

GOOD NEWS

ABOUT RCA RADIOTRONS



VOLUME I

FEBRUARY

NUMBER 12

A Set Name Plate—

*to Help You "Sew-up" the Tube Renewal
Business in Your Territory*



PLACED in every radio set that you sell or service, this polished brass Set Name Plate helps you to "sew-up" the renewal business in your territory. It serves effectively as an ever-present reminder to the set owner of the date on which his tubes should next be renewed, that RCA Radiotrons give best results, and that he should call your store when in need of tubes or service. Of convenient size—4" by 2"—and easy to install, the price of the Set Name Plate is only \$3.00 per hundred, with your imprint. Order from Harrison, N. J.

THE SET NAME PLATE IS EASY TO USE!



Wet the heavily gummed back, apply when sticky, and fasten with four small brads provided



Write date on which tubes should next be renewed on celluloid strip. Easily erased

RCA RADIOTRON COMPANY, INC. * * * HARRISON, N. J.

RCA Radiotrons

THE HEART OF YOUR RADIO

GOOD NEWS

About RCA Radiotrons

C O N T E N T S F O R F E B R U A R Y 1 9 3 1

VOLUME 1

25 Cents a Copy \$2.00 a Year

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THE SECOND STEP



BY this time, you have probably seen the tremendous advantages of such an enrollment and have joined the thousands of RCA Radiotron dealers who have become HEADLINER dealers. What is even more important, you have—by now—been able to incorporate the principles and material of the HEADLINER PLAN in the development of your radio tube business. As a result, you have not only sold more RCA Radiotrons, but have moved your other merchandise as well.

An order for an additional 50 RCA Radiotrons, placed with the same Distributor who took your original order, will entitle you to even greater sales assistance and increased merchandising co-operation—will entitle you to the privileges of a HEADLINER STAR DEALER. When you place this order, be certain to sign another Enrollment Form and mark in parentheses after your firm name—"HEADLINER Dealer." As a HEADLINER dealer, you have reached the half-way mark. Now is the time for you to take the second step.

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A magazine of radio merchandising counsel to help distributors and dealers of RCA Radiotrons make more profit.
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Lt. F. G. Eastman, U. S. Coast Guard, recently completed three years of active service on board the destroyers, Conyngham and Burrows

RADIO — and

Radio Represents the Most Important Single Factor in the Successful Operation of the Coast Guard

By Lieutenant F. G. Eastman,
United States Coast Guard Service

An Interview with H. G. Ommerle

THE United States Coast Guard—a name that spells mystery, adventure, and romance! To most people, if I am not mistaken, it is symbolical of all that is perilous, of all that is daring. They imagine the continual chase of bootleggers and smugglers, bloody hand-to-hand battles with these modern pirates of the sea, and their final subjection and capture by the United States Coast Guard. To the average individual, the existence of the Coast Guard depends entirely upon its successful suppression of bootleggers and its effective capture of unscrupulous smugglers. That is where many people are in error, where they have been misled by sensational newspaper stories and by magazine "thrillers." They have seen—or read about—only a small part of the entire picture, and that part has probably been so exaggerated and "padded" by an aspiring copy-writer that it is entirely beyond recognition.

Mystery, adventure, and romance in abundance, it is true, are to be found in the Coast Guard, but we do not have to depend upon bootleggers and smugglers for our excitement and thrills. The enforcement of the Volstead Act and revenue laws, in reality, occupies but a small part of our time. It is but one of many important duties of the Coast Guard, in

spite of the over-emphasis which has been placed on it in the public mind. The suppression of bootlegging and smuggling is, to be sure, an important part of our duties—but it is only a part, and not an entirety.

Perhaps I can more clearly demonstrate that rum-runners occupy only a portion of the Coast Guard's time if I



Mr. C. V. Hartman, Chief Radioman of the United States Coast Guard, picks up radio message

list a few of its major activities. The rescue and assisting of vessels in distress—to me by far the most important single function of the Coast Guard; the removal, salvaging, and destruction of all derelicts and the resulting freedom of navigation from danger; the ice patrol, which includes the locating of icebergs, the determination of their speed and direction of drift, and the warning to all vessels cruising in nearby waters; the enforce-

ment of navigation laws; life saving—and here it is interesting to note that during the last fiscal year over 6,000 persons were saved from drowning or rescued from peril by the Coast Guard; assistance to fisheries, etc.; and, finally, the enforcement of the revenue laws.

Embittered and uninformed people have sometimes referred to us as the "Dry Navy." We resent that term because we feel that putting Rum Row out of business is merely an additional duty. It is not our sole purpose, nor is it our most important. In the lexicon of the Coast Guard there are no rum-runners. There are smugglers, and there is no such thing as a degree of guilt in smuggling. It makes no difference to us whether they are smuggling dope, jewels, or liquor—the article is contraband, and it is our duty to suppress it.

Radio An Absolute Essential

In all of these Coast Guard functions radio plays a vital and essential part. To me, radio represents the most important single factor in the effective operation of the Coast Guard. In radio we find the

one essential—rapid communication—to the organization of an efficient method of patrol and a rigid enforcement of governmental laws and regulations. Without it, we could do comparatively little.

It goes without saying that all Coast Guard boats—even the small 75-foot patrols—are equipped with a system of radio communication. And, on this system of lightning-like sending and reception of messages they depend for

the Coast Guard

their instructions, their directions, and the performance of their duty. Without the use of radio they would, therefore, be severely handicapped.



U. S. Coast Guard Cutter Mojave, runs into some dirty weather U. S. U.

In the rescue of vessels in distress, radio plays its major role—for it is here that the use of radio saves the greatest amount of time and makes possible feats otherwise impossible. Surprisingly often, the difference of a few minutes means the difference between life and death for all on board a doomed vessel. Sometimes, of course, a crippled liner may remain afloat for hours and even days, but—often—she may dive to the bottom shortly after receiving her injury. When the latter is the case, radio passes from the state of being a convenient form of communication and becomes a vital necessity.

S. O. S.

The ship's "Sparks" flashes off a short message; it is immediately picked up by shore stations, relayed to the Coast Guard Communication Center, and a Coast Guard Cutter is off to the rescue—within a few minutes of the accident. Countless lives have thus been saved that might otherwise have been lost. Unable to send a frantic S.O.S., a wounded vessel could do little but wait and utter fervent prayers that its rocket distress signals would be observed by some boat in those waters—a very improbable event.

Radio is as fundamental, as imperative to the successful performance of the other activities of the Coast Guard as it is to the rescuing and assisting of

ships in distress. Deprived of radio communication, compass stations on the shore would be unable to warn effectively ships that were heading into shore, sandbars, or reefs.

They could not give them their bearings

and directions. The life of smugglers would be a relatively safe one, for—were it not for radio—they would have a great deal less to fear from the Coast Guard than they do now. The basis on which the Coast Guard is forced to work in all of its activities is one that depends on immediate action and speedy results. Radio communication bridges the gap between effective and haphazard operation.

Each year two Coast Guard Cutters are assigned to ice patrol. Turn and turn about, they patrol the northern

ocean for the purpose of locating bergs and fields in the vicinity of the trans-Atlantic lanes, keeping in touch with dangerous ice as it moves south and warning vessels of its position.

At the present time plans are being laid for a vigil and warning service during 1931 that will last from approximately February 15 until July. Only through the agency of radio has this patrol been made possible, for, having located ice, the cutter on patrol transmits four daily broadcasts, averaging more than 4000 words each, giving ice information for the benefit of shipping, and to individual vessels, upon request.

The Best Radio Tubes Must Be Used

In modern navigation, the radio is the most important part of the ship's equipment. It is not only a source of efficient and convenient communication for all passengers, but as a safety factor, it is paramount. Just as the safety and security of all passengers depend entirely upon the radio and its operator, so the radio set depends entirely upon the successful operation of its tubes. Where dependability is so essential as it is in Coast Guard work, the best radio tubes must be used. RCA Radiotrons, therefore, are used extensively in Coast Guard receivers and transmitters.



U. S. Coast Guard Cutter Modoc, on Ice Patrol, sights tremendous iceberg in northern waters U. S. U.

10,000 Dealers Can't Be Wrong!

One Out of Every Two Eligible for Selective Plan Have Signed Headliner Enrollment Pledge

AS THIS issue of Good News goes to press, half of the period over which the HEADLINER ENROLLMENT was scheduled to run is over. Logically, half of those dealers to whom we pointed as qualified to receive our undivided attention in the merchandising of RCA Radiotrons in 1931 should now be in the fold.

Halfway Figures Verify Prediction

We are able to report at this writing that there is a grand total of 10,000 HEADLINER STAR DEALERS and HEADLINER DEALERS. Of the 50,000 radio tube dealers in the United States, 20,000, or two-fifths—according

It should also be welcome to every dealer who has signed the HEADLINER ENROLLMENT pledge, since it is, in effect, a blanket endorsement by the more progressive of his colleagues of the step he has taken—an assurance that he has made no mistake.

From an analysis of the January results, one outstanding fact is apparent. That is, that of the two dealers out of every five who are entitled (by their readiness to contribute honest effort to the cause of greater profits) to our unqualified support, one has already written his name on the HEADLINER ENROLLMENT Pledge. In other words, there is space beside each name for the signature of just one more progressive dealer. Having started on January 2 with the force of an explosion, having gained momentum swiftly and steadily as the month

progressed, there is no doubt that the HEADLINER ENROLLMENT is a success. We have no hesitancy in predicting that our goal of 20,000 dealers during January and February will be reached with ease. Our problem, rather, is one of control. The number of enrollments must be kept within the limits implied in a plan that is truly selective.

Two to One

A striking HEADLINER development is that, of those enrolled to date, HEADLINER STAR DEALERS outnumber HEADLINER DEALERS by an overwhelming majority. For the first ten days of the activity, the ratio was 2 to 1! There could be no more conclusive verification of our belief that the average dealer belongs in the HEADLINER STAR DEALER class.

Undoubtedly, this is due to a determination on the part of most dealers to give tubes "the works" and not stop with any halfway measures. Why, after all, be content with only half as much material, when you can 'get' it all for an additional small order?

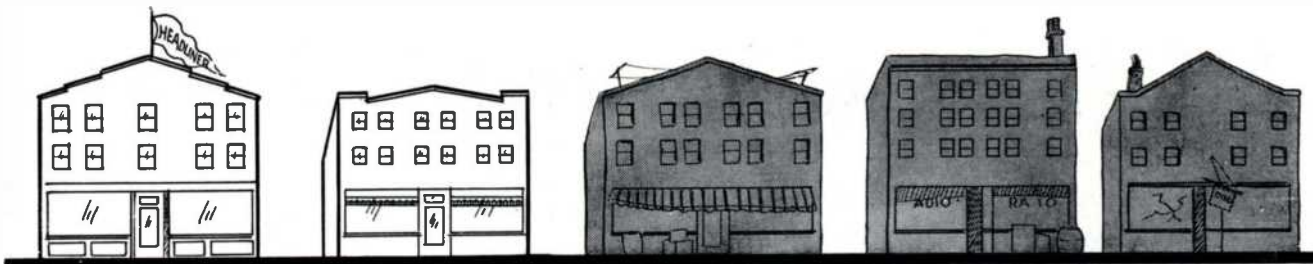
The HEADLINER is a plan whereby the RCA Radiotron Company selects a certain number of key dealers throughout the country and concentrates on helping them secure their share of 1931's potential tube market.

