

# RADIO TELEVISION JOURNAL

NOVEMBER

1943



*Radio In the War Issue*

MAJOR GENERAL HARRY C. INGLES · RAY  
ELLIS · PAUL GALVIN · JAMES T. MANCHESTER  
GEORGE D. BARBEY · W. A. JOHNSON



# TRIBUTE

FROM  
*Motorola Radio*



## to the Men of the U. S. Army Signal Corps



It is no secret that our armed forces have the finest communications equipment in the world. What is even more important is the fact that this equipment—"the eyes and ears" of our fighting men—is in the hands of that even finer product of American Democracy . . . the men of the U. S. Army Signal Corps. *To them from Motorola Radio—a speedy Victory and a quick safe return!*

**AFTER THE WAR . . .** For the Signal Corps, Motorola Electronic Engineers pioneered in the development of the famous Guidon Set, the new Walkie-Talkie and the highly effective Handie Talkie—portable two-way communications systems. When Victory signals resumption of Civilian Radio production Motorola Engineers will add to their impressive list of "Firsts" in the development and production of Special Electronic devices and 2-Way F-M Communications Equipment.


**Expect Big Things from Motorola—THEY'RE IN THE MAKING!**

*For the continued development and production of Radio Communications and other special Electronic equipment for our Armed Forces, the Motorola organization has been awarded two stars for their Army-Navy "E" Flag. Motorola is proud of the part it has been privileged to play in the speeding of Victory.*

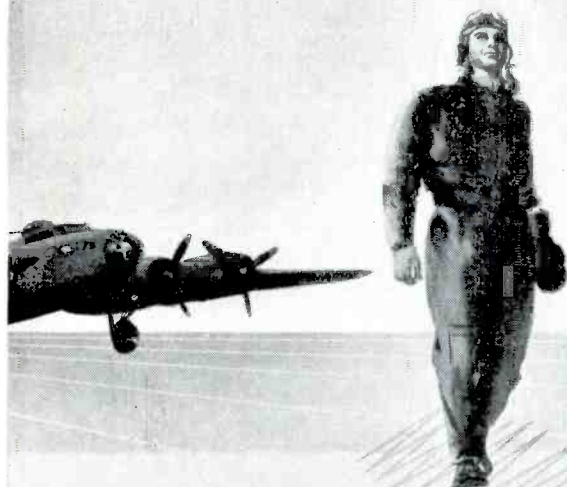


**Motorola** RADIO  
FOR HOME & CAR  
**GALVIN** MFG. CORPORATION • CHICAGO, ILLINOIS

# Belmont



**In the sky today**  
**. . in your home**  
**tomorrow . .** *keep*  
*your eyes on Belmont*



## Belmont Radio

TELEVISION \* FM \* ELECTRONICS

BELMONT RADIO CORPORATION, 5921 WEST DICKENS, CHICAGO 39, ILLINOIS



# ARVIN

A NAME TO KEEP IN MIND FOR  
*Fast Selling Radios*  
AFTER THE WAR



HERE'S ONE OF 500,000 GOOD LITTLE RADIOS BUILT BY THIS COMPANY DURING THE LAST PEACETIME YEAR

**ARVIN** is the name on  
Peacetime Products of  
**NOBLITT-SPARKS**  
INDUSTRIES, INC., COLUMBUS, IND.

*Home and Car Radios*

*Hot Water Car Heaters*

*Metal Furniture  
and other metal houseware*

*Bathroom Electric Heaters  
and other  
electrical houseware*

**SINCE THEN**, we've made many additional thousands of entirely different radios for war—precision-built, intercommunication sets—some of the finest that are being used in the war planes and on the battle fields.

**But you want to know what our experience will bring to you in radios, as soon as possible after the war. Here's what you can expect:**

We'll have some good radios for you—the first few months after war restrictions end. Attractive, well-built sets, of course—the kind that sell fast, at low prices.

Beyond our "early production" we're planning to keep in step with your market trends and desires. And you can rely on us for sound policies, with helpful sales support.

**ARVIN** A GOOD NAME TO REMEMBER  
FOR POSTWAR PROFITS!

# Our Readers Write

Dear Mr. Parks:

What a magazine this October R-T Journal! Just this word of congratulation, and wishing you much success, hoping that you can maintain the pace.

Yours respectfully,

**C. F. Cowan.**

Hockett-Cowan Music Co.,  
Fresno, California.

*\*\*\* One of the reasons we're always so deeply appreciative of letters like Mr. Cowan's is because they are so rare. About the only time Editors hear from readers is when they've done something someone doesn't like. But, when men like Mr. Cowan take time out to voluntarily write us such nice letters it makes up for all the other kind. However, we welcome all your letters because that's the only way we have of knowing whether or not the job we are doing for you meets with your approval.*

Dear Mal:

I am enclosing a short item which may interest you.

I am sure the boys would appreciate it if you could make mention of our N.E.D.A. meeting and election in RADIO-Television JOURNAL. I find that a great many of our dealer-customers read RADIO-Television JOURNAL and I hear it frequently quoted at dealer meetings.

With kindest regards,  
Sincerely,

**Harold H. Scott.**

Scott Radio Supply,  
Long Beach, California.

*\*\*\* Good Friend Hal Scott epitomizes the interest which radio parts jobbers take in the success of their customers. We have found virtually every parts jobber more than willing to spend time, money and effort in any move that would be of real help to dealers and servicemen. That is why it gives us such satisfaction to work together in the interest of all groups.*

Dear Mal:

I had occasion to sit in on the meeting called by you on November 11th of Greater Boston Radio Servicemen.

I sincerely believe the radio service industry should give you and your excellent magazine a vote of thanks for the effort you are making to have them organize for their own benefit.

Organization seems to be the order of the day, and any clear-thinking person can see that it definitely has a place in our American Way. By offering the help and guidance which you and your magazine are extending it is of great help to get the "ball rolling."

We will have many men coming out of the services whom we should welcome and we will have a few who would be a detriment to the profession, and a good strong-working and strong-thinking organization should help to make the problem less difficult to solve.

Please accept my sincere congratulations for having the foresight and initiative to institute and follow through your program of organization.

Very truly yours,

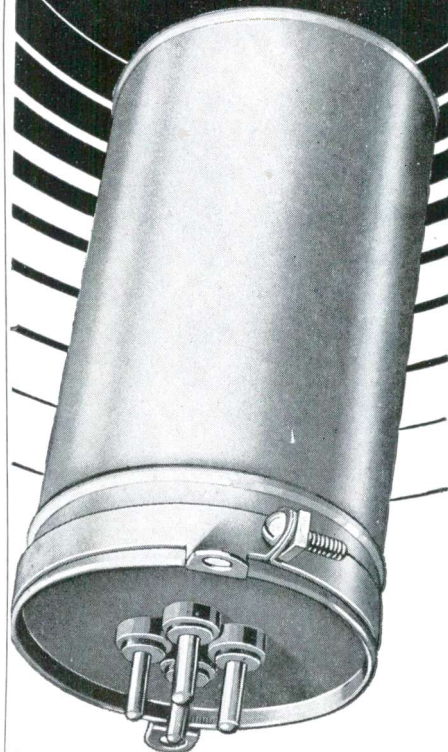
**Ray Nelson.**

Service Manager,

J. H. Burke Company, Distributors,  
Boston, Mass.

*\*\*\* Modesty is one of Ray Nelson's cardinal virtues and that is why he didn't mention the wonderful talk he gave before the Greater Boston group. One of the reasons why the Association work which we have been privileged to do has been so successful is because men like Ray have given it wholehearted support. The fellows in Washington who are preaching that the day of the wholesaler is past should get out and talk to dealers and servicemen who look on distributors like the Burke Company as friends, as well as suppliers.*

"The shape  
of things  
to come"



- It requires no gift of prophecy to sense that this capacitor stands for "The shape of things to come." The plug-in feature denotes ready replacement. That signifies a vital functional use. Also continuous, gruelling, telling service that wears out capacitors. Therefore, just as the demountable-rim wheel marked the transition of the automobile from Sunday diversion to everyday transportation, so this plug-in capacitor spells a still greater day for radio technique and radio men. Call it the Electronic Age, if you wish.

Our first job is winning the war. Tens of thousands of radio men are engaged in waging war. We at Aerovox are virtually 100% on war work. However, out of that experience, the wartime capacitor types and production growth, must come the foundation for the much-heralded Electronic Age. Thus "The shape of things to come."

## • Ask Our Jobber . . .

Ask for a free subscription to the monthly Aerovox Research Worker to keep you abreast of radio and electronic developments. Ask for the new "Victory Catalog." Or write direct.

**AEROVOX**  
Capacitors  
INDIVIDUALLY TESTED

AEROVOX CORP., NEW BEDFORD, MASS., U. S. A.  
In Canada: AEROVOX CANADA LTD., HAMILTON, ONT.  
Export: 100 VARICK ST., N. Y. C. • Cable: 'ARLAB'





WITH this issue we bring you some information on Radio in the War Effort because we feel that it is essential for every radio dealer and serviceman to get a clear picture of the part that our industry is playing in helping the Armies of the Allied Nations throughout the entire world.

☐ While I am sure that everyone in the industry recognizes the important part which radio is playing in this war of communications, it seems to me that one of the practical values of this issue will be to re-emphasize the tremendous growth which has taken place in the industry itself since Pearl Harbor. Let us just briefly review a few of the facts together.

☐ Before the war the value of the products produced by the radio industry was, roughly, about \$300,000,000 per year. To give you a comparison of the relative insignificance of the industry, we might compare it with, let us say, soda fountains which do a business of over \$2,000,000,000 every year. Therefore, the fact to be remembered is that the thinking of the industry and of every person in the industry was conditioned and circumscribed by the relative smallness of the industry itself.

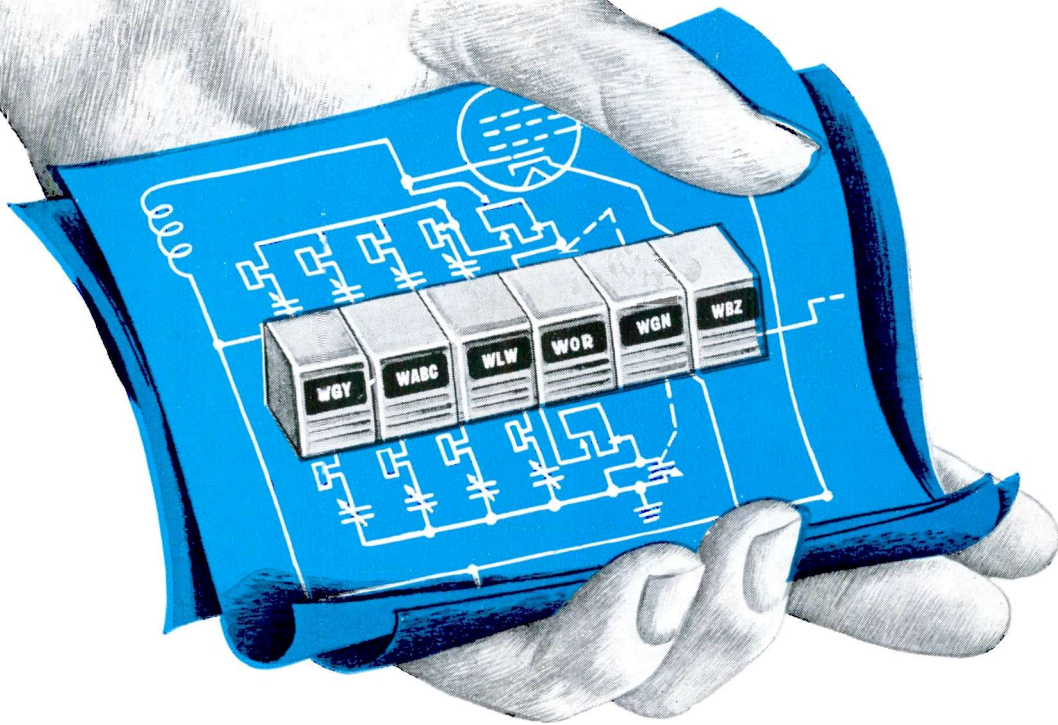
☐ Contrast this with the radio industry today which has grown into an industry whose products are valued at over \$4,000,000,000 a year. This is twice the value of all automobiles and trucks produced during the best year the automobile industry ever had. Just glance at a few figures. For example, in the 1943-44 production "blueprint" the Signal Corps is to receive \$4,796,131,773 for the procurement of electronic and radio apparatus. This is divided into \$3,659,473,705 for the Army Air Forces; \$366,010,624 for Lend-Lease; and, \$1,533,413,671 for the Army Ground Forces and Army Service Forces. In a recent statement the Chief Signal Officer pointed out that of the new appropriation the Army Air Force allotment includes \$2,750,094,494 for radio equipment to be installed in the projected 99,740 new army airplanes.

☐ What does this mean to the average service dealer? I believe it means that we must enlarge the horizon of our thinking and realize that we are members of one of the country's biggest businesses. We must recognize that the tremendous size of our industry provides a shining mark for competitors of all kinds who will be in there battling to get their share of this business. We must realize that the technological advances developed under the stress of war-time necessity make much of our previous knowledge obsolete. We must face the fact that, as individuals, if we are to maintain our place in this industry we must make up our minds now to know it more thoroughly, to study it more carefully, to keep abreast of its advances more alertly and realize that this is no longer a piker business, and that the only people who will get their share of its tremendous postwar potential will be the men who are big enough to fit into what is destined to continue being one of the country's biggest industries.

*Mal Parks*

**Editor**

## Remember radio's first Feathertouch Tuning?



Another General Electric "first" that helped sell hundreds of thousands of radios...and, after the war, General Electric's new and improved Automatic Tuning will be an even greater sales feature for you!

Who could forget the first popular-priced electric touch tuning? It was the radio industry's outstanding development in 1937.

G.E. is still proud of this development. But G.E. has something now that's a whole lot better—a new lightning-fast *Feathertouch* that will set an all-time high for automatic radio tuning performance!

We can promise you a mighty pleasant surprise when—after the war—you are introduced to the

new push-button tuning planned for you by G.E.

And this is only one of the many important sales-makers awaiting you when G.E. brings out its post-war FM radio for the home. *Electronics Department, General Electric, Bridgeport, Connecticut.*

Tune in "THE WORLD TODAY" and hear the news direct from the men who see it happen, every evening except Sunday at 6:45 E.W.T. over CBS. On Sunday listen to the G-E "All Girl Orchestra" at 10 P. M. E.W.T. over NBC.

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

**GENERAL  ELECTRIC**

175-012

# RADIO TELEVISION JOURNAL

Combining:

TALKING MACHINE WORLD in 1934

ELECTRIC APPLIANCE JOURNAL in 1939

Volume 55

NOVEMBER 1943

Number 5

## Contents

OUR READERS WRITE .....	5
EDITORIAL .....	6
RADIO'S PART IN WINNING THIS WAR .....	11
THE RMA AND RADIO IN THE WAR .....	14
CAPTURED ENEMY RADIO EQUIPMENT .....	15
RADIO'S MIRACLE OF PRODUCTION .....	18
THE PARTS JOBBER IN WARTIME .....	22
WHEN RADIO MEN COME HOME FROM WAR .....	24
WATCH YOUR DEPRECIATION DURING WARTIME .....	27
FUTURE IDEAS FILE .....	29
RADIO JOURNAL'S ASSOCIATION ACTIVITIES REPORT .....	30
WARTIME TUBE TIPS .....	32
HOW THE ARMY'S TECHNICAL TRAINING WAS STARTED.....	33
RADIO JOURNAL NEWS .....	34
JOURNAL'S END .....	38

## Advertisers

AEROVOX CORPORATION .....	5
Agency: Austin C. Lescarboura	
BELMONT RADIO CORP. ....	3
Agency: Beaumont & Hohman, Inc.	
EMERSON RADIO & TELEVISION CORP. ....	Outside Back Cover
Agency: William H. Weintraub, Inc.	
ESPEY MFG. CO., INC. ....	38
Agency: Modern Merchandising Bureau, Inc.	
FADA OF NEW YORK, INC. ....	28
Agency: Sternfield-Godley, Inc.	
GALVIN MANUFACTURING CORP. ....	Inside Front Cover
Agency: Gourfain-Cobb Advertising	
GENERAL ELECTRIC CO. ....	7
Agency: N. W. Ayer & Son, Inc.	
HALLICRAFTERS COMPANY .....	16-17
Agency: Burton Browne Advertising	
KEN-RAD TUBE AND LAMP CORP. ....	23
Agency: Allen, Heaton & McDonald, Inc.	
MAJESTIC RADIO & TELEVISION CORP. ....	20-21
Agency: Triangle Advertising Agency Co.	
MERIT COIL & TRANSFORMER CORP. ....	37
Agency: Ross Llewellyn, Inc.	
NOBLITT-SPARKS INDUSTRIES, INC. ....	4
Agency: Sidener & Van Riper	
SONORA RADIO & TELEVISION CORP. ....	10
Agency: Weiss & Geller	
SPRAGUE PRODUCTS CO. ....	Inside Back Cover
Agency: Harry P. Bridge Co.	
UNIVERSAL MICROPHONE CO., LTD. ....	25
Agency: Ralph L. Power Advertising Agency	
WOLFE RADIO DISTRIBUTING CO. ....	28
Agency: Direct	
VINCENT EDWARDS & COMPANY .....	37
Agency: Direct	

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## This Month's Cover . . .

