WLW is generally encountered.

Illinois

"Because we have almost no primary radio service here, we find sensitivity an essential qualification for a satisfactory receiver. Can you advise me which of the numerous stations audible here are actually the weakest during the day?" F. B. K., Effingham, Ill.

Answer: You should be able to tune in at least 25 stations on an average receiver at any time during the day at Effingham. WOWO and WHKC are both consistent, yet adequately weak for your sensitivity tests. Near sunset and sunrise, however, they are both likely to rise to substantial levels for brief periods and cannot, therefore, be used as a test for receiver sensitivity at such hours.

This picture of Danny Baumann and his new brother, mailed with 2,000 letters to Chicago customers of Roy Baumann, brought tangible sales results. See page 38.
MORE SNAP IN RADIO SELLING

Dedicated to the idea that peppy promotion will always pay off.

DENVER STORE RENTS RADIOS DURING FOOTBALL SEASON

That the football season and the "World's Series" offer the radio dealer an excellent opportunity for profitable rental of machines has been proved in an interesting way by the Le Moine Music Co., Denver. During the fall months, this company rents an average of 60 or 70 machines per month for use during big games.

The big volume of this business is done with inmates of hospitals, hotel residents and office tenants who do not have radio facilities and who during most of the year are not interested in them. Cost of getting the business has been practically nil—a poster in the window announcing the rental service has been the only advertising used.

Only table sets taken in on trades are rented. A flat rental fee of three dollars per month is charged for any machine the customer may choose.

The customer may, up to a specified time, apply the rental he has paid on purchase of this set or another one. Quite a number of extra sales are made in this way.

Losses on rented machines have been kept to a minimum through use of an iron-clad conditional-sales contract. The customer is required to sign exactly the same agreement as if he were buying the machine on time. However, in large letters across the face of a contract used for this purpose is written the word "Rental."

SOUND BOOTH IS A GOOD SALESMAN

When you are limited for space and cannot afford specially built-in rooms to demonstrate microphones and amplifying equipment, why not create a suitable substitute which produces the same thing at small cost?

"WE GOT MORE PROSPECTS FOR BETTER-GRADE MERCHANDISE"

Herewith, the completely remodeled premises of Kirks' Radio & Electric Co., Mattoon, Ill.

"Being able to display more merchandise and displaying it properly," reports Clyde Kirk, "We noticed a great increase in our business and certainly more traffic."

The front, in black glass with aluminum trim, cost $675. The red and green modernistic neon sign, designed by Mr. Kirk himself, cost $350. Inside, the color scheme is bone-white and red. Indirect lighting is used, with 3-position switches. No shadows. On one side is a 25 ft. display, lighted by four 100-watt lamps with special reflectors.

Cashier counters have black tops, chromium trims and posts. Executive offices have plate glass sidings with top corners cut in modernistic pattern.

That was the theory of Gene J. Rothman, manager of the Allentown (Pa.) Radio & Electric Service Company, Inc. So he built a special microphone testing booth right in the store to demonstrate amplifiers on the show room floor.

"We had a small store room, all on one floor, with no additional available space," explained Mr. Rothman, "and we did not have the room to put up a complete amplifying display. At the same time it was naturally quite impossible to demonstrate without any amount of feed-back."

"So we built this booth of wood framing, covered it with double celotex, provided air space between, and padded it. The glass is also of double thickness, with air space. This booth is very nearly sound-proof. On one side is the amplifier rack and our speaker rack is on the other side. With this set up we can hook up any one of the series of six speakers.

"It is an ideal set-up for the small store, where the question of finding room is a problem. It provides a special set up with all hook-ups complete, ready to demonstrate—any volume—a sound proof booth which does not give any feed-back. With a sound proof booth you can go in there and demonstrate any microphone at any time.... crystal, carbon, velocity, etc."

ELMER HAYSEED PERFORMS FOR RADIO

People in Mamaroneck, N. Y., recently noticed a man in overalls, straw hat and boots parading the streets carrying an old carpet bag bearing the words, "Yep, I'm on my way to Mosier's and $90,000 in free prizes."

Dealer Russell K. Mosier was using a character actor, "Elmer Hayseed" to attract prospects to his store. Elmer finally arrived at the shop, sat in a chair on the sidewalk and demonstrated RCA's electric tuning with a parasol. Street traffic was blocked, the while Elmer cracked wise.

Trimmings for the stunt were store and window decorations of pumpkins, cornstalks and autumn leaves. The affair lasted two days, cost Mr. Mosier only $15.25, netted dozens of prospect names.

22

Radio Today
HOWARD SCORES
ANOTHER FIRST!

MODEL 211
PUSH-BUTTON ADAPTER

Automatic tuning has captured the imagination of the radio buying public as nothing has since the dynamic speaker. Everyone wants it but hundreds of thousands will do without it rather than sacrifice their present radio. With this new Howard development you can give them automatic push-button tuning for the radio they now have at a small fraction of what it would cost them to purchase a similar automatic radio. Suitable for use with any receiver regardless of make, model or circuit. Provides instant push-button tuning for any eight stations on the broadcast band which can also include your favorite police station. Station selector quickly and easily changed by anyone without removing chassis from cabinet. Six tubes. Automatic volume control. Dynamic Speaker. Copper plated chassis. Handsome cabinet designed for either top-tuner or horizontal positions. Don't delay your investigation of this and the seventeen other sensational new Howard models for 1938. We have what it takes to get business when and where business is hard to get.

Write or Wire for Details

MODEL 240
ALL-AUTOMATIC RADIO

And here's more front page news for enterprising Dealers and Distributors! An Automatic Radio that retails for less than forty dollars. Eliminates dialing completely. All tuning is done by means of eight push-buttons instantly adjustable for any eight stations on the broadcast band including your favorite police station. Station selector quickly and easily changed by anyone without removing chassis from cabinet. Six tubes. Automatic volume control. Dynamic Speaker. Tone Control. Copper plated chassis. Handsome cabinet designed for either top-tuner or horizontal positions. Don't delay your investigation of this and the seventeen other sensational new Howard models for 1938. We have what it takes to get business when and where business is hard to get.

* Howard engineers are always busy on new developments that help you sell more merchandise. Watch Howard ads regularly for outstanding new ideas.

HOWARD RADIO COMPANY
1731-35 Belmont :: Chicago, Ill.

November, 1937
NEW THINGS FROM THE MANUFACTURERS

Fada automatic tuning table models


Lafayette sound system


DeWald receivers


Burgess "B" pack

- 135-volt multiple "B" battery pack designed to replace three No. 10308 batteries. Constructed in one flat unit with three standard type "B" battery plugs mounted on side of battery. Dimensions 4" x 12" x 13½". Burgess Battery Co., 111 West Monroe St., Chicago, Ill.—Radio Today.

Super-pro console


Aladdin multiple oscillator

- Multiple oscillator, aligned with Polyiron cores and contained in a compact housing. For use in pre-selected tuning systems. Use of Polyiron adjusting method obviates the drift as had in compression type trimmers. Ranges are from 1520 to 540 KC inclusive, covered by 6 coils. Aladdin Radio Industries, Inc., 466 West Superior St., Chicago, Ill.—Radio Today.

Bel-monitor station selector

- Mechanically operated station selector using no motors. Composed of a bank of keys which are linked to an equal number of adjustable centering cams mounted on tuning condenser shaft. Travels through shortest arc of travel to station desired—no special sequence of stations or operation required. Any key can be adjusted without affecting others. Eight-station model on Belmont 860 and 1175 consoles. 6-station type on table model 582. Belmont Radio Corp., 1357 Fullerton Ave., Chicago, Ill.—Radio Today.

6-volt & AC superhet

- Receiver designed for use in farm areas where electrification is under way. Set will operate on 6-volts or 110 AC. Five-tube dual-wave chassis tuning 540-1720, 5800-18,000 KC. PM dynamic speaker—pentode output system. Illuminated dial. Walnut cabinet 10¼ x 16¾ x 8¾ inches. Model 85BT6—list $44.95. RCA Mfg. Co., Cooper St., Camden, N. J.—Radio Today—see also advt. p. 41-44.

Armchair combination

- Phonograph radio combination is chairside design. Set has 8 tubes tuning 540-18,000 kc. 10-inch dynamic speaker. Cathode ray tuning indicator—6-inch dial. Tone and volume controls on radio and phono. Shelf-space in cabinet for records. Arvin model 848CS. Noblitt-Sparks Industries, Columbus, Ind.— Radio Today.
"A STITCH IN TIME . . ."—I PERSONALLY RECOMMEND THAT YOU ASSURE YOUR SUPPLY OF

KADETTE RADIO
The Christmas Gift of the Year!

DON'T DELAY ORDERING PLASTICS

First come—first served, must necessarily be the rule in filling orders for Christmas stocks of Kadette Jewels, Travel Sets, Classics and Cockettes. Top speed production is enabling us to catch up on jobber's requirements. And we hope to fill all demands for the holiday trade.

Dealers' orders received NOW will be scheduled for early delivery. Furthermore, dealers placing orders now will be sure of receiving the free cutout counter and window displays. The supply of these is definitely limited. See your jobber—write or wire—TODAY.

AND NOW! THE LEADER OF THE INDUSTRY

Dealers advertising $19.95 10-tube leader for... acclaim it the greatest producer of store traffic radio has ever seen! Increased production now permits filling additional orders for this sensational K-1019. ACT NOW!

INTERNATIONAL RADIO CORPORATION, 559 Williams Street, Ann Arbor, Michigan

November, 1937
NEW THINGS

5-watt amplifier

* Low-cost amplifier for covering audiences up to 1000 persons. Uses metal tubes with pentode output amplifier. Flat within 2 DB from 90 to 15,000 KC. High and low impedance inputs. Outputs of 1, 1 1/2, 2, 4, 8 ohms. Gain of 110 DB. Model 10B5—list $41. Webster Electric Co., Racine, Wis.—Radio Today.

Supreme signal generator

* Test oscillator and frequency modulator with spotlight dial. Hairline indicating shadow lights the individual frequency range and eliminates parallax. 38:1 vernier ratio. Provides unmodulated RF, 400 cycle modulated RF, 24 KC band frequency modulated RF, fixed 400 cycle audio, variable 0-10,000 AF. Model 581. Supreme Instruments Corp., Greenwood, Miss.—Radio Today.

Emerson AC console


Trailer radio


30-watt amplifier

* Compact rack type amplifier for all sound systems. Has exciton lamp unit for motion picture projectors and field supply for speaker units. Power output of 30 watts. Model WR. Herman A. DeVry, Inc., 1111 Armitage Ave., Chicago, Ill.—Radio Today.

RCA-Victor farm radio


Hickok oscillograph

* 3 inch oscillograph to be used with any frequency modulator or frequency modulator oscillator. Tube is mounted at an angle putting screen at eye level. Has removable screen and adjustable cathode ray tube mounting. Also focusing, intensity and positioning controls. Two sweep cir-

cuits with flexible, wide range, linear variable from 3 to 150,000 and 60 cycle sinusoidal. Automatic synchronization. Locking sweep circuit eliminates image wandering. Ampliers have flat re-

sponse curve up into R.F. One meg.

horizontal and vertical input. Hickok

Electrical Instrument Co., 10514 Du-

dupont Ave., Cleveland, Ohio—Radio To-

day—see also advt. p. 76.

General Electric table set


Test-o-lite

* Neon type test indicator to show presence of voltages from 90 to 500, AC or DC. Unit built with pocket clip to prevent loss. L. S. Bruch Mfg. Corp., 55 Dickerson St., Newark, N. J.—Radio Today.

Lightweight headphones

* Commercial headset featuring extra durability and substantially uniform frequency characteristics throughout voice ranges. Absolute sensitivity of 600-ohm impedance unit of 1 microvolt across terminals for a just audible signal. Will handle input up to 1 watt without rattling. Telephone type plug. Trimm Radio Mfg. Co., 1770 W. Berrian St., Chicago, Ill.—Radio Today.
Sell Sylvania! It pays — not only in actual tube profit, but by pulling future jobs your way, too!

Here's how Sylvania's dependability can add new profits to your business:

A customer calls you in to service his radio. You find he needs a new set of tubes. Okay, you install the tubes, and that's that.

But wait a minute! That's not that... not if you install Sylvania! That customer will be impressed by the fine job you did on his set—by the finer performance it gives. And, as hour after hour of faithful service is completed by these Sylvania tubes, he's going to say something like this: "Mm-m. Swell buy I got on those tubes. That guy must know his business. Guess I'll call him up every time!"

And that's that! The next time he phones for service, you will be on the other end of the wire—all because you have proven yourself a dependable dealer by selling him dependable tubes.

Sell Sylvania tubes. Put Sylvania's pulling power to work for you.

SYLVANIA
SET-TESTED RADIO TUBES
NEW THINGS

Meissner I.F. transformers

Star I.F. double-tuned transformers known as the wide range line. Feature is the wide range of frequencies that the transformers can be tuned to. One can tune to any I.F. frequency required from 121 to 650 KC without skip. Simplifies replacement problems. Available in either iron core or iron core; 1500 and 3000 KC units are available for amateurs. Meissner Mfg. Co., Mt. Carmel, Ill.—Radio Today.

Trav-ler receiver


RCA sound systems

* 1938 line of amplifiers and sound systems includes equipment for all applications of sound reinforcement. Outputs range from six to more than 50 watts. Model PG-112 illustrated is a 12-watt portable system operating from AC or a 6-volt dynamotor. Junior velocity mike, 2 heavy-duty FM speakers with baffles, interconnecting cables and carrying case. List $195.50 complete. RCA Mfg. Co., Front St., Camden, N. J.—Radio Today—see also advt. p. 43.

Midget volume controls


Amperite acoustic compensator

* Velocity microphone with acoustic compensator permits adjusting response of P.A. system to the requirements of any particular room or condition. Pitch is raised or lowered by pushing up or down the compensator. Acoustic baffle is used to absorb some of the lower frequencies. Amperite Co., 561 Broadway, New York, N. Y.—Radio Today—see also advt. p. 1.

Sentinel arm chair radios

* 5-tube, 2-band model band coverage 540 to 1720 KC and 2300 to 6300 KC. A.V.C., full range tone control and 8-inch dynamic speaker included. Rubber mounted chassis a special feature. Other arm chair models are 72 AAE 6-tube 2-band set and 80 BA-A 5-tube 3-volt single band. 90 BA-A 5-tube, 2-volt 2-band set and 75 BA-A 5-tube 6-volt models. Same cabinet design in all models. All battery operated sets have 8-inch F.M. Speakers. Sentinel Radio Corp., 2225 Diversey Pkwy., Chicago, Ill.—Radio Today.

Ohmite precision resistors

* Riteohm "71" a vitreous enameled 1 per cent accurate, precision resistor of 1 watt rating for use as voltmeter multipliers. Riteohms up to 50,000 ohms are 1% x 1/2" and 7/16" x 2" up to 100,000 ohms. Resistors are single layer wound with special alloy wire on a ceramic tube. Resistor is covered with ohmite vitreous enamel. Low inductance and distributed capacity. Ohmite Mfg. Co., 4855 W. Flournoy St., Chicago, Ill.—Radio Today.

6-volt 110 AC farm set

* All-wave, 6-tube receiver for use on 6-volts DC or 110 AC. Tunes 530-23,000 KC. Large mirror-dial, edge illuminated. Power output 21/2 watts on DC, 3 watts on AC. 6-inch PM speaker. AVC, continuously variable tone control. Octal glass type tubes. Model B-667A. Crosley Radio Corp., 1529 Arlington St., Cincinnati, Ohio—Radio Today—see also advt. p. 6.

12-volt vibrator supply


Howard automatic tuning

* Six tube push button automatic tuning table model tunes 8 stations—one in police band. Uses copper plated chassis mounted in two-position cabinet, which may be used as top-tuner or horizontal. Howard Radio Co., 1731 Belmont Ave., Chicago, Ill.—Radio Today—see also advt. p. 25.
DO YOU KNOW THIS ONE?
How does the "Eveready" "Air Cell" "A" Battery Breathe?

All primary batteries must have oxygen. In dry batteries this is supplied by a chemical placed in the battery when it is made. The "Eveready" "Air Cell" Battery takes its oxygen from the air, where the supply is free and unlimited.