Trade estimates give the tube business for the coming year (renewal and original installation) as \$200,200,000, or more than half the estimated set volume of \$340,000,000. If every dealer were to

to our nation-wide surveys and investigations—are ambitious enough and sufficiently advanced in their thinking to warrant their selection as HEADLINERS. The actual figures at the half-way mark more than bear out the correctness of that calculation.

This information is, of course, gratifying to the RCA Radiotron Company.





Nation-wide surveys and tests conducted by the RCA Radiotron Company show that two out of every five radio tube dealers are progressive enough to qualify for HEADLINER assistance. Of these two, one has signed during January. This leaves but one store out of every five to be enrolled during February

do a thorough merchandising job, this volume would practically be doubled. With a total original installation of 33,000,000 tubes and a renewal average of seven tubes for each of the 15,000,000 sets in operation at the end of 1930, the potential market for 1931 is 138,000,000 tubes!

Wide-awake Dealers Benefit

Through the HEADLINER ENROLLMENT plan, the three dealers out of every five who lack the interest or the initiative to create the profit they desire for 1931, will be eliminated from active consideration. The remaining two dealers in every five, however, will receive from the RCA Radiotron Company the benefit of its wide experience in the tube merchandising field and a generous share of the material necessary to make 1931 a banner year for profits.

This assistance, this material, the gigantic magazine, newspaper, and radio advertising campaign which the RCA Radiotron Company is conducting in conjunction with the HEADLINER activity—all point to one objective: getting the set owner to replace his old, worn-out tubes with new RCA Radiotrons. For, your competition and our competition is not your rival up the street, or another brand of tubes, but the ancient tube dying a peaceful and natural death in the average radio set, all unknown and unbemoaned by its owner.

HEADLINER Tools Supplied

HEADLINER STAR DEALERS and HEADLINER DEALERS are being supplied, and will be supplied, throughout the year with tools more than adequate for rectifying this situation. There are new and distinctive window, store front, delivery truck,

and counter displays that will draw customers into HEADLINER stores like a magnet. There are new and striking postcard, booklet, and letter campaigns for hammering home to every set owner the advisability of changing

foremost merchandising periodical.

To facilitate selling, there will be available to you a wealth of store sales aids, utility material, remembrance advertising features, a newspaper advertising service, probably the most comprehensive and up to date broadcast directory in existence—and a transparency of distinction and beauty that, placed on your door or window, will identify you to the public as a HEADLINER of the tube industry.

The greater portion of this material will be available without charge to HEADLINER STAR DEALERS. For the remainder, there is a small charge, either for imprinting, or, as in the case of co-operative material, where we consider the dealer should share the cost with us. HEADLINER DEALERS, whose investment was smaller, will receive material valued at \$10.

Personal Co-operation

In return for all this, plus the personal co-operation of its 56 merchandising specialists given to HEADLINER STAR DEALERS by the RCA Radiotron Company, the RCA Radiotron Company asks but two concessions from the dealer. One is a written pledge to the effect that he will make a serious attempt to develop his renewal business during 1931. And the other is an order for RCA Radiotrons (100 tubes from a HEADLINER STAR DEALER; 50 tubes from a HEADLINER DEALER—to be billed sometime during January or February) as a proof of his sincerity.

This explanation of the HEADLINER is necessarily brief. To any unsigned dealer who thinks he can qualify for 1931's radio merchandising opportunity, our advice is: Get out your January Good News and see 52 pages of reasons why you should!

Headliner Distribution Dates

Most of the material shown in January GOOD NEWS including the Modernistic Display (page 29), is now available. To obtain it, write your nearest RCA Radiotron District Warehouse according to instructions on the last page of the same issue.

Material still in production will be available as follows:

Socket Layout Guide, page 31, February 10

"Renew Your Tubes!" Booklet Campaign, page 35, February 15

"Renew Your Tubes!" Post Card Campaign, page 34, February 15

Spare Tube Clip, page 39, March 15

Service Department Plan, page 40, March 1

tubes periodically, and a set nameplate to help you "sew-up" the renewal business in your territory.

If you are a HEADLINER STAR DEALER, you will receive an original plan that will enable you to develop your service department into a real profit maker. You will have an RCA Radiotron Socket Layout Guide, listing and showing the location of every radio tube in the various models of all popular makes of receivers—a real time saver. The RCA Radiotron Reference Book, an indispensable item in the equipment of every service man, a mine of valuable merchandising information for every dealer, will be yours. And every month, you will receive Good News, the radio tube industry's

Change Your Spark Plugs



Mr. Harlow H. Curtice, President of the AC Spark Plug Company and author of this article

THE principal reason why car owners change their spark plugs every 10,000 miles is because they get better engine performance by doing so.

Advertising that is sensational but superficial may impress itself upon the public mind, but if that impression is to be a permanent one, it must be substantially sound. Lincoln's famous statement—"You can fool some of the people all of the time; all of the people some of the time; but you can't fool all of the people all of the time"—applies directly to modern advertising. The worth and success of any advertising campaign, plan, or idea depends upon its foundation on fact. Unless the public benefits by the "putting across" of some idea or plan of action, that idea will fail in the long run. If the "Change Your Spark Plugs Every 10,000 Miles" idea had not rendered a very definite public service, if it had been no more than an advertising scheme to increase sales, it could not and would not have met with such universal acceptance.

Service An Essential to Success

Unquestionably, one of the most important—if not the most important—responsibilities that confront manufacturers, dealers, and salesmen in every field is service. Service is as

"The Education of the Public to this Idea Has Given Them Better Engine Performance"

By Harlow H. Curtice
President, AC Spark Plug Company

fundamental, as essential to any and every type of successful business as honesty is to advertising. The public not only deserves service, but almost demands it. Where, in days gone by, personal contact and friendship used to be the ties that bound the consumer to one organization or another, today it is service. People have come to realize and appreciate the fact that good service and high quality are inseparable. They know that where they get one, they will get the other. We have tried, therefore, to make service a cardinal principle of our business and our every action, our every policy, has had the rendering of a public service as its ultimate objective. The "Change Your Spark Plugs" plan is especially representative of this.

We have stressed the importance of changing spark plugs every 10,000 miles, because we feel it incumbent upon us to educate the public to the importance of this change; we feel that it is a part of the service that we owe to the public and to the manufacturers to whom we supply AC Spark Plugs as original equipment on their cars.

If a car owner gets poor service from his automobile due to worn-out spark plugs—if it is hard to start, has a slow pick-up, or has lost a large part of its power—he is extremely liable to place the blame on the car itself. We feel that it is up to us to prevent this, that it is our responsibility to teach him to change his spark plugs so that he may enjoy maximum engine performance. If we can educate him to do this, we will have succeeded in rendering a service to both the car manufacturer and the car owner.

Although the modern automobile is really a marvel of efficiency, its various parts are bound to wear out in time; and, unless they are renewed the efficiency with which the car operates will necessarily decrease. After 10,000 miles, although the owner of the car may not at first realize it, his car has

What you get from your engine depends upon spark plugs. You can step up its performance, make it better with a new set of AC's. They will give you smooth, eager, unfailing power... "big league power"

There's a difference in getting your car—and there's a big one in getting better service from your engine. AC Spark Plugs are the spark plugs that give you the most reliable, most efficient, most economical performance. They're the spark plugs that give you the most power, the most economy, the most service. They're the spark plugs that give you the most "big league power".

AC Spark Plug Company, Flint, Michigan

A typical AC Spark Plug "Ad" stressing the necessity of periodical change

lost a considerable portion of its horse power; it consumes more gasoline and oil than it should; it is considerably harder to start; and, finally, it loses power on hills. Very often, such a condition may be completely remedied by a change of spark plugs. We do not claim that a change of spark plugs is a cure-all, a panacea, but we do know that, after 10,000 miles, spark plugs become pitted and corroded. At such a time, a complete change will certainly give increased operating economy and efficiency.

Every 10,000 Miles

Just as a small boy will grow up and mature so gradually that, although it is perfectly obvious to those who do not see him often, his family may remain entirely oblivious to his "growing up process" because of their constant contact with him—the deterioration of spark plugs is so gradual that it may not at first be noticed, no matter how marked it may be to some one thoroughly familiar with the actual potentialities of the automobile.

Change For Economy

The fact that spark plugs should be changed every 10,000 miles is no indictment against their quality. It simply means that this is the extent of their useful economical life, and that they should be renewed, if high quality engine performance is to be maintained. True enough, spark plugs have been used for more than 10,000 miles, for they do not automatically cease operation after such usage; but for best results, they should be periodically changed, just as you change the oil in your car every 500 miles.

One of the highest tributes paid to the dependability and certainty of AC Spark Plug performance was their selection and use by Colonel Charles A. Lindbergh when he made his

famous trans-Atlantic flight from New York to Paris. AC Spark Plugs came through this gruelling and exacting test—one of the most severe to which spark plugs have ever been subjected—with flying colors. After Lindbergh's epoch making flight, every trans-Atlantic flyer used AC spark plugs in the engine of the plane that was to carry him to safety and his country to glory.

Colonel Lindbergh knew, before he hopped off on the flight that was to make international history, that his plane and its every part must be in perfect condition. There could be no substitution of parts, no hasty repairs, no forced landing and a re-take-off! Once the Spirit of St. Louis had soared out above the vast Atlantic, there would be no turning back. If the engine was not mechanically perfect, if its parts were not of the best material available and of the highest craftsmanship possible, there could be no certainty that they would not fail. A clogged gas line, a broken twisted wire, or spark plugs badly fouled under the terrific strain and the Spirit of St. Louis would dive into the Atlantic. A noble and unparalleled feat would have been attempted—and would have failed.

By constant advertising and by the support of automotive engineers, car

manufacturers, service men, and dealers in the field, a worthy idea is being sold—"Change Your Spark Plugs Every 10,000 Miles For Better Engine Performance." It has given the car owner better engine performance and increased confidence in his automobile—has rendered a dual service to the automobile manufacturer and to the public!

Spark Plugs and Radio Tubes

Mr. Harlow H. Curtice's article is not only an excellent story, but should prove especially interesting to GOOD NEWS readers.

The many points of close similarity between the changing of spark plugs and the yearly renewal of tubes are clearly indicated. Both deteriorate so gradually that their loss in efficiency is not at first noticed, and the public derives a direct benefit by following the advice of engineers and manufacturers in both fields.

The "Renew Your Tubes Once A Year" and the "Change Your Spark Plugs Every 10,000 Miles" ideas have many of the same problems to meet; they are both basically sound, and both require education of the public by advertising.

His Problem and Ours.



Change your spark plugs every 10,000 miles



Renew your tubes at least once a year

At the Scene of Action!

There You Find the Announcer With His Short Wave Portable Set



A tense moment during the America Cup Races broadcast. Samuel Wetherill, associate editor of "Yachting" is shown at the microphone aboard the U.S. Destroyer Kane

THERE was a time when radio coverage of special happenings was largely confined to the banquet hall or athletic field, where nearly everything occurred within easy view of the announcer. Nowadays, a presidential review of the fleet off Hampton Roads, out of sight of land, does not baffle the broadcasters. Talking to a nation-wide audience from an aeroplane is a commonplace. And following the contenders for the America's Cup in a battleship is merely a matter of setting up equipment and getting the Navy's approval to take microphones, engineers and other equipment on board.



The NBC's "station-on-wheels"—the truck used for short-wave broadcasts

Four Short Wave Transmitters Used

The portable short-wave transmitter, used in conjunction with pick-up receivers at the point of land-wires termination, has done the trick. This gives announcers great "cruising range" and greatly broadens radio's

power to report at first-hand important special events.