The picture on the cover shows a "handy-talkie" in action on one of the numerous fronts where our soldiers are now engaged in a death struggle with the enemy. This is an unusual official U. S. Signal Corps photo which was not available in Washington and which was graciously loaned to us by the Synthane Corporation, Oaks, Pennsylvania, manufacturers of Bakelite laminated products. The radio industry is playing a major part in this war of communications, and it is safe to say that modern war could not be conducted without the products of our industry.

Radio-Television JOURNAL is published monthly by Kolbe Publications, Inc., Radio City, 1270 Sixth Ave., New York (20) N. Y., for radio-television Dealers, Servicemen and Jobbers. Chicago office 549 West Randolph, Telephone Central 5164. Also publishers of Musical Merchandise Magazine and The Music Trade Review.

RADIO-TELEVISION JOURNAL IS THE OLDEST PUBLICATION IN THE INDUSTRY





## Never mind "who done it"—pitch in and help get it down!

**T**HIS IS YOUR UNCLE SAM talking—but I'm going to talk to you like a DUTCH uncle, to keep all of us from going broke.

Ever since the Axis hauled off and hit us when we weren't looking, prices have been nudging upwards. Not rising awfully fast, but RISING.

Most folks, having an average share of common sense, know rising prices are BAD for them and BAD for the country. So there's been a lot of finger pointing and hollering for the OTHER FELLOW to do something—QUICK.

The government's been yelled at, too. "DOGGONNIT," folks have said, "WHY doesn't the government keep prices down?"

Well, the government's done a lot. That's what price ceilings and wage controls are for—to keep prices down. Rationing helps, too.

But let me tell you this—we're *never* going to keep prices down just by leaning on the government and yelling for

the OTHER FELLOW to mend his ways.

We've ALL got to help—EVERY LAST ONE OF US.

Sit down for a minute and think things over. Why are most people making more money today? It's because of the SAME cussed war that's killing and maiming some of the finest young folks this country ever produced.

So if anyone uses his extra money to buy things he's in no particular need of . . . if he bids against his neighbor for stuff that's hard to get and pushes prices up . . . well, sir, he's a WAR PROFITEER. That's an ugly name—but there's just no other name for it.

Now, if I know Americans, we're not going to do that kind of thing, once we've got our FACTS straight.

All right, then. Here are the seven rules we've got to follow as GOSPEL from now until this war is over. Not some of them—ALL of them. Not some of us—ALL OF US, farmers, businessmen, laborers, white-collar workers!

**Buy only what you need.** A patch on your pants is a badge of honor these days.

**Keep your OWN prices DOWN.** Don't ask higher prices—for your own labor, your own services, or goods you sell. Resist all pressure to force YOUR prices up!

**Never pay a penny more** than the ceiling price for ANYTHING. Don't buy rationed goods without giving up the right amount of coupons.

**Pay your taxes willingly,** no matter how stiff they get. This war's got to be paid for and *taxes are the cheapest way to do it.*

**Pay off your old debts.** Don't make any new ones.

**Start a savings account** and make regular deposits. Buy and keep up life insurance.

**Buy War Bonds** and hold on to them. Buy them with dimes and dollars it HURTS like blazes to do without.

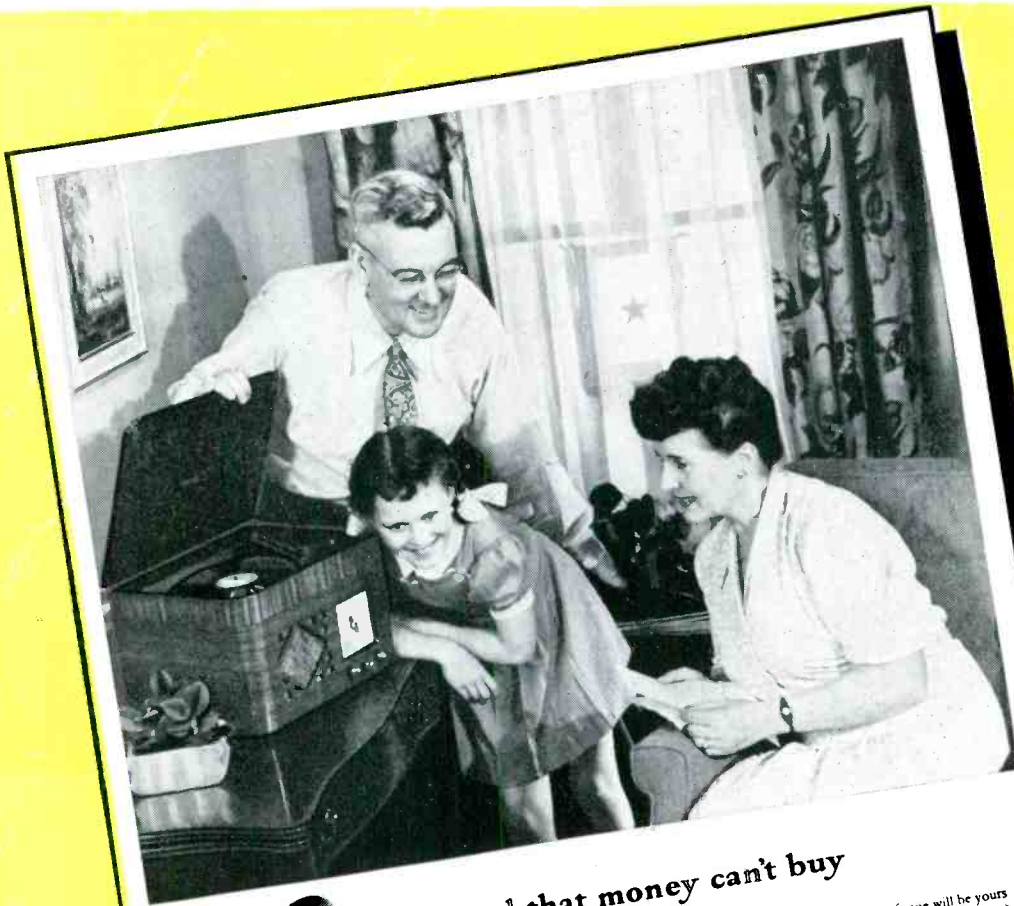
Start making these sacrifices now—keep them up for the duration—and this country of ours will be sitting pretty after the war . . . *and so will you.*

# KEEP PRICES DOWN!

Use it up • Wear it out  
Make it do • Or do without

*Uncle Sam*

This advertisement, prepared by the War Advertising Council, is contributed by this magazine in co-operation with the Magazine Publishers of America.



**The record that money can't buy**

Remember, Bob, that night at the U. S. O. . . you made a record to send to the folks back home. You could just see the family listening to it for the first time!

Mom smiling through it all—with a far-away look in her eyes. Sis, wide-eyed because it's her big sailor brother's voice coming over the speaker. And Dad, trying not to show his excitement—at least, not too much. You thought the whole business a huge lark. You *couldn't* know the immeasurable

thrill you'd give Mom and the folks—how precious that little disc would become—how often it would help dispel deep loneliness and the heart-catching fear that's always present—along with pride in their boy!

It seemed that Bob was tight there in the room, so faithfully did the SONORA Radio-Phonograph reproduce his words.

Tone fidelity of such matchless purity is an engineering achievement for which SONORA has been especially noted through the years.

This unique mastery of tone will be yours to enjoy just as soon as America's war needs are satisfied.

SONORA RADIO & TELEVISION CORPORATION  
325 NORTH HOYNE AVENUE, CHICAGO, ILLINOIS



**Sonora**  
Clear as a Bell

FOR VICTORY BUY WAR BONDS

RADIOS • PHONOGRAPHS • RADIO-PHONOGRAPHS • RECORDS • RADIO-PHONO-RECORDER

**MR. RETAILER:** Right in your town, the folks who read the American Weekly, Esquire, The American Magazine and other favorite national publications, such as Life, Redbook, Cosmopolitan, Time, American Home—already have seen this striking SONORA advertisement.

**IT'S AD NUMBER TWO** in a compelling campaign of full page, full color *demand builders*

that are lining up sales you'll cash in on just as soon as we can start turning out radios for you to sell.

**ASK YOUR JOBBER . . .** to tell you why our over-the-counter "Package" Plan will make SONORA as easy to handle as any minor appliance . . . and just as trouble-free.

SONORA RADIO & TELEVISION CORPORATION  
325 North Hoyne Avenue • Chicago, Illinois

**THE ONLY NATIONALLY ADVERTISED JOBBER-DEALER RADIO**

**Sonora**  
Clear as a Bell

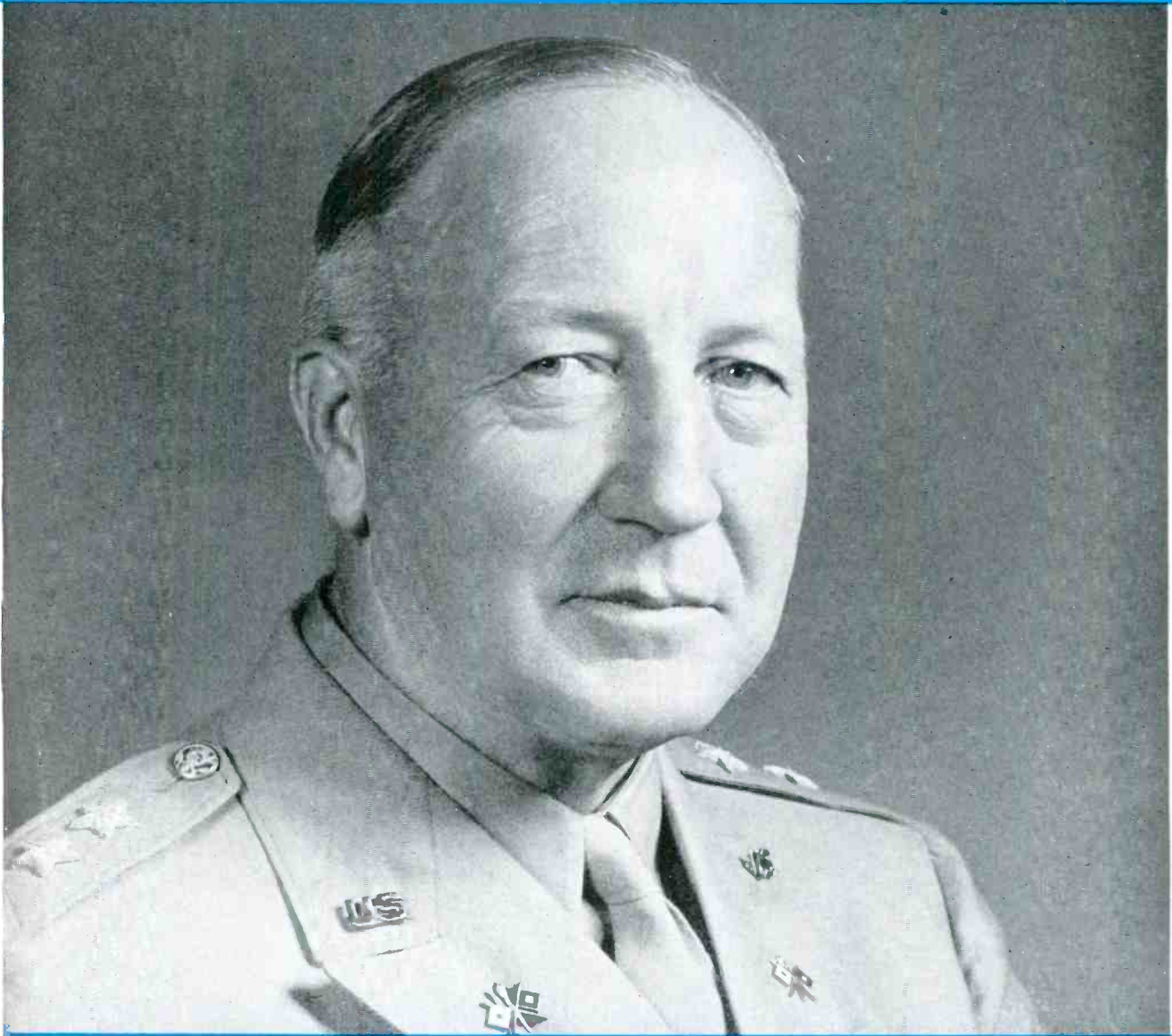


# Radio Television Journal

Vol. 55, No. 5

MAL PARKS, Editor

NOVEMBER, 1943



## RADIO'S PART IN WINNING THIS WAR

by MAJOR GENERAL HARRY C. INGLES  
Chief Signal Officer, Signal Corps, Army of the United States

This war is a war of movement over great distances at high speed. In World War I, front lines were relatively stable and measured in yards. In the present conflict, front lines are not stable and are measured in hundreds of miles that must be spanned in a day.

Communications equipment, including radio, assist in making it possible

to fight this war in the manner in which it is being fought.

With radio, the Chief of Staff in Washington has instantaneous communications with General Eisenhower in North Africa. With radio, General Eisenhower is in instant touch with all his commanders in Italy.

Radio assisted Lieutenant General Mark Clark, leader of the Anglo-Amer-

ican Fifth Army, to establish and maintain the beachhead at Salerno.

The ebb and flow of battle on the beach at Salerno two months ago was the latest in a series of engagements that emphasized anew the importance of proper communications.

There is no doubt that had radio communications failed, the cost in

*(Continued on next page)*



Shown above is one of the Hallicrafter SCR-299 mobile headquarters radio stations about which Major General Ingles writes, "Finally, as the beachhead was secured and command posts were established, the SCR-299 mobile headquarters radio station was landed and placed in operation. These giants of military radio are the means for long distance communications and, in voice and code, can operate while in motion or while stationary."

American lives would have been increased.

With the first troops who landed was the smallest radio transceiver in the Army, the handie-talkie. This five-tube set, carried in one hand, is no larger than a cracker box and is built with the precision of a pocket calculator.

As succeeding troops arrived ashore, they had with them two types of longer ranged sets: the walkie-talkie, carried on the back of a soldier, more powerful than the handie-talkie; and the Guidon Set, a two-piece transmitter-receiver with a range further than the walkie-talkie.

As the Fifth Army drove into the mountains surrounding the beachhead, and as larger units were landed, more powerful radio sets came with them. Regimental command sets, hand-powered and encased, and others that can be picked and carried like a suitcase, were set up. Many of the vehicles that threaded their way through mine fields, were also equipped with radio communications.

As the tempo of the attack on the ground increased during those first few days, Allied air power covered the area with a protective cover of fighters. Medium and heavy bombers blasted and strafed the Nazi's positions and supply lines. The coordination that existed between the ground forces and the air forces was superb. Radio communications enabled the various units

to coordinate their action and to perform as a team.

Offshore, Naval fire was concentrated on vital enemy installations, and laid down barrages upon requests of unit commanders ashore. The Navy was firing from information received by radio.

Finally, as the beachhead was secured and command posts were established, the SCR-299 mobile headquarters radio station was landed and



Above: There is a great deal of confusion in the minds of the general public between the "handie-talkie" and the "walkie-talkie." Illustrated above is an official "walkie-talkie" which is carried on the back of a soldier and is more powerful than the "handie-talkie."

placed in operation. These giants of military radio are the means for long distance radio communications and, in voice and code, can operate while in motion or while stationary.

On the last day of September, American armored units were able to advance onto the plains before Naples, and the battle of Salerno had been won. As an example of why the radio industry is totally a war industry today, let us examine the radio facilities that link up each tank in an armored organization.

Each tank is equipped with a radio receiver. In addition, every fourth tank includes a transmitter. In the tank of the platoon leader there is also a radio transmitter and receiver, for the platoon leader not only has to send orders to the tanks under his control but he must also be able to communicate with his company commander.

The company commander also has a two-way radio set, for, in addition to communications with each of the platoon leaders under his command, he must also maintain contact with his battalion commander.

In the halftrack motor vehicle that is his headquarters, the battalion commander has not one radio transmitter-receiver, but two. The second set, unlike the sets previously mentioned, which are operated with frequency modulation, uses continuous wave telegraph transmission and enables the



battalion commander to report to Divisional headquarters and to receive orders therefrom. He also has instantaneous communication with his mortar platoon, his mobile artillery, and his service units.

Further to the rear is the Divisional command post. Here, too, the Divisional commander is equipped with a frequency modulated set and a continuous wave set, for he must be in split-second touch with his corps commander, with his reconnaissance units, and with supporting groups of tanks, artillery, and supply and maintenance services to enable him to move rapidly as the situation demands.

The number of radio sets in a present-day armored division totals 975. They are distributed not only to the tanks which are the backbone of the armored unit, but also to the great number of other vehicles that go to make up the striking force—scout cars, halftracks, trucks, and jeeps.

Seven different basic types of transmitters and receivers which provide both code and voice modulated transmission are included. More than 75 per cent of these radio sets have push-button tuning, permitting the operator to change his channel instantly and automatically. Their ranges extend from a few miles to hundreds of miles. Each is mounted on a shock absorber and has been built in accordance with the most rigid specifications in order that it can withstand the terrific beating that is administered to it, including the concussion caused by the firing of large calibre guns. Most are powered through current supplied by the motor of the vehicles in which they are housed.

Is it any wonder, then, that the radio industry has not the capacity nor the supplies to make civilian radios on a business-as-usual basis? For the radio sets that have been mentioned up to now are only a small part of the immense variety the Signal Corps procures for the Army. There are many others: the "Gibson Girl," a radio set that automatically sends out an SOS when a crank is turned, and which is being procured by the thousands to help bring aid to our aviators who

*(Continued on next page)*



Shown above is the interior of a Hallicrafter SCR-299 unit which has played an important part in the invasions by our Armed Forces.

