

THE MARCH 1929 EDITION

# RADIO IN DEX

"THE TUNING BOOK"



Who Will Buy ?

RADEX shows the frequency to which set is tuned as dials are turned, gives exact location of dials for any station in America and identifies programs received without announcement. For any dial and any set.

# Use Your RADEX Properly

**A**ND it will add tremendously to your pleasure and success in tuning your radio set. RADEX is so simple a child can use it and yet we find that many people are not using it properly. If you will follow these simple directions, RADEX will do for you the following things:

Show you the wave length and frequency to which your set is tuned whenever you place your dials.

Tell you where to set your dials for any station in America, even those you have never received.

Identify programs received the instant you hear them without waiting for announcements.

All stations in America are listed in RADEX in three tables:

- 1st By Frequencies
- 2nd By Call Letters
- 3rd By States and Cities

The Index by Frequencies is the one to be used, the other two are merely supplementary.

Let us assume you have just bought your first RADEX. Proceed as follows:

Tune in some station — any station that comes in. Tune it sharply, turning down your rheostats (volume control) until we find the marks on your dials at which it comes in most clearly and with greatest volume.

Let us assume that the station we are hearing is WEAF in New York. First we must ascertain the frequency for this station. Look it up under WEAF in the Index by Call Letters or under New York in the Index by States and Cities. In either of these indexes we find that the frequency of WEAF is 660. Now we turn to 660 kilocycles in the Index by Frequencies and Dial Numbers. Here we find that WEAF is one of the two stations which have been assigned the 660 kcs. frequency by the Federal Radio Commission. We also find that it has a power of 50,000 watts, that it is located in New York City and is owned by the National Broadcasting Co., Inc.

## INDEX BY FREQUENCIES AND DIAL NUMBERS

590 kilocycles 508.2 meters

KHO	1800	Spokane, Wash.
WJLJ	2800	Albany, N.Y.
WJBT	500	Boston, Mass.
WJVA	1500	Winston, N.C.
WEMC	1800	Berlin Springs, Mich.

600 kilocycles 499.7 meters

CHCH	250	Itouquels Falls, Ont.
KRHD	500	Lynchburg, Va.
KSDI	500	San Diego, Calif.
WCAO	710	Baltimore, Md.
WEHN	250	Hahoi, Va.
WGSN	500	Lawrenceburg, Tenn.
WRDL	500	Memphis, Tenn.
WTEG	250	Barfield, Conn.

610 kilocycles 491.5 meters

KVBC	1000	San Francisco, Calif.
WBYE	1000	Kansas City, Mo.
WFSN	500	Philadelphia, Pa.
WJF	500	Philadelphia, Pa.
WJHJ	1000	Kansas City, Mo.

620 kilocycles 483.6 meters

KPAD	500	Phoenix, Ariz.
KCNW	500	Portland, Ore.
WJAF	1000	Tampa, Fla.
WHDH	1000	Orlando, Fla.
WJLZ	500	Hotelsborough, Me.
WREX	100	Worcester, Mass.

630 kilocycles 475.9 meters

CHCT	500	Chicago, Ill.
CHCX	500	Yorkton, Sask.
CHCA	500	Chicago, Ill.
CYR	250	Marshall, Mass.
KPRU	500	Concord, Mass.
WCHP	500	Fayetteville, Ind.
WMLL	250	Washington, D. C.
WDSJ	500	Jefferson City, Mo.

640 kilocycles 468.5 meters

KFI	5000	Los Angeles, Calif.
WATU	5000	Columbus, Ohio

650 kilocycles 461.3 meters

WSM	1000	Nashville, Tenn.
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660 kilocycles 454.3 meters

WJAW	500	Omaha, Neb.
WEAF	50000	New York City

670 kilocycles 447.5 meters

WMAO	2000	Chicago, Ill.
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680 kilocycles 440.9 meters

KPY	5000	San Francisco, Cal.
WTF	5000	Raleigh, N. C.

76 74

Lois Warner, Inc.  
Hessing N. S. Thomas  
Airfar Radio Corp.  
Edison Elec. Illuminating Co.  
Woodmen of the World  
Emmanuel Missionary College

75 73

Abilotti Power & Paper Co.  
Hessing N. S. Thomas  
Airfar Radio Corp.  
National Radio Co., Inc.  
Robert College  
Southern School of Music  
W.R.C., Inc.  
Travelers Insurance Co.

