Elevision 8 KIDDIES RECORDS SHELF PROOKS P CTOR Pinnechin miderland

MAY 1944 * Radio Dealers Hold Customers. Electric Appliance Selling. Radio & Appliance Maintenance. Sound. Jobber News. Record Merchandising.



Precision Production Means Careful Inspection, Too

Common Errors in Attempted Vibrator Repairs

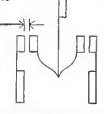
If you are thinking about tearing that vibrator out of the can and "working" on it, beware! Remember that individual parts of the vibrator mechanism are selected to operate with each other-adjusted to give maximum voltage output for the longest life. When contacts wear to the point of failure, attempts to bend or rework springs and arms can never return the vibrator to efficient operation.

CRITICAL

SPACING

1

If too close, arcing and bad wave result in noise and short life. If too wide, low output voltage and poor performance can be expected.







REDUCE CONTACT AREA



ATTEMPTED REPAIRS BY BENDING OPERATING HEAT CAUSES SPRING TO RETURN TO ORIGINAL POSITION

Mallory Helps for the Radio Service Engineer

MYE TECHNICAL MANUAL 408 pages of complete data on capacitors, noise suppression, re-ceiving tubes, lond speakers, vibrators, phono-radios, auto-matic tuning and other valuable information. Available from your Mallory distributor ... Price, \$2.00.

4TH EDITION RADIO SERV-RCE ENCYCLOPEDIA . . . Complete information on repairing any make or mode lof recelver. Circuit references, origina 1 part numbers and recommended replacements. Available from your Wallory distributor . . . Price, 95 cents.

This business of building a vibrator goes far beyond just "putting a few parts together." It involves close control of material in the fabrication of every part followed by systematic inspection. Assembly operations are performed by skilled operators. But the assembly is only the beginning.

After the delicate mechanism is ready for the can a highly skilled technician carefully adjusts the contacts. Another inspector then checks the exact spacing on the "Shadowgraph," a Mallorydesigned instrument that enlarges the image of the tiny contact hundreds of times for the most minute adjustment. After the proper adjustment the vibrators are further checked for actual performance. Other trained technicians carefully adjust each mechanism on an Oscilloscope to insure correct, exact wave pattern. It is only after these complete and exhaustive tests that the vibrators are sealed in the cans and permitted to bear the Mallory trade-mark.

When you buy a Mallory vibrator you can be assured of its quality and performance, backed by the most rigid selection of materials, production methods, precision adjustment and inspection in the industry.



P. R. MALLORY & CO., Inc., INDIANAPOLIS 6, INDIANA





THE PLANS

Sure, despite our wartime production of 3½ times our biggest peacetime year, we've made post-war plans. We've analyzed markets—we've made surveys—we've developed new ideas and new designs. We've mapped our advertising and distribution programs on a nation-wide basis. And, above all, we're going to make Admiral a profit line. Being realists, we know that our success rests upon your success. Yes, we have done a lot of post-war planning but . . .

THE PLUS

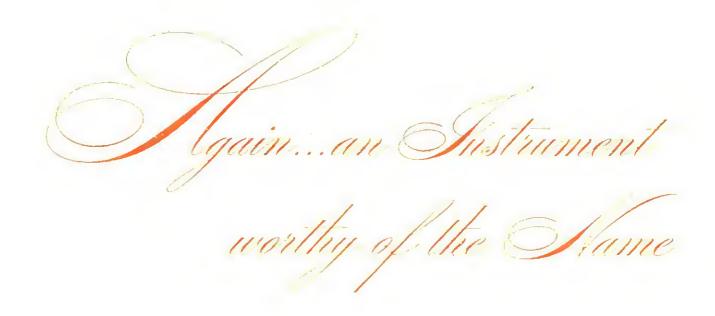
... we have done more than plan. Admiral Corporation has completed a purchase agreement for the manufacturing and sales rights of a leading line of major household appliances—refrigerators, home freezer lockers and electric ranges. The post-war period will find Admiral ready to offer feature-plus radios and appliances to distributors and dealers who are alert to the possibilities of quality merchandise at profit-producing prices. Now's the time—get aboard with

Admiral Corporation

Tune in CBS, 2:30 P.M., EWT, Sundays

Peacetime Makers of Admiral Radio - America's Smart Set
3800 CORTLAND STREET - CHICAGO 47, ILLINOIS

World's Largest Manufacturer of Radio-Phonographs With Automatic Record Changers



Introduced in 1937, PHILHARMONIC was promptly judged the outstanding instrument in America by all consumers' organizations. Each succeeding year it continued to head every impartial performance rating. The uncompromising standards that gave PHILHARMONIC pre-war quality leadership will assure for our new instruments the best—and nothing short of the best—in FM, AM and TELEVISION.

■ Quality dealers will be visited shortly by a PHILHARMONIC representative to discuss our post-war plans and exclusive franchise distribution. Inquiries are solicited from those who would like preliminary information.

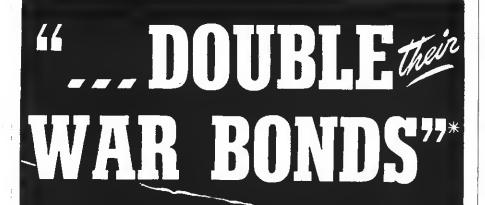
PHILHARMONIC RADIO CORPORATION, 216 William St., N.Y.



Philharmonic

RADIO AND PHONOGRAPH





back there could see where their money is going and doing Bonds, and I'm not kidding one bit!

ASSUREDLY if only every citizen could take a jaunt along a battle front, and SEE what our taxes and bonds are purchasing toward Victory — they would double their War Bonds, cheerfully! Yes, CORWICO wires are there, too

*William Ogert of Cornish Wire Co. had a letter from his son, now serving overseas.

Part of which is quoted here.

_cornish

WIRE COMPANY, INC.



15 Park Row, New York City, New York

"Made by Engineers for Engineers"



MAY, 1944

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ORESTES H. CALDWELL

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Don't put 'em on the shelf-let's fill our back orders!



"Hytron has allocated available MR tubes to us. We, too, are going to comply strictly with WPB rulings by allotting these tubes immediately to our dealers."

True, the WPB recently has permitted Hytron to ship its authorized distributors appreciable quantities of MR tubes. On the other hand, the war is far from over. Tubes are still scarce, and should be given to those who need them most. Hytron is confident that you are being as scrupulously fair in distributing your MR tubes, as it is in apportioning them to you.

You can bet that Hytron is looking forward to the day when it can solicit aggressively the business of both old and new friends.

HYTRON HYLIGHTS

Current reports forecast less MR tubes in the second quarter of 1944.

Remember also that WPB has ruled that MR receiving tubes shall be allocated upon a pro rata basis of 1941 purchases — that this prohibits sales to new distributors.

You can readily understand our regret at not being able to supply new customers - and why we ask that our authorized distributors await information from Hytron regarding allocations.



OLDEST EXCLUSIVE MANUFACTURER OF RADIO RECEIVING TUBES

CORPORATIO SALEM AND NEWBURYPORT, BUY ANOTHER WAR BOND

OUR POSITION ON TELEVISION AND RADIO AS IT AFFECTS YOUR FUTURE...AND OURS

hen this war is won, Stromberg-Carlson believes that television will face a future of great promise. As evidence of our conviction, we have applied for a license to operate our own television broadcasting station.

ur confidence in the eventual success of television is founded on long experience. We produced television receiving sets commercially as early as 1938. However, we feel it important for both you and us to consider the future of television and radio from the point of view of business common sense.

HERE'S OUR THINKING ON TELEVISION:

- Television has a great future.
- There is tremendous public interest in television. It will be several years after the war before television broadcasting stations can be built to provide full national coverage.
- 3 As television broadcasting facilities develop territory by territory—good business opportunities will be presented to you—and to us.

When television broadcasting develops so you can make money out of it, we will have a full line of television receiving sets which will bring to this rich field the 50-year-old fact: "There is nothing finer than a Stromberg-Carlson!"

AND HERE'S OUR THINKING ON RADIO:

- There always has been—always will be—a profitable demand for a good radio and radio phonograph—a fine musical instrument.
- 2 For the immediate post-war years, the expanding market for FM receivers and phonograph combinations will provide your greatest profit opportunity.
- We believe that such instruments must have superlative tone quality and an appearance in keeping with the best in furniture design.

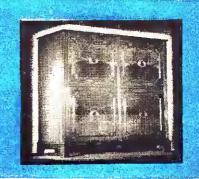
AND HERE'S OUR POST-WAR PLEDGE TO GET YOU BACK INTO THE RADIO BUSINESS:

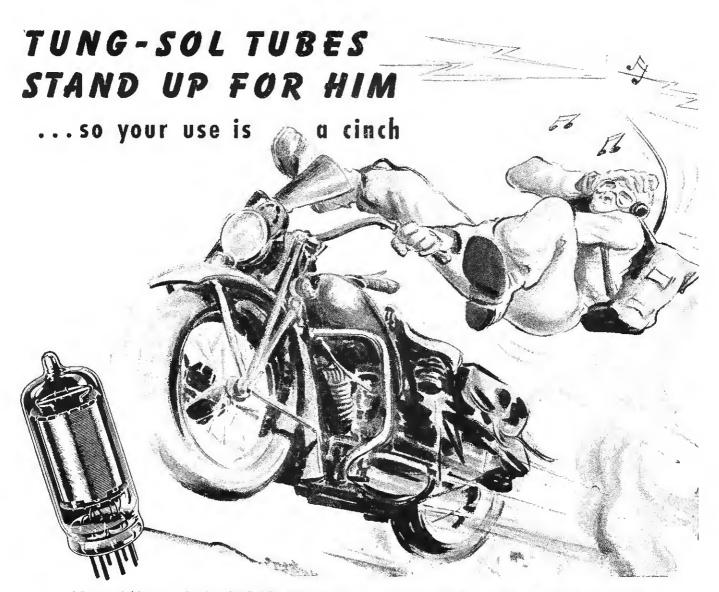
- We will have—soon after Victory—a fine line of Stromberg-Carlson FM and AM radios, phonograph combinations and television receivers in an attractive range of prices.
- We will have a policy of distribution planned to give every Authorized Dealer a good profit opportunity on the Stromberg-Carlson line.
- 3 And the Stromberg-Carlson name will be even more widely and more favorably known than ever before.

STROMBERG-CARLSON

ROCHESTER 3, NEW YORK

RADIOS, TELEVISION, TELEPHONES, AND SOUND EQUIPMENT





The enviable record of TUNG-SOL Electronic Tubes in military equipment shows the ability of these tubes to withstand abuse far beyond ordinary civilian requirements. This sturdiness is the result of many construction features developed by TUNG-SOL engineers in their never ending cycle of designing and testing.

A typical TUNG-SOL feature is the method of anchoring the filament tension spring. It

practically eliminates the possibility of spring failure, one of the causes of damage to the filament. It is the sum of these features that enables TUNG-SOL Electronic Tubes to remain efficient longer under adverse conditions.

All these war proven tubes will be available to service the new and better Electronic devices of the future. Today Tung-Sol Jobbers and Dealers are assured that they will be supplied with more tubes as fast as government limitations permit.

ANCHORING THE FILAMENT TENSION SPRING (GREATLY ENLARGED)





The common practice was to spotsweld the end of the spring to the top of an anchor post. The weld always causes crystallization of the spring at the point where flexibility was needed. The TUNG-SQL design locates the weld back from the fulcrum point so that the crystallization is at a point where it cannot impair the spring.

TUNG-SOL vibration-tested ELECTRONIC TUBES



TUNG-SOL LAMP WORKS INC., NEWARK 4, NEW JERSEY



NEW LETTER CONTEST for SERVICEMEN!

ELEVEN 1st PRIZE WINNERS IN 5 MONTHS IN CONTEST #1!

Yes sir, guys, the hundreds of letters received were so swell that double first prize winners had to be awarded each of the first four months and there were triple first prize winners the fifth and last month . . .

SO-HERE WE GO AGAIN!

Get in on this NEW letter contest—write and tell us your first hand experiences with all types of Radio Communications equipment built by Hallicrofters including the famous SCR-299!

RULES FOR THE CONTEST

Hallicrafters will give \$100.00 for the best letter received during each of the five months of April, May, June, July and August. (Deadline: Received by midnight, the last day of each month.) . . . For every serious letter received Hallicrafters will send \$1.00 so even if you do not win a big prize your time will not be in vain. . . . Your letter will become the property of Hallicrafters and they will have the right to reproduce it in a Hallicrafters advertisement. Write as many letters as you wish. V-mail letters will do. . . . Military regulations prohibit the publication of winners' names and photos at present . . . monthly winners will be notified immediately upon judging.



hallicrafters RADIO



DURABILITY

The relationship between pachyderms and JENSEN speakers is, of course, obscure. It will take another hundred thirty-five years or so to determine positively whether JENSEN speakers actually have the ruggedness and the longevity of an elephant, but we do know of many JENSEN speakers in use fifteen years and more that still are operating more than adequately. JENSEN engineers have never designed a speaker that didn't have durability as one of its major qualifications.

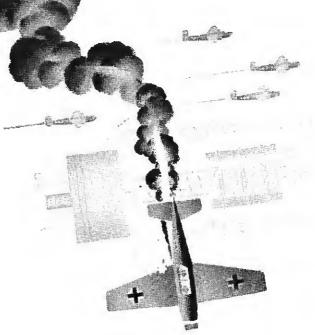


RADIO MANUFACTURING COMPANY 6601 50, LARAMIE AVE., CHICAGO 38, ILL.

Manufacturers and Designers of Fine Acoustic Equipment



Through the radio miracles of air warfare, Philco is helping to speed the advance of electronic science, storing up new knowledge for the Greater Philco of Tomorrow.





TOMORROW

Television is coming, finer Philco radios, phonographs, refrigerators and air conditioners...more than ever, the most valuable dealer franchise in appliance fields.







TEAM BEHIND THE BOMBER TEAM

• Just as seven men fight as a team in a bomber, seven girls work as a team at a Sylvania Radio Tube assembly bench.

Thousands of fine precision radio tube parts are assembled into a finished product that must pass rigorous tests for ruggedness and sensitivity.

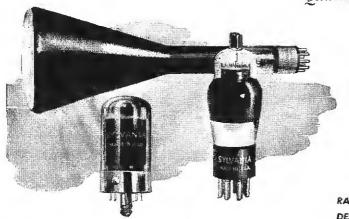
This is work that calls for the feminine touch, patience and sense of detail. Each girl "plays the position" on the team best suited to her ability.

Sylvania assembly teams compete with each other. But the champion in accuracy always takes precedence over the champion in speed.

This teamwork is just another example of how Sylvania maintains radio tube production at the highest standard of quality anywhere known.

You can sell Sylvania Radio Tubes with complete confidence.

Quality That Serves the War Shall Serve the Peace





SYLVANIA

ELECTRIC PRODUCTS INC.

RADIO TUBES, CATHODE RAY TUBES, ELECTRONIC DEVICES, INCAN-DESCENT LAMPS, FLUORESCENT LAMPS, FIXTURES AND ACCESSORIES RADIO & Television RETAILING • May, 1944

Auto These Hands...

These are the hands of a boy — any boy who grew up in America. These are the strong, determined hands of Freedom. These are the hands that are teaching Democracy's truths to the enemy. All of the communications instruments that Fada makes, superior and perfected though they be, are valueless until a human hand is at the controls. Only then do they become mighty weapons, helping us to hit harder, more often and with deadly accuracy. When competent hands and superior equipment have won the Victory, Fada will adapt these war-inspired improvements to the perfection of portable radios, small table models, frequency modulation and television receivers of unique beauty, durability and tonal reproduction.

PLACE YOUR FAITH IN THE

FADA Radio

OF THE FUTURE

Famous Since Broadcasting Began!

FADA RADIO AND ELECTRIC COMPANY, INC., LONG ISLAND CITY, N. Y.

Outposts of Communications . . .



Sentinel

The vital role that radio is playing in modern warfare is the result of years of intensive research and experiment. Sentinel has played a prominent part in this development—is continuing its part today by creating and producing equipment for battle communications.

The modern equipment we hear so much about today . . . the instruments developed during the war . . . will tomorrow be commonplace in the raised standards of American peacetime life. In the adaption to civilian life of these wartime developments with which Sentinel is so familiar, there is a promise of volume sales for Sentinel dealers.

SENTINEL RADIO CORPORATION
2020 RIDGE AVENUE, EVANSTON, ILL.

Quality Radio Since 1920



• In the field of electronics, nothing stays new for very long, Since Pearl Harbor there has been a tremendous increase in Raytheon technical achievements and production techniques, keeping pace with the vast requirements of the military. Experience gained in wartime assures the leadership of Raytheon in the new postwar era of electronics.

Raytheon is proud of the trust the Armed Forces have placed in its engineering and large-scale manufacturing abilities. This wartime experience doubly protects manufacturers of post-war radios and industrial electronic equipment, Let's win the war first! Then look to Raytheon for the best engineered and precision-made electronic tubes for all applications.

Raytheon Production Corporation

Newton, Massachusetts; Los Angeles. New York, Chicago, Atlanta.



Devoted to Research and the Manufacture of Tubes for the New Era of Electronics



RAYTHEON High Fidelity

RADIO AND ELECTRONIC TUBES



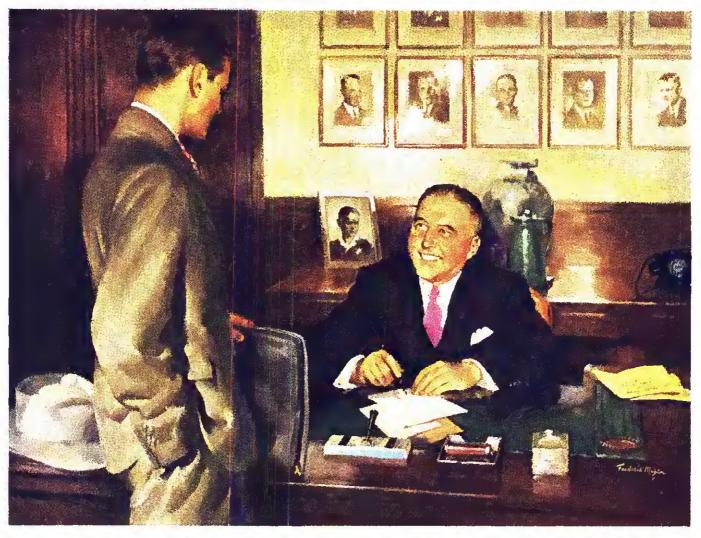
Year after year Presto has supplied more discs to broadcasting stations than any other single manufacturer.

There's a Reason! Broadcast Engineers are the most critical of all listeners. It is their business to spot the slightest trace of noise or distortion in musical reproduction. The clean, crisp, "surface free" wide range response of Presto Recordings is music to their ears . . . and yours, too. It's no wonder that year after year they choose—

Presto Recording Corporation, New York 19, N. Y., U.S. A.

World's Largest Manufacturers of Instantaneous Sound Recording Equipment and Discs





"...YOU SAY VIBRATOR POWER SUPPLIES CAN INCREASE SAFETY AND COMFORT IN PLANES?"

MR. W. A. PATTERSON, President of United Air Lines, recently said -

"It is our belief that the war has advanced public acceptance of the airplane as a mode of transportation by 20 years. The airlines, like every other service that eaters to the public, must anticipate their passengers' expectations of new facilities for greater comfort and safery. United will put in service new, huge 44 50 passenger Mainliners offering comforts, conveniences and thoughtful appointments surpassing anything besetofore known, and flying from coast to exact in 11 hours with new devices to assure safe flight."

E-L is ready right now with Vibrator Power Supplies to bring passengers the greater comfort of fluorescent lighting as well as the convenience and safety of radio and radio-telephone. If-L Black Light equipment is available as a safety device for instrument panel illumination at night to eliminate blinding interior glare and to provide clear, sharply defined instrument calibration. Engineered to specific space and voltage requirements, Electronic Laboratories products are used wherever current must be changed in voltage, frequency or type. E.L. engineers mute inquiries.

E-L STANDARD POWER SUPPLY MODEL 307

For the operation of standard 110 volt AC equipment, such as radios and sufail motors, from a 6 volt battery. Characteristics: Input voltage, 6 v. DC, Output voltage, 115 v. AC, Output power, 100 wates: Output frequency, 60 cycles.

Dimension 7 2x8 is 10 in 1 2 let 1 1 pounds.



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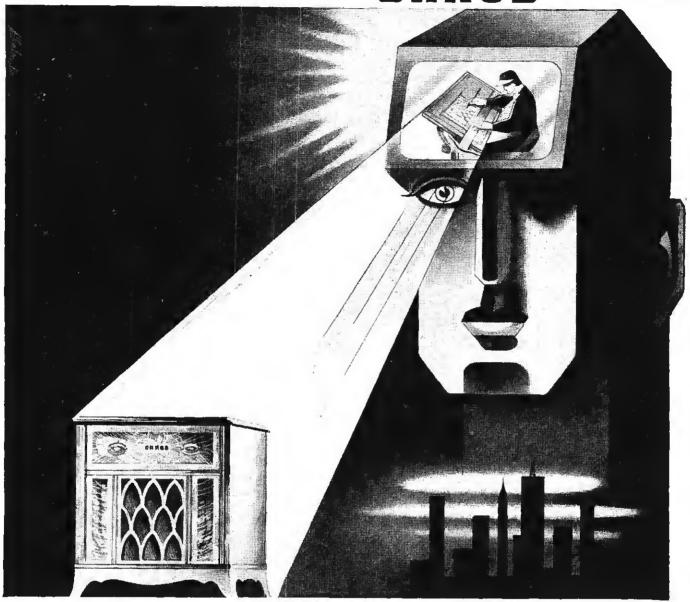


ATORIES INC.

HERE ONE MUST HEAR!



the extra measure of GAROD planning



The extra measure of Garod planning embraces more than the actual design and construction of our radios. Our projects begin with interpretation of public demands and carry through to adequate distributor selling aids and full protection.

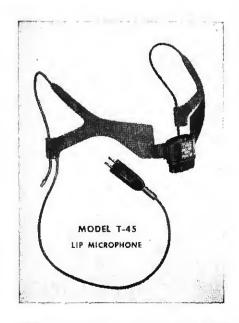
Following this pattern we are creating, for the postwar market, a complete line of radios, including AM and FM, table models, consoles, record changers and combinations, and television. The extra measure of Garod planning will provide prices for all incomes, and a desirable mark-up for Garod distributors and dealers. Inquiries regarding postwar franchises are invited.





History of Communications Number Four of a Series

SMOKE SIGNAL COMMUNICATIONS



While the puffs of our early American smoke Signals were not as complicated as the Morse Code, this type of communication was a speedy and effective means of communication at that time and could be seen for scores of miles on a clear day. Used for transmitting their battle messages, smoke signals in the days of the early American meant a progressive means of communication.

Restricted by climatic conditions this type of communication was limited in its use. Universal microphones in the part they play in modern electronic voice communication must withstand the climates of the Arctic and the Tropics all in a day's work. Built to accomplish a specific job, Universal Microphones are "getting the message through" on every Allied front.

Model T-45, illustrated at left, is the new Lip Microphone being manufactured by Universal for the U.S. Army Signal Corps. Shortly, these microphones will be available to priority users through local Radio Jobbers.

UNIVERSAL MICROPHONE COMPANY



Appliance distributors and dealers are urged to send for the CLARION Pre-View. A distributor franchise or a retail dealership obtained *now* will give you the advantage of a quick get-away when the race for civilian sales begins.

WARWICK MANUFACTURING CORPORATION
4646 WEST HARRISON STREET

CHICAGO 44 ILLINOIS

Clarion's 6-Point Post-War Program for Distributors and Dealers

- To direct CLARION sales through independent Appliance Distributors, assuring complete national sales coverage.
- To apply to civilian production the engineering and designing skill gained through our work for the armed forces—plus our years of experience in building fine radios.
- 3. To produce a complete and carefully planned line of table models, portables, farm sets, consoles and radio phonographs that will enable the distributor and dealer to satisfy his customers' demands with a minimum inventory.
- 4. To produce only those models of radios which careful analysis on dealers' floors has shown that the public wants.
- 5. To franchise with a line that will have continuous public demand because of well-developed selling features and trouble-free performance.
- 6. To insure public acceptance of our product through liberal sales promotion and advertising help.

Whatever your post-war facilities or plans may be, the CLARION franchise has the necessary flexibility to meet your conditions. Read the 6-Point Program and see the advantages CLARION will bring to you in your particular territory or locality.

PLAN WITH CLARION

WARWICK MANUFACTURING CORPORATION
4646 West Harrison St., Chicago 44, III.

Please send information and a copy of your Radio Preview.

Name of Firm_____

Street Address

City State _____

TODAY IS NONE TOO SOON TO BE THINKING ABOUT YOUR POST-WAR PLANS



NEW COMPLETE SYMPHONY RECORD SETS

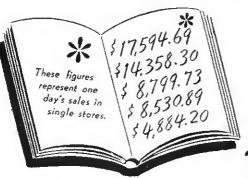
The Nation's Favorite Classics, Superb recordings by the finest symphony orchestras, 2, 3, 4 and 5 record sets. 3 record sets (6 sides) self for . . \$1.99 (Prices Include Exclse Tax)

FAVORITE OPERA RECORD SETS

The big sellers, Carmen, Faust, Rigoletto, Lohengrin, Pagliacci, and many others. 3 and 4 record sets. 3 record sets (6 sides) sell for \$1.99
(Prices Include Excise Tax)

SYMPHONIC AND OPERA RECORD SETS IN DE LUXE ALBUMS

RECORD SETS OF FAMOUS SYMPHONIES AND OPERAS are also supplied in attractive Albums. 3 record sets (6 sides) sell for \$2.69
(Prices Include Excise Tax



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.

Volume Sales. FULL Profit

The Continental Music Company, national distributors of these famous records, opens the opportunity now for a few additional retail record store outlets. Records are available at standard dealer markup. Here is a Golden Opportunity for retail record dealers to match, in their respective communities, the great sales successes that are prevailing elsewhere. You make your full profit.

Stake Your Claim. Write Today

Don't delay in making your contact for this valuable, profitable record dealership. Write today to learn more about Music Appreciation Records and how to cinch the profits that will be made from their sale in your community. Mail the coupon below to your nearest Continental Music Company office for detailed information. No obligation. Act now.

CONTINENTAL MUSIC COMPANY, INC.

Exclusive National Distributors

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

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

Yes! I'd like to have the complet opportunities offered by Music Ap	
igned	
irm Name	
iddress	
ity	State
o you now stock phonograph records?	YES TO NO TO

O. H. CALDWELL, EDITOR 480 LEXINGTON AVE.,



M. CLEMENTS, PUBLISHER NEW YORK 17, N. Y.

WHITE PAPER—That nice white paper on which our last two issues were printed is now, unfortunately, exhausted — though only temporarily, we hope.

That paper used in the March and April issues, owes its whiteness and opacity to the titanium which is compounded into the pulp. But such titanium is mighty scarce in wartime. And so without it, the paper stock takes a darker hue.

The publishers of RADIO & Television RETAILING are making every effort to get more of the white titanium-filled paper to brighten up these pages. We hope to have a further limited supply of it, later.

And when hostilities are over, expect to see this magazine again printed on the finest, whitest, calendered paper—as it was pre-Pearl Harbor.

with the "Man in the Moon"! Loud speaker behind "moon" at top of display for children's discs, entrances youngsters as they answer to their names and tell what music they would like to hear. Cy Jacoby, formerly specializing in appliance sales, sells records now (and builds future appliance sales) with this ingenious device (see page 28).



Learn About the Laws-Watch Your Step, Mr. Dealer

Elsewhere in this issue, an exclusive article features numerous Federal rules and regulations affecting practically every phase of activity radio and appliance men are engaging in during wartime. (See page 32.)

This article provides official information on the subject, and is a condensed, understandable breakdown of the entire selling-servicing picture as it pertains to compliance with various laws.

Motives Back of Laws

At first glance some of the rules may seem too stringent, involved, unnecessary and difficult to comply with. But the reader should consider the purpose of each regulation. WPB's job is to keep the war machine stoked; to prevent the diversion of "critical" materials to not-so-essential purposes, and to prevent waste. OPA, in controlling prices, seeks to prevent inflation, and to protect buyers against unduly high costs of living. The Treasury Department needs money to run the biggest business in the world.

There is no discrimination on the part of these Federal agencies. All businesses in the country are affected equally with ours in the radio-appliance fields.

The dealer, who's in there pitching now—with plenty of run-of-the-mill headaches—has lots of leeway operating his business as far as the rules, as interpreted in the article, go. For example, aside from complying with simple hourly and overtime requirements, he can conduct repair and maintenance services without too much red tape.

Can Ask Exceptions

The dealer, wishing to do "assembling" or "fabricating" can certainly request permission from WPB to do so.

If a dealer finds he has put so much time and/or materials into an article that it's impossible for him to sell it at the ceiling price, and make a profit, he certainly can go to the OPA and ask authority to raise the price to a profitable level.

So after all, the situation could be much worse—the need for aspirin even greater.

The main thing to do, apparently, is to study all regulations pertaining to your business, and adjust your operations to them. These are laws, and spokesmen for the various Federal departments all agree that they are making every endeavor to crack down on violators.

Priorities for Retailers, Also

With the boom interest centering upon postwar television, FM, and appliance sales, a lot of new dealer outlets undoubtedly will be attracted into the retail radio-music field to compete with our present readers. Existing radio-music merchants have rendered fine public service during wartime, by keeping listeners' sets in operation, in spite of shortages of tubes, repair parts, and manpower. It would be a deserved reward if these faithful merchants could be protected postwar by some such policy as the WPB already has planned for radio and electrical manufacturers after V-day. By that policy, newcomers into war-radio production will be excluded from civilian radio output for 6 months or longer, until the old-time radio set makers have gotten back into civilian production. Some similar protection would be welcomed by radio-music dealers.

Know Your Costs

Radio Retailers, Big or Smal Operating Expense:

• Every year, in normal times many new stores are opened. But the records show that within a few years 95 per cent of those stores fold!

On the other hand, if the individual store operator knows "what it's all about," the odds are 20 to 1 that his store will remain open permanently!

Look at the record of one chainstore group. It operates in 48 states. In 1929, on the eve of a depression, it opened 500 new units. Yet even today all but a handful of those 500, plus more than a thousand other units, are still going strong. Through good management that store group has put the "reverse English" on the 95 per cent mortality figure—for only 5 per cent of the 2000 stores it has opened have failed to survive.