Below, you see one of the complex Radio Direction Finders in actual operation under rigid winter conditions. American radio equipment such as this is responsible for the success of Allied Nations Armies on all battle fronts.



(Continued from preceding page)

have been forced to land on the ocean; aircraft radio equipment for our flying fighters; tiny vestpocket size transmitters sent aloft on free-flying balloons, which send back data on the atmosphere, the humidity and barometric pressure, to be used in making weather forecasts; fixed radio stations that are erected and operated after enemy territory has been conquered by our forces, and which are comparable to the commercial broadcasting stations in this country; and radio-telephoto equipment through which pictures of news and of strategic value are received.

It is the responsibility of the Signal Corps of the Army Service Forces to provide communications for the Army of the United States. This responsibility is dual. The Signal Corps has to supply signal equipment to all combat and service troops, as well as to operate the larger systems and fixed stations equipment and supply systems.

To do this first job the Signal Corps is spending approximately three and a half billion dollars this year—90 per cent of which is for radio equipment!

To do its second job, the Signal Corps today is greater in personnel than the regular peacetime Army of two years ago.

The radio industry has had to grow to meet the demands of our armed services and those of our Allies. Where a little more than a year ago manufacturers of radio equipment were turning out 30 million dollars worth of tubes, condensers, rheostats, capacitors, resistors, etc., a month, today they are producing 250 million dollars worth of such material monthly, and they are turning all except an infinitesimal fraction of that equipment over to the armed forces of the United States and to its Allies.

The equipment that is being produced by American radio manufacturers is playing a vital part in the victories that are being won in the once thriving vineyards of southern Europe and in the steamy jungles of the Southwest Pacific. For without enough of the equipment—on time—we would not be so far on the road to final victory.

the **R** ★ **M** ★ **A** ★  
and  
**RADIO**  
IN THE  
**WAR**

by

**PAUL J. GALVIN**

President

Radio Manufacturers Association



The outbreak of the war found the radio industry prepared for its part of the effort. Long before Pearl Harbor, under the guidance of the Radio Manufacturers Association, the industry was getting its house in order for its war effort. A complete and orderly program was sponsored by the Radio Manufacturers Association through several committees in contact with the armed services and the War Production Board, to properly point up to the various manufacturers within the industry the specific part of the task that they must perform. Also, through various R.M.A. committees, an orderly program of transition was worked out with the armed services and the WPB whereby the organizations of the various members of the industry were kept intact, and a gradual evolution out of civilian into military production was accomplished in a very effective and quick fashion.

When we compare the part that radio and electronics played in World War I with the part they are playing in this global war, one readily sees the gigantic task the industry has taken on. Many of the items which the industry is producing were little known until very shortly before the outbreak of the war. With herculean effort, the combined engineering forces of the industry have accomplished, in unbelievably short time, the development of

apparatus the quality of which surpasses that of our enemies. Our production forces have met the challenge of quantity production, and are delivering today in terms which would be astronomical and beyond prediction a few years back.

Many important efforts have had to be accomplished along the lines of standardization and substitution. In this, many elements had to be composed. We are glad to say that the Engineering Division in the Radio Manufacturers Association was prepared, and did make tremendous contributions in aiding this particular phase of the effort.

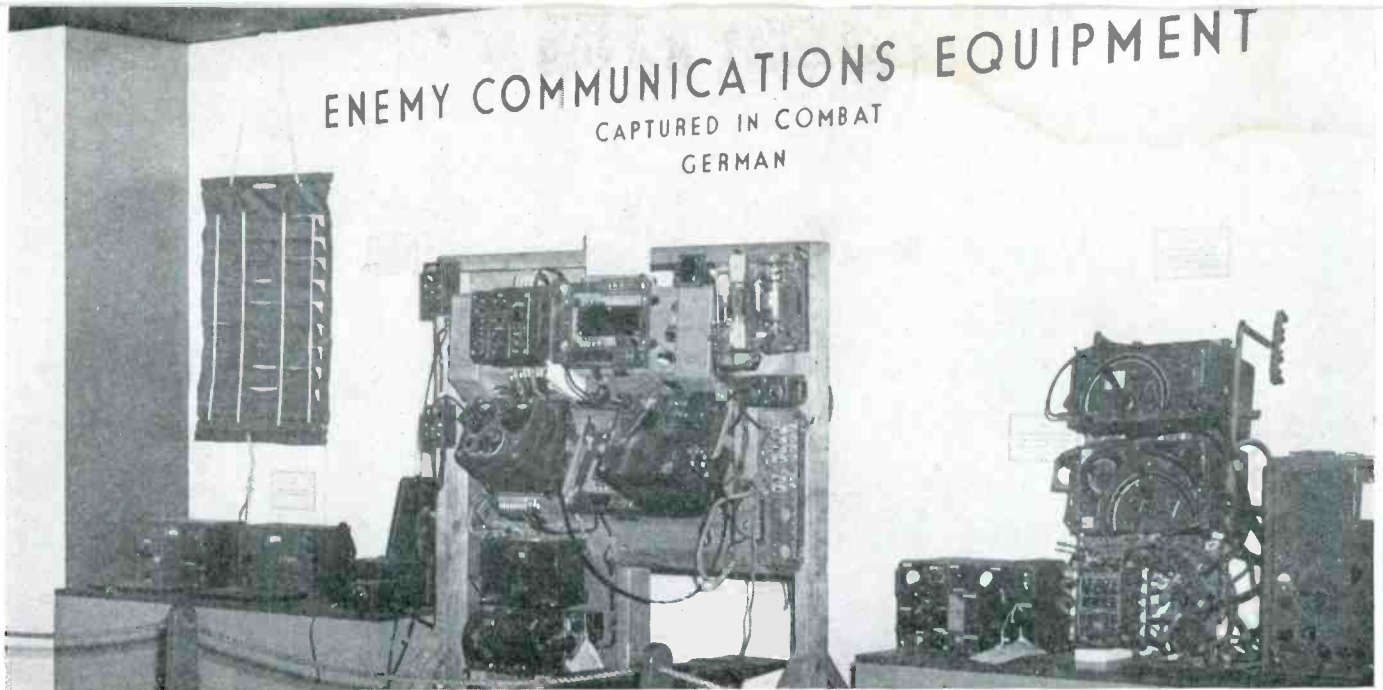
Through their association over the many years in R.M.A., both the apparatus and the parts manufacturers have become well acquainted with one another. This acquaintance placed us in a splendid position for mutual effort in quickly and effectively getting at the job on a cooperative basis. The tube manufacturers, condenser manufacturers, and apparatus manufacturers, intelligently got together and divided the load.

I am sure that there are many details written into the history of the war effort on the part of the radio manufacturers which are not revealed today. We should all be very proud of the fine job done and the contribution being made by the radio industry.



# ENEMY COMMUNICATIONS EQUIPMENT

CAPTURED IN COMBAT  
GERMAN



Above is shown captured German equipment which is of excellent quality and contains many scientific advances.

Captured German radio equipment is at least five years behind our own, according to Captain James P. Lipp who recently returned to this country from a mission with the Signal Section of Allied Force Headquarters in North Africa.

In the report on captured enemy signal equipment which Captain Lipp made he said, "German sets are well-built and have a great deal of strength, but those that we have tested were certainly not made for Africa. They lacked waterproofing and were not dustproofed. In many cases, stop-gap measures were used. For instance, we have noticed that tape and various sealing compounds were used in an attempt to make sets resistant to corrosion and to exclude dust. An obvious fault was the lack of impregnation of coils and transformers to keep out

moisture."

Remarking that German signal prisoners he interviewed did not seem very well trained on technical lines, although they were fairly good operators, Captain Lipp added:

"In many cases we have picked up radio sets that were intentionally sealed to prevent tampering so that German operators could not attempt their own repairs. Our own boys, of course, having 'Yankee ingenuity,' think nothing of repairing or improvising their own equipment if they have the tools and parts."

He reported that damaged enemy equipment is "cannibalized" for coils, condensers, resistors, tube, batteries and meters. These are used to repair our equipment and also enemy apparatus to be used by the Allies.

United States forces, Captain Lipp

said, have not yet had to resort to use of captured equipment.

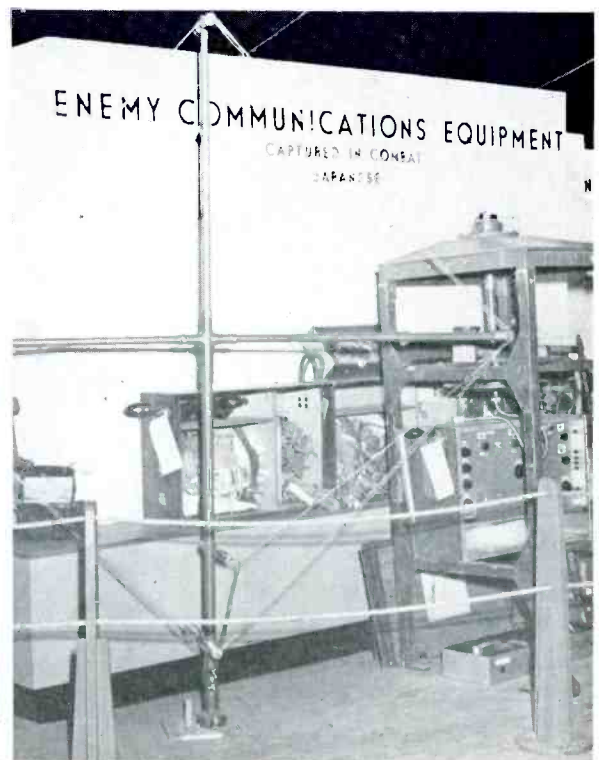
Captain Lipp and his men got some of their captured equipment through normal channels and found other pieces by scouting around the front lines.

Some of the captured equipment was taken from tanks crippled and planes shot down by the Russians; others from German communication centers overrun by American troops in the Cape Bon peninsula and other sectors of the Tunisian front.

The microphone of a German pack radio transmitter-receiver, similar to our own "walkie-talkie," used by an infantry company of the Afrika Korps until it was captured by Americans, bears a typical warning to the operator: "Feind hort mit!," meaning "The enemy listens too!"

## CAPTURED ENEMY RADIO EQUIPMENT

Below is shown Italian communications equipment which is characteristic of the poor quality material used by Italian forces. At the right is shown captured Japanese communications equipment much of which is a direct imitation and copy of early American equipment.





*Hallicrafters has the honor of being the first exclusive manufacturer to receive the Army-Navy Production Award for the third time! This third award adds a second White Star to Hallicrafters' flag—and stands as a symbol of their great contribution to the cause of freedom.*



**hallicrafters**

THE WORLD'S LARGEST EXCLUSIVE MANUFACTURER OF SHORT WAVE RADIO COMMUNICATIONS EQUIPMENT





## **HALLICRAFTERS WAS READY!**

*Under the abnormal climatic and operating conditions of war, the Signal Corps SCR-299 communications truck, built by Hallicrafters, is providing peak performance for the Allied armed forces, fighting throughout the world.*

*Hallicrafters peacetime communications equipment is meeting the wartime qualifications and demands of the Military!*

*Just as Hallicrafters Communications receivers are meeting the demands of war Today—they shall again deliver outstanding reception for the Peace—Tomorrow!*

**hallicrafters**

**BUY MORE BONDS**



*World's largest exclusive manufacturer of short wave radio communications equipment...First exclusive radio manufacturer to win the Army-Navy Production Award for the third time.*

# RADIO'S MIRACLE OF PRODUCTION

by  
RAY C. ELLIS



Ray C. Ellis, Chief, Radio & Radar Division, W.P.B., has been in an enviable position to observe the magnificent task accomplished by the manufacturers in our industry. Much of the credit must also go to Mr. Ellis' division with

whose cooperation the radio industry's miracle of production has been made possible.



without the miracle products developed by the radio industry no bomber would complete its mission of destruction upon the enemy.

When the Japs struck at Pearl Harbor, the American radio-electronics industry was producing at the rate of 20 million dollars a month, chiefly products of a civilian nature. Today, this production represents approximately \$300,000,000 a month and is constantly growing. Production of parts for maintenance of civilian equipment represents about a million dollar of this total. The limitation of the supply of component parts for civilian radio equipment is an inescapable corollary of the fact that total production now is dedicated to the single purpose of supplying the unprecedented demands of the United Nations for vital radio-electronics equipment for war.

As the development of modern warfare becomes more complex, the requirements for new types of equipment have increased. In present-day warfare, the force possessing the more efficient communications and fire control equipment has a definite superiority.

The armed services are keenly aware of the importance of superiority in radio-electronics equipment. The communications networks operated by the Signal Corps and the Navy use radio apparatus of the most modern design to flash messages between commanding officers and their men, and between commanders of theatres of operation and their headquarters in Washington. Every tank in the Armored Forces, and almost every vehicle in the mobile field artillery and mechanized infantry units is equipped with two-way radios. Every plane in the armed forces is a radio transmitting and receiving station, and many of the planes have two or more complete sets of radio equipment. In our bombers, there are interphone systems by which the navigator, pilot, bombardier and other members of the crew communicate with each other despite the separation of compartments and above the roar of the engines.

Types of radio equipment used in this war cover a wide range from the

smallest, containing one tube, weighing three pounds and costing \$20 or less, to a unit containing hundreds of tubes, weighing many tons and costing sums which may run into hundreds of thousands of dollars. The tiny unit is used on a balloon for determining humidity, barometric pressure and temperature. The super-units are used for controlling the fire of great artillery pieces on both land and sea. The radio-electronics installations in a tank may cost \$4,000 while the cost of the more complicated equipment in a Flying Fortress may be \$50,000 or more. Aside from the technical advances represented in the variety and types of applications of military radio equipment, the outstanding feature of present-day military communications equipment is its ruggedness. As owners of civilian radio sets know, a slight jar may serve to put a set out of commission and a tumble downstairs would ruin a set irreparably. However, military radios are built to withstand some of the toughest treatment the testers



can devise and must stand up efficiently under the brutal demands of battle.

The radio equipment manufactured today for use in ships, planes, tanks, and by infantry, artillery and other forces, is designed in models not developed a few years ago, and is continually being put to new special uses. Infantry patrols and other front line troops have used the five-pound "walkie-talkie" sending and receiving set as an effective and reliable means of communication. The effectiveness of military electronics equipment used by our forces is the result of concentrated and cooperative efforts which radio manufacturers and makers of component parts have put into development and production.

But equipment requirements in the war program are mounting steadily. The entire radio industry faces a fresh challenge in the higher production schedules proposed for the remainder of 1943 and the increase indicated for 1944.

Production of radio models designed for the unpredictable uses of the war in quantities sufficient to supply our armed forces and those of our allies in every part of the world has brought about wide changes in the industry. This industry was fortunate in one respect, however. Its members had the basic "know-how" of the production of communications equipment as differentiated from the change-over in other industries, from, let us say, typewriters to machine guns.

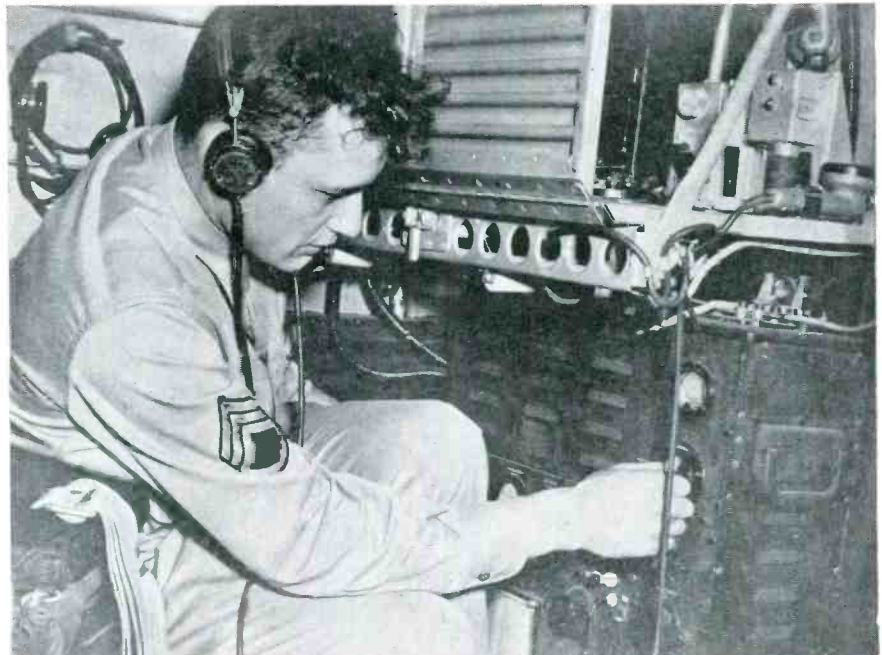
Even in the current production of radio equipment of approximately \$300,000,000 a month, the manufacturers have learned to shift quickly from model to model as the armed services required. In the interests of higher production, the armed services in turn seek continually to reduce the number of models being requested and to develop more adaptable types suited to the varied circumstances of battle.

In general, the wartime increase in production has entailed two classes of activity—expanding capacity and increasing efficiency. The expansion phase is just about complete, and our efforts hereafter are toward more thorough utilization of existing facilities. Of course, both activities have been progressing simultaneously, and we were doing as much last year to increase our efficiency as at present. There occur occasions when we must further expand capacity at one point or another, particularly when certain component parts become critically short in supply. Broadly speaking, the efficiency programs aim at getting more production without expanding facilities and the maintenance of this production in the face of materials and manpower problems.



