GREAT NEWS ABOUT RCA RADIOTRONS

Check and Double Check!
FOR the first time there is available to RCA Radiotron dealers a planned series of direct mail letters. Twelve of them. Each one packed with power. These letters, sent out one every two weeks, will cover a six months' period. Some time during that period your prospective customers are going to need RCA Radiotrons. When they do, they are going to think of you. That is, if they have been receiving these sales letters.

This portfolio of sales letters is available on request. Write for your copy today! Or ask your jobber's salesman.
Again the RCA Radiotron Company Leads the Way

WITH its announcement in this issue of Good News of the development of three new RCA Radiotrons for battery operation, the RCA Radiotron Company once again demonstrates its capacity for leadership.

For a long time it has been recognized that the farm market for radio was being neglected. Not that there haven't been good battery sets on the market, for there have been. However, it just seemed as though the great farm radio market wouldn't spurt forward until it received a development in its field as striking as the a.c. RCA Radiotrons were in the wired home market. RCA Radiotron engineers worked relentlessly on the problem. The results of their efforts are announced for the first time in this issue of Good News.

That this development has come from the RCA Radiotron laboratories should be encouraging to all RCA Radiotron dealers. It is one of the many visible indications that you are associated with a leader—an organization with which you can well afford to link your fortunes.

A magazine of radio merchandising counsel to help distributors and dealers of RCA Radiotrons make more profit.
Published Monthly by RCA Radiotron Company, Inc., Harrison, New Jersey
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Good Value Has Its Own Reward

No Industry or Company Can Succeed Permanently Without Giving an Adequate Return to the Public for Its Money

By T. W. Frech
President RCA Radiotron Company, Inc.

analysis of the reasons why radio has made such rapid progress would show:
1. It is a means of saving human life. This one reason alone justifies the existence of radio.
2. It is a method of communication which speeds our commercial world.
3. It brings enjoyment and education to the masses.
4. It appeals to the imagination.
5. It gives the public good value for its money.

Radio had its beginning in the first two which have been set forth. However, let us pass over them for they are distinctly apart from the field in which most of us are interested—home entertainment.

Radio is Ten Years Young

It was only ten years ago—1920 to be exact—that the first real experiments in voice broadcasting started. Radio entertainment progress dates from that year.

During the first decade of radio, programs have improved tremendously. However, as perfect as today's radio program is, the program of ten years from now is bound to be a vastly better program. Remember, radio is ten years young. Acting on the legitimate stage goes 'way back to early Greece. It has taken centuries to bring it to its present degree of perfection. Commercial motion pictures date back to 1894. And yet, today's radio programs compare favorably to the best productions of the stage and screen.

THE high pitch of an SOS signal came crashing through the radio program I was listening to the other evening. Immediately, the air was cleared.

As I listened to that ship operator, somewhere on the broad Atlantic, frantically calling for help, I realized more than ever before the real reasons why the radio industry has been so phenomenally successful. Perhaps it was because my mind was on that subject at the time that the true value of radio was brought so forcibly to my attention. However, I cannot see how anyone with imagination, enjoying a radio program which is suddenly cut short by an appeal for assistance, could help but see why radio isn't a fad and why it has come to the forefront of business.

Radio has made its giant strides because it serves a useful purpose. An
Radio is rapidly developing a technique of its own in program construction. The ultimate radio program will undoubtedly combine all of the good features of the other entertainment fields and add many of its own. Every day in every way radio programs are growing better.

Radio programs have a universal appeal. They are entertaining to rich and poor alike. And, fortunately, radio is within the reach of even the poorest of our fellow men. Today’s programs have a firm grip on their audiences. The time when a popular program goes on the air is changed and immediately the habits of millions of people are changed accordingly. People follow their favorite radio stars with almost hero-like worship.

Radio Business is Full of Romance

Any business which appeals as vividly to the imagination as radio does, is bound to be full of romance. The radio artist, standing before the microphone, visualizes a mighty audience a thousand times larger than has ever been commanded by a King or an Emperor before the advent of radio. In that audience he sees all races of people and all classes of individuals.

When we are in a business which possesses as much romance as radio we have greater interest and enthusiasm in our work. We see in what we are doing not so much mechanical work, or selling or servicing, but rather so much more happiness being brought into the world.

I know this to be a fact, for in one of our own factories we have installed centralized radio so that our employees might listen to radio programs while they work and as a consequence have a better understanding of the purpose of their work. The workers in that particular factory now realize that they are making more than radio tubes—they are making instruments of happiness for millions of people. The result is that they are taking a keener interest in their work and are putting forth greater effort to make a quality product.

Good Value Secret of Industry’s Success

Above all other reasons, radio has been successful because it has given good value to the public. There are few commodities or services in which the public can invest its money and secure from it a greater return in happiness and enjoyment.

Today an industry succeeds only because it gives good value. Men are already supplied with an abundance of things and are beginning to weigh the desirability of new commodities not against their cost in dollars, but rather in the time required to get them, that is, against the loss of leisure which is entailed in securing these commodities and services. Radio is a highly desirable service, yielding precious dividends in terms of happiness. That’s why it has gone forward. That’s why men will invest their money in radio in preference to the thousand and one other commodities and services which are bidding strenuously for their dollars.

As no industry succeeds unless it gives good value, so, too, no individual or organization in that industry succeeds unless he or it gives good value. A manufacturer who fails to build into his product the very best there is in materials and workmanship and who fails to sell his product at a reasonable price cannot expect to long survive. Neither can the retailer who fails either to sell merchandise which gives good value to the customer or to give service.

Good value has its own reward. A reward in the personal satisfaction which comes from giving adequately to the public for its dollars. Give the public good value for its money and net profit automatically takes care of itself.
What Does THE Radio Audience Want?

That is the Program Builder's Constant Problem Which Gives Him Many Weary Hours

By Nathaniel Shilkret
Musical Director, RCA Victor Company, Inc.

IN all broadcast concerts the cry is always for a new idea or a new method of presentation. This is true whether the hour is dramatic, comic, jazz or symphonic. While it may seem an easy matter to the public, in reality the making of a broadcast program is an art. As with all things artistic, expert knowledge is the first essential. And there must always be an extra sense—what we speak of in music as talent or genius. Like many other things in life, this instinct or extra sense is almost impossible to classify. Perhaps it can best be expressed as a knowledge of what the public wants and how to give it to them—in an original way.

Experience in program making is almost dangerous as it is likely to form habits with the result that successive programs lose their freshness. The constant fear of a program builder is that someone else will strike a new note which will make many broadcasters feel ashamed of themselves for their present efforts.

Played Clarinet in Boys' Orchestra

My musical experience goes back to my childhood days. At a very early age I studied the piano and when I was seven I was playing a clarinet in a boys' orchestra.

This was an organization in which the blood of its 70 young members would curdle at the strains of "Raymond Overture" or "William Tell." Our audiences at that time received a greater kick from such descriptive music as "Custer's Last Fight" than from any of the lighter Beethoven symphonies. Today, outside the larger cities, we still have plenty of audiences who feel the same way. It is because descriptive music kindles the imagination of a public which has not the time for musical training. That is the reason why this type of music is so popular today. It need not be as realistically descriptive as "Custer's Last Fight."

meaning, of course, that there is a ready acceptance for such higher forms of music as Dukas' "Sorcerer's Apprentice" and Liszt's "Mazeppa."

