

KEEP 'EM LISTENING

TEST, REPAIR, MODERNIZE



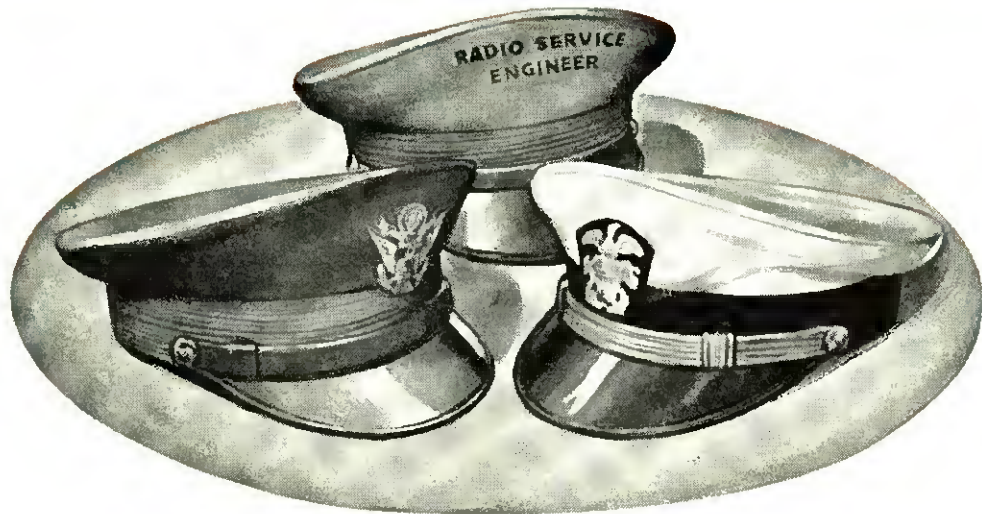
IN TWO PARTS — PART ONE

WHERE TO BUY ANYTHING IN RADIO
1942-43 YEAR BOOK AND TRADE DIRECTORY



MARCH

You're "In The Service", Too



You radio service engineers may not be in uniform, but you've got a big job in helping maintain the home front. It is up to you to keep receiving sets in operation, no matter what shortages and restrictions may grow out of wartime needs.

Mallory knows what an enormous job the home front involves, and you may depend on Mallory and Mallory Distributors for help with that job. Mallory Approved Precision Products put quality parts at your disposal for efficient, economical replacements. They give you the benefit of the Mallory time proven standardization program, tremendously important now that inventories are so short.

Furthermore, Mallory engineers are putting their backs into the task of overcoming the handicaps imposed by material shortages and wartime demands. They have set out to keep you supplied with necessary replacement parts for the home front. They have made great strides in developing new supplies to take the place of critical materials. They have an eye to the future, too—Mallory research is working today as never before to maintain Mallory leadership in the field.

And when you are confronted with a skull teaser that defies solution—remember Mallory—for friendly technical help that's yours—free for the asking.

Rely on Mallory—you will find it pays.

P. R. MALLORY & CO., Inc., INDIANAPOLIS, INDIANA Cable "Pelmallo"



FOR IMMEDIATE DELIVERY



COMBINATIONS featuring
RADIO PHONOGRAPH

Slide-A-Way

AUTOMATIC RECORD CHANGER

They're ready . . . and going fast . . . these latest radio-phonograph combinations by Admiral. Every one a hit . . . packed with Admiral "exclusives"! Supply is limited . . . so hurry. Get in touch with your Admiral distributor today.

FM AT ITS BEST . . . BY ADMIRAL

4207-B12 (see right)—Admiral FM-AM Radio-Phonograph with Slide-A-Way automatic record changer . . . lifetime needle . . . 3 tuning bands including Magna Band S-P-R-E-A-D short wave . . . feather touch electric tuning . . . record album compartment . . . plus FM at its best! All 12 tubes are used on both FM and AM circuits for maximum performance. Special limiter circuit minimizes noise on weak signals. New triple-tuned RF converter circuit (pat. applied for) gives higher sensitivity . . . eliminates tweets, whistles and other background noises. A superb musical instrument in a smartly styled walnut cabinet.

- SWIFT, SAFE AUTOMATIC RECORD CHANGING
- NO NEEDLES TO CHANGE
- NO NEEDLE SCRATCH
- RECORDS LAST LONGER



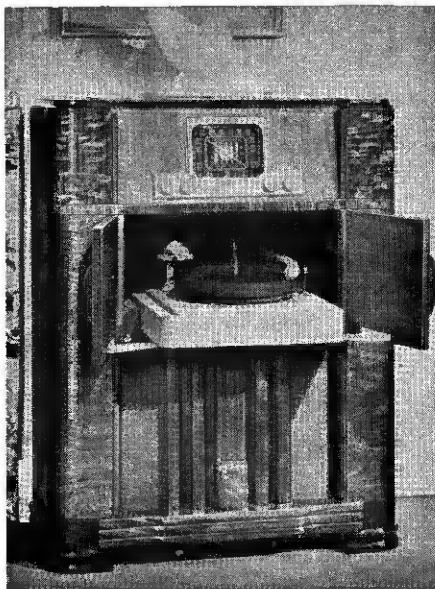
*World's largest manufacturers of automatic record changers. Originators of Slide-A-Way . . . Aeroscope . . . AC-DC-Battery . . . Bantam . . . Tilt-Tuning . . . Touch-O-Matic



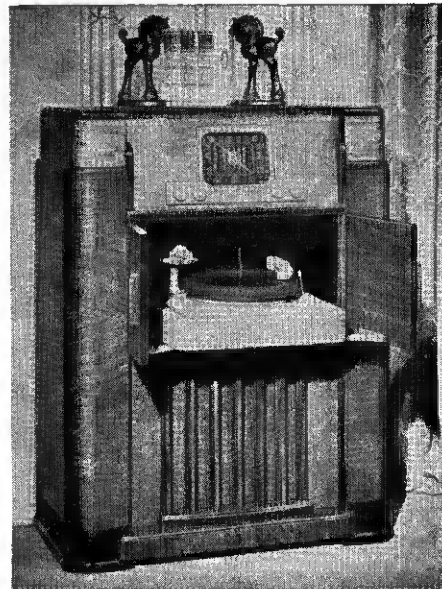
4221-N6—Admiral 6 tube, table model radio-phonograph with automatic record changer . . . lifetime needle . . . Sofglo dial . . . Aeroscope . . . bass compensation . . . continuous variable tone control . . . automatic volume control . . . heavy duty electro dynamic speaker.



4214-L5—Admiral 5 tube, table model radio-phonograph with automatic record changer . . . lifetime needle . . . slide-rule dial . . . beam power output . . . automatic volume control . . . Aeroscope . . . bass compensation . . . heavy duty speaker.



4215-C7—Admiral 7 tube radio-phonograph with Slide-A-Way automatic record changer . . . lifetime needle . . . high fidelity audio system . . . airplane dial . . . 10" electro dynamic speaker . . . variable tone control . . . bass compensation . . . automatic volume control . . . giant Aeroscope . . . 2 bands. Especially designed for use with FM converter.



4218-C7—Admiral 7 tube radio-phonograph with Slide-A-Way automatic record changer . . . lifetime needle . . . high fidelity audio system . . . airplane dial . . . 10" electro dynamic speaker . . . variable tone control . . . bass compensation . . . automatic volume control . . . giant Aeroscope . . . 2 bands. Especially designed for use with FM converter.

CONTINENTAL RADIO & TELEVISION CORP.

3800 Cortland Street, Chicago, U. S. A.
Export Office: 89 Broad Street, New York



EXCELLENT OPPORTUNITY FOR OUTSTANDING MEN

THE FARNSWORTH Television & Radio Corporation is adding to its staff of research and development specialists—the closely knit group which has won recognition throughout the world for its developments in the field of electronics. These men know how to work harmoniously toward a common goal, for each realizes that his opportunity to succeed is controlled only by his ability and ambition.

The urgency for additional research and development of highly specialized electronic apparatus at this time enables us to solicit applications from qualified American

citizens, including junior and senior engineers and physicists having suitable qualifications.

Excellent opportunity to participate now in most important engineering developments as well as to qualify for responsible positions in post-war activities.

Replies, including complete statements of experience and training, references and photographs, should be addressed to this company, attention of Personnel Manager, at its main office at Fort Wayne, Indiana.

Personal interviews will be by appointment only.

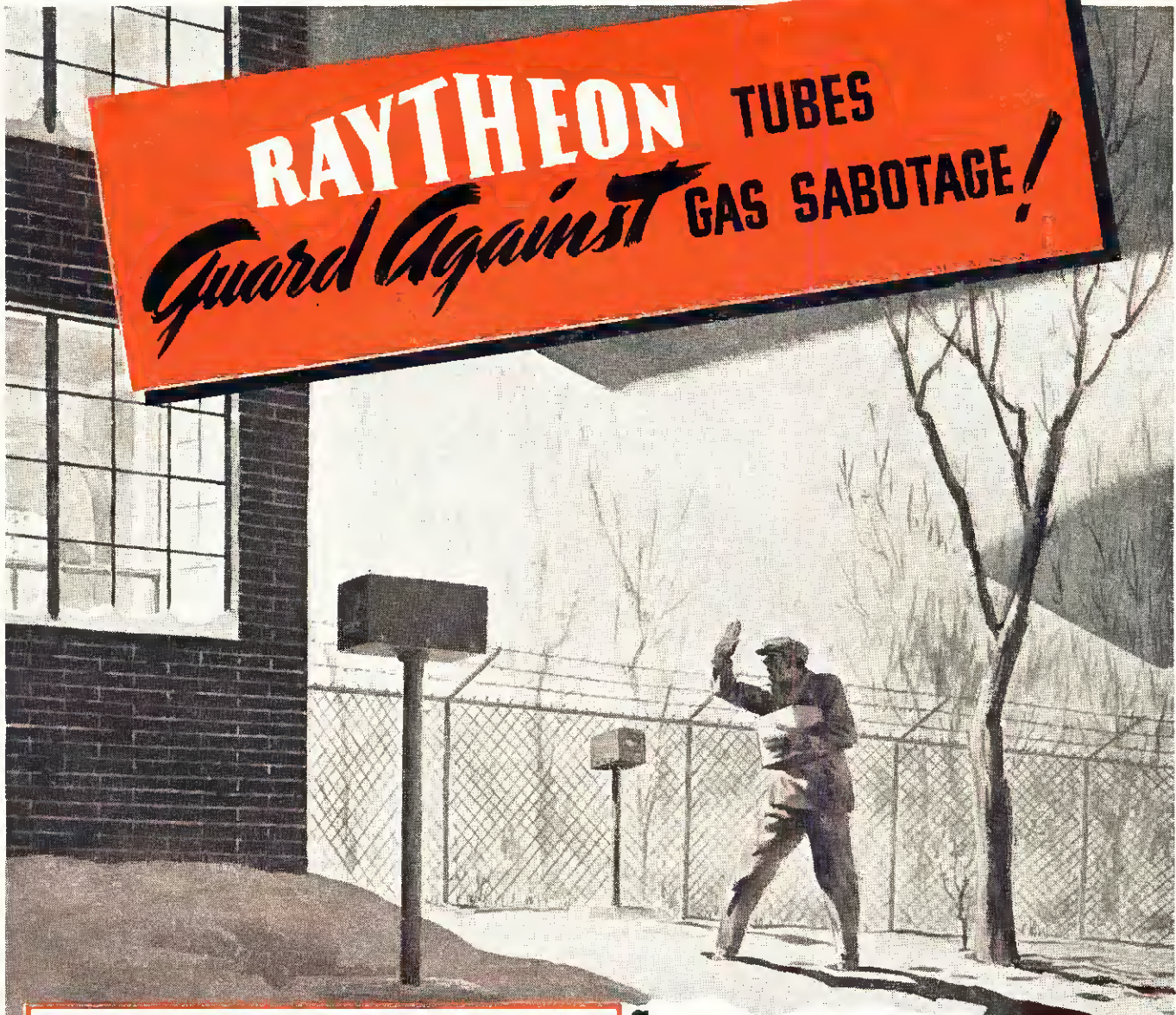
FARNSWORTH TELEVISION & RADIO CORPORATION
FORT WAYNE, IND. MARION, IND.

Makers of

RADIO AND TELEVISION TRANSMITTERS AND RECEIVERS, THE CAPEHART, THE CAPEHART-PANAMUSE AND FARNSWORTH PHONOGRAPH-RADIO COMBINATIONS

RAYTHEON TUBES

Guard Against GAS SABOTAGE!



NOTICE! If you have not obtained RAYTHEONS Interchangeable Tube Chart, it is important to get one of those cards at once from your RAYTHEON jobber. Speeds up radio repair service and simplifies your tube stock by elimination of a large number of types.



RAYTHEON
RADIO TUBES

Sabotage! . . . that constant threat to our National Defense is no longer a menace to one of the largest natural gas distribution centers (name deleted for obvious reasons) . . . their operating plant is under twenty-four hour "Fotoelectric" protection installed by Worner Products Corporation of Chicago.

These long range anti-sabotage units cover the entire outside area surrounding the Gas Distribution Center. Breaking the invisible light beam at night, brilliantly spot-lights the intruder from whatever direction he enters, giving the armed guards the advantage of darkness. By day it automatically signals the exact location

of intruders entrance. The heart of the system is the amplifier operated by RAYTHEON TUBES.

This is only one of the many important defense uses where RAYTHEONS are depended upon to safeguard life and property. Service men and dealers know that RAYTHEON TUBES safeguard their business with long trouble-free operating life and that is why thousands of service men are replacing with RAYTHEONS. They know RAYTHEON TUBE quality never varies . . . they can always depend on RAYTHEON TUBES no matter what the operating circumstance.

There is a big extra advantage, too . . . yet you pay no more!

RAYTHEON PRODUCTION CORPORATION

New York • Chicago • Los Angeles • Atlanta • Newton, Mass.

WORLD'S LARGEST EXCLUSIVE RADIO TUBE MANUFACTURER

G·E RADIO IS

with a **DRAMATIC News Program**

FEATURING

Frazier Hunt

**AUTHOR · WAR CORRESPONDENT
AND WORLD TRAVELLER**

You're going to like Frazier Hunt and his way of coming on the news. No other commentator broadcasting has the world-wide experience of Frazier Hunt. He has covered both World Wars. He not only knows important leaders of the nations involved, but he also knows the people who are fighting the war. "During the last 20 years," writes the publisher of his latest book, "Frazier Hunt has met, touched and talked with as many of the world's great men and women as any living person."

In addition to commenting on the news, every Frazier Hunt broadcast will contain a dramatic electronics story. For, Electronics is making news. Today it is doing it to help win the war. Tomorrow, when peace and victory come, it will do as much to help win the fight for business reconstruction.

48 STATIONS

3 Times a Week

156 Times a Year



ON THE AIR!

Coast-to-Coast Columbia Network

EVERY TUESDAY THURSDAY SATURDAY



A MESSAGE FROM DR. W. R. G. BAKER

Vice President, General Electric Company

a General Electric Radio Program—now?

It's a natural question—know-what-you-do, the outlook for civilian and knowing, that General Electric's radio production machine is geared up to an all-out war

Today, we are up against the grim task of fighting and winning the tomorrow we will be up against a really grim task of fighting post-war unemployment. *Electronics will win both these fights.* Out of Electronics' contribution to the nation's effort will come many new inventions—as did radio in the past.

America must be ready to launch peace-time industries when the war is over. Recognizing this, General Electric has organized a Post-War Planning Committee to make sure we are ready. We have only to discover the ways in which the electronic tube will serve man in the future.

It is included in the broad field of

Electronics, in addition to radio and television, are such modern wonders as the electric eye, the X-ray, industrial automatic controls, and many devices now being made for the armed services which will be utilized in peace-time products for better living.

Surely no advertising program could have more worthy objectives than the winning of the war and the creation of a strong and widespread desire for the new things General Electric knows it can produce and you can sell when the war is over.

A radio program is the most natural and logical medium for our purpose. Radio is the first great industry to be based on the science of Electronics. A News program enables us to make our advertising effort an immediate service to the American people.

This is *your* program. Its main purpose is to promote the future of *your* business. I know you will support it in every way.

*These stations will carry the program as rapidly as they can be cleared. In some cases the time stated here will vary slightly. See your local newspaper for exact time.

RADIO AND TELEVISION DEPT., BRIDGEPORT, CONN.

* 6:00 TO 6:15 P.M. EASTERN WARTIME

Akron	WADC	1350
Albany	WOKO	1460
Atlanta	WGST	920
Baltimore	WCAO	600
Boston	WEEL	590
Buffalo	WKBW	1520
Cincinnati	WCKY	1530
Cleveland	WGAR	1480
Columbus	WBNS	1460
Dayton	WHIO	1290
Detroit	WJR	760
Hartford	WDRC	1360
New York City	WABC	880
Philadelphia	WCAU	1210
Pittsburgh	WJAS	1320
Providence	WPRO	630
Richmond	WRVA	1140
Rochester	WHIC	1460
Syracuse	WFBL	1390
Washington	WJSV	1500

* 9:45 TO 10:00 P.M. CENTRAL WARTIME

Cedar Rapids	WMT	600
Chicago	WBBM	780
Dallas	KRLD	1080
Des Moines	KRNT	1350
Houston	KTRH	1320
Indianapolis	WFBM	1260
Kansas City	KMBC	980
Lincoln	KEAB	780
Louisville	WHAS	840
Minneapolis-St. Paul	WCCO	830
Nashville	WLAC	1510
New Orleans	WWL	870
Oklahoma City	KOMA	1520
Omaha	KOIL	1290
San Antonio	KTSA	550
Shreveport	KWKH	1130
Sioux City-Yankton	WNAX	570
St. Louis	KMOX	1120

* 8:45 TO 9:00 P.M. MOUNTAIN WARTIME

Colorado Springs	KVOR	1300
Denver	KLZ	560
Salt Lake City	KSL	1160

* 7:45 TO 8:00 P.M. PACIFIC COAST WARTIME

Fresno	KARM	1430
Los Angeles	KNX	1070
Portland	KOIN	970
Sacramento	KROY	1240
San Francisco	KQW	740
Seattle	KIRO	710
Spokane	KFPY	920

GENERAL  ELECTRIC

SELECTED *for* SERVICE



METAL TUBES

Metal is basic. Metal is permanent. That's why more than 80,000,000 Metal Receiving Tubes are in use. That's why we make and recommend metal tubes for better—more lasting performance.

Handle Ken-Rad Metal Tubes and Be Sure of Satisfied Customers.



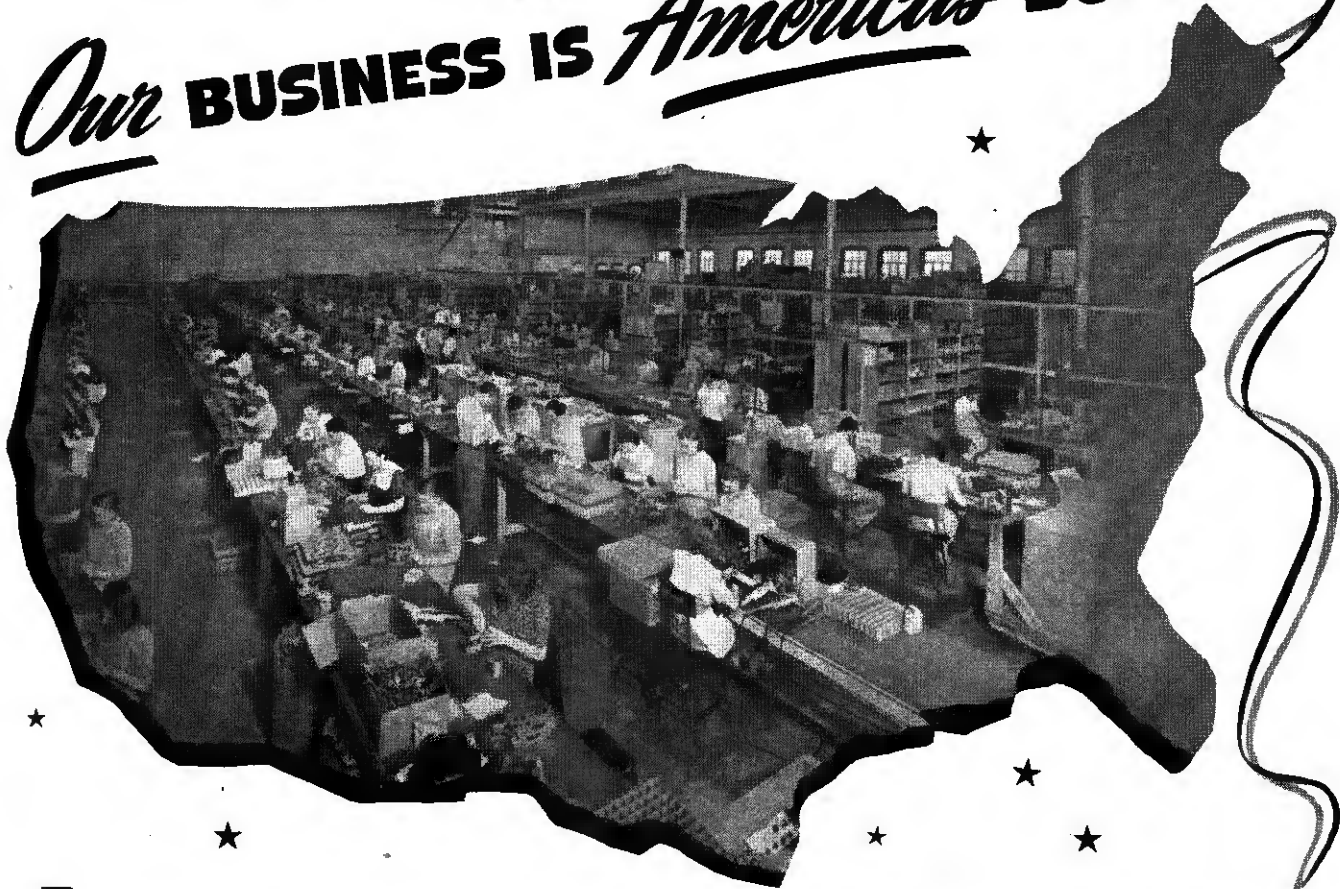
KEN-RAD

Metal Radio Tubes



KEN-RAD TUBE & LAMP CORPORATION, Owensboro, Kentucky

Our BUSINESS IS *America's* BUSINESS



This is War. We have cleared our decks. We are at our "battle stations."

All of our resources . . . our production capacity, our engineering skill, our equipment, our loyal labor . . . is being dynamically converted to war production . . . to the task of producing victory equipment for our Armed Forces. We're building, at an ever-accelerating pace, the vital sinews of modern warfare. We are in this fight. Our Business Is America's Business!

We know that our loyal trade joins with us in this common task that calls for the complete sacrifice of normal business. It is the American way, a way that puts victory and the preservation of our freedom above everything.

Heartening to us is the loyalty of the organization that is SONORA, the willingness and energy of every mind and hand and heart in the war work we've undertaken.

Heartening, too, is the cooperation and support of our suppliers, both old and new. Backed by their magnificent support, we are prepared to beat the promise to complete our current war work with precision and speed, prepared to take on new war production . . .

When this war is won, the experience, the technical advances, the expanded resources of SONORA will result in the finest of all "Clear as a Bell" Radios. But until that day comes—Our Business Is America's Business!

TO OUR TRADE: We have one other vital job to do . . . to help you keep America listening, to keep morale high. To assist you in maintaining hundreds of thousands of SONORA Radios in the best working order, we are establishing a special Service Division to give you repair, service, and engineering information. Full details of this Service Policy will be announced to you shortly.

Sonora
CHICAGO

"CLEAR AS A BELL"

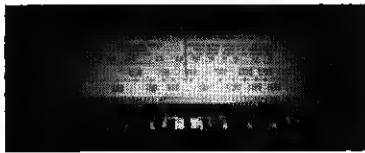


and that's only HALF the job

This is the most modern 50,000-watt transmitter in radio. It was erected on a man-made island for WABC, New York, key station of the Columbia Network. Since last October it has been sending the full schedule of CBS programs with new brilliance and clarity to 15,000,000 listeners. It's an outstanding achievement in radio—but it's only half the job...

In the year ending last October, 49 CBS stations increased their power. As many more completed major technical improvements to provide the best radio service to CBS listeners from coast to coast.

And even that's only half the job...



For in radio, *receiving* is as important as *sending*. And the responsibility at the "receiving end"—the other half of the job—remains, as always, in the skilled hands of distributors and service men. As William S. Paley, Columbia's president, recently said:

"The success of radio's attempts to serve in this crisis will depend on the skill and loyalty of the men who supply the nation with sets and keep those sets in working order. I am sure that the American radio retailer and repair man will rise to his responsibility."

Today, with radio news and entertainment at peak importance, we must all do our job well. Columbia's duty is to continue broadcasting good programs over its 119 well-equipped stations. Today, more than ever before, your duty is to keep America's sets in good working condition.

We are determined to do our half. We know you will do yours.



COLUMBIA BROADCASTING SYSTEM

How to sell "radio" without new radios



LAST year, for every radio sold to a home that had no radio, *four* sets were sold to radio-owners.

This single fact throws the spotlight on your biggest radio market today—repair and service to present radio-owners in your community.

How to go after repair business:

1. **Get your shop ready**—Set up a stock of genuine, factory-made parts. Choose your assortment for the types of radios most used in your community.
2. **Call on customers**—Stop around and see your customers who have bought consoles and combinations recently. Be sure they know how to operate their set efficiently, and how to care for it. See that they have sent in their warranty card. If possible, ask them for names of other radio-owners who might be prospects for service.
3. **Cover new prospects**—Compile a prospect list from town directory, from names on hand, and by canvass of community. Mail or distribute inexpensive circulars or postcards describing common radio troubles and how you are equipped to repair them.

Today, almost all of Stromberg-Carlson's productive capacity is dedicated to providing communications equipment for the armed forces. But we pledge our full cooperation to our authorized dealers in helping them meet their obligation to keep all Stromberg-Carlson radios working continuously until the war is won.

STROMBERG - CARLSON
ROCHESTER, NEW YORK



RADIO RETAILING COMBINED WITH RADIO TODAY

O. H. CALDWELL, EDITOR. M. CLEMENTS, PUBLISHER
480 LEXINGTON AVE., NEW YORK, N. Y.

will be tremendous new markets for frequency modulation and television.

And application of radio principles in industrial operations will make the new science of electronics bloom, as radio tubes find their way into applications everywhere in everyday life.

Radio men are going to have their hands full when the happy days of peace come again.

Television in Wartime

Every New York City police station now has a television receiver over which come instructions and demonstrations for air-raid wardens. The instructors are thus able to conduct their demonstrations in a central place, and neighborhood groups all over the big city can watch and hear them—saving time and travelling for all.

Had television been permitted to go ahead when it was ready, the electronic picture-screen might now be serving the public in many ways as an invaluable wartime aid.

When Radio Men Need Tires

Radio is a necessity. And the servicemen who keep radio sets working and American home morale at top notch, should be recognized when the rubber-tire priorities are being passed out.

Most radio servicemen have tires to last for the next few months. But after that the situation may get pretty tight in some quarters.

Certainly the radio man of the community is engaged in essential public service and rates a high standing when he needs tires and gas to make his rounds in the days to come.

Faith in Radio's Future

Just at a time when the radio industry is taking a body-blow to make way for all-out National Defense, it is encouraging to find a radio manufacturer launching a far-flung campaign on the air and in printer's ink, to acquaint the American public with future marvels of radio and electronics.

The General Electric Company's nation-wide thrice-weekly program on CBS and on a number of FM stations, involving an outlay of \$750,000, bears testimony of abiding faith in radio's future, and in the expansion of its allied arts, FM, television, and industrial electronics.

Post Up Your Pledge, Too!

Readers seem greatly pleased with the Radioman's Wartime Pledge, a copy of which was supplied with our last month's issue. Dealers and servicemen have posted it in their show-windows, stores and shops, and have used it to interpret to customers the essential services which radio men are rendering to the community. Jobbers and manufacturers have written us for additional copies to send to their local customers.

If your copy isn't posted where the public can see it—dig it up, sign it, and put it on display.

Behind the Receiver Shut-Down

As the orders to shut down the manufacture of civilian radio sets begin to take effect—putting radios into a classification with automobiles and refrigerators—it becomes apparent that Washington has several broad purposes in mind:

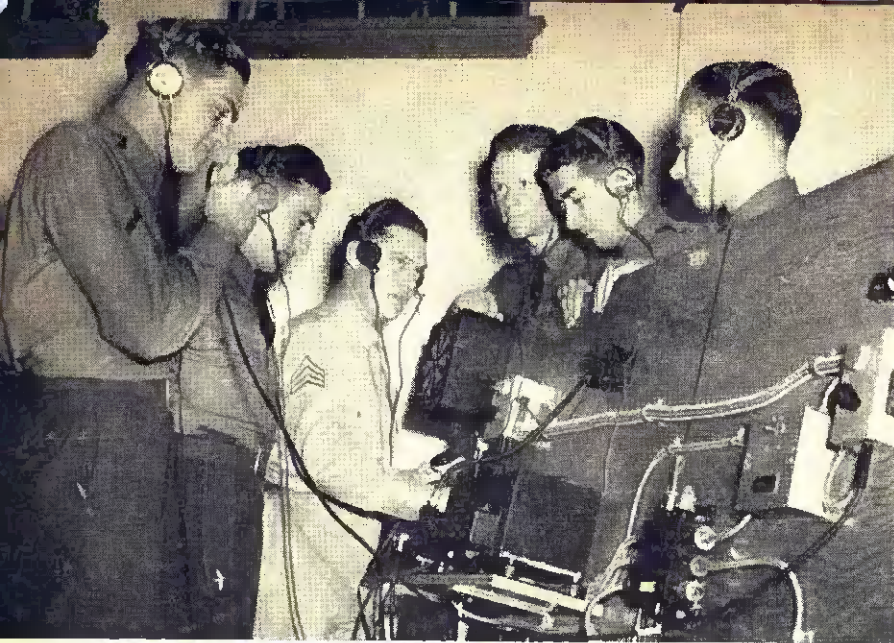
1. To make plants and employes immediately available for other war work.
2. To remove "luxury" articles from the market, so that war workers' surpluses will find their way into Defense Bonds.
3. To build up a deferred market for radio and other popular wanted articles, so that at the close of war activity, this great deferred demand will be available to get the economic machine going quickly on peacetime production.

Big Things Ahead for Radio Men

It is evident, then, that radio is going to be a whopping big business when the war is over. Besides picking up all the deferred purchasers demand for new radio sets, there

O. H. Caldwell

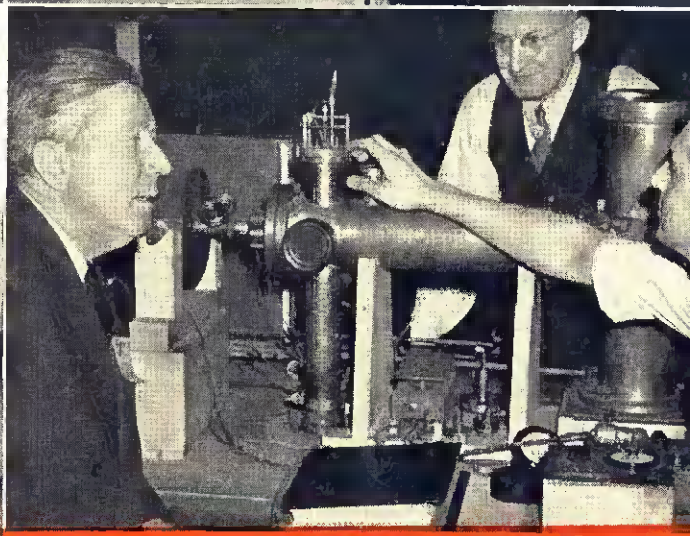
EDITOR



Above, Uncle Sam's future flyers are learning all about two-way radios, via a "mocked up" communications set pictured by the U.S. Army.

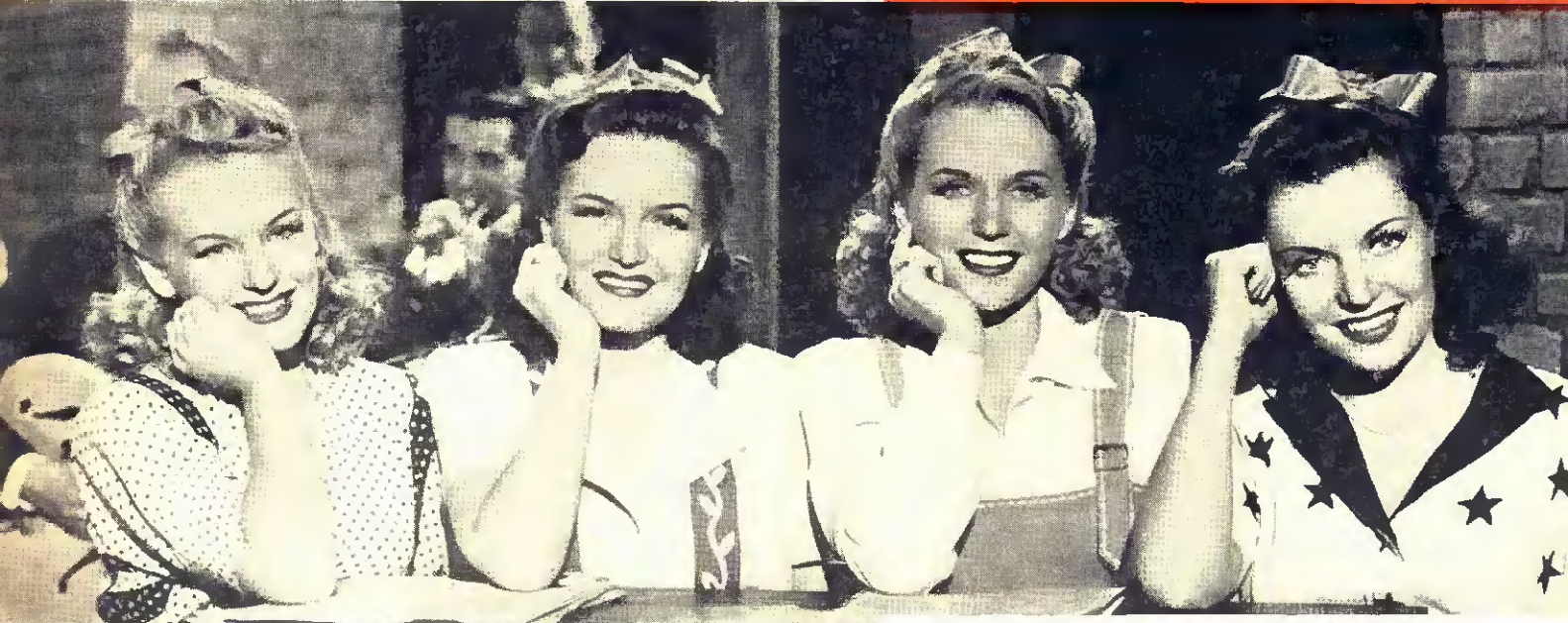
Upper right, mike unit of the new public-address system extending through B & O streamlined train, ideal for giving latest news flashes.

Below, 3,000 records and 30 record players are presented to Army Special Services, as personal gift of stage star Gertrude Lawrence.



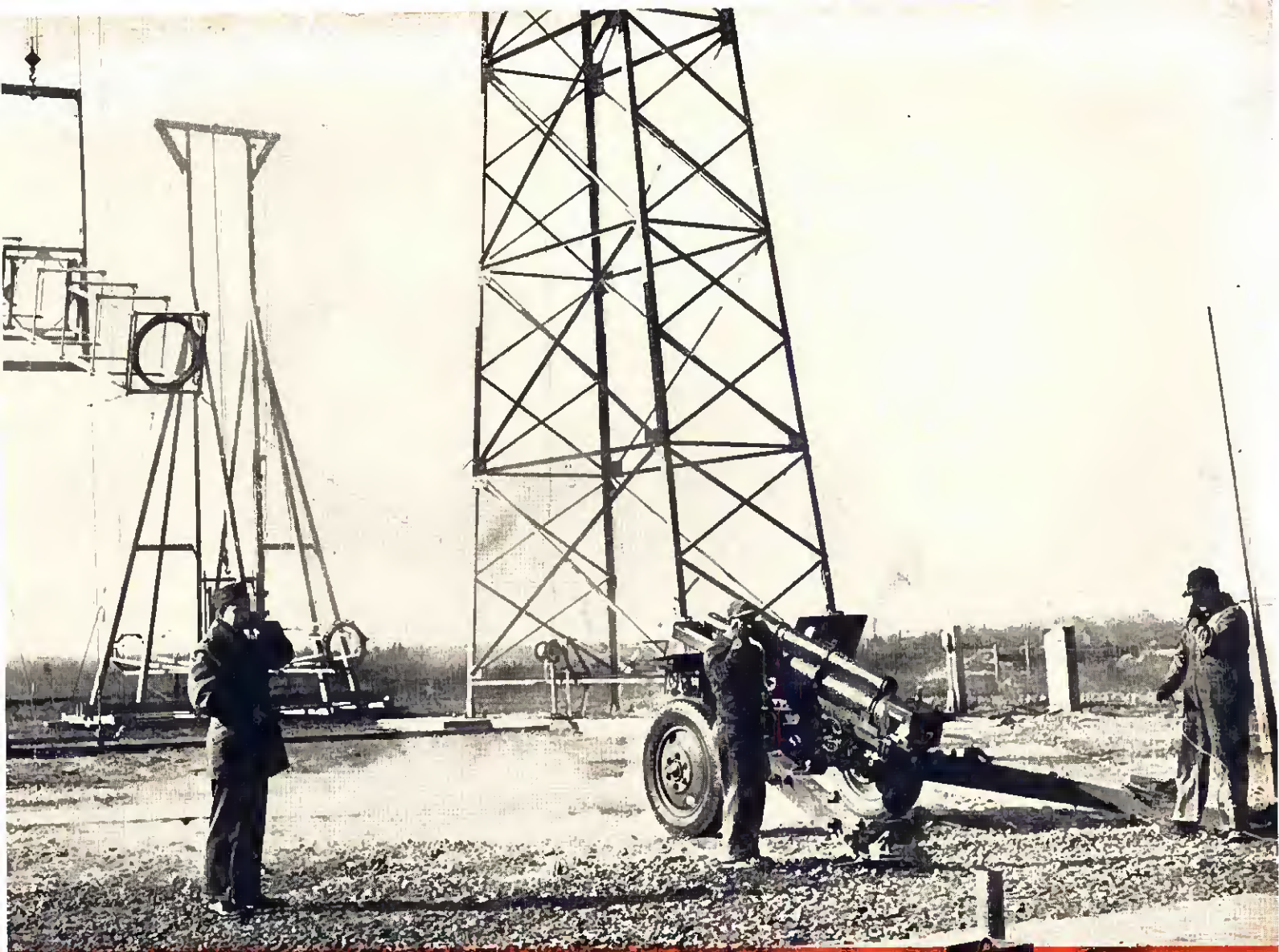
Frazier Hunt, left, the ace newscaster, views an electronic at General Electric plant. GE now sponsors Mr. Hunt on C of 48 stations, with electronic theme, 3 nights weekly.

