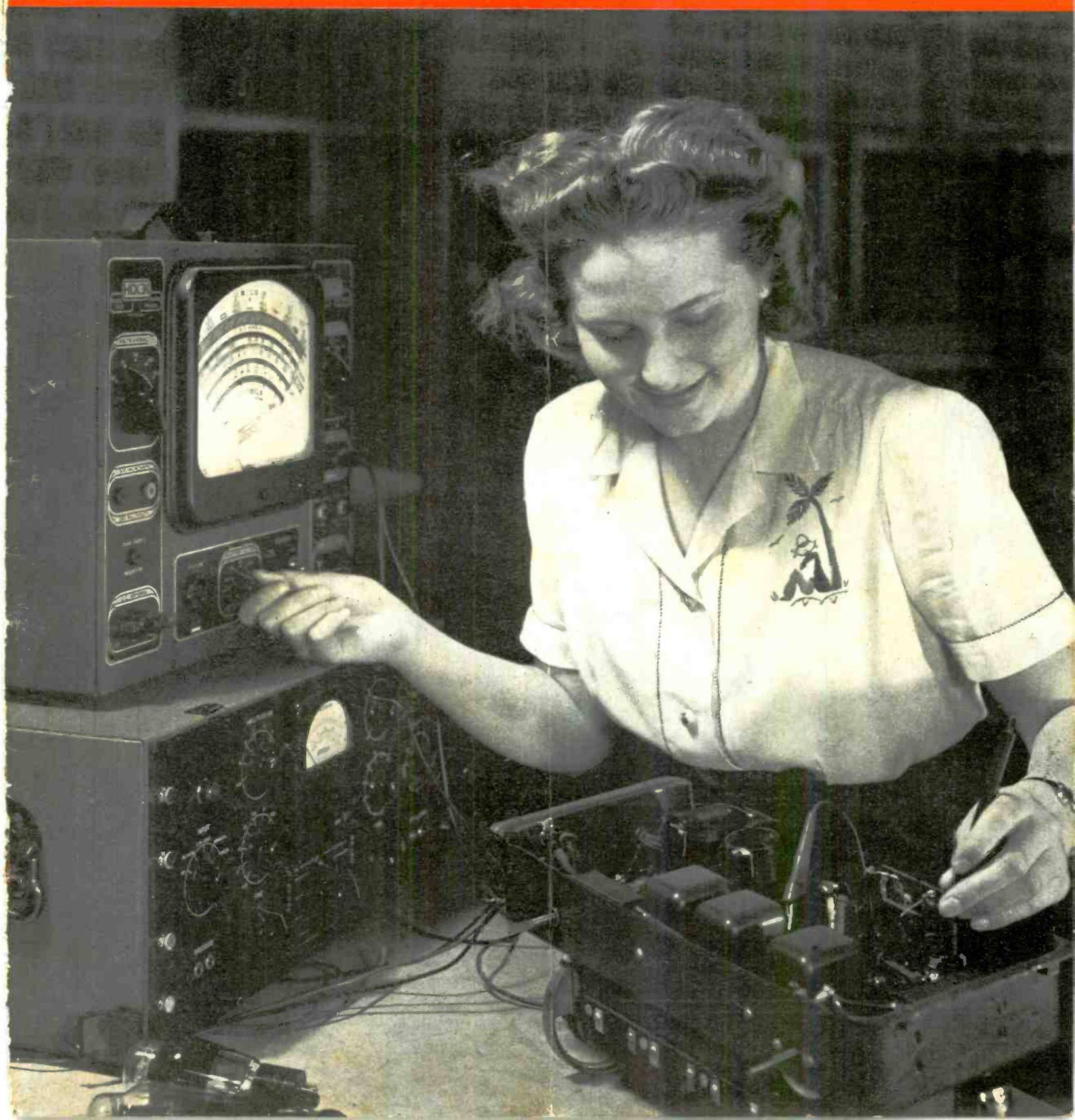
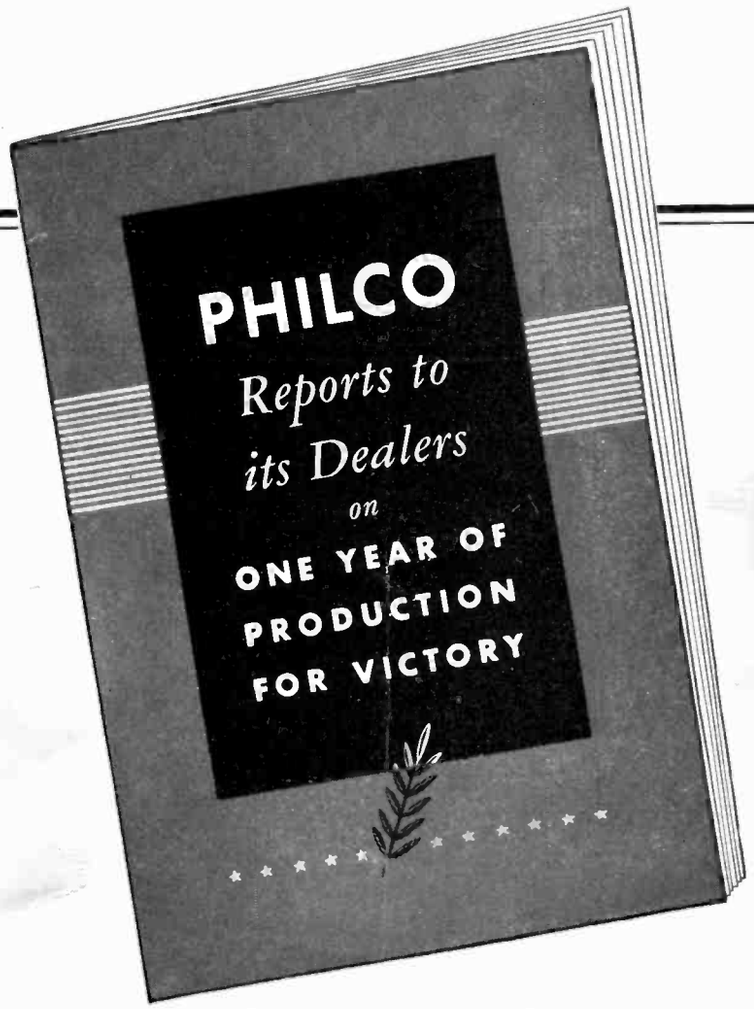
Radio-Television
JOURNAL
—and TALKING MACHINE WORLD

MAY, 1943





Have You Received Your Copy?

This memorable book, "Philco Reports to its Dealers on One Year of Production for Victory," was recently mailed to all Philco dealers of America. If you haven't received your copy, get in touch with your Philco Distributor today and ask for it. Or write to Philco Corporation, Philadelphia, Pa. It's a book you will not want to miss!

★ ★ ★

It is just about one year ago that Philco converted its complete research, manufacturing and promotional facilities 100% to the service of our fighting forces. During that year, the war achievements of the Philco laboratories and production lines form the brightest chapter in the long history of Philco industrial accomplishment. Its advertising activities have received nationwide recognition for their service in the interest of public war morale.

The story of this year of intense activity and achievement has real significance for every member of the Philco family. This report was written so that you and every other Philco dealer may know how the inventive research and manufacturing skill that gave you the most valuable franchise in the appliance field is now doing its part for Victory.

Be sure to read this fascinating review of Philco's war activities. For every Philco dealer, it's an annual report . . . *and a promise for the future!*

PHILCO CORPORATION

ARMY E NAVY

OUR WAR PRODUCTION PLEDGE:

MORE • BETTER • SOONER

Radio-Television JOURNAL —and TALKING MACHINE WORLD

VOLUME 54 | MAY 1943 | NUMBER 11

Founded
1916
by
"Glad" Henderson

Published Monthly
at
1270 Sixth Avenue
New York City
by
Kolbe Publications, Inc.

ALEX H. KOLBE
Managing Editor

MAL PARKS
Business Manager

B. BORIN
Circulation Manager

Chicago Office
FRED E. OWENS
549 West Randolph Street
Telephone - Central 5164

Contents

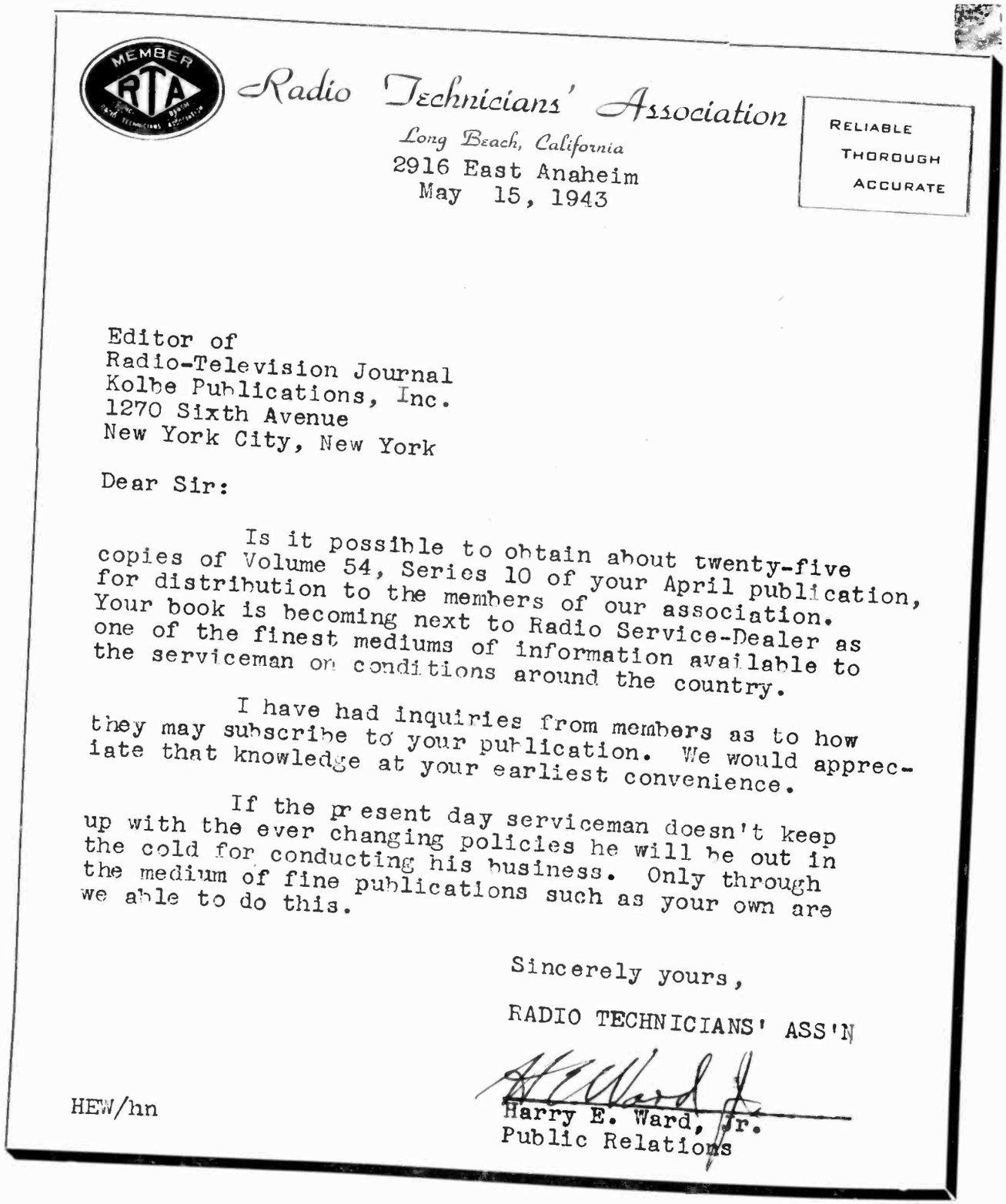
Index of Advertisers

Subscription Rates: One year, three dollars. Two years, five dollars. Single copies, 35 cents. **Advertising Rates:** Upon application.

"One of the Finest Mediums Of Information Available"

—HARRY E. WARD, JR.

Radio Technicians' Association



MEMBER RTA

Radio Technicians' Association

Long Beach, California

2916 East Anaheim

May 15, 1943

RELIABLE
THOROUGH
ACCURATE

Editor of
Radio-Television Journal
Kolbe Publications, Inc.
1270 Sixth Avenue
New York City, New York

Dear Sir:

Is it possible to obtain about twenty-five copies of Volume 54, Series 10 of your April publication, for distribution to the members of our association. Your book is becoming next to Radio Service-Dealer as one of the finest mediums of information available to the serviceman on conditions around the country.

I have had inquiries from members as to how they may subscribe to your publication. We would appreciate that knowledge at your earliest convenience.

If the present day serviceman doesn't keep up with the ever changing policies he will be out in the cold for conducting his business. Only through the medium of fine publications such as your own are we able to do this.

