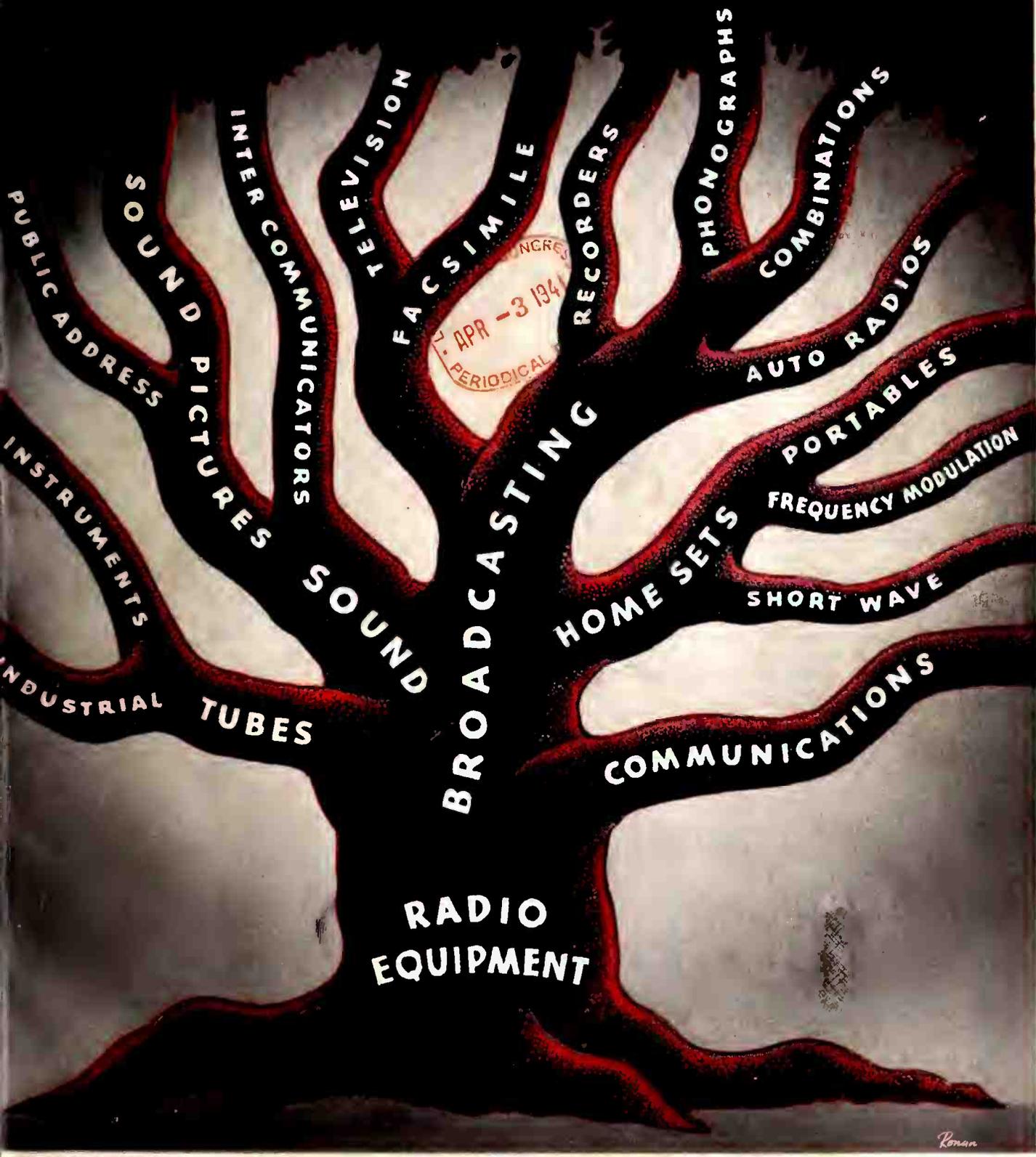


RADIO *and Television* TODAY

IN TWO PARTS - PART ONE



- SETS
- TUBES
- BATTERIES
- RECORDS
- PARTS
- TRANSFORMERS
- CONDENSERS
- SERVICE
- SOUND

Roman

IT'S HERE! IT'S FREE!

P. R. MALLORY & CO., Inc.
INDIANAPOLIS, INDIANA
MADE IN U.S.A.

DRY PRODUCTS

MALLORY
1941 Replacement VIBRATOR GUIDE
with "Radio in 1941 Cars"

More Than Ever... Insist on Mallory

The Only
COMPLETE
Vibrator
Guide with
Exclusive Data
"Radio in
1941 Cars"

ORDER
from your
distributor
TODAY!

- Up-to-the-minute, completely accurate vibrator replacement chart for all makes and models of auto radios and battery operated home receivers.
- Complete cross-reference of Mallory Vibrators by make and model of receiver.
- Interference elimination, and auto radio installation in all 1941 cars. An exclusive Mallory feature.
- Vibrator connection charts.

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than ever
— **INSIST ON**

P. R. MALLORY & CO. Inc.
MALLORY
APPROVED
PRECISION PRODUCTS

VIBRATORS • VIBRAPACKS • CONDENSERS •
VOLUME CONTROLS • ROTARY SWITCHES •
SINGLE AND MULTIPLE PUSH BUTTON SWITCHES
• RESISTORS • RADIO HARDWARE

THE RADIO OF TOMORROW **Today**

CONSENSUS OF OPINION ...
"Looks like you got something there!"

FADA Radio

Introduces the
**NEATEST... "DAWGONDEST"
GOOD LOOKING PORTABLE
YOU EVER CAME ACROSS!**

34 SERIES
5-TUBE SUPERHETERODYNE
(3-WAY AC-DC BATTERY)
**CAMERA TYPE
PERSONAL
PORTABLE**

Features

- 4 inch PM Dynamic Speaker provides **TONE QUALITY** equal to a large portable
- Double tuned Iron Core IF Transformers assure maximum **GAIN** and **SELECTIVITY**
- **WEIGHS ONLY 6 lbs.**
- Over 40 hours' **BATTERY LIFE** using 3 Flash Cells and one 67½ Volt "B" Battery
- **HiQ FA-DA-SCOPE** Built in **LOOP ANTENNA**
- Full Vision Dial and many other features



LIST PRICE

\$19.95

Complete with Batteries

Smartly Styled

**BY
LUGGAGE EXPERTS**

Also available in Sun Tan Finish
and in genuine Cowhide leather
at additional prices.



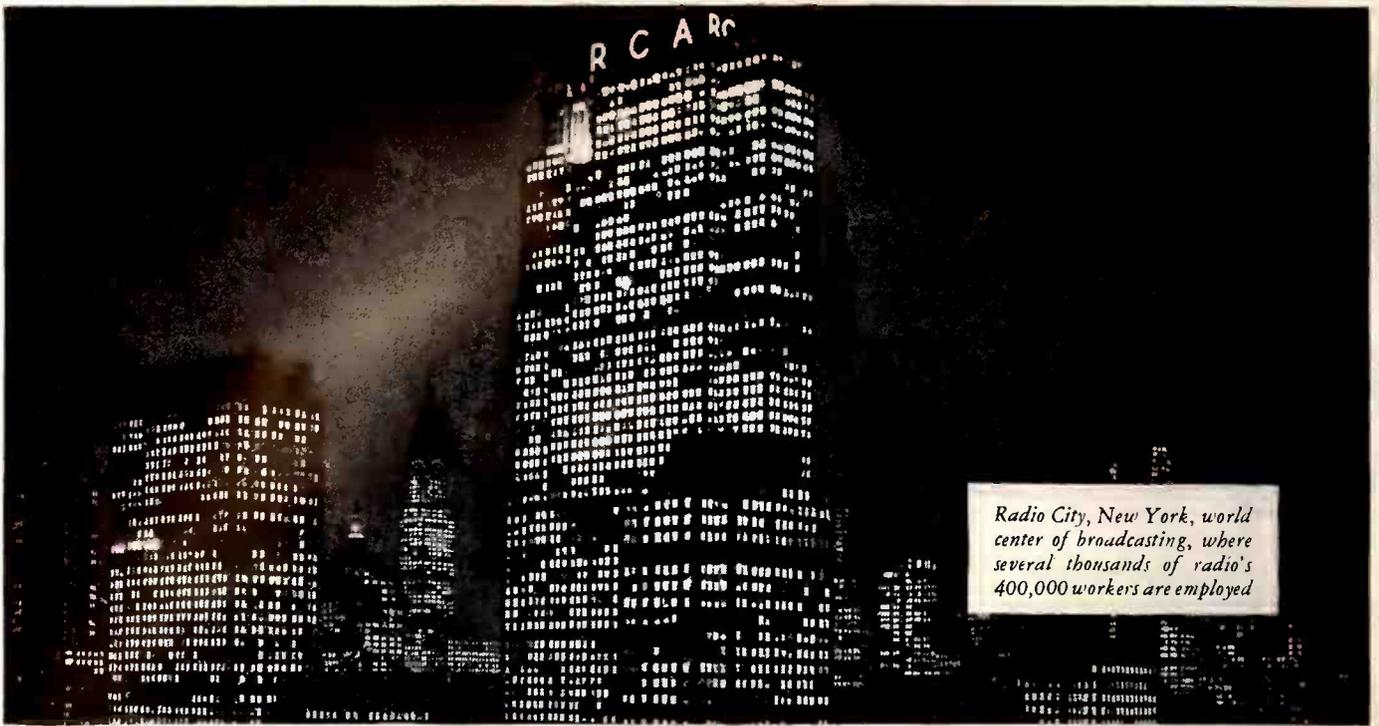
List prices slightly higher in the South and Far West

THE FADA LINE IS COMPLETE

FADA'S 1941 Line is complete with Table Models, Portables, Consoles, Combinations, Home Recorders, Farm Radios and Export Models in every price range.

Write for full details and sales brochure to

FADA RADIO & ELECTRIC CO., Inc., 30-20 Thomson Avenue, Long Island City, N. Y.



Radio City, New York, world center of broadcasting, where several thousands of radio's 400,000 workers are employed

How Radio Helps Employ 400,000 People!

AS YOU SELL A RADIO SET, do you ever stop to think of the many thousands of people employed in the industry of which you are an important part?

The radio industry employs directly 400,000 persons, and indirectly hundreds of thousands of others. From the research laboratory to the song on the air, the employees of radio are at the listeners' beck and call. They earn their living in jobs which only two decades ago did not exist.

An Endless Procession of Workers

Long before the radio set "goes on the air" in the home of your customer it helps to give employment to an army of workers—from lumbermen to cabinetmakers, from miners who mined the copper and iron, to electrical engineers who designed the circuits that perform the magic. And, of course, there are those who fash-

ion the metal chassis; those who make the plastics and the vacuum tubes.

Radio employment is an endless procession—as endless as the production belts that constantly carry new instruments to the public, or the research that constantly plans improved instruments for the future. There are factory workers, salesmen, advertising men, artists, printers, wholesalers, retailers, and many others who work in radio because people in the United States have installed 50,000,000 radios in their homes and automobiles, and will want 10,000,000 more radios this year.

The People Behind the Programs

Each broadcast program has its actors, but behind every voice or song, behind every comedian, opera and drama, are the program planners, script writers, technicians, announcers, sound-effects men, control oper-

ators, and thousands of clerical helpers. Broadcasters alone employ many thousands of men and women in 850 stations, while radio-telegraph stations ashore and afloat, aircraft and police radio, add greatly to the roster of radio and to the payrolls of America.

New Gateways of Employment

Constantly developing new products and services through research, radio is ever widening the gateway of employment. Television holds the promise of another new industry developed by American enterprise, to create employment and raise the American standard of living.

Through the sale of a radio you do your bit as an employer of people unseen, and that role is always yours as long as you are in radio—while radio works for you it enables others to work, too.



RADIO CORPORATION OF AMERICA
RADIO CITY, N. Y.

RCA Manufacturing Co., Inc. • Radiomarine Corporation of America • RCA Laboratories
National Broadcasting Company, Inc. • R. C. A. Communications, Inc. • RCA Institutes, Inc.

**COMBINATION
SALES SOAR!**

62,783 Combinations
Sold in 1937 - 350,000
in 1938 - 475,000 in 1939 -
850,000 in 1940 -

1941 OPPORTUNITIES
ARE FAR GREATER!

CASH IN NOW!

Feature the New
Emerson
PHONORADIO



Model 412

with
**Automatic
RECORD CHANGER**
and
"MIXER"
Changes 10" and 12" Records INTERMIXED

... IT'S GOT EVERYTHING!

Phonograph with Automatic Record
Changer and Mixer for continuous playing
of 10" and 12" records intermixed—with lid
closed! And a superb Superheterodyne radio
with ...

- Illuminated Slide Rule Dial
- 6½" P.M. Dynamic Speaker
- Automatic Volume Control
- Perfected Tone Control
- Bigger Inclosed Super-Loop
- Standard American and Police Band
- Hand-rubbed, Figure-stripped Walnut
in Sta-Bent Construction

\$49.95
LIST PRICE

Emerson, again, is there ahead of every trend . . . with models
that ride the crest of the popularity wave, and with values that
just sell themselves. These two Phonoradios will make your
Combination business soar!



Model 423 . . . STYLE, PERFORMANCE, VALUE!

A Style Leader of the year . . . and as outstanding in
performance as in beauty! Latest phonograph develop-
ment plus a great new Superheterodyne radio with ...

- Illuminated Slide Rule Dial
- Electro-Dynamic Speaker
- Automatic Volume Control
- Perfected Tone Control
- Bigger Inclosed Super-Loop
- American and Police Band
- Hand-rubbed, two-toned Walnut Cabinet

\$29.95

LIST PRICE

Prices Slightly Higher
in South and West

Call your nearest distributor for full details . . . today!

EMERSON RADIO and PHONOGRAPH CORPORATION, NEW YORK, N. Y.
World's Largest Maker of Home Radios



ARVIN

Radios

TO RETAIL FOR

\$6.95
TO \$29.95

Fast-Selling

NEW Model 422

\$6.95

Brown Finish

MODEL 422A, IVORY FINISH

\$7.95



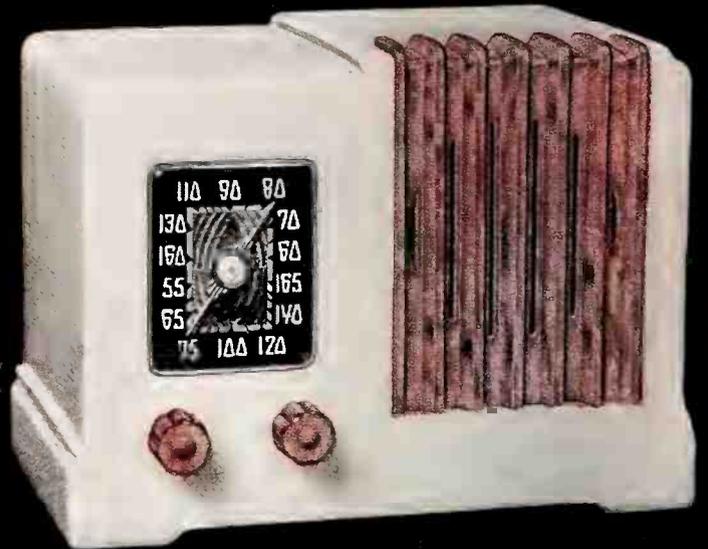
IT'S A 4-TUBE SUPERHET!

1 Compact but powerful 4-tube AC-DC superhet. Sells so fast every radio dealer needs it. Attractive unbreakable cabinet. Attached aerial. One-year service guarantee from factory to user.

● *Thousands of dealers* have taken on Arvins to supplement their other lines. Why? Because low list prices, good discounts, exceptional performance and eye-appeal all contribute to fast turnover and attractive net profits on Arvins.

Arvins are going big. There are 16 hot numbers in the 1941 line—backed by a responsible company that sold hundreds of thousands of radios last year. Arvins are quickly obtained from conveniently located jobbers who co-operate with dealers in merchandising these fast-selling radios.

NOBLITT-SPARKS INDUSTRIES, INC. • COLUMBUS, INDIANA
Prices slightly higher in extreme East, South and West.



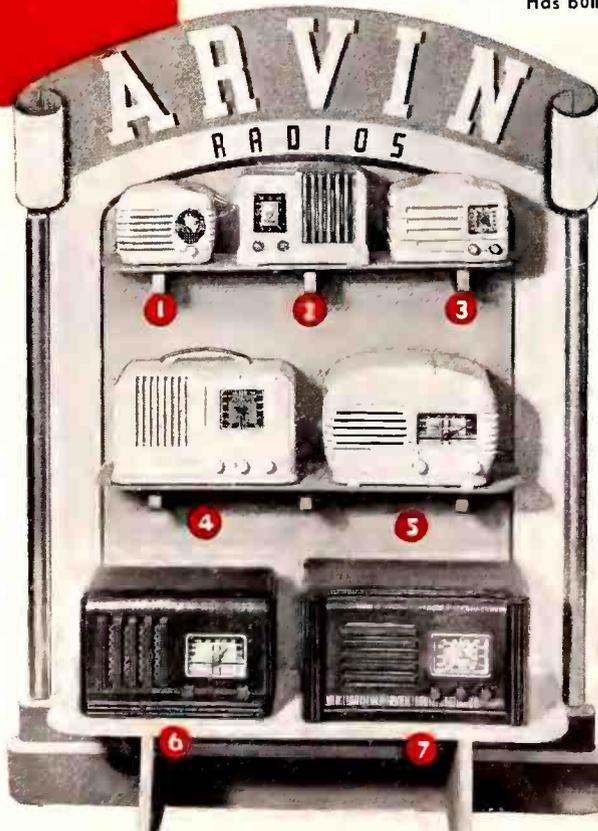
IT'S THE NEW CATALIN PLASTIC!

2 Most glamorous radio you've seen—in Catalin, the jewel of plastics. 5-tube AC-DC performance matches its jewel-like beauty. Has built-in loop.

MODEL 532A with onyx case, amber grille and knobs.

\$14.95

MODEL 532 with burgundy case, onyx grille and knobs at same price.



3 MODEL 522A—\$10.95. A 5-tube superhet with ivory finish unbreakable cabinet and built-in loop. Model 522 brown, \$9.95.

4 MODEL 722A—\$19.95. A 6-tube superhet in ivory plastic cabinet with built-in loop and carrying handle. Model 722 walnut, \$18.95.

5 MODEL 622A—\$14.95. A big 5-tube superhet in ivory plastic cabinet with built-in loop. Model 622 walnut, \$13.95.

6 MODEL 632—\$17.95. A big 5-tube superhet in walnut wood cabinet with built-in loop.

7 MODEL 732—\$24.95. A powerful 6-tube superhet in walnut wood cabinet with built-in loop.

FREE Five free floor display with an order for one each of six Arvin models... Ask jobber.

ARVIN - The Fast-selling Low-priced Line Every Dealer Needs

RE-SET PUSH BUTTONS THE *Rapid* WAY!



RCA Station Allocator

Covers all push-button setting and alignment work. **\$17.50**
Operates from either self-contained batteries or a-c.
Stock No. 171—Price

The RCA Station Allocator is an indispensable instrument for the service dealer who really plans to "cash in" on his greatest business-building opportunity in years. With it, you can handle more push button receiver re-tuning jobs in less time, with less effort and at greater profits. Moreover, it will serve as a useful shop instrument long after the present re-allocation is forgotten.

The Allocator is speedy, accurate, portable. Eight push buttons can quickly be set up to desired frequencies. Operation is with or without modulation. It then serves as an oscillator for rapid identification of desired stations during the re-tuning of receivers. Two buttons can be tuned to i-f frequencies if desired, thus providing remarkable flexibility for all alignment as well as push-button setting work. The Allocator operates from either a-c or self-contained batteries.

Only one adjustment is required for each frequency. What's more, thanks to the Allocator's magnetite core inductances and polystyrene condensers, these adjustments *stay put*. Weight is only 5½ lbs. with batteries. Size is 5" high, 8⅞" long and 3⅝" deep.

See the Allocator at your RCA Test Equipment Distributor's today. Prepare now for faster work and bigger profits!

SPECIFICATIONS

- PUSH-BUTTON RANGES:**
Buttons 1 and 2 (approximately) 405-825 kc.
Buttons 3, 4, and 5 " 600-1185 kc.
Buttons 6, 7, and 8 " 820-1700 kc.
- TUBE COMPLEMENT:**
1 RCA-1R5 as r-f oscillator, 1 RCA-6H6 for a-c rectification, 1 neon tube for a-f oscillator and pilot lamp.

Another RCA Time-Saving Money-Maker
RCA Junior VoltOhmyst

Costing only a little more than an ordinary volt-ohmmeter, the RCA Junior VoltOhmyst gives you electronic push-pull operation with all the time and money-saving features of the famous Rider VoltOhmyst circuits plus

the addition of an isolated rectifier-type a-c voltmeter! Special protective features guard against meter burn-out for d-c volts and ohms measurements. It is an instrument no wide-awake technician can afford to miss!

Price, Complete **\$34.95** Stock No. 165

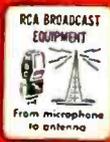


Test Equipment

YOUR KEY TO SYSTEMATIC
SERVICING FOR GREATER PROFITS

RCA MANUFACTURING CO., Inc., Camden, N. J. • A Service of the Radio Corporation of America

In Canada RCA VICTOR COMPANY Ltd., Montreal



KEN-RAD

ON PARADE



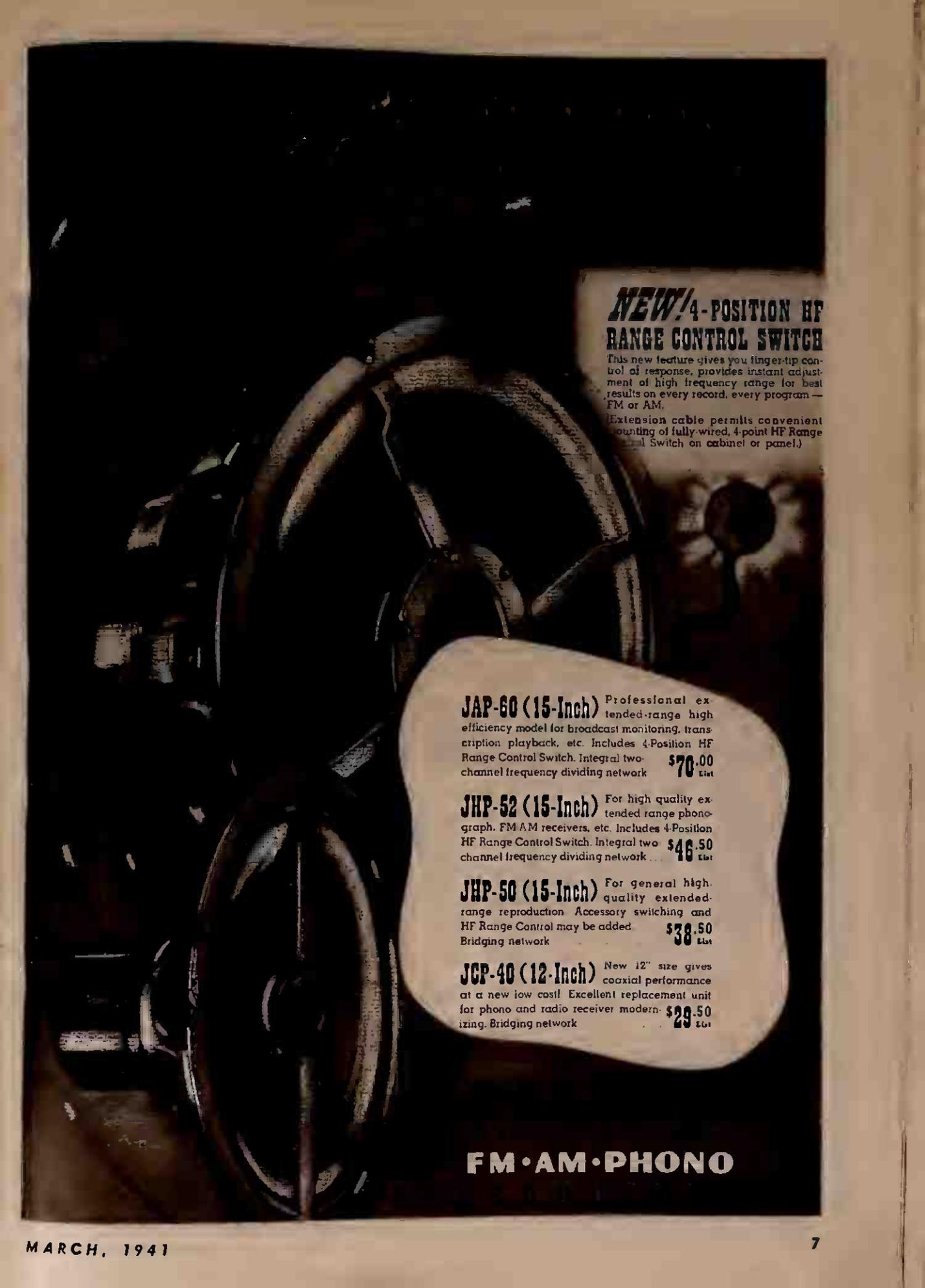
You can depend upon profits and satisfied customers when you handle and recommend Ken-Rad Radio Tubes. Hundreds of users write us in this vein: "We are receiving programs we never dreamed of getting before. Foreign countries come in like local stations." [Name on request.]

For Better Tube Business Recommend

KEN-RAD

Dependable Radio Tubes

KEN-RAD TUBE & LAMP CORPORATION, INC. • OWENSBORO, KY.
Makers of Ken-Rad Radio Tubes and Ken-Rad Electric Lamp Bulbs



**NEW! 4-POSITION HF
RANGE CONTROL SWITCH**

This new feature gives you finger-tip control of response, provides instant adjustment of high frequency range for best results on every record, every program — FM or AM.

(Extension cable permits convenient mounting of fully-wired, 4-point HF Range Control Switch on cabinet or panel.)

JAP-60 (15-Inch) Professional extended-range high efficiency model for broadcast monitoring, transcription playback, etc. Includes 4-Position HF Range Control Switch. Integral two-channel frequency dividing network **\$70.00** list

JHP-52 (15-Inch) For high quality extended range phonograph, FM AM receivers, etc. Includes 4-Position HF Range Control Switch. Integral two-channel frequency dividing network... **\$46.50** list

JHP-50 (15-Inch) For general high quality extended-range reproduction. Accessory switching and HF Range Control may be added. Bridging network **\$38.50** list

JCP-40 (12-Inch) New 12" size gives coaxial performance at a new low cost! Excellent replacement unit for phono and radio receiver modernizing. Bridging network **\$29.50** list

FM • AM • PHONO



Heart Trouble Avoided by This Utah Operation

HANDS as skilled as any surgeon's perform this delicate operation in the Utah factory. This precision adjustment of the contact points in Utah Vibrators is responsible for their long life, correct electrical balance, current output and freedom from noise.

Because Utah contact points are adjusted to a specified clearance, with a variation of less than .0005 in., they eliminate the causes of failure so frequently found in ordi-

nary vibrators. Pitted or locked points, unsatisfactory performance and short life are avoided.

Only high quality materials conforming to rigid standards are used in the manufacture of Utah Vibrators. The points, for example, are made of the best grade Tungsten, fully capable of standing up under the terrific punishment to which they will be subjected.

Write for information about the complete line of high-value, dependable Utah Vibrators. Utah Radio Products Company, 814 Orleans Street, Chicago, Illinois. Canadian Office: 560 King Street West, Toronto. In Argentine: Ucoa Radio Products Co., SRL Buenos Aires. Cable Address: Utaradio, Chicago.



V I B R A T O R S

SPEAKERS • TRANSFORMERS • UTAH-CARTER PARTS

STEEL BARS

SHATTERED

IN SECONDS

WITH RAYTHEON TUBE EQUIPPED TESTING APPARATUS!

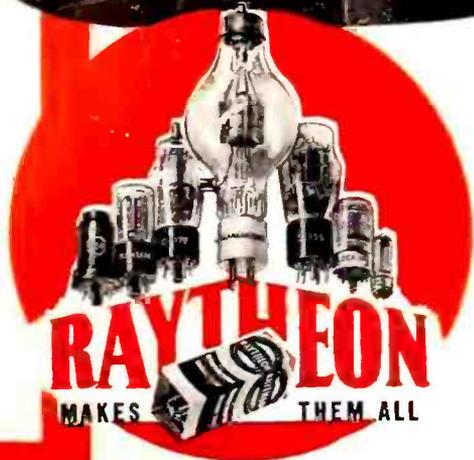
Every day in the testing laboratories of steel plants, turning out vast quantities of defense material, a continual fatigue-strength test of steel goes on. The Rayflex Fatigue Testing Machine meets industry's demand for the most scientific procedure to accurately conduct these tests.

The Rayflex machine vibrates a specimen bar of steel by the means of electromagnets actuated from an oscillator-amplifier combination with frequencies varying from 6,000 to 18,000 cycles, condensing all the wear of years into a matter of minutes! You would expect the control apparatus of Rayflex to be equipped with the best and most dependable tubes money could buy . . . tubes that must not fail under the exacting conditions of these essential tests.

You will find RAYTHEON RADIO TUBES performing this difficult task for Rayflex with the same consistent high quality performance that they have always given to radio dealers and servicemen. No special tubes were developed for the Rayflex machine . . . it uses the same standard RAYTHEON RADIO TUBES that are sold by thousands of radio dealers and servicemen every day.

Your RAYTHEON Distributor has an unusual tube deal for you . . . see him today . . . Remember, RAYTHEONS cost no more for their plus advantages.

Raytheon Production Corporation, Newton, Mass., New York, Chicago, San Francisco, Atlanta.



WORLD'S LARGEST EXCLUSIVE RADIO TUBE MANUFACTURERS

MARCH, 1941



IS MOVING DAY FOR STATION WAVELENGTHS!

Get EXTRA Profits When You Reset Push-Buttons!

SELL 'EM AN RCA VICTOR EXTRA RADIO

—for Extra Quality at No Extra Cost!



RCA VICTOR SUPER SIX

Model 15X—17 great sales features for less than \$1 a feature! Continental Style Cabinet. Six RCA Victor Preferred Type Tubes. R-F Stage for better reception. Edge-lighted Glass Dial. New Style Bull's-eye Pointer. Music-Speech Tone Control. Plug-in for Record Player Attachment. Powerful 5-inch Permanent Magnet Speaker. Improved Superheterodyne Circuit. Popular 1610-1712 KC. Police Band. Magic Loop Antenna. Big Knobs for easy tuning. Automatic Volume Control. Special Hi-Stability I-F Transformers. Connection for Extra Antenna. 16 to 1 Vernier Tuning. AC-DC operation. **\$16⁹⁵***

WEEK AFTER WEEK, more and more people are joining the thousands who have "discovered" these sensational RCA Victor extra radios. They give buyers extra quality at no extra cost—and they mean extra profits to the smart dealers who sell them while resetting the push-buttons on customers' present radios.

Take one of these sets along with your service kit. Demonstrate it in your customer's home! It will pay you.



You can offer your customers full short-wave reception for only \$3 extra —with the

NEW RCA VICTOR 16X-11

Here's a value that the ever-increasing army of short-wave listeners will go for in a great big way! It's priced only \$3.00 above the sensational Super Six—but it offers short-wave reception on the 49, 25, 19 and 16 meter bands. Has most of the features of the Super Six —plus two Built-in Antennas and Underwriters' Approval. AC-DC. **\$19⁹⁵***

Trademark "RCA Victor" Reg. U.S. Pat. Off. by RCA Mfg. Co., Inc. Price f.o.b. factory, subject to change without notice. In Canada, RCA Victor Co., Ltd., Montreal.



RCA Victor

RCA Manufacturing Co., Inc., Camden, N. J.
A Service of the Radio Corporation of America

RADIO *and Television* TODAY

RADIO AND THE TUBE MADE A MILLION JOBS

“Has radio put men out of employment?” This is the question raised in recent newspaper statements declaring that the coming of broadcasting has so shifted advertising revenues that 25,000 men previously employed in the printing trades in the United States, now find themselves denied jobs.

But this is only a small part of the picture. For, on the contrary, radio is a vast creator of new employment. For every one job dislocated by radio’s revolutionary advances, twenty new jobs have been created.

Let us make a roll-call of pay-rolls that did not exist 20 years ago, before the coming of radio.

| | |
|----------------------------|---------|
| Radio Manufacturing | 75,000 |
| Radio Distribution | 150,000 |
| Broadcasting | 50,000 |
| Radio Communications ... | 15,000 |
| Radio, miscellaneous | 90,000 |
| | <hr/> |
| | 380,000 |

Add to these 380,000 jobs, the other hundreds of thousands created by the radio tube in sound-pictures, in long-distance telephony, and in other industries and sciences foundationed on the tube.

Add also the “supply” jobs indirectly created by all the foregoing activities—jobs for men to mine raw materials, grow products, transport them, fabricate them, assemble them, advertise them, sell them. These “indirect” jobs in older industries—yet due to the tube—certainly total up to another 250,000.

Add them all together, and we have a grand total of at least a million jobs created by radio and the radio magic of the tube!

* * *

Radio has brought many blessings to mankind. Into every life it has carried entertainment, information, inspiration, and news of the big world.

But also, “out of empty space,” it has created property worth many billions, all dedicated to human enjoyment and progress.

And it has created new employment opportunities for a million men and women—twenty new and better-paid jobs for every instance where older employment has been displaced.

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N.Y. Telephone PLaza 3-1340.
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7, No. 3. March, 1941.

SERVICE IS VITAL TO

The only lasting foundation upon which a successful business can be built, is the satisfaction of those whom that business serves.

Some may call it reputation, while others may label it *good will*. But by whatever name it is known, this quality is vital to that business' ultimate success.

Radio dealers should carefully inspect and appraise this intangible, yet vitally essential, foundation of their business.

It is particularly important at this time, that *radio* dealers give more thought to customer satisfaction.

The trend in radio sales continues toward the "package unit" at the one extreme, and combinations at the other.

The trend to "package units" invites ever more non-radio dealers to engage in radio selling.

All too many radio dealers have already been lured into the merchandising trap of selling radio on a purely "price" basis, of sacrificing *service* and *customer satisfaction* on the altar of the volume.

Reliability and performance of radio have come a long way in the 20 years since broadcasting began.

EVERY SET NEEDS SERVICE

But that radio has not yet been built which does not require maintenance service if it is to give the lasting satisfaction to which the customer is entitled.

The smaller and cheaper the radio, the more service it should have.

Service is, and must be, a responsibility of sales.

Non-radio outlets sell package radio on the same basis as any other piece of merchandise. They buy it, and sell it, on the basis of price, appearance, and customer acceptance.

Customers have a habit of soon forgetting the price they pay, but of long remembering *what they get*.

These two factors constitute at once the greatest weakness of the non-radio dealer, and the greatest potential strength of the real radio dealer.

The most important reason why customers will prefer to buy radio from radio dealers is that they should get greater satisfaction with their radio when they do.

Plenty of radio dealers do not insure their customer's satisfaction, but invite them to go elsewhere and shop for "price" since they don't get the service they want, even when they pay for it. And so comes the non-radio dealer into the field.

In this way the future of many a radio dealer's business has been undermined.



Many factors enter into the building of customer satisfaction.

Since most customers do not actually want what they think they do, the first step in better merchandising is to have an ample assortment of models, styles, sizes, colors, and prices to facilitate the customer's selection and make a choice possible and practical.

The next important factor is that the salesmen have a thorough knowledge of radio, and be able to honestly compare the performances of the several models, and sincerely help the customer make the proper selection.

PROGRAMS, ROOM INTERIORS

The most successful dealers make it a point always to determine just what the customer prefers in the way of program type and source, and the furnishing of the room in which it will be used.

They then concentrate on those models which best meet these preferences, demonstrate them, explain them feature by feature, and sincerely sell them for the performance and satisfaction they will render.

The performance for which you sell a radio should be guaranteed to your customer.

The growing desire for recorded music should be brought to the attention of every radio customer, and record players, as well as combinations both large and small should at least be shown to every customer.

Selling your customer the right

radio is a very important step in building goodwill and is something the radio dealer can certainly do better than non-radio dealers, if they wish to.

The next step in deliberately insuring customer satisfaction, and making each radio sell another is to "follow up" each customer regularly.

CRITICAL 90-DAY PERIOD

Experience has shown that about 40 per cent of all radios sold can be substantially improved by an inspection, adjustment and tube test after from 30 to 60 days of use. It is also known that 90 per cent of the radios which are performing properly at the end of 90 days will continue to do so for another 6 to 9 months.

But every radio can be improved by a testing of tubes, a thorough inspection, readjustment and alignment at the end of each year's operation.

In these facts lie the means for any real radio dealer to build a lucrative business to insure the satisfaction of his customers, and to meet his non-radio competition at its weakest point.

Many radio dealers have been outstandingly successful in building their business on the foundation of customer satisfaction and customer "follow up."

Denied the ability to advertise in newspapers as extensively as their larger and more general competitors, these successful dealers have more than offset this disadvantage by their closer contact with customers.

ALES ... SATISFIED BUYERS ARE CONSTANT ADS FOR YOU!

"COURTESY CALLS"

Every radio they sell, they "follow up" and check in the home within 30 days after they sell it, again, around 90 days, and then at least once each year.

Dealers who adopt such a policy state that their customers talk about this free service, brag about it, urge their friends and relatives to buy from the same dealer and produce a "word of mouth" advertising far more valuable than the dealer could possibly obtain any other way.

Many dealers think these "courtesy calls" or "free service calls" are expensive.

But those who follow the policy state otherwise. They make a practice of giving their servicemen two "courtesy calls" in the near vicinity of each "paid" service call. Travel time is thus almost eliminated.

After the set has been sold, it should be kept in first-class operating condition, as only skilled radio servicing makes possible. Picture below shows resetting of push-button receiver for March 29th shift, with aid of RCA station allocator. (See also Part II).



The first and second early inspections can usually be performed in less than half an hour each, and material is almost invariably covered by manufacturers guarantee.

The yearly calls invariably produce a sale of tubes and direct service which not only pays all costs, but shows a direct profit too.

BUILDING GOODWILL

But more importantly, if the dealer is sincere in his effort, he knows that his customer is satisfied with his radio,

Reputation and goodwill go hand in hand with this method. So also, do sales, both of radio and of service.

On this foundation a dealer satisfies, and keeps his own customers, sells them more and more radio, the combinations, the compacts, the "personal" sets, the auto radio, which every family is now buying at rather frequent intervals.

But he also, through his own customer's recommendations, comes in contact with the dissatisfied customer of his competitors, and usually at a time when they need service they cannot get.

No dealer can ask more of any advertising, or sales promotion plan, than that it bring him into direct contact with a customer who needs what he sells, is dissatisfied with his previous dealer, and has the recommendation of his friends.

and continues so to be.

Make the radio work which your competitor can't, or won't,—and you are almost certain to sell this customer his next radio, as well as the attendant service.

But of more importance, you have made a customer, a satisfied customer, the soundest foundation under any business.

Maintaining regular contact with your customers is important, in keeping their good-will alive and active, for it is only through service and

sales contacts that you can translate good-will into dollars and profits.

Other dealers can do the same thing you do.—Can get your customers, if you neglect them, as easily as you can get theirs when the conditions are reversed.

People do not buy radio every day, or every month. But they do use them daily, and they may want service, or another radio any day.

REMINDERS BETWEEN TIMES

A telephone call, a letter, a postcard, may profitably be used between "courtesy calls" to keep your name before your customer, to be in frequent contact, to "be on the job" when the customer does need what you have to sell.

Your service department may be the vehicle by which you effectuate this policy of customer satisfaction.

But no service department can go farther, or do more, than the vision, and the viewpoint of the dealer.

And this can be the vital difference between the radio dealer and the non-radio dealer.

No customer buys a radio for the intrinsic value of the wood, metal and glass of which it is made. Nor do people buy radio to look at.

WHY THEY BUY

Radio is one of the greatest benefactors of mankind. It is a scientific wonder, a modern miracle. It is bought for the quality and diversity of entertainment, education and news which it brings to any and all, anywhere, anytime.

That's what radio is.

That's what people really want when they buy a radio.

That's what you should sell.

Sell radio for what it is, for what radio does, and you are definitely set apart, and above those who think of, buy and sell radio, on the basis of price alone, on the plane of potatoes or shoes or dry goods.

To be a real radio dealer, a dealer must be worthy of radio, must know radio, live radio, and sell radio.

Remember—

Service is a responsibility of sales
Radio dealers can insure better satisfaction.

People buy radios for the programs.

Sell programs, all around the clock:

Have an ample assortment of sets.

Have variety of models, sizes, colors, prices.

To succeed, you must know radio, live radio!

SERVICE IS VITAL TO SALES ... SATISFIED BUYERS ARE CONSTANT ADS FOR YOU!

The only lasting foundation upon which a successful business can be built, is the satisfaction of those whom that business serves.

Some may call it reputation, while others may label it *good will*. But by whatever name it is known, this quality is vital to that business' ultimate success.

Radio dealers should carefully inspect and appraise this intangible, yet vitally essential, foundation of their business.

It is particularly important at this time, that radio dealers give more thought to customer satisfaction.

The trend in radio sales continues toward the "package unit" at the one extreme, and combinations at the other.

The trend to "package units" invites ever more non-radio dealers to engage in radio selling.

All too many radio dealers have already been lured into the merchandising trap of selling radio on a purely "price" basis, sacrificing service and customer satisfaction on the altar of the volume.

Reliability and performance of radio have come a long way in the 20 years since broadcasting began.

EVERY SET NEEDS SERVICE

But that radio has not yet been built which does not require maintenance service if it is to give the lasting satisfaction to which the customer is entitled.

The smaller and cheaper the radio, the more service it should have. Service is, and must be, a responsibility of sales.

Non-radio outlets sell package radio on the same basis as any other piece of merchandise. They buy it, and sell it, on the basis of price, appearance, and customer acceptance.

Customers have a habit of soon forgetting the price they pay, but of long remembering *what they get*.

These two factors constitute at once the greatest weakness of the non-radio dealer, and the greatest potential strength of the real radio dealer.

The most important reason why customers will prefer to buy radio from radio dealers is that they should get greater satisfaction with their radio when they do.

Plenty of radio dealers do not insure their customer's satisfaction, but invite them to go elsewhere and shop "free" since they don't get the service they want, even when they pay for it. And so comes the non-radio dealer into the field.

In this way the future of many a radio dealer's business has been undermined.



Many factors enter into the building of customer satisfaction.

Since most customers do not actually want what they think they do, the first step in better merchandising is to have an ample assortment of models, styles, sizes, colors, and prices to facilitate the customer's selection and make a choice possible and practical.

The next important factor is that the salesmen have a thorough knowledge of radio, and be able to honestly compare the performances of the several models, and sincerely help the customer make the proper selection.

PROGRAMS, ROOM INTERIORS

The most successful dealers make it a point always to determine just what the customer prefers in the way of program type and source, and tip furnishing of the room in which it will be used.

They then concentrate on those models which best meet these preferences, demonstrate them, explain them feature by feature, and sincerely sell them for the performance and satisfaction they will render.

The performance for which you sell a radio should be guaranteed to your customer.

The growing desire for recorded music should be brought to the attention of every radio customer, and record players, as well as combinations both large and small should be as well shown to every customer.

Selling your customer the right

radio is a very important step in building goodwill and is something the radio dealer can certainly do better than non-radio dealers, if they wish to.

The next step in deliberately insuring customer satisfaction, and making each radio sell another is to "follow up" each customer regularly.

CRITICAL 90-DAY PERIOD

Experience has shown that about 40 per cent of all radios sold can be substantially improved by an inspection, adjustment and tube test after from 30 to 60 days of use. It is also known that 90 per cent of the radios which are performing properly at the end of 90 days will continue to do so for another 6 to 9 months.

But every radio can be improved by a testing of tubes, a thorough inspection, readjustment and alignment at the end of each year's operation.

In these facts lie the means for any real radio dealer to build a lucrative business to insure the satisfaction of his customers, and to meet his non-radio competition at its weakest point.

Many radio dealers have been outstandingly successful in building their business on the foundation of customer satisfaction and customer "follow up."

Denied the ability to advertise in newspapers as extensively as their larger and more general competitors, these successful dealers have more than offset this disadvantage by their closer contact with customers.