There are five and one-quarter pounds of zinc in this battery. Being acted upon on all sides by the electrolyte, the consumption of the zinc plates is practically complete. Therefore the 600 ampere hour capacity.

The slurry cake is the rejuvenator of the electrolyte. It separates the waste product from the electrolyte and the refreshed electrolyte returns for further action on the zinc.

Long life, practically constant voltage and the lowest cost per ampere hour of any primary battery combine to make the "Eveready" "Air Cell" "A" Battery the ideal source of filament current supply for 2-volt "Air Cell" receivers.

A cross section of the battery that breathes the same air as we do

How can you make the biggest profits out of the "Air Cell" battery?

The "Eveready" "Air Cell" Resistor widens your "Air Cell" battery market to include every two-volt receiver in your neighborhood.

Every true "Air Cell" receiver, no matter who makes it, is approved by National Carbon Company, Inc., and is ready to function on "Air Cell" "A" power without the addition of resistors.

All other 2-volt receivers may be quickly and easily adapted to the economical level power of the "Air Cell" battery by adding an "Eveready" fixed resistor of the proper value. Through this simple operation, the set owner is freed from tinkering with hand-operated resistors, from short-lived ballast tubes and from the excessive power-waste of dry "A" batteries, the nuisance and expense of storage batteries, chargers, etc.

Get a card of these "Eveready" "Air Cell" Resistors at once. Always keep them on hand. Note the five different resistances on each card so you need buy only one to take care of sets from 480 to 740 millampere drain.

AND HOW CAN I FIND OUT:
How long will "B" batteries last? How long will dry "A" batteries last? How long will an "AIR CELL" "A" battery last? What brings "Sudden Death" to "B" batteries? How does a dry cell produce electricity? How to cut "A" power costs in half. How to increase tube life two to three times. What to do about "voltage wasters." What should I promise my customers?

FREE
JUST MAIL THE COUPON

NATIONAL CARBON COMPANY, INC.
P. O. Box No. 600, Grand Central Station, New York, N. Y.
Please send me free of charge the new book: "The ABC of Radio Battery Life."

Name
Address

R.T.5
Operadio portable unit

* Model 108 portable public address system rated at 8 watts normal and 15 watts maximum. Amplifier is removed from case when being operated. Unit comes with velotron type microphone mounted on a stand. Mounting permits the microphone to be used either as a hand type microphone or as a banquet stand type. Built-in tone control permits frequency response to be varied to suit individual taste. Mounted in leatherette covered carrying case. Operadio Mfg. Co., St. Charles, Ill.—Radio Today.

Readrite oscilloscope

* A foundation oscilloscope with built-in 60 cycle sweep. For essential visual measurements of the amateur broadcast station. Also a foundation unit for those who wish to add external sweep and amplifiers for specific test purposes. Vertical and horizontal deflector plates. Controls for intensity focus and sweep amplitude. AC operated. Price net $17.50 with tubes. Uses one inch tube. Readrite Meter Works, Bluffton, Ohio—Radio Today—see also advt. p. 64.

“Knight” intercommunication systems

* Interphone systems include compact two-way units, super-selective systems accommodating as many as ten stations. Master call systems for paging in large offices, factories, or institutions. Standard superselective system permits direct two-way private communication between any two stations. Features include full-range audio system, beam power amplifier, combination P.M. speaker-microphone, volume control and noise filter circuit. Allied Radio Corp., 823 West Jackson Blvd., Chicago, Ill.—Radio Today.

Electro-Call interphones

* Line of 2-way intercommunicating systems. Model 302 consists of master and outlying station. 300-5 handles communication with 5 outlying stations. No selector switch required—just the talk push-button corresponding to desired station is operated. Model 305 permits simultaneous communication between any pair of stations. Handle 4 to 6 master units. United Scientific Mfg. Labs., 510 Sixth Ave., New York, N. Y.—Radio Today—see also advt. p. 70.

Clough-Brengle signal generator

* Model 110 signal generator has meter reading dial. Dial has unified calibrations, set one beneath the other for all five bands. Change of wave length is attained by turning hand selector switch. Large window dial makes for easy reading. Clough-Brengle, 2615 West 19th St., Chicago, Ill.—Radio Today.

Portable electric phonograph


RCA Victor-phone

* Master type interphone handling up to 5 remote stations. Operates on AC or DC. May be operated up to 1,000 feet apart. Remote units can talk with master unit. After contact is made one may both talk and listen without turning or holding switch. Master unit has volume control, selector switch, and talk switch. Housed in walnut cabinet. Master—list $35.95; remote units $12.50 each. RCA Mfg. Co., Cooper St., Camden, N. J.—Radio Today.

Long wave converter for auto radios

* Long wave converter for auto radios. Two metal tubes used, one provides r.f. amplification of long wave signals, other a signal which may be picked up by the receiver at 600-700 KC. Unit has band coverage of 130 to 430 KC. Designed for reception of government weather reports, ships, airplanes. Regular broadcast reception not affected when converter is not in use. A B C Radio Laboratories, 3334 N. New Jersey St., Indianapolis, Ind.—Radio Today.

Insulinine small-hardware

* Complete line of small-hardware assortments for electrical, radio, automotive shops and home craftsmen. Farts are supplied in indestructible flat metal boxes having hinged lids and individual compartments. Assortments include screw and nut assortment, all purpose radio hardware, insulated washers and grommets, rivets, lugs, etc. Insulinine Corporation of America, 25 Park Place, New York—Radio Today.

Atlas marine type horn

* Exponential horn and unit for marine use. Overall depth 12 inches, voice coil impedance 15 ohms, perma-
is the ONE thing to remember... FOR A PROFITABLE BUSINESS IN VIBRATORS

Original Equipment in More Than a Million Sets

HERE'S the vibrator that has EARNED customer preference by its ability to "TAKE IT." UTAH vibrators are TOUGH. Impartial tests PROVE it. That's why manufacturers have chosen it for original equipment in more than a million sets. That's why it is the preferred vibrator for replacement service. It's the easiest vibrator for you to sell—and the most profitable, too. Exclusive UTAH design and construction mean no costly "comebacks" for you. UTAH vibrators work better, last longer but cost no more. Just a few models service any radio. When ordering vibrators, remember the name UTAH. It's the profitable thing to do.

UTAH RADIO PRODUCTS CO.
CHICAGO, U.S.A.
TORONTO, CANADA (UCOA RADIO PRODUCTS CO.)
BUENOS AIRES

MAJESTIC RADIO & TELEVISION CORP.
2600 W. 50TH STREET
CHICAGO, ILL.

"16 YEARS OF LEADERSHIP"

November, 1937
NEW THINGS

nent field magnet. Has frequency response 300 to 6000 cycles, 100 per cent weatherproof. Has high directional characteristics and coverage angle of 30 degrees. Handles up to 20 watts input and has non-reflecting aluminum horn. Atlas Sound Corp., 1451 39th St., Brooklyn, N. Y.—Radio Today.

Matched dial plates

* Dial plates matched to Yaesey volume control units. Active rotation part of control marked in 100 degrees. Switch types marked with switch-shorting position. Plates 2¼-inch diameter—black background and aluminnum markings. P. R. Mallory & Co., Inc., Indianapolis, Ind.—Radio Today.

Patch kit


Panel mounting kits for auto radios

* Panel Mounting Kits for auto radios in 1958 cars. Kits include notabla features such as specially illuminated dials, colored knobs and attractively designed escutcheons, to

harmoise with automobile panel; interchangable controls and shafts, per-mitting use of same controls for all cars, including reinstallation jobs. Kits include airplane and drum-type dials. Crows Name Plate & Mfg. Co., 7458 Grace St., Chicago—Radio Today ...

Crosley Fivette


30-watt sound system


Transmitter type microphone

* Microphone for police, airways, and other small transmitting stations. Designed similar to a telephone in appearance. Press to talk switch mounted at top, in base, or side of stand. Furnished with single button carbon unit, crystal unit, or dynamic unit. Universal Microphone Co., Inglewood, Calif.—Radio Today—see also advt. p. 72.

Tube tester—multi-meter

* Tube checker testing all types of tubes—uses straight-line switches for setting up test circuit. Large meter with good bad scale. Multi-meter section has AC-DC ranges 0/100/1000/80/1000 volts. Current ranges 0/100/10/0.05. Ohmmeter measuring 0/500/100M/10M ohms. Seld-contained power pack. Royal Confidence analyzer—net $45.50. Apparatus Design Co., Randolph &

Elizabeth Sts., Chicago, Ill.—Radio Today.

Communications microphone


Automatic record changer


Compact paper condenser

* Oil-processed paper condensers of extremely compact design. Available in 600 and 1000-volt ranges and .06 to 4 mfd capacitances. housed in small rust-proof metal containers. 1 mike 1000-volt unit measures $1 x 1% x 1% inches. Tobe surgeproof filtermikes. Tobe Deutschmann Corp., Canton, Mass.—Radio Today.

Grebe Prestomatic sets

Raytheon pioneered the first outstanding tube developments that made home-like reception in auto-radios possible! Since then, Raytheon auto set tubes have been noted for their maximum life under adverse conditions — for their noiseless reception under extreme sensitivity! Raytheons, too, are especially designed and constructed for maximum life over the wide range of voltages in an automobile battery — to work efficiently in close proximity to each other — to withstand the jarring and pounding received on the roughest of roads.

It is almost impossible to find a modern auto-radio not using the latest Raytheon development — the OZ4 rectifier! This fact is a universal tribute to Raytheon engineering.

These are the reasons why more auto-radio manufacturers use Raytheon than any other tube — and why almost all servicemen use them as replacements.
Why not sell a line that's DIFFERENT?

That's STANCOR: the COMPLETE, COMPACT, COMPETITIVE line. It's COMPLETE because it covers the greatest range of transformer requirements with the fewest types... COMPACT because "dead-wood" has been eliminated... COMPETITIVE because it's COMPLETE, COMPACT and so conservatively priced. • It's different because a stable price policy protects everyone who buys or sells it • It's different because it is supported by active field merchandising that makes it the "livest" line on anybody's shelf • Get the full story on the STANCOR line. It's Different.

STANDARD TRANSFORMER CORPORATION
850 BLACKHAWK ST. • CHICAGO, ILL.

RECOTON
THE GREATEST INNOVATION IN PHONO-RADIO DEVELOPMENT

Makes Any Radio a Perfect Combination

This new record player is a fine, simplified musical instrument at a sensible price—an ideal unit for dealers and service men. A slight pull on the front panel and the entire mechanism comes forward into playing position. No fussing with lids or tops. A splendid high-fidelity phonograph with crystal pickup floating in rubber mounting with a ball-bearing pivot and handy pick-up armrest—special lever on pickup which facilitates placing on record; 12" turntable; self-starting motor with speed control and separate on and off switch; simple to connect, can be operated in closed position; AC or AC-DC models; exceptionally beautiful cabinet—genuine walnut with hand-rubbed lacquer finish.

Some territories still available; write for dealer proposition
RECOTON CORPORATION
178 PRINCE STREET NEW YORK, N. Y.

TRÍAD
BALLAST TUBES
(Resistor Units)
NOW AVAILABLE FOR REPLACEMENT •

Assortment No. 1 Consists of
50 Units (Assorted Types) Glass and Metal of Fast-Selling Numbers

Assortment No. 2 Consists of
100 Units (Assorted Types) Glass and Metal

Other Types Supplied on Request •

ALSO A COMPLETE LINE OF RADIO RECEIVING TUBES
A Profitable Line to Handle

TRÍAD MFG. CO., Inc.
PAWTUCKET RHODE ISLAND

• The Quality Name in Radio •

Radio Today
PROFITS FROM PLATTERS

Dealer angles on selling records and players

FEATURING COMBINATIONS

* A radio dealer who has gone over to phonograph-radio combinations entirely is the J. B. Bradford Piano Co., Milwaukee, Wis. Local radio prospects are hearing about a new type of merchandising from the concern.

"We feel that the move has been entirely successful so far," says Stuart G. Randall, a Bradford executive. "It has given our salesmen a real opportunity to sell fine musical instruments through salesmanship and not through price cutting. We find a great demand for the combinations, and the margin of profit on them is quite a bit greater than on straight radio."

Bradford's have created a "Capehart Salute" and are vigorously developing all branches of the combination appeal.

RECORD MERCHANDISING UNITS

* New cardboard display in the form of a giant record has been issued by RCA Victor to plug the newest popular dance band recordings. It is the first of a monthly series to be mailed to dealers; others will keep up with current dance fads.

This display is 36 in. high, has a brightly lettered base, and circled around the record are pictures of 12 popular bandmasters.

The company has also introduced a new record rack, a compact merchandising unit which may be mounted on its own base or on a counter. It displays records laid flat on a sloping panel front. Space in the back is provided for storage of 600 records, with room for complete accessories.

TOMMY DORSEY AUTographs RECORDS

* Great interest in record buying was stirred up recently in the Boston, Mass., area while Tommy Dorsey was appearing at the Metropolitan theater there. Two local record merchandisers, the Jordan Marsh Dept. store and J. McKenna's Record Shop made arrangements for the popular Victor swing artist to make personal appearances at their stores.

WAX WORTH WATCHING

* Leo Reisman and his orchestra playing Close and Rosalie, both from the MGM film, "Rosalie" and both with vocal by Lee Sullivan—Victor 25658.

Guy Lombardo and his Royal Canadians playing Everything You Said Came True and Maybe with a vocal by the Lombardo trio—Victor 25701.

Rudy Vallee and his Connecticut Yankee playing Have You Met Miss Jones and I'd Rather Be Right, both from the musical comedy "I'd Rather Be Right"—Bluebird 7235B.

Horace Heidt and his Alcatraz Brigadiers playing Vieni Vieni with vocal by Libbeth Hughes, Larry Cotton, Bob McCoy and Glen Club, and In A Moon By the Sea with vocal by Larry Cotton—Brunswick 8003.

Duke Ellington and his orchestra playing Crescendo in Blue and Diminuendo in Blue—Brunswick 3004.

Andy Iona and his Islanders playing Naughty Hula Eyes and Koko Ipo, both with vocal chorus—Vocalion 3762.

Bing Crosby and Connie Boswell with John Scott Trotter and his orchestra playing Basin Street Blues and Bob White—Deca 1383.

Dick Robertson and his orchestra playing Getting Some Fun Out of Life and Rose in December from "Life of the Party," both with vocal by Robertson—Deca 1487.

Mr. Dorsey consented to autograph his records personally, and a splash of publicity in local papers brought in fans galore.

In a recent weekly record release, Victor made history by listing only the new swing hits made by Dorsey. The group includes four discs, and ties in with his Friday night broadcasts on NBC.

* Charlotte Music Festival in North Carolina recently was used by J. P. McMillan of Southern Radio Corp., as an aid to record sales. The affair included a concert series by renowned artists and the RCA distributor arranged for tie-ins and displays. David Sarnoff, RCA president, sent a congratulatory telegram. Thomas F. Joyce, advertising and sales promotion manager for RCA Mfg. Co., addressed the Charlotte Chamber of Commerce meeting with dealers, he said that in the coming months, more than $20,000,000 would be spent to promote the sale of records and combinations.

* Working together for the first time, Fred Astaire and Ray Noble have recorded exclusively for Brunswick the hit tunes from RKO's new production, "Damsel in Distress." Astaire does a tap dance sequence on the discs, whose numbers are 7982 and 7988.

Irving Mills, managing director of Master and Variety labels, has announced that all Victory records will now be listed under the Vocalion banner, and all Master discs will be assigned to the Brunswick label. First platters to be issued under the new plan were Duke Ellington's "Diminuendo in Blue" and "Crescendo in Blue," on Brunswick.

* Mirror Record Corp., 58 W. 25th St., New York City, makers of all types of blank discs for recording purposes, have announced a new price schedule. Company will send lists to those requesting them.

RECONTON NEEDLES

* A new metallic phonograph needle of Swiss make has been introduced by Recoton Corp., 178 Prince St., New York City. It has been specially designed so that the point section is smaller than the rest of the needle, the point itself being a fine one, developed by a unique process to a smooth roundness. The Recoton needle is presented as one which wears the record only very slightly.

New interest in discs has moved manufacturers to issue tricky display units.
To the Radio Merchants of America:

The perfection of the newest radio sets—in fidelity, tone quality, selectivity, mechanical convenience, and beauty of appearance—has been stressed by every radio manufacturer. The improvement over the sets of only a few years ago is so great as to be almost unbelievable.