For use on broadcasts which take announcers beyond range of wire lines, NBC maintains four short-wave transmitters—two 50-watt units, one 7½-

watt unit, and a tiny 24-lb. transmitter of half a watt. In addition to this equipment, there is the new NBC truck, which carries a fixed antenna, and is surmounted by a manhole through which an announcer can protrude his head while watching in motion any scene he may wish to describe. The staff of the truck

is usually an announcer, the driver, and two engineers.

But the intricately timed and cued descriptions of happenings which NBC broadcasts today were not accomplished overnight. Nor is preparation for them simple, despite the fact that most of the serious technical difficulties have been overcome. And although NBC's use of short-wave transmitters

on special jobs is no longer classed on the organization chart as experimental, days—sometimes weeks, are spent by executives, program officials, and engineers in arranging such broadcasts.

Days of Preparation for Short Broadcast

As a result of their planning and testing, the radio audience may hear a two-hour show, during which three or four widely separated announcers converse with one another and describe what they see from a battleship, an aeroplane, and a vantage point on shore, all with the smoothness of a carefully rehearsed studio program.

One of the most elaborate jobs of reporting yet undertaken on NBC networks was the three-point coverage of the fleet review off Hampton Roads last summer. One 50-watt short-wave transmitter was stationed on shore, another was placed aboard the U.S.S. Salt Lake City, and the 7½-watt unit was carried by the dirigible, Los Angeles. From these three points two NBC announcers and William Burke Miller, in charge of all special events, maintained a three-way conversation concerning movements of the fleet as it passed before the President.

Nine engineers worked two weeks on the set-up for this broadcast. First there had to be a survey of locations for the land equipment, seeking a spot clear of interference either from

power lines or heavily travelled roads, and affording height enough for the elevation of antennae. Then came installations on the Navy craft and at the shore base where terminated wire lines would carry the program to New York. Next came the adjustment of the equipment to allotted channels, and finally the tests to prove whether communication could be effectively maintained between the three announcers. Greater distances between origin and pick-

up points were achieved during this event than in any previous broadcast of the sort.

Another "first" was accomplished during the reports of the America's Cup races off Newport, R. I., in September of last year, when the only ship-to-ship interview on radio's log book was staged by an announcer aboard one vessel questioning a yachting expert aboard another.

First Short Wave Relay Year Ago

But these present day, complicated special jobs don't cause nearly as much excitement among engineers and program officials at 711 Fifth Avenue as did the first, experimental short-wave relay nearly two years ago. It was on Washington's Birthday in 1929, that

NBC staged its now historic "over and under New York" stunt. First, an announcer described the Metropolis



A short-wave set-up atop NBC headquarters during a recent test between airplanes and ground

from an airplane, while his remarks were picked up on the ground and dispatched over the networks. The same formula was used a few moments later, when another announcer went deep into an excavation under the East River and described his sensations there.

This experiment worked so successfully that a more complicated short-wave routine was used two weeks later during NBC's coverage of the Hoover inauguration. The late William S. Lynch, in the cabin of an airplane flying over the capital, called the roll of four other NBC announcers stationed at various points along the parade route below. Lynch's words were transmitted by short wave to the ground below, where each of the other announcers heard them through their receivers.

Parachute Transmitter Developed

Next came the development of the parachute transmitter. A miniature broadcasting unit, so compact that it could be carried easily, was built in order that the late Buddy Bushmeyer might de-

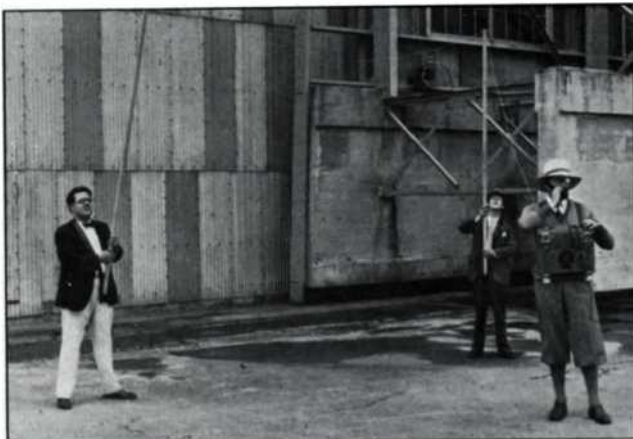
scribe for listeners the sensations of a parachute jumper during his descent. The stunt worked well until Bushmeyer became entangled in his antenna wires and had to throw a vital part of his equipment overboard. The stunt was later repeated successfully.

Floyd Gibbons used this parachute transmitter during his description of the *Graf Zeppelin's* arrival at Lakehurst. While he walked around the airport, he was followed by a "walking antenna." The antenna was suspended on poles which were carried.

Broadcasters are a restless and curious crew. They have always rebelled at the fact that wire lines keep them tied tantalizingly to one spot when something important is happening across the field, down the bay, around the corner, up in the air—



The late Henry (Buddy) Bushmeyer with the 24-pound portable short-wave transmitter



G. W. Johnstone (left) and Miller, NBC officials, carrying the antenna of the 24-pound portable short wave transmitter, which Floyd Gibbons (right) is using, at the time of the arrival of the *Graf Zeppelin* at Lakehurst, N. J., in 1929

just beyond the range of eye or ear. It was this desire to be on the scene of action which prompted National Broadcasting Company engineers to develop the short-wave transmitter for use in describing major athletic and news events.

All these things sound very easy but they represent years of patient experimenting and development. The broadcaster does not stint either time or money when there is a service to be rendered to the listening public. The miracles of yesterday have become the commonplace of today.

A Headliner's Merchandising Program

Keynote to Successful Retailing is Found in Planning and Controlling Activities

By T. F. Joyce

AS HARD as it may seem to believe, there are dealers who are making as much, if not more, money during this period of depression as ever before.

What is the secret of their success? Why are they prosperous in a period when many reckon their good fortune in how little they lose from month to month?

There is, strange to say, nothing miraculous about the methods of these successful retailers. These prosperous dealers owe their success to the application of three sound and proven fundamentals of all business success—*planning, acting and controlling*. Most of us do not fail to accomplish our objective because of lack of *hard work*, the second fundamental, but because we fail to *plan and control* our activities.

The object of all business is to make a profit. To accomplish that object a plan—a definite arrangement of means or steps for the attainment of an object—is the first requisite. What are the basic steps which are essential in a

Headliner's Merchandising Program? Briefly, they are: *sales quotas, inventories, gross profit and expense budgets*.

Sales Quotas

Every RCA Radiotron Headliner Dealer should have a sales quota, not alone on RCA Radiotrons, but on every merchandise item. This should be a quota for the year, broken down for each month, week and day. It is only by doing this that you can know from day to day where you are headed.

How is such a quota to be arrived at? Well, records of past performance are the best guide to establishing intelligent sales quotas. Where such records are not available the following sales factors should be considered: store location, appearance, layout, etc.; quality and quantity of merchandise and customer demand for it; store organization, its ability and determination to accomplish its objective; capital available to develop and conduct the business; character of the market, both from a buying and selling standpoint

and finally, the extent and character of your competition.

The foregoing suggestions will prove helpful in setting quotas on all of your merchandise lines. To help you in establishing your sales quotas on RCA Radiotrons, the following will prove helpful:

1. Number of sets to be sold—1931.
2. Average number of tubes per set (7), multiplied by \$2.50 (average list price) gives volume with set sales.
3. Sales by service men. (A full-time service man should sell from \$75.00 to \$100.00 per week worth of RCA Radiotrons.)
4. Over-the-counter sales.
5. Telephone and house-to-house sales.

Stock Limits

With the establishment of a sales quota, it becomes possible to set up your merchandise lines and stock limits. Stock limits are determined by turnover. For example: if your quota of



As NATION'S BUSINESS so timely points out, the new method of business profit control differs radically from the old. Which are you following?

RCA Radiotron sales is \$4,500 list and you are in a position to get quick service from your distributor, then you should be able to get a 12-time turnover, making your average investment \$225.00 net.

Gross Profit

With the sales quotas and inventories established, the next step in the Headliner's Merchandising Program is to determine his average gross profit on all merchandising lines. In arriving at this figure, allowances should be made for mark-downs.

In former days it was customary to determine what the expenses would be and the difference between expenses and gross profit represented the net profit. Today, the order is reversed. The net profit desired is first established, then expenses are budgeted accordingly. Naturally, there is a point beyond which expenses cannot be reduced without the impairment of both volume and net profit. However, a careful examination of expense budgets will usually show expense items which can either be eliminated entirely or reduced.

With the merchandise plan organized, the next step is to carry out that plan. This involves two major phases—buying and selling.

Buying

There is no place in retailing for haphazard buying. The merchant who buys haphazardly is gambling with all the odds against him. Certain basic principles govern buying and successful buying depends upon the application of those principles.

Factors which should determine buying policies are:

1. Potentialities of the market.
2. Type of customers catered to; nationality, purchasing power, education, etc.
3. Quantity of merchandise on hand at the time the purchase is considered.
4. Length of time it took to move the last purchase.
5. Estimated sale during the period for which the purchase is contemplated.

6. Study of past purchase records.

By determining who your customers are, then you can "buy for them." If you really "buy for your customers," then you have no selling problem. *It's when you don't buy for your customers that you have the real selling problem to contend with.*

By concentrating your purchases on well known brands, you are not only "buying for your customers" but in addition you are reducing your investment, avoiding unnecessary mark-downs, increasing turnover and simplifying selling.

Selling

With the merchandise well bought, it still has to be sold. The selling program has three major divisions. They are:

1. Personal salesmanship
2. Display selling
3. Advertising.

In a well balanced Headliner Merchandising Program, each of these sales factors finds a definite place.

A Headliner Dealer must have a sales force trained in the fundamentals of personal salesmanship. In an article of this length it is impossible to deal in detail with those fundamentals. Suffice it to say that personal salesmanship is nothing more than showing your prospects that what you have is what they need. Salesmanship is nothing more than making the other fellow see your point and getting him to do what you want him to do.

No modern dealer can minimize the importance of display selling. Most chain store organizations depend entirely on display selling for their success. Attractive window displays, featuring merchandise that everybody needs, everybody wants, everybody knows and can buy, will bring people into your store. Once inside, well arranged and planned interior displays will still further interest your customers in what you have to sell—which is largely what they want.

Advertising, today, has won a definite place for itself as a firmly established and important method of selling. Where, in days gone by, personal contact and friendship used to be the

(Continued on page 25)

A Headliner's February Merchandising Program

- Jan. 30 A. Outline your Feb. merchandising program
 B. Set sales quotas for Feb.
 C. Order sales promotion material for March. See page 25
 D. Install window display
- Feb. 2 A. Hold sales meeting with store force to outline sales plans for the coming week
 B. Rearrange store interior
 C. Mail letter No. 1—Subject—"Why Tubes Should be Changed Once a Year."*
 D. Ask every customer every day this week, "How's Your Radio?"
- 4 Prepare newspaper advertising for insertion Feb. 6. Use RCA Radiotron Newspaper Advertising Service
- 6 Change window display. See Radio Tonics
- 9 A. Hold sales meeting with store force. Review past week's work and cover plans for coming week
 B. Ask every customer every day this week, "How's Your Radio?"
- 11 Prepare newspaper advertising for insertion Feb. 13
- 12 Mail letter No. 2—Subject—"Millions Being Spent for Radio Entertainment. Check Your Tubes."*
- 13 Change window display. See Radio Tonics
- 16 A. Mid-monthly review—check progress to date and make plans for balance of month
 B. Hold sales meeting with store force
 C. Ask every customer every day this week, "How's Your Radio?"
- 18 Prepare newspaper advertising for insertion Feb. 20
- 20 Change window display
- 23 A. Sales meeting with store force
 B. Ask every customer every day this week, "How's Your Radio?"
- 24 Mail sales letter No. 3—"Service Department."*
- 25 A. Make plans for March business
 B. Prepare newspaper advertising for insertion Feb. 27
- 27 Install window display

* See Business Building Sales Letters

"How Is Your Radio?"