"COURTESY CALLS"

Every radio they sell, they "follow up" and check in the home within 30 days after they sell it, again around 90 days, and then at least once each year.

Dealers who adopt such a policy state that their customers talk about this free service, brag about it, urge their friends and relatives to buy from the same dealer and produce a "word of mouth" advertising far more valuable than the dealer could possibly obtain any other way.

Many dealers think these "courtesy calls" or "free service calls" are expensive.

But those who follow the policy state otherwise. They make a practice of giving their servicemen two "courtesy calls" in the near vicinity of each "paid" service call. Travel time is thus almost eliminated.

After the set has been sold, it should be kept in first-class operating condition, as only skilled radio servicing makes possible. Picture below shows resetting of push-button receiver for March 29th shift, with aid of RCA station allocator. (See also Part II).



The first and second early inspections can usually be performed in less than half an hour each, and material is almost invariably covered by manufacturers guarantee.

The yearly calls invariably produce a sale of tubes and direct service which not only pays all costs, but shows a direct profit too.

BUILDING GOODWILL

But more importantly, if the dealer is sincere in his effort, he knows that his customer is satisfied with his radio,

Reputation and goodwill go hand in hand with this method. So also, do sales, both of radio and of service.

On this foundation a dealer satisfies them more and more radio, the combinations, the compacts, the "personal" sets, the auto radio, which every family is now buying at rather frequent intervals.

But he also, through his own customer's recommendations, comes in contact with the dissatisfied customers of his competitors, and usually at a time when they need service they cannot get.

No dealer can ask more of any advertising, or sales promotion plan, than that it bring him into direct contact with a customer who needs what he sells, is dissatisfied with his previous dealer, and has the recommendation of his friends.

sales contacts that you can translate goodwill into dollars and profits.

Other dealers can do the same thing, you do—Can get your customers, if you neglect them, as easily as you can get theirs when the conditions are reversed.

People do not buy radio every day, or every month. But they do use them daily, and they may want service, or another radio any day.

REMINDERS BETWEENTIMES

A telephone call, a letter, a postcard, may probably be used between "courtesy calls" to keep your name before your customer, to be in frequent contact, to "be on the job" when the customer does need what you have to sell.

Your service department may be the vehicle by which you effectuate this policy of customer satisfaction.

But no service department can go farther, or do more, than the vision, and the viewpoint of the dealer.

And this can be the vital difference between the radio dealer and the non-radio dealer.

No customer buys a radio for the intrinsic value of the wood, metal and glass of which it is made. Nor do people buy radio to look at.

WHY BUY RADIO

Radio is one of the greatest benefactors of mankind. It is a scientific wonder, a modern miracle. It is bought for the quality and diversity of entertainment, education and news which it brings to any and all, anywhere, anytime.

That's what radio is. That's what people really want when they buy a radio.

That's what you should sell.

Sell radio for what it is, for what radio does, and you are definitely set apart, and above those who think of buy and sell radio, on the basis of price alone, on the plane of potatoes or shoes or dry goods.

To be a real radio dealer, a dealer must be worthy of radio, must know radio, live radio, and sell radio.

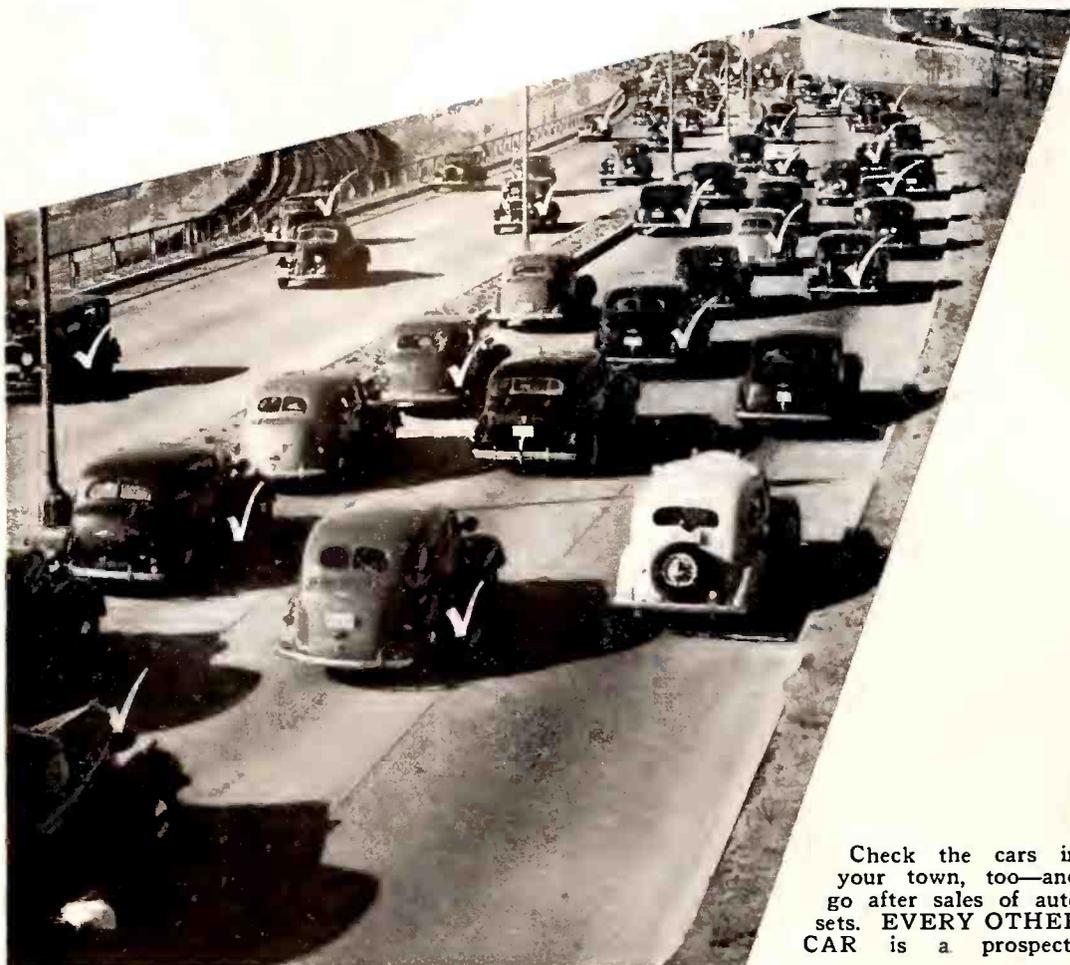
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To succeed, you must know radio, live radio!

FLAG THOSE DRIVERS!



Check the cars in your town, too—and go after sales of auto sets. **EVERY OTHER CAR** is a prospect!

HALF THE NATION WANTS AN AUTO RADIO—SELL 'EM NEWS AND MUSIC FOR SPRINGTIME DRIVING

Everybody wants a car radio for the nice Spring days ahead,—and for trips this coming Summer.

About one car in every three, is *already* equipped with radio, (and, so, is a prospect for servicing.)

Of course, there are a few cars too old or delapidated for auto radio.

But subtracting cars already equipped, and cars in the jalopy class, a big proportion is left,—prospects for radio.

So it boils down to the fact that *half* of the cars you see passing—or parked along the curb—are right now good prospects for the purchase of an auto-radio.

“One-half of the nation”—as President Roosevelt might put it—needs automobile radios! Which means one half of the car owners in your town, your vicinity.

Most of these good people just don't know how to get a car-radio installed.

They don't know “who to go to.”

They think it may take a lot of time to put in an auto radio.

Or they think a car-radio may cost a good deal of money.

TELL 'EM; SELL 'EM

This is where you come in, Mr. Radio Man.

Step right up and tell 'em you can do the installation job in a jiffy and at such little cost.

Step right up to any fair-looking car you see, which has no antenna, and ask the owner if he wouldn't like to have an automobile radio to enjoy while he drives.

Remind him he'll soon be making trips this Spring, and then vacation

tours in the summer. Auto radio means gay entertainment enroute.

He can use his car radio for latest news as he drives to work.

His family can enjoy a car radio as they drive, or sit parked, waiting at station, school or store.

Everybody wants an auto-radio. But most people just haven't gotten around to getting it, because “no one ever asked 'em to buy.”

So you will be doing these good people a great service, if you will step up, remind them of what they are missing, and show them how easy it is to have the old car equipped.

GO AFTER PROSPECTS

This means *going after* prospects by—

Talking with every owner you see parked.

Talking with every customer who has bought a set or tubes or other goods from your store.

Talking with every person who has called you in for a service job. Calling at every house-with-a-garage in your vicinity.

Cooperating with your gas-station friends to get them to help you sell and install sets (as well as to service auto-sets not working.)

Having handy cards or folders with your name and address, to put in cars standing without a driver.

One of the things you want to stress is that it is possible to get instrument-panel installations of both speaker and control heads on 1939, 1940 and 1941 cars where the manufacturer made provision for them. It is also possible to get a control head which will fit and match the instrument panel of any car regardless of age, make, or model.

SETS CAN BE TRANSFERRED

Another thing to stress to the consumer is that it is possible to buy a radio which can be transferred from one car to another. Remind them there's no use in putting off the purchase of a radio until they get a new car. They can enjoy all the benefits while driving the old car—and then for a dollar or two be able to transfer that radio into the new car and yet get a complete matched-instrument panel installation.

For, remember, the field of radio which is still least saturated in 1941, is the field of automobile radio.

Half the cars you see drive by need auto radios. Half the cars parked at any curb are prospects for auto radio sales right now!



The NBC singer, Yvette, at right, has also starred in television. Bing Crosby, the Kraft Music Hall favorite is also here, and at the left, Bea Wain, popular CBS artist. Below left, is Helen Forrest, singing with Benny Goodman's orchestra, and at right, Kenny Baker, now on Fred Allen's show.

ON DIAL & DISC

Radio singers who improve dealer sales by making records for Decca, Columbia, Victor.





Emerson "Futura" model

★ One of 5 new mid-season models presented by Emerson is the "Futura" model 422 table radio with slide rule dial. Separate line switch. built-in super-loop. Standard broadcast. Walnut cabinet. \$14.95. Emerson Radio & Phonograph Corp., 111 8th Ave., New York, N. Y.—**RADIO TODAY.**



Sonora portable

★ An open-face brown finished case with walnut overlay grille houses model LR-147, 5-tube, AC-DC-battery portable. Standard broadcast band. "Sonorascope" loop, PM dynamic speaker. On-off-battery-AC-DC indicator. 14 in. x 9½ in. x 6 in. \$24.95. Sonora Radio & Telev. Corp., 2626 W. Washington Blvd., Chicago, Ill.—**RADIO TODAY.**



RCA "Foreign Correspondent"

★ Overseas dial makes its first appearance on a table model receiver in the new "Foreign Correspondent" set. Covers the foreign band from 8600 to 12,000 kc. Standard broadcast and police. Has 5 tubes, AVC, P.M. dynamic loud-speaker, AC-DC operation, plug-in for Victrola attachment. RCA Mfg. Co., Camden, N. J.—**RADIO TODAY.**

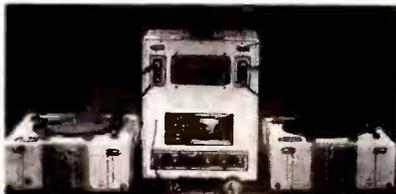
SETS FOR SPRING

Sentinel 3-way "personal"



★ A feature of Sentinel's new 3-way "Lightweight Champion"—247-P is an "Ex-tenna loop" for use in planes, trains, autos and locations where an external antenna is needed. Has 5 tubes, superheterodyne circuit and built-in loop. P.M. dynamic speaker. Tunes 539 to 1550 kc. Plastic tenite case, leatherette trim. Sentinel Radio Corp., 2020 Ridge Ave., Evanston, Ill.—**RADIO TODAY.**

Recordio "Pro"



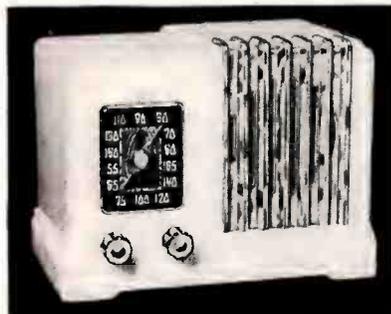
★ Portable radio, phonograph and recorder for professional use. Dual-speed recording. 10 tube, 2-band radio. Master unit (A-101) is \$100; turn-table unit (A-102), \$50. Either 1 or 2 turn-table units can be used. Wilcox-Gay Corp., Charlotte, Mich.—**RADIO TODAY.**

Motorola Vita-Tone set



★ Model 501, auto radio has 5-station push button tuning, 7 tubes and 7 in. speaker. Features push pull and new Vita-Tone speaker. 3-position tone control. Superheterodyne, AVC. Finished in tan Hammerloid. \$49.95. Fits and matches all cars. Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.—**RADIO TODAY.**

Arvin model 532A



★ Five tube superhet finished in onyx catalin is available in white and Burgundy (model 532). Both sets are AC-DC and have built-in loop antennas. Electro-dynamic

speaker, tuning range 540 to 1740 kc. Knobs match color of speaker grille section. List, \$14.95. Noblitt-Sparks Industries, Inc., Columbus, Ind.—**RADIO TODAY.**

Fada table combo

★ Radio-phonograph combination in walnut cabinet has Fa-da-scope built-in loop antenna. Plays 10 or 12 in. records. 5 tubes, superhet, 5½ in. dynamic speaker. Model PT208 (AC), \$34.95. PTU208, AC-DC has universal motor on phonograph, \$49.95. Fada Radio & Elec. Co., Inc., 30-20 Thomson Ave., L. I. City, N. Y.—**RADIO TODAY.**

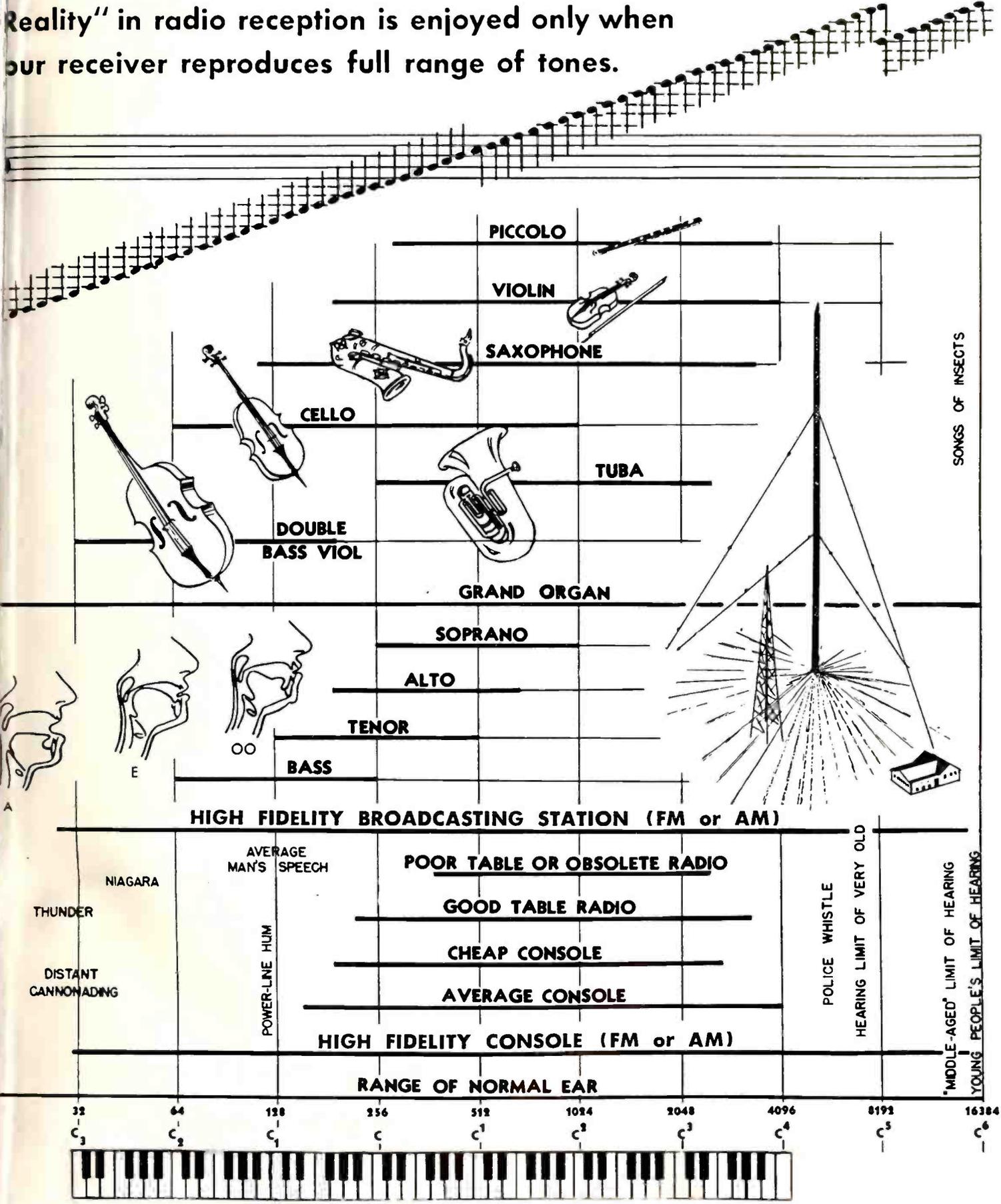
Zenith 10H573



★ Zenith's console model has "all three" Frequency Modulation, American and Foreign broadcasts. Full 64-position Radiorgan tone, 10 tubes including heater cathode rectifier tube. Walnut finish cabinet 42 in. high. \$129.95. Zenith Radio Corp., 6001 W. Dickens Ave., Chicago, Ill.—**RADIO TODAY.**

WHAT YOU HEAR—AND WHY

Reality in radio reception is enjoyed only when our receiver reproduces full range of tones.



VERTICAL LINES REPRESENT FUNDAMENTAL FREQUENCY RANGE
 HORIZONTAL LINES REPRESENT NECESSARY OVERTONES FOR LIFE-LIKE REPRODUCTION
 FREQUENCIES ARE GIVEN IN CYCLES PER SECOND

Copyright, 1941, by

RADIO TODAY



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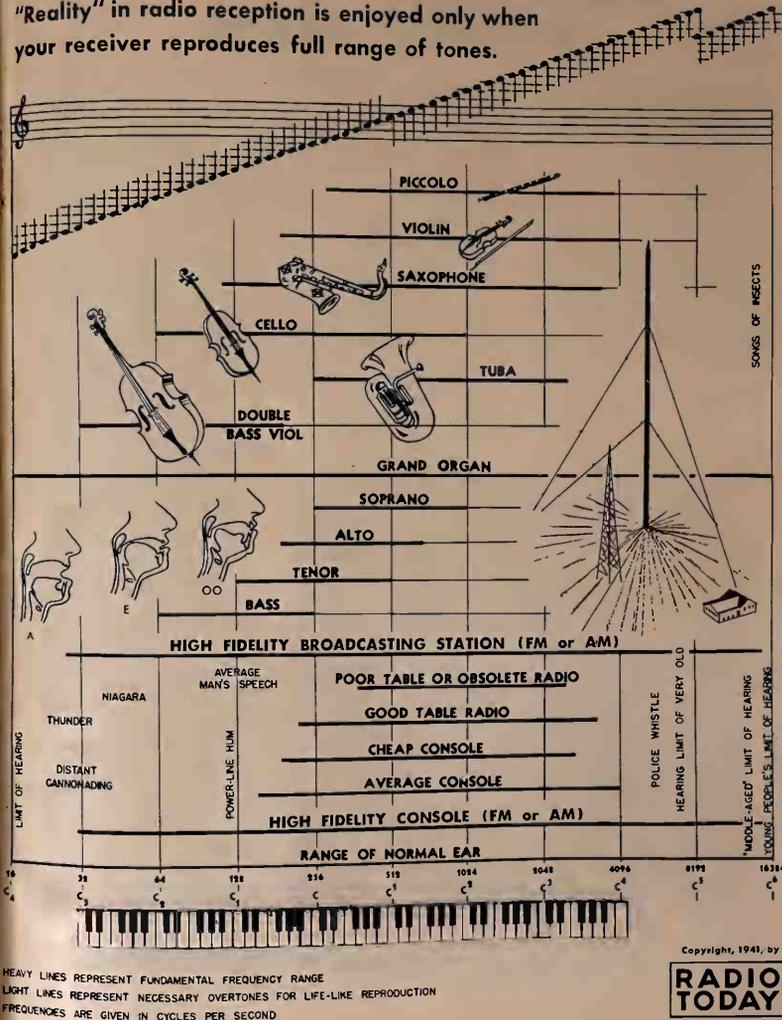
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LIGHT LINES REPRESENT NECESSARY OVERTONES FOR LIFE-LIKE REPRODUCTION
FREQUENCIES ARE GIVEN IN CYCLES PER SECOND

RADIO TODAY

MORE MONEY FOR RADIO MEN

Servicemen who cultivate the new electronic fields for installation and maintenance jobs in their vicinities, can develop some very profitable industrial business in non-radio applications of the same equipment which goes into radio sets.

Especially is this true, right now, of industrial jobs, in connection with the speed-up of production for National Defense.

Wide and varied uses are being found for electronic devices in industry, traffic control, medicine and therapeutics, and research laboratories. In fact, the opportunity for the radio man's services here ramifies in almost every direction, as outlined by the "tree chart" on the front cover of this issue. This diagram shows how radio tubes, radio amplifiers and associated equipment are being utilized in every field of everyday life, in factories, in shops, in transportation and in communication. It means that such jobs are going to come up in every town and community—in your town, too! The lesson is that the radio serviceman who wants to "get ahead" should be ready!

While such jobs are "electrical" installations, most of them are beyond the technical capabilities of the average electrical installer, wireman or contractor. But they employ the same equipment and "parts" as the radio man regularly works with in his radio servicing, and so he will find himself right at home in these industrial applications.

PLANT SAFEGUARDS

Since the Emergency began, infra-red electric eyes have been installed in great numbers around plants and warehouses to prevent sabotage. Their beams of "black light" set up deadlines around the plant—invisible lines across which no miscreant may step—without summoning police on the run! Thousands of such protec-

Industrial and Defense Jobs Electronic Opportunities

Black-light (ultra-violet) protection beams.

Space-radio alarms.

Automatic "friskers" and detectors.

Burglar alarms.

Photo-cell counting of products.

Photo-cell door-openers.

Photo-cell safety controls.

Smoke-alarms, fume alarms.

Switch and valve controls, color operated.

Fire alarms, heat alarms.

Plant and yard loud-speakers.

Intercommunicating systems.

Automatic lighting controls.

Research laboratory apparatus.

tive systems have already been installed to protect defense industries. Each invisible beam is projected onto a concealed photo-tube, and if any intruder anywhere intercepts this beam, the relay operates and sends out an immediate alarm.

One of the most elaborate protective systems of this kind was recently installed to protect New York harbor's "Free Port" on Staten Island where foreign cargoes are unloaded and transhipped without payment of U. S. duty.

To keep smugglers' boats from coming alongside in the darkness, 1800 ft. of the docks at the Free Port are now guarded by infra-red beams. Because of the need for protecting the dock fronts, along which there is a 6 ft. rise and fall of the tide, it was necessary to mount this protective system on floats. These follow the tide up and down and so give instant warning if any small boat comes within the prescribed area!

SPACE-RADIO "FRISKER"

In a plant working on Defense contracts, costly metal alloys were disappearing from day to day. Evidently some of the workmen were carrying off these precious materials, as they went home from work.

Then the "automatic frisker" was installed at the main employees' door of the factory. As each workman left he was made to pass close to a sensitive plate hooked up to a radio circuit. Passage of an ordinary human body through this radio doorway, caused no incident. But any man with a piece of metal secreted anywhere in his clothing at once upset the delicate radio balance, and a powerful gong rang an alarm, so that the plant police could call the suspect aside and search him. A few cases of this kind invariably revealed secreted bars of alloy, and after that, attempts to evade the automatic frisker ceased. The culprits were punished. And no more precious alloy was stolen.

DETECTING ESPIONAGE

In a Western airplane factory there was fear that secret aviation plans were being rifled and copied, endangering the loss of important military secrets.

So skillful was this systematic robbery that blueprints were being withdrawn, copied and replaced, all without detection. Suspicion pointed to three different employees of foreign extraction, but there was no way to trace incriminating movements on the part of any of the suspects.

Then one of the plant engineers suggested setting a man-trap with the aid of radio tube ultra-violet lamp and some of the new fluorescent powder recently developed for lining the tubes of fluorescent lamps and signs. A small quantity of this colorless powder was scattered around the blueprint case, where by ordinary light it was no more noticeable than so much dust. Then, twenty-four hours later under various pretexts, clothing recently worn by each of the suspects, was obtained. These garments were taken into a dark room, and a radio-tube source of ultra-violet rays was turned on. Two of the garments tested quite blank. But on the third coat, in the invisible



Jobbers' men are holding meetings of servicemen, explaining industrial-plant applications as well as radio-service problems. Note phototube-alarm demonstrator and testing devices on display. Picture shows Bill Coon of Spokane Radio, at Great Falls, Mont.

glow of the ultra-violet lamp, a whole galaxy of tiny bright stars flashed into view around the pockets. And, later, similar tell-tale stars gleamed all over that coat-owners desk, when this was investigated.

Made to glow by ultra-violet the otherwise invisible particles of willemitite had done their work. Unfailingly they traced the trail of the spy in accusing spangles of green fire shining everywhere he had carried the blueprints.

SPEEDING PRODUCTION

America is probably doing as well now as any combination of human eyes and hands with electricity can do. By putting radio tubes and electrons to work, however, we can introduce a new factor of such precision, delicacy and speed, that we should be able to increase radically the output of our machinery.

In the present vast production program, radio tube devices are speeding output, making controls more accurate, making measurements automatic, and even revolutionizing production techniques.

Take the brand-new art of surface hardening by radio-frequency waves. In the manufacture of steel gears and parts for airplanes, it is now possible to put an outer surface of case-hardened steel on the parts, after they have been machined—by bombarding the parts with radio waves—upon finishing which they are immediately ready for assembly. Formerly the finished gears had to be put in tempering furnaces for hours, and the hardening process resulted in distortions which then had to be eliminated by refinishing and re-grinding. But the new radio-frequency case-hardening has saved all these extra finishing processes, and makes the products instantly ready for use.

REVOLUTIONIZING STEEL

Radio tubes in electric welders have revolutionized both welding and mechanical construction of all kinds, enabling light built-up box-sections of steel or aluminum to replace former heavy solid parts—with greater strength and less weight. These new welding units permit the utmost nicety in control of the heat applied to the welding. For example, every second alternation of the current can be made effective—or one alternation in six or any other ratio can be utilized—whatever will bring best results.

In the making of steel, radio tubes and photo-tubes now play increasing parts. When the steel is being converted to the right chemical combination in open-hearth furnaces or Bessemer, it has always been necessary for a skilled steel expert to judge the color of the furnace, and give orders to stop the process at exactly the right instant. Now this delicate task of judging the color of the white-hot steel can be turned over to the scientific control of photo-tubes and radio tubes, which always react to the precise color conditions for which set, leaving no opportunity for errors of human judgment.

Radio tubes make precise measurements and tests of finished guns and small arms, affording accuracies of

mass production never before possible. And when it comes to testing the firing qualities, projectile velocities, and penetrating powers of American arms, remarkable new radio-tube "stop-watches" have been developed for ballistics research.

TEST GUNS, GUNNERY

These new micro-watches can "split a second 1,000 ways and will measure from one to 200 of these milliseconds." Such an electronic device can be used for measuring many ultra-fast operations, such as the explosion of cartridges, speed of a bullet at the muzzle and a thousand feet away, the firing of a blasting cap, the lighting of a photo-flash bulb, the operation of an electric relay.

"The present war has been termed 'mobile' or 'fluid' in that the entrenched positions employed in the last war have been replaced, at least to date, by mobile units," points out W. R. G. Baker, of General Electric. "Whether these units are planes, tanks, ships, or rapidly moving bodies of men, the problem of direction and coordination can be accomplished most efficiently through the utilization of radio. Most people think of radio chiefly as a means of transmitting intelligence. Yet there is every reason to believe that such functions may represent but a small part of the total aid radio and radio tubes will render to the military ser-

VICES. Indeed it now seems evident that much wider applications will be found for radio in all the supply services of national defense."

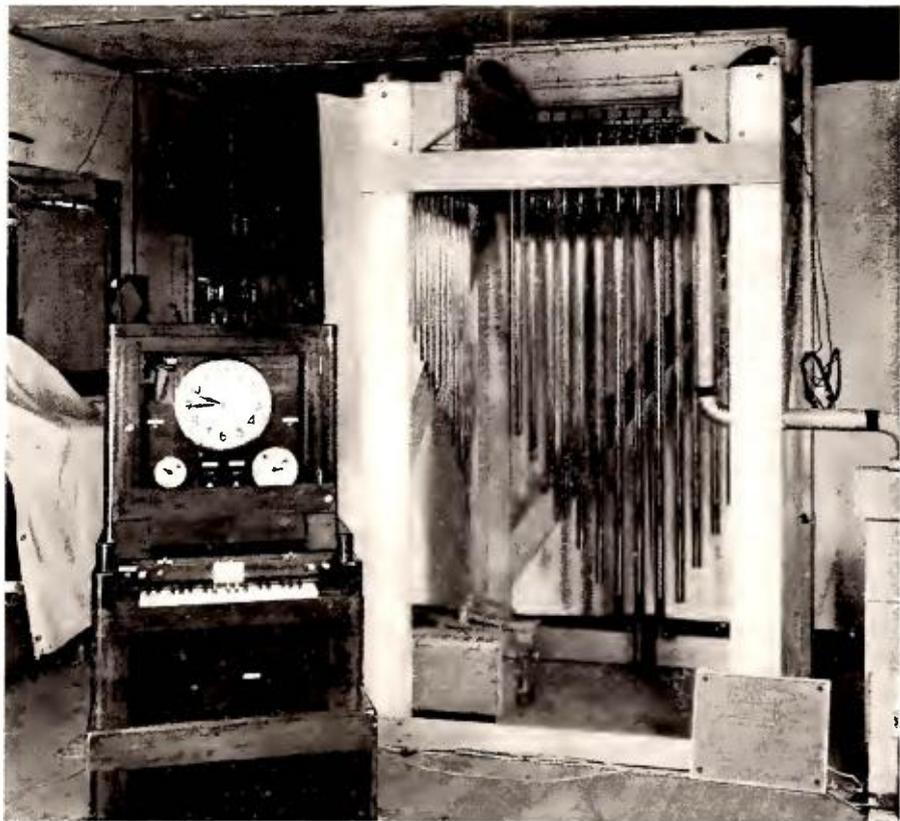
Conference on Interference at Univ. of Ill.

The University of Illinois is planning a Radio Interference Conference to be held in Urbana, Ill., Saturday, May 10. Its purpose is to inform radio servicemen, radio amateurs, public-utility interference trouble-shooters, and radio engineers about the sources of radio interference, and how to correct them.

Some of the topics to be discussed by outstanding engineers are: The generation of combination frequencies in a non-linear element; diathermy interference; receiver design to minimize strong signal interference; interference between radio amateurs and broadcast listeners; adjustment of transmitters to reduce spurious emissions; reduction of appliance interference; and other kindred topics.

"We feel that such a conference is unique," explains A. James Ebel, chief engineer of the University's broadcast station WILL, "and will be one step in the solution of a difficult problem which has long faced the industry, causing misunderstandings and friction."

Electronic-Chimes Jobs Waiting in Every Town



Every community has church steeples and towers which are waiting to be equipped with amplified tower chimes. Such electronic chimes are far less costly than bells; the speakers are lighter (important where structures are frail); and sound may be sent out directionally as desired. Organ music and announcements can also be broadcast locally.

"WATCHING STOCK"

Parts jobber has card inventory with automatic checkup for "outs" and re-order quantities

In any business where sales are composed of a large number of small units, the control of inventory is an important factor.

To the Parts Jobber, the control of his stock, often makes the difference between operation at a profit or at a loss. He must look on his inventory as dollars invested in merchandise, and must keep track of withdrawals and additions, as closely as he watches his dollars in the bank.

The Auto Service Supply Co. of Birmingham, Ala. has a simple system, and a compact form, which keeps tab on stock at all times.

Every sale of parts is recorded on a sale slip or a bill form. These are all numbered, so that each one can be accounted for.

From these forms the inventory control is posted, which takes about one half of a clerk's time.

From this simple record a wealth of vital information is available.

First, the average, or model stock is indicated in the upper left-hand corner of the card.

Then the danger, or "re-order" point is also indicated.

TELLS A LOT

These two figures give the order clerk the upper and lower limits of the desired stock in this article.

This stock-control card does the trick! Unless cost is affected, each order should not exceed next month's sales. Executive should see cards monthly.

Then there is a three-year monthly record of sales.

This plainly indicates the peaks and valleys in the sales curve, and tells the buyer very plainly "how many to buy," to maintain his service, and his turnover.

It is obvious if the re-order point 8 was reached in June, a re-order of 6 would be ample,—whereas the quantity ordered in September should be much more.

The date and quantity ordered, and the date and quantity received, are also recorded on the card, so that the time between order and receipt is always known.

The card also shows daily sales, and daily stock.

AID TO SMART BUYER

With this important information in his possession, a smart buyer can work wonders with his stock and his profits.

By keeping his stock balanced with sales, turnover can be worked up to a surprisingly high level.

Yet with an automatic recorder point, sales need never be lost because of an "out-of-stock" condition.

Peak demands are known, and can be anticipated.

With non-moving and excess stocks held low, working capital is free to use in other lines, new merchandise, special "buys", and special orders.

When the rate of sale falls off, the signal is plainly given to "have a look" and find out why.

If it is a fault of display, or selling, it can be corrected.

FLAGS ATTENTION

If another product is getting the demand, the reorder point should be reduced, the stock closed out, or whatever action taken which experience may indicate.

The point is that your attention has been flagged, the action is then up to you.

Every item in stock should be recorded on its own separate card.

The price should also be included on the card so that the stock clerk can verify the price of each sale.

If the cost is also shown, inventory value can be calculated directly from these cards.

The inventory figure shown on the cards should be constantly checked, a

few cards every day, against an actual physical inventory of those particular units.

When these cards are recapped on a weekly, or monthly report, the manager and buyer, have a pretty complete, and detailed picture of their business, with every danger signal, so far as sales, stock, prices, turnover, plainly indicated.

Catalog Assemblies Featured by Rep



Henry P. Segel

An aggressive technique in marketing radio lines in Maine, New Hampshire, Vermont, Connecticut, Rhode Island and Massachusetts is being used by Henry P. Segel, manufacturers representative at 235 Pine St., Gardner, Mass. His method is to distribute catalog "assemblies" to manufacturers, purchasing agents, engineers, jobbers, and schools—he offers to send complete catalogs to any of these groups requesting them.

The assemblies are made up of the catalogs issued by the manufacturers whom Mr. Segel represents, and they're bound between hard covers. One set is aimed at the jobbers, and another larger set includes products of interest to industrial accounts. Distribution of the catalogs is not intended to compete with distributors, "but rather to supplement their efforts . . . we believe it will enable the jobbers to get a considerable amount of business from manufacturers and other industrial accounts for their experimental and laboratory requirements."

RADIO TODAY

| AVERAGE STOCK: 20 | | DANGER POINT: 8 | | NO. B-171-3 | | Cost | | Selling | | TOTALS | | | |
|-------------------|---------|-----------------|------|-------------|------|------------|-------|---------|------|--------|------|------|------|
| SHIPMENTS | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| 1938 | 7 | 6 | 8 | 5 | 4 | 5 | 4 | 3 | 9 | 12 | 20 | 10 | |
| 1939 | 8 | 7 | 7 | 6 | 5 | 4 | 4 | 10 | 20 | 25 | 21 | 12 | |
| 1940 | 9 | 10 | 8 | 6 | | | | | | | | | |
| ORDERS | | RECEIPTS | | 1940 | | DELIVERIES | | | | | | | |
| C. T. E. | ORDER # | QTY | DATE | REC'D | DATE | SOLD | R. P. | DATE | SOLD | BAL. | DATE | SOLD | BAL. |
| 416 | 127-2 | 18 | 1/25 | 18 | 4/40 | 1m | 15 | 4/9 | 1 | 12 | | | |
| 325 | 129-7 | 12 | 4/3 | 12 | 1/5 | 2 | 13 | 4/17 | 1 | 16 | | | |
| | | | | | 1/9 | 1 | 12 | 4/25 | L | 15 | | | |
| | | | | | 1/13 | 2 | 10 | 4/29 | 1 | 14 | | | |
| | | | | | 1/16 | 3 | 7 | | | | | | |
| | | | | | 1/20 | 1 | 6 | | | | | | |
| | | | | | 1/2 | 18 | 24 | | | | | | |
| | | | | | 2/3 | 2 | 22 | | | | | | |
| | | | | | 2/7 | 1 | 21 | | | | | | |
| | | | | | 2/14 | 3 | 18 | | | | | | |
| | | | | | 2/15 | 2 | 16 | | | | | | |
| | | | | | 2/21 | 2 | 14 | | | | | | |
| | | | | | 3/2 | 1 | 13 | | | | | | |
| | | | | | 3/6 | 1 | 12 | | | | | | |
| | | | | | 3/12 | 2 | 10 | | | | | | |
| | | | | | 3/14 | 1 | 9 | | | | | | |
| | | | | | 3/21 | 1 | 8 | | | | | | |
| | | | | | 3/25 | 1 | 7 | | | | | | |
| | | | | | 4/3 | 1 | 19 | | | | | | |
| | | | | | 4/11 | 1 | 12 | | | | | | |

Order received

GET ON THE BAND-WAGON NOW

RECORDIO JR. **NETS BIGGER SPRING PROFITS**



Sensational
Portable Combination

★ **PHONOGRAPH**

★ **RECORDER**

★ **RADIO**

ONLY
\$39.95

(MICROPHONE INCLUDED)

F. O. B. CHARLOTTE, MICH.

Hop on the band-wagon NOW, and ride the Profit Road with this new Wilcox-Gay sensation, RECORDIO JUNIOR. What could be sweeter? Here's a portable combination recorder-radio-phonograph that shouts with sales appeal! Look at this list of features: Attractive, Sturdy, Airplane Luggage Style Covering; Easy to Carry—Weighs Less Than Twenty Pounds; Easy to Demonstrate Convincingly—Built-In Loop Antenna; Makes Radio and Microphone Recordings; Plays All 10" and 12" Records; Convenient Size—12¼" x 12½" x 9⅜"; Snap-On Cover, Strong Handle. Absolutely, there's *nothing* like RECORDIO JUNIOR on the market. And the public knows it! What a "natural" for spring and summer business! Get ready to meet the certain demand for this item. Get in on the **BIG PROFIT PAY-OFF!** Add RECORDIO JUNIOR to your present display line—today!

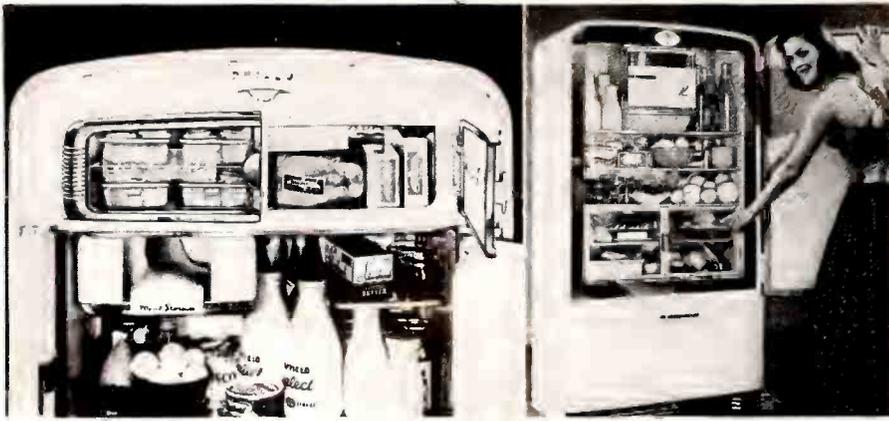
ATTENTION DEALERS—Why not *cash in* with Recordio Junior? It's a "Recorder for the Millions." Thousands have bought it. Thousands more are ready to buy. Act now! Contact your nearest Wilcox-Gay distributor. Or write direct to factory. But do it **TODAY!**

Built by Makers of America's Most Versatile Radio

RECORDIO
RECORDER • RADIO • PHONOGRAPH COMBINATION

WRITE • WIRE • PHONE • TODAY

WILCOX-GAY CORP.
CHARLOTTE, MICHIGAN



Features of every-day importance to dealers—left, the giant frozen-food compartment of the Philco MAH-7, and right, the Cold Mist Freshener on a “Moist Master” Kelvinator shown by Carol Bruce, radio and stage star.

REFRIGERATOR MARKETS

While the peak season for refrigerator sales gets nearer, the reports are that an increasing number of trade groups are considering some formal way of handling the trade-ins this year.

For instance, the Wisconsin Radio, Refrigeration and Appliance Association, Milwaukee, says that “some members of our group are of the opinion that this problem will reach a proportion during 1941 that will require some organized method for handling it.”

“Those who have made a preliminary study of the situation in Milwaukee estimate that from 20 to 30 per cent of the refrigeration sales made in 1941 in this trade area will involve trade-ins of used electric refrigerators which should be reconditioned before being resold. On the basis of refrigeration sales in 1940 and estimates for 1941, this will mean a job of reconditioning from 2,000 to 2,500 boxes.”

This group points out that “Too much emphasis cannot be placed on the importance of proper recondition-

ing of a trade-in box before it is offered for resale. Resale without complete reconditioning may do much harm to the future of electric refrigeration, because such units are usually sold to the class of people from which must come future customers. The family which buys a second hand refrigerator will quickly be converted into a prospect for a new box, provided the second hand purchase gives satisfaction. Properly reconditioned, it will give satisfaction.

TRADE-IN VALUES

“If such a family takes a box that has just been given a little new paint, without replacement of worn parts, etc., the chances are that this sale will simply disgust that family and destroy instead of create a future customer for a new refrigerator.

“If every salable box taken by trade-in in Milwaukee during 1941 is properly reconditioned before being offered for re-sale, some real good will have

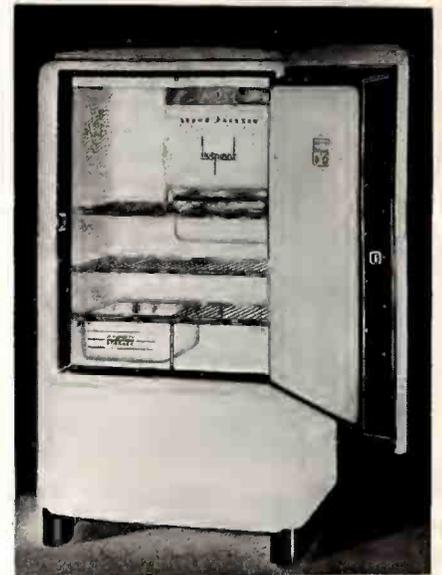
been accomplished in building acceptance of electric refrigeration among that portion of the people from which future customers must be developed.”

ONE SOLUTION

The Wisconsin group is carefully eyeing the progress of the Associated Refrigerator Plant, in Philadelphia, a privately owned company which has attracted wide notice as a buyer and re-conditioner of old refrigerators.

What effect this plant has had on the trade-in situation in Philadelphia is treated in a recent report by John A. Morrison, managing director of the Electrical Association of Philadelphia. Mr. Morrison tells of a survey of about 100 retailers there, in which they were asked, (1) What per cent of refrigerator sales involve a trade-in? (2) What allowance is made for the old box, and (3) What disposition is made of it? The results were as follows:

“From the survey, it is apparent that 25 per cent of the current refrigerator market in Philadelphia is a replacement market. This means an annual volume of 12,000 or 13,000 trade-ins to be resold or otherwise disposed of. This checks with the figures of one large distributor, who reported sales of 6,268 refrigerators by his dealers, 1,527 of these sales involved trade-ins, which comes to 24.3 per cent of the total.



Brand new “six footer” has been added to Hotpoint line—the Norman, to list at about \$130. It has Speed Freezer, regular 6-way Cold Storage, etc.



