Records vs Discs

1/2 HOUR PROGRAM—12-INCH RECORDS
7 × $75.00 = $525.00

1/2 HOUR PROGRAM—16-INCH DISCS
2 × $125.00 = $250.00

Only Company Equipped for Discs

THE NATIONAL BROADCAST AUTHORITY
BUREAU OF BROADCASTING,
RADIO DIGEST
E. C. RAYNER, President
CHICAGO

The Pioneer National Radio Advertising Representatives. Estab. 1926
Chicago: A. T. Sears & Son, 122 South Michigan Avenue
New York: Ingraham & Walker, 33 West 42nd Street, Lack. 2091
Now Ready:

Advertising by Radio

by Orrin E. Dunlap, Jr.,
Radio Editor, The New York Times

This pioneer book for the first time supplies authoritative answers to the questions that advertisers have been asking ever since sponsored programs began to go out on the air. A great deal of this information required special research and investigation, the results of which have never before been published.

This new book covers the entire subject; it is comprehensive but concise. It tells, for instance, how much broadcasting costs and what returns present users of this medium are getting; how to estimate the "coverage" of a particular station or chain; how to measure the purchasing power of the audience you reach. Scores of concrete examples illustrate the many points that Mr. Dunlap considers.

A PRIMARY objective with many broadcast advertisers is to stimulate sales through dealers. Here you will find details of the methods by which Ipana Toothpaste, Clioquot Club Ginger Ale, Stetson Shoes, Maxwell House Coffee, Wrigley's Chewing Gum, and many other products cash in, both by attracting new dealers and through getting better results from present distributors. Specific data are given on the types of material sent to dealers to aid them in attracting customers to their stores. There is also a great deal of data on making direct sales by radio.

Mr. Dunlap analyzes many types of programs and presents suggestions that will aid you in making up successful broadcasts and in avoiding pitfalls that reduce the program's value. The suggestions for preparing a radio continuity will alone be worth far more than the book's cost to any broadcaster.

How you can tell if your program is getting across? Mr. Dunlap describes various gauges that are in successful use, ranging from offers of free samples to an elaborate jury system. How to test your program on a limited scale before tying yourself up to heavy expenses; how to coordinate radio with other sales and advertising efforts; rotating programs to attract new audiences; picking the best time to broadcast—and dozens of similar points are covered.

There is not room here to adequately describe Advertising by Radio but you can see the book itself before deciding whether to buy it. The coupon below will bring you a copy on five days' approval; if you like it remit $4.00—otherwise send it back.

Sent Postpaid for 5 Days' Free Examination

The Ronald Press Company,

Send me, delivery charges prepaid, a copy of Dunlap's Advertising by Radio. Within five days after I receive it I will either send it back or remit $4.00.

Name
(Please PRINT to insure correct delivery.)

Firm
Position or Title
Business
Address

City State

Home Address

*(If you prefer to have book sent to your residence)*

Orders from outside continental U. S. and Canada, cash plus 25 cents to cover shipping.
Northwest’s Leading Radio Station

KSTP

NATIONAL BATTERY STATION
BROADCASTS CONTINUOUS DAILY SCHEDULE TOTALING 124 HOURS PER WEEK

MARKET
KSTP dominates the field in the Twin Cities and the Great Northwest with its millions of buyers of all kinds of commodities and service. The most powerful station in this territory, KSTP is heard at greater distances than any other Northwest station. Rates are based on local coverage, but KSTP is heard internationally.

SERVICE
KSTP service is complete and continuous from the first contact. Every department essential to successful radio production: research, merchandising, sales, publicity, program, continuity, music, dramatic, engineering,—is administered by an expert staff always at the service of the advertiser.

By giving the best entertainment and most service to the radio listeners, KSTP gives most to the radio advertisers. The largest audience in this great market listens regularly to KSTP.

Representatives:
Bureau of Broadcasting, Radio Digest, Chicago, Ill.
Scott Howe Bowen, Inc., New York, N. Y.

Accounts accepted from accredited advertising agencies.

STUDIOS
ST. PAUL HOTEL
ST. PAUL

Executive Offices
ST. PAUL HOTEL
ST. PAUL, MINN.

STUDIOS
RADISSON HOTEL
MINNEAPOLIS

August, 1929
Offers the Advertisers these Advantages

1. Nationally cleared channel.
2. Comes in at the center of the dial – 389.4 meters.
3. New 50,000 watt equipment, 100% modulation.
4. Nationally popular talent available at moderate cost.
5. WBBM program service is comprehensive and complete. Authoritative educational talks, household economics periods, and the outstanding entertainment attractions are presented from our studios, and as a member of national systems.
6. A complete merchandising department including copy and continuity writers is maintained, and is available to assist in planning your campaign.
7. Carried more advertising than any other radio station in Chicago last year.
8. The best “buy” in radio today. The advertising rate is appreciably less than that of any comparable station in the U. S. A.

You may discuss your advertising program with one of our experienced account executives, without obligation.

Call or Write the Station

410 N. Michigan Ave. Chicago
Natural Laws Which Limit Radio Advertising

Increased Power Necessary for Greatest Service to Mankind

By O. H. Caldwell*

Editor, Radio Retailing
Former Member, Federal Radio Commission

It was an old Scotchman who wrote in to the Federal Radio Commission and complained vigorously about his new radio set. He said this new set had proved a great disappointment. An investigator was sent out to see him, and shortly reported that reception with the set seemed really pretty good.

“Oh, of course,” admitted Sandy, “I can hear all right, but the dom’ little lights are too dim to read by.”

Not only does the public need more light on radio, but certainly Congress needs more light. And sometimes I suspect now and then that advertising men themselves need a little more illumination.

Commission Attempts Clean-Up

For the past two years we on the Federal Radio Commission have been endeavoring to build for you what amounts to “increased circulation” in this new medium of the air. We have been endeavoring to make these radio pages of the ether clearly legible and audible as far as they reach, out across the continent. We have been endeavoring to clear up the interference—to clean all the spoiled pages.

As advertisers, you know you would not be able to put across successful advertising messages if the pages on which they were printed were torn in two, or ripped into shreds, or were soiled with prior printings and off-sets from previous runs through the press. You require clear, clean white pages to start with. And in the same way, you require clear unspoiled radio wave lengths to carry your ether advertising. This is what we have been trying to accomplish for you.

You all recall the 1926 breakdown of the law. The air was then already full, and Mr. Hoover requested that no more stations come on the air. But, in spite of that, 250 more stations actually came on. Then some of the older stations “jumped” their wave lengths, getting into the more desirable part of the spectrum, and getting so close together that there was cross talk and interference, until some of the great stations in New York and Chicago had stations within two or three kilocycles of each other.

Channels Limited to 90

At the end of that period of anarchy in the air, when the Federal Radio Commission was finally appointed and called to Washington by President Coolidge, there were 730 stations operating simultaneously on the air, where there should not have been more than 150. At the present time we have approximately 165 radio stations which can operate simultaneously during the night hours, outside of a small number of 50 and 100-watt stations which are crowded on a certain limited number of wave lengths.

From the number of wave lengths to which you turn your own home dial, you will readily recognize that the number of wave lengths, or the number of positions which can be used, is strictly limited. We cannot put radio stations any closer together than 10 kilocycles, or 10,000 cycles. The reason for that will be quite simple to you when you recall that on the piano the highest note is 5,000 cycles. Since the waves vibrate on both sides of the fundamental we must provide twice 5,000 for each radio channel. Hence we are limited to a minimum of 10,000 cycles per channel.

We cannot add any more channels than the present number, which is about 95 of these 10-kilocycle channels, because the average radio set cannot be built to operate successfully or efficiently on a wider spread than about one and one-half octaves. Therefore, the present broadcasting band is fixed and limited at the range from 550 kilocycles to 1,500 kilocycles, which altogether is 950 kilocycles, or 95 of these one-kilocycle channels. Since six of those channels are reserved exclusively for Canada, we have 89 or 90 channels left on which to operate here in the United States. Of those 90 channels, the Commission has set aside 40 channels for the exclusive use of high-powered stations. Personally, I think there should be 50 or 60 set aside for such use, but, as a result of many compromises and many months of labor in Washington, we finally wore out the opposition of the politicians, and got it up to 40.