Sincerely yours,

RADIO TECHNICIANS' ASS'N

Harry E. Ward, Jr.
Public Relations

HEW/hn

May 1943

Radio-Television
JOURNAL
—and TALKING MACHINE WORLD

W. W. Wrigley, proprietor of the Electric Supply Co., Inc., 116 South Allen street, State College, Pa., told the Radio-Television Journal camera man to "see for himself" when he asked, "How many sets are now piled up in your repair department because you cannot obtain tubes and replacements?" This is what the camera man's camera "saw," but there were 15 sets in the shop all told. It must be remembered that State College is a small town. Larger shops in larger communities would show correspondingly larger accumulations.

Tube Shortage Ties Up Thousands of Radios

Dealers Say Industry Cooperation Can Break Bottleneck

THE dealer who doesn't service home radio sets will have a tough time keeping his doors open, now that floor stocks of new radios are virtually exhausted. But how can the dealer do servicing when he cannot get tubes and parts in sufficient quantities?

Answers to the questionnaire sent to a cross-section of our readers on April 30 confirm rumors of critical shortages of tubes in many parts of the country, and without tubes a receiving set is just so much junk.

The first 25 questionnaires returned showed that the dealers reporting had a total of 641 sets piled up in their repair departments because they could not obtain tubes and other replacement parts. That averages slightly more than 25 sets per dealer. One dealer had 150! But that isn't the whole story. Three of these 25 dealers reported that they had no sets piled up because they refused to accept them from owners when they knew beforehand that they could not service them since they hadn't the necessary parts. One dealer stated that he had plenty of radios in customers' homes standing idle and waiting for parts and tubes.

This grave situation is in no sense local. The replies in question came from ten states; California, Illinois, Kentucky, Maryland, Michigan, Missouri, New York, Pennsylvania, Tennessee and Vermont. The time at our disposal prior to going to press compelled us to limit this article to a discussion of the first 25 questionnaires returned. Since then, many more have poured in, all in about the same vein.

The tubes specifically mentioned as being urgently needed and seemingly unobtainable included: 50L6, 35Z5, 12SA7, 12SQ7, 12SK7, 35L6, 80, 12A8 and 25XC.

Of course the government cannot pull tubes out of thin air the way a magician is supposed to conjure rabbits from a top hat, but one dealer

Charles E. Remmey of the Pugh Street Radio Service, 109 Pugh street, State College, Pa., reported 26 radio sets on his shelves awaiting tubes and parts before they could be put into service for customers when the Radio-Television Journal camera man dropped in to make this picture during the first half of May. Remmey is an enthusiastic Motorola dealer.

made what seems to be a very practical suggestion for a sensible solution of the problem. He wrote:

"Try to get WPB to allow them (manufacturers) to release millions of tubes in their stocks that have been rejected as not meeting military specifications but that are suitable for civilian use."

That suggestion seems to cut right through red tape and production problems and go to the heart of the subject in a practical way. If every reader of Radio-Television Journal who agrees with this suggestion, or who feels that he has a better one will write today to the editor, this publication will lose no time in assembling the recommendations and laying them before the governmental authorities in Washington. But remember, sound suggestions, not mere complaints, are what the government needs to crack this tough nut.

Another thing you can do to dramatize this situation is to send us a photograph of sets piled up in your repair department because you cannot obtain tubes and other replacement parts. Send us the photos, for as the Chinese proverb says, "One picture is worth 10,000 words."

With a fat portfolio of letters from dealers, supported by sheafs of actual photographs, the government will have something definite, specific and graphic, to go on.

There need be no fear that such a presentation of evidence will fall on deaf ears and closed eyes.

Everyone in the government and out of it is aware of the vital role of radio in coordinating air raid alarms. That is a matter of possible individual, personal, life-and-death. Likewise, every holder of an elective office in the government knows that a political campaign is in the immediate offing and all of them will want to be on the air. Also, the value of radio programs as morale builders, bond sellers, labor recruiting aids, etc., is self-evident. Finally, there are still plenty of manufacturers sponsoring radio programs to sell the foods and other products they market who realize that their solvency and business life depends upon keeping their lines of communication to the public open at all times. The paper shortage which has cut the size and circulations of periodicals, and which may cut them further, intensifies the need for radio advertising as never before.

So when you send Radio-Television Journal tangible evidence of the straits the tube shortage is putting you and your customers in, you may be sure that there will be an attentive audience among the powers that be when we lay your evidence before them.

On succeeding pages in this issue you will find further information on the responses to this significant survey. Because the respondents have been so emphatically forthright it seems only fair that their anonymity should be preserved insofar as reference to them in these pages is concerned.

In making this survey, we asked only four basic questions. They were: (1) How many radio sets are now piled up in your repair department because you cannot obtain tubes and other replacement parts? (The answers to that question are presented in the third paragraph of this article). (2) What, in your opinion, should the manufacturer of radio receivers do NOW to help you stay in business? (3) What effect will the government's training of radio technicians have on your business when the men are demobilized? (4) What is your biggest complaint about anything in the radio business today? (Please don't pull your punches in answering this; we are seeking facts.)

As soon as you have read the answers, please take the time to write us your comments, too. They are needed, urgently!

Special Dealer Report No. 1

QUESTION:

What, in your opinion, should the manufacturer of radios do NOW to help you stay in business?

ANSWERS:

At least keep us supplied with the materials to repair radios as long as we have none to sell.

If the manufacturer has any tubes, send them to the distributor. Ask about his needs.

Victory table model radio.

Give us plenty of parts and tubes.

Furnish parts, tubes, batteries. Or and furnish circuit diagrams and instructions for changing over sets to take existing tubes and batteries.

Special Dealer Report No. 2

QUESTION:

What effect will the government's training of radio technicians have on your business when the men are demobilized?

ANSWERS:

Let the public know what the dealer is up against. They still don't seem to realize that there is a war on.

There isn't much a manufacturer of radios can do under present conditions. A dealer needs more than just tubes and replacement parts to stay in business. What the dealer needs is radio merchandise and of course that is out of the question for the duration.

Create or help create a Victory or War line of tubes and replacement parts and small electrical appliances.

Get us tubes and parts and try to get a Victory model out in mantel or else as console.

Give us parts to keep the old sets working for the duration.

The manufacturer should send out representatives to contact his large dealers to learn first-hand of the actual difficulties being experienced in the field, with a view to coordinating his own service operations to those of the larger service dealers, and also with a view to aiding in bringing his influence to bear on proper government officials to help remedy the parts, tubes and repair personnel problems prevailing. I do not think much of the idea of radio manufacturers urging their dealers to go into lines entirely foreign to their former operations . . . lines not at all associated with the radio industrry. In the long run, investment in these lines by the dealers will be frozen or lost should the war end.

Give us tubes and small sets.

Do everything possible to make sufficient replacement tubes available for repair work.

As soon as the situation permits, manufacturers should supply more tubes and parts.

Give us plenty of tubes and parts and one Victory model radio-phonograph.

Advertise that consumer repair his present radio and furnish dealers with all replacement parts.

Manufacture vital parts and tubes.

Be allowed to make one or two Victory model table radios and one Victory model phonograph.

More parts.

Publish more service data. Make more condensers, filters, tubes, etc. We need a Victory model.

Let us have the Victory tube program tubes now. We've been hearing about them for months.

See that we get a few needed tubes.

Try to get WPB to allow manufacturers to release millions of tubes in their stocks that have been rejected as not meeting military specifications, but are suitable for civilian use.

Give us tubes and parts.

We need tubes and parts.

It should be good because then we will be able to get servicemen whose salary demands will be within reason. Of course, now it is hard to get men at any price.

? ? ? ?

It should help our business.

A great many technicians will open service businesses with little or no equipment and not be able to give good service. This will give the service business a bad name and at the same time run down the price of service in general.

Plenty. Ex-government technicians, plus a half million refugees now in this country, plus millions more refugees during and after war will provide a service man for every radio.

Education can never be anything but beneficial to an industry.

An opportunity to build up a real staff of technicians who will be properly trained to handle all ailments prevalent in radio and phonograph instruments.

There will be more competition. Also more servicemen. This should not make much difference to any well-established business.

There will possibly be too many radio men, but many men will be trained more on the d-c battery-operated sets than on a-c.

This question is very hard to answer, but there should be some very good radio men after the war.

The post-war period will see so many trainees become so-called radio experts that the whole service business will be overcrowded and the price structure demoralized by low scale repair prices. A lowering of standards is indicated and certain difficulties in the sales of radio products will be encountered due to the technical questions that will be raised by the purchasers who may have been in any way connected with the government's radio training. This is already in evidence in our community, where many technical questions are being asked relative to the merchandise, but these questions are not at all relevant and have nothing to do with the ultimate performance of the product. In other words, the little knowledge which some of these men may obtain may be worse for them than none at all.

We hope it will give us some real service men.

We do not anticipate any negative results to our business procedure.

The market will probably be overstaffed with radio men if other work is not to be had.

It may demoralize the radio service industry.

Tremendous influx of new radio stores with a new low in competitive selling and servicing. Not so good for the industry.

If radio dealers are not able to remain in business those men who are now being trained in radio will not be able to follow their profession when demobilized.

Should be more servicemen available; especially a big help for the sale of television.

Will make it better.

This will murder repair parts and repair work profits.

Probably depress wages of this group (law of supply and demand) unless union organizes men.

Continued on Page 10

If you are one of the fortunate few who have tubes and parts to service radios, but do not have one of these colorful posters in your shop window, send ten cents to Radio-Television Journal today for your copy.

Special Dealer Report No. 3

QUESTION:

What is your biggest complaint about anything in the radio business today?

ANSWERS:

Shortage of all parts, including batteries, condensers, tubes, etc. If we had these we could keep the nation's radios playing. What's worse is the outrageous prices the wholesaler is asking for whatever merchandise is left. The dealer can't buy it because OPA would never approve the prices we'll have to ask in order to show even a small profit.

Give us tubes.

Former wholesale houses now selling at retail on hard-to-get tubes and parts and nothing being done by OPA or WPB.

Government bookwork. Government restrictions. Government taxes. And just too much Government inefficiency.

The new L-265 order. If all dealers could refuse to do business under the restriction and tell the public why, it would be corrected in short order.

Cutthroat competition. Indiscriminate trades and discounts. No reason whatever to "give away" merchandise to make a sale. Radio manufacturers could control this if they only would. Most of them do not care. Their only Bible is volume and more volume, regardless of whatever methods a retailer uses to dispose of his merchandise.

Shortage of (1) records, (2) tubes, (3) parts, (4) radios, (5) servicemen, etc.

The fact that every day and minute we are all passing out as radio dealers unless they allow us tubes, parts, wire and a few Victory model radios (three styles or four).

We need tubes and parts. The tubes we order from our distributor are always back-ordered. They receive tubes, but they are tubes that are not very often used.

There seems to be no effective way of getting more than promises from the WPB for proper allocation of needed supplies. I understand, of course, that material shortages are one of the difficulties. But it seems that by proper allocation the comparatively small amount of material needed for servicing radio equipment could easily be provided for without disrupting the war effort to any great extent. The importance of radio to the war effort is tremendous. Furthermore, so far as I can see, no real post-war merchandising surveys are being made by the radio industry, as are being made by other large industrial enterprises. Since Pearl Harbor I have seen but one representative of any factory whose lines I have always handled, and my interview with him indicated that very little constructive thought is being given to the subject of post-war problems. Unless a serious study is made of the questions of distribution, price maintenance, trade-in factors, quality and other important aspects of radio distribution, . . . the postwar . . . picture will drift into the same old chaotic state that prevailed in the old "dumping" and trade-in days of the past. I need not tell you what conditions were in those days. Our present operations are indeed a pleasure in comparison as all riff-raff competition has been disposed of and has either discontinued operations for the duration or has enlisted in the armed services.

Lack of merchandise.

The radio tube situation with regard to replacements.

The worst feature was the radio factories running out on guarantee policies they had maintained for years. This is in contrast to the refrigerator and stove companies, which have fulfilled all guarantees.

Radios in the home are essential. Parts and tubes should have a priority and one Victory model should be produced.

We cut out all lines of radios except . . . and . . . during the past three years because radio franchises were worthless. Have manufacturers prepare worthwhile franchises for post-war.

The fact that smaller radio receivers cannot be purchased by people who wish to keep up with the remarkable broadcasting of patriotic programs. Small manufacturers might be permitted to make a Victory model in sensible quantities.

Customers coming in and being sore because they can't get certain radio tubes or batteries. Since we sold it to them, we should see that they get it. This is the customer's reaction; not all of them, but a certain percentage.

Tubes!

Too many tube types and volume controls. Too much variation in chain store and "legitimate" (Ed. note—quotation marks ours) prices.

Ceiling prices should allow regular percentage extra to compensate for interest on investment, insurance, and warehousing costs. Make available several table Victory sets. Allot them to dealers on basis of volume for the past three years. Base restrictions, if possible, on shellac for records.

The complaint will come when the manufacturers put those "parlor" dealers, garages, etc., back in business after the war is over. Let us make a profit on every sale from now on.

Allowing the Army and Navy to pile up huge stocks of batteries and tubes that they cannot possibly use for months—if this is true, as we have heard from reliable sources.

Lack of being able to obtain tubes, parts and batteries for the trade.

No complaint. If we can do our best to win the war. Believe Mr. Nelson (Donald M. Nelson) is now trying his best to help out the civilians with more civilian goods.