The maids at the left show the front-row position of food in Crosley's new super-Shelvador; at the right, Norge dramatically pictures the “Night-Watch” feature which means fully automatic defrosting via a pre-set electric clock.

“Some variation was reported in the amount of the trade-in allowances, but the general trend appears to be centered about 10 per cent of the sale price.

“Wide variation was shown in the methods of disposing of the used boxes. Some were refitted and sold. Some were stripped of useful parts and junked. Some were broken up to obtain service parts. Some were sold at public auction. And some were cleared through the Associated Refrigerator Plant, either for reconditioning and sale by the dealer, or sold outright to the plant.

“The Associated Refrigerator Plant is prepared to enter into agreements (Continued on page 26)

Everybody's Talking About Hotpoint for 1941!

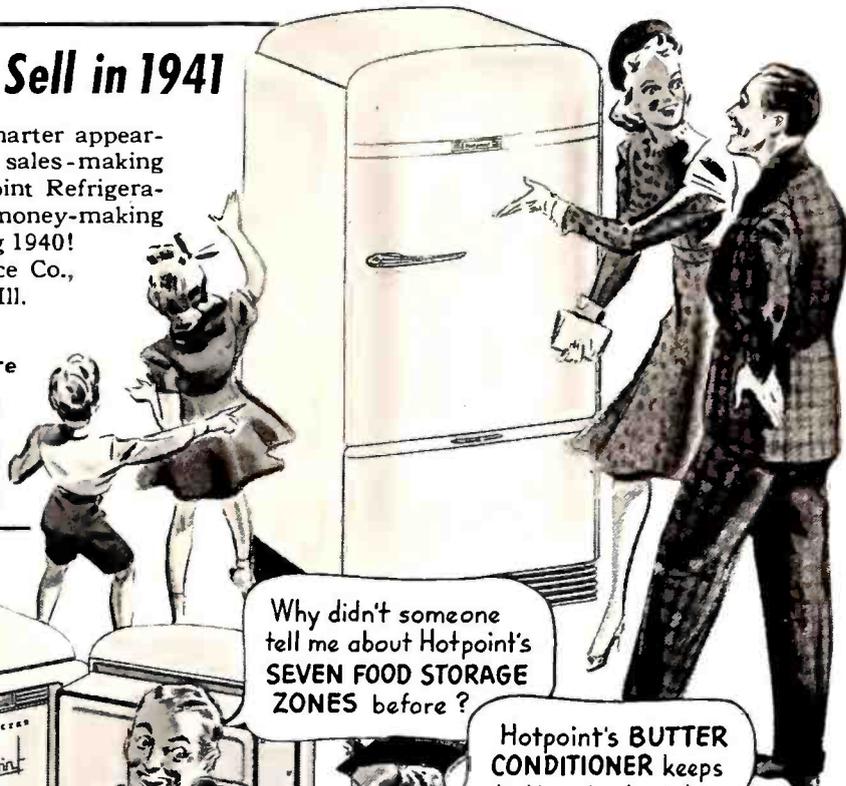
By Every Yardstick—A Great Refrigerator Buy

and a Hot Number to Sell in 1941

SWEEPING into 1941 with smarter appearance... greater values... more sales-making features than ever before—Hotpoint Refrigerators offer dealers an even bigger money-making opportunity than in record-breaking 1940! Edison General Electric Appliance Co., Inc., 5657 W. Taylor St., Chicago, Ill.

See the New Models at Hotpoint Distributors Everywhere

HOTPOINT REFRIGERATOR PRICES START AT \$119⁹⁵



Why didn't someone tell me about Hotpoint's **SEVEN FOOD STORAGE ZONES** before?

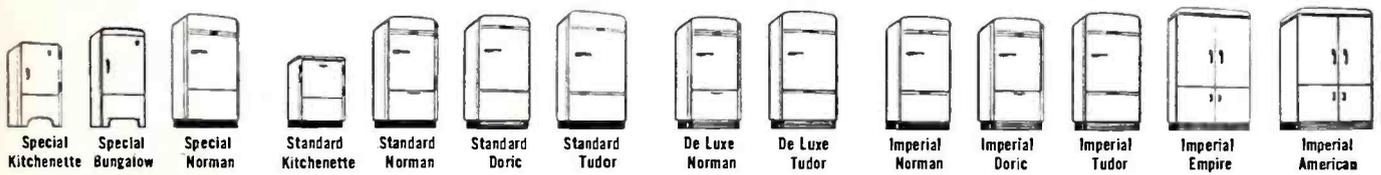
Hotpoint's **BUTTER CONDITIONER** keeps butter just right for easy spreading.

The **EXTRA BIN FOR DRY STORAGE** gives plenty of space for canned goods and cereals!

Hotpoint's **BIG BOTTLE SPACE** solves a real problem for us!



HOTPOINT PRESENTS 4 Distinguished Lines of Refrigerators



REALLOCATION SERVICE JOBS

Setting-up "capacity-switch" types of tuning units. Correcting station drift. Eliminating IF interference. See also Part II.

Of the ten million push-button radio sets that are to be changed March 29th, about half of them are of the switch-capacity type. (In the February issue of RADIO TODAY, pages 40, and 41 adjustments were shown for the popular mechanical and electrical tuning mechanisms.) While these capacity types are the easiest to reset for the station reallocation, there are some features of the systems that need particular attention by servicemen.

WATCH SWITCH CONTACTS

The push-button switch and the trimmer condensers are especially bothered by dust and dirt particles. In the switch, the dirt causes poor contacts with resultant noisy operation. In the trimmer condensers, the dust changes the dielectric material between the active plates of the condenser which at the same time changes the capacity and detunes the circuits. Under high humidity conditions, this dust can change the electrical characteristics of the trimmer over a wide range.

Because of these effects of dust and dirt, exposed switches and trimmer units should be carefully cleaned. A small artist's brush will come in handy. On the push-button switch contacts, use any of the recommended contact cleaners.

CORRECTING DRIFT

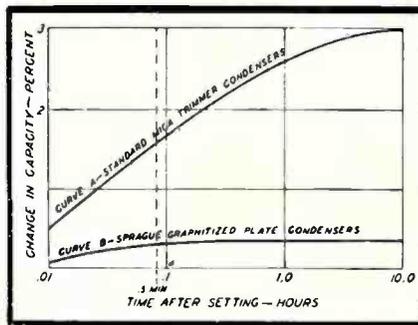
A particular complaint that will be heard from owners of the capacity-type-push-button sets, is "Why bother to re-set them, when the stations sound 'fuzzy' a month or so later?"

There is a reason for bothering with it, because recent developments in the trimmer condensers have improved the capacity drift characteristics until, for one type, it is only 10 per cent of old-type trimmers. By adding these new strips of trimmers in place of the old,

the customer can be guaranteed of a minimum of station drift.

The reasonable price of the improved capacitors will offer no objection to the change, yet you can easily build-up your profits on this type of re-set job by \$2 or \$3. The installation is simple, and a half-hour should do the job.

The accompanying graph shows the capacity variation with time of set operation for the standard mica trim-



Comparison of capacity drift vs. time for two types of mica trimmers.

mers and for the new Sprague Products Co., (N. Adams, Mass.) Graphitized plate trimmers.

NEW TRIMMERS

These new trimmers have a graphite coating on the surfaces and edges of the active plates. The improved capacity drift-time characteristic of these units is due according to the Sprague Co., to the lowered coefficient of friction between the adjusting screw, plates, and mica film. This lower friction between the parts permits the trimmer to be adjusted to a new position without the gradual shifting into place of the plates of the ordinary

types which caused the large drift in capacity.

As the graph shows, the maximum rate of drift is during the first five minutes, but for the standard type, drifting continues for 10 hours or more.

New switches may be needed to clear up contact noise or other failures. These are very good opportunities for extra profits on the types of push-button re-set job which would, because of their easy adjustment, be in the lower service charge class.

INTERFERENCE WITH 910 KC.

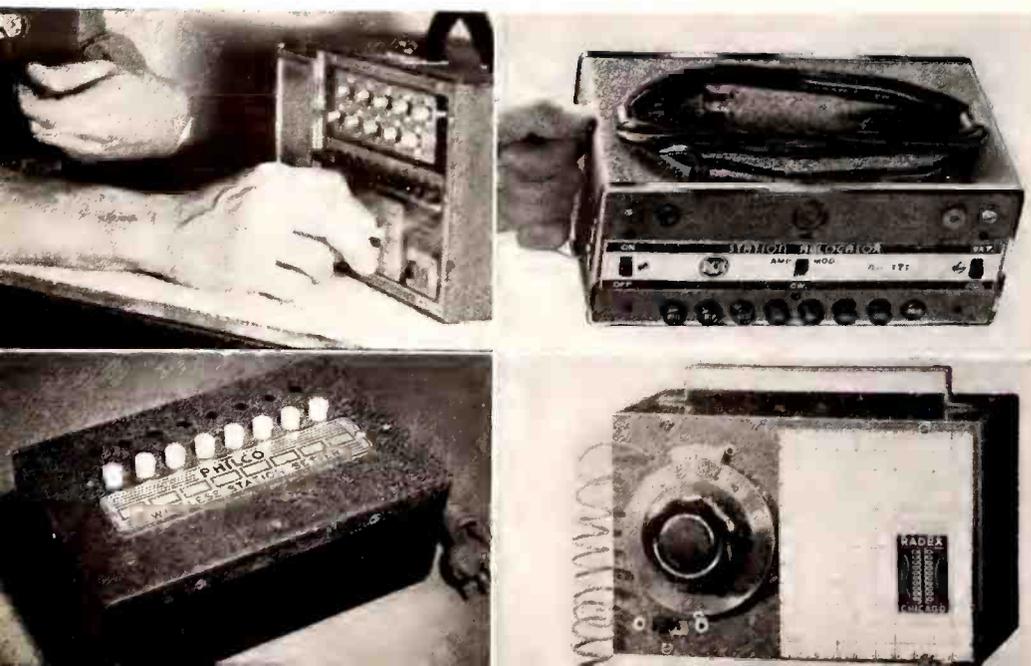
Another problem which may be encountered during the reallocation of certain sets is the interference due to the use of a new channel, 910 kc. Superhet receivers which are aligned to 455 kc. may have trouble if there is a station delivering a strong signal at the receiver on 910 kc. If the set is none too well shielded, and the signal is strong, a beat note will probably be heard when the set is tuned from 680 to 685 kc. If the set is tuned to 680 kc., the oscillator is 1135 kc. for a 455 kc. intermediate. If the 910 kc. station is putting a strong signal into the IF wiring, one beat note between 910 kc. and 1135 kc. is 225 kc. The second harmonic of this is 450 kc. which will beat with the 455 kc. IF to give a 5 kc. note in the output. Other beat notes may be heard between 680 and 685 kc. but since 680 is the assigned channel, interference with a station on 680 will be the problem.

RE-ALIGNMENT

If there are whistles or other interference on any part of the dial due to a strong 910 kc. signal, it will be fairly simple to re-align the IF at a few kilocycles higher or lower in order to get the IF away from one-half of 910 kc. Do not shift the IF any more than is absolutely necessary because the dial calibrations will not track.

It will probably be best to say as little about the necessity of re-aligning the IF as possible if interference is found, since your reallocation story to the customer should be one of the better reception that will result throughout North and Central America when interfering channels have been changed.

Pushbutton oscillator at upper left is Precision Apparatus Co., Brooklyn, N. Y., unit for 10 stations. Battery operated; 400 cycle audio. Approx. \$20. Upper right—RCA Allocator \$17.50. Battery or AC. 8 stations, 400 cps mod. Lower left—Philco 8-station setter, \$13.50. AC operated, 400 cycle mod. Lower right—Radex Corp., 1733 Milwaukee Ave., Chicago, station oscillator \$7.95 less batteries. Calibration scale.



GENERAL ELECTRIC OFFERS YOU HELP

On Radio Moving Day

MARCH 29th is the date! But — *now* is the time to plan.

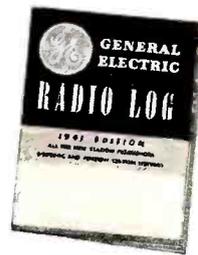
Get in touch with your General Electric Radio distributor *right away* — by wire or phone. Find out about his Moving Day Merchandising Plan, which was designed especially to help you cash in on push-button re-sets and to help you sell more radio sets and tubes.

Then — *put the plan in action!*



Use These Advertising Mats

Distribute These
Log Books



Display This
Window Streamer

Get started early! Re-allocation gives you one of the biggest "breaks" you've ever had in radio. Contact your General Electric Radio Distributor—*today*. General Electric Company, Radio and Television Department, Bridgeport, Connecticut.

GENERAL  **ELECTRIC**

here's

EXTRA PROFIT!



Modernize equipment now in use with the new light weight

Webster Electric AJ-1 Pick-Up

Thousands of owners of older equipment are looking for a way to get modern sound reproduction without buying complete new outfits.

Tell your customers how this new Webster Electric Crystal Pick-Up will improve tone fidelity and modernize their present equipment . . . how its lighter weight and lower pressure

(Licensed under patents of the Brush Development Company)

now make it possible to play thousands of records without changing needles, with practically no scratch, surface noise or record wear.

Here is new business . . . extra business . . . profitable business you can get with very little effort. Practically every outfit in use represents a potential prospect!

Webster Electric Sound Equipment

Webster Electric Sound Equipment incorporates base amplifiers of 12 to 50 watts, with power booster stages and complete portable, mobile and permanent systems . . . applicable to every installation requirement. It is engineered to give fine tone quality with long performance life.

Licensed by Electrical Research Products, Inc., under U. S. Patents of American Telephone and Telegraph Company and Western Electric Company, Incorporated



Webster Electric Recorder Heads



Unique and outstanding in performance. Webster Electric Recorder Heads cover the entire frequency range from 30 to well over 6000 cycles per second. Recordings made with them have clean quality and remarkable musical detail.

WEBSTER ELECTRIC COMPANY, Racine, Wis., U. S. A. Established 1909. Export Dept.: 100 Varick St., New York City. Cable Address: "ARLAB", New York City

WEBSTER ELECTRIC

"Where Quality is a Responsibility and Fair Dealing an Obligation"

REFRIGERATOR TRADE-INS

(Continued from page 22)

with any dealer in its service area, under which it will undertake to recondition any single door refrigerator, acquired by the dealer as a trade-in, for a flat charge of \$20. If, in the plant's opinion, the refrigerator is not suitable for such reconditioning, it may be purchased outright from the dealer for one-half of the Blue-Book price. This book, "The National Refrigerator Market Report," is compiled by Mr. Herman Hantober and is published and distributed by his company and is not in any way connected with the Electrical Association of Philadelphia.

"We obtained the following information regarding the 1940 operation of the Plant. A detailed analysis of 2,498 refrigerators of 63 different makes handled by the Plant shows that 1,786 were reconditioned, 429 were junked and 283 were sold 'as is.' This covered a portion of the 1940 activity. Many of those junked or sold without reconditioning were 'orphan' makes.

"This year has seen a larger percentage of boxes rebuilt than was possible in previous years—due primarily to the fact that a better class of refrigerator has been coming in. Most of them were built between 1928 and 1934.

"Of the boxes handled by Associated, about 80 per cent are bought outright from the dealers, and the other 20 per cent are reconditioned on order for them.

GUIDE TO VALUES

"The 1941 issue of the Blue-Book, now in preparation, will be completely reorganized in a new form, and will contain additional information and new illustrations, making it easier for dealers to identify models.

"Dealers have found the book useful not so much as a guide to trade-in allowances, but more as a means of demonstrating to the customer that the real value of her present refrigerator is much less than she thinks. It is in this latter field—that of correcting the customer's exaggerated idea of the value of the old refrigerator—that the book is really effective.

"As a test of the figures quoted in the book, one company in Philadelphia inaugurated a policy of allowing one-half the Blue-Book price on all trade-ins. 169 refrigerators were accepted at this rate—few, if any, sales were lost because of possible higher allowances elsewhere."

New York "Rep" Passes Away

Radio men in New York were shocked by the death on Feb. 27 of the well known manufacturers representative, I. R. "Bob" Smith, following an operation at a local hospital. Mr. Smith, whose headquarters were with those of his brother, Howard F., another manufacturers rep at 259 W. 14th St., was a member of "The Representatives" and a popular representative for Crowe Name Plate Co. and other firms.

NEW PRODUCTS

Fada personal portable



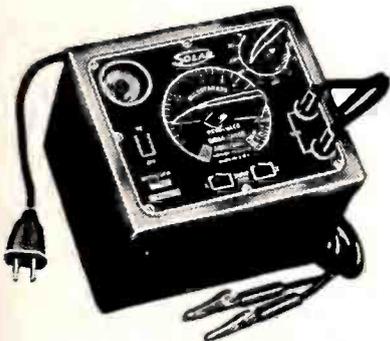
★ Series 34, 3-way camera type portable is 5-tube superhet. Weighs 6 lbs. and is 9 x 6 x 4. Loop antenna, battery switch on door. Electric switch on volume control. 4 in. dynamic speaker. In black leatherette (C-34), \$19.95, sun-tan leatherette (S-34), \$22.95, in brown genuine cowhide, L-34, \$27.95. Fada Radio & Elec. Co., Inc., 30-20 Thomson Ave., Long Island City, N.Y.—RADIO TODAY

Dumont filter



★ Noise filter for 110-220 volt fluorescent lamps or motors. Metal cased unit approved by UL. Suitable for lamps up to 100 watts. Price, 75c. Dumont Elec. Co., 514 Broadway, New York, N. Y.—RADIO TODAY.

Solar capacitor analyzer



★ Model QCA, capacitor analyzer indicates leakage, insulation resistance, impedance, power factor, capacities, and affords a dynamic check for shorts, opens and intermittents. Two styles—portable or bench panel mount. Solar Mfg. Corp., Bayonne, N. J.—RADIO TODAY.

Atlas Tri-Angle cabinet



★ New line of Tri-Angle speaker enclosures for corner mounting and cluster arrangements for 2, 3, and 4. Infinite baffle with bass reflex design TR-12 for all 12 in. cones is 22 x 19 x 10 in. Atlas Sound Corp., 1449 39th St., Brooklyn, N. Y.—RADIO TODAY.

Wilcox-Gay sound effects kit

★ Sound effects kit contains materials and instructions to make most of the sound effects of interest to recorder owners, such as thunder, hoof beats, fire engine, fire, doorbell, surf, etc. Wilcox-Gay Corp., Charlotte, Mich.—RADIO TODAY.

Cinaudagraph dual speaker



★ High fidelity concentric dual speaker with 12-inch "woofer" and 5-inch "tweeter" has flat range from 30 to 12,000 cps. For high fidelity phonograph, and radio work. Complete with cross-over filter network. Cinaudagraph Speakers, Inc., 2 Selleck St., Stamford, Conn.—RADIO TODAY.

Walsco staple driver

★ Staple driver for wire and cable installations, will drive staples into hardwood, brick, mortar and concrete. Its magazine works automatically and holds strips of staples which are available in several colors. It enables the stapling of wires in places not accessible with hammer and ordinary staples. Walter L. Schott Co., 5264 W. Pico Blvd., Los Angeles, Calif.—RADIO TODAY.

FREED-EISEMANN PHONOGRAPH COMBINATIONS

with Regular and FM Radio

An important message for merchants about the newest, quality radios from one of the oldest manufacturers of quality sets.



FM-42; Phonograph-Radio combination; 16 tubes; Panphonic dual speaker system; Garrard mixer record changer; Authentic Hepplewhite design cabinet—walnut or mahogany; for Frequency Modulation and regular broadcasting.

FREED-EISEMANN Staticless Frequency Modulation Combinations are considered the finest radio sets by engineers, the radio trade and many FM broadcasting stations. The new Freed-Eisemann is the complete modern radio. All sets embody regular broadcast band as well as Frequency Modulation.

AGGRESSIVE DEALERS — ATTENTION. You don't have to wait until FM broadcasting opens up in your territory to handle the Freed-Eisemann line. Because of its high quality phonograph reproduction, its superb reception of regular, as well as FM broadcasting, this is the set of today that will not be outmoded tomorrow. Read the booklet entitled "The ABC of FM." Send for it—no charge. And if you want a quantity for prospective customers they may be had at a nominal cost.

ADDITIONAL FEATURES. The Freed-Eisemann cabinets are masterpieces of craftsmanship. All are authentic period designs. The phonograph performance is unexcelled. The automatic record changer is the world-famous Garrard.

OTHER FREED-EISEMANN ADVANTAGES. You deal direct with the manufacturer. You can get an exclusive territorial franchise (several important territories still open). Your opportunity to take on a line with assured profit possibilities. Write for details to

FREED RADIO CORPORATION
39 WEST 19TH STREET, NEW YORK, N. Y.

Freed-Eisemann

FAMOUS SINCE RADIO BEGAN
Licensed under E. H. Armstrong Frequency Modulation System Patents.

Philco Ready with Big March Campaigns

"A new and powerful retail selling program"—a triple promotion of major size—is planned for the latter part of this month for Philco refrigerators. Details will be announced by general sales manager T. A. Kennally at sectional distributor meetings.

The drive will include ads in 15 leading national magazines, and is timed to capitalize on the vigorous interest in the Philco advance design models. Mr. Kennally says that the program "gives the dealer everything he needs to attract customers, sell them, and sell them up."

New Philco air conditioning units are also the subject of a special drive in late March, with Harry Boyd Brown visiting sectional meetings to reveal new units, new designs, new materials, more advertising. Both window-sill and floor models are in the campaign and it is said that following recent research in the field, "unique advertising and unusual merchandising plans" are ready.

New Solar Director

News from Solar Mfg. Corp., Bayonne, N. J., makers of capacitors, is that the Solar chief engineer, J. I. Cornell, has been elected a director of the company.

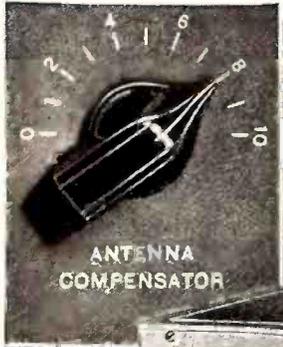
"The Reps" Have a New Chapter

A brand new "Chicagoland" chapter of "The Representatives" of Radio Parts Manufacturers, Inc., was organized last month at a meeting in Chicago. This group includes all members of "The Reps" operating in Illinois and Wisconsin.

Officers elected for the Chicago chapter are Royal A. Stemm, 21 E. Van Buren St., Chicago, president; Irvin I. Aaron, 4028 N. 16th St., Milwaukee, vice-president; and R. E. Stemm, Chicago, secretary-treasurer.

It was reported by David Sonkin, secretary of the national organization, that at the last meeting of the national group held in New York City, Paul M. Cornell, 3270 DeSota Ave., Cleveland Heights, Ohio, was elected to membership of the organization.

More news of "The Reps" is that two of their members have new addresses. Sigmund H. Cohn is now at 1356 S. Flower St., Los Angeles, and Harry Gerber is at 94 Portland St., Boston, Mass. Correct addresses of all manufacturers representatives are listed in RADIO TODAY's new directory on the subject, appearing on other pages of this issue. Members of "The Representatives" are marked with an asterisk.



You're always **"IN TUNE"**
with an
HQ-120-X



9.7-555 METERS

There's a good reason for the high signal-to-notice ratio in the "HQ-120-X." The first tuned circuit of any receiver controls the signal-to-noise ratio. When an antenna is coupled to this very important circuit, there is usually a detuning effect. This detuning effect lowers the signal-to-noise ratio. The antenna compensator on the "HQ-120-X" provides a control for restoring resonance, regardless of the effects of the antenna system. In high gain, highly selective circuits, this control becomes

a necessity if peak performance is to be had. Try an "HQ-120-X" and note its superior signal-to-noise ratio.

An improved highly efficient noise limiter; accurately calibrated main dial; band spread dial calibrated for 80, 40, and 20 meter amateur bands; sensitive "S-Meter" and variable selectivity crystal filter are a few of the other features which have made the "HQ-120-X" one of amateur radio's most popular receivers.

FOR TECHNICAL INFORMATION WRITE DEPT. D-3 FOR 16 PAGE BOOKLET



HAMMARLUND MFG. CO., INC.

424-438 WEST 33rd ST., NEW YORK

CANADIAN OFFICE: 41 WEST AVE., NO., HAMILTON, ONT.



NU to Cover World for Erwood Sound

From National Union Radio Corp., 57 State St., Newark, N. J., comes the news that NU has been appointed by Erwood Sound Equipment Co., Chicago, as exclusive distributor on all Erwood equipment and accessories for the entire world. National Union has for some time been the U.S. distributor for the Erwood products in the U.S.A.

The Erwood sound products come equipped with NU heavy duty sound X/tra tubes, which are described by the firm as "specially made for audio work and all types of sound equipment." The company also points out that the new Erwood units include all the latest innovations in the sound field, and that John and Joe Erwood continue to be two of the leaders in the PA business.

TokFone Features Complete Lines

Making a vigorous bid for the attention of the trade now is a complete line of TokFone products, made by the Regal Amplifier Mfg. Co., 14-16 W. 17th St., New York City. All types and prices of intercommunicators, recorders, amplifiers, and electric phonographs are being offered by Regal in elaborate new descriptive folders.

Phonographs come in either wire-less or wired types; some are portable units, and some have automatic changers. Among the recorders a portable phonograph-recorder-P.A. system is featured. Throughout the lines, attractive prices, high fidelity and "a new note in beauty" are stressed. Head of the Regal company is Walter Spiegel.

1941-1942

**RADIO
YEAR
BOOK**

**Including
RADIO TRADE DIRECTORY**



CALDWELL-CLEMENTS, INC.
480 Lexington Avenue, New York

INSTRUMENTS

that talk your language!



Model 776
Oscillator



Model 669
Vacuum Tube Voltmeter



Model 772
Super-Sensitive Analyzer



Model 697
Volt-Ohm-Milliammeter



Model 778
Serviset

Fundamental! Long Life! Lowest Overall Cost! More Profitable! Dependable Accuracy!

"We use WESTONS exclusively because we can make more money with fundamental instruments," says this successful-serviceman. "One reason is the fact that fundamental instruments never have to be replaced because of circuit changes or new developments. Furthermore, they remain trouble-free because they are simple, basic measuring tools, without trick circuits or troublesome gadgets. And when they are made by WESTON, you can bank on your measurements. With our group of WESTON instruments we're fixed for precise, profitable servicing for all time."

Be sure you get all the facts on the broad line of WESTON fundamental instruments for servicing radio receivers as well as communications and industrial circuits. Write to Weston Electrical Instrument Corp., 597 Frelinghuysen Ave., Newark, N. J.

WESTON
Radio Instruments

TUNG-SOL'S

10 Vital Points

for -

PROFITABLE *Radio Tube* **RETAILING**

✓
Uniform Quality Tubes

✓
Complete Line

✓
**Business Getting
Package**

✓
A Good Discount

✓
**Minimum Outlay
for Stock**

✓
Maintained List Price

✓
Territory Protection

✓
**A Fair Adjustment
Policy**

✓
**Promotion that
Builds the Dealer**

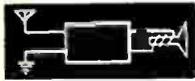
✓
**A Reputation for
Protecting its Dealers**

TUNG-SOL RADIO TUBES

RADIO TRADE DIRECTORY

Up-to-date, verified listings of manufacturers, products and trade names—the complete buying guide with products and advertisements indexed on pages 31 and 103

RECEIVING SETS



| | |
|----------------------|-----|
| Amateur | AM |
| Auto | A |
| Aviation | AV |
| Battery portable | BP |
| "Camera" portables | CP |
| Commercial | COM |
| Direction finders | DF |
| Facsimile | FAC |
| Farm | F |
| Frequency Modulation | FM |
| FM Converters | FMC |
| Home | H |
| Kits (as suffix) | K |
| Marine | M |
| Phanograph-radio | PR |
| Police | P |
| Police auto | PA |
| Radio Recorder Camb. | RRC |
| Television | T |

ABC RADIO LABORATORIES, 3334 N. New Jersey St., Indianapolis, Ind., "ABC"—Short wave auto converters

ADMIRAL—Continental Radio & Television Corp.

AIR KING PRODUCTS CO., INC., 1523 63rd St., Brooklyn, N. Y., "Air King"—BP, F, FM, H, PR, T

AIRLINE—Montgomery Ward & Co.

AIRPLANE & MARINE DIRECTION FINDER CORP., Clearfield, Pa.—AV, COM, DF, M, P, PA

AIR SCOUT—Allied Engineering Institute

ALLIED ENGINEERING INSTITUTE, 85 Warren St., New York, N. Y., "Air Scout"—AM, M, P

ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill., "Knight"—A, BP, F, PR, TK

AMERICAN COMMUNICATIONS CORP., 123 Liberty St., New York, N. Y.—COM, M, PR, P

AMERICAN TELEVISION CORP., 333 W. 52nd St., New York, N. Y.—T

ANDREA RADIO CORP., 4820 48th Ave., Woodside, L. I., N. Y.—BP, H, PR, T, TK, RRC

ANSLEY RADIO CORP., 4377 Bronx Blvd., New York, N. Y., "Dynamophone"—PR, FM

ARVIN—Nobilit-Sparks Industries, Inc.

AUTOCRAT RADIO CO., 3855 N. Hamilton Ave., Chicago, Ill., "Autocrat"—A, BP, F, H, PR

AUTOMATIC RADIO & TELEV. CO., INC., 122 Brookline Ave., Boston, Mass.—A, BP, H, PR, RRC

AUTOPHONE—Cavaller Motors Associates, Inc.

BANK'S MFG. CO., 5019 N. Winthrop Ave., Chicago, Ill.—BP, M, PR, P, PA

BASSETT RADIO MFG. CORP., Niles, Mich.—AV, COM, P, PA

BEE ENGINEERING CO., 7665 Grand River Ave., Detroit, Mich.—P, PA

BELL RADIO & TELEVISION, 125 E. 46th St., New York, N. Y., "Bell"—A, F, H, T, PR

BELMONT RADIO CORP., 1257 Fullerton Ave., Chicago, Ill., "Belmont"—A, BP, F, H, PR, RRC, T

BENDIX RADIO CORP., 920 E. Fort. Ave., Baltimore, Md.—AV, M, P, PA

BOND PRODUCTS CO., 13139 Hamilton Ave., Detroit, Mich.—A, BP, H, PR

BROWNING LABORATORIES, INC., 750 Main St., Winchester, Mass., "Browning"—FMK, HK

BRUNSWICK RADIO DIV., Mersman Bros. Corp., 206 Lexington Ave., New York, N. Y.—II (furniture)

CALVERT MOTORS ASSOCIATES, LTD., 1028 Linden Ave., Baltimore, Md.—A, H

CANTON TRADING CO., 135 Liberty St., New York, N. Y., "Kantola"—BP, H, PR

CARRON MFG. CO., 415 S. Aberdeen St., Chicago, Ill.—FM

CAVALIER MOTORS ASSOCIATES, LTD., 1028 Linden Ave., Baltimore, Md., "Autophone," "Mobilette"—A, BP

CINEMA ENGINEERING CO., 1508 S. Verdugo Ave., Burbank, Calif., "Cinema"—COM

CLARION—Warwick Mfg. Co.

COLONIAL RADIO CORP., 254 Rano St., Buffalo, N. Y.—A, BP, F, H, PR

COMMUNICATION MEASUREMENTS LAB., 136 Liberty St., New York, N. Y.—FM

CONTINENTAL RADIO & TELEVISION CORP., 3800 W. Cortland St., Chicago, Ill., "Admiral"—BP, CP, F, H, PR, RRC

THE CROSLLEY CORP., 1329 Arlington St., Cincinnati, Ohio, "Crosley"—A, BP, CP, F, FAC, H, PR, RRC

DELCO RADIO DIVISION, General Motors Service, Kokomo, Ind.—A, F, H

DETROLA CORP., 1501 Beard Ave., Detroit, Mich., "Detrola"—A, F, H, PR, P

DE WILD RADIO MFG. CORP., 436 Lafayette St., New York, N. Y.—A, BP, CP, F, H, PR, RRC

DOOLITTLE & FALKNER, INC., 7421 S. Loomis Blvd., Chicago, Ill.—AV, P, PA

ALLEN B. DuMONT, 2 Main Ave., Passaic, N. J., "DuMont"—T

DYNAPHONE—Ansley Radio Corp.

ECHOPHONE RADIO CO., 201 E. 26th St., Chicago, Ill.—AM

ELECTRICAL RESEARCH LAB., INC., 2020 Ridge Ave., Evanston, Ill., "Erla," "Sentinel"—BP, CP, F, H, PR, RRC

ELECTROMATIC DISTRS., INC., 88 University Pl., New York, N. Y.—H, Chassis

ELECTROTONE—Harris Mfg. Co.

EMERSON RADIO & PHONOGRAPH CORP., 111 Eighth Ave., New York, N. Y.—BP, CP, F, H, PR, RRC, T

ERLA—Electrical Research Lab., Inc.

ESPEY MFG. CO., INC., 305 E. 63rd St., New York, N. Y.—BP, H, M, PR

FADA RADIO & ELECTRIC CO., 30-20 Thomson Ave., Long Island City, N. Y., "Fada"—A, BP, CP, F, FM, H, PR, RRC, T

FARNSWORTH TELEVISION & RADIO CORP., 3700 Pontiac St., Fort Wayne, Ind.—A, BP, CP, COM, F, FM, H, PR, RRC, T

FEDERAL RECORDER CORP., Elkhart, Ind.—RRC

FEDERAL TELEGRAPH CO., 200 Mt. Pleasant Ave., Newark, N. J.—M

FINCH TELECOMMUNICATIONS, INC., 1819 Broadway, New York, N. Y.—FAC

FLUSH-WALL RADIO CO., 57 State St., Newark, N. J.—H (recessed wall chassis)

FREED RADIO CORP., 39 W. 19th St., New York, N. Y., "Freed-Eisenam"—FM, H, PR

GALVIN MFG. CORP., 4545 Augusta Blvd., Chicago, Ill., "Motorola"—AM, A, AV, BP, CP, COM, F, H, M, P, P, PA, RRC, T

GAROD RADIO CORP., 70 Washington St., Brooklyn, N. Y., "Garod"—F, H, PR, TK

GE—General Electric Co.

GENERAL ELECTRIC CO., 1285 Boston Ave., Bridgeport, Conn., "General Electric"—BP, CP, COM, F, FM, FMC, H, PR, RRC, T

GENERAL TELEVISION & RADIO CORP., 1240 N. Homan Ave., Chicago, Ill.—BP, F, H, PR

GILFILLAN BROS., INC., 1815 Venice Blvd., Los Angeles, Calif., "Gilfillan"—BP, F, H, PR, T

GREBE MFG. CO., INC., 70 Washington St., Brooklyn, N. Y., "Grebe"—BP, F, H, PR

HALLCRAFTERS, INC., 2611 S. Indiana St., Chicago, Ill., "Skyrider"—AM, COM, FMC

Famous HOWARD Chassis NOW AVAILABLE FOR REPLACEMENT MARKET!

Thrilling performance of the famous HOWARD Receivers is now obtainable in chassis form for servicemen and dealers to modernize old radios or to install in custom cabinets. Designed by the same engineers who are building HOWARD Communication Receivers, these household models are outstanding for their full tone, ability to get long distance and attractive appearance.

Available in sizes from 5 to 12 tubes. All have phono inputs, built-on loop antennas, Howard-Jensen speakers, illuminated dials, complete fittings, etc. Recording chassis have output for recording arm, mute switch for monitoring, microphone input and two inputs for phono pick-ups. Switching arrangement permits recording radio, radio and mike, duplicating recordings with or without mike accompaniment and use as sound system.

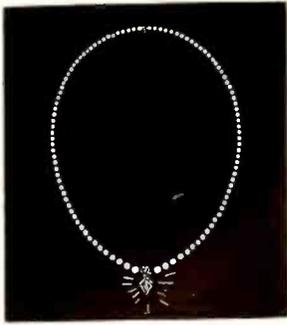


INCREASE PROFITS WITH THE HOWARD CHASSIS LINE — WRITE TODAY!

HOWARD RADIO COMPANY

1731-35 Belmont Ave., Chicago, Ill. Cable Address: HOWARDCO., U. S. A.

America's Oldest Radio Manufacturer



"Pearls of great price"

IN RADIO it means

Sets that the public will "take to" on sight . . . sets which have that indefinable "something" in style that makes customers out of lookers.



gives
you this

Sets that are priced right, to sell and to make a real profit . . . the kind of profit that makes you glad to be in the business instead of "bemoaning your fate".



is your answer
here, too

Sets that are built of the best materials, no skimping . . . built to give fine reception and complete satisfaction, so that "one customer tells another".



has all these
qualities

If you, Mr. Jobber-Mr. Dealer, want to handle a fully protected . . . CLEAN line, join with those who, in the past year, have seen a re-vivified and up-and-coming radio bring them sales and profits they have been delighted with.

The name is . . .

CLARION RADIO

Write for proposition NOW

WARWICK Manufacturing Corp.
1700 Washington Blvd. Chicago, Ill.

RECEIVING SETS—Cont.

HAMILTON RADIO CORP., 142-144, W. 26th St., New York, N. Y.—PR
HAMMARLUND MFG. CO., INC., 424 W. 33rd St., New York, N. Y., "Super-Pro"—AM, AV, COM, M, P
HARRIS MFG. CO., 2422 W. 7th St., Los Angeles, Calif., "Electrotone"—PR
HARVEY-WELLS COMMUNICATIONS, INC., Southbridge, Mass.—AV, BP, COM, M, P
HEINTZ & KAUFMAN, LTD., South San Francisco, Calif.—COM
HK—Heintz & Kaufman, Ltd.
HOWARD RADIO CO., 1731 Belmont Ave., Chicago, Ill., "Howard"—AM, A, BP, F, H, PR, P, RRC
RAY JEFFERSON, INC., 182 Millburn Ave., Baldwin, N. Y., "Mansley"—DF, M
JEFFERSON-TRAVIS RADIO MFG. CORP., 380 Second Ave., New York, N. Y.—M, P, PA
KAAR ENGINEERING CO., 619 Emerson St., Palo Alto, Calif., "Kaar"—AM, M, P, PA
KADETTE RADIO CORP., 310 First National Bldg., Ann Arbor, Mich.—H
KANTOLA—Canton Trading Co.
KARADIO CORP., 2233 University Ave., St. Paul, Minn., "Karadio"—A, AV, BP, COM, M, P, PA
KARNS-WHITE CORP., 1775 Broadway, New York, N. Y.—BP, F, M
KINGSTON RADIO CO., INC., Kokomo, Ind., "Kingston"—H
KNIGHT—Allied Radio Corp.
LAFAYETTE RADIO CORP., 100 Sixth Avenue, New York, N. Y.—AM, A, BP, CP, F, H, PR, RRC
LAUREHK RADIO MFG. CO., 3918 Monroe Ave., Wayne, Mich., "Laurehk," "Musique"—BP, F, H
LEAR AVIATION, INC., Dayton Municipal Airport, Dayton, Ohio—AV
FRED M. LINK, 125 W. 17th St., New York, N. Y.—P, PA
L'TATRO MFG. CO., 417 West Water St., Decorah, Iowa—BP, F, H
LULLABY—Mitchell Mfg. Co.
LUMITONE—Mitchell Mfg. Co.
MAGNAVOX CO., INC., 2131 Bueter Rd., Fort Wayne, Ind.—BP, FM, H, PR, RRC
MAJESTIC RADIO & TELEVISION CO., 2600 W. 50th St., Chicago, Ill., "Majestic"—BP, F, H, PR, T
MANSLEY—Ray Jefferson, Inc.
MARCONIPHONE, INC., 679 Madison Ave., New York, N. Y., "Marconiphone"—H, PR
MARINE RADIO CORP., 117-19 168th St., Jamaica, N. Y., "Marine"—AM, AV, COM, M
MEISSNER MFG. CO., Mt. Carmel, Ill.—Kits for AM, BP, F, FM, FMC, H, T
MIDWEST RADIO CORP., 909 Broadway, Cincinnati, Ohio, "Midwest"—BP, F, H, PR
JAMES MILLEN MFG. CO., INC., 150 Exchange St., Malden, Mass.—AM
MITCHELL MFG. CO., 1550 N. Dayton St., Chicago, Ill., "Lullaby," "Lumitone"—H
MOBILETTE—Cavalier Motors Associates, Inc.
MONTGOMERY WARD & CO., 619 W. Chicago Ave., Chicago, Ill., "Airline"—AM, A, BP, F, H, M, PR
MOTOROLA—Calvin Mfg. Corp.
NATIONAL COMPANY, 61 Sherman St., Malden, Mass., "National"—AM, AV, BP, COM, FM, M, P
NATIONAL UNION RADIO CORP., 37 State St., Newark, N. J.—BP, H
NOBLITT-SPARKS INDUSTRIES, INC., Columbus, Ind., "Arvin"—A, BP, H, PR
PACENT ENGINEERING CORP., 79 Madison Ave., New York, N. Y., "Pacent"—COM, FM, H, PR, T
PACKARD BELL CO., 1320 S. Grand Ave., Los Angeles, Calif., "Bell"—BP, H, PR, T
PARAMOUNT RADIO CO., 967 32nd St., Oakland, Calif.—BP, H
PHILCO RADIO & TELEVISION CORP., Triega & C Sts., Philadelphia, Pa.—AM, BP, CP, F, H, P, PA, RRC, T
PHILHARMONIC RADIO CO., 21 W. 45th St., New York, N. Y.—PR, FM
PHILMORE MFG. CO., 113 University Place, New York, N. Y., "Philmore"—BP, H, K
PIERCE AIRO—De Wald Radio Mfg. Corp.
PIERSON-DeLANE, INC., 2345 W. Washington Blvd., Los Angeles, Calif.—AM, COM, FM, P, PA
PILOT RADIO CORP., 37-06 36th St., Long Island City, N. Y., "Pilot"—BP, F, FM, H, PR, AM, COM, RRC, T