Keep on Asking 'Em and You'll Keep on Selling 'Em

By Mrs. June Tremblay

Manager of the Record Department,
Philip Werlein, Ltd., New Orleans, La.

"KEEP on asking 'em, and you'll keep on selling 'em"—that's my slogan. Regardless of what the customer originally asks for, whether it be records, needles or a piano tuned, I never fail to talk about RCA Radiotrons, with the result that very often one or more tubes are sold to a customer, and, in many cases, complete sets of RCA Radiotrons are the result of stating the constant reminder, "How is your radio?"

As soon as we first realized the tremendous opportunity open to us in the tube renewal market, a merchandising and sales campaign on RCA Radiotrons was inaugurated in our record department. After we had been thoroughly drilled in the principles of over-the-counter tube merchandising by representatives of the RCA Radiotron Company, we started in to contact our record customers.

Four thousand letters were sent out inviting customers to stop in at the record department and receive an RCA Radiotron Broadcast Directory. The response to this invitation was tremendous, and every-time that a customer called at the store for a directory, we immediately began to talk about his radio set—inquiring about the age of the tubes, and offering to test them free. To those customers who professed to have had the same tubes in their sets for a year or more, we stressed the importance



Mrs. June Tremblay, the attractive and highly efficient manager of Philip Werlein's Record Department

of renewing their tubes throughout with a set of new RCA Radiotrons. By pointing out to them that radio engineers advise a complete change of tubes at least once a year, we were able to convince the large majority of our

Just recently I had a 'phone call to send a service man to a customer's home, but on learning over the 'phone that his radio set was over a year old, I suggested a complete renewal of RCA Radiotrons. Our service man, however, reported that the tubes were still in good condition. I then telephoned the customer and, knowing that he drove a motor car, I pointed out the close analogy between spare tires and spare radio tubes. Even though the tubes in his set might last a few weeks longer, for safety's sake, he should keep a spare supply on hand. He bought a complete set of RCA Radiotrons!

Telephone Solicitation Pays Big Dividends

In the sale of records, telephone solicitation had proved very successful. When we started to feature RCA Radiotrons in our record department, I applied this same method to the sale of radio tubes, and I was pleased to learn that it was just as easy for me to sell RCA Radiotrons over the telephone as it was to sell records. We use this form of solicitation at all times and with excellent results. Just as a dentist telephones a patient periodically to inform him that it is now time to have his teeth examined, we periodically telephone our customers and advise a complete test of all the radio tubes in their sets.



A typical Philip Werlein window display featuring RCA Radiotrons

customer set-owners of the necessity of yearly tube renewal. As a direct result, many complete sets of new RCA Radiotrons were sold.

Recently I had a customer in the record department who asked for two packages of phonograph needles and, after ringing up the amount of twenty-five cents, asked the customer, "How is

One of our greatest assistances in bringing customers to our record department is a series of very attractive window displays that feature RCA Radiotrons. These displays are not

out tubes will mar the performance of new ones, yet on being told this point, they are quick to grasp it and lend an open ear to arguments in favor of yearly tube renewals.



At Werlein's, RCA Radiotrons and records go hand-in-hand. The counter of the Record Department

your radio?" The customer replied that he did not have a radio set. I then pointed out to him the wonderful entertainment that is daily broadcast over the air and convinced him that a radio set would be a fine investment. Before he left the store he had traded in his old phonograph for a new Victor R-35 receiver, complete with a set of RCA Radiotrons, and since he no longer had use for his phonograph needles, I had refunded his twenty-five cents.

By hammering away at customers on "How is your radio?" I am always able to determine whether they have had tubes in their sets for more than one year. It is then a simple matter to stress the importance of renewing all tubes at least once a year in order to receive the best reception.

Remind Them to Buy

We have found that the sale of RCA Radiotrons amounts merely to reminding the customer that his set needs new tubes. Once his radio set is mentioned, he will readily divulge all secrets about the age of his tubes and the quality of his reception. With these facts to work on, it is a simple matter to state a logical sales argument concerning the necessity and benefit of renewing all tubes that have been in use in excess of a year.

only attractive, but they carry a real sales punch. The customer sees the notice in the window to have his tubes tested free of charge, and is reminded to bring in his old tubes the next time he passes the store.

The matter of free testing of tubes serves as a wonderful entrée to tube renewal talk. When several tubes of a set fail to meet the test requirements, I always point out to the customer that a new set of tubes will really save him money in the end. Very few of our customers realize that inferior or worn-

By arranging an attractive interior RCA Radiotron display in our department, the customer coming in to purchase a record is immediately reminded of his radio tubes and is placed in the frame of mind that is very receptive to my eternal question, "How is your radio?"

Radio Announcements Speed Renewal Sales

Four times a week, Philip Werlein, Ltd., largest music house in the South, conducts broadcast programs from a New Orleans station. At the close of each program, there is always a short testimonial on RCA Radiotrons. One of our typical broadcast commercial announcements that has aided materially in substantially increasing our tube renewal business reads as follows:

"When you buy a radio set at Werlein's, it is always equipped with genuine RCA Radiotrons. Bring your old tubes into Werlein's, let us test them free of charge, and let us renew the worn-out tubes with new RCA Radiotrons. Don't forget that a good set deserves good tubes."

My slogan of "keep on asking 'em, and you'll keep on selling 'em" has certainly brought fine results, and I expect that the future will show even greater sales in this department.



SUPER SELLING FOOLS, a few RCA Radiotrons, cartons and the WD-1 Display combine to make a simple yet powerful window for Werlein's

Sixteen Steps to R



1. When customer asks to have tubes tested or stops before tube display—



2. Greet customer courteously and ask if you may be of any assistance



3. Inquire about the quality ask what type and...



6. If tubes are more than a year old, a complete renewal is advisable



7. Explain why customer should change tubes at least once a year. (See article on page 16)



8. Explain that the gradual deterioration of tubes may not be noticed at first



12. Consult Socket Layout Guide if in doubt as to what types of tubes the customer's set requires



13. Emphasize the superior quality of RCA Radiotrons as compared with "Jingo" tubes and others



14. Point to RCA Radiotrons manufacturers in B...

Renewal Selling...



4. *Ask about the quality of her radio reception and the make of radio set she owns*



4. *If radio reception is poor—noisy, fading, or distorted—it is probably caused by faulty tubes*



5. *Ask how long customer has had her radio set and when tubes were last renewed*



9. *Demonstrate how a complete set of new tubes would improve the customer's radio reception*



10. *Explain why it is better to renew all tubes at once rather than 1 or 2 at a time*



11. *Explain, and demonstrate, how easy it is for anyone to change the tubes in his radio set*



12. *Obtain tube endorsements by leading Broadcast Station Directory*



15. *Always get the customer's name and address for future reference and follow-up calls*



16. *Thank the customer for her patronage and ask her to come to your store again*

Renew Your Tubes At

A Discussion of the Numerous Advantages Resulting from Periodical Tube Renewal

RADIO tubes do wear out in service, and as a result, give impaired set performance. The wearing out of radio tubes can be grouped into two broad classes of failure.

The first class, and one which is of minor importance for this discussion, is the case where the tubes actually become inoperative and the set performance shows either a marked and sudden change in characteristics, or else complete silence. This type of failure is automatic announcement to the customer that new tubes are required.

The second class of failure is undoubtedly the more common and due to the character of the failure is frequently not perceived by the user until complete failure of the tube results. Here failure extends over many months of service, and is not noticeable to the customer until brought to his attention by odious comparison of his set with others, or by chance remarks of visitors in his home. The dealer and service man should find this discussion of the reasons and causes of gradual failure very helpful in the sale of complete yearly renewals.

Radio Tubes Similar to Spark Plugs

Similar analogies can be found in almost any line of product which the customer purchases. The slow imperceptible reduction from the original new product performance passes unperceived by the customer until his attention is forcibly directed to the matter. An example which has been brought home to most automobile drivers is the gradual impairment of spark plugs. The reduction in efficiency from day to day is so slight that the

average driver does not notice the fact. After some thousands of miles of use, however, a very noticeable improvement in car service is obtained if a new set of spark plugs is installed.

A very important reason for a new vacuum tube giving satisfactory per-



Testing RCA Radiotrons to insure high uniformity

formance is because a copious supply of electrons are available. These electrons are supplied by the cathode or filament of the tube and are projected from the filament or cathode when heat is applied to the filament or heater. Present day vacuum tubes almost universally employ coated filaments or the coated cathode construction. The active material which produces the electrons is coated on the filament, but during the life of the tube is gradually used up and becomes less active. Finally, a point is reached where there is insufficient emission to give any results. Long before this point is reached, however, performance of the set is reduced to a point of really

unsatisfactory quality. The important thing from the customer's viewpoint is that this loss of electron emission is not visible. The tube still lights and is to all ordinary inspections just as good a tube as it ever was. The fact remains, however, that the tube is actually worn out. The reason that the filament does not fail altogether is because the coating method of the present day is so efficient that the filaments operate at comparatively low temperatures.

This loss of electron emission may cause impaired set performance in a number of ways. For example, in the case of rectifier tubes the loss of emission means that the rectifier voltage supplied by the tube is reduced to a point which reduces the sensitivity of the set, introduces distortion in the output, and limits the volume at which the set can be operated.

In the case of output tubes the maximum obtainable volume is reduced. If this reduction in volume is carried to an

extreme, the set develops an extremely harsh and rasping quality.

In the case of the detector and audio stages, somewhat similar effect in quality is obtained as the tubes wear out.

In the radio frequency stages, a loss of sensitivity and corresponding loss of volume results.

Age Reduces Quality

Since the supply of electrons from the filament must be adequate to supply at least twice the normal plate current, as tubes wear out, their quality is greatly reduced. If this condition is not met, the tube is over-loaded on strong signals and the quality of the set response is impaired.

Least Once a Year . . .

If tubes are operated to the point where the emission is very much reduced, set performance may become very noisy and develop very obvious faults. Of course, when this condition occurs the customer realizes that something is wrong and is ready to get new tubes. The practical point, however, as far as the dealer is concerned, is that actually the customer has undoubtedly been obtaining very unsatisfactory performance from his set long before this extreme condition has been reached. Just a reminder to the customer that his set may not be giving all it should will make him more critical. He will then compare his results with the results from other sets.

The important thing to emphasize, both where these conditions may have occurred, or where tubes have become old, is that one bad tube in the set will impair the performance of the receiver. If it is a radio frequency tube, it will be impossible to get full sensitivity by changing just one tube if the other tubes are old.