ON THE



Above, the Four King Sisters, sparkling singers who are in patriotic records these days. With Alvino Rey, on

At the right, the Commander-in-Chief is shown during "World Map" fireside chat. President Roosevelt's voice a globe-circling network; CAB reports that 83% of U.S. listened to the half-hour address.



Here you see Army men measuring the speed of projectiles by firing them through coils connected to radio-tube detectors. Flight of the shells is recorded by instruments housed on another part of the testing grounds.

Courtesy
New York
Times

RADIO FRONT



Above, a combination becomes the center of interest at the Bantout, Ill., USO Club.



KEEP 'Em Listening!



• Radio is out in front, nowadays—at home and abroad.

Radio is playing a vital part in the life of your community, as we go into all-out War.

It is bringing news, warnings, entertainment and morale. Radio is essential.

But it is up to the radio men of the community to see (1) that every household has a good set, and (2) that the public's sets are all in first-class working condition and capable of receiving the programs on the air.

The responsibility for *keeping America alert through radio* is the major responsibility of the radio dealer and serviceman! It is the job of each local radio man, right in his own home town and home community.

Sell New Sets. Last Call!

New sets are available for the present and probably will be for the next few months. Now is the time to sell such sets to all the homes that need them. Last call!

The American public depends upon

its radio sets for news—instructions and safety information. So see that every home has a set in good working order.

Servicemen need to organize themselves and their businesses to survey the radio sets of the vicinity, and to handle their own jobs efficiently and surely.

Radio men must let the public know more about the things their technical ability can make available in the form of additional listening convenience and pleasure. For present radios, add

record players, remote control units, tuning eyes, extra speakers, headphones, call systems, etc.

Revisit Old Customers

This is a time to cultivate old customers and explain your resolution to keep the sets "delivering."

Organize your schedule of charges so as to make a profit. Study the minimum charge plan for your particular business.

Work with local broadcast stations to foster your mutual objective—better service for the listening public.

Modernize the second-hand sets you have, with new cabinets and additional mechanical and electrical features; slide-rule tuning dials, push-button tuning, modern speaker, etc.

Eliminate local interference which is spoiling customer's reception of important programs.

RADIO RETAILING'S
"Radio Man's War-

time Pledge" sent you with our February issue, provides an excellent guide for your wartime activities. Post up a copy of it in your store or window; read it over again yourself, and show it to your customers.

Work in cooperation with the local defense organization to make a community-wide check-up of radio sets in local homes.

Make up a survey and report answering these questions:

1. *What homes have no radios?*
2. *How many homes have sets out of order?*
3. *What repairs are needed to restore these sets to operation?*

After making such a survey, the servicemen who call have an excellent opportunity to call back, test tubes and put sets in shape, at an agreed-upon fee. Such a schedule of charges can be made general for the community, and can take into account the greater operating efficiency of making a continuous series of house-to-house calls, covering a vicinity, without special trips back to shop or headquarters.

Talk with your Mayor and city engineer before mapping out campaign. Radio servicemen can be of assistance in keeping morale of citizens high.

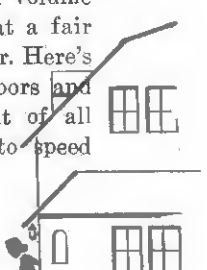
After the first series of service calls by areas, servicemen should make a follow-up check every three months during lifetime of the war emergency and at same charges.

Survey Routine

Average call should require less than one-half hour—to test tubes, tune set on several stations, inspect inside of chassis and antenna connections. Homes which are radioless, are carded and reported, so that defense council knows what percentage of local families cannot be reached through radio appeals. Also such a census would show the number of old sets, as well as new ones in the community. On each householder's card may also be entered answer to question "When does family, as a whole, listen to the radio?" By clocking answers in groups, local defense group can time its own air message to gain maximum audiences.

Talk with your defense council today and get underway a real volume of radio-set repair business, at a fair charge for inspection and labor. Here's a chance to help your neighbors and country in the greatest fight of all time. Here's your chance to speed the days of Victory.

store action on the "Wartime Pledge" is demonstrated at left by Jack Winer of Dynamic Radio, prominent New York radio dealer. Below, Max Schneller helps to "keep 'em listening" by selling a new line filter to a set owner.





Another receiver production program which it is hoped will help set-builders fill the interim period between April 22 and full conversion to war-production, contemplates the building of 800,000 to a million short-wave radios for South America, as sponsored by the Nelson Rockefeller committee. These low-priced sets would be distributed through regular export channels to our Southern neighbors. Provided with both standard-broadcast and short-wave bands, these sets would enable Latin-American listeners to follow programs and news reports beamed from the U. S.

Tube makers have been authorized to make 27 million replacement tubes during 1942, in comparison with 33

Radio's Fighting Plans

• The War Production Board on March 7, issued its expected order that manufacture of radios and phonographs be discontinued April 22, so that radio plants can be devoted to war production.

The WPB order permits each manufacturer to complete sets begun before April 22 if he does not use more than \$500 worth of materials (not including the cost of wooden cabinets). Continued manufacture of replacement and repair parts, including tubes, is permitted under this latest order, which will enable servicemen to be supplied with parts to keep existing radios in operation during the war period.

According to the WPB office, the 55 radio manufacturers affected by the shutdown order already have war orders totalling \$500,000,000—about twice the volume of their combined civilian-radio production in 1941, when radio plants consumed 2100 tons of aluminum, 10,500 tons of copper, 280 tons of nickel, and 70,000 tons of steel.

No Retail "Freezing"

No "freezing" of retail radio stocks is expected, and no move has been made in this direction—as was done in the cases of the automobile, tire,

refrigerator and typewriter trades. Instead, the WPB has ordered that radio sales to the public would continue on a "first-come first-served" basis.

It is expected that four or five million radio sets will have been manufactured by the end of April, which will keep an ample supply of radio sets available to dealers until June or July—perhaps till Labor Day.

Some manufacturers have applied for extensions beyond the April 22 date to fabricate inventories of parts and components on hand, and it seems likely that such extensions may be granted in special cases.

"Victory" and "Pan-American" Models

Where manufacturers are not able to convert their plants or to take on war work, the possibility exists that these plants will be allowed to take up production of a Victory Model radio—a minimum-sized set which will be available for resale to other manufacturers to be marketed under different nameplates, for distribution through their wholesale and retail channels. As many as a million of these Victory Model radios may be produced during 1942, bringing the year's total domestic radio-set output up to five or six million.

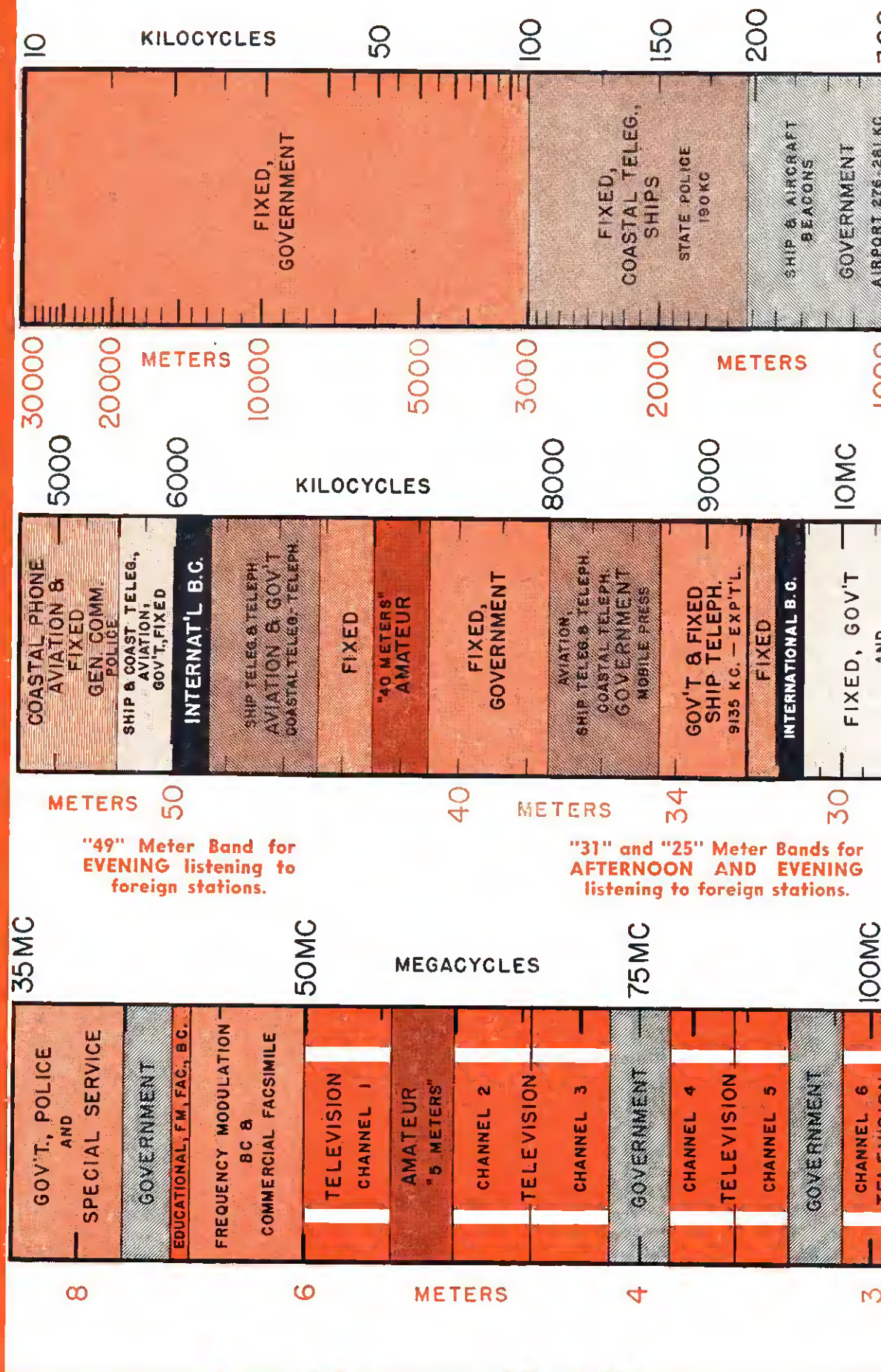
million replacement tubes made in 1941. Tube manufacturers are also filling large government orders, as well as Lend-lease commitments, so that the tube-production program will go ahead during 1942 on a fairly large scale.

Tubes and Parts Continue

It is expected that the same general planning will later be applied to other replacement parts—although at present Washington's disposition is to depend upon the large existing stocks of parts in manufacturers' and distributors' hands, to carry out replacement and repairs for the time being. Cancelled initial-equipment orders will contribute to this quantity of available parts.

Many references have been made to the vast two-billion-dollar war order placed with radio manufacturers by the Signal Corps. This huge order is almost entirely for radio apparatus—52 per cent for airplane locators, 15 per cent commercial type radios, 30 per cent semi-commercial radio, and 3 per cent miscellaneous. This equipment calls mostly for high-precision radio equipment, and so far most of these orders have been placed with the "big five" as they are called, only two of whom had heretofore been makers of home radios.

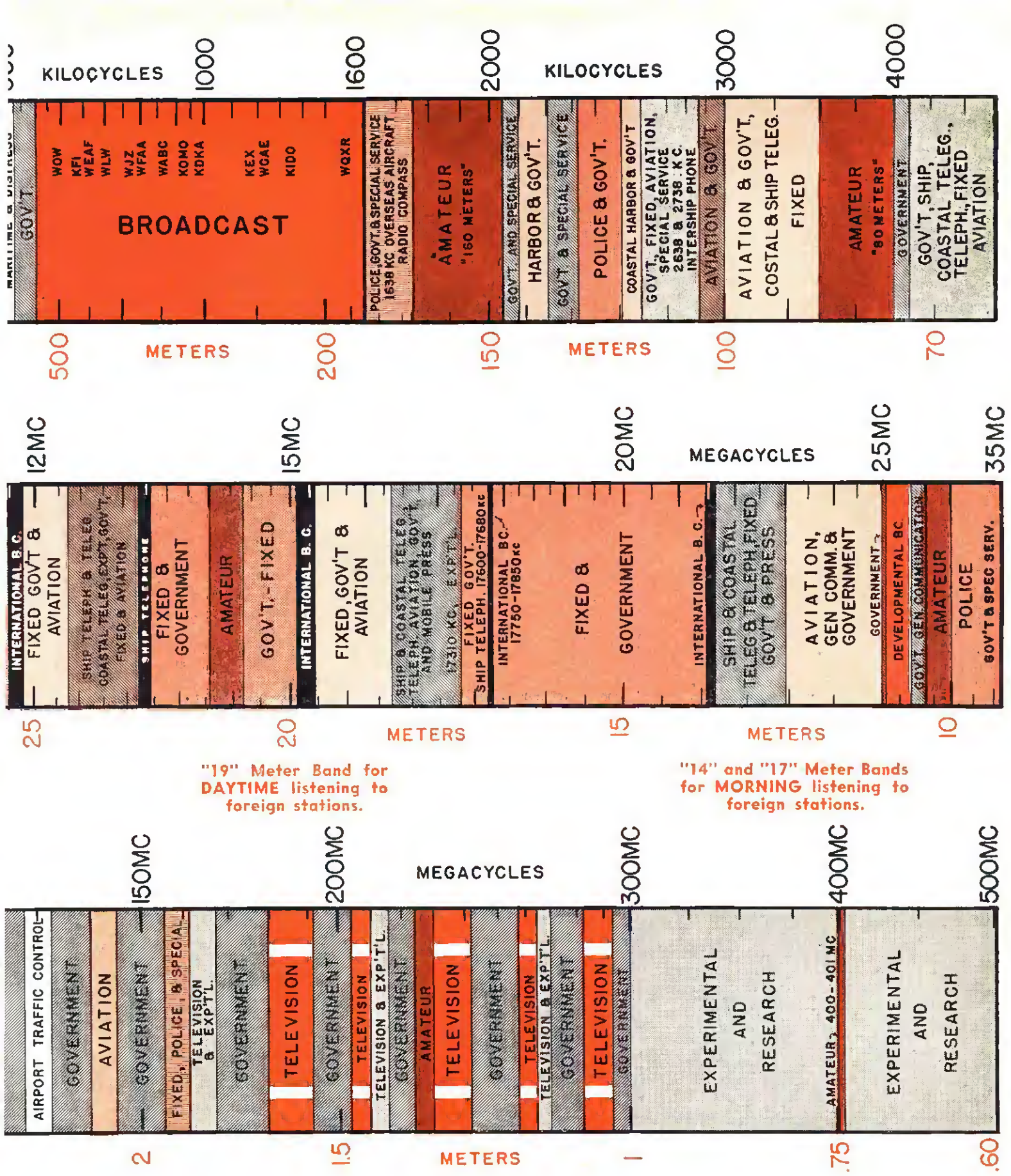




"49" Meter Band for EVENING listening to foreign stations.

"31" and "25" Meter Bands for AFTERNOON AND EVENING listening to foreign stations.

RADIO'S BATTLEGROUND



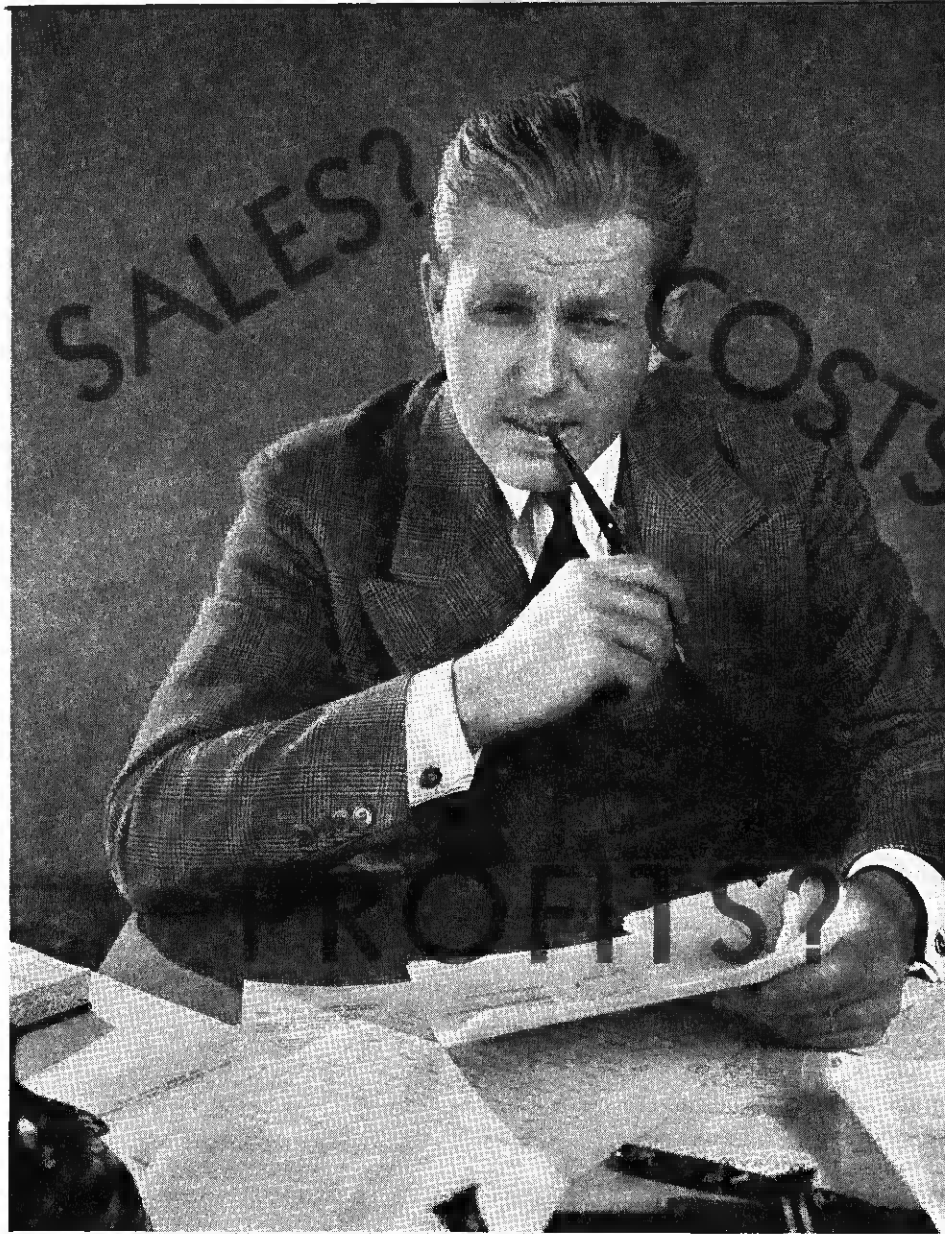
"19" Meter Band for DAYTIME listening to foreign stations.

"14" and "17" Meter Bands for MORNING listening to foreign stations.

marshalled for Wartime Service, Here Are the Channels Over Which Pour News and Patriotic Programs, International Broadcasts, Navigation Aids, and Miscellaneous Communications, Including FM, Television and Facsimile

RADIO RETAILING
RADIO TODAY

**WATCH OUT
FOR RED INK!**



Figuring Your Future

• This is one of the most critical periods in the history of the world.

None of us can look very far ahead with a clear view, or with any assurance that our hopes and our plans will be realized.

"Total War" has already left its impress on business in general, and has left a deep mark on some.

What has been done may well be but a small dent compared with what is yet to come.

Hard though it may be on some, it is both necessary and proper that some individuals, some businesses, must be sacrificed for the common good.

The automobile radio and appliance business are now in the process of being completely reorganized.

How well those now engaged in those lines of distribution will come

through will depend very largely upon how accurately business men know what is happening to them, and why—and how clearly they can change their plans to fit currently changing conditions.

The facts and figures of your business have always been important, but are now far more necessary to the safe conduct of your business than ever before.

But the figure facts of your business are only tools, and cannot of themselves fashion a sound business plan for you.

Health Test

You must understand the story your figures tell, know what the ratios of one to another means, and what the trend leads to.

Let's take a look at some figure facts

of a typical radio-appliance dealer, the "Financial Statement" shown herewith.

The ratio of assets to liabilities is 1.8 to 1.

This is passable—perhaps, but certainly not too good, and a condition which needs immediate attention and correction.

Quick assets, cash and accounts receivable total \$7,858.22 against Accounts Payable and Notes Payable of \$9,709.50.

And this represents a rather delicate, if not dangerous condition.

Compare the inventory of \$8,378.41 with the Accounts Payable of \$8,709.50 and you see at once that not only is the inventory not paid for, but some of the merchandise already sold has not yet been paid for.

The figures do not indicate how much of the inventory is new, current stock and how much is old, slow moving stock.

It is probable that at least 30% of the inventory lies in this slow moving classification, and perhaps very much more.

And so, the story seems to be that this dealer has invested his own money in the poorer, less valuable end of his inventory, and still owes for the salable merchandise.

This is anything but a healthy condition.

But knowing it, corrective action can be taken. This slow moving stock must be converted into cash, because it represents a very substantial part of the net worth of this business, and the only part which can be converted into cash without affecting the sales appeal of his assortment or requiring replacement.

There are no figures to indicate the "age" of the Accounts Receivable or how regularly payments are being received.

It is not enough to watch Accounts Receivable in total. They should be classified by age, that is, by month of origin, as should the payments made, so that a comparison will quickly show any change in the rate of payment, warn of coming danger, and indicate the exact place where danger lurks.

Check With Sales

Although Accounts Receivable are a very substantial part of the assets, when you check them against sales you see they are almost exactly 10% of the annual sales, and probably quite in line. But if this dealer has put on his own books the charges which finance companies refused to risk, or if any large part of these accounts are service charges more than 30 days old, the business may be in a jam.

There is one other item, Notes Payable—\$1,000, which does not look too good when considered in the light of the high ratio of Accounts Payable to Inventory.

It is probable that some distributor has become a little concerned and said "let's have some jack—or else."

And the dealer has borrowed on his note, from a friend, or his bank.

If that were all—it still might be OK.

But we all know that distributors clear their credit experience, one with another.

FINANCIAL STATEMENT

January 31, 1941

ASSETS

Cash, on hand and in bank.....	\$2,459.94
Accounts Receivable.....	5,398.28
Inventory	8,378.41
Equipment (3,520 less 1,185 depreciation).....	2,335.00
TOTAL ASSETS	18,571.63

LIABILITIES

Accounts Payable	8,709.50
Notes Payable	1,000.00
Accrued Expense	141.43
Accrued Taxes	175.00
TOTAL LIABILITIES	10,025.93
NET WORTH	8,545.70

OPERATING STATEMENT OF PROFIT AND LOSS

SALES	\$58,196.43
COST OF MERCHANDISE SOLD	
Inventory, Jan. 1, 1941.....	4,765.26
Purchases	43,756.69
	<u>48,521.95</u>
Less Inventory, Dec. 31, 1941.....	8,378.41
	40,143.54
GROSS PROFIT	18,052.89
EXPENSE	
Salaries	3,657.28
Commissions	2,515.94
Owner's Draw	3,600.00
Rent	960.00
Heat, Light, Power.....	519.41
Depreciation	480.00
Interest and Fees.....	467.04
Office Expenses	867.14
Telephone	672.23
Advertising	1,076.15
Truck Expenses	865.48
Taxes	378.29
TOTAL	16,058.96
NET PROFIT	1,993.93

If one has turned on the pressure others probably will. And that may easily mean trouble.

Profit Potential

Now let's examine the Profit and Loss or "Operating Statement," also shown herewith.

Sales amounted to \$58,196.43. This figure alone doesn't have much to say, except that with sales of over \$1,000 per week, real profit potential does exist.

But if you have your accountant prepare a monthly statement, and you

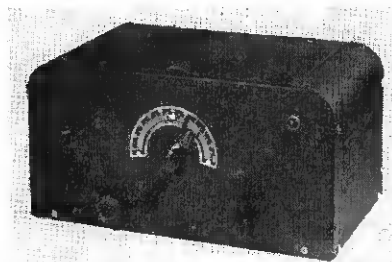
compare the sales week by week, month by month, and year to date, they will tell a very clear story of what your business is doing, where it is going.

Particularly now, when your major merchandise lines must be replaced by other lines, it is absolutely necessary that you know all the time, just what is selling and how much and how your current sales are trending, where the trend leads.

Inventory has gone up sharply, though an average stock of \$6,500, giving a stock turn of 9 is certainly OK.

(Continued on page 46)

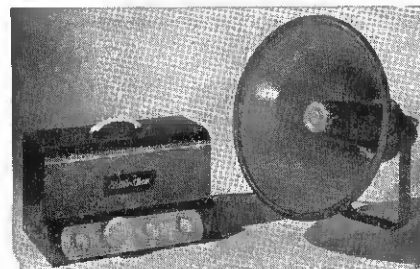
NEW PRODUCTS



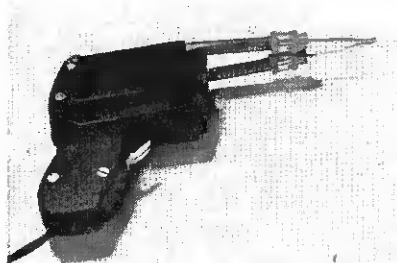
BLACKOUT AIR RAID EQUIPMENT includes automatic radio apparatus for turning off lights when radio station carrier is interrupted during an air raid, a radio street light switch, and home alarm set which sounds warning when carrier is shut off. Adapter kit for home alarm also available. Blackout, Inc., 405 Lexington Ave., New York, N. Y.—RRT.



RCA TABLE MODEL VICTROLA model R-36, only 7 in. high, 8½" wide and deep. Wood cabinet with simulated leather covering. 5 in. dynamic speaker. Self-starting motor. On-off switch and volume control is located on the top of the cabinet serving also as a tone arm rest. Plays either 10 or 12 in. records. RCA Mfg. Co., Camden, N. J.—RRT.

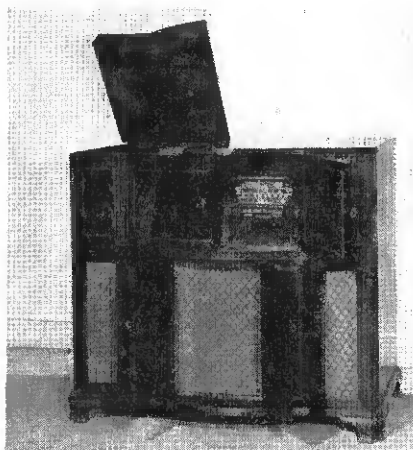


MECK ELECTRO-SIREN is an electronic air raid alarm with a vacuum tube tone generator. 50 per cent more power is claimed possible than from ordinary sound system. The pitch of the signal is adjustable and a mike can be used to give announcements. The device will operate from 110 volts or 6-volt car battery. John Meck Industries, 1313 W. Randolph St., Chicago, Ill. RRT



WELLER FAST HEATING soldering iron consists of high current, low voltage transformer with its primary circuit controlled by a trigger action switch. Across its secondary terminals is shunted a soldering tip of No. 11 B & S gauge copper wire. It reaches soldering temperature in 5 seconds, consumes 80 w. power and weighs 2 lbs. Can easily be bent into various shapes. Weller Bros., 516 Northampton St., Easton, Pa.—RRT.

G-E PHOTO-CELL BLACKOUT CONTROL is designed to switch off building and window lights as soon as nearby street lamps are darkened for an approaching air raid. Unit also sounds warning. Basic equipment is adjusted to meet individual conditions. Price, about \$30. General Electric Co., Schenectady, N. Y.—RRT.

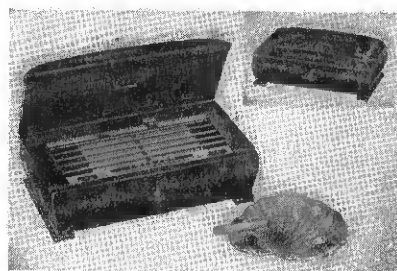


STROMBERG-CARLSON EMPIRE MODEL 1055 PSM radio phono in English 18th C. mahogany cabinet. 4 tuning ranges—standard BC, shortwave and FM. Built-in antenna for standard shortwave, and FM. 12 in. speaker. Automatic record changer plays 10 in. and 12 in. records mixed. Album space with four albums. Also available in crotch swirl walnut (1055PSW). Stromberg-Carlson Tel. Mfg. Co., 100 Carlson Rd., Rochester, N. Y.—RRT.



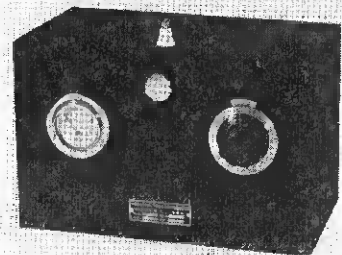
MOTOROLA TABLE RADIO-PHONOGRAPH combination, 51F12, is housed in the new "Dial-Over-Speaker" cabinet of walnut veneers. Automatic record changer. Covers regular broadcast band, 550-1700 kc. Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.—RRT.

SOLAR TYPES MK AND ML are mica capacitors, molded in Bakelite, designed for standard radio receiver and other low voltage applications. Features convenient size, physical arrangement and higher capacity range. Type MK is supplied with flexible, tinned brass terminal leads; type ML with terminal lugs. Solar Mfg. Corp., Bayonne, N. J.—RRT.



EMERSON MODEL 455, a 4-tube super-heterodyne "Personal" set in Ingraham "Sta-Bent Jewel box" cabinet. Powered by self-contained batteries, it operates instantly when the lid is lifted and automatically shuts off when it is closed. Emerson Radio & Phono Corp., 111 8th Ave., New York, N. Y.—RRT.

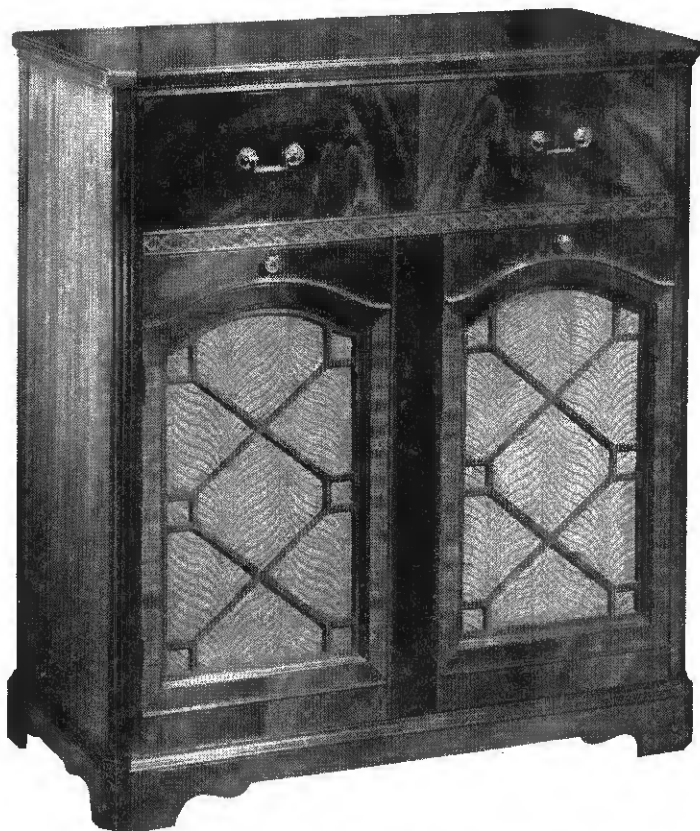
BOGEN MODEL E75 high powered amplifier. Incorporates two 35 w. output amplifiers. Three input channels for 2 mikes and a phono. Equipped with a Bass-Treble Tone Control. Has 17 tubes. Each output channel provides tapped terminals of 4-8-15-250 and 500 ohms. Grey wrinkle finish. Available with choice of microphones and with 4-12 in. P.M. speakers, walnut baffles or with 4 weatherproof reflex trumpets and units. David Bogen Co., Inc., 663 Broadway, N. Y. C.—RRT.



INDUSTRIAL RADIO RAID WAR-DEN is tuned to carrier of 24-hour station and operates a relay to cut off lights, sound alarm, etc., in case air raid causes station to shut down. Equipped with tuning meter, pilot lamp. Relay capacity, 10 amps at 110 v. Power requirements, 110 v. AC or DC. Industrial Timer Corp., 113 Edison Pl., Newark, N. J. RRT

PLUS FEATURES

MAKE WILCOX-GAY RECORDIO
EASY TO DEMONSTRATE—AND TO SELL



YOU find your selling job made easier when you demonstrate a RECORDIO. This recorder-radio-phonograph gives you so much more to talk about. For it boasts a galaxy of great features—many of which are not offered by the ordinary combination. Yes, and RECORDIO gives you a bigger profit—a wider margin on each unit sale. Think how important this is to you, when you consider the present day market. Sell RECORDIO to the people who want a good combination and have the money to pay for it. RECORDIO—an established leader in its field—gives more satisfaction to the buyer, more profit to you.

TWENTY-EIGHT FEATURES OF RECORDIO MODEL A-112 SHOWN ABOVE

- Nine tubes.
- Two wave band coverage.
- Complete broadcast and partial police.
- Full foreign reception 6 to 19 megacycles.
- Push-pull high fidelity amplifier.
- Six watts output.
- Vernier tuning knob.
- Continuously variable tone control.
- Built-in rotating loop for best reception.
- External antenna and ground connection if desired.
- Trimmer condenser to match outside antenna to loop circuit.
- Magnetic cutting head, counter balance for any thickness of records.
- Snubbing action on cutting head prevents head chatter during recording.
- Tip-out radio tuning.
- Feather weight playback arm with crystal cartridge.
- 3000 to 4000 playback permanent type needle.
- Large, easily read "slide rule" dial.
- Feather touch push buttons for various functions of the RECORDIO.
- Six watt public address system.
- Records radio and microphone simultaneously.
- Either recording position automatically places audio system in treble position for recording all available frequencies.
- "Tuning eye" level indicator.
- Insta-Matic record changer with Uni-point control.
- Plays ten 12" or twelve 10" records automatically.
- On and off switch, reject and record selector, all located on one control post.
- Separate on and off switch for turntable.
- Master switch on panel controls both radio and phonograph.
- 12" auditorium type speaker, floated in rubber.

Built by Makers of America's Most Versatile Radio
RECORDIO
RECORDER • RADIO • PHONOGRAPH COMBINATION
WILCOX-GAY CORPORATION
CHARLOTTE, MICHIGAN



Another combination in the thick of the war effort as Glenn Miller demonstrates the "Magic Brain" unit he awards weekly to service camps. Marion Hutton, right, sings with the Miller band.

and phone calls.

Among the millions of record fans, all of whom are not thinking about much else besides winning the war, there is getting to be a healthy curiosity about the new titles on wartime records. A lot of folks will listen to "The Commando's Serenade" or "Here's to You McArthur!" if you suggest it. More examples of interest-stirring titles are "We're Gonna Have to Slap the Dirty Little Jap" and "The Yanks Are Comin' Again."

A great many of the new discs are very appropriate for meetings concerned with fund-raising. For instance: "Any Bonds Today?," "Remember Pearl Harbor," "Keep 'Em Flying" or "Angels of Mercy."

A number of the tunes, such as "The White Cliffs of Dover," are top-selling quality on their own, regardless of their connection with the war situation. And more of the classics are certain to appear as the patriotic list widens and the experts go to work on the "Victory" theme.

Strong Demand

Collectors are beginning to be active in this field. They're beginning to assemble the best music of World War II, and they're getting interesting comparisons with World War I. Some

(Continued on page 46)

Victory Records

• Recordings of patriotic tunes have begun to hit their sales stride. The better ones are on the best-seller lists, and are widely heard on the air. More new albums with the red-white-and-blue theme are being offered, and dealers realize that these numbers are now an important profit factor.

It may be that some of the early songs in this group were of a disappointing character. Retailers said that they did not sell properly because they were wild, over-zealous and some-

times bad taste. But now, this type of music has taken on a rousing quality of genuine merit.

Who buys them? Clubs, men in the Armed Forces, record fans who want to make their music sessions timely, families who have sons in the service, benefit groups, etc.

All of these people should be contacted by a dealer who has a fresh stock of patriotic records. They should be notified when new ones are released, and they will stand some direct mail

BEST-SELLING POPULAR RECORDS

(As reported by the manufacturers)

Bluebird

MOONLIGHT COCKTAIL and HAPPY IN LOVE—Glenn Miller on B-11401.

DEAR MOM and KEEP 'EM FLYING—Glenn Miller on B-11443.

I SAID NO and DEEP IN THE HEART OF TEXAS—Alvino Rey on B-11391.

BLUES IN THE NIGHT and SOMETIMES—Dinah Shore on B-11436.

DAY DREAMING and A STRING OF PEARLS—Glenn Miller on B-11382.

Columbia

DEEP IN THE HEART OF TEXAS and LORETTA—Horace Heidt on 36525.

A ZOOT SUIT and WHEN THE ROSES BLOOM AGAIN—Kay Kyser on 36517.

I GOT RHYTHM and ROYAL FLUSH—Metronome All Stars on 36499.

SHE DON'T WANNA and DO SOMETHING—Orrin Tucker on 36490.

I DON'T WANT TO WALK WITHOUT YOU and B-19—Harry James on 36478.

Decca

BLUES IN THE NIGHT and THIS TIME THE DREAM'S ON ME—Woody Herman on 4030.

DEEP IN THE HEART OF TEXAS and LET'S ALL MEET AT MY HOUSE—Bing Crosby on 4162.

I DON'T WANT TO WALK WITHOUT YOU and MOONLIGHT COCKTAIL—Bing Crosby on 4184.

THE WHITE CLIFFS OF DOVER and I GOT IT BAD—Jimmy Dorsey on 4103.

ROSE O'DAY and SOMEONE'S ROCKING MY DREAM BOAT—Woody Herman on 4113.

THE SHRINE OF ST. CECILIA and JACK OF ALL TRADES—Andrews Sisters on 4097.

I SAID NO and THIS IS NO LAUGHING MATTER—Jimmy Dorsey on 4102.

ARTHUR MURRAY TAUGHT ME DANCING IN A HURRY and NOT MINE—Jimmy Dorsey on 4122.

REMEMBER PEARL HARBOR and YOU'RE A SAP, MR. JAP—Dick Robertson on 4144.

A STRING OF PEARLS and LAS CHIAPANACAS—Woody Herman on 4176.

Okeh

BLUES IN THE NIGHT and SAYS WHO? SAYS YOU, SAYS I—Cab Calloway on 6422.

SOMEBODY ELSE IS TAKING MY PLACE and THAT DID IT, MARIE—Benny Goodman on 6497.

BLUES IN THE NIGHT and WHERE OR WHEN—Benny Goodman on 6553.

YOU'RE A SAP, MR. JAP and WE DID IT BEFORE—Carl Hoff on 6556.