High Powered Stations

The reason for the necessity of a clear channel with high-powered

O. H. Caldwell

Broadcast Advertising
stations is that, with such a single high-powered station—5,000 or 50,000 watts, the station’s signal will reach, undisturbed, out to the very limit at which it can be heard, without a heterodyne. If we should put even a 500-watt station on the same wave length, the effective usefulness of that first station would be cut down from 300 or 400 miles of fair reception to 60 or 70 miles. At all points beyond 60 or 70 miles, on good nights, a whistle would come in.

WOR in Newark, you may recall, formerly had a whistle on its wave, noticeable within 25 miles. That was produced by a little station out in Missouri, a 500-watt station. Therefore, you will see, we must have clear channels, because only on such clear channels, as far as the station on that channel can be heard, can it be heard clearly. And the only way to reach the farmer and the distant listener, the people who live in the small towns, in the cross-road villages (and 40 per cent of our population live at a distance of more than 75 miles away from any kind of a broadcasting station which is giving regular and consistent service), we must have these clear channels. And we must have high-powered stations, because, having put a high-powered station on an exclusive channel, we may as well run the power of that station up to 50,000 watts or more. Every man in this room has an automobile that has more power than 50,000 watts. Fifty thousand watts (50 kw. 65 hp.) is a very small amount of power, as power is measured today, in fields outside of radio.

Some of our long-whiskered friends in Congress have been greatly exercised about high power and these clear channels. There is an effort now under way to reduce slightly the number of clear channels. I am afraid that process of reduction will go on, under political pressure, because there is pressure on every politician to get more broadcasting stations on the air for his own community. And since no politician can think more broadly than his own voting district, this distinctive action will go on at the expense of radio service to the country as a whole.

What the Commission Has Accomplished

The two things which the Federal Radio Commission has accomplished, I believe, are, first, to set up a fair degree of clearing of the air in cities. We have also separated all the stations by 50 kilocycles or 100 kilocycles, so that you can tune in from one station to another without hearing cross-talk from the adjoining station.

On the other hand, 40 clear channels have been set up, and over these 40 avenues, radio programs have been brought to every home on this continent. Tonight, every home in America and Canada can have its choice of five or six programs, undisturbed and uninterfered with by heterodynes. It is merely necessary to use a radio set of sufficient sensitivity. When the station comes in, it is there, free of interference; it is free of heterodynes, and the program is undefiled.

That, as I see it, has tremendously increased the potential audience for radio, until we have, today, in the radio audience, every home on the continent. Particularly, you see, we have gone out and reached those homes

(Continued on Page 27)
Non-Cancellable Contracts---
A Protection for Clients

By Ralph L. Atlass
Station WBBM, Chicago

The constant increase in the use of radio as an advertising medium is occasioning many new and complex problems in regard to the technicalities of the placing of accounts, as well as the determining of the copy to be used.

The advertiser is acquainted with the rules and regulations governing the placing of his advertisement in the older mediums. The agencies have evolved forms of orders for the placing of this advertising that protect the client, the agency and the publication.

Radio differs from any publication in that there is only a limited amount of time to sell. Pages, or hours cannot be added to a radio program. Consequently, the conditions of placing time over a radio station are entirely different than that of placing space.

The past year has marked ever increasing activity among agencies on radio accounts. Then, too, advertisers are turning to their agencies to handle their radio advertising. This movement is to the distinct advantage of the advertiser, the radio station and the agency. Through a coordinated campaign, and the use of those same principles and ideas which he has used, the advertiser receives the maximum advantages of his radio appropriation.

Radio is recognized as one of the greatest aids to secure enthusiastic dealer cooperation, as well as consumer acceptance. To these ends, the advertiser frequently announces his programs in his printed advertising, and makes extensive use of the coming radio campaign to merchandise his product.

Now, the probability is that the order for this advertising has been placed on a regular form order that the agency uses for publications. This order usually carries a short rate cancellation provision; which the station will accept—subject to the cancellation being a mutual privilege. Now, perhaps, the order will be for a fifteen minute period. This fifteen minute period will possibly tie up an entire hour on the station’s schedule. Should the station require this fifteen minutes schedule to “clear” an hour for another advertiser, it naturally behooves the station to exercise its cancellation privilege.

This problematical case has not frequently occurred in the past. There is rapidly developing, however, a greater demand for time on the leading radio stations than those stations have hours available.

The station appreciates the inconvenience and financial loss that might result to the advertiser from a cancellation by the station. Such possibilities can be readily eliminated by the writing of non-cancellable contracts by the agencies, and their issuance of a special radio advertising order to the stations.
Retaining Sponsors’ Names
In Published Programs

Subterfuges to Disguise Trade
Names Do More Harm Than Good

In a letter appearing in the Editor & Publisher of July 20, Walter A. Dealy of the Dallas (Tex.) News tells why he believes the firm names of those sponsoring radio programs should be printed, or rather why it is impossible to avoid printing them and at the same time satisfy newspaper readers. Mr. Dealy’s letter follows:

Editor & Publisher frequently and some publishers occasionally express their perplexity over the listing of radio programs sponsored by manufacturers, distributors and even retailers who have seen fit to divert some of their advertising budget to air instead of print paper. So active is the sentiment and so acute the hostility that it will take very little to bring this matter to a head and obtain united action one way or another from the publishing group. The radio interests seem to fear something like this and evidently are trying to avoid an actual issue. Station WENR, Chicago, has just announced that names of sponsors will be omitted from program lists submitted to newspapers for publication. Two major press associations are omitting firm names almost entirely, using such designations as these: “A. K. Program” for the Atwater Kent Hour on the NBC system, “Theatre-Of-The-Air” for the program on the Columbia network sponsored by Grigsby - Grunow, makers of Majestic radios. The Associated Press feature service calls the General Motors Family Party merely “The Family Party,” The A. & P. Gypsies, “The Gypsies”; The Ipana Troubadours, “The Troubadours,” and resorts to such a ridiculous compromise as “The Wonder Bakers,” for “The Happy Wonder Bakers.”

The Associated Press took action after polling its members and the policy evidently satisfies a majority of papers served. One syndicate releasing a consolidated program has adopted a similar method, probably in response to expressed wishes of its clientele.

There is reason to believe, however, that this practice is against the current and can not hold out long. It is not fanciful to predict that newspapers will be listing firm names within a year or suffer a loss of prestige for their radio pages.

The Atwater Kent Radio Hour undeniably is the classic of the air. All lovers of serious music and followers of the greatest musical performers have been receiving this program consistently for three years. If these radio listeners are accustomed to using newspaper radio programs as a guide, they will want their favorite program listed by its real name. Such a subterfuge as “A. K. Program” is almost calling the program something else. And why the “A. K.” if the object be to suppress all firm identifications? Why not list it as merely “program.”

Most newspaper publishers hold
that the inclusion of the firm name gives a free ride to the advertiser who is spending money in a competitive medium. Many publishers, moreover, suspect that radio would like to appropriate the entire advertising budget if it could, and by asking newspapers to publish names of radio advertisers is pouring salt in a wound freshly opened and quite tender. This may or may not be true. But no newspaper, with a sense of realism, can close its columns to free advertising. Publishers like to believe that they don't have to play Santa Claus to non-spending businesses, but they know better. Otherwise baseball would be cut to a stick, prize-fighting eliminated, theaters held to a story a week, art never mentioned, real estate deals never reported. In fact, nine out of ten stories printed seem to do somebody financial good without their spending a dime or offering a “thank-you” for the help.

Whether radio is the nemesis of the newspaper or not remains to be seen. The only sure thing about it is that broadcasting and reception are tremendously popular and its growth has just started. Such newspaper pea-shooting as doctoring a program list beyond recognition is not going to settle the fate of radio one way or another. The cue for the newspaper is to explore radio sympathetically and seize upon such phases of radio as will benefit the newspaper itself.

At present most newspapers ask themselves, “How can I do these radio advertisers the least good?” Such a thought is neither useful nor constructive. They might better ask, “How can I do myself the most good?” An immediate answer is this, “By giving the readers as complete and usable a radio program service as possible and by gratifying their interest in radio with whatever it takes.”

This leaves the problem squarely up to the press-agent or advertising unit of the radio time-purchaser. The basis of successful press-agenting is to make news. If the radio advertiser wants his name published, let him devise a scheme to weave his name inextricably with the radio program. For example, there is the Lucky Strike Dance Orchestra, a popular NBC network feature. This has a tremendous following among young people, no doubt, scan radio programs for stations transmitting this feature. It is an orchestra better than good. To divest it of the “Lucky Strike” and to list it merely as “Dance Orchestra” is to withhold from readers something that they seek. This injures the newspaper far more than the radio hour. A conscientious reader service by the newspaper can not avoid using the name “Lucky Strike.”