Yet, when we describe the excellence of the receiver we tell only half the story. For a radio can be only as good as the program. The realization, therefore, that the approaching winter season offers an incomparable selection of radio programs should double the sales appeal of every new set. Never before, in all history, has man had at his fingertips the gift of so many priceless treasures of music, education, drama, comedy, sports and news. These and more are made available to the public through the world's most famous conductors, musicians, artists, actors, and public speakers. The purchaser of a modern radio set really obtains a front-row season ticket to the greatest show ever produced by mankind.

No individual on earth has the wealth to buy, or the power to command, what the radio gives free to the humblest set-owner.

Saul L. Almanoff
President
Radio Corporation of America
RCA VICTOR DEALERS

Move Ahead On All Fronts!

ONLY COMPLETE LINE IN THE BUSINESS

PROFITS... 12 MONTHS A YEAR

JOIN THIS POWERFUL ARMY AND MAKE MORE MONEY!

“RCA ALL THE WAY” MEANS “NEVER A SLACK SEASON”

IT’S YEAR-ROUND PROFITS WHEN YOU HANDLE RCA!
1. Only RCA offers you a complete line of radio and sound products—every one a sensational success.

Dealers say it pays them BIG PROFITS to go "RCA All The Way." For only RCA offers them a complete line of radio and sound products. Dealers find that by selling all the products of RCA, they get a steady year 'round business... no seasonal declines... which often occur when dealers carry one product only. RCA makes all the important radio and sound items a retailer needs... all bear one name, RCA... all are packed with features that make selling easy... each a leader in its field. The following facts tell an impressive story of why it will pay you to go "RCA All The Way!"

RCA Victor Electric Tuning sets terrific sales pace

In a survey of 15,000 dealers, Electric Tuning was voted the year's greatest selling feature. It has sold radio after radio, smashing all previous sales records. Each sale means $60 or more profit for you.

Sensational Victor Record gain

Each month sets a new high mark in record sales, which have increased 575% in less than four years. Proof that people are hungry for music. If you're not selling Victor Records you're missing tremendous profits.

RCA Victor Combination and Record Player sales shoot up

Everywhere, sales of RCA Victor Phonograph-Radio Combinations and Record Players mount higher and higher each day. Every sale means a double profit—on Instruments and on Records.

RCA Tubes unquestioned sales leader

300,000,000 of them have been sold—proof of their public acceptance. Proof, too, of the ready market for their sale!

RCA Commercial Sound Equipment sets new high in installations

Here's a business that is on the up-swing—and traveling fast. RCA makes equipment to cover every phase of commercial sound. Ask your distributor for the latest RCA Sound Catalogue.

RCA Parts break all sales records

Never in RCA history have parts sales been so
high! Genuine RCA replacement parts, accessories and test equipment mean extra money for you. Ask your distributor for the latest Parts Catalogue.

2. Only RCA offers you products of the world's greatest radio and sound organization.
No company in radio has a background of achievement that even closely approaches RCA's! Only RCA is engaged in every phase of radio and sound. Through the National Broadcasting Company, RCA creates and broadcasts the majority of network programs. Through Victor, RCA has the benefit of 39 years' leadership in sound reproduction. And RCA engineers, NBC broadcast skill, Victor mastery of tone are responsible for the excellent quality of every RCA product. This means every RCA dealer can offer his customers the finest in radio and sound.

3. Products consistently advertised and promoted for 39 years.
Every year RCA spends millions of dollars in magazines, newspapers, and on radio programs to promote the sale of its products. And that advertising makes sales for RCA dealers. When you go "RCA All The Way," you can be sure that every product is backed by advertising.

4. RCA offers you the greatest name in radio.
RCA's unmatched experience in all branches of radio . . . its outstanding accomplishments . . . its splendid products—all have earned for the RCA trade-mark unequalled fame! The buying public asks for RCA Products. And your association with RCA stamps you as a reliable retailer. That, too, means more money for you.
It's Money in Your Pockets All Year Round

When You Go

RCA ALL THE WAY

Here's Why!

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4. RCA offers you the greatest name in radio.

RCA's unmatched experience in all branches of radio ... its outstanding accomplishments ... its splendid products — all have earned for the RCA trade-mark unequalled fame! The buying public asks for RCA Products. And your association with RCA stamps you as a reliable retailer. That, too, means more money for you.

Sensational Victor Record gain

Each month sets a new high mark in record sales, which have increased 575% in less than four years. Proof that people are hungry for music. If you're not selling Victor Records you're missing tremendous profits.

RCA Victor Electric Tuning sets terrific sales pace

In a survey of 15,000 dealers, Electric Tuning was voted the year's greatest selling feature. It has sold radio after radio, smashing all previous sales records. Each sale means $60 or more profit for you.

1. Only RCA offers you a complete line of radio and sound products — every one a sensational success.

Dealers say it pays them BIG PROFITS to go "RCA All The Way." For only RCA offers them a complete line of radio and sound products. Dealers find that by selling all the products of RCA, they get a steady year 'round business ... no seasonal declines ... which often occur when dealers carry one product only. RCA makes all the important radio and sound items a retailer needs ... all bear one name, RCA ... all are packed with features that make selling easy ... each a leader in its field. The following facts tell an impressive story of why it will pay you to go "RCA All The Way!"

RCA Victor Combination and Record Player sales shoot up

Everywhere, sales of RCA Victor Phonograph-Radio Combinations and Record Players mount higher and higher each day. Every sale means a double profit — on Instruments and on Records.

RCA Tubes unquestioned sales leader

300,000,000 of them have been sold — proof of their public acceptance. Proof, too, of the steady market for their sale!

RCA Commercial Sound Equipment sets new high in installations

Here's a business that is on the up-swing — and traveling fast. RCA makes equipment to cover every phase of commercial sound. Ask your distributor for the latest RCA Sound Catalogue.

RCA Parts break all sales records

Never in RCA history have parts sales been so high! Genuine RCA replacement parts, accessories and test equipment mean extra money for you. Ask your distributor for the latest Parts Catalogue.

2. Only RCA offers you products of the world's greatest radio and sound organization.

No company in radio has a background of achievement that even closely approaches RCA's! Only RCA is engaged in every phase of radio and sound. Through the National Broadcasting Company, RCA creates and broadcasts the majority of network programs. Through Victor, RCA has the benefit of 39 years' leadership in sound reproduction. And RCA engineers, NBC broadcast skill, Victor mastery of tone are responsible for the excellent quality of every RCA product. This means every RCA dealer can offer his customers the finest in radio and sound.

3. Products consistently advertised and promoted for 39 years.

Every year RCA spends millions of dollars in magazines, newspapers, and on radio programs to promote the sale of its products. And that advertising makes sales for RCA dealers. When you go "RCA All The Way," you can be sure that every product is backed by advertising.

4. RCA offers you the greatest name in radio.

RCA's unmatched experience in all branches of radio ... its outstanding accomplishments ... its splendid products — all have earned for the RCA trade-mark unequalled fame! The buying public asks for RCA Products. And your association with RCA stamps you as a reliable retailer. That, too, means more money for you.
MEMBERS OF THE RCA PROFIT ARMY.

Men like you say "JOIN UP!"

Dear Sirs:

I have been an exclusive RCA Victor dealer for 16 months selling RCA's entire line of products in the field of radio. I send you this letter because I think you deserve to know what a profitable venture going "RCA all the way" has been for me.

Before I took on all the RCA products I did a pretty good business around South Brooklyn selling radios. But since I have standardized on one name and carry a line that is complete in every way, my radio business has not only skyrocketed, but I have felt a general improvement in other lines that I carry. And best of all my profits are consistent - monthly, not seasonal.

If you want to use this letter to tell other dealers value of going "RCA all the way" you have my permission. I was to help you because you have helped me.

Cordially yours,

Godin's Inc.

Milton Godin

October 29, 1957.

RCA Victor

RCA Manufacturing Co., Inc., Camden, N.J. - A Service of Radio Corporation of America
METROPOLITAN OPERA

AMERICA'S TOWN MEETING OF THE AIR

RADIO CITY, N.Y.

INA CLAIRE

DRAMA
COOPERATIVE SELLING

* Many a new development in cooperative dealer merchandising activity has appeared recently in the appliance field. Utility companies have widened their promotion efforts into something of increasing importance to the retailer.

A lively example of the new trend was noted when E. F. Jeffe, vice-president of the Consolidated Edison Co. of New York, Inc., recently addressed the International Association of Electrical Leagues on the subject of "Cooperative Dealer Merchandising in the Metropolitan New York Area."

A part of Mr. Jeffe's address reads: "The Consolidated Edison Co. endeavors to develop, through cooperative effort, the sale of electrical devices. Business-getting agents and Home Service demonstrators, who are especially trained in the business of selling electric service and electric-consuming devices for the benefit and happiness of their users, are in daily contact with our domestic consumers. Surveys of electrical appliance applications are constantly undertaken. Results of these surveys are turned over to the manufacturers, distributors and dealers.

"Of a total of 245,000 emergency service calls made within a period of twelve months, more than 10 per cent were occasioned by defective home electrical appliances. A series of letters has been devised which are sent to consumers, outlining the causes of interruption of service. Simultaneously the cooperative retail appliance dealer is notified so that the consumer having defective equipment--live prospective electrical appliance purchasers--can be contacted. This opens a tremendous market for the replacement of sub-standard or worn-out appliances with new, standard appliances which will operate satisfactorily and use kilowatt hours at the low steps of the rate.

Coop advertising

"The company initiates special campaigns linking its advertising to that of the manufacturer and dealers, and developing special effort throughout the sales organization for the sale of the device which is being campaigned.

"Our advertising and display efforts have been developed with the objective of having customers become conscious of neighborhood appliance dealers. The insignia of the approved cooperating dealer appears in our showrooms, newspaper advertising, bill enclosures, as well as in the dealers' windows and on the individual dealer's stationery.

"In a city as large as New York with its large population of foreign-born citizens, many of whom do not speak the English language, it is necessary for us to approach them through the channels of foreign language newspapers and in some cases special advertising written in other than the English language. We endeavor to consider all of our customers and have given particular thought to the people in the lower income bracket groups.

"Company employees conduct lectures in the public and private schools,
in the churches, and in other assemblages, where consumers are acquainted with the advances and cost developments in the domestic electrical appliance field and in the proper use of home electrical appliances for their convenience and happiness. They are shown how to do things electrically. These demonstrations are given annually to about 250,000 individuals, and the Company's staff of Home Service specialists make approximately 2,500 demonstrations annually on major electrical appliances in the consumers' homes. Twice monthly a meeting of approved cooperative retail appliance dealers is held for active demonstrations and discussions by experts on the origin, development, operation and cost of home electrical devices. These meetings are invited the appliance sales employees of both the Company and the dealers. Manufacturers have been cooperative in the furnishing of equipment and experts to assist in demonstrations at these meetings.

"Whenever an electric range is sold, a trained and experienced Company employee demonstrates the proper use of this equipment to the consumer, in the consumer's home. To make certain that it is properly used and gives satisfaction and efficient service. No time or expense is spared in proper instruction in the use of electrical appliances by experts furnished by the Company without cost or obligation to the consumer, to the manufacturer or his distributor, or to the retail appliance dealer.

Practical angle

"This Company realizes its responsibilities toward the electrical appliance merchants. We are not dealing in generalities, but rather are getting to the 'meat' of the problem. The practices of over-selling and 'over-jazzing' these merchants have been discontinued, and in the place of such practices, there has been substituted a good sound business development plan. The interest of these merchants is considered in every phase of our business. We assist them to become prosperous business men and make periodic contacts with a view of solving their problems in a common-sense, practical, business manner.

"Much can be said for the individuality of cooperative merchandising plans as pertaining to separate and distinct regions. Because of the different conditions, all of which must be studied for the development of proper plans and campaigns, it is not to be expected that any one plan can be universally adopted."

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**Fairbanks-Morse newest**

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**Stewart-Warner 1938 refrigerators**

* Line includes 6 Deluxe models, 768, 668, 568, 768P, 668P, and 568P, the latter 3 porcelain inside and out; and 3 Master models 658, 558 and 458. Deluxe model 768, illustrated here, has vapor sealed cabinet, high-bake Deluxe exterior, porcelain interior. Net capacity, 7.5 cu. ft.; shelf area, 16 sq. ft. Equipment includes sav-a-step, push-button slide-a-tray, econ-o-lite, cold storage chest, interior thermometer, 2 tilt-a-shelves, illuminated 15-point cold control dial, safety temperature control, jumbo porcelain vegetable freshener, jumbo fruit basket, porcelain evaporator with reversible door. It makes 136 cubes or 115/8 lbs. of ice.

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**Frigidaire's new models**

* Line just announced for 1938 is made up of deluxe models 8-38 (illustrated) 7-38, 6-38, 5-38 in porcelain, and master models 8-38, 7-38, 6-38, 5-38 and 4-38 in durable Dulux. One Imperial model also included. Model 8-38 has 19.4 sq. ft. shelf area, 8.25 cu. ft. for food storage. Makes 168 cubes weighing 14 lbs. Features are silent meter-mixer, quick-tube tray, automatic tray release, 9-way adjustable interior, 2-way frozen storage, sliding shelves, 2-way multi-storage, sliding hydrators with moisture-seal lids, four zones of cold, automatic reset defroster, double-range cold control, food-safety indicator, automatic interior light, silent sentinel, touch-latch door opener, and others. Frigidaire Division, General Motors Corp., Dayton, Ohio.—Radio Today.

(To next page)
* Home Appliance Dealers' Association, Philadelphia, Pa., reports renewed activity in cooperation with dealers and distributors in the elimination of harmful practices, such as retail selling at discount and objectionable advertising. H. H. Ponecher, 17th at Sansom St., is executive secretary.

* Fairbanks-Morse comes out with new refrigerator lines earlier this year, with its national distributors' convention Nov. 15th and 16th in Indianapolis at the Columbia Club. This procedure allows dealer showings to be held before Dec. 4 and gets the new models on the dealers' floors for the Christmas trade. W. Paul Jones, general manager, and John S. Garceau, advertising and sales promotion manager, point out that national refrigerator figures show a strong trend toward earlier seasonal selling.

* GE's general manager of appliance sales, R. J. Cordiner, has announced organization changes both in the field and at headquarters: C. R. Thorson, formerly district appliance sales manager at Minneapolis, is now sales manager of the electric clock section at Bridgeport, Conn. J. P. Rainham still continues as manager of the section. T. B. Allen, formerly district appliance sales manager at Atlanta, succeeds Thorson at Minneapolis, and J. M. Walker, formerly general sales manager at Rex Cole, Inc., New York, is now district appliance sales manager at Atlanta.

* Special showing of Bendix Home Laundry, the automatic washer which is described as "the successor to the washing machine," was sponsored recently in New York City by jobbers Bruno-New York, Inc. A large audience found its attention riveted on the dramatic presentation. Speakers were Irving Sarnoff, Bruno-New York, president; Judson Sayre, Bendix vice-president; John L. Chamberlain, Bendix engineer, and others.

* Earl D. Doty has been appointed advertising manager of Delco-Frigidaire conditioning division of General Motors. Mr. Doty has been with Frigidaire and its predecessor, Delco-Light, for 21 years.

* Former appliance sales manager Charles R. Pritchard of the General Electric Supply Corp., Atlanta, Ga., has been named manager of specialty appliance sales for the same organization at its Bridgeport, Conn., headquarters.

* Frigidaire's new electric range, "a gleaming white lifetime porcelain sister to the General Motors Frigidaire refrigerator," has been given dramatic showings at the Waldorf-Astoria Hotel in New York City, at the American Furniture Mart in Chicago, and at the Dayton Institute, Dayton, Ohio. The firm has introduced its 1938 refrigerators 3 months earlier this year than has been the custom.

* The new 1938 Stewart-Warner line of refrigerators, introduced to distributors Nov. 11 and 12 in Chicago, will be backed by more than twice as much national advertising as was used in 1937, according to John Ditzell, radio and refrigerator sales manager for the firm. Stewart-Warner's network feature will continue in 1938, changed to the NBC Blue web at 9 p.m. EST on Tuesdays with more stations and more power added. Big schedules in magazines, newspapers and on billboards are also planned.