Dealer Report No. 2

Continued from Page 9

From what I have observed of what they have learned they won't be of much help or competition to commercial business.

Can't say.

It will reduce our service work, which is all right as we lose money on our service department anyway.

We wonder! Will we have lots of competition? Certainly they cannot all work for what dealers there are.

Front Cover Picture An Object Lesson

Women have been star performers in many instances on the sales floors of almost all radio stores for many years. And now, with the man-power shortage rapidly becoming more acute, they are also being found in set servicing work in ever-increasing numbers.

The young woman pictured on the front cover is a member of a class of RCA engineering cadettes at Purdue University, Lafayette, Ind. She and her sisters are in training to become engineering aides to RCA quality control engineers, design engineers, advance development engineers and war contract executives. Eventually, many of them may be promoted to executive posts in the RCA organization.

The average radio dealer or distributor cannot hope to develop a training course of the scope on which RCA is operating, but it behooves every one who expects to stay in business for the duration to begin training women in set servicing work to the best of his ability, and to begin right away.

Television Boom Seen By Du Mont Program Director

RAPID expansion of television stations throughout the United States "even to small communities of modest means," was forecast by Will Baltin, program director of Du Mont television station, W2XWV, in New York City, in an address before members of the American Television Society at Hotel Capitol, New York, on May 13.

Baltin declared that experience gained at the Du Mont transmitter, which radiates programs to televiewers in New York, New Jersey and Connecticut on Sunday and Wednesday nights, has proved that a television station can be operated effectively with a small personnel and a modest studio at low cost.

Developments in electronics have been enormous, Baltin said, adding that television will blossom as a major industry when the cannonading ceases.

The camera equipment employed at the Du Mont station is so compact and flexible, the program director disclosed, that it "could be wheeled out of the studio, rushed by a small delivery truck to the scene of a big news event and set into operation in about as much time as a newsreel unit."

"You'll see television stations mushroom across the nation and radio dealers, who have experienced a business famine since the outbreak of war will find a tremendous market for the new marvel of the century as soon as war production is replaced by peacetime manufacture," Baltin predicted.

"Regional television stations, which are the first and logical step in the expansion of a new industry, will eventually be linked in a chain or series of chains," he prophesied.

Television screens no longer will be limited in size, the speaker pointed out, with various sizes designed for homes and schools placed on the market "at prices comparable to an average modest radio-phonograph combination."

"Theatre television, to which millions will flock to see events of national, and, perhaps international importance, is as certain as the dawn of tomorrow," he continued. "New developments in the laboratory indicate that this form of entertainment is going to electrify the amusement world in much the same manner as the talking picture did back in the late 1920's."

A statistician is a man who draws a mathematically straight line from an unwarranted assumption to a foregone conclusion.

—Nation's Business

Wall Street Busily Boning Up on Electronics

Wall Street began delving earnestly into the subject of electronics on May 10, when the first of six lectures was started under the auspices of the New York Institute of Finance. Each will be held on a Monday at 3:45 o'clock in the Governors' Room of the New York Stock Exchange. Experts from the leading electric manufacturing companies are the speakers.

John Mills of the Bell Telephone Laboratories talked at the first meeting on "The Scientific Method and How It Applies to Electronics." On May 17 Dr. K. K. Darrow of the same company discussed "Transmutation and Radioactivity." Later lecturers will be Dr. Willard F. Libby of the University of California; Dr. David Grimes of the Philco Corp.; A. C. Monteith of the Westinghouse Electric and Mfg. Co., and Dr. W. R. G. Baker of the General Electric Co.

This interest in electronics in financial circles presages the fact that when this war is won, plenty of capital will be available to commercialize discoveries made in war work, so an era of rapid expansion may be looked for by those of our readers who are eagerly awaiting the resumption of civilian goods production in this field.

LUCILLE McCARTHY at the Indiana plant starts a carefully chosen record which will soon have its beneficial effect upon production by this Hoosier group.

Tempo as a Tonic

SWEET AND SWING are vitamin music for Jane Murphy and Katherine de Barry—and most other N. J. bladespeople, according to 700 requests received in a six-week period.

MUSIC in American war industry is keeping production purring along the assembly line at a tempo which bodes disaster to the whole vicious set-up of the Axis.

While the debut of music in industry is too recent for appraisal of its full potentialities, those who have given it a trial feel it has a permanent role to play wherever smooth production is desired. It is well liked by all hands and that is a triumph in huge war plants, where it is difficult to install innovations that meet unqualified approval through all phases of productive work.

One war plant whose pioneering in industrial music is being watched by many industrialists is the Pioneer propeller plant of the Curtiss-Wright Corporation in New Jersey.

Tuneful rhythm floats five times daily there through the din and clatter of propeller production. Broadcasts including such mirthful nonsense as "Pass the Biscuits, Mirandy" have taken the grimness out of the long work week for bladesmen; reduced fatigue and boredom, prime breeders of errors and accidents, and have kept

Reprinted from "The Bladesman," employee magazine of the Curtiss-Wright Corp.

ATTENTION, PLEASE. Here's Barbara Betts, lyric voice behind the mike at the Curtiss-Wright pioneer propeller plant; more formally, "Director of Industrial Music."

HOW CURTISS BLADESPEOPLE LIKE THEIR MUSIC

A brief analysis of 700 request cards

From Men—67% From Women—33%

BY SHIFT

12 M.-8 A.M.—30% 8 A.M.-4 P.M.—49%

4 P.M.-12 M.—21%

THEY LIKE BEST:		THEIR DEPARTMENTS:	
Foxtrot	70%	Inspection	51%
Waltz & Polka	10%	Machine Shops	12%
Swing	8%	Dural Blades	10%
Light Opera	4%	Sub Assembly	6%
March	2%	Tool Service	5%
Cowboy	2%	Dispatching	3%
Latin Rhythms	2%	Final Assembly	2%
Other	2%	17 Other Dept's	11%

production moving in brisk march time.

Replies to a plant-wide query, "Do you like music broadcasting in the plant during work hours?" were revealing:

Bladesman: "It's a great idea. Those tunes come just when we need a lift."

Foreman (efficiency sheets in hand): "Anyone who would propose taking music out of the shop would meet stiff opposition from me and many other foremen. Around 11 and 3 o'clock, I used to see men's faces sagging. Their slow response to questions indicated their minds were logy. Now, faces light up the moment the first notes come through. By the time the program is ended, nearly everyone is hitting on all cylinders again."

Executive (perusing daily production sheets before and after music had been piped into the plant): "I am convinced music in defense plants is a sound idea . . . a forward-looking production policy."

Anton De Young, machine shop foreman, had never heard of existing industrial music programs when the inspiration struck him to broadcast recorded music through the New Jersey plant. With the support of Erwin Kallenberger, production superintendent, and David Almroth, maintenance foreman, the plan was destined to blossom, for these men do not allow a promising idea to wither in the bud if they can help it.

The idea developed further than the originators had anticipated when it was submitted for final approval. While arrangements were made promptly to pipe recorded programs through the paging equipment, plans were begun also to install a music system at the headquarters plant. Upon completion, it will operate along many lines for its regular listeners, almost as if it were a local radio station.

Things were a trifle makeshift before comely young Miss Barbara Betts arrived to preside over the diminutive "studio" below stairs at the New Jersey plant. Employees brought their own records for the first programs, and the maintenance department, godfather to the broadcasts, rigged up the "studio." Even now, their Mr. Morrison lends a hand to bring bladesmen an extra half hour of music on Sundays, the bluest day of the week in war plants.

Work music has gone far since Thomas Edison toyed with the idea back in 1915. To wire this New Jersey plant for music, sound engineers had

Continued on page ??

BEER BARREL POLKA is kept on tap for John Janocko, engine lathe man in the New Jersey machine shop.

DAVID BANGHART reads face alignment with the greatest of ease when waltzes throb in the New Jersey plant.

PENSIVE? Not always. Music unfurrows the pretty bow of Margaret Lau. She checks concentricity of brake disks.

RADIO MANUFACTURERS ASSOCIATION *News*

BOND GEDDES, EXECUTIVE VICE-PRESIDENT, 1317 F STREET, N.W., WASHINGTON, D. C.

RMA War Production Conference June 10

A WAR Production Conference in connection with the nineteenth annual meeting of the RMA membership has been planned for Thursday, June 10, by the RMA Board of Directors. The war program and its radio problems will be the keynote of the industry meeting, which will be headed by prominent government officials being invited for discussion of the part in and problems of radio manufacturers.

President Paul V. Galvin of RMA will preside at an industry luncheon, and there will be meetings of the Association's Set, Tube, Transmitter, Parts and Speaker Divisions; also of a number of committees. There will be no social features, such as a banquet or exhibits. New officers and directors of RMA will be elected for future service in the present war program and also for the association's plans on postwar problems.

* * *

Industry Conference on Civilian Radios

Measures for maintenance of the public's radios were considered at an April 29 conference in Chicago by officials of RMA, the National Association of Broadcasters, the WPB Radio and Radar Division and Office of War Information, during the NAB "War Conference" and convention. Problems of supplying civilian tubes and parts, also their distribution, and the maintenance of adequate radio servicing were considered at the joint industry conference. President Neville Miller of NAB presided and among those in attendance were President Paul V. Galvin and Executive Vice-President Bond Geddes of RMA; Arthur C. Stringer, NAB Director of Promotion; Chief Frank H. McIntosh, the Civilian Section, WPB Radio and Radar Division; Morris Weisz, consultant of the WPB Labor Division; and Don Stauffer, assistant director of the Office of War Information. Several radio manufacturers, including A. S. Wells, P. S. Billings and Ross Siragusa also attended.

Chief McIntosh detailed the present civilian replacement program of 2,000,000 tubes monthly. Also, he discussed the future WPB replacement parts program, as well as measures under consideration to provide for equitable distribution by distributors of replacement tubes and parts. The latter includes probable future use of WPB "directives," both for production and also distribution, in the replacement components program. The problem of draft deferment of servicemen also was discussed in detail at the conferences.

* * *

RMA, with IRE, Organizing Technical Planning Board

Plans of RMA, with participation of IRE and cooperation of the Federal Communications Commission, to establish a "Radio Technical Planning Board" for the study of postwar services to the public, including FM and television, were announced by Chairman James L. Fly of FCC on April 28, at the annual meeting of the National Association of Broadcasters in Chicago. The FCC and other government agencies will cooperate in extensive postwar technical studies planned of the use of ultra-high frequencies in the radio spectrum.

The RMA, through its engineering department under Director W. R. G. Baker, initiated the plans for the Radio Technical Planning Board, following suggestions made by Chairman Fly last November at the RMA-IRE fall meeting in Rochester, N. Y. The scope of RTPB organization and technical studies is similar to that of the National Television System Committee, which was organized by RMA with FCC cooperation, and which Chairman Fly said at Chicago "did a monumental work for the industry and the government."

Preliminary organization of RTPB now is being completed and its operations will be financed entirely by RMA. The tentative organization plan, after revision, was approved by the RMA board of directors at New York on April 15 and later by FCC. It awaits final action by the IRE board of directors. An initial appropriation of $10,000 for RTPB operations was made by the RMA governing board.

President Paul V. Galvin of RMA and Dr. L. P. Wheeler, president of IRE, are to appoint the RTPB chairman, with the approval of Chairman Fly of FCC. The RTPB board members and numerous panels and committees of technical experts are to be appointed by the RTPB chairman. Dr. Baker is scheduled for the appointment to the chairmanship.

The RTPB "Organization and Procedure" as approved by the RMA board of directors and FCC provides for technical studies of radio spectrum frequency allocations over which the FCC has jurisdiction of assignment, and RTPB primarily will formulate recommendations to the Commission for such allocations. Radio services now are virtually limited to frequencies under 100 megacycles, but experimental work is being done up to 3,000 megacycles.

Many technical experts and scientists will be drafted for the RTPB work, on its panels and committees, provided in the proposed organization draft. The Board itself will be composed of representatives of industry groups, such as Interdepartmental Radio Advisory Committee (IRAC), of government officials, including Army and Navy; National Association of Broadcasters, American Radio Relay League, and other regularly constituted radio groups and including all chairmen of the RTPB panels.

At the Chicago convention of NAB, Chairman Fly announced the proposed establishment of RTPB and said in part:

"All of us realize the extreme importance of planning for change in advance and, in particular, the importance of laying a sound and spacious foundation for new services so that progress will not be handicapped by the dead hand of obsolescence. During the early 1920's standard band broadcasting developed without any sound foundation plans, and oldtimers in the industry still remember the chaos which resulted. Since then we have learned much and so the frequency modulation band was opened up pursuant to an allocations plan, which, whatever its imperfections in detail, nevertheless made orderly progress possible.

"The same sort of orderly progress will be necessary in the postwar world, and so the Commission has welcomed proposals from the Institute of Radio Engineers and the Radio Manufacturers Association looking toward the formation of a new group to be known as the Radio Technical Planning Board."