Above, the radio man is a key man on any bombing plane. Not only must he be alert for weather instructions, etc., but he may be called upon to direct surface ships to the rescue of the crew of any ship that is attacked, and be ready to flash a warning if an invasion fleet or enemy planes are sighted. In this picture a Sergeant is checking his instruments. Note the throat microphone which picks up the voice from the larynx.

Below, is shown one of the transmitters which keeps in constant contact with flight radio operators as seen in the picture above.



*Majestic*  
CONFERENCE ROOM

Sit in with  
Majestic's  
post-war planning  
conference



*Majestic*  
MIGHTY MONARCH OF THE AIR

*In Wartime as in Peacetime*



**Write your letter now!**

**\$1,000 PRIZES IN WAR BONDS**  
for your assistance

**Contest closes  
December 31**

Majestic announced its \$1,000 idea contest last August. It's been going, going, and soon, December 31, 1943, it will be GONE. But where's the bid from YOU?

Listen, men, this is more serious than just a friendly War Bond competition. This is far more—more to you—than just another prize contest.

This is your opportunity to express yourself on what you consider sound, business-like radio merchandising policy for post-war years. Now is the time to crystallize thoughts you may have which can help shape merchandising and distribution policies that will make the future position of the radio distributor and dealer stronger, sounder and more profitable than it has ever been in the past.

\$1,000 worth of War Bonds is only the ante in the game. The REAL PRIZES for which you can and WILL receive consideration, if you wish it so—will be coveted dealerships under Majestic's Post-War Controlled Distribution Plan.

What is that plan, and why so valuable?

Well, the plan is just what it says and it's valuable for the same reason.

Controlled Distribution means that dealerships will be limited. It means that Majestic Distributors will select and negotiate with active, experienced, capable dealers, qualified to represent the post-war Majestic Radio with constructive merchandising methods.

It means that you will be supported, first, last and always with a fair margin—with a large measure of protection against UNFAIR COMPETITIVE ATTACK—that you will have the backing of sales-minded factory executives who regard the position of the independent distributor and carefully selected dealers as the key salient in the first line of the drive for sales.

It means, also, in your arsenal of "sales weapons" you will have that combination of features, style, appearance and value that will appeal to the public—*instantly*.

Put on your thinking cap. Let us have your answers to the three questions below—at once! These questions should stimulate your own post-war thinking—and will be a valuable check against Majestic's Post-War Plans.

**\$1,000 Prizes in War Bonds for Most Helpful Answers to These Three Questions**

1st Prize \$500 maturity value; 2nd Prize, \$250 maturity value; 3rd to 13th, \$25 maturity values. Every one is eligible. Contest ends December 31, 1943. To stimulate YOUR post-war thinking, and to check OUR post-war plans, Majestic offers prizes for the most helpful answers to these questions:

(1) What types of radios will be in large demand in YOUR locality immediately following victory? (2) In what new features or new merchandising policies are you most interested at present? (3) What kind of advertising support do you believe will be most helpful to you?

Competent judges will read your answers. It's facts and ideas, not rhetoric, that will count. If any two prize-winning letters are considered by the judges to have equal merit, duplicate awards will be made. Write your answers to these three questions—mail them to me personally, today!

  
E. A. TRACEY, President

**MAJESTIC RADIO & TELEVISION CORPORATION**

2600 W. 50th Street

Chicago 32, Illinois

*Builders of the Walkie-Talkie. Radio of The Firing Line"*



# THE PARTS JOBBER

## IN WAR TIME

by

GEORGE D. BARBEY

President

National Electronic Distributors Assoc.



Every radio service dealer is indebted to Mr. George Barbey and the N.E.D.A. for the wonderful work which they have done in an effort to obtain some civilian supplies to keep radios in operation. Sacrificing vital time needed in the operation of his own parts jobbing organizing, Mr. Barbey spends a great deal of time, effort and money in Washington fighting the battle of all radio jobbers, dealers and servicemen. Those of us who know, feel that Mr. Barbey has done more than any other single individual for the civilian end of this industry during the critical times which it is passing through today.



It is somewhat disconcerting to realize that in this industrialized, commercialized and defense-minded era that we are working in, the radio parts distributor must assert his right to existence. This article will, therefore,

be a sermon written around the text:

"Blessed be he who bloweth his own bazoo, lest, perchance the same be not blown."

There have been . . . and our Washington friends admit there still are . . . many people who subscribe to the idea that jobbers are not needed in the distribution chain, and simply add to the cost of getting merchandise to the consumer. That idea can be eliminated at once by the simple statement that in the radio industry at least, history proves that any manufacturer who ever decided to eliminate the jobber, selling direct to dealer or consumer, was completely out of business in a year. As the "man in the brown derby" used to say . . . "Look at the record."

There are many persons in the Government who believe the jobber is necessary for consumer business, but unnecessary in the defense set-up. There are also many radio dealers and service men who feel that the jobber has let them down since the war started. Both of those groups are entitled to the answer to their problems. The right of any business to exist is expressed entirely in the service rendered, and that is what the electronic distributors are going to brag about . . . SERVICE.

In the good old days the jobber's stock was limited only by the amount of merchandise he could pay for, or get on very liberal terms. Anything the service-man needed was on the shelves for immediate delivery. The jobber had on his staff the best radio men in the territory to advise and help when necessary. Long before we were in the war, materials began to tighten up and deliveries slowed down. A little more ingenuity in buying, and a little more assistance to the customer in selling, kept everybody happy. And then came the perfidy of Pearl Harbor. The stampede towards armament resulted, of course, in an immediate scarcity of raw materials. Believing conditions worse than they actually were, and not knowing their own program very far ahead, the Signal Corps Depots and other government agencies sent out trucks manned by officers with orders to take everything from the jobbers' shelves that they THOUGHT THEY MIGHT NEED SOMETIME. Many a jobber had his shelves stripped of all popular parts, and, unless he quickly buried some of his stock, was left without any items such as .1 mfd

by-pass condensers or 8 mfd electrolytic condensers in the place. Much of this material never was used, AND NEVER WILL BE USED. The jobber, nevertheless, was in a dire predicament to keep servicemen supplied and keep civilian sets operating. What was then seemingly a tragedy is now looked upon, in retrospect, with a smile—for those green officers even took speaker-cones and special volume controls. Further comments upon this situation "deponent sayeth not," . . . referring the reader to the "Army and Navy stores" after the war.

Then came the red tape . . . miles and miles of it. PD-25c, PD-25d, L-63, L-183, PD-336, PD-1A, PD-1X, P-133, L-293, M-293, M-9-c, CMP-5, etc. ad lib . . . until finally L-265. The only worry that the radio serviceman had in the beginning of the *alphabet parade* was in doing a little more shopping, a little more waiting, and a little more "finagling." But, the jobber got LESS merchandise, LESS sales, LESS profit, LESS help, and LESS sleep. Only a jobber knows how the system of figuring PD-1X allocations gradually cut down his stock, just as the "house-kitty" finally ruins a poker-game. Only a jobber knows how, after PD-1X had whittled down his stock, the over-night advent of L-265 froze his inventory as of April 24, 1943. If he was born under a lucky star, or was on good terms with the angels, he had at least a small working inventory. But, a majority of jobbers, due to the interminable delay in processing PD-1X forms, and slowing down of deliveries, was caught with practically no inventory . . . and, (under L-265) had no way of getting it except through special applications for relief which, in a few cases, released a pathetically small amount of merchandise.

Did the jobber throw up his hands? . . . NO. Did the jobber stop serving his clientele? . . . NO. Did the jobber "beef"? . . . YES. The distributor organizations, N.E.D.A., co-operated with W.P.B. in making PD-1X and L-265 work as well as possible. It pointed out unworkable features of the "L-" orders, and obtained some amendments. It kept jobbers informed as to methods of handling orders under the regulations and advised them of amendments as issued. The benefit of this advice and help was transmitted to the service customer. The distributor organization was represented on the Standards Committee that developed the so-called VICTORY LINE of replacement parts. There is also an INDUSTRY ADVISORY COMMITTEE composed of electronic jobbers who confer with the Radio and



Radar Division of W.P.B. on all pending regulations. Through the cooperation of the men in W.P.B. with the N.E.D.A. and the individual jobber, the service customer is getting the best possible service that can be rendered under the war conditions of material shortages and man-power shortage. The efforts of a group of jobbers to direct a half-million radio tubes into service channels on a *non-profit basis* will be one of the epics of the civilian radio story of the war.

In concluding the *radio service* picture of the distributor's war effort, the serviceman should be made acquainted with the fact that most jobbers are doing a good job of obeying the regulations and allocating the available supplies. When copper wire was visible on the shelves and none could be sold, it was regulation M-9-c that prevented the sale and not the perverseness of the jobber. And, when a distributor with 500 customers on his books receives a shipment of 250-50L6GT tubes, page King Solomon to make the allocation to dealers and page Job to console the jobber. (Maybe the Jobber was named after Job.)

And now, to show that the distributor has a definite place in the Priority Business. The manufacturers are all very busy and most of their orders are tremendous. Without any question, large orders should go direct to the factories. But, in every branch of the industry there is a point at which it is no longer advisable, from the standpoint of *TIME* or *ECONOMY* for the factory to handle the orders direct. Below that point, which will vary with different lines of merchandise, all orders should go through Jobbers. It is not a matter of business and profit for the Jobber, but rather a matter of *EFFICIENCY*. Every Jobber handling Priority orders has men trained to handle this type of business . . . trained far better than the average purchaser or expeditor employed by the Signal Corps. Many of the small items are already on the Jobbers' shelves. The Jobbers' men know what is needed, where to get it, how to expedite it . . . **HOW TO DELIVER THE GOODS.**

Certainly the Jobber's price on individual items will be higher than the manufacturer's price. That difference is in the cost of the service rendered. Let me cite an exact case of a Priority order consisting of 800 separate items totalling only \$2800 handled by a certain Chicago Distributor.

Can you imagine a Government agency handling those 800 items with long-distance telephone calls, telegrams, and letters, to many factories . . . getting three bids on each item, scheduling and awarding the bids, expediting delivery, and finally checking and paying hundreds of invoices. The cost to the Government of the office work alone, would have been more than the total of \$2800 paid to the distributor. The Jobber made one shipment and mailed one invoice. He had the facilities and did the work . . . **RENDERED A SERVICE TO THE GOVERNMENT QUICKLY AND ECONOMICALLY.**

The truth of this matter can be proved by many Jobbers who have in their files hundreds of letters from Military Officers and defense plants, attesting to the efficient contribution they have made to the war effort.

**ARE WE DOWNHEARTED? NO!!!!** Some jobbers are a little more gray, some are a little more bald, and some are a little more "NUTS," but they are smiling and working with confidence that when the war is over, they will still be doing business at the old stand, rendering a **REAL SERVICE TO THE INDUSTRY, AND TO THE PEOPLE OF THE NATION.**



Only the industry and the military know the war-story of "shorter wave-lengths or higher frequencies" and the precision thinking and disciplined imagination going into the use-development of the fundamental electric charge of the universe

For these purposes Ken-Rad makes radio and electron tubes Total production now goes to *shorten the war* The experience thus gained will be available for commercial utilization as soon as possible

# KEN-RAD

TRANSMITTING TUBES  
CATHODE RAY TUBES

INCANDESCENT LAMPS  
FLUORESCENT LAMPS

METAL AND VHF TUBES  
SPECIAL PURPOSE TUBES

OWENSBORO KENTUCKY U S A



We are proud to present this unusual article which we feel will be of value to every person in the radio industry. Servicemen, dealers and manufacturers have all suffered the loss of vital men who are now in the Armed Forces. If we are to keep faith with these men when they are demobilized we must plan now to solve the most challenging problem this country has ever had. The solution to this problem of orderly demobilization depends on the cooperation of every individual in this and all other industries. This exclusive article, which was written for RADIO Television JOURNAL, provides both an inspiration and a practical guidepost for the use of every individual concerned with the problem of demobilization as it affects them personally, their employees, and their loved ones in the service.

## WHEN RADIO MEN COME HOME FROM *War*

by JAMES T. MANCHESTER



Now is the time to chart the course for the way radio men, and millions of others, will come back. Let us do it now before events pass us by. Let us think, and plan, and work to perfect the machinery for readjusting Ex-servicemen to civilian life and civilian life to a peace-time tempo.

The Selective Training and Service Act of 1940, as amended, specifically provides that Selective Service shall be responsible for assisting Veterans of World War II in obtaining their former jobs, and for aiding the jobless ones in finding new employment.

To accomplish this task, Selective Service must depend upon the whole-hearted co-operation and active participation of the Community and its resources. This means you, and you, and you. Community participation under Government supervision is the ideal combination for achieving a successful rehabilitation program. This is your responsibility and your opportunity to make an all important contribution to both the war and the home fronts.

It is important to the war front from a morale standpoint for if the men now returning are properly integrated into civilian life they will say so when writing to their buddies at the front. However, if they are not properly integrated, they won't, and the repercussions may be horrible to contemplate. Either the Community will absorb these men back into civil life as individuals, or will be the cause for developing a large pressure group whose demands could easily exceed the

Community's normal capacity to satisfy.

Most people do not realize the extent of the problem already within our very midst. Since conscription began in 1940, nearly a million men have been discharged from Military Service, most of them for medical reasons.

Today we still have time for trial and error in learning how to solve the endless complex problems affecting the Ex-servicemen and the Community. Tomorrow may be too late, as the problems are steadily mounting day by day. A sudden reverse in the battle situation could hopelessly entangle the entire effort. If the opportunity for finding the answers is neglected, events might easily cause us to lose the initiative and all hopes of winning the peace. If, on the other hand, we grasp our opportunities now, the way can be found and paths cleared for an orderly demobilization and a peaceful change-over from a war-time to a peace-time economy.

Far too many people are prone to leave it up to the mysterious "they," believing and saying to all and sundry that "they" are doing something for the boys, "they" are arranging to care for them, "they" will look after them when they come back, completely overlooking the fact that the mysterious "they" exists only in their own minds.

If something is to be done for the Veterans, if they are to be taken care

of, it will come about only if members of the Community band together now and voluntarily contribute their skills, services and resources toward that goal. The sum total of the community effort will largely account for success or failure in solving the readjustment problems. Incalculable harm will be done to the Veterans and to the Country if the impression is allowed to persist that everyone can sit back and wait because Uncle Sam will do the job. No one Government Agency can accomplish singly the tremendous task of solving the puzzle of readjustment. It must come from the combined efforts of every resource within the community. Only through the efforts of the people, and the material things they control can the tools be fashioned that are needed to do the job.

Members of the Community have a grave responsibility toward Ex-servicemen, for upon their treatment of the returning men rests to a large extent the elements of adjustment and maladjustment. Consider the vast changes that occur to the average man when he is suddenly lifted out of his home, job and community existence, and transplanted overnight into alien surroundings. He is given new foods, new ideas, hears new tongues, and is taught new habits. He no longer has to struggle to keep the wolf from the door for he now has acquired a virtual Santa Claus, who cheerfully feeds, clothes, houses, entertains and pays him. He doesn't even have to think much, for his responsibility ends when he carries out an order. Then one day after being so carefully and amply pro-

Mr. Manchester heads the Re-employment  
Advisory Division, Selective Service  
Administration, New York City



vided for, something misses fire, he is sent up for examination, put through a thorough series of tests and flunked out . . . discharged as no longer fit for Military Service; a terrible psychological blow to most men.

Upon his discharge he is given his travel-fare home plus whatever back pay may be due him. He is permitted to take with him only one of his beloved uniforms. Unless he has a service-connected injury for which Uncle Sam is responsible, and most of the men already discharged on Certificate of Disability Discharges have not, he will not collect any form of Veterans Pension.

He now has to face stark reality again; he must attempt to readjust himself to a changing world where even his old neighborhood doesn't look the same to him. If he is very lucky he may return to his former job, provided however his disability does not prevent him from performing the duties involved.

A short while ago he was a hero, pitting his all against the forces of evil; now the biggest parade in history has passed him by. He has missed the boat and it invariably leaves its mark on him causing self-consciousness, a feeling of being a failure and a reluctance to return to family and friends. Many of them want nothing better than to disappear into areas where they are not known.

These men need understanding and tactful handling, especially during the first few months after discharge which is the very difficult readjustment period. If they can be speedily and properly handled while the aura of Military Service is still upon them, many complications could be avoided.

Above all else these men need an opportunity to engage in gainful employment at a job tailor-made to fit their mental and physical status. Sloppy sentimentality, probing for facts, ribbing or horseplay on why they are out of service is highly dangerous to their readjustment, and should not be indulged in by the well-meaning but uninformed. Employers who set policy could profit by instructing their entire personnel on how to treat Ex-servicemen.

Employers should not take the attitude that "if this man is not good enough for Uncle Sam why is he good enough for me." Rather they should remember the difference in standards as required by Uncle Sam and themselves. Uncle Sam's test is that a man must be able to carry sixty pounds while marching thirty miles. Employers should not subject Ex-servicemen

to any physical examination except that provided for ordinary civilians, no more and no less. Surely the man should not be militated against merely because he has served his country.

Entirely too much emphasis is put upon the subject of psycho-neurosis. In most instances the right job with its resultant clearing up of the home situation will quickly overcome the psychosis. A man who didn't fret, worry or was not concerned when things at home were bad, would certainly be a subject for question.

Industry can make a very definite contribution to a successful conclusion of the Veteran problem and postwar economic security, by establishing training courses within the companies themselves, or by employing Ex-servicemen and having them attend a trade school until they develop sufficient skill to warrant their use on the job. The Re-employment Advisory Division in New York City has already had some success in this direction.