On the other hand, there is Paul Whiteman’s orchestra playing on the Columbia chain to publicize Old Gold cigarettes. Here the news punch is Paul White- 
man, not Old Gold. It is necessary to list only Paul White- man’s Orchestra” to render full service to the reader.

Other, popular performing units are Cliquot Club Eskimos, A. & P. Gypsies, General Electric Symphony, Cities Service Cavaliers, Happy Wonder Bakers, Interwoven Pair—Jones and Hare, Flit Soldiers, Ipana Troubadours. To use the microphone name without the firm name is not enough to identify them. Other programs go by such designations as “Palm-

Broadcast Advertising
The Press Has Nothing to Fear from Radio

THE apprehension of newspaper publishers that radio will make
inroads upon their advertising revenue is wholly without foun-
dation. It is based upon a false assumption—that advertising
appropriations are inflexible; that what one medium gains, the
other must lose.

Advertisers have found the use of newspaper space highly pro-
itable in the past; there is no danger that this medium will be
forsaken in the future.

Many new forms of advertising have come into general use
in recent years. Billions of dollars annually are expended for
outdoor advertising, direct-by-mail, novelties, calendars, and trade
paper space—a development that could not have been foreseen
thirty years ago. None of these newer forms of advertising have
encroached upon the fields of the others. Newspaper lineage has
increased in spite of the entrance of so-called competitors.

For the building of good will and the rapid introduction of
new products, radio has proved itself to be by far the best
medium ever devised. But this does not imply that it will replace
other mediums. A druggist will not discontinue to sell soap be-
cause it is more profitable to compound prescriptions. Shrewd
advertisers will continue to invest in all mediums that “pay out”
even though the returns from some may be less than from others.
Broadcasting—A Universal Advertising Medium

Amount Spent for Broadcasting Increases 400% in Two Years

By H. A. Bellows*
Manager, WCCO, Gold Medal Flour Former Member, Federal Radio Commission

There has probably been no subject in the whole field of advertising during the past three or four years which has aroused as much discussion as the value of radio broadcasting. On the one hand, we have the American Tobacco Company declaring that broadcasting is the greatest medium of general sales publicity ever developed, and on the other we have Roger Babson, famous as a statistician, complaining that his mail response as the result of half an hour of chain broadcasting was negligible in comparison with what he received from the same amount of money spent in newspapers. Nobody denies that broadcasting as a medium for publicity reaches an enormous number of people, but there is much disagreement in the advertising world as to how effective it is for the promotion of sales, and as to the ways in which it can best be used for this purpose.

Growth of Broadcast Advertising

I do not intend to bore you with a lot of figures, but the old saying that "money talks" has a direct application in this case. In the first three months of 1927 the total amount of money invested by advertisers in chain broadcasting over the two great national chains, leaving out all advertising over individual stations, amounted to $823,202. In the first quarter of 1928 the corresponding amount was $2,284,233, and in the first quarter of 1929 it was $4,240,703. In other words, the amount invested by advertisers in chain broadcasting in the first three months of this year was five times what it was in the first three months of 1927, and nearly twice what it was in the first three months of 1928.

Still more interesting, the advertisers who were doing the entire volume of chain business in

*An address before the Eighth District Convention of the International Advertising Association, Fort William, Ont., June, 1929.
the first quarter of 1927 were individually continuing practically all their business over the chains two years later. A few of them, of course, had dropped out of the picture, but enough of them had remained so that the amount spent by them on chain advertising in the first quarter of 1929 was $713,566. Of the total amount of $4,240,703 spent on chain advertising in the first quarter of 1929, $3,423,758 was spent by advertisers who had had previous experience with chain broadcasting.

Local Business Gaining
I am citing these figures simply to show that, whatever the arguments, the amount of money being spent on broadcasting indicates that advertisers are sufficiently convinced of its value to invest heavily in it, and that the bulk of the investment is coming as the result of actual experience. This is only a very small part of the picture. The past two years have seen an enormous growth in the volume of local advertising done over individual broadcasting stations. No figures on this are yet available but at a conference recently in Chicago I learned that there are a considerable number of stations now doing a local advertising business ranging from a hundred thousand dollars up to more than a quarter of a million a year.

This increase in local advertising is, indeed, the greatest source of anxiety to the chain broadcasting companies. Owing to the very heavy cost of wire transmission, the chain companies cannot afford to pay the stations anything like their regular local rates for commercial time, and the stations, which even a year ago, were thankful enough
to take all the chain commercial programs they could get at the nominal rate of $50 per hour, are now refusing chain programs because they can sell the time locally at rates ranging from $100 to $600.

Station Attitude Changed
The change in the attitude of broadcasting stations and their owners has been quite extraordinary. Four years ago I visited a considerable number of the leading stations, from Kansas City on the west to Boston on the east, to try and buy time for commercial programs for our own company. In nearly every station I was received with about the cordiality accorded to the familiar wood-pussy at a lawn party, and was told that the station never had sold time commercially, and never would, and that I was insulting the dignity and honor of its owners by even suggesting such a thing. Today every one of these stations is selling time, and exceedingly glad to be able to do so. You will find all their commercial rates duly listed in the Standard Rate and Data Guide, and today the concern that wants to buy time does not have to visit the stations, because the representatives of the stations are sitting on its doorstep with their mouths open.

Radio Circulation
The thing which, more than anything else, has created uncertainty as to the value of broadcasting as an advertising medium is the impossibility of determining circulation. With practically every other medium you have some definite check on the number of people reached by your advertising messages. In a newspaper or magazine you have an
audited circulation statement. With a billboard you can sit beside the road with a calculating machine and count the number of people who pass it in the course of a given period of time. With direct mail solicitation you know, often to your cost, just how many stamps have to be licked and put on envelopes. But with radio you know practically nothing.

Mail response is a most unsatisfactory clue, because as many of you have already discovered, the listeners whom you are most anxious to reach are the very ones who seldom or never take the trouble to respond to a radio program. The request for letters has been made so generally that nowadays the only way to get a large volume of mail response is to pay for it by offering prizes or other inducements.

Offers of this kind mean very little, and lend themselves to all kinds of misinterpretation. There is the now famous case of a certain fish company which announced over our station, before we knew better, that it would give away a pound of lutefisk to each person who wrote in. Of course every good Scandinavian in the Northwest who heard the announcement told all his friends to write, with the result that the lutefisk market of the United States was cleaned out in about three days, largely for the benefit of people who had never heard the announcement over the air at all.

There is the equally famous case of a station in the Southwest, anxious to prove its long range reception, which offered a prize of $500 for the telegram commenting on a certain program coming from the farthest distance. An enterprising person living almost in the shadow of the station's towers heard the announcement, and promptly cabled his brother in Honolulu to send in a wire, obligingly telling him just what to say. The brother responded without knowing what it was all about, and the two conspirators split the $500, to the delight of everybody except the station involved when it finally discovered what had happened.

Zone Distribution

The best way to figure radio circulation is not through mail responses but through a somewhat complicated process of figuring how many radio receiving sets are located within the effective service range of a station. This means taking into careful consideration such factors as power and wave length, for operation on a cleared channel and on a relatively long wave length is essential if more than purely local coverage is to be expected.

Our own method of figuring circulation, which has been fairly generally accepted as sound, is, roughly, as follows. We divide the territory surrounding our transmitter into five zones. The first one is a circle with a radius of 50 miles. In this circle we have a total population of 1,018,581 persons, with approximately 101,500 radio receiving sets. In this zone we can count on 100 per cent delivery of our programs; in other words, every radio receiving set in this first zone can get every one of our programs, day or night, summer or winter, with good quality.

The second zone represents the territory in the band between 50 and 100 miles from the trans-
mitter. In this territory there are 678,660 persons, and about 61,500 receiving sets, and here we figure on about 90 per cent delivery. In the third zone, from 100 to 150 miles distant from the transmitter, we have a population of 1,117,746 persons, with 102,000 receiving sets, and reports indicate that we can figure on about 65 per cent program delivery.

In the fourth zone, from 150 to 200 miles away, we have 1,269,243 persons, 115,000 receiving sets, and about 45 per cent program delivery. The fifth zone is irregular in shape. Starting from the 200 mile circle it represents a territory in the Northwest in which radio listeners are more or less regularly dependent on our station because it is the nearest high powered station operating on a nationally cleared channel. In this fifth zone, with about 2,683,171 persons, and 206,000 receiving sets, we figure about 20 per cent program delivery.