Radio Technical Planning Board Organization and Procedure

(1) *Objective*: To plan and recommend such frequency allocation and systems standardization as will expeditiously bring into the service of all peoples the advances in the radio and electronic science made during the war period in the interest of: (a) Expanding the radio and electronic serv-

MUSIC BOOSTS PLANT OUTPUT

The Modulators, all employees of the Stromberg-Carlson Co., Rochester, N. Y., "give out" with everything from Irving Berlin to Bach and Beethoven at lunchtime concertos in the plant, twice a week. The Modulators owe their success to the efforts of Robert Gifford of production control in cooperation with the production drive committee, a recent item in the "Stromberg-Carlson Speaker" stated.

ices of the prewar period both at home and in the foreign field. (b) Raising the standard of living of all peoples by the prompt development of new radio and electronic services.

(2) *Function*: In the proper allocation of operating frequencies so essential to the mutual accommodation of the many present and potential services is to be found the principal basis for that coordination which is essential to the prompt attainment of the objectives of the Board. Accordingly, the RTPB will be constituted of engineering representatives of the many branches of the radio industry and services to assist in this work of allocation, as well as to guide the industry and the radio services in broad standardization programs. The RTPB will develop such studies, investigations, recommendations, and standards as are required to attain its objectives.

(3) *Organization*: (*A*) *Board*—The Chairman of the RTPB shall be appointed by the President of the Radio Manufacturers Association, the President of the Institute of Radio Engineers, and the Chairman of the Federal Communications Commission. This Board shall be comprised of representatives of recognized radio groups and the chairmen of panels. The Chairman of the RTPB shall designate the members of the Board, a Vice-Chairman, a Secretary, a Recorder, and a Coordinator, with the advice and counsel of the President of RMA, the President of IRE, and the Chairman of the FCC. The Chairman shall similarly appoint one alternate to each member of the Board. (*B*) *Panels*: The RTPB shall establish and direct a series of panels each of which will concentrate its effort on a particular phase of the broad problem, to work under the instructions of, and to report its findings to, the RTPB. As the work proceeds, additional panels may be established as the necessity arises. The work of each panel shall be under the supervision of a Chairman, and a Vice-Chairman who shall be appointed by the Chairman of the RTPB. The Chairman of each panel shall appoint the members of his panel, subject to the approval of the RTPB.

It is contemplated that panels devoted to the following will be established: Allocation; Spectrum Utilization; HF Generation; Television and Facsimile; Direction Finding and Location; Industrial, Medical and Scientific Equipment; Standard Broadcasting; VHF Broadcasting; Relay Systems, and Radio Communication.

Participation in the work of the Board and its panels shall not be deemed as affecting the jurisdiction of the FCC, IRAC, or other governmental agencies.

Appropriate government representatives may meet with the Board and the various panels for the purpose of exchange of views and information. No government representative, however, shall be entitled to vote on any matter before the Board or any of its panels.

(4) *Meetings*: (A) *Notification*—Meetings of the RTPB and its panels shall be called at the discretion of the respective chairmen with notification to the members at least one week prior to the date of the meeting. (B) *Records*—The chairman of each panel shall appoint a recorder for his panel, under whose direction, detailed written reports of all meetings shall be prepared. Such meeting reports shall be distributed promptly to all members of the panel and to members of the RTPB. (C) *Quorum*—The quorum for any regular meeting of the RTPB will comprise 75 per cent of its voting members and the majority vote of the voting membership present at any meeting will be required for the approval of any proposed action, providing such vote represents a minimum of 51 per cent of the number of voting members of the board. The vice-chairman, the secretary, recorder, coordinator, and the FCC advisory shall have no vote. The chairman of the RTPB may vote only in case of a tie. No agency represented on the Board shall be permitted more than one vote on any proposed action. . . . The quorum for any regular meeting of a panel will comprise 50 per cent of the voting members of the panel. A majority vote of those present will be required for the approval of any proposed action. The chairman of any panel may vote only in case of a tie. No agency shall be permitted more than one vote on any proposed panel action. . . . In the event of lack of a quorum present at any announced meeting of the RTPB or any of its panels, action may be taken by a majority vote of those present, but such action will not be valid unless or until three-fourths of the total voting members of the RTPB panel, as the case may be, approves such action. . . . Any panel member may be represented by an alternate on presentation of a letter of authorization to the chairman from the member.

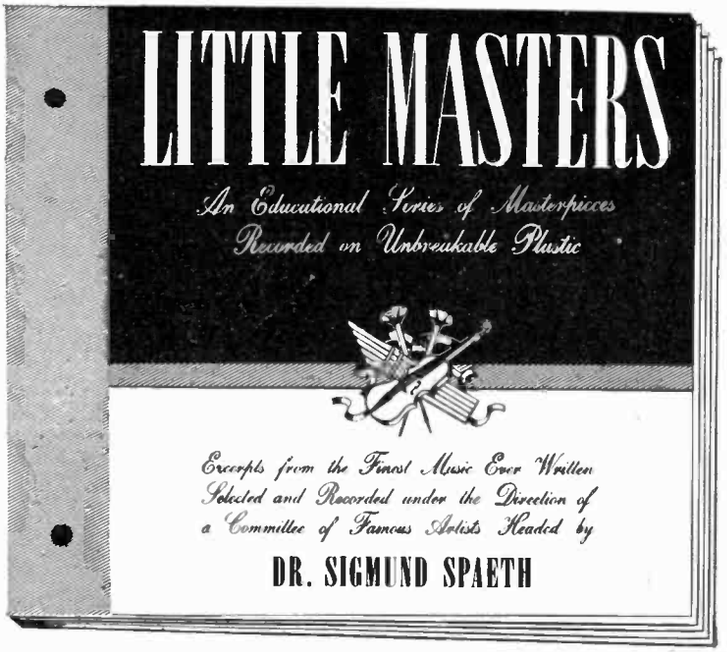
(5) *Project Reports*: Upon the completion and approval of an assigned project by a panel, an appropriate report including both the majority and minority opinions will be submitted to the RTPB.

(6) *Approval and Transmission of Reports*: As reports and recommendations are approved by the RTPB they will be submitted by the Board to interested Governmental Agencies, Industry, and Professional Organizations.

Philadelphia Service Men On Radio Quiz

A series of Question-and-Answer Talks on radio maintenance by members of the Philadelphia Radio Service Men's Assn., 1643 South Wilton street, Philadelphia, Pa., is being broadcast over station WFIL each Sunday evening during May. The talks are being given, one each Sunday, by Roy Eby, Wm. Poole, A. Giardina, Al Lynsky and Wm. Humes. This is a continuation of a series of similar talks conducted during April by Charles Wrigley, Larry Oebblecke, F. B. Guthrie and Stanley Myers.

Everybody's Buying CHILDREN'S



Your Favorite Classics —In Seven-Inch Miniatures

Played by a fine Symphony Orchestra

On double faced records made of shellac

Selected by DR. SIGMUND SPAETH, Radio's Tune Detective

The Little Masters are an educational series of musical masterpieces. Ideal for adults and children alike.

Buy them in sets of six albums—all different

COMPLETE ALBUM
WITH FOUR DOUBLE-FACED RECORDS

$1.10 LIST

Subject to Dealer's Discount

LIST OF "LITTLE MASTERS" ALBUMS AND CONTENTS

ALBUM No. 1-A
Strauss' BLUE DANUBE WALTZ and Schubert's MARCHE MILITAIRE
Liszt's LIEBESTRAUM and HUNGARIAN RHAPSODY
Wagner's RIDE OF THE VALKYRIES and Josef Strauss' PIZZICATO POLKA
Boccherini's MINUET and Schumann's THE POET SPEAKS

ALBUM No. 2-A
Tschaikowsky's CHINESE DANCE, THEPAK and MARCHE SLAV
Grieg's ANITRA'S DANCE and IN THE HALL OF THE MOUNTAIN KING
Strauss' TALES FROM THE VIENNA WOODS and Bizet's MARCH OF THE DRAGONS
Schumann's TRAEUMEREI and Wagner's PILGRIMS CHORUS

ALBUM No. 3-A
Mozart's DON JUAN MINUET and Rossini's WILLIAM TELL OVERTURE
Humperdnck's PRAYER FROM HANSEL AND GRETEL and Verdi's TRIUMPHAL MARCH FROM AIDA
Mendelsshon's NOCTURNE and Ponchielli's DANCE OF THE HOURS
Bizet's ARAGONAISE and OVERTURE FROM CARMEN

ALBUM No. 4-A
Sibelius' FINLANDIA and Elgar's SALUT D'AMOUR
Schubert's MOMENT MUSICALE and Thomas' GAVOTTE
LONDONDERRY AIR and Moussorgsky's GOPAK
Gounod's BALLET FROM FAUST and Sibelius' VALSE TRISTE

ALBUM No. 5-A
Wagner's PRELUDE, ACT 3, LOHENGRIN and Berlioz' RAKOCZY MARCH
Meyerbeer's CORONATION MARCH and Beethoven's MINUET IN G
Rimsky-Korsakoff's SPANISH CAPRICE and Bach's GIGUE
Chopin's PRELUDE No. 20 and Mascagni's INTERMEZZO

ALBUM No. 6-A
Tschaikowsky's DANCE OF THE TOY PIPES and Beethoven's TURKISH MARCH
Bach's GAVOTTE and BOUREE IN G from the THIRD SUITE
Beethoven's COUNTRY DANCES Nos. 1, 7 and 12; and Chopin's PRELUDE No. 4
Verdi's LA TRAVIATA and Delibes' BALLET MUSIC FROM SYLVIA

Erno Rappe's Melodyland Reco Book

Six Musical Fairy Tales With Eight Recordings of Popular Classics

Here's a sure-fire "natural" that combines an ADVENTURE BOOK, six moving picture FAIRY TALES and eight recordings of FINE MUSIC—all in one package! . . . TURN THE WHEEL . . . inside each 9x12 page, and see a host of childhood characters springs to life in glorious 6-color lithography! . . . PLAY THE RECORDS . . . and hear inspired performances of immortal music conducted by the Musical Director of Radio City Music Hall—ERNO RAPEE . . . HEAR THE STORIES narrated just as they appear in the book by the famed NBC radio announcer—MILTON J. CROSS.

ALBUM COMPLETE WITH FOUR DOUBLE-FACED MASTER RECORDS

$1.98 LIST—Subject to Dealer's Discounts

THE NEW BOOK FOR CHILDREN THAT
MOVES and TELLS STORIES and PLAYS MUSIC!

RECORDS

FOUR BEST SELLING LINES
ORDER NOW—Immediate Delivery

Listen-Look
Record and Picture Books

A double faced seven-inch record
set in two-color, sixteen-page story book

Buy them in assortments

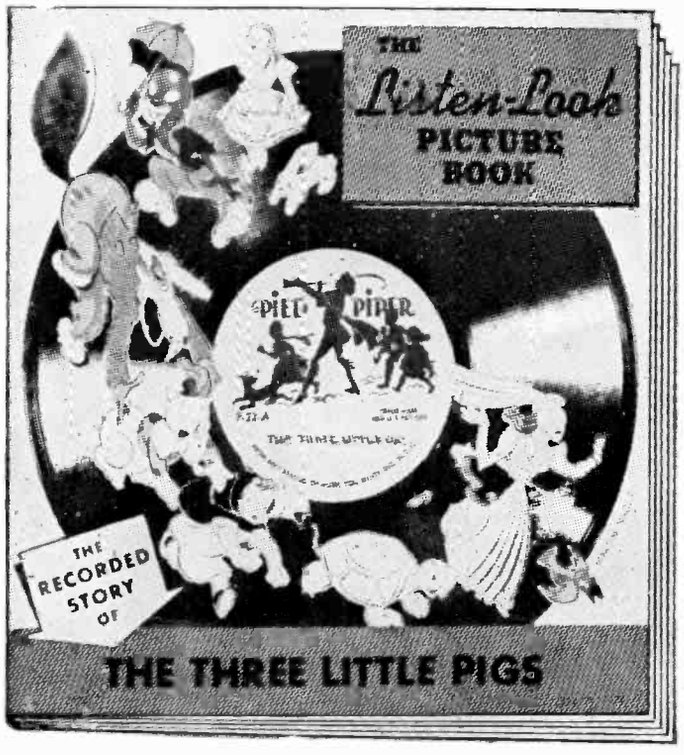
LIST OF RECORDS AND PICTURE BOOKS

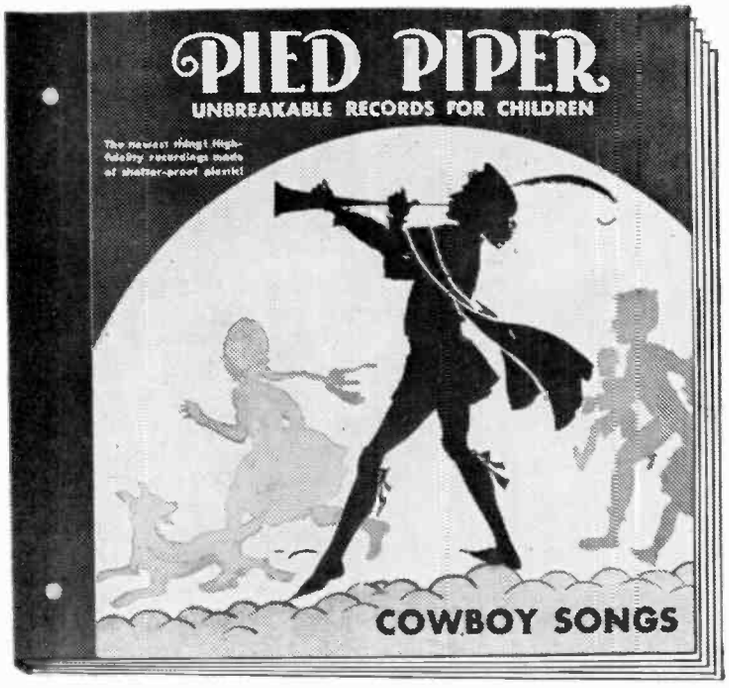
Little Red Riding Hood
Alice in Wonderland
The Three Little Pigs
Little Black Sambo
Myrtle the Turtle
Cinderella

COMPLETE PICTURE BOOK AND RECORD

35c EACH LIST

Subject to Dealer's Discount





Pied Piper
Children's Records In Albums

Fine Recordings—Popular Compositions

LIST OF ALBUMS

Album No. 1—Dance Records
Album No. 2—Dance Records
Album No. 3—Marches
Album No. 4—Nursery Rhymes
Album No. 5—Cowboy Songs
Album No. 6—Assorted

FOUR DOUBLE FACED SEVEN-INCH RECORDS
IN ATTRACTIVE ALBUM

$1.10 LIST

Subject to Dealer's Discount

Pied Piper Children's Records Seven-Inch, Double-Side, Shellac

An assortment of twenty different selections. Nursery songs, marches, cowboy, polkas and favorite children's subjects.
Order in assortments of 50— **25c EACH LIST** —Subject to Dealer's Discount

BARTH-FEINBERG, INC., 17 Union Sq., NEW YORK, N. Y.