Yardstick for Success

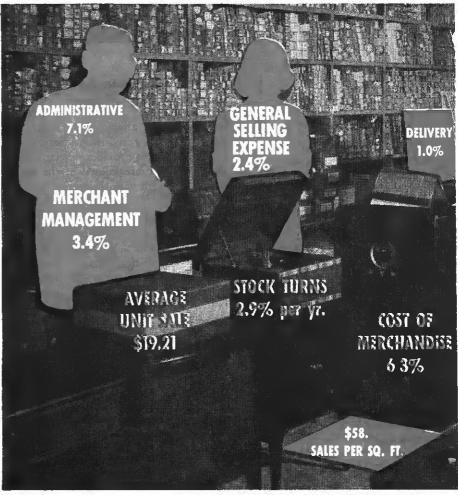
How come? Is it that the management of this chain—and a million independent retailers as well—make a nice living because they have some innate flair, some sixth sense for retailing? Not at all. Only that they have learned how to think. They have learned to keep their eyes open.

Proof: Their windows are shining, their floors are swept, displays are eye-catching, stock is well arranged, salespeople are happy and cheerfully selling wanted merchandise or a reasonable facsimile to an ever-growing group of customers.

Simplify!

Such retailers, big or small, take things in their stride—administrative problems, publicity and advertising, financial control, management and merchandising. They don't try to make their jobs seem difficult. In sharp contrast, many retailers firmly (and foolishly) believe that the quality of a good merchandiser is measured by his ability to achieve high "mark-on" or low "markdowns," or high stock-turn or efficient assortment control, or any one of a hundred other theoretical ingredients of retail success.

There is no mystery about retail merchandising or management or publicity or advertising. The real



A radio department's "Operating Expenses" in picture form. See table at lower do YOUR business expenses line up for YOU? Accurate records will go far to

test of a merchandiser is his relative success in obtaining the exact articles the people want to buy.

Figures the Cornerstone

Yet the cornerstone of retailing is figures that inform—figures, whether they are gotten up by the boss's wife or by a big statistical department. Figures can be made practically painless, even entertainingly instructive.

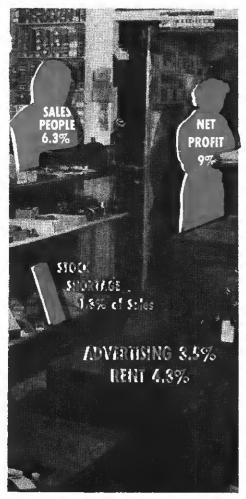
Illustration: We stopped at the corner to buy a newspaper from Dave, the corner stationer. His two-minute torrent of conversation was definite, not made up of next to meaningless adjectives. "Y'see this lousy order! The jobber," said Dave with disgust, "tells me he can't fill it. I'm paying a premium for extra service but he

won't give me any of these cigars for two weeks. I lose \$25—\$25 profits! . My competitor, that feller on the next corner? Sure he makes money. He's right at the subway station, so he's got traffic. His store is only 10 x 28 but he pays \$275 rent. He does \$1200 a week. So what? The people he bought the store from a year ago did \$1500. He and his wife are grouches—that's why they've slipped. But they sell a raft of papers. They're open 17 hours a day, seven days a week. The rest of us, including druggists, agreed to close Sunday afternoons at 2 o'clock. But he's open all day Sunday. He's the only chiseler around here!"

Thus young Dave, who talks like a couple of machine-guns. His conver-

of Doing Business

Lust Carefully Study Details of 'igures from Radio Departments.



right for clarification of terms. How make your management problems easier.

sation always bristles with figures. His business is tiny (rent \$50 a month) but it is growing. He knows where he's going. Has figures.

What sort of figures should a retailer of radios and other electrical appliances have at hand? . . . He should be able to make comparisons, just as the very largest retailers do. Nothing exists except by comparison.

Yearly Comparisons

So it is that leading retailers are accustomed to comparing their own figures with their competitors', and this year's results with last year's.

For many years the largest retailers, including principal department stores, specialty chains and mail order houses, have been accustomed to

classifying their operating and merchandising figures under 20 or 30 different heads. Then under each of those heads the store, or chain of stores, sets down its figures for its various departments. Opposite the department designated as Radios, Phonographs and Records are found such carefully calculated figures as those on this page. (See below.)

The store's profit is reckoned by subtracting Total Operating Expense from Gross Margin: Since the Radio-Phonograph-Record department of the store whose figures we present has a Gross Margin of 37.0 per cent we find that its net profit is 37.0 per cent less 28.0 per cent, that is 9.0 per cent. Gross Margin is the figure arrived at oy deducting the net cost of goods sold from net sales. Net cost of goods sold is the net invoice cost of goods sold plus charges for freight, depreciation and stock shortages.

Supplementing Operating Expenses are other data, under the heading Merchandising Statistics. They serve to define our picture of the store.

MERCHANDISING STATISTICS

Gross Margin	37.0%
Sales, % to Last Year	
Number of Stock Turns	2.9%
Stock Shortages, % to sales	1.3%
Returns, % to gross sales	12.8%
Cash Discounts, % to sales	1.4%
Sales per sq. ft. of Selling Space.	\$58
Average Gross Sale	\$19.21

Naturally a radio-appliance retailer who operates only one or two stores, both of modest size, has no need of assembling as many statistics as a chain. (Some retail chains in normal times have been accustomed to making a net profit of 7 per cent from merchandising operations and then gaining another 3 per cent from "Other Revenue, Net" which includes any profit or loss on real estate operations; the amount charged in expense for interest on net worth; dividends from manufacturing or foreign subsidiaries; and other miscellaneous revenue.)

The independent retailer must have basic figures on his business, to show what his store is doing.

You can't run a business without figures.

OPERATING EXPENSES, RADIOS AND PHONOGRAPHS

SELLING:

Salespeople's Salaries, per cent	to sales 6.3%
General Selling Expense, per cent	to sales
General Selling Expense includes	wrappers, cashiers, supplies, etc.)
Delivery Expense	1.0%
	9.7%

ADMINISTRATIVE:

(Includes executive,	accounting,	credit, etc.,	offices, plus	interest	
at 6% on cost value	of average	inventory) .	********		7.1%

OCCUPANCY:

PUBLICITY:

MERCHANDISING MANAGEMENT:

(Includes direct and distributed expenses of merchandise management and buying, buying affices, receiving and marking)...... 3.4%

Total Operating Expense, per cent to sales. .28.0%



Proprietor Vern Slagle, left, and his service manager, Ernest Jarvis, discuss the parts stock.

• When Vern Slagle opened his own radio service shop in Fort Wayne, Ind., 8 years ago, he selected a location in a strictly residential section several miles from the downtown business district.

His primary purpose was to build up a radio repair service that would stand on its own feet and grow through repeat orders, and afford fair profits year in and year out.

How well his plan worked is shown by the fact that Slagle now operates one of the largest exclusive radio repair shops in northern Indiana, doing a strictly retail business on home sets only.

Specializes in Repair

The business is operated on the solid foundation of earning fair profits, and has gradually built up repair service to where an average of 12 major overhauling jobs are turned out each day.

The average repair job is about \$12. Some are more, others less. This figure does not include the number of minor repair, inspection and adjustment jobs turned out. Neither does it include overhauling jobs on midget sets. These come under a separate category. However,

Radio Service

Modern Technique for Vern Slagle

as Mr. Slagle says, "We do comparatively few midget jobs, the ones customers bring in."

The truck is out about 4 hours each day. Two men call for the sets, deliver the jobs when finished. The city routes—Fort Wayne's population is about 122,000—are divided into 5 sections, thus affording one delivery each week into each section, excepting Saturday when an all-around swing is made to get sets delivered for the week-end family use.

Conserves Gas and Tires

This method saves a vast amount of mileage, cuts down rubber and gasoline consumption, and still satisfies the trade, as they have been fully informed about the necessity of restricted deliveries. This factor also saves the company money on lower delivery costs and gives the workmen more time to turn out profitable jobs.

A flat charge of \$2 is made to the customer for pick-up and delivery, in addition to the labor and parts or material charges.

As a good will builder, this dealer believes in returning every job to the owner as nearly like new as it is humanly possible to do. Aside from the thorough overhauling on each set, the cabinet is cleaned and polished.

A guarantee is stamped on each invoice, and reads as follows: "This radio was completely overhauled by us and we guarantee all parts and work for ninety days." Another stamp on the invoice reads: "Only the work and parts replaced by us as listed, are covered by our guarantee of 90 days. We cannot be responsible for anything which may develop in some other part."

Slagle says with the labor situation what it is, he cannot afford to quote prices in advance. Too much time is wasted in checking.

One might spend hours on some job attempting to arrive at an approximate price. Then if the price seems more than the prospect expected, the latter may walk out, and the shop has done all the work for nothing, according to Slagle.

Complete confidence of his customers is what the dealer wants, Mr. Slagle is convinced.

"You can't work for nothing,"

declares this dealer. Everybody is charged on the same basis, namely, for the number of hours put in on the job, plus replacement parts installed. The labor charges on one unit may run to \$9 or \$10 for example, with only 80 or 90 cents for parts. Another may involve as much as \$20 for labor, and a corresponding sum for parts.

Slagle is not afraid to tell people the truth about this labor factor. Some servicers, he says, are afraid to explain that labor is the biggest factor (in most jobs) and some will make up the difference by charging for parts that were not put in. This does not mean that the customer has been

PRODUCTION, CLIENTELE

- Vern Slagle isn't afraid to ask
- He advertises for new custom
- He has upped repair output
- He has solved his own help
- He has eliminated "visitor"

actually overcharged, but the dealer lets himself in for criticism and distrust if and when the subterfuge is found out.

"This is unfair to dealer and customer alike," Slagle believes. He goes on to say: "We are right—why should we back down?"

Another thing, the acute labor shortage and critical gasoline-tire situation demands his firm, but courteous, handling of jobs on which customers think they must have rush service.

All such requests are refused—all jobs taken in the order they are received, and none taken beyond one week's production.

"There is just one exception to this rule," Slagle said. "That is, when the serviceman comes home on a few days' furlough, and wants his radio fixed, we'll stop at nothing to get the job done for him."

The only repair work the company does in the home is to adjust or test units covered by the guarantee of 90 days and on jobs recently fixed, if not functioning right. Such jobs are

Salesman

pell Profits fort Wayne, Ind.

> usually replacement of a burned-out tube or something on that order.

All service charges and parts are cash. There is no time to carry accounts on the books and make collections. As Mr. Slagle puts it, "This policy means we don't have to add bad debts to the price of work for our cash customers.'

When any set is delivered to the home, or over the shop counter to a customer, an itemized invoice is given. This includes a complete list of all parts installed, and a completely itemized statement of the labor done. This not only satisfies customers that the work was done, and how much, but is a good check-up on future

PROFITS and *INCREASED*

fair prices; thus increases profits. ers despite big rush of work. 50% by segregating servicers. problem. interruptions.

repairing that may be necessary. Invoices are marked "Paid" and if anything happens within the 90 day guarantee period, the office can check back from its copy with the least expense, and to the full satisfaction of the customer.

In the building, which is 30 x 60 ft. and located on a one-acre lot at 1704 Hale Ave., Mr. Slagle had 4 small rooms made. Each room is 5' x 8' and insulated to make it as nearly sound-proof as possible. Here the mechanics work on the technical jobs unmolested, free from noise, and able to concentrate on their work.

Increases Production

This factor alone, increases production on many jobs varying from 25 per cent to 50 per cent, because:

1. Nobody can bother servicers from the outside. People like to barge in unannounced-to ask about their sets or other questions which cause outright delays.

2. It is inherently natural for a group of men working in a single room to talk. They interfere with each other, and cannot concentrate.

"When we can arrange for more space in a new building now contemplated for postwar construction, we will make these private rooms larger, increasing them to approximately 6' x 10'.'

Cuts Down Interruptions

Another important factor in this program of increasing production through privacy, is the location which precludes nearly all but nearby residents from calling in person to bring in and call for sets. The pick-up and delivery policy has proved highly satisfactory to the company's customers, and insures the very peak of efficiency in shop production, due to the minimizing of interruption from shop visitors.

Obviously, customer contacts are not lost, but actually improved, the management believes, by its own servicers calling for and delivering the units. Good will is furthered in this respect by a courteous assurance that if the set fails to function properly, a prompt and efficient ad-

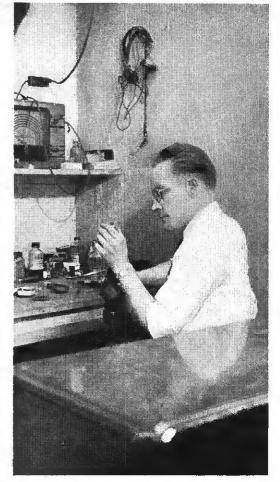
justment will be made.

Slagle uses a double column, fiveinch space in the classified section of the Fort Wayne telephone directory. In addition, he runs a "catchy" classified advertisement in both the morning and evening papers daily, emphasizing pick-up and delivery. Also a 1-inch, single column advertisement in each paper at regular intervals during each week, emphasizing that trained service men are available to repair or completely overhaul sets.

Before the war, the company used to put out 25,000 circulars delivered from house to house, every 3 months. The firm has its own printing press.

Mr. Slagle's policy on advertising hinges on the proof that "it pays to advertise when business is good, to keep it, and to advertise when business is bad, to create it." Although there is more business being brought in now than the company's force of 5 skilled technicians and 3 others, including the city service truck drivers, can turn out, no let up on advertising has been considered.

As Mr. Slagle has aptly pointed out, "It is our selling job to build up and hold good will by advertising



Service manager Ernest Jarvis repairs a microphone. He is shown in one of the "sound-proof" work rooms.

and sustaining our reputation by good workmanship. This is furthered by cooperation, and by being courteous to everybody, regardless of the sellers' market in which we now operate."

Mr. Slagle points out that it takes years to learn to be a skilled radio service man, and only skilled men can do the job right. He pays his technical men \$1.50 per hour. He has one such man on full time, and 4 others who work 6 hours a day average, during 5 days, and all day on Saturdays.

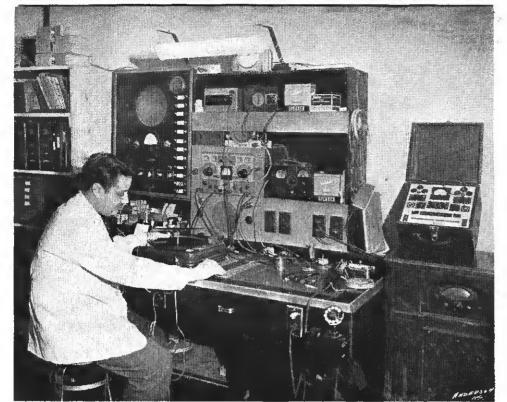
Solves Labor Problem

These men are taking higher training at Indiana Technical College in Fort Wayne. They come in afternoons and work until 7 P.M. They range from 18 to 25 years old. "This source is the answer to our labor problem, although the method does involve considerable turn-over."

The company has lathes, coil winders and a drill press. Where transformers cannot be obtained, the company rewinds them and frequently makes parts not available on the open market. Car radios are not repaired -such orders are referred to other dealers who specialize in such work. Advertising brings in business from 50 miles around.







Paul Valenti is the shop expert on record-players. When war ends, Valenti will head electrical appliance sales. He has a fine background for the job.

• Leo Seem isn't just dreaming of the future! Although there are not many spare-time moments for the owner of Radio Clinic, a radio and record-player service shop located in one of the busiest outlying business districts of Kansas City, Mo., there are a few, and these "moments" are utilized to the fullest extent for formulating a concrete, long-range program. Leo Seem is first-last-and-always a technician, well schooled in the intricacies of repairing radios, but he has a keen eye out for postwar opportunities.

"Unless economic experts err," declared Mr. Seem, "there is to be a big buying period that will last for some years after the war. Although radio servicing has always been my field, I intend, like any good businessman, to keep in tune with the times."

Appliance Future

The first move on the part of Mr. Seem towards a postwar program was to annex a partner. Paul Valenti, an electrical appliance sales manager at a large department store, was made a full-fledged partner in the Radio Clinic. One of the important features of the postwar program of this firm is the selling of major and minor appliances, so it will be partner Valenti's task to set up the postwar appliance department and guide its destiny.

A well-organized service department will always be a part of the Seem scheme of things, and it will be Mr. Seem's duty to handle this section, while Mr. Valenti takes charge of sales. Each will assist the other.

Already a nationally-advertised brand of radios has been chosen for the postwar store, and the partners are looking over well known brands of electrical appliances which will augment the line of radios.

Blueprints for Postwar

Radio Clinic is also preparing blueprints for an enlarged building which will house the wide stock of appliances and the service department after the war.

"We know," said Mr. Seem, "what line of radios we will carry. We know what each of our jobs will be—we know the set-up of the building we intend to occupy, and we know that we intend to feature in the business after the war prompt and courteous service, plus reasonable prices. It's a formula that we feel can't fail!"

The team of Seem and Valenti has gained a reputation for expertness in repairing record-players. Mr. Valenti was considered an authority on players and their parts, when he promoted sales for the department store. He carried his wisdom regarding automatic record-changers, etc., into the Radio Clinic, and now players closely press radios as the leading repair item.

Several large department stores and furniture dealers, which have elim-

APPLI

inated service departments for the duration, have turned their radio and record-player repair trade over to the firm.

From 50 to 100 radios are usually lined up for repair work on the shelves. The pair service about sixty sets a week, with the aid of a part-time helper who comes in every evening. 60 per cent of the trouble with sets is defective tubes, 30 per cent ailing condensers, and the other 10 per cent represents a wide variety of other difficulties.

Being able to fix anything that might be wrong with a radio in a minimum of time, is the major reason Leo Seem advances for his success. "Work is never held up because of a lack of parts or tubes," Mr. Seem said. When the stock gets low, Mr.

HE'S from MISSOURI!

 Servicer Seem of Radio Clinic doesn't need to be shown! He knows postwar selling is a "natural" for big volume, so he is getting ready.

He's taken a partner experienced in appliance sales.

He has prepared blueprints for a larger building.

Partners Seem and Valenti have already chosen a well known line of radios.

They are looking over minor and major appliance lines now.

And in the MEANTIME:

Radio Clinic keeps going now through:

- High-class service.
- Re-sale of used radio receivers.
- Re-sale of used record-players.
- Spic-and-span order in service department.
- Emphasis on the business end through use of part-time bookkeeper.

ANCES TOMORROW!

Strictly Service in Past, Kansas City Radioman Plans Strong Postwar Selling Position

Seem drops all other duties and replenishes it somehow. He's on friendly terms with a number of parts distributors. "That helps," he admitted. He also keeps his eyes open for stocks of tubes and parts that are for sale when other firms in the field abandon their service departments.

The radio repair bill has gone up in the past year, although the shop in order to save on time, gasoline and tires.

Like many other wives of radio servicemen, Mrs. Seem has deserted her kitchen in order to help her husband solve the manpower shortage problem. She handles the detail of the front office, and sometimes pinchhits as a tube-tester, and occasionally makes minor repairs. "They're just

finding out what wives can do in radio service shops," she commented, with a smile.

The shop has a professional appearance. Both of the men wear white jackets. Repair manuals are neatly-stacked near the benches. Work benches are not a jumble of miscellaneous parts, scattered hither and yon, but look clean and orderly. Benches have tool drawers and filing compartments. A filing card system is used on incoming and outgoing repair work.

Up-to-date Accounting

Once a month, a free-lance book-keeper comes in, picks up the records, and prepares a detailed statement on the income and expenses of the shop. Records compiled by him are broken down, so that Seem and Valenti can note exactly where expenses have been unduly high or profits have increased during a month.

"It's the ideal arrangement," said Mr. Seem, "for the shop that doesn't require the services of a full-time bookkeeper. Slovenly-kept records can create chaos in any shop."



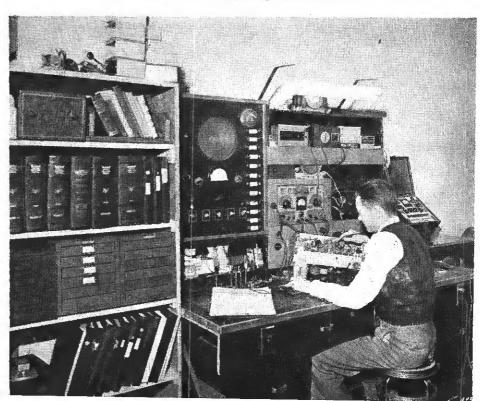
Like wives of many radio service men all over the country, Mrs. Seem helps her husband weather the war manpower shortage by attending to office detail.

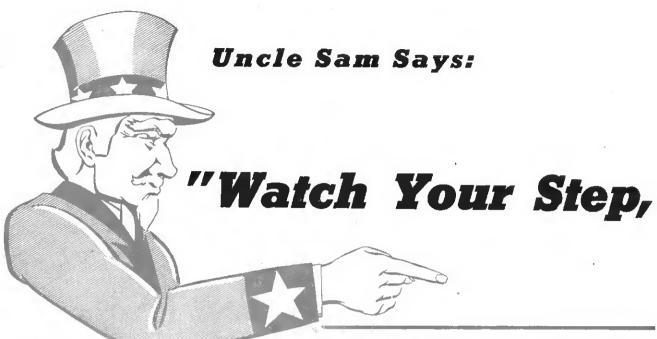
always stresses fair prices. The average bill now is around \$5. There are two methods of charging—by the hour and the job. \$2.50 is the labor charge in installing condensers, and \$2.50 is also the hourly rate set by Mr. Seem. There is a charge for service calls of \$1.50 and \$2 if the firm picks up and delivers the set.

Because the draft has taken the last servicers in many nearby small towns, there is quite a bit of out-of-town business drifting into the hands of Kansas City radiomen, and the Radio Clinic is getting a lot of this trade. Their location isn't central, but it is on a well-traveled trafficway.

For three nights a week the shop is kept open until 9:30. This move was made in order to allow a larger percentage of the clientele to bring in radios, and thus cut down on the mileage of the firm's delivery car. It has helped. On other days, shop hours are from 9:30 A.M. until 6 P.M. Three days a week are allotted to making service calls. A different section of town is covered each day

Leo Seem has 14 years' experience in repairing radio sets.





WPB SAYS DEALER MUSTN'T!

• How "Dealer Blank's" activities are affected under regulations of the War Production Board is explained in the following statement by Frank H. McIntosh, in charge of civilian radio for the Radio and Radar Division of WPB, at Washington. Mr. McIntosh writes:

"In answer to your letter of April 13, 1944, regarding the WPB rules and regulations concerning a dealer who rebuilds radio sets, we have the following comments to make:

"Your attention is called to General Limitation Order L-265 which regulates the manufacture of electronic equipment. 'Manufacture' is very broadly defined so as to include any act of modifying equipment other than actual repair.

"Manufacturing includes the act of putting a chassis into a cabinet. Your attention is called to Interpretation No. 1 of Order L-265 which quite clearly states that if a speaker or cabinet has been added since April 24, 1943, the set is not exempt from the restrictions on transfer.

"The production of radio receiving sets was stopped by General Limitation Orders L-44 and L-44a in the Spring of 1942.

Repair Jobs Exempt

"Unless the dealer in your 'hypothetical' case was doing a strictly repair job he would be in violation of Order L-265 in regard to the manufacturing of a radio set. He would also be in violation if he sold the set (Continued on page 80)

Today, there is no phase of radio selling and servicing by dealers that is not subject to regulation by one or more Federal government agencies.

All of the following operations are definitely controlled:

- 1. Assembling or converting radio sets, radio-phonograph combinations, public-address equipment, automatic music machines and phonographs (including hand-wound models).
- 2. Selling any of the above mentioned units or equipment-new or used.
- 3. Repair services to any of such equipment. OPA, in a new regulation No. 22 to MPR 165, permitted certain servicers to increase their prices.

THE DEALER WHO AND

• Through buying or "swapping-in" old radio sets, and installing them in new cabinets, or in old cabinets he refinishes, Dealer Blank is enjoying a profitable business during wartime by selling these "conversions" to his customers.

He obtains the old radios from private owners, and from other dealers. He regularly advertises for such old sets in the local newspapers, offering to buy sets "in any condition." In his ads he also stresses the fact that he has many over-hauled receivers for sale.

Some Sets Sold "As Is"

Some of the radios he is able to buy need nothing more than a few minor repairs and a "clean-up" job to put them in salable condition. He finds a ready market for these, and transacts this phase of his business on an attractively profitable basis.

Dealer Blank also does a large business buying and selling

TREASURY DEMANDS

RADIO & Television RETAILING submitted to the Treasury Department for official comment, the hypothetical article above, together with this publication's interpretations of the Treasury Department's regula-

tions, and has received from D. S. Bliss, deputy commissioner, Treasury Department, office of Commissioner of Internal Revenue, Washington, the following statement:

"In the hypothetical case stated, it

Mr. Radioman!"



Under the terms of the new order, dealers who charge on the basis of a customer's hourly rate, may continue charging at their highest March 1942 prices, but may employ alternate methods of determining ceiling prices.

The new regulation was explained on page 80, January 1944 issue of this magazine.

RADIO & Television RETAILING presented the accompanying hypothetical case of a radio dealer, engaging in various wartime business activities, to the various government agencies, and as a result has received concise and clear interpretations to present its readers.

The hypothetical article appears below, in heavy black type.

REBUILT RADIOS SOLD THEM

used "electric" and hand-wound phonographs. This activity, he finds, fits in well with the sale of records.

Increases Service Charges

The importance of radio service work is not overlooked by Dealer Blank. He always has a lot of work ahead, and despite the fact that he has more repair jobs offered him than he can conveniently handle, advertises in local newspapers to keep his name before the public.

Due to the increase in his cost of operation, and to the scarcity of help and parts, Dealer Blank has slightly increased his hourly service charge rates.

"I have to keep on my toes these days," says Dealer Blank, "but I find that in spite of the shortage of new radios, I am still able to do a pretty good selling job with new and rebuilt sets, and am keeping all of my customers satisfied."

TAX BE PAID

appears that certain dealers are engaged in the conversion of old-style radio sets into more modern and salable models by inserting the chassis of the old sets into new cabinets. In your statement your answer to the

hypothetical question indicates that the tax imposed under section 3404 of the Internal Revenue Code, as amended, attaches to the sale of the radio set assembled as indicated. This an-(Continued on page 84)

OPA INSISTS PRICES BE APPROVED

QUESTION: If the dealer mentioned in the accompanying hypothetical article operated as described therein, but did not comply with the terms of Maximum Price Regulation No. 430, is he violating rules of the Office of Price Administration?

(Daniel P. Woolley, regional OPA administrator, New York City, issued for the benefit of our readers the following special summary of OPA regulations relating to pricing of used radios):

Answer: Yes. Dealer Blank must establish ceiling price and follow other procedures laid down by OPA if he "assembles" radio sets. If he buys and offers for resale a new or used radio, without changing it in any way, he still must establish a ceiling price, and get his price o.k.'d by his nearest OPA office.

The authority to assemble radios must first be secured from the War Production Board, WPB General Limitation Order L-265.

Since the dealer mentioned is converting electronic equipment from one type to another, he is considered to be an "assembler," and therefore should operate under MPR No. 430.

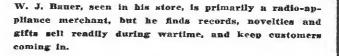
To comply with the regulation mentioned above, the dealer should fill out form 6813-404, or a reasonably accurate facsimile, which may be obtained from his regional OPA office.

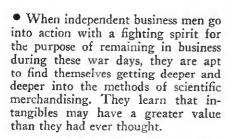
Regulation No. 430 shows how ceilings are established by two formulas, one for distributor-assemblers and the other for retailer-assemblers.

(Continued on page 80)

BAUER HAS the "PROSPECTS"

Appliance Dealer Surveys His Own Trading Area to Insure Postwar Sales Volume. Keeps Going With Alternate Lines. Has Satisfied 19 Out of 20 Repair Customers by "Check Back" Plan





An Appliance Specialist

These "intangibles" make background for postwar merchandising. And that is one reason why men like W. J. Bauer of Bauer Radio Co., 2621 Gravois Ave., St. Louis, should be in a position to get their share of postwar business.

What about postwar business? That's easy, Bauer believes, if you take into account the "intangibles," and scientific ideas which will appear in the picture of merchandising. Bauer expects to expand. There will be.

he knows, hundreds of new items coming out, but he intends to know all the facts before he stocks them.

He knows washing machines, refrigerators and other electrical household appliances; he keeps informed on new developments in radios; he has interested himself in plastics.

Bauer has his trading area so thoroughly analyzed that he can tell you, by more than sixty-five per cent, the kind of washing machines, radios, and refrigerators in the homes occupied by local permanent families.

Large Prospect List

He knows whether Mrs. So-and-So is in the market for a washing machine or a new type radio. In a trading area such as his, it is an easy matter to make a proper analysis for future business.

Tucked away for postwar use,

Bauer has a list of names of women who are going to be in the market for radios and major appliances. The list looks like a roster for a battalion of WACS. Mrs. Smith tops the list. She has priority over Mrs. Brown on that particular list, and so on down

During holiday seasons, customers find Bauer's Store stocked with toys and gift goods, priced from a dime up to several dollars. These gift items include games, lamps, glassware and pictures. After the holidays are over, these four lines are still good sellers for some time.

The "leftovers" keep people coming in. As each sporting season approaches, the store puts on display a small, but substantial stock conforming to the time, which takes the place of outgoing items no longer in demand. Lines carried are supplies for tennis, baseball, fishing, archery, foot-



ball, bowling-low priced, medium priced, and some high priced. If the item desired is not in stock, an effort is made to get it. Phonograph records, too, have proved a moneymaker for Bauer.

Has Follow-up System

People don't just "happen to see" these goods. If a man has purchased anything or had a repair job done during the past two years, Bauer has his name and address on file.

From time to time this customer receives a mimeographed letter which keeps him posted on new things being offered. Bauer advertises in two neighborhood newspapers that are delivered to every door, free, once a

His repair man, a radio expert, over draft age, has been with him several years. If a radio can't be fixed in the home, the servicer makes an estimate of the cost of doing the work, and takes the receiver to the shop. If he finds more wrong with it than showed up while in the home, he calls the owner for instructions, telling just when delivery may be expected. If an unavoidable delay occurs he phones again. The customer is the boss and must be respected as such in order for this shop to remain in business, says Bauer.

Satisfying Customers

A couple of weeks after the radio has been returned to its owner, the latter receives a letter or a telephone call asking if the radio is giving complete satisfaction. If the answer is "No," the set is checked at the home within a few hours. If the repairman can't make the radio work, back to the shop it goes-without further charge, unless, of course, something else has developed that didn't show up on its first trip to the shop.