If, now, we take the population of each zone, and the number of receiving sets, and reduce the figures according to the percentage of dependable program delivery, we get 3,463,703 persons who could count on receiving programs from WCCO with fairly complete regularity if they all had access to receiving sets, and 316,000 receiving sets which will bring in our programs dependably most of the time. If we allow four persons to receiving set, the actual, dependable, regular circulation of the station may be estimated as about 1,264,000.

Importance of Program Quality

Of course this does not mean that this number of people will listen to any individual program. Neither does the circulation figure of a newspaper mean that all the readers will likewise read the copy of every advertisement. When you buy space in the Saturday Evening Post, you buy simply a guarantee that a certain number of copies of your advertisement will be distributed for people to read if they want to. In the same way, the actual number of people who will listen to any given radio program depends quite as much on the character and quality of the program as it does on what I have called the station's dependable circulation.

The best possible program, sent over a station poorly equipped as to power, wave length or transmitting equipment, will reach only a short distance, but within that distance it will absorb, during that particular hour, the attention of a large proportion of the listeners. I believe that a first rate program over a poor station is more effective than a poor program over a powerful station operating on a nationally cleared channel. When, however, you have the combination of high power, a nationally cleared channel, good transmission, and a fine program, you are pretty safe in estimating your regular audience at no less than a million.

Sales Promotion

The question of what constitutes a good radio program is closely bound up with the methods used to make it efficient from the sales standpoint. An advertiser can spend $2,000 on talent for an hour's program and then largely throw away his money because he annoys and disgusts his listeners with the character of his advertising. I have in

(Continued on Page 23)
How may the radio reach the farmer? What are his needs and what does he want from the radio?

The farmer is generally thought of chiefly as a producer. People think of him as growing grains and vegetables, raising stock, and selling these to the public, and therefore they see his need of markets and market information. They forget that in like measure and proportion he is also a consumer. If he raises crops he must have seed and implements, and the necessary help to do so. He must buy before he can sell and it is of paramount importance that he shall buy wisely and economically. His laborious efforts from dawn until darkness will avail him but little if his initial outlay is out of proportion to what he can reasonable expect at harvest.

One of the greatest benefits of the radio, then, to the farmer is to serve as a guide in his purchasing. This includes not only the quoting of prices from the different commercial houses, on seed, farm implements, etc. But it also includes advice as to what crops may be sown to best advantage in certain localities, when to plant, best methods of planting, good combinations adaptable for local conditions, etc. This advice and other most helpful measures can be given to the farmer through the radio. Experts prepare talks on eradication of certain weeds, prevention and treatment of diseases among livestock, increased and better production and kindred subjects. The preparation of such talks as these are a federal service and weekly bulletins are issued by the government to be given over the air to reach the farmer to help in dealing with these problems. Many of these stations, likewise, keep a staff of experts qualified to give personal advice to farmers and they offer this service free. That this is appreciated and utilized by the farmer is shown by the hundreds and thousands of letters received daily at any of these stations asking information upon countless numbers of subjects.

Of great value also to the farmer is the weather report, given twice daily from the various stations. The reports on the condition of roads and highways, and the department of public service found in most of the sta-
tions are for the benefit of the farmer. This last-named includes a lost and found department and police service, of various kinds, which have proved of great value to the outlying communities.

Twice daily complete market reports for both grain and livestock are given, which is of estimable value to the farmer.

That “man cannot live by bread alone” is well demonstrated by the appeal that the radio makes in the farming communities. This is a vital factor and a basic one. The farmer craves not only the “bread” but he wants the other things of life as well. Man is gregarious by nature. Love of his fellowman and a craving for companionship and to be in touch with the world are natural instincts and if life is to be full and complete they must be met. The radio has done more than any known device to provide for this in the home of the farmer. It supplies him and his family not only with the news of the world and with entertainment, but it is in addition the bridge over the fields of loneliness to the outside world. He hears friendly human voices talking to him. He can attend ball games, political conventions, concerts, entertainments of infinite variety even in his far-away home. He may have the cravings of the “inner voice” satisfied by the church services that are now given over most of the stations of the Northwest. It is amazing the number of people who are reached in this way. Literally hundreds of responses pour in to the hands of the Radio Pastor. At this station, WNAX, the Radio Pastor received one week forty-two hundred letters, other weeks letters ranging from two hun-

dred to eighteen hundred in number. Every day brings its letters of appreciation for the inspiration, comfort, hope and blessing received; also letters asking for prayers, advice, counsel, requesting hymns and certain poems that satisfy an inner longing.

In connection with the work of the Radio Pastor in this station also there is a unique type of service which was originated and instituted by him here. This carries the name, The Radio School of Vocational Guidance and Self Analysis and it proved to be very popular over a very wide area in this section of the country, as possibly five hundred high schools and colleges used this program. This plan included the bringing together to our station every Wednesday afternoon for twelve consecutive weeks of each semester twice during the school year, the outstanding and most successful business men in the Northwest, who prepared and delivered a thirty-minute address on his vocation as a life calling.

He set forth the advantages and the disadvantages, as well as the qualifications that a young person should have in order to make good in their line of work, showing all sides of their line of work and putting it as a challenge. In this way twenty-four splendid speakers were brought to our high schools and colleges. During and following this there were sent out to those who requested them questionnaires for self-analysis which were returned to this office after being filled out by the student and were then analyzed by psychological experts and an individual report sent to each student. Over seventeen hundred of these were completed within the last school
year. So great was the demand for copies of the different speeches that they have been put into printed form by the director of the work in the form of a monthly paper which has a subscription list of about fifteen hundred, and this number steadily increases, which shows how far-reaching the work has been.

A different type of service that has met with great response has been the musical contests for children of the public and country schools sponsored by this station, in which a great number of children took part, and which created tremendous enthusiasm out in the districts from which the contestants came.

Equal or even greater enthusiasm was shown when the basketball games for the state supremacy were broadcast here and also, by remote control, the National championship games from Chicago.

A further evidence of the appeal that the radio is making to the farmer and that shows its influence is the call for funds last winter for a certain orphanage in the state. In answer to this, there was received in all the magnificent sum of over three thousand dollars.

Many of the letters from the farmers tell us that the radio is tuned in the first thing in the morning and remains on all day long. The farmers appreciate the music and entertainment that comes from these stations, and it makes life rosier and the humber drum routine duties lighter, the disappointments easier and the cares and worries less to have this given to them as they work and plan and hope out on their farms. Thousands of letters from them tell each in their own individual way the vast amount of benefit derived from the radio and express their appreciation of its various forms of entertainment and service. All of them feel a debt of gratitude for this wonderful thing that unites them all. The city man is now near neighbor to the farmer and may we all profit by the closer union and work together for the common good.

**WENR Will Broadcast Television on Regular Schedule**

The Great Lakes Broadcasting Company, at Chicago, which operates Station WENR, has been granted a license to broadcast television with 5,000 watts power. It was announced by the Federal Radio Commission.

Morgan L. Eastman, manager, stated that no decision had been reached as to whether advertising would be broadcast over the television station.

The Chicago station has been allocated the visual broadcasting channel ranging from 2,850 to 2,950 kilocycles for television transmission on regular schedule, it was explained orally at the Commission. There are now approximately a dozen stations licensed to broadcast television. It was stated, but all on an experimental basis with the exception of **WENR**.

**Radio Agency Changes Name**

The name of the National Radio Advertising Agency of New York has been changed to Radio Counsellors, Inc. The company specializes in planning, preparing, and producing radio programs.

**A Correction**

Through error, credit lines were omitted from two articles appearing in the July number of Broadcast Advertising. Both “Function of the Agency in Broadcast Advertising” by Roy S. Durstine, and “Who Pays for Broadcasting?” by O. H. Caldwell, were excerpts from addresses delivered at the semi-annual meeting of the Association of National Advertisers, held last May.
Gauging Listener Interest in Radio Broadcasts

Methods Used by Advertisers to Determine Public's Opinion

By Orrin E. Dunlap, Jr.
Radio Editor, The New York Times

ONE secret of success in advertising on the radio is to have the name of the broadcast sponsor or entertainer form a reasonably complete advertisement. For example, Eveready Hour, Trade and Mark, the Flit Soldiers, the Capitol Family, Roxy's Gang, the Stetson Band, the Palmolive Schoolgirls, whom, of course, the radio audience is asked to visualize as having "that schoolgirl complexion." This brings out the point that there is no stronger appeal on the radio to women than beauty.