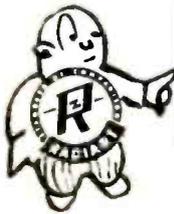
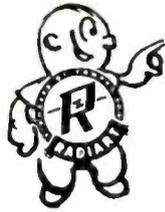
PORTOMATIC CORP., 50 E. 77th St., New York, N. Y., "Portomatic"—PR
PRESTO RECORDING CORP., 242 W. 55th St., New York, N. Y., "Presto"—COM
RADIO ENGINEERING LABS. INC., 35-54 36th St., Long Island City, N. Y.—FM, P, PA
RADIOLA—RCA Mfg. Corp.
RADIO MFG. ENGINEERS, INC., 111 Harrison St., Peoria, Ill., "RME"—AM
RADIOMARINE CORP. OF AMERICA, 75 Varick St., New York, N. Y.—COM, M
RADIO PRODUCTS CORP., 3800 W. Cortland St., Chicago, Ill.—A, BP, H, PR
RADIO RECEPTOR CO., INC., 251 W. 19th St., New York, N. Y.—AV, COM, FM
RADIO TRANSCEIVER LABS., 86-27 115th St., Richmond Hill, N. Y., "Radio Transceiver Labs"—AM, BP
RADOLEK CO., 601 W. Randolph St., Chicago, Ill., "Radolek"—AM, A, BP, F, H, PR
RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "Radiola," "RCA," "RCA Victor"—AM, A, AV, BP, CP, COM, F, H, PR, P, PA, RRC, T, FAC
RCA VICTOR—RCA Mfg. Co.
RECORDOVOX, INC., 80 Cortlandt St., New York, N. Y.—BP, H, PR
REMLER CO., LTD., 2101 Bryant St., San Francisco, Calif., "Remler"—BP, F, H, PR
RME—Radio Mfg. Engineers, Inc.
ROCKOLA MFG. CORP., 800 N. Kedzie Ave., Chicago, Ill.—PR, RRC
E. M. SARGENT CO., 212 9th St., Oakland, Calif., "Sargent"—AM, COM, DF, M
E. H. SCOTT LABS, INC., 4450 Ravenswood Ave., Chicago, Ill., "Scott"—FM, H, PR
SENTINEL—Electrical Research Lab., Inc.
SETCHELL-CARLSON, INC., 2233 University Ave., St. Paul, Minn., "Setchell-Carlson"—BP, F, H, M, PA
SILLCOX RADIO & TELEVISION CORP., 60 Wall Tower, New York, N. Y.—A, BP, F, H, PR, T
SKY CHIEF RADIO CORP., 345 E. 27th St., New York, N. Y.—H, PR
SKYRIDER—Hallcrafters, Inc.
MAXWELL SMITH CO., 1027 N. Highland Ave., Hollywood, Calif.—AM, AV, COM, FM, M, P, PA
SONORA RADIO & TELEVISION CORP., 2626 W. Washington Blvd., Chicago, Ill.—A, BP, CP, F, H, PR, T
SPARKS-WITHINGTON CO., E. Ganson Ave., Jackson, Mich., "Sparton"—BP, F, H, PR, T
SPARTON—Sparks-Withington Co.
STEWART-WARNER CORP., 1826 Dfersey Pkwy., Chicago, Ill., "Stewart-Warner"—A, BP, F, FM, FMC, H, PR, RRC, T
STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y., "Stromberg-Carlson"—F, FM, H, PR, T
SUPER-PRO—Hammarlund Mfg. Co.
TEFFT RADIO CO., Plymouth, Mich.—AM
TELEVISO PRODS., INC., 2400 N. Sheffield Ave., Chicago, Ill.—M
TRAV-LER KARENOLA TELE CORP., 1036 W. Van Buren St., Chicago, Ill., "Trav-Ler"—A, BP, CP, F, H, PR
TREBOR RADIO CO., Pasadena, Calif., "Trebor"—A, H
TROUBADOUR—Warwick Mfg. Co.
TROY RADIO & TELEVISION CO., 1144 S. Olive St., Los Angeles, Calif.—A, BP, F, H, PR, RRC
TRUETONE—Western Auto Supply Co.
UNITED CINEPHONE CORP., Torrington, Conn.—AV
UNITED STATES TELEVISION MFG. CORP., 220 E. 51st St., New York, N. Y.—T
UNIVERSAL BATTERY CO., 3410 S. LaSalle St., Chicago, Ill., "Universal"—A, F, H
WARWICK MFG. CO., 1700 W. Washington Blvd., Chicago, Ill., "Clarion," "Trouhadour," "Warwick"—A, BP, F, H, PR
WATTERSON RADIO MFG. CO., Dallas, Texas—F, H
WELLS-GARDNER & CO., 2701 N. Kildare Ave., Chicago, Ill.—AM, A, BP, F, PR
WESTERN AUTO SUPPLY CO., 2107 Grand Ave., Kansas City, Mo., "Truetime"—A, BP, F, H, PR
WESTERN ELEC. CO., 300 Central Ave., Kearny, N. J.—AV, M, P, PA
WESTINGHOUSE ELECTRIC SUPPLY CO., 150 Varick St., New York, N. Y., "Westinghouse"—BP, CP, F, H, PR, RRC, T
WILCOX ELECTRIC CO., INC., 4014 State Line, Kansas City, Kans.—AV, COM, M, P
WILCOX-GAY CORP., Charlotte, Mich., "Wilcox-Gay"—BP, H, PR, P, RRC
ZENITH RADIO CORP., 6001 Dickens Ave., Chicago, Ill.—AM, A, BP, CP, COM, F, FM, H, M, PR, P, PA, RRC, T
ZEPHYR RADIO CO., 13139 Hamilton Ave. Detroit, Mich., "Zephyr"—A, F, H, PR

ANTENNAS & ACCESSORIES



| | |
|------------------------------------|----|
| All-wave (home) | AW |
| Auto | A |
| Frequency modulation | FM |
| Ground clamps | G |
| Insulators | I |
| Kits | K |
| Lightning arresters | L |
| Loop antennas | LA |
| Master systems | MS |
| Noise-reducing broadcast | N |
| Outlets | O |
| Television | TL |
| Towers & supports (home) | T |

- ABC RADIO LABORATORIES, 3334 N. New Jersey St., Indianapolis, Ind., "ABC"—A (All-Wave)
- AEROVOX CORP., 740 Belleville Ave., New Bedford, Mass.—antenna eliminator
- AIRLINE—Montgomery Ward & Co.
- AIRPLANE & MARINE DIRECTION FINDER CORP., Clearfield, Pa.—LA (Direction finding)
- ALDEN PRODUCTS CO., 715 Center St., Brockton, Mass.—K
- ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill., "Knight"—AW, A, K, LA, MS
- AMERICAN COMMUNICATIONS CORP., 123 Liberty St., New York, N. Y.—AW, G, I, K, MS, N, O, TL
- AMERICAN LAVA CORP., Cherokee Blvd., & Manufacturers Rd., Chattanooga, Tenn.—K
- AMERICAN RADIO HARDWARE CO., 476 Broadway, New York, N. Y., "Arico"—A
- AMY, ACEVES & KING, INC., 11 West 42 St., New York, N. Y.—MS
- ANDREA RADIO CORP., 4820 48th Ave., Woodside, L. I., N. Y.—AW, N, TL
- ARHCO—American Radio Hardware Co.
- ARVIN—Noblitt-Sparks Industries, Inc.
- BEE ENGINEERING CO., 7665 Grand River Ave., Detroit, Mich.—I, K
- BELDEN MFG. CO., 4647 W. Van Buren St., Chicago, Ill.—AW, G, I, K, L, MS, N, TL
- BIRCO—Birnback Radio Co.
- BIRNBACH RADIO CO., INC., 145 Hudson St., New York, N. Y., "Birco"—AW, G, I, K, L, MS, N, O, TL
- BOND PRODUCTS CO., 13139 Hamilton Ave., Detroit, Mich.—G, L
- L. S. BRACH MFG. CORP., 55 Dickerson St., Newark, N. J.—AW, A, G, I, K, L, MS, N, TL
- BUD RADIO, INC., 5205 Cedar Ave., Cleveland, Ohio, "Bud"—G, I, L, O
- BURTON ROGERS CO., 857 Boylston St., Boston, Mass., "Burton Rogers"—A
- CLAMPIPE—Mueller Electric Co.
- CONSOLIDATED WIRE & ASSOC. CORPS., Peoria & Harrison Sts., Chicago, Ill.—A, AW, G, I, K, L, MS
- CORNING GLASS WORKS, Walnut St., Corning, N. Y., "Pyrex"—I
- CORNISH WIRE CO., INC., 15 Park Row, New York, N. Y., "Noise-Master," "Corwico"—AW, G, I, K, L, MS
- CORWICO—Cornish Wire Co., Inc.
- CRESCENT INDUSTRIES, INC., 4140 Belmont Ave., Chicago, Ill.—G
- DAVEN CO., 158 Summit St., Newark, N. J.—TL
- D-X RADIO PRODUCTS CO., 1575-1579 Milwaukee Ave., Chicago, Ill.—LA
- EAGLE ELECTRIC MFG. CO., INC., 59 Hall St., Brooklyn, N. Y.—AW, G, I, K, L
- EFFARSEE—Fishwick Radio Co.
- EX-STAT—Tilton Electric Corp.
- FARNSWORTH TELEVISION & RADIO CORP., 3700 Pontiac St., Fort Wayne, Ind.—AW, A, N, TL
- FEDERAL SCREW PRODUCTS CO., 26 S. Jefferson St., Chicago, Ill.—G
- FISHWICK RADIO CO., 139 W. 4th St., Cincinnati, Ohio, "Etfarsee"—AW, A
- F & H RADIO LABORATORIES, Fargo, N. Dakota—N, antenna eliminator.



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—meaning not only can size and prong arrangement, but load-limit and frequency designed to work **RIGHT** with other components of the circuit.

RADIART VIBRATORS are BETTER VIBRATORS

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- CLOSED FRAME.
- EXTRA FLEXIBLE LEADS.
- REEDS and sub-reeds of Swedish steel.
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- HEAT-RESISTANT SOCK and other quality features.

RADIART VIBRATORS are GUARANTEED

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Vibrator Power, up to
100 Watts

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Always a Year Ahead

- SELECTICOIL—lets servicemen "tailorfit" Radiart Aerials to the set.
- Most Types FIT ALL BODIES—inventory reduced—turnover multiplied.
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- "Static Muffler" MAGIC RING
- ALL-METAL ANTI-RATTLERS
- Ro-TENNA—the mechanical WIND-UP AERIAL

WRITE FOR CATALOGS
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CLEVELAND, OHIO

WARD Aerials for 1941

*give you the edge
over competition -*

Compare the Ward 1941 line dollar-for-dollar, item-for-item and feature-for-feature with anything else on the market. You'll see why this year, more than ever before, *Ward Aerials lead the field*. Each year Ward introduces new designs and features later accepted as standard in the industry. Be the first to show them to your customers.

New for 1941

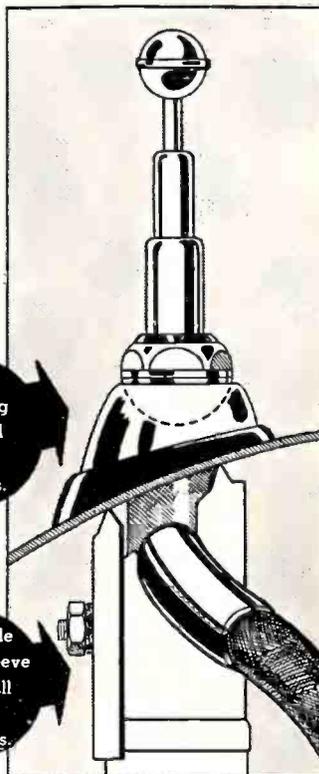
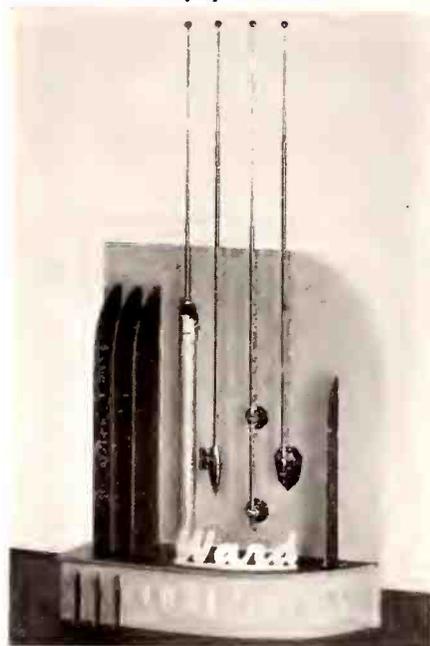
WARD "Bi-Flex"

The first concealed fender or cowl antenna *completely adjustable to any contour*. Positive manual operation. Can be quickly and easily installed on any car without extra parts. Includes 4-foot double-waterproofed lead.

"FLEX-ANGLE" — Now Available 90" long

America's fastest selling aerial—introduced by Ward last year. Simple adjustment compensating for fender and cowl contours without extra parts. To meet popular demand, it is now offered in a four-section model, extending to 90"—in addition to the former 3 section, 68" model.

Ward Display WA 127 D



OB3-45, 3 section 45"
OB3-62, 3 section 62"

WARD 1941 DISPLAY featuring the four leading numbers in the Ward line

To help you demonstrate and sell the new 1941 line, this modernistic display is offered to distributors and dealers for the cost of the merchandise only. Order yours today!

Write for 1941 Catalog

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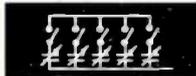
The **WARD PRODUCTS CORP.**
WARD BUILDING CLEVELAND, OHIO

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- M. M. FLERON & SON, INC., 113 N. Broad St., Trenton, N. J., "Fleron"—AW, G, I, K, L, N, O, TL, T
- FOWLER MFG. CO., 9 Rutger St., St. Louis, Mo.—AW, K
- FULTON RADIO CORP., 100 6th Ave., New York, N. Y.—A, TL
- GALVIN MFG. CORP., 4545 Augusta Blvd., Chicago, Ill., "Motorola"—AW, A
- GENERAL CEMENT MFG. CO., 919 Taylor Ave., Rockford, Ill.—L
- GENERAL CERAMICS CO., 30 Rockefeller Plaza, New York, N. Y.—I
- GE—General Electric Co.
- GENERAL ELECTRIC CO., 1285 Boston Ave., Bridgeport, Conn., "GE", "V-Doublet"—AW, K, N
- GENERAL TELEVISION & RADIO CORP., 1240 N. Homan Ave., Chicago, Ill., "Syncroterina"—AW
- GENERAL WINDING CO., 254 W. 31st St., New York, N. Y., "Gen-Win"—AW, K, MS, N
- GEN-WIN—General Winding Co.
- D. H. HARRELL, 1527 E. 74 Place, Chicago, Ill.—N
- HOWARD RADIO CO., 1731 Belmont Ave., Chicago, Ill.—LA (Directional loop)
- ICA—Insuline Corp. of America
- ILLINOIS SEATING CORP., 2138 N. Racine Ave., Chicago, Ill.—AW, G, MS, N, TL, T
- INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—AW, A, G, I, K, L, MS, O, TL
- ISOLANTITE, INC., 343 Cortlandt St., Belleville, N. J., "Isolantite"—I, Ultra high frequency antennas
- J. F. D. MFG. CO., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y., "JFD"—A, FM, TL, T
- KNIGHT—Allied Radio Corp.
- KRAEUTER & CO., INC., 563 18th Ave., Newark, N. J.—A
- LAFAYETTE RADIO CORP., 100 Sixth Ave., New York, N. Y.—AW, A, K, MS
- LEAR AVIATION, INC., Dayton Municipal Airport, Dayton, Ohio—K
- LITTLEFUZE, INC., 4757 Ravenswood Ave., Chicago, Ill.—Accessories
- MAGNAVOX CO., INC., 2131 Bueter Rd., Fort Wayne, Ind.—AW
- P. R. MALLORY & CO., 3029 E. Washington St., Indianapolis, Ind., "Yasley"—O
- JAMES MILLEN MFG. CO., INC., 150 Exchange St., Malden, Mass.—I
- MIMS RADIO CO., P. O. Box 504, Texarkana, Ark.—TL
- MONTGOMERY WARD & CO., 619 W. Chicago Ave., Chicago, Ill., "Airline"—AW, A, G, I, K, L, N, O, TL, T
- MORRIS REGISTER CO., Council Bluffs, Iowa—A, G
- MOTOROLA BOOSTER—Galvin Mfg. Corp.
- MUELLER ELECTRIC CO., 1573 E. 31 St., Cleveland, Ohio, "Clampipe"—ACC, G
- MUTER CO., 1255 S. Michigan Ave., Chicago, Ill.—AW, LA
- NATIONAL CO., INC., 61 Sherman St., Malden, Mass.—I, O
- NOBLITT-SPARKS INDUSTRIES, INC., Columbus, Ind., "Arvin"—AW, A, K
- NOISE-MASTER—Cornish Wire Co., Inc.
- NORWEST RADIO LABS., Blaine Ave. & Hill St., Shelby, Mont., "Streamline", "Vertenna"—AW, A
- PACENT ENGINEERING CORP., 79 Madison Ave., New York, N. Y., "Pacent"—AW, N, TL
- PHILCO RADIO & TELEVISION CORP., Tioga & C St., Philadelphia, Pa.—AW, A, K, N
- PHILSON MFG. CO., INC., 156 Chambers St., New York, N. Y.—A, TL
- PREMAX PRODUCTS DIV., Chisholm-Ryder Co., Niagara Falls, N. Y., "Prenax"—AW, A, K, T, Ground rods
- PYREX—Corning Glass Works
- QUAM-NICHOLS CO., 33rd Pl. & Cottage Grove Ave., Chicago, Ill.—A, G, K, L
- RADEX CORP., 1733 Milwaukee Ave., Chicago, Ill.—AW

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 RADOLEK CO., 601 W. Randolph St., Chicago, Ill., "Radolek"—AW, A, K
 RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA"—AW, A, K, MS, N, TL
 RIVARO MFG. CO., Toledo, Ohio—AW, A, G, I, K, L
 H. B. SHERMAN MFG. CO., 22 Barney St., Battle Creek, Mich.—G
 SNYDER, INC., 813-23 Noble St., Philadelphia, Pa.—A
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 SPARTON—Sparks-Withington Co.
 STREAMLINE—Norwest Radio Labs.
 STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y., "Stromberg-Carlson"—AW
 SUPERIOR TUBE CO., Norristown, Pa.—A
 TACO—Technical Appliance Corp.
 TECHNICAL APPLIANCE CORP., 17 E. 16th St., New York, N. Y., "Taco"—AW, FM, K, MS, N, TL
 TELERADIO ENGINEERING CORP., 484 Broome St., New York, N. Y., "Teleradio"—LA
 TILTON ELECTRIC CORP., 15 E. 26th St., New York, N. Y., "Ex-Stat"—A
 VERTEENNA—Norwest Radio Labs
 VERTROD MFG. CO., 132 Nassau St., New York, N. Y.—AW, K, N, TL
 VOGUE CO., 8134 Vincennes Ave., Chicago, Ill.—AW
 THE WARD PRODUCTS CORP., 1523 E. 45 St., Cleveland, Ohio, "Ward"—AW, A, K
 WILCOX ELECTRIC CO., INC., 4014 State Line, Kansas City, Kans.—TL
 YAXLEY—P. R. Mallory & Co.

AUTOMATIC TUNING UNITS & PARTS

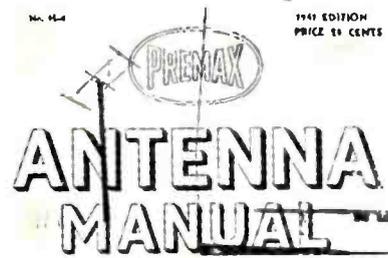


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 Station name cards SC
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 ALDEN PRODUCTS CO., 715 Center St., Brockton, Mass.—K
 ALLIANCE MFG. CO., Alliance, Ohio—M

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 AMERICAN STEEL PACKAGE CO., Squire Ave., Defiance, Ohio, "Defiance"—MS
 ARHCD—American Radio Hardware Co.
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 BUD RADIO, INC., 5205 Cedar Ave., Cleveland, Ohio—S, CU
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 CONSOLIDATED WIRE & ASSOC. CORPS., Peoria & Harrison Sts., Chicago, Ill.—MS
 CDTD-COIL, INC., 71 Willard Ave., Providence, R. I.—MS, R, S
 CROWE NAME PLATE & MFG. CO., 3701 Ravenswood Ave., Chicago, Ill., "Crowe"—MS, K, SC
 HARRY DAVIES MOLDING CO., 1428 N. Wells St., Chicago, Ill.—K
 DEFANCE—American Steel Package Co.
 D-X RADIO PRODUCTS CO., 1575 Milwaukee Ave., Chicago, Ill.—IT, CU
 ERIE RESISTOR CORP., 640 W. 12th St., Erie, Pa., "Ceramic"—K, CU
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 GEMLOID CORP., 79-10 Albion Ave., Elmhurst, L. I., "Gemloid", "Gemlite"—SC
 GENERAL CEMENT MFG. CO., 919 Taylor Ave., Rockford, Ill.—SC, S
 GENERAL INSTRUMENT CORP., 829 Newark Ave., Elizabeth, N. J.—MS
 GENERAL MFG. CO., 1255 S. Michigan Ave., Chicago, Ill.—IT
 GENERAL WINDING CO., 254 W. 31 St., New York, N. Y., "Gen-Win"—IT, FM, PT, CU, M
 GEN-WIN—General Winding Co.
 CARL GORR PRINTING CO., INC., 2615 N. Ashland Ave., Chicago, Ill.—SC
 GUARDIAN ELECTRIC MFG. CO., 1621 W. Walnut St., Chicago, Ill.—R, S
 E. I. GUTHMAN & CO., INC., 400 S. Peoria St., Chicago, Ill., "Guthman"—IT, PT, CU
 HAMMARLUND MFG. CO., INC., 424 W. 33 St., New York, N. Y.—CU
 HEGELER ZINC CO., P. O. Box 599, Danville, Ill.—IT
 ICA—Insuline Corp. of America
 INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—R, S, CU
 P. R. MALLORY & CO., 3029 E. Washington St., Indianapolis, Ind., "Yaxley", "Mallory"—K, S, CU
 MEISSNER MFG. CO., 7th & Belmont, Mt. Carmel, Ill., "Meissner"—IT, PT, R, S, CU
 JAMES MILLEN MFG. CO., INC., 150 Exchange St., Malden, Mass.—CU
 THE MUTER CO., 1255 South Michigan Ave., Chicago, Ill., "Muter"—IT, PT, S, CU
 NATIONAL CO., INC., 61 Sherman St., Malden, Mass.—S
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For 6 volt radios
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Converts 98% of all 6 volt radios. Vibrator disturbance is eliminated. High fidelity performance assured. List price \$13.95.

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Supplies "A", "B" and "C" power to 4 to 8 tube battery-operated radios using 2 volt tubes. List price \$9.95.

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- SPARTON—Sparks-Withington Co.
- SPEEDWAY MFG. CO., 1834 S. 52 St., Cicero, Ill.—M
- SPRAGUE PRODS. CO., N. Adams, Mass.—CU
- STACKPOLE CARBON CO., Tannery St., St. Marys, Pa., "Stackpole"—S
- F. W. STEWART MFG. CORP., 340 W. Huron St., Chicago, Ill., "Stewart"—MS, K, PM, R, SC, S
- TELERADIO ENGINEERING CORP., 484 Broome St., New York, N. Y., "Teleradio"—IT, PT, CU
- UTAH RADIO PRODUCTS CO., 820 Orleans St., Chicago, Ill., "Utah"—M, S
- YAXLEY—P. R. Mallory & Co.

BATTERY ELIMINATORS & RECTIFIERS



- Battery charging tubes B
 Battery eliminators BE
 Gas filled tubes G
 Metallic rectifiers M
 Mercury arc MA
 Power units complete PU
 Vacuum tubes (receiving excluded) V

- ACA—Amplifier Co. of America
- AIRPLANE & MARINE DIRECTION FINDER CORP., Clearfield, Pa.—PU
- AMERICAN COMMUNICATIONS CORP., 123 Liberty St., New York, N. Y.—G, M, PU
- AMERICAN TELEVISION & RADIO CORP., 300 E. 4th St., St. Paul, Minn., "ATR"—BE, M, PU
- AMPLIFIER CO. OF AMERICA, 17 W. 20th St., New York, N. Y., "ACA"—PU
- VICTOR J. ANDREW, 6429 S. Lavergne Ave., Chicago, Ill.—PU
- ARCO TUBE CO., 227 Central Ave., Newark, N. J.—B, V
- ARLAB—Arlavox Mfg. Co.
- ARLAVOX MFG. CO., 430 S. Green St., Chicago, Ill.—G
- ATR—American Television & Radio Corp.
- AUTO RADIO FILTERPAC—The Benwood Linze Co.
- AUDIO DEVICES INC., 1600 Broadway, New York, N. Y., "Audio"—1 phase 110v. to 3 phase 220v. converter
- BEE ENGINEERING CO., 7665 Grand River Ave., Detroit, Mich.—PU
- THE BENWOOD LINZE CO., 1832 Washington Ave., St. Louis, Mo., "B-L", "Auto Radio Filterpac"—M, PU

- B-L—The Benwood Linze Co.
- CINEMA ENGINEERING CO., 1508 S. Verdugo Ave., Burbank, Calif., "Cinema"—PU
- COLLINS RADIO CO., 2920 First Ave., Cedar Rapids, Ia.—PU, V
- DELCO—United Motors Service
- DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—B, G, MA, PU
- ECCO HIGH FREQUENCY CORP., 120 W. 20th St., New York, N. Y.—PU
- ELECTRICAL PRODUCTS CO., 6535 Russell St., Detroit, Mich.—M
- ELECTRONIC LABORATORIES, INC., 122 W. New York St., Indianapolis, Ind.—PU
- ELECTRONIC PRODUCTS CO., St. Charles, Ill.—PU
- ELECTRO PRODUCTS LABORATORIES, 549 W. Randolph St., Chicago, Ill.—BE, PU
- FANSTEEL METALLURGICAL CORP., 46 W. 22nd St., N. Chicago, Ill.—M
- FEDERAL TELEGRAPH CO., 200 Mt. Pleasant Ave., Newark, N. J., "Federal"—B
- FERRANTI ELECTRIC, INC., 30 Rockefeller Plaza, New York, N. Y.—PU



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Here's a complete line of high quality, silent A and B battery eliminators. They are designed for economical operation from alternating current sources of supply—or from dry or storage batteries.

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 GENERAL ELECTRIC CO., West Lynn, Mass.—B, G, M, V
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 THOMAS B. GIBBS & CO., 900 W. Lake St., Chicago, Ill.—PU
 ROBERT M. HADLEY CO., 709 E. 61st St., Los Angeles, Calif., "Hadley"—PU
 INTERNATIONAL TRANSFORMER CO., 17 W. 20th St., New York, N. Y.—PU
 P. R. MALLORY & CO., INC., 3029 E. Washington St., Indianapolis, Ind., "Mallory Dry Disc"—M, PU
 NATIONAL CO., INC., 61 Sherman St., Malden, Mass.—PU
 PORTA-POWER—General Transformer Corp.
 THE RADIART CORP., W 62nd St. and Barberton Ave., Cleveland, Ohio—PU
 RADIO ENGINEERING LABS, INC., 35-54 36th St., Long Island City, N. Y.—PU
 RADIO RECEPTOR CO., INC., 251 W. 19th St., New York, N. Y., "Radio Receptor"—PU
 RADIOTRON—RCA Mfg. Co.
 RAYTHEON MFG. CO., 190 Willow St., Waltham, Mass., "Rectifilter"—PU
 RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA," "Radiotron"—B, G, PU, V
 RECTIFILTER—Raytheon Mfg. Co.
 SKAGGS TRANSFORMER CO., 5894 Broadway, Los Angeles, Calif.—PU
 MAXWELL SMITH CO., 1027 N. Highland Ave., Hollywood, Calif.—PU
 STANCOR—Standard Transformer Corp.
 STANDARD TRANSFORMER CORP., 1500 N. Halsted St., Chicago, Ill., "Stancor"—M, PU
 UNITED CINEPHONE CORP., Torrington, Conn.—MA, PU, V
 UNITED MOTORS SERVICE, 3044 W. Grand Blvd., Detroit, Mich., "Delco"—PU
 UNITED TRANSFORMER CORP., 150 Varick St., New York, N. Y.—PU
 WESTERN ELECTRIC CO., 300 Central Ave., Kearny, N. J.—G, V
 WESTINGHOUSE ELECTRIC & MFG. CO., E. Pittsburgh, Pa.—MA
 WILCOX ELECTRIC CO., INC., 4014 State Line, Kansas City, Kans.—PU
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 "B" B
 "C" C
 Bias cells BC
 Dry cells DC
 Flashlight cells FL
 Portable A & B PB
 Storage S

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 AIR CELL—National Carbon Co., Inc.
 AIRLINE—Montgomery Ward & Co.
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 BOND ELECTRIC CORP., 148 Munson St., New Haven, Conn., "Bond"—A, B, C, DC, FL, PB
 BRIGHT STAR BATTERY CO., 200 Crooks Ave., Clifton, N. J., "Uned-it," "Eclipse"—A, B, C, BC, DC, FL, PB
 BURGESS BATTERY CO., Freeport, Ill., "Power-House," "Multi-Ply," "Uni-Cel"—A, B, C, BC, DC, FL, PB

TAKE A TIP FROM AN EXPERT!



(A personal message from Homer G. Snoopshaw, B. R. S.)

"If there is any single thing that deserves credit for my meteoric rise in the replacement field—any one help that, above all others, enabled me to climb to dizzy heights on the ladder of success, it is the BURGESS line of replacement batteries—and, of course, the BURGESS Replacement Guide.*

* FREE ON REQUEST
 See your Burgess distributor, or write Burgess Battery Co., Freeport, Illinois.



B30 "Now, take BURGESS No. B30, for instance. It's merely a standard type 45-volt portable "B" Battery retailing at \$1.50, but without it I would lose out on about 80% of my replacements. It's really surprising the number of portable radios I equip with B30's. It is always the first battery I reach for, when I see a customer bring in his portable."

the service fully equivalent to any other battery of similar size on the market."



M30 "Then, for those radios requiring a half-size, half-weight 45-volt "B" Battery, there is BURGESS No. M30 to the rescue—retailing at \$1.50 and equal to the B30 in everything except size and weight. Made by an entirely new development in cell manufacture called "Multi-Ply" construction, it's specified as replacement for many popular portables."

4F "Now, for "A" Batteries—take a look at the BURGESS 4F. It's a companion to the B30 "B" Battery in most cases, and retails at 50c. It has been made by Burgess for years in ignition and telephone types—famous as the 'Little-Six' line."



2F4L "There are quite a few radios being used that require a long type six-volt "A" Battery, and Burgess makes the No. 2F4L, retailing at \$1.00, for this type radio. This is usually used with the M30 "B" Battery."



XX45 "And for those new 'personal' receivers—BURGESS is just announcing the new No. XX45—another 'Multi-Ply' "B" Battery, rated at 67½ volts, retailing at \$2.25. It's a 'mighty midget', weighing only 12 ounces, but it really delivers

4GA41 "And, by way of indicating the wide range of "AB" packs made by BURGESS, just look at the 4GA41, a combination 1½-volt "A" and 61½-volt "B"—widely used on a number of portables—retailing at \$2.50."



"You see, Burgess makes a specialty of supplying all types of batteries for replacements—and that's what a man needs if he's going to get anywhere in this business. Of course, the few batteries mentioned above are only a small part of the complete line listed in the free Burgess catalog."

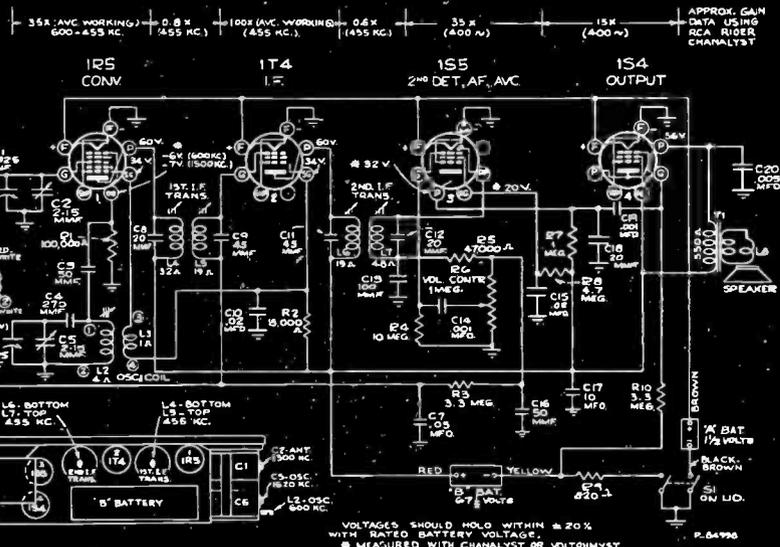
"Take a tip from a man who knows—get a copy of the Burgess Replacement Guide from your local distributor or write the Burgess Battery Company at Freeport, Illinois. It will answer the replacement problem on over 500 different portables—and that's a big help to any service man!"

"Tie Up With Burgess—The Complete Replacement Line"

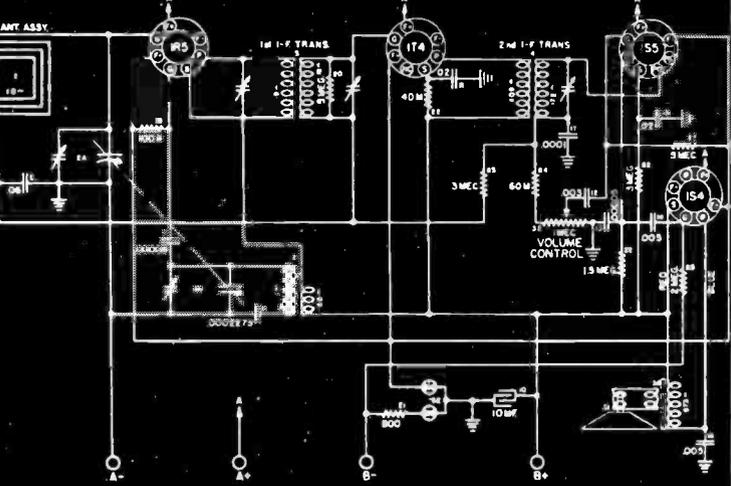
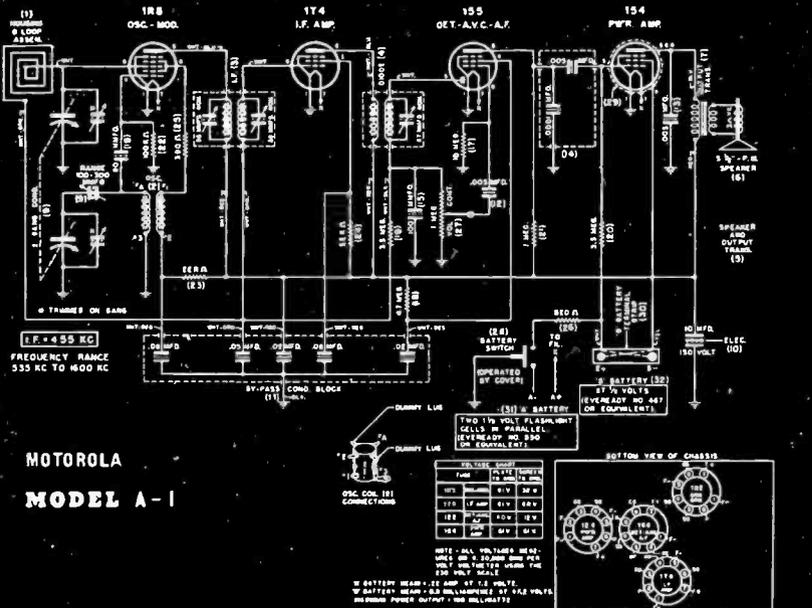
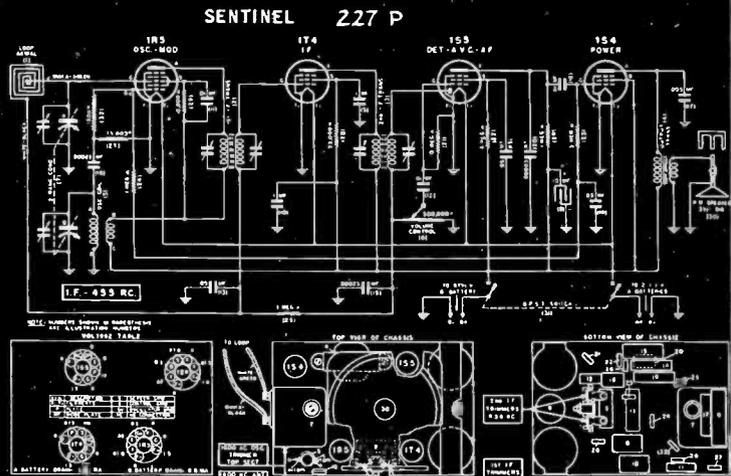
BURGESS BATTERIES

BURGESS BATTERY COMPANY, FREEPORT, ILLINOIS

MINIATURE BATTERY-PORTABLE CIRCUITS



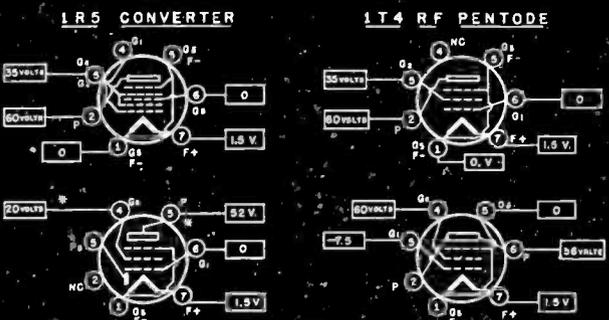
RCA MODEL BP-10



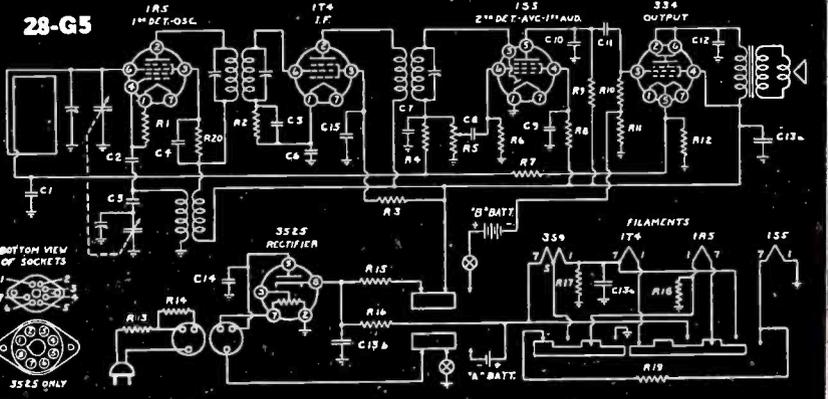
ALL SETS-
 'A' BATTERY - 1 1/2 VOLT FLASHLIGHT CELLS
 'B' BATTERY - 67 1/2 VOLTS (EVEREADY NO. 467 OR EQUIVALENT).

RADIO TODAY

MINIATURE TUBE BASE DIAGRAMS



ADMIRAL 28-G5



RESISTORS

| No. | Ohms | Watts |
|-----|------------|-------|
| R1 | 100,000 | 1/2 |
| R2 | 5,000,000 | 1/2 |
| R3 | 80 | 1/2 |
| R4 | 20,000 | 1/2 |
| R5 | 5,000,000 | 1/2 |
| R6 | 1,000,000 | 1/2 |
| R7 | 10,000,000 | 1/2 |
| R8 | 10,000,000 | 1/2 |
| R9 | 4,000,000 | 1/2 |
| R10 | 1,000,000 | 1/2 |

CONDENSERS

| No. | Capacity (Mid.) | Volts |
|-----|-----------------|-------|
| C1 | 200 | 200 |
| C2 | 100 | 200 |
| C3 | 100 | 200 |
| C4 | 100 | 200 |
| C5 | 100 | 200 |
| C6 | 100 | 200 |
| C7 | 100 | 200 |
| C8 | 100 | 200 |
| C9 | 100 | 200 |
| C10 | 100 | 200 |
| C11 | 100 | 200 |
| C12 | 100 | 200 |
| C13 | 100 | 200 |
| C14 | 100 | 200 |
| C15 | 100 | 200 |

BATTERIES, DRY & WET—Cont.

DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—S
 ECLIPSE—Bright Star Battery Co.
 ELECTRIC STORAGE BATTERY CO., Allegheny Ave. and 19th St., Philadelphia, Pa., "Exide"—S
 EVEREADY—National Carbon Co.
 EXIDE—Electric Storage Battery Co.
 GENERAL DRY BATTERIES, INC., 13100 Athens Ave., Cleveland, Ohio, and Dubuque, Iowa—B, C, FL, PB
 GLOBE-UNION, INC., 900 E. Keefe Ave., Milwaukee, Wis., "Globe-Union"—S
 IDEAL COMMUTATOR DRESSER CO., 5079 Park Ave., Sycamore, Ill. Fl. (storage type)
 JUMBO BATTERY MFRS., Ellsworth, Iowa, "Jumbo"—S
 KNIGHT—Allied Radio Corp.
 LAYER-BILT—National Carbon Co., Inc.
 MINI-MAX—National Carbon Co., Inc.
 MONARK BATTERY CO., INC., 4556 W. Grand Ave., Chicago, Ill., "Monark"—S
 MONTGOMERY WARD & CO., 619 W. Chicago Ave., Chicago, Ill., "Arline"—A, B, C, DC, FL, PB, S
 MULTI-PLY—Burgess Battery Co.
 NATIONAL CARBON CO., INC., 30 E. 42nd St., New York, N. Y., "Air Cell," "Eveready," "Layer-Bilt," "Mini-Max"—A, B, C, DC, FL, PB
 NATIONAL UNION RADIO CORP., 57 State St., Newark, N. J., "National Union"—A, B, C, BC, PB
 PHILCO RADIO & TELEVISION CORP., Tioga and C Sts., Philadelphia, Pa.—A, B, C, DC, FL, PB, S
 POWER-HOUSE—Burgess Battery Co.
 RAY-O-VAC CO., 2317 Winnebago St., Madison, Wis., "Ray-O-Vac"—A, B, C, DC, FL
 SILLCOX RADIO & TELEVISION CORP., 60 Wall Tower, New York, N. Y.—A, B, C, DC, FL, PB, S
 STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y., "Stromberg-Carlson"—S, DC
 UNEEO-IT—Bright Star Battery Co.
 UNI-CEL—Burgess Battery Co.
 UNITED STATES ELECTRIC MFG. CORP., 222 W. 14th St., New York, N. Y., "Usalite"—DC, FL, PB
 UNIVERSAL BATTERY CO., 3410 S. LaSalle St., Chicago, Ill., "Universal"—S
 U S L BATTERY CORP., Niagara Falls, N. Y., "U-S-L"—S
 USALITE—United States Electric Mfg. Corp.
 WILLARD STORAGE BATTERY CO., 246 E. 131st St., Cleveland, Ohio, "Willard"—A, B, C, DC, FL, PB, S
 WIND-IMPELLER ELECTRIC WORKS, Ellsworth, Iowa—S

AUTO RADIO CONTROLS

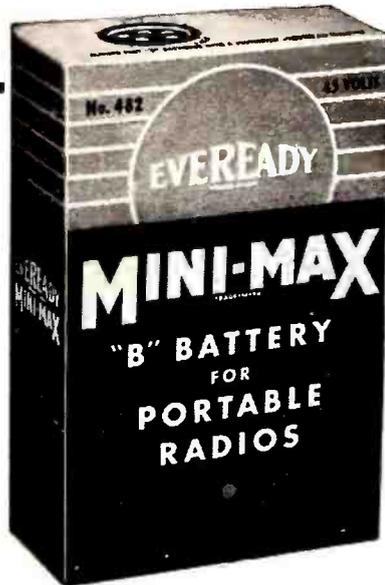


Cable replacement tools . . . T
 Control units (complete) . CU
 Control heads CH
 Fittings F
 Flexible shafts FS

ALOEN PRODUCTS CO., 715 Center St., Brockton, Mass., "Alden"—F
 AMERICAN RADIO HARDWARE CO., 476 Broadway, New York, N. Y., "Arho"—T, F
 ARHCO—American Radio Hardware Co.
 ARVIN—Noblitt-Sparks Industries, Inc.
 BUO RADIO, INC., 5205 Cedar Ave., Cleveland, Ohio—FS
 CRESCENT INDUSTRIES, INC., 4140 Belmont Ave., Chicago, Ill.—CH
 CROWE NAME PLATE & MFG. CO., 3701 Ravenswood Ave., Chicago, Ill., "Crowe"—CU, CH, F, FS
 OELCO—United Motors Service
 OUAL REMOTE CONTROL CO., 31776 W. Warren St., Wayne, Mich., "Ducon"—CU, CH, F, FS
 OUCON—Dual Remote Control Co.
 GALVIN MFG. CORP., 4545 Augusta Blvd., Chicago, Ill., "Motorola"—CU, CH, F, FS
 GEMLITE—Gemloid Corp.
 GEMLOID CORP., 79-10 Albion Ave., Elmhurst, L. I., "Gemloid," "Gemlite"—F
 HUNTER PRESSEO STEEL CO., Lansdale, Pa.—CU, CH
 ICA—Insuline Corp. of America
 INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—FS

MARCH, 1941

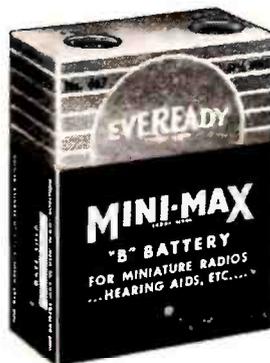
THE BIG NEWS IN PORTABLE RADIO IS THIS LITTLE BATTERY



"Eveready" "Mini-Max" Radio "B" Battery No. 482 outsells all other portable batteries combined. Reason? It fits more than 90% of the 2,000,000 portable sets now in use. It lasts almost twice as long as ordinary batteries of equal size. It costs no more than ordinary portable radio batteries. Ask your distributor about this profit-maker now!