Industry can also contribute mightily by serving as employment advisors on the Re-employment Committees at the Selective Service Local Draft Boards.

At present each Local Draft Board throughout the country either has or is in process of setting up a Re-employment Committee to help the boys on the way back.

The New York City area which contains 280 Local Draft Boards is serviced directly from the New York City Selective Service Headquarters at 1 East 44th Street by the Re-employment Advisory Division. The reason for operating differently from the rest of the country is to avoid duplication of effort, and to use community skills, services and resources to their fullest extent.

The function of this Division is to perform the duties of analytical fact-finding body, to continually search for facts about either the Veteran or the Community that are of value in re-orientating men to civil life, and to bring the interests and resources of the entire community under its jurisdiction into concerted action for a harmonious solution of the rehabilitation problem.

Contact is made with the Ex-serviceman soon after his discharge from Service. We learn of his discharge from Service through the receipt of a Severance Notice from National Selective Service Headquarters, Washington, D. C. The first appointment with him is during the evening hours. There are many reasons why this procedure is necessary. Congress did not pro-

(Continued on next page)



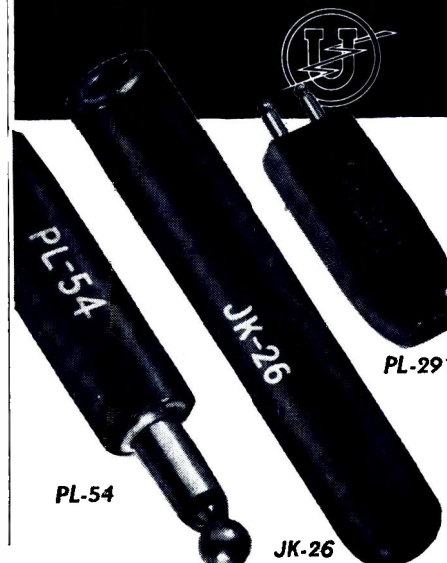
## Voice Communication Components

Universal Microphones, as well as Universal Plugs, Jacks, Cords, and Switches, are vital voice communication components today in the War Effort. When peace comes, they will continue to fulfill their role in a postwar world surmounting the barriers of distance with Radio and Aircraft.

**UNIVERSAL MICROPHONE CO., LTD.**

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CANADIAN DIV: 560 KING ST. WEST, TORONTO 2  
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(Continued from preceding page)

vide funds with which to do this huge job, therefore, in order to obtain the necessary volunteer services of people qualified to handle the intricate parts of rehabilitations, evening sessions were inaugurated.

Skilled personnel was recruited on a volunteer basis from Hospitals, Clinics, Private Social Welfare and Government Agencies and from large-scale employers.

Doctors are needed and used for physical and mental examinations so that we may know whether or not the Veteran is ready for work, or needs treatment or special training.

Medical Social Workers are needed and used for interpreting the findings of the doctors to the Veterans in a way that will put their minds at ease about their condition, to instruct the Veteran on treatment procedures, and to make appointments for them with hospitals or clinics on a non-fee paying basis.

Vocational Guidance Counselors, Educational and Training Counselors, Veterans Employment Representatives from the U.S.E.S., Recreational Counselors, and businessmen, preferably Personnel Directors or large-scale employers, are needed to serve on Advisory Panels to discuss and help solve the Veteran's individual problem.

Experienced clerical people are needed and used to keep the paper work

running smoothly. Non-professional people are needed, trained and used as Selective Service Representatives. They are stationed in a U.S.E.S. office for assisting the Veterans Employment Representative in finding a job to fit the Veteran's limitation whenever he isn't readily placed through the regular U.S.E.S. channels. This phase permits the rendering of personalized service to Ex-servicemen on a volunteer basis which could not otherwise be provided because of lack of funds. It also makes the maximum use of non-professional but experienced women who have been doing war work with such Voluntary Agencies as A.W.V.S., C.D.V.O., Navy League, etc.

The proposed plan for the Advisory Panel is along the following lines.

One man will be a Vocational Guidance Counselor who knows employment counseling, psychological job testing and social welfare problems.

One man will be an Educational and Training Counselor to assist on questions concerning opportunities for education and training.

One man will be a Veterans Employment Representative from the U.S.E.S. who knows labor priorities, employment clearance, and U.S.E.S. office procedure.

One man will be a businessman either a Personnel Director or large-scale employer. He will furnish the answers to job requirements versus physical limitations.

One man will be a Recreational Counselor who can advise on problems dealing with leisure time hobbies, clubs, churches, or social life.

Pertinent facts will be recorded on forms, a copy of which is to be forwarded to the U.S.E.S. for assisting in placement.

The Advisory Panels will hold a strategic position in the machinery now being developed for re-adjustment problems. They will have a singular opportunity for success, for upon their analysis of and counsel to the Ex-serviceman hinges whether or not he is directed into the proper or improper channels. The wide variety of skills and experience which will be represented on the panel comes very close to the ideal arrangement for fully covering subjects which run the gamut of human affairs.

Veterans will understand from discussion with the Panel that although they can no longer serve in military uniform, they can and should serve, unless physically unable, as one of the men behind the guns. They will learn that extremely high wages are paid *only* to those who have much needed skills or else those able and willing to work very long and inconvenient hours. They realize their capacities; know what is expected of them; try not to over-reach themselves; know what they want and where and how to get it. All this transpires only so long as Advisory Panels are properly manned and functioning. Skilled people interested in serving the rehabilitation program in New York City should apply to the Re-employment Advisory Division, 1 E. 44th Street.

Part of the duties of the Re-employment Advisory Division are to create preferential employment opportunities for Ex-servicemen. Invitations from industry for consultations on ways and means of accomplishing this purpose are earnestly sought. Job orders are eventually channeled through the U.S.E.S. However, we believe we can be of important service to all concerned in matching the man to the job.

This article is an appeal to all to rally round the ramparts on the home front. Let it not be said that the same mistake was made twice. Rather let us awaken everyone to the dangers of thinking that the other fellow is doing the job, and let us start now, right in our own community, right in our own business to do all we can to help prepare for the demobilization of our own home-town boys.

## MAKE MONEY with Rare Records

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This month we're featuring Lillian Russell's recording of "Come Down Mah' Evenin' Star" privately recorded in March, 1912. These nationally-publicized Lillian Russell records retail for \$2.00. You get 40% discount, you pay only \$1.20 in lots of 5 or more. Display material will be provided free with each purchase.

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### RARE RECORD SALES CO.

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NEW YORK 20, N. Y.



**I**n prewar years depreciation was often overlooked or mishandled by radio retailers. This meant a hidden expense for the time being, but eventually, the net worth had to be written down to reflect the decrease in asset value. Depreciation must be properly handled today if the dealer expects to survive the duration in the best possible shape because it is increasing at a faster tempo. To help the dealer get a better understanding of the subject, we discuss its various phases.

**1—Purpose.** Depreciation serves a four-fold purpose. (a) It is an internal expense charged against profit so that the cost of an asset, pro-rated over its life, is recovered in the selling prices. (b) It reduces asset value to reflect wear and tear annually. Instead of charging the entire outlay to the year of purchase, thereby distorting the profit picture, causing costs to soar abnormally, and profits to drop likewise, the investment is charged off in annual installments for the life of the asset, providing greater stabilization of costing and pricing. (c) It permits an annual deduction for wear and tear on the income tax return. (d) It keeps inflation off the balance sheet. Too many dealers have assets on their books at original cost or inflated values. Their statements show a bloated net worth because they have never written down their assets with annual depreciation charges or have been figuring too little depreciation.

**2—Computation.** There are numerous ways to compute depreciation but the straight-line method, whereby you charge off depreciation in equal annual installments, dividing the cost into the estimated useful life, is the best for radio retailers. Ordinarily, depreciation computed by this method represents the actual reduction in service value from year to year as closely as any other method, with fewer headaches involved. Then too, the facility with which provision or changing life estimates may be applied on the income tax and the practical simplification of accounting records make the straight-line method most desirable.

Some dealers put all depreciable assets into one composite account and one depreciation reserve, others segregate their assets into class groups, where use is the guiding factor, such as furniture and fixtures, building, trucks, servicing equipment, etc. Other

# WATCH YOUR DEPRECIATION DURING WARTIME

by

FRED MERISH

Business Management Editor, Radio Journal

*This is the second in a series on Business Management by Fred Merish, a well-known financial writer who was recently appointed Business Management Editor of your RADIO JOURNAL. Mr. Merish will be glad to answer, without cost or obligation, all questions from readers dealing with financial, cost control, tax and other business problems. Address your questions to Mr. Merish in care of RADIO TELEVISION JOURNAL*

dealers use item accounts whereby individual records are kept indicating the cost and depreciation reserve for each item. We recommend the class grouping of assets according to use because it involves less detail.

Depreciation does not apply to inventories, stock in trade, land, personal property or goodwill. Tools purchased during the year which are of little monetary value and short life may be written off entirely in the year of purchase. If you lease a business property and make improvements thereon, you can depreciate the cost annually. Play safe on bad debt losses by depreciating accounts receivable. Average your bad debt losses for the past 3 years based on credit sales and charge the percentage to profits yearly, crediting a reserve for bad accounts. This percentage is a permissible deduc-

tion on the income tax return but if you use the reserve method, you can not deduct for the bad debts as they materialize from year to year.

**3 — Inadequate depreciation.** Short-change yourself on depreciation and your profits are inflated by this hidden internal expense. You also pay more income tax because you do not take an ample deduction and your selling prices will be that much less profitable although you won't know it until it comes time to buy new equipment. You can't reclaim this shortage later on because the income tax law states that a taxpayer is NOT permitted in subsequent years to take advantage of prior failure to take any depreciation or an allowance inadequate under the known facts of prior years. You're stuck if you have not taken sufficient depreciation to date,

*(Continued on next page)*





# FUTURE IDEA FILE

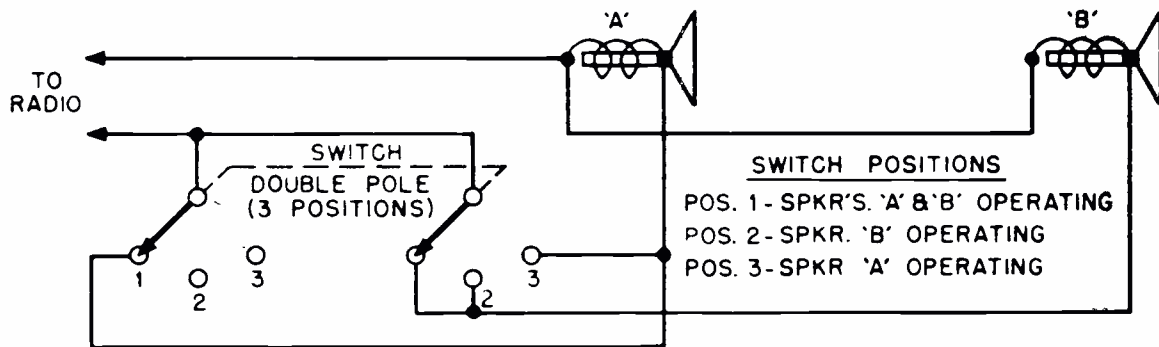
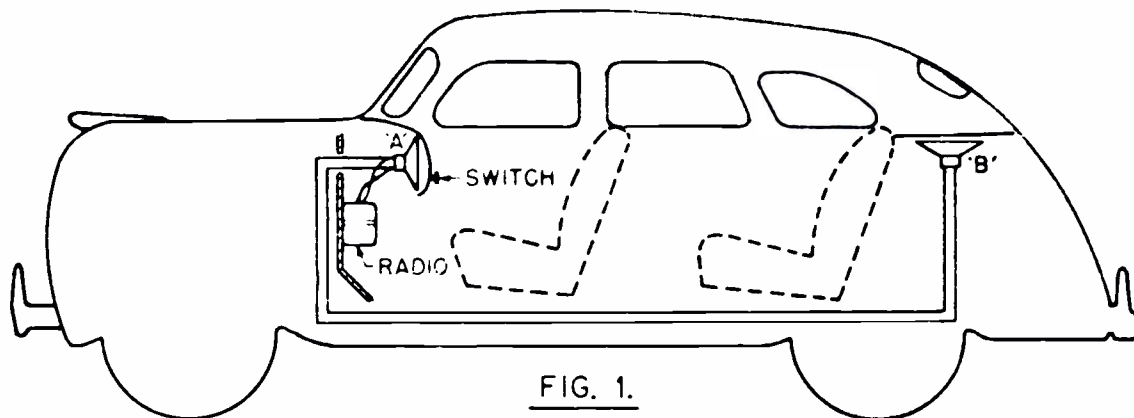
One of the major problems connected with automobile radios has been the fact that ordinary installations result in an excessive tone volume for front-seat passengers, while the rear-seat passengers often find it difficult to hear well. Present day automobiles were not designed for their acoustic value and for that reason ordinary dashboard installation often results in echoes and other detriments to good hearing. This can be overcome by the installation of an auxiliary speaker which can be mounted in the trunk of the car against the shelf at the back of the rear seat. Once the speaker is installed a wire grille and any type grille cloth should be placed over the speaker opening.

Figure 1 (top diagram below) demonstrates a general method of installation which is readily attached to any make of automobile, providing that it is a sedan, coupe or club sedan. These auxiliary speaker installations naturally are of more value in sedan models.

The first step in installing this auxiliary speaker is to mount a double-pole three-position switch on the dashboard. This type of switch has the advantage of permitting the operation of the radio set speaker

alone; the auxiliary speaker alone, or, the operation of the radio set speaker and the auxiliary speaker simultaneously. Figure 2 (bottom diagram below) is a schematic diagram which shows the method of connecting the switch and speaker to the radio set itself.

There is no reason why radio service dealers should not suggest this auxiliary speaker installation with the sale of every automobile radio. Furthermore, extra business can be developed by suggesting such an installation with every car radio repair job. There is a potentially enormous amount of business which can be done in installing these auxiliary speakers. If we figure a minimum of 5 million cars a year after the war, with a charge of \$5.00 for the job we have an extra \$25,000,000 a year added to the income of service dealers. Then, if we figure another minimum of 30 million cars on the road at a cost of \$5.00 for the job, this makes another \$150,000,000 potential business. Therefore, this auxiliary speaker installation shows that it is possible to add \$175,000,000 to the income of radio service dealers by the installation of an auxiliary speaker in every automobile right after the war ends.



**EDITOR'S NOTE:** From time to time we run across many ideas which may not be practical to put into effect at the present time due to material and manpower shortages, but which could be used very successfully when conditions return to normal. The automobile auxiliary speaker installation idea contained in this month's "Future Idea File" is something which every radio service dealer can use later on. Every automobile radio owner is a potential customer for one of these jobs which can be installed in a short time at a very high profit. We suggest that you cut out this page along the dotted line, procure an inexpensive three-ring binder, and file alphabetically under the index title which you will find at the top right-hand side of this page. This title is for your convenience. We are indebted to Mr. Charles Golenpaul of the Aerovox Corporation for suggesting the idea and to Mr. Victor Irvine of the Galvin Manufacturing Co. for helping us with the diagram and explanatory material.

CUT OUT ALONG THIS LINE AND FILE FOR FUTURE REFERENCE

## **JOURNAL EDITOR HELPS FORM OHIO ASSOCIATION**

**Almost 100 in attendance at special meeting sponsored by Bell Radio Parts Inc., Columbus, Ohio, hear Mal Parks urge formation of Association now.**

Nearly one hundred radio servicemen and four leading radio Parts jobbers from adjacent areas gathered in the Blue and Gold Room of the Seneca Hotel, Columbus, Ohio, on Friday evening, November 5th, to hear Radio Journal's Editor, Mal Parks, discuss the need for a strong local association in their state now.

Sponsored by Bell Radio Parts, Inc. of Columbus, the meeting was opened by Bell's manager, Mr. Norb Derr. He briefly outlined some past efforts to form local associations and stated that he felt the broad national experience gained by Radio Television Journal in their Association Activities provided a background on which the assembled group could organize an association that would be truly representative of radio servicemen in that area.

Mr. Parks then spoke and stressed the fact that one of the advantages of the group present was the fact that they lived and worked in a state capitol with daily contacts with state legislators. He then pointed out that barbers in Ohio are licensed and have to attend an accredited school and pass an examination before being allowed to cut

hair or shave their patrons. Mr. Parks then contrasted the average barber with the average radio serviceman and emphasized that he felt it was a sad commentary on the attitude of the public toward radio servicing when it was not even put on a basis of equal importance to such types of business as barbering.

Using these facts as a basis, Mr. Parks argued that one of the first duties of a local association should be to work with legislators to the end that standards of practice be established and examinations arranged for, all pointing to the eventual licensing of radio servicemen in Ohio. He showed that the tremendous advances in electronics, television and other industry developments would make it possible to apply for legislation which could be based on the factor of "public health, safety and convenience."

In concluding he urged the audience to decide right then and there to form an organizing committee whose express purpose would be to take steps looking toward the formation of the *Ohio Radio Servicemen's Association*, and he asked the assembled group to pledge

themselves to support such an association once it was formed.

Mr. Derr then took the floor and asked for volunteers who would work as a temporary committee whose duties would be to organize the association. He pointed out that this would have to be a voluntary committee composed of members themselves and that he, as a parts jobber's representative, felt no outside organization or company should choose the committee or have any voice in the affairs of the association.

Frank Knoderer then volunteered to be a member of such an organizing committee and was promptly appointed temporary chairman of the meeting. He then chose Francis Gibb, John Graham, Leo Loudner and Harvey Brower as members of the organizing committee. Just before the meeting adjourned 26 of those assembled signed up as possible members of the association when it was formed.