I DON'T WANT TO WALK WITHOUT YOU and MOONLIGHT COCKTAIL—Tommy Tucker on 6554.

Victor

REMEMBER PEARL HARBOR and DEAR MOM—Sammy Kaye on 27738.

BLUES IN THE NIGHT and THIS TIME THE DREAM'S ON ME—Artie Shaw on 27609.

THIS LOVE OF MINE and NEIANI—Tommy Dorsey on 27508.

GOD BLESS AMERICA and STAR SPANGLED BANNER—Kate Smith on 26193.

TICA TI TICA TA and I REMEMBER YOU—Jan Savitt on 27775.

War working America turns to
Good Music for Rest and Recreation



Here is the
Golden Opportunity
for Retail Record Dealers

MUSIC APPRECIATION RECORDS

ARE SETTING NEW RECORDS IN RECORD SALES

In the few big cities where they have been offered to the public, Music Appreciation Records have achieved a staggering sales volume unequalled in history. The public demand for the world's great music,—symphonic, operatic, and classic treasures,—has been proved beyond doubt when superb recordings by celebrated vocal and instrumental artists are made available at popular prices.

Now! This Comes to You

Today the Continental Music Company, appointed National distributor of these same famous Music Appreciation Records, brings to you the opportunity to do a record business of similar volume in your own community, at your full profit.

Everyone Wants Fine Music

Think of being able to sell Tchaikovsky's Piano Concerto No. 1 in Bb Minor for only \$2.66. Not for just one record but for the complete set of double face 12-inch records. The most humble home in your entire trade area can be your regular patron for these famous record masterpieces. Beethoven, Bach, Brahms,

Schubert, Mozart, Debussy; and the great operas of Verdi, Gounod, Puccini, Wagner, and many more, at amazingly low prices.

Make Your FULL Profit

Remember, these same Music Appreciation Records, whose phenomenal sales you have heard so much about, are now available to record dealers at standard dealer mark-up. Now for the first time dealers can stock this complete line of best selling records at customary dealer profits.

Don't Delay. Be the FIRST

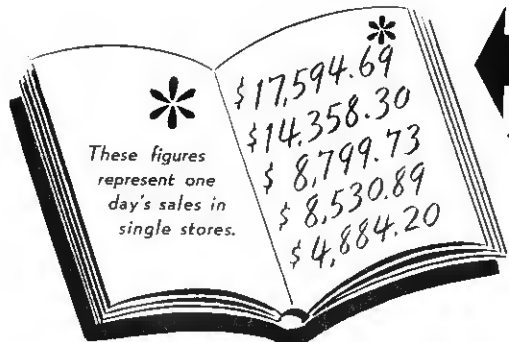
Act today to learn more about Music Appreciation Records and how to get your share of the profits that will be made from their sale in your community. Mail the coupon below, wire or phone your nearest Continental Music Company office for detailed information. The Music Appreciation Record franchise is one that every record dealer in your trade zone is eager to have. Stake out your claim now by mailing at once your request for complete information. No obligation. Act now.

CONTINENTAL MUSIC COMPANY, INC.

630 S. Wabash Avenue, Chicago, Ill.
251 Fourth Avenue, New York, N. Y.

Exclusive National Distributors

569 Mission Street, San Francisco, California
150 Marietta Street, N. W., Atlanta, Ga.



★
Mail Today!

GET SET FOR YOUR SHARE OF THE profits!

CONTINENTAL MUSIC CO., Inc., Dept. 4354

Yes! I'd like to have the complete story of the profit opportunities offered by Music Appreciation Records.

Signed _____

Firm Name _____

Address _____

City _____ State _____

Do you now stock phonograph records? YES NO



Tanks get there the hard way

...and RCA Metal Tubes go with them!

You'll find RCA Metal Tubes in the transmitters and receivers of American tanks, British tanks, Russian tanks! For metal tubes afford greater ruggedness under shock and vibration—the positive pin-contact, the self-shielding and compactness—that have helped make Allied military radio equipment the finest in the world.

RCA is now turning out metal-envelope tubes at the fastest pace

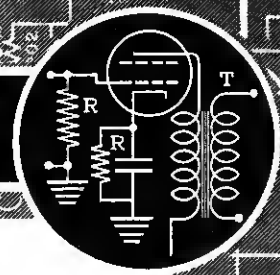
in history—for radio equipment in tanks accounts for only part of the demand. Metal tubes by the millions are serving on land, at sea and in the air...meeting the rigid requirements of the armed services. Wherever radio reception must be most reliable—wherever



the going is hardest—you'll find that "metal" means *modern!*

With vast emergency demands by no means unusual today, you may find difficulty in securing metal tubes. We're doing the best we can—we're doing more than ever before—but some delays and shortages may be unavoidable. For, obviously, war equipment comes first... and war equipment needs *metal* tubes!

METAL TUBES



Services to Sell!

Radio sets are still plentiful, and probably there will be enough to go around for the next few months.

But when new sets do grow scarce, the radio man has a lot of things to turn to, to improve the sets already in his customers' hands, and to earn income for himself.

Most radios in use today need **new tubes**. And four out of five need **proper antennas**.

Volume controls that have grown noisy should be replaced. And listeners everywhere complain of set noises which **filter condensers** would cure.

People today want **record players**, wired or wireless, to work through their existing sets. In FM areas they are prospects for **FM translators**. And remote-control **push-button converters** would be a great convenience to many.

Cathode-ray tuning eyes would improve operation of sets whose owners tune with difficulty. **Extra speakers** attached to sets solve some home situations. **Headphones** for silent-radio operation would be boons to certain households. **Bone-conductors** mean a lot to the hard-of-hearing.

Special cabinets and period furniture enclosures are wanted by many discriminating homemakers. **Record-changer units** are more popular than ever in these days of phonograph music. And there are still push-button radios not yet reset to conform with the March 1941 Re-Allocation. **Receiver re-alignment** is another service to sell. **Yearly check-ups** are needed, and the public should be sold on such regular inspections.

Radio men have a lot of services to sell to existing set owners.

It's a matter of explaining these services to the public, then—

Ask 'em to buy!

Servicemen's Wartime Jobs

How to Get the Maximum Life from Receivers, Test Equipment, and Vital Parts

• With new receiver production slated to be halted soon, the serviceman now becomes the key-man in maintaining the public contact—via radio—with the affairs of the world. It is now necessary to keep sets running “for the duration.”

To repair many of the older sets now in use will in some cases be a real job for the serviceman. They will be at the point where they should normally be replaced with a new set. It will require ingenuity to keep these sets going. Parts which were hard to get before will be impossible to obtain in the near future. The art of substituting and adapting available parts will have to be practiced at an increasing rate.

Four Methods

The first job of the serviceman in these times is to keep the sets operating which we now have. This can best be done by four methods; preventive service, conservative repairing, repair of parts, and substitution of parts.

Preventive service is a method that the radio men could study from the automobile industry, doctors, dentists, etc. The good citizens of this country change their oil (in their cars) every 1000 miles, see their dentists twice a year, and call a radio man after they've tried for a week to fix it themselves. Why not, “have your radio sets looked over every 6 months”? The same procedure pays dividends in driving convenience and health; it will do the same by cutting down big repair bills on radios. You will make more money in the long run. Follow up your customers with a card or letter reminder that it was six months ago that you repaired their set and it is time to have it checked over. Your dentist does this.

Do It Once

Conservative servicing means care and good judgment in selecting the parts, and changes that you make in a set. Allow a greater margin on the voltage ratings of condensers that you put into a set. The aluminum foil in them is valuable and the slight extra thickness of paper or chemical coating (in electrolytics) is cheap. Don't make it necessary to put another condenser in a set because the first one you used was “too light in the insulation” to do the job. The same principle goes for transformers, resistors and other components. It is better in these

times to use an oversized part that will insure continued performance rather than ruin a smaller unit and tie-up another to put the set back in operation. If the line voltage at the customer's premises is high, it will pay in continued life of the set, to cut it down to the recommended value for the receiver. Plug-in ballast resistors will do the job. Many of the old set and some of the larger ones of today have taped primaries. Use the tap which gives normal filament voltage or about 5 per cent less than normal.

Repair and Substitution

The repair of damaged parts depends a great deal on individual cases. It is only worth while trying in the case of high value parts, speakers, transformers, etc. Damaged speaker cones, field windings, power transformers, chokes, audio transformers, tuning condensers, record changers, etc., will probably have to be repaired by the serviceman because new ones will be more and more difficult to obtain. Low ohmage field coils are not difficult to rewind particularly if you rig up a simple winder and counter from a hand-drill and speedometer.

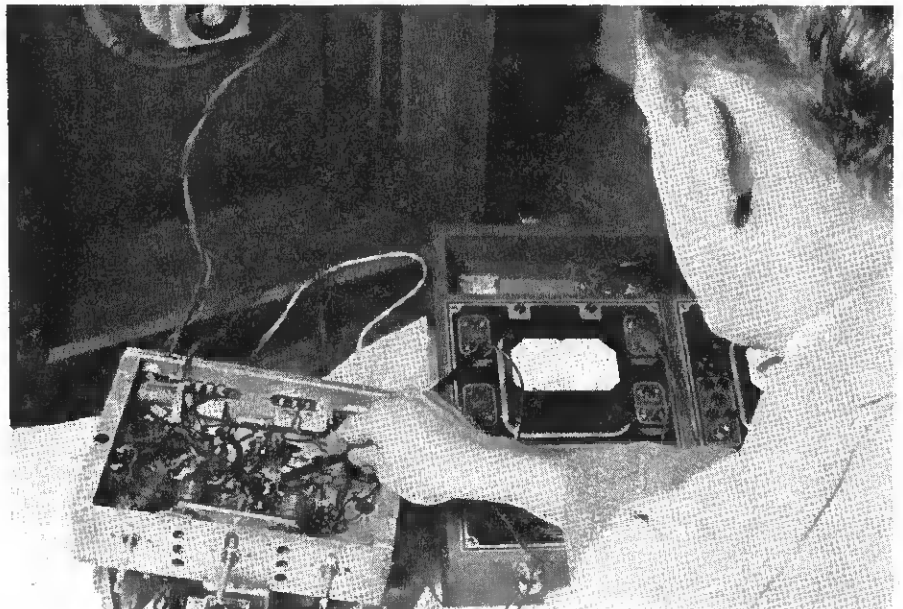
Part substitution will play a big part in the job of keeping sets going. Fortunately, the trend of design in

sets in recent years has been away from the types of parts which called for exact replacements. When certain sizes and shapes of transformers, condensers, etc., are no longer available, the serviceman will have to do the best job possible with parts he can obtain. No one is going to be too critical of the “fit” or how it looks. The fact that the set is made to operate at least as efficiently as before will be the important point.

Test Equipment Repairs

The revamping of old sets will be the job which radio men can do to supply sets where they are needed. Those old receivers which need a little dusting off and a new tube or so can be worked up into attractive sets by adding new cabinets and possibly new tuning dials of the slide rule type or similar modern scales. A number of companies are specializing in radio cabinets for custom-built trade. Many of these old chassis can be modernized with AVC, tuning eyes, improved tone controls, better volume control circuits and new tuning dials. These sets can help to make up for the shortage of new sets.

The test equipment problem is another that the serviceman will have to meet as shortages become more severe. Normally, servicemen do not



Servicemen must protect their equipment from damage, repair and modernize sets now in use, and use parts with critical materials wisely.



attempt to repair their own service equipment because of the lack of laboratory equipment to calibrate and check various units after necessary repairs have been made. Now, however, and even more so as the war progresses, it will be necessary to do your own repairing and calibrating. Many test equipment manufacturers are busy with war orders and haven't the facilities to handle these jobs.

Conserving Supplies

Take the best care of your meters. Watch the range selector settings to see that overloads are avoided. And while your meter is in good shape and accurate it is a good idea to get a basic 0-1 ma. or higher sensitivity meter and calibrate its scale against the voltage, resistance, current and other scales on your multi-meter. You can plot these other scales in terms of the scale of the basic meter on graph paper and thus not be left without an instrument in case your regular unit is damaged. If possible get a meter with the same or higher sensitivity than the meter in your test set. With a double pole double throw switch the substitute meter can be interchanged with the regular meter in order to calibrate it. If the sensitivity of the substitute is higher than the regular meter, it can be shunted in order to make the two have exact full-scale current values.

Signal generators must also be accurate. Fortunately, the IF ranges can be checked against broadcast stations, and the higher frequency ranges can be checked against WWV with its 5 and 15 mc. carriers.

Solder and copper wire should be treated with respect. Tin shortages

may cut solder supplies in the future. Copper is already a major shortage. Tinned copper hook-up wire should not be wasted.

Treat your cathode ray tubes as if they were the last you will ever see. All your tubes will last longer if you will be sure to operate them at proper voltages and *do not* switch them off and on every few minutes. It will be a lot less damaging to a tube's life if you let it run for two hours instead of turning it off and on a half dozen times during the same period. This also applies to other parts in the instrument such as filter condensers, etc.

The vital part of a tube tester is usually the indicating meter. Here again it will be wise to have a meter which you can calibrate now and hold as a spare. Many standard meters are available which can be adapted to tube tester service.

Use your native ingenuity to help win the war at the home front.

Follow the Radioman's Pledge.

Separate Oscillator in Shortwave Portable

The new Zenith portable model 7G605 has many unusual circuit features. This set has five short-wave spread-band ranges in addition to the BC band. This tuning range covers the 6, 9, 12, 15 and 18 mc. international shortwave channels.

Three antennas are built into the set. A broadcast band loop, a short-wave loop, and a telescoping "fish-pole" antenna. The loops are of the familiar removable type that can be mounted clear of the set. These loops are of the low impedance type. The BC loop has

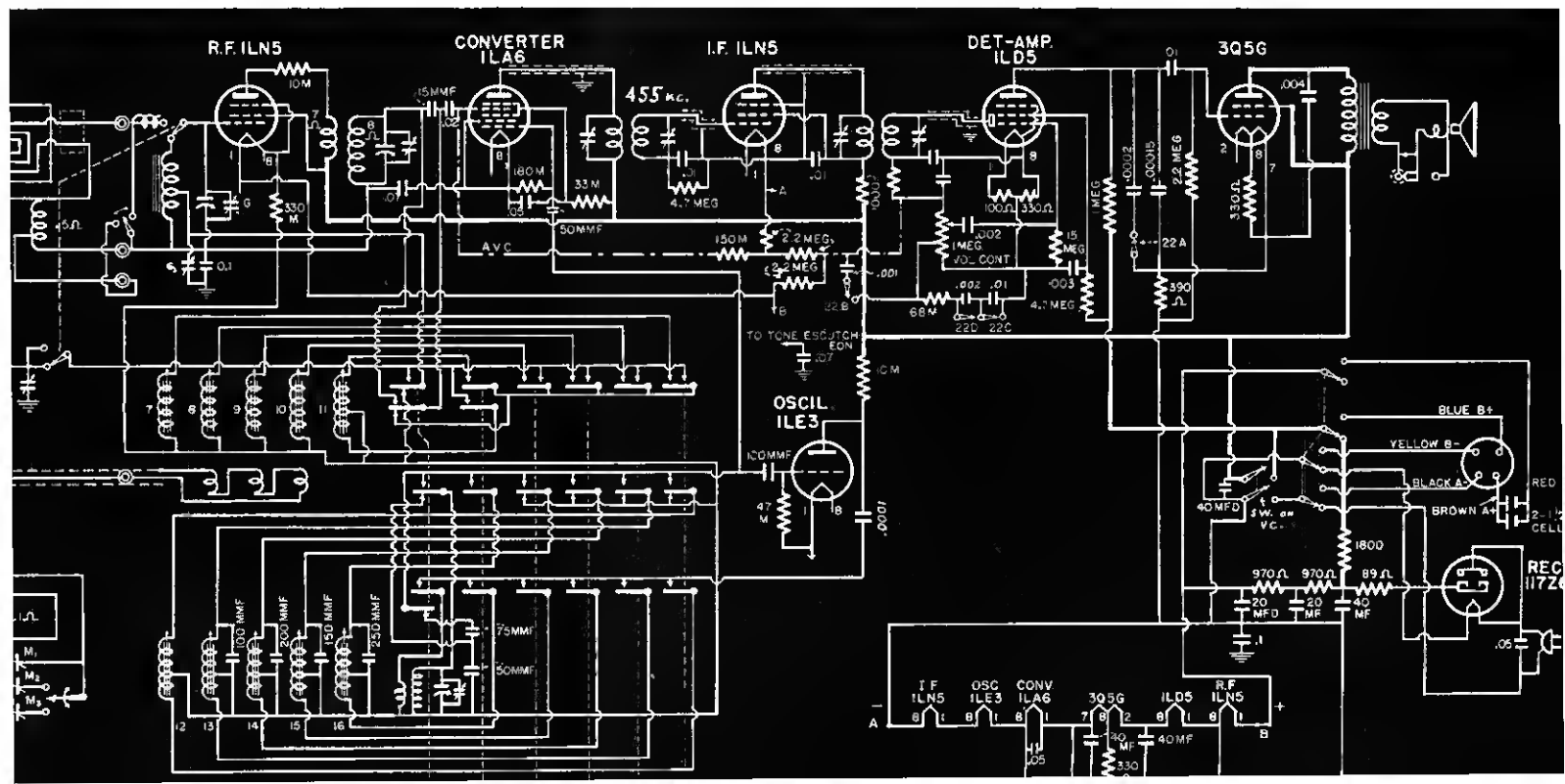
a loading coil and the SW loop is coupled through a low impedance primary on the antenna coils.

A separate oscillator tube is used in this set to give good performance on SW. The oscillator voltage is connected to the number one grid of the 1LA6 converter. The rest of the circuit is similar to most portables. Note however, the pushbutton tone control. Single-pole single-throw switches adjust the amount of bass compensation in the volume control circuit and switch 22A controls a shunt high frequency pass in the plate circuit of the 1LD5 amplifier. A battery pack supplies the "B" voltage and part of the "A" voltage. Two additional 1.5-volt dry-cells in parallel are connected in series with the A section of the pack to give the 10.5 volts necessary for the series string of tube filaments. A 117Z6G half-wave rectifier supplies the set with power from the AC line.

Parallel Coils

The diode IF transformer also houses the IF by-pass capacitors and the series load resistor. The AVC control voltage is introduced into the injector grid of the 1LA6 converter.

The short-wave coils in the detector and oscillator circuit are switched in parallel with the main tuning gang condenser and the broadcast coils which are permanently connected across these gang sections. Since the inductance of the shortwave coils is considerably less than that of the broadcast coil, the total inductance tuned by the gang condenser is just slightly less than the inductance of the short-wave coils alone. Series capacitors are switched in series with
(Continued on page 34)



"Robot Music" Speeds Production

War Effort Stimulated by
"Industrial Serenade"

These are the days when our American factories are humming along at their top speed, and any equipment which will lift the spirit of their workers and improve production quality is a vital part of the Victory program.

Sound amplifying equipment, installed in the factory in such a way as to provide regular music and announcements for the employees, can therefore be classed as vital. More and more of the plant managers are beginning to realize the value of the sound systems as a significant part of their new production schedules.

Scarcely anybody is better prepared to testify to the success of such a system, than the officials at the plant of the Hygrade Sylvania Corporation, Emporium, Pa. "Industrial public address" is no longer an experiment at this factory; Sylvania has serenaded its employees for ten years and when you hear about this system now, you are hearing about a plan that has the "bugs" out of it.

It's a smooth-running "robot" system, operated by time relays and requiring human attention only to load records onto the two automatic record players in the "record room."

The company has several other plants in the New England area, and it considers the "sound" idea so successful that new systems are being installed wherever they are appropriate.

Stimulating Tunes

The Emporium set-up uses 70 speakers for its total of 2,500 employees. It has been found that popular music of the "sweet swing" type is what the workers prefer. Heavier music, which may have a "mood," or which may "tell a story" is regarded as mildly depressing and not of satisfactory effect.

Further, the employees have a voice as to what records will be played while they work, and the majority rules in picking the selections from the library of 1,500 discs which the company has on hand.

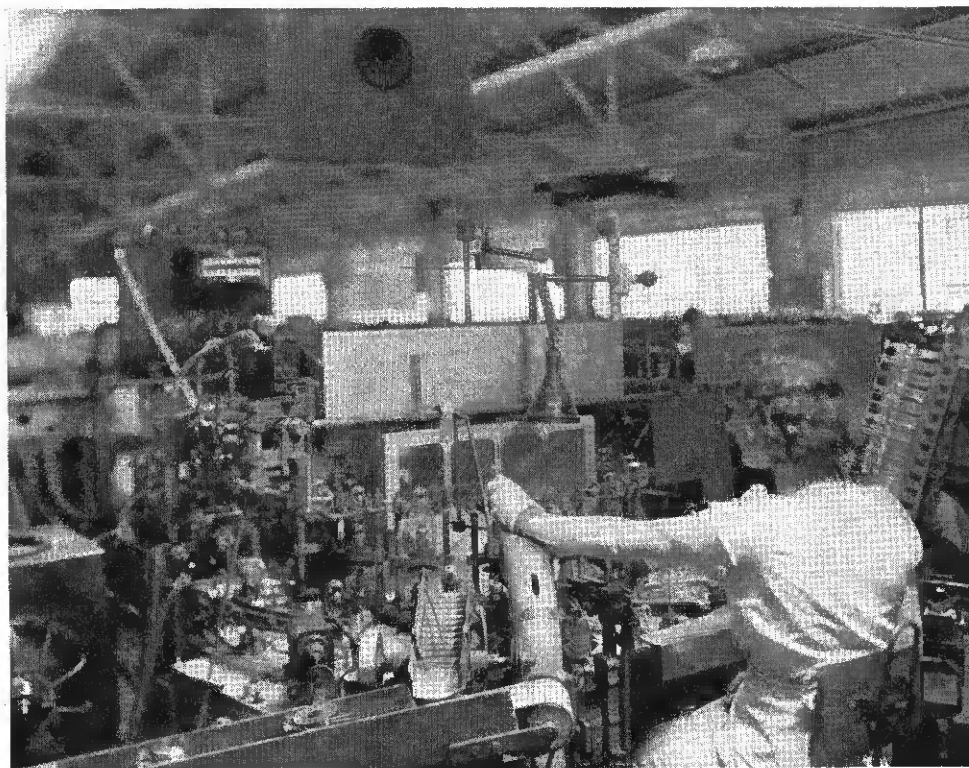
Music is normally broadcast at half-

hour intervals, using from one to three selections during each period. Lively march tunes are played during the time that workers are leaving the plant. Popular selections are also played over the loudspeakers in the company cafeteria during lunch periods.

Several years ago these musical programs were studied by Prof. John F. Hume, psychologist of Pennsylvania State College, and the general conclusion was that "when music was played at frequent intervals workers in general performed their work on tube assembly lines, requiring a high degree of dexterity, with less shrinkage due to errors, and that from the point of view of factory morale, music is highly beneficial and desirable."

Also "broadcast" on the system are

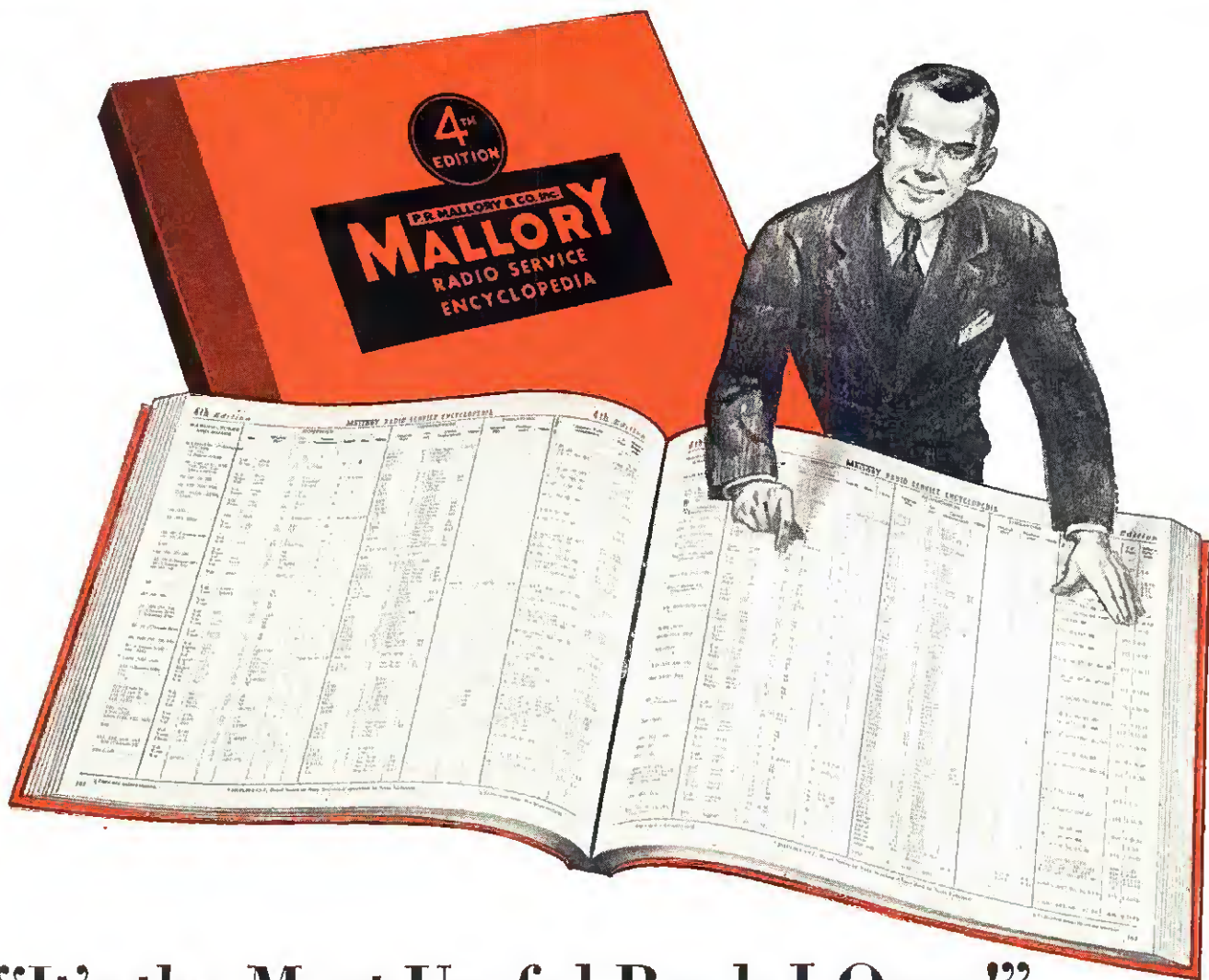
The quick hands in this photo are working to music, and getting more done. It's heard at regular intervals from the speaker at upper center.



Many of the announcements "broadcast" throughout the factory originate here, via a special microphone installed at the telephone switchboard.

the necessary paging calls that a big plant needs, and various "safety" announcements on fire drills or emergency rules. Officials have learned that they can get complete cooperation in this way, on matters which are of first importance to employee welfare. Whether or not the P. A. system has been a major contributing factor, the Sylvania company has had several na-

(Continued on page 32)



“It’s the Most Useful Book I Own!”

That’s the report from thousands of radio servicemen who refer almost hourly to their copies of the Fourth Edition “MYE”—the Mallory Radio Service Encyclopedia.

Having this book on your workbench is like having a factory engineer at your elbow! It tells you what part makes the best replacement and exactly how the part should be installed. In one compact listing, on one page, you’ll find the essential information necessary to make a speedy, satisfactory repair for *any* model of *any* receiver... circuit references, original part numbers, recommended replacements for volume controls, condensers, vibrators.

Also, the “MYE” gives you the tube complement, the I. F. peak and the Rider’s Reference, if a detailed inspection of the entire schematic is necessary.

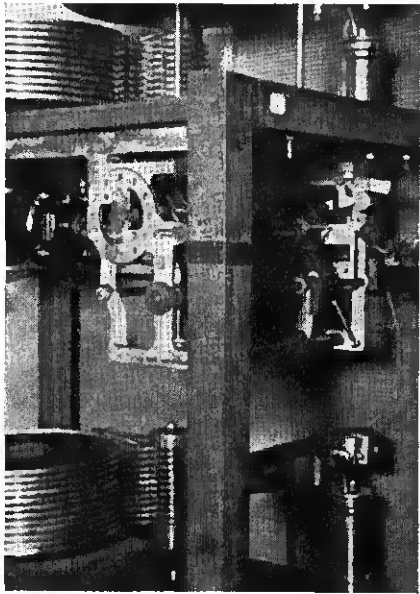
Just ask any radio serviceman who has bought one. He’ll tell you how much time and money he’s saved by daily use of his Fourth Edition “MYE”.

Get *your* copy today from your nearest Mallory Distributor!

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P. R. MALLORY & CO. Inc.
MALLORY
Approved Precision Products



These two automatic units play selected records at proper times 24 hours a day, but cut off for fire signals.

(Continued from page 30)

tional awards for its "safety" records, and has cut its accidents down to a minimum.

Listen America

News flashes are broadcast on the system, and this policy gives the workers a feeling that they are really a part of the bigger production program of the nation.

News items of special interest to employees, such as lost and found articles, athletic and other recreational events, Red Cross and home defense activities, are heard from the loudspeaker. "Personals," such as birthdays, engagements and weddings of employees are announced when the people concerned have okayed the news. Such publicity for individual workers has a very friendly effect, as any editor of a company "house organ" publication will tell you.

Since announcements may be made at any time during working hours,

WHAT THE WORKERS HEAR

Music at half-hour intervals.

Songs for lunch hours.

News flashes and "personals."

March tunes at quitting time.

Paging calls and "safety" news.

Announcements from personnel dept

they are preceded by the words "attention please." This insures that they will be heard from the first word.

Bulletins Flashed

Most of these announcements are made from the telephone switchboard, where a special microphone is installed. The Personnel Department is also connected by microphone with the speaker system, so that important announcements pertaining to personnel or company policies can be handled by this department.

The music originates in the "record room" where the only man-power required is twice-a-day loading of 24 discs on two completely automatic record players. Through the use of a timeclock relay mechanism the system

operates with robot efficiency. At the proper time the music is started, the desired number of records are played, and the music stops, all without human control or attention. It is also set to cut off in case fire signals should sound while the music is playing, operation is continuous twenty-four hours a day, though the mechanism can be set to operate only during the day if desired.

From all this, the radio man will find many talking points for similar installations in other industrial plants. Music in industry is here to stay; the principle is valid and practical; after ten years experience the Hygrade Sylvania Corporation likes it better than ever, both from the standpoint of employee morale and of production efficiency.

British Industrialists Report on Benefits of Factory Music

The use of appropriate music in industry to alleviate boredom, to increase production, and to enhance employer-employee relations, has been more extensively studied in Great Britain than in the United States.

The Industrial Health Research Board in England made an extensive investigation. Its finding can be summarized:

Familiar types of dance music with their well-marked rhythm and distinctive melodies were the most popular and effective stimulants to production and pleasure in work. No attempt was made to study the isolated effects of rhythm and melody, but it is probable that both contributed to the results obtained. It is generally agreed that rhythm induces a pleasant emotional effect which acts as a more favorable background to production.

"It is highly probable that the observed increase in output and greater pleasure in work were due chiefly to the distracting effects of music and to the pleasant emotional experiences which it aroused. The knowledge that music would be played at specified times within the spell of work created a more favorable outlook so that the operatives as a whole began the day in a more buoyant and enthusiastic frame of mind.

"Their thoughts, instead of being directed to the prospect of a long pe-

riod of somewhat monotonous activity, were diverted by the anticipation of music. The mind became more or less detached from work and this detachment was practically complete during the actual music period. Time seemed to pass quickly and pleasantly and the workers were often agreeably surprised that so much had been done in apparently so short a time. The music provided the necessary mental distraction while productive activity was facilitated or at least remained unimpaired."

Special Conditions

The most effective duration and distribution of the playing periods for each factory will probably have to be determined by experiment, because of the existing variations in the type and conditions of work. This, however, is a simple matter, but it may be said with confidence that the total duration should be not less than one hour or more than two hours in each spell of work.

Music is an effective antidote to boredom. During the time when music was played increases in output have resulted reaching 6 to 11 per cent, while the total daily output showed an increase of 3 to 6 per cent. Different types of music are found to have slightly different effects upon the output.



Do Your Customers Know a BARGAIN When They See It?

Here's One
45

powerful
1½ volt
cells packed
in the smallest
possible space!



A MIRACLE of compact power—the greatest “B” battery value ever wrapped up in such a small package!

It's the battery that “personal” radio sets were designed around!... the “Eveready” “Mini-Max” Radio “B” Battery No. 467.

Yet customers sometimes speak of its expense! That's because they don't realize what they're buy-

ing—they look at the small size instead of the *big output*. It does a man-sized job!

There's your answer for such customers—in the cutaway picture above.

Or put it another way: Many batteries *twice* the size deliver *less power*. No wonder the “Eveready” “Mini-Max” Radio “B” Battery No. 467 is such a whale of a bargain!

“EVEREADY” “MINI-MAX”

RADIO “B” BATTERIES

NATIONAL CARBON COMPANY, INC.
Unit of Union Carbide and Carbon Corporation



The words “Eveready” and “Mini-Max” are registered trade-marks of National Carbon Company, Inc.



SERVICEMAN'S WARTIME PROBLEMS

(Continued from page 29)

the tuning condenser and short-wave coils to give the bandspread tuning. The fixed capacitors across the oscillator coils are of the compensating type.

The oscillator circuit uses a portion of the short-wave coils to feedback the plate voltage to the grid circuit. The tuned portion of the shortwave oscillator coils not being used is shorted out by switch sections on all models except those with serial numbers T-847011 to T857010.

The fish-pole antenna can be used on any band including the broadcast. The short-wave loop functions on the 9, 12, and 15 mc. bands. A slide switch on the SW loop selects the proper trimmer for each of these bands.

IF, RF Alignment

The IF transformers are aligned at 455 kc. The signal is connected through a 0.1 capacitor to the converter grid. The dial is set at 600 kc. on the BC band.

The BC band is aligned by introducing a signal through a one turn loop loosely coupled to the BC loop. With the signal of 1600 kc., adjust the trimmer on the oscillator gang section for correcting reading of the pointer on the dial. With a 1400 kc. signal adjust the trimmer on the detector gang section with the set tuned to resonance. Also adjust the trimmer on the antenna gang section at 1400

For the next section of adjustments, the signal is introduced, from 3 feet of wire connected to the signal generator to the extended fish-pole antenna. The distance between the rod and wire should be about one foot.

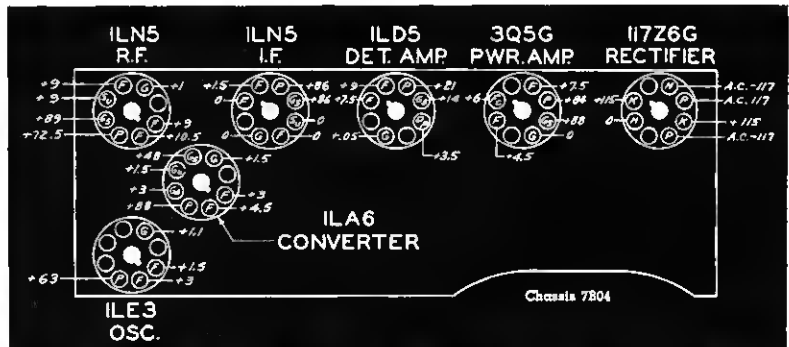
With the dial and signal generator set at 1400 kc., adjust the trimmer G₁ on the detector coil for peak output. This is the adjustment for the Waverod for BC use.

With the dial and generator tuned to 6.2 mc. on the 49 meter band, adjust the proper oscillator coil core and the detector coil core for peak output. Repeat at 9.6 mc. on 31 meter band; at 11.8 mc. on 25 meter band; at 15.2 mc. on 19 meter band; at 17.8 mc. on 16 meter band.

With a one-turn loop loosely coupled to the shortwave loop, and the dial and generator set at 15.2 mc. on the 19 meter band, adjust M₁ and M₂ for peak output. Adjust the loop trimmer M₂ on 11.8 mc. in the 25 meter band. Adjust M₃ at 9.6 mc. in the 31 meter band. Be sure that the slide switch on this loop is in the position corresponding to the band being aligned.

Overload Indicator on Motorola 51R11

Two neon flasher indicator lamps are used on the radio-phono-recorder model 51R11. A voltage divider cir-



Socket layout and operating voltages as measured with 20,000 ohms per volt meter from B— to socket terminal for Zenith 7G005.

cuit across the output tube is designed to show the proper recording level and a "too loud" indication.

In the accompanying circuit, the neon lamp which indicates the correct recording level is connected across the 82M resistor which is 45 per cent of the total resistance in the left-hand path. The "too-loud" flasher is across 39M, or about 20 per cent of the resistance in the right-hand path.

The "too loud" flasher will operate if the output AC signal rises 25 per cent above the value which just flashes the "recording" lamp. Recording at too high a volume level may cause the cutter to cut through to the adjacent grooves.

A novel form of feedback is used in the output stage. The cathode of the 6V6GT is connected to the secondary of the output transformer and through the voice coil and bucking coil to ground. The 68-ohm bias resistor is shorted out on straight radio operation. The impedance of voice and bucking coils in the cathode circuit develop the feedback voltage from the plate current and the voice coil current. Since the hum-bucking coil feeds any hum voltage to the cath-

ode of the output tube, any hum in the grid circuit of that tube, which might be amplified, is canceled out.

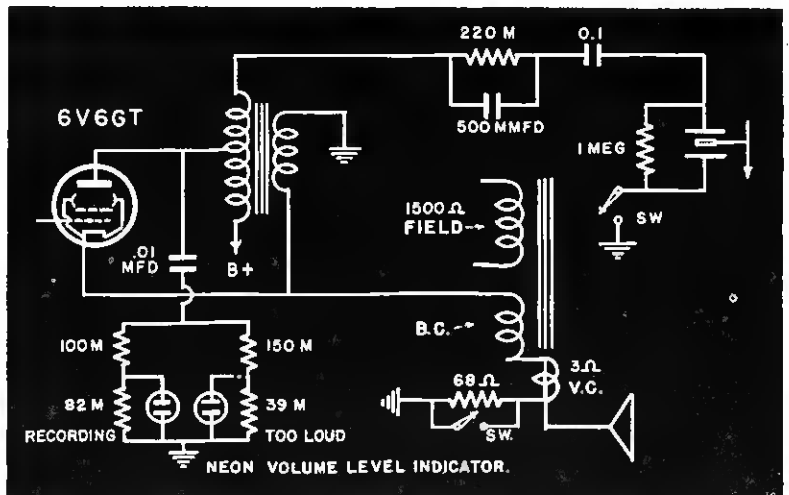
Howling or microphonics in this model, when playing a record, may be due to the pick-up spindle. This spindle is rubber mounted and should float freely. If it is too tight, loosen the mounting nut.