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"MINI-MAX"
 RADIO "B" BATTERIES

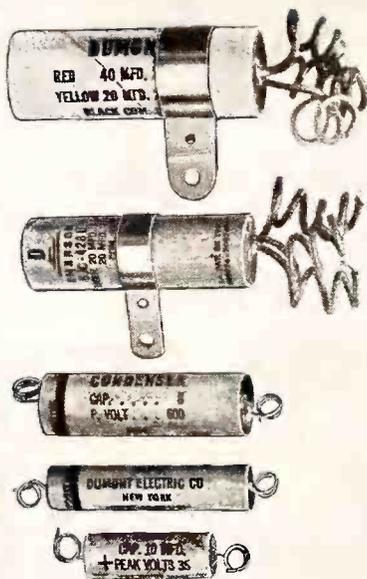
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Unit of Union Carbide and Carbon Corporation



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NOBLITT-SPARKS INDUSTRIES, INC., Columbus, Ind., "Arvin"—CU, FS
PHILCO RADIO & TELEVISION CORP., Tioga & C Sts., Philadelphia, Pa.—CU, CH, FS
F. W. STEWART MFG. CORP., 340 W. Huron St., Chicago, Ill., "Stewart"—T, CU, CH, F, FS
UNITED MOTORS SERVICE, 3044 W. Grand Blvd., Detroit, Mich., "Delco"—CU
S. S. WHITE DENTAL MFG. CO., 10 E. 40th St., New York, N. Y.—FS

PLASTIC MOLDERS



Cabinet molders C
Small parts molders P

ALDEN PRODUCTS CO., 715 Center St., Brockton, Mass.—P
AMERICAN INSULATOR CORP., New Freedom, Pa.—C, P
AMERICAN PHENOLIC CORP., 1250 Van Buren St., Chicago, Ill., "Amphenol"—P
AMERICAN RADIO HARDWARE CO., 476 Broadway, New York, N. Y., "Arhco"—P
AMPHENOL—American Phenolic Corp.
ARHCO—American Radio Hardware Co.
ASSOCIATED ATTLEBORO MFG., INC., Attleboro, Mass.—C, P
AUBURN BUTTON WORKS, Auburn, N. J.—C
BARBER-COLMAN CO., Rockford, Ill.—P
BOONTON MOLDING CO., 326 Myrtle Ave., Boonton, N. J.—C, P
CELORON—Continental-Diamond Fibre Co.
CHICAGO MOLDED PRODUCTS CO., 1030 Kolmar Ave., Chicago, Ill.—C, P
CONTINENTAL-DIAMOND FIBRE CO., Newark, Del., "Celoron"—P
HARRY DAVIES MOLDING CO., 1428 N. Wells St., Chicago, Ill.—C, P
DUREZ PLASTICS & CHEMICALS, INC., North Tonawanda, New York, "Durez"—C, P
HUGH H. EBY, INC., 4700 Stenton Ave., Philadelphia, Pa.—P
ELECTRICAL INDUSTRIES MFG. CO., Red Bank, N. J.—P
ERIE RESISTOR CORP., Erie, Pa.—P
GEMLOID CORP., 79-10 Albion Ave., Elmhurst, L. I., "Gemute"—P
GEMUTE—Gemloid Corp.
INSULATION PRODUCTS CO., Richland St. & Annon Way, Pittsburgh, Pa.—P
INSUROK—Richardson Co.
KURZ-KASCH INC., 1421 S. Broadway, Dayton, Ohio—P
MEISSNER MFG. CO., 7th & Belmont, Mt. Carmel, Ill.—P
ELMER E. MILLS CORP., 812 W. Van Buren St., Chicago, Ill.—P
MONSANTO CHEMICAL CO., Plastics Div., Springfield, Mass.—C, P
REMLER CO., LTD., 2101 Bryant St., San Francisco, Calif., "Remler"—C, P
RESINOX CORP., 230 Park Ave., New York, N. Y.—C, P
RICHARDSON CO., 27th & Lake Sts., Melrose Park, Ill., "Insurok"—C, P

MAXWELL SMITH CO., 1027 N. Highland Ave., Hollywood, Calif.—P
SYRACUSE ORNAMENTAL CO., Syracuse, New York—C, P
TELEX PRODS. CO., 1645 Hennepin Ave., Minneapolis, Minn.—P
UNIVERSAL PLASTICS, 235 Jersey Ave., New Brunswick, N. J.—C, P
S. S. WHITE DENTAL MFG. CO., 10 E. 40th St., New York, N. Y.—P

RADIO & TELEVISION SCHOOLS

Correspondence C
Radio training RT
Residence R
Television training TT

AMERICAN SCHOOL, Drexel Ave., at 58th St., Chicago, Ill.—C, RT
CAPITOL RADIO ENGINEERING INSTITUTE, INC., 3224 16th St., N.W., Washington, D. C.—C, RT, R, TT
DODGE INSTITUTE, Valparaiso, Ind.—RT, R, TT
MASSACHUSETTS RADIO SCHOOL, 18 Boylston St., Boston, Mass.—RT, R, TT
MIDLAND TELEVISION, INC., Power & Light Bldg., Kansas City, Mo.—RT, R, TT
NATIONAL SCHOOLS, 4000 Figueroa St., Los Angeles, Calif.—C, RT, R, TT
NATIONAL RADIO INSTITUTE, 16th & U Sts., Washington, D. C.—C, RT, TT
PACIFIC RADIO INSTITUTE, 1355 Market St., San Francisco, Calif.—RT, R, TT
PORT ARTHUR RADIO COLLEGE, Port Arthur, Texas—RT, R
RADIO-TELEVISION INSTITUTE, INC., 480 Lexington Ave., New York, N. Y.—RT, R, TT
RADIO TRAINING ASS'N. OF AMERICA, 4525 Ravenswood Ave., Chicago, Ill.—RT
RCA INSTITUTE, INC., 75 Varick St., New York, N. Y.—C, RT, R, TT
RCA INSTITUTES, INC., Merchandise Mart Bldg., Chicago, Ill.—C, RT, R, TT
SPRAYBERRY ACADEMY OF RADIO, 2548 University Pl., N.W., Washington, D. C.—C, RT, TT
UNIVERSAL TELEVISION SYSTEM, 2107 Grand Ave., Kansas City, Mo.—RT, TT

RADIO LOGS & GLOBES



GEORGE F. CRAM CO., 730 E. Washington St., Indianapolis, Ind.—Geographical globes
GORDON SPECIALTIES CO., 1104 S. Wabash Ave., Chicago, Ill.—World time clocks
CARL GORR PRINTING CO., INC., 2615 N. Ashland Ave., Chicago, Ill.—Short wave charts
HAYNES RADIO LOG, P. O. Box 444, Park Ridge, Ill.—Radio logs
WEBER-COSTELLO CO., Chicago Heights, Ill.—Radio globes

CAPACITORS, FIXED



Ceramic C
Electrolytic dry ED
Electrolytic wet EW
Industrial I
Mica receiving M
Paper (receiving) P
Plug-in condensers PF
Polystyrene insulated PO
Power factor correct. PC
Silvered mica S
Temperature compens. TC
Transmitting T

AEROVOX CORP., 740 Belleville Ave., New Bedford, Mass.—ED, EW, I, M, P, PF, PO, T

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BAYONNE, N. J.

For
Communications and
Industrial
Applications

AMERICAN CONDENSER CO., 2508 S. Michigan Ave., Chicago, Ill.—ED, I, P, T

VICTOR J. ANDREW, 6429 South Laverne Ave., Chicago, Ill.—T

ARTCO—Art Radio Corp.

ART RADID CDRP., 115 Liberty St., New York, N. Y., "Arteo," "Liberty"—P

ATLAS CONDENSER PRODUCTS CO., 518 Westchester Ave., New York, N. Y.—ED, P

ATDMS—Sprague Products Co.

AUTOMATIC WINDING CO., INC., 900 Passale Ave., East Newark, N. J.—C, M, T

BOND PRODUCTS CO., 13139 Hamilton Ave., Detroit, Mich.—P

BUD RADIO, INC., 5205 Cedar Ave., Cleveland, Ohio—M

ALLEN D. CARDWELL MFG. CORP., S1 Prospect St., Brooklyn, N. Y.—T (Air)

CENTRALAB, 900 E. Keefe Ave., Milwaukee, Wis.—C, TC

CERAMICON—Erle Resistor Corp.

CONDENSER CORP. OF AMERICA, 100D Hamilton Blvd., South Plainfield, N. J.—ED, EW, I, M, P, T

CONDENSER PRODUCTS, 1375 N. Branch St., Chicago, Ill.—ED, P, PO

CONSOLIDATED WIRE & ASSOC. CDRPS., Peoria & Harrison Sts., Chicago, Ill.—ED, P, T

CORNELL-DUBILIER ELEC. CDRP., 100D Hamilton Blvd., South Plainfield, N. J.—ED, EW, I, M, P, T

COSMIC RADIO CDRP., 699 E. 135th St., New York, N. Y., "Cosmic," "Megrite"—ED, P

TDBE DEUTSCHMANN CDRP., Canton, Mass.—ED, I, P, T

DOMINO—Solar Mfg. Corp.

DUMONT ELECTRIC CO., INC., 514 Broadway, New York, N. Y., "Dumont"—ED, EW, I, M, P, S, T

D-X RADIO PRODUCTS CO., 1575 Milwaukee Ave., Chicago, Ill.—C

ECCO HIGH FREQUENCY CORP., 120 W. 20th St., New York, N. Y., "Ecco H.F."—T

ELECTRO MOTIVE MFG. CO., INC., So. Park & John Sts., Willimantic, Conn.—M

ELMENCO—Electro Motive Mfg. Co., Inc.

ERIE RESISTOR CORP., Erie Pa., "Ceramicon"—S, TC, C

EX-STAT—Tilton Electric Corp.

J. E. FAST & CO., 3101 N. Pulaski Ave., Chicago, Ill.—I, P, PO, T

GENERAL ELECTRIC CO., Pittsfield, Mass.—I, T

GENERAL MFG. CO., 1255 S. Michigan Ave., Chicago, Ill.—C, M, P

GENERAL RADIO CO., 3D State St., Cambridge, Mass., "G-R"—Precision M, Special

G-H—Girard-Hopkins

GIRARD-HOPKINS, 1437 23rd Ave., Oakland, Calif., "G-H"—ED, EW, I, P, PO, T

G-R—General Radio Co.

HEINTZ & KAUFMAN, LTD., South San Francisco, Calif.—T (compressed gas filled)

HK—Heintz & Kaufman, Ltd.

H. R. S. PRODUCTS, 703 N. Cicero Ave., Chicago, Ill.—ED, I, P, PO, T

ICA—Insuline Corp. of America

ILLINOIS CONDENSER CO., 1160 N. Howe St., Chicago, Ill., "Illinois"—ED, I, P

INDUSTRIAL CONDENSER CORP., 1725 W. North Ave., Chicago, Ill., "Industrial"—ED, I, P, T, PO

INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—T

E. F. JOHNSON, Waseca, Minn., "Johnson"—T

KODACAP—Mecamold Radio Corp.

LEEDS & NORTHRUP CO., 4970 Stenton Ave., Philadelphia, Pa.—Precision M

LIBERTY—Art Radio Corp.

LITTLE GIANT—Solar Mfg. Corp.

MAGNAVOX CO., 2131 Bueter Rd., Ft. Wayne, Ind., "Magnavox"—ED

P. R. MALLORY & CO., 3029 E. Washington St., Indianapolis, Ind., "Mallory"—ED, EW, I, M, P, T

MICAMOLD RADIO CORP., 1087 Flushing Ave., Brooklyn, N. Y., "Kodacap"—ED, I, M, P, PO, T

MEGRITE—Cosmic Radio Corp.

JAMES MILLEN MFG. CO., INC., 150 Exchange St., Malden, Mass.—C, I, PO, T

MINICAP—Solar Mfg. Corp.

MUTER CO., 1255 South Michigan Ave., Chicago, Ill., "Muter"—C, M, TC

NATIONAL UNION RADIO CDRP., 57 State St., Newark, N. J.—ED, EW, P

PHILCD RADID & TELEVISION CDRP., Tioga & C Sts., Philadelphia, Pa.—ED, EW, M, P



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Bought with CONFIDENCE

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Eliminating man-made interference, appliance noises and other power line disturbances.

It is our policy to create economical quality products. We manufacture an extensive variety of radio condensers, of all types and sizes, and specialize on the ones used by service men.

You may purchase Atlas condensers in the usual manner or in kits containing assortments of popular sizes. Five standard kits are available. In addition, special assortments can be supplied on request. Every kit saves you money.

Our Clear-a-Tone Filter (Model AFB shown above) is an effective, scientifically constructed filter with a wide market, a low price and a good margin for service man and dealer.

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ATLAS CONDENSER PRODUCTS CO.
548 Westchester Ave.
NEW YORK, N. Y.



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THE POTTER CO., 1950 Sheridan Rd., North Chicago, Ill., "Potter"—ED, I, P, T
RCA FARADON—RCA Mfg. Co.
RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA," "RCA Faradon"—C, M, P, T
SANGAMO ELECTRIC CO., Springfield, Ill., "Sangamo"—M, T
SEALDTITE—Solar Mfg. Corp.
SEVISION MAGNETO ENG. CO., 379 Phillips Ave., Toledo, Ohio—P
F. W. SICKLES CO., P. O. Box 920, Springfield, Mass., "SilverCap"—M (silvered mica)
SILVERCAP—F. W. Sickles Co.
SOLAR MFG. CORP., Bayonne, N. J., "Solar," "Domino," "Sealdtite," "Tom Thumb," "Transoil," "Transmica," "Minicap," "Little Giant"—ED, EW, I, M, P, PF, PO, T
SPRAGUE PRODUCTS CO., N. Adams, Mass., "Sprague 600 Line," "Atoms"—ED, EW, I, M, P, T, TC
STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y.—P
TELERADIO ENGINEERING CORP., 484 Broome St., New York, N. Y., "Telradio"—M, TC
TILTON ELECTRIC CORP., 15 E. 26th St., New York, N. Y., "Ex-Stat"—ED, EW, P
TOM THUMB—Solar Mfg. Corp.
TRANSMICA—Solar Mfg. Corp.
TRANSOIL—Solar Mfg. Corp.

CAPACITORS, VARIABLE



Air trimmer A
Mica trimmer M
Receiver tuning RT
Transmitting tuning TT

AIRPLANE & MARINE DIRECTION FINDER CORP., Clearfield, Pa.—A, RT, TT
ALDEN PRODUCTS CO., 715 Center St., Brockton, Mass., "Na-Ald"—M, RT
AMERICAN STEEL PACKAGE CO., Squire Ave., Defiance, Ohio, "Defiance"—RT
AUTOMATIC WINDING CO., INC., 900 Passaic Ave., East Newark, N. J.—A, M
BARKER & WILLIAMSON, Ardmore, Pa.—TT
BROWNING LABORATORIES, INC., 750 Main St., Winchester, Mass.—RT, TT
BUD RADIO, INC., 5205 Cedar Ave., Cleveland, Ohio, "Bud"—A, M, RT, TT
ALLEN D. CARDWELL MFG. CORP., 81 Prospect St., Brooklyn, N. Y.—A, RT, TT
CERAMICON—Eric Resistor Corp.
DEFIANCE—American Steel Package Co.
DE WALD RADIO MFG. CORP., 436 Lafayette St., New York, N. Y.—A, RT
DOOLITTLE & FALKNER, INC., 7421 S. Loomis Blvd., Chicago, Ill.—TT
D-X RADIO PRODUCTS CO., 1575 Milwaukee Ave., Chicago, Ill.—M
ELECTRO MOTIVE MFG. CO., INC., So. Park & John Sts., Willimantic, Conn., "Elmenco"—M
ELMENCO—Electro Motive Mfg. Co., Inc.
ERIE RESISTOR CORP., 640 W. 12th St., Erie, Pa., "Ceramicon"—M
GENERAL INSTRUMENT CORP., 829 Newark Ave., Elizabeth, N. J., "G.I."—RT
GENERAL RADIO CO., 30 State St., Cambridge, Mass., "G-R"—Special purpose
GENERAL WINDING CO., 254 W. 31st St., New York, N. Y., "Gen-Win"—A, M
GEN-WIN—General Winding Co.
G. I.—General Instrument Corp.
G-R—General Radio Co.
E. I. GUTHMAN, INC., 400 S. Peoria St., Chicago, Ill., "Guthman"—A, M
HAMMARLUND MFG. CO., INC., 424 W. 33rd St., New York, N. Y.—A, M, RT, TT
HEINTZ & KAUFMAN, LTD., South San Francisco, Calif.—TT (compressed gas filled)
HK—Heintz & Kaufman, Ltd.
ICA—Insuline Corp. of America
INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—A, M, RT, TT
E. F. JOHNSON, Waseca, Minn., "Johnson"—TT
P. R. MALLORY & CO., 3029 E. Washington St., "Mallory"—M
MEISSNER MFG. CO., 7th & Belmont Sts., Mt. Carmel, Ill., "Meissner"—A, M, RT
JAMES MILLEN MFG. CO., INC., 150 Exchange St., Malden, Mass.—A, M, RT, TT
J. W. MILLER CO., 5917 S. Main St., Los Angeles, Calif., "Miller"—A, M
THE MUTER CO., 1255 South Michigan Ave., Chicago, Ill., "Muter"—M

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For permanence of calibration and precision in setting combined with high electrical efficiency, National Condensers are without peer in the communications field. Their compactness and low losses make them ideal for high frequency work. They are available in a variety of types, of which the PW-4 is illustrated above.



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National IF Transformers employ air dielectric condensers for tuning both primary and secondary. Coils are air core litz-wound honeycombs, with iron dust cores optional. Similar units are available for use as fixed channel TRF amplifiers for high fidelity reception.



LOW-LOSS SOCKETS

National low loss sockets are representative of a complete line of HF parts, ranging from RF chokes to cabinets. The socket illustrated above, Type CIR, features low loss ceramic insulation, a cantact that grips the tube prong for its entire length and a metal ring for six-position mounting.



COMMUNICATION RECEIVERS

National Communication Receivers are built to the highest standards of performance for use in the most exacting communication services. Illustrated above is the HRO Receiver, with frequency range from 50 KC to 30 MC. National Receivers and parts are described in detail in the National Catalogue No. 400.

NATIONAL COMPANY, INC.
MALDEN, MASS.

NA-ALD—Alden Products Co.
 NATIONAL COMPANY, 61 Sherman St., Malden,
 Mass., "National"—A, M, RT, TT
 PHILCO RADIO & TELEVISION CORP., Tlaga & C
 Sts., Philadelphia, Pa.—M, RT
 RADIC CONDENSER CO., Davls St., & Copewood
 Ave., Camden, N. J., "R.C.C."—RT
 RCA FARADON—RCA Mfg. Co.
 RCA MFG. CO., Front & Cooper St., Camden, N. J.,
 "RCA," "RCA Faradon"—A, M, RT
 R.C.C.—Radio Condenser Co.
 RELIANCE DIE & STAMPING CO., 1260 Clybourn
 Ave., Chicago, Ill., "Reliance"—RT
 F. W. SICKLES CO., 165 Front St., Chicopee, Mass.
 —A, M
 SOLAR MFG. CORP., Bayonne, N. J., "Solar"—M
 TELERADIO ENGINEERING CORP., 484 Broome St.,
 New York, N. Y., "Teleradio"—A, M

CRYSTALS



Amateur A
 Blanks BL
 Broadcast B
 Frequency Std F
 Holders H
 I. F. Filter S
 Temp. control ovens T

ALLIED RADIO CORP., 833 W. Jackson Blvd., Chi-
 cago, Ill., "Knight"—A
 AMERICAN LAVA CORP., Cherokee Blvd. & Manufac-
 turers Rd., Chattanooga, Tenn.—H
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 bridge, Mass., "Harvey"—A, B
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 ICA—Insuline Corp. of America
 INSULINE CORP. OF AMERICA, 30-30 Northern
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 RCA MFG. CO., Front & Cooper Sts., Camden, N. J.,
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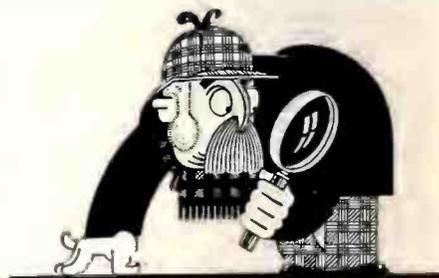
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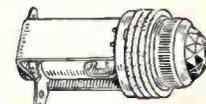
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AMERICAN PHENOLIC CORP., 1250 Van Buren St., Chicago, Ill., "Amphenol"—C, GC, G, P, T, WF
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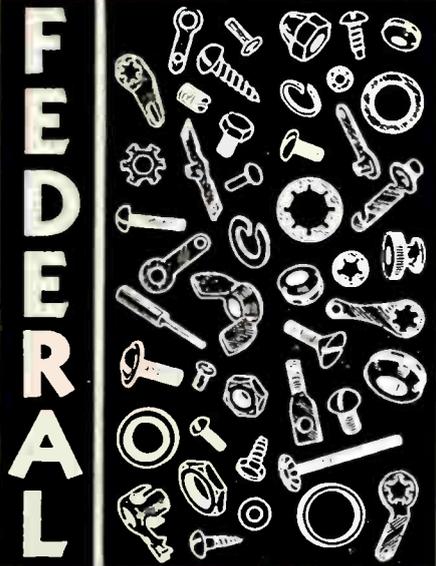
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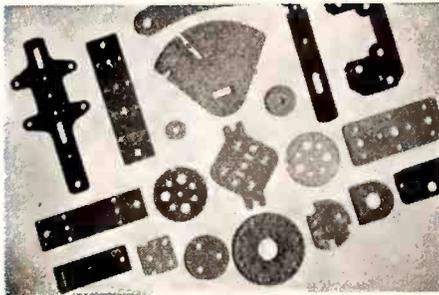
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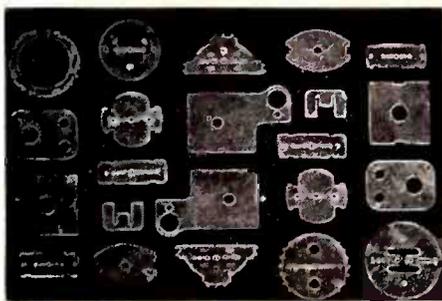
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| Fibre | F |
| Fibre-glass | FG |
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| Mica | M |
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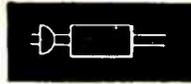
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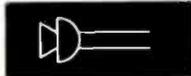
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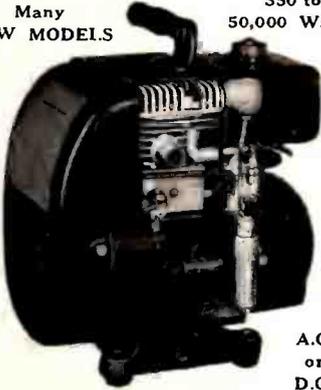
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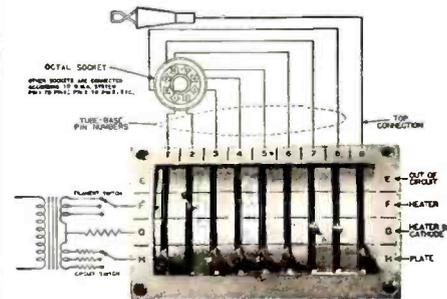
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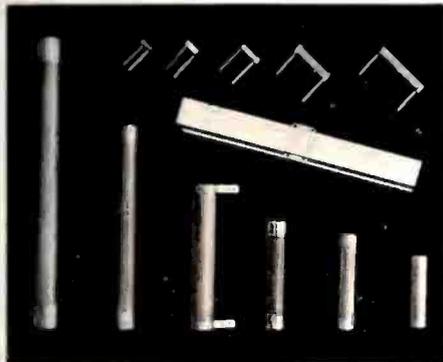
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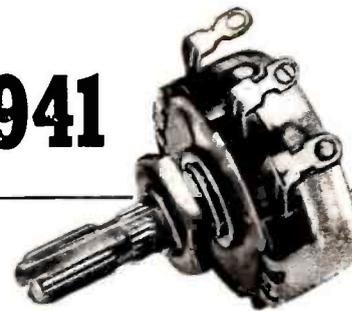
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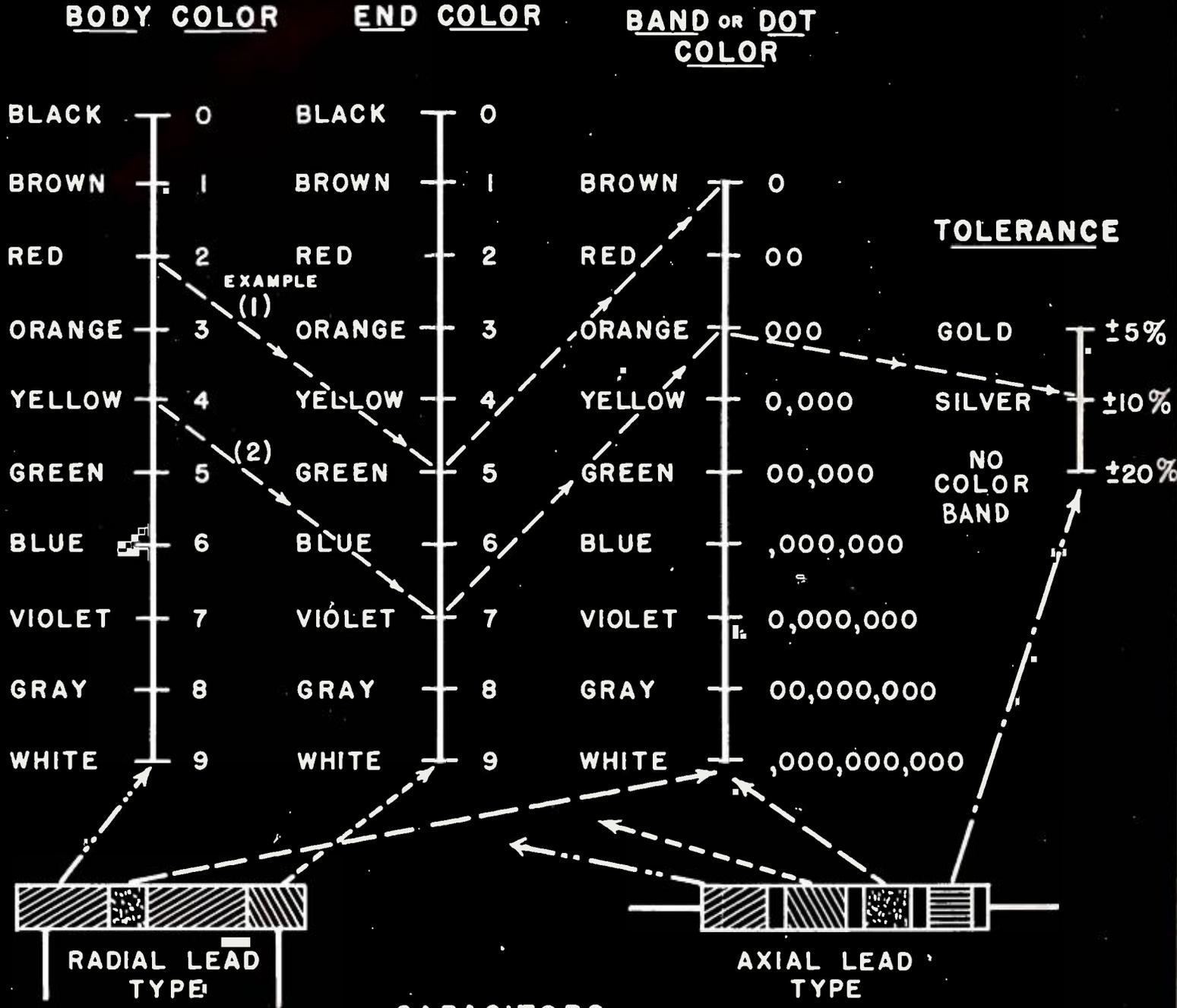
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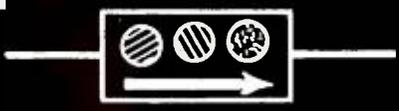


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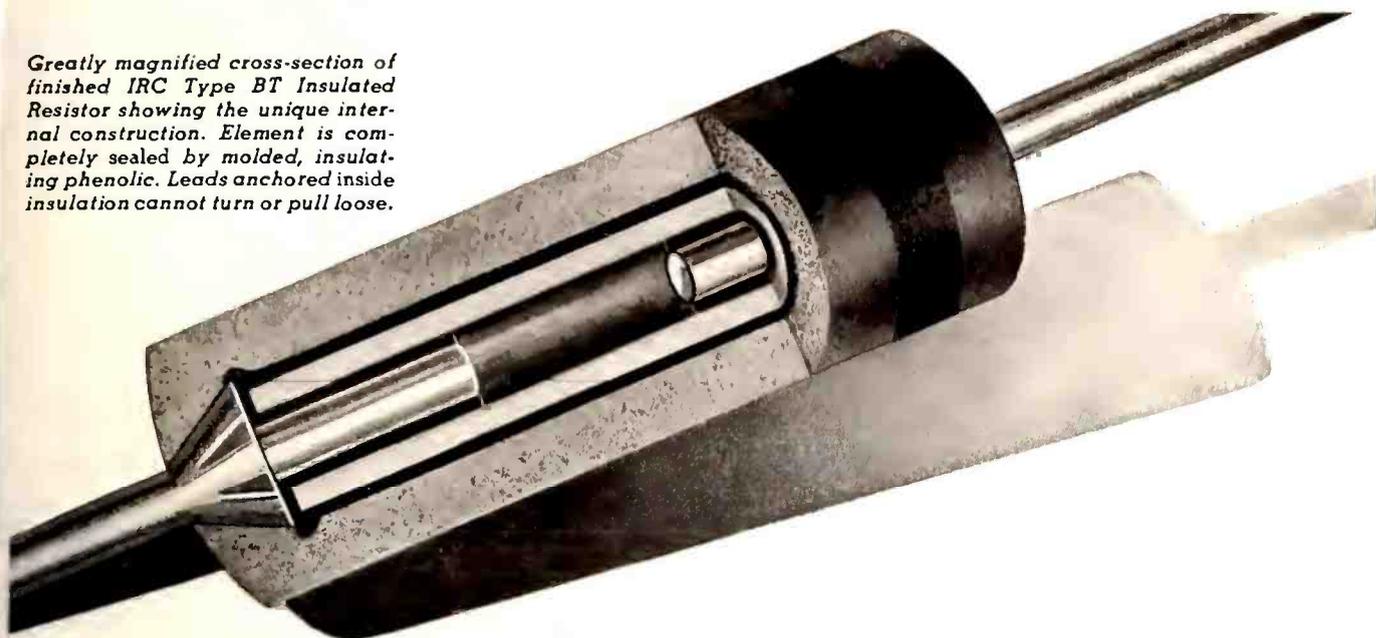
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RADIO TODAY

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RED, GREEN, BROWN.
= 250 MMFD.
0.00025 MFD.

EXAMPLE 2.
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The IRC Insulated Resistor was designed from the ground up for what it is — an integral, scientifically constructed unit offering a new and distinctly different approach to resistance engineering problems.

IRC resistor insulation did not come in the nature of an afterthought. It did not come as something added to an old

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IRC insulation is far more than an insulator. It assures humidity characteristics hitherto unobtained. It facilitates rapid, low cost resistor manufacture. It anchors the leads. It seals the unit from end to end. Above all, it simplifies and modernizes the use of an exclusive resistance principle that has proved its superiority since the early days of Radio—the famous filament type of resistance element.

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1. A glass tube continuously drawn with utmost precision to the size of a small pencil lead, is the beginning of an IRC Type BT Insulated Resistor.

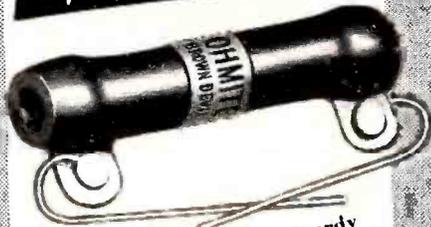
2. The tube is coated with a Metallized filament type resistance material permanently bonded to its outer surface and stabilized by a baking process.

3. Special leads have enclosed, positive contact to element which cannot open. Leads inserted *inside* element tube draw heat rapidly out of the resistor.

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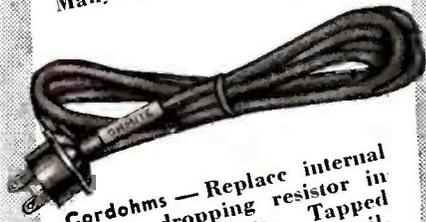
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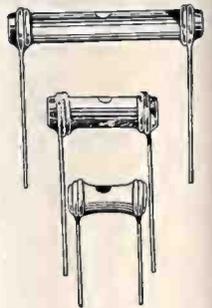
AMERICAN CYNAMID CO., 30 Rockefeller Plaza, New York, N. Y. (Beetleware)
BAKELITE CORP., 30 E. 42nd St., New York, N. Y., "Bakelite"—C, PH, P
BUD RADIO, INC., 5205 Cedar Ave., Cleveland, Ohio, "Bud"—Lucite
CARBIDE & CARBON CHEMICALS CORP., 30 E. 42nd St., New York, N. Y., "Vinylite"
CATALIN CORP., 1 Park Ave., New York, N. Y. (Catalin)
CELLULOID CORP., 180 Madison Ave., New York, N. Y., "Lumarith"—C
CRYSTALLITE—Rohm & Haas Co.
DOW CHEMICAL CO., Midland, Mich., "Ethocel"
E. I. DUPONT DE NEMOURS & CO., INC., Plastics Dept., 626 Schuyler Ave., Arlington, N. J.—Lucite
DUREZ PLASTICS & CHEMICALS, INC., North Tonawanda, N. Y., "Durez"—PH
ETHOCEL—Dow Chemical Co.
GENERAL ELECTRIC CO., Schenectady, N. Y., "Textolite"
HERCULES POWDER CO., 916 Market St., Wilmington, Del.—C
INSUROK—Richardson Co.
LUCITE—E. I. Dupont de Nemours & Co., Inc.
LUMARITH—Celluloid Corp.
MARBELETTE CORP., 37-21 30th St., Long Island City, N. Y.
MONSANTO CHEMICAL CO., Plastics Div., Springfield, Mass.

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RESISTORS

and Volume Controls
SPECIFIED
by leading set manufacturers
PREFERRED
by experienced servicemen

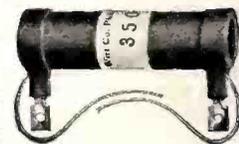
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Wound on ceramic tubes. Protected by either Vitreous enamel, Phenocote or Baked enamel. Stock sizes, 5-10-20-50 watts rating. Any size up to 300 watts made on order.

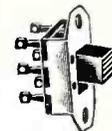
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RESISTORS



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Single Pole, Double Throw
Double Pole, Single Throw
Double Pole, Double Throw

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National Trade Show**
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MARCH, 1941

PLASTICS—Cont.

NATIONAL VULCANIZED FIBRE CO., Wilmington, Del., "Phenolite"—PH
PHENOLITE—National Vulcanized Fibre Co.
PLASKON CO., 2121 Sylvan Ave., Toledo, Ohio
PLEXIGLASS—Kohm & Haas Co.
RICHARDSON CO., 27th & Lake Sts., Melrose Park, Ill., "Insitrok"
ROHM & HAAS CO., 222 W. Washington Sq., Philadelphia, Pa. "Plexiglass," "Crystallite"
TENITE—Tennessee Eastman Corp.
TENNESSEE EASTMAN CORP., Kingsport, Tenn., "Tenite"
TEXTOLITE—General Electric Co.
VINYLITE—Carbide & Carbon Chemicals Corp.

**ELECTRONIC MUSICAL
INSTRUMENTS, CHIMES, ETC.**



Bells & Chimes BC
Organs O
Pianos P
String Instruments S
Tuning devices T

ANSLEY RADIO CORP., 4377 Bronx Blvd., New York, N. Y., "Dynamophone"—P
CLARION—Transformer Corp. of America
DYNAPHONE—Ansley Radio Corp.
EPIPHONE, INC., 142 W. 14th St., New York, N. Y.—S
EVERETT PIANO CO., South Haven, Mich., "Orgatron"—O
FRETTED INSTRUMENT MFG., INC., 87 Ferry St., THE JOHN GABEL MFG. CO., 1200 W. Lake St., Chicago, Ill.

GIBSON, INC., 219 Parsons St., Kalamazoo, Mich.—S
GULBRANSEN CO., 816 N. Kedzie St., Chicago, Ill.—O
SEBASTIAN GUNDLING & SONS, W. Lancaster, Pa.—O
HAMMOND INSTRUMENT CO., 2987 N. Western Ave., Chicago, Ill., "Novachord," "Solovox"—O
HARDMAN, PECK & CO., 33 W. 57th St., New York, N. Y., "Alhupiano"—P
THE HARMONY CO., 1742 N. Lawndale Ave., Chicago, Ill.—S
CHARLES JACK MFG. CORP., 120 Lehigh St., Allentown, Pa.—BC
KRAKAUER BROS., Cypress Ave. & 136th St., New York, N. Y.—P
MIESSNER INVENTIONS, INC., 18 Main St., Millburn, N. J.—Licensee and patent development
MINIPIANO—Hardman, Peck & Co.
NATIONAL DOBRO CORP., 400 S. Peoria St., Chicago, Ill., "National," "Supro"—S
NOVACHORD—Hammond Instrument Co.
ORGATRON—Everett Piano Co.
PACKARD BELL RADIO CO., 1320 S. Grand Ave., Los Angeles, Calif.—P
RANGERTONE, INC., 201 Verona Ave., Newark, N. J.—BC
RCA MFG. CO., Front & Cooper St., Camden, N. J.—BC
MARK SIMPSON DISTR. CO., 186 W. 41st St., New York, N. Y.—Pickups for musical instruments
SOLOVOX—Hammond Instr. Co.
STORY & CLARK PIANO CO., 64 E. Jackson Blvd., Chicago, Ill., "Storytone"—P
SUNDT ENGINEERING CO., 4757 Ravenswood Ave., Chicago, Ill.—Amplified Carillons
SUPRO—National Dobro Corp.
TRANSFORMER CORP. OF AMERICA, 69 Wooster St., New York, N. Y., "Clarion"—BC
THE VEGA CO., 155 Columbus Ave., Boston, Mass.—S
VIVI-TONE CO., 6321 Gratiot Ave., Detroit, Mich.—P, S
WINTER & CO., 849 E. 141st St., New York, N. Y.—P
RUDOLPH WURLITZER CO., Niagara Falls Blvd., N. Tonawanda, N. Y.—P

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Substitutes
imitate Recoton
in looks but
not in
action

Be sure they're

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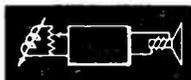
PHOTO ELECTRIC EQUIPMENT



| | |
|-------------------------------|----|
| Photo tubes, gas | PG |
| Photo tubes, vacuum | PV |
| Photo cells | PC |
| Relays | R |
| Light supplies | L |
| Complete units | EE |

- ADVANCE ELECTRIC CO., 1260 W 2nd St., Los Angeles, Calif.—R
 AMPEREX ELECTRONIC PRODS. CORP., 79 Washington St., Brooklyn, N. Y., "Amperex"—PC
 BRADLEY LABS., INC., 82 Meadow St., New Haven, Conn., "Luxtron"—PC
 CONTINENTAL ELECTRIC CO., Geneva, Ill.—PV, PC
 DE VRY CORP., 111 Armitage Ave., Chicago, Ill.—PC, L
 HUGH H. EBY, INC., 4700 Stenton Ave., Philadelphia, Pa.—PC, R, EE
 ELECTRONIC PRODS. CO., St. Charles, Ill.—PG, R, EE
 GENERAL ELECTRIC CO., Schenectady, N. Y.—PC, R, L
 GUARDIAN ELECTRIC MFG. CO., 1621 W. Walnut St., Chicago, Ill.—R
 LUXTRON—Bradley Labs., Inc.
 MICRO SWITCH CORP., Spring St., Freeport, Ill.—R
 NATIONAL UNION RADIO CORP., 57 State St., Newark, N. J.—PC
 PHOTO BELL CORP., 123 Liberty St., New York, N. Y.—EE
 PHOTRONIC—Weston Electrical Instrument Corp.
 POTTER & BRUMFIELD MFG. CO., Princeton, Ind.—R
 RCA MFG. CO., Front and Cooper Sts., Camden, N. J.—PG, PV, R, EE
 STRUTHERS DUNN, INC., 1315 Cherry St., Philadelphia, Pa.—R
 UNITED CINEPHONE CORP., Torrington, Conn.—R, EE
 VACUTRON, INC., 2819 12th St., Arlington, Va.—PC
 WESTERN ELEC. CO., 300 Central Ave., Kearny, N. J.—PC
 WESTON ELECTRICAL INSTRUMENT CORP., 614 Freelinghysen Ave., Newark, N. J., "Photronic"—PC
 WORNER PRODS. 1019 W. Lake St., Chicago, Ill.—EE, L

RECORDS & PLAYING EQUIPMENT



| | |
|--|-----|
| Automatic record changers | ARC |
| Electric phonographs | EL |
| Motors | M |
| Needles | N |
| Needles, sapphire | SN |
| Pick-ups (crystal) | PC |
| Dynamic pickups | D |
| Pick-ups (magnetic) | PM |
| Records | R |
| Record albums | RA |
| Record cabinets | RC |
| Record catalog service | RS |
| Record compounds | RO |
| Record player attachments | RP |
| Store equipment | SE |
| Transcription record players | TR |
| Turntables | TT |
| Wireless players | WP |
| Coin record players | CM |

- ACA—Amplifier Co. of America
 H. W. ACTON CO., INC., 370 7th Ave., New York, N. Y., "Actone"—N
 ACTONE—H. W. Acton Co., Inc.
 ADLER MFG. CO., 2901 W. Chestnut St., Louisville, Ky.—RC
 ALLIANCE MFG. CO., Alliance, Ohio—M, TT
 ALLIED ENGINEERING INSTITUTE, 85 Warren St., New York, N. Y.—Phono oscillators
 ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill., "Knight"—EL, RP, TR, WP
 AMERICAN COMMUNICATIONS CORP., 123 Liberty St., New York, N. Y.—EL, RP, WP

- AMPLIFIER CO. OF AMERICA, 17 W. 20th St., New York, N. Y., "ACA"—EL, TR
 ANDREA RADIO CORP. 4820 48th Ave., Woodside, L. I., N. Y.—EL
 ANSLEY RADIO CORP., 4377 Bronx Blvd., New York, N. Y., "Dynaphone"—EL, RC, RP, TR
 ARROW RADIO CO., 900 W. Jackson Blvd., Chicago, Ill., "Audovox"—EL, RP
 ASTATIC MICROPHONE LABORATORY, 830 Market St., Youngstown, Ohio, "Astatic"—PC
 AUDAK CO., 500 Fifth Ave., New York, N. Y., "Audax"—PM
 AUDAX—Audak Co.
 AUDIO DEVICES, INC., 1600 Broadway, New York, N. Y., "Audopoint"—N, SN
 AUDOVOX—Arrow Radio Co.
 AUTOCRAT RADIO CO., 3855 N. Hamilton Ave., Chicago, Ill., "Autocrat"—EL, M, PC
 BANK'S MFG. CO., 5019 N. Winthrop Ave., Chicago, Ill.—EL
 BELFONE—Bell Sound Systems, Inc.
 BELL SOUND SYSTEMS, INC., 1183 Essex Ave., Columbus, Ohio, "Belfone"—ARC, EL, RP, TR, TT
 A. BITTER CONSTRUCTION CO., 27-01 Bridge Plaza N., Long Island City, N. Y.—RC, SE
 BLUEBIRD—RCA Mfg. Co.
 DAVID BOGEN CO., INC., 663 Broadway, New York, N. Y.—ARC, EL, M, PC, PM, TT