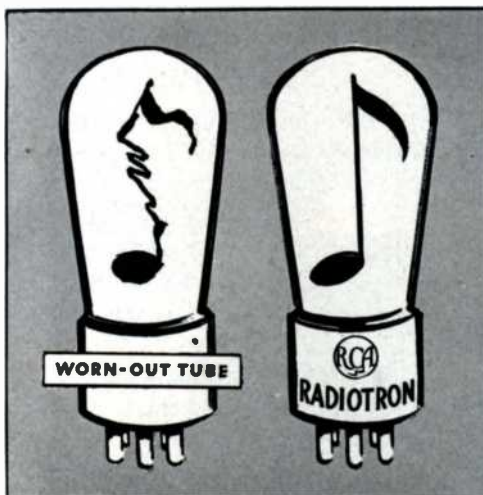
New Tubes Minimize Hum

A condition which is quite usual, due to worn-out tubes, is an increase in the hum from the set. As this increase in hum is also a gradual process, it may not at first be noticed by the set owner himself. Hum may be caused by unequal loss of filament emission of the rectifier tube filaments. It is possible for unbalance in the rectifier filaments to introduce more hum into the set than can be smoothed out by the filter. In the case of push-pull output tubes, the use of one good tube and one poor tube can cause trouble. The unbalance caused by this combination may cause hum, and will certainly cause reduced output and, often, very serious distortion.

There is another good argument that has not yet been given for the replacement of tubes before they have actually failed. It is on the same

basis that many people change tires, before they are completely worn-out. There is a satisfaction in receiving uninterrupted performance which makes this a logical procedure. A complement

damage. This simply emphasizes, however, the first statement of the desirability of changing tubes before failure occurs in order to obtain reliable service.



Take your choice—poor or perfect radio reception—old tubes or new RCA Radiotrons

A further reason which can sometimes be used for the renewal of tubes is that in a rapidly changing industry such as the radio business, improvement in results can be obtained by purchasing tubes of later manufacture. Progress is continuous in tube design and manufacture. In the case of the RCA Radiotron Company this progress is guaranteed by an elaborate and thorough development program. Competent engineers are engaged on numerous problems. Their efforts are directed toward making improved RCA Radiotrons. The purchase of new tubes therefore, enables the customer to take advantage of the improvements in later tubes.

to the argument is the fact that if tubes are allowed to operate to the point of actual failure they may upset

To Help You Sell

A large number of reasons for the renewal of radio tubes have been given in this discussion. Naturally the dealer at one time will probably utilize only one or two of the arguments, but sufficient arguments have been given to approach different types of customers.

The dealer should not be content to sell only one renewal tube but should try to sell as many tubes as possible, up to a complete new set. The customer will receive better results from a complete new set of tubes, and in the long run will be better satisfied with the dealer's service, due to the fact that his tube requirements have been taken care of for some time to come.

The dealer should point out to a customer that the old tubes can be kept as spares to be used in an emergency. The old tubes however, may never be used because of the noticeable improvement which has resulted from the change to new ones. The customer will be convinced by his own demonstration that new tubes restore the original high quality of the set.

8 Reasons Why You Should Renew Your Tubes

1. Increased sensitivity
2. Increased volume
3. Tone quality—freedom from distortion
4. Minimum hum
5. Poor tubes impair performance of the good
6. Insurance of uninterrupted service
7. Take advantage of latest developments and improvements in radio tube design manufacture
8. Better radio reception.

circuit conditions and in some cases cause harm to the set, or to the other tubes in the circuit. Ordinarily, failures of this kind result in the set being shut down immediately with no serious

It Seems But Yesterday

*In Ten Years, Radio Broadcasting Has Developed
From an Idea into a Billion Dollar Industry*

By Bertha Brainard

National Program Manager,
National Broadcasting Company

As told to J. J. Wilson

WHEN Frank Conrad, a youthful experimenter who had been wondering about and dabbling with radio for some time, sold a vice president of the Westinghouse Company on the idea of permitting him to use his garage for an experiment, the real beginning of what has led to present day broadcasting was innovated. A few select friends of the experimenter and the executives were let in on the experiment, and through the broadcasting of election returns and mouth-to-mouth advertising, all of western Pennsylvania "went radio."



Miss Bertha Brainard is one of the pioneers of radio broadcasting, having first identified herself with WJZ in 1922. Since then, her rise has been rapid and the recent announcement of her promotion from Eastern Program Manager to Program Manager, in charge of the National Broadcasting Company's presentations, was hardly a surprise. She has been in turn a dramatic critic, an announcer, assistant to the manager, and manager of WJZ.

Later, that crude experimental station developed into KDKA, which to this day has remained one of the leading broadcasters in the nation. After this informal beginning, radio spread over the nation like wild-fire, and when Bertha Brainard, the present program manager of the National Broadcasting Company, left a newspaper position to join the staff of WJZ, this station was the only one on the Atlantic seaboard.

Miss Brainard's job, when she first affiliated herself with WJZ, was to go about pleading with performers to "do

their stuff" for the unseen audience. All that she had to offer in those days was a ride to the Westinghouse factory in Newark—in one of the cloak-rooms of which WJZ was then operating—lemonade, cake, and tea.

Today Bertha Brainard, as program manager for the National Broadcasting Company, occupies a large, airy office on the seventh floor of the NBC Studios at 711 Fifth Avenue. She has hundreds of employees at her beck and call, and, where her job used to be to scour the Metropolitan area for sufficient talent to

fill up a program, today it is to direct the auditions granted to the thousand or more applicants NBC hears every week and to arrange the exceptionally successful features NBC is regularly presenting to a radio audience that now totals 52 millions.

"I can remember distinctly my early days at

WJZ," exclaimed Miss Brainard when we first encountered her in her office. "Those were the real pioneer days of radio. Crystal sets dominated the American homes, broadcasters sought for talent that would perform for the sake of performing, and announcers talked into cone-shaped microphones, wondering vaguely whether or not their voices were penetrating the fickle coils and crystals of their public.

Twelve and One-half Millions to be Spent on Talent During Year

"What a difference between then and now," continued Miss Brainard. "The National Broadcasting Company alone, plans to spend 12½ million dollars for talent during 1931, and the radio industry as a whole is purported to have a billion dollar turnover."

"I can recall very easily," continued Miss Brainard, "the rapid development of radio broadcasting. I was particularly interested because I was directly affiliated with it, and I think the development of the station with which I started gives as complete an example as any.

"When I came to WJZ, the station was operating in a cloakroom of the



The original Shannon quartette before old WJZ's microphone when it was a real feat to broadcast

plant of the Westinghouse Electric and Manufacturing Company in Newark, N. J. Due to a long line of

"Already, radio engineers regard a regular scheduled relay of international broadcasting programs as an entirely

days before radio became a necessity.

"I wish I had been more active with the camera in those days. I would be able to show you pictures of Billy Jones and Ernie Hare, coatless and with an inquiring and not too over-confident look, performing before a microphone that might, at any minute, develop a terrible case of asthma or



The reception room of old WJZ, then thought luxurious

One of the reception rooms now found at NBC's headquarters, 711 Fifth Avenue, New York City



circumstances, we moved in turn from Newark to the old Aeolian Hall in New York and from there to our present elaborate building at 711 Fifth Avenue. Each time we moved I thought we had reached the pinnacle of accomplishments in radio broadcasting, but I am now convinced that broadcasting is a child with many years in which to develop.

feasible thing. They have no doubt that the study which has been concentrated on international communication by radio during the past few years has reached such a point where it can be put into constant practical use.

"And yet, with all the wonders of the modern broadcasting studio, with all the overwhelming figures that accompany the radio industry, it is interesting to look back over those old

become limp from overwork and clatter to the floor. I might be able to show you a photograph of Vincent Lopez and his then far-famed Hotel Pennsylvania orchestra crowded into a two-by-four corner. Those were the days!

Broadcaster Aided by Radio Industry and Advertisers

"But," - remarked Miss Brainard, "today the broadcaster is presenting to the 52 million radio listeners in the United States and to many more over the entire world, the finest possible entertainment. He is aided in his effort to give only the best by the great national advertisers who employ the radio as an advertising medium, the set and tube manufacturers, and their thousands of dealers and distributors. In ten years radio has grown from an idea into a gigantic industry, from a toy into America's leading source of entertainment. It is a marvelous thing, this mammoth and breathtaking development, so marvelous that no one dares prophesy what the radio industry holds in store for tomorrow."

The orchestra of old WJZ in its then largest studio



Nathaniel Shilkret, in NBC's largest studio, with his RCA Orchestra

From Those Who Know

Merchandising Ideas That Are Making Profit for Successful RCA Radiotron Dealers

Broadcasting Builds Business

The Harding Music Company of Bay City, Michigan, conducts a broadcast program each noon over station WBCM. During each program they devote time to RCA Radiotrons and tell listeners about their tube testing service. In addition they invite listeners to call at the store for a complimentary RCA Radiotron Broadcast Station Directory.



Such radio advertising has served as a great stimulus to their business and tube sales are increasing daily.

Tuscaloosa Radiotron Minded

Mr. Todd of Radio Service Company, Tuscaloosa, Ala., says, "I never dreamed that a sales letter could have so much effect on customers as the RCA Radiotron letter which I sent out recently." Mr. Todd has discontinued his radio set line and is devoting his entire time to the sale and service of RCA Radiotrons. He has ordered RCA Radiotron post cards and claims that before he has finished his direct-mail campaign, he will have new RCA Radiotrons in every receiving set in Tuscaloosa.

Starting the New Year Right

Staeble and Sons, New Orleans, have inaugurated a house-to-house canvass on RCA Radiotrons. Two men equipped with tube testers and a supply of RCA Radiotrons are calling on every house in a certain section of the city. They will offer to test, free of charge, all radio sets, and in all cases will endeavor to sell a complete renewal of RCA Radiotrons. They are confident that this will be a big success.



Tube Sales Increase 500%

The Kroh Music Company of Muskogee, Arkansas, has had a much greater percentage of responses from RCA Radiotron mailing cards than from any other similar material ever used by the store. Mr. Kroh states that since he began his first campaign, his tube sales have increased 500%.

A Small Town But A Big Business

J. J. Moates, radio dealer in Andalusia, Alabama, a town of 3,500 people, sells nothing but RCA Radiotrons, and enjoys a tube renewal business of 350 tubes per month. He uses direct mail and newspaper advertising in developing his business.

New RCA Radiotrons Via Taxi

The Hughes-Bozarth-Anderson Company of Oklahoma City is planning to arrange with the taxicab companies in Oklahoma City to put a sign in each cab to the effect that new RCA Radiotrons will be delivered to any address in the city, for the price of the tubes plus the taxi fare.



Sales Letter Brings Results

O. K. Houck, dealer in Memphis, Tennessee, recently sent out a letter on RCA Radiotrons to all customers. The results, Mr. Houck claims, are quite wonderful. One salesman sold \$60 worth of RCA Radiotrons the day after the letter went out.

It Pays to Tie-in

Hatry and Young, dealers in Hartford, Connecticut, are tying-in with RCA Radiotron advertising in the *Hartford Times*. At present, they are selling about \$600 worth of RCA Radiotrons every month. They attribute a large part of this business to their tie-in with RCA Radiotron advertising.

You Can Even Bury 'Em



The Tafel Electric Company of Louisville, Ky., has just completed a test with a Westinghouse radio set, equipped with RCA Radiotrons and which operated down in Mammoth Cave, 200 feet underground and 2,000 feet from the entrance. The reception was perfect.

A Clever Advertising Scheme

Some time ago, the Gibson Company in Washington, D. C., conducted a very clever advertising stunt. A window was arranged to feature a popular make of radio set. Around the set were piled about 400 RCA Radiotron cartons. The passerby who estimated most closely the value of the RCA Radiotrons in the window, was to receive the new radio set, free.