After adjournment the Organizing Committee met with Norb Derr and Mal Parks who pledged the continued aid of Radio Journal in helping the Committee. This help consists of sending all such Committees suggested By-laws, Membership Campaign material and, once the Association is formed, Radio Journal then supplies the Secretary with stationery, envelopes, membership blanks, publicity material, dues collection ideas etc. The final arrangement was for the Committee to get preliminary work underway and then call a Special Membership meeting at which Mr. Parks was invited to be principal speaker.

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## **ILLINOIS DEALER ASSOCIATION TO BE REVIVIFIED**

**Officers of Illinois Radio & Appliance Dealers Association Meet with JOURNAL Editor to Discuss Plans for Revivifying Organization.**

At a special meeting called by President Syd Morris, officers of the inactive Illinois Radio & Appliance Dealers Association were guests at a dinner tendered by Alex H. Kolbe, publisher of RADIO-TELEVISION JOURNAL, which was held at the Le Petit Cafe of the Palmer House, Chicago, Ill., on Monday, November 8th, 1943.

During the discussion which followed the dinner, Editor Mal Parks presented results of a carefully-conducted national survey among JOURNAL readers which showed that leading service-dealers in most major cities were anxious to form associations. Also brought out by Mr. Parks was the fact

that a similar survey conducted among servicemen showed a preponderant majority of them in favor of combined associations which would be composed of dealers and servicemen together.

The survey result was concurred in by President Morris and by Executive Secretary J. G. Strader. Mr. Strader pointed out that the line of demarcation between dealers and servicemen had practically vanished due to wartime conditions and he showed that most dealers today depend on service work for the bulk of their revenue. Mr. Morris supplemented this by saying that he knew many servicemen who planned to be dealers after the war.

It was generally agreed that the Association must be revived now in order for it to gain the necessary momentum to have the authority it would need for the protection of its members during the postwar period. RADIO-TELEVISION JOURNAL was appointed to conduct a membership drive and plans were laid to hold a mass meeting of past and prospective members in Chicago during the next few weeks. Mr. Parks was then appointed as Acting Chairman of the temporary Membership Committee and was instructed to act in close cooperation with President Syd Morris and Executive Secretary J. G. Strader.



## TWO BOSTON GROUPS HOLD COMBINED MEETING

Charley Golenpaul, A. W. Mayer and Mal Parks speak at Annual R. S. A. Banquet distinguished by presence of R. T. G. Officers.

The Annual Banquet of the Boston Chapter, R.S.A., was held at the Smorgasbord Restaurant, Boston, Mass., on Thursday evening, November 11th. Recording Secretary Ingvar Paulson acted as Master of Ceremonies ably assisted by Chairman Hy Leve and Vice-chairman Ray Wyman.

Setting the Banquet apart from previous functions was the fact that, of almost 60 people assembled, several were officers of the Boston Radio Technicians Guild who were present by the express invitation of the R.S.A. group. After the dinner, Mr. Paulson welcomed those assembled and set the tone of the meeting by pointing out the seriousness of the situation which will face radio servicemen during the postwar period. He then spoke briefly regarding the previous regular meeting of the group and mentioned the ideas which had been expressed by the Journal's Editor at that meeting.

He then introduced Mal Parks who reviewed some of the ideas mentioned by Mr. Paulson, and who then pointed out the wonderful opportunity there was for both groups to merge in a common Association which could represent the Greater Boston Radio Servicemen. He asked the officers of both groups to join in forming an organizing committee which would ask members to transfer their allegiance from each separate group to the new, combined Association.

Mr. Charles Golenpaul, of the Aerovox Company, New Bedford, Mass., then addressed the meeting and told some of the stories for which he is justly famed. Then, reverting to a serious mood, Mr. Golenpaul said that he felt there would be a tremendous boom in radio servicing after the war but that there was a possibility of there being a lot of highly-trained technicians trying to get the business. He said that he felt the industry should welcome the best of these men, but that it should realize that strong, local associations could help in keeping the situation fairly even with regard to prices, service charges, standards of work to the public, etc.

Mr. Golenpaul went on to say that he took a particular interest in the Boston group because of the wonderful job which it had done under trying circumstances. He mentioned that

he had heard this work talked about in the industry at large and he felt that the foundation provided by this long experience and background would be of real value in interesting new members in a combined association. Speaking as the representative of a manufacturer, Mr. Golenpaul said, he felt that the time to start working was now and that he knew most progressive manufacturers would give wholehearted support to any strong local association which was operated on a sound basis.

He then told the assembled group that the discussion which had taken place during the evening was one of the finest postwar planning meetings which he had ever seen, from a practical standpoint. Before concluding, Mr. Golenpaul conducted an open Question-and-Answers forum during which guests asked the answers to problems which they felt needed Mr. Golenpaul's help in solving. At the end of the discussion forum Mr. Golenpaul paid tribute to Radio Journal's Editor, Mal Parks, and the work which he is doing nationally in the interests of industry associations.

Following Mr. Golenpaul was Mr. A. W. Mayer, of the A. W. Mayer Co., Boston parts jobbing concern, who gave the gathering his ideas about associations from the viewpoint of a radio parts jobber. Mr. Mayer pointed out that most alert parts jobbers were anxious to work with local associations but they realized that it must be done as a due-paying associate member whose counsel would be available when needed, but who would have no voice in the decisions of the asso-

ciation. He pointed out that strong, local associations would make it easier for the parts jobber to help servicemen eliminate many practices which were inimical to both groups and to the industry at large.

Mr. Mayer urged the officers of both groups to forget any differences which might have existed in the past and to join forces in a combined association that would give every individual member greater collective strength and prestige. He sincerely pledged the support of himself personally and of his company to do everything possible to help the new association provided the two groups would agree to work harmoniously together.

Immediately after Mr. Mayer's talk which was received with prolonged applause, Master of Ceremonies Ingvar Paulson asked for a showing of hands to determine how many present would like to see an organizing committee formed, this committee to consist of the officers of R.T.G. and R.S.A. Mel Shikes, president of the R.T.G. group, then spoke and agreed to work with such an organizing committee and to aid in every possible way the formation of a strong, unified association in the Greater Boston area. Mr. Shikes' address created great interest and was warmly received. Just before the meeting adjourned samples of the latest Technical Literature were distributed to the assembled group. This literature distribution was arranged for by Radio Journal and it was contributed by the following companies: *Aerovox Corporation; Allen B. Dumont Laboratories; National Union and Sylvania Electric Products Inc.*

### SPECIAL ANNOUNCEMENT

Many readers, jobbers and manufacturers have inquired whether or not the JOURNAL's Association Activities were for radio servicemen only. The answer is no. RADIO JOURNAL believes that strong dealer organizations are necessary and further believes that having stronger dealer and servicemen's associations will provide the opportunity for mutual discussion on any points at issue. Several important dealer meetings, as well as meetings with service groups, are scheduled during the coming months. Any interested dealer groups may obtain full information concerning the JOURNAL's Association Plan by writing to Editor Mal Parks, 1270 Sixth Ave., New York 20, New York.

# Wartime TUBE TIPS

by

W. A. JOHNSON

While everybody seems to be talking about the tube situation, Mr. W. A. Johnson of the "Automotive Inc.," Fort Smith, Arkansas, believes in doing something about it for the benefit of his customers. Each month The Automotive sends a bulletin to radio service-dealers containing late information on tube substitutions. We are happy to bring you the following tube tips, and believe that you will find them of real value in your business.

Now that it is impossible to get even half the tubes needed for replacement it becomes necessary to look for substitutes. In making substitutions it is often necessary to change the socket or the wiring or add filament resistors. This, of course, takes time and is a repair job for which the serviceman should charge. If the set owner is unable to locate a needed tube and insists upon you fixing it, then he will

be willing to pay a reasonable price for the extra work involved.

Some tubes can be replaced with other types and work satisfactorily, although maybe not as well as the original tube. In substituting tubes of similar type be sure to check filament drain, etc. As for an example, a 5U4-G is the same as a 5Y3-G except it draws one ampere more on the filament and unless the transformer can handle this extra load the transformer is apt to burn out.

## Type 35Z5

Here is a rectifier used in thousands of small sets and one that has become extremely hard to get.

The following are tips that may be helpful.

When a 35Z5 is burned out often an ohmmeter check will indicate only one section of the filament to be open. If this is the pilot lamp section (2 and 3) a 30 ohm 5 watt resistor can be connected between 2 and 3 as shown in drawing and the tube will operate. If prong 2 and 3 are tied together, the set will operate, but the pilot lamp will not burn.

## Type 50L6

A 35L6 can be substituted for a 50L6 by inserting a 10 watt 100 ohm resistor in the filament lead. Take No. 2 or No. 7 socket connection loose and install the resistor between the socket prong and the wire or wires you removed from the socket prong.

A 6G6-G can be used in place of a 50L6 in the same manner as described above, except use a 300 ohm resistor. (The 6G6-G will replace a 35L6 by using a 200 ohm resistor.) These resistors should have a rating of 10 watts.

A 50L6 can be replaced with a 50C6 without making any circuit changes.

A 35Z4 can be substituted for a 35Z5 by connecting 2 and 3 together and leaving out the pilot lamp.

## Metal Tubes

Now that the good old metal tube has gone off to war and we are having to use all glass types, some difficulty is being encountered. The metal tube, of course, is completely shielded with the shield connected to number one tube prong.

When metal tubes are replaced with glass tubes and you are unable to "peak" the trimmers without the set oscillating, try shielding the tube or tubes.

Tube shields are on the "hard-to-get" list, but they can be made out of tin cans. Simply cut a piece of tin and bend it into a cylinder that will fit tight around the tube and extend from the base up to at least the top of the tube. Connect a small wire or strip of tin to the number one prong on the tube and solder to the shield. A fine copper wire wrapped around the prong up at the base and pulled up tight around the corner of the base and soldered will not interfere with the tube fitting in the socket.

Never detune or misalign a set to get rid of oscillations. Alignment is never the cause of these whistles and squeals and can and should be corrected before alignment is attempted.

We would like to get your comments and suggestions on this wartime tips page, and will welcome any of your own ideas which you might have developed in your day-to-day radio servicing. Please drop us a line and let us have your comments and suggestions for further articles of a similar nature which would be helpful to you.

## Battery Types

One of the most critical groups of tubes today is the 1½ volt battery group. There is not much variety here to choose from. However, Octal types can be substituted for Octal types by changing sockets.

1LA6 for 1A7, 1LN5 for 1N5, 1LH4 for 1H5, 1LA4 for 1A5.

1G4 is the same as 1H4 except for filament current drain. Type 1B7 can sometimes be substituted for 1A7, but the filament drain of the 1B7 is .1 amp compared to .05 amp for a 1A7. The same thing is true of 1C5 and 1A5.

Following is a list of types that are interchangeable in most cases. They are not exact in some cases but near enough to enable their use.

6J5 - 6L5 - 6C5 - 6P5 usually interchangeable.

6Q7-G - 6R7-G - 6B6-G usually interchangeable.

6SG7 - 6SK7 - 6SD7 - 6SJ7 usually interchangeable.

The following, although having different voltage ratings will interchange when used in series because they have the same current drain.

6Q6-7 - 6T7-G - 12Q7-G.

## Rectifiers

Rectifiers 5Y3-G, 5W4-G, 5U4-G, 5Z4 and 5T4 will interchange except that the filament current is not the same for all the tubes and it will be necessary to carefully check to see if the transformer will handle the load. The 5U4-G draws 3 amps. The 5W4 draws 1½ amps. All of the other tubes in this group draw 2 amps.

A 5Y3G can be replaced with a 5Y4G by removing leads to No. 2 prong and connecting them to No. 7.



# HOW THE ARMY'S TECHNICAL TRAINING PROGRAM WAS STARTED

by  
**GEORGE DUVALL**



Technical Editor  
Radio Journal

On Sunday afternoon, December 7, 1941, while busy aligning television video chassis, the news of the Japanese attack on Pearl Harbor came over the air. On several occasions I had done radio work aboard Japanese ships arriving in New York, and although heavily sugar-coated, the atmosphere was anything but friendly. It appeared as if the Japs had a bad case of superiority complex, and their constant bowing and hissing did not conceal it. The attack on Pearl Harbor certainly did not surprise anyone who had dealings with these "Charlie McCarthys" of the Far East, and current news confirms that they are wooden-headed automatons.

Having been the President of the Local Radio Servicemen's Organization for several years, and the National President from June 1939 to July 1941, my first thought was of the vast importance of communications in a modern war, and especially the part that the Radio Industry as a whole would be called on to perform in an all-out war. Through a friend who was an official of one of our largest broadcasting systems, and a high ranking officer in the USNR, my position in the service field was brought to the attention of the Office of the Chief Signal Officer of the Army. During a personal call from Washington one Sunday evening, arrangements were made to pay a visit to the Chief's Office, to discuss what could be done to assist in bringing radio servicemen into the service of the country, but fast.

The Washington visit revealed an urgent need for radio servicemen for a specific problem then facing the

ground forces of the Army. Unfortunately the persons contacted had little knowledge of radio, and no authority to make decisions or take effective action. It was explained what would be necessary to do, in order that a large number of servicemen with the particular knowledge required, be contacted, interviewed and hired into the service of the country. Considerable time and expense would be involved. No cooperation was forthcoming to cover even bare expenses, and while I was perfectly willing to donate my time, no money was available for the expense of traveling the country from coast to coast.

Personal papers sent to Washington were returned to New York, and the position of Technical Advisor to the Officer-in-Charge of Civilian Training, Second Service Command for the Signal Corps was offered and accepted. From April to August 1941, hundreds of competent radio servicemen, technicians and engineers, were contacted through my various connections, and induced to accept training and work for the Signal Corps. All of these men were given training in radio manufacturers' schools, and from all reports are today doing an excellent job for their country. The supply of such men was quickly exhausted, and the demand far from satisfied.

Orders came through to manufacture radio servicemen starting from scratch. Arrangements were made between the U. S. Office of Education

and the Educational Department of the State of New York to set up the necessary schools. Frederick L. Horman was introduced by me to those concerned, and accepted the position of Director of New York State Signal Corps training schools. It became my job to direct the procurement, selection and processing of thousands of suitable persons for training in these schools. I know I am not alone in paying high tribute to Fred Horman for the excellent job he did in setting up these schools and directing the training. Reports coming back from the field indicate the superiority of the training in these schools. Also during this period I was ordered to procure and select over a thousand young men for training as Code Operators, and to supervise their training in accordance with Signal Corps methods. Reports from the field indicate these men are superior in that work. While all this was going on, orders came through for me to inspect several universities and colleges, and report on their facilities to train men of college-level in ultra-high frequency leading to maintenance of detection-ranging equipment with which we are familiar today. The Presidential order, ending voluntary enlistments brought to a close the procurement of persons for the various phases of training for the Signal Corps under supervision of our office.

With the ending of civilian training, my position was continued with a Technical Training Unit of the Army Service Forces, which supervises and administers the training of large numbers of uniformed personnel for various branches of the Service. This then is a short-short story of my personal activities in the war effort to date.

NATIONAL  
COVERAGE  
FROM  
COAST TO COAST

# RADIO Television JOURNAL NEWS

LAST MINUTE NEWS  
ABOUT  
PEOPLE  
PRODUCTS  
AND PLANS

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## Belmont Receives Second White Star

To mark the continued excellence of the production of electronic equipment for the armed forces, a second White Star has been added to the Army-Navy "E" flag of the Belmont Radio Corporation of Chicago.

This is the second renewal of the government production award that was presented to Belmont employees a year ago. At that time they were among the first of the nation's larger radio manufacturers to receive the "E."

Notification of the new award was received by the employees from Robert P. Patterson, Under Secretary of War.

"In maintaining the fine record which first brought you distinction," Mr. Patterson wrote, "you have set an inspiring example for your fellow Americans on the production front."

## Burton Browne Appointed

Thomas B. Gibbs Co., Delavan, Wis., manufacturer of precision electronic equipment, has placed its account with Burton Browne, Inc., Chicago. Business publications will be used.



## Alfred A. Ghirardi Sells Radio & Technical Publishing Co. To Farrar & Rinehart

After twelve highly successful years in the Radio book publishing business, Alfred A. Ghirardi, internationally known author of some of the most highly-regarded and widely-used texts on radio theory, maintenance and repair, announces the purchase of his Radio & Technical Publishing Company by Farrar & Rinehart, Inc., publishers, of 232 Madison Avenue, New York City, whose subsidiary the new Radio & Technical Division of Murray Hill Books, Inc. will continue to publish the present "Ghirardi" radio books as well as new ones that he will now have time to write.

All orders for Ghirardi radio books should now be sent to Radio & Technical Division of Murray Hill Books, Inc., 232 Madison Ave., New York City.



New Sylvania Tube Plant

A new plant for the manufacture of radio tube parts has been acquired at Wakefield, Mass., and is already in production, it was announced today by Sylvania Electric Products Inc. It will augment the company's existing facilities and help supply the increased demands of the armed forces and vital war industries.

The new plant, formerly owned and operated by the Boit-Winship Company is a four-story structure containing 35,000 square feet of floor space. Extensive alterations, to furnish the most modern of equipment and employee-facilities, are being made. Fluorescent lighting is being installed throughout to increase employees' safety and comfort.

Walter E. Poor, President of Sylvania, in announcing the new building, explained that the internal assemblies of radio tubes made in the new plant will be shipped to the Salem plant for

completion. John Woodworth, formerly General Foreman of Sylvania's Salem tube plant, has been named Superintendent of the new Wakefield division. J. J. Jackman, of Sylvania's Salem tube plant, will be Manager.