Distributors of Quality Musical Merchandise

Tube and Parts Turn-In Program Launched

"TUBE for tube" and "radio part for part" are the rules which now govern the repair of radio sets. Limitation Order L-265, issued April 24 by the WPB, requires that the owner of a radio set turn in an old part when he buys a new one or when a new one is installed by a repair man. It makes exception, however, for cases in which the return of a part is impractical.

In issuing the order, WPB officials emphasized that owners of radio sets need not secure priority ratings to replace old parts. In some localities repair men are rumored to have demanded such unobtainable ratings in order to sell more expensive servicing, the WPB asserts.

WPB officials said that dealers should be able to supply tubes and other radio parts to their customers as old ones are turned in. It was pointed out that tube production, available for civilian radio maintenance, is close to peacetime levels. Existing shortages will be remedied as manufacturers concentrate production on types most in demand and, by exchanging tubes among themselves, round out their own stocks and those of their jobbers.

The order makes allowance for rural set owners who can buy only by mail and for those who have lost the part which is to be replaced. Such a buyer must "certify that the part(s) specified on this order are essential for presently needed repair of electronic equipment which I own or operate."

The radio repair man or dealer must collect a part or certificate when he sells a part to a consumer, but need not pass that part along to his supplier. Instead, he must certify that he has collected either components of the kind being ordered or certificates for them. Such certification must be made both by the repair man who sells a part to an owner of a set and by the supplier who sells to a repair man or to another jobber. Dealers must take used parts to scrap heaps or salvage stations within 60 days of receiving them.

WPB officials pointed out that the dealer is free to develop his own bookkeeping system in balancing the receipt of parts and certificates against purchases. They stated that the order will be enforced through checks made in the field. Records of sales and purchases must be kept. In most cases, this will not require changes in bookkeeping practice, officials said.

The order applies generally to electronic equipment, radios and phonographs, but exceptions are made to permit the sale of entire radio sets, phonographs and sound motion picture projectors completed before April 24. Hearing aid devices, electric batteries and power and light equipment are not covered by the order. L-265 supersedes L-44 and L-44a, incorporating the prohibitions of those orders against the manufacture of new radio sets, phonographs and the like.

The order also supersedes L-183, which required a minimum rating of A-3 for transfers by manufacturers of electronic equipment, and raises this rating to A-1-a. However, purchases against parts or certificates do not require ratings. L-265 prohibits the manufacture of electronic equipment, except to fill orders of the Services, orders rated AA-4 or higher, or to the extent that the manufacturer has received his materials under the Controlled Materials Plan.

The new rule does not appear to work any special hardship on jobbers who had stocks of tubes and parts when the regulation became effective, but for those who did not, the time-lag until dealers can collect enough old tubes or parts, or certificates to turn in to the jobbers, and the jobbers can in turn make up factory orders based on them and get deliveries, will be a costly experience, indeed.

Tempo as a Tonic

Continued from Page 13

to overcome acoustical problems which differ in the four corners of the plant. The trick was so to space and power the loud speakers that the music cuts through the noise, instead of adding to it. Melodic strains of an old-fashioned waltz must pulse sweetly through the noise kicked up by machine shop operations.

In measuring dosages of harmony, Miss Betts carefully follows dictates of bladesmen's request cards. Most ask for fox trots and swing, polkas, waltzes, and marches to be played by "name" orchestras; and, for seasoning, tunes with a Latin-American lilt. Currently, the highbrow coterie is gaining. Brahms, Schubert, Gilbert & Sullivan and folk music have a growing following. Bladesmen lost no time commending a recent broadcast of Ravel's "Bolero."

Feminine as a lace handkerchief are some requests. "Please play 'When The Lights Go On Again,'" urged one girl who confided, "It's his favorite song. He's in the Coast Artillery."

A mother, with two service stars on her flag, brought her favorite record to the studio: "Dear Little Boy of Mine."

Why does night work create a thirst for hill-billy songs and cowboy laments? Miss Betts hopes the owl shift will shed light on this. Her curiosity aroused by the many requests from nocturnal workers for ranch harmony, Miss Betts checked with the music department of the Indiana plant. She found the same preference there among the night shift.

Miss Betts prepares programs from a library of 300 records, of which 60 are exchanged each month by the industrial music service which implements the studio.

Selection is guided by expert advice which warns that too brisk music can make pulses gallop too rapidly for the health of sustained production while soft melodies must not be too soothing if the day dreamer is to be brought out of her trance.

Industrial psychologists are the chief exponents of music in industry. They see music as the coming antidote to major production ills: fatigue, industrial ennui, and their by-product, faulty work.

They believe that abolition of industrial fatigue is esentially a problem of establishing the perfect rhythmic balance between work and rest. In support, they cite the human heart, which beats through a lifetime, each day exerting enough energy to lift 144,000 pounds one foot high, and yet escapes exhaustion by relaxing briefly but satisfactorily at each contraction.

Current research on auditory reactions to music of varied types indicates music can scientifically influence production. Dr. Burris-Meyers, expert working under Rockefeller grant, says:

"It's easy to step up production in a plant. In fact, you could step it up so high that it would backfire, which would not be so good. More desirable is to strip the tedium out of a dull job . . . and that is not impossible."

Employees of the New Jersey plant offer striking evidence that astonishing things are possible in blending sound broadcasts with work.

Universal's Bill Wells Reports Arrival of Wm. III

Bill Wells, war production supervisor of the Universal Microphone Co., Inglewood, Cal., is the father of a new son, William Walter Wells, III. The new arrival tipped the scales at eight pounds, eleven ounces.

Preference Ratings for Test Equipment Scrapped

"After May 1, deliveries of radio and radar test equipment will be made in accordance with schedules determined under M-293 instead of preference rating," it was stated at an April meeting of the Test Equipment Industry Advisory Committee with the Radio and Radar Division of the War Production Board.

Buyers of test equipment will fill in Form 556, on the basis of which the placement and delivery of new orders will be determined. These forms, available at WPB regional offices, will be submitted to the WPB Radio Division for approval, and the approved forms will be attached to purchase orders.

While it is expected that buyers no longer will be able to trump each other's bids for equipment with triple-A ratings, they will be able, under restrictions, to obtain directives for prompt delivery. However, requests for such directives are being scrutinized more closely, leading to a swift reduction in the number of them in force.

Elmer Crane, Chief of the Components Section, said that while deliveries of test equipment no longer would be subject to the completion of priority ratings, production would continue to be expedited by the use of ratings to purchase components and materials. Since supplies of those components, consisting of resistors, condensers and other equipment, are not as tight as those of test apparatus, schedules of the component producers will not be upst.

Since test equipment purchase orders now must carry WPB approval on Form 556, manufacturers receiving purchase orders without such approval should return them to their customers, it was stated. Jobbers, like manufacturers, must see that their customers receive approval on Form 556, and that the approved form is sent with the purchase order to the producer.

Oxford-Tartak Elects Arnt and Kopetzky V-P's

Paul H. Tartak, president of the Oxford-Tartak Radio Corp., 3911 South Michigan avenue, Chicago, Ill., announced the election of Alexander M. Arnt and Karl A. Kopetzky as vice-presidents on April 24.

Mr. Kopetzky, besides continuing his executive duties, will take charge of electronic developments occasioned by the firm's war conversion and expansion. Mr. Arnt is in charge of production.

The corporation in peace-time manufactured loud-speakers. With war conversion, it expanded into electronic devices, range filters and transmitters.

Poke All Your Troubles In the Old Gripe Box

Walter Markowski, packing engineer at the RCA Victor war plant in Camden, N. J., recently devised a novel remedy for chronic grouches, a Gripe Box, which has been credited with eliminating complaints, reducing arguments, and even stepping up morale. Since the box was installed only one complaint has been deposited. It came from a girl who wanted a "date." She got it.

Ives Television Device Produces Clearer Image

A patent was granted on his improvement in television scanning to Dr. Herbert E. Ives of the Bell Telephone Laboratories early in April by the U. S. Patent Office. Dark streaks in present television transmission are due to the narrow, rapidly moving beam of light used to stimulate the apparatus passing over imperfections in the sensitive screen. In Dr. Ives' invention one of two methods is employed: Either the beam is made wider in one dimension by passing through a cylindrical lens or it is caused to oscillate rapidly up and down. The beam is restored to its normal state later by being put through a second lens or by having the "kinks" ironed out of it by means of a second oscillating device in phase opposite to the first one. By either method the imperfections are "averaged out" of the wider path before the beam is made narrow again.

Utah Advances Jester To Vice-Presidency

Oden F. Jester, who has been director of sales of the Utah Radio Products Co., Chicago, Ill., was recently elected a vice-president of the company, as were also W. Austin Ellmore and Remy L. Hudson. Prior to his association with Utah a number of years ago, Mr. Jester was with the radio division of the Stewart-Warner Corp.

The Essence of Electronics

By W. C. WHITE*

ELECTRONICS is defined as "the science which deals with the behavior of electrons." Like many definitions, this one is not very helpful and one must go a step further. Recently I saw a definition which I rather liked and which read "electricity freed from the bondage of wires." That, I think, is better because at least it is descriptive and somewhat intriguing.

The electron, of course, is the basic unit of electricity. Just as a drop of water can be considered a sort of basic unit in measuring amounts of water, so the electron is the unit by which we could measure the quantity of electricity. I say "could" because an electron is not a convenient measure. Again using the drop-of-water analogy, if we are talking about small amounts of liquids, such as a teaspoonful, it is logical to express the amount by the number of drops. However, when speaking of large amounts of water, such as go over Niagara Falls per hour, it would be absurd to express them by the number of drops.

The same thing is true of electrons. Even the number of electrons that make up the small current used in the filament of a household incandescent lamp is so huge and, therefore, runs into so many significant figures that we don't talk about the electric currents we use in such terms.

However, the electron is a very real thing and its mass and charge were accurately measured by scientists many years ago.

In addition to the extremely small charge it carries, the other unusual property of the electron is the enormous speed at which it can travel under proper conditions. This speed can approach that of light. Here again, we do not express this speed in such terms as miles-per-hour because the number of zeros involved after the figure would make it too bulky to use. Instead, we speak of the voltage used to accelerate the electrons.

Now, let's go back to the idea of free electrons, because that is important. Until scientists created the so-called vacuum tube for these electrons to perform in, they were not free to be moved about as desired and their interesting and useful properties could not be studied and made use of.

Right here, let us point out that the words "electron tube" and "vacuum tube" describe the same device. (It is largely a matter of personal preference as to which term is used.)

The things that go on inside a high-vacuum electron tube are contingent upon two basic components. The first is some source of free electrons and the second includes "elements," so that the motion of the electrons can be definitely guided.

The first we can liken to heating water to the boiling point to liberate steam. Heating a metal red hot liberates electrons from the surface in a somewhat analgous way.

Now, if that red-hot piece of metal is inside of a highly evacuated bulb, the cloud of electrons coming out from the surface of the metal is very mobile.

Then comes the second step. You have all noticed that when a comb becomes charged electrically it will attract dust and bits of paper. In a somewhat similar way, the liberated cloud of electrons may be caused to move toward a positively charged terminal placed inside the bulb. Therefore, electrons pass from the hot plate element, which is called a cathode, to the cold plate element, which is called an anode, and the resulting continuous transfer of electrons constitutes a flow of electric current.