"Our average is nineteen out of every twenty radios repaired to the complete satisfaction of the customer," said Mr. Bauer. "Knowing that customers are of all types, we consider that an excellent showing. The one not wholly satisfied is generally a person not wholly satisfied with a brand new set-or his suit of clothes,

or his wife's hats!"

Competition after the war! "I'm not bothered with the thought," says Mr. Bauer. "There's enough business for all who give honest service, and that is what we must give in order to stay in business. The reputation I build now is going to carry me far when I have to buck postwar competition.

TELLS 'EM

Chicago Dealer's Free Evening Shows Attract Customers for Radio Repairs— Puts Him in Postwar Sales Picture

• Proprietor Al Palacz of the Arrow Radio & Appliance Shop, 5646 W. Diversey Ave., Chicago, is a newcomer, who opened his shop a year ago, but he is now doing about \$1,000 a month in radio repairs, and he has put television to work for him in a unique and telling fashion.

Television programs, given in his store every Wednesday evening, attract new customers, entertain the regular ones, and identify Palacz as the television merchant of his community.

Aside from building a larger clientele, the television demonstrations provide Arrow Radio & Appliance Shop with a big list of prospects for television receivers for postwar.

The entire community is familiar with Arrow's television shows, and those who have witnessed the programs express great interest—and desire to buy receivers. Every Wednesday evening, the store is packed to capacity with youngsters and adults. The programs—motion picture projections—are broadcast from the testing and experimental laboratories of the Zenith Radio Corp.

Gets Out 20-25 Sets Daily

Occupied solely with repair work, Al manages to get out from 20 to 25 sets per day. Of late he has been unusually busy, and the added work has made it necessary for him to spend long hours at the radio bench. All work is guaranteed, since Al's chief aim is to give satisfaction. The minimum charge for any set is \$1.50.

When a RADIO & Television RETAILING representative called at the shop he found two groups of sets on the floor. In the first batch, at the front of the shop, were about 25 sets ready to go back to owners. In the second group, near the work bench, 25 receivers were awaiting repairs.

"For a one man shop I'm kept

pretty busy," Al volunteered. "In fact, I'm somewhat surprised. I never thought I would be doing as much business as actually comes my way.

"The tube situation puts the clamp on me whenever I run into a set that has those hard-to-get tubes. Sometimes I succeed in locating the necessary tubes in short order by doing a

TELEVISION What to do About it NOW

Today—right now—is the time for the enterprising dealer to reserve a seat on the Television bandwagon.

The first step he should take in setting himself up as the Television merchant and expert of his community is to publicize himself as such—now.

There are many methods the retailer can employ to identify himself with the coming Television picture. He can use his show windows to stress the fact that his store will be headquarters. He can and should write or give interviews on Television for the local newspapers. If he is in a television area and has a Television receiver, he can use it to advertise his business like Al Palacz of Chicago, whose methods are described on this page.

The foresighted dealer can study now the selling techniques he will use in merchandising Television postwar.

He can scan his radio "prospect" list, and remind his customers that immediately after peace, Television production will very likely be limited, and that delivery of sets will be on a first-come, first-served basis, thus lining up business in advance.

The public (the prospective purchaser) is already talking about Television, so the dealer, to put himself in a strong position to sell Television tomorrow, must talk about it today.

lot of running around. In that case the set goes back to the owner in a short time.

"But sometimes one of those hardto-find tubes almost drives me dizzy. When this happens the set remains in the shop for a couple of weeks while I search for the tube whenever I find the time.

"Thus far I've been lucky. Every tube that I've gone after I eventually secured. I try always to refrain from making any circuit changes on the chassis in order to get the radio to play. I think it's a poor policy even with the tube shortage."

Uses Catchy Slogan

Al uses an impressive slogan on his business cards which puts the idea across to the customer; the card reads: "If it won't say a thing, give us a ring, and we will soon make it sing!"

The attractive exterior of the shop is a potential business-getter also. The black on white lettering stands out, and one glance informs the passer-by that here is a fine repair shop. To procure further repair work, Al uses consistent advertisements in a community newspaper, "The North Side News."

Repairs Auto Radios

Al repairs auto radios. Whenever the opportunity presents itself he buys both auto and home radios — puts them into peak condition, and offers them for sale. However, this latter phase of business is not gone after strongly; Al is busy enough taking care of repair work alone.

The Arrow Radio Shop does about \$1,000 worth of repair work per month. Looking to the future, Al is anxious to line up with a good radio manufacturer and go places when the time comes.

with TELEVISION



Television audience in the Arrow Radio & Appliance Shop (Chicago). The "shows" interest current putrons, attract new customers.

Radioman Al Palacz's attractive store-front clearly announces that he is ready to do business in repair work, and identifies him as alive to the future of television.



WITH RADIOMEN

Servicers Solve Labor Problems— Factory-Referred Calls Valuable—

LOS ANGELES, Cal.—E Iliott L. Jones' Mesa Radio Shoppe, 2608 Crenshaw Blvd., has solved the help shortage problem. Several men give part time services. This provides a night shift, 5 nights a week. The part-time workers hold good daytime radio jobs in warplants. The schedule in this shop is as follows: Monday, Wednesday, Friday, 2 technicians and Mr. Jones; Tuesday and Thursday, I technician; day employees—3; shop technician and delivery days, I, on Zenith and Packard Bell referred calls.

"Tubes and parts are a great headache on volume servicing," says Mr. Jones, "and adaptations are now a necessity. Many of these tax my ingenuity despite 30 years' experience in radio. Am now grateful for the years spent with Western Electric as radio and acoustic field engineer. Technical knowledge now pays off well.

"One hard and fast rule here is that I pass on all adaptations. A diagram, showing the changes made, goes out with each job."

Mr. Jones says that the great increase in his service business is due to factory-referred jobs. "I have always agitated for closer cooperation between factory representatives and dealers. The manufacturer's responsibility should not end with a dealer's sale and guaranty.

"A product like radio," continues Mr. Jones, "requires maintenance. Factory-controlled service would provide customer satisfaction at fair, reasonable prices. When many of the jobbers lost their servicing departments, I was remembered. I had been on Philco 'Radio Manufacturers Service' for years, and still use RMS pricing. A schedule of our charges has been filed with OPA.

"Zenith and Packard Bell refer service calls to our shop. These are 'silver platter' introductions. Prices and satisfaction are assured the customer." This shop gives 48-hour service on all calls which are factory recommended.

According to Mr. Jones, phonograph records and recording are very



HEP COWS DIG DAIRY JIVE

We all know what a boon music is proving to industry—how it combats fatigue and improves production of war-plant workers, but here's an item describing how the magic of sound in dairying is causing the humble cow to become a more willing producer on the food front.

It's all done with radio!

According to Ralph H. Plummer, owner of Radio Service & Supply Co., all dairy barns surrounding Martinsburg, W. Va., are equipped with radio receivers.

Dairymen in the vicinity discovered that musical programs during milking time caused the animals to relax, consequently releasing their milk more freely.

popular in the vicinity, and so much of this work is done by his shop that it requires one man alone to service players and changers.

"We have almost forgotten what selling is like," declared Mr. Jones, "but when merchandising again comes into its own we will have thousands of job cards for a prospect list."

Business in this shop in 1942 doubled over 1941, and 1943 almost doubled 1942. The first quarter of 1944 has provided continued increases as well.

CHICAGO, III.—The Bob Becker Radio Shop, owner Bob Becker, 5647 West Park Road, is quite busy these days servicing radios and refrigerators. A profitable record business is maintained. Use of local advertising, and plenty of display window streamers bring the customers in.

ST. PAUL, MINN.—In order to better take care of its repair business, the E. H. Larson Co., has recently moved into larger quarters at 367 Robert St., St. Paul. It can now give services on all household appliances, including washing machines, vacuum cleaners and ironers.

BUFFALO, N. Y.— Acme R a d i o Service advises that some customers bring a set in with the complaint, "The sound isn't quite natural," or, "I can't get anything but local stations during the daytime." To prevent wasting time with this class of work, Acme will not accept a set for checking unless the owner has a real complaint. In newspapers, and via the radio, customers are urged not to bring in sets with trivial complaints.

Borsing reserves Saturday afternoons and nights for rural customers. From 1:00 through 9:00 PM Borsing works exclusively on farm sets brought in Saturday morning, so that, if possible, out-of-towners can take their receivers back with them Saturday night.

City Radio recommends that customers who bring in their own sets should be given bus fare both ways if set is a portable, and a 25 cent transportation allowance if set comes via owner's car. These amounts represent approximately what the shop would be out on delivery costs through the regular channels, according to City Radio.

ELGIN. III.—Elgin Washer and Poultry Sales is weathering the war period by handling all washer repairs of former customers, and adding a complete poultry feed line. This firm has a large display area which is filled with bagged feed, poultry raising equipment, poultry remedies and all kinds of baby chicks. Several men are kept busy handling the orders, for folks in this area are raising many chickens to help produce more food. Elgin Washer also rents part of its big store as an office for a coal dealer, and these various combinations seem to work cut well for all concerned.

ACROSS THE U.S.A.

epair Household Appliances etailers Do Volume in Record Sales

CLEARFIELD, Pa.—Electric Supply Co., Inc., directed by P. T. Flaherty still had a fair stock of Philco, Zenith and General Electric radios and parts until about six months ago. These, and other appliances are now dwindling, and the chief electric business centers in floor lamps.

About a year ago the company branched out into toys, and after the American Toy Show in New York this year came away with a \$25,000 stock. Mr. Flaherty says they will never again be without them, because having items at all prices from a dime or a quarter up, they find that the public comes into the store as it never did when customers supposed they had to be prepared to

WASHINGTON, D. C.—Star Radio Co., 409 Eleventh St., N.W., radio specialists for 20 years, pride themselves in remaining as such in these difficult times. Consistently active in the service field in the past, repair work has been greatly stepped-up since Pearl Harbor. Foreseeing a long war, Nat Wallack, head of the Star organization, realized the need for plenty of tubes and replacement parts, and bought accordingly at an early date. In addition to operating three repair shops, this firm also sells tubes and parts over the counter at ceiling prices.

Records have been added, and a big volume in sales reveals that classics and populars are in equal demand. Self-service merchandising its entire stock of radios and electrical appliances. Edward Nelson, owner, has established an "International Department," carrying records in four languages. Record albums and populars are in good demand.

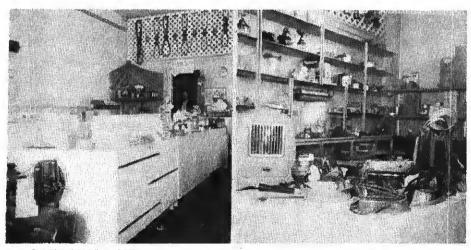
WAUKESHA. III.—Howard Dixon. who operates a fine radio service setup at the edge of town, is solving his labor problem by hiring a high school boy part time to help do minor repairs. This boy is able to test tubes and such minor work, reports Mr. Dixon, and he is also very useful in calling for and delivering radio sets. In fact, by bunching his calls in this manner so that the boy can call for radios, Dixon is able to stick at his repair bench most of the time and thus can turn out quite a volume of work. He has been in business since 1937, and expects a good volume of work in the postwar era, too.

Dixon kept up his tube stock by buying stocks of dealers who went out of business during the past two years. He also did a lot of change-over work on some radios, and thus was able to keep customers satisfied. He makes a minimum charge of \$1.00 on radio service calls in homes. Dixon does no service work on other appliances, but sticks to radio.

WOODSTOCK, III— Donald Menzel, Menzel Electric Co., handles radio and other appliance repairs, but is all booked up for a month or more ahead. Folks seem content to leave them, hoping the needed items will soon become available. This store gets a lot of small electrical appliances for repair, says Mrs. Menzel.

Most of such items can be fixed with available parts and tools, and the work is profitable. This store added Coolerator refrigerators as a line to help out with sales. Menzel also distributes Philgas bottled gas in 22-pound containers.

UTICA. N. Y. — Gray's sets aside two days a week on which sets can be brought in for servicing—Monday and Thursday. On these two days the firm picks up sets in its truck, or they are brought in by the customer. This cuts down number of shop visitors on other days of the week.



LAKE MILLS, Wis.—Engsherg Electric Co. uses large display room to show repaired appliances. Owner Gerald Engsberg does a volume business in appliance repair, both major and minor. Mrs. Engsberg handles the cord replacements on small units. Alternate lines are airplane models and electric fencing.

purchase an electric refrigerator or radio-phonograph combination.

Furniture has also filled a large part of the gap in regular merchandise, and the concern is lucky in having a low overhead which permits small mark-ups. Ceiling prices have been practically no handicap, because the firm has been able to market competitive merchandise around the twenty-dollar level at selling prices six to eight dollars below present tags in the big cities.

methods are employed. Listening booths are limited to two in number, to prevent loss of time in disc sales transactions. While Star's policy is against the addition of lines foreign to the radio field, this concern definitely plans to retain its record department as an adjunct to postwar radio sales.

CHICAGO, III. — The De Luxe Music Shop, 4063 Milwaukee Ave., is doing a thriving trade in records and sheet music since the disposal of

SALES in "LIBRARY

Radio-Music Retailer Believes Selling Job in Discs

• Fred F. Kramer, owner of Kramer Music House, 544 Hamilton St., Allentown, Pa., is one who believes the present boom in records is "only the beginning." Current trends in buying seem to point to larger sales volume after the war, he reports.

In this business all his life, Mr. Kramer inherited his present establishment from his father, who founded it in 1887. Extensively music from all its angles, radios were added in 1923 and the lines included RCA, Philco, Zenith and Capehart.

An astute merchandiser, Mr. Kramer was quick to foresee the current potential sales value in records, and stocked a tremendous inventory in this line, well in advance of today's

limited supplies.

Miss Libby Messinger, record department manager, reports that classics sell as well as the popular numbers. A university center, Allentown has always been musical-minded, she claims. In the past the girls at Cedarcrest College and the boys at Muhlenberg bought plenty of records. Now Muhlenberg College is a Naval training school, but the young people are still purchasers of discs.

Miss Messinger says that many men in the armed forces when on leave in Allentown request classic numbers in preference to populars.

Armed Forces Market

"One young soldier asked for Grieg's Piano Concerto," she said. "The young man seemed to feel that this called for an explanation and he went on to say: 'You'll never guess where I learned to like that kind of music, and that album in particular! I first heard it on the African desert during a night encampment. I promised myself if I ever lived to get back home again, I'd buy me that album for my own! Now that I'm home on 21 days' leave, you can bet I'm going to buy a lot more albums like it.'

"Another instance of the growth of music appreciation is the fine acceptance recorded music is receiving from the convalescing wounded," Miss Messinger recounted. "One of the best customers in the record department is a local doctor, who is now serving as an army surgeon. His duties call for constant trips on shipboard and plane, travel-

ing between the combat areas and home, bringing back the wounded. In here recently, the doctor requested one of the 'Showboat' albums for this purpose, so you see they like the semiclassic, as well."

Kramer's record department has sold three complete shipments of Decca's "Oklahoma!" album, and find their customers greatly interested in getting recordings of the actual casts of Broadway's hit musicals.

Concert Tie-ins

Mr. Kramer, formerly president of the Allentown Concert Forum, is now on its board of directors. The store's tie-ins with this Forum offer, among other things, the use of Kramer's specially fine Steinway Grand maintained for visiting artists' practice.

Located in a trading area of approximately 400,000, Allentown's population is about 100,000. Of this number 12,000 are now in the fighting forces. Orders from local families for Kramer's to ship albums to their boys in the training camps and on the

fighting fronts have covered almost every point from Iceland to India.

The pre-induction aged youth, also, is more interested in the classics to-day than the generations recently passed. A great believer in "floor observation of his customers on a Saturday afternoon," Mr. Kramer has heard several of the "turtle-neck sweater type" ask for the better kind of recording. He believes there is a definite trend on the part of youth to better music, and that records are pointing the way.

Record libraries are a nother method of building sales volume in discs and albums. Mr. Kramer believes a smart record sales assistant who knows music can educate the buying public and guide their purchases toward a really fine collection.

This cannot be done in two weeks, Mr. Kramer cautions. Rather a personal interest on the part of the sales individual must be shown in the customer by a study of the type person and the kind of music they like from the start. "Miss Messinger has done



BUILDING"

Can Guide Public's Tastes to the Best in Recorded Music





Above, record department of Kramer Music House. Below, Mr. Kramer and Miss Messinger discuss his extensive inventory of classics and populars. Mr. Kramer, recently made president of the Chamber of Commerce, is also active in his city's musical affairs.

this for one of our customers who originally bought nothing but the hill-billy records. Now he has a really fine library of hill-billy discs, and Victor Herbert, Kostelanetz, Friml, Strauss, and is now on his way to opera!"

After this war is over, Mr. Kramer will again sell the many fine musical instruments, pianos, and quality radios he carried in the past, and he will maintain a bigger and better record department than ever before. He regrets present advertising by some of the radio manufacturers, as he believes it tends to put the dealer "on the spot" in the future.

One other department Mr. Kramer will most certainly have is a good radio service department. He claims that this is absolutely necessary to a good radio retailing establishment, and hopes to obtain the services of some of the Number I technicians now being trained by Uncle Sam.



• Decca's new smash hit is its recording of "Carmen Jones" (album 366), which features the entire cast of New York's musical success of the same name, adapted from the Bizet opera "Carmen."

The show's all-sepia cast does a rousing good job in colorful rendition of the immortal Bizet music, which is unchanged. The plot, however, is altered in time and locale. This upto-date version of the opera presents Carmen as Carmen Jones, a defense worker in a southern American parachute factory, and her Don José is Corporal Jo in Uncle Sam's present army. The triumphant toreador of the opera becomes "Husky," a champion prize-fighter.

Decca offers dealers flashing display material in the fuchsia and light blue album cover, album liners of montage show shots, and prints of candid photos taken at the album's recording. Accompanying album booklet is extremely interesting and enhances listening enjoyment.

Suggestion for tie-in window display is the use of several copies of Life's May 9th issue, opened to its reproduction of Covarrubias' colorful paintings of the show.

• Columbia scores a new high in blue notes with its current release of a collection of Count Basie's syncopating rhythms in album form, "Blues by Basie" (Set C-101). Containing 4 discs, it includes such outstanding favorites as "Royal Garden," "How Long," "Cafe Society," and "St. Louis" Blues.

Basie's star of success began a steady ascendency with the birth of the blues in 1934, until now he is truly one of the Kings of Jazz.

Famous for his appearances on stage, in the night clubs, and on the air over national nets, his recordings in album form will be welcomed by the Basie fans and sought by others less familiar with his inimitable style. Composer of the "One O'Clock Jump," he is often called the Jump King of Swing! Window and point-of-sale promotions suggest much color and variety.

• Victor's Lena Horne albums are definitely a master offering in sepia and blue. "Moanin' Low Album" (Smart Set P-118) includes such unforgettables as "The Man I Love" and "Stormy Weather." La Horne's "Birth of the Blues Album" (Smart Set P-82) is another display-for-

NOTES IN BLUE

in Race Records and their Colorful Artists

dealer-profits number, especially now that this artist is appearing in so many currently popular films.

Duke (of Hot) Ellington is also a Victor headliner in blue. A new release, "A Slip of the Lip" backed by "Sentimental Lady" (20-1528), and re-issues "Main Stem" (20-1556) and "Chlo-e" (20-1547) are top-flight numbers in popular appeal.

Currently starred at the "Hurricane", New York nightery, the Duke is scheduled to make a concert tour with his band through leading cities end of this summer. Such of the Ellington compositions as "Black, Brown and Beige" and "A New World A'Comin'" are not now in disc form due to the Petrillo ban on recordings. But on the basis that the public will buy what it can see, display of available Duke Ellington recordings should be profitable. Your Victor distributor can advise you on dates.

- Capitol is proud of their Benny Carter and his orchestra and his thrush, Savannah Churchill. Their latest: "Hurry Hurry" backed by "Poinciana" (No. 144) has had a great success with race record buyers.
- Hit's new Cootie Williams album "Echoes of Harlem" (No. H-122)

(see RADIO & Television RETAILING, April, 1944, pg. 82) is Hit's new high note in sepia jazz. It is now ready for release to dealers.



Top, Duke Ellington, composer and Victor artist. Left, Victor's Lena Horne. Lower left, Columbia's Count Basie in action. Lower right, Capitol's Savan nab Churchill.





RADIO & Television RETAILING . May, 1944

Emerson Awards Bonds to Employees



Jack Geartner, Emerson radio official, presents War Bonds to two Emerson employees for their suggestions to the management which have resulted in increased production and the conservation of man-hours.

Appliance Merchandiser

(Continued from page 29)

played record departments in the area.

Needless to say, with the attention given this portion of the business, record sales volume has doubled in the past year. These merchandisers attribute this success to display of discs on the self-service plan, and local newspaper advertising.

Display in the record department is adequately representative of the complete line that is carried. Inventory is, of course, important, and records can be sold on the most successful basis when the inventory is all-inclusive, dealer Jacoby claims.

The display starts with their attractively arranged window which highlights the fact that the store has in stock records of all the large recording companies.

Inside the store, the record department occupies about one-half the floor space—the entire right-hand half of the store, with the tables, center aisle and wall racks.

Kiddies Listen To "Man in Moon" at Top of Display

Paramus carries every kind of disc from classics to children's records. These last have a remarkable sales potential, Mr. Jacoby believes. He decided that this type of record was not displayed advantageously and that he would do something about it. Due to the large area covered by this store and its various divisions, in prewar time Mr. Jacoby made good use of an intercommunication system with five speakers: 1 to cars entering for service, 1 to rear service building, 1 to storeroom, 1 to auto laundry (now closed for the duration), 1 to the store, and 1 in the office. By building the Kiddie Korner display for children's records and music books (see front cover), which idea he got

from the World's Fair exhibits for children, he installed one of the speakers behind the "moon."

When the children are in front of the display to choose a disc or album Mr. Jacoby, unseen, from his office, addresses them over the speaker, impersonating "the man in the moon," and calling them by name, asks them what records they would like to hear.

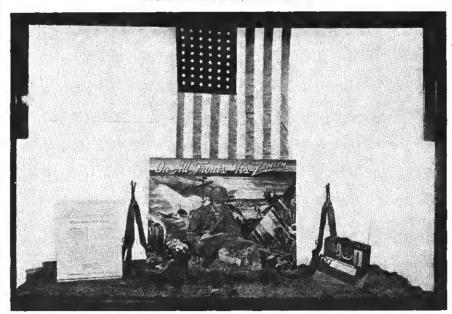
It goes without saying that this makes a big hit with the young children for whom the display was planned, and it does a great selling job.

Builds Good Will

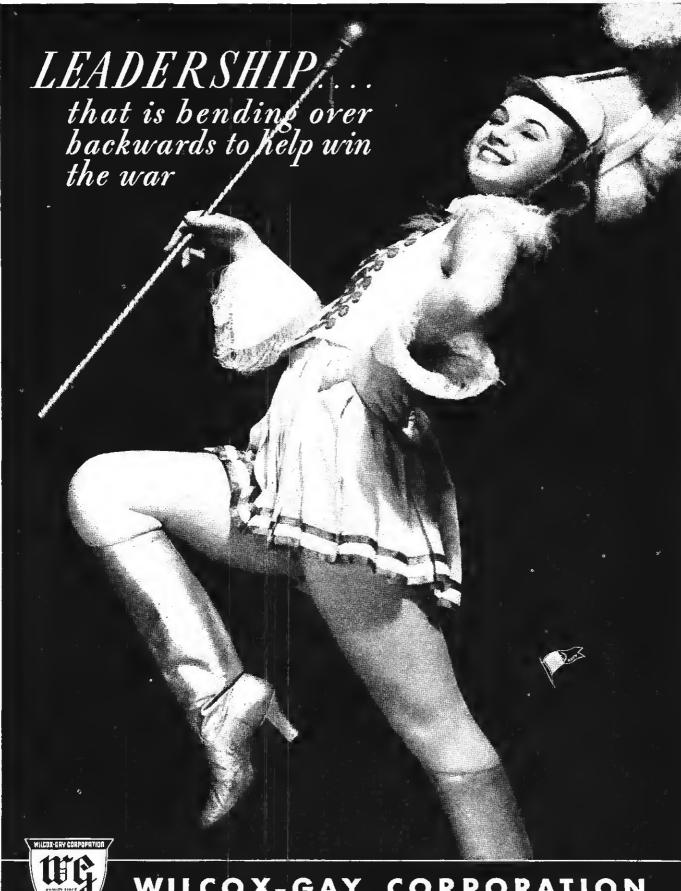
This kind of merchandising is only one of the many ways by which dealer Jacoby has endeared himself to his customers. Many a local radio technician now in the armed forces learned his first bit of radio trouble-shooting in the service shop of Cy Jacoby. Mr. Jacoby is proud of his collection of over one hundred Christmas cards which he received this past holiday from boys on the fighting fronts all over the world, from the Aleutians to Guadalcanal. He writes back, too, and for this he sets aside many a Sunday at home.

Postwar plans for this store are ambitious indeed. Blueprints for store expansion after the war are actually drawn. They call for a separate store next door to be devoted to records alone. The present large setup will be rebuilt to include a large outer driveway for drive-in auto service and gasoline tanks. Inside, the ample showroom will be just packed with radios, refrigerators, laundry equipment, and small home appliances.

Zenith Dealer Window



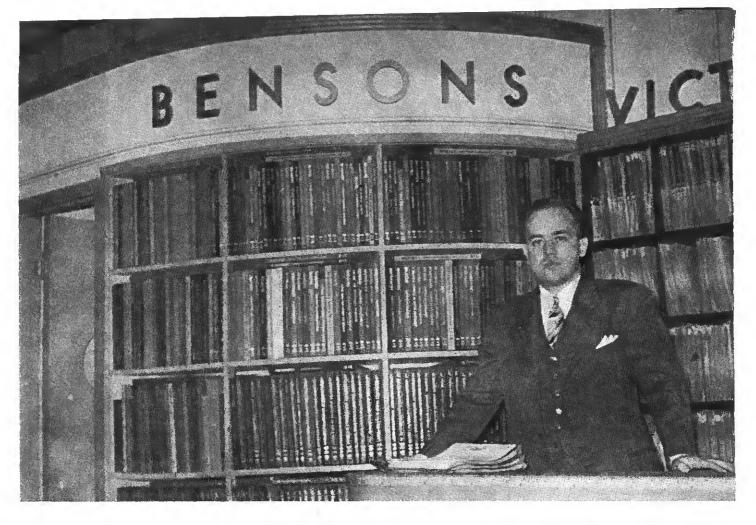
Interest-getting display built around Zenith's reply to individuals in the armed forces requesting portables. These sets cannot be supplied by Zenith, the answer states, inasmuch as ALL Zenith production facilities and material must fill war operations orders, FIRST.



WILCOX-GAY CORPORATION

CHARLOTTE, MICHIGAN

Manufacturers of the Recordio, Famous Home Recording-Radio-Phonograph Combination



Benson "Faced the Music"

Chicago Radio-Appliance Dealer Finds Records the Answer to Merchandise Shortages

• Shortly following the ban on the manufacture of electrical merchandise, the Benson Shops, Chicago, faced a crisis. The last of their stock was on display, and this was being absorbed daily.

The Benson Shops consisted of four stores, all located opposite each other in the 5200 block on West

Chicago Ave.

Prior to the war, the shops enjoyed considerable business, being then among the largest organizations on the west side of the city. The founder, Andrew Benson, opened a piano shop in 1910, at the northeast corner. Later, he acquired control of the three corner stores across each of the streets, and the junction became known as "Benson's Corners." The piano business is still maintained in the original quarters.

Faced a Real Problem

With merchandise slowly going out and nothing to speak of coming

in, Clarence Benson, son of the founder, was up against a serious problem. The question was, how could all four shops operate in the face of lack of merchandise?

Heretofore, each of the corner stores carried a definite line of merchandise. One shop was devoted to the sale of radios, phonographs and radio service work exclusively; a second, entirely to refrigerators, washing machines, ironers and similar articles; the third, handled stoves of all kinds, and the fourth was devoted to the sales of pianos and band instruments. Also, secluded in a corner of this shop was an insignificant record counter—an "orphan"—destined to play an important part in the future of the business.

When the quantity of merchandise on hand at each of the three shops reached the lowest point, Benson concluded there was just one thing that could be done—that was to vacate three shops and to move remaining radios and appliances to the piano store. This was subsequently done.

\$12,000 Stock Now

Benson's is now a record shop, doing a large volume of business. Its initial stock of \$1,000, has grown to a \$12,000 inventory—and all within two years.

The shop interior was entirely renovated. Cream-colored celotex was used on the walls. The rear partition and ceiling was built into an oval, thus creating a streamlined effect. The floor was carpeted, and six listening booths were installed.

Records from the piano shop were placed on the shelves, and the shop was ready for business.

It then became necessary to reach the type customer who might be interested in buying the records the shop had in stock. Using advertis-(Continued on page 84)

Larmen Jones

Not an Opera Star in the Cast-but WHAT A HIT!

From the waterfront and the stockyards — from behind store counters — from everywhere but grand opera came the great-voiced, gifted cast of Billy Rose's sensational operatic production. With new, modern story and lyrics by Oscar Hammerstein II (who wrote the lyrics for Oklahomal) and the original "Carmen" music by Georges Bizet, Carmen Jones is already a box-office marvel on Broadway.

Who else but Decca would you count on for records of this unusual hit—with original cast, chorus and orchestra? Packaged in a distinctive album, to sell for \$6.50. Complete on six 12-inch records. Selections include: Prelude—Dat's Love—You Talk Just Like My Maw—Dere's a Cafe on de Corner—Beat Out Dat Rhythm on a Drum—Stan' Up and Fight—Whizzin' Away Along de Track—Dis Flower—De Cards Don't Lie—My Joe—Dat's Our Man—Finale.



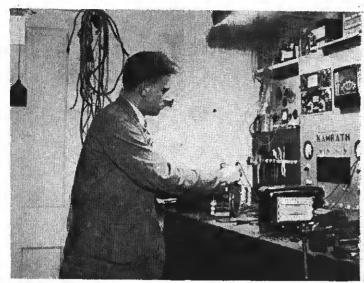
Order now from your regular Decca Branch

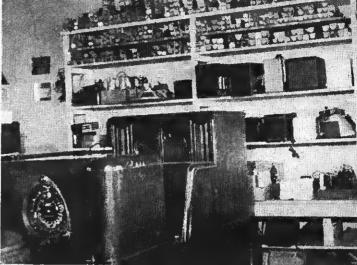
*List price, not including federal, State or Local taxes



DISTRIBUTING CORPORATION







Servicer Edgar Kamrath at the bench turns out large volume of sets in spite of tube and part shortages. At right, some of the receivers awaiting repair.