The manufacturing of radio tubes is an intricate science consisting of dozens of separate miniature weldings, plus application of the glass-blower's complex art, and numerous chemical, metallurgical and physical processes, which for years made mass production difficult. Wakefield has been added to Sylvania's system of "feeder plants," which has proved a successful method for increasing the production of vital war material on a large scale. In addition to a number of factories in Massachusetts, the corporation operates others in several Pennsylvania communities.

## High Altitude Oil Capacitors

Based on extensive tests and studies of terminal breakdown voltages in rarefied atmospheres, Aerovox Corporation of New Bedford, Mass., is now offering high-altitude oil capacitors to aircraft equipment builders.

One of these capacitors is similar to the standard Aerovox Type '12 round-can barrier-cap units, except that one terminal is a short screw post. The other is a tall insulator post with corona shield at top. The cover assembly is a one-piece ceramic cap, with the can top spun over a

rubber gasket and the cap for a perfect hermetic seal. The arrangement of terminals, corona shield and ceramic cap minimizes surface leakage, corona losses and probability of voltage breakdowns even at extreme altitudes.

This aircraft Type '12 capacitor utilizes Aerovox Hyvol vegetable oil for the impregnant and fill. This special oil has the desirable characteristic of maintaining effective capacitance even at sub-zero temperatures, which is an important factor in high-flying applications.

## G. E. Surveys Stockholders On Postwar Radios

As part of General Electric's postwar planning, an illustrated questionnaire asking the Company's 227,000 stockholders what type of a radio receiver they would like to buy after the war has been mailed with the Company's third-quarter dividend check. This survey asks what kind of a radio is now owned, if and when they plan to buy a new receiver, the style and type preferred, and whether or not they know about or are interested in FM, frequency modulation.

To make it easy and convenient for stockholders to reply, a postage prepaid postcard accompanies the folder on which the answers may be indicated. Returns will be referred to the Electronics Department's commercial research receiver division for consideration determining the trend of tomorrow's radio in postwar planning.



## Reeves Labs Appoints Pinkerton

L. D. Ely, President of Reeves Sound Laboratories, Inc., announces the appointment of Fred H. Pinkerton as Director of Public Relations.

Mr. Pinkerton was formerly Manager of Sales Promotion and Advertising of the Industrial Division of United States Rubber Company.

Coincidentally he is serving as Public Relations Counsel to the National Electrical Wholesalers Association. Also, he has just completed designing and writing the industry book entitled, "Electrified Production," for the National Electrical Contractors Association, Washington, D. C.

He was formerly President of the Industrial Marketers of New Jersey and in 1942 General Conference Chairman of the National Industrial Advertisers Association.



### Sylvania Tube Substitution Charts Available

A concise pamphlet containing charts and all necessary data on radio tube substitutions has been compiled by Sylvania Electric Products Inc. engineers as a wartime help to radio servicemen, and is available free of charge from Sylvania distributors or direct from Sylvania at Emporium, Pa.

The pamphlet includes substitution charts for 150 milliamper AC-DC receiver tubes, 300 milliamper AC-DC receiver tubes, and battery tube types, carefully edited to conform with the WPB civilian radio tube program. The pamphlet shows quickly the required receiver and modifications necessary for tube substitutions, helps solve difficult tube substitution problems, and gives first and second choices in possible replacements in an easy-to-use check list. The pamphlet fits standard-size loose-leaf binders.



### Emerson "Raider" Radio Helps War Effort

Now, with both hands and arms free to do their jobs, American Raider troops and paratroopers are equipped with "Raider" radio receivers over which they get their orders for action. The remarkable little development, produced by Emerson Radio and Phonograph Corporation, is another of the long list of Axis troubles being turned out in ever increasing volume by that company.

The receiver and battery of the "Raider" are contained in a small kit, the straps of which are slung over the shoulders and the set carried on the marine's chest. The earphones are built into a fabric cap and fitted into the metal helmet. The helmet acts as the antenna.

Unlike most receiving equipment used by our armed forces, this compact Emerson product is virtually invisible and it is an added safeguard to its operator in that it does not distinguish him from his regular marine companions. Furthermore, its construction makes it proof against harm to the equipment that is usual in immersion, storm, shock, heat, cold—to which the raider must submit himself and his equipment.

### Radio Retailers Views Form Basis for Majestic Postwar Product Plans

While the Majestic Radio factory is engaged 100% in the production of war material for the Armed Forces, a committee of executives, headed by E. A. Tracey, President, Majestic Radio & Television Corporation, Chicago — finds time in spite of stepped-up wartime administrative duties to plan the strategy of Majestic's Reconversion Postwar Program.

The approach of the company is a unique one . . . in that the committee has hit upon a singularly effective way to "get the facts from the source of postwar sales."

Believing that executive armchair planning cannot alone reflect the needs in the field of distribution, nor the wants of the consumer public, Majestic developed a method designed to encourage radio retailers to submit their opinions regarding postwar radio sets . . . as to selling price, as to features, as to the public's reaction (on the retail sales floor), to prewar models.

This was accomplished by a contest, widely advertised to distributors and dealers of radio, offering \$1000 in (maturity value) War Bonds. Through this plan, Majestic's Postwar Planning Committee, according to Mr. Tracey, has the benefit of the thinking of thousands of retailers, salesmen and radio servicemen, located in large cities and small towns in all sections of the country.

Though the contest has not ended, it is already apparent that many retailers are cognizant of Mrs. America's wants and desires. Hundreds of entries were written on the basis of dozens of interviews with housewives. . . . thus Majestic has the opportunity to analyze dealer views and what is more important — consumer opinions. Majestic feels that basically, the public and retailers will be formulating its postwar program, specifically as to product and to a large extent as to distribution policies.

### Wiggin Returns to Sears

The Radio and Musical Instrument Industry will be interested in hearing that Parker E. Wiggin, who for the past nineteen months has been connected with the War Department, as chief business adviser, Procurement and Distribution Service, U. S. Signal Corps, has returned to Sears, Roebuck and Co. headquarters in Chicago to resume charge of the Parent Radio and Musical Instrument buying organization.

**BUY  
MORE  
WAR BONDS**



### Ken-Rad Employees Buy Bomber

A brand new bomber—"Ken-Rad"—will soon take to the skies as a result of the record-shattering bond-buying campaign of the employees of Ken-Rad Tube & Lamp Corporation, Owensboro, Kentucky, which topped the goal of \$500,000 by \$84,450.

Larry O'Brien, Director of Sales for the Ken-Rad Company, was in charge of the bond sales drive and impresario of the community promotion for Ken-Rad, which was credited with having subscribed nearly 25 percent of the total of Ken-Rad's home county, Daviess County, Kentucky, as announced October 1st.

One of the spectacular features of the Ken-Rad drive was the participation of Ken-Rad employed young men and women dressed in the native costumes and carrying the national flags of United Nations countries.

Shown above is a group of Ken-Rad employees at the pep meeting addressed by H. E. Baumgarten, Treasurer, at the outset of the campaign. Daily information of the progress of the bond-buying was posted as Mr. O'Brien addressed Ken-Rad employees over the PA system.

The corporation purchases of \$584,450 in bonds in the Third War Loan campaign went to the subscription of Series E, F, and G bonds, and did not include other types of treasury issues, which boosted the over-all subscription to more than \$700,000.

Assisting Mr. O'Brien in the generalship of the campaign was William E. Leverette, now of the Ken-Rad family, who was formerly in charge of several civic promotions for southern cities.



### Moock Electric to Handle Aeropoint Needles

Charles Conrad, Manager of the Moock Electric Supply Company, Cleveland, and some of his staff convince Dorothy Steven, Sales Manager of the Aero Needle Company, 737 North Michigan Avenue, Chicago, that they are "all out for Aeropoint phonograph needles."

Standing left to right are: Miss Lynn Landstrom, supervisor of the record department; Mr. Con-

rad; Dorothy Steven of Aeropoint; Dean Gunter, dealer salesman; Howard Elliott, counter salesman; and Earl Dietrich, sales representative for Aeropoint. The displays which they hold are counter cards on Aeropoint 111, the \$1 list needle, and a banner on the new plastic-shanked Aeropoint 88, which lists at \$1.50.



## E. H. Fritschel and H. J. Mandernach Named Sales Managers in G-E Tube Div.

E. H. Fritschel has been named Sales Manager of Transmitting Tubes, and H. J. Mandernach, Sales Manager of Receiving Tubes in the Tube Division of the General Electric Company's Electronics Department, according to an announcement by G. W. Nevin, Division Manager. Both men are located in Schenectady, N. Y.

Mr. Fritschel, a native of Waverly, Iowa, was graduated from Iowa State College in 1926 with a B.S. degree in electrical engineering.

Mr. Mandernach, formerly sales manager of the Replacement Tube Section of the G-E Electronics Department at Bridgeport, is a native of Chicago, Ill. He was employed by General Electric in 1936 and became district radio representative in the central west, with headquarters in Chicago. He held that position until March, 1942, when he was transferred to Bridgeport and appointed to the Replacement Tube Section.

## Majestic Sales and Profits Up

Majestic Radio & Television Corporation, Chicago, announced that sales and profits for the first four months of the current fiscal year, ended September 30, 1943, exceeded, both with respect to sales volume and profits, the figures for the first eleven months of the past fiscal year.

In making the announcement, Mr. E. A. Tracey, Majestic President, stated that all computations regarding profits were made before provision for Federal Income Taxes.

## Detrola Merger Proposed

A proposal to merge Detrola Corporation, radio and electronics equipment manufacturer, into International Machine Tool Corporation under the name of International Detrola Corporation as a step in launching the latter into a diversified field of postwar industry was announced by the two boards of directors in letters to stockholders.

Strengthening of International's bid for postwar activity and the enlistment of its larger capital for Detrola's peacetime program of making quality precision radio and other equipment were listed by C. Russell Feldmann, president of both concerns, as principal objectives of the statutory merger.

Both companies are engaged deeply in war production. Detrola's modern plant in Detroit employs some 1,250 persons in making military radio and other service items exclusively. Pre-war products included portable and home radios, record changers and automobile radios. Four main buildings comprise some 275,000 square feet of floor space.



## Stromberg-Carlson Presents Forty-Year Pins to Employees.

To celebrate their forty years of continuous service with their firm, thirteen employees of the Stromberg-Carlson Co., Rochester, N. Y., were recipients of Forty-Year Pins and tendered a luncheon at the company plant October 5th. Wesley M. Angle, President of the firm, who also marked his fortieth year with Stromberg-Carlson, presided. Dr. Ray H. Manson, Vice-president and General Manager, and Edwin C. Roworth, Vice-president, both of whom have been with the com-

pany 39 years, made the presentation. Shown left to right, James S. Gibson, Edwin C. Roworth, Alfridolf O. Stigberg, Eugene Reinke, D. Walter Brown. Seated, left to right, are Joseph Gaudioso, Sr., James T. McGuire, Wesley M. Angle, Miss Minnie Maierhofer, Dr. Ray H. Manson, John H. Levis, and Matthew J. Cross. A half dozen others in the company's branch offices also qualified for the Forty-Year Pins.



Mr. Harold Shevers (right), president of the Espey Manufacturing Co., 305 East 63rd Street, New York City, receives the "E" flag, Army-Navy award for firm's exceptional war production from Lt. Col. Walter B. Brown, Chief of Employees Relations Section.

An Army-Navy "E" Award presentation was held at the New York Times Hall, 240 West 44th Street, New York City, Friday, November 5th. Alois Havrilla, well-known newscaster of Station WOR, presided at the ceremonies which were attended by representatives of the Army and Navy and various government agencies, as well as the employees, their families, and guests.

Jean Merrill, of Station WOR, sang "America" and "The Star Spangled Banner."

Lt. Colonel Walter B. Brown, Chief of Employees Relations Section, Office of the Chief Signal Officer in Washington, D. C., presented the "E" pennant which was officially accepted by Mr. Harold Shevers, president of the Espey Manufacturing Company.

Lieutenant Thomas W. Dewart, USNR, 3rd Naval District, Headquarters of the Commandant, New York, assisted by a wounded veteran presented "E" Token pins to five employees.

Mr. Shevers, in his speech of acceptance, commended the fine spirit and workmanship of the men and women of the company. In closing his remarks, he quoted Mr. Robert P. Patterson, Under Secretary of War, who said recently "Victory is ahead but it is the considered judgment of our military leaders that we still have a long hard fight. We must not relax our efforts until the last enemy has laid down his arms." Mr. Shevers pledged to the Army and Navy in behalf of his company, their whole-hearted continued assistance and cooperation.

Mr. Sidney Cohen, who spoke as a representative of all the employees, upon receiving their "E" insignia pins, said, "There are few of us here today, who do not have somebody we love in the Armed Forces. That alone, brings the war mighty close to home. But, in even a larger sense, we realize well, the tremendous stake that the working man and woman has in the outcome of this war.

## Radio Engineers Elect New Officers

Hubert M. Turner, of New Haven, has been elected President of The Institute of Radio Engineers for the coming year, it was announced today by the Board of Directors. He is Associate Professor of Electrical Engineering at Yale University and succeeds Dr. Lynde P. Wheeler, of the Federal Communications Commission, Washington.

During the first World War, Professor Turner organized technical instruction for the U. S. Army Signal Corps at the University of Minnesota, and later at the Signal Corps School for Officer Candidates at Yale. He is noted for his methods of experimental and laboratory techniques in teaching radio engineering. He is a Member of the American Institute of Electrical Engineers.

The election of Ralph A. Hackbusch, of Leaside, Ontario, as Vice President was also announced. He is Vice President in charge of Radio, for Research Enterprises, Ltd.

Directors elected for three-year terms were: Raymond F. Guy, Radio Facilities Engineer of National Broadcasting Company, New York; Lawrence C. F. Horle, of New York, consulting engineer and authority on television; and William C. White, Engineer of General Electric's Electronics Laboratory, Schenectady.

## Pure Oil Company May Sell Radios and Appliances

Although the Pure Oil Co., Chicago, Ill., has been giving serious consideration to entering the retail appliance business in the postwar period, no decisions have as yet been reached, states a company official. The firm is studying the possibilities of selling radios and appliances through its many gasoline and oil service stations.

It is understood that Pure Oil contemplates offering these items under a private label in the same manner that it has been selling tires. The company sells its petroleum products through approximately 17,000 service stations, but it is expected that only about 25 per cent of these would have the facilities to handle other lines.

The Pure Oil official said that the company will determine its program early in 1944.

## E. N. Hughes Leaves Radio Television Co.

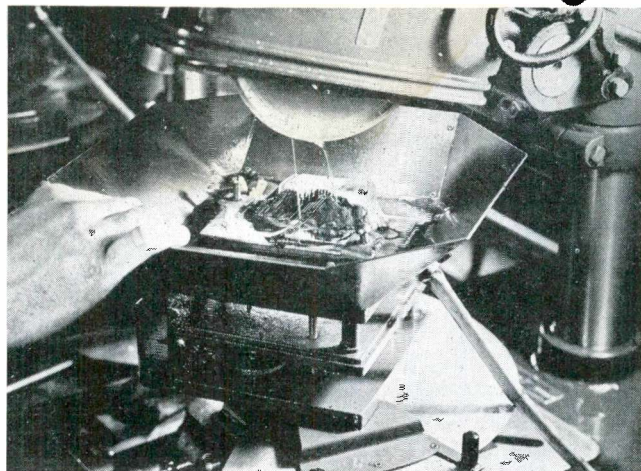
Emmett N. Hughes has severed his connection with the Radio Television Supply Co., distributing firm of Los Angeles, Cal., and is now operating as a manufacturers' representative. Mr. Hughes represented the Southern California Chapter of the National Electronic Distributors' Association on the NEDA board of directors.



### H. A. Crossland Named Manager of General Electric Receiver Division

H. A. Crossland has been named Manager of Sales of the Receiver Division of the General Electric Company's Electronics Department, according to an announcement by I. J. Kaar, Division Manager. In this capacity, Mr. Crossland will be responsible for all sales matters of the division. For the present he will divide his time between Bridgeport, Conn., and Schenectady, N. Y.

Born in Corsicana, Texas, Mr. Crossland attended the University of Texas and was employed by General Electric Company in October, 1930, as a field service representative in the radio sales section of the Receiver Division at Bridgeport, Conn. In August, 1936, he was made Manager of the Field Technical Section of the division. The following year he became Manager of Tube Sales. During 1938 he was Manager of the Technical Sales and Service Section, and in June, 1939, he was made Manager of Television Sales for the division. In January of 1940 Mr. Crossland went to San Francisco to become Regional Sales Manager for the western region of the Receiver Division. He was transferred to Schenectady and placed in charge of certain military radio contracts for the Electronics Department in June, 1942.



### New John Meck Diamond Saw

Shown above is a newly improved diamond saw, developed to save cutting waste of scarce Brazilian quartz crystals, which slices a single crystal into hun-

dreds of slim wafers in the John Meck Industries, Plymouth, Ind. Quartz crystal wafers are vitally needed now for military walkie-talkie radio equipment.

### Universal Microphone Adds Two New Depts.

Universal Microphone Co., Inglewood, Cal., has added two new departments. Dept. 10 will be a new department with 35 company inspectors headed by Supervisor John Nettleton. Dept. 11 will produce the new T-45's, Army Signal Corps lip microphones that rest on the upper lip and adjust to the ear via bands.