Value of Nation-Wide Hook-Ups

Human nature is alike the country over. A radio program that pleases in Michigan will please in Massachusetts, Ohio, or California. That is why network stations can radiate the same program with good results. Dealers are an excellent index of how a broadcast is received. How many times have you heard an announcer say, "If you have enjoyed this program, tell your local dealer." It gives the retailer a new contact with his customers.

On the other hand, does a nation-wide novelty broadcast pay? What benefit does an automobile manufacturer, for example, gain by buying an hour on the air with stations linked into the circuit from coast to coast and border to border, with talent entertaining from different cities, such as New York, New Orleans, Chicago, and San Francisco? It all depends upon the result desired. If the object is to induce people in all parts of the nation to visit the dealers' showrooms the next day to see the newest car, the plan is excellent.

Advance publicity in the newspapers builds up an attentive audience, anxious to hear the participants in the program, people of whom they have read much in the newspapers. It is true, the entertainment value of such a broadcast is not generally up to standard, and is soon forgotten. The novelty is what attracts the large audience. Thousands, no doubt, are informed, under somewhat pleasant circumstances, that there is a new automobile on the market. If they do not like the program, they may reason this way, "Well, if the car is no better than that fellow sang, then it cannot be much."

Very likely, however, many enjoy the broadcast, and visit the showroom the next day. Radio has aroused their curiosity. If this motor car manufacturer has offered a new road map to all who call at the dealers', added thousands will visit the showrooms, where the salesmen are on duty.

to direct attention to the new car.

This novel radio stunt was used by Dodge Brothers to introduce the Victory Six car to the nation. The program cost $67,000, trifle more than $1,000 a minute. The entertainers received $25,000 of the sum. Will Rogers acted as master of ceremonies from the living room of his home in Beverly Hills, California; Fred and Dorothy Stone talked and sang from the backstage of the Erlanger Theater in Chicago; Al Jolson, at the Roosevelt Hotel in New Orleans, put a "Mammy" song on the air, and attempted to waft several jokes across the continent, while Paul Whiteman's Orchestra actuated a microphone in New York with the "Rhapsody in Blue."

The nation was hooked up in virtually one studio. The real advertising value of the event came from the publicity afforded by the novelty of the radio audience from coast to coast being able to hear entertainers from four quarters of the United States on the same program. There have been superior broadcasts before and since, so far as entertainment quality is concerned. It was estimated, nevertheless, that 30,000,000 listeners were within range of the broadcast. How many stayed in tune from beginning to end? Probably a goodly number, because it was a new and novel show on the radio.

On the whole, we may say that such novelty broadcasts are like comets, sky-writing by an airplane, or one-page advertisements inserted once. The effectiveness is short-lived. A month later, ask a radio fan what was the biggest broadcast, and he would probably say the Lindbergh celebration, the Tunney-Dempsey fight or the national political conventions. If the broadcaster is to profit, he must keep everlastingly at it, just as in any form of advertising; otherwise the songs are likely to have been sung for a lost cause.

Music Radio's Safety First

This type of performance brings up the question whether or not stars of the stage can be stars of the microphone. Their voices are not necessarily effective by radio. Ninety per cent of the black-faced comedian is in seeing him in action on the stage or in the talking movies. The same applies to the majority of theatrical entertainers; their real value is in seeing them act or dance in the glare of the footlights. Their voices are not usually radio voices. Will Rogers is fair on the radio, but being a humorist, he is not as well suited for broadcasting as he is for stage appearances or writing. If he tries to be funny in a radio studio, the microphone will probably extract the laughs, but if he faces an audience and forgets the microphone, the broadcast will be more real. The best part of the Dodge program was Whiteman's Orchestra. It proved again that music is radio's "safety first."

Few souls are saved after the first five minutes of a program that neglects good music to favor humor.

Stay away from the brilliant continuity writer with unique style who knits the program together with complex words and music. Simplicity is what counts. Francis De Sales said that wordly friendship is profuse in honeyed words, passionate endearments, commendations of beauty, while true friendship speaks a simple honest language. The radio audience cares nothing for "hifalutin" words. Talk in language every-
one can understand. Let the theme of the program be simple. Foreign phrases may show that the announcer has a command of languages, but, as the two Black Crows might say, "Who cares?"

Frivolity and humor have no place in advertising on the radio. Even the best jokesters fall pitifully flat when their words are given the wings of radio. The microphone simply does not handle jokes unless they are brand new. It requires more than voice personality to make a huge audience laugh. Most humorists need facial expressions and gestures to aid them. Radio, without television, cannot handle them, and they waste time at a microphone. The real radio humorist has not yet appeared. Until he does, let the man who foots the broadcasting bill beware. One must see a comedian to appreciate his antics.

How can a broadcaster determine the interest in his program? In the days of 1921 and 1922, the mail was an excellent indicator. The announcers asked for criticism of the programs, and for reports on how far the waves traveled. Broadcasting was then a novelty. It inspired a letter, postal card or telegram. But times have changed. Today listeners are poor correspondents. They are more like the theater audience, which does not think of stopping at the box office on the way out to praise the show or, when they get home, writing a letter to the producer. Aside from the change in the psychology of radio listeners, no one knows whether one letter represents five or five thousand auditors. The proof is intangible. Pleading for mail is bad etiquette on the radio today.

Several years ago, Marion Davies, movie actress, spoke on the radio from a New York studio, and offered an autographed photograph to all who wrote to her. The station reported that she received 15,000 requests, though she was not on the air more than ten minutes. In those days it was estimated that at least 10 per cent of the unseen audience would take advantage of such an offer. If this were true, Miss Davies talked to 150,000 people. And that was before the days of chain broadcasting. Orchestra leaders and many artists tried the same stunt, but the public became wary. Perhaps they wondered if a movie star or radio artist would sit down and autograph thousands of photographs—a job in itself.

The sponsors of one prominent hour on the air have tried every way under the sun to determine how much the public enjoys the programs. They canvassed from door to door in various residential sections in an effort to see what the housewife thought of their entertainment. They were surprised to discover that few recalled a feature as part of any particular hour on the air. For example, many remembered hearing Charlie Chaplin, John Barrymore, Commander Richard E. Byrd, Trader Horn, and others on the radio, but they did not link them with any particular sponsorship, such as Eveready. They recalled hearing John McCormack, Mary Garden, and other talented singers, but a month or so later they could not say who the angel was who sent the voices of distinction to them. Was it Atwater Kent, Victor Talking Machine, or Columbia Phonograph? Well, the radio listener just did not remember. So the house-to-house canvass was given up.
Testing by the Jury System

After all other methods had been tested and abandoned, the following plan was adopted as a program gauge. It is called the "jury system." An impartial survey of opinion is obtained within forty-eight hours.

Each week a questionnaire is sent to more than one hundred employees of the company sponsoring the program. A cross-section group comprising executives, office boys, stenographers, clerks, factory hands, truck drivers, etc., receives the blank form. And if they happen to be listening in at that particular hour, they are asked to fill in the answers to the questionnaire, and thus tell what they think of the program. It has been found that this is a fairly satisfactory way to obtain a cross-section opinion of the total radio audience. The results are tabulated, and the program rated accordingly. The danger of this method is that the executives are likely to be too critical, while the office force will endeavor to praise instead of giving a frank opinion. It is obvious that the reports, so be of value, must be unbiased.

This company also has tried to determine the size of its audience, but so far the report is that "only a composite picture of the mute and invisible audience is available."

Repetition of Programs

"No matter how good a program, alas, some people will dislike it," contends George Furness, director of the Eveready Hour. On the other hand, no matter how bad a program is, some people will like it. The task of the broadcaster is to secure majorities of approval for his offerings at all times. He must find out what will please a large cross-section of people sufficiently well at one time, and another large cross-section at another time. Upon his findings depends the amount of success with which he rotates his types of broadcasts in an effort to please all of the people through the sum total of his programs. One man's or one woman's opinion does not definitely prove anything one way or another of any radio production. The test of mass appeal is what counts. A man might be wrong one night because his own temperament was, or was not, behaving as usual. Therefore, the larger the collection of opinions, the more effectively will the public interest in the program be judged.

"Fan mail can be classified as largely negative in influencing broadcasters," asserts Mr. Furness. "People write to tell how pleased they were. They seldom write to express displeasure—it is far easier to spin the dial to another station. Of course, offense to their moral, religious, or political natures may cause them to write because they are angered. The wise broadcaster does not rely on mail alone as an index to the popular verdict. The national broadcaster who has been on the air for several years and has tested his programs is in a far better position to please his public than when he first started. Programs of the universal type can be repeated once a year if experience proves their power as an attraction."