If this were all there was to the matter, one might well ask, "Why all this complication simply to provide a flow of electric current, when an ordinary piece of copper wire might seem to accomplish the same purpose?" However, this electronic method of conducting electric current offers possibilities of controlling the current in ways that are totally impossible in an ordinary conductor such as a piece of wire. This possibility arises from the fact that inside a high-vacuum electron tube these electrons may be started, stopped, and deflected very easily. This is done by putting additional electrodes in the tube and operating them at a certain combination of voltages which determines how many of these electrons travel across the space and at what speed and how often they are started and stopped.

Here again, it is well to remember those two separate steps in this process of electrons moving through a vacuum. The first is getting the electrons out of the metal and the second is getting them across the space to the other electrode. It is only during this second step, their trip across the space, that they are subject to control by additional electrodes.

Because such a host of electrons are required to carry an appreciable amount of current and because they move so rapidly, the flow of current through the tube can be subject to variations of an extraordinary degree as regards speed and nature of the variation.

This means that if a wire carrying a small current is cut and the elementary vacuum tube just described is inserted in this gap in the circuit, you have great opportunities for unusual control of the current in that circuit. When I say, cut the wire and insert the tube, I mean that one of the free ends of the cut wire, the negative one, is connected to the hot-cathode terminal of the tube and the other, the positive, is connected to the cold anode plate.

That, in its simplest form, is an electron tube in an electrical circuit. During the split second when the electric current in this circuit is in the form of a stream of free electrons leaping across the gap through the vacuum of the tube, you can control this current with great speed and accuracy. The control element in the tube is usually like a screen or grid which is placed directly across the stream of electrons.

If a proper voltage is applied to this grid or control electrode, the current through the tube, and thus the current in the circuit, may be varied. The kind of tube used depends on the magnitude of the currents and voltages involved and how fast the control has to be, and it can easily be up to a billion times a second.

It is natural to ask why, year after year, we continue to use electron tubes both in our radio receivers and radio transmitters. Is it not possible to substitute for them other devices that will do the job as well or better? The answer is "no" and will probably continue to be "no" in radio for a very long time to come because electron tubes perform certain functions that so far as science knows, cannot be done in any other way.

There are at least four reasons why electron tubes are the heart of radio equipment:

The first of these results from their almost complete independence of electrical frequency. As you well know, many electrical devices are suitable only for use on direct current or only on the one frequency of 60-cycle alternating current. However, as we have seen, an electron tube can function at millions of cycles a second just as well as at 60 cycles. It can do this because the myriads of electrons in the evacuated space inside the bulb can move at such enormous velocities that the frequency range mentioned above is slow compared with the time required for them to move from one electrode to another.

Continued on Page 23

* Excerpted from a talk on the Science Forum program of Station WGY, Schenectady, N. Y., on April 13. Mr. White is the engineer in charge of the Electronics Laboratory of the General Electric Co.

OPA Deadlines "Special Deals" Price Adjustments

Sellers who have made "special deals" during March 1942 have until May 31, 1943, to obtain adjustments of their maximum prices under Section 1499.4b of the General Maximum Price Regulation, the Office of Price Administration stated on May 7.

In announcing the deadline, OPA stated that sufficient time has elapsed for relief to have been effected for all sellers in need of such adjustments because of conditions temporarily existing during March 1942.

An amendment to the General Maximum Price Regulation issued July 17, 1942, permitted sellers of articles subject to that measure who had certain temporary reductions in prices during March 1942—reflected in free goods sales, combination sales at reduced prices, or special discounts—to adjust to the highest price at which the particular commodity was delivered during the 30 days preceding the date upon which the special deal became effective.

The adjustment deadline was contained in Amendment 53 to the General Maximum Price Regulation, effective May 13, 1943. A copy of the ruling may be had from any OPA office.

Krich-Radisco Secretary Now an Army Captain

Barney Gordon Krich, secretary of Krich-Radisco, Inc., Newark, N. J., who was inducted as a private in the Army in January, 1941, is now a captain. He is the Quartermaster Corps at Hampton Roads port of embarkation, Newport News, Va., as assistant executive officer to the Port Quartermaster and as officer in charge of the quartermaster operations branch.

Captain Krich was made a master sergeant shortly after induction, following which he attended OCS at Camp Lee, Va., from which he was commissioned a second lieutenant on July 15, 1942. On September 16 he was made a first lieutenant and on April 28 of this year was given his present grade.

Government Seeking Civilian "Bedrock" Use Levels

No new radios, phonographs or record players would be permitted in the government's contemplated plan to cut civilian consumption to "bedrock levels," it is rumored, but 50 per cent of 1939 purchases of phonograph needes and replacement tubes and ten per cent of records would be allowable, according to a statement published recently in The Billboard magazine. Just how these percentages would be arrived at, and how applied, was not stated.

Captain William Sparks Dies Following Long Illness

Captain William Sparks, president of the Sparks-Withington Co., Jackson, Mich., died at Foote Hospital on May 13, following a long illness. Mr. Sparks, a distinguished pioneer in radio manufacturing, came to Jackson with his parents from his birthplace in Burrington, Devonshire, England, as a lad of six in 1879. He earned his captaincy in the Michigan National Guard several decades ago. He organized the hand grenade manufacturers in the first World War and also founded the Withington Zouaves, a fast-stepping drill team which later became the American Legion Zouaves. This outfit was a feature of the American Legion Convention in Paris.

For more than a decade a powerful figure in the Radio Manufacturers Association, Captain Sparks was a director of that organization from 1927 to 1937 and was vice-president in 1929-30. In NRA days, he was chairman of the RMA code committee.

When Captain Sparks retired from active business several months ago, his sons, Harry G. and Clifford M., took over at the Sparks-Withington plant.

Funeral services were held on May 15 at St. Paul's Episcopal Church.

Motorola Radio Earns White Star on Its Army-Navy "E" Flag

One of the first Chicago firms to be permitted to display a white star on its Army-Navy "E" flag, for continued excellence in production, is the Galvin Mfg. Corp., 4545 Augusta boulevard. The flag was originally awarded to the Galvin organization on September 8, 1942.

Ever since the ceremony at which Lt. Col. Paul F. Hannah presented the "E" flag and emblems to President P. V. Galvin, representing the Motorola management, and P. J. Maloney, representing the Galvin employees, the Motorola factory has kept abreast of and ahead of its production quota. It is this record which led to the recent star award.

On being notified of the award, President Galvin said, "We are proud of this new recognition of our war production record. This star will be an additional reminder to everyone in our organization of the necessity of maintaining and even improving it if possible."

Philco Common to Pay 20 Cent Dividend June 12

Philco Corp., Philadelphia, Pa., declared a dividend of 20 cents per share of common stock on May 10, payable June 12, to stockholders of record May 28, 1943. The previous payment was 15 cents per share on March 12.

Your Editor Will—

WELCOME

—news items, letters, suggestions and comments from you for publication in these columns. This is your magazine. Do your share to make it live, interesting, informative and useful—

TODAY!

Radio Prices Skyrocketing In England

CESSATION of home radio receiving set production in England has created a shortage among consumers that in turn has sent the price of used sets skyrocketing, according to a report appearing recently in *The Daily Sketch*, published in London. The story, as it appeared in that publication, is as follows:

"Second-hand radio sets have been 'cornered.' There is such a big demand for them that 15-year-old sets are fetching as much as they cost when new.

"And so far there has been no sign of the 100,000 new sets which, according to a statement last month in the House of Commons by Mr. Dalton, president of the Board of Trade, are being manufactured.

"Delivery is held up because of the increasing needs of the services.

"It is estimated that about 500,000 owners are now unable to listen because their radios are out of action and they are unable to have them repaired because of the shortage of parts.

"During a tour of London radio dealers yesterday I discovered many examples of the way second-hand prices have rocketed.

"At one shop I was asked 12 pounds, 12 shillings, for a set which cost that amount in 1933. In 1939, just before the outbreak of war, I could have had it for three pounds, three shillings.

"While I was talking to the manager of another shop a customer inspected a radiogram which cost 40 guineas when new in 1938. He offered 50 guineas for it on the spot, and was prepared to pay up to 60 guineas.

"Prices like these prevail at the reputable dealers. They are higher still among less scrupulous dealers.

"The manager of a leading London dealer said to me: 'second-hand sets of recent manufacture and in working order are almost unobtainable.

" 'So are replacement and spare parts of all kinds, especially valves (tubes), and it is impossible to meet the public demand. The shortages of materials and labor, plus the insistent demand, make the prices now being asked perfectly legitimate.' "

The British Ministry of Information in New York City stated that the ceiling prices of second-hand sets were fixed at the list price of the sets when new, but because of difficulties in the application and administration of the ceiling originally established for the new sets those prices were forced out of line before the supply of new sets was completely exhausted. Consequently the prices of second-hand sets are proportionately high. It is anticipated that legislation to correct the present situation will be enacted shortly.

"One Year of Production For Victory"

While production goes on apace, the Philco Research Laboratories are at work on vital and secret electronic development projects to aid the war effort, the Philco Corp., Philadelphia, Pa., recently reported to its dealers in a summary of its war activities entitled "One Year of Production for Victory". The report tells in detail how the complete facilities of Philco's laboratories, production lines, machinery, engineering and factory personnel, and the company's far-flung service organization have been turned over 100 per cent to war production.

"In addition to the research which the laboratories have done for the material now in production in our factories, Philco engineers are at work night and day on urgent and vital projects in the realm of pure research and development," the report to dealers states. "Their background of knowledge, experience and achievement, both in the theory and practical application of radio, television and ultra-shortwave principles, makes them a prime asset of the nation in electronic research.

"Today, Philco is building for the Army and Navy airborne electronic and communications equipment, radios for planes, tanks and ships, frequency meters, quartz crystals, artillery fuzes, shot and shell, and power storage batteries."

Philco was well equipped for the battle of production in the field of electronics, the report points out, and states that for 12 consecutive years it led the radio industry in sales and production.

To help meet the need for radio technicians, the Signal Corps asked Philco, with its years of experience in training service men, to take on the job of preparing men to install and service the vital airborne electronic equipment in America's war planes, the report states. Today the Philco Training School, has an enrollment of 2,000 students and 10,000 graduates a year. Its 150 instructors are recruited from the Philco factory, distributor and dealer personnel.

"Just as Philco research and manufacturing facilities have been converted to the service of the armed fores, so Philco advertising has been completely converted to the service of the nation's war morale," the report says. The Philco cartoon campaign has been officially selected as one of the best in the country, and the Philco radio program — "Our Secret Weapon" — was given the Annual Advertising Awards silver medal "for the advancement of radio advertising as a social force."

"One Year of Production for Victory" which is being sent to all Philco dealers, was the joint work of James H. Carmine, vice-president in charge of merchandising, and Sayre M. Ramsdell Associates, Inc., the Philco advertising agency.

Philco Quarterly Dividend Well Ahead of '42

Net income of Philco Corp., Philadelphia, Pa., in the first quarter of 1943, after estimated Federal and State income excess profits taxes, amounted to $770,890, or 56 cents per share of common stock, of which $178,000, or 13 cents per share is the post-war refund provided for by the revenue act of 1942, John Ballantyne, president, reported on May 4.

In the corresponding quarter last year, the company had adjusted net income of $595,035, or 43 cents per share of common stock, including a post-war refund of $100,000 or 7 cents per share.

"Sales of Philco Corp., consisting principally of radar equipment, in the first quarter of 1943 were substantially ahead for the same period last year," Mr. Ballantyne said. "Present indications are that production and sales will increase further in coming months as engineering work is completed on additional new equipment for the Army and Navy."

In recognition of its continued war production record, the Chicago division of Philco was awarded the Army-Navy "E" with a white star, on April 28.

Add "Collections"

"If you don't pay me what you owe me, I'll tell your other creditors that you did," a creditor wrote. Which reminds us of the deadbeat who once confided to us in his cups that some day he was going to get mad and tell all of his creditors that he was getting plenty tired of getting letters from them that all started with "Unless"!

Who Will Pay for Television Programs, Industry's Puzzle

HOW will television programs be paid for? The answer to that question is now being prepared even though civilian television is necessarily a war casualty. The Allen B. Du Mont Laboratories, Inc., operating television station W2XWV at 515 Madison avenue in New York City, are inviting broadcasters, advertisers and advertising agencies to take part in studying and experimenting with telecasting technique without cost for studio and station facilities so that the sponsorship angle can round out the engineering and programing angles already worked out to a high degree. With the signing of the peace, therefore, telecasting will be all set to go on a truly commercialy basis.

For months past Station W2XWV has been on the air each Sunday evening with a scheduled program of professional entertainment. The program is strictly of the sustaining category. The talent is paid for. As a consequence, an audience of several thousands, gathered about the several thousand television receivers in the metropolitan area, are following these Du Mont television presentations. As substantiating proof of the size and interest of the audience are the returns from one of the program features, the "What Do You Know?" quiz, with its cash awards for correct answers.