Unquestionably broadcast programs today are being built on broader lines and are giving the public a liberal education in worthwhile music.

Well, after six years of playing both as soloist and instrumentalist in the boys' orchestra, I discovered that I had participated in some 300 programs per year. Naturally I was just at an impressionistic age and the knowledge of these programs has always remained with me. Then at the age of 13 I joined the Russian Symphony and the
Volpe orchestra in New York. Two years later I joined the New York Philharmonic. Then came my seasons with Walter Damrosch and the Metropolitan Opera House in New York City.

These were great years for me because they made me familiar with the works of the greatest composers of the age. In many cases I was privileged to participate in their first rendition in America.

Public’s Musical Taste Changing

Just as an incident of how the public’s music taste is changing, let us consider the names of some of the greatest composers.

Today practically everyone who owns a radio is familiar with such names as Tchaikovsky, Rachmaninoff, Scriabin, Glazounoff, Rimsky-Korsakov, Sibelius, Balakirew and others. A few years ago the average American had never heard of them.

I consider that a proper blending of classic and popular music is essential to every successful radio program.

In spite of my familiarity with the works of Russian composers I have always had a decided feeling for the American type of music which is in a broad sense termed “jazz.”

Early Work Provides Background for Program Arrangement

It was at the age of 23 that I joined the Victor Talking Machine Company as Musical Director. Here I became acquainted with not only the latest compositions but with traditional and folk songs of every nation. In fact, the recording of such music requires catalogues appealing to 35 different nationalities.

In this work it was my pleasure and privilege to form orchestras composed of musicians from many nations. Then came the interesting experience of recording the voices of our great operatic stars. And between times I was producing records of all the latest current hits. This meant attending the premieres of new Broadway shows, reading manuscripts of popular songs as written by rising young writers, listening to all of the new “gags,” as Tin Pan Alley called them, and adapting them in my own work.

You will see that this gave me a splendid back-ground when I first began the planning of radio programs. In the early days of broadcasting, programs were not considered particularly important. The matter of getting anything approaching good reception was the paramount consideration. With this in mind and with my recording experience I gathered together an orchestra which I considered ideal for broadcasting at that time.

Early Days of Broadcasting

Then as radio grew more general, orchestras that became outstanding features were the ones that sounded better than the others. The only consideration given to selections was that a certain contrast was necessary. I think I might say here, that I was the first conductor to introduce the idea that a program need not necessarily be made up completely of popular or of classical music. I came to the conclusion that popular music could be made to sound softer and almost semi-classic. I knew this could be done by a certain treatment of arrangement and also that there was and is a type of classical music, not too severe, which could be interpolated between popular members with the result of obtaining a well balanced program.

A New Idea in Programs

The success of this idea involved many programs that had to be changed from all dance numbers to a relief of mixed semi-classic numbers. This meant that the dance orchestras had to be improved and that the musicians must use the softer instruments of a legitimate orchestra. It also meant better players and better programs. The result of this was that the public became more and more keen for the sound of good music.

Within the last five years of radio’s development there is not one orchestra in the country that has not been engaged at some time or other for radio broadcasting. Their varied successes led to the engagement of a number of symphonic orchestras on regular commercial programs. Next year there will be at least eight commercial hours which will have as their stars, the world’s finest orchestras, both symphonic and jazz.

Best Orchestras Now Featured

Needless to say the featuring of finer orchestras has brought larger audiences but the orchestral feature is not the only phase of a successful program. Equally important is the dramatic end. Today, I believe that the technique and the skill used in broadcast continuities of the dramatic type is almost as great as that of the stage itself. On some of my broadcasts we have taken a whole month of rehearsal just to produce one hour of great dramatic intensity. The entire subject is very fascinating to me and I see no limit to radio’s future.

I know that many people take issue on the subject of symphonic and popular music. Naturally, I lean toward classical music, but I may say that I get great joy out of popular music and especially that type of symphonic jazz which is really good. This leads me to one consideration which I think is of the utmost importance in my work. The value of musical art does not lie in the fact that a composer writes in a particular vein, but in the value of the composition itself.
New RCA Radiotrons to
New Battery Tubes to Give Farmer a New Deal. Leading
Manufacturers Developing Sets for Their Use

By Meade Brunet, Sales Manager
RCA Radiotron Company, Inc.

developments will unquestionably lead to the perking up of the radio business in farming areas. Radio tube and set sales in rural districts will result in greater profit for wide-awake RCA Radiotron dealers.

The characteristics of these new low current, two volt tubes represent a real advance in the art of designing RCA Radiotrons for dry battery operation. They are decidedly non-microphonic and permit ample volume with battery service. The three new RCA Radiotrons are, the general purpose RCA 230, the power amplifier RCA 231, and the screen grid RCA 232.

RCA Radiotron 230
The filament voltage for the new RCA Radiotron 230 may be supplied by either dry-cells or a single cell storage battery. In either case, however, an adjustable filament rheostat must be used together with a permanently installed indicating instrument (voltmeter or milliammeter) to secure the proper filament voltage.

This general purpose RCA 230 may be used in circuits of conventional design as either a radio-frequency amplifier, a detector, or an intermediate audio amplifier. When the RCA 230 is employed as an amplifier a negative grid bias must always be used.

RCA Radiotron 231
The filament of the power output RCA 231 should be operated in accordance with the specifications set forth for the filament of the general purpose RCA Radiotron 230.

This RCA Radiotron is so designed that a slight reduction in plate voltage will not cause undue distortion. At a lower plate voltage, however, the output will be decreased somewhat.

In the United States today there are over 6,000,000 active farms of which approximately 2,000,000 have radios. That is unquestionably startling, but when I tell you that more than one-fifth of the homes in the country are on farms and only 7.2 per cent of these electrified, it is doubly so.

What a tremendous opportunity for the radio dealer lies in this farm market! More than 20 per cent of the homes in the entire nation are on farms, yet the dealer and manufacturer have not recognized the importance and the immensity of this outlet for radio equipment.

We who are located in the congested city areas where battery sets are almost unique find it difficult to realize the vastness and the importance of the farm market. Radio dealers have been lured from the true facts by the sensational and far more interesting a.c. sets and have come to believe that a battery set is a relic of the past.

Farm Market Offers Great Opportunity
In some states the number of electrified farms is as low as seven-tenths of one per cent. It is difficult to believe but it is nevertheless true. This is the market that the three new RCA Radiotrons, which have been developed especially for sets for farm use, will open up. Not since the advent of the a.c. tube has such an advance been made in the art of tube design. Now the farmer, who does not have 110 volts a.c. can obtain results in radio reception comparable with that obtained by use of the modern a.c. set.

The newly developed RCA Radiotrons will unquestionably make the farm market a very large one for radio. For the past year and one-half the farm market has been sadly neglected due to the fact that there were no sets that would adequately take care of the needs of those great farming areas which are still without electricity. Now these new RCA Radiotron
RCA Radiotron 232

The third of the new tubes is the screen grid RCA Radiotron 232, designed primarily for use as a screen grid radio-frequency amplifier tube. The control grid is electrostatically shielded from the plate by means of an extra grid placed between plate and control grid and operated at a suitable positive potential.