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 . . . Can you place 6 to 10 records in the customers' hands in about ten seconds flat?
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J. W. MILLER CO., 5917 S. Main St., Los Angeles, Calif., "Miller"—WP
 MILLS NOVELTY CO., 4100 Fullerton Ave., Chicago, Ill.—CM
 MIRACLE POINT—M. A. Gerett Corp.
 MIRROR RECORD CORP., 58 W. 25th St., New York, N. Y.—N, TR, TT
 MOTOROLA—Galvin Mfg. Corp.
 MUSICAL TOWER—Sundt Engineering Co.
 MUSICRAFT RECORDS, INC., 242 W. 55th St., New York, N. Y., "Duralite"—N, R, RA, RO
 MUSIC MASTER MFG. CO., 508 S. Dearborn St., Chicago, Ill.—ARC, EL, N, SE, TR, WP
 OKEH—Columbia Recording Corp.
 OPERADIO MFG. CO., 13th & Indiana Sts., St. Charles, Ill., "Operadio"—EL
 PACENT ENGINEERING CORP., 79 Madison Ave., New York, N. Y., "Pacent"—ARC, EL, M, PM, TT
 PAN-AMERICAN RECORD CO., 705 S. 1st St., Louisville, Ky.—EL, R, RA, TR
 PEERLESS ALBUM CO., INC., 38 W. 21st St., New York, N. Y.—RA, N
 PERMO POINT—Permo Products Corp.
 PERMO PRODUCTS CORP., 6415 Ravenswood Ave., Chicago, Ill., "Permo Point"—N, R, TR
 PFANSTIEHL CHEMICAL CO., 105 Lakeview, Waukegan, Ill.—N
 PHILCO RADIO & TELEVISION CORP., Tioga & C Sts., Philadelphia, Pa.—WP
 PHILHARMONIC RADIO CO., 21 W. 45th St., New York, N. Y.—EL
 PHONOGRAPH NEEDLE MFG. CO., INC., 42 Dudley St., Providence, R. I., "Supreme"—N
 PRESTO RECORDING CORP., 242 W. 55th St., New York, N. Y., "Presto"—EL, M, N, PM, R, TR, TT
 B. A. PROCTOR CO., INC., 230 Park Ave., New York, N. Y.—PM, RC, TR, TT
 RADIOTONE, INC., 7356 Melrose Ave., Hollywood, Calif.—PC, TR, TT
 RADOLEK CO., 601 W. Randolph St., Chicago, Ill., "Radolek"—EL, RP, TR, WP
 RALSTON RECORD CO., 112 Cedar Ave., Pitman, N. J., "Ralston radio code course"—R

RANGERTONE, INC., 201 Verona Ave., Newark, N. J.—N
 RAY LAB, INC., 211 Railroad Ave., Elmira, N. Y., "Ray Lab"—TR (for silent film)
 RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA," "Victor," "Bluebird"—ARC, EL, M, N, PC, PM, R, RA, RC, RP, TR, TT, WP
 RECORD REVIEWERS, 2440 Lakeview Ave., Chicago, Ill.—RS
 RECORDAID—Alex. A. Gettlin
 RECOTON CORP., 42 W. 15th St., New York, N. Y.—N
 REGAL AMPLIFIER MFG. CORP., 14 W. 17th St., New York, N. Y.—ARC, EL, R, RP, TR, WP
 REMLER CO., LTD., 2101 Bryant St., San Francisco, Calif., "Remler"—TR
 ROCK-OLA MFG. CORP., 800-867 N. Kedzie Ave., Chicago, Ill.—CM, ARC
 SCHLOSS BROS. CORP., 801 E. 135th St., New York, N. Y.—RC
 J. P. SEEBURG CORP., 1510 N. Dayton St., Chicago, Ill.—CM
 SHURE BROS., 225 W. Huron St., Chicago, Ill., "Zephyr"—PC
 SILLCOX RADIO & TELEVISION CORP., 60 Wall Tower, New York, N. Y.—ARC, EL
 MARK SIMPSON DISTR. CO., 186 W. 4th St., New York, N. Y.—ARC, EL, RP, TR, WP
 HERMAN SMITH, 180 Lafayette St., New York, N. Y.—N
 MAXWELL SMITH CO., 1027 N. Highland Ave., Hollywood, Calif.—TR
 SONORA RADIO & PHONOGRAPH CORP., 2626 W. Washington St., Chicago, Ill., "Sonora"—EL, RP
 SONATA PHONO. MFG. CO., INC., 410 E. 32nd St., New York, N. Y.—EL, WP
 SOUND APPARATUS CO., 150 W. 46th St., New York, N. Y.—EL, M, N, PM, R, TR, TT
 SPARKS-WITHINGTON CO., E. Ganson Ave., Jackson, Mich., "Sparton"—WP
 SPARTON—Sparks-Withington Co.
 SPEAK-O-PHONE RECORDING & EQUIPMENT CO., 23 W. 60th St., New York, N. Y., "Speakophone"—EL, N, PC, TR, TT
 STANGARD PRODS. CO., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y.—N, RP

STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y., "Stromberg-Carlson"—ARC, RP
 SUNDT ENGINEERING CO., 4757 Ravenswood Ave., Chicago, Ill.—ARC, R (Musical tower)
 SUPREME—Phonograph Needle Mfg. Co., Inc.
 TALK-A-PHONE MFG. CO., 1219 W. Van Buren St., Chicago, Ill.—ARC, EL, RP, WP
 TALKING DEVICES CO., 4451 Irving Park Blvd., Chicago, Ill.—ARC, R, TT
 TONK MFG. CO., 1912 N. Magnolia Ave., Chicago, Ill.—RC
 TRANSFORMER CORP. OF AMERICA, 69 Wooster St., New York, N. Y., "Clarion"—ARC, EL, RC, RP, TR, TT, WP
 TROY RADIO & TELEVISION CO., 1144 S. Olive St., Los Angeles, Calif.—EL, RP, WP
 TUNNIS BROS., 726 Lake St., Oak Park, Ill.—Record Index Systems
 UNITED CINEPHONE CORP., Sound Equip. Div., Torrington, Conn., "United Cinephone"—PM, TR, TT
 UNIVERSAL MICROPHONE CO., Inglewood, Calif.—M, N, PC, PM, R, TR, TT
 VICTOR—RCA Mfg. Co.
 WABASH CABINET CO., Wabash, Ind.—RC
 WALCO—Electrovox Co.
 J. J. WARNER CO., 1244 Larkin St., San Francisco, Calif.—R, TR, TT
 WATERS-CONLEY CO., Rochester, Minn.—EL, RC, RP, TR
 WEBSTER-CHICAGO, 5622 Bloomingdale Ave., Chicago, Ill.—ARC, EL, M, PM, RP, TT
 WEBSTER ELECTRIC CO., Racine, Wis., "Webster-Electric"—PC, PM
 WESTERN ELEC. CO., 300 Central Ave., Kearny, N. J.—EL, PM, TR
 WESTERN SOUND & ELECTRIC LABS, INC., 311 W. Kilibourn Ave., Milwaukee, Wis.—N
 WILCOX ELECTRIC CO., INC., 4014 State Line, Kansas City, Kans.—RC
 WILCOX-GAY CORP., Charlotte, Mich.—N, R, RA, WP
 RUDOLPH WURLITZER MFG. CO., North Tonawanda, New York—CM
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 ZEPHYR—Shure Brns.



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- Easily equalized for various recording characteristics.
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CABINETS



Carrying bags CB
 Cloth covered CC
 Console (wood) C
 Metal M
 Plastic (see plastic molders)
 Portable P
 Rawhide R
 Table (wood) T

ADLER MFG. CO., 2901 W. Chestnut St., Louisville, Ky.—C, T
 AMERICAN COMMUNICATIONS CORP., 123 Liberty St., New York, N. Y.—M, T
 AMERICAN RADIO HARDWARE CO., 476 Broadway, New York, N. Y.—"Arhco"—M
 ANSLEY RADIO CORP., 4377 Bronx Blvd., New York, N. Y.—"Dynamophone"—C, T
 ARCADIA—Wells-Gardner & Co.
 ARHCO—American Radio Hardware Co.
 BELL SOUND SYSTEMS, INC., 1183 Essex Ave., Columbus, Ohio—CC, M, P
 BUD RADIO, INC., 5205 Cedar Ave., Cleveland, Ohio, "Bud"—M
 CASTLEWOOD MFG. CO., INC., 12th & Burnett Sts., Louisville, Ky.—C, T
 CASWELL-RUNYAN CO., Huntington, Ind.—C, T
 CHICAGO NOVELTY FURNITURE CO., 1750 N. Campbell Ave., Chicago, Ill.—C
 CHURCHILL CABINET CO., 2119 W. Churchhill St., Chicago, Ill.—C, T
 DYNAPHONE—Ansley Radio Corp.
 ERIE CAN CO., 816 Erie St., Chicago, Ill.—M
 FLOCK PROCESS CORP., 17 W. 31st St., New York, N. Y.—Flock covered
 ROBERT M. HADLEY CO., 711 E. 61st St., Los Angeles, Calif.—"Hadley"—M, P
 ICA—Insuline Corp. of America
 ILLINOIS CABINET CO., Rockford, Ill.—CC, C, P, T
 ILLINOIS WOOD PRODUCTS CORP., 2512 S. Damen Ave., Chicago, Ill.—C, T
 INGRAHAM CO., Bristol, Conn.—C, T
 INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y.—"ICA"—M
 LE FEBURE CORP., 716 Oakland Blvd., Cedar Rapids, Iowa—M
 LINCROPHONE CO., 1661 Howard Ave., Utica, N. Y.—P
 J. W. MILLER CO., 5917 S. Main St., Los Angeles, Calif.—M
 NATIONAL CO., INC., 61 Sherman St., Malden, Mass.—M
 PAR METAL PRODUCTS CORP., 32-02 49th St., Long Island City, N. Y.—"Par-Met"—M
 RADIOTONE, INC., 7356 Melrose Ave., Hollywood, Calif.—C, P
 MARK SIMPSON DISTR. CO., 186 W. 4th St., New York, N. Y.—(C, C, P)
 SONATA PHONO MFG. CO., INC., 410 E. 32nd St., New York, N. Y.—T
 STEGER FURNITURE MFG. CO., Steger, Ill.—C, T
 TILLOTSON CABINET CO., 1775 Broadway, New York, N. Y.—C, T
 WATERS-CONLEY CO., Rochester, Minn.—CC, P
 WATTERSON RADIO MFG. CO., Dallas, Texas—C, T
 WELLS-GARDNER & CO., 2701 N. Kildare Ave., Chicago, Ill.—"Arcadia"—C, P, T
 WILCOX ELECTRIC CO., INC., 4014 State Line, Kansas City, Kans.—M
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 Metallic MC
 Motor generator MG
 Power line (home) PH
 Power line (service station) PS
 Vacuum tube VC
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| Chrome Steel | Taper-Tone |
| (100% shadowgraphed) | (two sized shank) |
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 ATR—American Television & Radio Corp.
 BATTERY BOOSTERS—The Benwood Linze Co.
 B-L—The Benwood Linze Co.
 THE BENWOOD LINZE CO., 1832 Washington Ave., St. Louis, Mo., "B-L," "Battery Boosters"—MC, PH
 BRIGGS & STRATTON CORP., 2711 No. 13th St., Milwaukee, Wis., "Briggs & Stratton"—G
 CARTER MOTOR CO., 1608 Milwaukee Ave., Chicago, Ill.—MG
 EICOR, INC., 1060 W. Adams St., Chicago, Ill., "Utilite"—G, MG
 ELECTRICAL PRODUCTS CO., 6535 Russell St., Detroit, Mich.—G, PH, W
 FOWLER ENGINE MFG. CO., Kokomo, Ind.—G
 GENERAL ELECTRIC CO., W. Lynn, Mass.—MC, MG, PH, PS, VC
 HETRO ELECTRICAL INDUSTRIES, INC., 4611 Ravenswood Ave., Chicago, Ill.—G, PH, W
 JANETTE MFG. CO., 556 W. Monroe St., Chicago, Ill.—MG

KATO ENGINEERING CO., 727 S. Front St., Mankato, Minn., "Kato"—G, MG, W
 KNIGHT—Allied Radio Corp.
 LAUREHK RADIO MFG. CO., 3918 Monroe Ave., Wayne, Mich., "Laurehk"—VC
 THE LAUSON CO., New Holstein, Wis.—G
 P. R. MALLORY & CO., 3029 E. Washington St., Indianapolis, Ind., "Mallory"—PH
 MIDCO MFG. & DIST. CO., INC., S. 13 & Kentucky Ave., Sheboygan, Wis.—G
 MONTGOMERY WARD & CO., 619 W. Chicago Ave., Chicago, Ill.—G, PH, PS, VC, W
 D. W. ONAN & SONS, 43 Royalton Ave., Minneapolis, Minn.—G
 PINCOR—Pioneer Gen-E-Motor Corp.
 PIONEER GEN-E-MOTOR CORP., 466 W. Superior St., Chicago, Ill., "Pincor"—G, W
 RAYTHEON MFG. CO., 190 Willow St., Waltham, Mass., "Recticharger"—PS
 RECTICHARGER—Raytheon Mfg. Co.
 SILLCOX RADIO & TELEVISION CORP., 60 Wall Tower, New York, N. Y.—G, PH, PS, W
 SKAGGS TRANSFORMER CO., 5894 Broadway, Los Angeles, Calif.—PH, PS, VC
 STANCOR—Standard Transformer Corp.

STANDARD TRANSFORMER CORP., 1500 N. Halsted St., Chicago, Ill., "Stancor"—PS
 STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y., "Stromberg-Carlson"—PH
 TECHNICAL PRODUCTS INTERNATIONAL, 135 Liberty St., New York, N. Y., "Technipower"—G, W
 TECHNIPOWER—Technical Products International
 UTILITE—Elcor, Inc.
 WEBSTER ELECTRIC CO., Racine, Wis., "Webster Electric"—VC
 WILLARD STORAGE BATTERY CO., 246 E. 131st St., Cleveland, Ohio, "Willard"—PS
 WINCHARGER CORP., Sioux City, Iowa—W
 WIND-IMPELLER ELECTRIC WORKS, Ellsworth, Iowa—W

RECORDING EQUIPMENT AND BLANKS

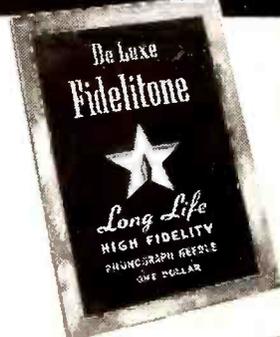


| | |
|-----------------------------------|----|
| Cutting heads | CH |
| Discs (blank) | D |
| Equalizers | E |
| Magnetic tape recorders | MT |
| Motors | M |
| Needles (cutting) | CN |
| Recording machines | RM |
| Recording machine assem | RA |
| Recording supplies | RS |
| Screws | S |
| Stroboscopic speed disc | ST |
| Turntables | TT |

H. W. ACTON CO., INC., 370 7th Ave., New York, "Actone"—CN
 ACTONE—H. W. Acton Co., Inc.
 AIR KING PRODUCTS CO., INC., 1523 63rd St., Brooklyn, N. Y., "Air King"—RM
 ALLIANCE MFG. CO., Alliance, Ohio—M, TT
 ALLIED RECORDING PRODUCTS CO., 21-09 43rd Ave., Long Island City, N. Y.—CH, D, M, CN, RM, RS, S, TT
 ARROW RADIO CO., 900 W. Jackson Blvd., Chicago, Ill., "Audovox"—D, CN, RM, RS
 AUDIO DEVICES, INC., 1600 Broadway, New York, N. Y., "Audiodescs," "Audiopoints"—D, CN, RS
 AUDIODISCS—Audio Devices
 AUDIOPOINTS—Audio Devices, Inc.
 AUDIOGRAPH—John Meek Industries
 AUDOVOX—Arrow Radio Co.
 BATEMAN SOUND SYSTEMS, 680 Johnston St., Akron, Ohio—RM, RS, S, TT
 BELL SOUND SYSTEMS, INC., 1183 Essex Ave., Columbus, Ohio, "Record-o-fone"—RM
 DAVID BOGEN CO. INC., 663 Broadway, New York, N. Y.—RM
 BRUSH DEVELOPMENT CO., 3311 Perkins Ave., Cleveland, Ohio—CH, CN, MT
 CARRON MFG. CO., 415 S. Aberdeen St., Chicago, Ill.—D, CN
 F. L. COOK, 606 Parkman Ave., Los Angeles, Calif.—D, CN
 DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—RM, RS
 DUOTONE CO., INC., 799 Broadway, New York, N. Y.—D, CN
 DURALITE—Muscraft Records, Inc.
 THE ELDEEN CO., 176 W. Wisconsin Ave., Milwaukee, Wis.—CN
 ELECTRICAL INDUSTRIES MFG. CO., Red Bank, N. J.—CH, D, M, CN, RM, RS, S, TT
 ELECTROVOX CO., 424 Madison Ave., New York, N. Y., "Walco"—CN, D
 EMELOD MFG. CO., 287 Laurel Ave., Arlington, N. J.—D
 EMERSON RADIO & PHONO CORP., 111 8th Ave., New York, N. Y.—D
 FAIRCHILD AERIAL CAMERA CORP., 88-06 Van Wyck Blvd., Jamaica, L. I., N. Y., "Fairchild"—CH, D, CN, RM, RS, TT
 FEDERAL RECORDER CO., INC., Elkhart, Ind.—D, CN, RM
 FLOCK PROCESS CORP., 17 W. 31st St., New York, N. Y.—Turntables flocked
 GALVIN MFG. CORP., 4545 Augusta Blvd., Chicago, Ill.—D
 GENERAL CEMENT MFG. CO., 919 Taylor Ave., Rockford, Ill.—CN, RS, S, turntables flocked
 GENERAL INDUSTRIES CO., 3537 Taylor St., Elyria, Ohio—M, TT
 GENERAL PHONOGRAPH CO., INC., Box 2, Putnam, Conn.—CN

Sell *The Nationally Advertised* Fidelitytone

Line of Phono Needles for Fast Turnover,
 Greater Profits and Complete Customer Satisfaction



De Luxe Fidelitytone world's finest phono needle made for expensive, high fidelity instruments . \$1.00



Fidelitytone Floating Point phono needle, filters record scratch through floating point 50 cents



Fidelitytone Home Recording Long Life Stylus. 50 cents



Permo Point long life professional recording stylus. Each stylus microinspected for uniformity \$1.30



Transcrip-Tone professional play-back needle. For peak efficiency in play back and dubbing work \$1.00



Microspecter for inspecting your record grooves and needle tips 50 cents

FIDELITONE Phono Needles are made by expert metallurgists and are merchandised with attractively colored metallic Counter Displays. See your distributor or write the makers for details on these profit making sales units. There is profit with the Fidelitytone line.

PERMO PRODUCTS CORP.

Manufacturing  *Metallurgists*

6415 RAVENSWOOD AVENUE • CHICAGO, U. S. A.

The Choice of the Leaders



ALLIANCE "Even-Speed" PHONO-MOTORS

IDEAL REPLACEMENT UNITS

The same dependability and performance that has made "Even-Speed" phono-motors the industry's first choice as original equipment is also making them the service man's first choice as replacement units.

The low cost of "Even-Speed" motors makes it more practical and more profitable to replace the entire motor and turntable unit, in case of trouble, than to attempt what may prove to be a difficult repair job. All Alliance phono-motors are easily and quickly installed, and fit practically all standard phonograph and combination models.

DEALERS AND SERVICE MEN

Ask your jobber or mail a postcard today for prices and complete information on the complete "Even-Speed" line of phono-motors. Address Dept. RT.

ALLIANCE MANUFACTURING COMPANY
ALLIANCE, OHIO

THERE'S AN "Even-Speed" MODEL FOR ALL COMMERCIAL FREQUENCIES AND VOLTAGES

SPECIFICATIONS:

MODEL 80. "Even-Speed" Model 80 is available for operation on 110 or 220 volt, 40, 50 or 60 cycle source at 16 watts input in 8", 9" or 10" turntable sizes (Model K for 110 or 220 volt, 25 cycle operation in 8" or 9" turntable sizes and is interchangeable in mounting with Model 80). Both are exceptionally quiet in operation—no gears—smooth, positive friction rim drive. Excellent regulation characteristics for uniformity of table speed. Ample proportioned bearings—large oil reserves. Forced ventilation for cool operation. Slip type fan precludes possibility of injury. Mounting plate maintains correct turntable height regardless of mounting board thickness.

MODEL 60, ALLIANCE'S FINEST PHONO-MOTOR. Available for operation on 110 or 220 volt, 50 or 60 cycle source at 14 watts input. Self-starting—maintains constant record speed. Designed for superior speed regulation under wide variations of voltage, load and temperature. Large bearings, ample oil reserves. Laminated bakelite helical cut gears for quiet operation, completely enclosed and protected. Forced ventilation for cool operation. Universal mounting plate maintaining correct turntable height with any thickness of mounting board. Available with 8", 9" or 10" turntable tops. Motor dimensions: Length 4 $\frac{3}{8}$ "; width 3 $\frac{1}{8}$ "; depth to mounting plate 3 $\frac{1}{4}$ ". Precision assembly for uniform production.

ATTENTION JOBBERS—Each motor and turntable unit is packed in a handy, individual display carton



NO MOTORS BETTER BUILT OR BETTER ENGINEERED

HF STATIONS - FM, TELEVISION, FACSIMILE

FREQUENCY MODULATION STATIONS

| Operating or Authorized | | | | | |
|-------------------------|-----------------------------------|------|---------|------------------------------------|--------|
| Call | Location | MC. | Call | Location | MC. |
| K45LA | California Los Angeles | 44.5 | W55NY | " | 45.5 |
| W53H | Connecticut Hartford | 45.3 | {W51NY | " | 45.1 |
| W65H | " | 46.5 | {W2XWG* | " | 45.1 |
| W63C | Illinois Chicago | 46.3 | W63NY | " | 46.3 |
| W47C | " | 44.7 | W59NY | " | 45.9 |
| W59C | " | 45.9 | W75NY | " | 47.5 |
| W67C | " | 46.7 | W8XVB* | Rochester | 43.2 |
| W51C | " | 45.1 | W8XAD* | " | 42.6 |
| W71RF | Rockford | 47.1 | {W57A | Schenectady | 45.7 |
| W45V | Indiana Evansville | 44.5 | {W2XOY* | New Scotland | 43.2 |
| W71SB | South Bend | 47.1 | W47A | Schenectady | 44.7 |
| W49FW | Ft. Wayne | 44.9 | W49BN | Binghamton | 44.9 |
| W45RG | Louisiana Baton Rouge | 44.5 | W63SY | Syracuse | 46.3 |
| W39B | Massachusetts Boston | 43.9 | W2XAG* | Yonkers | 117.19 |
| W81SP | Springfield | 48.1 | W45CM | Ohio Columbus | 44.5 |
| W1XTG* | Holden | 43.4 | W69PH | Pennsylvania Philadelphia | 46.9 |
| W67B | Hull | 46.7 | W53PH | " | 45.3 |
| W1XOJ* | Paxton | 44.3 | W57PH | " | 45.7 |
| W45D | Michigan Detroit | 44.5 | W47PH | Pittsburgh | 44.7 |
| W49D | " | 44.9 | W75P | " | 47.5 |
| W39B | New Hampshire Mount Washington | 43.9 | W47NV | Tennessee Nashville | 44.7 |
| W2XMN* | New Jersey Alpine | 42.8 | K47SL | Utah Salt Lake City | 44.7 |
| W2XQR* | New York Long Island City | 43.2 | {W55M | Wisconsin Milwaukee | 45.5 |
| W67NY | " | 46.7 | {W9XAO* | " | 42.6 |
| {W71NY | " | 47.1 | W9XYH* | Superior | 43.0 |
| {W2XOR* | " | 43.5 | | District of Columbia Georgetown | 43.2 |
| | | | | Washington | 42.6 |

*Present operating station.

First commercial broadcast by an FM station took place March 1, when FM station W47NV at Nashville, Tenn., owned by National Life & Accident Insurance Co., received full commercial authorization.

Another famous FM transmitter to get commercial status as we go to press, is Major E. H. Armstrong's pioneer Alpine, N. J., transmitter, with 35,000 watts, which will operate on 43.1 mc and cover 15,610 square miles within a 100-mile radius.

TELEVISION STATIONS

| Call | Location | MC. | Call | Location | MC. |
|---------|-------------------------|---------|----------|------------------------------|---------|
| W6XAO | California Hollywood | 50-56 | W2XVT | New Jersey Passaic | 78-84 |
| W6XDL | San Francisco | 50-56 | W3XEP | Camden | 84-90 |
| W6XHT | " | 60-66 | W3XAD-P | " | 321-327 |
| W6XHH | Los Angeles | 60-66 | | New York | |
| W6XYZ | " | 78-84 | W2XBS | New York | 50-56 |
| W6XEA | " | 96-102 | W2XAB | " | 60-66 |
| W6XCB | " | 162-168 | W2XB | New Scotland | 66-72 |
| W6XLJ | " | 186-192 | W2XWV | New York | 78-84 |
| W6XMC | " | 210-216 | W2XBB | " | 96-102 |
| W6XLA-P | " | 236-242 | W2XI | New Scotland | 162-168 |
| W6XDU-P | " | 324-330 | W2XH | Schenectady | 288-294 |
| | Illinois | | W2XMT | New York | 162-168 |
| W9XZV | Chicago | 50-56 | W2XBT-P | " | 162-168 |
| W9XBK | " | 60-66 | W10XKT-P | " | 264-270 |
| W9XCB | " | 78-84 | W2XBU-P | " | 288-294 |
| W9XBT-P | " | 210-216 | W2XCB-P | " | 336-348 |
| | Indiana | | | Ohio | |
| | Ft. Wayne | 66-72 | W8XCT | Cincinnati | 50-56 |
| W9XG | W. Lafayette | 66-72 | | Pennsylvania Philadelphia | 66-72 |
| | Iowa | | W3XE | " | 84-90 |
| W9XUI | Iowa City | 50-56 | W3XAU | " | 102-108 |
| W9XUI | " | 210-216 | W3XPP | " | 236-242 |
| | Kansas | | W3XP-P | " | |
| W9XAK | Manhattan | 50-56 | | Wisconsin Milwaukee | 66-72 |
| | Massachusetts | | | District of Columbia | |
| W1XG | Boston | 50-56 | W3XWT | Washington | 50-56 |
| | Missouri | | W3XNB | " | 60-66 |
| W9XAL | Kansas City | 50-56 | | P-Mobile pickup units. | |
| | | | | All licenses experimental. | |

FACSIMILE STATIONS

| Location | Call | MC. | Location | Call | MC. |
|-----------|------------|-------|------------|----------|-------|
| | Illinois | | | New York | |
| Chicago | WGN | 0.720 | Albany | W2XWE | 25.05 |
| | Kentucky | | | Ohio | |
| Eastwood | W9XWT | 25.25 | | | |
| | Missouri | | Cincinnati | WLW | 0.700 |
| St. Louis | W9XZY | 25.1 | Cleveland | WHK | 1.390 |
| | New Jersey | | Cincinnati | W8XUJ | 25.02 |
| Newark | WOR | 0.710 | Cincinnati | W8XVC | 25.17 |
| Newark | W2XUP | 25.25 | Columbus | W8XUM | 25.2 |

BC Shift of Mar. 29

It is to provide the necessary exclusive channels for our neighbor nations of North America, particularly to the south, that Uncle Sam has had to move over from channels which U. S. stations have long been using, and let our friends North and South have their shares of the broadcast spectrum.

After much study, a plan has been worked out for a minimum of shift of U. S. stations.

Here, in general, is how the shift of the 795 U. S. stations will be accomplished.

Stations from 550 to 720 kilocycles, no change.

Stations 740 to 780 kilocycles will move up—that is, will move to a position 10 kilocycles higher in frequency.

Stations which have been using from 790 to 870 kilocycles will move up 20 kilocycles (two channels).

Stations between 880 and 1450 kilocycles will generally advance 30 kilocycles (three channels).

In the 1400-kilocycle band, clear-channel stations operating on 1460-1490 kilocycles will shift to 1500-1530 kilocycles.

Then there will be some 30 stations which will have to make irregular shifts—such as from the 1010 kc. channel, to various positions at 690, 740, 990 and 1050 kc!

By far the largest portions of the 795 stations which have to shift will be those stations which will move up 30 kilocycles. An analysis of the effect of the change on the present

862 standard broadcast stations, shows:

| | Stations |
|----------------------------|----------|
| No change | 85 |
| Move up 10 kilocycles ... | 20 |
| Move up 20 kilocycles ... | 26 |
| Move up 30 kilocycles ... | 614 |
| Move up 40 kilocycles ... | 25 |
| Move down 10 kilocycles .. | 64 |
| Irregular shifts | 30 |

Roll-Call of Radio Organizations

Radio has at least nine central organizations which head up the activities in the various branches of the business. These groups are listed herewith, along with the names of their 1941 secretaries.

FEDERAL COMMUNICATIONS COMMISSION—T. J. Slowie, Washington, D. C.

FREQUENCY MODULATION BROADCASTERS, INC.—J. R. Poppele, 52 Vanderbilt Ave., New York City.

NATIONAL ASSOCIATION OF BROADCASTERS—C. E. Arney, Jr., 1626 K St., N.W., Washington, D. C.

NATIONAL RADIO PARTS DISTRIBUTORS ASSOCIATION—Ar-

thur Moss, 65 Park Terrace East, New York City.

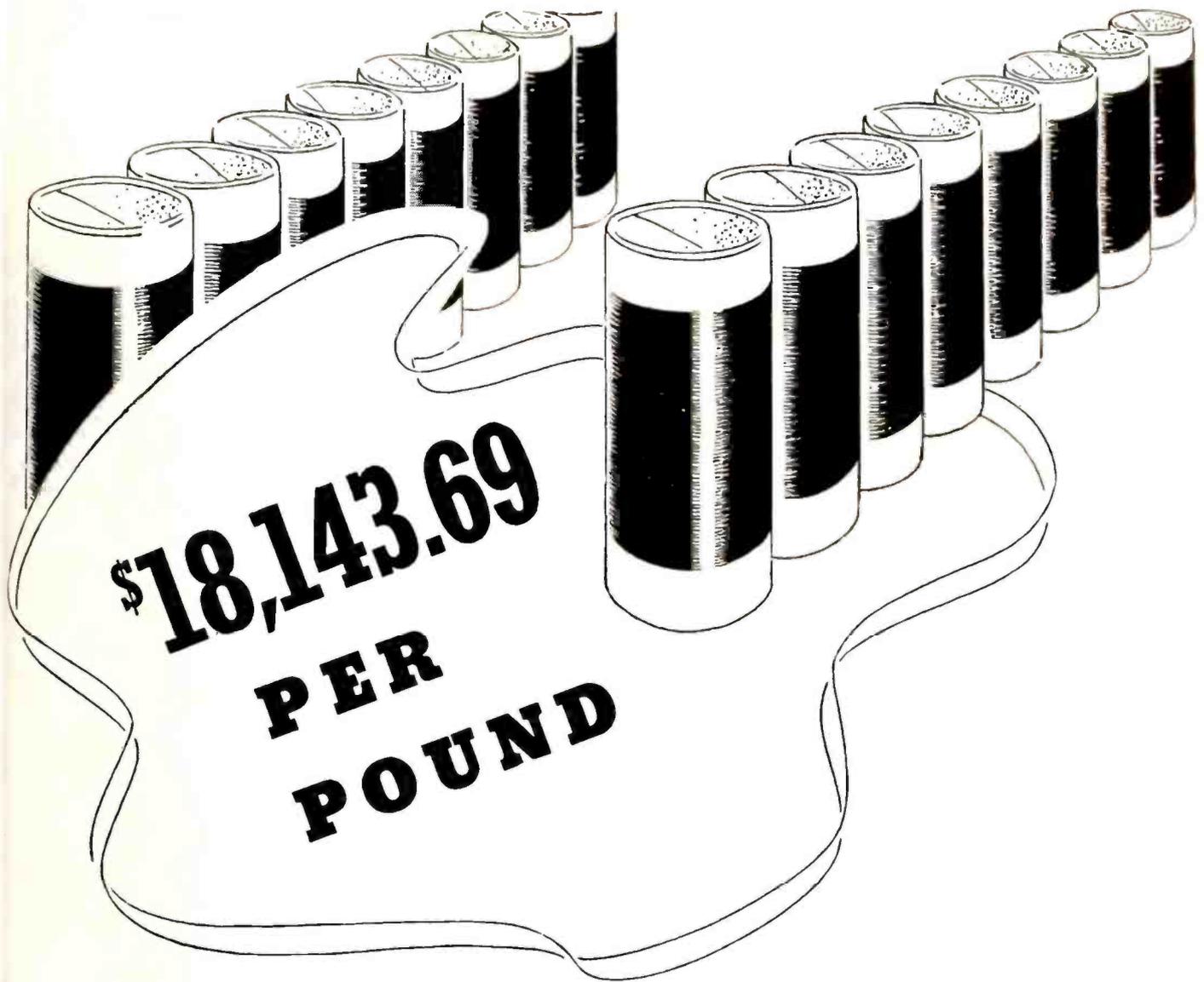
NATIONAL TELEVISION SYSTEMS COMMITTEE—Virgil M. Graham, Emporium, Pa.

RADIO MANUFACTURERS' ASSOCIATION—Bond Geddes, 1317 F St., N.W., Washington, D. C.

RADIO SERVICEMEN OF AMERICA—Joe Marty, 304 S. Dearborn St., Chicago, Ill.

THE REPRESENTATIVES—David Sonkin, 220 E. 23rd St., New York City.

SALES MANAGERS' CLUB—Eastern Group, W. W. Jablon, 424 W. 33rd St., New York City. Western Group, Kenneth C. Prince, 77 W. Washington St., Chicago, Ill.



**\$18,143.69
PER
POUND**

YES . . . that's what we pay for filament wire used in the Sylvania 1.4 volt and 50 ma. battery tubes, the tubes that paved the way for the remarkable sale of battery portable radios since their introduction on the market in 1938. This filament wire, one-fourth as fine as the human hair, is the finest in the world.

From emitting materials to plate electrode, only the best goes into Syl-

vania products. This filament wire of which we speak is a striking example: Expensive as it is, reprocessing and coating makes it still better . . . still more dependable—extra Sylvania value.

This is simply good business on our part . . . for Hygrade Sylvania builds its trade on quality and dependability to help you build *yours* on the same sturdy foundation.

SYLVANIA

SET-TESTED RADIO TUBES



Also makers of Hygrade Lamp Bulbs, Hygrade Fluorescent

Lamps and Miralume Fluorescent Light Fixtures

Duotone CUTTING and PLAYBACK NEEDLES

STEPHEN NESTER, formerly an executive of Recoton Corp., introduces to the trade a most complete line of American-designed and American-made needles calculated to surpass in quality and performance the best hitherto available. There is a specific needle for every purpose, and distributors are invited to communicate with the company immediately for our very attractive proposition.

DUOTONE COMPANY, Inc.
799 Broadway • New York City

Get BETTER
NEEDLES
from GENERAL

FUTUR-IS-TIC
Needle
PRE-TESTED FOR
PERMANENT VALUE

OUR OWN
PLAYBACK
NEEDLES

CAREFREE PLAYING

Supreme
CUTTING,
PLAYBACK and
LONG-PLAYING NEEDLES

YOUR recording units or assemblies will win more praise with General TRUETONE Cutting Needles. Made with supreme precision, by the shadowgraph process, and highly finished. Insist on their sale and use for all recording, both professional and amateur. And for true fidelity to your recorders, insist on the use of General OUR OWN Playback Needles. . . Also sell FUTUR-IS-TIC Long-playing Needles (2000 to 3000 times), and your choice of General's 39 types of Phonograph Needles. All held to closest service specifications, by microscopic inspection and rigid tests. Attractively packaged. Write today for prices.

Truetone

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We're Not Fooling, Mr. Serviceman!

➔ NATIONAL DUES IN THE RSA ARE
➔ ACTUALLY ONLY \$1.00 A YEAR



Yes—it seemed amazing . . . incredible . . . but Servicemen found it was true. Now hundreds of applications are pouring in from all parts of the country! Just think—a full year membership

in the National RSA for only \$1.00 (that's less than 2c a week).

You get the RSA Membership Certificate and the RSA House Organ. You have access to RSA Technical Help Bureau, and you can participate in all the other functions and benefits RSA offers.

RADIO SERVICEMEN OF AMERICA, Inc.

"Reliable Service Assured"

JOE MARTY, JR., Executive Secretary
304 S. DEARBORN STREET • CHICAGO, ILL

Get the RSA Push-Button Changeover Plan!

Are you ready to get your share of the Push-Button Changeover business? Join the RSA now and get the complete plan available to RSA Members.

Protected territories will be established as rapidly as local chapters are formed. Applicants in present chapter areas will be referred to the local chapter.

It's your big opportunity. Fill out the coupon, attach a \$1.00 bill and mail it in today.

RADIO SERVICEMEN OF AMERICA, INC.
304 S. Dearborn Street, Chicago, Illinois
\$1.00 enclosed for 1941 National Dues in RSA

Name.....
Address.....
City.....State.....

Radio Today—March

RECORDING EQUIPMENT & BLANKS—Cont.

M. A. GERETT CORP., 2947 N. 30th St., Milwaukee, Wis., "Black Diamond"—CN
 GOULD-MOODY CORP., 395 Broadway, New York, N. Y.—D
 HOME RECORDING CO., 54 E. 11th St., New York, N. Y.—D, RS
 MAGNAVOX CO., INC., 2131 Bieter Rd., Ft. Wayne, Ind.—RM
 JOHN MECK INDUSTRIES, 1313 W. Randolph St., Chicago, Ill., "Audlograph"—CH, RM
 MEISSNER MFG. CO., Belmont and 7th Sts., Mt. Carmel, Ill.—RM

MELLAPHONE CORP., 714 University Ave., Rochester, N. Y.—CH, RM, TT
 MILES REPRODUCER CO., INC., 812 Broadway, New York, N. Y.—D, CN, RM (Sound-on-Film)
 MIRROR RECORD CORP., 58 W. 25th St., New York, N. Y.—D, CN, RM, RS
 MUSIC MASTER MFG. CO., 508 S. Dearborn St., Chicago, Ill.—D, CN, RM, RS
 MUSICRAFT RECORDS, INC., 242 W. 55th St., New York, N. Y., "Duralite"—D, CN
 PERMO POINT—Permo Products Corp.
 PERMO PRODUCTS CORP., 6415 Ravenswood Ave., Chicago, Ill., "Permo Point"—CN, RS
 PFANSTIEHL CHEMICAL CO., 105 Lakeview, Waukegan, Ill.—CN
 PHILCO CORP., Tioga and C Sts., Philadelphia, Pa.—D
 PHONOGRAPH NEEDLE MFG. CO., INC., 42 Dudley St., Providence, R. I.—CN
 POINSETTIA, INC., Pitman, N. J.—D, RM, RS
 PRESTO RECORDING CORP., 242 W. 55th St., New York, N. Y., "Presto"—CH, D, M, CN, RM, RS, S, TT
 RADIO ENGINEERING LABS., INC., 35-54 36th St., Long Island City, N. Y.—TT
 RADIOTONE, INC., 7356 Melrose Ave., Hollywood, Calif.—CH, D, M, CN, RM, RS, S, TT
 RANGERTONE, INC., 201 Verona Ave., Newark, N. J. D, CN, RM
 RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA"—CH, D, M, CN, RM, RS, S, TT
 RECORDISC CORP., 395 Broadway, New York, N. Y. D, CN, RS
 RECORD-O-FONE—Bell Sound Systems, Inc.
 REGAL AMPLIFIER CORP., 14 W. 17th St., New York, N. Y., "Tok-Fone"—RM
 RECOTON CORP., 42 W. 15th St., New York, N. Y.—CN, RS
 REK-O-KUT CORP., 176 Lafayette St., New York, N. Y.—M, RM, RA, TT
 REMLER CO., LTD., 2101 Bryant St., San Francisco, Calif., "Remler"—RM
 J. P. SEEBURG CORP., 801 E. 135th St., New York, N. Y.—RM
 SELECTAR MFG. CORP., 30 W. 15th St., New York, N. Y.—RM
 H. A. SELMER, INC., 1119 N. Main St., Elkhart, Ind.—ST
 MARK SIMPSON DISTR. CO., 186 W. 4th St., New York, N. Y.—RM
 HERMAN SMITH, 180 Lafayette St., New York, N. Y.—CN
 SOUND APPARATUS CO., 150 W. 46th St., New York, N. Y.—CH, D, M, CN, RM, RS, TT
 SOUND DEVICES CO., 160 E. 116th St., New York, N. Y.—D
 SPEAK-O-PHONE RECORDING & EQUIPMENT CO., 23 W. 60th St., New York, N. Y., "Speakophone"—CH, D, M, CN, RM, RA, RS, TT
 STANGARD PRODS. CO., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y.—D, CN, RS
 TALK-A-PHONE MFG. CO., 1219 W. Van Buren St., Chicago, Ill.—D, CN, RM, RS
 TALKING DEVICES CO., 4451 Irving Park Blvd., Chicago, Ill.—CH
 THORDARSON ELEC. MFG. CO., 500 W. Huron St., Chicago, Ill.—E
 TOK-FONE—Regal Amplifier Corp.

UNIVERSAL MICROPHONE CO., Inglewood, Calif.—CH, D, M, CN, RM, RS, S, TT
 VIBRALOC MFG. CO., 1273 Mission St., San Francisco, Calif.—RM
 J. J. WARNER CO., 1244 Larkin St., San Francisco, Calif.—CH, D, RM, RS, S, TT
 WEBSTER-CHICAGO CORP., 5622 Bloomingdale Ave., Chicago, Ill.—M, RM, TT
 WEBSTER ELEC. CO., Racine, Wis.—CH, RS
 WESTERN SOUND & ELECTRIC LABS. INC., 311 W. Kibbourn Ave., Milwaukee, Wisc.—CH, D, CN, RM
 WILCOX ELECTRIC CO., INC., 4014 State Line, Kansas City, Kans.—CH
 WILCOX GAY CORP., Charlotte, Mich., "Wilcox-Gay"—D, CN, RM, RS
 ZEPHYR PRODS. CORP., 67 W. 44th St., New York, N. Y.—RM

PHONOGRAPH NEEDLES

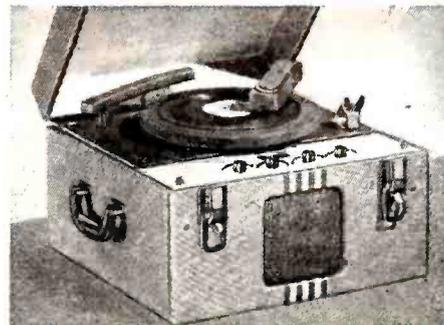
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 PLAYBACK CUTTING

Nationally Famous
 or
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 176 W. WISCONSIN AVE.
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THE BEST SELLER IN HOME RECORDERS!



Here's a Smash Hit—TALK-A-PHONE'S sensational Home Recorder! (1) Makes Records; (2) Plays Records; (3) Works as PA System. 5 Tube Amplifier; 3½ Watts Output; 6½" Dynamic Speaker; Electric Eye Indicator; with Crystal Microphone. Plays 10" and 12" records with lid closed. In handsome luggage-type portable case; 16" x 16" x 11". Quality-built—priced for mass sales! Write for literature.



A Complete PHONO LINE—20 Models!
 COMPLETE INTERCOM SYSTEM LINE!
 Profit-Builders all! Wired and Wireless Players, Player-Amplifiers, Changer Players, etc. Also fast-moving Intercommunication Systems, priced to sell. Take on these profitable lines! Distributors—a few choice territories still open. Dealers—see nearest distributor or write us direct. Prices, discounts, literature sent on request.