Now, in addition to the Sunday evening program which is serving to formulate the studio technique and to train a telecast personnel under the direction of Program Director Will Baltin, the Du Mont organization aims to study and formulate a satisfactory advertising or sponsorship practice in collaboration with those seeking to be identified with the business end of future television. These latter activities are headed by Sam Cuff, well-known telecaster, whose "Face of the War" and other program presentations are already known to thousands in television, while his news commentaries are followed by hundreds of thousands of broadcast network listeners.

To broadcasters, Du Mont extends an invitation to come to W2XWV and survey at first hand the operations of a telecasting station. To quote Allen B. Du Mont:

"Television is far simpler, much less expensive, and nearer the commercial stage than most people realize. We believe that broadcasters, advertisers and agencies will be delightfully surprised with what we can show them. Our station has been operating with relatively modest studio facilities and yet we have been putting out a wide variety of entertainment.

"Our marked economies in studio and transmitting equipment can be directly traced to the use of Du Mont units and so-called chains. Instead of special equipment built specifically to given telecast needs, our equipment comprises standard units coupled together into chains. These chains are made up of the required units, meeting any given studio and station requirements. Since the units are standardized, they can be fabricated most economically. Also, the system is flexible, so that units can be added or substituted as telecasting activities develop, while reducing obsolescence of equipment to an absolute minimum.

"We are working with studio cameras for direct or 'live' pickups. We are making good use of 35 and 16 mm. films for part of our programs. We have evolved equipment for remote pickups either by special coaxial cable or by ultra-high-frequency radio relay. For several years past we have been concentrating on the engineering end until we now have a thoroughly commercial setup. For the past year we have been evolving the program end until we now have the basis for satisfactory telecast entertainment. The remaining factor in rounding out the commercialized television of the postwar era is the advertising or sponsorship angle, which end is now about to be studied and formulated in collaboration with broadcasters, advertisers and agencies," concludes Mr. Du Mant.

Invitations have already been sent to broadcasters, selected advertisers and advertising agencies to participate in the present experimentation. Several advertisers and agencies have been prompt to accept the invitation and are going to put on sponsored programs on an experimental basis. The studio facilities and station time are being made available at no cost to advertiser or agency.

Meanwhile, broadcasters and others interested in future television possibilities are visiting the Du Mont station and surveying the existing situation at first hand.

"Television will go commercial overnight," adds Mr. Du Mont. "The engineering end is ready and even rarin' to go. Programing is already reduced to a definite formula, with trained studio personnel and a host of entertainers with actual telecasting experience. And now, with the proper formulation of sponsorship through actual practice at no cost to advertisers and agencies, we can set television definitely for immediate commercialization following the end of the war."

Essence of Electronics

Continued from Page 20

The second reason why electron tubes are unique is their ability to control electrical currents smoothly. Most devices employed to vary an electric current do their work step-by-step, but in electron tubes the charge carried by each electron is so exceedingly small that the rhythmic increases and decreases of current to reproduce music or the human voice are easily, accurately, and smoothly accomplished.

The third reason is the ability of electron tubes to control the movement and velocity of the speeding electrons by merely changing the electrial potential of one of the electrodes inside the tube. This requires only a very small amount of electrical power. This is just another way of expressing the well-known fact that electron tubes are amplifiers and can reproduce, at a greatly increased power level, the impulses fed to them.

The fourth reason is the ability of electron tubes to pass current only in one direction or, as it is often expressed, to act as a rectifier.

If one considers electron tubes from the light of these four unique characteristics, it is readily seen why they are so absolutely essential to modern radio. It is because these tubes possess and can utilize simultaneously some or all of these properties. In turn, modern radio needs just these properties. It is easy to understand this when we remember that radio is inherently a science of very high electrical frequencies; that it requires complicated wave forms, and that at the receiver one must pick up the very minute amount of power received from space by a few inches of wire and increase it to a point where the reproduced sound is at a relatively high power level or, as we say, has been greatly amplified.

Electron tubes are now available in an almost bewildering array of kinds and sizes and are now in use for many purposes in addition to radio. However, in all their applications, they represent that vital link in the electrical circuit where the current flowing in the circuit is no longer in a wire, but rather of such a nature that it can be controlled in unique and useful ways "free from the bondage of wires." Such is the essence of electronics.

PHONOGRAPHS and RECORDS

Columbia Advances Paul E. Southard

PAUL E. SOUTHARD, under whose management sales of the Columbia Recording Corp., Bridgeport, Conn., have increased 12 times since 1939, was elected vice-president in charge of sales, Columbia reported on May 8.

OPA Amends Record Tax Regulations

TAX calculations on sales of new phonograph records that result in a fraction of a cent should be reduced to the nearest lower cent if less than one-half cent, and must be increased to the nearest higher cent if the fraction is one-half cent or more, the Office of Price Administration stated on April 28.

For a sale by a retailer, the calculation should be based on one record as the unit of sale regardless of the quantity included in the sale. For a sale by a manufacturer or wholesaler, the calculation should be based upon the quantity included in the sale.

These provisions were incorporated into Maximum Price Regulation No. 263 (New Phonograph Records and Record Scrap) by Amendment No. 3, effective May 4, 1943.

Previously the regulation made no provision for this problem.

The amendment is as follows:

(Document No. 14763) Part 1932—Plastics—MPR 263,[1] Amendment 3—New Phonograph Records and Record Scrap.

A statement of the considerations involved in the issuance of this amendment, issued simultaneously herewith, has been filed with the Division of the Federal Register.*

Section 1392.55 (c) is added, as set forth below:

(c) *Fractions of cents.* Tax calculations resulting in a fraction of a cent shall be reduced to the nearest lower cent if the fraction is less than one-half cent and shall be increased to the nearest higher cent if the fraction is one-half cent or more. For a sale by a retailer, the calculation shall be based upon one record as the unit of sale, regardless of the quantity included in the sale. For a sale by a manufacturer or wholesaler, the calculation shall be based upon the quantity included in the sale.

This amendment shall become effective May 4, 1943.

(Pub. Laws 421 and 729, 77th Cong.; E.O. 9250, 7 F.R. 7871)

Issued this 28th day of April 1943.

PRENTISS M. BROWN,
Administrator.

Steinweiss Succeeds Dolan As Columbia Adv. Mgr.

Alex Steinweiss succeeded Patrick Dolan as advertising Manager of the Columbia Recording Corp., Bridgeport, Conn., on April 20. Mr. Dolan, who managed Columbia's advertising and sales promotion department for the past three years, is on a special war assignment for the United States Government.

Mr. Steinweiss, who has made a brilliant record as Columbia's art director, will continue in this capacity in addition to his new duties. His designs for the covers of Columbia's record albums are outstanding examples of commercial art, and have been on exhibit several times, in addition to other work he has done.

His work has been on exhibit at the A-D Gallery in New York; the Lakeside Galleries, Chicago; Massachusetts School of Art, Boston; Architectural League, New York; and the North Texas State Teachers College, Denton, Texas.

Mr. Steinweiss has won awards in several contests, among them the War Bond Poster Contest sponsored by the Museum of Modern Art; the Hemisphere Defense Poster Contest sponsored by that same museum; and, in 1942, the prize in a closed competition for the design of a cover for a camouflage periodical to which the United States Army invited nine of America's leading designers.

He is a graduate of the Parsons School of Design, and came to the Columbia Recording Corp., in 1940.

Excise Tax Collections For March, 1943, Down

Taxes collected during March 1943 on sales of radio sets, components, phonographs, etc., by the Bureau of Internal Revenue totaled $239,546.27 as compared to $2,046,024.66 for the same month in 1942. Taxes collected on phonograph records for the same periods were $134,888.02 and $135,226.78, respectively. On musical instruments the figures were $75,808.79 as compared to $233,381.25.

Army to Have New Magnetic Recorder

At a documentary radio symposium sponsored by Ohio State University, Columbus, Ohio, on May 1, Col. E. M. Kirby, chief of the radio section of the War Department, demonstrated a new magnetic wire recorder with which he said it would soon be possible to report frontline battle action. The equipment embodied a combination recorder and playback machine weighing 44 pounds. It is capable of recording 66 minutes of sound.

CLARK & JONES ADS GIVE OLD STORY NEW TWIST

Clark & Jones, who do a large business in phonograph records in Knoxville, Tenn., departed from the traditional paths of advertising with remarkable success when George W. Mankel of the Knoxville News-Sentinel of that city conceived the unique copy approach evidenced in the four advertisements shown above. Mr. Mankel's series of Clark & Jones ads attracted nation-wide attention.

BEST-SELLING PHONOGRAPH RECORDS FIRST WEEK OF MAY, 1943

This chart is based upon the reports from the stores shown in the principal cities. IF YOU FIND THIS INFORMATION USEFUL, you can help the good work along by mailing to us, on June 10, the names of the ten records that sold best in YOUR store the WEEK ENDING JUNE 5, for publication in this chart in our JUNE issue. The numerals indicate the relative standing of the records in each reporting store.

		NEW YORK—Center Music Store	NEW YORK—Gramaphone Shop	NEW YORK—Macy's	NEW YORK—New York Band Inst. Co.	CLEVELAND—Lyon & Healy, Inc.	DALLAS—Whittle Music Co.	DETROIT—Grinnell Bros.	LOS ANGELES—Barker Bros.	SAN FRANCISCO—Sherman Clay & Co.
POPULAR										
Decca	—Don't Get Around Much Anymore—*Glen Gray*	1		3						2
Decca	—Don't Get Around Much Anymore—*Ink Spots*					1	1	6		
Brunswick	—As Time Goes By—*Jack Renard*			2	2		8	2		
Victor	—As Time Goes By—*Rudy Vallee*					4			6	1
Columbia	—Brazil—*Xavier Cougat*	3		5	1		5	5	5	8
Victor	—That Old Black Magic—*Glen Miller*	4		4			3	4	10	5
Columbia	—Let's Get Lost—*Kay Kyser*	5								
Victor	—Let's Get Lost—*Vaughn Monroe*			7				10		
Columbia	—You'd Be So Nice to Come Home To—*Dick Jurgens*	6								
Columbia	—You'd Be So Nice to Come Home To—*Harry James*				5					
Victor	—You'd Be So Nice to Come Home To—*Dinah Shore*									6
Decca	—For Me and My Gal—*Judy Garland*	7		9			7	7		10
Columbia	—Taking a Chance on Love—*Benny Goodman*	8					2	8		9
Columbia	—I've Heard That Song Before—*Harry James*	9		8		6	4	3	2	3
Victor	—Murder, He Says—*Dinah Shore*	10					6		4	4
Hit Record	—It Can't Be Wrong—*Allen Miller*			1				1		
Columbia	—Velvet Moon—*Harry James*			6	4		9		3	7
Columbia	—Why Don't You Do Right—*Benny Goodman*			10		5		9	1	
Victor	—Boogie Woogie—*Tommy Dorsey*					2				
Columbia	—One O'Clock Jump—*Harry James*					3				
Bluebird	—Rose Ann of Charing Cross—*Four Vagabonds*					7				
Columbia	—Prince Charming—*Harry James*					8				
Columbia	—Fuddy Duddy Watchmaker—*Kay Kyser*					9				
Decca	—Please Think of Me—*Russ Morgan*					10				
Voc.	—Honey Song—*Louise Massey*						10			
Victor	—It Started All Over Again—*Tommy Dorsey*								7	
Victor	—Moonlight Mood—*Glen Miller*								8	
Victor	—Why Don't You Fall in Love with Me?—*Hal McIntyre*								9	
STANDARD										
Columbia	—Shostakovich—*Piano Concerto*		1							
Victor	—Russian Easter Music—*Stowkowski*				6					
Columbia	—Rapsodie Espagnole		2							
Victor	—Schubert Trio—*Heifetz, Feuermann, Rubenstein*				7					
Columbia	—Walton—*Scapino Overture*		3							
Keynote	—Red Army Chorus				8					
Victor	—Beethoven—*Emperor Concerto*		4							
Victor	—Beethoven—*Fifth Concerto—Schnabel*				3					
Victor	—Debussy—*Violin Sonata*		5							
Victor	—Songs of the Service				9					
Victor	—Oratorio Arias by Richard Crooks		6							
Columbia	—Morton Gould Concert				10					
Victor	—Weinberger—*Czech Rhapsody*		7							
Decca	—Ethel Waters Souvenir Album		8							
Brunswick	—Pine Top Smith—*Boogie Woogie Piano*		9							
Brunswick	—Red Nichols Classics—Vol. 1		10							

Recorded "Talking Books" Teaching the Blind

The American Foundation for the Blind, 15 West Sixteenth street, New York City disclosed recently that thanks to its "talking book" for the blind, sightless children throughout the country are now able to study American history from phonograph records. The Foundation said it had recorded its first "talking book" in American history entitled "The Rise of Our Free Nation," by Edna McGuire and Thomas B. Portwood.

In making the announcement Robert B. Irwin, sightless executive director of the Foundation, said the decision to record the history text had been made on the basis of careful research. Mr. Irwin said experiments with blind students show that they can comprehend narrative material as successfully by listening to the "talking book" as by reading it in Braille.

The approximately 700 pages of the printed edition will be recorded on 55 double-faced records.