The resultant reduction in plate to control-grid capacity makes high voltage amplification per stage practical without external capacity neutralization circuits.

Special Circuit Needed

The new screen grid RCA Radiotron 232 will not work successfully in the normal three-electrode tube circuits and cannot ordinarily be substituted for a three-electrode vacuum tube.

The connection for the control grid is made to the metal cap at the top of the bulb.

The coated filament of the screen grid RCA Radiotron 232 should be operated in accordance with the requirements specified for the filament of the general purpose RCA Radiotron 230.

The positive voltage for the screen should be obtained from a tap on the plate battery. Stable operation of this screen grid RCA Radiotron in circuits designed to give maximum gain per stage requires separation of the input and output circuit elements. Internal shielding by the screen makes neutralization of the plate to grid capacity unnecessary.

However, the high amplifying ability of this tube makes it essential to prevent external coupling between circuit elements if the full capabilities of the tube are to be obtained. In general, with multistage amplifier circuits, it is necessary to use complete stage shielding including all the components of each stage. It is particularly necessary to shield the control-grid circuit from the plate circuit.

Average Characteristics of the New Battery RCA Radiotrons

<table>
<thead>
<tr>
<th>The New General Purpose</th>
<th>RCA Radiotron 230</th>
</tr>
</thead>
<tbody>
<tr>
<td>...may be used either as detector or amplifier. Its characteristics are:</td>
<td>...</td>
</tr>
<tr>
<td>Filament Voltage</td>
<td>2.0 Volts</td>
</tr>
<tr>
<td>Filament Current</td>
<td>0.06 Amperes</td>
</tr>
<tr>
<td>Plate Voltage, Max.</td>
<td>135 Volts</td>
</tr>
<tr>
<td>Grid Voltage (C-Bias)</td>
<td>135 Volts</td>
</tr>
<tr>
<td>Plate Current</td>
<td>8 Ma.</td>
</tr>
<tr>
<td>Plate Resistance</td>
<td>4000 Ohms</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>3.5</td>
</tr>
<tr>
<td>Mutual Conductance</td>
<td>675 Microhmos</td>
</tr>
<tr>
<td>Undistorted Power Output</td>
<td>170 Milliwatts</td>
</tr>
<tr>
<td>Effective Grid-Plate Capacitance</td>
<td>6 Mmf.</td>
</tr>
</tbody>
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<tr>
<th>The New Power Output</th>
<th>RCA Radiotron 231</th>
</tr>
</thead>
<tbody>
<tr>
<td>...has been designed for volume output from battery operated receivers where economy of plate current is important. It is for use in last audio stage. Its characteristics are:</td>
<td>...</td>
</tr>
<tr>
<td>Filament Voltage</td>
<td>2.0 Volts</td>
</tr>
<tr>
<td>Filament Current</td>
<td>0.150 Amperes</td>
</tr>
<tr>
<td>Plate Voltage, Max.</td>
<td>135 Volts</td>
</tr>
<tr>
<td>Grid Voltage (C-Bias)</td>
<td>135 Volts</td>
</tr>
<tr>
<td>Plate Current</td>
<td>2.0 Ma.</td>
</tr>
<tr>
<td>Plate Resistance</td>
<td>4500 Ohms</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>4.5</td>
</tr>
<tr>
<td>Mutual Conductance</td>
<td>700 Microhmos</td>
</tr>
<tr>
<td>Undistorted Power Output</td>
<td>1511 Milliwatts</td>
</tr>
<tr>
<td>Effective Grid-Plate Capacitance</td>
<td>8 Mmf.</td>
</tr>
</tbody>
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<tr>
<th>The New Screen Grid</th>
<th>RCA Radiotron 232</th>
</tr>
</thead>
<tbody>
<tr>
<td>...is particularly recommended for use as a radio frequency amplifier in circuits designed especially for it. Its characteristics are:</td>
<td>...</td>
</tr>
<tr>
<td>Filament Voltage</td>
<td>2.0 Volts</td>
</tr>
<tr>
<td>Filament Current</td>
<td>0.06 Amperes</td>
</tr>
<tr>
<td>Plate Voltage, Max.</td>
<td>135 Volts</td>
</tr>
<tr>
<td>Grid Voltage (C-Bias)</td>
<td>135 Volts</td>
</tr>
<tr>
<td>Screen Voltage, Max.</td>
<td>67.5 Volts</td>
</tr>
<tr>
<td>Plate Current</td>
<td>1.5 Ma.</td>
</tr>
<tr>
<td>Screen Current - Not over 1/3 of plate current</td>
<td>...</td>
</tr>
<tr>
<td>Plate Resistance</td>
<td>800,000 Ohms</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>440</td>
</tr>
<tr>
<td>Mutual Conductance</td>
<td>150 Microhmos</td>
</tr>
<tr>
<td>Effective Grid-Plate Capacitance</td>
<td>0.09 Mmf.</td>
</tr>
</tbody>
</table>

Use of Filters Advisable

The use of filters in all leads entering the stage shields is advisable to reduce coupling in external parts of the circuit.

In the construction of filters for the screen circuit, a by-pass condenser must be provided to keep the impedance from screen to ground as low as possible.

In general, properly designed radio-frequency transformers are preferable to impedances for inter-stage coupling.

If, however, impedance coupling is used, blocking condensers of 0.00025 microfarad capacity and grid leaks of from 2 to 5 megohms are suitable for screen voltages not higher than 45 volts.

If the maximum screen voltage of 67.5 volts is used, the grid-leak should not exceed 1.0 megohm.

The recommended and maximum plate voltage for the screen grid RCA Radiotron 232 is 135 volts; the corresponding negative grid bias is 3 volts, and the maximum positive screen voltage is 67.5 volts. Neither plate nor screen voltage is critical.

The grid and plate circuit returns should be made to the negative filament terminal. The control-grid bias for B-battery operated receivers should be obtained from a C-battery.

Great Merchandising Possibilities Lie Ahead

There are unlimited merchandising possibilities for these three newcomers to the radio tube world. The farm market has needed just such a development and the 6,000,000 farm homes in the United States will welcome an opportunity to join the rest of the world in enjoying superior radio reception.

And what is most important, they open new avenues of profit for RCA Radiotron dealers.
New Era for Minor League Baseball
Means Increase in Radio Audience

By A. W. (Sen) Kaney
Chief Chicago NBC Announcer

THERE was a sharp resounding crack and the white sphere hurtled through space. The shortstop scooped it up and snapped it to first. "You're out," cried the umpire. "Ow-wah!" wailed the crowds and thus on May 2, 1930 the first major night baseball game was officially ushered into the sporting world. New pages were added to the annals of baseball history that night when Wichita was the guest of De Moines of the Western League in a game played entirely under artificial light.

What a thrill it was to sit at that microphone and visualize the anticipation with which the listeners who had read advance reports of the game awaited its broadcast and the surprise of the many others who stumbled upon it by chance.

It must have been like a nightmare to some to hear the shout of the umpire, the boos of the crowd, and the piercing cries of the soda pop and hot dog vendors coming from their loud speakers in the middle of the night.

In a few years it will probably be a common thing to listen to the broadcast of ball games amidst the snores of a sleeping family and to hear occasional announcements like "Time has been called while electricians are attempting to locate a short circuit. Play will be resumed shortly."