It was evident that those placing ballots were interested in new sets and new tubes, and, as a result, this company finished the contest with a brand new, live-wire mailing list of potential RCA Radiotron tube purchasers.

Educating the Customer

The Liscum Electric Company of Center Moriches, New York, sells only RCA Radiotrons. When a customer requests another brand, a list of other brands of tubes and prices is shown but the customer is informed that only the most reliable merchandise is carried, but if the customer insists, the desired tubes will be obtained.

The almost inevitable result is the sale of new RCA Radiotrons, a satisfied customer, and a tinkling cash register. Try it—it pays.



An Efficient Service Check-up

The Service Hardware Company, Washington, D. C., has a very good check on all service calls and reports. When a radio set is sold, a service slip is pasted in the back of the set and a duplicate placed on file in the store. Each call is recorded in both places, and each tube renewal is listed.

No Substitute for Quality

"There is no substitute for quality in the radio business, that's why I always use RCA Radiotrons," says Frank P. Bruner, Jr., dealer deluxe in Sacramento, California.

Mr. Bruner here tells a true story which certainly proves his point.

"One evening in the late Fall, Mr. and Mrs. Jones were enjoying an opera being broadcast over a nation-wide



hook-up. The leading role was being played by a very popular and well known artist.

"The radio which Mr. and Mrs. Jones were using, was of a very good make, the manufacturers of which recommend RCA Radiotrons for the best results. But—an unscrupulous dealer, thinking he saw a little more profit, had substituted jingo tubes when the set was sold.

"At an interesting point in the program the music suddenly stopped. Mr. and Mrs. Jones became impatient and when they could get no response from the set, called the dealer from whom it had been bought. Fortunately for them, they could get no answer. Being determined not to miss the program,



they racked their brains for a solution to their problem. Then they remembered a card which had been

found in their mail box a few days previous. This card had been left by one of the men employed by Frank P. Bruner, Jr., a well known Better Business Radio Serviceman who guaranteed his work and employed only trained radiotricians. The card stated that fifty cents entitled the holder to a thorough inspection of radio and tubes.

"Mrs. Jones called the 'phone number on the card and within a few minutes a serviceman was working on the set. It was found that two of the jingo tubes had burned out, and that a grid bias resistor had burned out when one of the



jingo tubes shorted. Upon the recommendation of the service man, a complete set of new RCA Radiotrons was installed with the suggestion that in the future all tubes be renewed at least once a year.

"Needless to say, Mr. and Mrs. Jones heard the rest of the program and are now ardent boosters of RCA Radiotrons and the service they received.

"This is only one of many instances we could tell. We have over 1800 steady service customers and sell approximately \$600 worth of RCA Radiotrons every month. Our service car carries a complete line of RCA Radiotrons at all times. We always leave or destroy old tubes on a job because this instills confidence in the customer."

(Signed) FRANK P. BRUNER, JR.

Window Displays Increase Sales

During December the Radio Equipment Company of Battle Creek, Michigan, proved the value of displaying RCA Radiotrons. The first two weeks they displayed RCA Radiotrons in their windows and the last two weeks they did not. Mr. Holmberg, the manager, states that 20 per cent more tubes were sold when RCA Radiotrons were on display.

RCA Radiotron Display Triples Sales

Loveman, Joseph and Loeb, a large department store in Birmingham, placed a large RCA Radiotron display adjoining the elevator on the main floor. The display suggested RCA Radiotrons as an ideal Christmas gift. Mr. Max, manager, states that his over-the-counter tube sales have tripled since the display was installed. He states, further, that he has decided to use RCA Radiotrons for all renewal business.

Good News for the Passerby

The Lancaster Sales and Service Company of Philadelphia often uses Good News in window displays. Recently they took the story on station WJZ and pasted it on the window so that it could be read from the outside. It attracted considerable attention and interest.

Western Union Delivery of RCA Radiotrons



The Meier Music Company of Lubbock, Texas, has arranged with Western Union to deliver RCA Radiotrons anywhere in the city at any hour, day or night.

They are advertising this extensively and expect it to serve as a great stimulus to their RCA Radiotron sales.

Real Tube Prospects

The Forestal Radio Company of Seattle, Washington, through newspaper advertising, direct mail, window display, and efficient service men has built up its RCA Radiotron business from almost nothing to between \$400 and \$500 per month.

Says Mr. Forestal, "Last March, when set sales dropped off materially, I started sending out letters to all my old set customers, asking them to let our service men call and inspect their set. We received replies from 30% of these former set purchasers, and when the service man called, RCA Radiotrons were sold to over 60%. We were thus able to build up our tube sales as our set sales fell off."

A Good Idea



The Jackson Furniture Company of Oakland, California, is doing an excellent business on RCA Radiotrons. They

have a counter right up front with a girl in attendance testing the customer's tubes. Each month they remind people by mail, to bring in their tubes to be tested.

A Radio Tube— What Makes It Go?

By L. G. Lessig

Commercial Engineering Dept., RCA Radiotron Co., Inc.

A TWO-ELECTRODE tube contains a filament and a plate sealed in an evacuated glass bulb. The plate is made electrically positive with respect to the filament by means of a battery in the plate-to-filament circuit. Nearly all modern receivers (and transmitters) are designed to use two-electrode tubes for the purpose of converting alternating current to direct current. The direct current is then used for the plate and screen grid supplies of three and four-electrode vacuum tubes.

Sometimes two separate filaments and two separate plates are mounted in the same bulb. This construction permits the rectification of both halves of the alternating cycle. Such tubes, which are really two tubes in one, are called *full-wave rectifiers*. The effect of rectifiers on alternating current is shown in the wave forms of Fig. 1.

The Operation of a Two-Electrode Tube

When the filament is heated it produces a cloud of electrons around it. If the temperature of the filament is gradually raised by a slowly increasing current from the "A" battery, electronic emission will also increase (see article in November Good News). Since electrons are continuously streaming in every direction from the filament, it is obvious that there are at every instant a number of electrons in the

space between the filament and the plate. They move toward the plate and, literally are absorbed by it, while new electrons are emitted at the same rate by the filament. The number of

electrons in the space between the filament and plate depends upon the rate of absorption by the plate and upon the filament emission. An increase of the filament temperature increases the electron emission from the filament, and, therefore, the number of electrons present in the space between the plate and the

filament. This "cloud" of electrons collectively produces a negative charge which in itself has a tendency to retard new electrons attempting to leave the region of the filament. This is known as *space charge effect*.

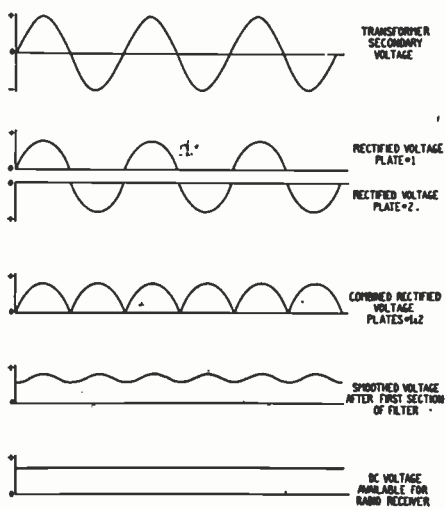
With a fixed filament voltage (which produces a definite filament temperature) more and more electrons will be drawn to the plate as the voltage of the latter is increased—up to a certain point. Beyond this point additional plate voltage has little effect in increasing the plate current, because all of the electrons emitted by the filament at the given temperature are being drawn to and absorbed by the plate. This maximum plate current is called *saturation current*, and because it is an indication of the total number of electrons emitted, it is also called the *emission current* or, simply, *filament emission*. When this condition has been reached, however,

the plate current can again be increased by the use of a higher filament temperature. For any given temperature of the filament in a perfect tube, there is a corresponding maximum value of plate current. This maximum value is obtained when the electrons are drawn over to the plate as rapidly as they are emitted from the filament.

Three-Electrode Tubes

It has been shown that the plate current may be influenced by changes in either filament temperature, plate voltage, or both. Another factor which will influence the flow of plate current is the effect of an electric charge on a third electrode in the tube. The third electrode which is placed between the filament and plate is called the *control grid* or merely *grid* (as explained in the November issue of Good News). A diagrammatic representation of a three-electrode tube is shown in Fig. 3.

When the grid of a three-electrode vacuum tube is made positive, or negative, with respect to the filament or cathode, the plate current will



FULL-WAVE RECTIFICATION

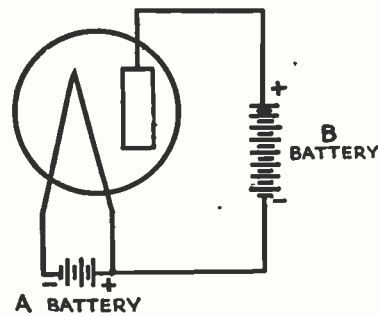


Fig. 2

Elementary diagram of the circuit connections of the two-electrode vacuum tube

correspondingly increase or decrease. The grid is located much nearer the filament than is the plate, and a small voltage change on the grid will have

the same effect on the plate current as a larger voltage change on the plate. A grid in performing this function requires very little power, serving merely

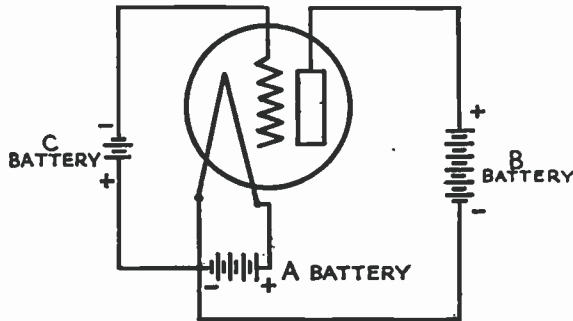


Fig. 3
Elementary diagram of the circuit connections of the three-electrode vacuum tube

as a valve to control the comparatively large amount of power in the plate circuit.

A negatively charged grid tends to force the space electrons back toward the filament. This effect decreases the plate current. Plate current, in fact, may be reduced to zero (cut-off) by making the negative grid charge sufficiently large. On the other hand, when a positive charge is applied to the grid, the electrons are accelerated and increased plate current results. Radio tubes are generally operated with negative voltage on the grid. The amount of this voltage, called grid bias voltage, depends somewhat upon the circuit in which the tube is designed to be used. The battery used to supply this grid bias voltage is called a "C" battery. See Fig. 2.

Interelectrode Capacity

When a radio tube is functioning in a circuit its *input circuit* is considered to be from grid to filament and its *output circuit* from plate to filament.

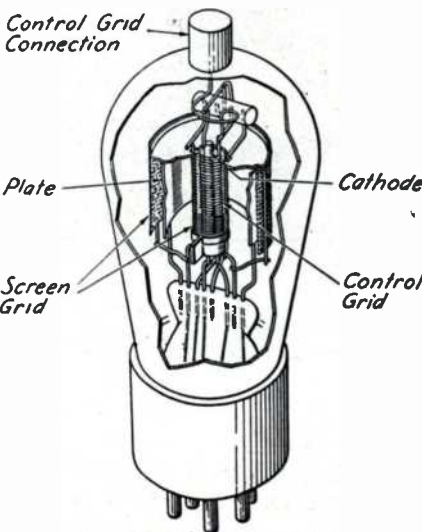
The electrodes of a vacuum tube form an electrostatic system, each electrode acting as one plate of a small condenser. The capacities which exist are the grid-to-plate capacity, the grid-to-filament capacity and the capacities of the grid-to-filament and grid-to-plate connected together. The largest of these, and the one more often considered, is the capacity which exists between the grid and the plate. Its effect tends to produce undue coupling

between the input and output circuits. Such coupling is often sufficient to cause undesirable feed back in the form of oscillations and general instability under conditions of high amplification.