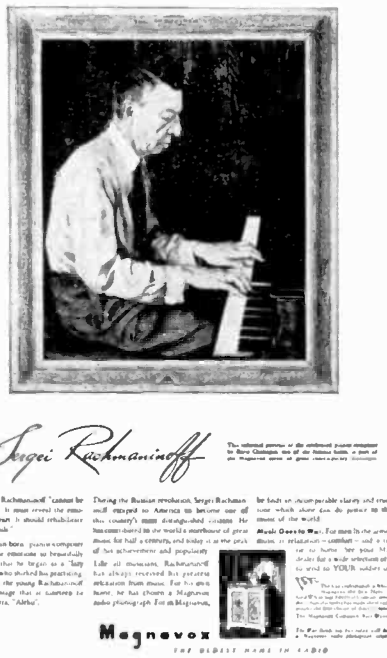
In peacetime, Waters Conley is America's oldest and largest manufacturer of portable phonographs, maker of the famous Phonola line. Today, our engineers and craftsmen are building equipment that links our armed forces—communications devices, code signal converters, and telephonic systems for tanks.

Waters Conley COMPANY

Tomorrow, when a whole new world of electronic wonders stands revealed . . . Waters Conley will be ready to serve home and industry with many new devices—converting knowledge and experience gained in the stress of war to the enrichment of life in peace.

Phonola

WATERS CONLEY COMPANY
ROCHESTER, MINNESOTA
17 E. 42nd St., New York • 224 S. Michigan Ave., Chicago



Magnavox Runs Strong Campaign

A SERIES of institutional consumer advertisements in Time, National Geographic, House & Garden, House Beautiful, Town & Country and the Atlantic Monthly was recently inaugurated by the Magnavox Co., Ft. Wayne, Ind. The advertisements stress the significance of music in civilian life as well as among the armed forces. The copy in each gives a brief biography of an outstanding contemporary musician and follows with a message about the inspirational value of good music. Readers are informed that the Magnavox dealer offers a wide selection from which to choose. See reproductions at left.

Musicians featured in the advertisements include Sir Thomas Beecham, Fritz Kreisler, Rachmaninoff, Horowitz, Ormandy and Toscanini. The portraits of these performers used to illustrate the advertisements were painted by Boris Chaliapin.

The theme of the campaign was conceived by Frank Freimann, executive vice-president of Magnavox, who reasoned that a campaign built around good music would have great lasting value to his firm's dealers as well as to the firm itself.

In a brochure sent to dealers, Mr. Freimann made the following comment:

"Designed to promote widespread interest in good music, each advertisement in the new Magnavox advertising campaign is dedicated to some great contemporary musician. You will note that their high character creates the same impression of refinement and good taste which we have attempted to incorporate in the product itself. Beyond that, however, we tell a human interest story about each famous man portrayed and it is our desire and hope that the copy will be so interesting and informative as to invite reading and build up community of interest.

"This campaign has been created to protect your investment as well as our own in the Magnavox name and the Magnavox merchandise. We believe it will create good-will, prestige and expanded interest in Magnavox radio-phonographs that will be an important factor in our postwar merchandising. We hope it meets with your approval and complete satisfaction and we solicit your suggestions and criticisms."

Execution of the campaign is under the direction of Maxon, Inc., advertising agency of Detroit, Mich., of which L. J. Sholty of Maxon's Chicago office is Magnavox account executive.

Successful Self Service Principles Being Sought

Self-service record departments have produced such encouraging results that a literal "revolution" in merchandising methods is now well under way. However, self-service involves much more than a mere slogan, or a simple placing of records where customers can see and handle them.

The RCA-Victor organization has given extensive study to this subject and has arrived at the following conclusions, an informative article in the April 30 issue of the Victor Record News discloses. The article says in part:

"Before self-service can be attempted on a nation-wide scale there are many problems to be solved . . . any record department considering self-service must work out the following angles: (1) The most effective display fixtures for albums. (2) The most effective display fixtures for single records. (3) The most practical stock-control system. (4) The most strategic labeling of prices. (5) The perfect method of displaying merchandise in the most effective categories . . . considering maximum convenience and maximum sale. (6) The most effective method of training personnel.

The six factors enumerated above were apparently discovered in the stores where self-service was tried during the last Christmas holidays season, notably at Wieboldt's in Chicago. To prove them further and to solve them, if possible, a special study is being undertaken in the record department at Bloomingdale's in New York City.

Record Buyers Must Take What Dealers Can Get

Wilfred Tremblay of the record department of M. Steinert & Sons, Boston, Mass., was recently asked by this publication to send in his list of ten best-selling records for the first week of the month to be published in the tabulation of Best Selling Records which was launched with the March issue and repeated in April and in this issue. In response to that request, Mr. Tremblay wrote in part:

"Were we in any sort of position, even the most approximate, to make a list of the ten best-selling records in a given week, we should certainly be glad to co-operate with you. However, under existing conditions, we find it absolutely impossible to keep any record whatever of the ten best-selling records. So many records are asked for that we cannot supply these days that we feel that a list of the ten records of which we actually sold the greatest amount would not represent the true state of affairs at all. If we may make a suggestion, we feel that the ten records asked for most often would be a far truer picture of affairs today, and if you would like us to make a tabulation on this basis, records requested as well as records actually sold, we shall be glad to co-operate with you."

Syracuse Army Air Base Given Fine Music Library

The idea of creating master record libraries for servicemen has found concrete form through the efforts of Melville Clark, president of the Clark Music Co., Syracuse, N. Y. Mr. Clark is chairman of the Records-for-Servicemen Committee in that vicinity.

An appeal for classical records for use at Army and Navy camps was issued by Mr. Clark early last fall, through spot radio announcements. These announcements and word-of-mouth promotion with record customers in the Clark store, at holiday time particularly, were the main sources of collecting 17 albums containing a variety of the world's great recorded music.

On April 24, Mr. Clark presented to Lt. C. H. Stowe, chaplain at the Syracuse Army Air Base, the library of records donated by patriotic and public-spirited Central New Yorkers, for use by the men at that camp, where a Capehart automatic radio-phonograph has also been provided.

Sponsors of the movement, which is being conducted on a nation-wide scale, are Dr. Walter Damrosch, Howard Hanson, Deems Taylor, Serge Koussevitzy and others.

In Syracuse Mr. Clark is promoting the idea still further, with a view to securing libraries for all Army and Navy bases in that vicinity.

Melville Clark, left, presents Lt. C. H. Stowe, chaplain of Syracuse Army Air Base, with the library of fine records contributed by townspeople for the use of the men in the Service at the base.

Brooklyn School Kids Turn In Scrap Records

"Scrap Record Week" started on April 26 in Brooklyn, N. Y., by proclamation of Borough President John Cashmore as part of a city-wide drive to collect 2,000,000 obsolete phonograph records.

Proceeds of their sale to materialshy record manufacturers went to the service men's lounge operated by teacher volunteers at 191 Joralemon street, Brooklyn.

With approval of Dr. John E. Wade, Superintendent of Schools, the sponsoring Teachers' Voluntary Service Organization urged pupils to bring to school two records each.

WPB Search Discloses Idle Shellac Stores

Enough shellac to make several million phonograph records was found in warehouses during the "treasure hunt" recently completed by the regional redistribution division of the WPB—1,130,504 pounds of it, to be exact. The shellac, along with more than 100 other critical materials, was brought to light by merely examining warehouse ledgers, rather than by search and physical inventory. Items that had been held by manufacturers longer than four months or by brokers longer than six months were checked in this way.

Capitol Records Signs Eddie Miller's Band

Glenn Wallichs and Johnny Mercer, executives of Capitol Records, Inc., Hollywood, Calif., recently signed Eddie Miller's orchestra to a recording contract.

LAST YEAR'S BONDS GOT US STARTED

THIS YEAR'S BONDS

ARE TO WIN!

★ Last year saw nearly 30,000,000 workers voluntarily buying War Bonds through some 175,000 Pay-Roll Savings Plans. And buying these War Bonds at an average rate of practically 10% of their gross pay!

This year we've got to top *all* these figures—and top them handsomely! For the swiftly accelerated purchase of War Bonds is one of the greatest services we can render to our country . . . and to our own sons . . . and our neighbors' sons. Through the mounting purchase of War Bonds we forge a more potent weapon of victory, and build stronger bulwarks for the preservation of the American way of life.

"But there's a Pay-Roll Savings Plan already running in my plant."

Sure, there is—but how long is it since *you've* done anything about it? These plans won't run without winding, any more than your watch! Check up on it today. If it doesn't show substantially more than 10% of your plant's pay-roll going into War Bonds, it needs winding!

And you're the man to wind it! Organize a vigorous drive. In just 6 days, a large airplane manufacturer increased his plant's showing from 35% of employees and 2½% of pay-roll, to 98% of employees and 12% of pay-roll. A large West Coast shipyard keeps participation jacked up to 14% of pay-roll! You can do as well, or better.

By so doing, you help your nation, you help your workers, and you also help yourself. In plant after plant, the successful working out of a Pay-Roll Savings Plan has given labor and management a common interest and a common goal. Company spirit soars. Minor misunderstandings and disputes head downward, and production swings up.

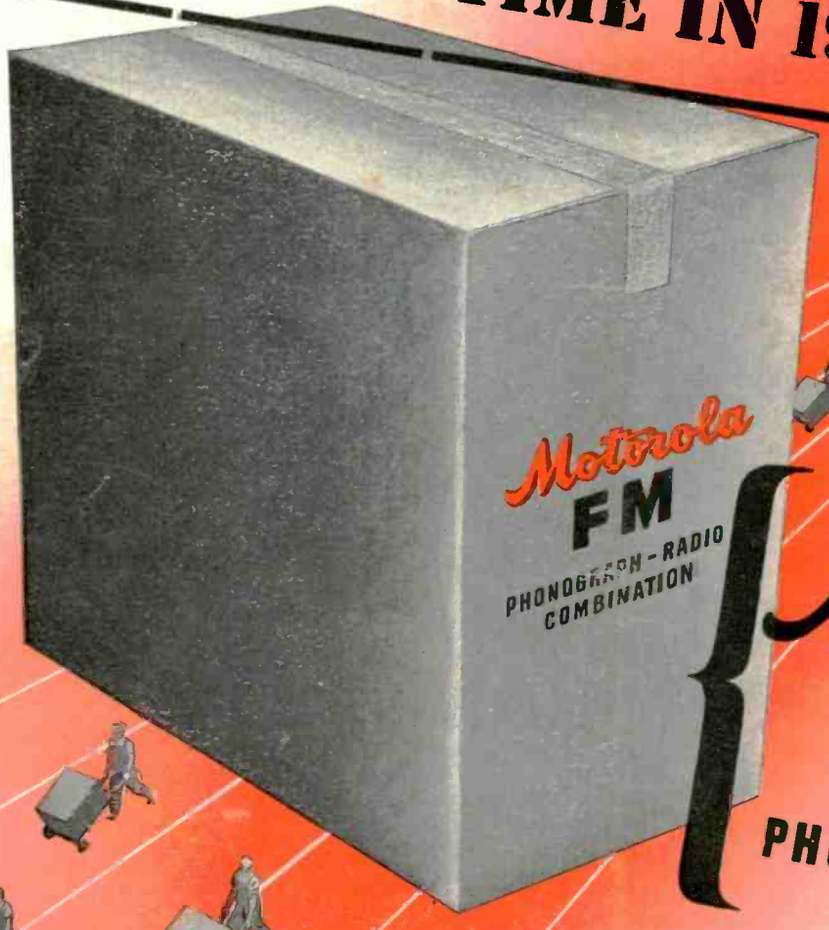
War Bonds will help us win the war, and help close the inflationary gap. And they won't stop working when victory comes! On the contrary—they will furnish a reservoir of purchasing power to help American business re-establish itself in the markets of peace. *Remember, the bond charts of today are the sales curves of tomorrow!*

You've done your bit  Now do your best!

THIS SPACE IS A CONTRIBUTION TO AMERICA'S ALL-OUT WAR EFFORT BY

Radio-Television Journal
and Talking Machine World

SCHEDULED FOR DELIVERY SOME TIME IN 194?



A GREAT NEW Motorola FM PHONOGRAPH-RADIO COMBINATION

A new and distinctly *better* type of home radio combination was about ready to make its bow to the American public when war drafted the complete Motorola facilities. Had this *static and noise-free* F-M receiver been seen and heard by the general public, it would have aroused unqualified enthusiasm . . . whetted an appetite that will have to be satisfied when Peace once again releases electronic talents and skills war-sharpened for radio's greatest progress and achievement. In the interests of national defense, Motorola is now delivering the finest in F-M emergency broadcast and receiving equipment. You may look for notable scientific developments in F-M radios from Motorola engineers. We can't say *when* . . . but we *can* say that no one will be ready sooner.

Expect big things from Motorola!

THE ARMY-NAVY "E"—Awarded for excellence in the production of Communications Equipment for America's Armed Forces

Motorola Radio Communications Systems
Designed and Engineered to Fit Special Needs

GALVIN MFG. CORPORATION • CHICAGO