Russell W. Ayers, new chief engineer of Stewart-Warner's refrigeration division. New 1938 models shown Nov. 11-12.

* To meet the demand for washers to be operated from power chargers, Crosley Radio Corp. has introduced four Savamaid models. They are exactly the same as the standard washers except for the power equipment.

* O. D. Miller, district manager of appliance sales for the General Electric Supply Corp. at Dallas, has been appointed manager of the Allen-town, Pa., branch of the same organization, succeeding L. H. Miller. The latter has been named sales manager of the G-E domestic refrigeration sales section at Cleveland. Mr. L. H. Miller, thus advanced to a key position, has been a GE merchandising expert since 1926. With special success he has handled executive positions in Cleveland, Cincinnati, Harrisburg, and Allentown, Pa.

Roy Johnson is now ad manager of the entire household appliance sales division of the General Electric Co.
FAKE "14-TUBE" RADIO ANALYZED

Additional details of laboratory tests in comparison with standard receivers

ON pages 12-14 of this issue, Radio Today charts the results of tests conducted by a reputable radio laboratory on the fake "14-tube" radio set purchased by Radio Today's editors in the New York metropolitan market. These charts compare the performance of the fake "14-tube set," with a standard 14-tube set and with a standard set in the same ($69.95) price-range.

A partial interpretation of these charts and underlying tests is given on the earlier pages referred to. Reproduced herewith are more complete engineering details of the tests bearing on the three sets compared, together with comments on the performance of the fake "14-tube bargain" offering.

**Selectivity**

In many districts the selectivity of the $69.95 fake "14-tube" console would be inadequate to permit reception of all the local stations without interference. Strong stations would override some of the weaker ones. Note in Chart 3 on page 12 that the adjacent channel selectivity is less than half as good as the standard $69.95 set and only 40 per cent of that of the standard 14-tube receiver. What good is a receiver that gets two or more programs at the same time.

Volume or power output is another important feature of a receiver. For lifelike reproduction the set should be able to play the loud passages without distortion. Chart 4 shows that the standard 14-tube set has 10 times as much power, while the standard $69.95 set is roughly 3½ times better in this respect.

**High hum**

Other characteristics not illustrated that have been taken are as follows. The hum in the fake "14-tube receiver is extremely high—it can be heard at a distance of 15 or 20 feet. On a comparative basis it is about 60 times as bad as the hum in the standard $69.95 model.

In some localities the poor image ratio of the fake "14-tube" set may cause interference from nearby police radio stations and amateur stations, or even strong local stations.

**Tuning bands in kilocycles**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Standard 14-tube set</th>
<th>Standard $69.95 set</th>
<th>Fake 14-tube set</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 to 18,500</td>
<td>550-1700</td>
<td>550-1700</td>
<td>550-1700</td>
</tr>
<tr>
<td>18,500 to 35,000</td>
<td>5500-18000</td>
<td>5500-18000</td>
<td>5500-18000</td>
</tr>
<tr>
<td>35,000 to 70,000</td>
<td>22000-70000</td>
<td>22000-70000</td>
<td>22000-70000</td>
</tr>
</tbody>
</table>

This image selectivity is about 75 times better in a standard 14-tube receiver.

If the owner is located near the seacoast or stations broadcasting on frequencies near the intermediate frequency of the receiver, it is very likely that code transmissions will spasmally interfere with the reception of even local stations. The standard 14-tube set is about 80 times better in this respect while the standard $69.95 is roughly ten times as good.

**Short wave**

While the faked receiver is advertised as covering foreign short-wave, it tunes to only one of the six international short-wave bands. Many all-wave sets tune on all six bands, and the majority cover at least five of them.

Distortion of the broadcast signal is of prime importance where clear, lifelike reception is desired. The harmonic distortion in the standard 14-tube set is less than one-third of that occurring in the fake "14-tube" receiver.

Rather than be satisfied with laboratory tests of the receiver, the set was given a trial at the technical editor's apartment in downtown New York. A few more bad points were found, as well as generally verifying the lab tests. Motorboating was apparent at several regions on the dial, and on the high-frequency end of the dial the set would often go dead over an area of 400 KC (oscillator went dead). Also much noise was picked up via the AC power line.

**Sensitivity in microvolts per meter at 1/2 watt output**

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>Standard 14-tube set</th>
<th>Standard $69.95 set</th>
<th>Fake 14-tube set</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 KC</td>
<td>17.2 75*</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>1000 KC</td>
<td>16.3 44*</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>1400 KC</td>
<td>23.2 35*</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>6000 KC</td>
<td>22.0 210*</td>
<td>70</td>
<td></td>
</tr>
</tbody>
</table>

*Set has lo-lo pitched antenna winding designed for all-wave antenna transmission line. Consequently values should not be compared to those of the 14-tube sets.

**Selectivity in kilocycles at 1000 KC**

<table>
<thead>
<tr>
<th>Selectivity</th>
<th>Standard 14-tube set</th>
<th>Standard $69.95 set</th>
<th>Fake 14-tube set</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 x</td>
<td>10.0* 17.8</td>
<td>13.5</td>
<td></td>
</tr>
<tr>
<td>20 x</td>
<td>19.7* 25.8</td>
<td>43.6</td>
<td></td>
</tr>
<tr>
<td>30 x</td>
<td>31.2* 36.6</td>
<td>77.0</td>
<td></td>
</tr>
</tbody>
</table>

*Sharp selectivity position.

**Image ratios**

<table>
<thead>
<tr>
<th>Image ratios</th>
<th>Standard 14-tube set</th>
<th>Standard $69.95 set</th>
<th>Fake 14-tube set</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 KC</td>
<td>100,000 254</td>
<td>113</td>
<td></td>
</tr>
<tr>
<td>1000 KC</td>
<td>15,000 113</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>1400 KC</td>
<td>1,500 34.2</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td>6000 KC</td>
<td>300 19.3</td>
<td>9.65</td>
<td></td>
</tr>
</tbody>
</table>

**Harmonic distortion (total)**

<table>
<thead>
<tr>
<th>Harmonic distortion</th>
<th>Standard 14-tube set</th>
<th>Standard $69.95 set</th>
<th>Fake 14-tube set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna input 1000 KC, 5000 microvolts, 30% modulated, 400 cycles.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>50 milivatts</td>
<td>8.05</td>
<td></td>
</tr>
<tr>
<td>5000 microvolts</td>
<td>3.82</td>
<td>7.15</td>
<td></td>
</tr>
<tr>
<td>15,000</td>
<td>5.50</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>50,000</td>
<td>2.68</td>
<td>7.15</td>
<td></td>
</tr>
<tr>
<td>150,000</td>
<td>14.0</td>
<td>113</td>
<td></td>
</tr>
</tbody>
</table>

**Modulation hum**

<table>
<thead>
<tr>
<th>Modulation hum</th>
<th>Standard 14-tube set</th>
<th>Standard $69.95 set</th>
<th>Fake 14-tube set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio system only</td>
<td>194.9</td>
<td>45.0</td>
<td></td>
</tr>
<tr>
<td>60 cycles</td>
<td>.3 microvatt</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td>120 cycles</td>
<td>.4 microvatt</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>180 cycles</td>
<td>.5 microvatt</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>240 cycles</td>
<td>.6 microvatt</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td>300 cycles</td>
<td>.7 microvatt</td>
<td>11.3</td>
<td></td>
</tr>
</tbody>
</table>

**L.F. Harmonic whistle (2nd harm)**

<table>
<thead>
<tr>
<th>L.F. Harmonic whistle (2nd harm)</th>
<th>Standard 14-tube set</th>
<th>Standard $69.95 set</th>
<th>Fake 14-tube set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>8.7</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>50 microvolts</td>
<td>13.8%</td>
<td>8.7</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>8.7</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>15.0%</td>
<td>8.7</td>
<td></td>
</tr>
<tr>
<td>150,000</td>
<td>6.5</td>
<td>5.8</td>
<td></td>
</tr>
</tbody>
</table>

**Electrical fidelity**

<table>
<thead>
<tr>
<th>Electrical fidelity</th>
<th>Standard 14-tube set</th>
<th>Standard $69.95 set</th>
<th>Fake 14-tube set</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 cycles</td>
<td>-0.94 DB</td>
<td>-1.59 DB</td>
<td>-20.0 DB</td>
</tr>
<tr>
<td>50 cycles</td>
<td>-2.3</td>
<td>-4.1</td>
<td>-6.7</td>
</tr>
<tr>
<td>100 cycles</td>
<td>-3.3</td>
<td>-5.3</td>
<td>-8.8</td>
</tr>
<tr>
<td>180 cycles</td>
<td>-4.1</td>
<td>-6.7</td>
<td>-9.9</td>
</tr>
<tr>
<td>300 cycles</td>
<td>-5.3</td>
<td>-8.8</td>
<td>-11.3</td>
</tr>
<tr>
<td>500 cycles</td>
<td>-6.6</td>
<td>-10.6</td>
<td>-13.9</td>
</tr>
<tr>
<td>1000 cycles</td>
<td>-7.8</td>
<td>-11.3</td>
<td>-15.3</td>
</tr>
<tr>
<td>1500 cycles</td>
<td>-8.7</td>
<td>-11.3</td>
<td>-15.3</td>
</tr>
<tr>
<td>3000 cycles</td>
<td>-9.6</td>
<td>-11.3</td>
<td>-15.3</td>
</tr>
</tbody>
</table>

**AVC figure of merit**

<table>
<thead>
<tr>
<th>AVC figure of merit</th>
<th>Relative to 200,000 microvolts</th>
<th>44.0 DB</th>
<th>44.2 DB</th>
<th>33.4 DB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative to 200,000 microvolts</td>
<td>44.0 DB</td>
<td>44.2 DB</td>
<td>33.4 DB</td>
<td></td>
</tr>
</tbody>
</table>
AUTOMATIC TUNING SYSTEMS

A simplified explanation of how the Motorola
and Detrola electrical push button tuners operate

* CONTINUING the series of explanatory articles on electric tuning, Radio Today this month presents the Motorola and Detrola systems. Complete schematic and illustrative diagrams designed to show clearly how the various parts perform are included. For the Stewart-Warner and Admiral systems refer to pages 42 and 44 of the October issue. And on pages 24 and 26 of the September number the RCA-Victor, Spartron, and General Electric push-button tuners were explained in detail.

Motorola network tuner

The Motorola tuning mechanism is quite interesting in that a rotor with but a single switch is employed to select 19 stations. The push buttons are located on a circle on the front of the set. In Fig. 2, the center drawing shows how these buttons are placed. On each push button there is a stop arm which can be rotated through a small angle, and the exact position of this arm determines the setting for the station. The right-hand drawing at the top shows the side view of a single button. When the button is depressed, the entire assembly moves.

On the rotor (center and right-hand drawings) there is a switch which controls the operation of the motor. Note that this switch “B” is located behind a small slot. When a push button is pressed, the projection on the stop arm is brought nearer to the rotor. When the rotor turns so that the slot is opposite the projection, the projection drops in the slot and opens the switch, thereby killing the motor. If two buttons were depressed simultaneously, the motor would tune in the first station it reached.

Locking plates

In addition to the rotor and push buttons, there is a locking plate which serves to hold down any button that is pressed and to release the button previously selected. This plate is comprised of two identical sheets of thin metal. The plates are assembled with springs which tend to rotate one plate with respect to the other in such a manner as to keep the holes out of line. The edge of the hole on one plate will cover up part of the hole on the other plate.

Close examination of the shaft connected to the push buttons will show that there is a notch for locking it into position. When the button is depressed, the holes in the locking plates are lined up during the time that the shoulder on the shaft is passing through the plates. Since the holes are in alignment, the spring on the push button previously depressed causes it to snap up. When the selected button is pushed into the operating position, the locking notch is in line with the locking plates. The spring on the plates then forces the plates out of alignment and the button stays depressed.

Fig. 1 shows the electrical circuit employed. A reversing switch is attached to the condenser gang and serves to reverse the direction of rotation when the condenser is in either extreme position. The switch “B” for station selection is connected in series with the ground return of the motor. In addition, there is a manual switch which serves to kill the AFC and open the motor circuit when manual tuning is desired.

In operation, contacts “A” and “B” must be closed for the motor to run. When the release button is depressed for hand tuning, the motor circuit is broken at “A.” When any other button is pressed for automatic tuning, the release button jumps out, closing the circuit at point “A.” The motor then starts turning the mechanism until the slot in the rotor reaches the button that has been pressed, at which time the circuit is broken at “B” stopping the motor.

Tertiary motor winding

A rather unusual means of killing the audio system during tuning is employed in this receiver. A third winding is introduced into the motor. Whenever the motor is turning or connected, a voltage is induced into the tertiary winding. This 60 cycle voltage is rectified by a diode and the resulting negative voltage used to bias the audio amplifier to cut-off. As a result no additional switches are required for muting the set.
To set up the mechanism the station stop arm is loosened and the station and manual buttons are depressed together. The station is then tuned in by hand while watching the cathode ray tuning eye. In this way the proper setting of the station stop arm is obtained. Since each arm covers only a small portion of the whole dial, its range of frequencies is limited. Be sure that the range of the button selected includes the desired station, if not, use one that does. Two stations normally falling on the same button can be accommodated by shifting the rotor-condenser relationship, so that the stations fall on adjacent buttons, instead of the same one.

The Detrola push button tuning system employs the selector drum type of mechanism with a series of adjustable contacts for setting up the stations. Fig. 3 shows the actual layout of the drum and station contacts. The contacts are mounted in two slots and are movable in an 180° arc.

Momentary contact switches

In Fig. 4 the electrical circuit of the arrangement is given. For each station there is a momentary type switch operated by the push button. One side of each switch is connected to an adjustable contact.

When any button is held down the motor starts turning in such a direction as will bring in the desired station. This is accomplished by having a split drum, each side of which is connected to a different motor winding. If the desired station lies to the left of the last station tuned in, the motor winding which will turn the motor directly to that station automatically connected since the contact for that station is to the left of the dead point on the drum. If the desired station were to the right, the contact for the desired station would be to the right of the dead point.

By using this drum arrangement the mechanism always goes direct to the desired station. Of course, it is necessary that the push buttons be set up so that from the low frequency end, the frequency progressively increases for each contact (in the two slots).

Thermostatic switch

Note that a thermostatic switch is incorporated in the motor to prevent burnouts due to continuous operation of the motor. This switch opens after approximately 10 minutes operation and closes after the unit has cooled down.

Muting of the audio systems is done by taking off an AC voltage from one of the motor windings and rectifying it. The resultant negative DC voltage is employed to bias the audio amplifier to cut-off. The AC voltage for the muting is present only when a station selector switch is depressed and the station selector drum moving. After the station is tuned in (contact resting in gap between selector drums) no voltage is present since the circuit has been opened by the selector drum.

Station set up is accomplished by tuning in the station manually and moving the adjustable contact so that it coincides with the break on the selector drum. A small lamp with a flexible lead is attached to the chassis to indicate visually when the contact and insulated section are in exact alignment. No manual button is required since non-locking types of buttons are used. When selecting a station, the push button is held down until the dial stops moving, at which time the station is tuned in.

**SERVICE SHOP GETS DIAGNOSIS CHARGE**

*Ben J. and Harvey J. Lang who operate Lang's Radio Shop, 1929 Wiamechago Street, Madison, Wisconsin, always insist on a diagnosis charge when someone brings an ailing radio into their shop.*

This diagnosis charge usually amounts to a minimum of $1.00 and it consists of the time taken to inspect the radio and find out what the trouble is. Sometimes such an inspection takes two hours. The set owner then must pay for his repair work separate.

"We've been in the radio business for fifteen years and we've always insisted on this diagnosis charge," states Ben Lang. "In the first place, you must pay a doctor for a diagnosis when you come to him to find out what is the matter with your body. If the doctor treats you, the treat-
History speaks for itself. It shows unmistakably that Sprague Condensers have always led in quality because they have always been the first to be improved. Constant, far-reaching engineering research is a Sprague tradition.