Supper club crowds will soon start to fill the grand stands. Ladies and gentlemen in evening clothes will occupy the boxes. Perhaps even the players will wear a more formal cut to their shirts
that they may be in the accepted mode for evening wear.

Of course there is one difficulty in night baseball that will have to be overcome. Moon struck batters and players susceptible to romantic reactions at the sight of the moon will constantly have to be guarded against. Fight fans, while they do not favor love matches, will at times consent to sit through them, but baseball fans, never!

Has Far Reaching Possibilities

But for all the ludicrous possibilities of night baseball there are others that are both practical and far reaching. Night baseball will unquestionably save the minor leagues. It has been a hard financial struggle for most of the minors but with the advent of night baseball many more persons should find it possible to visit the games and thus lessen the oppressing financial burdens of these teams. Night baseball, it seems to me, will open the way for an almost entirely new audience of baseball followers in addition to those regular fans that are now attending these games. Personally, I can’t imagine anything more pleasant than sitting in an open air stadium through nine innings of thrilling baseball on a hot summer evening.

Naturally the predominant question concerning such an event as this night baseball game is “Was the lighting sufficient to provide adequate playing facilities?”

Lighting Conditions Ideal

The answer is that it most certainly was. In many instances it was less difficult to follow the ball under the 40 million candle-power light than it would have been under a glaring sun.

The field resembled a smooth, correctly lighted billiard table. The grass looked even more green than in the daytime, the foul lines even more white. The movements of the players and the flight of the ball were so easily followed that there was little thought given to the remarkableness of the whole thing.

Nor do I believe that the players had any difficulty in following the ball. There were several extraordinarily difficult plays made that I think should have proven impossible under a glaring white sun. Bullet-like drives and high flies were handled with equal precision and the game as a whole was a very practical and successful demonstration of the possibilities of night baseball.

There was not one serious misplay during the entire game that could be attributed to the lighting and it is impossible to conceive of any play for which the lighting facilities would have been inadequate.

Should Foster Radio Sales

When night baseball becomes a standard and accepted thing added impetus will be given for the sale of radio sets and tubes.

People will not let their sets give unsatisfactory performance for the national pastime is still exceedingly popular and baseball fans the nation over will insist upon the finest reception possible.

This innovation will unquestionably be a boon to radio as well as to baseball. And broadcasting these night programs will stimulate attendance at them and be a big factor in putting them on a paying basis. You can’t sit at home night after night listening to thrilling baseball games without wanting to see one. Once again radio comes to the rescue.

Above — A few of the 146 thousand watt MAZDA Lamps which made the Des Moines baseball game as easily played by night as by day.

Left — The entire park showing the immense towers that flooded the playing field with forty million candle power.
I HAVE just heard again that retailers will never realize—

1. That there is real money and profit in going after the tube renewal business; that the RCA Radiotron is the razor blade of the radio business.

2. That even if they realize it, they will not have enough interest or desire to go after it.

3. That what is needed is good, sound merchandising of the 1930 variety. In the first place, how anybody who lives in this country can say that anything will never be done, I do not know. Very few radio retailers seem to have discovered the perfectly obvious fact that they can make money in merchandising radio tubes. After all this time they are just becoming interested and the realization of this opportunity to make money is beginning to dawn. Of course there are a few who know they can make money by using common-sense methods in merchandising radio tubes. Still, if there is one person who thinks the thing can't be done, there may be others.

I HAD the pleasure, some years ago, of assisting in making the measurements which proved that a young friend of mine had broken the world's records for the running broad jump and the running high jump in one successful leap. Unfortunately the leap wasn't official. There were no witnesses present, even the jumper wasn't present very long. But, he did it.

Here's the tale: A large, rough and boisterous gentleman had a pretty, vivacious daughter. He forbade her to see a friend of mine, and, when this gentleman forbade, he forbade in certain and in no uncertain terms. Nevertheless, the heart-driven young man loved the beautiful daughter. One night he managed to get into their home. He stood trembling, doubly stirred by love and fear, in a dark hallway, with the forbidden but oh, so desirable light of his heart. Suddenly, the very rough parent turned on the lights and discovered the daring youth and the determined daughter in a forbidden but thrilling clutch. Departing youth and irate parent hit the back door with only ten inches and disaster between them.

Unfortunately, my young friend, in the befuddlement of passion, neglected to plan his departure further than the rear entrance and immediately found himself confronted with a most desperate situation. On his left, there was a high fence. On the right, the towering wire screen of a tennis court hemmed him in. Straight ahead he saw the enormous hulk of a great iron roller which had been used in smoothing out the tennis court and which had been left by a tired laborer exactly in front of a rear gate.

What was he to do? Escape? He couldn't. But he had to. So he did. He left the ground, heading definitely away from there and nowhere else. He cleared the roller, machine, gate and all and lived (only to marry the girl).

The actual distances covered broke both world's records and although he was jumpy for months later, he could never again approach that performance. He did it because he was interested in doing it.

This incident is another case, to add to the millions, which proves that impossible things can be accomplished if the desire, the interest and the determination are powerful enough, and that most things are easily possible if you only know it.

More and more the listeners of America are becoming accustomed to their radio sets. More and more the opportunity and need for smart merchandising of tubes for renewal purposes are becoming apparent. People are becoming less afraid to go to stores and get what they want. They want to know where to go and they want to know that they can get what they know is the best product when they get there.

Don't let anyone tell you that the pleasant, profitable and delightful business of getting tube renewal business can't and won't be done. It is simply a question of interest and desire. Knowing how will make it easier. May we suggest RCA Radiotrons and Good News as a starter? You know there are some people who think radio is impossible.
They Always Come Back to RCA Radiotrons

By MILT GROSS

JINGO TUBES
100% REPLACEMENT POLICY

YESSIR. THAT'S HOW I'M GOING TO CLEAN UP.

RIGHTO M'BOY JUST AS THE SIGN SAYS.

BAM TUBE

JINGO TUBES

LOOKS LIKE A CLEAN-UP.

2 MONTHS LATER.

BAM TUBE

BAM TUBE

NO SALE

HELP. THE FLOOR.
ILL SUE FOR DAMAGES.
ILL SUE FOR A BROKEN RIB.
OWWW! MY LEG.

IM TH' LANDLORD.
THIS'LL COST YE PLENTY.

DID HE CLEAN UP ON HIS 100% REPLACEMENT POLICY.

BANANA OIL?

KEEP OFF THE GRASS.

MILT GROSS
That's What This Young Dealer Has
Obtained by Selling Standard Lines

By Z. V. Thompson
Sales Promotion Dept., RCA
Radiotron Co., Inc.

Five years ago a hustling service
man—today one of the youngest
and most successful radio merchants of
Syracuse, N. Y. That is the enviable
record of George Freeman.

It was not because Freeman was
extraordinarily brilliant or knew some
deep dark secret that others did not,
that he made a success of his radio
business. Rather, it was because he
had darn good common sense and sold
only standard lines of merchandise from
which he was sure of making each
customer a satisfied one.

Just as easy and simple as can be . . .
and that's the way with most winners . . .
but it's always the easiest things
that seem to be the hardest for most
of us to comprehend.