Keep the Hook Covered

Remember that in "fishing" for buyers in the sea of radio, as in fishing for perch, the hook must be covered with the bait. Be natural and simple. Use the shortest possible words, and make every
word ring with sincerity. The advertiser on the radio must reach the emotions through the mind. Never has this been more clearly demonstrated than in the case of broadcasting the 1924 National Democratic Convention. There was a marked difference in the attitude of the crowds in Madison Square Garden at the convention as they listened to the orators within their sight and hearing and the attitude of the crowd, fully as large, gathered in Madison Square outside the building, listening to the same orators through the loudspeakers of the public address system. When the crowd inside was aroused to a frenzy of applause and excitement, the silent crowd outside in the park made no outcry and indulged in no applause.

It is pointed out that the audience inside listened as a crowd with aroused emotions, but dulled intellects. The audience outside listened with unaroused emotions, as thinking individuals. In other words, radio, which gives the speaker the greatest hearing, has destroyed his power to arouse the emotion of his audience except through an appeal to their reason. Instead of reaching the mind through the emotions, he must, when speaking over the radio, reach the emotions through the mind if he is to reach them at all.

Some will applaud the song of the nightingale; some, Niagara’s roar; others, the whistle of the winds atop Pike’s Peak—others will tune out all three, and applaud the sound of the surf at Atlantic City. Such is the radio audience!

A broadcaster can estimate only approximately how many he entertains. The best way to get this inkling, and test the attention value of the program, is to offer something that listeners will want and request. It may be a budget book, a poem, a souvenir, a picture of a celebrity, a radio station log, the football schedule, a copy of the Constitution of the United States, the Declaration of Independence, a road map, or what not. If it is something that the listeners can save, something that is decorative, instructive, or of service in some way, it is likely to score for the sponsor. A free booklet, properly handled, is considered as broadcasting’s coupon. No broadcaster can guarantee circulation. Make a “coupon” test at reasonable intervals, at least three times yearly. Guard against selling copy in the booklet. Keep it in harmony with the broadcast program. Beware of veiled selling talks and tricks used to disguise direct advertising. Thrift, economy, and efficiency are keynotes that strike responsive chords. Helpful offers along such lines are usually successful.

One broadcaster offered a budget book. Thousands requested it. Out of 20,000 writing to express appreciation of the program, 17,000 asked for the book. Why was a budget featured? Because this radio sponsor had securities to sell as well as a widely used product. Those interested in a budget proved to be the type of people interested in savings and sound investments. It is reported that a good percentage of those who asked for the budget book also bought the stock as an investment.

The old adage, that “there is nothing free in this world,” applies to radio. There is method behind the anxiety of a broadcaster to give something away. He wants something in return. Other-
Serving the Heart of the Mid-West---

WIBW is the favorite station of rural Kansas. This prosperous territory is waiting the story of your product.

The Capper Publications
TOPEKA, KANSAS

WJAC
Johnstown - Penna.
The only station that consistently covers the Johnstown area—center of the iron, steel and coal industry—during daylight hours.

Owned and Operated by
Johnstown Automobile Co.
Write for Rate Card

KWCR
Cedar Rapids, Iowa
A popular station in a populous area—programs with a “punch”; clear reception; over 1,600,000 population—rural and urban; 301,000 radio sets; one of the wealthiest broadcast areas in U.S.; gratified advertisers. Include this resultful station in your schedules.

CEDAR RAPIDS
BROADCASTING CORPORATION
Cedar Rapids, Iowa

The Oldest Broadcasting Station in the Northwest---

WDAY
Fargo, N. Dak.
solicits an opportunity to prove that we can get results for you as we have done for hundreds of clients.

wise he becomes a philanthropist. He is no longer a salesman.

Testimonials on the radio as yet have not had a fair trial, but it is doubtful that they will be effective. Why should the radio audience give up Camels for Lucky Strikes because an announcer interrupts a fine dance program to read a letter or telegram from a channel swimmer, society dame, aviator, movie star, or World's Series pitcher eulogizing the Luckies? Does the public not feel that these endorsements are paid for, and carry little or no conviction? Do the endorsements necessarily involve the use by the person who lauds the article? The majority of listeners are not credulous.

This is a good point to call attention to the fact that all things done on the radio are not approved by the advertising agent. The agency generally knows better than the client, but the man who spends the money feels that he is not getting the most out of broadcasting unless he hears his product’s name, the name of his company, testimonials, etc., come from his loudspeaker. It is pleasing to him. It satisfies his vanity, but defeats his purpose in broadcasting. It is a joy for the program sponsor to sit at home and hear an opera singer or a noted actor laud his product. But what about the listeners, the majority of whom are probably aware that the testimonials are “bought and paid for,” either by money or by the publicity afforded by the broadcast.

The Hubbell Advertising Agency, Cleveland, Frank Hubbell.—As we handle more broadcast advertising than any agency in Cleveland, we are interested in your magazine. Would it be possible to secure numbers 1, 2 and 3 in order that our files may be complete?
mind a certain program over one of the great national chains, played by one of the outstanding dance orchestras in New York, which I believe is absolutely creating a public distaste for the article advertised because of the way in which the advertising is handled. On the other hand, there is the danger of not going far enough in the direction of sales argument, and thus leaving the listener very pleasantly impressed with the program but rather vague as to why it is being broadcast, and not in the least moved to go and buy the product of the company which is paying the bill.

Not long ago, at its meeting in Chicago, the Radio Manufacturers' Association took the position that there was a good deal too much direct advertising in radio programs, and that this tendency might actually impair the public interest in broadcasting and cut down the market for receiving sets. Personally, I do not think it is the quantity so much as the quality of advertising which is doing the harm. It seems to me that what is needed above all is the kind of tact which is more and more apparent in the preparation of copy for visual advertising. Advertising agencies have developed the writing of copy into a fine art, and they have learned how to put over their messages in such a way as to make a pleasant impression on the reader. In broadcasting, largely because of its newness, we are lagging far behind. There are plenty of ex-
amples of radio advertising which have a distinct selling
value, and which have proved
their effectiveness, but which do
not offend the taste of the most
fastidious listener. On the other
hand, there is a lot of advertising
on the air at the present time
which simply causes the listener
to give his dials a twist and so
get rid of the obnoxious intruder
into his home.

Selecting Hours

More and more we are coming
to realize that different hours of
the day and night are best suited
to different kinds of advertising.
We have found, for example, that
in the morning the audience is
largely composed of women, and
they are eager to get a type of
advertising service which the lis-
teners at night would not tol-
erate. In other words, you can
tell a woman over the radio at
9:30 in the morning that she can
get a great bargain at so-and-so’s
store for $3.98, and she will re-
spond with fervent thanks. Tell
her the same thing at 8 o’clock
in the evening and she, her hus-
bond, her mother-in-law, her
maiden aunt and all the children
will sign a petition to the Fed-
eral Radio Commission to have
your license cancelled.

At noon, between 12 and 1, is
the great time for reaching the
farmer and the inhabitant of the
small town. In the cities the
noon audience is relatively small,
for the men seldom go home to
lunch and the women are often
out or busy. In the country, on
the other hand, the whole family
collects for dinner shortly after
12 o’clock, and then goes the radio.
With the use of plenty of tact,
for the noon audience does not
like to be exploited too evidently,
you can put over a tremendous
amount of direct selling to the
farms and the small towns at
noon. Our own experience with
noon programs has been the sub-
ject of particularly careful analy-
sis, and we have found it to be
an exceptionally valuable adver-
tising period when properly used.

The afternoon provides an op-
portunity for reaching women’s
organizations, but the woman at
her study club will not tolerate
anything like as much direct ad-
vertising as she will welcome a
few hours earlier in her own
home. Also, there is evidently a
vast population which has noth-
ing to do in the afternoons ex-
cept to listen to broadcasts of the
baseball games. I have heard it
said that we have no leisure
class in America, but when a
baseball game is called off on ac-
count of rain, and our telephones
start ringing to know why we
are not broadcasting the report
of the game, I feel that I have
discovered America’s leisure
class. I do not need to say that
a sport broadcast is an ideal
medium for certain types of ad-
vertising.