Screen-Grid Tubes

Several schemes for decreasing this effect are offered. The first scheme is the use of complicated circuit arrangements to counteract or neutralize the coupling due to interelectrode capacitances. The second method is to eliminate, or nearly eliminate, grid-to-plate capacity in the tube itself. This is accomplished by employing the screen-

grid type.



Screen-grid type drawn to show construction

grid tube. Intricate circuits and neutralizing difficulties are thus eliminated. In general practice the grid-to-plate capacity is reduced from an average of 8.0 micromicrofarads (mmfd.) in the three-electrode tube to 0.01 mmfd. in the screen-grid tube. This permits stable amplification of many times that of three-electrode tubes. The screen-grid type consists of the usual electrodes and an additional grid called a "screen" which is used as a shield around the control grid and serves to "screen" it from the effect of the plate. See Fig. 4.

It is undesirable to completely screen the plate from the grid since some electrons must get to the plate through the grid for normal operation. The

screen is fixed at some positive potential lower than that of the plate. The electrons from the filament proceed toward the screen at considerable speed. Many of them go through it and are collected by the plate, provided the plate is at a higher potential than the screen. Because of the interposition of the screen between the plate and the grid, the rate at which electrons go across the space is not controlled so much by the plate voltage as it is by the voltages on the screen and grid. In other words, changes of plate voltage above the screen voltage have little effect on plate current.

Secondary Emission

At plate voltages lower than the screen grid voltage, electrons may come from the plate and go to the screen, thereby causing the current to the plate actually to decrease. This backward-flowing current is due to *secondary emission*. That is, an electron from the filament may get through the screen, but at the plate it dislodges an electron and then both are dragged back to the screen because of its greater positive potential.

Tube Characteristics

The performance of a radio tube is generally based upon its inherent characteristics. For instance, the nearer the grid is to the filament and the farther the grid is from the plate (both within certain limits) the better are the detecting qualities of a tube. Conversely, the farther the grid is from the filament and the closer to the plate, the better

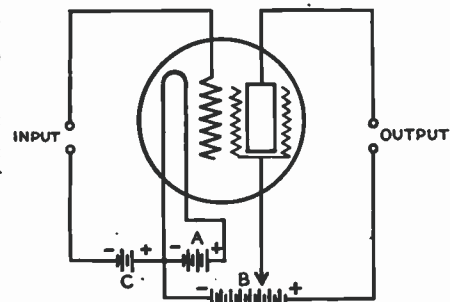


Fig. 5
Elementary diagram of the four-electrode (screen-grid) connections

are the amplifying qualities of a tube. The study of such tube constants and structure will appear in a future issue.

RADIO TONICS

By G. Gerard Clark and T. A. Joloff

Sales Promotion Department, RCA Radiotron Company, Inc.

Scene: Living room of the Smiths.

Time: 8:28 p.m., any Wednesday or Saturday evening.

The curtain rises on Mr. and Mrs. Smith as they are listening to their favorite broadcast, the RCA Radiotron program.

Mrs. Smith: "You know, I don't think our set sounds nearly so good as when we first bought it."

The voice of John S. Young comes through the speaker: "Why gamble with your radio enjoyment? Put new life in your set. Equip your set throughout with genuine RCA Radiotrons . . ."

Mr. Smith: "I'll bet that's what's wrong with our radio. Needs new tubes—I'll have Jones' Radio send up a set of RCA Radiotrons the first thing in the morning."

. . . .

Core of All Advertising the Same

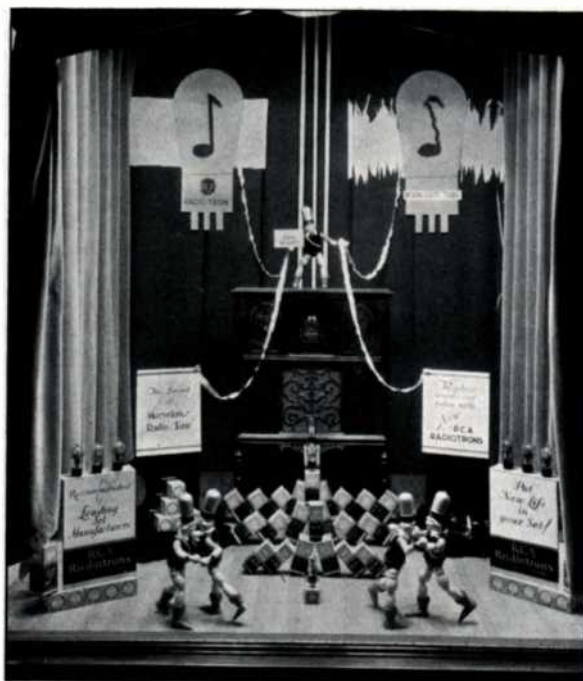
THE heart of all RCA Radiotron advertising—magazine, newspaper, and radio—is the same. Reaching millions of potential customers through each medium, the message appears in

different guises, but the objective does not change. That objective is to get people to replace their old tubes with

Possibly the current example, or others to appear in future issues of Good News, will appeal to you. If they do,

give them a trial in your window. But remember, these are only suggestions. Many dealers will have ideas as good, or better. The important thing is to get "Renew Your Tubes!" into the window and repeat it there at frequent intervals.

The window illustrated on this page employs an idea found effective in the national campaign. The pure quality of tone produced by a new RCA Radiotron is visualized as a solid, symmetrical wave. The poor tone resulting from a worn-out tube appears as a ragged wave, without any semblance of uni-



An attractive "Renew Your Tubes!" window that enables the spectator to visualize the effect of bad tubes on his reception

new RCA Radiotrons at least once a year.

Watch and listen for this advertising. You will be interested in noting that the idea, even though repeated endlessly, does not lose its freshness or effectiveness. That's the way it is handled.

How can a HEADLINER DEALER turn the effect of this advertising to his own advantage? First, by putting to work every one of the sales aids supplied by the RCA Radiotron Company. But every dealer with initiative will see opportunities to supplement the material—complete as it is—with creations of his own. And one of the likeliest ways in which to exploit his talent—if not the likeliest way—is to try his own hand at "Renew Your Tubes!" window dressing.

"Radio Tonics" inaugurates this month a series of windows of this type.

formity. The two tubes themselves are shown, the RCA Radiotron with a perfect note, the worn-out tube with a broken note.

Steps in Construction

The window is constructed as follows:

1. Cover the back wall of the window with Dennison's black crepe paper. The sheets should be stretched from top to bottom, so as to form a smooth solid surface.

2. Cut the smooth wave and the ragged wave from yellow (or other light color) crepe. Pin them in position on the black background.

3. Cut out the two tubes according to the diagram on the opposite page. They are of heavy red paper. The RCA Radiotron should be labelled with black paint, while the worn-out tube can best be identified with a black-lettered

Order March Sales Promotion Material Now

If you are to get your share of the March tube renewal business, then you must be prepared to go after it. You can make use of all of the sales aids shown in the January issue of GOOD NEWS, but in particular you should have the following:

1. Business Building Sales Letters
2. "Renew Your Tubes" Post Card Campaign
3. Broadcast Station Directory
4. Set Name Plate

Place your order now!

card pasted on the base. Pin the tubes in position, against the waves. They should be fastened to the background at enough points to keep them secure.

4. Cut the two musical notes, one perfect, the other imperfect, out of black paper and paste each on the proper tube.

5. Construct the yellow paper cylinders used as vertical dividing lines according to instructions in September Good News. They are fastened with tacks.

6. Place a radio console as shown, with a SUPER SELLING FOOL on top. Attach one end of streamers (yellow crepe) to tubes, pass them through SUPER SELLING FOOL'S two hands, and attach other ends to side cards. Place card in SUPER SELLING FOOL'S hand as shown.

7. Have side cards made, lettered as shown. These are mounted on pedestals of cartons covered with black velvet. On the side of the window occupied by the large RCA Radiotron, place RCA Radiotron cartons as illustrated. On the other side, place a pile of miscellaneous tubes.

8. Fill in the foreground with WD-2 display cards, cartons grouped in triangles, and pairs of SUPER SELLING FOOLS dancing.

Window displays depend for their effectiveness on being changed at frequent intervals. Between two of your "Renew Your Tubes!" windows, try this month's seasonal offering, the Valentine window. It is particularly appropriate as a tie-in with the well-known RCA Radiotron slogan.

Steps in construction are as follows:

1. Use the same background as above, or a suitable one of your own design.
2. Cut the large heart out of beaver board, and color it red with showcard paint. To insure symmetrical sides, use a pattern made by folding a sheet of

paper in the middle, and, with the fold as the center axis, cutting half a heart.

The heart in the picture stands five feet high and is four and a half feet wide.

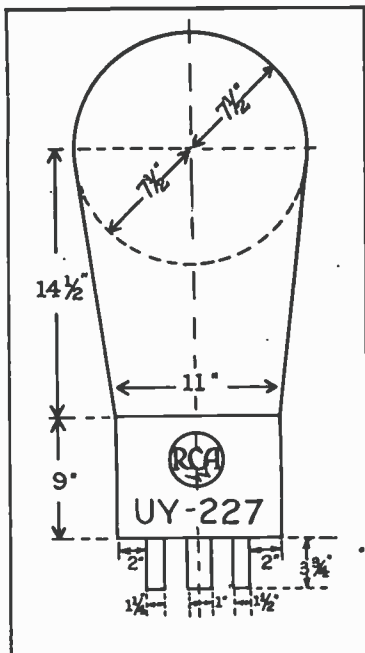
It is supported by a board hinged to a small block of wood on the back.

3. Suspend small hearts on streamers

of white crepe—in this window, two and a half feet long. The hearts may be made of red crepe or can be bought at any five and ten cent store.

4. Place SUPER SELLING FOOL on console, holding display card: "RCA Radiotrons, the Heart of Your Radio." Connect streamers of white crepe to WD-2 side cards in the foreground.

5. Fill out foreground with cartons grouped as shown.



Follow this diagram in constructing giant tubes in window on opposite page

as to provide the stimulus for a sale or purchase without personal contact of any kind, is ample evidence of the importance of the role played by advertising in present day retailing and wholesaling.

From the retailer's standpoint, advertising finds especially effective use as a tie-in with the national campaigns of the manufacturers of the merchandise he handles. A small "ad" inserted below a larger RCA Radiotron advertisement, for instance, appearing in the local paper, is almost sure to result in stimulated sales for that dealer.

Control

It is not enough to have a planned activity and to put forces into motion to carry out that plan. Those forces must be controlled and directed, otherwise the different phases of your activities may be working

against each other—not together.

Effective business control depends on a close daily check of activities, plus a periodical check. The first serves to guide your activities from one day to another and the latter to review accomplishments over a sufficient period of time to get an average performance and thus ascertain where you stand in the progress of your plan and make any modifications necessary to reach your objective.

A Headliner's Merchandising Program

(Continued from page 11)



A Valentine's Day window exploiting the famous slogan—"RCA Radiotrons, the Heart of Your Radio"

Because of their importance to RCA Radiotron dealers, the different parts of a Headliner's Merchandising Program will be the subject of future articles in Good News.