Advice to Servicers

Beaver Dam Dealer, Busy as a Beaver, Finds Time Spent Visiting Other Radiomen Is Worth While

• "I have been lucky enough to keep my tube stock in fair shape by buying the stocks of dealers going out of business in towns as far as 50 miles distant," says Edgar Kamrath, operating Kamrath Radio Service, 1306 Spring St., Beaver Dam, Wisconsin, since 1935. "I have made every effort to contact such dealers and such purchases have helped me immensely. I know it can't continue, however, but we will come through all right."

During wartime, as in peacetime, every radio dealer must do certain things in advance of the general trend, says Mr. Kamrath. He believes in visiting other radio dealers to gain their viewpoint and to buy and sell miscellaneous equipment. Such acquaintanceships always help out in an emergency. As a result of these visits, he was able to buy some stocks of tubes when other dealers went to war or closed their businesses for the duration.

100 Sets to Service

"We have a great deal of work on hand right at the present time," he says. "I have about 100 sets awaiting repairs. I handle all my own work and try to devote as much time to bench work as possible. I use a lot of ingenuity to get some sets operating when parts are scarce. So far I haven't been stumped."

Mr. Kamrath employs a young high school boy to work late afternoons and Saturdays for him, handling bookwork and the front office. This young man can attend to phone calls and other routine work and thus Kamrath is enabled to stick to his bench and get more troubleshooting done. "People have so many questions to ask about radios during wartime, that a dealer could spend most of his time talking," he declares. "I have to conserve all the time I can for radio repair."

Repairs Exclusively

This dealer has gone in for service exclusively during wartime and he is glad that he did. Running a one-man shop, he feels he can do a much better job by handling only radio repairs, and in this way, too, he has built a reputation of being a service specialist.

Kamrath feels that sets should not lie around the shop waiting for certain tubes and parts which in many instances are impossible to obtain. By using all the "know how" methods, it is possible to get sets repaired and back to the customer. Substitute tubes, universal replacement parts, and a knowledge of circuits must all be used to do the jobs.

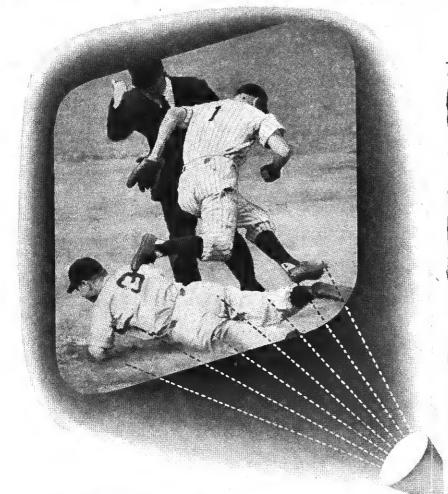
Kamrath offers no home repair or delivery service for the duration. He insists that people bring their sets to his shop. That this policy works out is attested by the fact that his display room, formerly devoted to showings of new radios, is always jammed with sets awaiting repair.

Customers to Pay Delivery

"If a customer has a large model," says Kamrath, "I hire a local drayman to get it and to deliver it when the job is finished. I explain to the customer he will have to pay for delivery charges. Very seldom do any of them object."

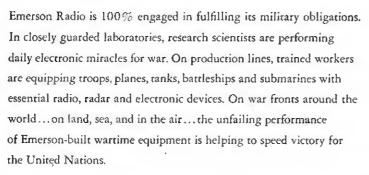
Rather than trying to hire new workers—a tough task in any event—Kamrath prefers to operate his present setup by trying to do all bench work himself and hiring parttime help to handle the office. This is working out well for him.

"There is no doubt but what the crying need of the radio dealer at this moment is the supply of a wider selection of tubes," says Kamrath. "Radio men in general have done a fine job in keeping sets functioning in every community. Give us radio dealers some more tubes and we can continue to stay in business and make a profit, and also serve the best interests of our communities. With war production up in most instances, I believe we will be given more tubes."



great engineering ideas in small packages





"A THEATRE IN EVERY HOME" with EMERSON TELEVISION

Practical Television at a price within reach of every home—will be but one of the many postwar developments of Emerson Radio engineers and scientists.

Emerson Radio's vast research facilities augmented by its sensational wartime advances in the field of electronic science will find practical expression in "great engineering ideas in small packages"... when materials for new civilian radios become available.

The technical perfection of these fine instruments will be matched by cabinets of exceptional beauty and workmanship... STYLED as only Raymond Loewy, famed industrial designer, can create them.

As in the past, there will be outstanding merchandising and sales promotion, further enhancing the value of the Emerson Radio. Dealer Franchise.

Meanwhile, the Emerson Radio Postwar Planning Board is keeping public interest in the Emerson name alive through a coast-to-coast radio show and a powerful national advertising campaign...developing business-building dealer plans which will stimulate store traffic and patronage today...as well as tomorrow.

Even while they look ahead to the prosperous electronics future, Emerson Radio executives are keeping their eyes on the current "pay-the-rent-and-make-a-profit" needs of the radio trade.

A new, timely, and powerful "PREFER-ENCE" promotion will be announced shortly. Watch for it...capitalize it!

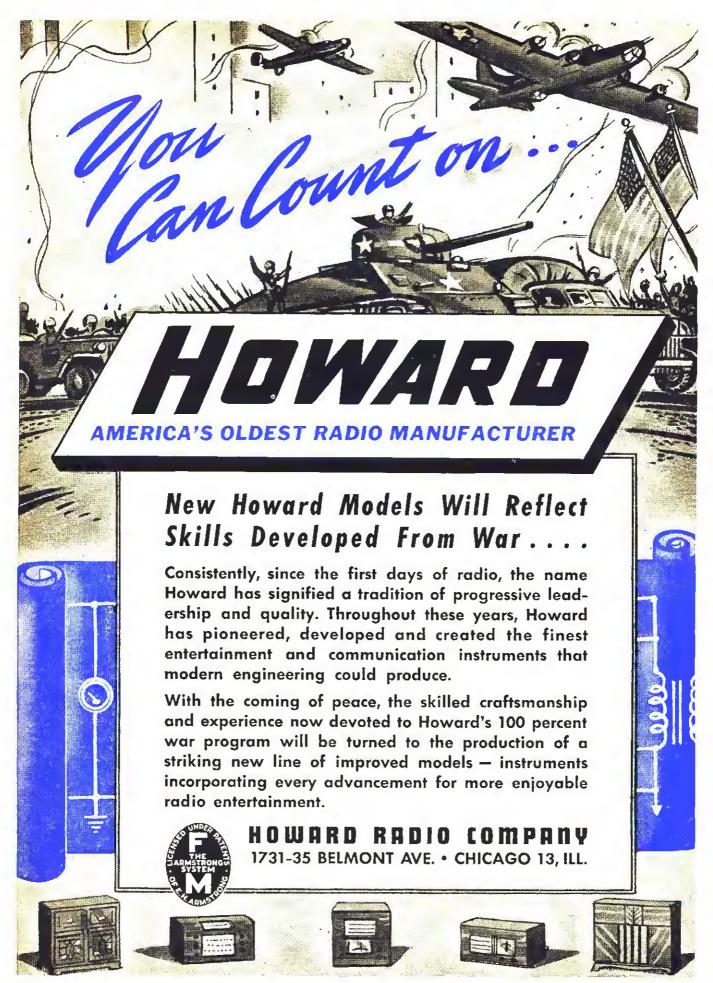
Tune in on "GREEN VALLEY, U.S.A."

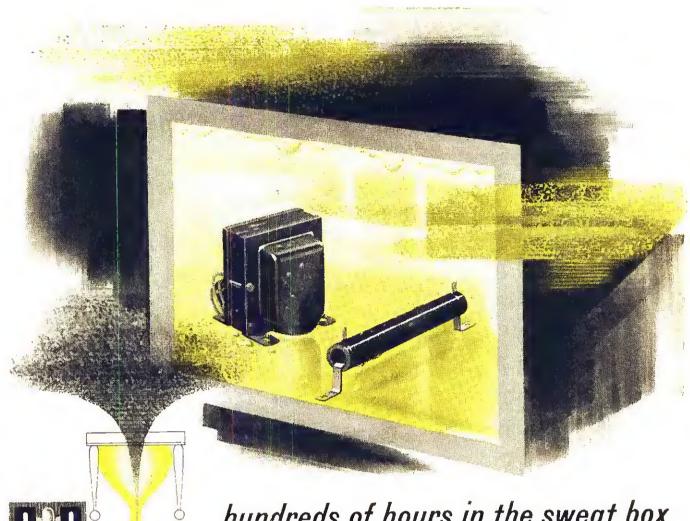
Over Mutual Network, Sundays, 5 p.m. EWT...

Short-waved to our men and women overseas

Emerson Radio

EMERSON RADIO & PHONOGRAPH CORPORATION, NEW YORK II, N.Y.





hundreds of hours in the sweat box

The destructive moisture of New Guinea jungles or a London fog is duplicated in this high humidity chamber in the Utah laboratory.

This "sweat" treatment is giving Utah parts being tested the chance to prove that they can take anything that excessive humidity can give them.

As a result, there will be no breakdowns or a lack of efficiency when these parts

encounter actual conditions in the field.

Utah's complete testing laboratory is an important aid to Utah engineers in adapting new, war-created radio and electronic developments to military needs today and in making them available for commercial requirements tomorrow,

Every Product Made for the Trade, by Utah, Is Thoroughly Tested and Approved



Keyed to "tomorrow's" demands: Utah transformers,

speakers, vibrators, vitreous enamel resistors wirewound controls,

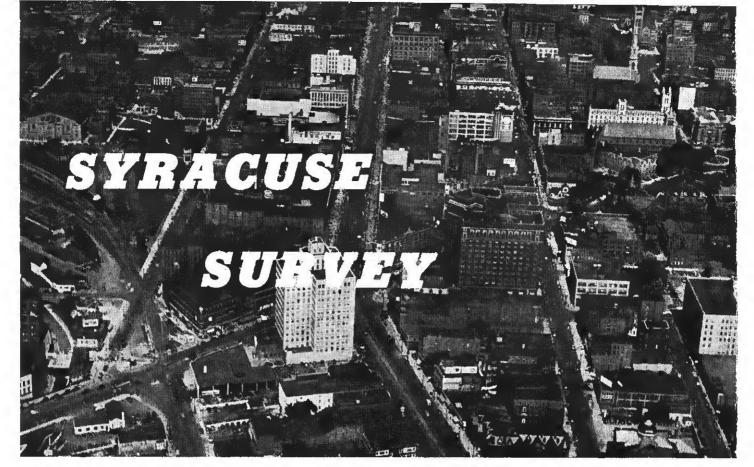
plugs, jacks, switches and small electric motors.



Utah Radio Products Company,

810 Orleans Street, Chicago 10, Illinois





Business district, looking north on Salina St.

New Stocks Practically Exhausted—Dealers Sell and Service "Sound"—Varied Repair Techniques

• Syracuse, N. Y., is a city of slightly over 250,000 inhabtants. Its citizens are extremely radio conscious as there are 4 radio stations all doing business at the same old stand.

Let's take a look at the radio service men and dealers in this area.

Taking the dealers first, there's Clark's, on Salina St. Mr. Richardson, head of their radio department, reports that there are still high-priced consoles available but that the lower priced sets have disappeared.

Industrial Repair

Clark's biggest interest right now lies in the field of industrial radio. PA systems in factories need repair.

Other factories wish to expand their paging and factory music-sound systems. Despite the priority requirements, Clark finds that with ingenuity, it's possible to devise adequate sound installations to fill this need.

Then there's Bernard's, who, in addition to radio, handles a variety of electrical items. They report their biggest business is in second-hand sets. Before the war they thoughtfully accumulated a backlog of used sets.

Bernard advises that there is a

great demand for used toasters, percolators, irons and shavers. They use the "want ad" section of the local newspaper to request used electrical items of all kinds.

Bernard believes dealers with new sets on hand can acquire a considerable number of used sets by contacting farmers who have old radios they would like to trade in towards new "high-priced" console sets. The rural traffic has been sadly neglected in this respect, this dealer believes.

On to Berndt Radio on S. Warren St., headquarters for short wave and amateur parts, originally with car radio service a sideline. Car radio is now the big-time factor, and ham radio is out for the duration. Their car radio business is up nearly 30 per cent.

Uses School Papers

Berndt advises that many high school youngsters have junk piles of usable radio parts in their cellars or attics. He recommends using ads in school newspapers, asking boys to bring in anything along this line.

Van Radio, State St., finds its main business is the repair and service of amplifiers and PA systems. Restaurants, department stores, theaters—all use PA. Van also concentrates on inter-communication systems in hotels and other business places.

Rubenstein, on the same street, reports that you can't eliminate home calls. You simply have to put up with 'em. He does, however, warn patrons who insist on home service that it may take two or three days before he can make the rounds. If they're anxious for quick service they'll get the set into the shop in some fashion.

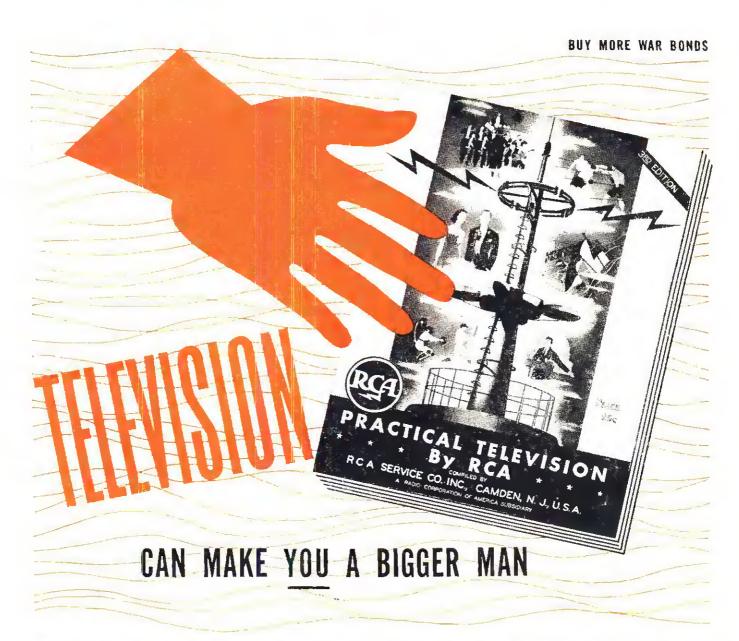
Home Service Charge

Rubenstein does charge more for home calls—there's a service charge tacked on which covers his gas, tires and time consumed in getting from shop to house. This charge usually runs \$1.00 in addition to his labor charges and component replacement costs.

Lee Roberts, one of the old Syracusans, however, still makes house calls at the same rate.

C. E. Alberts, on Erie Blvd., states that he still checks tubes free if they are brought into the shop. He feels it's a wartime service. He also gives

(Continued on page 88)



OU radio servicemen and dealers of yesterday and today have a great tomorrow ahead of you! TELEVISION—the art of transmitting sound and sight—will open up opportunities for you to surpass your pre-war experience with radio—the art of transmitting sound alone.

Are you preparing yourself today for that tomorrow? Others are, Don't you miss the boat!

For instance, have you a copy of "PRACTICAL TELEVISION by RCA." the comprehensive, 40-page booklet, now reprinted in its 3rd edition especially for you? Have you familiarized yourself with the television receiver design, installation, and service information, the page of television definitions, and the 62 diagrams and other illustrations which this down-to-earth guide contains?

If you haven't a copy, get one today, Ask your RCA Tube & Equipment Distributor for one. If his supply has run out, write to us—Room 300, RCA Victor Division, RADIO CORPORATION OF AMERICA, Camden, N. J. There are dollars-and-cents reasons why you should have a copy. It's meant for you. It's another RCA service to help you help

yourself to a bigger slice of tomorrow...and the price is only 25c per copy.

Remember, the Magic Brain of all electronic equipment is a Tube...and the fountain-head of modern Tube development is RCA!



HOW THE "GOLDEN GLOVES" FINALS LOOKED TO TELEVISION OWNERS













4-T-2-WILL HE MAKE IT?



THOUSANDS HAVE IGSIDE SEATS" RIGHT IN THEIR HOMES

Wounded Service Men See Bouts From Bedside in Army—Navy Hospitals

IT WAS just his if Madison Square Grarden had no walls! As the NBC relevision camers focused on the whirelyind action of the Golden Gloves Finals in New York, people as far-off-points, including hundreds of hospitalized soldiers, gasped at the shambang tactics of this most famous of amazeur boxing clustics.

At home with families and friends, owners of relevision-sect located in

At home with families in a trients, owners of relevision-sets forated in New York State. New Jersey, Connection and Pennsylvania freached by a Scity network; sow every blow as from ringside... heard the third of leather set, the crowd's explosive roar.

leather ..., the crowd's explosive roar.
Telecasts of the Golden Gloves Intercity Finals (Chitego v. New York,
March 27) aroanother important demoustration of how television is carrying on during these way years. But its
real growth must, of course, wait for
the peacetime years whead.
Then television's electronic

Then television's electronic eves-

developed in RCA Laboratories—will roam many places, via nationwide networks. When its great promise is finally fulfilled, it will make of your living room a place to see important and stirring news events while they happen a thrilling stage productions seem that it is a second to the constructions as many things, to fact, us the human eye itself can see.

As sook as possible after the war.

human eye itself can see.

As soon as possible after the wat,
RCA will devote the accumulated experience of many years in television
to the industry's further growth. One
part of that job will be the manufacture of home television receivers at a
price you can afford.

price you can allord.

And Just as television is showing the importance of FM for static-free sound, so foure RCA home incursaments—whether radio, phonograph or television receiver—will demonstrate the greatness of RCA's super FM circuit.













WAIT A MINUTE BOT-LET HIM UP!

CORPORATION OF AMERICA

RADIO RCA VICTOR DIVISION . CAMBEN, N. J.
LEADS THE WAY. In Raillo. Tricinion., Tubus., Phonographs., Records., Electronics



and you will share in the great Television Industry RCA is helping to build

TODAY, television counts its audience in the thousands. But tomorrow it will be millions. That is the great promise . . . millions of television sets for you, the radio dealers of America, to sell and service. The nation's "next great industry" will belong to you. And it will begin rolling as soon after the war as the industry's technical recommendations receive FCC approval.

Meanwhile, the National Broadcasting Company and other progressive television broadcasters are keeping television active in New York, Philadelphia, Chicago, Los Angeles and Schenectady. Studio programs, Army-Navy war films, the

circus, and highlights in the world of sports are a few of the types of programs on regular schedules.

RCA has spent more than \$10,000,000 in the development of television;—circuits, tubes, the very eye, in fact, that television sees with, came from work that RCA scientists began years ago.

After the war, this great store of experience will produce both transmitting and receiving equipment, including home receivers at prices millions can afford. And RCA merchandising, not only of television, but of fine new radios and phonographs with the RCA Super FM Circuit, will mean good business for you.

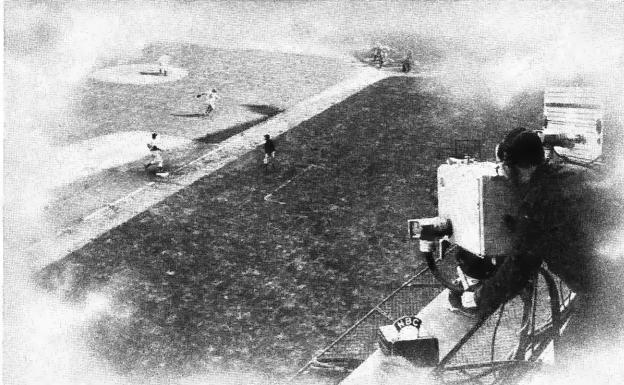
The newspaper advertisement at the left is another in the RCA series being published in selected television cities to keep the public informed about the "next great industry." This latest one not only shows how much of a "going concern" television is today but suggests its great possibilities for the future. Listen to "The Music America Loves Best"... every Saturday, 7:30 p.m., EWT, Blue Network.



RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION . CAMDEN, N. J.

LEADS THE WAY . . In Radio . . Television . . Tubes . . Phonographs . . Records . . Electronics



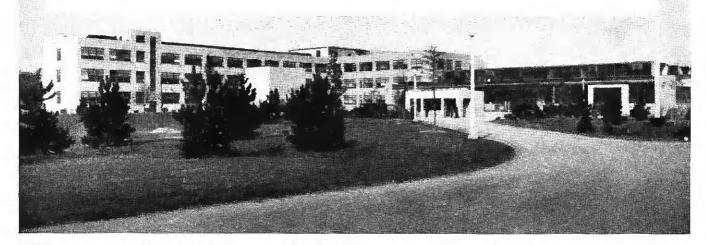
NEW VISIONS for Tomorrow's World

• IT DOESN'T MATTER NOW whether clouds hide the sun, or whether evening shadows fall on the baseball diamond. If the fans in the grandstand see the game so can the modern television camera.

That was not always so; the pre-war television "eye" needed as much sunshine as it could get to illuminate the scene. The same was true of football—final quarters were occasionally "washed out" on the television screen.

But thanks to research, conducted at the RCA Laboratories, a new super-sensitive television camera, rivaling the human eye in its ability to see under conditions of poor light is in prospect for the postwar world. Then, by television you will see every last-minute play of the ball game as clearly as if you were in the stands. Entertainment, sports, news events will pass before your eyes with every detail, every shadow faithfully reproduced.

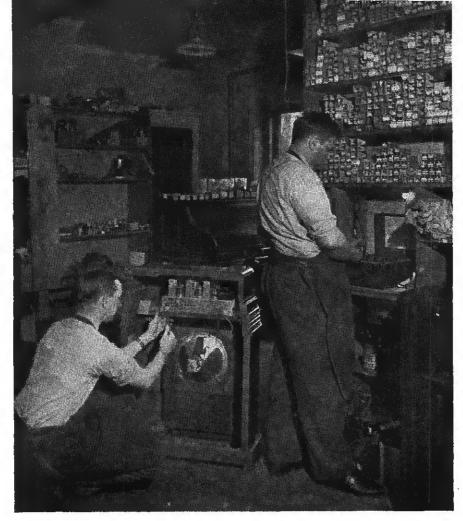
Today, RCA's research facilities are devoted to providing the fighting forces of the United Nations with the best radio and electronic equipment available. Tomorrow, these same skills will continue to serve America in developing and creating new and finer peacetime products.



RADIO CORPORATION OF AMERICA

RCA leads the way in radio—television electronics





Top: Brobst (left) bolts down a Phileo, while Schock tests tubes. Below: Schock balances an all wave receiver using the oscillator and V.T. meter. Brobst checks an intermittent receiver.

• For the past year Harvey Schock and Addison Brobst have combined their talents as highly skilled technicians to keep the radio sets playing in Reading, Pa.

Located at 501 Schuylkill Ave., they are on one of the main high-ways. It is easy for customers bringing in sets from either the suburbs or the city itself. This is important because they do not pick up or deliver.

Concentrating on service only, these partners do all possible to keep a high rate of speed in their work and still turn out top-flight repair and rebuilding jobs. Assured by the sincere dealing of their jobber supplier, they are not worried by low stocks in tubes and parts, but do the best they can with what they have. Equipment they cannot secure due to shortages is built by themselves. They could make trips to nearby cities, but find the time lost to be more than they can spare.

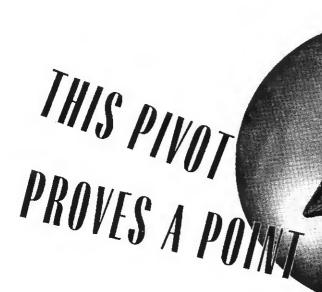
Both men are well equipped for their jobs. Both have been in the field for seventeen years. Harvey

(Continued on page 72)

Concentrating on Service



RADIO & Television RETAILING . May, 1944



HIS unretouched photomicrograph, approximately 1 50 times actual size, shows pretty clearly what we mean by the value of experience, when it comes to the making of electrical instruments and testing equipment.

Pivots play an important part in determining an instrument's life and accuracy. In the Simpson-made pivot above, you have what is truly a masterpiece of its kind ... perfect in contour ... all surfaces brilliantly polished to prevent rusting . . . rounded end properly correlated with radius of jewel to minimize friction and withstand vibration and shock . . . heat-treated for an unusual combination of strength and hardness.

The obvious explanation for, this excellence rests in the fact that Simpson employs some processes others do not, and safeguards every step of manufacture by the finest and most complete control modern science can provide. But in the final analysis, it is only Simpson's long experience which makes such a pivot possible.

That experience reaches back more than 30 years. From it has come new shortcuts in manufacture, new refinements in design, which today permit Simpson to make "instruments that stay accurate" in greater volume than ever before. From this long specialization has come too a sound basis for further advance; in your postwar Simpson Instruments you will see still more forcefully the value of this experience.

SIMPSON ELECTRIC CO. 5200-5218 Kinzie St., Chicago 44, Ill.

Buy War Bonds and Stamps for Victory



for finer radios tomorrow

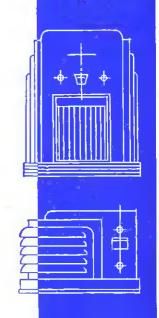
New management, new methods, new and enlarged production facilities—designed for volume manufacture of quality electronic equipment—that's DETROLA today. All this new plant and personnel are now producing electronic devices for VICTORY. That comes first. When Peace is won, the skills we have acquired in making quality war equipment will be turned to the production of the finest radios and other items for civilian use. Help make the finer post-war world an early reality by buying War Bonds and MORE War Bonds.

DETROLA RADIO

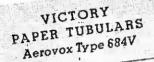
DIVISION OF INTERNATIONAL DETROLA CORPORATION . BEARD AT CHATFIELD, DETROIT 9. MICH.

C. RUSSELL FELDMANN





Ammunition.



ovox	A.S.A.	20.	M.F.D.	PRICE
AEROVOX CAT, NO. 684V 684V	VPC-2 VPC-3 VPC-4	800 600 600	.001 .002 .005	\$0.20 .20 .20 .20
684V 684V 684V	VPC-8		.02 .05	.20 .25 .30 .45

VICTORY ELECTROLYTICS Aerovox Type PRSV

SELL OF LELL	Acres and the State of the Stat	1: 30		LIST
AEROVOX	A.S.A.	p.C. w.v.	CAPACITY M.F.D.	PRICE
CAT. NO.	SPEC. NO.	25	25 - ::	\$0.60
PRSV	VEC-10	50	10	.55 75
PRSV	VEC-2	150	20	1.30
PRSV	VEC-4	150	50	1 10
PRSV	VEC-5	150	20	1.00
PRSV	VEC-6	1 15	0 10	1.40
PRSV			10-10	1.75
PRSV	2100		50 40	
PRS	A	-	** 1.1.	The second second

for the HOME RADIO FRONT

CONDENSER

● These are Victory Capacitors. Available in voltages and capacitance ratings selected to meet a wide range of servicing requirements. Indeed, these numbers, used singly or in groups, can service about 90% of the usual capacitor replacements, while much critical material and labor are being conserved for the urgent needs of our fighting men.

AEROVOX VICTORY PAPER CAPACITORS are simply certain selected values in the long-established Aerovox Type 684 tubular line. Millions already in daily use. Enviable performance records. Conservatively rated non-inductive vacuum-impregnated paper sections in extra-wax-sealed cartridges. Yellow-black-red varnished label jackets. They are just as good as they look.

AEROVOX VICTORY ELECTROLYTICS are selected values of well-known Aerovox Type PRSV Dandees. Again, millions already in daily use. Conservatively rated dry electrolytic sections in sturdy tubular housings. Extra-wax-sealed. Built for tough going.

For the duration...for dependable servicing...you can count on Aerovox Victory Capacitors: truly ammunition for the home radio front.

SEE OUR JOBBER...Consult him regarding your wartime capacitor requirements. He carries a stock of essential replacements for your regular servicing and maintenance needs. And for your more special needs, if they have a war significance, he can get unusual items on high priorities.



INDIVIDUALLY TESTED

AEROVOX CORPORATION, NEW BEDFORD, MASS., U. S. A.

SALES OFFICES IN ALL PRINCIPAL CITIES

Export: 13 E. 40 St., New York 16, N. Y. . Cable: 'ARLAB' . In Canada: AEROVOX CANADA LTD., Hamilton, Ont.

And now... war PREPARES MAGNAVOX FOR PEACE

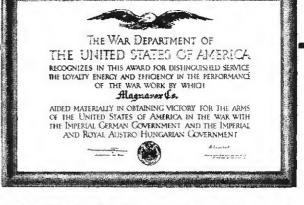
YESTERDAY—in the first World War, Magnavox received this award "For Distinguished Service." And the peacetime history of Magnavox also is distinguished by outstanding achievements. In 32 years' service to the radio industry, this company made many important contributions, prominent among them the electro-dynamic speaker.

actruadio
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kills
field

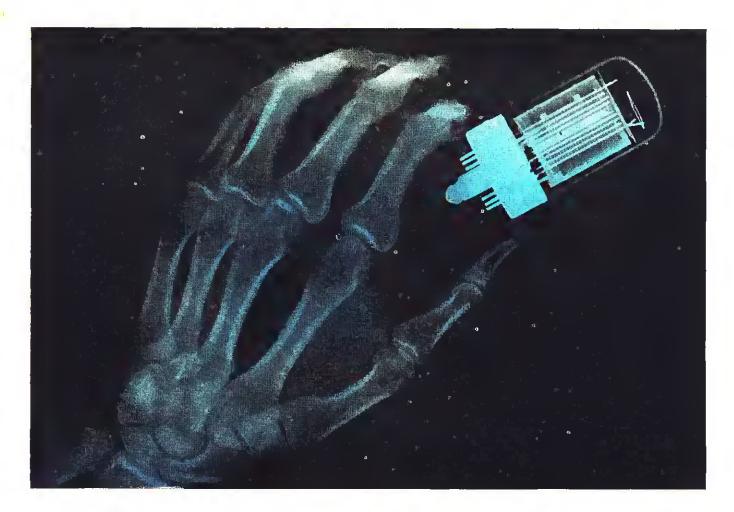
TODAY—Magnavox is producing such scientific instruments of war as electric gun-firing solenoids, giant radio direction finders and radio communication equipment of many kinds for all branches of service. Magnavox skills and craftsmanship won the first "E" award in this field (in 1941)—now with three White Star Renewal Citations.