SPRAGUE
GOOD CONDENSERS—EXPERTLY ENGINEERED—
COMPETENTLY PRODUCED

SPRAGUE SPECIALTIES COMPANY, NORTH ADAMS, MASS.
OPERATING VOLTAGES AND SOCKET LAYOUTS FOR POWER OUTPUT PENTODE AMPLIFIERS

Types 47, 6A4-LA

- Average voltages (TC ground or B-) as used in sets
  - Left group: high, middle, usual, right: low
  - White blocks give voltages for AC/DC operation at 115 volts
  - Three sets of voltages are given for AC operation of tubes; these represent the normal range found in present-day radios. The left hand set of potentials represents the highest voltage usually encountered. The middle group is most commonly found, while the right hand listing is the lowest set of voltages ordinarily used. For any particular tube, use either the high, low, or middle group of voltages exclusively.
  - Tubes having the same socket wiring and voltages are grouped together—these tubes are equivalent but not necessarily interchangeable.
“Since installing Ken-Rad Tubes reception is indeed clearer and better”

Mrs. Ruth M. Landolina,
621 Merton Ave., Memphis, Tenn.

Satisfy customers and increase profits with Ken-Rad Tubes. The Ken-Rad name is well known and attracts new trade.

Ken-Rad Electric Light bulbs share the prestige of the Ken-Rad name. They give efficient lighting with real economy.
Radio Today with this twelfth installment of the I.F. Peaks and Color Coding completes the largest and most accurate listing of I.F.'s ever compiled—a total of more than 8,000 models. In addition to the frequencies listed in this feature, the peaks of more than a thousand sets have been included in the Specifications of Receivers published during the past year in Radio Today.

These listings have been checked and rechecked against all available sources of information, including the set manufacturers' files when possible. And the color coding data supplied by the set manufacturers is found only in this feature of Radio Today. To the co-operating manufacturers and publishers listed below, the editors of Radio Today extend a well-deserved thank you.


**SIMPSON**

**NEW Simpson**

**"TEST MASTER"**

**MODEL 440**

A test set of tremendous scope—As a set tester the Model 440 has six A.C. and D.C. voltage ranges at 1,000 ohms per volt: 150 - 300 - 750 - 1,500. All A.C. ranges are available for output measurements. Three ranges cover resistance from 1 ohm to 100,000,000 ohms. Scales are 1,000 ohms (30 ohms center). 100,000 ohms (1,000 ohms center) 100,000,000 ohms (1,000,000 ohms center). Four milliamperes ranges are provided: 0 - 3 - 15 - 75 - 300. There are six decibel ranges of -12 to +58. D.C. current range of 0 - 15 amperes is incorporated for auto work. Capacity range is 0 - 30 microfarads. Meter leakage test for all condensers including electrolytics is provided.

There is truly nothing that you can do better at a lower price than that of the instruments that do not approach its range, its accuracy, its stamina, its beauty of design and finish. Here, briefly, are some of the features it brings to you:

**No other tester, selling at any price, provides as many tests and ranges!**

Yet the dealer's net price is only $59.00.

Leakage neon test and "high sensitivity" neon short check—individual tests for each electrode in tube. Cathode, diode, battery types and gaseous rectifiers are tested under signal load. Even "noise test" pinpoints are provided for auto radio servicing. Impressive "good" and "bad" scale is provided as well as percentage scale for comparing or matching tubes. It is a tube tester that tells the whole story to you and your customer in your terms and his terms. Tube charts in loose form are readily accessible in the cover. Supplementary cards are easily added.

**SIMPSON ELECTRIC CO., 5316 W. KING STREET, CHICAGO, ILLINOIS**

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**"PINCO"**

**THE ONLY COMPLETE GAS-O-LECTRIC POWER PLANT LINE**

Cash in on this Market

Here is an exclusive dealer-jobber line of portable electric light, power and battery-charging plants, priced for quick sale and big profit. "PINCO" combination A.C.-D.C.

**GOLD CROWN**

**HEAVY DUTY POWER PLANT**

**FOOTER GEN-E-MOTOR CORPORATION**

Dest. No. R-2K, 466 West Superior Street, Chicago, Illinois

Please send me complete information on:

- [ ] "RED TOP"
- [ ] "GOLD CROWN"
- [ ] Converters
- [ ] Dynamotors

Name: __________________________
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State: __________________________

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Radio Today
Serviceman Lang believes, and rightly too, that he should be paid for diagnosis as well as for repairing the set. Repairs cost extra. In the radio business we feel it is the same. If you give a free diagnosis service, some set owners may think your quotation on repairs too high and take the set elsewhere to be repaired. Then you lose out.

But when you make a diagnosis charge, you are paid for your time, and you can also show the client you know what is wrong with his set; you can also quote him a price on the repairs, and you stand a chance of getting the order right away in most cases.

In the set shown in the picture the repair job ran $16.75 which was much more than the client figured. However, when Lang explained that there was transformer and condenser trouble, etc., and showed how much time it would take to make the repairs, the client said okay. The diagnosis charge was additional.

**STROMBERG-CARLSON HI-FI RECEIVERS**

* This year’s line of S-C high-fidelity receivers have several new circuit arrangements. Separate diode circuits are used for the AFC, AVC, and audio circuits.

At the extreme left of the diagram the 2nd I.F. transformer is shown with the fidelity-tube switch “A” in the normal position. When switched to the hi-fi position a 270 ohm resistor is connected in the secondary circuit of the transformer and a 10 ohm unit in the primary side. A similar but slightly different circuit is employed in the 1st I.F. transformer. This added resistance changes the effective coupling and “Q” of the circuits thereby increasing the bandwidth of the I.F. amplifier which is necessary to hi-fi reception.

The 6B8 2nd I.F. amplifier tube uses its two diodes separately. One is connected to a tuned circuit which is directly coupled to a tertiary winding in the 3rd I.F. transformer and is used to provide an audio signal across its load resistor. The extra-tuned circuit provides additional selectivity.

The second diode of the 6B8 is capacitively coupled to its plate circuit. The rectified voltage is used to provide AVC. The diode load resistor instead of going directly to the grounded cathode is returned to a point a few volts negative to ground, thereby providing a delay action in the AVC circuit.

The third diode circuit in the receiver is the AFC twin-diode discriminator which supplies voltage to the AFC control tube.

Switch “B” is the bass and phono-switch. Phono connections have been omitted for simplicity. In the audio system of the set, a 6C6 phase inverter tube is employed to drive the lower 6L6 output amplifier.

**SILVERTONE WHISPER TUNING CIRCUIT**

* Featured in the larger Silver-tone receivers is whisper tuning, a type of noise squelch circuit which keeps the sensitivity of the set from building up while tuning between stations. This low noise circuit also serves to kill the audio system.

The low noise circuit makes use of a 6QTG tube in which the effective plate voltage applied to the tube is adjustable by means of a 750 ohm potentiometer in the cathode circuit. The plate current of this tube creates a voltage drop through the diode load resistor to which it is coupled and therefore puts a negative bias on the control grids of the AVC controlled tubes. Note in the circuit diagram that the heavy lines represent the complete plate to cathode circuit. The negative voltage is also applied to the diodes of the second detector and provides a delayed detection act and quiets the set. (Circuit on next page.)

A portion of the I.F. signal is fed to the diode of the 6QTG whisper tuning tube. The resulting diode current creates a voltage that is applied to the grid of the tube to provide negative bias. When a sufficiently strong signal is tuned in, the negative bias applied to the grid of the

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Stromberg-Carlson employs separate diode circuits for AFC, AVC, and audio in the larger sets. Other features illustrated are the high-fidelity circuit controlled by switch “A” and the audio phase inverter tube.

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November, 1937
6Q7G will be strong enough to decrease the plate current of the tube. The voltage drop due to this plate current is biasing off the receiver as explained above. Therefore, the decrease in bias will increase the sensitivity of the R.F. and I.F. stages. This increased sensitivity will permit more diode current to flow in the whisper tuning control tube thereby decreasing the plate current still further until the plate current is practically cut off. This action takes place in a fraction of a second so that the station seems to break in instead of gradually building up in volume.

The strength of the signal necessary to create sufficient negative grid voltage in the whisper tuning control tube to cut off the plate current depends upon the plate voltage of the tube which in turn is determined by the setting of the potentiometer. Therefore, this setting determines the break-in point of the receiver. The drop-out point depends upon the plate current-grid voltage characteristic of the tube. This differs from the break-in point because at the drop-out point the plate current of the tube is at maximum; at the break-in it is at minimum. The plate current-grid voltage characteristic of the tube is different at these two extremes. When the low-noise control is at normal position the switch in the plate circuit is opened so that it cannot put any bias on the other tubes.

**NEW CIRCUITS**

Circuit of the Silvertone whisper tuning noise control.

**ADAPTER UNIT FOR SOCKET ANALYSIS**

* New use for Radio Today's Socket Wiring and Voltage Data Charts has been submitted by W. A. Diefenbach of the Radiocraft Shop in Waterloo, Iowa.

Analyzer unit is of the usual type

Colony Radio Service of Washington, D. C., have fitted up the basement for a spacious workshop. Consequently overhead for the service department is kept to a minimum. Also, noise will not disturb customers upstairs.
IRC HAS SPARED NO EXPENSE SO THAT YOU CAN BE SURE

Study the design of IRC Metallized Controls. Note in particular the precision construction of the 5-Finger "Knee Action" Silent Element Contact and the new Silent Spiral Connector.

Each of these exclusive features means thousands of dollars in research by IRC engineers. Each means additional manufacturing expense—yet IRC Controls cost you no more than ordinary controls having neither of these noise-eliminating features.

It is "plus" values such as these that have made IRC resistance products famous the world over. By giving you the greatest value for your money, by doubly insuring you against customer complaints, we protect our reputation by helping you protect yours. That is good business for both of us!

Silent Spiral Connector available on IRC Special Replacement Controls listing at $1.50 and up... designated in Guide with prefix "I".

5-Finger "Knee Action" Silent Element Contact supplied on all IRC Controls.

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401 NORTH BROAD STREET, PHILADELPHIA, PA

Factories or Licensees in Canada, England, France, Germany, Italy, Denmark and Australia

MAKERS OF RESISTANCE UNITS OF MORE TYPES, IN MORE SHAPES, FOR MORE APPLICATIONS THAN ANY OTHER MANUFACTURER IN THE WORLD

November, 1937 55
Mr. J. A. Campbell of Scranton, Pa., says:

... we consider QUALITY of parts a major essential ... and am consistently 100% Centralab.

Boy! ... what a boost for Old Man Centralab. But, then ... that's the reward for trying to "make a better mousetrap than our neighbor." No wonder the radio-men have been making a beaten path to our door.

The Standard Radiohm offers accurate tapers—low noise level—longer life and better power dissipation.

Get the 1937 Volume Control Guide

STANDARD RADIOHM

Milwaukee, Wis.
Division of Globe Union, Inc.

BRITISH CENTRALAB, Ltd.
Canterbury Road, Kilburn
London, N.W.6, England

FRENCH CENTRALAB CO.
116 Avenue Ledru-Rollin
Paris XI, France

Left, the layout and voltage chart as adapted for use in the analyzer at right.

PHILCO COMBINED DETECTOR-AMPLIFIER

* This year's model 116 Philco has an unusual 6K7G amplifier and diode detector. Tube is employed as a grid-leak biased tetrode amplifier driving the AFC discriminator. Also the rectified audio voltage developed across the grid leak is fed to the audio system.

Circuit is shown in the accompanying diagram. Note that the suppressor grid is tied to the screen of the tube. When a signal is fed to the grid of the tube, the grid and cathode act the same as any diode detector and a negative bias is developed across the load resistor. This negative bias serves to vary the gain of the 6K7G amplifier tube—the more bias, the less the gain, etc. In other words, the tube acts as a limiter amplifier providing full gain on weak signals and greatly reduced amplification on strong signals.

Since the grid is part of a rectify-

In the Philco 116 set a 6K7G tube is employed as diode detector and limiter amplifier for the AFC discriminator.
NEW Standardized Test Bench Panels by

- Triplett is now offering for the test bench the same kind of standardization that has made Triplett Master models outstanding favorites: a standard size panel to accommodate standard Master and Deluxe models. Testers may be added as required.
- Testers are held firmly in the panel compartments by flexible rubber retaining grommets with compression fit. Instant installation or removal of instruments is possible. When in the panel, testers give appearance of being permanently installed.
- Laboratory panel cabinets can be bolted together if desired.
- Cabinets are of metal, black wrinkle finish. Size 22½"x16½"x5" top, 7½" bottom.
  Provision for lamp attachment.
  Price of Cabinets. Any Model Only $10.00, Dealer Net; Clamp-on Lamp, $4.34, Dealer Net.
  Model 1402 Accommodates Any Two Deluxe Models.
  Model 1403 Accommodates Any One Deluxe and Two Master Models.
  Model 1404 Accommodates Any Four Master Models.

(Illustration shows three cabinets bolted together)

New Triplett Delux Set Tester

Contained in black leatherette case (as shown) with removable cover. Roomy compartment for accessories.

Dealer's Net Price $49.33

Also furnished in black wrinkle finish metal case (same as above less black leatherette carrying case and cover).

Dealer's Net Price $45.33

SEE YOUR JOBBER — WRITE FOR CATALOG

Any Combinations may be made up using standard Triplett 1200 Master Units and Triplett 1600 Deluxe Testers.
SERVICE NOTES

ING CIRCUIT, IT IS ONLY LOGICAL TO USE THE AUDIO VOLTAGE WHICH IS DEVELOPED ACROSS THE LOAD RESISTANCE. THE AUDIO COMPONENT ACROSS THE LOAD RESISTOR IS COUPLED TO A 2 MEG TONE-COMPENSATED VOLUME CONTROL AND THENCE TO THE 1ST AUDIO AMPLIFIER.

Another unusual item in the set is the use of a separate diode circuit for AVC. This diode tube is coupled to a tap on the primary side of the third LF transformer.

The AFC circuit is similar to the Philco circuits that have been described in former issues of Radio Today. Since a “push-pull” type of AFC control tube is employed, two AFC voltages are supplied by the discriminator.

BOOK REVIEWS

AUTOMATIC FREQUENCY CONTROL SYSTEMS

By John F. Rider

* The addition of AFC to the superhet receiver has added just one more problem that the serviceman must solve. And “Automatic Frequency Control Systems” has been written to help the serviceman crack this new problem.

As in all good textbooks, a chapter is devoted to a brief explanation of electrical and radio principles involved in AFC circuits. In this way the reader reviews the required fundamental principles.

Another chapter is devoted to the theory of the discriminator and contains basic circuits employed by the various manufacturers in their sets. Both elementary and advanced explanations are given with illustrative diagrams.

A fourth section is devoted to the theory and operation of the oscillator control tube. Commercial AFC Circuits is the title of the chapter which illustrates and explains the operation of the circuits employed in the 1937 and many of the 1938 receivers.

Of extreme value is the data devoted to the various methods of alignment in AFC sets. Specific references are made to current receivers. And the concluding chapter deals with servicing AFC circuits.

Book is chock full of data on AFC. We feel that it is a must item for every serviceman's library—it should be read and kept on hand for reference.

Size of book is about 7½ x 5 inches and has more than 140 pages. Priced at $1.00 and bound in washable cover. Published by John F. Rider, 1440 Broadway, New York, N. Y.—Radio Today.

SERVICING WITH SET ANALYZERS

By H. G. McIntee

* Written mainly for the beginner in radio servicing, Servicing with Set Analyzers begins with a chapter of 11 pages on the fundamental principles involved in the design of an instrument for measuring voltages, currents, resistances, etc. The section on the use of the analyzer, illustrated with many diagrams, presents material of the “every-day” variety.

Of value to all servicemen interested in commercial test equipment is the 20-page chapter on manufactured instruments. Pictures, circuit diagrams, and a description of representative types of servicing equipment are given. Paper bound, and 64 pages, the book sells for 50 cents and is published by Radercraft (Gernsback) Publications, Inc., of N. Y. C.—Radio Today.

ARVIN MODELS 1237 & 1247

* Last month on page 64 of Radio Today the circuit of the Arvin models 1237 and 1247 had a slight error in the tuned circuit of the 355 KC oscillator. While the error is quite obvious upon inspection, the portion of the circuit involved has been corrected and is presented herewith.