Timely Air-Raid Folders Ready

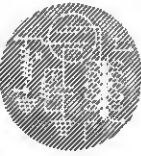
Air Raid Precautions direct mail folders and posters in red and black are now being made available by Hy-grade Sylvavnia Corp. to Sylvania servicemen. Eighteen precautions appear on these posters, which are issued at imprinting costs.

Folders are 8½" x 11" and every order of 250 or more, Sylvania gives the serviceman a jumbo size blow-up, 17" x 22" for mounting on his window. They help to present the serviceman to the public as a home communications radio servant.

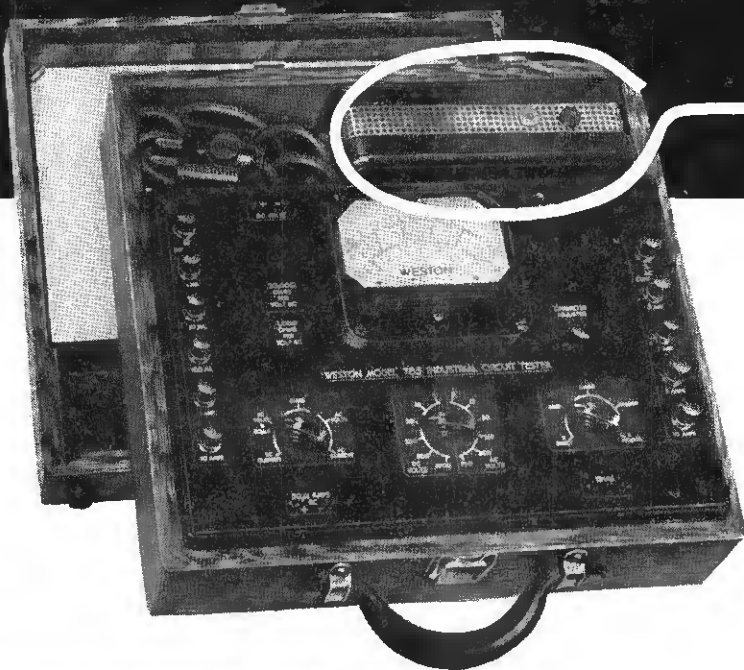
The firm advises servicemen to use the folder either as a direct mail piece or as a door to door handout, offering it at the same time, by means of the poster, to street traffic.



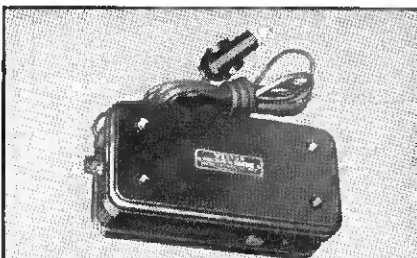
Output circuit for Motorola 51R11 showing neon lamp indicators for normal and "too loud" recording levels. See description above.



NOW WESTON MODEL 785 INDUSTRIAL CIRCUIT TESTER



**Also Tests
INSULATION
RESISTANCE
VALUES!**



**WESTON (Model 792)
INSULATION AND CABLE
COVERING RESISTANCE TESTER**

... for use with WESTON
Models 785 and 772

An extremely compact unit, operating from any 100-130 volt AC 50-60 cycle supply line... connects into the ohmmeter circuit of Models 785 or 772 by a pair of leads, and provides for resistance measurements up to a value of 900 megohms on the ohmmeter scale. Supplied with Models 785 or 772 on order*. Unit also sold separately for use with instruments now in service.

Already recognized throughout industry as the most *complete* tool for maintenance test needs, the utility of the Model 785 is now further increased to include insulation and cable covering resistance testing.

Thus this one instrument now serves for checking motor and control circuits... lighting circuits... sensitive relay circuits... communications and electronic circuits... and insulation resistance as well. The broad range coverage of Model 785 is as follows:

DC VOLTAGE ... 0-1/10/50/200/500/1000 volts—20,000 ohms per volt. (*5000 volt range with external multiplier.)

AC VOLTAGE ... 0-5/15/30/150/300/750 volts—1000 ohms per volt.

DC CURRENT ... 0-50 microamperes, 1/10/100 milliamperes, 1 ampere and 10 amperes (*ranges above 10 amperes with external shunts).

AC CURRENT ... self-contained ranges 0-5/1/5/10 amperes (*higher ranges with an external current transformer).

RESISTANCE ... 0-3000, 0-30,000, 0-300,000 ohms, 0-3 megohms, 0 to 30 megohms (self-contained batteries). 0-900 megohms (*with compact Model 792 Resistance Tester described at the left).

...

In addition to *wide adaptability* which enables today's busy plants to cut corners and costs in maintenance and other test work, Model 785 also provides the *years of measurement dependability* so typically WESTON. The complete story on Model 785 and other WESTON instruments can be secured from the WESTON representative near you, or, by writing Weston Electrical Instrument Corp., 581 Frelinghuysen Avenue, Newark, New Jersey.

*Extra equipment on special order.

Laboratory Standards... Precision DC and AC Portables... Instrument Transformers... Sensitive Relays... DC, AC, and Thermo Switchboard and Panel Instruments

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Specialized Test Equipment... Light Measurement and Control Devices... Exposure Meters... Aircraft Instruments... Electric Tachometers... Dial Thermometers

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Operating Bias for Output Tubes

Values for grid bias, bias resistor, and load resistance for popular tube types in typical operating conditions.

TUBE	PLATE VOLTAGE	AMPLIFIER CLASS	GRID BIAS	CATHODE RESISTOR	LOAD RESISTANCE	NOTES
1A5-G	90	A ₁	- 4.5	*	25000	
1C5-G	90	A ₁	- 7.5	*	8000	
1LA4	90	A ₁	- 4.5	*	25000	Similar 1A5G
1LB4	{ 67.5 90	{ A ₁ A ₁	{ - 6.0 - 9.0	*	{ 16000 12000	
1Q5-GT	90	A ₁	- 4.5	*	8000	
1S4	{ 45 67.5	{ A ₁ A ₁	{ - 4.5 - 7.0	*	{ 8000 5000	
1T5-GT	90	A ₁	- 6.0	*	14000	
1D8-GT	{ 67.5 90.0	{ A ₁ A ₁	{ - 6.0 - 9.0	{ * *	{ 16000 12000	
1E7-G	135	A (PP)	- 7.5	850	24000	(Two 1F5-G's)
1F5G, 1F4	{ 90 135	{ A ₁ A ₁	{ - 3.0 - 4.5	{ 600 430	{ 20000 16000	
1G5-G	{ 90 135	{ A ₁ A ₁	{ - 6.0 - 13.5	{ 525 12000	{ 8500 9000	
1J6-G, 19	{ 135 135	{ B B	{ - 6.0 0	{ — —	{ 10000 10000	
3Q4	90	A ₁	- 4.5	*	10000	
3Q5GT	90	A ₁	- 4.5	*	8000	
3S4	90	A ₁	- 7.0	*	8000	
3LE4	90	A ₁	- 9.0	*	6000	
33	180	A ₁	- 18.0	670	6000	
49	{ 180 135	{ B (PP) A ₁	{ 0 - 20	{ — 3500	{ 12000 11000	Screen tied to plate
2A3	{ 250 300 300	{ A ₁ (1) AB ₁ AB ₁	{ - 45 — - 62	{ 750 780 —	{ 2500 5000 3000	{ Push Pull Push Pull
2A5	Same as 6F6					
45	{ 180 275 275 275	{ A ₁ A ₁ AB ₂ AB ₂	{ - 31.5 - 56 - 68 —	{ 1020 1550 — 775	{ 2700 4600 3200 5060	{ 2700 4600 Push Pull Push Pull
46	{ 250 400	{ A ₁ B	{ - 33 0	{ 1500 —	{ 6400 5800	{ Screen tied to plate Screen tied to grid
53	Same as 6N7					
47	250	A ₁	- 16.5	450	7000	
59	{ 250 250	{ A ₁ A ₁	{ - 28 - 18	{ 1080 410	{ 5000 6000	{ As triode As Pentode
6A3	Same as 2A3					
6A4	{ 100 180	{ A ₁ A ₁	{ - 6.5 - 12	{ 615 465	{ 11000 8000	
6A6	Same as 6N7					
6AC5-G	250	B(PP)	0	—	10000	Direct Coupled
6B4-G	Same as 2A3					
6F6/42	{ 250 250 315 375 350	{ A ₁ A ₁ A ₁ AB ₂ AB ₂	{ - 16.5 - 20.0 - 24.0 - 26.0 —	{ 410 650 320 340 730	{ 7000 4000 10000 10000 10000	{ As Pentode As Triode Push Pull Push Pull Push Pull Triodes
6G6-G	{ 135 180 180	{ A ₁ A ₁ A ₁	{ - 6 - 9 - 12	{ 450 500 1100	{ 12000 10000 12000	As Triode
6K6-G '41	{ 100 250	{ A ₁ A ₁	{ - 7 - 18	{ 650 500	{ 12000 7600	
6L6	{ 250 250 270 360	{ A ₁ A ₁ A ₁ AB ₁	{ - 14.0 - 20.0 - 17.5 - 22.5	{ 170 490 125 —	{ 2500 5500 5000 6600	{ As Pentode As Triode Push-Pull Push-Pull
6N7	300	B(PP)	0	—	8000	
6V6	{ 180 250 285	{ A ₁ A ₁ AB ₁	{ - 8.5 - 12.5 - 19.0	{ 260 250 250	{ 5500 5000 8000	Push Pull
6Y6-G	{ 135 200	{ A ₁ A ₁	{ - 13.5 - 14.0	{ 220 220	{ 2000 2600	
6Y7-G	Same as 79					
6Z7-G	180	B(PP)	0	—	12000 to 20000	
38	{ 135 250	{ A ₁ A ₁	{ - 13.5 - 25.0	{ 1100 1000	{ 13500 10000	
79	250	B(PP)	0	—	1400	
89	{ 250 250 180	{ A ₁ A ₁ B(PP)	{ - 31 - 25 0	{ 970 670 —	{ 5500 6750 9400	{ As Triode As Pentode As Triode
7A5	125	A ₁	- 9	220	2700	
7B5	Same as 6K6-G, 41					
7CS	{ 180 250 250	{ A ₁ A ₁ AB ₁	{ - 8.5 - 12.5 - 15.0	{ 260 240 200	{ 5500 5000 10000	Push Pull
12A5	{ 100 180	{ A ₁ A ₁	{ - 15 - 25	{ 750 650	{ 4500 3300	
25A6, 43	{ 95 135	{ A ₁ A ₁	{ - 15 - 20	{ 625 450	{ 4500 4000	
25A7G	100	A ₁	- 15	600	4500	
25B6-G	135	A ₁	- 22	350	1700	
25C6-G	Same as 6Y6-G					
25L6	110	A ₁	- 7.5	140	2000	
32L7GT	90	A ₁	- 7	250	2600	
35A5	110	A ₁	- 7.5	200	2500	
35L6-G	110	A ₁	- 7.5	175	2500	
50A5	110	A ₁	7.5	150	2000	
50CG-G	Same as 6Y6-G					
50L6GT	Same as 25L6GT					
70L7GT	110	A ₁	- 7.5	175	2000	
117L7/GT 117P7GT 117M7GT	{ 105	{ A ₁	{ - 5.2	{ 110	{ 4000	
117N7GT	100	A ₁	- 6	100	3000	

PP = Pushpull

* Series Filament

Par. = Parallel



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

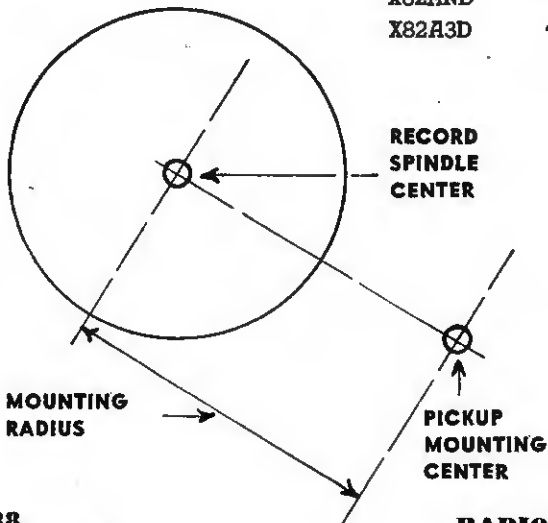
✓
A Reputation for
Protecting its Dealers

* With exceptions due to the War Effort

TUNG-SOL RADIO TUBES

Phonograph Pickups for Replacements

MANUFACTURER	PICKUP MODEL	MOUNTING TYPE	RADIUS	RECORD CAPACITY	NEEDLE TYPE P— PERMANENT R— REPLACEABLE	OZ. PRESSURE ON RECORD	LIST PRICE
The Astatic Corp., Youngstown, Ohio	AB-8	Crystal	8"	12"	R- Any	2¾	\$10.00
	AB-8M	"	7"	12"	R- "	2¾	12.50
	B-10	"	9 ²¹ / ₃₂ "	12"	R- "	2¾	17.50
	B-16	"	11 ¹¹ / ₃₂ "	16"	R- "	2¾	22.50
	D-9	"	6½ or 7"	12"	R- "	2¾	4.95
	FP-8	"	8"	12"	P-Sapphire	1	16.50
	FP-18	"	8"	12"	P- "	1	16.50
	FP-38	"	8"	12"	P- "	1	16.50
	FL-48	"	8"	12"	R-Any	1¼	12.50
	O-7	"	7"	12"	R- "	2¾	6.50
	HP-16	"	12"	16"	P-Sapphire	1	25.00
	HP-36	"	12"	16"	P- "	1	25.00
	S-8	"	8"	12"	R-Any	2¾	10.00
	S-12	"	12"	16"	R- "	2¾	12.50
	S-L-8	"	7 or 8"	12"	R- "	2¾	4.95
Audak Co., Inc., 500 5th Ave., New York, N. Y.	D-27E	Magnetic	8 ³ / ₁₆ "	12"	R-Any	1¾	19.75
	D-31E	"	8 ³ / ₁₆ "	12"	R "	1¾	27.50
	D-36E	"	8 ³ / ₁₆ "	12"	P or R	1½	39.75
	(All Units Also Available for 16" Records)	D-38H	"	8 ³ / ₁₆ "	" " "	1½	59.50
	PRO-2	"	8 ³ / ₁₆ "	12"	" " "	1¾	68.50
	AT-12	"	7½"	12"	R-Any	2	14.50
Brush Development Co., 3311 Perkins Ave., Cleveland, Ohio	PL-20	Crystal	10 ¹ / ₁₆ "	17¼"	P-Sapphire	1	45.00
	PL-25	"	6¾"	12"	P- "	1	33.00
Electrovox Co., 356 Glenwood Ave., East Orange, N. J.	—	Crystal	6 ⁷ / ₈ "	12"	P-Sapphire	1	6.00
Garrard Sales Corp., 296 Broadway, New York, N. Y.	H-6	Crystal	7¾"	12"	P-Sapphire	1	16.50
Shure Brothers, 225 W. Huron St., Chicago, Ill.	97AN	Crystal	6 ⁷ / ₈ "	12"	P-Sapphire	1	5.50
	97A	"	6 ⁷ / ₈ "	12"	R-Any	1	5.50
	95A	"	6 ⁷ / ₈ "	12"	R-Any	2	5.50
Webster Electric Co., Racine, Wis.	AJ1	Crystal	7"	12"	R-Perm-metal	1½	6.50
	GX80A3D	"	7¼"	12"	R-Any	2½	4.95
	X82AND	"	7¼"	12"	R-Sapphire	1¾	6.75
	X82A3D	"	7¼"	12"	R-Any	2½	5.50



● For pickups to operate properly, it is important that the distance between the center of the turntable and the center of the pickup mounting post be the value recommended by the manufacturer. When replacing pickups, use this chart to select the type which will most nearly fit the mounting radius of the old unit. When exact fits are not available, shift the motor and turntable slightly, or enlarge the pickup mounting hole and cover it with a metal baffle plate drilled at the correct position.





ASTATIC



Model 0-7, List \$6.50



Model D-9, List \$4.95



Model AB-8, List \$10



Model B-10, List \$17.50



Model B-16, List \$22.50



Model SL-8, List \$4.95



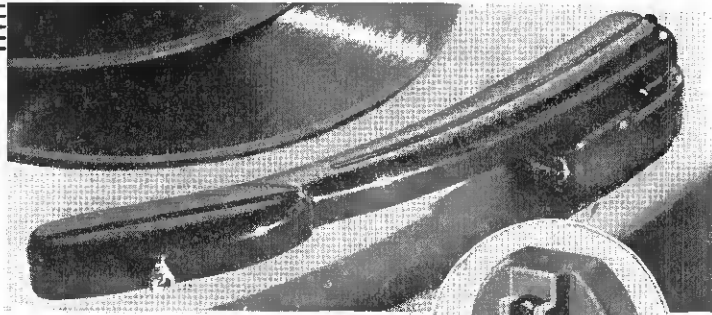
S-8, \$10 S-12, \$12.50



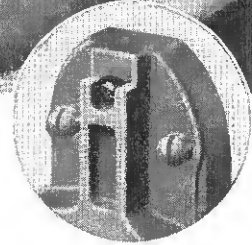
HP-16 and HP-36,
Each \$25.00



Model AB-8M,
List \$12.50



Models FP-8, FP-18 and FP-38
Low Pressure Crystal Pickups
List Price, Each \$16.50

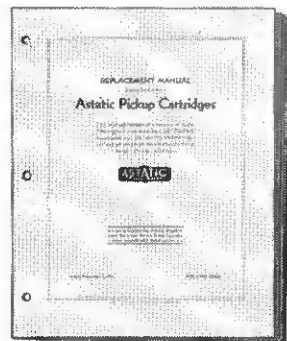


ASTATIC CRYSTAL PICKUPS FOR REPLACEMENTS

Anticipating an ever-increasing demand for Crystal Pickups and Cartridges for replacement purposes, The Astatic Corporation illustrates here, for your convenience, the various Astatic Crystal Pickups in general use, together with model numbers and list prices as referred to in Radio Retailing's Chart on the opposite page. In addition, Astatic's Pickup Cartridge Manual, available at your Radio Jobber's, lists radio-phonograph models of a majority of the leading manufacturers, together with the correct pickup cartridges for replacements.

See Your Radio Jobber
for this FREE Copy of
**ASTATIC'S Replacement
Manual for
Pickup Cartridges**

Dealers and service men will find
this manual extremely useful for
quick, accurate reference.



ASTATIC

THE ASTATIC CORPORATION

YOUNGSTOWN, OHIO

Licensed Under Brush
Development Co. Patents

In Canada:
Canadian Astatic Ltd.
Toronto, Ontario

HF STATIONS, FM

CALL	LOCATION	FREQ.	CALL	LOCATION	FREQ.	CALL	LOCATION	FREQ.
CALIFORNIA			MASSACHUSETTS			NEW YORK—Cont.		
	MC.	MC.		MC.	MC.		MC.	MC.
K31LA	Hollywood	43.1	W43B	Boston	44.3	W55NY	New York	45.5
K37LA	Los Angeles	43.7	W67B	"	46.7	W59NY	"	45.9
K45LA	"	44.5	W1XK	"	42.6	W63NY	"	46.3
K53LA	"	45.3	W81SP	Springfield	48.1	W67NY	"	46.7
K61LA	"	46.1	W1XSN	"	42.6	W71NY	"	47.1
			W1XTG	Worcester	43.4	W75NY	"	47.5
CONNECTICUT			MICHIGAN			W49BN	Binghamton	44.9
W65H	Hartford	46.5	W45D	Detroit	44.5	W8XAD	Rochester	42.6
W53H	"	45.3	W49D	"	44.9	W51R	"	45.1
ILLINOIS			W53D	"	45.3	W47A	Schenectady	44.7
W51C	Chicago	45.1	W73D	"	47.3	W57A	"	45.7
W59C	"	45.9	W69	Grand Rapids	46.9	W2XOY	"	43.2
W47C	"	44.7	W77XL	Lansing	47.7	W63SY	Syracuse	46.3
W63C	"	46.3	MISSOURI			NORTH CAROLINA		
W67C	"	46.7	W9XER	Kansas City	..	W41MM	Winston-Salem	44.1
W75C	"	47.5	K51L	St. Louis	45.1	OHIO		
W79C	"	47.9	K59L	"	45.9	W45CM	Columbus	44.5
W71RF	Rockford	47.1	NEW HAMPSHIRE			PENNSYLVANIA		
INDIANA			W39B	Mount Washington	43.9	W49PH	Philadelphia	44.9
W45V	Evansville	44.5	NEW JERSEY			W53PH	"	45.3
W71SB	South Bend	47.1	W91HJ	Jersey City	49.1	W57PH	"	45.7
W49FW	Fort Wayne	44.9	W95HJ	"	49.5	W65PH	"	46.5
KENTUCKY			NEW YORK			W69PH	"	46.9
W51SL	Lexington	45.1	W31NY	Alpine, N. J.	43.1	W73PH	"	47.3
LOUISIANA			W2XMN	"	42.8	W47P	Pittsburgh	44.7
W45BR	Baton Rouge	44.5	W2XQR	New York	43.2	W75P	"	47.5
MARYLAND			W2XWG	"	45.1	TENNESSEE		
W59BM	Baltimore	45.9	W35NY	"	43.5	W47NV	Nashville	44.7
			W47NY	"	44.7	TEXAS		
			W51NY	"	45.1	K51	Amarillo	45.1

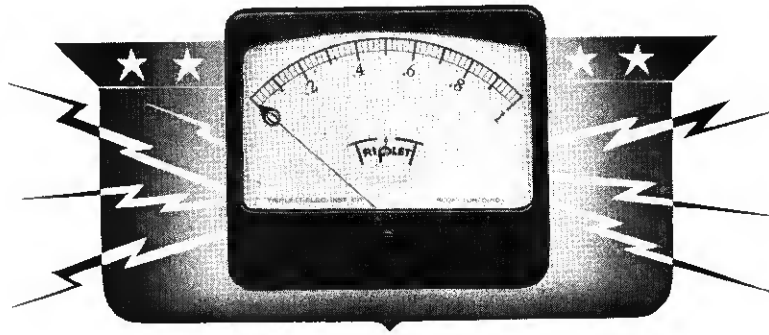
TELEVISION

CALL	LOCATION	FREQ.	CALL	LOCATION	FREQ.
CALIFORNIA			NEW YORK		
	MC.	MC.		MC.	MC.
KTSL	Hollywood	50-56	WNBT	New York	50-56
W6XDL	San Francisco	50-56	WCBW	"	60-66
W6XHT	"	60-66	WRGB	New Scotland	66-72
W6XHH	Los Angeles	60-66	WABD	New York	78-84
W6XYZ	"	78-84	W2XBB	"	96-102
KSEE	"	96-102	W2XI	New Scotland	162-168
W6XCB	"	162-168	W2XGE	Schenectady	162-168
W6XLA-P	"	236-242	W2XMT	New York	162-168
ILLINOIS			W2XBT-P	"	162-168
WTZR	Chicago	50-56	W10XKT-P	"	264-270
W9XBK	"	60-66	W2XGU-P	"	288-294
W9XCB	"	78-84	W2XCB-P	"	346-358
W9XBT-P	"	210-216	OHIO		
W9XBB-P	"	384-396	W8XCT	Cincinnati	50-56
INDIANA			PENNSYLVANIA		
W9XG	W. Lafayette	66-72	WPTZ	Philadelphia	66-72
IOWA			W3XAU	"	84-90
W9XUI	Iowa City	50-56	W3XPP	"	102-108
KANSAS			W3XP-P	"	236-242
W9XAK	Manhattan	50-56	W3XTF-P	"	230-242
NEW JERSEY			WISCONSIN		
W2XVT	Passaic	78-84	WMJT	Milwaukee	66-72
W3XEP	Camden	84-90	W9XCV	"	300-312
W3XAD-P	"	321-327	DISTRICT OF COLUMBIA		
			W3XWT	Washington	50-56
			WNBW	"	60-66

UTAH		
K47SL	Salt Lake City	44.7
WISCONSIN		
W55M	Milwaukee	45.5
W9XYH	Superior	..
DISTRICT OF COLUMBIA		
W3XO	Washington	43.2

Bold face stations operating; others under construction.

Applications for FM stations in the following cities are pending:
 California; San Francisco, Oakland, San Bernardino.
 Colorado; Denver.
 District of Columbia; Washington.
 Georgia; Atlanta.
 Illinois; Cicero, Chicago.
 Iowa; Cedar Rapids.
 Indiana; Indianapolis. (2)
 Kentucky; Ashland, Louisville.
 Louisiana; Alexandria.
 Maine; Falmouth.
 Maryland; Baltimore.
 Massachusetts; New Bedford, Worcester, Boston (2).
 Michigan; Detroit, Grand Rapids (2), Lansing, Battle Creek.
 Missouri; St. Louis (3).
 New Hampshire; Manchester.
 New Jersey; Ewing Township.
 New York; New York City (7), Albany, Rochester.
 North Carolina; Winston-Salem.
 Ohio; Cleveland, Youngstown.
 Pennsylvania; Philadelphia, Reading.
 Rhode Island; Providence (2).
 Texas; Houston.
 Wisconsin; Superior, La Crosse.



"THERE IS A BRIGHT SIDE"

An Open Letter to Users of Electrical Measuring Instruments

Much more than instruments is needed to fill the vast requirements of America's gigantic production program. Experience gained by many years of actual instrument manufacturing is vital. Triplet's broad experience in filling peace-time needs is answering the call to arms — is doing its part in re-establishing in the world the Democratic ideals of freedom.

Private business must undergo restrictions for the sake of National security. As good Americans we will bear these willingly.

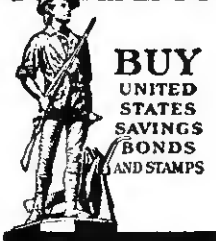
And there is a bright side. Rapid expansion, new fields and improved processes mark today's instrument program. New developments unbelievably revolutionary in their scope are growing out of the vast proving ground of war-time production. When war ends, these advantages will be passed on to all of you. From the experience of today will come many new and greatly improved instruments to better serve the peaceful world of tomorrow.

N. A. Triplett

Sales Manager

The Triplet Electrical Instrument Co.

FOR DEFENSE



**BUY
UNITED
STATES
SAVINGS
BONDS
AND STAMPS**

We Can Also Help In Another Way

Buy Defense Stamps and Bonds. Buying them regularly is the best way you can help General MacArthur and our fighting men. We must all pull together now, and your dollars can best serve in stamps and bonds.

THE TRIPLET ELECTRICAL INSTRUMENT CO.
BLUFFTON • OHIO

Electronic Devices at Work

**Radio-tube Apparatus Is Helping to Win
the War in Battle, in Industry, at Home**

• Under the lash of war, probably more extensive and revolutionary accomplishments are now under way in the electronic research laboratories of the nation, than in any similar period in radio's history.

America can expect many new war weapons from the nation's scientific laboratories as the result of intensive research being carried out in secret in the interest of national victory. Naturally details of the new weapons now under development cannot be disclosed, but they are going to be extremely effective in the success of America and many of them are already proving of great value to the Allies. Since the Defense effort started, research has been greatly stimulated and increased. Research in such fields as electronics, physics, chemistry, radio and metallurgy has more than doubled in the past year.

Success in modern war depends upon surprise, upon the use of new devices which are effective until the enemy can find means of defense against them. The submarine was such a surprise. But it has passed its peak of usefulness. For research on audio-locating devices, the observation plane, radio communication and the depth bomb has done much to eliminate this great menace.

Radio Tube Locators

The bomber plane also has lost much of its power because the remarkable developments of beam radio in the research laboratories have made it possible to locate and follow attacking planes long before they reach their objectives. Such a method of defense allows interceptor planes to break up bomber attacks and make them fly so high that the dropping of bombs is much less effective.

These new researches and their results are for the present military secrets which will not be disclosed until after the end of the war. But with the coming of peace all this vast research can be expected to bring wonderful new services of radio and electronics into everyday life.

In the field of facsimile, that is, the transmission of writing, printing and pictures by radio or wire, 1941 marked the perfection of a facsimile pick-up box for telegrams. The sender merely writes out his message and drops it into a slot. Whereupon an electric eye scans the written message and transmits it to the telegraph office at the speed of light, without benefit of slow-footed messenger boys.

Where Radio Tubes Serve U. S.

Manufacturing—control, processing, sorting, counting, protection, sabotage prevention.

Combat—plane and ship detection, navigation, gun fire control, etc.

Communication—military and civilian.

The Home—radio sets, fire and theft protection, "sun" lamps, door openers, air raid alarms, etc.

A long-distance record for trans-oceanic facsimile transmission was set during the year by the Russian Embassy at Washington, which received all its current news from Moscow via ultra-high-frequency facsimile. Details of the system are not known to American engineers, although samples of the tape-bearing remarkably clear Russian symbols—have been shown to a select few friends of embassy attaches.

There's nothing particularly new in the use of facsimile for such purposes except that the Russians now rely 100 per cent on this form of communication to get the latest news from home and are thought to be the only diplomatic unit so doing.

The Soviets have erected a large listening post and receiving center on the outskirts of Rock Creek Park, Washington, the first foreign embassy with such a setup. They do not, however, have a license to install transmitting equipment, under the anti-alien provisions of the Communications Act.

Radio Waves in Shoes, Plywood

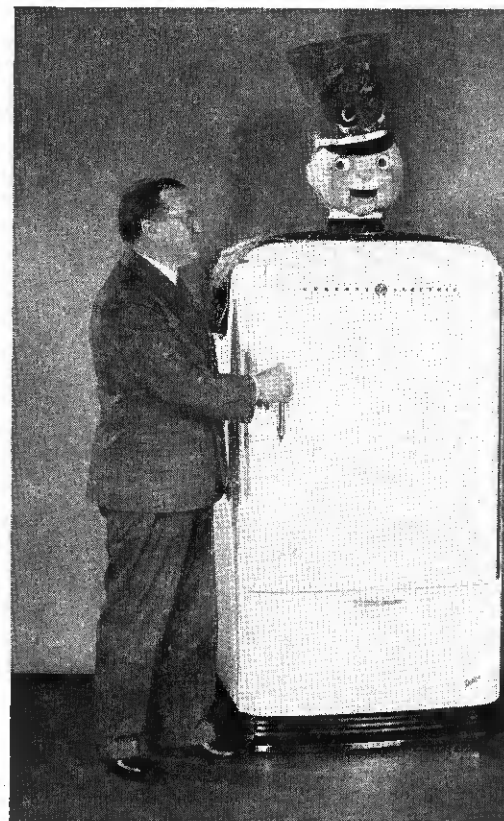
The use of high-frequency radio waves in diathermy equipment to produce artificial fever is not news. However, for the manufacture of plywood sheets, 300 kw. of 1500 kc. energy is now being "broadcast" through 14 inch thick piles of veneer sheets, 4 feet x 8 feet to set the glue between the sheets of wood. In this first industrial production use of this process, the plywood is now bonded in 5 to 10 minutes as against 8 hours in the former cold-press method.

Similar diathermy radio-wave heating apparatus has been developed for cementing leather soles to shoes by a new method which produces a cemented joint actually stronger and more durable than the leather itself. Such

shoe cementing equipment is now being developed for local shoe repair shops. So when you next take a pair of old brogans into Tony's to be re-soled, it is likely that not Tony but radio magic will actually do the job!

And speaking further of intimate details of our daily life—invisible but luminous laundry marks are the latest refinement in the laundry art. To speed up the job of identifying shirts and handkerchiefs, sheets and underwear, more than 150 laundries are marking "linen" with invisible fluorescent ink which glows brightly under ultraviolet or "black" light and thus reveals "secret" markings. The old-fashioned ink laundry mark seems bound to disappear now that laundrymen can stamp ordinarily invisible numbers an inch high on expensive tablecloths, embroideries, laces and silk ties, which formerly had to be tagged or otherwise conspicuously identified.

Radio waves control the walking and talking of this General Electric demonstration refrigerator. Control of the eyes, mouth, voice and walking action is done entirely without wires.





Centralab

The Quality Line

STANDARD RADIOHMS
 From Servicemen, Experimenters and Manufacturers appreciate the wide availability of Centralab products. Since 1922 more than a billion million radio parts through the universal acceptance of Centralab products. Here is the making of good radio-radio quality parts.

WIRE WOUND RADIOHMS
 CENTRALAB Div. of Globe-Union Inc. MILWAUKEE, WIS.

LEVER ACTION SWITCH
 CENTRALAB Div. of Globe-Union Inc. MILWAUKEE, WIS.

ATTACHABLE SWITCH-CONTACTS
 CENTRALAB Div. of Globe-Union Inc. MILWAUKEE, WIS.

SLIDING CAPACITOR
 CENTRALAB Div. of Globe-Union Inc. MILWAUKEE, WIS.

SEND FOR CATALOG NO. 23

Centralab

For Every Need in EVERY Emergency

Centralab AXIAL LEAD RESISTORS

These resistors are the best quality resistors ever made. They are made of pure carbon and are guaranteed to last for years. They are available in a wide range of values and are suitable for use in all types of radio circuits.

CENTRALAB Div. of Globe-Union Inc. MILWAUKEE, WIS.

Complete NET only \$10.95

Always THE RIGHT REPLACEMENT CONTACT WITH THIS CENTRALAB PORTABLE

Centralab

Answering the Call

A—STANDARD
 These resistors are the best quality resistors ever made. They are made of pure carbon and are guaranteed to last for years. They are available in a wide range of values and are suitable for use in all types of radio circuits.

B—MIDGET
 Small in size but large in capacity. Available in a wide range of values and are suitable for use in all types of radio circuits.

C—ELF
 Small in size but large in capacity. Available in a wide range of values and are suitable for use in all types of radio circuits.

CENTRALAB Div. of Globe-Union Inc., Milwaukee, Wis.

Centralab RADIOHMS

A **B** **C**

Plotting the Course of Progress

Old Man Centralab is not as old as he seems. He has a heart of gold and a head of brass. He has been in the radio business since 1922 and he has never been out of it. He is the only man in the business who has been in it for so long. He is the only man in the business who has been in it for so long.

CENTRALAB Div. of Globe-Union Inc. MILWAUKEE, WIS.

Centralab RADIOHMS

A **B** **C**

41 PASSES IN REVIEW

The history of CENTRALAB can be read in its advertisements down through the years. New developments . . . the result of research and pioneering . . . keep Centralab constantly in the vanguard.

Today . . . research alone is not enough . . . the demands of the present emergency call for an "ALL OUT" program of production. In '42 CENTRALAB will not fail to maintain its record. In '42 as in '22 and '32 . . . always "SPECIFY CENTRALAB".

QUALITY
PERMANENCE
DEPENDABILITY

There's a

CENTRALAB SWITCHES WITH MOUNTING INSULATION

CENTRALAB SWITCHES WITH MOUNTING INSULATION

CENTRALAB SWITCHES WITH MOUNTING INSULATION

STILL IMPROVING QUALITY!

Centralab

Div. of Globe-Union Inc., Milwaukee, Wis.

CONTROLS • SWITCHES RESISTORS CAPACITORS

NO QUIET

ON THE LISTENING FRONT

-Thanks to YOU!



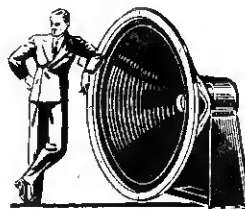
The "listening front" must be kept open! This is your part in the Victory program—maintaining the radio receivers in the millions of American homes and automobiles in top-notch condition. You are aiding not only in supplying the morale-building function

of entertainment, but helping radio support national defense by aiding in the sale of defense bonds and stamps, in quick dissemination of important news, in constant availability for civilian emergency instructions and in many other services.

The replacement requirements which in the months to come will be more and more important to your business, call for careful selection of parts in order to conserve resources and materials so important to the Victory program.

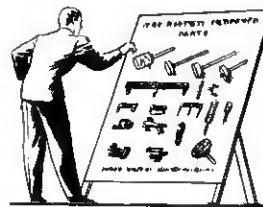
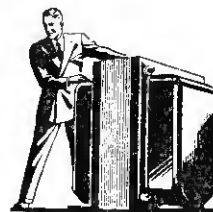


UTAH VIBRATORS' outstanding design and advanced engineering have maintained their leadership. The Utah line provides exact replacements for every vibrator requirement.



UTAH SPEAKERS meet practically every radio receiver and sound equipment need in these industries. It is a balanced line, and ruggedness and adequate power handling capacity are built-in characteristics.

UTAH TRANSFORMERS are fully guaranteed. They have a non-corrosive, protective film of cellulose acetate which provides absolute insulation—prevents breaking down even under high humidity and severe atmospheric conditions.



UTAH-CARTER PARTS include vitreous enamel resistors, volume controls, potentiometers, rheostats, plugs, "T" and "L" pads, long and short jacks, imp jacks, jack switches, push-button switches, plug-in type D.C. relays. Satisfactory performance is

assured at every Utah-point in the circuit. Be sure to insist on Utah products. Look for the Utah trademark.



VIBRATORS • SPEAKERS • TRANSFORMERS
UTAH-CARTER PARTS



Rugged, Time-Honored CONSTRUCTION



GIVES UTAH VIBRATORS DEPENDABILITY

Today, well over a million receivers are equipped with Utah Vibrators—over a million witnesses to Utah dependability. In addition, Utah Vibrators are "Life Tested" in the Utah Laboratory—the industry's most versatile and best equipped. And they carry the standard R.M.A. Warranty against defective materials and workmanship.

Utah Vibrators are delicate and sensitive, providing utmost performance and radio reception. Then, too, they have the strength to resist shock, motor vibration, normal wear and tear—rigors that cause the downfall of ordinary vibrators. But Utah Vibrators, with their rugged, time-honored construction, keep right on performing.

Utah Vibrators supply ample power with low voltage batteries for many types of requirements. And the completeness of the Utah line makes it possible to get exact replacements. Write today for full details.

UTAH RADIO PARTS DO THEIR PART

Many Utah parts are being utilized in the Victory program—for Army, Navy, Air Corps and important civilian communications. Utah engineers are continually at work, meeting the demands of the emergency and its necessary restrictions on some materials. In some instances they have developed substitutes to replace products in which materials important to national defense are used—substitutes that are equal in performance and reliability to the famous products they are replacing.