"When you handle nationally adver-
tised products," George says, "there is
considerably less sales resistance and
consequently far less responsibility
thrown on the dealer. When you know
that people are going to demand certain
products, the only sensible thing to do
is to keep those products in stock.
Sales volume, not individual discounts,
go to make the old ledger look rosy at
the end of the year."

Play Safe With Standard Lines
And most certainly Freeman's view-
point is a practical, common-sense one.
If a dealer endeavors to handle a
standard and nationally known prod-
uct he doesn't take the risk of losing
a customer or of losing his own
reputation as the result of inferior
performance.

When a dealer handles a prominent
nationally known product he knows
that should any trouble develop at
any time the manufacturer is going to
be more interested in solving the
problem than the dealer himself. No
large manufacturer can afford to have
any dissatisfaction with his product,
and no such manufacturer permits any
dissension as to the merits of his
product to exist very long.

But 21 year-old George Freeman is
much too wide awake to sit back and
let the manufacturer do all the work.
He wants even more business than the
extensive campaigns of these great
manufacturers bring and has, as a result,
devised means of reaching his pros-
spective customers through local media.

Direct Mail Brings Results
Once a year he employs the ever
effective direct mail campaign by offer-
ing a free set and tube inspection to all
his present and prospective buyers. It
is a clever, tactful method of securing
the confidence of the public and of
rendering an important radio service.

Nor in this inspection service does
he permit his service man to merely
inform the customer that he requires so
many new RCA Radiotrons. On the
contrary, the service man shows the
owner of the set that his present tubes
should be renewed. By the simple
method of testing the tubes before the
set-owner's eyes, the service man
demonstrates the difference in power
between the tubes already in the set
and the new tubes which he carries in
his kit. If it becomes necessary, he
installs a complete new set of RCA
Radiotrons and exhibits to the cus-
tomer the increased radio satisfaction
that can be had.
Pays Expert Window Dresser
$5.00 a Week

Another very important factor that has contributed much to his success is that George makes the best possible use of his two excellent windows. Just look at the illustration and see the way in which he makes use of RCA Radiotron display material. That's the kind of thing that gets people into the store and sells RCA Radiotrons. He pays an expert window dresser $5 a week to trim his windows. This is not an extravagance. It is common sense and results in increased sales. At night these same windows are adequately illuminated with 200-watt Mazda lamps so that passers-by can easily see what is on display. Spot lights are cleverly arranged to add emphasis.

The easiest way in which to show the effectiveness of the principles employed by George Freeman in the building up of his business is to compare his activities of five years ago with those of the present. Five years ago, when Freeman was only sixteen years of age, he was one of many service men whose home was his headquarters. Today his business-like little store grosses him—$29,000 annually—approximately $6000 of which is in tube sales. Most certainly this is an enviable achievement.

First Be Sold Yourself

Of course, George has always been sold on his product. That is fundamental. Ever since a lad he has worked and experimented with radios giving him knowledge with which he has built up a profitable and stable radio trade. He has inspired confidence in his customers through his courtesy and dependability. Many of his clients have been with him since his early service-man days.

When he first set himself up as a radio dealer he had scarcely any capital that you are sincere in your business and in your efforts to satisfy their requirements."

Around this idea he has built his entire program and the sensationally successful results are clearly made manifest by his ever mounting sales and growing profits.
Radio's New Service

Contentment and Efficiency Fostered by Its Use

By L. D. Brown
Manager Newark RCA Radiotron Factory

Radio, that great new force that has brought untold pleasures and been of inestimable service to modern civilization, has now found its place in modern industry.

The Newark factory of the RCA Radiotron Company, Inc., was one of the first large industrial plants to make use of radio to keep its workers happy and increase their efficiency. By reproducing regular radio programs and relaying them to the factory workers the RCA Radiotron employees are afforded an excellent opportunity of realizing what a tremendous thing radio is. They are shown how much radio means to those who depend on it for entertainment and are inspired to give their best efforts in manufacturing a product upon which radio enjoyment depends.

When employees are content with their jobs they stay at them. This results in a stable group who are acquainted with the various phases of their work and greatly lessens the necessity of continuously training new and inexperienced operators to fill the places of those who have left for more pleasant and comfortable surroundings.

The Newark RCA Radiotron factory has been among the first to recognize the importance of employing satisfied and cooperative workers and of showing to these workers by a concrete example just how important to humanity is the industry in which they are engaged. The Newark organization's views are so progressive that they might even be regarded as being a few steps ahead of the modern industrial trend. A trip through this plant is not only a revelation, it is a stimulant.

As you walk through the factory soft strains of the latest dance music turn the constant hum of the machines into a pleasant bass accompaniment. "Happy Days Are Here Again," and "I'm a Dreamer, Aren't We All," have subdued the buzzing machines and an air of light and cheer seems to pervade every corner.

The whole secret of the success of the Newark factory, its record production and its efficiency, lies in the fact that the employees have been indirectly convinced, through the radio, that they are dominating and are not being dominated by the machines.

Nor when the broadcast is in progress do the girls cease working. The effect of the music seems to awaken them and their otherwise tiring movements become rhythmically attuned to the beat of the selections.
to Industrial Workers

played. They now realize that the very product they are making is the one which gives them this pleasure and a similar pleasure to countless others.

Dynamic speakers of the most modern type are mounted in pairs on every other pillar in the factory. From these come the latest Victor dance music and regular radio programs.

This centralized radio system is an intensely interesting one and the Newark plant is justly proud to be among the first industrial organizations in the world making practical use of such apparatus. The Victor reproducing machine and the powerful radio receiving set may be set to function for any period during the day and automatically shuts itself off when the period is over.

Factory Manager Addresses Workers

One microphone is installed in my office and one at the control board. By means of the former I can talk to the whole plant at one time. This I do about once a week. It is a great thing, for I can by this means make each and every worker feel that he or she is personally acquainted with me. It would be impossible for me to go around and see each worker much as I would like to, but by centralized radio almost the same result can be accomplished.

At the suggestion of some of the workers plans are under way to utilize the new centralized radio by using "home talent," that is, employees of the factory who are interested in playing musical instruments and in giving vent to their feelings vocally or in whatever other manner presents itself.

Scattered throughout different sections of the factory we have request boxes built in the shape of RCA Radiotrons. These permit employees to voice their opinions concerning the broadcasts and to request the playing of whatever numbers they desire. Needless to say these boxes are kept well filled. If there are several requests received for a selection an effort is immediately made to secure a record so that it may be added to our constantly growing record library.

Best Workers Allowed Parade

Nor is the radio the only thing that is putting life and zest into those who are engaged in the manufacturing of RCA Radiotrons. On Mondays frolicking groups of gayly clad workers on foot and on elaborate floats tour the factory. These are the members of the department whose work was most efficiently turned out during the preceding week. Extra pay for the department whose work shows the lowest number of defects and grand prizes ranging from $20.00 down to $1.00 to the girls with the lucky numbers, chances for which are earned by the departments turning out the best work for the day, tend to add enthusiasm and encourage the production of quality work. Also small white ivory elephants suitable to be worn on necklace or bracelet are presented to the leading departments. These all create an interest and give employees something to work for besides hollow praise.