* The fixed condenser across the tuned side of the circuit should have been connected across both the coil and the 100 ohm resistor instead of just the coil alone. This connection across the two elements is required so that a phase difference in voltage will be applied to the grid of the 6J7G control tube.
If you can answer "Yes" to these questions:

1. Have you an established radio service business?
2. Is your location free from interference with already established Tung-Sol agents?
3. Have you the necessary technical knowledge and equipment to service radio?
4. Is three months' supply a sufficient tube stock?
5. Will you agree to make a monthly stock report on standard forms provided by the wholesaler?
6. Will you regularly use display and advertising material furnished by us?
7. Will you maintain Tung-Sol established retail prices?
8. Have you sufficient capital to meet your obligations promptly when due?

If you can answer "Yes" to these questions, Tung-Sol has a Consignment Plan that will show you better and quicker tube profit than you ever thought possible.

Look the questions over—and if your answers are "Yes"—WRITE TODAY for name of your nearest wholesaler.

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WARD LEONARD ELECTRIC COMPANY
40 South Street, Mount Vernon, N. Y.

Please send me service man's price sheets No. 507A.

Name .................................................. Address ...........................................................
City ..................................................... State .....................................................
Jobber's Name ........................................

November, 1937
Business Blunder

* A veteran sound man points out that one of the unfortunate "sales diseases" in the sound business is over-eagerness on the part of price-minded salesmen to close sales. The blunder is that they went only the name on the dotted—without or without profit.

The volume demons do their work vigorously but are forever rushing back to headquarters with the suggestion that the boss cut the price so that a certain job can be landed. They do not realize that jobs done at cost are purely a series of headaches. And their attitude indicates that the matter of price, rather than quality or customer satisfaction, has been the basis of their sales talk.

Loudestspeakers as Buglers in Modern War

* The colonels or sergeants-major of old-time army days who prided themselves on being able to shout orders to an entire regiment without cracking their vocal cords have lost their jobs to science, according to Dr. E. E. Free, consulting sound engineer, Flatiron Building, New York City.

At recent maneuvers in England of the 131st Surrey Territorial Brigade of the British Army, successful experiments were carried out using a microphone, a radio amplifier and a loudspeaker for the issuance of military orders. An artificial voice thousands of times stronger than any living man could shout made every word of the commander audible to even the most distant recruit. Meanwhile the commander himself did not need to raise his own voice above a whisper.

Light-weight motor trucks, carrying the amplifiers, loudspeakers and other necessary equipment, now can follow military commanders as buglers used to do, explains Dr. Free. Even on foot the commander might still take portable equipment with him, although the leader of a modern mechanized army is likely always to ride a car or tank, as his amplifier and sound engineer also can do. For instructional maneuvers such as the recent ones in England, the equipment is even more useful. The troops under instruction can hear all orders and see how these are carried out. The instructor also can explain, like a lecturer in a classroom, just what is going on. For secrecy in time of actual war it would be possible for commanders to use special signals, as is done with football teams.

Proper Care of Mercury Vapor Rectifiers

* It has been noted that in some quarters, there is an unjustified fear of the larger mercury vapor rectifiers associated with high powered amplifiers. The general impression is that the life of these tubes is very short. Actually, their life even under severe operating conditions may be found to be of extraordinary length if certain precautions are taken. First, practically all of these tubes should be mounted in a vertical position. Before the high voltage is applied to their plates, be sure that their filaments have been heated a sufficient length of time to remove any globules of mercury which may have adhered to the electrodes. The time involved is sometimes as much as 30 minutes, and this same procedure must be followed every time one of these tubes is removed from its socket and replaced.

The small particles of mercury adhering to the electrodes cause a flashover when the high voltage is applied, with a definitely disadvantageous result. The heating process vaporizes these globules and allows them on cooling to return to the reservoir in the base of the tube. After the initial heating, repeated use—provided the tube has not been moved—requires only about 30 seconds of preheating.

No Slump in Sound, Say Distributors

"Our report on the sales of sound equipment in this territory is definitely favorable." We note that the income to be realized from this business is increasing."—Radio Service Laboratory, Portland, Me.

"Certainly on the increase—this is how we characterize the volume of sound equipment sales in this part of the country," opines the Ferguson Co., Paducah, Ky. "If you compare the unit sales of this merchandise with those of a year ago, our estimate would be that they are at least 10 per cent better."—Radio Wholesalers, Washington, D. C.

"I think that unit sales of sound equipment here are up as much as 30 to 40 per cent. If you consider the total dollar volume being done in this branch of the radio business, there can be no doubt but that it is on the increase."—Hunter's Radio Shop, Enid, Okla.

"Although we do not handle sound equipment at this time, it is our observation that sales in that field are better. From the looks of things in our area, we would say that general activity in public address is increasing."—Brown Electric Co., Oklahoma City, Okla.

"We will simply say that compared with former activity in sound, sales out here are slightly better. We must say also that we notice a trend toward cheaper equipment, and yet an increased total dollar volume."—Power City Radio Co., Sioux Falls, S. Dak.

Trailer chapel sound equipped for missionaries. The rear wall folds outward, forming a roof and a platform. At this microphone is Father Holloran.
NEW BOOKLETS

* New off the press is Philco's new parts price catalog. Its 40 pages have more than 300 illustrations; some 10,000 items are listed. Prices on replacement parts and consumer accessories are not given, but net figures are included on items used exclusively by servicemen.

* Andrea Radio Corp., 48-20 48th Ave., Woodside, N. Y., have issued a new catalog for U. S. dealers and jobbers on the Andrea "Climate Sealed" line. Booklet lists 16 features of the 1938 models. Ten receivers are described and shown, including AC, AC-DC, farm, and phonograph-radio combination.

* Western Electric Co., 195 Broadway, has released a new bulletin on receiver equipment designed to cover the various frequency bands useful in aviation work.

* "Modern Small Panel Instruments" is the title of a new folder released by General Electric Co., Schenectady, N. Y.

* Special material to assist commercial sound distributors and dealers to promote the series of 74 commercial sound service meetings being held in 38 states, has been issued by RCA Mfg. Co., Camden, N. J., in a new booklet.

* New list price Birnbach catalog, the first to be issued in 3 years, is now available free from Birnbach Radio Corp., Inc., 145 Hudson St., New York City. Over 3,000 items are listed in elaborately illustrated style, including antennas and accessories, insulators, sockets, jacks, plugs, conductors and cables.

* Recently released by National Carbon Co., Inc., is an elaborate 14-page descriptive catalog (No. A 1352) on Eveready flashlights and batteries. The colorful booklet lists some 30 items, currently of special holiday interest, and will be sent free to those addressing the firm at 30 E. 42nd St., New York City.


* Just released by Weston Electrical Instruments Corp., Newark, N. J., is a new folder on test equipment—"for industry, school and laboratory."

* Entirely new service manual has been issued by Clarostat Mfg. Co., Inc., 285 N. Sixth St., Brooklyn, N. Y. Handy pocket size, it has over 200 pages of exhaustive and detailed data compiled as a result of extra work by engineers. Copies are free to those writing on biz stationery.

(To next page)
TO GET MORE BUSINESS...
Sell Something NEW

THAT'S the slogan of dealers who are in the money today. That's why leading dealers all over the country are featuring the PRESTO JR. SOUND RECORDER. Because it's new. Because everyone likes to talk into a microphone. Because everyone likes to hear his own voice reproduced from a phonograph record.

THE PRESTO JR. RECORDER will bring more customers into your store... make more friends for you... give you more word of mouth advertising than anything else in your line. There is still time to attract the Xmas trade to your store with this fascinating new gadget.

WRITE TODAY FOR THE NEW PRESTO FOLDER ENTITLED "HOW TO SELL THE PRESTO SOUND RECORDER." It tells you step by step how successful dealers have developed the market for recorders. It illustrates free window and store display material, ready to run ads for your local newspaper and direct mail pieces.

PRESTO RECORDING CORP.
137 W. 19th St., New York, N. Y.

* Two-color, 8-page general catalog of new test instruments is offered free by Supreme Instruments Corp., Greenwood, Miss. This brochure describes the company's 1938 set testers, analyzers, signal generators, multimeters, frequency modulators and both 2 in. and 3 in. cathode ray oscillographs.

* Data on the protection of electrical equipment, dealing particularly with the precise protection afforded by the Re-Circuit breaker, is offered in a new 8-page illustrated folder available from Hehmann Electric Co., Trenton, N. J., on request.

* "Official Football Facts and Guide for 1937" is being distributed by Philco dealers. W. W. "Pudge" Heffelfinger, former Yale star, has edited the booklet.

* New tube chart for use with the Precision Electronometer is being released by Precision Apparatus Corp., 821 E. New York Ave., New York City. This testing information is available free to owners of series 500 or 600.

* Pocket-size tube complement booklet of 165 pages has been released by Hygrade Sylvania Corp., Emporium, Pa. Included are complements for 10,386 receivers, complete I.F. frequencies, replacement information on 75,000 sockets, trade name directory, technical articles, etc.

* Off the press recently was Raytheon Production Corp.'s 11th edition of the firm's characteristic data chart. It carries more complete information for jobbers' salesmen, dealers and servicemen and may be had free from Raytheon jobbers or from company headquarters at 420 Lexington Ave., New York City.

* A folder titled "Clear Reception," handling the subject of background noise suppression and featuring several types of noise eliminators or filters can now be had free from Aerovox jobbers or from offices at 70 Washington St., Brooklyn, N. Y.

* "High Fidelity Radio Reception" is the title of a new 11-page booklet issued by Philco Radio & Television Corp., Philadelphia. It was written by chief engineer W. H. Grimdtich in non-technical terms and is available from Philco jobbers.


* To aid the easy selection of radio transformers and chokes, Jefferson Electric Co., Bellwood, Ill., has just issued a catalog (372-R) of 16 pages—augmented by a similar number of pages on public address equipment. Booklet includes a transformer replacement guide for nearly 2,000 sets, dimension tables, and other data. Copies are free.

SQUAWKING BABY

When your radio squawks, call us

OUR RADIO SERVICE IS GUARANTEED

* From parts jobbers, servicemen may now get a new window-counter display card released by National Union Radio Corp., 570 Lexington Ave., New York City. The card is lithographed in brilliant red, green, black and silver, and features a photo of a squalling baby.

FLASHING COLORED PHOTOS

* Advertising broadcast entertainment along with Touch Tuning, General Electric has released a giant action window display made up of three units. Center unit, illustrated here, is an enlarged reproduction of the GE instrument panel. Tuning buttons are included and as a hand moves out to touch them, natural color photos of broadcast artists are flashed on an upper section.

There are 6 different photographs used, symbolizing as many types of broadcast entertainment. Flanking this center piece are two side dis-
LETTERHEADS FOR SOUND MEN

A new aid to PA men is a series of letterheads lithographed in color and imprinted with the dealer’s name, address and phone number. The Amperite Co., 561 Broadway, New York City, offers them in three different styles, in an effort to help sound men improve their business personalities.

Amperite is also busy issuing window decals and displays as merchandising aids for PA specialists.

SUPREME POSTER

A new window poster 13” by 18” has been released by Supreme Instruments Corp., Greenwood, Mass., to all new users of Supreme test instruments. Full details on the poster and on the new 1938 line will be sent those writing to Greenwood.

NEW MERCHANDISING PLAN ENABLES DISTRIBUTORS TO HANDLE WINCHARGERS PROFITABLY FOR CONVENIENCE OF DEALERS

Now dealers will be able to get quick delivery on Winchargers direct from their radio distributor. With a quick source of supply they can more profitably push the sale of Winchargers and battery radios, for they can pick-up Winchargers at the same time they get their battery radios... can often have a Wincharger shipped with a battery radio for no extra freight cost. With Winchargers readily available, dealers can deliver them to their customers at the same time they deliver their radio, thus avoiding the delay of ordering a Wincharger from the factory and making a second trip to the country when it arrives.

DEALERS are enthusiastic with this new plan which gives them quick delivery on Winchargers. DISTRIBUTORS are contacting their dealers NOW in order to anticipate their orders and have an adequate stock of Winchargers on hand.

DISTRIBUTORS—If you are not familiar with Wincharger’s new PROFIT PLAN for DISTRIBUTORS write or wire Dept. RT for complete details.

WINCHARGER CORPORATION, SIOUX CITY, IOWA

World’s Largest Makers of Wind-Electric Equipment

November, 1937 63
SERVICE EQUIPMENT
CARRYING CASE

* Featured as a dealer help by Arcturus Radio Tube Co., Newark, N. J., is a new professional service kit with space for a complete set of parts, tubes, tools, etc. In the design of the case, Arcturus has emphasized compactness, convenience, and durability; there is a removable tray and a hinged side. Servicemen get the cases from Arcturus distributors.

ST. NICHOLAS DISPLAYS

* "Timely touched with a head of old St. Nicholas," new displays for the Kadette models called Classics, Clockettes, Travel sets and Jewels, have been produced by International Radio Corp., Ann Arbor, Mich.

The new displays accent the unusual appearance of the models, as well as the popular prices, and are released as a "art" of Kadette's promotion of the sets as gifts.

STREAMER PLUS DISCS

* A new display lithographed in colors is being distributed to radio service dealers by Ken-Rad jobbers. It tells radio set owners what service, including the testing of tubes, is available from the dealer. It consists of a 30 x 10 streamer and 5 discs 11" in diameter.

DISPLAY TREE

* A 4-ft. Santa Claus display for window, counter or floor has been issued by Burgess Battery Co., Freeport, Ill. Colorfully lithographed, it has room for 16 actual Christmas tree lights, and real gifts may be attached to the tree.

COLORED CARD

* A neatly colored display card which is mainly circular in design has been released by Hytron Corp., Salem, Mass. Planned to accent uniform quality in Hytron tubes, the new eye-catcher is suited for window or counter use.

RADIO FOTO LOG

* A booklet having 132 dramatic pictures of broadcast artists has been issued by National Union Radio Corp., 570 Lexington Ave., New York City, under the title, "Radio Foto Log." Treatment of the pictures has unusual variety and interest, and general dope of interest to the listener has been included. For distribution to customers and prospects, the booklet is available to dealers and servicemen through National Union distributors.

COLORED DECAL

* As a part of an extensive jobber-cooperation program being undertaken by Standard Transformer Corp., the company has issued a colored decal mania for use by Stancor agents. The item is designed for window or door display and provides eye-catching identification for the firm's distributors.

GADGETS IN FULL VIEW

* Special compact combination counter and wall display stand has been announced by Radio & Technical Publishing Co., 45 Astor Place, New York City. It has room for six of Ghirardi's home-radio gadgets and six of his auto-radio gadgets. Design of the display keeps the merchandise in full view even after some items have been sold and removed. Dealers buying fixed amounts get the display free.

IMPROVED UP-TO-THE-MINUTE 1937-38 TUBE TESTER

Only $9.80

for this TUBE TESTER

Positively Checks All Type Radio Tubes According to Latest Recommendation of Tube Engineers.
- Has Line Voltage Adjustment
- Has Leakage and Short Test
- Uses Triplet Direct Reading Instrument (GOOD-BAD Scale)

Five flush type sockets provide for all tubes. The tester operation is very simple and indicates condition of the tube for dealer and customer on Direct Reading (GOOD-BAD) colored scale of Triplet instrument. Will also test for inter-element shorts and leakages. Complete in attractive, sturdy, quartered-oak case. Sloping panel of silver and black. Suitable for portable or counter use.

Model 430 same as 431 except has Readrite (GOOD-BAD) Meter

Model 430
DEALER PRICE $19.80

Model 431
DEALER PRICE $15.90

SEND YOUR JOBER WRITE FOR CATALOG

A MODIFIED EMISSION TYPE TESTER . . . APPROVED CIRCUIT

Readrite

RANGER SERIES

Radio Today
ONAN ALTERNATING CURRENT PLANTS

operate AC RADIO, PUBLIC ADDRESS, SOUND CAR and MOTION PICTURE EQUIPMENT . . . . .

These PLANTS supply electricity for Domestic and Commercial places where current is not available. Operate Water System, Refrigerator, Household Appliances.

SIZES TO SUIT EVERY PURPOSE
Operate on Gasoline, Gas or Distillate. Sizes 350 to 50,000 watts, $110 and up. Also 0, 12, 32 and 110 volt. DC Models. All Models furnished complete, ready to run. Write for Details.

D. W. ONAN & SONS
376 Royalston Ave. Minneapolis, Minn.

No Scratch!