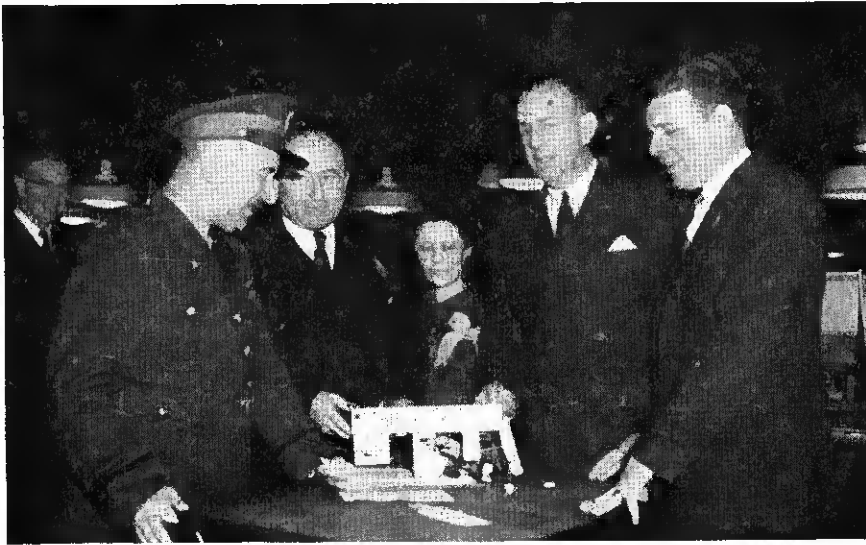
UTAH RADIO PRODUCTS COMPANY

810 ORLEANS STREET
CHICAGO, ILLINOIS

CANADIAN OFFICE:
560 KING STREET WEST, TORONTO

CABLE ADDRESS:
UTARADIO, CHICAGO

Manufacturer in Step with War Program



A new receiver assembly at Crosley Corp. gets the once-over from Lieut.-Colonel Robert Ginsburgh of the War Dept., left. Others are R. C. Cosgrove, Crosley mfg. division vice-pres. and general manager; president Powel Crosley, Jr.; and Harold Lattmer, head of Crosley local IBEW.

FIGURING YOUR FUTURE

(Continued from page 21)

This opening inventory was certainly far too low, and indicates one of three things.

1. Sales this year have increased greatly over the previous year.
2. An excellent stock balance was maintained during the previous holiday season, and a poorer one this year.
3. Stock was over-extended this year to meet rapidly rising sales and reduced availability of stock.

The latter is probably the true picture, in view of the ratio of Accounts Payable to Inventory.

Out of Line

If Accounts Payable did not indicate that this dealer had bought more than he should the stock turn would be excellent, and the inventory conservative. As it is, the situation demands quick attention.

Gross Profit of \$18,052.89 or about 30.2% is a little low, probably indicating that as creditors pressed, prices were cut to get cash.

But when you look at Expense, and find it only 27.6%, the story is plainly told that this dealer knew just how far to go, just when to stop. And is doing a fine operating job.

Of course, \$1,993.93 net profit is small for all of the headaches in running a \$60,000 business.

But as you look over Expense items,

you see Owner's Draw—\$3,600.

The owner of this business has had for himself over 10c. of every sales dollar.

And that is where much of his trouble lies.

He had taken so much out of his business that the business itself is shaky.

Certainly other expenses are well in line, and rent is low. The advertising and telephone charges indicate the business is alive and going.

With uncertain times ahead, this dealer should reduce the amount of his draw, must tighten his own belt, quickly.

Get his Accounts Payable down to a reasonable figure. Convert his old stock into cash. Reduce his expenses to a weekly basis and to a "percent of sales" ratio, and keep them in line with his changing sales curve.

Take on other lines of merchandise and carefully check sales and "cost of sales" with his past "figure facts."

If dollar volume cannot be held—week by week, and month by month, then Expense must be reduced proportionately.

Salaries, Commissions, Advertising, Truck, may have to be reduced.

And if the "facts and figures" indicate such a reduction, you have no one to blame but yourself if you do not heed the advice they give you.

So long as you maintain, week by week, and month by month, an expense to sales ratio which is less than

your gross margin, you must wind up OK.

That's obvious, and you need no intricate set of books to tell you that.

New Lines

But as you experiment with new merchandise — and new merchandising — the going may not be so easy.

You must watch each classification of expense and the contribution of each new line to the gross margin and expense picture.

You must know that each line is carrying its full share of the expense load and contributing its full share of margin.

When these ratios begin to swing out of line you must know just where to look for the "weak sister" and just what "medicine" to give the weakling.

Properly classified and tabulated, the whole story of your business unfolds as clearly to one who understands the figures, as though the story were printed in type.

It's your business to have such figures, to understand them—and to use them.

VICTORY RECORDS

(Continued from page 24)

of these buyers show a tendency to wait a while, to get a better line on public acceptance of the discs, but retailers should keep them informed.

Certainly part of this market is the steady, solid demand for good recordings of "The Star Spangled Banner," "America," and the anthems that are a traditional part of the American scene. There is also a growing demand for marches by military bands, and recordings of Army and Navy music. "Anchors Aweigh" and "Marines' Hymn" are examples.

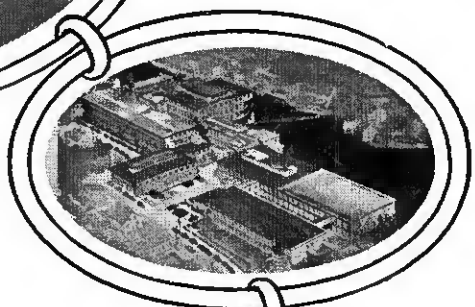
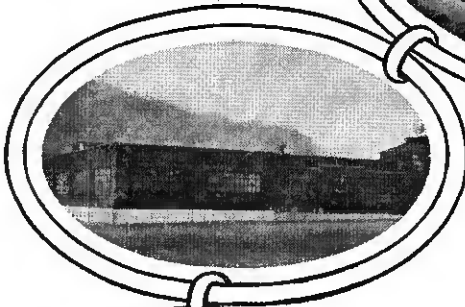
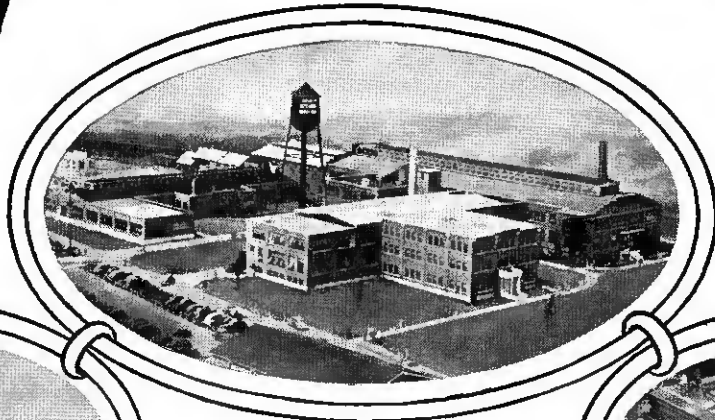
Another type of wartime record in this group is the disc which carries the historical speech. Of course President Roosevelt and Prime Minister Churchill are the stars here, and plenty of people want their words in wax.

Display Splurge

Naturally this type of record lends itself well to display in the store and in windows. Retailers can think of a dozen ways to use the red, white and blue in striking backgrounds for the spirited new discs. These exhibits will add zip and timeliness to record stocks that may otherwise be colorless and dull.



Linking us to America's Destiny



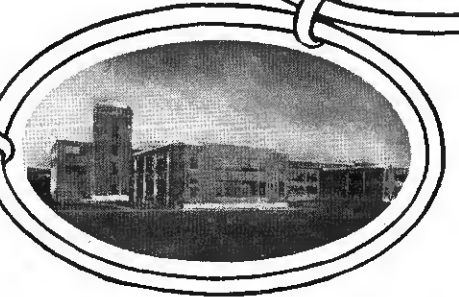
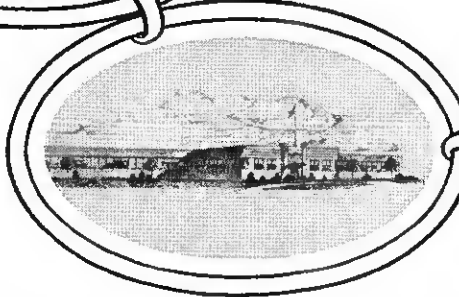
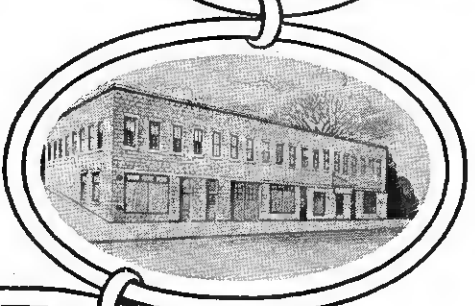
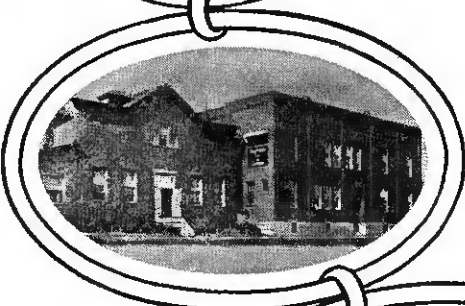
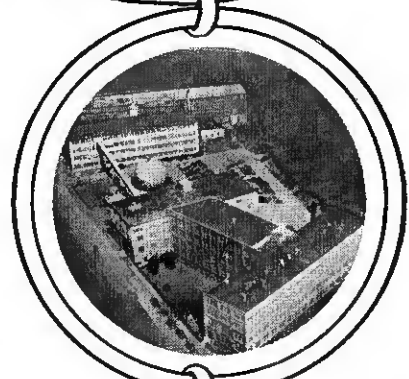
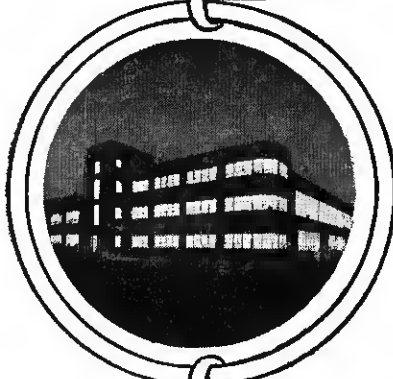
THIS is the network of plants that comprises the rapidly growing production facilities of the Hygrade Sylvania Corporation.

Each plays a highly specialized role in the manufacture of products that have gained a far-flung reputation for excellence.

Today, America looks to each, in serving the fighting forces, war production and home defense, for the best in radio tubes, as well as the finest in fluorescent and incandescent lighting.



Pictured here are the nine links in the Hygrade Sylvania chain of plants and offices—stretching from Pennsylvania to Massachusetts. Starting at top and reading clockwise, they are: Radio Tube Plant, Fluorescent Fixture Plant, Headquarters Lamp Plant, Chemical Works, Radio Tube Plant, New Power Tube Plant, Incandescent Lamp Plant, Fluorescent Lamp Plant and Radio Parts Plant.



HYGRADE SYLVANIA CORPORATION EMPORIUM, PENNSYLVANIA

Manufacturers of Hygrade Incandescent Lamps, Fluorescent Lamps and Fixtures, and Sylvania Radio Tubes.

News! RADIO-REMOTE-CONTROL for BLACKOUT... APPROVED

And

BLACKOUT CONTROL, INC.
STEPS TO THE FRONT IN THE
EMERGENCY WITH A FULL
LINE OF EQUIPMENT TO—

- blackout every type of lighting
- sound raid alarms in the home

ALL OPERATED BY RADIO-REMOTE-CONTROL
ALL PROOF AGAINST THE SABOTEUR!

HERE is important news for every wide-awake radio merchandiser in the "target area." A complete line of radio-remote-controlled attachments, designed to blackout every type of lighting; fixed or mobile; that is, lights on outdoor signs, lights in store windows, on theaters, marquees, inside and outside of buildings, lights on moving vessels and vehicles.

... a BRAND NEW and immediate market opportunity for the alert dealer ... ready and waiting to take up the slack when set production stops.

BLACKOUT CONTROL, INC., has engineered to new and highly practical principles: *First*: A special purpose circuit has been developed (a receiving circuit not adaptable for audio reception). This circuit is used to actuate a relay which in turn trips a power relay, by means of which one or any number of lights may be controlled. *Second*: Likewise, a brand new application of radio principles is used and applied in a simple attachment whereby any standard receiving set may be made to sound a raid warning any hour of the day or night.

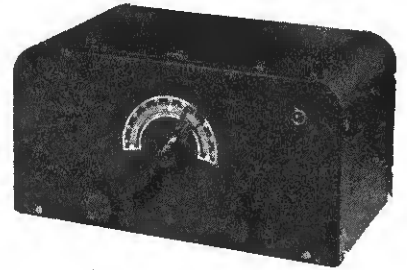
The "BLACKOUT-ER" provides the simplest, most practical automatic control of all lighting. It relieves the air raid wardens of a job which, in most cases, can be done only with the utmost difficulty and delay. It is actuated from ONE centralized, responsible source. It saves precious minutes, prevents confusion and leaves the wardens free to concentrate on other important duties.

Each model of "BLACKOUT-ER" or "RAID-O-LARM" is tuned to the carrier of a local 24-hour broadcast station. The instant this carrier goes off the air, every "BLACKOUT-ER" and every "RAID-O-LARM" in the area will be actuated. Lights will blackout, or warning signals will sound, as the case may be.

Distributors wanted. For further information or discounts, write or wire at once. Orders are being filled strictly in the order of their receipt. Custom built models to fit any special need.

BLACKOUT CONTROL, INC.
CHRYSLER BUILDING NEW YORK, N. Y.

"BLACKOUT-ER" Patent Applied for



NEWS

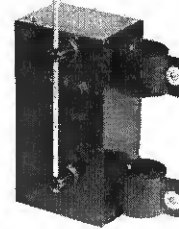
TYPE A: Sturdy, well engineered super-sensitive receiving relay designed for sections where field strength of local station is weak. Controls circuit carrying 15 amperes.....List price, \$60.00

TYPE B (patent applied for): Less sensitive; will receive selected stations up to 250 miles; breaks circuit up to 10 amperes.....List price, \$45.00

"BLACKOUT-ER"

TYPE C

Patent Applied for



One of two models to control outdoor city or town lighting:

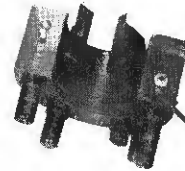
For street, bridge, park lights; this type for installation outside pole.

NEWS

"BLACKOUT-ER"

TYPE D

Patent Applied for



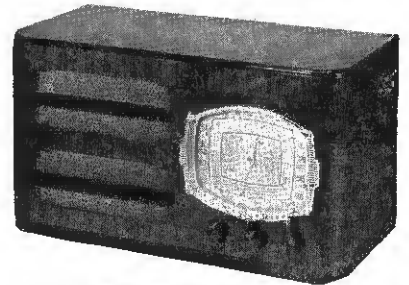
Also for city and town light control designed especially for installation in base of pole.

Prices C and D on application.

NEWS

"RAID-O-LARM"

Patent Applied for



NEWS

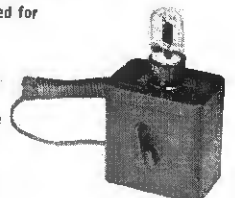
Home air raid warning built into an excellent superheterodyne receiving set of splendid tone quality and reception. "RAID-O-LARM" does not interfere with normal reception. List price, \$39.50

"RAID-O-LARM"

KIT Patent Applied for

Home Raid warning ready to hook up with any standard receiving set; complete with instruction sheet for service men.

List price, \$8.50



NEWS

1942-1943

**RADIO
YEAR
BOOK**

**Including
RADIO TRADE DIRECTORY**



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

Communication in War

Not only for the Army and Navy; not only for the 130,000,000 People; but for the COMMANDER IN CHIEF as well, RADIO is the accepted vehicle for local, national and world-wide dissemination of thought.



SUPERIOR

SUPERIOR TUBE COMPANY, NORRISTOWN, PENNSYLVANIA






THE BIG NAME IN
**SMALL
TUBING**

To the RMA, and specifically the Radio Tube Manufacturers—To the Electronics Industry as a whole, Superior Tube Company says:

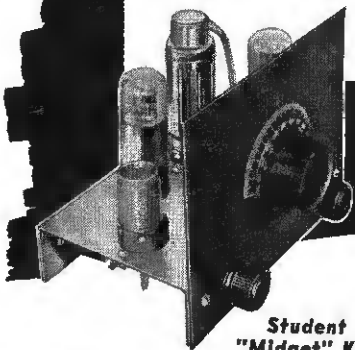
WE believe it to be our duty to use to the utmost the greatly extended facilities in our Cathode Sleeve Department, where we produce Seamless and Lockseam types to the full extent of raw materials that may be available to us.

Not a thing has been left undone to save *ounces* of scrap, wherever possible.

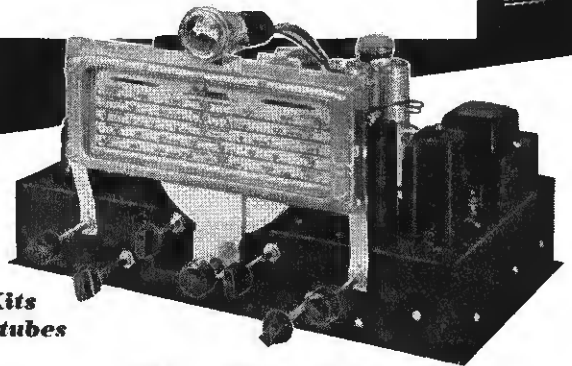
To us, 16 ounces of Nickel means 5,000 Sleeves, and a million of them above the usual output means someone's plant can run longer.

Tubing from $\frac{5}{8}$ " OD down...SUPERIOR  Seamless in various analyses. WELDRAWN  Welded and drawn Stainless. BRAUN  Welded and drawn "Monel" and "Inconel". SEAMLESS and Patented LOCKSEAM Cathode Sleeves.

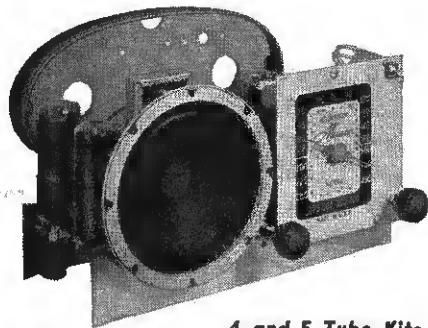
P *Meissner* Precision-Built Products...



Student "Midget" Kits
1-2 and 3-tube Kits with add on features.



12 Tube "Custom" Super Kits
Covers 540 to 42 mc. An exceptional all wave receiver.



4 and 5 Tube Kits
4-tube AC-DC—T.R.F. Kits—5-tube AC-DC Super-Het Kits—5-tube AC—T.R.F. Kits.

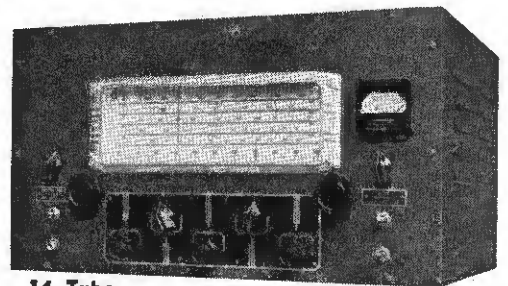
Student "Midget" Kits
1-2 and 3 tubes
4 and 5 tube Kits
7 and 8 tube Kits
9 and 12 tube Kits
9 tube

Communications Kits
14 tube
Communications Kits
4 band Pre-selector
Uni-signal Selector
Signal Calibrator
Signal Spotter
Signal Splicer
Signal Shifter

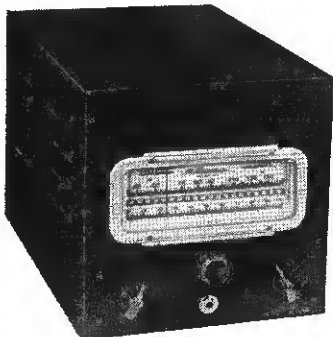
Relays—Wave Traps—
Chokes
P-A Tuners
Frequency Modulation
Components

F-M Converters
Coils—All Types
Coil Assemblies
R.F. Chokes
Dials—Switches
Variable Condensers
Trimmers and Padders
Interference Filters

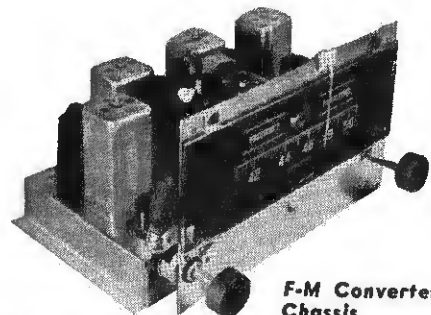
MEISSNER QUALITY
NEVER VARIES



14 Tube
Communications "Traffic-Master" Kit
Available in kit form or as a completely wired and laboratory tested unit.



P-A Tuners and Kits
High Fidelity P-A Tuners. "Utility" P-A Tuners. Dual-Band P-A Tuners. Available in kit form or completely wired ready to operate units.



F-M Converter Chassis
Complete unit—less cabinet. Gives FM reception on any radio. Can be installed in console type cabinets.

Write Dept. RT-3 for Complete Catalog

Meissner
MT. CARMEL, ILLINOIS

PRECISION BUILT PRODUCTS

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 51 and 105

RECEIVING SETS



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

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

AIRADIO, INC., 2 Selleck St., Stamford, Conn.—AV, M, P

AIRLINE—Montgomery Ward & Co.

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

AIR SCOUT—Allied Engineering Institute

ALDEN PRODUCTS CO., 117 N. Main St., Brockton, Mass.—FAC

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

ALLIED RADIO CORP., 333 W. Jackson Blvd., Chicago, Ill., "Knight"—A, BP, BPK, CP, F, FM, H, HK, PR, RRC

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., 21-10 49th Ave., L. I. City, N. Y., "Dynaphone"—PR, FM

ARVIN—Noblitt-Sparks Industries, Inc.

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

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

AUTOPHONE—Cavalier Motors Associates, Inc.

BANK'S MFG. CO., 8019 N. Winthrop Ave., Chicago, Ill.—BP, M, PR, P, PA

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

BATES LABORATORIES, 33 Sunset Drive, White Plains, N. Y.—FM

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., 244 Madison Ave., New York, N. Y.—PR

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.—FMK, FMCK

CAVALIER MOTORS ASSOCIATES, LTD., 1028 Linden Ave., Baltimore, Md., "Autophone," "Moblilette"—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

COMMUNICATIONS EQUIP. CORP., 134 W. Colorado St., Pasadena, Calif.—A, AV, BP, COM, DF, M, P, PA

COMMUNICATION MEASUREMENTS LAB., 138 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., "Detroit"—A, F, H, PR, P

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

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

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

DUNN-HALL CO., 1477 W. Adams St., Los Angeles, Calif., "Tiny Tim"—BP

DYNAPHONE—Ansley Radio Corp.

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

ECKSTEIN RADIO AND TELEVISION CO., LeRoy, Minn.—A, AV, COM, F, H, P, PA

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

ELECTROMATIC DISTRS., INC., 38 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, FM, 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"—CP, CON, F, FM, H, PR

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

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-Elsemann"—A, FM, PR

GALVIN MFG. CORP., 4545 Augusta Blvd., Chicago, Ill., "Motorola"—BP, CP, COM, F, FM, FMC, H, M, PR, P, PA, RRC

GAROD RADIO CORP., 70 Washington St., Brooklyn, N. Y., "Garod"—BP, CP, COM, FM, H, PR, RRC, 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., 2811 S. Indiana St., Chicago, Ill., "Skyrider"—AM, COM, FMC

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, COM, FM

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

HETRO ELECTRICAL INDUSTRIES, INC., 5819 N. Drake Ave., Chicago, Ill.—A, F, H, PR

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

MADETTTE RADIO CORP., 310 First National Bldg., Ann Arbor, Mich.—H

KANTOLA—Canton Trading Co.

KARADIO CORP., 2238 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 AVIA, INC., Piqua, Ohio—AV

FRED M. LINK, 125 W. 17th St., New York, N. Y.—P, PA

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., 2800 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, AV, BP, FM, FMC, RRC

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—Galvin Mfg. Corp.

NATIONAL COMPANY, 61 Sherman St., Malden, Mass., "National"—AM, AV, BP, COM, FM, H, M, P

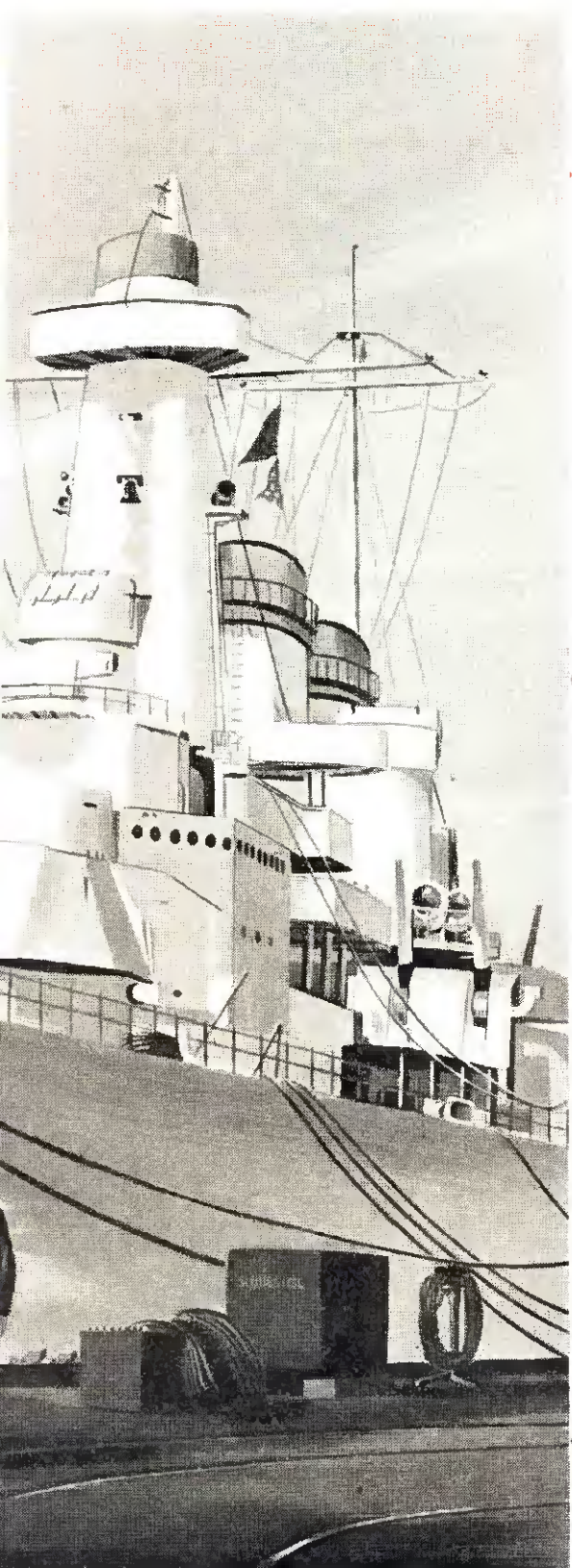
NATIONAL UNION RADIO CORP., 15 Washington St., Newark, N. J.—BP, H

NOBLITT-SPARKS INDUSTRIES, INC., Columbus, Ind., "Arvin"—A, BP, H, PR

WE'R



ITH YOU, SAILOR!



With you through the long watches of the night . . . with you through storm and battle . . . with you through whatever waters you sail, on whatever soil you tread . . .

Yet you shall never see us!

When through the air, from a distant plane on patrol duty, the message flashes, "Enemy sighted!"—then you shall know that we are there...

When in battle formation, ship separated from ship by tons of foaming water, commander talks to commander to carry out over-all strategy, then you shall have still more proof that we are there.

We are there with you as surely as shot and shell are there with you, as torpedo and depth charge and anti-aircraft shell are with you.

You shall not see us, but you shall benefit from the product of our hand and muscle, our mind and whole being. For our purpose is your purpose...complete and total victory, won through American might, American ingenuity, American sweat.

We are the people who fabricate for you the ears and voice of the fleet...radio equipment and communications, without which modern war cannot be fought.

We know the urgency with which you need this equipment. For two whole years we have made it our task to get it through for you. And now your coveted and treasured "E" Flag—"E" for excellence and a job well done—has been awarded to us for our labor, for "beating the promise" on production and delivery dates.



And we are proud of this honor—but not satisfied. For now there is a bigger promise to beat—a more urgent date to be met. And we shall not fail you. For we work as you fight—as free people. And we work for the rights of a free people and with the hope of a free people—that out of this conflict a newer and finer world will be born, and out of this turmoil new and greater accomplishments—American accomplishments in the field of radio—will result.

Did you ask, who are we? We are the people who are RCA Victor—the thousands of workers in RCA Victor plants, now on the job day and night—the thousands of RCA Victor dealers, who cheerfully forego the sale of new sets to see that you are properly equipped.

United, nothing can beat us!

RCA VICTOR

RECEIVING SETS—Cont.

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

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PARAMOUNT RADIO CO., 967 32nd St., Oakland, Calif.—BP, H

PHILCO RADIO & TELEVISION CORP., 1102 & C Sts., Philadelphia, Pa.—A, BP, F, FM, H, PR, 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 AIRC—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 Varlek 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

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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

SEA PAL RADIO CO., 228 N. La Salle St., Chicago, Ill.—BP, DF

SENTINEL—Electrical Research Lab., Inc.

SETCHELL-CARLSON, INC., 2233 University Ave., St. Paul, Minn., "Setchell-Carlson"—BP, F, H, M, PA

SILCOX 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., 325 N. Hayne Ave., 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.

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TEMPLETON CORP., Mystic Conn.—BP, F, H, PR

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UNITED CINEPHONE CORP., Torrington, Conn.—AV

UNITED STATES TELEVISION MFG. CORP., 106 7th Avenue, New York, T

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 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

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AIRPLANE & MARINE DIRECTION FINDER CORP., Clearfield, Pa.—LA (Direction finding)

ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill., "Knight"—AW, A, FM, G, I, K, L, LA, TL

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

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

ARVIN—Noblitt-Sparks Industries, Inc.

BEE ENGINEERING CO., 7665 Grand River Ave., Detroit, Mich.—I, K

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BUD RADIO, INC., 1923 E. 55th St., 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., 1635 S. Clinton, 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.

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

EX-STAT—Tilton Electric Corp.

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FOWLER MFG. CO., 9 Rutgers St., St. Louis, Mo.—AW, K

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FULTON RADIO CORP., 100 6th Ave., New York, N. Y.—A, TL

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GE—General Electric Co.

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GENERAL TELEVISION & RADIO CORP., 1240 N. Homan Ave., Chicago, Ill., "Synerotenna"—AW

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GEN-WIN—General Winding Co.

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- 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 Sts., Philadelphia, Pa.—AW, A, FM, LA, MS, N, TL, T
- PHILSON MFG. CO., INC., 156 Chambers St., New York, N. Y.—A, TL
- PREMAX PRODUCTS DIV., Chisholm-Ryder Co., Niagara Falls, N. Y., "Premax"—I, T, Ground rods
- PYREX—Corning Glass Works
- RADEX CORP., 1308-22 Elston Ave., Chicago, Ill.—AW
- THE RADIART CORP., W. 62nd St. and Barberton Ave., Cleveland, Ohio—AW, A, FM, T
- RADOLEK CO., 601 W. Randolph St., Chicago, Ill., "Radolek"—AW, A, K
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- RIVARD MFG. CO., Toledo, Ohio—AW, A, G, I, K, L
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- SNYDER, INC., 813-23 Noble St., Philadelphia, Pa.—A
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- TILTON ELECTRIC CORP., 138 W. 17th St., New York, N. Y., "Ex-Stat"—A
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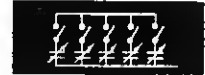


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- PHILCO RADIO & TELEVISION CORP., Tioga & C Sts., Philadelphia, Pa.—CU, CH, F, FS
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MINI-MAX—National Carbon Co., Inc.
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MONTGOMERY WARD & CO., 619 W. Chicago Ave., Chicago, Ill., "Airline"—A, B, C, DC, FL, PB, S
MULTI-PLY—Burgess Battery Co.
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PHILCO RADIO & TELEVISION CORP., Tioga and C Sts., Philadelphia, Pa.—A, B, C, DC, FL, PB, S
PORTABLE ELECTRIC POWER, 545 5th Ave., New York, N. Y.—SN
POWER-HOUSE—Burgess Battery Co.
RAY-O-VAC CO., 2317 Winnebago St., Madison, Wis., "Ray-O-Vac"—A, B, C, DC, FL
SILCOX 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
UNEED-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, SN
WIND-IMPPELLER ELECTRIC WORKS, Ellsworth, Iowa—S

BATTERY CHARGERS



Gas engine G
 Metallic MC
 Motor generator MG
 Power line (home) PH
 Power line (service station) PS
 Vacuum tube VC
 Wind driven W

ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill., "Knight"—G, PH, VC
AMERICAN TELEVISION & RADIO CORP., 300 E. 4th St., St. Paul, Minn., "ATR"—PH, MC
ARLAB—Arlavox Mfg. Co.

**THE
MUTER COMPANY**

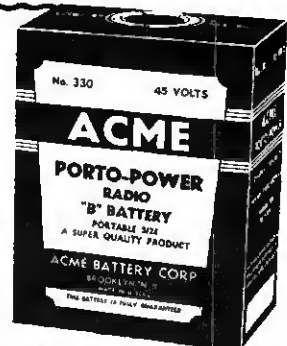
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MARCH 1942

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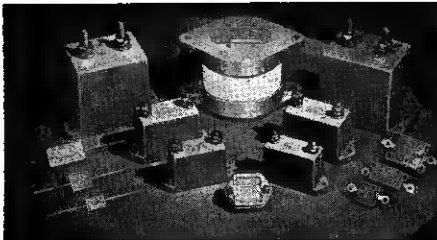
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ARLAVOX MFG CO., 430 S. Green St., Chicago, Ill., "Arlab"—VC
ATR—American Television & Radio Corp.
BATTERY BOOSTERS—The Benwood Linze Co.
B-L—The Benwood Linze Co.
THE BENWOOD LINZE CO., 1832 Washington Ave., St. Louis, Mo., "B-L," "Battery Boosters"—MC, 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., 5819 N. Drake 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.
LAURENK 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, PS
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.
SEA PAL RADIO CO., 228 N. La Salle St., Chicago, Ill.—G
SILCOX RADIO & TELEVISION CORP., 80 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
TAYLOR TUBES, INC., 2341 Wabansia Ave., Chicago, Ill.—VC
TECHNICAL PRODUCTS INTERNATIONAL, 135 Liberty St., New York, N. Y., "Technipower"—G, W
TECHNIPOWER—Technical Products International
UTILITE—Elicor, Inc.
WEBSTER ELECTRIC CO., Racine, Wis., "Webster-Electric"—VC
WILLARD STORAGE BATTERY CO., 248 E. 131st St., Cleveland, Ohio, "Willard"—PS
WINCHARGER CORP., Sioux City, Iowa—W
WIND-IMPELLER ELECTRIC WORKS, Ellsworth, Iowa—W

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
ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill.—B, BE, G, M

AMERICAN COMMUNICATIONS CORP., 306 Broadway, 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. Laverne 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.
BEE ENGINEERING CO., 7685 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.
CETRON—Continental Elec. Co.
CHERETON PRODUCTS CO., 6535 Russell St., Detroit, Mich.—M
CINEMA ENGINEERING CO., 1508 S. Verdugo Ave., Burbank, Calif., "Cinema"—PU
CLARK LABS, Palm Springs, Cal.—G, MA, PU
COLLINS RADIO CO., 2920 First Ave., Cedar Rapids, Ia.—PU, V
CONTINENTAL ELECTRIC CO., Geneva, Ill., "Cetron"—B, G, MA, 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
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
FADA RADIO & ELECTRIC CO., 30-20 Thomson Ave., L. I. City, N. Y.—BE, PU
FANSTEEL METALLURGICAL CORP., 48 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
FERRIS INSTRUMENT CORP., Boonton Ave., Boonton, N. J., "Ferris"—PU
GENERAL ELECTRIC CO., Schenectady, N. Y.—MA
GENERAL ELECTRIC CO., West Lynn, Mass.—B, G, M, V
GENERAL TRANSFORMER CORP., 1250 W. Van Buren St., Chicago, Ill., "Porta-Power"—BE, PU (AC power packs for portables and farm sets)
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 TEL. & TEL. CO., 67 Broad St., New York, N. Y.—M
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
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"—EE, M
 TAYLOR TUBES, INC., 2341 Wabansia Ave., Chicago, Ill.—G, MA, V
 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
 WESTON ELECTRICAL INSTR. CORP., 614 Frelinghuysen Ave., Newark, N. J.—M
 WILCOX ELECTRIC CO., INC., 4014 State Line, Kansas City, Kans.—PU
 WILLARD STORAGE BATTERY CO., 248 E. 131st St., Cleveland, Ohio, "Willard"—B

DUMONT ELECTRIC CO., INC., 34 Hubert St., 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.
 EMERSON RADIO & PHONOGRAPH CORP., 111 8th Ave., New York, N. Y.—ED, M, P
 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., 30 State St., Cambridge, Mass., "G-R"—Precision M, Special
 G-H—Girard-Hopkins
 GIRARD-HOPKINS, 1000 40th 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., 1180 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

CAPACITORS, FIXED



Ceramic	C
Electrolytic dry	ED
Electrolytic wet	EW
Fluorescent starter	FS
Fluorescent ballast	FB
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
 ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill., "Knight"—ED, M, PF, S, T
 AMERICAN CONDENSER CORP., 2508 S. Michigan Ave., Chicago, Ill.—ED, I, P, T
 VICTOR J. ANDREW, 6429 South Lavergne Ave., Chicago, Ill.—T
 ARTCO—Art Radio Corp.
 ART RADIO CORP., 115 Liberty St., New York, N. Y., "Arteo," "Liberty"—ED, P
 ATLAS CONDENSER PRODUCTS CO., 548 Westchester Ave., New York, N. Y., "Mite," "Mercury"—ED, P, FS, FB
 ATOMS—Sprague Products Co.
 AUTOMATIC WINDING CO., INC., 900 Passaic Ave., East Newark, N. J.—C, M, T
 BOND PRODUCTS CO., 13139 Hamilton Ave., Detroit, Mich.—P
 BUD RADIO, INC., 1923 E. 55th St., Cleveland, Ohio—M
 ALLEN D. CARDWELL MFG. CORP., 81 Prospect St., Brooklyn, N. Y.—T (Air)
 CENTRALAB, 900 E. Keefe Ave., Milwaukee, Wis.—C, TC
 CERAMICON—Erie Resistor Corp.
 CONDENSER CORP. OF AMERICA, 1000 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. CORPS., 1635 S. Clinton, Chicago, Ill.—ED, P, T
 CORNWELL-DUBILIER ELEC. CORP., 1000 Hamilton Blvd., South Plainfield, N. J.—ED, EW, I, M, P, T
 COSMIC RADIO CORP., 699 E. 135th St., New York, N. Y., "Cosmic," "Megrite"—ED, P
 TOBE DEUTSCHMANN CORP., Canton, Mass.—ED, I, P, T
 OOMINO—Solar Mfg. Corp.