TOMORROW—Peace will find Magnavox skills and facilities at their peak, stepped-up by the necessities of war. In this modern six-acre factory, Magnavox engineers again will build components for the radio industry... and will figure prominently in the new developments of electronics. The Magnavox Company, Fort Wayne 4, Indiana.

Magnavox







Induction Ceremony



This is an X-ray photograph of the final step in the stiff pre-induction examination which National Union engineers are giving many of the N. U. Tubes now headed for combat duty.

Why X-ray? Because with great objectives and priceless lives at stake, it is a military necessity to know that critical-type N. U. Tubes are sound through and through-equal in every way to the ordeals they'll face in battle. Even tubes which have passed scores of operational tests with flying colors, are scrutinized by the searching eyes of the X-ray engineer. X-ray examination of the finished tubes-after all

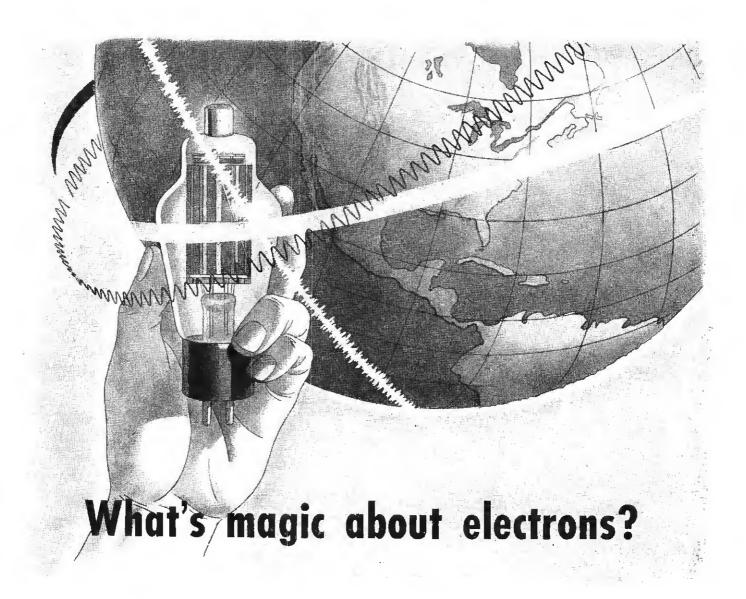
processing has been completed-helps our scientists to know that there is no hidden weakness anywhere.

This insistence upon leaving nothing to chance typifies the uncompromising scientific standards which prevail at National Union. It is assurance that every tube which carries the N. U. trademark can be counted on to do its duty, always. Can be counted on, too, to reflect credit on the service engineers who sell them. For radio, television and electronic tubes of known dependability . . . count on National Union.

NATIONAL UNION RADIO CORPORATION, NEWARK, N. J. Factories: Newark and Maplewood, N. J., Lansdale and Robesonia, Pa.

NATIONAL UNION RADIO AND ELECTRO

Transmitting, Cathode Ray, Receiving, Special Purpose Tubes . Condensers . Volume Controls . Photo Electric Cells . Panel Lamps . Flushlight Bulbs



The magic about electrons is man's ingenuity in putting them to work. The magic about electrons is their promise of service in marvelous ways only hinted at in the last few years. Now harnessed for war, the science of electronics will later work to enrich the peace.

Working in close cooperation with Army and Navy engineers, Delco Radio has applied its knowledge and skill to putting electronics actively and effectively into the fight for Victory. In Delco's laboratories, principles are explored and exploited; in Delco's engineering department, designs are evolved to apply these principles; and on Delco's production lines, complete equipment is manufactured with the speed and skill that only a large manufacturer of precision radio instruments can bring to such work.

Put your dollars "in action"
BUY MORE WAR BONDS



MEISSNER OF MT. CARMEL



Beauty — and Accuracy! Top-grade personnel, brought up in a community where electronics skill has become a heritage, give Meissner products their far-famed quality. There are hundreds doing similar work.

Close Co-operation! This is a factory conference at Meissner's Mt. Carmel plant. Here production plans are worked out for maximum harmony, top efficiency.



Trouble for the Axis! Youthful vision here combines with mature judgment to keep Meissner in the forefront of electronics progress. These men are testing.

Why all eyes in the Electronics Industry are on this little city in Illinois



Precision-el—that's the name carned by Meissner personnel because of their skill at all types of precision work. Here is one of many Meissner veterans.

Just Out! Special 1944 Bulletin!

—showing radio parts in Meissner's 1944 line. Contains complete descriptive matter, with pictures. Now, more than ever, you need to know what the market offers. Send for your copy today. The supply is limited. It's free. Write to address below.



MEISSNER

MANUFACTURING COMPANY • MT. CARMEL, ILL.

ADVANCED ELECTRONIC RESEARCH AND MANUFACTURE

RADIO & Television RETAILING • May, 1944



This is a bomber-riding radio man. With high-precision, Belmont-made equipment, he is tuned in on the greatest drama of our times . . . a drama in which he is one of the audience and one of the principal characters too.

It is a drama filled with periods of nerve-racking silence... the chilling sound-effects of machine-gun fire . . . moments of high exhibaration, deep anxiety, and painful suspense ... a drama in which many may pay with their lives if but one muffs a line or misses a cue.

The responsibility of this radio man is great indeed. But willingly he accepts it, concentrates on it, and meets it with all his resourcefulness and skill. And as producers of much of the equipment he uses, Belmont accepts its own responsibility in this same spirit. Belmont Radio Corporation, 5931 West Dickens Avenue, Chicago 39, Illinois.



Belmønt Radio

ELECTRONICS EVISION



WEBSTER RECORD CHANGERS

Will Guide Your Choice of Postwar Radio-Phono Combinations You Will Sell



LIGHT THE WAY TO VICTORY with WAR BONDS

Webster Record Changers postwar will be the dependable, long-service mechanisms you have learned to expect from Webster . . . incorporating important developments we have all desired. As the largest manufacturer of record changers in pre-war years, Webster accumulated a huge background of experience about what you want and need. During the war we have maintained close contact with dealers and users of our record changers. All this experience is translated by our expert personnel-working with precision equipment -into Webster Record Changers you will want to watch for in the postwar radio-phono combinations you choose to sell.



WEBSTER PRODUCTS

3825 W. ARMITAGE AVE. CHICAGO 47, ILLINOIS





lent record established in commercial and naval ships.



THE HAMMARLUND MANUFACTURING INC. CO.,

460 WEST 34th ST., NEW YORK, N. Y.

Established 1910

Circuits For Tubes

Socket Change Suggestions to Simplify Tube Substitution Problems. Circuit Modifications and Operation Data

• The supply of particular tube types varies from month to month and from one section of the country to another. Adaptors are now available for convenient interchange from octal to loctal, etc. Conversion of

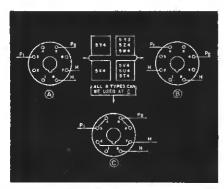


Fig. 1—Rectifier socket wiring at C will take all 8 tube types above. Filament and load current requirements may limit types interchanged.

circuits and sockets is still necessary in many instances to keep sets going until tube supplies are normal. The following circuits are those worked out by M. G. Goldberg, Beacon Radio Service, St. Paul, Minn.

Fig. 1 shows how one socket may serve for any one of four different types of rectifier tubes by means of a few simple wiring changes. The diagram is self-explanatory, but the procedure is as follows:

- Lift and tape up any leads using dead socket prongs as tie points.
- 2. Connect three jumpers as shown at C. Jump 3 to 4; 5 to 6; and 2 to 7.

A few receivers have sockets with only the correct number of socket lugs for the type of tube used, and therefore the only solution here is to change the socket to a standard octal type.

Sub for 35Z5

Fig. 2 shows a simple method of using a noisy 35L6 or 50L6 in place of a 35Z5GT without any appreciable loss in output. Some of these discarded output tubes have given three or more months of service in such positions in the circuit, and the best part of the changeover is that the 35Z5, when available, can be

placed back in the socket with no further change. If the tube has an intermittent plate to screen, or screen to grid short it will make no difference when used like this. If tube has a cathode to heater or cathode to grid short, it will blow the pilot and this would, of course, be positive indication that it is of no use either as an output or rectifier tube. If R₁ is used in original 35Z5 circuit, connect as shown between #2 and #3, instead of between \$3 and \$5 as is usual. Many of the receivers use dead points such as #4 on the Z5 socket for a tie point, so be sure to lift and tape up any leads connected to this lug. The only added part is



Fig. 2—Noisy 50L6 and 35L6 tubes will serve as 35Z5 in emergency cases. Rewire as at right.

a one-half watt 30 to 40-ohm resistor for the pilot shunt. Use a #47 pilot. In some changeover circuits, the 12SA7 and 12A8 tubes are replaced by using the 12SK7 with the oscillator plate coil in series with the primary of the IF coil. Some of the sub-standard types and MR types coming through are somewhat below par in this circuit and inserting a 5M resistor in series with the low end of the IF primary coil, bypassed by an .01 capacitor will usually correct any difficulty from this source. A sure cure is shown in Fig. 3, showing a resistor in both screen and plate circuits.

The 7C6 tube can be substituted for the 12SQ7 by changing the socket to a loctal type and following the tube charts, matching element for element. The heater current is still 0.15 amp. and the difference in voltage drop is taken care of by adding a 50-ohm, 2-watt resistor in series with the 7C6 heater pin No. 8. This leaves the No. 1 heater terminal still at ground potential. See Fig. 4A. If the line voltage in your territory is 110 volts, the resistor may be dispensed with, but if 115 or 125 volts, use it in the circuit.

7A7 for 12SK7

The equivalent tube in the 7 series for the 12SK7 is the 7A7. The same procedure is followed here as for the 12SQ7 above, changing the socket to a loctal type and rewiring,

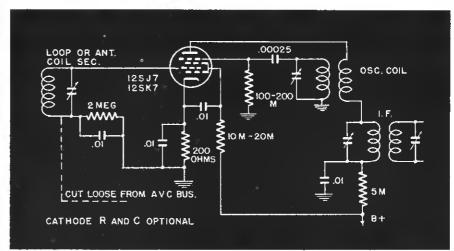


Fig. 3—Converter circuit using 12SJ7 or SK7 for 12SA7 is improved by adding 5M resistor in plate circuit as shown. Suppressor grid is used as oscillator grid and plate is used for both oscillator and IF sections.

following the tube base wiring charts for the proper tubes. The 50-ohm resistor mentioned above should be used here, but it is immaterial whether the resistor is connected in series with the No. 1 or No. 8 pin. See Fig. 4B.

Suggestions for the 12SK7 and 7A7 tubes, and also for the 12SA7 have been given before, (RADIO RE-TAILING, March) but in Fig. 5A is another one using the 7A8 tube, which works very smoothly. socket is changed to a loctal as in the above two tubes, and the connections are as shown. The only unusual feature is the tying together of the oscillator plate, and screen grids to keep the feedback coil in the cathode circuit so as not to disturb the calibration. Here again the 50-ohm resistor is used where line voltages are 115 or higher.

The 1A7G and 1R5 can be changed after installing the miniature socket. Because of the small hole needed for the miniature socket, it is advisable to carefully break out the socket prongs on the IA7 socket (after disconnecting and marking wires with small tags). This will still leave the upper bakelite wafer which can be drilled out carefully to the proper size to allow the mounting of the miniature right on top of the remaining wafer. If this is not done, it will be necessary in most cases to make another washer or wafer to fit the larger hole left by the 1A7 and then mount the small new socket through this washer. A standard oscillator circuit is shown in Fig. 6A. Fig. 5B shows the socket arrangements. To keep the 1R5 from super-

Fig. 4A-Socket wiring for 128Q7 and equivalent loctal 7C6.

regenerating, insert a 150M resister (1/4 or 1/3 watt) in series with the screen terminal, bypassing it with a .005 or .01 condenser, 200 or 400 volt type. Also make certain that the grid leak is approximately 40M ohms.

Change Notes

Note the screen of this tube becomes the oscillator plate, therefore, do NOT bypass from the screen to ground but around the resistor between the screen and plate coil ternot apply to a definitely poor tube which of course should be discarded:—

- I. Make certain the proper A and B voltages are present at the socket terminals of the 1A7. Remember that even a 1000 ohm per volt meter will make an appreciable difference on a low voltage scale when checking A volts across this tube type.
- 2. Check the coupling capacitance in the oscillator grid. Sometimes adding a .00005 mfd. condenser

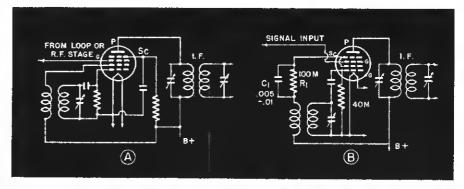


Fig. 6—Typical 1A7 oscillator circuit at left and suggested circuit for 1R5 at right. See text for ideas on installing socket for miniature tube.

minals. See circuit of Fig 6B. For surge protection use a 150-ohm resistor across the filament of the 1R5, which will make no difference in operation. Before changing to this 1R5 arrangement, if the old 1A7G or GT is fair, and operates only at some points on the dial, several more months of operation may be secured from it in most cases without a changeover if the following points are kept in mind. This, however, does

Fig. 4B-Socket wiring for 128K7 and 7A7 loctal with same filament drain.

Fig. 5A.—Converter tubes in octal and loctal series with same filament drain.

Fig. 5B—The 1R5 miniature will replace 1A7 with changes given in text.

- across the present capacity will help, or replacing the old one with a new .0001 mfd. mica.
- 3. Check the screen voltage on the 1A7 type. If too high, oscillation will be erratic. Inserting a 100 to 125M resistor in series with the screen bypassed to ground with an .01 mfd. condenser will start the tube working as well as ever. Try a slightly higher grid leak value.

C₁ and R₁ in Fig. 6B above can be used in series with either end of plate coil, but works out better for wiring purposes in position shown.

By following the same line of reasoning as used in case of the 1A7-1R5 changeover, the serviceman can use the 1T4 in place of the 1N5GT, and the 1S5 in place of the 1H5GT tubes. Because of mismatch and limited output, it is not advisable to use the power tubes (1S4 or 3S4) in the miniature series to replace the standard 1.4 volt types. The 1A5GT, 1Q5GT and 1T5GT can be used interchangeably with little noticeable difference to the average customer's ear. This applies to portables using 1.5 volt A battery where filaments are in parallel, and does NOT hold true of filaments are in series, because of different filament resistances of the three latter tubes mentioned.



All-Purpose Pocket Size Volt-Ohm-Milliammeter

A new modernistic styled, compact unit that provides an answer to all Volt-Ohm-Milliammeter requirements. Incorporates all the testing facilities of larger, more costly equipment. A.C. and D.C. Volts 0-2.5-10-50-250-1000-5000 (D.C. at 10,000 ohms per volt; A.C. 1000 ohms per volt); 0-.1-1-10-100-1000 D.C. Milliamperes, at 100 millivolts; 0-10 D.C. amperes at 100 millivolts; Resistance 0-400 Ohms (10 ohm center scale); 0-40,000 ohms (500 ohms center scale) 0-4 Megohms (50,000 ohm center scale). Self contained batteries. Selector switch control for all ranges.

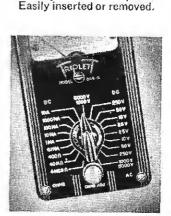
Self contained batteries. Selector switch control for all ranges. Completely insulated black molded case and panel, attractive streamlined design. (Leather carrying case also available to hold tester and accessories.)

The Triplett Line-more comprehensive than ever-goes today for war needs but its exacting services in war assure you the final answer for post-war equipment requirements.

TETRICAL STANDARDS ARE SET BY INCORDING TO

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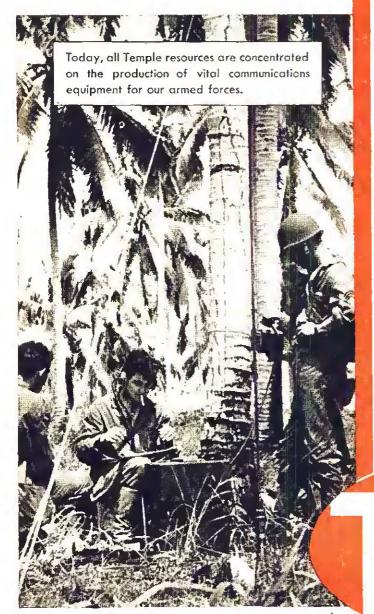


Battery slides into place.

Twenty position selector switch control for all ranges.

Today-

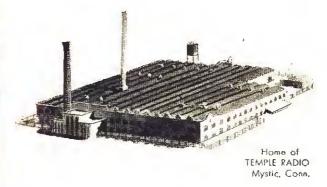
REACHING EVERY BATTLEFRONT



In the South Pacific—U. S. Marines shown setting up emergency radio outfit for communications with advancing patrol forces. INS Photo.

Tomorrow-

REACHING EVERY AMERICAN MARKET



Tomorrow...in the peacetime era to come ...the name Temple will not only identify the finest of radio receivers, but mark, as well, a sound, far-seeing sales and merchandising policy to insure and maintain both volume and profit for every Temple dealer. It will pay you to "team up with Temple".

TEMPLETONE RADIO COMPANY MYSTIC, CONN.

FM...TELEVISION...RADIO-PHONO COMBINATIONS



HERE FM

WILL ALSO MEAN FINEST

Adding Resistors to a Heater String

 In order to determine the proper value of series and shunt resistors in heater strings, use is made of the following formulas in which E=voltage in volts, I=current in amperes, R= resistance in ohms, and W=power in

 $R = \frac{E}{I}$ (which may also be written as E=I R or as I= $\frac{E}{R}$)

W=E×I (which may also be

written as $W=I^2R$ or as $W=\frac{E^2}{R}$

When the calculated value of resistance is not available in standard fixed-resistor sizes, it is suggested that an adjustable resistor be used in order to obtain the proper value. The wattage rating of either shunt or series resistors should be chosen at about twice the calculated value in order to provide an adequate safety factor under conditions of free circulation of air. A higher factor of safety may be required in compact receivers where air circulation is poor.

As a guide for calculating seriesand shunt-resistor values, several examples applying to tube substitutions in 150-milliampere and 300-milliampere heater strings follow.

Fig. 1. To substitute a 6.3 v. 150 ma. type for a 12.6 v. 150 ma. type. calculate value of the resistor to be added in series with the 6.3-volt heater. Using the formula R=E/I, we have

12.6 - 6.3/0.15 = 42 ohms

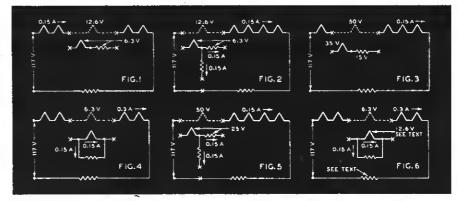
The calculated wattage is W=E I or 6.3 x 0.150 = 1 watt, but to provide an adequate factor of safety use at least a 2-watt size.

Fig. 2. To substitue a 6.3 v. 300 ma. type for a 12.6 v. 150 ma. type in string position as indicated, calculate value of resistor R which must shunt all components in the heater string except the substitute type. Using the formula R=E/I, we have

117-6.3/0.15 = 738 ohms The calculated wattage is W=E I or (117—6.3) x 0.150=17 watts, but to provide an adequate factor of safety use a 50-watt size. The resistance to be added in series with the 6.3-volt heater is

12.6 - 6.3 / 0.15 = 42 ohms and the calculated wattage is 6.3 x 0.150=1 watt, but to provide an adequate factor of safety use at least a 2-watt size.

Fig. 3. To substitute a 35 v. 150 ma. type for a 50 v. 150 ma. type, proceed as in discussion for Fig. 1.



Filament circuits useful in tube substitution.

Value of series resistor is

50-35/0.15 = 100 ohms the calculated wattage is (50-35) x 0.150 2.3 watts, but to provide an adequate factor of safety use at least a 5-watt size.

Fig. 4. To substitute a 6.3 v. 150 ma. type for a 6.3 v. 300 ma. type, calculate value of shunt resistor to be added across the 0.150-ampere heater. Using the formula R = E/I, we have

6.3/0.15 = 42 ohms The calculated wattage is W=E/I or 6.3 x 0.150=1 watt, but to provide an adequate factor of safety use at least a 2-watt size.

Fig. 5. To substitute a 25 v. 300 ma. type for a 50 v. 150 ma. type in string position as indicated, proceed as in discussion for Fig. 2. Value of shunt resistor R is

117-25/0.15 = 613 ohms The calculated wattage is (117-25) x 0.150=14 watts, but to provide an adequate factor of safety use a 50-watt size. The resistance to be added in series with the 25-volt heat-

50-25/0.15 = 166 ohms and the calculated wattage is 25 x 0.150=3.8 watts, but to provide an adequate factor of safety use a 10watt size.

Fig. 6. To substitute a 12.6 v. 150 ma. type for a 6.3 v. 300 ma. type, proceed as in discussion for Fig. 4. Value of shunt resistor is

12.6/0.15 = 84 ohms

and the calculated wattage is 12.6 x 0.150=2 watts, but to provide an adequate factor of safety use a 5watt size. Since the substitute type increases the total voltage drop of the string by 6.3 volts, it will be necessary to decrease the voltage drop, and hence the resistance, through the line-voltage dropping device (such as line cord or ballast tube) by 6.3 volts, or 6.3/0.3=21 ohms. To effect this decrease, the practical solution will usually be

found in the use of a new line-voltage dropping device whose resistance is 21 ohms less than that of the original component.

These service notes are from the new Tube Substitution Directory prepared by RCA, Harrison, N. J. The 16-page guide contains 2000 tube substitutions and helpful hints. The price is ten cents.

Concentrating on Service

(Continued from page 57) Schock is a graduate of Lehigh University and a former Westinghouse service manager. Addison Brobst attended an engineering vocational school and was distributor service manager for Philco.

Just to prove what concentration can do, these co-workers, in addition to handling all their own service work, do the repair for about one-half of the radio dealers in Reading. At this writing they had just completed work on their 2,825th radio set repaired since June, 1943. Their story in their own words follows:

"Our minimum charge is \$1.50 for a single call, and is also the same for a set brought in," says Schock. "There is no set routine in finding receiver trouble, as each case is different. A dead receiver would probably be diagnosed as follows:

"(1) Notice if tubes are normally lighted.

"(2) Check rectifier for overload or heavy short.

"(3) Test tubes.
"(4) 'Clicking' tubes (touching grids) starting at last audio.

"(5) Checking voltage (roughly) at tubes.

"(6) Find specific point of trouble. "Mr. Brobst has been the service manager for two radio jobbers, and has taught classes for the Signal Corps. I have night classes under the supervision of Pennsylvania State College and the federal government.

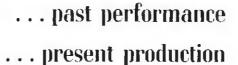




In War and Peace

TENITH

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... future planning

"Radionics Exclusively" PAYS OFF!

Zenith's consistent policy of devoting all its research, experience, manufacturing facilities and manpower to the manufacture of radionic products exclusively has always meant a fast moving, profitable radio line to Zenith franchised dealers.

Today, Zepith is doing its part in the war effort as every patriotic manufacturer should—it's our simple duty—so we are not bragging about it. The point is, that through our present efforts we are main-

taining our hard-hitting staff and field organization intact, expanding our facilities and gaining an experience that will mean an even finer line of Zenith Radios than ever before—Zenith, continuing in war time its long established policy of Radionics exclusively will not have a long drawn-out re-tooling period. When the word is given, we shall be ready to go—on civilian radio—as we now operate on war material radionics exclusively—full speed ahead!

Zenith Radio Corporation • CHICAGO 39, ILLINOIS



MORED'S TEADING MANUFACTURED OF HADDING PRODUCTS EXCLUSIVELY



Better than Cash
WAR SAVINGS STAMPS AND BONDS



Mr. and Mrs. Edward Baff busily at work in their compact shop.

At Your Service!

• Strictly "at your service" where radios are concerned is the watchword of Radio Clinic, 137 Main St., Hempstead, N. Y.

In their present location for the past four years, Mr. and Mrs. Edward Baff do an efficient business in one of the most compact and neatly arranged shops we have seen.

Like a lot of other service people, they could use more tubes! However, despite difficulties they succeed in meeting a ten-day promise for repair on sets. They also do some rebuilding of radios.

Edward Baff is employed from 9 to 5:30 daily by a nearby war plant in its electronic research laboratory.

and works in his own store nights. Sometimes he manages to put in a needed hour at "Radio Clinic" during his lunch period.

Mrs. Baff is in the shop during the day and helps her husband by her pleasant attitude towards customers, keeping the shop in order, and arranging attractive small displays of the few sets they still have for sale. Customers bring in and call for all

Mrs. Baff Checks Sets

Not to be overlooked is the fact that Mrs. Baff also tests tubes, can do the less complicated realignments, can fix the less difficult jobs, and she can really follow the diagrams! We found her busily checking and setting up work for her husband on the repair bench. On his arrival in the evening he finds all the preliminary checking and removal of chassis done, and ready for him to begin the really difficult trouble-shooting.

Mrs. Baff keeps an efficient card file record of all sets repaired. These cards contain the name, address, radio model number and note of repair made, including price. A claim check is given to the customer which duplicates the tag on the radio left for repair.

"After the war we hope to be able to sell sets again," Mrs. Baff said, "but right now, our business is strictly service!"

Radio Clinic, Hempstead, N. Y., clearly invites patronage.



A Third CITATION

FOR THE INSTRUMENT LEADER



MERITORIOUS FOR PRODUCTION

This third citation for meritorious war production ... climaxing a long record of war service . . . is a source of justifiable pride to the men and women of WESTON.

The record began back in the earliest days of our defense period, when a large segment of WESTONS' capacity was assigned to the production of instruments vital to military needs. Thus, when we finally were forced into this world struggle, WESTON was ready for full-scale war production.

This new star which adorns our "E" pennant marks the third time WESTON has been first in this highly specialized field to receive each successive war citation. Weston Electrical Instrument Corporation, Newark 5, New Jersey.



Loberatory Standards Precision DC and AC Portrobles Instrument Transformers Sensitive Relays DC AC and

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

FOR OVER 55 YEARS LEADERS IN ELECTRICAL MEASURING INSTRUMENTS

Television Talk

CBS Urges Aid for Postwar Television Improvements

In an important policy decision on postwar television, the Columbia Broadcasting System advocates earliest possible support of known opportunities for improvement in television, according to an official announcement.

At the same time CBS acknowledges that such a stand will create problems which "government, manufacturer, broadcaster and the public must face. But," states the announcement, "we see even more clearly the serious predicament which delay would create."

Pointing out that suggested improvements will be "at cost of scrapping prewar investment," CBS, nevertheless, urges speedy action, stating "if new television standards are inevitable (CBS believes they are), then the quicker they come the better for the manufacturer."

Newspaper Is Televised

How television stations can bring to home audiences everything from news to display advertising was demonstrated to 200 newspaper publishers at WRGB, General Electric's television station at Schenectady, April 28. The publishers witnessed the televising of a metropolitan newspaper presented by staff members of the New York Herald-Tribune.

Chicago Seen Great Center of Televison Activity

According to J. C. McKeever, president of the Illinois Manufacturers Assn., Chicago promises to be one of the great centers of television. He said 100 plants were planning expansion of radio and television manufacturing facilities, and he forecast widespread use of television by theatres in the Chicago area.

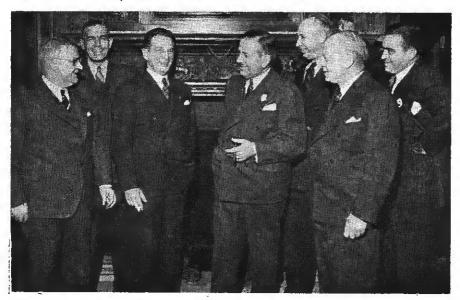
Mutual System, De Mille Join Television Group

One of motion picture's pioneer figures, and one of the nation's oldest operating radio broadcasting organizations were listed among new members joining the Television Broadcasters Assn., Inc.

Cecil B. De Mille has entered the television field, applying for membership in TBA on behalf of the Cecil B. De Mille Productions. Inc.

The Bamberger Broadcasting Service, owners of WOR, New York, key outlet of Mutual has now joined with representatives of National Broadcasting Co., Columbia Broadcasting System, Philco, General Electric, Du Mont Laboratories, Don Lee Broadcasting System, Television Productions, Inc., Crosley Corp., and other major radio broadcasters in fostering the rapid development of commercial television.

Meyberg Executives Visit RCA Victor



Officials of RCA's west coast distributor, Leo J. Meyberg Co., pictured with Frank M. Folsom, vice-president RCA Victor Division, at Camden, N. J. Left to right: Robert Shannon, general manager RCA Victor Division; William Lancaster, sales manager, and Al. Meyer, president Meyberg Co., in Sau Francisco; Mr. Folsom; Pete Sues, Meyberg vice-president; Manfred Meyberg, and William Kelley, RCA Victor's west coast regional manager.

"Age of Television"

"When this conflict is over, much of the radio we knew at the time of Pearl Harbor will be old and obsolete. The trumpets which signal 'Cease Firing' at the end of this war will sound the reveille for the Age of Television."—General J. G. Harbord, board chairman RCA.

Beal Predicts Moderate Priced Television Sets

Predicting that home television receivers will be sold at moderate cost, Ralph R. Beal, assistant to the vice-president of RCA Laboratories, also told members of the Engineering Society of Detroit that his company's ultimate aim is to match the perfection of the human eye through use of three-dimensional color view.

Sees Projected Pictures For Postwar Television

Predicting that the tube-end television picture will become obsolete in the near future, B. Ray Cummings, vice-president in charge of engineering of the Farnworth Television & Radio Corp., Fort Wayne, Ind., declared that postwar television receivers will employ projected pictures. His remarks were made in an address before members of the Television Press Club in New York City.

Emerson Official Attends Television "Round-Table"

Dorman D. Israel, vice-president in charge of engineering at Emerson Radio and Phonograph Corp., New York City, was one of the industry's well known figures participating in the television engineer's "round-table" which the American Television Society held in New York. Participants in this forum represented all phases of the television art—broadcasting, engineering, manufacturing and servicing.

Television for Rochester

Television was assured for Rochester shortly after the end of the war by action that has just been taken by the Stromberg-Carlson Co. Already the owners and operators of Station WHAM and of FM Station WHFM, the local radio, communications and telephone manufacturing company, has made application to the FCC., for the license to operate on a commercial basis a television broadcasting station.

(Continued on page 94)

Who'll be your Best Customer?