Electric razors which do not scratch the face may make scratchy, crackling sounds in your radio and those of your neighbors for several hundred yards about! This electrical interference may be stopped at the razor's power outlet with a CONTINENTAL Carbon FO1DH unit. List. $1.00

No Squawk!

And if your neighbor's razor causes interference, install a CONTINENTAL Carbon RO1DH Filternoys unit at your radio for relief. Send a Filternoys unit on every service call! Send 10c in stamps for Handy Pocket Data on Radio Interference Elimination.

CONTINENTAL CARBON Inc.
13910 LORAIN AVENUE, CLEVELAND, OHIO
or Toronto, Ontario, Canada

NOT in years has there been such a heavy demand for wire in connection with the Service man's business. You have noticed it—we have noticed it. With Public Address going like a prairie blaze and Radio a seething hotbed of activity which promises to be sustained, you will be needing GOOD WIRE.

CORWICO Wires are scientifically produced to do their job 100%. Antenna Systems, P-A Cables, Hookup Wires—"made by engineers for engineers." Use CORWICO on your next contract.

CORNISH WIRE CO., Inc.
30 CHURCH STREET NEW YORK CITY
CORWICO Wire Catalog available to Service men. Distribution is exclusively through jobbers

November, 1937
DOPE ON DISTRIBUTORS

* Announced for Dec. 1 and 2, a Radio and Electrical Show and Open House will be sponsored in Philadelphia by jobbers’ Radio Electric Service Co. The event is set for the company’s main store at 7th and Arch Streets, and is announced as “The New York Trade Show brought to Philadelphia.” Participating manufacturers include RCA, Cornell Dubilier, International Resistance, Supreme, Emerson, Hammond, Maytag, Burgess, Philco, Westinghouse, and Universal appliances.

* Announced as distributors for Fada in the state of Wisconsin is Radio Parts, Inc., 635 W. State St., Milwaukee, Wis. Charles Brown is head of the firm and the Fada district manager in the area is J. A. Keim. Radio Parts has a branch at Madison, Wis., and has already begun a series of lively dealer showings.

The SELLING SENSATION of 1938
FOUR MORE MODELS ADDED TO THE GREATEST LINE IN GREBE HISTORY—ALL WITH GREBE PRESTOMATIC

INSTANTANEOUS TUNING
PRESS A BUTTON...PRESTO!...THERE’S YOUR STATION!

Sell GREBE. That’s the advice of men who know automatic tuning systems. After years of research, Grebe gives you a press-a-button tuning in its simplest and most reliable form. Climaxing many years of dependable manufacturing, and in cabinet work and dials, your customers will be awed by their sheer beauty.

MODEL 782 L—7 tube AC-DC Superheterodyne American, Foreign, and Police. Console cabinet of selected walnut veneers with graceful modern overlay construction and contrasting inlays hand rubbed to piano finish. 10” Super Dynamic Speaker. Dimensions 40” x 24” x 13½”.

MODEL 782 L—7 tube AC-DC Superheterodyne American, Foreign, and Police. Ultra modern cabinet of rich walnut, artistic and distinctive—beautifully finished. Special 8½” P.M. Dynamic speaker gives superb tone. Dimensions 15⅞” x 103/4” x 8½”.

MODEL 782 T—7 tube AC-DC Superheterodyne American, Foreign, and Police. Exquisitely up-right cabinet of beautifully grained walnut with contrasting inlays. 8” Super Dynamic Speaker. Dimensions 19⅝” x 15½” x 9½”.

MODEL 762 L—7 tube AC-DC Superheterodyne American, Foreign, and Police. Modern hand rubbed cabinet of choice walnut 8” Super Dynamic Speaker. Dimensions 21½” x 11¼” x 9½”.

Dealers! Give YOURSELF a Merry Christmas. Wire or write for the complete Grebe brochure. J.P.F. We have no regrets.

• HAS EXCELLED IN QUALITY FOR 26 YEARS •

* John J. Crider, for the past 8 years a special sales representative for Cooper-Louisville Co., the Louisville, Ky., jobbers for Crosley, has been elected vice-president and director of the firm.

* Warren Electric Co., Sioux City, Iowa, has been appointed distributor for Stromberg-Carlson radio to service dealers in northwest Iowa and northern and eastern Nebraska.

* Krich Radisco, the Newark, N. J., distributors for RCA and the RCA Mfg. Co., were recently joint hosts to 50 dealers from Newark. There were taken on a tour of the Camden, N. J., RCA plants and were entertained at a luncheon. On the program were the RCA execs Fred Wilson, Lou Sullivan, David J. Fima and Lou Roth; Paul Krich, the Krich-Radisco sales manager, also made a short address.

* Appliance Sales Co., the Wichita, Kan., distributors for Cros- ley, were recent hosts to 259 dealers along with the Crosley Radio Corp. Jack Hennigh, appliance sales manager, arranged the meeting with these Crosley execs attending: John J. Hope, W. F. White, Richard O’Connor and H. A. Armbricht.

* At H. A. McRae & Co., Inc., the Stewart-Warner jobbers of Troy, N. Y., “Rudy” Browd has been named general manager and vice-president. For the past several years, Mr. Browd has been sales manager for McRae, P. C. Ford is president. The company is now travelling 5 salesmen in its automotive dept. and 4 in the appliance dept.

* Sam M. Harper, 53 Park Place, New York City, has been ap- pointed representative for The Turner Co. in New York City, Pennsylvania, Delaware, Maryland, Washington, D. C., and New Jersey. Turner’s, of Cedar Rapids, Iowa, are makers of sound equipment and crystal mikes.

* Unusual advertising stunt re- cently accompanied the announce- ment of Lawrence Furniture Co. as New Orleans jobbers for Radette. Under the direction of Jimmy Woods, Southern division sales manager for International Radio Corp., a radio ad appeared on every page of local newspapers for three successive days.

* Kierulf & Co., 1833 S. Flower St., Los Angeles, distributors for Admiral, have just doubled their floor space. Show rooms have been annexed in order to handle visiting dealers, who, according to Charley Kierulf, manager, are genuinely enthusiastic about the line.

* Ross Struggs, president of Continental Radio Division Corp., Chicago, spent a recent week in New York City contacting Admiral dealers and distributors.

* At Crosley Distributing Co., Chicago, James Cunningham has been added to the wholesale sales force.
O. W. Githeus, president of Universal Camera Corp., makers of Univex cameras and projectors, has announced the most extensive pre-Christmas ad campaign in the history of the firm. National magazines, newspapers, and a series of displays and booklets are a part of the promotion. Raymond Spector is advertising counsel for the company.


New technical representative in the Chicago area for the Allen B. DuMont Laboratories, Inc., is Rowe Radio Research Laboratory Co., 1103 Bryn Mawr Ave., Harry C. Rowe, Jr., heads the firm.

J. P. Quam, president of the Quam-Nichols Co., Chicago, Ill., loud speaker manufacturer, has returned after a successful trip to the Pacific Coast. "Jim" found business very satisfactory in the Coast markets, and visited the trade with Carl A. Stone and O. A. Huber, the company's representatives in Los Angeles and San Francisco, respectively. Right now Jim is visiting the Middle West manufacturers with Ivan Pichard, Q-N sales representative from the factory.

Continental Radio & Television Corp. advises that their new district manager in New England for Admiral is James Hayes. Headquarters will be in Boston, Mass.

Feature Something
Santa Claus knows what he's talking about! Here's the movie camera that millions want and the only one everybody can afford! They've been hearing about it all year! Now they'll be reading about it in the largest and most dynamic advertising campaign ever put behind any movie camera!

CASH IN!
Make this the biggest Xmas you ever had by cashing in on this unparalleled promotional opportunity! Tie up with the sensational campaign in 12 magazines and 25 newspapers. Write today for free displays, mats, leaflets and electro.

DON'T DELAY!
Remember, you can't sell merchandise if you don't have it. Because of the unprecedented demand, it will be impossible to guarantee shipments unless you order immediately. Be smart—this Xmas make your store Univex headquarters. Universal Camera Corporation (World's Largest Manufacturers of Movie Cameras), New York... Chicago... Hollywood.

Detrola radio and refrigeration has a new district manager in Denver, Colo.
—Earl F. Bryant.

November, 1937
CASH IN on the Automatic Tuner Demand

Selectromatic

Converts Any Superheterodyne To An Automatic Tuner Model

ONLY 3 WIRES To Connect
Installation is simple on any set. Just connect 3 wires — that's all.

PACIFIC RADIO CORPORATION
844 W. ADAMS ST.
CHICAGO, ILL.

NEW OPPORTUNITIES for a Bigger and Better Service Business

NATIONAL UNION RADIO TUBES—
• A Complete Line
• Highest Quality
• Thoroughly Guaranteed

NATIONAL UNION CONDENSERS—
• A complete Line of Electrolytics and Papers
• Highest Quality
• Thoroughly Guaranteed

PLUS FREE EQUIPMENT

Now National Union deals can be worked out with both N.U. Radio Tubes and N.U. Condensers. This is wonderful news for the service engineer who wants more and better equipment. Your condenser purchases combined with your tube purchases make it easier and quicker to own the kind of equipment you want.

National Union has constantly put the latest advances in scientific equipment as well as modern selling aids within reach of the service dealer. The National Union deal calls for a dealer deposit which is rebated when the purchase of the required amount of tubes and condensers has been made. Thousands of completed deals. Every dealer should investigate. Just ask your jobber.

THE ROAD TO BETTER BUSINESS

1. Full guarantee on highest quality radio tube.
2. Cut price business not solicited.
3. Timely business building aids.

NATIONAL UNION RADIO CORP.
570 Lexington Avenue, New York City

DISTRIBUTORS

★ First prize winners in Philco’s national contest among distributors on merchandising Double X models have been announced: Group 1, Philco Radio & Television Corp. of New York; Group 2, Beaumont, Inc., Rochester, N. Y.; Group 3, The Mathes Co., Fort Worth, Tex.; Group 4, Schmiers Radio Shop, Rock Island, Ill. Silver plaques presented by Philco president Larry E. Cobbs, celebration dinners, and gold watches are presented to group winners.

★ Bruno-New York, Inc., the New York RCA distributor, was a first prize winner in the national electric tuning display contest. Award was based on the number of exclusive RCA windows in any given area. Bruno-New York had more than 250 special ones in its territory. Dealer winners were F. E. Wace & Sons, Middletown; Michaels Bros., Brooklyn; Liberty Music Shops, New York City; Fordham Radio Co., Jackson Heights; and John J. Shanel, Bronx.

★ Distributors report widespread satisfaction with the use of Stewart-Warner’s 17-foot radio-and-refrigerator display coaches. Results of the coach’s travels come under these heads: (1) Jobbers contact more dealers (2) Dealers don’t have to travel to far-away distributing centers (3) It gives the dealer local prestige (4) It attracts crowds and contacts consumers for the dealer.

★ Burstein-Applebee Co., distributors of parts, supplies and equipment at 1012 McGee St., St. Louis, Mo., have issued a new catalog of 164 pages covering radio, electrical, refrigeration and public address.

★ Reader’s Wholesale Distributors, the Crosley jobbers of Houston, Tex., have moved into a new home at 1811 Ruiz St.—larger showrooms and improved facilities throughout. W. H. Treanor, president, expects to double business next year, is enthusiastic about the recently announced Prestontune models.

★ Standard Transformer Corp. has announced the appointment of H. S. Roes, 2004 Grand Ave., Kansas City, Mo., as a new representative to cover western Missouri, Kansas and Fort Smith, Ark. Also, Roye Sales Agency of New York City has been granted an extended territory to include Philadelphia, Delaware, Maryland, New Jersey and Washington, D. C. These appointments replace Stancor’s former affiliations in those areas.

★ A meeting recently held for dealers of the Monongahela West Penn organization, Stromberg distributors of Fairmont, W. Va., was led by Lee McCown of that company. Other Stromberg-Carlson representatives present were William Fraser and J. E. McCauley.
Sales manager Harry Kalker of Sprague, left, has a parts huddle with Thomas H. Brown, distributor of New Haven, New London and Waterbury, Conn.

* Radio Specialties Co., Los Angeles, reports Chas. G. Mackey as a new member of its sales force to handle Hollywood territory.

* The Arnold Co. of Richmond, Va., has named R. E. Chase to handle N. C. territory. Ed. Thornbury (W3GPV) has also been added to the order dept. and amateur sales.

* Maurice Raphael, general sales manager for Grebe Mfg. Co., has announced that E. B. Latham & Co., 250 Fourth Ave., New York City, will distribute the Grebe line in New York, Long Island, and Westchester. Latham firm, itself 36 years old, is one of the pioneer jobbers for Grebe. Re-appearance of this company as a Grebe Jobber is therefore a reunion of radio veterans, as Mr. Raphael has represented Grebe since 1919.

* Automobile Equipment Co., the Arvin jobbers of Detroit, Mich., recently held a dealer meeting to honor 1938 lines. Some 656 dealers attended the big affair.

* Specialty Distributors, recently moved to their new location at 937-45 Fort Wayne Ave., Indianapolis, Ind., have been appointed distributors for Crosley products in the Indianapolis territory. Paul D. Cave is owner and manager.

* Billings Wholesale Radio, Fresno, Calif., have just modernized their showrooms and plan additional expansion. Now 14 years old, the firm is the new central California distributors for Packard-Bell radios, and plans "the most modern service dept. in the area."

Congratulations go from Maurice Raphael, right, of Grebe Radio, to L. E. Latham of E. B. Latham & Co., on latter's appointment as Grebe jobber.
ON THE TRADE TICKER

Here's a Simpson Electric Co. corne, including, left to right, Arthur H. Baier, Cleveland, Ohio; Ray Simpson, president, and G. H. Koch, sales manager.

* Engineering department of Clarostat Mfg. Co., Inc., 285-7 N. Sixth St., Brooklyn, N. Y., has been expanded. Also more equipment has been added to handle the bigger research program undertaken by the company.

* Miles Reproducer Co., Inc., now occupy new and larger quarters at 812 Broadway, New York City. Expansion announcement says that "we are equipped to give our deal- ers prompt and most efficient service on any and all of their sound require- ments."


* The Standard Transformer Corp., manufacturers of Stancor produc- ts, recently bought a four-story building at the north-west corner of Halsted and Blackhawk Streets, Chi- cago, which will give the company an increase of more than 50 per cent in manufacturing facilities over its present headquarters at 850 Blackhawk Street. J. J. (Jerry) Kahn, president of the company and a director of RMA, takes particular pleasure in this latest expansion of his company, because only a year and a half ago, Stancor doubled its manufacturing space in order to keep pace with its increasing business. The company is only seven years old, but in this short space of time has attained an outstanding success that is reflected in its constant growth. Looking ahead to the future, Mr. Kahn also purchased two lots at the north end of the new building which will be available for expansion purposes.

Install the Motors That Help Your Demand

You will find that music-wise customers constantly are pleased by the superior performance of General Industries Flyer Motors. Building up enthusiasm for the purchase of more radio-phonograph combinations—boost- ing your record demand. Install General Industries Flyer Motors. Dependable for high fidelity in playing all records, regardless of changing record drug. Self-lubricating, quiet, precision built for long trouble-free operation. Easily and quickly installed. Low cost.

Types for A.C. or universal A.C.-D.C. Also two speeds can be furnished on ordering—please specify exact voltage and frequency of current you use.

The General Industries Co.
3758 Taylor Street • Elyria, Ohio

Radio Today
A WORLD-WIDE RADIO SELLING JOB
CAN BE DONE in the DECEMBER ISSUE of
RADIO TODAY

THE ANNUAL EXPORT ISSUE
AND BUYERS' GUIDE

The only ALL-RADIO medium covering the ALL-RADIO export market!

An issue surpassing all previous efforts of RADIO TODAY in the foreign field will give you access to the finest radio outlets in all countries—with undivided interest on the subject of radio.

The Export Issue puts you in touch with foreign importing houses who are able to make the most of any radio marketing opportunity.

In each foreign country that is now a radio market, the circulation of the Export Issue will conform closely with the percentage of radio exports to that country. Thus, in the foreign field as well as at home, Radio Today's circulation is based upon buying power.

FOUR BIG SPECIAL FEATURES
plus all regular monthly services

1 FOREIGN BUYING POWER—5,000 super outlets in all countries that can be regarded as markets; eliminating those that are closed by war or other restrictions.