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E. F. JOHNSON, Waseca, Minn., "Johnson"—T
 KODACAP—Micamold Radio Corp.
 LEEDS & NORTHRUP CO., 4970 Stenton Ave., Philadelphia, Pa.—Precision M
 LIBERTY—Art Radio Corp.
 LITTLE GIANT—Solar Mfg. Corp.
 MAGNAVOX CO., 2181 Bueter Rd., Ft. Wayne, Ind., "Magnavox"—ED
 P. R. MALLORY & CO., 3029 E. Washington St., Indianapolis, Ind., "Mallory"—ED, EW, M, P, PF, PC, T
 MICAMOLD RADIO CORP., 1087 Flushing Ave., Brooklyn, N. Y., "Kodacap"—ED, I, M, P, PO, T
 MEGRITE—Cosmic Radio Corp.
 MERCURY—Atlas Condenser Products Co.

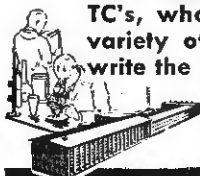
JAMES MILLEN MFG. CO., INC., 150 Exchange St., Malden, Mass.—C, I, PO, T
 MINICAP—Solar Mfg. Corp.
 MITE—Atlas Condenser Products Co.
 MUTER CO., 1265 South Michigan Ave., Chicago, Ill., "Muter"—C, M, TC
 NATIONAL UNION RADIO CORP., 15 Washington St., Newark, N. J.—ED, EW, P
 PHILCO RADIO & TELEVISION CORP., Tlora & C St., Philadelphia, Pa.—S, ED, EW, M, P, PF, S, TC
 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., 586 Avenue A, Bayonne, N. J., "Solar," "Domino," "Sealtdite," "Tom Thumb," "Transoil," "Transmica," "Minicap," "Little Giant"—C, ED, EW, I, M, P, PF, PO, PC, S, T, TC
 SPRAGUE PRODUCTS CO., N. Adams, Mass., "Sprague 600 Line," "Atoms"—ED, EW, I, M, P, PC, S, T, TC
 SPRAGUE SPECIALTIES CO., N. Adams, Mass.—ED, EW, I, M, P, T, TC
 STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y.—P
 TELERADIO ENGINEERING CORP., 434 Broome St., New York, N. Y., "Telerradio"—M, TC
 TILTON ELECTRIC CORP., 138 W. 17th St., New York, N. Y., "Ex-Stat"—ED, EW, P
 TOM THUMB—Solar Mfg. Corp.
 TRANSMICA—Solar Mfg. Corp.
 TRANSOIL—Solar Mfg. Corp.



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Long ago, Sprague TC Tubular (by-pass) Condensers first won the World's Most Convincing Award of Merit—and they've continued to win it year after year. It isn't a grand prize or blue ribbon. It's far more convincing than that. It's the continued first choice preference for Sprague TC's by leading servicemen, engineers, manufacturers and amateurs—men who prefer TC's, who specify TC's, and who insist on TC's for a wide variety of jobs—men whose actual field experience helped write the now-famous TC slogan "Not a Failure in a Million!"



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"NOT A FAILURE IN A MILLION"

SPRAGUE PRODUCTS COMPANY, North Adams, Mass.

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., 117 N. Main St., Brockton, Mass., "Na-Aid"—M, RT
 ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill.—A, M, RT, TT
 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., 1923 E. 55th St., Cleveland, Ohio "Bud"—A, M, RT, TT
 ALLEN D. CARDWELL MFG. CORP., 81 Prospect St., Brooklyn, N. Y.—A, RT, TT
 CERAMICON—Erie Resistor Corp.
 CORNING GLASS WORKS, Corning, N. Y., "Pyrex"—RT, TT
 DEFIANCE—American Steel Package Co.
 DE WALD RADIO MFG. CORP., 436 Lafayette St., New York, N. Y.—A, RT
 DOOLITTLE RADIO, 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, 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
 NA-ALD—Alden Products Co.
 NATIONAL COMPANY, 61 Sherman St., Malden, Mass., "National"—A, M, RT, TT
 PHILCO RADIO & TELEVISION CORP., Tioga & C Sts., Philadelphia, Pa.—A, M, RT
 PYREX—Corning Glass Works
 RADIO CONDENSER CO., Davis St., & Copewood Ave., Camden, N. J., "R.C.C."—RT
 RCA FARADDN—RCA Mfg. Co.
 RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA," "RCA Faradon"—A, M, RT
 R.C.C.—Radio Condenser Co.
 RELIANCE DIE & STAMPING CO., 1260 Ciybourn Ave., Chicago, Ill., "Reliance"—RT
 F. W. SICKLES CO., 165 Front St., Chicopee, Mass.—A, M
 SOLAR MFG. CORP., 586 Avenue A, Bayonne, N. J., "Solar"—M
 SPRAGUE SPECIALTIES CO., N. Adams, Mass.—M
 TELERADIO ENGINEERING CORP., 424 Broome St., New York, N. Y., "Telradio"—A, M

WESTERN ELECTRIC CO., Kearny, N. J.—B, F, H, S, T
 WILCOX ELECTRIC CO., INC., 4014 State Line, Kansas City, Kans.—A, F

ALADDIN RADIO INDUSTRIES, INC., 468 W. Superior St., Chicago, Ill., "Aladdin"—IF, CH, P, RF, T
 ALDEN PRODUCTS CO., 117 N. Main St., Brockton, Mass., "Na-Ald"—RF
 ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill., "Knight"—F, W, IF, CH, RT, RF, T
 AMERICAN COMMUNICATIONS CORP., 123 Liberty St., New York, N. Y.—T
 AMERICAN LAVA CORP., Cherokee Blvd. & Manufacturers Rd., Chattanooga, Tenn.—F
 AMERICAN PHENOLIC CORP., 1830 S. 54th Ave., Cicero, Ill., "Amphenol"—F (polystyrene)
 AMPHENOL—American Phenolic Corp.
 ANACONDA WIRE & CABLE CO., 25 Broadway, New York, N. Y.—F, IF, CH, RF, T
 VICTOR J. ANDREW, 6429 South Laverne Ave., Chicago, Ill.—T
 AUTOMATIC WINDING CO., INC., 900 Passaic Ave., East Newark, N. J.—W, IF, CH, RF, T
 BARBER & HOWARD, East Avenue, Westerly, R. I.—W, IF, CH, RF
 BARKER & WILLIAMSON, Ardmore, Pa.—F, T

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 R. F. chokes (receiving) . CH
 R. F. chokes (transmitting) RT
 R. F. coils (receiving) . . . RF
 Transmitting T

CRYSTALS



Amateur A
 Blanks BL
 Broadcast B
 Crystal Cartridges C
 Frequency Std F
 Holders H
 I. F. Filter S
 Police, marine, air SW
 Temp. control ovens T
 Ultrasonic UC

ALDEN PRODUCTS CO., 117 N. Main St., Brockton, Mass.—H
 ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill., "Knight"—A, H
 AMERICAN LAVA CORP., Cherokee Blvd. & Manufacturers Rd., Chattanooga, Tenn.—H
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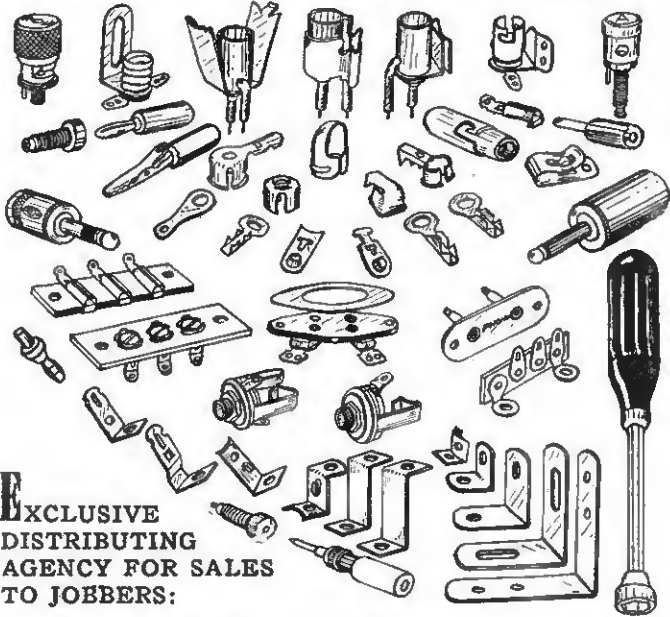
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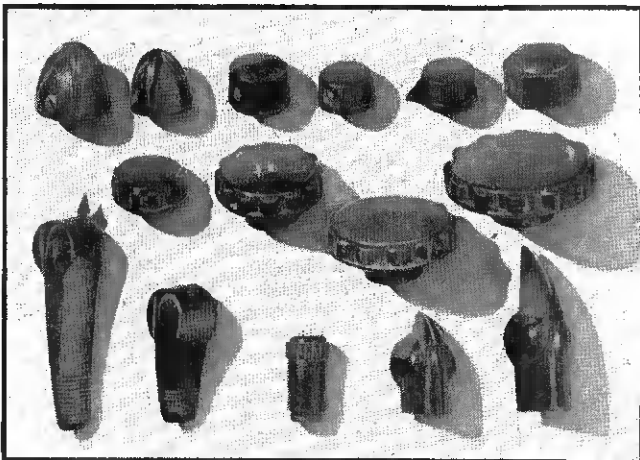
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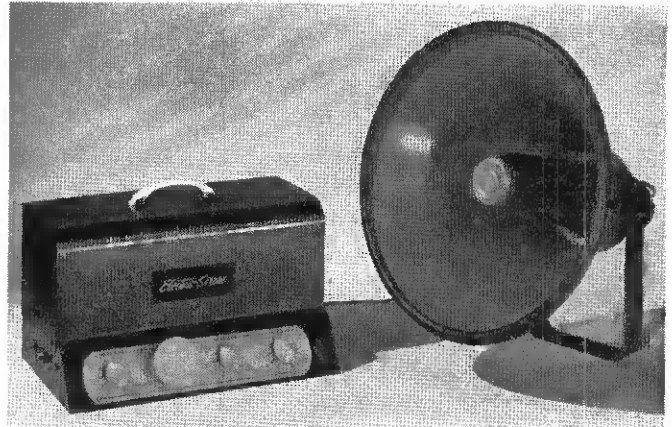
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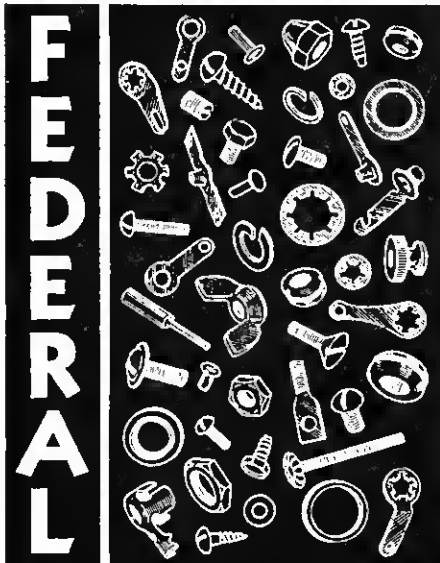
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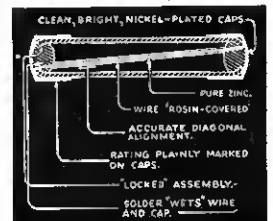
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- ERIE CAN CO., 816 Erie St., Chicago, Ill., "Erie"—CS, TS
- EVERLOCK—Thompson-Bremer & Co.
- EX-STAT—Tilton Electric Corp.
- FEDERAL SCREW PRODS. CO., 26 S. Jefferson St., Chicago, Ill.—BP, FH, GC, G, J, MB, P, R, S, SS, SKT, SL, T, FW, WL
- G-C—General Cement Mfg. Co.
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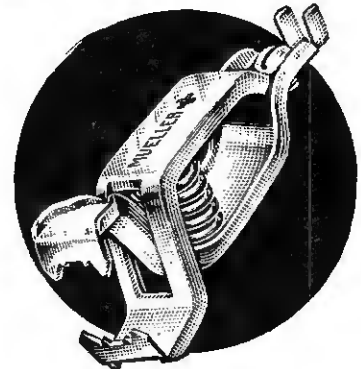
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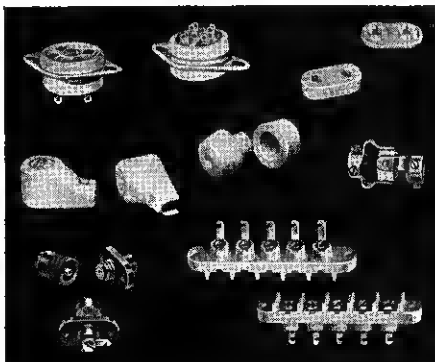
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INDUSTRIAL SCREW & SUPPLY CO., 711 W. Lake St., Chicago, Ill.—BP, G, MB, S, SL, WF, WL
INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y.—“ICA”—BP, C, CS, GC, G, MB, P, S, SKT, SL, T, TS, WF, WL
J.F.D. MFG. CO., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y.—C
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MPCARTA FABRICATORS, INC., 4619 Ravenswood Ave., Chicago, Ill.—GC, SKT, T, WF
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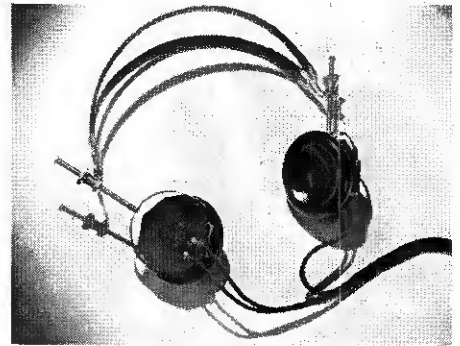
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DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—HA
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ELECTRO-VOICE MFG. CO., 1239 South Bend Ave., South Bend, Ind.—D
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MONTGOMERY WARD & CO., 619 W. Chicago Ave., Chicago, Ill.—HA, M
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PHILMORE MFG. CO., 113 University Place, New York, N. Y., "Philmore"—M
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TELEX PRODS. CO., 1645 Hennepin Ave., Minneapolis, Minn.—C, HA
TRIMM RADIO MFG. CO., 1770 W. Berteau Ave., Chicago, Ill., "Trimm"—HA, M
UNIVERSAL MICROPHONE CO., Inglewood, Calif.—C, D
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- FYBEROID—Wilmington Fibre Specialty Co.
- GENERAL CEMENT MFG. CO., 919 Taylor Ave., Rockford, Ill.—P, PL, FT, T, VC, ST
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- ICA—Insuline Corp. of America
- INSULATION MANUFACTURERS CORP., 565 W. Washington Blvd., Chicago, Ill.—F, FG, M, P, T, VC
- INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—C, SO, T, VC
- INSUROK—Richardson Co.
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- IRR-O-VOLT—Irvington Varnish & Insulator Co.
- ISOLANTITE, INC., 343 Cortlandt St., Belleville, N. J., "Isolanite"—B, C, SO
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- LAMICOID—Mica Insulator Co.
- LOALIN—Catalin Corp.
- LUMARITH PROTECTOID—Celluloid Corp.
- MAAS & WALDSTEIN CO., 438 Riverside Ave., Newark, N. J.—E
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- MICA INSULATOR CO., 200 Varick St., New York, N. Y., "Lamicoid"—F, M, PL, T, VC
- MICARIA FABRICATORS, INC., 4519 Ravenswood Ave., Chicago, Ill.—F, PL, T
- JAMES MILLEN MFG. CO., INC., 150 Exchange St., Malden, Mass.—C, PL, SO
- J. W. MILLER CO., 5917 N. Main St., Los Angeles, Calif., "Miller"—SO
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- N-C—National Company
- NATIONAL COMPANY, 61 Sherman St., Malden, Mass.—B, C, PL, SO
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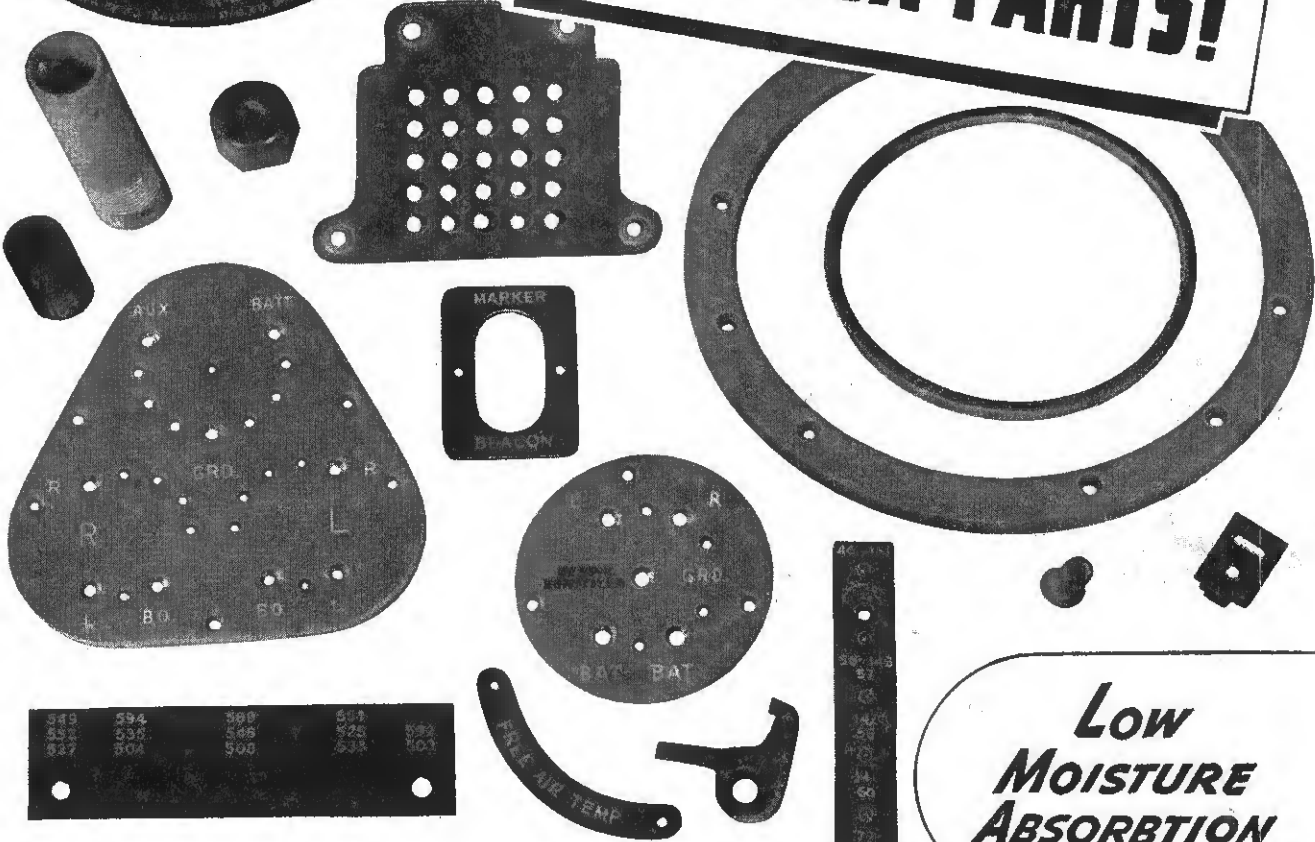
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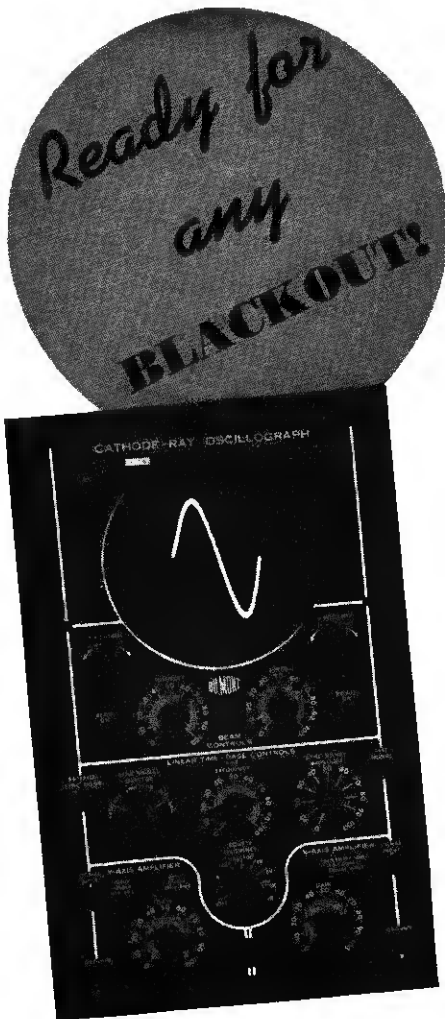
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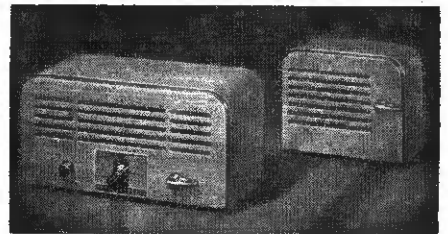
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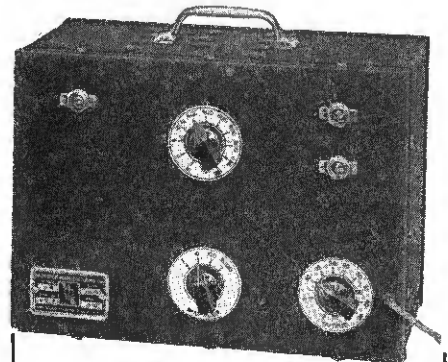
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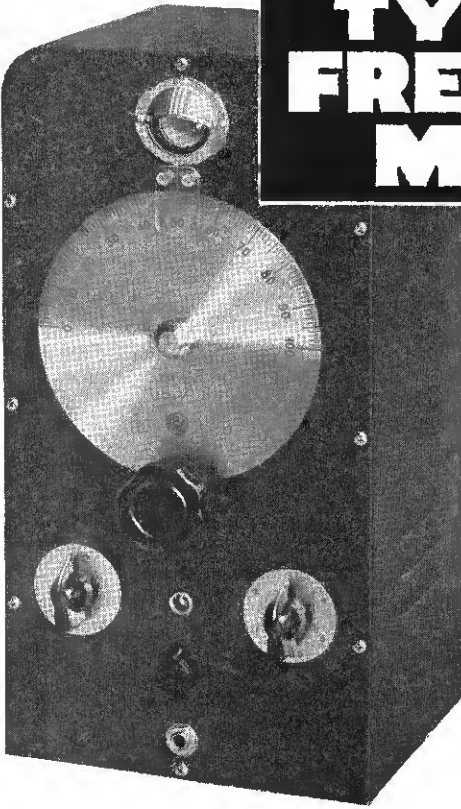
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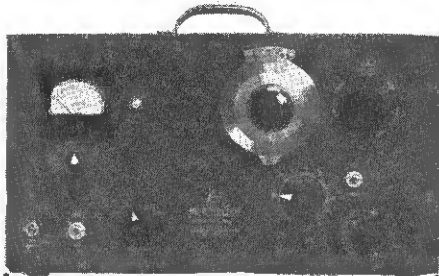
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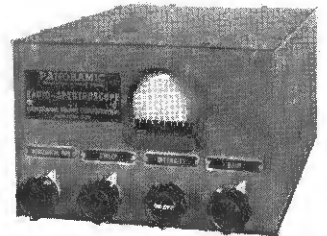
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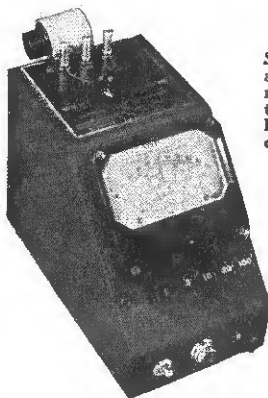
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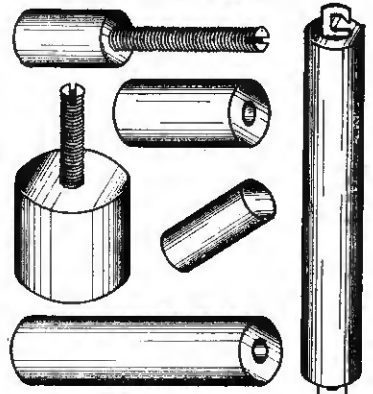
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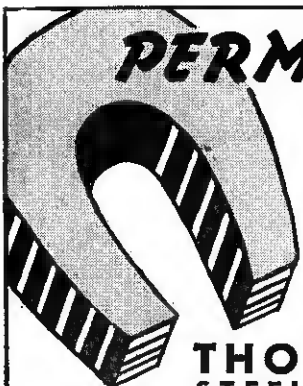
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ERIE CAN CO., 816 Erie St., Chicago, Ill.—C, S, TH
FANSTEEL METALLURGICAL CORP., 46 W. 22nd St., No. Chicago, Ill.—M, T, TA
FERROCART CORP. OF AMERICA, Hastings-on-Hudson, N. Y.—IC
GENERAL CEMENT MFG. CO., 919 Taylor Ave., Rockford, Ill.—F, P
GENERAL LAMINATED PRODUCTS, INC., 175 Varick St., New York, N. Y.—IC
GENERAL MAGNETIC CORP., 2126 E. Fort St., Detroit, Mich.—PM
GENERAL RADIO CO., 30 State St., Cambridge, Mass., "G-R"—C, P, R
GIBSON ELECTRIC CO., 8350 Frankstown Ave., Pittsburgh, Pa.—electrical contacts.
G-R—General Radio Co.
L. F. GRAMMES & SONS, INC., 366 Union St., Allentown, Pa.—S
ROBERT M. HADLEY CO., 711 E. 61st St., Los Angeles, Calif., "Hadley"—C, CM, L, P, R, S, TH
HUNTER PRESSED STEEL CO., Lansdale, Pa.—S
ICA—Insuline Corp. of America
INDIANA STEEL PRODS. CO., 6 N. Michigan Ave., Chicago, Ill.—PM
INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—A, C, P, R
INTERNATIONAL NICKEL CO., INC., 67 Wall St., New York, N. Y.—N
CHARLES JACK MFG. CORP., 420 Lehigh St., Allentown, Pa.—P, R
JOHNSTON TIN FOIL & METAL CO., 6106 S. Broadway, St. Louis, Mo.—P
KARP METAL PRODUCTS CO., INC., 129 30th St., Brooklyn, N. Y.—C, P, S
KING LABORATORIES, INC., 205 Oneida St., Syracuse, N. Y.—Special chemicals and metals
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GEO. S. MEPHAM CORP., 2001 Lynch Ave., East St. Louis, Ill.—CP
METROLOY CO., INC., 57 E. Alpine St., Newark, N. J.—T
J. W. MILLER CO., 5917 S. Main St., Los Angeles, Calif., "Miller"—C, S
NA-ALD—Alden Products Co.
NATIONAL COMPANY, 61 Sherman St., Malden, Mass., "National"—C, P, IC, R, SH
NORWALK TRANSFORMER CORP., South Norwalk, Conn., "Norwalk"—CM, L, PM, TH
PAR METAL PRODUCTS CORP., 32-62 49th St., Long Island City, N. Y., "Par Metal"—C, P, R
PAUL & BECKMAN, 4250 Wissahickon Ave., Philadelphia, Pa.—C, SH, S, TH
PERMOFLUX CORP., 4916 W. Grand Ave., Chicago, Ill.—S
PLASTIC METALS, INC., 105 Bridge St., Johnstown, Pa., "Plast-iron"—CP
RCA MFG. CO., Camden, N. J.—IC
RIVERSIDE METAL CO., Riverside, N. J.—SM
SIMONDS SAW & STEEL CO., Lockport, N. Y.—PM
MAXWELL SMITH CO., 1027 N. Highland Ave., Hollywood, Calif.—P, R, S
SPEER CARBON CO., St. Mary's Pa.—G, CA
STACKPOLE CARBON CO., St. Marys, Pa.—IC
STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y.—R
TAYLOR-WHARTON IRON & STEEL CO., High Bridge, N. J.—PM
THOMAS & SKINNER STEEL PRODS. CO., 1107 E. 23rd St., Indianapolis, Ind.—L, PM, S, TH
UNIFORM TUBES, Shurs Lane, Roxborough, Philadelphia, Pa.—A, B
WEBSTER-CHICAGO CORP., 5622 Bloomingdale Ave., Chicago, Ill.—L, SH, S, TH
WILCOX ELECTRIC CO., INC., 4014 State Line, Kansas City, Kans.—P, R
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Condenser CON
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Connectors CTR
Stands STD
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ALDEN PRODUCTS CO., 117 N. Main St., Brockton, Mass.—"Na-Aid" ACC, CTR
ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill.—CAR, CT, CRY, DYN, HB, VEL, ACC, CTR, STD, SPR
AMERICAN MICROPHONE CO., INC., 1915 S. Western Ave., Los Angeles, Calif., "American"—CAR, CON, CRY, DYN, HB, VEL, ACC, CTR, STD, SPR
AMERICAN PHENOLIC CORP., 1830 S. 54th Ave., Cicero, Ill., "Amphenol"—ACC, CTR
AMPERITE CO., 561 Broadway, New York, N. Y., "Amperite"—CT, DYN, VEL, CTR, STD
AMPHENOL—American Phenolic Corp.
ART SPECIALTY CO., 1115 N. Franklin St., Chicago, Ill.—ACC, STD
THE ASTATIC CORP., 830 Market St., Youngstown, Ohio, "Astatic"—CRY, STD
ATLAS SOUND CORP., 1451 39th St., Brooklyn, N. Y., "Atlas Velvet Action"—ACC, CTR, STD
BANK'S MFG. CO., 5019 N. Winthrop Ave., Chicago, Ill.—DYN, HB
BELFONE—Bell Sound Systems, Inc.
BELL SOUND SYSTEMS, INC., 1183 Essex Ave., Columbus, Ohio, "Belfone"—CRY, DYN, VEL, STD
BIRNBACH RADIO CO., INC., 145 Hudson St., New York, N. Y.—ACC, CTR
W. C. BRAUN, INC., 601 W. Randolph St., Chicago, Ill.—STD
BRUSH DEVELOPMENT CO., 3311 Perkins Ave., Cleveland, Ohio—CRY, STD
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CINEMA ENGINEERING CO., 1508 S. Verdugo Ave., Burbank, Calif., "Cinema"—CON, STD
DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—CRY, DYN, VEL
EASTERN MIKE-STAND CO., 56 Christopher St., Brooklyn, N. Y., "Eastern"—ACC, CTR, STD
ELECTRICAL INDUSTRIES MFG. CO., Red Bank, N. J.—CAR
ELECTRO-VOICE MFG. CO., 1239 South Bend Ave., South Bend, Ind., "Electro-Voice"—CAR, DYN, VEL, ACC, CTR, STD, SPR
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THE LIFETIME CORP., 1825 Adams St., Toledo, Ohio—CAR, CON, DYN, VEL, ACC, CTR, STD, SPR
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PHILMORE MFG. CO., 113 University Place, New York, N. Y., "Philmore"—HB
RACON ELEC. CO., INC., 52 E. 19th St., New York, N. Y.—DYN
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INSULATION MANUFACTURERS CORP., 565 W. Washington Blvd., Chicago, Ill.—V, W

INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., “ICA”—C, L

IRVINGTON VARNISH & INSULATOR CO., 6 Argyle Terrace, Irvington, N. J., “Irvington,” “Harvel”—E, P, R, V

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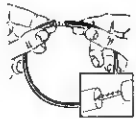
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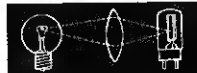


Photo tubes, gas PG
Photo tubes, vacuum PV
Photo cells PC
Relays R
Light supplies L
Complete units EE

ADVANCE ELECTRIC CO., 1260 W 2nd St., Los Angeles, Calif.—R
ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill.—PG, PC, R, L, EE
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BRADLEY LABS., INC., 82 Meadow St., New Haven, Conn., "Luxtron"—PC
CETRON—Continental Electric Co.
CONTINENTAL ELECTRIC CO., Geneva, Ill., "Cetron"—PG, PV, PC
DE VRY CORP., 111 Armitage Ave., Chicago, Ill.—PC, L
HUGH H. EBY, INC., 4700 Stenton Ave., Philadelphia, Pa.—PC, R, EE
ELECTRO-EYE—Hansen Radio Co.
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
HANSEN RADIO CO., R3, Niles, Mich., "Electro-Eye," "Radiocall," "Ordercall"—EE
LUXTRON—Bradley Labs., Inc.
MEISSNER MFG. CO., Belmont and 7th Sts., Mt. Carmel, Ill.—R
MICRO SWITCH CORP., Spring St., Freeport, Ill.—R
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PHOTO BELL CORP., 123 Liberty St., New York, N. Y.—EE
PHOTRONIC—Weston Electrical Instrument Corp.
POTTER & BRUMFIELD MFG. CO., Princeton, Ind.—R
POTTER ELEC. SIGNAL & MFG. CO., 937 Century Bldg., St. Louis, Mo.—EE
RBM MFG. CO., Logansport, Ind.—R
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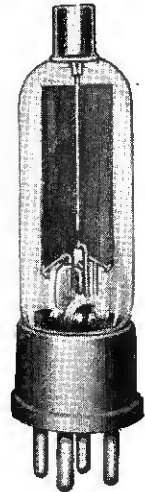
STRUTHERS DUNN, INC., 1315 Cherry St., Philadelphia, Pa.—R
UNITED CINEPHONE CORP., Torrington, Conn.—R, EE
VACUTRON, INC., 2819 12th St., Arlington, Va.—PC
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Cellulose acetate C
Phenols PH
Polystyrene P

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Cabinet molders C
 Small parts molders P

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 BOONTON HOLDING CO., 326 Myrtle Ave., Boon-
 ton, N. J.—C, P
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 "Catalin"—C
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 Ave., Chicago, Ill.—C, P
 CONTINENTAL-DIAMOND FIBRE CO., Newark, Del.,
 "Celoron"—P
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 DUREZ PLASTICS & CHEMICALS, INC., North
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 HUGH H. EBY, INC., 4700 Stenton Ave., Philadel-
 phia, 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
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 REMLER CO., LTD., 2101 Bryant St., San Francisco,
 Calif., "Remler"—C, P
 RESINOX CORP., 230 Park Ave., New York, N. Y.
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 RICHARDSON CO., 27th & Lake Sts., Melrose Park,
 Ill., "Insurok"—C, P
 MAXWELL SMITH CO., 1027 N. Highland Ave., Hol-
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 —C, P
 TELEX PRODS. CO., 1645 Hennepin Ave., Minne-
 apolis, Minn.—P
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 R. D. WERNER CO., INC., 380 2nd Ave., New York,
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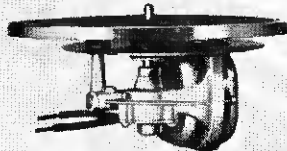
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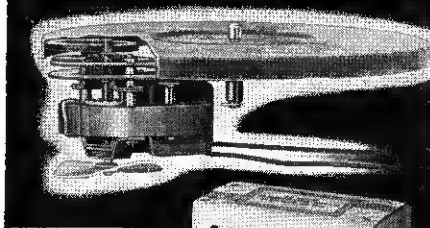
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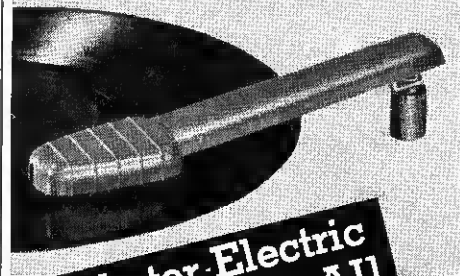
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AUDOVOX—Arrow Radio Co.
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BELL SOUND SYSTEMS, INC., 1183 Essex Ave., Columbus, Ohio, "Record-o-fo-ne"—RM
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CARRON MFG. CO., 415 S. Aberdeen St., Chicago, Ill.—D
CRITERION PRODUCTS CO., 1600 Broadway, New York, N. Y.—CN
F. L. COOK, 606 Parkman Ave., Los Angeles, Calif.—D, CN
DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—RM, RS
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DUOTONE CO., INC., 799 Broadway, New York, N. Y., "Duodisc"—D, CN, RS
DURALITE—Muscraft Records, Inc.
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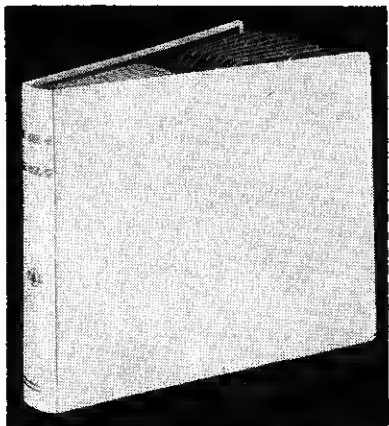
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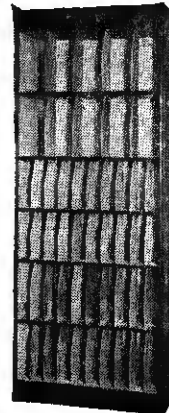
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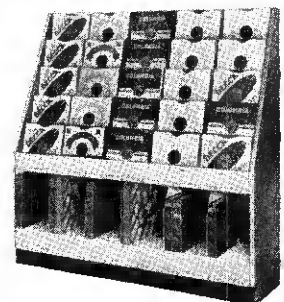
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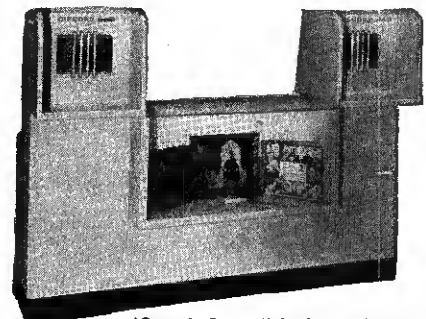
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MAGNAVOX CO., INC., 2131 Bueter Rd., Fort Wayne, Ind.—EL
MAJESTIC RADIO & TELEVISION CO., 2600 W. 50th St., Chicago, Ill., "Majestic"—WP
MANUFACTURERS SCREW & SUPPLY HOUSE, 216 W. Hubbard St., Chicago, Ill.—M
MARCONIPHONE, INC., 678 Madison Ave., New York, N. Y.—EL
MASTERWORKS—Columbia Record Corp.
JOHN MECK INDUSTRIES, 1313 W. Randolph St., Chicago, Ill.—ARC, EL, PC, RP
MIDWEST RADIO CORP., 809 Broadway, Cincinnati, Ohio—ARC
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.
MUSIC APPRECIATION—Continental Music Co.
MUSICAL TOWER—Sundt Engineering Co.
MUSCRAFT RECORDS, INC., 242 W. 55th St., New York, N. Y., "Duralite"—N, R, RA, RO
MUSIC MASTER MFG. CO., 608 S. Dearborn St., Chicago, Ill.—ARC, EL, N, SE, TR, WP
NEW PRODUCTS CORP., Benton Harbor, Mich.—ARC
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
PARTY RECORD CO., INC., 415 Lexington Ave., New York, N. Y.—R, RA
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., "Fidelitone," "Permo Point"—N, R, TR
PFANSTIEL CHEMICAL CO., 105 Lakeview, Waukegan, Ill.—N
PHILCO RADIO & TELEVISION CORP., Tioga & C Sts., Philadelphia, Pa.—ARC, EL, N, PC, RA, RP, TT, WP
PHILHARMONIC RADIO CO., 21 W. 45th St., New York, N. Y.—EL
PHONETTE CO. OF AMERICA, 6806 Santa Monica Blvd., Los Angeles, Cal.—CM
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, 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., 73 Winthrop St., Newark, N. J.—N, R
THE RAULAND CORP., 4245 Knox Ave., Chicago, Ill.—ARC, PM
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, RP, TR, TT, WP
RECORD GUILD OF AMERICA, 36 W. 44th St., New York, N. Y.—R
RECORDVOX, INC., 248 W. 23rd St., New York, N. Y.—EL
RECOTON CORP., 21-10 49th Ave., L. I. City, N. Y.—N, SN
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

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There's a reason why dealers throughout the country are stocking up with **RECOTON PHONEEDLES**, and a darned good one!