Pep Signs Identify Leaders

Throughout the entire factory are cartoons and placards, products of the clever hand of James Stilwell, our assistant manager, which carry jovial

Just a few of the many enthusiastic workers on parade.
messages concerning everything from quality sermons to jibes at foremen and other leaders. The most efficient units each day are indicated by arrows done in the red and black RCA Radiotron colors, identifying them as the leaders and the week's foremost divisions are shown by large posters. These signs have become coveted prizes and there is the keenest friendly competition imaginable to secure them.

The workers are human beings whose particular part is as important as the executive's. They are not cogs of an immense machine. They are members of a family, co-workers producing something that has brought them relaxation and which they know will render the same gigantic service to others.

That's the way a feeling of cooperation and cheerfulness has been established. Workers are now an enthusiastic group who have been given a concrete and worth-while stimulant for the production of a quality commodity. They have been entertained and work has been made less difficult for them by the use of the very product which they manufacture. In this manner they have been educated to the tremendous value of that which they are engaged in producing and are enthusiastically anxious to turn out a superior radio tube.

Girls Express Appreciation
It may be surprising but employees are not only happy, but eager to work at the RCA Radiotron factory in Newark. A host of appreciative letters submitted through the radio request boxes bear out this statement which otherwise would seem unbelievable. There is no dissatisfaction, no feeling of antagonism among the workers. The atmosphere is so jovial and the day so filled with interest that there is no time for anything but cooperation.

The whole spirit of the organization seems to be voiced in this paragraph from the girls of department 280:

"Ever since the radio has been installed all of us girls have a smile on our faces at all times. It makes it so much easier to work with our smiling gang." And in another the same grateful note is expressed:

"It has been a great pleasure to us to hear the radio. Every morning when we start for work we are always happy because we think of the good times we are going to have." The letter was signed "Two Happy Pals."

And there are many more, some of them light, others revealing a deep note of pathos, but all of them sincere in expressing their appreciation and gratitude for the joy the radio has brought.

Quality First
The aim of the Newark factory's staff has not been to drive the workers. "Quality first" is the motto and consequently quantity becomes a secondary consideration. And, though it is hardly necessary, we might add that the motto is being lived up to and the aim it incorporates is being attained.

But no matter what is said or written it cannot adequately reveal the complete satisfaction and spirit that has been instilled into the workers. Employees are now part of the organization.

And all this goes to show why the RCA Radiotron Company leads in the tube industry. Not only is it giving its dealers a quality product and new ways, every day, to make sales easier but it is also making life more pleasant for those who produce these quality tubes.
We Point With Pride—

**T. F. Joyce**

And here you have a first hand view of T. F. Joyce. You may not know it but Tom is one of the reasons why the Sales Promotion Department snaps into things with such whirlwind speed. When Tom gets an idea it reminds you of firecrackers going off. But unlike firecrackers his ideas are very effective and have far reaching results. Like most people who are real people Tom is very unassuming and retiring. He was even a bit hesitant about letting us publish his picture. Nevertheless, we are proud to introduce him and know you will be equally proud to meet him.

**Frederick A. Mulvany**

A “dyed in the wool” Californian—that’s Frederick A. Mulvany who, after years of valuable business experience becomes our Pacific Coast Division Sales Manager.

Fred, who is thirty-seven years old, attended school at Berkeley and at the University of California. Even at school he experienced that restless desire to be up and doing things and when the war happened along it was just in his line. During the war he served as liaison officer aboard a British steamer.

His joyous nature has already endeared him to many dealers and jobbers and they will be pleased to know Fred Mulvany is now playing an important part in keeping RCA Radiotrons the fastest selling tube line.

**Arnold L. Pipper**

And now we’d like you to meet Arnold L. Pipper who is in charge of factory operations for the RCA Radiotron Company. "Pip," as he is most familiarly known to his host of friends, is one of those persons who express themselves through actions rather than words.

Starting in the industrial world with a meagre position he climbed to the position of an assistant factory manager. Consistently adhering to his ability to mount the ladder of life he joined the army during the world war as a buck private and emerged a second lieutenant.

We are proud to present Arnold L. Pipper.

**W. L. Van Keuren**

W. L. Van Keuren, who is in charge of the engineering department, is a man’s man.

His research work on the Dumet wire (on which he received several patents) is one of the most important developments of either the lamp or tube industry. He also took a notably active part in the development of tungsten and molybdenum drawn wire.

His everlasting efforts to see that nothing but perfect RCA Radiotrons reach the market is one of the main reasons why RCA Radiotrons have acquired such a widely accepted reputation for quality.

**R. R. Kane**

If Virginia is the home of presidents then it is the home of good counselors as well. At least you would say so if you could meet R. R. Kane, general attorney for the RCA Radiotron Company, Inc.

A law degree from Washington and Lee, a naval aviator during the world war, attorney for the Federal Trade Commission—that briefly is the history of the man who sees that everything we do is according to Hoyle. Of course, we might spend pages relating his admirable qualities but he is so modest that he refuses to divulge them.

**Hayes Clarke**

Now meet Hayes Clarke, District Sales Manager for the RCA Radiotron Company with headquarters at Chicago. Born in Baltimore, Hayes was educated at Loyola College and the Maryland Institute. He saw active service in France and has served in the National Guard.

Hayes is chiefly interested in his work and has gained much knowledge that will prove of considerable value to RCA Radiotron dealers and jobbers in the middle west.

His old friends will be glad to see his abilities have been recognized and those who have not been so fortunate as to meet Hayes have a treat in store.
An airplane view, from the beach of the world's newest and largest auditorium and convention hall. It is located in Atlantic City, N. J.

Main auditorium chamber which seats 41,000 people

A T L A N T I C City, the Playground of the World—now has the world's largest auditorium and convention hall, built by the municipal government at a cost of $15,000,000, occupying an entire block of seven acres and fronting directly on the Boardwalk, between Mississippi and Georgia Avenues.

The mammoth structure, encircled on the beach front by a splendid colonnade, seats 41,000 persons in the main auditorium alone, while the entire permanent population of Atlantic City—66,000 persons—can be seated in the building and still leave room to spare.

It offers a gross exhibit area of 268,000 square feet, with 10,000 square feet additional for separate exhibits, all within the same building, as well as an imposing array of smaller meeting rooms, the smallest of which seats one hundred and fifty persons.

In addition to the main auditorium, which contains, also, the largest stage in the world, and an ice-skating rink, as well as a swimming pool, there is a spacious ball room on the boardwalk front, where 5000 persons can be seated and where there is another large stage.

Centralized Radio One of Features

In the main auditorium the startling distances between enclosing walls, floor and ceiling are such that a thirteen-story building, five hundred feet long and two hundred feet wide could be placed there, with more than a hundred feet on all sides to spare.

Despite the great size of the Atlantic City Auditorium and Convention Hall, through use of specially designed apparatus, a whisper in one end of the huge auditorium can be clearly heard in the other end. The auditorium will contain the largest pipe organ in the world, with 32,000 pipes of unprecedented size, grouped along the 350-foot trusses of the vast ceiling. There are no columns in the main auditorium to break the view.

Steam trains can be operated to the ground floor entrances of the hall, while ramps make it possible to drive automobiles from the street level directly to the main auditorium floor. Specially designed freight elevator equipment makes it possible to handle the heaviest pieces of machinery and exhibits with ease.