2 SPECIAL "PRODUCTS AND PERSONNEL" SECTION—listing names and addresses of all advertisers in this Export Issue, with their products and export managers; photographs of personnel will be used wherever available.

3 LITERATURE INSERT—listing the chief products of all advertisers in the issue. Three languages—French, Spanish and English. Detachable mailing card to facilitate inquiries.

4 BUYERS' GUIDE—listing in handy, convenient form every product made by RADIO TODAY advertisers.

22,000 KEY MEN OF THE RADIO INDUSTRY including 5,000 FOREIGN IMPORTERS, WHOLESALERS AND MANUFACTURERS

Closing Date, December 4

RADIO TODAY
480 LEXINGTON AVENUE, NEW YORK

November, 1937
**TRADE FLASHES**

**6E TUBE PROGRAM**

* To help dealers to get into the tube business with only a small investment, General Electric has announced a complete merchandising program. Charles E. Wandres, GE tube sales manager, points out that the set-up offers a comprehensive line of tubes, advertising, sales promotion aids and service equipment all in one deal. The company placed their receiving tubes on the market 6 months ago.

The line includes 21 metal types, 41 octal base glass types, and practically all the standard base glass tubes. Ads are running in 500 newspapers and in the biggest national magazines. Also GE has prepared a merchandiser's cabinet, to allow the dealer to set up a tube dept. in a small space. This will hold 324 tubes in four compartments, has a tube checker on top, and a four-color sign. The merchandiser includes GE service notes, 1930-35, and a combination insulated screwdriver and socket wrench. All this is available at special prices to those placing orders for tubes.

* Pleasantaire Corp. has moved general offices to 1623 Connecticut Ave., Washington, D. C.

* The Criterion & Fern Co., Columbus, O., has announced the appointment of Fred Olhoff as sales manager of the radio and appliance division of their chain.

*..., doing de luxe job as manager of Phyl Coe Mystery Contest, A. P. L'Hommedieu, Philo tube exec.

* Reports received recently by George Russell, Sentinel sales manager from Pat Reed, factory representative in the West and South-West, indicate that the demand for six-volt sets is exceptionally active in this territory; those reports being based on Mr. Reed's activities with the dealers in the various trading centers. Recent visitors at the Sentinel executive offices were Jim McCormack, manager of the major appliance division of Marshall-Wells, Duluth, Minn., and D. R. Warren, Jr., of the Stratton-Warren Hardware Co., Memphis, Tenn.

* H. J. Clippinger, vice president and general sales manager of the Continental Radio and Television Corp., Chicago, III., has announced the appointment of James Hayes as branch manager in New England with headquarters at Boston. Mr. Hayes has long been identified with this territory and has already started "the ball rolling."

* Returning recently from 6 weeks in London, Mr. Silver announced that he will desert his former direct-to-user sales policy, and that the products of McMurdo Silver Corp. will now be marketed through exclusive high class dealers, one to a city only. While in London, Mr. Silver organized an English branch, the British McMurdo Silver Co., Ltd., and had the Duke of Kent and Douglas Fairbanks, Sr., for the first customers. In the U. S. Masterpiece receivers are being merchandised in the "luxury" market by such retailers as Lyon & Healy, Chicago; Jenkins Music Co., Kansas City to Texas; Sherman Clay, West Coast; Acolian Co., St. Louis; and Daveco City, New York City.

* Shure Bros.' crystal record reproducer, called the "Balanced-Tracking Zephyr" received honorable mention in the Scientific Group in the recent Modern Plastics Competition conducted by Modern Plastics Magazine.
Round-up of Raytheon execs includes, left to right, D. F. Reed, ass't credit, Arthur Akeroyd, NW office mgr.; Earl Dietrich, mgr. of distributor sales; R. M. "Bob" Campion, Texas and Louisiana dist. mgr.; and F. E. Anderson, assistant works manager.

* Among the awards made in the second Modern Plastics Competition, a $10 prize, in the decorative group, was given to Mead's "Ferar." Carl dette. This event was sponsored by the Chicago Plastics magazine. The prize was won by Carl Dette of Fiberon, and was designed by Carl W. Sundberg and Montgomery Ferris. Said a press release that "We are particularly gratified to know that this is the only radio for which such an award has ever been given." Mr. Verschoor also states that "we have a hard time getting orders for plastic models. Approaching the holidays, we would like to have a complete inventory on the market."

* Arthur Moss, secretary-treasurer of the Radio Parts Manufacturers National Trade Show, and Miss Marjorie Thalheimer of New Haven, Conn., were married at the Warwick Hotel in New York City, October 14. Returning to New York after two weeks in Havana, Mr. and Mrs. Moss will be at home to visit their friends at 5 W. 56th Street, New York City, about November 15. Mr. Moss is sales manager of Solur Mfg. Co., New York, and is widely known throughout the radio industry.

* D. E. Johnson, formerly president of the Day-Rad Company, Dayton, Ohio, and who, for the past two years has been sales manager of the Bendix Day-Rad, has purchased the Day-Rad division from the Bendix organization. Mr. Johnson has been in Chicago to check inventory, and to supervise the movement of equipment and apparatus to Dayton, where he will manufacture a complete line of test instruments and units using the former trade name Day-Rad. His new company, known as the Dayton Radio Corporation, will begin operation at once.

* New manager of the RCA auto radio division is Walter H. Dyer, who has had more than 15 years experience as a sales executive in the auto radio field. H. D. Mysing will continue his auto radio activity in Detroit, acting as assistant to Mr. Dyer.

* John Stcupak has recently been appointed production superintendent of Ariston Mfg. Corp., Chicago, Ill. He was formerly with Peerless Reproducers, United Reproducers and recently with the speaker division of Continental Motors.

* Powell Crosley III, for sometime one of the vice presidents of the Crosley Radio Corp., has been put in complete charge of the radio set manufacturing division of the company. Vice-president J. P. Rogers is now in charge of the private brand division which covers the sale of automobile radio sets to car manufacturers and special brand radios and refrigerators to large users.

* G. K. Throckmorton, who has been executive vice president of ACA Mfg. Co. and operating head since the 1932 retirement of E. T. Cunningham, has been elected president of the company. Mr. Throckmorton began his radio work in 1925, following 10 years of merchandising experience in the electrical field.

* Chicago office of the Arcturus Radio Tube Co., Newark, N. J., is now located at new and larger quarters in Room 14112A, Merchandise Mart. Wm. "Bill" Johnson is in charge of the new layout, with F. P. Benson, R. S. Bieth and E. Englehardt assisting.

* Earl S. Dietrich, Raytheon's manager of distributor sales, has a new assistant, Art Akeroyd, recently named manager of the company's New York office at 420 Lexington Ave. Akeroyd was formerly Raytheon's Ohio representative. Also promoted is Carl M. Landquist of the Chicago office, now district sales manager for the Cleveland area.

* Allen B. DuMont Labs., Inc., Upper Montclair, N. J., have purchased a factory building at 2 Main Ave., Passaic, N. J., and will move to the New Jersey plant early in 1937. Various DuMont departments will be expanded, the firm personnel will be doubled, and activity in television equipment will be increased.

* The jury of awards of the National Industrial Advertising Association has again awarded first prize for the most effective advertising campaign to Fairbanks, Morse & Co. Credit goes to J. C. Loomis, director of publicity and advertising for FM's industrial products, and to the advertising agency, Henri, Hirst & McDonald, Inc., Chicago, who planned the campaign.

* Among the awards made in the second Modern Plastics Competition, a $10 prize, in the decorative group, was given to Mead's "Ferar." Carl dette. This event was sponsored by the Chicago Plastics magazine. The prize was won by Carl Dette of Fiberon, and was designed by Carl W. Sundberg and Montgomery Ferris. Said a press release that "We are particularly gratified to know that this is the only radio for which such an award has ever been given." Mr. Verschoor also states that "we have a hard time getting orders for plastic models. Approaching the holidays, we would like to have a complete inventory on the market."

* Arthur Moss, secretary-treasurer of the Radio Parts Manufacturers National Trade Show, and Miss Marjorie Thalheimer of New Haven, Conn., were married at the Warwick Hotel in New York City, October 14. Returning to New York after two weeks in Havana, Mr. and Mrs. Moss will be at home to visit their friends at 5 W. 56th Street, New York City, about November 15. Mr. Moss is sales manager of Solur Mfg. Co., New York, and is widely known throughout the radio industry.

* D. E. Johnson, formerly president of the Day-Rad Company, Dayton, Ohio, and who, for the past two years has been sales manager of the Bendix Day-Rad, has purchased the Day-Rad division from the Bendix organization. Mr. Johnson has been in Chicago to check inventory, and to supervise the movement of equipment and apparatus to Dayton, where he will manufacture a complete line of test instruments and units using the former trade name Day-Rad. His new company, known as the Dayton Radio Corporation, will begin operation at once.

* New manager of the RCA auto radio division is Walter H. Dyer, who has had more than 15 years experience as a sales executive in the auto radio field. H. D. Mysing will continue his auto radio activity in Detroit, acting as assistant to Mr. Dyer.

* John Stcupak has recently been appointed production superintendent of Ariston Mfg. Corp., Chicago, Ill. He was formerly with Peerless Reproducers, United Reproducers and recently with the speaker division of Continental Motors.

* Powell Crosley III, for sometime one of the vice presidents of the Crosley Radio Corp., has been put in complete charge of the radio set manufacturing division of the company. Vice-president J. P. Rogers is now in charge of the private brand division which covers the sale of automobile radio sets to car manufacturers and special brand radios and refrigerators to large users.

* G. K. Throckmorton, who has been executive vice president of ACA Mfg. Co. and operating head since the 1932 retirement of E. T. Cunningham, has been elected president of the company. Mr. Throckmorton began his radio work in 1925, following 10 years of merchandising experience in the electrical field.

* Chicago office of the Arcturus Radio Tube Co., Newark, N. J., is now located at new and larger quarters in Room 14112A, Merchandise Mart. Wm. "Bill" Johnson is in charge of the new layout, with F. P. Benson, R. S. Bieth and E. Englehardt assisting.

* Earl S. Dietrich, Raytheon's manager of distributor sales, has a new assistant, Art Akeroyd, recently named manager of the company's New York office at 420 Lexington Ave. Akeroyd was formerly Raytheon's Ohio representative. Also promoted is Carl M. Landquist of the Chicago office, now district sales manager for the Cleveland area.

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How Wincharger Corp. tells the 32-volt story to U. S. rural areas. Stanley E. Byther is shown with one of 9 outfits now whirling thru America.

* Earl J. Hadley, who has been general advertising manager for the Rudolph Wurlitzer Co., has joined Henri, Hurst & McDonald, Inc., as account executive. This agency is launching a broader program of merchandising service for its client, Fairbanks, Morse & Co., home appliance division, Indianapolis. Mr. Hadley will serve on this account. Prior to his Wurlitzer connection, he was advertising manager of the Grigsby-Grunow Co., manufacturers of Majestic radios and refrigerators. His advertising background also includes nine years as advertising manager for the Cable Piano Company.

* Philco division managers from all parts of U. S. met at a merchandising and advertising conference in Philadelphia recently to huddle over Christmas radio promotions.

DUBLIER ANNIVERSARY

* The Dublifier Condenser Co., Ltd., of London, England, celebrating the 25th anniversary of its founding by William Dublifier, has presented to Mr. Dublifier an illuminated address expressing affection and gratitude to its founder. The address traces the engineering genius of Dublifier from his first work with the static capacity, through his work in Russia, the founding of the American firm in 1910, and the beginning of the London company in 1912. The English organization, now among the huge plants of the Cornell-Dublifier Electric Corp. at South Plainfield, N. J., remain under the close supervision of pioneer Dublifier.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 4, 1913


Before me, a Notary Public in and for the State and county aforesaid, personally appeared Orestes R. Caldwell, who, having been duly sworn according to law, deposes and sayeth that he is the Editor of RADIO TODAY and that the following is to the best of his knowledge and belief, true and correct statement of the ownership, management, and circulation of the above-named publication for the date shown in the above caption, retained for the use of the stockholders, mortgagees, and other persons entitled thereto. The names and addresses of the stockholders, mortgagees and other security holders as shown by the books of the concern are:

Orestes R. Caldwell, 277 Park Avenue, New York, N. Y., Orestes R. Caldwell, Canoe Road, Canoe City, Conn.

The above-named publication is published at New York, N. Y., and distributed at the following places: New York City, New York, N. Y., Orestes R. Caldwell, Canoe Road, Canoe City, Conn.

Theabove-named publication is sold by the editor, editor, managing editor, and business managers only.

Copy of this statement, together with the name and address of the editor, will be kept at the office of publication.

 geometrically constructed — economical to operate — ruggedly built for years of trouble-free service — used or recommended by the largest manufacturers of sound apparatus — in use in all countries of the world — Send for prices and data.

Janette Rotary Converters
FOR CONVERTING DIRECT TO ALTERNATING CURRENT

- Built in capacities from 35 to 3250 volt amperes — with or without all wave filters. Dynamos constructed — economical to operate — ruggedly built for years of trouble-free service — used or recommended by the largest manufacturers of sound apparatus — in use in all countries of the world — Send for prices and data.

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While every precaution is taken to insure accuracy, we cannot guarantee against the possibility of an occasional change or omission in the preparation of this index.

November, 1937

TRANSMITTING CAPACITORS

OIL-PAPER

and

MICA TYPES

TRANSOIL ... SOLAREX ... TRANSMICA

Write for complete catalog

SOLAR MFG. CORP., 599-601 BROADWAY, NEW YORK, N. Y.
R. M. Karet of Utah Radio Products
relaxes between sales drives.

ZENITH ADDS PROMOTION

* Continuing its master review of unusual promotional efforts currently being made by radio manufacturers, Radio Today presents here with a summary from Zenith Radio Corp.

"Advertising plans for Zenith are of course very much larger this year than they were last," states Edgar G. Herrmann, advertising manager for the company.

"Plans include more evening radio programs on leading network stations, national advertisements in practically all the major magazines, and a widespread dealer cooperative campaign of broadcast, billboard and newspaper advertising through our exclusive distributors.

"Zenith continues steady monthly ads in nearly two-score farm publications. Another important promotion is our direct mail campaign—a series of mailings from the company to jobbers, from jobbers to dealers, and from dealers to the consumer.

"It would be a Herculean task for me to detail to you our many efforts in store backgrounds, window displays, posters, signs, and other dealer helps. This job is continuous with us, and this year the operation has been greatly increased.

"Zenith has again issued to its exclusive distributors a guarantee against mid-season new models, lower prices, cut-price and 'sleuth' advertising. Dealers will be protected not only in words but in deed.

"Our advertising and promotion generally stresses the new arm chair models introduced in a major way by Commander McDonald, electric automatic tuning, and Robot Dial."
Radio's Two Biggest Selling Months Are Here

Make Them the Biggest In Your Business

WITH THESE TWO SENSATIONAL GENERAL ELECTRIC TOUCH TUNING MODELS

MODEL F-96
G-E touch tuning—just press a button that's all—at a sensational, low price. The biggest radio dollar value in years, with an exceptional appeal to all buyers. Stocks now being rushed to your G-E Radio Distributor for immediate delivery.

MODEL F-107
It's head and shoulders above other radios in the field. The highest development in automatic tuning. More stations at your finger tips—16 buttons in all. Exclusive G-E scan button—plus many other features. A real Christmas business promoter.
DETROLA proves that DETROLA Electric Tuning is PERFECT! With every Electric Tuning Radio you sell, you can give your customer a 5 YEAR GUARANTEE... backed by the mighty DETROLA Corporation! This powerful selling feature is EXCLUSIVE with DETROLA. Yes... you'll do a bigger job with DETROLA because DETROLA does big things for you!

★ 10 BUTTONS
★ REMOTE CONTROL ADAPTER
★ NEW ESCUTCHEON

MODEL T-2
With Guaranteed Electric Tuning

MODEL T-3
With Guaranteed Electric Tuning
Deluxe Model. 10 Buttons. Remote Control Adapter. 9 Tubes. Telbeam Tuning Eye. Standard, Foreign, Police, Amateur. RETAILS AT $74.50

A FEW DESIRABLE DISTRIBUTORSHIPS AVAILABLE

DETROLA CORPORATION • DETROIT, MICHIGAN