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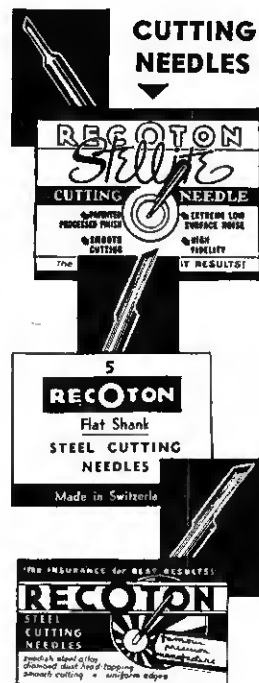


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FREE DISPLAYS

Live displays, in brilliant colors, boost sales of cutting needles fast when shown on your counters. Stocks and dispenses. Send for yours today... free with your order.



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RECORDS AND EQUIP.—Cont.

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WALTER L. SCHOTT CO., 5266 W. Pico Blvd., Los Angeles, Cal., "Walco"—RO
SCRANTON RECORD CO., 1 E. 57th St., New York, N. Y.—RM
J. P. SEEBURG CORP., 1500 N. Dayton St., Chicago, Ill.—CM
SHURE BROS., 225 W. Huron St., Chicago, Ill., "Hilo," "Zephyr"—PC
SILCOX 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
SONART RECORD CO., 251 W. 42nd St., New York, N. Y.—R, CS
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
STANDARD RECORD CO., 168 W. 23rd St., New York, N. Y.—R, RA
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

TRANSFORMER CORP. OF AMERICA, 69 Wooster St., New York, N. Y., "Clarion"—ARC, EL, RP, TR, TT, WP
TREBOR RADIO CO., Pasadena, Cal.—RP, WP
TROY RADIO & TELEVISION CO., 1144 S. Olive St., Los Angeles, Calif.—EL, RP, WP
TRU-POINT MFG. CO., 463 W. 42nd St., New York, N. Y.—CS
TUNNIS BROS., 726 Lake St., Oak Park, Ill.—Record Index Systems
UNITED CINEPHONE CORP., Sound Equip. Div., Torrington, Conn., "United Cinephone"—PM, TR, TT
UNITED LOOSELEAF CORP., 233 Spring St., New York, N. Y.—RA
UNIVERSAL MICROPHONE CO., Inglewood, Calif.—M, N, PC, PM, R, TR, TT
VICTOR—RCA Mfg. Co.
WALCO—Electrorox Co.
J. J. WARNER CO., 1244 Larkin St., San Francisco, Calif.—R, TR, TT
WATERS-CONLEY CO., Rochester, Minn.—EL, 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. Kilbourn Ave., Milwaukee, Wis.—N
J. WIDDER & CO., 110 5th Ave., New York, N. Y.—RA
WILCOX-GAY CORP., Charlotte, Mich.—ARC, WP
RUDOLPH WURLITZER MFG. CO., North Tonawanda, New York—CM
ZENITH RADIO CORP., 6001 Dickens Ave., Chicago, Ill.—WP
ZEPHYR—Shure Bros.

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

ANSLEY RADIO CORP., 21-10 49th Ave., L. I. City, 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., Jersey City, N. J.—S
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., "Minipiano"—P
THE HARMONY CO., 1742 N. Lawndale Ave., Chicago, Ill.—S
CHARLES JACK MFG. CORP., 420 Lehigh St., Allentown, Pa.—BC
KRAKAUER BROS., Cypress Ave. & 136th St., New York, N. Y.—P
MIESSNER INVENTIONS, INC., Van Beuren Rd., Morristown, 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., 73 Winthrop St., Newark, N. J.—BC
RCA MFG. CO., Front & Cooper St., Camden, N. J.—BC

SAVE 20% and more on GLASS RECORDING DISCS

• The new PRESTO RED LABEL disc is 20 to 25 percent lower in price than previous Presto glass discs and is intended for educational recording in school speech and music departments as well as for file and reference recording in radio stations and agencies.

Presto has developed this new and less expensive glass base disc to replace steel base discs, because the entire supply of metals is now needed for war production.



PRESTO RED LABEL discs have 4 center holes. The thickness is .070". They are made in the 10"-12"-13½" and 16" sizes. The 16" discs are packed 15 to a carton . . . the smaller sizes 20 to a carton. They are ready for immediate delivery. Order a sample shipment today.

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CHICAGO, Har. 4240 • CLEVELAND, Me. 1565 • DALLAS, 37093 • DENVER, Ch. 4277 • DETROIT, Univ. 1-0180 • HOLLYWOOD, Hil. 9133 • KANSAS CITY, Vic. 4631 • MINNEAPOLIS, Atlantic 4216 • MONTREAL, Wel. 4218
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Global
REG. U. S. PAT. OFF.

CERAMIC RESISTORS

● Finding the right resistor for a specific application is likely to be no easy problem. Because the solution so often is found in Global Brand Ceramic Resistors we urge you to acquaint yourself with the distinctive qualities of these versatile resistors. The handy chart below shows types available, together with their characteristics.

TYPE	A	B	CX
DIAMETER			
MIN.	1/16"	1/16"	1/16"
MAX.	1"	1"	1"
LENGTH			
MIN.	1/4"	1/4"	1/4"
MAX.	18"	18"	18"
WATT RATING*			
MIN.	1/4w.	1/4w.	1/4w.
MAX.	54w.	54w.	150w.
RESISTANCE per in. of length			
MIN.	25 ohms	5 ohms	1 ohm
MAX.	15 meg.	15 meg.	1000 ohms
NORMAL RATING w./sq. in. of radiating surf.			
	1	1	2-1/2

*By artificial cooling these ratings may be increased substantially.

Characteristic Coefficient:

Type A: Commercial straight line Voltage and Temperature

Type B: Negative Voltage Negative Temperature

Type CX: Commercial straight line Voltage and Temperature

Terminals: All types: Metalized ends with or without wire leads

In addition to these standard items, special resistors can be made to meet definite specifications both as to shape and characteristics. Ask for Bulletin R and give us details of your requirements.

Global Division
THE CARBORUNDUM CO.
REG. U. S. PAT. OFF.

NIAGARA FALLS, N. Y.

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MARK SIMPSON DISTR. CO., 186 W. 4th St., New York, N. Y.—Pickups for musical instruments
SOLOVOX—Hammond Instr. Co.
STORY & CLARK PIANO CO., 84 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

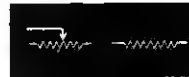
ROTARY MACHINES



Power plants (gas engine) AC
Converters CON
DC generators DC
Dynamotors DYN
Gas engines ENG
Motor generator MG

ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill.—AC, CON, DC, ENG
BODINE ELECTRIC CO., 2254 W. Ohio St., Chicago, Ill.—CON, DYN
CARTER MOTOR CO., 1608 N. Milwaukee Ave., Chicago, Ill.—CON, DC, DYN, MG
DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—AC, CON
DIEHL MFG. CO., Elizabethport, N. J., "Diehl"—CON, MG
EIGOR, INC., 1060 W. Adams St., Chicago, Ill.—AC, CON, DC, DYN, ENG, MG
ELECTRIC SPECIALTY CO., Stamford, Conn., "Esco"—CON, DYN, DC
ESCO—Electric Specialty Co.
GENERAL ELECTRIC CO., Schenectady, N. Y.—CON, DC, MG
GOODMAN'S ROTARY DISPLAY SPECIALTIES, 19 W. 34th St., New York, N. Y.—Rotary display turntables
JANETTE MFG. CO., 556 W. Monroe St., Chicago, Ill.—AC, CON, DC, MG
KATO ENGINEERING CO., 727 S. Front St., Mantato, Minn., "Kato"—AC, CON, DC, MG
LAUSON CO., New Holstein, Wis.—ENG
MIDCO MFG. & DIST. CO., INC., S. 13th & Kentucky Ave., Sheboygan, Wis.—AC, ENG
MONTGOMERY WARD & CO., 619 W. Chicago Ave., Chicago, Ill.—AC, CON, DC, ENG, MG
D. W. ONAN & SONS, 43 Royalston Ave., Minneapolis, Minn.—AC, DC, ENG
PIONEER GEN-E-MOTOR CORP., 466 W. Superior St., Chicago, Ill.—AC, CON, DYN
POTTER CO., 1950 Sheridan Rd., North Chicago, Ill.—AC
RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA Photophone"—CON
RCA TELEPHONE—RCA Mfg. Co.
SEA-PAL RADIO CO., 228 N. La Salle St., Chicago, Ill.—AC

RESISTORS & VOLUME CONTROLS



Attenuators (precision) . . . A
Fixed composition FC
Fixed wirewound FW
Industrial fixed I
Plug-in (tubes) PT
Power rheostats PR
Precision PRE
Suppressors SU
Variable V
Volume controls VC

AEROVOX CORP., 740 Belleville Ave., New Bedford, Mass.—FW, I
ALLEN-BRADLEY CO., 1326 South 2nd St., Milwaukee, Wis., "Bradleyunit," "Bradleyometer"—FC, SU, V, VC
ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill., "Knight"—FC, FW, I, PT, PR, PRE, SU, V, VC

• Specify

Stackpole

Dependable

VARIABLE RESISTORS

Resistance Range from
1000 OHMS—5 MEGOHMS

for every type of

VOLUME CONTROL
TONE CONTROL
SENSITIVITY CONTROL

—as well as special applications for other uses

● Stackpole controls are made with materials satisfactory to the various government branches and are constructed to withstand exposure to moist, salt atmosphere without corrosion. These controls are produced in various resistance ranges and curves.

FIXED RESISTORS

Resistance Range from
10 OHMS—20 MEGOHMS

INSULATED with ratings of
1/3 WATT — 1/2 WATT — 1 WATT

NON-INSULATED with ratings of
1/2 WATT—1 WATT—3 WATTS—4 WATTS

● Stackpole Resistors will stand up to 100% overloads for long periods of time without damage or excessive change of resistance value. They can be suitably waxed to meet government specifications and are available in standard RMA color codes. Resistors may be stamped with proper type or identifying number.

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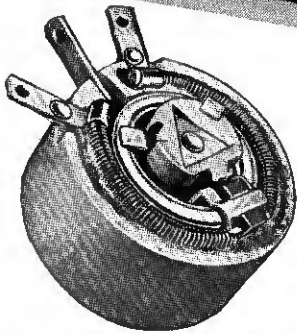
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YOUR RESISTANCE PROBLEM



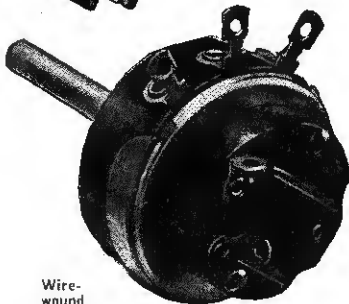
Clarostat power rheostat. 25-watt rating even at one-third resistance setting.



Greenohm power resistors . . . 10 to 200 watts. Fixed and adjustable.



Tube-type plug-in ballast or voltage divider originated by Clarostat.



Wire-wound controls.



Composition-element controls.

★ Yes indeed, it pays to follow the example of your Uncle Sam, the communication companies, leading equipment builders and others who know what's what in radio parts: Let Clarostat solve your resistance problem! Because Clarostat has a wider choice of resistors, controls and resistance devices, you can take care of every initial-equipment or replacement need when you *standardize with Clarostat*. And as for performance and life, simply ask the man who uses Clarostats. First and last, Clarostats are easiest on your pocketbook.

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Clarostat composition-element controls are the last word in high-resistance radio controls. Ad-A-Switch feature. 1000 ohms to 5 megohms. Choice of tapers and taps. ★ Clarostat wire-wound controls are the same as supplied to leading broadcasters, government services, etc. 1 to 100,000 ohms. Ad-A-Switch. ★ Clarostat power rheostat, 25-ohm rating, is built for hardest service. ★ Also faders, padders, mixers, attenuators.

Resistors . . .

Greenohms—those green-colored cement-coated power resistors found in transmitters, oscillographs, fine instruments and dependable electronic assemblies—are positively the toughest power resistors made. 4 to 200 watts. Fixed and adjustable. Also in non-inductive type. ★ Widest choice of voltage divider strips, voltage-dropping power cords, etc.

Ballasts . . .

Tube-type plug-in resistors, line-voltage reducers, automatic line-voltage regulators, etc.

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He'll tell you more about that wider choice of controls and resistors provided by the Clarostat line as applied to your own problem. Ask for latest catalog—or write us direct.

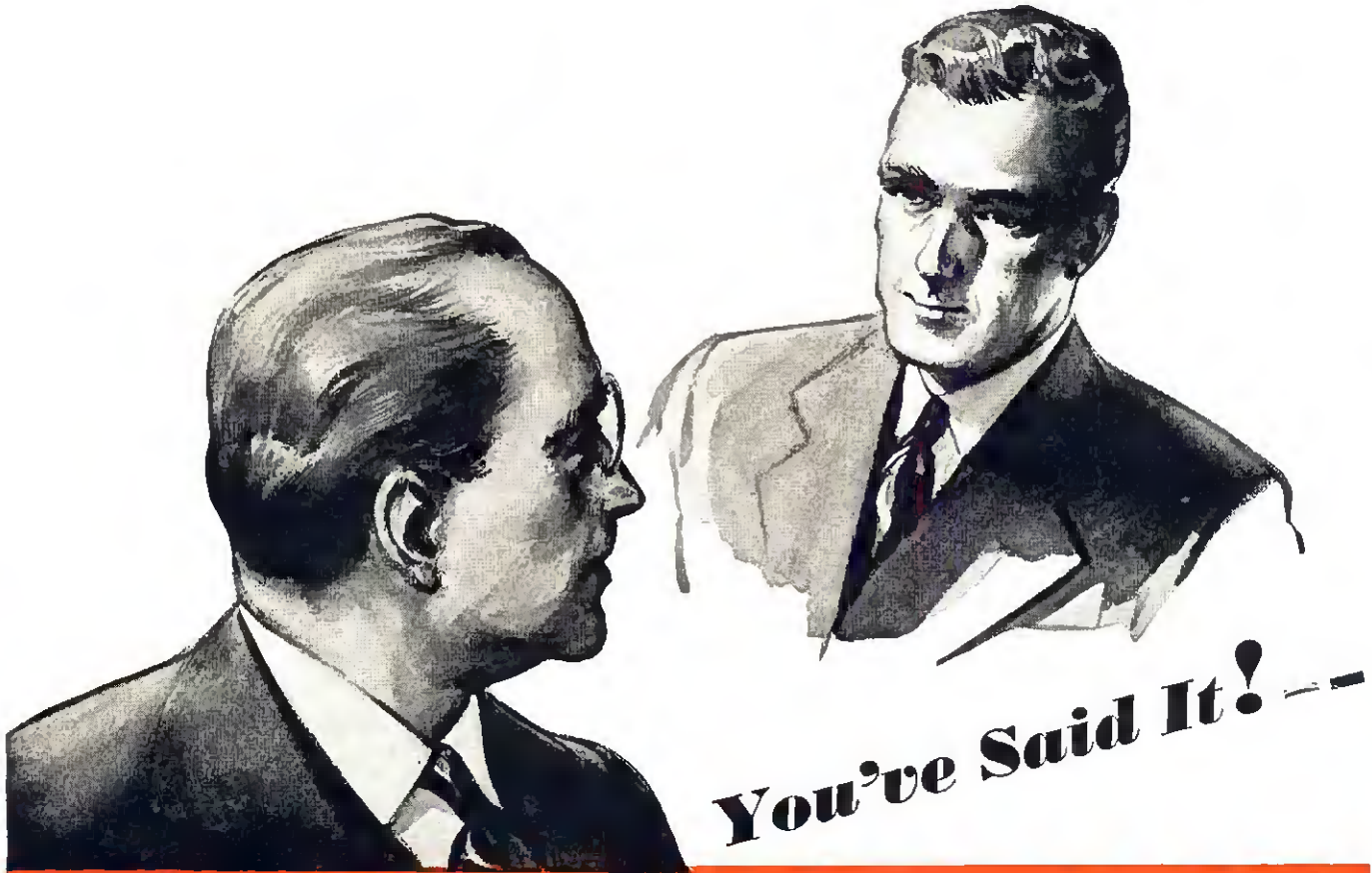
CLAROSTAT Manufacturing Co. Inc.

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• OFFICES IN PRINCIPAL CITIES •

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- AMPERITE CO., 561 Broadway, New York, N. Y., "Amperite"—PT
- ARCO TUBE CO., 227 Central Ave., Newark, N. J.—PT
- ARTCO—Art Radio Corp.
- ART RADIO CORP., 115 Liberty St., New York, "Artco"—VC
- ATLAS RESISTOR CO., 423 Broome St., New York, N. Y., "Atlas"—FW, V
- BOND PRODUCTS CO., 13139 Hamilton Ave., Detroit, Mich.—SU, V, VC
- BRADLEYOMETER—Allen-Bradley Co.
- BRADLEYUNIT—Allen-Bradley Co.
- BROWN DEVIL—Ohmite Mfg. Co.
- CANDOHMS—Muter Co.
- CENTRALAB, 900 E. Keefe Ave., Milwaukee, Wis., "Centralab"—A, FC, PR, SU, V, VC
- CHAMPION RADIO WORKS, Danvers, Mass.—PT
- CHICAGO TELEPHONE SUPPLY CO., 1142 W. Beardsley Ave., Elkhart, Ind.—V, VC
- CINEMA ENGINEERING CO., 1508 S. Verdugo Ave., Burbank, Calif., "Cinema"—A, FW, I, PR, PRE, V, VC
- CLAROSTAT MFG. CO., 285 N. 6th St., Brooklyn, N. Y., "Clarostat"—A, FC, FW, I, PT, PR, PRE, V, VC
- CONSOLIDATED WIRE & ASSOC. CORP., 1635 S. Clinton, Chicago, Ill.—FC, FW, V, VS, SU
- CONTINENTAL CARBON, INC., 13900 Loraine Ave., Cleveland, Ohio, "Continental"—FC, FW, PRE, SU
- CORDOHM—Ohmite Mfg. Co.
- CORNING GLASS WORKS, Corning, N. Y., "Pyrex"—FW
- DAVEN CO., 158 Summit St., Newark, N. J.—A, FW, PRE, VC
- DEPENDABLE—Radio City Products Co., Inc.
- DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—FW, I, PR, VC
- DIVIDOHM—Ohmite Mfg. Co.
- ELECTRO MOTIVE MFG. CO., INC., S. Park & John Sts., Willimantic, Conn., "Elmenco"—FC, SU
- ELECTRO PRODUCTS LABORATORIES, 549 W. Randolph St., Chicago, Ill.—VC
- ELMENCO—Electro Motive Mfg. Co., Inc.
- EMERSON RADIO & PHONOGRAPH CORP., 111 8th Ave., New York, N. Y.—FC, PT, V, VC
- ERIE CAN CO., 816 Erie St., Chicago, Ill.—Volume control shields
- ERIE RESISTOR CORP., Erie, Pa.—FC, SU
- EX-STAT—Tilton Electric Corp.
- GENERAL CEMENT MFG. CO., 919 Taylor Ave., Rockford, Ill.—SU
- GENERAL RADIO CO., 30 State St., Cambridge, Mass., "G-R"—PRE & special purpose
- G-H—Girard-Hopkins
- GIRARD-HOPKINS, 1000 40th Ave., Oakland, Calif., "G-H"—FC
- GLOBAR DIV., CARBORUNDUM CO., Niagara Falls, N. Y., "Globar"—FC, I
- GLOBAR—Carborundum Co.
- G-R—General Radio Co.
- HARDWICK & HINDLE, INC., 40 Herman St., Newark, N. J.—FW, I, PR
- HYGRADE-SYLVANIA CORP., Emporium, Pa., "Sylvania"—PT
- HYTRON CORP., 23 New Derby St., Salem, Mass., "Hytron"—PT
- ICA—Insuline Corp. of America
- INSTRUMENT RESISTORS, INC., 379 Main St., Little Falls, N. J.—FW, I, PRE, V
- INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—FW, PRE, SU, V, VC
- INTERNATIONAL RESISTANCE CO., 401 N. Broad St., Philadelphia, Pa., "IRC"—A, FC, FW, I, PR, PRE, SU, V, VC
- IRC—International Resistance Co.
- J. F. D. MFG. CO., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y., "JFD"—PT
- KNIGHT—Allied Radio Corp.
- KOOLOHMS—Sprague Products Co.
- LAFAYETTE RADIO CORP., 100 6th Ave., New York, N. Y., "Trutest"—FC, FW, V, VC
- LECTROHM, INC., 5133 W. 25th Place, Cicero, Ill.—FW, I, V
- LEEDS & NORTHRUP CO., 4970 Stenton Ave., Philadelphia, Pa.—A, PRE
- P. R. MALLORY & CO., INC., 3029 E. Washington St., Indianapolis, Ind., "Yaxley"—A, FW, I, SU, V, VC
- MICAMOLD RADIO CORP., 1087 Flushing Ave., Brooklyn, N. Y.—FW, PT
- MICROHM—Precision Resistor Co.
- MORRILL & MORRILL, 30 Church St., New York, N. Y.—PRE
- MULTIVOLT—Ohmite Mfg. Co.



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You can depend on Mallory Approved Precision Products right now—just as you have in the past and will in the future. Even though the supplies of some raw materials have been drastically curtailed, demanding design changes, forcing the use of substitute materials, taxing ingenuity to the utmost, Mallory insists that—"Quality must be maintained!"

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RAYTHEON PRODUCTION CORP., 55 Chapel St., Newton, Mass.—PT
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RITEOHM—Ohmite Mfg. Co.
SHALLCROSS MFG. CO., 10 Jackson Ave., Collingdale, Pa., "Shallcross"—A, FW, PRE, V
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SPRAGUE PRODUCTS CO., N. Adams, Mass., "Koolohms"—FW, I, VC, PRE
SPRAGUE SPECIALTIES CO., N. Adams, Mass.—FW, I, VC, PRE
STACKPOLE CARBON CO., Tannery St., St. Marys, Pa., "Stackpole"—FC, I, V, VC
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SYLVANIA—Hygrade-Sylvania Corp.
TECH LABORATORIES, 7 Lincoln St., Jersey City, N. J., "Tech Lab"—A, PRE, VC
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TRIPLETT ELECTRICAL INSTRUMENT CORP., Harmon Rd., Bluffton, Ohio, "Triplett"—PRE
TRUTEST—Lafayette Radio Corp.
UTAH RADIO PRODUCTS CO., 820 Orleans St., Chicago, Ill.—A, FW, I, PRE, V, VC

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ATLAS CONDENSER PRODS. CO., 548 Westchester Ave., New York, N. Y.—FF, S
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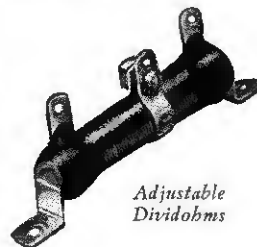
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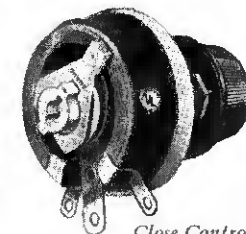
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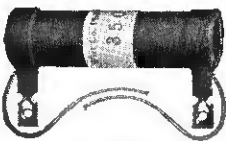
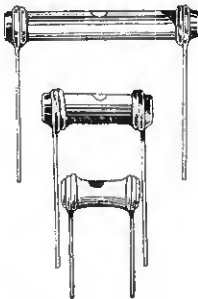
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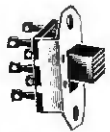
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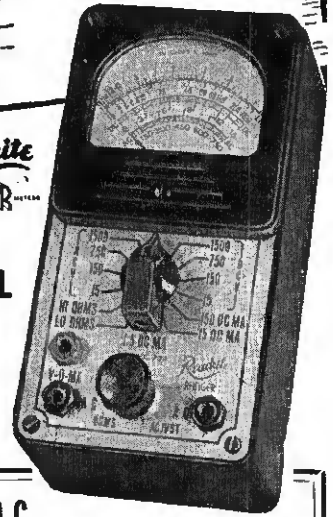
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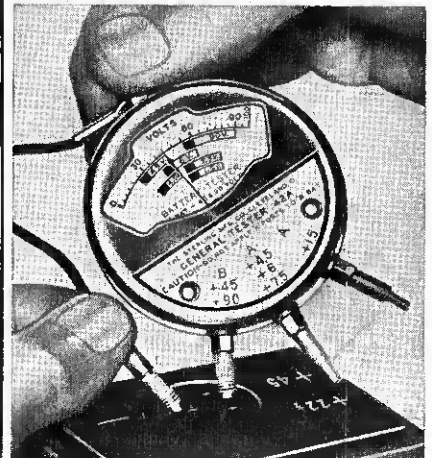
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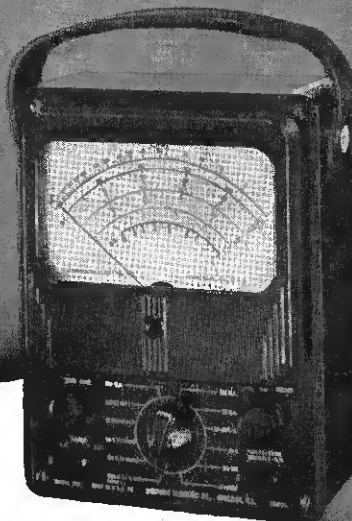
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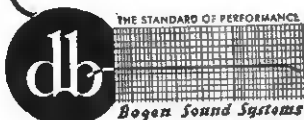
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- LITTLEFUSE INC., 4763 Ravenswood Ave., Chicago, Ill.—F, NI
- MARION ELECTRICAL INSTRUMENT CO., Manchester, N. H., "Marion"—M
- MEASUREMENTS CORP., Box 88, Boonton, N. J.—SG, VTV
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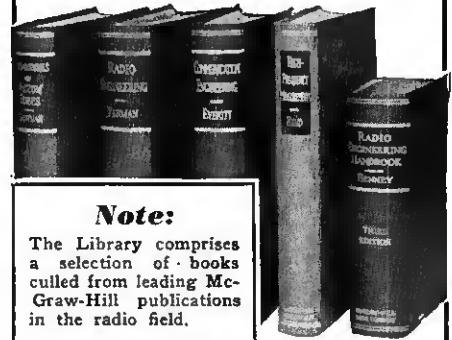
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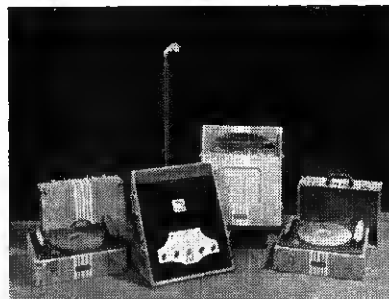
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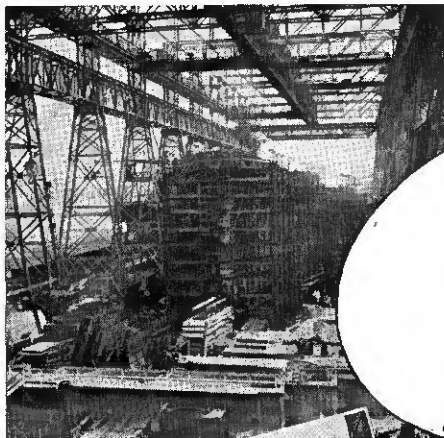
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- DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—B, D, FE, HF, PM, PS, PH
- DINION COIL CO., P. O. Box D, Caledonia, N. Y.—F
- ELECTRO PRODUCTS LABS., 549 W. Randolph St., Chicago, Ill.—FE
- EMERSON RADIO & PHONOGRAPH CORP., 111 8th Ave., New York, N. Y.—D, PM
- ERWOOD SOUND EQUIP. CO., 223 W. Erie St., Chicago, Ill.—B, PH, ST
- FIBRE-FORM, INC., Columbia City, Ind.—C
- FLOCK PROCESS CORP., 17 W. 31st St., New York, N. Y.—Grille screens flocked
- FULTON RADIO CORP., 100 6th Ave., New York, N. Y.—D, FE
- GALVIN MFG. CORP., 4545 Augusta Blvd., Chicago, Ill., "Motorola"—M, PM
- G-C—General Cement Mfg. Co.
- GENERAL CEMENT MFG. CO., 919 Taylor Ave., Rockford, Ind., "G-C"—ACC, GC, S
- ROBERT M. HADLEY, 711 E. 61st St., Los Angeles, Calif.—B
- HAWLEY PRODUCTS CO., 201 N. First Ave., St. Charles, Ill., "Hawley"—B, C, PH
- A. G. HINTZE, 300 W. Adams St., Chicago, Ill.—GC
- ILLINOIS WOOD PRODUCTS CORP., 2512 S. Damen Ave., Chicago, Ill.—CH, B
- INDUSTRIAL WIRE CLOTH PRODUCTS CORP., Wayne, Mich.—GC (rayon flocked)
- INTERNATIONAL TRANSFORMER CO., 17 W. 20th St., New York, N. Y.—F
- JENSEN RADIO MFG. CO., 6601 S. Laramie Ave., Chicago, Ill., "Jensen"—CH, B, C, D, F, FE, HF, PM, PS, PH, ST, WB
- KNIGHT—Allied Radio Corp.
- LEOTONE RADIO CO., 63 Dey St., New York, N. Y.—ACC, B, C, D, F, GC
- THE LIFETIME CORP., 1325 Adams St., Toledo, Ohio—ACC, B, PM, PS, PH, ST
- LINORPHONE CO., 1661 Howard Ave., Utica, N. Y.—B
- MAGNAVOX CO., 2131 Bueter Rd., Ft. Wayne, Ind., "Magnavox"—D, PM
- JOHN MECK INDUSTRIES, 1313 W. Randolph St., Chicago, Ill.—CH, B, D, PM, PS, PH, ST
- MILLION RADIO & TELEVISION LABORATORIES, 1617 N. Damen St., Chicago, Ill., "Million"—CH, B, D, PM, PS, PH, ST
- MOTOROLA—Galvin Mfg. Co.
- NATIONAL CO., INC., 61 Sherman St., Malden, Mass.—D, PM
- NOKOIL—Wright-DeCoster Inc.
- NORWALK TRANSFORMER CORP., South Norwalk, Conn., "Norwalk"—F, FE
- A. OLEK & SON MFG. CO., 4759 Melrose St., Philadelphia, Pa.—GC
- OPERADIO MFG. CO., 13th & Indiana Sts., St. Charles, Ill., "Operadio"—CH, B, D, FE, PM, PS, PH, WB
- OXFORD-TARTAK RADIO CORP., 915 W. Van Buren St., Chicago, Ill., "Oxford"—ACC, C, D, F, FE, M, PM, PS, PH, WB
- PACENT ENGINEERING CORP., 79 Madison Ave., New York, N. Y.—PM
- PERMOFLUX CORP., 4916 W. Grand Ave., Chicago, Ill.—D, PM, M
- PHILCO RADIO & TELEVISION CORP., Tioga & C St., Philadelphia, Pa.—C, D, F, M, PM
- POWERIZER—Radio Receptor Co., Inc.
- QUAM-NICHOLS CO., 33rd Pl. & Cottage Grove Ave., Chicago, Ill.—ACC, D, M, PM
- RACON ELEC. CO., INC., 52 E. 19th St., New York, N. Y.—CH, B, C, D, F, FE, HF, M, PM, PS, PH, ST
- RADIO RECEPTOR CO., INC., 251 W. 19th St., New York, N. Y., "Powerizer"—B, D, PM, ST
- RADIO SPEAKERS, 221 E. Cullerton St., Chicago, Ill.—D, PM
- THE RAULAND CORP., 4245 Knox Ave., Chicago, Ill.—B, PM, PH, WB
- RAY-LAB, INC., 211 Railroad Ave., Elmira, N. Y., "Ray-Lab"—CH, B, FE
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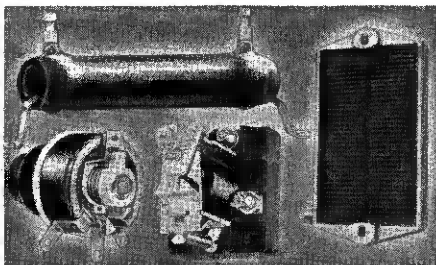


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- SPEAK-O-PHONE RECORDING & EQUIPMENT CO., 23 W. 60th St., New York, N. Y. "Speakophone"—B
- STANGARD PRODS. CO., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y.—F, GC
- STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y.—B, D, M, PH
- SWEDISH IRON & STEEL CO., 17 Battery Pl., New York, N. Y.—D, M, PM
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- UTAH RADIO PRODUCTS CO., 820 Orleans St., Chicago, Ill.—C, D, M, PM, WB
- VAC-O-GRIP CO., 2023 Detroit Ave., Toledo, Ohio, "Vac-O-Grip"—ACC
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SWITCHES & RELAYS

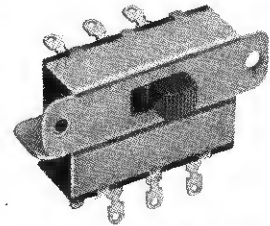


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- Test equipment TS
- Time TE
- Vacuum V
- Wave change (receiver) W
- Wave change (transmitter) WT

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- ALDEN PRODUCTS CO., 117 N. Main St., Brockton, Mass., "Na-Ald"—K, TS
- ALLIED CONTROL CO., INC., 227 Fulton St., New York, N. Y.—CB, R
- ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill.—C, K, M, P, PR, B, SK
- AMERICAN PHENOLIC CORP., 1830 S. 54th Ave., Cicero, Ill., "Amphenol"—TS, W
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- AUTOMATIC ELEC. MFG. CO., 729 S. Front St., Mankato, Minn., "Automatic"—R, TE
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BUD RADIO INC., 1923 E. 55th St., Cleveland, Ohio—P
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CETRON—Continental Electric Co.
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., 4719 W. Sunnyside Ave., Chicago, Ill.—C, PR, R, SK
CLAROSTAT MFG. CO., 285 N. 6th St., Brooklyn, N. Y., "Clarostat"—P
CONTINENTAL ELECTRIC CO., Geneva, Ill., "Cetron"—M, V
COTO-COIL, INC., 71 Willard Ave., Providence, R. I.—W, WT
R. W. CRAMER CO., INC., Centerbrook, Conn.—TE
CUTLER-HAMMER, INC., N. 12th St. & W. St. Paul Ave., Milwaukee, Wis., "Cutler-Hammer"—P, TS
DAVEN CO., 158 Summit St., Newark, N. J.—TS, WT
DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—M
DURAKOOL, INC., 1010 N. Main St., Elkhart, Ind., "Durakool"—M
HUGH H. EBY, INC., 4700 Stenton Ave., Philadelphia, Pa.—R
ECCO HIGH FREQUENCY CORP., 120 W. 20th St., New York, N. Y.—Selector
ELECTRICAL PRODUCTS CO., 6535 Russell St., Detroit, Mich.—M, R, TE, V
ELECTRONIC PRODUCTS CO., St. Charles, Ill.—R
GARDINER-LEVERING CO., Haddon Heights, N. J.—AC, R
GENERAL CEMENT MFG. CO., 919 Taylor Ave., Rockford, Ill.—CB, P, TS
GENERAL ELECTRIC CO., Schenectady, N. Y.—R, FS
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., 4313 N. Knox 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
HYGRADE SYLVANIA CORP., 500 Fifth Ave., New York, N. Y.—FS
ICA—Insuline Corp. of America
THE INSTRUCTOGRAPH CO., 4701 Sheridan Rd., Chicago, Ill.—AC
INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—TS, V, W, WT
ISOLANTITE, INC., 343 Cortland St., Belleville, N. J., "Isolantite"—Rotary ceramic switches
P. R. MALLORY & CO., INC., 3029 E. Washington St., Indianapolis, Ind., "Yuxley"—PB, TS, TE, W, WT
MARK TIME—M. H. Rhodes, Inc.
T. R. McELROY, 100 Brookline Ave., Boston, Mass.—AC, K
MEISSNER MFG. CO., Mt. Carmel, Ill., "Meissner"—R, 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
DONALD T. MOSSMAN, INC., 6031 Northwest Highway, Chicago, Ill.—SK
MUSIC MASTER MFG. CO., 508 S. Dearborn St., Chicago, Ill.—R
MUTER CO., 1255 S. Michigan Ave., Chicago, Ill., "Muter"—TS
NA-ALD—Alden Products Co.
NATIONAL CO., INC., 61 Sherman St., Malden, Mass.—PB
NEW ENGLAND RADIOCRAFTERS, 1156 Commonwealth Ave., Brookline, Mass.—TS, W
OAK MFG. CO., 1260 Clybourn Ave., Chicago, Ill., "Oak"—R, W, WT
OHMITE MFG. CO., 4835 W. Flournoy St., Chicago, Ill.—TS, P, WT
PHILMORE MFG. CO., 113 University Place, New York, N. Y., "Philmore"—CB
POTTER & BRUMFIELD MFG. CO., Princeton, Ind.—R, TE

RBM MFG. CO., Logansport, Ind.—PB, R
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
SHALLCROSS MFG. CO., 10 Jackson Ave., Collingdale, Pa., "Shallcross"—TS, W, WT
SIGMA INSTRUMENTS, INC., 76-78 Freeport St., Boston, Mass.—R
STANDARD ELEC. PROD. CO., 317 Sibley St., St. Paul, Minn., "Staco"—R, antenna change-over
SPENCER THERMOSTAT CO., 34 Forest St., Attleboro, Mass.—CB, Thermal switches
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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, "Triplett"—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., 35 South St., Mt. Vernon, N. Y., "Ward Leonard"—P, 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
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Power (receiving) P
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AMERTRAN—American Transformer Co.
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ARLAVOX MFG. CO., 430 S. Green St., Chicago, Ill., "Arlab"—A, C, P
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BOND PRODUCTS CO., 13139 Hamilton Ave., Detroit, Mich.—SI
CHICAGO TRANSFORMER CORP., 3501 West Addison St., North Center Station, Chicago, Ill., "Chitran"—A, C, P
CHITRAN—Chicago Transformer Corp.
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COLLINS RADIO CO., 2920 First Ave., Cedar Rapids, Iowa—AT, A, AU, C, CT

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 DE VRY CORP., 1111 Armitage Ave., Chicago, Ill.—A, AU, P
 DINION COIL CO., P. O. Box D, Caledonia, N. Y.—A, AU, C, CW, CT, FA, P, VR, R
 JAMES W. DOYLE, INC., 311 N. Desplanes St., Chicago, Ill.—AT, A, AU, C, CW, CT, P, R
 ECCO HIGH FREQUENCY CORP., 120 W. 20th St., New York, N. Y.—CT
 ELECTRICAL PRODUCTS CO., 6535 Russell St., Detroit, Mich.—CW
 EMERSON RADIO & PHONOGRAPH CORP., 111 8th Ave., New York, N. Y.—C
 EX-STAT—Tilton Electric Corp.
 FERRANTI ELECTRIC INC., 30 Rockefeller Plaza, New York, N. Y.—AT, A, AU, C, CT, P, VR
 FREED TRANSFORMER CO., 72 Spring St., New York, N. Y.—AT, A, AU, C, CW, CT, P, VR
 GENERAL MFG. CO., 1255 S. Michigan Ave., Chicago, Ill.—CW
 GENERAL RADIO CO., 30 State St., Cambridge, Mass., "Q-R," "Variac"—A, AU
 GENERAL TRANSFORMER CORP., 1250 W. Van Buren St., Chicago, Ill., "Streamliner"—A, AU, C, CW, CT, P, VR
 G-R—General Radio Co.
 ROBERT M. HADLEY CO., 711 E. 61st St., Los Angeles, Calif., "Hadley"—AT, A, AU, C, CW, CT, P, VR
 THE HALLDORSON COMPANY, 4500 Ravenswood Ave., Chicago, Ill.—AT, A, AU, C, CW, P, VR
 ICA—Insuline Corp. of America
 INSULINE CORP. OF AMERICA, 30-30 Northern Blvd., Long Island City, N. Y., "ICA"—AT, CW
 INTERNATIONAL TRANSFORMER CO., 17 W. 20th St., New York, N. Y.—A, AU, C, CW, CT, P, VR
 JEFFERSON ELECTRIC CO., 900 25th Ave., Bellwood, Ill.—AT, A, AU, C, P
 KAHLE ENGINEERING CORP., 941 De Mott St., North Bergen, N. J.—AT, CT
 KENYON TRANSFORMER CO., INC., 840 Barry St., New York, N. Y., "Kenyon"—AT, A, AU, C, CT, PT, P
 KNIGHT—Allied Radio Corp.
 MAGNETIC WINDINGS CO., 16th & Butler Sts., Easton, Pa.—A, AU, C, CW, CT, P
 MARINE RADIO CORP., 117-19 168th St., Jamaica, N. Y., "Marine"—AT, A, AU, C, CT, P, VR

NATIONAL COMPANY, 61 Sherman St., Malden, Mass., "National"—A, C, CT
 NORWALK TRANSFORMER CORP., South Norwalk, Conn., "Norwalk"—AT, A, AU, C, CW, CT, P, VR
 OHMITE MFG. CO., 4835 Flournoy St., Chicago, Ill.—C, P
 OXFORD-TARTAK RADIO CORP., 3911 S. Michigan Blvd., Chicago, Ill.—A, C, CW
 PHILCO RADIO & TELEVISION CORP., Toga & C Sts., Philadelphia, Pa.—A, C, P
 RADEX CORP., 1733 Milwaukee Ave., Chicago, Ill.—AU, C, CW, CT
 RADIO RECEPTOR CO., INC., 251 W. 19th St., New York, N. Y.—AT, A, CW, CT, P
 RAYTHEON MFG. CO., 190 Willow St., Waltham, Mass.—AT, A, AU, CT, VR
 RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA"—A, AT, C, CT, P, VR
 SHURE BROS., 225 W. Huron St., Chicago, Ill.—MT
 SKAGGS TRANSFORMER CO., 5394 Broadway, Los Angeles, Calif.—AT, A, AU, C, CW, CT, P, VR
 MAXWELL SMITH CO., 1027 N. Highland Ave., Hollywood, Calif.—CT
 SOLA ELECTRIC CO., 2525 Clybourn Ave., Chicago, Ill.—VR, R
 SPARKS-WITHINGTON CO., E. Ganson Ave., Jackson, Mich., "Sparton"—FA
 SPARTON—Sparks-Withington Co.
 STANDARD ELECTRICAL PRODUCTS CO., 317 Sibley St., St. Paul, Minn., "Adjust-A-Volt"—VR
 STANCOR—Standard Transformer Corp.
 STANDARD TRANSFORMER CORP., 1500 N. Halsted St., Chicago, Ill., "Stancor"—AT, A, AU, C, CW, CT, FA, P
 STREAMLINER—General Transformer Corp.
 THORDARSON ELECTRIC MFG. CO., 500 W. Huron St., Chicago, Ill., "Thordarson"—AT, A, AU, C, CT, MT, P, VR
 TILTON ELECTRIC CORP., 133 W. 17th St., New York, N. Y., "Ex-Stat"—A, C, P
 TRIUMPH MFG. CO., 4017 W. Lake St., Chicago, Ill.—C
 UNITED TRANSFORMER CORP., 150 Varick St., New York, N. Y., "UTC"—AT, A, AU, C, CT, MT, PT, P, CW, VR
 UTC—United Transformer Corp.
 UTAH RADIO PRODUCTS CO., 820 Orleans St., Chicago, Ill.—AT, A, AU, C, P
 VARIAC—General Radio Co.