Successful Service Men



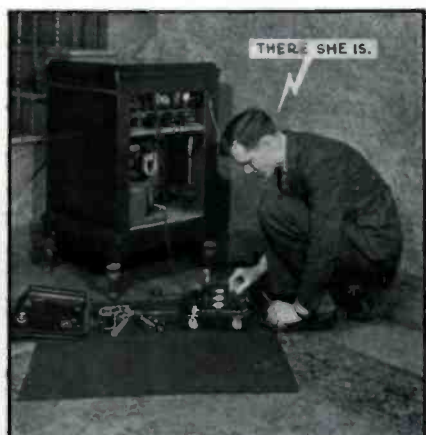
1. Arrange your calls so as to save time. Be sure that your customer will be there when you call



2. Collect and arrange all your equipment for the morning's work. Be sure that you carry a sufficient quantity of RCA Radiotrons



3. Don't block the customer's driveway or sidewalk entrance with your truck. See that the customer has space to park his car



7. Always be sure to take a complete set of readings, using a good set analyzer



8. Use the RCA Radiotron Reference Book's circuit analysis chart to help you quickly locate the trouble



9. Make the necessary repairs as quickly as possible. Be sure that all connections are properly soldered



13. Give the customer an itemized sales slip showing cost of repairs, parts, and tubes



14. Point out that the cost of a new set of RCA Radiotrons is a trifle compared to the increased enjoyment



15. A demonstration of this kind should convince the customer of the wisdom of your argument

Follow This Plan

By E. C. Hughes, Jr.
Sales Promotion Dept.
RCA Radiotron Company, Inc.



4. Be courteous; always remove your hat; be sure that your shoes are clean; and that you are neatly dressed



5. Lay your tools out on a clean cloth. Find out what the customer thinks is wrong. This may save a lot of time



6. Check power supply, antenna and ground connections, then the tubes. They are the most frequent causes of trouble



10. Demonstrate to the customer that the radio set has been restored to its former operating condition



11. Install a new set of RCA Radiotrons and explain why all tubes should be changed at least once a year. See story on page 16



12. Express the cost in terms of hourly radio enjoyment. With a daily use of 3 hours, the cost is about 1.38 cents per hour



16. Put set nameplate in the set so the customer will know when to change the tubes and on whom to call for service



17. Always leave the customer's property as you found it. Don't spoil your good work by carelessness



18. Make certain that the customer is entirely satisfied and leave her with a good impression of yourself and your company

"Look Inside the Cabinet!"

Commercial Continuity Used in RCA Radiotron Broadcast Programs Packs Powerful Sales Punch



TO the sparkling humor of "Bugs" Baer, add the husky crooning of Welcome Lewis, the golden clear voice of Harold Van Emburgh, the perfection of Sam Herman's xylophone technique, the peppy syncopation of William Daly's Radiotron Orchestra—and you have the RCA Radiotron Varieties! Fast moving, varied, amusing and packed full of appeal, it is little wonder that the RCA Radiotron program has won such instantaneous welcome. The hundreds of letters already received form a great testimonial to the original humor of the inimitable "Bugs" Baer and to the tremendous popularity of his supporting artists—an indisputable assurance that the RCA Radiotron program is meeting with nation-wide favor!

Largest Coast-to-coast Hook-up Used

Broadcast over the largest coast-to-coast net-work used by any manufacturer of radio tubes exclusively, the

RCA Radiotron program is carried into millions of homes each week. Reaching more than 8,750,000 enthusiastic listeners over a 37-station hook-up every Wednesday evening, and more than 9,335,000 on Saturday nights with a hook-up of 44 stations, the RCA Radiotron program has, in only two months, established itself as one of the Headliner programs on the air. Millions of people all over the country enthusiastically look forward to this fifteen minutes of sparkling humor and unexcelled entertainment.

Carried by the golden voice of John S. Young, NBC's popular announcer, a powerful sales message goes to millions of radio listeners twice each

week. It is a sales message that tells set owners of the dependability and of the high quality of RCA Radiotrons, and that urges them to make sure that their new radio set is equipped with RCA Radiotrons. It is, in short, a message that wins their appreciation for the finest radio reception just as the RCA Radiotron program has already won their appreciation for the finest entertainment.

"Look Inside the Cabinet!"

"It takes only one worn out tube to mar your radio reception. Avoid the risk! When you buy one of the marvelous new sets, be sure to look inside the cabinet and make certain the set is equipped throughout with RCA Radiotrons, the radio tubes recommended for years by manufacturers of radio sets. RCA Radiotrons cost no more than ordinary tubes. . . . Why gamble with your radio enjoyment? Put new life in your set. Equip your set throughout with genuine RCA Radiotrons.

Go to your dealer and ask for RCA Radiotrons, the radio tubes in the red and black cartons—the tubes that are backed by the guarantee and the reputation of RCA."

From Portland, Maine, to Portland, Oregon; from Miami to Los Angeles, the RCA Radiotron program reaches millions of potential customers twice each week. To every one of these enthusiastic and receptive listeners—to every one of these potential customers it carries this powerful sales message—a constant and repeated reminder to "look inside the cabinet" and to make sure that the new sets they buy are equipped with the industry's standard radio tube, the RCA Radiotron!

Ode to Radio's Famous "BUGS" BAER

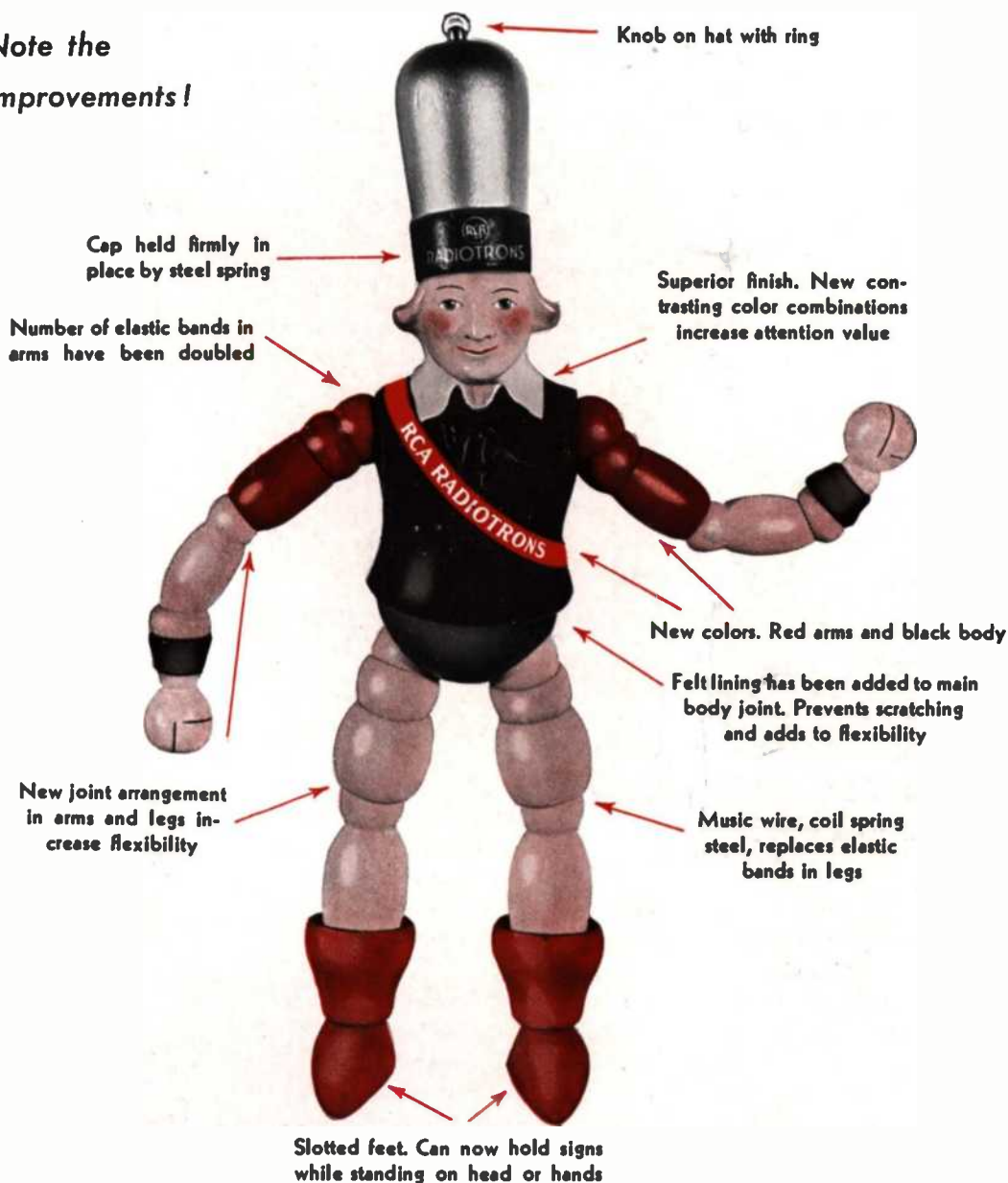


Knight of the barbed and trenchant wit,
Over the radio now you sit
Twice a week on a journey gay,
Twice a week for the RCA!
"Old Bugs" Baer of the mighty pen,
Old in brains but a MAN 'mongst men,
Radio sure needs more like you,
Whose gags, like itself, are strong and NEW!

—From Nick Kenny's column,
"Getting an Earful," in the
N. Y. Daily Mirror.

The Super Selling Fool

Note the
Improvements!



HERE he is. The new Super Selling Fool. His appearance has been improved with new colors and a better finish. Finer quality seasoned lumber for the wood turnings is also used throughout. His usefulness has been increased in proportion to his appearance. The price is now \$5 for four, with fourteen sales-getting two-color cards. Orders will, as before, be filled in the sequence they are received.

RCA RADIOTRON COMPANY, INC. » » » HARRISON, N. J.

RCA Radiotrons

THE HEART OF YOUR RADIO

Tonight... put New Life into your radio set

... by putting in the radio tubes used by more than 200 leading broadcasting stations . . .

NO one knows radio tubes like broadcasting engineers. *They've got to know!* Inferior tubes could ruin the thousands of programs sent out each year! Hence over 200 leading broadcasting stations use RCA Radiotrons. So far advanced are those tubes that many leading radio manufacturers build their sets around them. Remember, a set can't work better than its tubes...insist on RCA Radiotrons when you buy a new set...or when you replace worn-out tubes... look for the RCA trademark on the red and black carton!

RCA RADIOTRON CO., Inc.
Harrison, New Jersey
A Radio Corporation of America Subsidiary

RCA RADIOTRONS

The heart of your radio



Tune in "Bugs" Baer and the new RCA Radiotron Varieties on NBC coast-to-coast network every Wednesday and Saturday night at 8:15 p. m. Eastern Standard Time.

Beware of worn-out tubes!

Even a single worn-out tube in a set of new ones will cause crackles, distortion and poor tone! Besides, in order to make the worn-out tube work—you burn out the good tubes. Remember—the eye can't tell the difference between a good tube and a worn-out tube. So tonight . . . take the tubes out of your set and have your radio dealer test them. They're as easy to take out as a light bulb. New tubes will put new life into your radio!



This advertisement will appear in the Saturday Evening Post, February 7; Liberty, February 14; and has appeared in Collier's, January 31; and in Literary Digest, January 17

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Schenectady, N. Y.