Even in the evening the hours
have varied advertising value.
Between 6 and 7 people want
what I have often called “eating
music”—the type of music that
can be enjoyed during a meal.
Long and elaborate announce-
ments during such a period are
utterly wasted; the best way in
which to use time of this sort
is to create good will for a brand
name, and it is a peculiarly favor-
able time for insisting on the
name of a brand of some variety
of food. From 7 until 10 the
listening public wants entertain-
ment, and is peculiarly averse to
selling talk. These hours are
best adapted for creating institutional good will or for setting up a trade or brand name.

Beginning about 10 o'clock, the character of the audience completely changes. The serious minded go to bed, the frivolous want to dance, and the mentally warped desire to listen to distant stations. If an advertiser, unwilling to spend enough money on radio to get full coverage is anxious to get the widest possible publicity from his use of a single station, he should certainly use the time late in the evening, when the long distance fans are hard at work. He should also put on a good program of dance music, so that the young people who are looking for entertainment will find what they want.

Changing Characteristics

Present indications justify the belief that radio advertising in the next year or two will see a tremendous increase, but that its character will very greatly change. Frankly, I believe that chain broadcasting is going to have a very hard time of it. It is in the unhappy position of Sinbad the Sailor, when he was staggering under the weight of the Old Man of the Sea, the old man in this case being the enormous cost of telephone wire transmission. As long as chain broadcasting is paying a tax of several million dollars a year to the telephone company for carrying its programs, its chance of being able to pay the individual broadcasting stations a fair return for their time, in comparison with what they can get locally, is small.

Furthermore, it is apparent that the majority of radio listeners prefer a good local program to a program of equal merit coming from a distance. We find, for instance, that there is vastly more enthusiasm among the listeners over the broadcasts of the Minneapolis Symphony orchestra than there has ever been over broadcasts of symphony concerts from New York or Chicago. Chain broadcasting has a very necessary place, but I think it is only a matter of a short time before the basis for chain service will be radically changed.

Recorded Programs

One of the greatest influences in bringing about this change is the steadily increasing use of specially recorded broadcast programs. You can put on your program in a studio, performing it before a microphone just as if it were immediately going on the air, but instead of sending it over wires, you can make a mechanical record of it which can then be copied to an unlimited extent, and sent to any station you may desire by mail or express. For one thing, this completely overcomes the time difficulty. For instance, you want national coverage and have chosen the admirable hour from 8 to 9 in New York. In the summer, however, this brings your program to Chicago between 7 and 8, to Minneapolis between 6 and 7, to Denver between 5 and 6, and to San Francisco between 4 and 5. Furthermore, about the time you have chosen your stations for national coverage, you find that they have local contracts covering the exact time you want and the only time available on the chain.

The recorded program solves this problem, as it also solves the very serious problem of the annoyance caused to the listener.
when one program is simultaneously sent out by a majority of the largest stations of the whole country. I well remember the angry letters we used to get, particularly from country clergymen, complaining that on Tuesday nights the only thing they could hear, no matter how they twisted their dials, was a lesson on how to play bridge. The quality of mechanical reproduction is improving very rapidly, and I believe that another six months will see it securely established as a very satisfactory solution for the advertiser desiring either national or widely scattered regional coverage through broadcasting.

Need for Co-operation

I have heard it suggested that advertising by radio may be simply a fad, and that it is not likely to have a long life. To this I have only one answer. Radio represents the most nearly universal means of communication ever devised by the human mind. It disregards all the ordinary channels of transportation, and goes direct into the homes of millions of people. Such an agency as this cannot possibly be displaced from our national life; it is just as securely established as the railroad and the telephone.

Now, any agency which can reach millions of people in their homes is a good medium for advertising. If this be granted, and I do not see how it can be disputed, the one thing that remains is so to use this medium as to get the maximum amount of good out of it. Hitherto this task has been left almost entirely to the broadcasters, but the one thing which I want to place before you as advertising men and women is that the right development and use of this medium is up to you.

It is for the advertisers and their agents to find out what radio is good for. The broadcasters are ready and eager to cooperate, and such tremendous gains have been made in the past year that I feel confident that we shall soon see the advertising agencies handling broadcasting with the same efficiency that they have already displayed in other forms of publicity. When this happens, we shall see radio, never seriously competing with visible advertising, because its appeal and its potentialities are so utterly dissimilar, but supplementing the other and older forms, taking its place among the world's greatest advertising media.

Salesmen Wanted

Men calling upon advertisers and advertising agencies are wanted to take subscriptions for "Broadcast Advertising" as a sideline.

Address
Broadcast Advertising,
440 So. Dearborn St.
Chicago
which needed radio more than anyone else—not the suburban or the city homes, but the remote and distant homes in the little towns, the ranches, the farms, the mountains, and the islands along the coast.

Power Needed to Overcome Static

Power is necessary not only to reach out in distance, but power is also necessary in order to overcome static. Power is the only way to overcome the static that we have in summertime. And every time you flick a switch, or run a motor, ether noise is produced that builds up a whole background of roar in the ether, which can be overridden only by power on the part of the broadcasting station. For that reason we need high power and more power. Power is the only thing which will furnish radio programs in all their beauty and clearness to the farmer and the distant listener.

When you realize that each broadcasting station is competing with lightning, where the ordinary flash has a momentary power of perhaps 20,000 WEAF’s or KDKA’s, and that those flashes are going on over the country almost continuously during the summertime, you will realize that, if broadcasting is to be heard, power is necessary. The great stations, like WEAF, KDKA, WLW and WGY, are already using 50 kilowatts, and at the present time some 15 other stations are being constructed with such power. That is going to have the effect of building up a tremendously stronger field strength or signal strength for
broadcasting, so that, in every part of the country, radio programs will be received that will be satisfactory and of proper strength, and which will overcome the static.

**Dependable Radii**

There has been a good deal of exaggeration by the broadcasters, I am sorry to say, about the actual radius of delivery of a broadcasting station. I want to tell you frankly that a broadcasting station of 500 watts, a station like WRC in Washington and such stations of second order of that type, does not reach out consistently, day and night, winter and summer, more than 10 miles. Stations of 5,000-watt power, like WABC or WOR, reach out about 30 miles with a dependable program, day and night, winter and summer. Of course, a 500-watt station will serve farm listeners as far away as 60 miles. A 5,000-watt station will give a farmer service, which can be heard satisfactorily in wintertime and out away from the power lines, without bad static, for a distance of 150 miles.

A 50-kilowatt station, such as WEAF and WLW, does not have a dependable range of more than 100 to 150 miles, although such a station will give fair service for a radius of 400 miles, and, of course, all of these stations are heard under freak conditions for several thousand miles. The conditions for winter and summer, of course, differ. On a good winter night, little stations are heard sometimes at enormous distances. A 7-watt station, last winter, was heard clear across the country after midnight. Fifty-hundred-watt stations in New Orleans are occasionally heard up and down the whole Mississippi Valley. There seem to be corridors through the country. A radio wave will go out in one direction, but meet a barrier in another direction. New England has, characteristically, a very tough condition for transmitting radio. There are places in Connecticut where programs cannot be heard 30 or 40 miles away from high-powered stations. In fact, in Massachusetts, I have seen a point within sight of a 15,000-watt station, WBZ, where the station could not be heard on the most sensitive receiving set.

**Summer Audiences**

In the summertime, of course, the range of a station is diminished. In wintertime, for example, a 50,000-watt station (notably WLW, which, in the winter months, is covering practically the entire country, coming into New England, Montana, Texas and down into Florida, with all the power and punch of a local station) will, as the summer comes along, suffer a reduced range of transmission until it comes very much nearer to the figures of from 100 to 400 miles that I have referred to.

At the same time, as the listening audience is cut down in radius, it is also intensified. That is, the same process of shielding which shuts out that station from reaching any great distance also shuts out other stations from coming in, and so intensifies the local listening on the local station that can be heard, and in that way compensates for the loss of the distant audience by increasing the local audience.

**Fading**

Advertising men have complained about radio fading, and seem to think that it is charac-
teristic of certain stations. It is true that certain stations have suffered from fading in certain directions. But fading, after all, is an inherent characteristic in radio as it is today. Fading limits the distance at which a station can be satisfactorily heard to about 100 to 150 miles. The explanation for it, I think, can be readily understood.

Every broadcasting station sends out two waves, (1) a ground wave, which comes directly along the ground surface, and which is consistent day and night, winter and summer, and (2) a so-called sky wave, that goes up and strikes an imaginary ether mirror or Heaviside layer, which seems to exist about 125 miles up from the earth's surface. From this reflector, the wave is reflected down again.