WARD LEONARD ELECTRIC CO., 35 South St., Mount Vernon, N. Y.—VR
 WELLER BROS., 516 Northampton St., Easton, Pa.—A, C, CW, P, R

TOOLS



- Alignment tools AT
- Chassis holders CH
- Drills, electric D
- Electroplater E
- Hacksaw blades HB
- Hand drills HD
- Hole cutters HC
- Knob puller KP
- Pliers P
- Punches PU
- Punching machines PM
- Ratchet wrenches RW
- Screwdrivers SD
- Socket wrenches SW
- Solder S
- Soldering irons (elec.) SI
- Soldering iron stands SS
- Soldering iron tips SE
- Solder pots ST
- Staple driver SH
- Flux, fluid SF
- Flux, paste SP
- Tube pullers TP
- Wire strippers WS

ACRO TOOL & DIE CO., 5324 N. Kedzie Ave., Chicago, Ill.—CH
 ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill.—AT, CH, D, E, HB, HD, HC, P, PU, SD, SW, S, SI, SS, SE, SP, WS, SH

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TOOLS—Cont.

- ALPHA METAL & ROLLING MILLS, INC., 363 Hud-
son Ave., Brooklyn, N. Y.—S
- AMERICAN PHENOLIC CORP., 1830 S. 54th Ave.,
Cicero, Ill., "Amphenol"—HC, PU
- AMERICAN RADIO HARDWARE CO., 476 Broadway,
New York, N. Y., "Arico"—AT, SD, SW, SI,
SE, TP
- AMPHENOL—American Phenolic Corp.
- ARHC—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., De-
troit, Mich.—SI
- BUD RADIO, INC., 1923 E. 53th St., Cleveland, Ohio,
"Bud"—AT, SD, SW
- COLE RADIO WORKS, 86 Westville Ave., Caldwell,
N. J., "Instansolder"—Electric arc soldering iron
- 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.—S, SW, SE, SP
- FORSBERG MFG. CO., 125 Seaview Ave., Bridgeport,
Conn., "Whale"—HB, SD
- GARDINER METAL CO., 2514 W. 48th Pl., Chicago,
Ill.—S
- G-C—General Cement Mfg. Co.
- GENERAL CEMENT MFG. CO., 919 Taylor Ave.,
Rockford, Ill., "G-C"—AT, CH, S, SE, SP, WS, KP
- GRAUBARD MFG. CO., 3434 Knox Pl., New York,
N. Y.—SP
- 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
- JIGGERS, INC., 215 W. Illinois St., Chicago, Ill.—S
(single connection units)
- K-D MFG. CO., Lancaster, Pa., "K-D Pliers"—P,
SD, RW
- KESTER SOLDER CO., 4201 Wrightwood Ave., Chi-
cago, 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"
—HC, ST
- J. W. MILLER CO., 5917 S. Main St., Los Angeles,
Calif.—AT
- MORRIS REGISTER CO., Council Bluffs, Iowa—HC,
PU
- NEW YORK SOLDER CO., 15 Crosby St., New York,
N. Y.—S
- PARK METALWARE CO., INC., Orchard Park, N. Y.,
"Xeelite"—AT, P, SD, SW
- PARKER-KALON CORP., 200 Varick St., New York,
N. Y.—PU
- PFANSTIEHL CHEMICAL CO., 105 Lakeview, Wau-
kegan, Ill.—SP
- PHILCO RADIO & TELEVISION CORP., Tioga & C
Sts., Philadelphia, Pa.—AT, SD, SW, TP
- PYRAMID PRODUCTS CO., 2224 S. State St., Chi-
cago, Ill.—WS
- RADIO ESSENTIALS, INC., 476 Broadway, New York,
N. Y.—AT, SD, SW, SI, SE, TP
- 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., Colum-
bus, Ohio, "Rubyfluid"—S, SP, SF
- RUBYFLUID—Ruby Chemical Co.
- WALTER L. SCHOTT CO., 5266 W. Pico Blvd., Los
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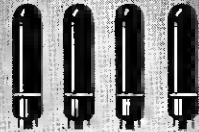
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SPEEDCRAFT—The Wire Stripper Co.
SPEEDWAY MFG. CO., 1824 S. 52nd St., Cicero, Ill.—D
STANLEY WORKS, New Britain Conn.—D, HD, PU, SI, SD, SE
STROMBERG-CARLSON TELEPHONE MFG. CO., 100 Carlson Rd., Rochester, N. Y.—D, HD, P, SD, SW, S, SI, ST, SP
TILTON ELECTRIC CORP., 138 W. 17th St., New York, N. Y.—S
VACO PRODS. CO., 1803 S. Michigan Ave., Chicago, Ill.—P, SD, SW
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
WELLER BROS., 516 Northampton St., Easton, Pa.—SI
WESTERN ELEC. CO., 300 Central Ave., Kearny, N. J.—D, HF, M, PM, PS, PH
WHALE—Forsberg Mfg. Co.
S. S. WHITE DENTAL MFG. CO., 10 E. 40th St., New York, N. Y.—Flexible shaft tools. Inspection mirrors.
THE WIRE STRIPPER CO., 1725 Eastham Ave., East Cleveland, Ohio, "Speedcraft"—WS
XCELITE—Park Metalware Co.

EIMAC—Eitel-McCullough, Inc.
EISLER ELECTRIC CORP., 534 39th St., Union City, N. J.—I, TT, TM
EITEL-McCULLOUGH, INC., 798 San Mateo Ave., San Bruno, Calif., "Elmac"—I, T
EMERSON RADIO & PHONO. CORP., 111 8th Ave., New York, N. Y.—B, 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

GOAT METAL STAMPINGS, INC., 314 Dean St., Brooklyn, N. Y.—TP
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
HYTRON CORP., 23 New Derby St., Salem, Mass., "Hytron"—B, R
INTERNATIONAL NICKEL CO., INC., 67 Wall St., New York, N. Y.—TP
ISOLANTITE, INC., 343 Cortlandt St., Belleville, N. J., "Isolantite"—TP
J. F. D. MFG. CO., 4111 Ft. Hamilton Pkwy., Brooklyn, N. Y., "JFD"—B
KAHLE ENGINEERING CORP., 941 De Mott St., North Bergen, N. J.—TM

TUBES & PARTS



Anodes, graphite	AG
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
Filament wire	F

ALLIED RADIO CORP., 838 W. Jackson Blvd., Chicago, Ill., "Knight"—B, R, VC, MT
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. 58th 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"—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
CETRON—Continental Electric Co.
SIGMUND COHN, 44 Gold St., New York, N. Y.—TP
COLLINS RADIO CO., 2920 First Ave., Cedar Rapids, Ia.—R, T
CONTINENTAL ELECTRIC CO., Geneva, Ill., "Cetron"—I, R
CUNNINGHAM—RCA Mfg. Co.
THE CROSLY CORP., 1329 Arlington St., Cincinnati, Ohio—R
WILBUR B. DRIVER CO., 150 Riverside Ave., Newark, N. J.—TP
DRIVER-HARRIS CO., Harrison, N. J.—P
ALLEN B. DuMONT LABS., INC., Passaic, N. J.—CR, TT

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 KING LABORATORIES, INC., 205 Oneida St., Syracuse, N. Y.—TP
 KNIGHT—Allied Radio Corp.
 METROLOY CO., INC., 57 E. Alpine St., Newark, N. J.—TP (lead-in wires)
 NATIONAL UNION RADIO CORP., 15 Washington St., Newark, N. J., "National Union"—CR, R, TT, VC
 PAUL & BEEKMAN, 4250 Wissahickon Ave., Philadelphia, Pa.—TP
 PHILCO RADIO & TELEVISION CORP., Tioga & C Sts., Philadelphia, Pa.—B, CR, EM, TT, MT
 RADIOTRON—RCA Mfg. Co.
 RAYTHEON PRODUCTION CORP., 55 Chapel St., Newton, Mass.—R, T
 RCA MFG. CO., Front & Cooper Sts., Camden, N. J., "RCA Radiotron," "RCA-Victor," "Cunningham"—B, CR, I, R, TT, T, VC (special purpose) MT
 SILLCOX RADIO & TELEVISION CORP., 60 Wall Tower, New York, N. Y.—B, R
 MARK SIMPSON DISTR. CO., 186 W. 4th St., New York, N. Y.—R
 SPARKS-WITHINGTON CO., E. Ganson Ave., Jackson, Mich., "Sparton"—R
 SPARTON—Sparks-Withington Co.
 SPEER CARBON CO., St. Marys, Pa.—AG
 SUPERIOR TUBE CO., Norristown, Pa.—TP
 SYLVANIA—Hygrade Sylvania Corp.
 TAYLOR TUBES, INC., 2341 Wabansia Ave., Chicago, Ill., "Taylor"—I, T
 TUNG-SOL LAMP WORKS INC., Radio Tube Div. 95th St., Newark, N. J., "Tung-Sol"—R, T, MT
 UNITED ELECTRONICS CO., 42 Spring St., Newark, N. J.—I, T
 VACUTRON, INC., 2819 12th St., S. Arlington, Va.—CR, I, R, TT, T, VC
 VICTOR—RCA Mfg. Co.
 WELTRONIC CORP., 3080 E. Outer Drive, Detroit, Mich.—I
 WESTERN ELEC. CO., 300 Central Ave., Kearny, N. J.—B, CR, I, T, VC
 WESTINGHOUSE ELECTRIC SUPPLY CO., 150 Varick St., New York, N. Y., "Westinghouse"—I
 ZENITH RADIO CORP., 6001 Dickens Ave., Chicago, Ill., "Zenith"—R

TRANSMITTERS & EQUIPMENT



- | | |
|-------------------------------------|-----|
| Amateur (xmitters) | AM |
| Amateur kits | AK |
| Antennas | A |
| Antenna tuners | AT |
| Aviation (xmitters) | AV |
| Broadcast (xmitters) | BC |
| Commercial (xmitters) | COM |
| Control consoles | CC |
| Crystals | CR |
| Facsimile | FAC |
| Frequency control equip. | FC |
| Frequency measurements | FM |
| Ground screens | OS |
| Insulators | I |
| Marine (xmitters) | M |
| Police (xmitters) | P |
| Speech amplifiers | SA |
| Towers | T |
| Transmission monitor equip. | TM |
| Vertical radiators | VR |

- AIRADIO, INC., 2 Selleck St., Stamford, Conn.—AV, M, P
 AIRPLANE & MARINE DIRECTION FINDER CORP., Clearfield, Pa.—AV, COM, FC, M, P, SA
 ALDEN PRODUCTS CO., 715 Center St., Brockton, Mass.—I

- ALLIED RADIO CORP., 833 W. Jackson Blvd., Chicago, Ill., "Knight"—AK, AM, A, CR, I
 AMERICAN COMMUNICATIONS CORP., 123 Liberty St., New York, N. Y.—AM, AV, BC, COM, CC, M, P, SA
 AMERICAN LAVA CORP., Cherokee Blvd. & Manufacturers Rd., Chattanooga, Tenn.—I
 AMERICAN PHENOLIC CORP., 1830 S. 54th Ave., Cicero, Ill., "Amphenol"—I
 AMPHENOL—American Phenolic Corp.
 AMPLEX ENGINEERING INC., New Castle, Ind.—A (rotary beam)
 VICTOR J. ANDREW, 6429 S. Laverne Ave., Chicago, Ill.—A, AT
 BASSETT RADIO MFG. CORP., Niles, Mich.—AM, A, AV, COM, M, P, SA
 BELDEN MFG. CO., 4647 W. Van Buren St., Chicago, Ill.—A
 BENDIX RADIO CORP., 920 E. Fort Ave., Baltimore, Md.—AV, COM, FC, FM, M, P, TM
 BIRNBACH RADIO CO., INC., 145 Hudson St., New York, N. Y.—A, I
 BLAW-KNOX CO., Blawnox, Allegheny Co., Pa.—VR
 BLILEY ELECTRIC CO., Union Station Bldg., Erie, Pa.—CR
 BROWNING LABORATORIES, INC., 750 Main St., Winchester, Mass.—AK, FM
 BUD RADIO, INC., 1923 E. 55th St., Cleveland, Ohio—AM, AK, I
 WM. W. L. BURNETT RADIO LABORATORY, 4814 Idaho St., San Diego, Calif.—FM
 CINEMA ENGINEERING CO., 1508 S. Verdugo Ave., Burbank, Calif., "Cinema"—CC, SA, TM
 CLARION—Transformer Corp. of America
 COLLINS RADIO CO., 2920 First Ave., Cedar Rapids, Ia.—AM, A, AV, BC, COM, CC, FC, FM, I, M, P, SA, T, TM, VR
 COMMUNICATIONS EQUIPMENT CORP., 134 W. Colorado St., Pasadena, Cal.—A, AV, COM, M, P, VR
 CORNING GLASS WORKS, Walnut St., Corning, N. Y., "Pyrex"—I
 COTO-COIL CO., INC., 71 Willard Ave., Providence, R. I.—AM, I
 DAVEN CO., 158 Summit St., Newark, N. J.—TM (gain)
 DOOLITTLE RADIO, INC., 7421 S. Loomis Blvd., Chicago, Ill.—A, AV, BC, COM, CC, FC, FM, P, SA, TM
 D-X RADIO PRODUCTS CO., 1575 Milwaukee Ave., Chicago, Ill.—AK
 ECKSTEIN RADIO AND TELEVISION CO., LeRoy, Minn.—AV, COM, P, SA
 ELECTRICAL INDUSTRIES MFG. CO., Red Bank, N. J.—COM, M
 ELECTRONIC COMMUNICATIONS CO., 306 N.W. Broadway, Portland, Ore.—M
 FADA RADIO & ELECTRIC CO., 30-20 Thomson Ave., L. I. City, N. Y.—AV, COM, P, SA
 FARNSWORTH TELEVISION & RADIO CORP., 2700 Pentac St., Fort Wayne, Ind.—AV, BC, COM, CC, FC, TM
 FEDERAL TELEGRAPH CO., 200 Mt. Pleasant Ave., Newark, N. J., "Federal"—BC, COM
 FERRANTI ELECTRIC INC., 30 Rockefeller Plaza, New York, N. Y.—AV, BC, COM, M, P, SA
 M. M. FLERON & SON, INC., 113 N. Broad St., Trenton, N. J., "Fleron"—A, I
 GALVIN MFG. CORP., 4545 Augusta Blvd., Chicago, Ill., "Motorola"—AM, A, AV, BC, COM, CC, M, P
 GENERAL ELECTRIC CO., Schenectady, N. Y.—BC, P, frequency mod., television
 THOMAS B. GIBBS & CO., 900 W. Lake St., Chicago, Ill., "Gibbs"—SA
 ROBERT M. HADLEY CO., 711 E. 61st St., Los Angeles, Calif., "Hadley"—AK
 HALLICRAFTERS, INC., 2611 S. Indiana Ave., Chicago, Ill., "Skyrider"—AM
 HAMMARLUND MFG. CO., INC., 424 W. 33rd St., New York, N. Y.—AM, AK, COM
 D. H. HARRELL, 1527 E. 74th Place, Chicago, Ill.—A, VR
 HARVEY RADIO LABS, INC., 447 Concord St., Cambridge, Mass., "Harvey"—AM, AV, COM, M, P, SA
 HARVEY-WELLS COMMUNICATIONS, INC., Southbridge, Mass.—AM, AV, COM, M, P
 H-B INSTRUMENT CO., INC., 2518 N. Broad St., Philadelphia, Pa.—FC
 HEINTZ & KAUFMAN, LTD., South San Francisco, Calif.—COM
 HOWARD RADIO CO., 1731 Belmont Ave., Chicago, Ill.—FM
 ICA—Insuline Corp. of America
 IDECO—International-Lacey Corp.
 ILLINOIS SEATING CORP., 2138 N. Racine Ave., Chicago, Ill.—A, VR
 INSULINE CORP. OF AMERICA, 90-80 Northern Blvd., Long Island City, N. Y., "TCA"—AM, AK, A, I

INTERNATIONAL-STACEY CORP., International Derrick & Equip. Div., 910 Michigan Ave., Columbus, Ohio, "Ideco"—A, GS, T, VR

INTERNATIONAL TEL. & RADIO MFG. CORP., 1000 Passaic Ave., Newark, N. J.—COM, M

ISOLANTITE, INC., 343 Cortlandt St., Belleville, N. J., "Isolantite"—I

CHARLES F. JACOBS, 270 Lafayette St., New York, N. Y.—Antenna and feeder spreader

RAY JEFFERSON, INC., 182 Milburn Ave., Baldwin, N. Y.—AV, M, P

JEFFERSON-TRAVIS RADIO MFG. CORP., 380 2nd Ave., New York, N. Y.—M, P

E. F. JOHNSON, Waseca, Minn., "Johnson Q"—A

KAAR ENGINEERING CO., 619 Emerson St., Palo Alto, Calif., "Kaar"—AM, M, P

KENYON TRANSFORMER CO., INC., 840 Barry St., New York, N. Y.—AK

KNIGHT—Allied Radio Corp.

LAFAYETTE RADIO CORP., 100 6th Ave., New York, N. Y., "Trutest"—AM

LAPP INSULATOR CO., INC., Gilbert St., Leroy, N. Y.—I

LEAR AVIA., INC., Piqua, Ohio—AV

JOHN E. LINGO & SON, INC., Camden, N. J.—A, T, VR

LOCKE INSULATOR CORP., S. Charles & Cromwell Sts., Baltimore, Md.—I

MARINE RADIO CORP., 117-19 168th St., Jamaica, N. Y., "Marine"—AM, AV, BC, COM, M, SA

MEISSNER MFG. CO., Mt. Carmel, Ill., "Meissner"—AM, AT, FC, I

JAMES MILLEN MFG. CO., INC., 150 Exchange St., Malden, Mass.—AM, AK, FC, I

MIMS RADIO CO., P. O. Box 504, Texarkana, Ark., "Signal Squirrel"—AM, AK, A, I, T

MONTGOMERY WARD & CO., 619 W. Chicago Ave., Chicago, Ill.—AM, AK, A, COM, I, SA

MOTOROLA—Galvin Mfg. Corp.

MUSIC MASTER MFG. CO., 508 S. Dearborn St., Chicago, Ill.—AM, AK, A, FC, P, SA

N-C—National Company

NATIONAL CO., 61 Sherman St., Malden, Mass.—AM, I, SA

NORWALK TRANSFORMER CORP., South Norwalk, Conn., "Norwalk"—AM, AV, BC, COM, M, P, SA, TM

PIERSON-DeLANE, INC., 2345 W. Washington Blvd., Los Angeles, Calif.—BC, FC, FM, P, TM

PREMAX PRODUCTS DIV., Chisholm-Ryder Co., Inc., Niagara Falls, N. Y., "Premax"—A, I, VR

PREMIER CRYSTAL LABS., INC., 55 Park Row, New York, N. Y.—FC, FM, TM

PYREX—Corning Glass Works

RADIART CORP., W. 26th St. and Barberton Ave., Cleveland, Ohio—A, I, VR

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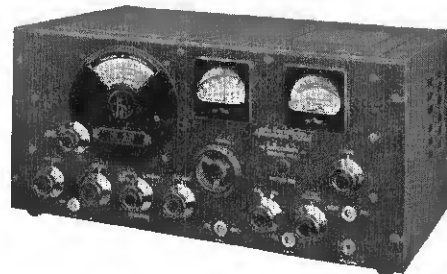
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MUELLER, MARK G.,
1644 Blake St.

Greeley
MOSS, GORDON G.,*
P. O. Box 428
MOSS, LEROY G.,*
1530 13th Ave.

CONNECTICUT
Andover
SEYD, ERNEST K.,*

Hartford
HATTON, A. T.,
410 Asylum St.

WASHINGTON, D. C.
COOKE, D. I.,
319 Newport Ave.
MacDONALD, SAMUEL K.,*
217 Riggs Bank Bldg.
SHAPP, MILTON,*
7711 17th St., N.W.
WINDMULLER, LEWIS,
National Press Bldg.

FLORIDA
Lutz
WALLACE, STANLEY K.,*

Tampa
FASSETT, FRANK C.,
P. O. Box 9298.

GEORGIA
Atlanta
BURWELL, HENRY W.,*
105 Forrest Ave., N. E.
HOLLINGSWORTH & STILL,*
407 Norris Bldg.
HOPPER, WILLIAM E.,*
357 Marietta St., N. W.
MILLAR, JAMES,*
P. O. Box 116
MURPHY & GOTA,*
291 Peachtree St., N. E.
SMITH, MAITLAND K.,*
2745 Lenox Rd., N. E.
TAYLOR CO., MORRIS F.,*
440 W. Peachtree St., N. W.
TURNER, W. F.,
440 W. Peachtree St.

ILLINOIS
Chicago
ARKIN CO., I. L.,
1525 Newberry St.
BAUMAN & BLUZAT,*
1706 Fullerton Ave.
BERGGREN, J. W.,*
2007 S. Michigan Ave.
BOMKE SALES CO., W. F. E.,
605 Washington Blvd.
BOYD & CO., W. W.,
9 South Clinton St.
BRUNING, ALBERT H.,
208 N. Wells St.
CAINE SALES COMPANY,
605 W. Washington St.
CHAMBERS CO., L. A.,
565 Washington St.
CHURCH, JOHN F.,
4753 Broadway
COLE, G. McL.,
43 E. Ohio St.
CUSHING CO., L. G.,
540 N. Michigan Ave.
DARMSTADER, S. B.,
520 N. Michigan Ave.
DIETHERT, RUSS,*
7910 Drexel Ave.
ELLINGER SALES CO.,
9 S. Clinton St.
ESCHNER, LE ROY,
9 S. Clinton St.
GARNER CO., FRED E.,*
43 E. Ohio St.
GOODE, J. E.,*
82 W. Washington St.
GRANAT, GARY,*
323 S. Franklin St.
GREENE & MALLEGG,
400 W. Madison St.
HEFTER & CO., E. G.,
14 W. Elm St.
HORLACHER, W. A.,
1717 North Shore Ave.
INSTRUMENT SALES CO.,
325 W. Huron St.
KAHAN, I. J.,
333 N. Michigan Ave.
KNODELL, AL,
5746 N. Artesian Ave.
KONGABEL, GEORGE F.,
1260 Clybourn Ave.
LUND, R. O.,
1720 North Damen Ave.
MACK, L. P.,
1603 S. Michigan Ave.
McARTHUR, L. C.,
100 S. Jefferson St.

Indianapolis
Fort Wayne
FISCH, BUD,*
419 W. Sherwood Terrace.
MacPHERSON, B. L.,*
1919 Wells St.
SOUTHERN SALES CO.,*
4605 Tacoma Blvd.
VALENTINE, FORREST C.,*
1212 Old-First Bank Bldg.

IOWA
Burlington
MORFORD, CHARLES H.,
821 N. 9th St.

Council Bluffs
KELLER, TED,*
208 Morningside Ave.

Des Moines
BIGHAM, N. J.,
Y.M.C.A. Bldg.
LEWIS SALES CO., E.,
1080 45th St.
NEWELL, R. J.,
2946 Fifth Ave.

LOUISIANA
New Orleans
PEIRCE, GEO. H.,*
618 Girod St.
SOUTHERN SELLERS,
918 Union St.

MARYLAND
Silver Springs
TAYLOR CO., MORRIS F.,*
8416 Georgia Ave.

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.
McCARTHY, J. U.,*
1725 Hillcrest Ave.

MISSOURI
Kansas City
BORNSTEIN, LEON M.,
333 Manufacturers Exchange Bldg.
FARRIS, RICHARD W.,*
127 E. 81st St.
GLASSMAN, B. W.,
1800 Fidelity Bldg.
KYSELA, F. J.,
614 Interstate Bldg.
LUNDGREN, E. B.,*
606 Manufacturers Exchange Bldg.

McGRADE, E. W.,
206 E. 11th St.
MUNDY & CO., R. J.,
3940 E. 68th St.
ROES, HERBERT A.,*
2017 Grand Ave.
SOMERS, F. C.,*
2015 Grand Ave.
WELLMAN, W. N.,
406 Reliance Bldg.

St. Louis
BENEKE CO., JULES W.,
598-595 Arcade Bldg.
BORGHOFF, WM.,
4018 Greer Ave.
BULLIVANT, F. J.,
1918 Washington Ave.
GOLDSTEIN, ALVIN M.,
310 Ninth St.
JONES, J. W.,
1427 N. Hanley Road.
McGARY, WILLIAM T.,
3800 N. Grand Ave.
PICKSEN, GEORGE W.,
528 N. Vandeventer Ave.
WOOD & ANDERSON CO.,
915 Olive St.

University City
JAQUES, L. E.,
Box 19.

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.

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

Livingston
CERF, ARTHUR E.,*
224 Hillside Ave.

Newark
SCHENCK, LeROY,*
15 Washington St.

Teaneck
SCHWARTZ, ADOLPH,*
262 Grasson Place

Trenton
HARKER, EARL T.,*
326 W. Moreland Dr.

NEW YORK
Buffalo
COSTELLO, J. V.,
250 Delaware Ave.
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.,*
883 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.,
78 Monroe St.

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

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.,*
395 Broadway
BLOCK & CO., WESLEY,
15 E. 26th St.
BREUER & SCHECHTER,*
1674 Broadway
BURLINGAME, BRUCE O.,
69 Murray St.
CAMBER, MATTHEW A.,*
30 Dongan Place
CARDUNER, WILLIAM,*
296 Broadway
COOPER-DIBLASI,*
259 West 14th St.
DANZIGER, HAROLD I.,
5th Ave. Hotel
DESPRES, MAURICE S.,
1780 Broadway
EGERT, S. S.,*
27 Park Pl.

FIXEL, PHILIP R.,
420 Lexington Ave.
FORSHAY, JOHN M.,*
27 Park Place
FREED, ARTHUR
230 Fifth Ave.
FREED, LEO,*
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FRIEDMAN, ADOLPH,*
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FURMAN, NAT,*
395 Broadway
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72 Park Place
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6 E. 45th St.
SMITH-BENNY SALES CO.,
11 W. 42nd St.
SMITH, HOWARD P.,*
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

FIXEL, PHILIP R.,
420 Lexington Ave.
FORSHAY, JOHN M.,*
27 Park Place
FREED, ARTHUR
230 Fifth Ave.
FREED, LEO,*
1150 Broadway
FRIEDMAN, ADOLPH,*
220 E. 23rd St.
FURMAN, NAT,*
395 Broadway
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.,
Empire State Bldg.
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.
ROYE SALES AGENCY,*
11 Warren St.
SAFTLER, PERRY,*
53 Park Place
SCHARF, JACK,*
152 W. 42nd St.
SCHARP, WESLEY, W. S.,*
67 W. 44th St.
SCHMITT SALES CO., F. EDWIN,*
136 Liberty St.
SIMBERKOFF, J. A.,*
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KAELBER

They're Good Shots



Radio men go hunting to the wilds of the Bitter Root Range, in Idaho, and do an A1 job on the bear and elk there. At right is Ross D. Siragusa, Admiral president; the other hunter is Ken Turner, Admiral chief engineer.

Stancor Jobbers at Kansas City

Executives and sales staffs of the Burstein-Applebee Co., the Manhattan Corporation, Radiolab, and M. Brother-

son—Standard Transformer Corporation jobbers in the Kansas City area—held a joint meeting with Stancor executives at the Pickwick Hotel, Kansas City, January 19, to review problems of manufacture and distribution.

Jerome J. Kahn, president of Standard Transformer, explained the many priority provisions affecting conditions today. He urged the cooperation of all jobbers and salesmen in meeting the needs of the Government to bring the war quickly to a victorious conclusion.

C. L. Pugh, sales manager of the jobber division of Stancor, outlined the sales features of Stancor products which are being supplied to the trade and indicated how jobbers can cooperate specifically in distribution of economies and in meeting the needs of dealers.

Representing the Burstein-Applebee Co., at the meeting were, J. A. Burstein, M. W. Applebee, Ray Friesz, Rollo Fouts, Don E. Hatter, Harris A. Fromhold, C. W. Dreese, Danford Cater, F. W. McCarty, Arnold Hamilton, James Bunt, and Milton Saunders.

Representing the Manhattan Corporation, included C. W. Goebel, Mary Ann Bingham, J. Harold Higgins and C. J. Ritsch.

Among the representatives of Radiolab at the meeting were, Robert M. Smith, H. Kenneth Payne, W. B. Kissel, Ed Haase, A. O. Gray, Quinn Cunningham, Stanton F. Briggs, Ruby

Boileau, Evelyn Fuller, Doris Knapp, Merry C. Nelson and Nadine Raberding.

Sayre Ramsdell Heads New Company



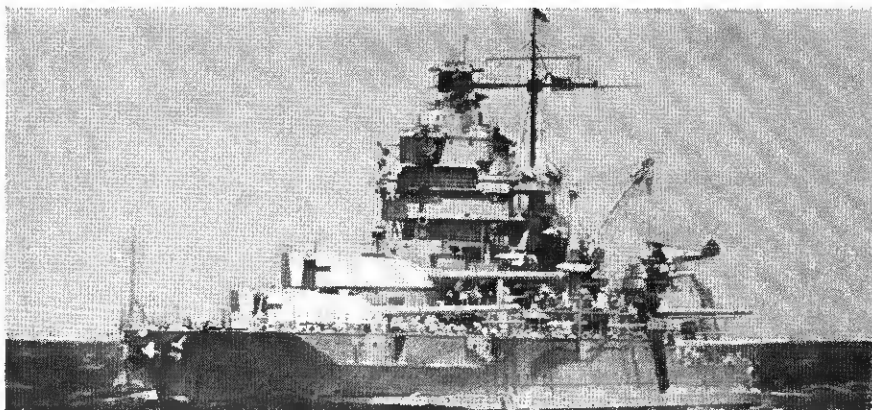
Sayre M. Ramsdell

A new company, Sayre M. Ramsdell Associates, Inc., has been formed at 3701 N. Broad St., Philadelphia, with the well known Philco executive, Mr. Ramsdell, as president. The new firm will create and place advertising for a number of industrial companies.

Mr. Ramsdell, who has been with Philco since 1919 and has headed its advertising and sales promotion since 1922, will continue as a member of Philco Corp.'s board of directors. Frank A. Hutchins of Rochester, N. Y., will be vice-president of the new agency, and Sidney J. Stall will be secretary and production head.

"...GIVE ME LIBERTY OR GIVE ME DEATH"

— PATRICK HENRY



AMERICANS are again repeating, "Is life so dear, or peace so sweet as to be purchased at the price of chains and slavery?" Today, the roaring activity of our defense industries is America's triumphant hymn of determination . . . and we are proud to add our part . . . for LIBERTY.

KENYON TRANSFORMER CO., Inc.

840 BARRY STREET

NEW YORK, N. Y.

Stromberg Ready with Service Program

A new radio service program for war-time will shortly be announced by Stromberg-Carlson Mfg. Co., according to Stanley Manson, the SC sales promotion and service manager. The plan is based on a recent survey of today's needs of dealers and distributors.

The announcement reveals that "an integrated program of factual and selling material will be included in the program."

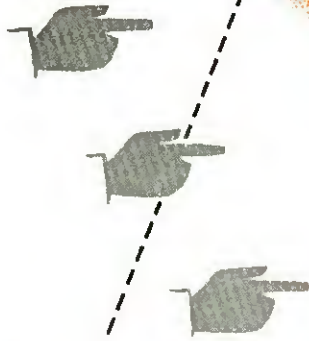
Red Cross to Benefit from Scrap Record Drive

A campaign to collect 1,000,000 scrap records in the New York City area has been started by Davega City Radio. RCA Victor will buy the records and give all proceeds to the Red Cross War Fund, via a plan worked out by H. M. Stein, Red Cross radio chairman.

HERE'S YOUR COMPLETE 1942

Motorola

AUTO RADIO DEPARTMENT



★ ★ ★
**200 CONTROL
HEAD DESIGNS**
make it easy to
FIT and MATCH
ALL CARS
Old or New

★ ★ ★
**SPECIFICALLY
DESIGNED**
for Instrument
Panel Mounting
in 1940-41-42
Cars

NEW PROFITS FOR YOU!

There was never a time in the history of radio when the desire to own a CAR RADIO was as strong as it is today. With WAR NEWS POPPING every minute—every hour of the day—sell the idea that if your customer has no Motorola Auto Radio THERE'S SOMETHING VITAL MISSING FROM HIS CAR! You can FIT and MATCH the older models as well as provide custom-built models for the newer ones. Don't let a single prospect slip through your fingers. TELL the MOTOROLA story and you'll SELL quickly and with worthwhile profit to yourself.

GET BUSY! PUT IN A COMPLETE DISPLAY!

*See Your Motorola
Distributor or Write*

GALVIN MFG. CORPORATION
4545 Augusta Blvd. ★ Chicago, Ill.



The Navy says:

"WELL DONE!"

... and Radio Research Contributed

The Navy "E" pennant, symbol of achievement in war production, is the highest praise the United States Navy can bestow on an industry.

▶ Recently awarded to RCA Manufacturing Company, this emblem of excellence is a tribute to the loyalty and cooperation of the men and women who are working night and day to "Beat the Promise" to the Government on delivery dates of vital war equipment.

▶ It is a tribute, also, to RCA radio research which has helped in large measure to make

America's naval and military radio equipment the finest in the world.

▶ When the war is won, many of these war-time applications will serve industry, and the public, by helping to create new services and products. Today, at Princeton, N. J., the new RCA Laboratories building is taking shape—destined to be the world's foremost center of radio research. Surrounded by every modern tool of research, workers in the new Laboratories will continue to seek new knowledge of radio and electronics . . . new discoveries for America at war and America at peace.

RCA LABORATORIES

A Service of the Radio Corporation of America

Other RCA Services:

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