That our children may live with the "Four Freedoms." this war is being fought. One of the great working symbols of the "Freedoms" in the post-war era will be Radio...fulfilling for young Americans their right to hear free expressions of opinion. Radio will provide an unprecedented wealth of education and

entertainment for growing minds. Farsighted radio men are anticipating our children's need for good individual radios ... like Tray-Ler Midgets. So when the time comes. Tray-Ler Karenola will have the finest radios and equipment that war experience can endow.



Distributors Active

Manufacturers Make Many Appointments as Jobbers Get Set for Postwar Business

Kane Company Named Admiral Distributors

H. J. Clippinger, vice-president in charge of sales of the Admiral Corp., announces the appointment of the Kane Company as distributors for Admiral radio and home appliances in the Columbus, Toledo and Cleveland, Ohio, trading areas.

The distribution will be handled separately from each of the three mentioned locations. Offices and warehouses will be maintained in Toledo, Columbus, Cleveland and Akron.

The Kane Company was founded in 1913 as distributors of furniture and electrical appliances. A. J. Kane is president of the company; M. A. Kane, treasurer; B. M. Kane is vice-president, executive head and merchandise man for the company.

In pre-war days, the Kane Company were outstanding distributors of Admiral radio and Stewart-Warner home appliances

Purchases Denver Distributing Firm

O. F. (Jerry) Achtenhagen, for the past two years general manager of the Philco Training School, Philadelphia, Pa., has purchased the Radio and Appliance Distributing Co., Denver, Col., a long-established Philco distributor serving the Colorado area, it has been announced by Thomas A. Kennally, vice-president in charge of sales for Philco. The new president and owner of Radio and Appliance Distributing Co. will keep the company name, take over all assets and occupy the same building at 1708 Sixteenth St., Denver.

Mr. Achtenhagen has a background of 25 years of active merchandising experience. In 1928 he entered the automobile radio business with the Transitone Automobile Radio Corp., and in 1931, when Philco acquired that company, Mr. Achtenhagen became one of its field representatives, introducing Philco automobile radios throughout the entire western part of the United States. In 1935 he became sales manager of the Philco automobile radio division, Detroit. When the Philco national merchandising staff was formed in 1940, Mr. Achtenhagen took an active part in introducing the company's new radio and refrigerator models west of the Mississippi. Since the outbreak of the war, he has been general manager of the Philco training school, which has trained and graduated over 12,000 advanced radio technicians for the Army and Navy.

Michigan Jobber Gets Large Territory

Morley Brothers, Saginaw, Mich., have been appointed distributors for the Admiral Corp., according to J. H. Clippinger, Admiral's vice-president in charge of sales. They will distribute Admiral radios and home appliances to the entire state of Michigan, with the exception of the city of Detroit and immediate vicinity.

Morley Brothers was founded in 1863, and have handled radios and major appliances for many years. Postwar, they will operate two display rooms and warehouses for Admiral Products—one in Grand Rapids and one in Saginaw. L. C. Buetow is manager of the radio and appliance division of the company.

St. Louis Firm Will Distribute for Crosley

Appointment of the Schwander Appliance Co., division of the General Pipe and Brass Co., of St. Louis, Mo., as distributor for The Crosley Corp., Cincinnati, in St. Louis and surrounding territory, has been



Julian Schwander

announced by J. H. Rasmussen, commercial manager of Crosley.

Julian Schwander has been president and treasurer of the company, which was (Continued on page 79)



O. F. Achtenhagen, left, is congratulated by Thomas A. Kennally of Philco, on his purchase of Denver firm,

organized in 1929, ever since the company was formed.

The company occupies modernized twostory brick buildings at 3927-33 Olive Street in St. Louis. Elaborate display rooms and private and general offices are on the first floor. Service and parts facilities are temporarily on the second floor of the building, but the appliance division will eventually move across the street into a two-story brick building, with 20,-000 square feet of floor space, where a stream-lined electrical appliance showroom will be installed.

Other members of the firm are: L. Howard Schwander, vice-president; and Roger Walwark, Jr., vice-president.

Emerson Distributor Meetings Are Popular

Among the distributors visiting the plant and offices of the Emerson Radio and Phonograph Corp., New York City, were: Samuel Schulman, president of S. E. Schulman Co., Chicago; Morry Lasky, president of Mayflower Sales Co., St. Louis; Theodore Ember and Ray Goldman, president and vice-president, respectively, of Electrical Products, Inc., Baltimore; William M. Schuster, president of Warren Radio Co., Erie, Pa.; and Joseph Good, president of Electric Appliance Distributors, Altoona, Pa.

These Emerson distributors in conferences with Charles Robbins, vice-president, have expressed considerable interest in the firm's postwar plans and are anxious for the day when civilian sets will again become available.

Washington, Montana, Jobbers Are Appointed

The Commercial Appliance Co., Seattle, Wash., of which Frank Hawkins is vice-president and general manager, has been appointed distributor for the Crosley Corp., in the Seattle territory, including the western half of the state of Washington.

The Great Falls Paper Co., Great Falls, Montana, has been appointed by the Crosley Corp., as distributor for Montana, and will merchandise Crosley products under its department known as The General Supply Co.

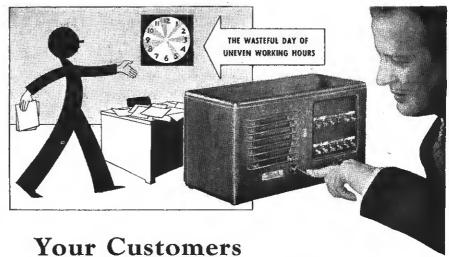
Both announcements were made by J. H. Rasmussen, commercial manager for Crosley.

Krich-Radisco Executive Returns to Civilian Life

Captain Paul R. Krich, until recently stationed at Camp Kilmer branch of the New York Port of Embarkation, has completed his tour of active duty with the Army Air Forces and has returned to his business.

Captain Krich is executive vice-president of Krich-Radisco, Inc., exclusive New Jersey distributors for RCA Victor, Kelvinator, Bendix, Ironrite, Eureka and other major appliance lines.

(Continued on page 90)



Can't Afford a 24-Hour Week

Absurd, you say? Of course they work 48 hours a week — or more! But what about the time it takes to jump up and hunt for Jones? The minutes wasted waiting for a messenger to bring the figures needed NOW? The time lost while a secretary runs down information on orders? All the countless, costly, confusing delays that waste time?

Show your customers how this lost time adds up—multiply it by the time wasted in the same way by every key man in the organization. Then show them how Teletalk Amplified Intercommunication will give them a full 48-hour week to get things done.

It's so easy for the busy executive to flip a convenient key and ask for what he wants—ask for it in his own voice—and get quick, intelligent answers from his key men, in their own voices. Nobody is disturbed. Mistakes and misunderstandings are fewer. There is no confusion, no undignified chasing hither and yon—just ACTION NOW.

You will find it to your advantage to tell your customers how Teletalk will give them the time to do a thousand and one things easier and better. Let us show you how Teletalk can become a profitable addition to your business.





LET'S ALL BACK THE ATTACK-BUY EXTRA WAR BONDS

Licensed under U.S. Patents of Western Electric Company, Incorporated, and American Telephone and Telegraph Company

WEBSTER ELECTRIC COMPANY, Racine, Wis., U.S.A. • Established 1909 • Export Dept.: 13 East 40th St., New York (16), N.Y. • Cable Address: "ARLAB" New York City

WEBSTER MELECTRIC

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

Watch Your Step

(Continued from page 33)

WPB Says (Cont'd)

on an unrated order. The purchaser would be in violation if he purchased a set without a preference rating.

"A further violation would also be the purchase of the cabinets. Cabinets are to be considered electronic equipment and their transfer is controlled by Order L-265. This is quite clearly set forth in Interpretation No. 1 of Order L-265. "General Limitation Order L-260a regulates the use of wood in the building of furniture. This Order prohibits the use of wood in the manufacture of radio cabinets, which are considered furniture under the terms of this Order.

"It appears, therefore, that any attempt to conduct a business of rebuilding radio sets as engaged in by Dealer Blank in your 'hypothetical' case would probably be carried on in open violation of WPB Orders in several ways.

"You ask if WPB would take ac-

tion against such cases. While no such actual case has come to our attention, WPB has taken action in several cases of conversion of automobile sets. The conduct of such an operation would undoubtedly require the procurement of materials either through 'black market' channels or by the use of falsely extended rating or certifications.

"The maximum penalty for violation of WPB Orders is \$10,000 fine or 10 years imprisonment. The maximum penalty for falsely certifying a purchase order is the same.

Should Know Restrictions

"One of the most potent factors in obtaining an understanding and cooperative action between the industry and WPB is the trade periodical. A proper presentation of restrictions temporarily necessary to divert all available manpower and materials toward effectively ending the war, can obtain a cooperation from a large number of individuals that can be obtained in no other way. Such cooperation is absolutely essential as the efforts of any one individual may not greatly affect the over-all picture. The cooperation of the trade as a whole is absolutely essential.

"Very truly yours,
(signed) "Frank H. McIntosh,
Chief, Domestic and
Foreign Branch, Radio
and Radar Division,
WPB, Dept. 4510."

Note: A spokesman for the War Production Board said that a person or firm "converting" a radio set, for example, from DC to AC current, and offering same for sale, would be considered an "assembler."

OPA Insists (Cont'd)

Prices, when determined by the assembler, are to be submitted to the nearest regional OPA office, and the models are not to be offered for sale until 15 days thereafter. If OPA does not direct otherwise, the model may be offered for sale at the expiration of the 15-day period. All models so priced must have a written guarantee for 90 days.

Units Must Be Tagged

A tag must be prominently placed on the unit, reading as follows: "The retail ceiling price of this unit is \$_____. Assemblers' stock number of unit is _____. This unit

(Continued on page 82)

REPLACEMENT TUBE ADAPTORS

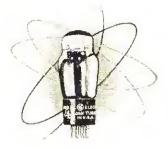
Adaptor No.	Use Tube Type	To Replace Tube Type
1		#80—#5Z3—#83
2.,	#7 A 8	#12 A 8
3	#7C6	#12SQ7
4	#1 4A7	#12SK7
5	#35 Z 3	#35 Z 5
6	#14 A7	#12SA7
7	#7 A 8	#12SA7
8	#1 LA 6	#1 A 7
9	#1LC6	#1 A 7
10	#43	#25L6
11	#7B7	#12SA7
12	#14B8	#12SA7
13	#1 4Q 7	#12SA7
14	#14B6	#12SQ7
15	#39/44	#6 K7
16	#7Y4	#6 X 5

1/3 Deposit with Order. Balance of Order C.O.D.

Chicago Novelty Co., Inc.

1348 Newport Ave.

Chicago 13, Illinois



AM, FM and television transmitters and tubes



Radio and television receivers and tubes



Industrial electronic tubes



Industrial electronic devices



Electronic measuring



instrument:



Public address systems



television,

Electronic insulating

materials



Magnetic wire recorders



Electron microscopes



and electronics Police ro

first in radio,

Police radio equipment



Aviation radio and electronic equipment



Marine radio and electronic equipment



Carrier-current equipment



Military radio and electronic equipment



GENERAL BELECTRIC

T75-C5
GENERAL ELECTRIC IS BUILDING MORE MILITARY RADIO
EQUIPMENT THAN ANY OTHER HOME-RADIO MANUFACTURER



A nationwide WINDOW DISPLAY contest

JUNE 12th TO JULY 8th

\$3,000 IN WAR BOND PRIZES for the 5th War Loan Drive!

This is an official request of the U.S. Treasury directed to the Retail Merchants of America.

And a challenge to the combined sales talents of Display Managers and the Window Display Industries.

The 5th War Loan is the most crucial, the most vital of all drives to date. This means that you displaymen—and your store—have the biggest JOB IN HISTORY. This means that powerful, hard-hitting patriotic displays are needed.

Time is short. The task tremendous. Line-up your personnel. Draft your windows. And get the full cooperation of your advertising departments.

Here's the Contest Plan:

SPONSORS The NATIONAL ASSOCIATION OF DISPLAY INDUSTRIES through the cooperation of the DISPLAY WORLD.

JUDGES . . Nationally known business men and artists.

DATE. . . . June 12th to July 8th inclusive.

PRIZES... A grand total of \$3,000 in War Bonds to be awarded by sponsors. Individual prizes are to be the same in each of

two classifications.

GROUP I - \$1,500 - Stores in cities of 100,000 population-or more.

Ist prize—\$500 War Bond
2nd prize— 300 War Bond
3rd prize— 200 War Bond
4th prize— 100 War Bond
And eight additional \$50 War
Bond prizes.

RULES

- Each display window, regardless of size, must be devoted exclusively to a 5th War Loan display.
- All photographs must be 8 x 10 and plainly marked on the face with the name of the store and city.
- 3. On the back of the photograph must be: 1—the name of the one person selected by the store to receive the award, if any. 2—the exact date and length of time the display was in the window.
- All photographs must be in the mails not later than July 20th. Address them to:

WAR BOND DISPLAY CONTEST c/o The Display World 1209 Sycamore Street, Cincinnati, Ohio **GROUP II** — \$1,500 — Stores in towns of 100,000 population—or less.

(Same Prizes as Group 1)

Each award will be made to the one person selected by the store as having made the greatest contribution toward the creation and installation of the Window Display.



This is an official U. S. Treasury advertisement prepared under the auspices of Treasury Department and War Advertising Council. The Treasury Department acknowledges with appreciation the publication of this message by

RADIO & TELEVISION RETAILING

has been assembled and priced pursuant to OPA Maximum Price Regulation No. 430."

An assembler must comply with the regulations no matter how few or how many assemblies he turns out. Sales of radios or phonographs by householders are not affected by the regulation.

Nothing in the regulation prevents the dealer from performing acts incidental to the maintenance or repair of electronic equipment.

Who Is an "Assembler"?

It will be seen that the dealer becomes an "assembler" when he converts or changes a radio, phonograph or other "electronic" equipment by fabricating or assembling in such fashion that he changes the type or model and/or the mode of its operation.

If a dealer buys and sells new or used radios, he must not resell them at above ceiling prices. Full information on methods of determining selling prices will be found in General Maximum Price Regulation.

Assembling—Repairing Explained

Two "sample" cases are cited for clarification purposes:

r. Dealer A buys a used radio receiver and installs in the chassis new or used components—original make or comparable replacement, in order to repair the unit, and does not change the make or model, type or mode of operation in so doing. He may resell such device without operating under Regulation No. 430, since he would not be looked upon as an assembler. But he must establish a ceiling price as outlined in the General Maximum Price Regulation.

2. Dealer B performs the exact service as Dealer A did, but installs the chassis in a new or used cabinet of a different type and design than the original. He then becomes an "assembler" and must operate under Regulation No. 430.

However, some of the above operations are controlled by Treasury Department and WPB regulations.

Appliance Repair and Resale also Affected

Those dealers repairing and selling many other electrical appliances are subject to regulations also, and should contact nearest Federal government agencies for information.

(Continued on page 84)



How You Answer Their Television Questions

When Your Customers Ask ... "Will Television carry news events, sporting features, motion pictures?"

Tell them: Yes, for Television can carry any scene that cameras can record in the studio or in the field. Someday soon, owners of DuMont Television Receivers will sit comfortably in their homes and the whole world will "come alive" with startling clarity right before their eyes. News, entertainment, the faces of the great, all the things they want to see as well as hear.

When Your Customers Ask . . . "How perfect will Television pictures be?"

Tell them: Today, Television is as good as 16 mm. motion pictures. Tomorrow, peacetime Television will equal the present high quality of the cinema—with the aid of the DuMont Cathode-ray Tube.

When Your Customers Ask . . . "How far can Television programs be broadcast?"

Tell them: A Television station will serve virtually the same radius and primary area as today's leading radio stations. Today, DuMont's W2XWV, New York, has high-fidelity reception over practically these same areas claimed by New York's best-known 50,000-watt radio stations.

When Your Customers Ask ... "Who will make the finest peacetime Television Receiver?"

Tell them: DuMont's impressive pioneering achievements in Television and precision electronics assure you of unique performance in every DuMont Television Receiver. DuMont's peacetime Television Receivers will always represent the ultimate in electronic engineering and beauty.

MIMINE Precision Electronics and Television

ALLEN B. DOMONT LABORATORIES, INC., GENERAL OFFICES AND PLANT, 2 MAIN AVENUE, PASSAIC, N. J. TELEVISION STUDIOS AND STATION W2XWV, 515 MADISON AVENUE, NEW YORK 22, NEW YORK

TREASURY DEMANDS (Con't.)

swer is in accord with the position of the Bureau.

"Your statement, that if a retailer assembles a complete radio receiving set from new or used parts and offers it for sale, the resultant sale by such retailer being subject to tax, is correct.

"Your comments with respect to the repair of radios by the replacement of defective parts are essentially correct, provided title to the used article

HOMER G. SNOOPSHAW SAYS:

to help 'em understand.'

'So folks won't be 'up-in-the-air' about the scarcity

of batteries, we're running a series of ads like this in important magazines every month

which is to be repaired is retained by the customer. If, however, title to such used radio is acquired by the dealer making the repairs, whether the resale of the reconditioned radio is subject to tax would depend on the extent of the reconditioning operations

"In this connection your attention is invited to ST 927, which appears in Internal Revenue Cumulative Bulletin 1942-2 at page 225. It may be stated that the replacement of a cabinet of a used radio, even if the new cabinet is of the same or similar style

of the old cabinet, would not be considered the replacement of a minor part.

D. S. Bliss,

Deputy Commissioner

Methods of figuring amounts of excise taxes and credits may be found in bulletins issued by the U. S. Treasury Department, Bureau of Internal Revenue.

BENSON'S

(Continued from page 46)

ing in the local community newspaper, Benson's pointed out the advantages of owning the renditions of famous artists, comprising the stock taken from the piano store. The advertising proved to be a profitable investment, and soon the shop increased its inventory of both popular and classical albums.

Pushes Sale of Classics

Benson's then made an effort to increase the sale of classical numbers. Now, 500 circulars a month are sent to a customer mailing list, and patrons are invited to come in and hear selections without any obligation on their part to buy.

According to Benson, record dealers are complaining these days because they are unable to get all the current hit records they require, while their shelves are filled with numbers they consider to be "slowmovers." For a start, says Benson, pick out three albums which have been on your shelves for three months, and use your efforts to sell only these. If you push the sale of these intelligently, through the use of circulars, Benson will bet you dollars to doughnuts, you'll be well pleased with the results, and the shortage of hits will not worry you any more.

At Benson's the display window is made full use of. Albums, records and cards of phonograph needles are prominently displayed. All merchandise within the shop is in orderly fashion arranged on shelves and on racks, making the whole appealing and attractive.

Benson's Selling Hints

This orderly arrangement of both popular single disc and albums enables patrons of the shop to browse. From his own experience Benson has learned that customers enjoy the added privilege of going through the racks without the interference of a (Continued on page 86)





How to Behave in a

Any upset may be an opportunity to grow—and remodel.

It may be awfully uncomfortable.
—but it can be darned valuable.
—but it can be darned struck our Last summer, lightning struck our summer cottage and burned off the south end. Well, it gave us a south end. Well, it gave us a chance to enlarge our living room. This war hurts a lot of us. But

chance to entarge our living room.
This war hurts a lot of us. But
it is going to give many folks a
chance to get some perspective on themselves.
A lot of radio service men are

in a terrible stew right now.
Parts and help are hard to get. It's a mess!



PHOTO OF A RADIO SERVICE MAN THROWING AWAY POST-WAR BUSINESS

But, at least, it's different!
And it can be stimulating. And
after it's all over, you can have
things different

things different.
Maybe this is the time to revise your shop—straighten it up

This certainly is the time to thank of a make postwar plans—to think of a make postwar plans—to think of a future twice as hig as your past ruture twice as hig as your past ruture twice as hig as your past future twice as higher and allied new products in radio and allied new products in radio and allied lines. And it is a time to make

friendly prospects out of customers in trouble-to help boom towers business in those days to

As a typical consumer, I'm itch-ing for better postwar radio ing for better postwar radio equipment and all the other new electrical gadgets that are on

I'm going to tidy up the up my mind



And, incidentally, I have more con-And incidentally, I have more confidence in dealers who let it be known that they string with famous manufacturers and use high grade parts—for instance INTERNATIONAL RESISTANCE UNITS.

> No. 4 in a series of special messages prepared by America's famous business writer, humorist and cartoonist, Don Herold. . . . In sponsoring these Don Herold "broadcasts," IRC pays tribute to the thousands of Radio Service Men who, whenever possible, specify and use IRC resistance units in their work.



401 N. Broad St. • Philadelphia 8, Pa.





It's possible to improve the working conditions of your employees and at the same time make life easier for yourself.

It's a lot easier for the man at the bench to get factual and authoritative circuit data from one of the thirteen Rider Manuals than it is for him to laboriously trace the circuit of an ailing receiver and guess-out the servicing information he needs to repair it. It's a lot more pleasant for him—and you too. For your production is increased—and deliveries speeded.

Never have Rider Manuals been so widely used as today when speed in the tracing of circuits means not only additional profits, but the development and preservation of invaluable good will. Have all thirteen volumes of Rider Manual on each of your benches. Check the list to the right—erder any missing volumes today.

Check, too, the list of Rider Books. They're chock-full of technical information that can further speed your repair work and enable you to make the most of your present opportunities to add to the volume and good will of your business.

RIDER MANUALS (13 VOLUMES)

EASIER FOR YOU

Volumes XIII to	VII\$11.00 ed	ch volume
	11 8.25 ec	
Abridged Manua	Is I to V [I volume]	\$12.50
Automatic Record	Changers and Recor	ders 6.00

OTHER RIDER BOOKS YOU NEED The Cathode Ray Tube at Work

	The dolload hay tobe at trock	
	Accepted authority on subject	\$3.00
-	Frequency Modulation	
	Gives principles of FM radio.	1.50
	Servicing by Signal Tracing	
	Basic Method of radio servicing	3.00
	The Meter at Work	
	An elementary text on meters	1.50
	The Oscillator at Work	
	How to use, test and repair.	2.00
	Vacuum Tube Valtmeters	
	Both theory and practice	2.00
	Automatic Frequency Control Systems	
	- also automatic luning systems	1.25
	A-C Calculation Charts	
	Two to five times as fast as slide rule	7.50
	Hour-A-Day-with-Rider Series —	
	On "Alternating Currents in Radio Receivers"	' <i>'</i> →
	On "Resonance & Alignment"-	
	On "Automatic Volume Control"-	
	On "D-C Voltage Distribution"90c	each

JOHN F. RIDER PUBLISHER, INC. 404 Fourth Avenue, New York 16, N.Y.

Export Division: Rocke-International Corporation 13 E. 40th Street, New York City Cable: ARLAB

RIDER MANUALS
GIVE YOU THE HELP YOU NEED!





sales person. However, a clerk is always available to serve any customer unfamiliar with the arrangement, or unable to find the particular number in mind.

Benson also recommends stocking sheet music, and praises the cooperation of the distributors, who keep fast-sellers on the dealer racks, and yank out the ones not moving. Thousands of radio-record shops are gaining additional revenue through the sales of sheet music, says Mr. Benson, and in his opinion it is a line well suited to records, since both records and sheet music are sought by the music lover. Initial investment necessary is only from \$25 to \$100, it is pointed out.

Has Postwar Plans

Speaking of his postwar plans, Mr. Benson says: "I'm keeping my finger on the pulse of postwar days. When Victory comes I again intend to open our closed shops. One thing that has come out of the turmoil is the record shop, which will be permanent after the war.

"My aim is to hold onto the customers that the shops have made through the years, until the return of radios, tubes, records and electrical merchandise in quantity. I'm serving my customers to the best of my ability so that they will continue to be my customers come postwar. This principle has been uppermost in my mind during these trying times."

Benson pointed out that his radio repair work is done at reasonable prices, and the workmanship is guaranteed for a 90-day period.

"I'm of the opinion that the amount of business one does is governed by the retailer's reputation gained through fair dealings with his customers. Were I to charge exorbitant prices nowadays I would be deliberately ruining my business for the future. I want present-day customers to come to me for their electrical needs after Victory—for radios, refrigerators, washers and the whole conglomeration of electrical merchandise that will come on the market. To gain extra profit now would mean less later. I'll satisfy customers now and profit later."

Radio Repairs— \$1000 a Month

Quick radio repair work is an outstanding feature of the shop—another point that is giving customer satisfaction. Two service men are

(Continued on page 88)



What comes next at Majestic?

THIS is a pretty fast old world we're working in right now. Anything can happen . . . and usually does. Especially if you're in the radio business.

It wasn't very long ago that the name "Majestic" meant only what other big radio names meant—a producer of radio receivers—not necessarily one to make people turn around, prick up their ears, ask questions, as they do today.

"Controlled Distribution" not so long ago was just an expression. A term to be found in economics textbooks. A policy dreamed of by retailers. But Majestic has made it an actuality in the radio industry.

"The Majestic Radio News... The Standings of the Stars" is winning millions of friends. Yet only a few months ago, hardly anyone thought radio manufacturers could do anything but "mark time" until peace. But Majestic had other ideas. So its new advertising and merchandising idea is working now for Majestic's future leadership.

Electronics was only a laboratory experiment a short time ago.

Television was still around the corner.

But we're moving fast these days. We have to. The world moves fast.

What comes next at Majestic? Naturally some of it—much of it—can't be revealed now. But with the kind of experienced, sales-minded, forward-

thinking radio men united under the Majestic banner, what comes next will be "interesting" to say the least. "Interesting" to distributors... "interesting" to dealers... "interesting" to all radio people who want to go places!

Sounds like a boast, doesn't it? but the eagle is flying again. The power of the name "Majestic" today proves it. General acceptance of Controlled Distribution proves it. The enthusiasm accorded the Majestic Radio News proves it.

These are some of the reasons . . . there are plenty more...why we can say with confidence:

Majestic means business ... and lots of it!



steadily engaged to handle the sets brought in for repairs and their object is to put the set in shape as soon as possible. When a customer is told his radio will be ready on a certain date the promise is kept. In the event some difficulty arises where the set cannot be ready on the date specified, the customer is immediately notified. The service department has been moved to a store next to the record shop. This arrangement keeps the departments separate units, and there is no "mixture" of customers. The service work amounts to \$1000 per month.

SYRACUSE

(Continued from page 52)

free inspection on sets brought into the shop, because he finds that 75 per cent of customers bringing in sets for the inspection will leave said sets no matter what the estimate.

Roy Stage, also of Erie Blvd., is interested in the model airplane business. Stage points out that right now plant workers like to tinker with model planes just for relaxation's sake.

After the war, Stage states that the dealer stocking model airplane prod-

ucts will be in clover. Schools are adding model courses and someone will have to supply the models. In this case, Roy expects to be Johnny on the spot.

A brief look-in at the department stores showed no radio activity at all, or, at best, only dim reminders of past radio retailing days. Jewelers are in the same boat—no radios to sell, save a few car sets.

That, in a nutshell, is radio in Syracuse. Leading distributors report a new low in parts and not much change expected in the tube situation for several months to come.

Warwick Describes Clarion's Postwar Sales Position

Warwick Manufacturing Corp., Chicago, has issued an illustrated booklet, entitled "A Radio Preview—Clarion After the War," This booklet describes what distributors and dealers may expect in the way of markets and buying power, and describes the radio market of the future

Reau Kemp, director of sales, has written about Clarion's place in the postwar picture. The distributor and dealer policy of the company is explained, and tested sales plans, sales help, sales training, displays and advertising will be available. The factory sales organization will assist the distributor in holding dealer meetings, training the distributor's wholesale men, and spending as much time as possible with the distributor's representatives in the field.

John S. Holmes is Warwick's president; Gordon G. Brittan, vice-president; Reau Kemp heads sales. H. A. Gates is director of engineering and Fred L. Holmes is secretary.

Shure "Mikes" in Many Broadcast Stations

According to "Smilin'" Jack Berman, sales manager of Shure Brothers, Chicago, manufacturers of microphones and acoustic devices, over two-thirds of all broadcast stations in the United States are now using Shure Super-Cardioid microphones.

Shure is using an attractive map of the country, in its advertising, with pins to represent radio stations Shure equipped.

Cartwright Representing Astatic Corporation

R. T. Schottenberg, sales manager, announces the appointment of J. M. Cartwright, 1276 Peabody Ave., Memphis, Tenn., as representative of The Astatic Corp., Youngstown, Ohio, in the States of Louisiana, Mississippi, Arkansas and western Tennessee.

Mr. Cartwright, long familiar with radio and sound products, will serve Astatic's established customers to good advantage in this territory, where he is so well and favorably known.

For the extra measure of record-playing pleasure

GAROD PERMATONE PHONO NEEDLES



88

What have you to say?



can say it more intelligibly

Turmer

HAN-D

Hang it, hold it, mount it on desk or floor stand it's truly a handy mike!

When you need crisp, clear reproduction of any sound, turn to a Turner Microphone. These instruments are scientifically engineered to reproduce faithfully all gradations of volume, amplifying only the vibrations received by the diaphragm, without adding any of the harmonics. From the faintest whisper to the loudest train whistle, a Turner Microphone will reproduce precisely without distortion or blasting.

For indoor or outdoor use, under all climatic and acoustic conditions, you can be sure of intelligible transmissions when you specify and use a Turner. For broadcasting studios, vital war communications in war plants, airdromes, ordnance plants, docks, army camps, police transmitters and other highly sensitive spots where accuracy is of supreme importance, you'll be grateful for a Turner.

Whatever you have to say — whatever sound you want to transmit, be sure of superb performance with a unit that's rugged and dependable — a unit you'll be proud to have seen in your possession. It's time to turn to TURNER.

Crystals licensed under patents of The Brush Development Co.

TURNER

Send for Free Microphone Catalog The TURNER CO., Cedar Rapids, Iowa

Turner · Pioneers in the Communications Field



Curner

99 Dynamic for Professional Performance



Turner

22X-22D Crystal or Dynamic Units

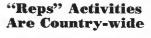
Furner

211 Broadcast Model for Studio Performance



Turner

U9-S Fills
4 Impedance
Requirements



The Representatives of Radio Parts Manufacturers continue to gain new members, and to keep active during wartime.

The addition of the following two new members has been announced by the Buckeye Chapter: F. Bell, 1400 W. 25th St., and L. A. Morrow, 2108 Payne Ave., both Cleveland 14, Ohio. Mr. Bell has been elected secretary-treasurer of the chapter, and the other officers are Arthur H. Baier, president, and Earl S. Dietrich, vice-president.

J. J. Backer of 2321 2nd Ave., Seattle 1, Wash., and G. Norris, 307 Wall St., Seattle 1, Wash., have been elected membersat-large.