Temperature Controlled Automatically

There is automatic heat and ventilating control throughout the structure,
with an entire change of air every seven minutes, washed and cooled in the summer and warmed in the winter.

Facilities for conventions and exhibitors are unusually complete, no expense having been spared to furnish efficient aid for installation and maintenance.

The great hall is marked by true architectural majesty. With frontal exterior of Indiana limestone and marble, flanked by 100-foot towers and with broad steps leading in splendid sweep to the main entrance the hall—a modern adaptation of the Romanesque period—literally breathes the indefinable essence of the sea.

Mellow floodlights, iridescent and softly tinted with the blue and green of the ocean, pleasantly bathe the great structure when darkness falls, etching it out even among the numberless lights of a brilliant skyline, and blending perfectly with the color scheme within.

Along the entire boardwalk front there is an arcade containing fourteen stores, faced with marble and ornamental bronze enframements, and with a richly decorated 50-foot wide entrance to the Hall proper. There are, also, twenty-one stores on the Pacific Avenue front of the building, at the street level.

Two splendidly built and equipped bath houses are on the ground level at the front of the structure, each as large as an ordinary building, while there is also a magnificent colonnade approach to the huge structure from the beach itself.

Has Multiple Uses

The Atlantic City Auditorium and Convention Hall is used not only for conventions and exhibits, but for staging of a series of outstanding events in the theatrical world, pageantry on a large scale and athletic activities of national interest. The last named include indoor football and baseball, soccer, championship boxing bouts, golf tournaments, basketball, wrestling, ice skating, hockey, swimming races, intercollegiate athletic meets and the like.

It might be noted that it is not only the world's greatest convention hall and auditorium, but the first to be built primarily to accommodate national exhibits, housing the largest of these, together with the convention, in the one structure under ideal circumstances.

The broadcasting rooms are elaborately equipped and furnished. Inter-locked with the broadcasting chambers is the largest amplifying and music reproducing system in the world, installed at a cost of $268,000. The system and its control apparatus enables the voice of a lone speaker on the auditorium platform to be heard distinctly and clearly by more than 40,000 persons seated in the hall and by millions more throughout the country by means of broadcast hook-up. This system is a marvel of present day radio engineering.

Largest Amplifying System in World

Compared with any other system of the kind now in existence, this amplifying apparatus requires 57 miles of wire. It is said to be three times larger than any other now in use.
"Hail to the Chief!"

Finest Electric Sign in the Country
Now Atop Harrison Offices

NOW the RCA Radiotron message will be hurled down from the skies in the form of a gigantic new electric sign that just oozes personality. This sale making builder of good-will stretches its massive form for 150 feet across the roof of the Home Office of the RCA Radiotron Company in Harrison, N. J., and rears its mighty bulk upward for some sixty feet.

Its personality is singularly unique. It is the only sign we know of with a theme song. Jumping musical notes constituting the opening bar of "Hail to the Chief" make the sign extraordinarily effective and memorable.

The new sign is one of the largest and finest in the country and will be seen, according to the Chamber of Commerce in Newark, N. J., by over 140,000,000 people each year. Six important railways—the Pennsylvania, Delaware and Lackawanna, Lehigh Valley, Erie, Jersey Central and Hudson and Manhattan Tubes, pass our very door. Countless other travelers who use the main traffic arteries leading to the Holland Tunnel and northern New Jersey highways come within view of the RCA Radiotron Building. Besides this the new sign is directly in the course of the regular airplane passenger service operating from the renowned Newark Municipal airport and will be seen clearly by the many persons who choose this means of transportation.

The RCA Radiotron message in immense 12-foot letters will be flashed instantaneously into the minds of those who pass by. Its size alone is so impressive as to make it impossible to forget. Add to this the fact that it has 4000 brilliant Mazda lamps and you will see what a stupendous thing this marvel in eye music is.

The sign makes five complete changes in fifteen seconds. In its first operation it shows the outline of the RCA Radiotron 224 in the phantom. Bands of lightning flash from opposite sides and on these a clef, 14 feet high, and the opening notes of "Hail to the Chief."

Everything then fades out and on comes the famous RCA Radiotron carton followed by the legend, RCA Radiotrons, "The heart of your radio."

The name "RCA Radiotrons" in red letters 11 feet high commands the eye of everyone for miles around.

The brevity of its operation and the size of its letters insure everyone getting the complete message at a single glance. Its many colors and its unusual musical notes hold attention while the RCA Radiotron message is driven home. Superlative in size, effective in coloring, unique in design, and having a location even better than New York’s Broadway, this sign which was put in operation June 1, cannot help attracting one’s attention.

It is but another indication of what is being done to make sales easier for RCA Radiotron dealers.
Not So Long Ago

Listen to the birdies

Hot Stuff!

Six...seven...eight...nine

Pre-radio network (Harpers Weekly 1891)

Barney Google speaking!

Lamp the set

It takes practice....

Fore...out of five are dubs

I'd rather have fish

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Service Slants THAT Build Sales

How the Aeolian Company Systematizes Service for Increased Efficiency and Sales

By E. C. Hughes, Jr.
RCA Radiotron Company, Inc.

When you have a service department so organized that it keeps the customer satisfied, makes money for the company and makes each service man feel that he has a real job, then you have something. And that is exactly what the Aeolian Company of New York City has under the able direction of C. P. Baldwin.

The Aeolian Company has built up a most flexible and satisfactory system of handling service work. Realizing that in the final analysis the success of any service department depends upon the service man and his proficiency this Company has built its system entirely around the individualization of the service man.

With this system each service man is paid upon a flat piece-rate basis. For each call that he makes he receives a certain fixed amount. However, if a send back call is necessary to complete a job that was improperly done the service man receives nothing for the second call. This tends to make them do a complete job the first time. In no case must a service man spend less than one half hour on a job. Even though it takes only five minutes to correct the trouble, he must spend the rest of the half hour in going over the set and checking its operation. Thoroughness is the service key-note of the Aeolian Company.

Compensation for Car and Distance

Additional fees are paid the service man if he uses his own car. This is to compensate him for mileage and depreciation. For each party out call, he receives a fee to compensate him for the time lost in getting to and from the place. Also, each original antenna installation carries a definite fee in addition to the set installation fee. Then, if it is necessary for the service man to carry a set or large piece of apparatus he receives a cartage fee.

Every service man must own his own set of tools and meters; if he so desires, he is financed in the purchase of new equipment by the Aeolian Company. Small deductions are then made from his pay each week until the apparatus or tools are completely paid for. Each mechanic is thus impressed with the value and necessity of good tools. Owning his own equipment makes him doubly thoughtful of its use and care.

For kit stock such as tubes, B-batteries, spare parts, and the like, each service man has an inventory. He
submits at regular intervals a list of the equipment he has on hand. This is checked with his orders for stock and his credits for materials used.

Under this system it will be seen that each service man is put on his own. His job is what he makes it and his salary depends to a large extent upon his ability.

The records of service and installations that are kept in the office are designed to furnish at all times pertinent information about any set that has been bought from or serviced by the Aeolian Company. The forms illustrated show the entire layout used.