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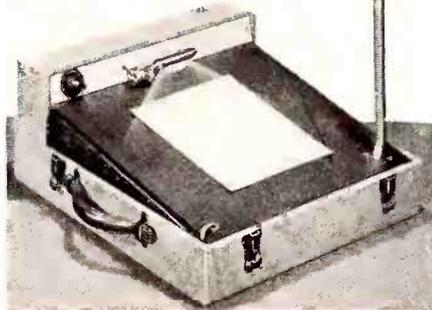
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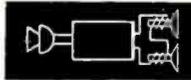
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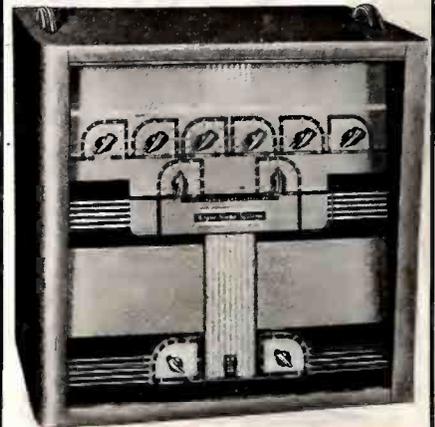
SOUND SYSTEMS, AMPLIFIERS & ACCESSORIES



| | |
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| Carrying cases | C |
| Kits (amplifier) | K |
| Mobile amplifiers | M |
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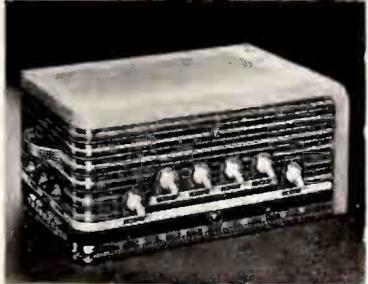
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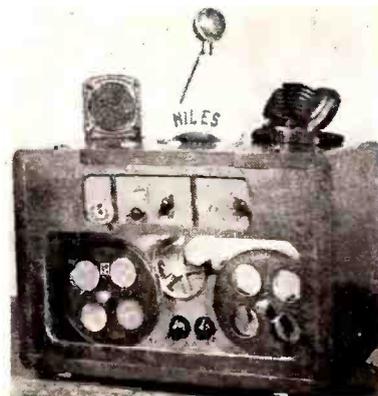
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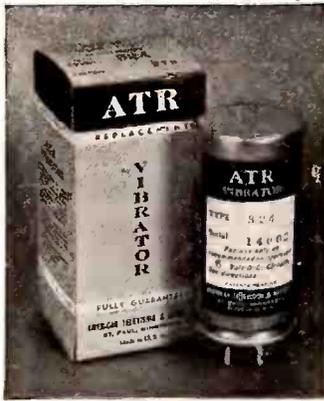
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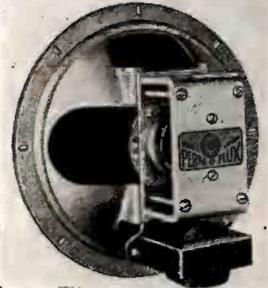
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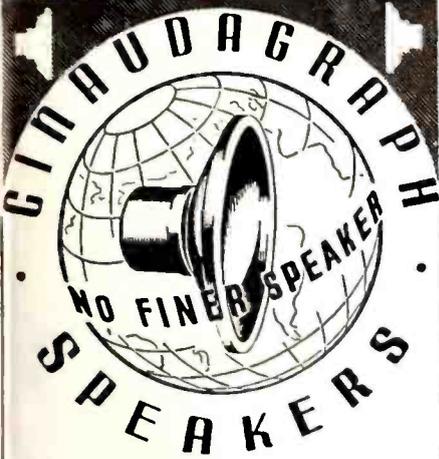
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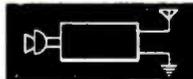
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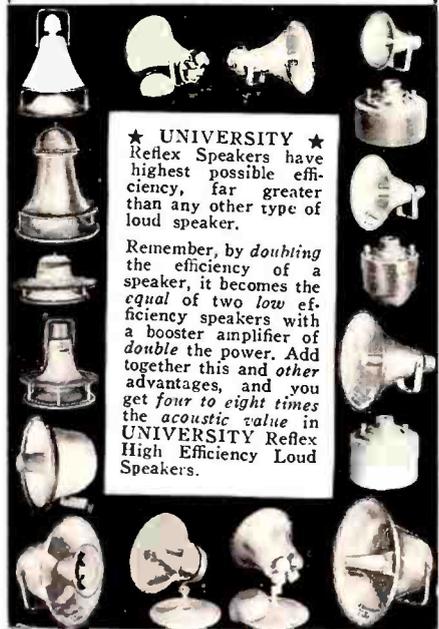
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 AMERICAN RADIO HARDWARE CO., 476 Broadway, New York, N. Y., "Arbco"—AT, SD, SW, SI
 AMPHENOL—American Phenolic Corp.
 ARHCO—American Radio Hardware Co.
 AUTOMATIC MFG. CO., INC., Harrison, N. J.—PM
 BELDEN MFG. CO., 4647 W. Van Buren St., Chicago, Ill.—SI
 THE BLUE WIZARD CO., 2431 East Slauson Ave., Huntington Park, Calif., "Blue Wizard"—HC
 BOND PRODUCTS CO., 13139 Hamilton Ave., Detroit, Mich.—SI
 BUD RADIO, INC., 5205 Cedar Ave., Cleveland, Ohio, "Bud"—AT, SD, SW
 CARRON MFG. CO., 415 S. Aberdeen St., Chicago, Ill., "Carron"—SI
 COLE RADIO WORKS, 86 Westville Ave., Caldwell, N. J., "Instansolder"—Electric arc soldering iron
 CRESCENT INDUSTRIES, INC., 4140 Belmont Ave., Chicago, Ill.—CH
 CRIPPS ELEC. SERVICE, 2889 W. Pico Blvd., Los Angeles, Calif., "Soldergun"—SI (solder feeding)
 DRAKE ELECTRIC WORKS, INC., 3656 Lincoln Ave., Chicago, Ill.—SI, SS
 DUAL REMOTE CONTROL CO., 31776 W. Warren St., Wayne, Mich., "Ducon"—SI
 DUCON—Dual Remote Control Co.
 EAGLE ELECTRIC MFG. CO., INC., 59 Hall St., Brooklyn, N. Y.—SI, SP
 ESICO—Electric Soldering Iron Co., Inc.
 ELECTRIC SOLDERING IRON CO., INC., Deep River, Conn., "Esico"—SI
 FEDERAL SCREW PRODS. CO., 26 S. Jefferson St., Chicago, Ill.—PU, S, SW, SI, SP

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 GREENLEE TOOL CO., Rockford, Ill.—HC, PU
 HEXACON ELEC. CO., 161 W. Clay Ave., Roselle Park, N. J.—SI
 IDEAL COMMUTATOR DRESSER CO., 5079 Park Ave., Sycamore, Ill.—SI (arc), WS
 ICA—Insuline Corp. of America
 INSTANSOLDER—Cole Radio Works
 INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—AT, D, HC, PU, SD, SW, SI
 JACKSON ELECTRO CORP., 625 Broadway, New York, N. Y.—SI
 K-D MFG. CO., Lancaster, Pa., "K-D Pliers"—P, SD, RW
 KESTER SOLDER CO., 4201 Wrightwood Ave., Chicago, Ill.—S
 KRAEUTER & CO., INC., 563 18th Ave., Newark, N. J.—P, PU
 KWIKHEAT—Vanatta Mfg. Co.
 LECTROHM, INC., 5133 W. 25th Place, Cicero, Ill., "Lectrohm"—ST
 MEISSNER MFG. CO., Mt. Carmel, Ill., "Meissner"—PU
 J. W. MILLER CO., 5917 S. Main St., Los Angeles Calif.—AT
 MORRIS REGISTER CO., Council Bluffs, Iowa—HC, PU
 PARAMOUNT PRODS. CO., 545 5th Ave., New York, N. Y.—D, HD
 PARK METALWARE CO., INC., Orchard Park, N. Y.—AT, P, SD, SW
 PARKER-KALON CORP., 200 Varick St., New York, N. Y.—PU
 PFANSTIEHL CHEMICAL CO., 105 Lakeview, Waukegan, Ill.—SP
 PHILCO RADIO & TELEVISION CORP., Tioga & C Sts., Philadelphia, Pa.—AT
 PYRAMID PRODUCTS CO., 2224 S. State St., Chicago, Ill.—WS
 RAPID ELECTROPLATING PROCESS, INC., 1414 S. Wabash Ave., Chicago, Ill.—E

RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA"—AT
 ALBERT F. ROSS & CO., 2341 Wolfram St., Chicago, Ill.—SI, ST
 RUBY CHEMICAL CO., 68-70 McDowell St., Columbus, Ohio, "Rubyfluid"—S, SP, Liquid flux
 RUBYFLUID—Ruby Chemical Co.
 WALTER L. SCHOTT CO., 6264½ W. Pico Blvd., Los Angeles, Calif.—SH
 HERMAN SMITH, 180 Lafayette St., New York, N. Y.—AT, SV
 SPEEDCRAFT—The Wire Stripper Co.
 SPEEDWAY MFG. CO., 1834 S. 52nd St., Cleero, Ill.—D
 STANLEY WORKS, New Britain Conn.—D, HD, PU, SI, SD, SE
 STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y.—D, HD, P, SD, SW, S, SI, ST, SP
 TEFTEFF RADIO CO., Plymouth, Mich.—HC, PU, TP
 TILTON ELECTRIC CORP., 15 E. 26th St., New York, N. Y.—S
 VACO PRODS. CO., 1603 S. Michigan Ave., Chicago, Ill.—P, SD
 VANATTA MFG. CO., 615 Monterey Ave., Ontario, Calif., "Kwikheat"—SI (temperature control)
 VASCO ELEC'L. MFG. CO., 4116 Avalon Blvd., Los Angeles, Calif.—SI, ST, SE
 J. D. WARREN MFG. CO., 1939 Avon St., Montpelier, Ohio—PC
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 BOND PRODUCTS CO., 13139 Hamilton Ave., Detroit, Mich.—P, TS
 BUD RADIO INC., 5205 Cedar Ave., Cleveland, Ohio—P
 CARRON MFG. CO., 415 S. Aberdeen St., Chicago, Ill.—TS, W
 CENTRALAB, 900 E. Keefe Ave., Milwaukee, Wis., "Centralab"—TS, W
 CHICAGO TELEPHONE SUPPLY CO., 1142 W. Beardsley Ave., Elkhart, Ind.—W
 CINEMA ENGINEERING CO., 1508 S. Verdugo Ave., Burbank, Calif., "Cinema"—CB, PR, R, SK
 C. P. CLARE CO., 4901 Lawrence Ave., Chicago, Ill.—C, PR, R, SK
 CLAROSTAT MFG. CO., 285 N. 6th St., Brooklyn, N. Y., "Clarostat"—P
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 DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—M
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 HUGH H. EBY, INC., 4700 Stenton Ave., Philadelphia, Pa.—R
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 ELECTRICAL PRODUCTS CO., 6535 Russell St., Detroit, Mich.—M, R, TE, V
 ELECTRONIC PRODUCTS CO., St. Charles, Ill.—R
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 GENERAL CEMENT MFG. CO., 919 Taylor Ave., Rockford, Ill.—CB, P, PR
 GENERAL ELECTRIC CO., Schenectady, N. Y.—R
 GENERAL RADIO CO., 30 State St., Cambridge, Mass., "G-R"—TS
 THOMAS B. GIBBS & CO., 900 W. Lake St., Chicago, Ill., "Gibbs"—TE
 G-M LABS., INC., 1731 Belmont Ave., Chicago, Ill.—R
 G-R—General Radio Co.
 GUARDIAN ELECTRIC CO., 1621 W. Walnut St., Chicago, Ill.—CB, PR, R, TE, W
 H-B ELECTRIC CO., INC., 2518 N. Broad St., Philadelphia, Pa.—Thermal switches, R
 HEINEMANN CIRCUIT BREAKER CO., 610 Plum St., Trenton, N. J.—CB
 HEINTZ & KAUFMAN, LTD., South San Francisco, Calif.—WT
 ICA—Insuline Corp. of America
 THE INSTRUCTOGRAPH CO., 4701 Sheridan Rd., Chicago, Ill.—AC
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 ISOLANTITE, INC., 343 Cortlandt St., Belleville, N. J., "Isolantite"—Rotary ceramic switches
 P. R. MALLORY & CO., INC., 3029 E. Washington St., Indianapolis, Ind., "Yaxley"—P, TS, W, WT
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 J. W. MILLER CO., 5917 S. Main St., Los Angeles, Calif.—W
 MIMS RADIO CO., P. O. Box 504, Texarkana, Ark.—R
 MUSIC MASTER MFG. CO., 503 S. Dearborn St., Chicago, Ill.—R
 MUTER CO., 1255 S. Michigan Ave., Chicago, Ill., "Muter"—TS
 NATIONAL CO., INC., 61 Sherman St., Malden, Mass.—WT
 NEW ENGLAND RADIOCRAFTERS, 1156 Commonwealth Ave., Brookline, Mass.—TS, W, WT
 OAK MFG. CO., 1260 Clybourn Ave., Chicago, Ill., "Oak"—R, W, WT
 OHMITE MFG. CO., 4835 W. Flournoy St., Chicago, Ill.—P, WT
 PHILCO RADIO & TELEVISION CORP., Tioga & C Sts., Philadelphia, Pa.—P, TS, W
 PHILMORE MFG. CO., 113 University Place, New York, N. Y., "Philmore"—CB
 POTTER & BRUMFIELD MFG. CO., Princeton, Ind.—R, TE
 RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA"—CS
 READRITE METER WORKS, 138 E. College Ave., Bluffton, Ohio, "Readrite"—TS
 M. H. RHODES, INC., 30 Bartholomew Ave., Hartford, Conn., "Mark Time"—TE

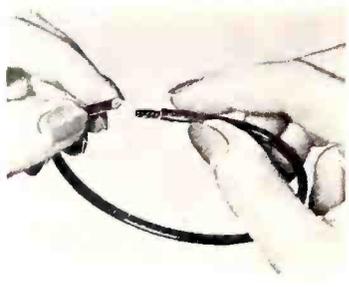
SWITCHES & RELAYS



| | |
|-------------------------------------|----|
| Auto code senders | AC |
| Capacity | CS |
| Circuit breakers | CB |
| Counters, electric | C |
| Keys, telegraph | K |
| Mercury | M |
| Power | P |
| Protective | PR |
| Push button | PB |
| Relays | R |
| Switch keys | SK |
| Test equipment | TS |
| Time | TE |
| Vacuum | V |
| Wave change (receiver) | W |
| Wave change (transmitter) | WT |

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 ALDEN PRODUCTS CO., 715 Center St., Brockton, Mass.—TS
 ALLIED CONTROL CO., INC., 227 Fulton St., New York, N. Y.—CB, R
 AMERICAN PHENOLIC CORP., 1250 Van Buren St., Chicago, Ill., "Amphenol"—TS, W
 AMPERITE CO., 561 Broadway, New York, N. Y.—R (automatic change-over for portables)
 AMPHENOL—American Phenolic Corp.
 ARROW-HART & HEGEMAN ELEC. CO., 103 Hawthorn St., Hartford, Conn.—P, R
 ASSOCIATED RESEARCH, INC., 16 N. May St., Chicago, Ill.—TS, TE
 AUTOCALL CO., Shelby, Ohio—CB, M, R, TE
 AUTOMATIC ELEC. MFG. CO., 729 S. Front St., Mankato, Minn., "Automatic"—TE
 AUTOMATIC SIGNAL CORP., E. Norwalk, Conn.—R
 BANK'S MFG. CO., 5019 N. Winthrop Ave., Chicago, Ill.—R, W, WT
 BENDIX RADIO CORP., 920 E. Fort Ave., Baltimore, Md.—WT

INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—TS, V, W, WT
 ISOLANTITE, INC., 343 Cortlandt St., Belleville, N. J., "Isolantite"—Rotary ceramic switches
 P. R. MALLORY & CO., INC., 3029 E. Washington St., Indianapolis, Ind., "Yaxley"—P, TS, W, WT
 MARK TIME—M. H. Rhodes, Inc.
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 MEISSNER MFG. CO., Mt. Carmel, Ill., "Meissner"—R, TS, W, WT
 MICRO SWITCH CORP., Spring St., Freeport, Ill., "Microswitch"—P, R
 J. W. MILLER CO., 5917 S. Main St., Los Angeles, Calif.—W
 MIMS RADIO CO., P. O. Box 504, Texarkana, Ark.—R
 MUSIC MASTER MFG. CO., 503 S. Dearborn St., Chicago, Ill.—R
 MUTER CO., 1255 S. Michigan Ave., Chicago, Ill., "Muter"—TS
 NATIONAL CO., INC., 61 Sherman St., Malden, Mass.—WT
 NEW ENGLAND RADIOCRAFTERS, 1156 Commonwealth Ave., Brookline, Mass.—TS, W, WT
 OAK MFG. CO., 1260 Clybourn Ave., Chicago, Ill., "Oak"—R, W, WT
 OHMITE MFG. CO., 4835 W. Flournoy St., Chicago, Ill.—P, WT
 PHILCO RADIO & TELEVISION CORP., Tioga & C Sts., Philadelphia, Pa.—P, TS, W
 PHILMORE MFG. CO., 113 University Place, New York, N. Y., "Philmore"—CB
 POTTER & BRUMFIELD MFG. CO., Princeton, Ind.—R, TE
 RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA"—CS
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TYPE SS-7

—a three position slide switch which may be used as a three position tone switch, two speed small motor switch with off position or as a bright—dim—off light switch.

*Illustrations are
actual size*



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STACO—Standard Elec. Products Co.

STANDARD ELEC. PROD. CO., 317 Sibley St., St. Paul, Minn., "Staco"—R, antenna change-over

STANGARD PRODS. CO., 4111 Ft Hamilton Pkwy., Brooklyn, N. Y.—CB, W

STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y.—R

STRUTHERS DUNN, INC., 1315 Cherry St., Philadelphia, Pa.—R, TE

SWEDISH IRON & STEEL CO., 17 Battery Pl., New York, N. Y.—CB, R, M

TECH LABORATORIES, 7 Lincoln St., Jersey City, N. J., "Tech Lab."—TS, WT

TELEPLEX CO., 67 Park Pl., New York, N. Y.—AC

TORK CLOCK CO., INC., 1 Grove St., Mt. Vernon, N. Y., "Tymit"—TE

TRIPLETT ELECTRICAL INSTRUMENT CORP., 122 Main St., Bluffton, Ohio, "Triplet"—R, TS

TRIUMPH MFG. CO., 4017 W. Lake St., Chicago, Ill.—R, WT

TYMIT—Tork Clock Co., Inc.

UNITED CINEPHONE CORP., Torrington, Conn.—PR, R, TE, V

UTAH RADIO PRODUCTS CO., 820 Orleans St., Chicago, Ill.—R

THE VIBROPLEX CO., 832 Broadway, New York, N. Y.—K

WARD LEONARD ELECTRIC CO., 31 South St., Mt. Vernon, N. Y., "Ward Leonard"—PR, R, TE, W, WT

WESTON ELECTRICAL INSTRUMENT CORP., 614 Frelinghuysen Ave., Newark, N. J., "Weston"—R, TS

WHEELCO INSTRUMENTS CO., 1933 S. Halsted St., Chicago, Ill.—CB, PR, R, TS

WIRT CO., 5221 Greene St., Philadelphia, Pa.—P, W

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Ballast (regulating) B

Cathode-ray CR

Electron multiplier EM

Industrial I

Receiving (including rectifiers) . R

Television TT

Transmitting T

Tube machinery TM

Tube parts TP

Voltage control VC

Miniature tubes MT

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AMERICAN LAVA CORP., Cherokee Blvd. & Manufacturers Rd., Chattanooga, Tenn.—TP

AMERICAN RADIO HARDWARE CO., 476 Broadway New York, N. Y., "Arhco"—TP

AMERICAN TELEVISION CORP., 130 W. 56th St., New York, N. Y.—CR, TT

AMPEREX ELECTRONIC PRODUCTS CORP., 79 Washington St., Brooklyn, N. Y., "Amperex"—I, T

AMPERITE CO., 561 Broadway, New York, N. Y., "Amperite"—B, VC

ARCO TUBE CO., 227 Central Ave., Newark, N. J.—R, T

ARHCO—American Radio Hardware Co.

ART RADIO CORP., 115 Liberty St., New York, N. Y.—R, B

CHAMPION RADIO WORKS, Div. of Consolidated Electric Lamp Co., Danvers, Mass., "Champion"—R, B

SIGMUND COHN, 44 Gold St., New York, N. Y.—TP

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EISLER ELECTRIC CORP., 534 39th St., Union City, N. J.—I, TT, TM

EITEL-McCULLOUGH, INC., 798 San Mateo Ave., San Bruno, Calif., "Eimac"—I, T

EMERSON RADIO & PHONO. CORP., 111 8th Ave., New York, N. Y.—R, MT

FARNSWORTH TELEVISION & RADIO CORP., 3700 Pontiac St., Fort Wayne, Ind.—CR, EM, TT, T

FEDERAL TELEGRAPH CO., 200 Mt. Pleasant Ave., Newark, N. J., "Federal"—T

M. M. FLERON & SON, INC., 113 N. Broad St., Trenton, N. J., "Fleron"—VC

GAMMATRON—Heintz & Kaufman, Ltd.

GENERAL ELECTRIC CO., 1285 Boston Ave., Bridgeport, Conn.—R

GENERAL ELECTRIC CO., Schenectady, N. Y.—CR, I, TT, T

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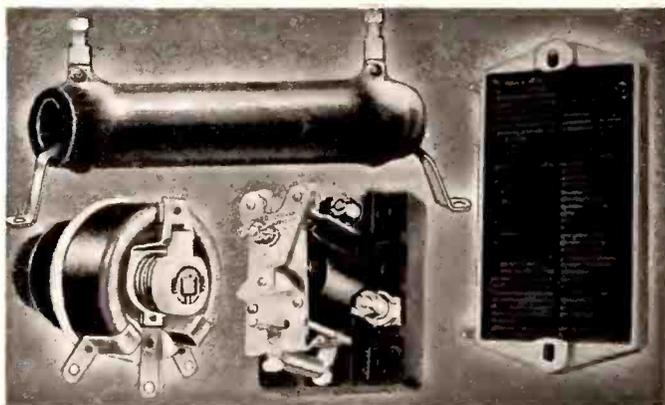
HEINTZ & KAUFMAN, LTD., South San Francisco, Calif., "HK," "Gammatron"—T

HK—Heintz & Kaufman, Ltd.

HYGRADE SYLVANIA CORP., 500 Fifth Ave., New York, N. Y.—CR, R, TT

HYTRONIC LABORATORIES, 23 New Derby St., Salem, Mass., "Hytron"—I, T

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| Flat woven cable | FL |
| Guy | G |
| Hook-up | HU |
| Insulated cable | IC |
| Litzendraht | L |
| Magnet | M |
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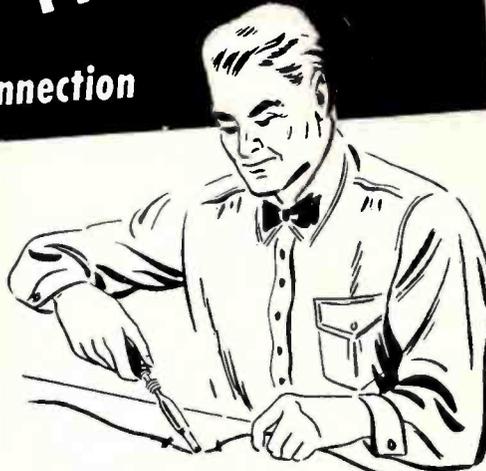
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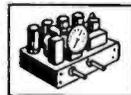


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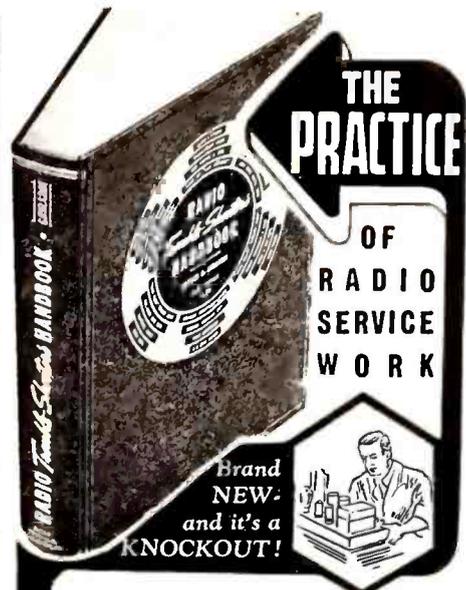
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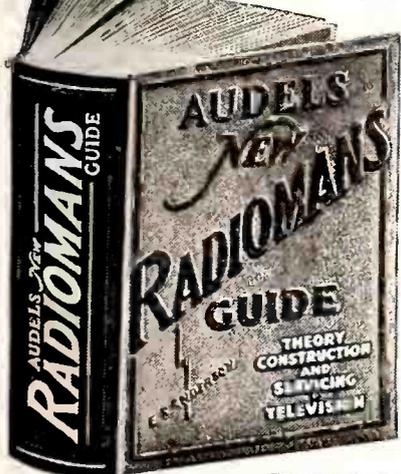
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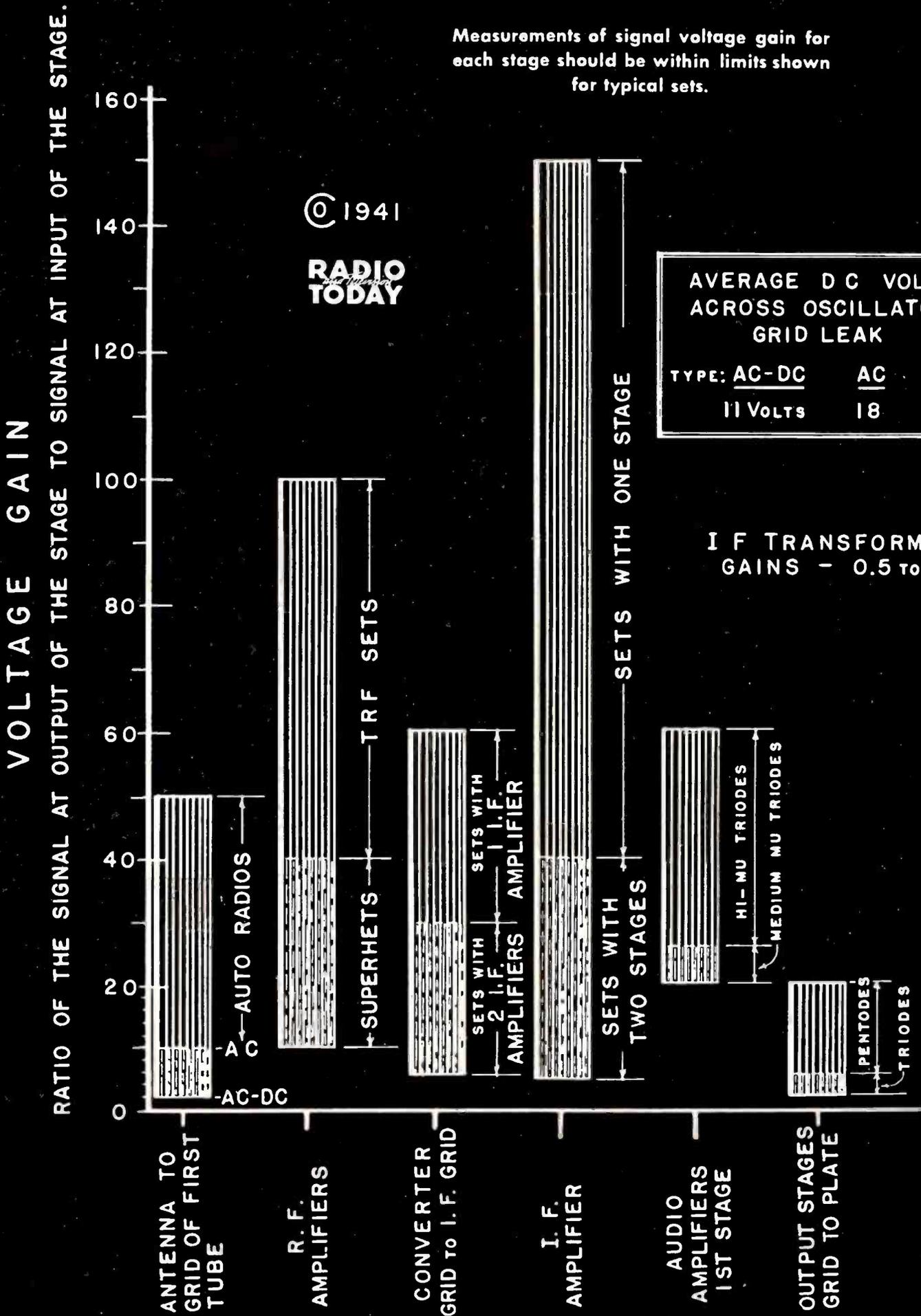
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GAIN VALUES FOR NORMAL CIRCUIT

Measurements of signal voltage gain for each stage should be within limits shown for typical sets.



Using Radio Today's Reference Charts

Throughout this issue of RADIO TODAY and the RADIO YEARBOOK are charts and graphs of particular value to the serviceman. Have them handy and you will find extra help in your daily service jobs.

GAIN VALUES FOR CIRCUITS (P. 92)

This chart is of particular value for those of you using signal tracing and similar methods for isolating set troubles. It is a graph of the ranges in voltage gain for various stages and types of sets. While the values appear to vary widely, defunct stages will fall completely outside these bars. In general, the sets with few tubes have a higher gain per stage.

When measuring the gain of a particular stage, apply a medium signal of the correct frequency and measure the signal strength at the grid and then at the plate. The voltage reading or attenuator dial reading at the plate is divided by the reading obtained at the grid circuit to give the gain ratio. The AVC bias voltage will, of course, largely determine the gain in the controlled stages. Most manufacturers are recommending the use of -3 volts bias applied to the AVC bus after it has been disconnected from the AVC rectifier (second detector usually). A couple of flashlight cells do the job nicely. This is a fairly low bias and will give gain values near the upper limits for most sets.

Oscillator grid voltages may be considerably different than those shown and the set may be operating normally.

COLOR CODES (P. 64, P. 96)

The color code charts are self-explanatory. The color code for capacitors is for mica units.

The miniature battery portable circuits along with the tube and battery data will be kept up to date with newest circuits as they are available. (P. 42)

WHAT YOU HEAR AND WHY (P. 17)

This chart of tone ranges of various types of radios and musical instruments can be used to sell the fidelity of higher priced radios. The larger sets show a tone range that more nearly approximates the hearing range of the human ear.

The tone range of FM and AM transmitters is shown to be the same since international high frequency broadcast stations without the 10 kc. bandwidth limitation of standard broadcast stations can also transmit high fidelity programs. High fidelity receivers can also be of either type when audio bandwidth and amplifier and speaker quality are the same.

Kiger in Allied Post

New appointee to the post of merchandise manager for the radio set division of Allied Radio Corp., Chicago, is Charles S. Kiger, according to word from Allied president A. D. Davis. Mr. Kiger's radio experience adds up to 15 years—with E. H. Scott, Sears Roebuck and Montgomery Ward. Robert M. Lachman becomes Allied's assistant radio merchandise manager.

MARCH, 1941



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 APPROVED TECHNICAL APPARATUS CO., 123 Liberty St., New York, N. Y.—CT, MM, OHM, RB, SA, SG, ST, TT, VTV
 ARHCO—American Radio Hardware Co.
 ASSOCIATED RESEARCH, INC., 18 N. May St., Chicago, Ill.—CT, DB, FM, IB, M, MM, NI, OHM, RB, SA, SPK, TT, VTV, VT
 AUDIOGRAPH—John Meck Industries
 AUDOLYZER—Supreme Instruments Corp.
 BLILEY ELECTRIC CO., Union Station Bldg., Erie, Pa.—CC
 BROWNING LABORATORIES, INC., 750 Main St., Winchester, Mass.—FM, SG
 BUD RADIO, INC., 5205 Cedar Ave., Cleveland, Ohio, "Bud"—AD
 WM. W. L. BURNETT RADIO LABORATORY, 4814 Idaho St., San Diego, Calif.—CC, FM
 BURTON-ROGERS CO., 857 Boylston St., Boston, Mass., "Hoyt," "Burton-Rogers"—M
 CARRON MFG. CO., 415 S. Aberdeen St., Chicago, Ill.—AO, MOD, SG, ST, TW
 CHANALYST—RCA Mfg. Co.
 CLOUGH-BREngle CO., 5501 N. Broadway, Chicago, Ill., "Clough-Brengle"—AO, CRO, CT, FM, IB, MM, MOD, OHM, RB, SA, SG, TT
 CONSOLIDATED WIRE & ASSOC. CORP.S., Peoria & Harrison Sts., Chicago, Ill.—CT, OI, RB, TT
 CORNELL-DUBILIER ELEC. CORP., 1000 Hamilton Blvd., S. Plainfield, N. J.—CT

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For use on all Standard Receivers including the new FM

For streamlined, high speed servicing. A time saver on all types of receivers—and made to order for FM. Accurate, dependable. Features an oversize, easy to read meter with ZERO center.
 • Tests 1000 megohms insulation leakage.
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 • With 31 scales.

INDISPENSABLE FOR FM TESTS . . .
 MODEL J SPECIAL
 NET PRICE, ONLY . . . \$29.95

Write for Literature on the complete Million line of Test and Sound Equipment.

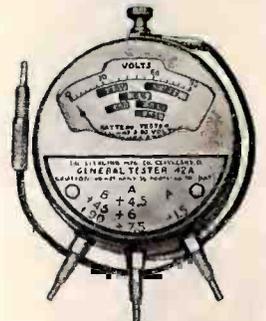
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Sterling POCKET METERS

for rapid testing of "A" & "B" batteries in
 PORTABLES • POCKET SETS
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New season is starting. Every dealer, every serviceman, will be testing batteries from now on. Old type testers won't do. Get ready with the new



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For Every Need
in EVERY Emergency



AXIAL LEAD RESISTORS
 TYPE 710 — size 1/8" x 3/8" rated 1/2 watt
 TYPE 714 — size 1/4" x 1" rated 1 watt

Centralab AXIAL LEAD RESISTORS

Under water... in the air... under ground... on every "front" these famous resistors are proving their fitness in routine as well as emergency work.

Due to more exacting conditions in the industry... the vogue of smaller plastic models; there is an even greater need for resistors that are both small in size and positively insulated. Centralab AXIAL LEAD resistors are designed to fit into limited space without danger of shorting. Moulded bakelite CAPS through which the end leads protrude... complete the positive insulation afforded by the non-conducting ceramic jacket. Will withstand five times rated load without permanent change.

For further information ask your jobber
 or write for Bulletin No. 606.

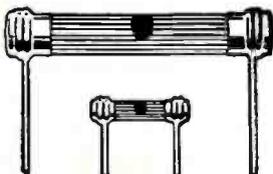
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Builders of the famous
CENTRALAB VOLUME CONTROLS . . .
SWITCHES CERAMIC CAPACITORS . . .



Magnified cross section shows center core of resistance material surrounded by a non conducting shock proof ceramic.

Both core and jacket are fired together at 2500 degrees F. into a solid unit—hard and durable as stone and impervious to moisture. Pure copper spray at extreme ends gives positive electrical and mechanical contact.



RADIAL LEAD RESISTORS

The radial leads where attached to the body of the resistor are uninsulated... making these resistors 90% insulated... in every other respect the electrical characteristics are the same as the AXIAL Lead units.

TYPE 310 — size 1/8" x 3/8" Rated 1/2 watt
 TYPE 314 — size 1/4" x 1" Rated 1 watt
 TYPE 316 — size 1/4" x 1 1/4" Rated 2 watts

SERVICING EQUIPMENT—Cont.

REARITE METER WORKS, 136 B. College Ave., Bluffton, Ohio, "Ranger-Examiner," "Readrite"—AD, CRO, CT, M, MM, OHM, OI, SA, SG, TT
 ROTO-RANGER—Simpson Electric Co.
 WALTER L. SCHOTT CO., 5264 W. Picu Blvd., Los Angeles, Calif., "Walco"—CU, DO, CF
 SHALLCROSS MFG. CO., 10 Jackson Ave., Collingdale, Pa., "Shallcross"—DB, IB, MM, OHM, OI, RB, SA
 F. W. SICKLES, 165 Front St., Chicopee, Mass.—TIV (loop antennas)
 SIGNALIZER—Million Radio & Telev. Labs.
 SIGNALYST—RCA Mfg. Co.
 SIMPSON ELECTRIC CO., 5216 W. Kinzie St., Chicago, Ill., "Simpson," "Roto-Ranger"—BT, M, MM, OHM, SA, SG, TT

SOLAR MFG. CORP., Bayonne, N. J., "Solar"—CT
 SOUND APPARATUS CO., 150 W. 46th St., New York, N. Y.—OR
 SPRAGUE PRODUCTS CO., N. Adams, Mass., "Tel-Ohmike"—CT
 STANDARD TECHNICAL DEVICES, INC., 3008 Ave. M, Brooklyn, N. Y.—TT
 STANGARD PRODS. CO., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y.—NI
 STERLING MFG. CO., 9205 Detroit Ave., Cleveland, Ohio—BT, M, MM, OHM, OI
 SUNOT ENGINEERING CO., 4757 Ravenswood Ave., Chicago, Ill.—NI, TW
 SUPERIOR INSTRUMENTS CO., 136 Liberty St., New York, N. Y.—CT, M, MM, OHM, OI, SA, SG, ST, TT
 SUPREME INSTRUMENTS CORP., 414 Howard St., Greenwood, Miss., "Supreme"—AD, AO, CRO, CT,

DB, IB, M, MM, MOD, UHM, OI, RB, SA, SG, ST, TT, VTV
 TACO—Technical Appliance Corp.
 TECHNICAL APPLIANCE CORP., 17 E. 16th St., New York, N. Y., "Taco"—OI
 TEFFT RADIO CO., Plymouth, Mich.—AO, CT, FM, IA, MOD, SA, SG, TT
 TELEVISO CO., 341 N. Pulaski Rd., Chicago, Ill.—AO, CC, DB, SG, VTV
 TEL-OHMKE—Sprague Products Co.
 THORARSON ELECTRIC MFG. CO., 500 W. Huron St., Chicago, Ill.—CRO kit, VTV
 TRACEOMETER—Hickok Elec'l. Instr. Co.
 TRIPLETT ELECTRICAL INSTRUMENT CORP., 122 Main St., Bluffton, Ohio, "Triplet"—AD, AO, BT, CRO, CT, M, MM, MOD, OHM, OI, SA, SG, TT, VTV, VT
 TRIUMPH MFG. CO., 4017 W. Lake St., Chicago, Ill., "Triumph"—AD, AO, CRO, CT, IB, MM, MOD, OHM, OI, RB, SA, SG, ST, VTV, VT
 VACO PRODS. CO., 1603 S. Michigan Ave., Chicago, Ill.—NI, TW (loop antennas)
 VEOLYZER—Supreme Instruments Corp.
 WALSCO—Walter L. Schott Co.
 EARL WEBBER CO., 1313 W. Randolph St., Chicago, Ill., "Webber"—AD, AO, CRO, CT, M, MM, MOD, OHM, OI, RB, SA, SG, ST, SPK, TT, TW, VT
 WESTERN ELEC. CO., 300 Central Ave., Kearny, N. J.—CRO
 WESTINGHOUSE ELECTRIC CO., Orange St., Newark, N. J.—M, MM
 WESTON ELECTRICAL INSTRUMENT CORP., 614 Frelinghuysen Ave., Newark, N. J., "Weston"—AD, BT, FM, M, MM, OHM, OI, SA, SG, TT, VTV
 WHEELCO INSTRUMENTS CO., 1933 S. Halsted St., Chicago, Ill.—M
 WILCOX ELECTRIC CO., INC., 4014 State Line, Kansas City, Kans.—FM

SERVICING by SIGNAL SUBSTITUTION

As Simple As **AA** **BB** **CC**

A Alert service engineers acclaim this simplified method of dynamic receiver analysis . . .

B Because "S-S-S" requires NOTHING COMPLEX TO LEARN . . . IS UNIVERSAL . . . NON-OBSOLESCE . . .

C Cost is low, Performance high . . . "S-S-S" employs ONLY BASIC TEST EQUIPMENT . . . NO EXTRAS . . .

Every necessary facility for modern servicing (AM & FM) can be provided by a proper selection of ONLY 2 BASIC TEST INSTRUMENTS. Signal Generator (such as PRECISION Series E-200) . . . Tube Tester and the multi-range meter (such as PRECISION combinations Series 920 or 954).



★ Series 954 Combination Dynamic Mutual Conductance Type Tube Tester and 20,000 ohms per VOLT Multi-Range AC-DC Set Tester

A complete service laboratory answering the demand for a compact unit with every facility for accurate, reliable solutions of all tube test and measurement problems (A.M., F.M. and Television). A single master rotary range selector permits simple, rapid measurements in troublesome stages, quickly localized through "Servicing by Signal Substitution." 954 MCP—in open face portable metal case (illustrated for Series E-200). Complete with battery and extra high voltage test leads \$61.95

954 P—(illustrated above) Hardwood case. Complete \$65.95
 954 PM—Standard panel mount. Complete \$65.95

FREE A 120 page text book "Servicing by Signal Substitution" describes this simplified approach to receiver adjustment problems. Furnished FREE with every PRECISION Series E-200. Also available at leading distributors or directly from factory at 35c—Write for it today!

More than 40 models in the New PRECISION 1941 LINE . . . 21 Dynamic Mutual Conductance Type Tube Tester and Set Tester models ranging in price from as low as \$29.95 . . . 16 Multi-Range Tester models from as low as \$14.95 . . . Signal Generators from \$35.95 . . . See them at your local distributor . . . Ask or write for the PRECISION TEST EQUIPMENT 1941 CATALOG.

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★ Series E-200 Modern Laboratory Type Multi-Band Signal Generator

Not only an unsurpassed Signal Generator for purposes of receiver alignment, but SPECIFICALLY DESIGNED as the key to "Servicing by Signal Substitution" . . . Nevertheless priced within the easy reach of every progressive radio service engineer.

E-200—(illustrated)—in heavy gauge metal cabinet, complete with tubes, coaxial output cable and FREE copy of "Servicing by Signal Substitution" \$35.95

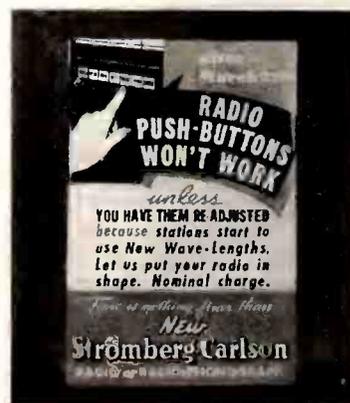
E-200PM—in standard panel mount, complete \$39.95

Big RCA Kit for Mar. 29th

To help radio servicemen with the big opportunity to get into the homes of 10,000,000 owners of push-button radios, during the Mar. 29 re-allocation period, the RCA tube and equipment division is ready with a promotion kit, a big ad in *Saturday Evening Post*, station allocator and frequency range book. Complete sales helps are announced by RCA tube advertising head, J. P. Allen.

Equipment for the actual changing of buttons, is featured elsewhere in this issue. Promotion kit includes an ad reprint, the exclusive frequency range book, streamers, counter card, two direct mail cards, a duplex card, 25 log books, radio spot announcements, and a catalog sheet on the allocator—it adds up to 35 pieces.

News of the Shift



For the re-allocation event Mar. 29th, Stromberg offers this display card. Mailings, ads, etc., are also ready to get folks interested in the change, and in better radios.

Stage by Stage Alignment Reduces Regeneration

Regeneration in IF stages can be traced to improper alignment procedure. When using an output meter as the indicator proceed as follows. 1. Connect the signal generator through a 0.01 mfd. capacitor to the grid of the IF tube and adjust the primary and secondary of the 2nd IF transformer for maximum output. 2. Connect the signal generator through the 0.01 mfd. to the grid of the first detector and adjust the primary and secondary of the 1st IF transformer for maximum output. 3. Do not readjust the 2nd IF transformer.

When using a cathode ray oscilloscope for alignment, adjust the trimmers until the response curves coincide, rather than for peak output. Regeneration will show up at the bottom of one side of the curve as spurious tapering peaks.

Check the Controls!

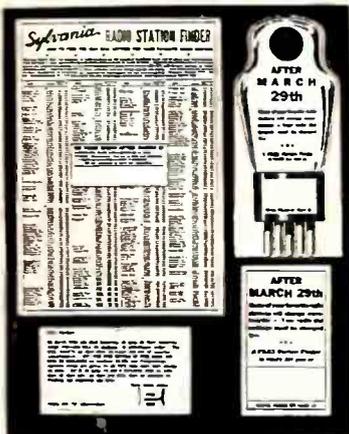


For extra replacement profits during the re-alignment period, says International Resistance Co., 401 N. Broad St., Philadelphia, take this volume control cabinet along on every job. Cabinet is free with order of assorted switches and shafts

Tarnished Push-Button Contacts

Tarnished and dirty contacts on push-button switches are sometimes caused by the chemicals in the rubber coating of nearby wires. The sulphur in the rubber causes a tarnish on the contacts similar to that on unused silverware. Clean the contacts and keep rubber covered wiring away from the switch.