The Wolverine Chapter, of which R. Milsk is secretary, has added the name of R. C. Nortstrom to its roster. Mr. Nortstrom's address is 2111 Woodward Ave., Detroit 1, Mich.

R. E. Stemm, secretary of the Chicagoland Chapter, announces the removal to new addresses of the following members: C. R. Bluzat to 2753 W. North Ave., Waltel Bauman, also to 2753 W. North Ave., and Russ Diethart to 612 N. Michigan Ave., all Chicago, Ill.

Entertain Jobbers

The Missouri Valley Chapter held a meeting at the Pickwick Hotel in Kansas City, invited guests being all the radio parts jobbers in the locality. Fred Larabee of the WPB was a guest speaker, and answered questions regarding the present priority setup on radio tubes and parts. The following jobbers' representatives were present: Harris Fromhold, Joe Burstein, Merle Applebee, Ray Frieze, all of Burstein-Applebee; Charles Goebel, Manhattan Corp.; Jim Stapleton, Acme Radio Co.; John H. Brown, All-State Dist. Co.; H. H. Plunkett and Martin Brotherson of Stewart-Warner Prod. Co.; E. H. Nestrender, Radio Equipment Co.; Robert M. Smith, Radiolab; A. H. Kaler, McGee Radio Co.; S. K. Thacher, Overton Electric Co.; G. C. Green, Radio, Inc.

"Bill" Cartwright Joins Memphis Organization

J. M. Cartwright, 1276 Peabody Ave., Memphis, Tenn., member of "The Representatives of Radio Parts Manufacturers," announces that his son, William C. Cartwright, has joined him as an associate. "Jim" Cartwright has been a manufacturers' agent in the mid-south territory for the past 14 years, representing many of the leading electronic and electrical manufacturers of the country.

"Bill" Cartwright, as he is known to many of the manufacturers and jobbers of the south, attended Tennessee State College, Gulf Radio, at New Orleans, and California Institute of Technology.

Prior to the war, he was radio officer on luxury liners to South America, leaving this field to become radio officer in the (Continued on page 92)



RADIO MANUFACTURING CO., INC.

122 Brookline Avenue, Boston, Mass.



10 Maria

SPRAGUE TRADING POST

A FREE Buy-Exchange-Sell Service for Radio Men



When there's a by-pass capaci-tor job to do, do it with famous Sprague TC Tubulars—and forget It. They will not let you down! We'll appreciate it it you ask for them by name.

WANTED—G-1 recording and play-back unit (or similar) with or with-out amplifier. Cash. Howard E. Boko-voy, Radio Station PAV, Deer Lodge, Mont.

FOR SALE--Four 12" Rola electro-dynamic speakers, used but in A-1 condition. Send your list in exchange for mine. David A. Bensman, 1608 19th St., Two Rivers, Wisc.

WANTED—Record player or record changer. D. Jarden, 7149 Ardleigh Ave., Philadelphia 19, Pa.

WANTED—One 15 mmf, variable condenser and following tubes: 6K7, 6A8, 25L6, 25Z5, 6U5, 6G5, 6Q7. Eugene Menkoff, 201 St. 36th W. Pl., Tulsa 6, Okla.

WILL TRADE—RCP Co. appliance

WILL TRADE — RCP Co. appliance tester #417 never used, measures acdc amps, & volts, calibrated in watts. Also have two HY75 and one RCA 913 tubes, new. Will trade for new or used tubes (rectifier or mixer type). Also need O-50 microammeter, and xtal pickup & cutter cartridges, new, used, or burned out. Harold's Radio Shop, 206 Main St., Huntington Beach, Calif.

WANTED—Late sig. generator, V-O-C, tube tester, cathode ray oscilloscope in good condition. Cash. J. Allen DeWald, Route \$3, Danville, Pa. WANTED FOR CASH—Hickok jumbo multimeter, but will consider other types. Meil Massey, 16 N. Main St., Liberty, Mo.

WANTED—Combined set and tube tester ac-dc, V-O-M. All letters an-swered. Moore Appliance Service, 329 37th St., Ashland, Ky.

WILL SWAP—New Browning pre-selector with tube for ac-dc multi-tester, dependable model 411 or what type have you? Pvt. Henry Kuvutz, 830th, C.A., Ft. Monroe, Va.

WANTED FOR CASH—I volt series tubes, 12, 35, 50 volt ditto. Little River Music Mart, Miami 38, Fla.

WANTED — Hallicrafter HT-7 frequency standard 10-100-1000 kc. R. R. Palmer, 511½ S. Rosemary, Lansing 15, Mich.

FOR SALE OR TRADE—High quality PA eqpt. incl. Daven & U.T.C. components, dynamic mikes, resistors, by-pass condensers, etc. Send for list. Want Jr. voltohmyst, condenser bridge, 'scope, etc. A. G. Kellerman, bridge, 'scope, etc. A. G. Kelterman, 1975 Sedgwick Ave., Bronx, New York 53, N. Y.

FOR SALE OR TRADE — Howard Comm. Receiver #1438; also two Jewell meters, one ac volts 0-4-8-16-160 and one dc volts 0-7-5-300-600/1000 ohms per volt 0-15-150 ma. Both 3" meters. Need a sig. generator. W. V. Drinkard, Box 2219, Sheridan Park, Bremerton, Wash.

WANTED FOR CASH—V-O-M, sig. generator, or late model comb. tube 6 set tester. Also: 12SA7, 12SK7, 12SQ7, 50L6, 35L6, 35Z5, 1A7G, 1H5G, 1N5G, 1Q5G tubes. Stephens Radio Service, 407½ - 3rd Ave., Columbus, Ga.

METER WANTED—Will buy any good VTVM or VOM in fair condition such as Hickok #202. What else have you? Ichiro Umino, 24-4-B, Hunt, Idaho.

WANTED-Appliance tester in good condition, measuring watts, volts & amps., make immaterial. Have NR1 radio course and many technical radio books, guides, and circuits to swap or sell. Write for list. John Halstead, 33 Bayview Terrace, Newburgh, N. Y.

FOR SALE OR SWAP-New 6 and 32V FOR SALE OR SWAP—New 6 and 32V vibrator power supplies; new and slightly used RCA 845 tubes, W.E. 242A and 288A tubes; W.E. 205D and 264 sound eqpt, tubes, 160 watt Electric Specialty DC to AC rotary converter with filter. Want Rider's manuals. Vincent lauarone, 2727 Laconia Ave., Bronx, New York, N. Y.

FOR SALE—Meter from RCA Jr. Voltohmyst, new, never used. First \$18 takes it. Radio & Television Service, 821 Porter St., Philadelphia

48, Pa.

WANTED FOR CASH—Rider chanalyst; AC-DC VOM multimeter; Solar CB-1-60 condenser tester; etc. Will sell Superior 1240 tube checker, Philco battery sig. generator, crystal and carbon mikes, 5 small AC-DC volt, ohm, and ma. meters, tubes, tools, parts and kits. Write for list. L. K. Simons, 2209 Payne Ave., Cleveland 14, O.

WANTED FOR CASH—Soldier needs

WANTED FOR CASH—Soldier needs 35Z5 and 117Z6 tubes. Pfc. Frank Martini, PATD, Kirtland Field, Albuquerque, N. M.

WANTED-Small Hallicrafter or sim wanted—omail Haillcrafter of similar set to operate from either 110V or batteries, such as S-29. Pvt. Ellsworth Philbrick, Jr., ASN 11128196, Co. G., 101st Inf., A.P.O. 26, Fort Jackson, S. C.

WANTED FOR CASH-Good used 931 or other type electron multipliers. Pfc. Paul F. Bahr, 15333260, 8th Stn. Comp. Sqdn., 95th Bomb, Group, APO 559, c/o Postmaster, New York, N. Y.

TO TRADE—Have Remington portable typewriter #5 with case, like new. Will trade this & pay cash difference for good comm. receiver. H. L. Collins, 2834—6th Ave., San Diego, Calif.

SELLING OUT complete Radio & Fixit shop. Est, 20 years, Prosperous small town in rich farming area. No competition. Complete test eqpt. small town in rich farming area. No competition. Complete test eopt, stock tubes, parts, also some cleaner 6 washer parts. 6-room house, large 2-story shop 6 garage. C. W. Flaherty, Box 184, Tully, N. Y.

WILL SWAP English technical and commercial radio or electro-mechancommercial radio or electro-mechan-ical literature for equivalent Amer-ican. Would like to set up corres-pondence with dealers in N. Y. and Chicago, exchange ideas on wartime trends & makeshifts necessitated by shortages of parts. S. G. Lewis, F. Portland Court, New Brighton, Fnoland

-Eveready 467 or Burgess atteries. S. Charles Law-67.5 volt batteries. S. Charles Law-rence, A & R Division, U.S.N.A.S., Alameda, Calif.

FOR SALE-National Radio Institute correspondence course, 1941 edition, complete. Includes FM and Television. 1/2 price. M. F. Speck, R.D. 2, Carlisle, Pa.

WANTED-Dependable signal generator for cash. W. B. Cox, Rt. #3, ator for cash. Anson, Texas.

FOR SALE-Triplett 1200E V-O-M, FOR SALE—Triplett 1200E V-O-M, 2500 ohm per volt, factory reconditioned, \$38; Precision signal generator E200 late model, \$38. Both A-1 condition. Want headphone, not cheap model; power trans. 6.3V fil. 300-0-300 high; 0-1 milliammeter at least 3" diam. but prefer square type 4". Walter W. Stolzenberg, c/o RCA Lab, Riverhead, N. Y.

WANTED-Hallicrafters Super Defiant or equivalent for cash. Also 12SF7 tube, F. G. Daly, Rt. #1, Harri-man, Tenn.

man, Tenn.

FOR SALE—160 pretested new-used tubes (40 most popular types) \$50; Supreme analyzer ac-dc volts; ohms, mils, capacitor meter (six ranges eacn) \$30; Readrite #430 tubetester (not over 25V tubes) \$10; record player with extra xtal, \$10; crystal pickup with extra xtal, \$10; crystal pickup with extra xtal, \$5; list of other parts on request. Have quit service business. Byrl T. Jenkins, R.R.#1, Upland, Ind.

WANTED—Amplifiers microphones

WANTED—Amplifiers, microphones, speakers, horns, trumpets, or what have you? Lewis Radio & Sound Service, 226 W. Liberty St., Louisville

WANTED—Grunow chassis 11G V-O-M in good condition, also tube checker. Nat. SW3 with coils 40, 20. 80 to exchange. F. Bou, 38 Woodland Ave., Botany Dept., Philadelphia

FOR SALE—2 new Gen. Elec. FM dipole antennas, model 69 LM, in factory cartons, \$11.95 ea. One new Mitchell fluorescent metal fixture \$2027, 110-125V, 60 cy. for two 40-watt tubes for shop or store. In factory carton, \$19.95. E. A. O'Connell's Radio Shop, Westfield, N. Y.

WANTED FOR CASH—Rider Junior Voltohmyst. R. Jordan, 804 E. 6th Ave., Mitchell, S. D.

WANTED—Code practice in oscilla-tor working condition, factory-built, or home-made. Cash. Raymond J. Mercer, 18 Orchard St., Gloversville,

FOR SALE — Precision multimeter model 44, also No. 8 Rider manual, and a hi-fidelity model L-18 Jensen auditorium loud speaker, field 200-250 V. Kenneth Fisher, 435 W. Lawrence St., Mishawaka, Ind.

WANTED-RCA Jr. Voltohmyst. Leo E. Baer, 34 Broadway, Meyersdale,

TUBES WANTED — 1A7G, 35Z5, 50L6, 50Y6, 6K8, 6SA7, 6SK7, 6SQ7, 12SA7, 12SK7, 12SQ7, 25Z5, 35L6. L. C. J. Knowles, 81 Elm St., So. Portland 7, Me.

WANTED—C-D model BN bridge and Triplett 1213 or Radio City 309, or Readrite 432 tube tester. A. H. Standberry, 1946 E. Main, Rochester

URGENTLY NEEDED—One 2A3 tube, one 2A5, two 8 mfd. 475V electrolytic condenser. Alfred L. Mergele, Rt. 1, Box 70, Dilley, Texas.

WANTED - Pair Brush BJ crystal headphones or similar type. Cash. headphones or similar type. Cash. R. Dupes, 32 Ann St., Middletown,

WANTED—Triplett, Weston, Precision, Supreme, or Ranger V-O-M or foundation meter for same. Bob Goldsworthy, 29 Navy St., Venice 0,

WANTED—SX16, SX17, SX24, or any good comm, receiver for cash. Bob Stofan, 332 Herrick Ave., Teaneck, N. J.

-YOUR OWN AD RUN FREE!-

This is Sprague's special wartime advertising service to help radio men get needed parts and equipment, or dispose of radio materials they do not need. Send your ad today. Write PLAINLY OR PRINT—hold it to 40 words or less. Due to the large number received, ads may be delayed a month or two, but will be published as rapidly as possible. We'll do everything we can to help you—and the fact that thousands of pieces of Radio-Electronic equipment are in operation today as a result of sales or "swaps" made through The Trading Post offer convincing proof of the far-reaching effectiveness of this service. Remember that "Equipment for Sale" ads bring best results. Different Trading Post ads appear monthly in Radio Retailing-Today, Radio Service-Dealer, Service, Radio News, and Radio Craft. Sprague reserves the right to reject ads which do not fit in with the spirit of this service.

When buying Capacitors—please ask for Sprague's by name. We'll appreciate it!

SPRAGUE PRODUCTS CO., Dept. RRT-45, North Adams, Mass.

Obviously, Sprague cannot assume any responsibility, or guarantee goods, services, etc., which might be exchanged through the above advertisements

RADIO & Television RETAILING . May, 1944

(Continued from page 90)

Merchant Marine early in 1941, having been rejected by the Navy and Air Force because of physical disability. He left the Merchant Marine in 1942 to join the Pan-American African Ferry Command at Miami, Fla., becoming radio officer and navigator in this command.

He became disabled in this work, and after several months in hospitals, was advised by his physicians to go to a semitropical climate to recover. It was then that he went to California and attended Cal Tech. He left Cal Tech to go back to sea as Lt. (sg) on a tanker to the South Pacific, from which he has just returned to California.

Many Wholesalers Visit Zenith Plant in Chicago

A number of leading distributors are visiting the Zenith Radio Corp. plant in Chicago, where present problems and postwar business are being discussed. Some of the recent visiting jobbers include:

A. A. (Dolph) Schneiderhahn, A. A. Schneiderhahn Co., Des Moines, Ia.,

B. B. Arnett, Eskew, Smith & Cannon, Charleston, W. Va.,

J. S. Shaw, Moore-Handley Hardware Co., Birmingham, Ala.,

J. A. White, J. A. White Distributing Co., Grand Rapids, Mich.,

F. E. Stern, Stern & Co., Hartford, Conn..

Adolph Uliman and George Cohen, Northeastern Distributors, Inc., Boston, Mass..

C. W. Hyde, Griffith Distributing Corp., Cincinnati, Ohio.

Sherwood Joins The Joseph Strauss Co.

Charles M. Sherwood has resigned as branch chief in the copper division of the War Production Board to join the executive staff of the Joseph Strauss Co., Inc., Buffalo, N. Y., distributors, in charge of all wholesale activities of the company, it



Charles M. Sherwood

has been announced by Luke Strauss, president. He is to succeed Edward T. Ball, who served the company for 29 years.

The appointment of Mr. Sherwood is a part of the company's broad plan for continuing present war production and distribution activities.

Mr. Sherwood has had long experience in the electrical appliance and general merchandising fields, and is a pioneer in the radio business.

During the first World War Mr. Sherwood served as an officer in the Coast Artillery Corps, carrying on experimental wireless communication between ground and planes.

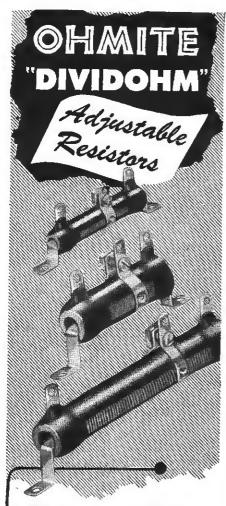
Selling Specialist

After the war Mr. Sherwood became sales manager for Steelman Inc. of New York City, a radio distributing organization serving the metropolitan area. He then became associated with the Fada Radio Corp. in an executive sales capacity, and later joined RCA.

At the time of the outbreak of the present war Sherwood was associated with the Bendix Home Appliances Inc, in an executive sales capacity.

The Strauss organization is one of the oldest distributors of Zenith radios. They also distribute Bendix washers, Gibson refrigerators and other well known appliance lines in western New York State. The business was founded by the late Joseph Strauss in 1896 and is now owned and operated by Luke J. Strauss, president, and George V. Strauss, vice-president.





Ohmite "Dividohms" make ideal voltage dividers by the use of one or more adjustable lugs. Also handy for obtaining odd resistance values, for adjusting circuits, and for use on equipment which must be set to meet various line voltages.

various line voltages.

The "Dividohms" are wire wound on ceramic cores, and vitreous enameled. A narrow strip of the wire is exposed for contact with the adjustable lug. Every turn of wire is securely held against shifting. Stock units made in 10, 25, 50, 75, 100, 160,200 watt sizes—wide range of resistance values.

Write for Free Catalog 18

Ohmite Manufacturing Co. 4872 Flournoy St., Chicago 44, Illinois



Handy Ohm's Law Calculator

Helps you figure ohms, watts, volts, amperes—quickly, easily. Solves any Ohm's Law problem with one setting of the slide. Send 10c in coin to cover handling. (Available in quantities.)

Be Right with OHMITE

Garod Needle Sales Soar Following Big Campaign

Backed by an extensive promotional campaign in the trade press and featuring window displays at record dealers, the Garod Radio Corporation's campaign for its Permatone phono needles is at "flood stage" now, it was announced by sales manager Lou Silver. Leading recording artists are highlighted in the series soon to be released.

In addition to full scale promotion for the three types of Permatone phono needles, now standard best sellers in the trade, Garod has also introduced a new recording stylus retailing for 50c.

Strong Jobber Setup

Definitely committed to a policy of selling direct to distributors, Garod is sparing no effort in its current advertising series to promote the best interests of the exclusive jobbers it has set up in its selling territories. This "exclusive-with-distributors" policy, long a feature of Garod merchandising, will continue into the postwar period, Silver added.

The Garod Permatone phono needles are especially prized by jobbers for their "self-selling" and ease of handling. Packed in kit form, all the jobber need do is simply attach a label and mail, obviating the need of time-consuming checking and special wrapping.

Information may be obtained by writing direct to the Garod Radio Corp., 70 Washington St., Brooklyn 1, N. Y.

Sylvania Sales Soar

Sales volume of Sylvania Electric Products Inc., for 1943 was the largest in the history of the company, according to the annual report to stockholders, amounting to \$60,473,821, compared with \$32,338,870, in 1942; an increase of 87 per cent, and nearly 3 times as great as sales in 1941.

Lou Carlson Appointed

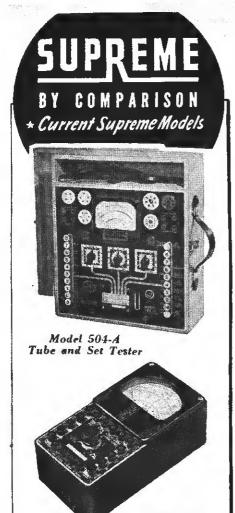
Lou A. Carlson, who has been appointed production engineer of Admiral Corp., Chicago, will supervise all production and inspection of both the Dual-Temp and conventional refrigerators, according to an announcement by L. H. D. Baker, vice-president in charge of major appliances for Admiral. Mr. Carlson has been associated with a number of prominent manufacturers, specializing in domestic refrigerators.

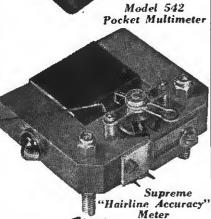
Paul Ellison Chairman of University Alumni Fund

Paul S. Ellison, director of advertising and sales promotion of Sylvania Electric Products Inc., and coordinator and campaign manager of the 1944 American Red Cross Fund through the War Advertising Council, has been named chairman of the St. Lawrence University Alumni Fund for 1944, it is announced by Millard H. Jencks, president of the university from which Mr. Ellison graduated in 1922.



125 VARICK STREET





Whats new-

IN TEST EQUIPMENT?

Military secrecy precludes our answering that now. But radical new developments in testing techniques have been and are being perfected. Because of these important advances, when Victory comes your NEW Supreme Test Equipment will be, more than ever, "Supreme By Comparison."

SUPREME INSTRUMENTS CORP.

Greenwood, Miss., U. S. A.

(Continued from page 76)

What Will Those Postwar Television Sets Sell For?

Speaking at a meeting of the Radio Executives Club in New York, Dr. A. N. Goldsmith, consulting engineer, and vicechairman of the Radio Technical Planning Board made some comment on what he believes television receivers will sell for in the postwar period, Dr. Goldsmith said:

"Television receivers will depend for their cost on a number of factors. Accurate figures cannot be given because no one can say at this time what will be the cost of labor and materials after the

"Broadly speaking, television receivers, even for small pictures, are hardly likely to fall below \$100 per unit for many years to come. Most television-receiver lines will probably start somewhere between \$150 and \$250 and extend upward to \$400 or more. But it must be emphasized that these are merely rough estimates in terms of 1942 dollars."

Joins Espey Company



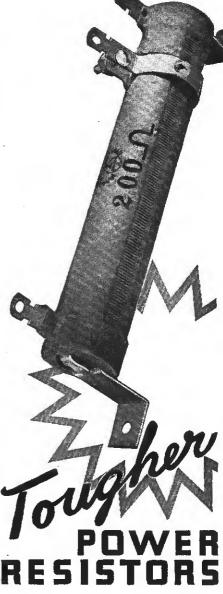
Ricardo Muniz, electronics specialist, has joined engineering staff of Espey Mig. Co., New York, according to announcement by Harold Shevers, Espey president.

Survey Shows Television Sets Standing Up Well

In order to secure an idea of how television sets are operating during wartime, the National Broadcasting Co., and the Radio Corp. of America mailed 4590 questionnaires to the NBC television mailing list, About 32.1 per cent of the 1412 returns were tabulated with the following results:

Question one asked: "What make of television receiver do you own?" Reports on 1434 receivers, 22 returns reported more than one receiver, indicated the following: 870 RCA 60.7 per cent; 149 Du-Mont 10.4 per cent; 146 GE 10.2 per cent; 7 don't know and no answer 0.5 per cent.

Question two was: "What size screen



* Those green-colored inorganic-cementcoated power resistors you now see in

quality radio and electronic assemblies are Clarostat Greenohms. They are chosen today by builders of equipment that must stand up, regardless. Likewise by servicemen who must keep vital equipment going.

10 and 20 watts fixed Greenohms, available on usual jobbing priorities. Adjustable units up to 200 ohms on highest

*See Our Jobber...



CLAROSTAT MFG. CO., Inc. - 285-7 N. 6th St., Brooklyn, N. Y.

RADIO & Television RETAILING . May, 1944

does your receiver have?" The same 1434 receivers indicate screens of the following size: 56 over 12 in. 3.9 per cent; 721 12 in. 50.2 per cent; 292 9 in. 20.5 per cent; 323 5 in. 22.5 per cent; 42 don't know and no answer 2.9 per cent.

Question three read: "What is the present operating condition of your television receiver?" 957 excellent or good 66.7 per cent; 202 fair 14.1 per cent; 68 poor 4.8 per cent; 160 not operating 11.2 per cent; 47 don't know and no answer 3.2 per cent.

Television Organizations

American Television Society, 1140 Broadway, New York City. Presidentelect, Dan D. Halpin, RCA., vice-president, Ray Nelson; treasurer, Don Mc-Clure; secretary, Kay Reynolds. Directors: Norman D. Waters, George T. Shupert, D. H. Halpin, Prof. E. C. Cole, Lela Swift, Charles Kleinman and J. R. Hutchinson.

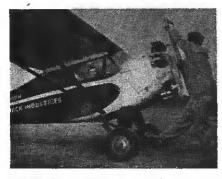
Television Broadcasters Assn., Inc., 500 Fifth Ave., New York City. President, Allen B. Du Mont, Passaic, N. J., vice-president, Louis Allen, Los Angeles; secretary-treasurer, Will Baltin; provisional assistant secretary, Jack R. Poppele, New York.

Society of Television Engineers (Pacific Coast)

Secretary-treasurer, Curtis W. Mason, 141 No. Vermont Ave., Los Angeles. RTB representatives; Frederick C. Wolcott, Gilfillan Bros., Los Angeles and Frederick Ireland, General Radio Co., Hollywood, Cal.

Television Producers Assn., 1425 Broadway, New York City. Acting president, Bud Gamble, Farnsworth Tel. & Radio Corp., acting vice-president, Edwin Woodruff, Du Mont Labs., acting secretary, Jay Strong; acting treasurer, Roger Caelos.

Meck Airplane Delivers!



W. W. Montgomery, executive engineer, John Meck Industries, Plymouth, Ind., flown by girl pilot, gets ready to make emergency crystal delivery.

Third Award to Sprague

On April 22, the third Army-Navy "E" award for excellence in war production was made to the 3 plants of the Sprague Electric Co., North Adams, Mass., designers, engineers and manufacturers of Sprague capacitors, Koolohm resistors and other electrical components.

"Speed Queen" Company Re-elects All Officers

All officers of Barlow & Seelig Mfg. Co. were re-elected following the annual stockholders' meeting at the company offices at Ripon, Wis. The officers are: R. C. Stuart, chairman of the board; H. A. Bumby, president and general manager; H. R. Scott, vice-president; R. C. Labisky, assistant to the president; W. A. Royce, secretary-treasurer; J. B. Murray, assistant secretary.

H. A. Bumby was also re-elected president of the American Ironing Machine Co., Algonquin, Ill.

Barlow & Seelig has also received its second Army-Navy production award.

RCA's New Air Show Boosts Disc Selling

RCA's new radio program, "The Music America Loves Best," which is aired Saturday nights over the Blue network, is serving effectively not only as an institutional advertising vehicle, but also as a continuous promotion for Victor and Bluebird phonograph records through frequent appearances of its recording artists.

This is achieved through the presentation on the program of numbers which the Victor or Bluebird guest star has recorded and which are listed in the Victor catalogue. The program name itself is the title of Victor's famous catalogue, "The Music America Loves Best."



WPB Urges Repairers to Operate Under Aid Plan

Repair services for many domestic appliances are being greatly handicapped, the War Production Board says, because many electrical and mechanical repair shops are not taking advantage of a WPB regulation designed especially to aid them in more readily obtaining parts and materials for their operations.

These items of civilian equipment include radios, refrigerators, washing machines and other electrical appliances, as well as watches and clocks, bicycles, lawnmowers, sewing machines, stoves, automatic heating plants and plumbing.

Controlled Materials Plan Regulation No. 9-A provides that these shops may purchase in each calendar quarter up to twenty tons of carbon and alloy steel, 500 pounds of copper base alloy and brass mill and foundry products, and 200 pounds of aluminum in specified forms and shapes. In addition, electrical contractors, electricians, and repairmen of electrical appliances, radios and household refrigerators may purchase in a calendar quarter up to \$150 of copper wire, or one-eighth of what they used in making repairs during 1941. Under this regulation, a repairman may also buy as much other material and repair parts as he needs for his maintenance and repair work.

To buy these materials and parts a repairman need merely certify on his purchase order, in the form specified in the regulation, that he is applying the allotment symbol of V-3 and the preference rating of AA-3 which has been assigned by CMP Regulation 9-A. This eliminates the necessity of the repairman filing WPB-541 (formerly PD-1A) or CMP 4B applications and waiting for ratings, etc.

The material may not only be used for maintenance and repair work, but also for reconditioning and rebuilding a damaged or used item for resale; however, in such reconditioning or rebuilding, the item may not be improved from its original design. For example, a non-automatic iron may not be made automatic, and a treadle-operated sewing machine may not be converted to motor operation. Up to \$25 worth of material may also be used to install any unit of cooking, plumbing, heating, or used air-conditioning or refrigeration equipment.

Simple Procedure

Although CMP Regulation 9-A was originally issued last November, letters from repairmen and a cross-country check of many repair shops has indicated that many repairmen are not familiar with the simplified form of obtaining parts and materials, WPB said. While some roo,000 repair shops are scattered throughout the country, no record of all repair shops and their locations is available, WPB said. It is, therefore, impossible for WPB to contact each shop individually.

WPB is particularly concerned about keeping present appliances and equipment in operation since war needs make it necessary to curtail production of new products not urgently essential to the war.

Copies of CMP Regulation 9-A may be obtained from any of the 112 War Production Board field offices, or from the Electrical and Mechanical Repair Section, Service Trades Division, Office of Civilian Requirements, WPB, Washington 25, D. C.

Represents Sprague Firm



C. L. Pugh has been appointed to represent Sprague Electric Co., in Ohio, West Virginia and Pittsburgh, according to sales manager Harry Kalker of Sprague Co., No. Adams, Mass.

Award to National Union

An impressive ceremony marked the awarding of the Army-Navy production award to the Lansdale division of the National Union Corp., Lansdale, Pa., on May 2nd.



TODAY in WAR..TOMORROW in PEACE

On mile-a-minute PT boats, as on hurtling jeeps, rumbling tanks, amphibian tractors and "walkie-talkies", Brach Antennas are doing their part in the vital task of communications. Today, our entire output goes exclusively to the nation's armed forces—on land, on sea, and in the air. But after the war, for the best in radio antennas and accessories, remember the name—BRACH.

L. S. BRACH MFG. CORP. World's Oldest and Largest Manufacturers of Radio Antennas and Accessories 55-65 DICKERSON STREET • NEWARK N. J.

Atlas Sound Expands Its Brooklyn Factory

Accelerated demands for critical U. S. Navy equipment have made necessary the expanded facilities just taken over by Atlas Sound Corp., Brooklyn, N. Y.

Atlas Sound, manufacturers of specialized loudspeaker equipment for many



R. C. Reinhardt, Atlas president

years, have been engaged in designing and making vital war materiel since the beginning of the present conflict.

R. C. Reinhardt, president of the corporation, says, "I feel that conditions, not only present, but future, justify taking a healthy step forward. I have full confidence that postwar conditions will merit this additional space—and maybe even larger quarters.

"What I have seen taking place in the development and improvement of loud-speakers during the war period makes it apparent how outdated prewar speakers will be when the barriers are lifted and manufacturers will again be making equipment for civilian use.

"Facilities will surely remain taxed to capacity for some time to come."