**Detailed Service Information Kept**

When a call for service first comes in a customer's order memo is made out. This, together with the service cost sheet on the back, furnishes detailed information about each service call that is made. The service man carries with him a record of radio sales and service. If a previous call has been made complete information about the nature of the work done and the materials used are recorded. By looking back over this the service man can get a complete history of the set and thus be able to tell where the trouble most likely is without even making a test. This has been found to speed up the service work tremendously. When the call is finished and the set is operating satisfactorily the customer signs the slip if he is satisfied. This record is returned to the files for future reference.

**Complete Records Kept of All Sets**

The service department radio control card furnishes a record of the service necessary on each customer's set. Thus a complete check is kept upon each set in service.

With this excellent service system the Aeolian Company is able to maintain an absolute check on its service men for the work done.
THE whole world is the radio stage! In that sentence lies a wonderful opportunity to build a simple yet an exceedingly effective window display. Secure a comparatively large globe from your local stationery store and place it in the center of the window. Cover up the legs with a drape or box to give a platform effect; then at the upper left or right hand corner of the window hook up a spotlight focused upon the globe. A sign reading "The Whole World is the Radio Stage—Use RCA Radiotrons" will immediately suggest the purpose of the window and RCA Radiotron display materials will tie the selling idea in perfectly. The display material will be supplied by your jobber upon request.

The background is always most effective when it has a direct bearing upon the rest of the material featured in the display. The natural thing, then, is to make the crepe paper background of red and black. This blends with the RCA Radiotron carton colors and increases the selling power of the display.

**Balance Your Set With RCA Radiotrons**

The second suggestion is a bit more complicated but it is unquestionably an excellent selling idea. Get a large balancing scale holding a symbol of tone on one side and of power on the other. These can be drawn up for you on heavy cardboard by a local artist at a very slight cost. Then for a background ask your jobber for a giant carton, if you haven’t one already. Print a sign reading, "Balance your set with RCA Radiotrons." Paste or fasten this sign over the black base of the carton where the tube voltage requirements are marked.

This alone is an effective display but to add motion and make the window unusually attractive only a bit more work is necessary. Get an electric fan and remove the shield and blades. Adjust the head of the motor so you can use the slowly rotating movement at the back of the fan (the movement that slowly turns the fan from one side to the other). Fasten a shaft to the fan motor and some ordinary wrapping
cord to the shaft. Run the cord through the giant carton and attach it to the scale about six inches from the scale head. Be sure the surfaces over which the string passes are perfectly smooth—otherwise the string will soon wear through and break. A block of wood fastened to the scale on the opposite side of that to which the cord is fastened will throw the balance to one side and keep the twine taut so the scale will move up and down as if it were perfectly balanced.

Merely featuring this giant carton background with the scale and leaving the rest of the window without display material the idea will attract enough attention to make the window a decided success.

Hang Out Your Shingle

The third suggestion is one for a permanent sign on the exterior of your store. In this issue an article explains the gigantic new RCA Radiotron sign in Harrison, N. J., where RCA Radiotron headquarters are located. Why not tie in your own store with this monster of the advertising world. The accompanying illustration shows a simple but interesting sign. It is symbolic of radio. The musical notes and the lightning are unquestionably attention-getters and the conciseness of the message will sell the entire idea in a few seconds. It looks so simple as to deserve nothing but passing attention but it is the simple, easily read and understood message that gets across in these days of hurrying crowds.

Catering to the Feminine Purchaser

And now there's one for the ladies. The woman buyer in the future will undoubtedly prove an important figure in the radio trade. At present she decides on almost everything else in the home and it is only a matter of time before she will govern the purchase of the radio and its tubes. To appeal to this prospective feminine buyer a display that features something with which she and she alone is directly associated is necessary. But that's not nearly so difficult as it sounds. Arrange a simple kitchen scene in your window, using the accompanying illustration as a copy or for suggestions. Your public service company will be glad to lend you an electric range for this purpose. The table and chair also can be easily borrowed from a furniture store. Maybe they will want to borrow a radio set some time and you can reciprocate. Feature a radio set on the kitchen table and an RCA Radiotron boy on the giant carton (a regular RCA Radiotron display piece that you may obtain by writing your jobber) near the table. A line of regular RCA Radiotron cartons and a sign reading, "Modern Home Economics for the Housewife" will complete the display.

Using the Weather as a Display Topic

The fifth suggestion features the old stand-by of conversation, the weather. As Mark Twain said, "Everyone talks about it but no one does anything about it." Well, let's do something. Divide the window in half and on one side feature a cardboard sun shining brightly with a showcard reading, "Reception Fine and Clear with RCA Radiotrons." On the other side of the window gloomy looking crepe paper storm clouds and tinsel rain tied in with a card reading, "No Cracking or Fogy Reception with RCA Radiotrons." This is a sure bet for sales.

The background for the sunny side of the window can be of plain, bright blue crepe paper on the top of which is tacked a yellow cardboard sun. From this beams of yellow crepe paper are extending.
Dollar Pulling Windows

Right—Fourth of July will soon be here! Tie your window in with Independence Day. Make the background red, white and blue crepe paper. The giant firecrackers are quickly made from cardboard or heavy paper. Be sure and have a local artist make the signs for you as poorly done signs will spoil this display.

Left—This attractive window belongs to the Thomas Electric Company, Des Moines, Iowa. It is an example of what can be done with a medium size window and some of the display material which we have at your disposal.

Left—This suggested window display looks very attractive in the summer time. The background light colored crepe paper. The uniformity and simplicity of the whole layout is such that it is a sure-fire attention-getter.

Right—Here is an RCA Radiotron window that brought results. The three spinners in the middle are attached to electric fans. They attract attention of passers-by. The Houston Lighting & Power Co., Houston, Tex., is the originator of this display which brought them increased RCA Radiotron sales.
Let the People Know that your Store is the Headquarters for RCA Radiotrons

IDENTIFY your store as the headquarters for RCA Radiotrons and radio service. No surer way of doing this than through newspaper advertising. Now, there is available to you a series of eye-catching, sales-making newspaper advertisements—advertisements which stand out on the newspaper page in the competition for the reader’s attention.

A copy of this Newspaper Advertising Portfolio will be supplied on request. Electros or mats of these newspaper advertisements will be sent free of charge. Send for your copy of this portfolio now! Or ask your jobber’s salesman.
"We always recommend RCA Radiotrons"

says

DR. FULTON CUTTING
Chairman of the Board
COLONIAL RADIO CORPORATION

COLONIAL engineers are enthusiastic about RCA Radiotrons and test all Colonial sets with them. It has been repeatedly proven that inferior tubes are a serious handicap to complete radio satisfaction, for if the tubes do not function properly, nothing functions properly. RCA Radiotrons are recognized as the standard of the industry and are built with scientific precision. So we always recommend RCA Radiotrons to owners of Colonial sets."

RADIO ENGINEERS ADVISE:

Replace all the vacuum tubes in your radio set with RCA Radiotrons at least once a year. This is the only sure way to maintain good performance and minimize disagreeable noises and other troubles caused by inferior tubes. RCA Radiotrons will give you the maximum in selectivity, sensitivity and tone quality.

Old tubes may impair the performance of the new

RCA RADIotron CO., INC., HARRISON, N. J.

This advertisement will appear in Liberty, June 28; Literary Digest, June 7; Saturday Evening Post, June 14; Popular Science, June; and appeared in Collier’s, May 24. It is also appearing in 216 of the leading newspapers.