When the sky wave thus comes down and strikes the ground wave at a distance, say, 100 miles away from the station, the sky wave has, of course, traveled a few miles longer distance. And, even traveling at the rate of the speed of light, 186,000 miles a second, it comes in a few millionths of a second behind the direct wave. That difference may be just sufficient to exactly neutralize the two waves. While they do thus neutralize, you have a momentary period of silence. A few seconds later, the Heaviside reflecting layer may swing up or down and, instead of the two waves subtracting, the two waves will add, and you get the loud peals of sound.

In this way, a distance of from 100 to 150 miles from a radio station, you will get, under certain conditions, a swinging in and out of the loudness of the program. Sometimes that distance subject to "fading" is as close as 60 miles, though fading is not ordinarily noticeable inside of 75 or 100 miles. It also largely disappears again at a distance beyond 150 miles, and the reception is again uniform. But for fading within that distance, don't blame the poor broadcasting station, for it has not been possible to provide any solution for that problem as the art stands today.

Selecting a Station

If I were selecting a station today for a job of radio advertising, particularly from the standpoint of reaching its audience (which I understand is the assignment put up to me today), I think I would first carefully study the actual audience which that station ordinarily commands. I would want to find how much good-will that station had established at its point of the dial in each community, because the way in which it has administered its programs in the past will influence the public response for the future. You will find that, just as we all have our favorite stations, the public will tune its receiving sets and will leave them at the stations which are of maximum popularity, and, therefore, of course, of maximum interest to you.

How to Gauge Station Popularity

There is an easy way to find out the popularity in each community and also the relative value of stations. I will let you in on a little secret as to how we made these allocations down in Washington. We wrote around to representative and leading citizens, whose names we got from the telephone directory and other sources. We supplied those citizens in each community a list of

August, 1929
the stations serving them, the stations being arranged in the order of dates of their licenses so that everything would be entirely impartial and fair. We asked the listeners to indicate the station which they considered most popular by marking it 100 per cent, and to rate the other stations in proportion to their interest.

As a result of such a survey there is seldom any difference of opinion in a community. In the New York area, for example, three or four stations there almost always landed in the brackets between 95 and 100. There was another group of stations in the brackets around 50 per cent. And then another group where the stations landed below 10.

Power the Second Consideration

The second thing I would look for in a station is the station's power, because power is a measure of the area that the station will serve. Roughly, you can figure that a station will cover area proportional to its power. Power is simply advertising paint. If you have 10,000 watts you can cover twice as much area, roughly, as you can if you have 5,000 watts. Of course, if that radius falls on an uninhabited area, it is wasted. But if that area has a large proportion, of which you yourself can judge, it becomes proportionately valuable and useful to you.

Technical Equipment Rates Third

Then the third point that I would consider in a station is the excellence of its technical equipment, whether its equipment for modulating is up-to-date and whether it is delivering true tone values. Because there is no need of your spending $10,000 an hour to put some great artist or some great musical program on the air, if it will not go on the air in its true tone values.

Phonograph Records

Your officers have also asked me to say something about the phonograph scheme of operation, and the attitude of the Federal Radio Commission toward it.

The Commission has ruled that, whenever a phonograph is operated as the source of a radio program, it must be announced as a phonograph record. But the Commission has also ruled, that, if a special record is prepared which is designed only for broadcasting purposes and is not offered for sale outside (so that, instead of the wire as a medium for chaining the stations together, this special record is used), it is merely necessary to announce such a program by the accepted name of the scheme of reproducing that is used. That is, it does not have to be announced as a "phonograph record."

There are now being developed several methods of chaining together stations by phonograph records, and those records have an accuracy of reproduction which is as good or better than 50 miles of transmission of telephone. Certainly there can be no complaint of the question of accuracy of transmission on the part of such mechanical reproduction.

As you know, there are three schemes of such reproduction: There is the disk method of reproduction, the regular old phonograph scheme. Then the scheme of using the film record, such as the talking movie records are made on. And third, there is the method of magnetizing steel wire and running that through the ma.
The wire is cross magnetized at each point corresponding to the voice vibrations.

**Lord Northcliffe's Plan**

I feel when an advertiser is starting into broadcasting, as I understand many of your members are, certainly the wisest course would be to start on a single station first and so make all your mistakes in a limited area. It was Lord Northcliffe, I believe, who, when starting a newspaper in London, made it up complete with news reports, editorials and all for 30 days, before selling a single copy outside. Only 100 copies were run off and those were circulated only among the officers and appointed critics. It seems to me some method of that kind should be adopted in starting off some new, untried plan on the radio.

We have been up against that problem in our own company, the McGraw-Hill Publishing Company, since my return, because I have been trying to get the McGraw-Hill Company to take up radio as a means of advertising to supplement our present methods, which include the national magazines, newspaper industries and business papers and direct-by-mail.

As advertising executives, I think you will be interested to know that the McGraw-Hill Company, in effect, sets aside 10 percent of its gross for advertising. With an annual business of over $12,000,000, its outlay for advertising last year totaled $1,200,000. Thus you will see that the company believes in practicing what it preaches.

I believe it is necessary to study the public taste carefully in shaping your program—not only on a single station, but on the chain. Certainly, the listener is king. I heard your presiding officer say that members of this group are spending $8,000,000 annually in radio broadcasting. Yet, let me tell you, the public is still the boss, because the public is spending $600,000,000 in apparatus each year to listen to you; in other words, while you are spending, on broadcast advertising, about $100,000 a day, the public is spending 20 times as much—$2,000,000 a day—to buy the equipment with which to hear you.

**More Than One Radio to a Family**

The radio audience in homes now equipped with sets comprises between 30 and 40 million people. At the present time there are about 3,000,000 of the new alternating current sets in use. Those sets were introduced about a year and a half ago. There are, however, some 19,000,000 wired homes, so that we still have a great many more of these modern radio sets to sell to the public. This year the public will undoubtedly buy about 3,000,000 sets, although manufacturers seem to be confident in their planning to sell about five or six million. If that is done, certainly we shall have to have several radio sets to each home. That is not an absurdity. There is no reason why a home with two cars shouldn't have at least two or three radio sets. In my little home there are two radio sets for the family, one for the maid and one for the hired man, and it is hard to pry either the sets or the hired man or the maid loose.

**New Technique Needed**

I believe a new technique is needed in our radio programs, be-

*August, 1929*
cause the old advertising methods will not do. Remember that the radio program is coming directly into the home, and it is necessary to treat it differently. Those agencies which have set aside special departments for radio have done the best job. For example, you cannot report or reiterate on the radio and get the value out of it as you do in advertising with the printed word.

We must take care not to offend the listeners by what is said, either by lack of good taste, or too much direct advertising. We must limit the time that is devoted to the mention of the product. I believe if that is limited to a few seconds you can get away with almost anything. It is a question of not spending too much time out of the 15 minutes or an hour in mentioning the product.

**Listeners' Attitudes Differ**

The attitude of the public to direct selling is quite different in different parts of the country. Out in Iowa and the Midwest it seems they will sit for hours and listen to a direct selling program for prunes and boots and shoes. But that wouldn't go in the metropolitan areas. The morning hours are of great importance, and are of special interest to the women and children.

Then there are valuable hours in the summertime. As you know, this year some of the bigger features are going to be continued during the summer. That presents an audience for your message, and insures your message being heard.

**Short Wave Areas**

There is a great deal more to radio besides broadcasting as we know it, and the range of radio you can listen to on your dial as you turn it back and forth. There are several aspects which I believe will be of interest. One is this wonderful area of the short waves. These are the ones that reach out across the oceans and around the world. The world isn't big enough to wear them out; they go around the globe two or three times in a second. Their echoes are heard regularly one-seventh of a second apart as they circle around the world. Using these waves, in the future, you, as advertising men, are probably going to have the problem of international broadcasting over short waves, and will have to provide programs that will work internationally.

**Talkie and Television**

The radio has, of course, two daughters—talkies and television. As someone in Cincinnati said last night, one of those still lisps, and the other is still blind.

I want to say this, television may surprise you, and come into your own field before long. I have seen full-length figures of men, with entire clarity, boxing, fencing. I have been able to recognize the faces of my friends. And, while the apparatus today is complicated, television is apparently on its way.

There is one very serious drawback, however, to this television which you, as gentlemen, will protest against. That is the upset which it provides between the blonds and brunettes. The ideal television subject is a brunette, dark hair and dark eyebrows. When you put a blond up in front of a television screen, the picture comes out a blank! That is going to be hard on Mary Pickford in the television future.