Sylvania in Frequency Change Promotion



A special "frequency change" promotion program for servicemen and deal-

ers is offered by Hygrade Sylvania Corp., including streamers, postcards, door knob hangers and a new radio station finder, all dedicated to extra profits for Mar. 29th re-allocation. Sylvania's radio tube sales and advertising manager Paul S. Ellison, in introducing the promotion says to servicemen that "the doors of the public are unlocking to you . . . ordinary dial sets need your master servicing touch, too."

The poster is a two-color job with jumbo headline, offered free. The station-finder comes with or without imprint, designed as a good-will gift to set-owners. Stamped postal cards and door hangers carry friendly messages on the broadcast shift. Free material comes from Sylvania jobbers; imprinted pieces are available either from

them or more promptly from Hygrade Sylvania Corp., Emporium, Pa.

TYPICAL TROUBLES

Westinghouse WR-260 Weak, distorted

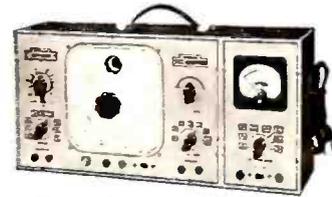
High voltage on voice coil. Short in speaker between field and hum coil.

ZENITH 230

This receiver often has an intermittent trouble that is hard to find. All voltages will check the same when the set is in operation or completely dead and coupling condensers will check OK. The last I.F. transformer is usually at fault. Inspection of the unit will disclose a rosin joint on the secondary. Resolder all transformer joints.

"THE INSTRUMENT THAT PAYS FOR ITSELF"

During the re-allocation rush you want to do better work and do it faster—and Sprague De Luxe Tel-Ohmike is just the instrument to help you do it. It tests *all* condenser and resistor characteristics. It indicates "opens" and short-circuits—even intermittent "opens." It measures leakage current and power factor; measures insulation resistance up to 10,000 meg. and resistance measurements from .5 ohms to 5. meg. You can't beat Tel-Ohmike at anywhere near the price!



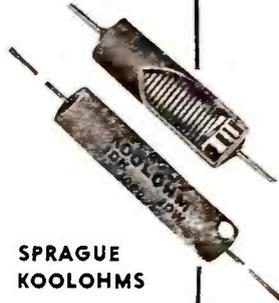
De Luxe TEL-OHMIKE
Costs Less — Does More

Includes built-in voltmeter and milliammeter with switch and pin jacks so that meters may be used for external measurements.

Net Price Complete \$39.95

(Standard Tel-Ohmike without meters, but with jack so you can plug in your own meters....\$29.70 net)

THE ONLY RESISTORS WOUND WITH INSULATED WIRE



SPRAGUE KOOLOHMS

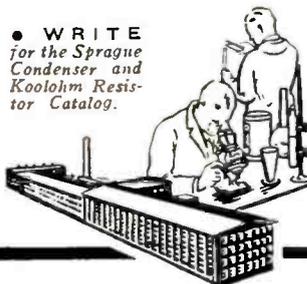
Common sense will tell you the advantage of having every bit of wire in a wire wound resistor insulated *before it is wound* with a special heat-proof, moisture-resistant material. Layer windings, larger wire sizes, more resistance in smaller size resistors, 5% accuracy, no chance for shorted windings, cooler operation, inexpensive non-inductive windings—these are but a few of the features that make Sprague Koolohms unsurpassed in the resistor market today.

Sprague Koolohm Resistor wire showing portion of insulation removed

YOU CAN ALWAYS GET AT 'EM WITH ATOMS

A couple Kits of Sprague Atom midget dry electrolytic condensers carried with you on push button adjustment jobs will equip you for practically any condenser replacement that might pop up. Your jobber will give you ST straps for strapping several units together for hard-to-get capacities. Atoms are smaller—better—and last longer. All capacities—all voltages. Use them universally!

• WRITE for the Sprague Condenser and Koolohm Resistor Catalog.



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FOSTER, MEL,*
601 Cedar Lake Rd.
FRANKLIN SALES CO.,*
2649 Nicollet Ave.
HARDING, F. E.,*
329 LaSalle Bldg.
HEIMANN CO., THE,*
1218 Harmon Place
HILL-HEDQUIST CO.,*
256 First Ave., N.
LEONARD & CO., TEX,
253 Plymouth Blvd.
OSZMAN, E. W.,
8 S. 13th St.
SHARPLESS COMPANY,
8 E. 19th St.
SMITH CO., HARRY P.,
1017 Lumber Exchange

St. Paul

BORK, ROLAND J.,*
2494 University Ave.
KENNEDY SALES CO.,*
2362 University Ave.
McARTHUR, J. U.,*
1768 Laurel Ave.

MISSOURI

Kansas City

FARRIS, RICHARD W.,*
127 E. 31st St.
GLASSMAN, B. W.,
1800 Fidelity Bldg.
KYSALA, F. J.,
614 Interstate Bldg.
LUNDGREN, E. B.,*
606 Manufacturers Exchange Bldg.
McGRADE, E. W.,
1025 Grand Ave.
MUNDY & CO., R. J.,
3940 E. 69th St.
ROES, HERBERT A.,*
2017 Grand Ave.
SOMERS, F. C.,*
2015 Grand Ave.

St. Louis

BENEKE CO., JULES W.,
593-595 Arcade Bldg.
BORGHOFF, WM.,
4018 Greer Ave.
BULLIVANT, F. J.,
1913 Washington Ave.
GOLDSTEIN, ALVIN M.,
DeSoto Hotel

RADIO TODAY LISTS THE COAST-TO-COAST
ROSTER OF REPRESENTATIVES FOR MAKERS
OF RADIO AND ELECTRONIC PRODUCTS

The names marked* are members of "The Representatives" of Radio Parts Manufacturers, Inc.

McGARY, WILLIAM T.,
3800 N. Grand Blvd.
PICKSEN, GEORGE W.,
536 N. Vandeventer Ave.
WOOD & ANDERSON CO.,
815 Olive St.

University City

JAQUES, L. E.,
1248 Midland Blvd.

Webster Groves

KATHRINUS, N. W.,*
480 E. Jackson Rd.

MONTANA

Billings

ROE COMPANY, HARRY,
16 N. 34th St.

NEW JERSEY

Camden

KEEFE, JR., John,*
721 Market St.

Collingswood

SHAPP, MILTON,*
180 Fern Ave.

East Orange

GAWLER, H. C.,*
102 N. 22nd St.

Livingston

CERF, ARTHUR E.,
238 Hillside Ave.

Newark

SCHENCK, LeROY,*
57 State St.

NEW MEXICO

Albuquerque

PATCHIN, NEAL A.,
P. O. Box 361

NEW YORK

Buffalo

COSTELLO, J. V.,
250 Delaware Ave.
CROYSBILL, W. T.,
98 Harvard Place
HEALY & ASSOCIATES, E. E.,
190 Main St.
LOTZ, ALBERT F.,
191 Sterling Ave.
MITSCHER, R. W.,
487 Ellicott Square
MOORE, BYRON L.,*
191 Starin Ave.
SEEMAN, WM. F.,*
523 Ellicott Square
SEGAR, HARRY B.,*
683 Ellicott Square
THRUSH, HAROLD G.,
258 Cambridge Ave.
VAWTER, JAMES H.,*
259 North Drive

Ellenville

TERWILLIGER, P. D.,
190 Center St.

Geneva

DENIKE, G. E.,
76 Monroe St.

Brooklyn

BAUM, SID,*
1142 East 24th St.
KOLMAN, EDWARD M.,*
1290 Ocean Ave.

Long Island

Flushing

SCHWARTZ, ADOLPH,*
14726 Elm Ave.

Forest Hills

BERGER, G. E.,
15 Portsmouth Place

Rego Park

HARPER, SAM M.,
63-12 Haring St.

New York City

BELL RADIO CO.,
125 E. 46th St.
BENEDIKT, JOHN,*
1674 Broadway
BIALEK, SAMUEL,
205 E. 42nd St.
BITTAN SALES CO., INC., D. R.,*
53 Park Place

BLAIR STEINBERG SALES CO.,*
423 Broome St.
BLOCK & CO., WESLEY,
15 E. 30th St.
BREUER & SCHECHTER,*
1074 Broadway
BURLINGAME, BRUCE D.,
69 Murray St.
CAMBER, MATTHEW A.,*
30 Dongan Place
CARDUNER, WILLIAM,
296 Broadway
COOPER-DIBLASI,*
91 7th Avenue
DANZIGER, HAROLD I.,
511 W. 232nd St.
DESPRES, MAURICE S.,
1780 Broadway
EGERT, S. S.,*
56 W. 45th St.
FIXEL, PHILIP R.,
420 Lexington Ave.
FORSNAY, JOHN M.,*
27 Park Place
FREED, ARTHUR
230 Fifth Ave.
FREED, LEO,*
1150 Broadway
FRIEDMAN, ADDLPH,*
220 E. 23rd St.
FURMAN, NAT,*
423 Broome St.
GOLD, WILLIAM,
72 Park Place
GOLDEN SALES CO.,*
152 W. 42nd St.
JOSEPH, BEN,*
258 Broadway
KAELBER, J.,*
1270 Broadway
KASSON & CO., DAVID M.,
265 Canal St.
KOPPLE, JOHN J.,*
60 E. 42nd St.
LEWIS & SACHS CO.,
220 5th Avenue
MACK SALES AGENCY, P. W.,
1270 Broadway
MASIN, O. F.,
17 E. 42nd St.
NEVINS, IRVIN,*
53 Park Place
NEWMAN, CHARLES,*
53 Park Place
PRICE, J. B.,
12 E. 41st St.
RDYE SALES AGENCY,*
11 Warren St.
RUTT, WILLIAM
561 Fifth Ave.
SAFTLER, PERRY,*
53 Park Place
SCHARF, JACK,*
152 W. 42nd St.
SHARP, WESLEY, W. S.,*
67 W. 44th St.
SCHMITT SALES CO., F. EDWIN,*
136 Liberty St.
SIMBERKOFF, J. A.,*
347 Fifth Ave.
SMALLEY, PAUL,*
6 E. 45th St.
SMITH-BENNY SALES CO.,
11 W. 42nd St.
SMITH, HOWARD F.,*
259 W. 14th St.
SONKIN, DAVID,*
220 E. 23rd St.
SPECTOR SALES ASSOCIATES
17 E. 42nd St.
SPRUNG, JOSEPH,
254 W. 31st St.
STESSIN, MAC,*
476 Broadway
SUSSMAN, JULES,*
220 E. 23rd St.
TOBIAS, DAVID F.,*
30 Church St.

Syracuse

WOLFE, MICHAEL,*
1530 E. Genesee St.

Tuckahoe

WEBER, JACK,*
36 Westview Ave.

NORTH CAROLINA

Asheville

ERICKSON CO., HERB,
P. O. Box 307

Winston-Salem

TURNER, W. F.,
515 N. Spruce St.

OHIO

Cleveland

BAEHR, ALBERT M.,
1400 W. 25th St.
BAIER, ARTHUR H.,*
1957 Temblehurst Rd.

DOLFUSS, JR., CHAS. H.,*
219 Film Exchange Bldg.
EDWARDS SALES CO.,*
530 Erie Bldg.
HENGGER-FAIRFIELD CO.,
1808 Columbus Road
JACKMAN, L. H.,*
7600 Euclid Ave.
OLSON, JOHN O.,*
1456 Waterbury Road
RAPFOLG, ALBERT,
700 Prospect Ave.
SCOTT SALES CO., ERNEST P.,*
1836 Euclid Ave.

Cleveland Heights

CAMERON, G. M.,
2662 Shaker Road
CORNELL, PAUL M.,*
3270 DeSota Ave.

Columbus

McFADDEN, WM. E.,*
915 Montrose Ave.

Dayton

STOLL, C. A.,*
139 Alton Ave.

Lakewood

WALL, E. J.,*
17610 Archdale Ave.

Toledo

CLARK, RALPH B.,
1415 Addington Road

OKLAHOMA

Tulsa

KAY SALES CO.,*
317 Central Bank Bldg.

OREGON

Portland

BURCHAM, DON H.,*
917 S. W. Oak St.
DETSCH CO., ARTHUR S.,
69 Security Bldg.
DOBBS, M. A.,
524 S. W. Pine St.
KILLAM, H. A.,
131 S. W. 4th Ave.

PENNSYLVANIA

Erie

BARNER, C. F.,
1259 Buffalo Road

Glenside

HILLIARD, D. M.,
329 Linden Ave.

Philadelphia

ELKISH, JULES,
1033 Chestnut St.
FRIEDMAN, MARTIN,*
6030 Christian St.

GATTY, SIDNEY H.,*
6713 N. Sydenham St.
HYDE ELECTRIC CO., E. N.,
117 W. Ashmead St.
JEFFRIES, SAMUEL A.,*
916 Packard Bldg.
JORALEDON, L. D.,
112 S. 16th St.
LEBAN, ALBERT D.,*
5716 Nassau Rd.
MacDONALD, SAMUEL K.,*
1343 Arch St.
MAGUIRE, J. A.,*
Drexel Bldg.
McKINLEY, J. E.,
519 N. 33rd St.
TRINKLE, W. S.,*
2324 Ripley St.

Pittsburgh

BAUMGARTEN, FRANK A.,
405 Penn. Ave.
CLARK, INC., RUSSELL F.,
810 Penn. Ave.
GROETZINGER, H. W.,
1500 Cooper Ave.
MIDDLEMAN, ALBERT E.,
524 Penn. Ave.
PARKE CO., H. B.,
918 Hill Ave.
STOVER & CO., S. H.,
704 Century Bldg.
TANNER, G. O.,*
600 Grant St.

Upper Darby

LOWERY, L. D.,
7101 W. Chester Pike

TENNESSEE

Memphis

CARTWRIGHT, J. M.,*
1288 Vinton Ave.

TEXAS

Dallas

ANDERSON CO., GEORGE E.,*
Santa Fe Bldg.
AYMOND CO., EDWARD F.,*
3750 Urban Ave.
BERTHOLD, A. L.,*
P. O. Box 1052
CAMPION, R. M.,*
P. O. Box 4116
CORRY, HAL F.,*
3522 Gillon Ave.
HAFFER COMPANY,
707 S. Ervay St.
PATTERSON & CO.,*
434 Allen Bldg.
PAYLOR, B. G.,*
Jefferson Hotel
RUHLING, T. C.,*
304 Burt Bldg.
SCHOONMAKER, J. Y.,*
2320 Griffin St.
SMITH, J. EARL,*
P. O. Box 1805
SMITH, ROYAL,
912 Commerce St.

WILKS, ERNEST L.,*
7935 Eustis St.

Fort Worth

SMITH, W. JAY,
2317 Arrowhead Court

Houston

WILLISON, G. G.,*
306 West Bldg.

UTAH

Salt Lake City

BOWEN, RONALD G.,
Box 2005
INTERMOUNTAIN JOBBERS SUPPLY,
150 S. 4th St., W.

VERMONT

Brattleboro

VAN DER VEER, JOHN D.,
92 High St.

VIRGINIA

Richmond

GROVES, FRED G.,*
3106 Edgewood Ave.
HUDSON, GEORGE W.,
3308 E. Broad St.
MOON, J. MARTIN,
3234 W. Franklin St.

Staunton

S & S COMPANY,
Box 627

WASHINGTON

Seattle

BACKER CO., JAS. J.,
109 Bell St.
GENERAL SALES COMPANY,*
2605 Second Ave.
LEE, DAVE M.,*
1001 Westlake Ave., N.
MARSH AGENCIES,
104 Battery St.
NORRIS CO., GEO. D.,
2420 Third Ave.
NORTHWESTERN AGENCIES,*
2411 First Avenue

WISCONSIN

Milwaukee

AARON & ASSOCIATES, INC.,
IRVIN I.,*
4028 N. 16th St.
BOCHER & COMPANY, C. R.,
416 E. Juneau Ave.
HENRICH, ERVIN W.,
3634 N. Green Bay Ave.
MOELLER, ROLAND,*
2105 N. 2nd St.
ROBINSON, CLEM,
2711 N. 76th St.
ROSCHKE, O. E.,
740 N. Plankinton Ave.

The Mountain Goes to Mohammed!





Since Bud got a copy of the Burgess Replacement Guide* he has had no need for the services of Homer G. Snoopshaw, B. R. S., (Battery Replacement Specialist)

Homer's ex-employer is tickled with the new arrangement. The Replacement Guide answers all replacement problems in a jiffy—and its free!

***IT'S FREE**
See Your Burgess Distributor or write Burgess Battery Company Freeport, Illinois

BURGESS
The Complete Replacement Line

PUBLIC ADDRESS HEADQUARTERS



RADOLEK De Luxe Public Address Systems offer the most for your money in Styling—Hi-Fidelity Performance—Reserve Power—fast, convenient, easy installation. Offered in 15, 30, 50 and 100 watt sizes—for permanent, portable or mobile use. They feature from 2 to 6 input channels, built-in input and mixing controls, AVC, and the newly developed "feedback" tone control circuit. Wide choice of microphones and speakers. Mail coupon for complete information.

RADOLEK'S NEW 1941 RADIO PROFIT GUIDE FREE!

Indispensable to every serviceman, dealer and sound engineer. Send for big FREE Radolek Profit Guide now!



SEND TODAY! PASTE ON A PENNY POST CARD

RADOLEK CO., Dept. RD-52
601 W. Randolph St., Chicago, Ill.

Please send information on Radolek Public Address equipment—also new 1941 Radio Profit Guide.

Name _____
Address _____
 DEALER SERVICEMAN ENGINEER

Preferred Renewal Tube Types Recommended by RCA

The Preferred Tube Type program has been extended into the renewal market by the recent announcement of L. W. Teegarden, Manager of RCA's Tube and Equipment division. A recommended list of 66 types of receiving tubes has been prepared to provide for 66 per cent of the total renewal demand. An additional eighteen per cent of the renewal demand may be handled by the inter-changeability of the 66 types with those they can replace. Thus, according to Mr. Teegarden, 66 tube types can take care of 84 per cent of all tube renewal requirements.

The campaign is being introduced to jobbers, distributors, dealers, and servicemen through a large broadside emphasizing the interchangeability of the 66 tubes with those in the more than 400 remaining types. The slogan of the campaign is "66/66".—66 types for 66 per cent of the market.

McKelvy Directs Seeburg Sales

Announcement from the J. P. Seeburg Corp., 1500 Dayton St., Chicago, is that C. T. McKelvy, who has been a key merchandiser of radio and music products for 20 years, has been named director of sales for Seeburg. The company is a specialist in automatic record changers and recorders.

Mr. McKelvy had previously directed sales and sales promotion for such firms as Zenith, RCA, Brunswick Balke Collender, Brunswick Radio Corp., etc. In 1938 Seeburg made him president of its radio division, where he began vigorous development of automatic record changer sales.

Dealer Give-Away from Stromberg

A new log book is among the merchandising helps Stromberg-Carlson is providing dealers to tie in with re-allocation of station wavelengths.

It contains a complete listing of all stations, revised to include new stations and the new wavelengths of old stations. Featured is the SC 600-H plastic table radio and the 535-PG automatic radio-phonograph.

Arthur Freed Appointed



New sales manager for Freed Radio Corp., Arthur Freed.

Just named for the post of general sales manager for Freed Radio Corp., 39 W. 19th St., New York City, manufacturers of Freed-Eisemann FM radio receivers, is Arthur Freed, brother of Joseph D. R. Freed, head of the firm. Arthur has been associated with his brother in radio activities since the earliest days of broadcasting.

NU Points Out Movin' Day Opportunity

A strong effort to help jobbers, servicemen and dealers tie in with local stations and the RMA and NAB celebration of Radio Movin' Day, Mar. 29th, is under way at National Union Radio Corp., 57 State St., Newark, N. J. In a bulletin to jobbers, NU offers free, a lively folder for use by servicemen, calling attention to the wavelength change and what it means to owners of push button sets.

The bulletin suggests that the RMA-NAB plan for the local "Radio Rally for Radio Servicemen" is "probably the best chance for publicity in cooperation with broadcasting stations that has ever been offered to the radio parts jobber and radio parts dealer."

New Solar Repts

Appointed by Solar Mfg. Corp., the Bayonne, N. J., makers of capacitors, as industrial sales engineers for the state of Ohio is the Ambos-Jones Co., 1085 The Arcade, Cleveland, Ohio.



Make money with us!
SELL THE NEW Sun-Kraft
The Wireless ULTRA VIOLET LAMP

THESE EXCLUSIVE Sun-Kraft FEATURES SPELL RAPID SALES

- INSTANTANEOUS EYE APPEAL
 - GENUINE PURE QUARTZ TUBE IS WIRELESS, CANNOT BURN OUT!
 - BUILT IN AUTOMATIC TIMER
 - USES ONLY 20 WATTS A.C. OR D.C.
 - 2 MINUTE TREATMENT WILL CREATE HEALTHY SUN-TAN
 - NO CHARGE FOR CARRYING CASE
- Accepted for listing by Underwriters Laboratories

PRICE \$49.50

Write NOW for details and generous discounts

Sun-Kraft, Inc., 215-17 WEST SUPERIOR STREET, CHICAGO

RECORD NEWS

Nester Forms Duotone Needle Firm

A new manufacturing and selling organization, ready to market a complete line of American-made playback and recording needles, has been formed by Stephen Nester, at 799 Broadway, New York City. The new firm, the Duotone Co., Inc., has announced that extra quality will be accentuated in the Duotone line; details will be sent to those who request them.

Mr. Nester has for several years been identified with the Recoton Corp. and is widely known among distributors throughout the U.S. His new needles are designed for all home and professional uses.

Tailored Stock-Control for Records

Record dealers are now finding extra conveniences in stock control, in the disc label service offered by Alex Gettlin, 1616 Walnut St., Philadelphia, Pa. Mr. Gettlin is the publisher of *Recordaid*, a bi-weekly booklet containing lists of all the new record releases by all manufacturers.

To the *Recordaid* subscribers, Mr. Gettlin now mails each week a series of labels, carrying the artists and the tunes to be released the following



SPECIAL RECORDINGS
Hymns, Sacred Songs Attract Church Patronage

SELECTED sacred and semi-sacred compositions—the favorites of millions. Meet the present amazing demand for selections of a serious type. Reproduced in acetate low-scratch materials. Advertised in an influential list of religious publications.

Prospective customers for these records know what they want, and only perfected renditions are necessary to sell them. It is also a fact that such renditions of sacred songs and hymns, suitable for all denominations, are extremely rare. Equip yourself to meet this situation. You can—with profit.

A number of these records are made especially for musical towers or carillons—no scratch, two-sided acetate 12" transcriptions. All suitable for both Catholic and Protestant churches, religious organizations, lodges, etc.

Write for list.

SUNDT ENGINEERING CO.
4763 RAVENSWOOD AVE. CHICAGO, ILL.

SUNDT ENGINEERING CO.
4763 Ravenswood Ave.
Chicago, Ill.

Please send list of records, and further information on music for carillons, etc.

Name
Company
Address
City..... State.....

Good Sales Bets Among New Records

LEO REISMAN and his orchestra playing Jenny, from "Lady in the Dark," with VR by Sara Horn—Victor 27340.

BENNY GOODMAN and his orchestra playing Corn Silk, with VC by Helen Forrest—Columbia 35992.

ANDREWS SISTERS singing Boogie Woogie Bugle Boy, from the Universal picture, "Buck Privates"—Decca 3598.

GUY LOMBARDO and his Royal Canadians playing Corn Silk, with VC by Kenny Gardner—Decca 3616.

BARRY WOOD singing I Yi, Yi, Yi, Yi from the 20th Century-Fox film, "That Night in Rio"—Victor 27327.

UNA MAE CARLISLE singing Walkin' by the River—Bluebird B11038.

BOB CROSBY and his orchestra playing Blue Echoes with VC by Mr. Crosby and Bob-o-Links—Decca 3605.

TOMMY DORSEY and his orchestra playing Delces from the Paramount film "Las Vegas Nights" with VR by Frank Sinatra and The Pied Pipers—Victor 27317.

ORRIN TUCKER and his orchestra playing It Was Wonderful Then with VC by Bonnie Baker—Columbia 35997.

JACK LEONARD with Ray Bloch's orchestra singing The Last Time I Saw Paris—Okeh 6072.

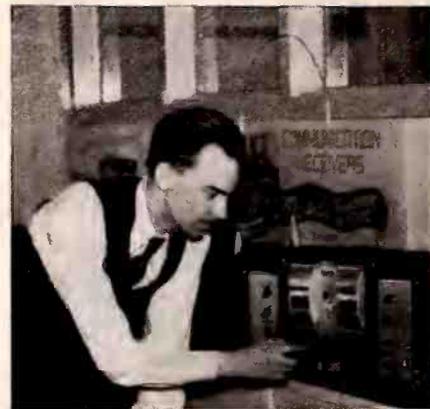
week. These are gummed, for convenient fastening to stock envelopes, and they have plenty of space for a complete record of dates, and quantities on hand. The dealer thus has a system for keeping his stock in good shape, and for rapid re-ordering without a mass of bookkeeping.

This stock-control service applies to all record labels—Columbia, Okeh, Bluebird, Decca, and Victor. It has received an increased amount of attention since the prices of records have been lowered and dealers' turnover has sharply picked up.

Walco Sapphires in New Display

A colorful new display for Walco sapphire needles has been issued by Electrovox Co., 424 Madison Ave., New York City, as part of the new Walco merchandising plans. The sapphires now have a brand new package, and on this display are mounted 12 of them. Electrovox recently reduced the price of the Walco needle to \$1, and announced vigorous promotion plans to fit in with the trend toward quality needles.

Ziegler Joins Howard



H. T. Ziegler, in radio since 1924, is the new ad manager for Howard Radio Co., Chicago. He's a well known technical author, and the youngest member of radio's "Old Timers" Club.

Columbia Has New Plan for Dealer Ads

Cooperative dealer advertising on Columbia records this year will be more than double that of last year, it has been revealed by Patrick Dolan, CRC's advertising manager.

Details for the drive were outlined to Columbia distributors last week in regional meetings held by Mr. Dolan, sales manager Paul Southard and district managers.

Mr. Dolan said that "With this big increase in our local advertising budget, we are inaugurating a new plan for dealer advertising which we believe will answer many of the problems of the past. Expenditure of funds will be strictly confined to newspapers and radio.

Order Cards to Leave in Homes

A "golden opportunity" for servicemen when they re-set push buttons, is seen in their chance to start selling extra home recording discs and accessories. To help them get this disc business started, imprinted order cards are now being offered by Presto Recording Corp., 242 W. 65th St., New York City. These cards, carrying the name, address and phone of the serviceman are to be left in the home.

\$293 REWARD: TO ONE TELEGRAM USER!

You're rewarded with big cash savings on telegrams when Postal Telegraph surveys your telegraph costs! This free cost analysis saved \$293 last year for one firm (name on request). It uncovers huge wastes and provides easy-to-follow plan to stop them!

For information about free telegraph cost analysis —wire collect: P. B. Hinerfeld, Postal Telegraph, 253 Broadway, N. Y. C. No obligation!

WIRE COLLECT:

Postal Telegraph

"Finest Dynamic I ever used"
 SAYS EVAN R. RUSHING, SOUND ENGINEER, HOTEL NEW YORKER

AMPERITE
P. G. DYNAMIC
 BRINGS STUDIO QUALITY
 TO ORDINARY P. A. JOBS

- **UNI-DIRECTIONAL.** NEW SUPERIOR ELIPSOID PICKUP PATTERN
- **ELIMINATES FEEDBACK** TROUBLE BECAUSE IT HAS LOWEST FEEDBACK POINT OF ALL DIAPHRAGM TYPE MICROPHONES
- **FLAT RESPONSE.** FREE FROM ANNOYING PEAKS, GIVING STUDIO-QUALITY REPRODUCTION.



The P.G. diaphragm follows air particle velocity where amplitude is a GRADIENT of the PRESSURE. In ordinary dynamics amplitude is restricted from following air particle velocity.

The P.G. DYNAMIC is a radical improvement in this type of microphone. You can actually hear the difference. Case is designed according to modern acoustic principles. Rugged, not affected by temperature, altitude or humidity. **HAS UNUSUALLY HIGH OUTPUT, -55 DB.**

MODEL PGH (PGL. 200 ohms). Excellent for high fidelity P.A. installations, broadcast studio, and professional recording. With switch, cable connector, 25' cable. Chrome finish. LIST \$32.00 (40. 10000 C.P.S.)

MODEL PGAH (PGAL. 200 ohms). For speech and music. 70-8000 C.P.S. Switch, cable connector, 12' cable. Chrome, LIST \$25.00

COMBINATION VELOCITY-DYNAMIC
 ACHIEVED WITH
ACOUSTIC COMPENSATOR



An exclusive Amperite feature: By moving up the Acoustic Compensator you change the AMPERITE VELOCITY to a DYNAMIC microphone without peaks. At the same time you reduce the back pick-up, making the microphone practically UNI-DIRECTIONAL.

WITH ACOUSTIC COMPENSATOR:
 MODEL RBHk; RBMk (200 ohms) with switch, cable connector.

Chrome, LIST \$42.00

RSHk; RBSk (200 ohms). Switch, cable connector, Acoustic Compensator.

Chrome or Gunmetal. LIST \$32.00

AMPERITE KONTAK MIKE
 Puts Musical Instruments Across



So beautiful is the tone produced with the Kontak Mike, that it was used in the Philadelphia Symphony to amplify a mandolin solo. Gives excellent results with any amplifier, radio sets, and record players.

MODEL SKH (hi-imp) LIST \$12.00

MODEL KKH, with hand volume control... LIST 18.00

Plug extra List 1.50

FOOT PEDAL, for making beautiful crescendos LIST 12.00

WRITE FOR FREE SALES AIDS

AMPERITE ©

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

Specify **AMPERITE**



Motorola

AUTO RADIO



with 200 Different
INSTRUMENT PANEL
CONTROL HEADS
IS THE ONLY RADIO THAT
FITS and MATCHES
ALL CARS

Old and New
Motorola DEALERS IN 1941 GET
ALL THIS and

3-DIMENSION

VITA-TONE

BIGGEST
NATIONAL
ADVERTISING
PROGRAM
50 Million Readers
SATURDAY EVENING POST
LIFE
COLLIER'S
AMERICAN WEEKLY
AMERICAN MAGAZINE
RADIO AND MOVIE GUIDE

WRITE YOUR MOTOROLA DISTRIBUTOR TODAY
GALVIN MFG. CORPORATION · CHICAGO



(Continued from first page)

mal. That's your cue to start selling—a new set if possible; otherwise a husky repair job.

Naturally you will give first attention to the tubes. The more you test, the more replacements you will sell. Just as in the case of repairs, there is no sense in re-setting the buttons until it is known that the tubes are in good condition. If not okay, don't hesitate to recommend a full set of new tubes. Figure up the price and tell the customer.

Perhaps it's better for your customer to use that outlay as a deposit or down payment on a new set. At least, you are reasonably sure to sell a complete set of tubes. Now look around. Is there another radio in the house? Yes or no, you resume selling. Get into the kitchen if you can. Does it need a little kitchen set? Is the refrigerator old, noisy and wasteful? Keep selling. The chance is too good to miss.

SELL GENERAL SERVICE

While service stands on its own feet as a radio necessity, it will always come to bat for *Sales* if you really want it to. Each additional need of service is another leverage on a sale. So sell—enthusiastically—both for the sake of service and the sake of sales. Whether a set needs alignment, new filters, speaker-centering, or what not, get a commitment to do the job. That's a good basis for subsequent salesmanship. And don't forget antenna replacements. Eight out of ten aerials are obsolete or faulty. New sets with self-contained loops often have jacks or terminals for external antennas.

Tell your customer about the many improved types of antennas for better pick up, noise reduction, etc.

SELL MERCHANDISE

Make it a principle to sell *up!* If the prospect has a table model, try to sell a console. If he has a record player, sell him a combination with automatic record changer. Or a radio-phonograph recorder. Keep your eye peeled for sales of portables, personal radios—even future FM and television!

Every home should have at least one modern console, capable of reproducing the finest programs with utmost fidelity. But many homes need more than one. Kitchens, bedrooms and recreation rooms must not be overlooked. Nor the opening to sell appliances.

How much you will profit from this campaign depends on sales effort rather than service volume—on the sales you make now and the ones you initiate now for later closing.

SETS OBSOLETE

A great majority of the sets in use are obsolete and utterly incapable of present-day performance. This of course is not a new situation but never before have radio men had such universal access to homes. And you will be bringing a great improvement in reception to each customer.

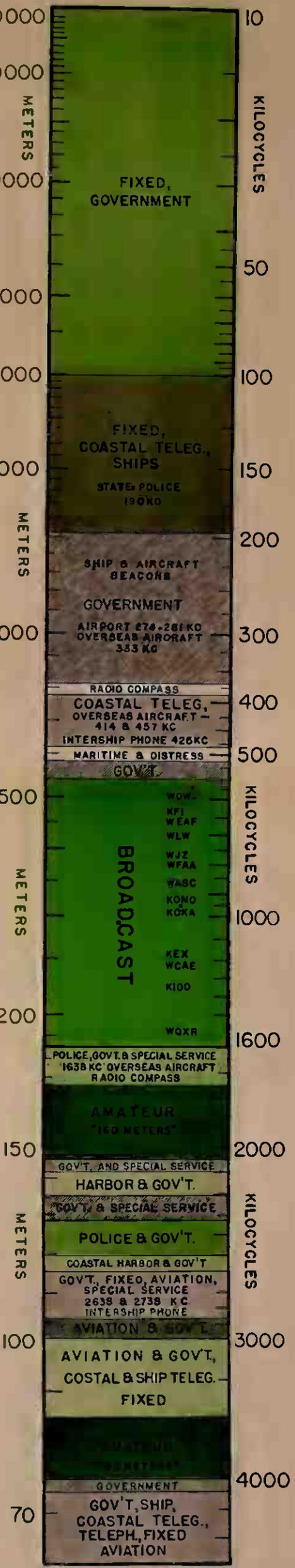
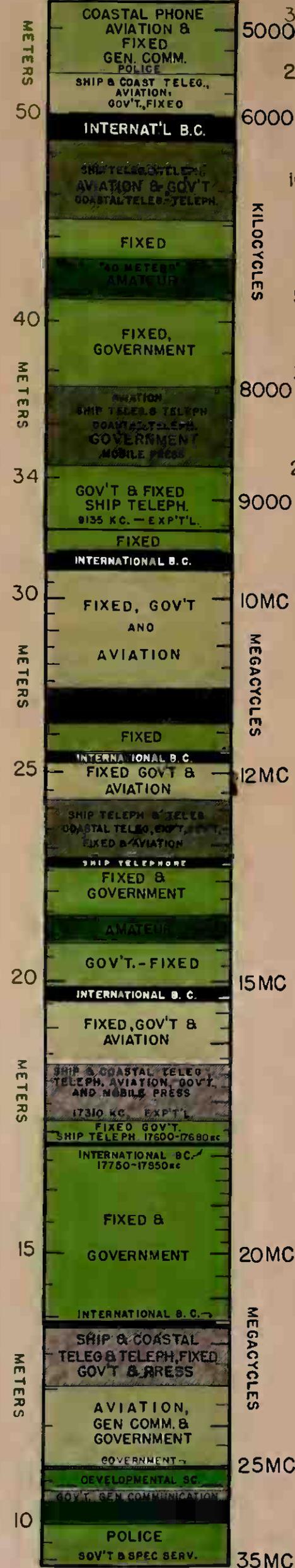
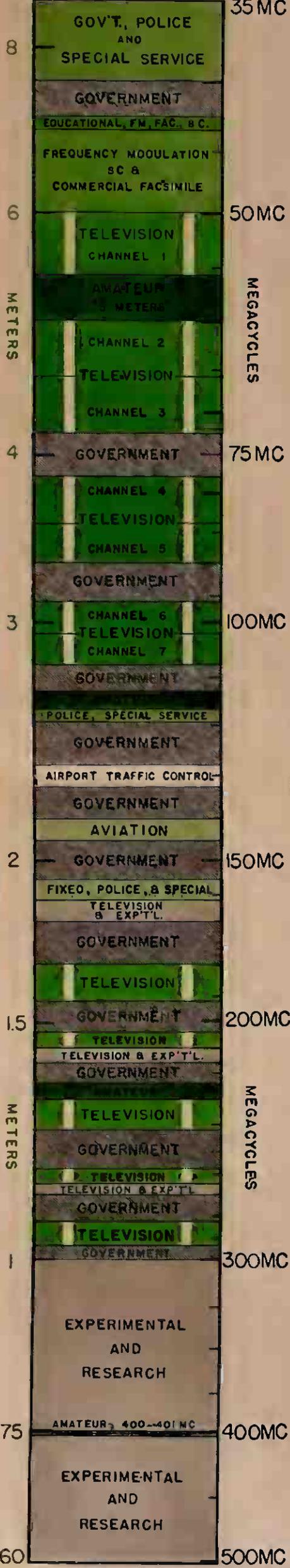
A tremendous amount of business is thus “all wrapped up in cellophane” and waiting for the servicemen and dealer to go out and get it. First, it means resetting push-buttons. But it also means sale of tubes, new sets, new parts, and overhaul jobs. It means “good business” for every serviceman who goes after it.

HINTS ON ORGANIZING THE BIG SELLING JOB

1. **START EARLY!** This will not only prevent a jam later on but will spread the work so you can sell more service and more merchandise.
2. **GOOD PRICES!** Stiffen up on all parts, sets, and other merchandise. This is a seller's market.
3. **INVENTORIES!** Be sure you have what you will need. With everybody selling to a market that's a hundred times bigger than usual, stocks will get low and lines will become exhausted.
4. **INDUCEMENTS!** Make it attractive for customers to *bring in their sets*. The small ones, of course. The customer will see your display. Perhaps buy a new one. The time you save will free you for a better job of selling in the home. Selling consoles, combinations, recorders—yes even refrigerators and other appliances.
5. **DATES BY PHONE!** You have more prospects than you can possibly contact personally. Phone every one you can reach. Arrange for a checkup now. Set buttons later.
6. **DOOR-TO-DOOR!** Don't shy at this type of selling, especially now when every home needs what you have to offer. Uncle Sam is getting you in—to serve and to sell.
7. **POSTCARDS!** Start immediately to send postcards to your entire list, warning prospects about the change-over and offering full explanation on call.
8. **LISTS!** Keep a card record of every interview—by phone or personally. Jot down what they own, what you expect to sell or to do. Follow up all.
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RADIO TODAY
MARCH 1941



RADIO TODAY - The Radio Spectrum, Including Latest Television, Frequency-Modulation, and Facsimile Assignments.



Motorola

AUTO RADIO



with 200 Different
INSTRUMENT PANEL
CONTROL HEADS
IS THE **ONLY RADIO THAT**
FITS and MATCHES
ALL CARS

Old and New
Motorola DEALERS IN 1941 GET
ALL THIS *and*

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BIGGEST
NATIONAL
ADVERTISING
PROGRAM
50 Million Readers
SATURDAY EVENING POST
LIFE
COLLIER'S
AMERICAN WEEKLY
AMERICAN MAGAZINE
RADIO AND MOVIE GUIDE

WRITE YOUR MOTOROLA DISTRIBUTOR TODAY
GALVIN MFG. CORPORATION · · CHICAGO

(Continued from first page)

mal. That's your cue to start selling—a new set if possible; otherwise a busky repair job.

Naturally you will give first attention to the tubes. The more you test, the more replacements you will sell. Just as in the case of repairs, there is no sense in re-setting the buttons until it is known that the tubes are in good condition. If not okay, don't hesitate to recommend a full set of new tubes. Figure up the price and tell the customer.

Perhaps it's better for your customer to use that outlay as a deposit or down payment on a new set. At least, you are reasonably sure to sell a complete set of tubes. Now look around. Is there another radio in the house? Yes or no, you resume selling. Get into the kitchen if you can. Does it need a little kitchen set? Is the refrigerator old, noisy and wasteful? Keep selling. The chance is too good to miss.

SELL GENERAL SERVICE

While service stands on its own feet as a radio necessity, it will always come to bat for Sales if you really want it to. Each additional need of service is another leverage on a sale. So sell—enthusiastically—both for the sake of service and the sake of sales. Whether a set needs alignment, new filters, speaker-centering, or what not, get a commitment to do the job. That's a good basis for subsequent salesmanship. And don't forget antenna replacements. Eight out of ten aerials are obsolete or faulty. New sets with self-contained loops often have jacks or terminals for external antennas.

Tell your customer about the many improved types of antennas for better pick up, noise reduction, etc.

SELL MERCHANDISE

Make it a principle to sell up! If the prospect has a table model, try to sell a console. If he has a record player, sell him a combination with automatic record changer. Or a radio-phono recorder. Keep your eye peeled for sales of portables, personal radios—even future FM and television!

Every home should have at least one modern console, capable of reproducing the finest programs with utmost fidelity. But many homes need more than one. Kitchens, bedrooms and recreation rooms must not be overlooked. Nor the opening to sell appliances.

How much you will profit from this campaign depends on sales effort rather than service volume—on the sales you make now and the ones you initiate now for later closing.

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RADIO *and Television* TODAY

IN TWO PARTS • PART TWO

CASHING IN ON MARCH 29 SHIFT

Never has the radio man and service expert enjoyed such widespread help in promoting his own business, as will be given him in connection with the broadcasting-station shift of March 29!

Broadcasting stations covering his community will devote costly time-on-the-air to advising listeners to "Call in a Serviceman" to reset their push-button radios. Many stations will also do printed advertising and send out folders and booklets.

The great networks will devote special programs to the subject of the Big Shift of March 29, telling why it was necessary and what will happen. Dramatic sketches will show the public what tuning inconveniences they may suffer if they do not have a qualified radio man reset their push-buttons.

NEW STATION POSITIONS

Newspapers will notify their readers about the coming shift and will publish the new channel positions for all stations heard best in each community. National magazines will also carry the Re-allocation story for listeners.

Utilities will devote local newspaper advertising space to reminding householders to summon expert help to change station settings,—for the electrical companies derive large income from radio sets and do not want listening interrupted. Some power companies will also mail reminder folders with their monthly bills; others will have special window displays in their show rooms.

Mayors and public officials will make proclamations of "Radio's Moving Day" and in other ways signalize the importance of the occasion.

Boy Scouts, Girl Scouts, Red Cross groups, ministers, educators, department stores, will all cooperate to spread the message. All of these groups will stress the improvement that will result to broadcast reception from the change of station positions.

Radio manufacturers have provided splendid promotion material for the use of servicemen and dealers. These folders and bulletins can be sent to past customers and present prospects.

USE THE PUSHBUTTON CHANGE, MARCH 29th, TO SELL

Tubes . Parts . Antennas . Noise-elimination filters . Overhaul jobs . Vibrators . Extra radios . Portable radios . Full-BC-band radios (550-1600 KC.) . Record-players and records.

LOGS AND STATION-SETTERS

Special broadcasting logs showing the new positions, are being issued by many radio-set and tube manufacturers, for distribution to retail customers. Many of these logs are already available, and include useful suggestions for short-wave listening, as well.

Several manufacturers have also brought out special push-button oscillators or "station setters" to aid service men in resetting receiver push-buttons. These instruments will be handy for setting up sets *before* March 29; they are also especially convenient after March 29 for setting up positions during daylight or at other times when favorite stations are not heard well locally.

TEST EVERY TUBE

Re-setting buttons—this, of course, is the big door-opener. It gets you in. It lets you discover what the customers need—what they can be sold—now or later on. Remember, already many homes have more than one radio. Many others *should* have. Eleven million push-button receivers must be reset. 11,000,000 sets ÷ 25,000 servicemen = 440 jobs per man!

But, we repeat—button-setting is only the beginning. Inspection and test will indicate repairs that should be made before setting the buttons. Be on the alert for sets that are weak, noisy, distorted, and otherwise below normal.

(Continued on last page)

Making pushbutton changeover with Philco "station-setter"