### Stromberg-Carlson Employees Stage Comedy

Climaxing their \$200,000 participation in the Third War Loan, employees of Stromberg-Carlson Co., Rochester, N. Y., created, produced and acted in an all-employee musical comedy entitled "Communications Capers," filling Rochester's big Eastman Theatre in two performances Sept. 28 and 29.

### Rear Admiral Praises Hallcrafters Equipment

The complete story of the part radio has played in winning the war cannot be told until final victory is won. Meanwhile we get occasional glimpses of the stupendous generalship of radio when the censor releases some choice bit of news, as contained in a telegram to the Hallcrafters Company, Chicago.

It was sent by Rear Admiral E. L. Cochrane, U.S.N., Chief of the Bureau of Ships, concerning the performance of Hallcrafters SX-28 on board the U.S.S. Enterprise during action in the South Pacific. This 19,900 ton ship is a sister of the Yorktown and Hornet, and carried 2,072 men and flyers. Rear Admiral Cochrane's telegram is as follows:

To the Men and Women of Hallcrafters Company, Inc.

Your SX-28 receiver on the 'U.S.S. Enterprise' received constant use during this famous carrier's extensive actions against the Japs in the South Pacific. Tuned to receive messages from her planes on mission and from fighter planes patrolling the fleet your receiver efficiently kept the 'Enterprise' informed of their activities. This information was usually translated into action against the Japs to their subsequent sorrow as the 'Enterprise's' record of 185 planes destroyed, 27 ships sunk and 16 damaged will attest.

(Signed) E. L. COCHRANE

## ADVERTISING Clippings

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WE'LL send you newspaper clippings of the best merchandising ideas, as well as copy and layout suggestions from companies of your own type. Each customer chooses just what he wants. Let us put on your desk regularly ad-clippings showing what the leaders are doing; only one idea a month will more than pay for the service. We clip ads from several hundred cities.

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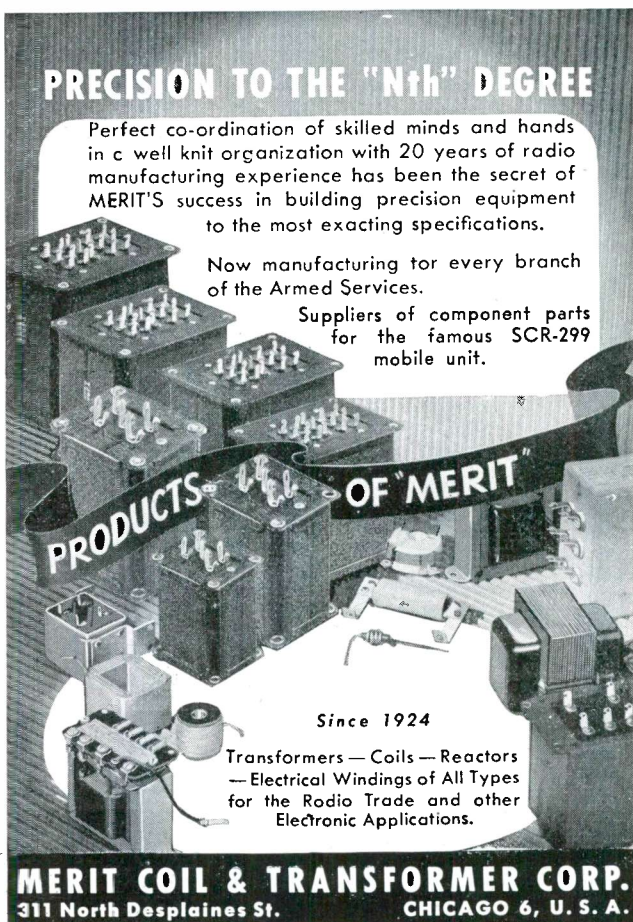
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## Journal's End by MAL PARKS

*H*ello again . . . glad to see you back here in our own private little corner . . . lots of things have happened since our visit together last month . . . first off, I want to thank you for all the swell letters you wrote and for the nice things you said about our October issue . . .

. . . Had grand visit and good lunch with Stancor's **Jerry Kahn** . . . met export manager **V. S. Casillas** and got some real fine data on South American markets from him . . .

. . . Aside to Shure Brother's **Jack Berman** . . . was mighty sorry we couldn't have lunch together that day . . . anyhow, sincere thanks for all those good ideas you gave me . . . I'll remember them . . .

. . . I tell you, fellows, there's just nothing like being an editor . . . at least everybody feeds you which is something these days . . . and that is prompted by the wonderful lunch the boss and I had with Sonora's **Joe Gerl** and **Herbie Hall** in their plant cafeteria . . . and was that food ever good . . . was strongly tempted to ask the boys for a job just to get those good eats . . .

. . . Aside to that certain dealer in Chicago . . . the O.P.A. knows all about those six thousand 50L6's you got, knows too about the black market prices you're charging, . . . you'd better have a good explanation ready very soon, brother . . .

. . . All right, can I help it if I'm always hungry . . . that lunch I had with Admiral's **Wally Aeverman** was really a good one . . . he told me about the little girl moron who ate firecrackers so her hair would grow out in bangs . . .

. . . I'd like to see Mfrs. **REP Ben Miller** and International Resistance Corp.'s **Dan Fairbanks** matched at eating barbecued spareribs . . . according to **Burton Browne's Joe Callahan** the way **Ben** tore into those ribs at Chicago's **Singapore**, he'd have the edge on **Dan** . . .

. . . They really rolled out the green carpet for the boss and me at **Magnavox** . . . talked at length with good friend **R. C. "Groff" Groffman** and **Magnavox** president **O'Connor** . . .

then "**Groff**" toured us over the plant where we met some of the nicest people we've seen in a long time . . . finally the boss and I wound up at "**Groff's**" house where we met the family . . . all in all, we had a really swell time . . .

. . . I liked this one by **Mme. Chiang Kai-shek** . . . "When one works for personal glory the work is bound to suffer. Only work for the sake of work itself and the good it can do deserves success" . . .

. . . Swell letter from **Wendell Willkie** telling about his experience with radio on that famous trip . . . promised to send along an article one of these days . . . we're hopeful of getting it for you very soon . . .

. . . Just missed **Commander McDonald** but had nice visit with **Zenith's** genial and capable **Ed Hermann** . . . spent a pleasant half-hour chatting with **Ed** and **Ted Leitzell** . . . those **Zenith** folks certainly make you feel right at home . . .

. . . Did you know that **N.E.D.A.'s** president **George Barbey** was cousin to **Rear Admiral Daniel E. Barbey** . . . who was just cited for bravery in Allied landings at **Lae** and **Finschhafen** . . . this earned the **Admiral** a well-merited **Navy Cross** . . . perhaps this will stop some of the **W.P.B.** fellows from asking **George**, "Don't you know there's a war on?" when he goes to bat for civilian tube production . . .

. . . Had nice talk with **Hallcrafters' E. V. Browne** . . . was in his office when the citation from **Rear Admiral Cochrane** was read over the loud speaker . . . it's a real thrill to be part of an industry that is contributing so much to the war effort . . . I know every **Hallcrafters'** worker feels that way, too . . .

. . . Gosh . . . there's no more room left and we've missed a lot of people who were simply swell to me on my western trip . . . to them goes all my sincere thanks for making my job of Editor so pleasant and friendly . . .

. . . And . . . to you here's my personal invitation to meet with us again in this space next month . . . I'll be looking for you . . .



# SPRAGUE TRADING POST



## A FREE Buy-Exchange-Sell Service for Radio Men

**FOR SALE**—Hickok tube tester, model AC49. Elmer M. Wahl, Box 23, Rusk, Wisc.

**WANTED AT ONCE**—0-1 milliammeter, AC or DC. Will buy tester containing one of these in good condition, or pay good price for separate unit. Home Electric Service, 807 N. Market St., Lisbon, Ohio.

**EQUIPMENT WANTED**—Will buy complete radio shop equipment—everything from tube tester to signal generator, condenser tester and meters. Cain's Radio Service, 201 E. Houston St., Nacagdoches, Texas.

**COMPLETE SHOP EQPT. FOR SALE** because of illness: One Hickok 510X tube tester; one Hickok No. 155 signal tracer; one Solar condenser tester; one Clough-Brengle No. 110 signal generator; hundreds of new tubes such as 12SK7GT, 1N5ZT, 25Z6, OZY2T, etc.; also hundreds of new condensers, speakers, transformers, chokes, etc., and several new radios. Total value over \$600, will sell for \$400 cash. Jim's Radio Service, 621 Chambers St., South Haven, Mich.

**WANTED**—RCA voltohmmyst No. 165; RCA-Rider Chanalyst No. 162. Cash. Dean Speidel, 3304 S. 18th St., St. Louis, Mo.

**NEEDED**—40-100 watt amplifier or booster ampl., microphone, speakers, Presto or similar recording table, decibel meter, mike Xformers, generator or converter, and mike cable. Most any condition. E. H. Munn, Jr., 306 N. West St., Hillsdale, Mich.

**FOR SALE**—No. 155 Readrite 0-25 DC MA. Also 0-50 DC V. One model 95 square type 0-200 DC MA meters. \$2.50 for all three. David Glass, Langenburg, Sask., Canada.

**WANTED**—One magnetic recording head, Model 6 Speak-O-Phone, 15 ohm impedance or other make of same size, shape and rating. T. E. Pekonen, 1013 Carney Blvd., Marinette, Wisc.

**WANTED**—Will pay \$15 cash for a "Mac" chromium-plated, teardrop style automatic speed key. Must be in excellent condition. Reply immediately. Wayne C. McClung, 1149 Dawson Rd., Albany, Ga.

**WANTED**—Echophone Model EC1 receiver in any condition. S/Sgt. A. J. Ardizzoni, 12008933, 10th Bomb. Squadron, 25th Bomb. Gp., A.P.O. No. 695, c/o Postmaster, New York, N. Y.

**FOR SALE**—Amertran Type W, and de luxe plate, filament, reactor, modulation transformers for 250-watt transmitter. New condition, complete specifications. Ernest Schwartz, 306 W 94th St., New York, N. Y.

**WANTED**—Set tester, tube tester, oscilloscope. Have for sale misc. variable condensers, chokes, etc. Doyle McCall, 328 Roosevelt St., Wenaschee, Wisc.

**WANTED**—Meissner analyst or similar instrument in good condition. L. H. Duggan, 1209 Ratone St., Manhattan, Kans.

**FOR SALE**—Zenith model 17 32-v DC to 110-v AC inverter, rated 100 watts; two auto radio filter packs, models B-L 160, rated 2.2 amps. and 8-10 amps., 6-v DC from 110-v AC; S-M power trans. with windings for 4-26; 1-27; 2-50; and 2-81's, nearly 1500-v. across hv. sec. pri. 115 AC. Also back files of Radio Craft and Radio News. Want late radio test eqpt. and text books. Blackford Radio Service, Brodhead, Wisc.

**WANTED**—A cheap code oscillator (new or used) and a "Sky Buddy" receiver in good condition. Arnold E. Collins, 23rd C.T.D. (Air Crew), Section 35, University of Buffalo, Buffalo 14, N. Y.

**FOR SALE**—Clough-Brengle 79 best audio oscillator, \$35; Clough-Brengle 88 peak and RMS vac. tube voltmeter, \$40; C-B No. 20 tube tester modernized, \$27.50. Want to buy 100-w booster amplifier, reflex speaker projectors and driver units; also thermocouple RF ammeters 0.1 amp. and 0.3 amp. 3" or 5" cathode ray scope. Must be reasonable and in good condition. Fox Sound Eqpt. Co., 435 S. 5th St., Richmond, Ind.

**WANTED** for new service business: AC & DC multimeter; late tube tester; and a good signal generator. Must be in A-1 shape. Cash. L. Ovalle, 5605 Ave. K, 535-A, Galveston, Texas.

**FOR SALE**—Hickok universal sig. generator No. 117. Has most features of latest model No. 117 except is not wired for crystal or voltage reg. tube. Price \$65. Cook's Radio Lab., 1110 Prince St., Brunswick, Ga.

**URGENTLY NEEDED**—One multimeter and one tube tester, portable or counter model. Offer you an AAS priority and cash. Describe fully. Reynold Nickols, 715 So. Herbert St., Los Angeles 23, Calif.

**WANTED**—Instructions for operating No. 550 Radio tester serial No. 550467 deluxe series. Will pay for this. Western Auto Asso. Store, Dexter, Mo.

**WANTED**—New or second-hand Bateman 12" recording unit with Brush RC-20 crystal cutter, Astatic FP-38 high-fidelity pickup, 110-v AC-DC recording motor with 12" turntable, preferably weighted. Must be good. John K. Major, Yale Station, New Haven, Conn.

**WANTED TO BUY** for cash; Jewell 199 set analyzer; Jewell No. 444 ditto; Jewell No. 57 D-C voltmeter; Test-o-phone radio test unit; RCA service tip file; Rider chanalyst; RCP tube checker No. 309S, 309SC, or 308P; Triumph No. 630 A & B power pack battery tester; GTC porta-power unit model U or G; Philco signal generator model 070; Superior tube tester No. 1240; also all vols. Rider's Service manuals. Quote price and send full details of any or all. Howell's Radio Electric Service, Anna, Texas.

**WANTED**—A good crystal mike or dynamic type. Will pay cash. Describe fully. W. F. Ragland, 205 Graves St., McKinney, Texas.

**WILL TRADE**—Will swap one MCD140M split-stator Hammarlund condenser, several 15 mmfd. star midget condensers, or one set Hammarlund plug-in coils, for two 140 mmfd. midget condensers. J. D. Pyle, South Pittsburg, Tenn.

**UX280 TUBE WANTED**—Must be in working condition. John L. Rhoton, 1740 McGee St., Kingsport, Tenn.

**WANTED**—32L7 tubes. Write price. Zanzi Radio, 2027 W. Division, Chicago, Ill.

**WILL PAY CASH** for Supreme No. 562 audolyzer and Triplett No. 1612 tube tester, also Precision E-200 signal generator. Adrian Chappellias, 17 Elder Pl., Potomac Hts., Indian Head, Md.

**WANTED**—Radio parts and test equipment of all types. Describe fully. Milford Thomas, Sr., P. O. Box No. 31, Canebrake, W. Va.

**WANTED**—Western Electric 253-A rectifier tube for school P. A. system. Jimmy Gray, 623 E. Woodlawn Ave., San Antonio, Texas.

**MIDGET RADIOS WANTED**—Will buy or trade for good units—also want an AC-DC multimeter of good make. Have tubes, filters, speakers, etc. Gerald Samkofsky, 110 Wilson St., Brooklyn, N. Y.

**TUBE TESTER WANTED**—Also a good voltmeter. Have portable AC-DC set to trade. John Haynes, Doe Run, Mo.

**FOR SALE**—Two 30-watt amplifiers and three 12" RO LA speakers (18-watt) complete, ready to use. Also have 2 dynamic mikes and one 700-D Shure crystal, 150 ft. mike cable with fittings. Write for details. Fred Richards, Payette, Idaho.

**FOR QUICK SALE**—Jackson tube checker No. 636; Supreme radio tester No. 444; Philco battery tester No. 015; Ward's battery charger 4-2 amp.; Walker multi-unit Epiphone Electar amplifier, blond case with dust cover; 2 Epiphone electric Hawaiian guitars; one National electric Hawaiian guitar, all with cases; 1 Shure crystal mike with floor stand and cable. All in good condition. What am I offered? Also have parts, tubes, phono motors, pickups, used radios, typewriter, etc. Write for details. Willard Durr, Box 254, Troy, Ohio.

**WANTED**—3" oscilloscope and Rider's Manuals, Vols. 8 to 13. Cash. State lowest price. Norman Jacobson, 1697 Andrews Ave., Bronx, New York, N. Y.



## CASH WAITING FOR YOUR UNUSED PARTS AND EQUIPMENT

Going into the Army or Navy? Giving up your service work for a war job? Or, even if you have remained in servicing work and have unused parts and equipment lying around, you can still render a patriotic service by advertising these for sale through the Sprague Trading Post. We'll gladly run your ad free. Radio equipment of all types is badly needed today—and the Trading Post will help you dispose of it quickly. It is a golden opportunity to do your bit in keeping radios working on the home front and, at the same time, turn unused materials into cash, and avoid the possibility of obsolescence when the war is won and new, up-to-the-minute equipment is again available.

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SPRAGUE PRODUCTS CO., North Adams, Mass.



# SPRAGUE CONDENSERS KOOLOHM RESISTORS

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**PLANNING FOR A BETTER WORLD TOMORROW**

# *Emerson Radio*

**WILL BE A PRICELESS DISTRIBUTOR-DEALER ASSET**



On Saturday, November 13, a group of authorities on design, manufacturing and marketing met at the executive offices of Emerson Radio and Phonograph Corporation.

Each of those specialists, armed with research data on their respective departments, had projected "Emerson Radio-Electronics" as they envisioned the enterprise—INTO THE FUTURE.

Emerson's postwar planning—down to earth, but broad in perspective—was effectively under way.

Emerson's war production goes on—at an even faster rate than ever before. The many new laboratory projects, the stepped-up manufacturing processes, the vastly increased equipment, are all performing feats which are helping to speed the victory.

The planning, converting and dovetailing of a highly trained personnel, and of war-born facilities for peacetime products and services, will take place quickly and efficiently.

Distributors and dealers will get the goods to sell and will operate in accordance with policies which will be in all ways constructive.

Definite announcements will not be made until all plans have jelled. But of this you may be sure—Emerson distributor and dealer franchises will be priceless assets in radio merchandising of the future.