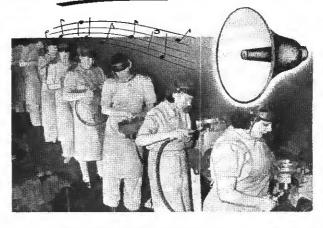
Hoffman Predicts Postwar Electronic Era Here

Predictions of an electronics era in postwar days were to be made by H. L. Hoffman, president of the West Coast Electronics Mfg. Assn., May 14, over KMPC, Hollywood, during the Los Angeles Times' "Everybody's Hour" at 6 P.M.

The weekly broadcast, a series recently launched by the newspaper, devotes a portion of each half hour to a talk by a spokesman representing outstanding southern California industries. Early speakers in the series included Donald Douglas for the aircraft industry and Leonard Firestone of the rubber industry.

Mr. Hoffman, who is also president of the Hoffman Radio Corp., Los Angeles, in non-technical language will briefly interpret trends in the electronics field of the west coast. Manufacturers, who are now devoting their facilities 100 per cent to electronics output for the army and navy, are expected to continue in postwar days with continuing employment for workers, and even greater plant expansion in capital investment and production facilities.

Music IN INDUSTRY



Improving morale, increasing production and reducing absenceism are some of the excellent results achieved by music in industry! The idea is being enthusiastically adopted by increasing numbers of industrial organizations everywhere according to recent surveys. And large, medium and small plants are discovering that the high quality of AMPLICALL's

sound control units and speakers lend themselves admirably to paging and instrumental programs. Rauland national advertising is keeping the name AMPLICALL constantly before executives of the nation's industrial plants, helping RAULAND jobbers increase their sales now and build up a profitable future business as well.

THE RAULAND CORPORATION . CHICAGO 41, ILLINOIS

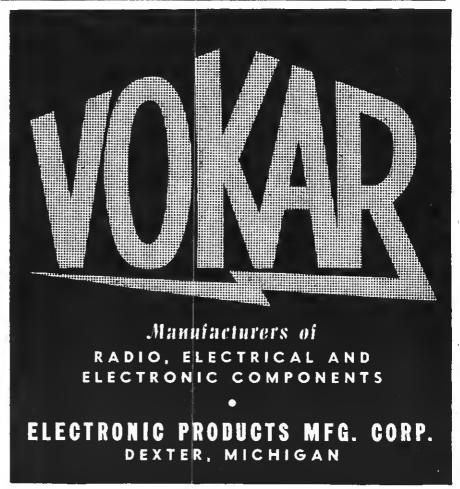
Electroneering is our business

BACK THE



BUY MORE WAR BONDS

RADIO + RADAR - SOUND - COMMUNICATIONS - TELEVISION





ALLIANCE RESUMES PRODUCTION on One Standard Model

• We are now able to return to production of one standard variation of Alliance Model 80 Phono-motor, according to the following definite specifications and on the production plan explained below.

STANDARD SPECIFICATION No. 811—Turntable No. Y-278-S2; 110 Volt, 60 cycle, 9" Model 80 Production must be on the following practical basis under present conditions where there are no large volume priority orders—namely, by accumulating a sufficient quantity of small orders with necessary priority and making periodical single production runs at such time as the quantity of accumulated orders is enough to make this practical. Priority orders (currently only orders of AA-3 or higher, with GOVERNMENT CONTRACT NUMBER and MILITARY END USE, or where certified to be used in Sound Systems, Intercommunicating or Paging Systems, as exempted from order M-9-C) must allow delivery time required to obtain a minimum practical production run; to procure material for all orders in hand, and make one production run of the one type standard unit only, for shipment on the various accumulated orders. . • Check the above against your requirements, and if you have proper priority, communicate with us.

REMEMBER ALLIANCE—Your Ally in War as in Peace!

AFTER THE WAR IS WON, WE WILL TELL YOU ABOUT SOME NEW AND STARTLING IDEAS IN PHONO-MOTORS

ALLIANCE MANUFACTURING COMPANY
ALLIANCE, OHIO



Raytheon Greets War Hero



Visiting the Raytheon Production Corp. plant, Newton, Mass., Captain Alden C. Dinsmore, back from Pacific area, is seen here with F. J. Link, assistant personnel director, and Russell O. Lund, assistant replacement sales manager.

Westinghouse Set to Speed Appliance Making

Barring a raw material bottleneck, "resumption" models of electric home appliances will start to roll off the Westinghouse Electric and Manufacturing Co. assembly lines within a few months after the government authorizes production.

This prediction was made by W. B. Montague, application data manager of the central district of Westinghouse in a speech in Pittsburgh.

"In order to fill a crying need for electric appliances which wartime restrictions have prevented civilians from buying, as soon as we are permitted we intend to get into production fast on essentially those appliances sold before the war," the speaker asserted.

Rapid Re-conversion

Electric home appliance production by Westinghouse has been entirely side-tracked by the manufacture of binoculars, anti-tank shot, insecticide bombs and other war necessities, Mr. Montague said. However, wartime manufacturing layouts in the appliance divisions at Mansfield, Ohio, and East Springfield, Mass., were planned so that they could be re-shuffled quickly for mass production of home electric appliances.

The so-called "dream" appliances will come later, after it is certain the public wants them, the Westinghouse manager said.

Rola Is Honored

Notification of the award of a star to be added to its Army-Navy "E" Flag has been received by the Rola Company, Inc., Cleveland manufacturer.

The Rola Company, Inc., of which B. S. Engholm is president, is a large producer of transformers, coils, headsets and other electronic parts used by the armed forces.

Annual NAMM Convention

The 1944 war time educational conference and music trade show will be held concurrently with the 43rd annual convention of the National Association of Music Merchants, Inc., July 24, 25 and 26, at the Palmer House, Chicago.

Sylvania Negotiates to Buy Colonial Radio

The fact that negotiations are underway for the purchase of the capital stock of Colonial Radio Corp., Buffalo, N. Y., by Sylvania Electric Products Inc., was announced jointly by A. H. Gardner, president of Colonial, and Walter E. Poor, president of Sylvania.

Since 1931, Colonial has been a manufacturer of radio receivers principally for Sears, Roebuck and leading automobile manufacturers. It is expected that they will continue to operate in these markets.

Colonial's 1943 volume of \$56,000,000 was made up entirely of radio equipment for the armed services. This compared with a 1942 volume of \$14,000,000, and with \$9,000,000 in 1941.

Emerson Appoints Century In Southern California

Announcement has just been made by Emerson Radio and Phonograph Corp., New York City, of the appointment of Century Distributing Co., 935 East Pico Blvd., Los Angeles, as distributor of Emerson radio products in the southern California and contiguous territory.

This new company is headed by Louis R. Swenson, well known sales executive in that territory. "Lou," as he is popularly called by dealers throughout that area, has had 23 years of wholesaling experience in radio and appliances, and in that period has continually contacted the trade.

Service to Dealers

Mr. Swenson stated that even though no Emerson radios are presently available, due to the fact that the Emerson radio facilities are devoted exclusively to war work, his organization has installed an attractive showroom in anticipation of the day when radios will again be available. In the meantime, Century Distributing is stocking a complete line of parts and tubes for servicing Emerson radio sets in that territory and has also established a centralized service station, manned by efficient servicemen for the purpose of assisting those dealers who do not now have servicing facilities.

4 Million Homes Use Electric Ranges

Four million homes are cooking with electricity today. The trend to electric ranges, according to manufacturers, is shown by sales of 750,000 in 1941, compared with 450,000 in 1940 and 375,000 in 1939. The war halted production in the spring of 1942.

450,000 Juke Boxes

In answer to frequent inquiries which reach the office of RADIO & Television RETAILING regarding the number of juke boxes in the United States, we find that the figure most generally accepted in the industry is 450,000. This figure is within 25,000, plus or minus, of estimates given by industry leaders.

Since no juke boxes have been manufactured since 1942, it is reasonable to deduct 10 per cent for those now not in use or in need of repair.

In addition to these 450,000 juke boxes, the total home phonograph and pick-up units of all kinds in the U. S. is estimated at 6 million—about 10 per cent of the total radios in use at the start of the war.

Philco Sales Up; All Directors Are Re-elected

Sales of Philco Corp. in the first quarter of 1944 were 55 per cent ahead of the corresponding period last year, John Ballantyne, president, stated following the annual meeting of stockholders at Philadelphia.

The present directors were re-elected to serve for the ensuing year. They are Larry E. Gubb, William Balderston, John Ballantyne, Raymond A. Boyce, James T. Buckley, Harold W. Butler, James H. Carmine, Charles S. Cheston, Russell L. Heberling, W. Paul Jones, Thomas A. Kennally, Wm. Fulton Kurtz, Frank H. Mancill, and William R. Wilson.



TRANSMITTING TUBES

CATHODE RAY TUBES

SPECIAL PURPOSE TUBES EXECUTIVE OFFICES

OWENSBORO · KENTUCKY

EXPORTS IS MOORE STREET NEW YORK

RECEIVING TUBES INCANDESCENT LAMPS

FLUORESCENT LAMPS

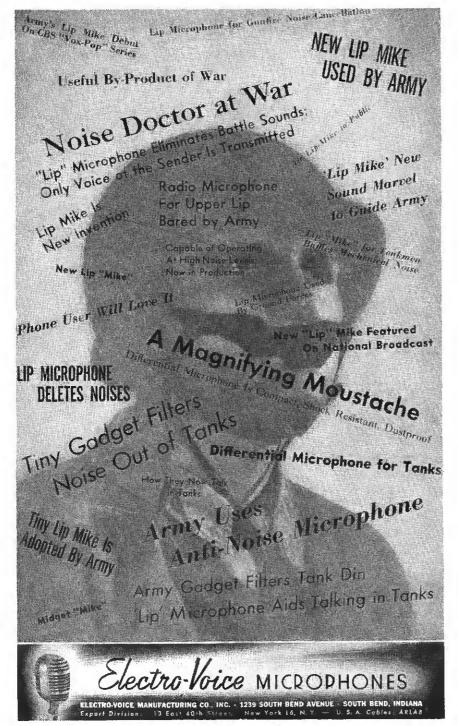
"Utility" Competition Is Seen Lessening

"We are of the opinion, after sitting in at a conference of electric utility representatives at Chicago, that most of the large utilities throughout the country are planning to promote programs of closer cooperation with retail dealers in the postwar era. We got the impression that the tendency in utility merchandising generally over the nation will be toward lesser competition for the retail dealers from the utilities."—From Bulletin of the Wisconsin Radio, Refrigeration and Appliance Assn.

Sprague Changes Name of Its Company

Without changing ownership or management, Sprague Electric Company is now the official name of the Sprague Specialties Co., North Adams, Mass., nationally known designers and manufacturers of Sprague Condensers, Koolohm Resistors, power factor control equipment and other important electrical components,

Believing that for some time past the word "Specialties" has not adequately indicated the nature of its business, the company has made this change and sent formal notification to suppliers, customers and others.



Poses With a Motorola



Winston Churchill, during visit to U.S.A., is interested as he listens to "Handie-Talkie," developed by Chicago's Gaivin Mfg. Co.

Universal "Mike" House Organ Now 2 Years Old

The Universal Microphone Co., Inglewood, Cal., under a May dateline, issued the first jobbers' edition of "Micro Topics" as an 8-page issue, well illustrated with photos of factory representatives, company executives and plant supervisors.

It will be issued at frequent intervals, but with no set publication date.

"Micro Topics" is now on its second year of publication as a bi-weekly employees' journal.

Duotone Circular Issued

Urging dealers to make up "Duodisc" window displays, and to have their clerks approach each customer with the idea of having his voice recorded, the Duotone Co., 799 Broadway, New York, has valuable sales suggestions in a new circular, "Duodisc Promotional Hints." The circular also stresses Duotone cutting needles as fast-selling items, in a wide selectior ranging in price from 25c to \$7.25; Duotone hardening fluid, to preserve recordings, and the company's transcription needles.

New Illinois Group

A new organization, the National Electrical Retailers' Assn., has been incorporated as a non-profit organization in Illinois.

This organization is intended to includfor membership all retailers of electrica appliances.

Stewart-Warner Sales Up

The 38th annual report of Stewart Warner Corp. and subsidiaries, for 1943 shows the greatest sales in the firm's his tory. The report shows gross sales were \$115,064,408, an increase of 48 per cen over 1942.



4111 Ft. Hamilton Parkway.



Blakeslee Named for RCA Selling Position

M. F. Blakeslee, nationally known sales and merchandising executive, has been appointed eastern regional manager for the sale of all RCA Victor products, it was



M. F. Blakeslee

announced by Frank M. Folsom, vice-president in charge of the RCA Victor division of RCA.

Mr. Blakeslee, whose headquarters are at 411 Fifth Ave., New York City, will be in charge of the eastern seaboard territory extending from Maine to Virginia, and from New York to Cleveland.

Prior to his RCA association, Mr. Blakeslee handled department store sales of the United States Rubber Co. products, nationally.

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He joined RCA in 1935, becoming a member of a special sales group which aided dealers and distributors in putting on intensive merchandising campaigns in the East. Later, he was made special representative in Texas for RCA packaged goods products. He was then promoted successively to become the district sales manager of the company's Atlanta, Chicago and New York territories.

Peine With G.E. Company

Louis Peine has been appointed district representative for products of the General Electric Company's specialty division, electronics department, with headquarters at \$40 South Canal St., Chicago, according to an announcement by A. A. Brandt, general sales manager of the department.

Park Joins Admiral

Louis M. Park, formerly supervisor of radio and home appliance sales statistical and order department of Stewart-Warner, has become associated with Admiral Corp., Chicago, as executive assistant, sales department.

Park started with Stewart-Warner in 1927 and worked in radio and home appliance divisions from the time of their inception, acquiring a wide acquaintanceship with the Stewart-Warner distributors. Prior to this time, Mr. Park was connected with the merchandising department of Marshall Field, Chicago.



Jumont Electrolytic tubulars for the duration have the following special features...and are guaranteed to give the same high quality performance for which all Dumont Electrolytic Tubulars have a reputation.



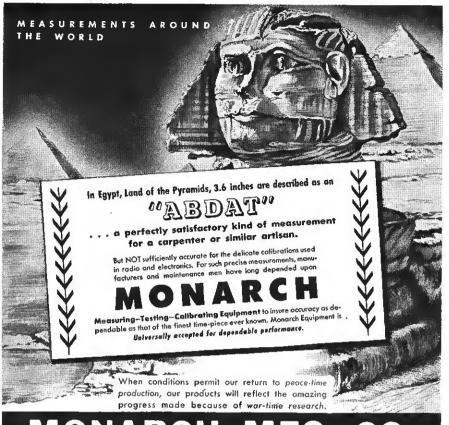
BUY WAR BONDS

SELF HEALING
LONG LIFE
ECONOMICAL
VARNISHED TUBES
DOUBLE SEALED
SMALL SIZE
FULLY GUARANTEED
Pats, Pend.



MFR'S OF CAPACITORS FOR EVERY REQUIREMENT 34 HUBERT STREET

NEW YORK, N. Y.



MONARCH MFG. CO. 2014 N. Major Ave. Chicago, III.



Truesdell Gets Sales Post With Crosley Corp.

Appointment of Leonard C. Truesdell as assistant commercial manager, manufacturing division, The Crosley Corp., has been announced by J. H. Rasmussen, Crosley commercial manager.

For the past 20 years Mr. Truesdell has been associated with various phases of merchandising, principally in the appliance field. He is widely acquainted



Sales Veteran Truesdell

with major dealers in utility, department store, furniture store and household appliance store circles from coast to coast.

He served successively as sales promotion manager and as refrigerator sales manager for the Sterling Radio Corp., Kansas City, Mo., and later operated his own retail appliance business through three stores in Kansas City.

He joined the Frigidaire division of General Motors in 1933 as sales manager in its Kansas City branch. Since 1939, until his present connection with Crosley, he had been in Frigidaire's Dayton offices as manager of the major dealer development department.

Date Shifted to October

In order to be assured of adequate hotel accommodations and more favorable transportation conditions, the annual radio parts industry get-together is being shifted from June to October this year. The electronic parts and equipment industry conference will be held at the Edgewater Beach Hotel, Chicago, October 6 to 9, inclusive, and will be attended by the Sales Managers Club (Eastern Group), the Association of Electronic Parts and Equipment Manufacturers (Western Group), the Representatives Club, and the National Electronic Distributors Assn., and other parts distributors.

Herb Clough of Belden Mfg. Co., has been elected chairman of the conference, heading the conference committee as follows: Robert P. Almy of Sylvania; Charles Golenpaul of Aerovox; Harry Kalker of Sprague; Roy S. Laird of Ohmite; A. E. Schaar of Talk-a-Phone Mfg. Co., Jack Berman of Shure Brothers; A. H. Petersen of Amphenol; A. E. Akeroyd of Raytheon Products, and Jesse Fishel of the Federal Mfg. Co.

FOURTH REVISED EDITION

WAR-TIME RADIO SERVICE

The Only Book of Its Kind—All Data Compiled from Practical Experience.

Every Substitution has been tried in a Radio.

TUBE SUBSTITUTIONS

The description of each substitution is complete and there is nothing for you to figure out yourself—no reference is necessary—almost 500 substitutions for all the *impossible* to get tubes.

PRICE \$3.00 POSTPAID

If you have an old copy, the publishers imprint and \$1.00 buys the Fourth Revised Edition.

SUPPLEMENT NUMBER ONE

Over 700 additional substitutions. Practical—Profitable—Tested data for changing many models of Silvertone and other 2 Volt Battery radios for electric operation. This supplement is for use in connection with the fourth revised edition of WARTIME RADIO SERVICE.

PRICE \$1.00 POSTPAID

Get both of them from your distributor or order from

CITY RADIO COMPANY

504-6 E. WASHINGTON STREET, PHOENIX, ARIZONA

Canadian orders to

Sparling Sales Ltd., Winnipeg

Hygrade Radio Ltd., Vancouver

ELECTRICITYFor Any Job — Anywhere

For a dependable source of electricity on projects remote from commercial power, Onan Electric Plants are proven leaders in the field. More than half of the armed Forces' total requirements for Power plants are built by Onan.

Gasoline driven. . . . Single-unit, compact design. . . . Sturdy construction. . . . Suitable for mobile, stationary or emergency service.

Over 65 models, ranging in sizes from 350 to 35,000 watts. 50 to 800 cycles, 110 to 660 volts, A.C.—6 to 4000 volta, D.C.—Also dual A.C.-D.C. output types.

Descriptive literature sent promptly on request.





SAVE MAN HOURS • SPEED PRODUCTION

WITH

BURGESS vibra-tool

(Trade Mark Reg. U. S. Pat. Off.)

Any one can operate! Marks identifying numbers on production parts; engraves names on identification disks instantly; marks on tools, dies, any equipment . . even hardest steel with Tantahum, equipment . . even hardest steel with Tantahum, earlide needle. CUTS INTO GLASS, RUBBER, CLOTH, WOOD, CARDBOARD, PLASTICS.

Vibro-Tool uses VIBRATION PRINCIPLE, Vibro-Tool uses VIBRATION PRINCIPLE, 120 vertical strokes per sec., 60 cycle 110 V. A.C. Thousands being used in plants everywhere.

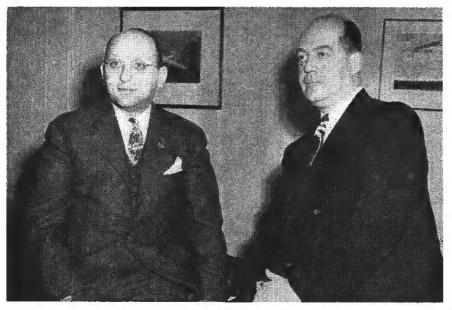
Sold on priority only, Orders filled immediately, Send for sample, or ask for detailed circular.

ELECTRIC SOLDERING IRON CO., INC.

235 WEST ELM STREET, DEEP RIVER, CONN.

(HANDICRAFT DIVISION)
BURGESS BATTERY COMPANY
194 N. Wabash Avenue Chicago 1, III.

Adelman Represents Solar Corporation



Leon L. Adelman, well-known sales manager, right, has become jobber representative. Among other lines, he will represent Solar Capacitor Sales Corp., N. Y. Sylvan A. Wolin, Solar jobber manager, is seen at left.

Kelvinator Advertising Stresses Dealer Activities

Continuing its "wartime service program," Kelvinator will release national magazine advertising for appearance this month, June and July to help dramatize the appliance dealers' determination to

· keep owners "in refrigeration" and "cooking facilities" for the duration, according to C. J. Coward, Kelvinator's director of advertising. Striking color ads in leading national magazines will be used to acquaint appliance owners with the No. 1 trouble maker behind summer service calls, and urging owners of refrig-

erators with open type units, regardless of brand, to clean condensers and oil motors to help prevent unnecessary service calls.

The campaign will include four-color insertions in the Saturday Evening Post, McCall's, Good Housekeeping, Better Homes and Gardens, American Home, Household Magazine, and True Story. Further advertising is scheduled in a comprehensive list of trade periodicals.

Standard Transformer Solves Labor Problem

When the personnel department of Standard Transformer Corp., Chicago, signaled real distress in its efforts to secure enough employes; Jerry Kahn, president, who was convinced that this type of war work not only was well paid, but was fascinating, "took his factory to the worker."

Show Window Results

The Stancor president set up an assembly line in a store not far from the main plant—and waited. His windows stopped the housewife and other potential workers dead in their tracks,

In three weeks' time, the windows brought in enough applications to mark the novel enterprise a success. Mr. Kahn points out that inasmuch as many contractors were offering higher wage-rates, his experiment proved that people are just as much interested in the kind of work they do as in the hourly pay.



why Padiart Vibrators EXCEL

4. Seasoned Production

RADIART VIBRATORS and VIPOWERS give rugged, dependable service under all sorts of conditions because they have achieved seasoned production through years of painstaking developments.

Carefully engineered improvements, checked by millions of vibrators in actual operation, have perfected RADIART VIBRATORS and VIPOWERS and have given them wide recognition for unexcelled performance.

The Army, Navy and Signal Corps recognize that performance as evidenced by their large demands for RADIART PRODUCTS for use on all battle fronts.

Radiart Corporation

3571 W. 62nd. St.

CLEVELAND 2, OHIO



Here it isl... the Government approved Victory Condenser that we are producing for immediate delivery on L265 ratings or better. Write for complete list of Victory items and prices.



INSIDE DOPE

Twenty pages of "hot" tube substitution tips that are not common knowledge are clearly and completely explained in the NEW RELEASE:

"Supplement No. 2"

(Code: GREEN)
to the

"RADIO TUBE SUBSTITUTION & CHANGE-OVER MANUAL"

Price: 50 cents

Successful Forerunners:
"Radio Tube Substitution
& Change-Over Manual"

(Code: BLACK)
Price: \$1
and

"Supplement No. 1"

(Code: YELLOW)
Price: 50 cents

See your radio parts jobber or write

Oelrich Publications

1627 S. Keeler Avenue Chicago 23, Ill.

Fall Market Week Dates Announced by Runyan

Frank K. Runyan, president of the Western Merchandise Mart, has announced that the board of governors of the Mart Exhibitors Assn. has voted to hold Fall Market Week at the Western Merchandise Mart in San Francisco from July 24 to 29, Monday to Saturday, inclusive.

While undoubtedly the supply of such goods as furniture, wool carpets and electrical appliances will be sharply curtailed or allocated, there will be many other lines of merchandise.

Appointed by Admiral





Top, Sidney H. Regovin, former Stewart-Warner executive, has joined the Admiral Corp., Chicago, as eastern regional manager. Above, Richard A. Graver, resigned from RCA Victor to become Midwest regional manager for sale of Admiral radios, appliances.

Hoffman Radio Purchases Western Cabinet Factory

The Hoffman Radio Corp., Los Angeles, Cal., has purchased the cabinet manufacturing plant of the Belcher Co., Inc., Los Angeles.

R. J. McNeely, plant superintendent, made a survey of sources of materials, such as veneers, panels, woodworking machinery and hardwood lumber in the central and eastern states. Mr. McNeely feels that the organization that lays the groundwork now for the solution of their materials problem will certainly be far to the fore when peace time conversion occurs.

REPLACEMENT

"B" BATTERIES

for Miniature and Personal Portable Radios

With Spring here and Summer coming, the need for replacement batteries of this type will be in great demand.

Don't lose sales on this most popular "B" battery.

We have in stock 3,000 fresh batteries. Now is the time for you to order. In ordering send along a money order or check for 20 per cent of your order, balance shipped on a C.O.D. basis.

We cannot accept orders for less than 72 since today's conditions with regard to shipping and handling make it impossible to ship less.

Don't wait — our supply will soon be exhausted.

Replacement "B" Battery for \$160
Miniature and Personal Portable
Radios

HARSAM BATTERY COMPANY

13 East 16th Street, New York, N. Y.





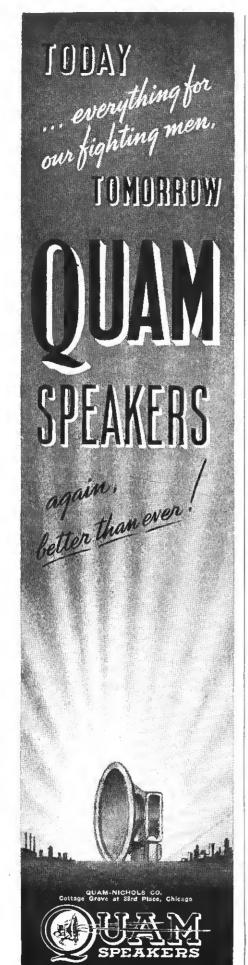
MACHINE GUN TRAINER

Operadio-built communication systems that forge the crews of hombers, of tanks, of fighting ships, into combat teams have a significance to you. When you look for better electronic equipment lines, remember this war-won electronic "know-how" will be back of the Operadio name.

OPERADIO

Electronic Specialists

OPERADIO MANUFACTURING COMPANY, ST. CHARLES, ILL.



Boston Jobber Solves Help Shortage Problem

One jobber who has successfully solved the manpower shortage problem is The Louis M. Herman Co., now occupying their new 4-story building at 885 Boylston St., Boston 16, Mass.

When so many of the Herman Company's men went into the armed services, the firm started training girls for counter work, and finds that they work out very satisfactorily.

Louis M. Herman, president of the company, says: "We have found that during these critical days, the radio serviceman is very cooperative—that is—he does not expect the counterman to be a genius. He is satisfied to get what he can."

The Louis M. Herman Co., founded 15 years ago, has built many unusual jobs in communication apparatus. At one time they built a machine that was to be used in an oxygen tank, without switches, so that the doctor could communicate with the patient inside the device. They have also built special sound equipment to be used with a seismograph, a device used to record and locate earthquakes.

Many of their sound jobs have aided materially in the prosecution of the war.

Representative Lines

The Herman Co, acts as distributor for many well known manufacturers, including: Aerovox Condensers, Utah Radio Products, Clarostat Mfg. Co., Alpha Wire, General Cement, Supreme Instruments, University Labs., Electro-Voice, Recordisc Corp., Atlas Sound, Operadio, Bell Sound Systems, Crowe Name Plate, Amphenol, Amperite, American Television & Radio, Budd, Cinaudagraph, Hickok, Par-Metal, Radio City Products, Turner Co., United Motors and Delco Products, a division of General Motors.

Mr. Herman says that "the manufacturers have been most helpful during the past two years, and have done an outstanding job in keeping the radios working throughout the country by seeing that the wholesalers share equally in the distribution of supplies."

Sales Job for Hotpoint



F. C. Margolf has been appointed manager, home laundry equipment sales division of Edison General Electric Appliance Company, Chicago.

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



Cartoon Courtesy Radio Craft Magazine

Motorola HANDIE-TALKIE 2-WAY Radio



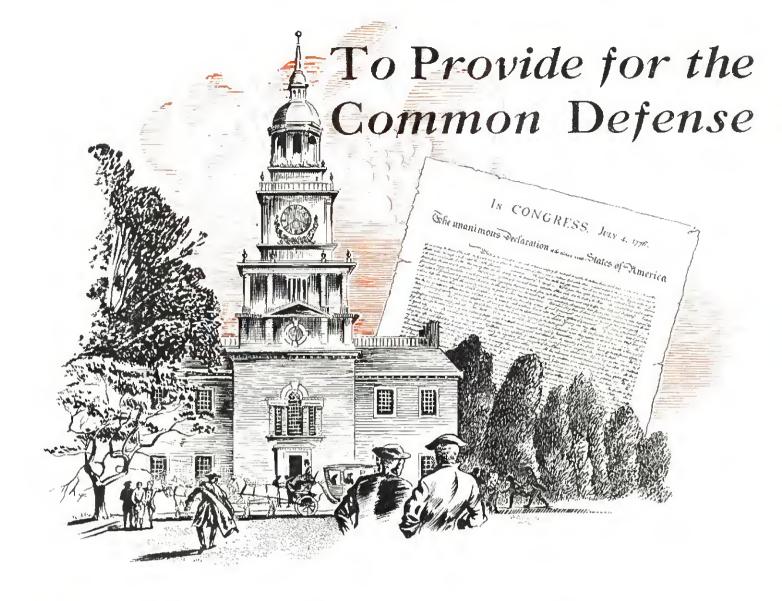
THE BUSIEST" FIGHTINGEST RADIO IN THE ARMY

It's here...there...everywhere. On the fighting fronts, in the training camps...wherever there is need to talk and listen the two-way Handie Talkie is busy, working 'round the clock. This amazing radiotelephone system is no larger than a cookie carton, weighs little more than five pounds and operates on batteries. It is a vital part of our military communications system. Motorola Radio Engineers saw the need for such a unit long before Pearl Harbor. They developed it and had it ready when Uncle Sam called. It's a Motorola habit to be first!

After the war, you can look to Motorola for new pioneering that will make Motorola home and car radio better than ever

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--- Motorola Radio



N 1787, early in May a century and a half ago, distinguished visitors began to appear in the city of Philadelphia. Eventually, on the 25th of May, 55 delegates from twelve States met in a formal body and the Constitutional Convention opened.

Throughout the summer these men. "clear-headed, moderate men, with positive views of their own and firm purpose, but with a willingness to compromise," labored soberly to provide their loved country with a means of securing its growth, its safety and the liberty of its people forever.

These men were realists. In the very first Article of the Constitution they provided for an army and navy "for the common defense."

The freedoms, the decency, the justice, the very dignity of man which the Constitution establishes and defends are today being attacked by Japan and Germany. We who draw breath under the Constitution have been forced to create an army and navy to protect it and ourselves. We must continue to build, to increase our own attacking power. It takes work and sacrifice, and it takes money—

"For the Common Defense" -- Buy War Bonds!