74 72

Don Lee, Inc.  
Kansas City Star Co.  
Kyrwood Broadcasting Co., Inc.  
Cincinnati Bros., Inc.  
Unity School of Christianity

73 71

Electrical Equipment Co.  
The Boston Publishing Co.  
Tampa Publishing Co.  
Boston Globe, Inc.  
Thompson L. Greenough  
St. James' Church

72 70

Virginia Broadcasting Ass'n.  
Chicago Credit Exchange  
Continental National Hallways  
Cathryn Egan  
Wiggins-Carlson  
Fayetteville on the Air, Inc.  
M. S. Lister Co.  
State Marketing Bureau

70 68

Earle C. Anthony, Inc.  
American Insurance Union  
National Life & Accident Ins. Co.

69 67

Omaha Grain Exchange  
National Broadcasting Co., Inc.

68 66

Chicago Daily News, Inc.  
M. S. Lister Co.

67 65

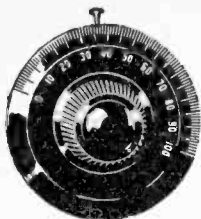
Hills Bros. & The Chronicle  
Durham Life Insurance Co.

In the blanks for dial numbers opposite 660 kilocycles (which is the wave length of 454.3 meters) enter the dial readings of your set. It is immaterial whether your set has one, two or three dials. Use as many of the three spaces provided as you need. The set used in the illustration had two dials. In this case we entered the dial readings for 660 kilocycles as 69-67.

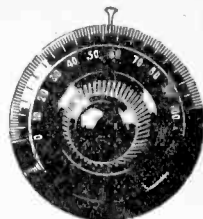
Let us now tune in some other station. We repeat the same procedure in tuning and find that we are hearing, let us say, WOS at Jefferson City. Proceed as before in ascertaining the frequency of WOS. This we find to be 630 kcs. We turn to 630 in the Index by Frequencies and enter our dial readings for this band which on the set we are using was 72-70.

We have now found that the dial numbers for 630 kcs. are 72-70 and the dial numbers for 660 kcs. are 69-67. If we now will set our dials for 70-68 it is obvious we will have our set tuned for 650 kcs. We listen carefully and if they are on the air and within range of our set we will tune in WSM at Nashville at this point. We then enter the dial readings for WSM opposite 650 kcs. Now it is clear that if we reset our dials at

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# RADIO IN DEX



F. C. BUTLER, Editor

FIFTH YEAR

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# THE QUESTION BOX

Conducted by S. E. Shapiro  
Technical Editor of RADEX

**M**Y RADIO set is a type that uses a UX 171 Power Tube. Would there be any advantage if I changed it to a UX 171-A Power Tube?

The only advantage you would derive would be less A Battery consumption. The 171-A will not deliver more volume than the 171, nor will it last any longer or give better tone quality. In actual figures the new 171-A uses approximately half of the power a 171 does.

I have a new AC set. The efficiency of this set has dropped considerably during the last week or so. I feel that my tubes are not giving the proper output. How can I make sure that they need replacing?

If your set has slowly given up its sensitivity to weak signals; if it no longer reproduces low notes or receives DX signals on a good night when your next door neighbor is getting distant stations, it would be advisable to have your tubes tested. When the quality seems bad and the amplifier overloads easily, look for bad power tube. In this case the filament of the power tube has been over loaded so that it no longer has sufficient electrons to handle low or loud notes. Any reputable dealer can test your tubes.

I purchased a radio receiving set in September and since that time have had to replace three tubes. This set has RCA Tubes. What can be the trouble? Also advise what kind of out-door Antenna is the best for distance with less static.

The burning out of tubes is probably due to a high line voltage or an excess of voltage from your power supply to the filament. Have both of these lines tested. We find a 50 foot aerial most efficient although a longer aerial will

give more distance but will it also amplify your interference. We would suggest you install both a long and a short aerial so that you can change as conditions permit.

I have a 7 tube electric set with Dynamic speaker and am troubled with a sort of hum and rattle connected with it. I have had two sets of the same make and still get this. Is it possible that a line noise through the power supply would cause this?

Your trouble in the Dynamic speaker is not an unusual one. Remember that Dynamic speakers are very sensitive and will amplify any electrical disturbance. This causes us to believe that your trouble may be due to a line noise. Should this not be the trouble, your speaker is possibly out of adjustment.

Just a few words in regard to my radio set, which is a 5 tube Sonora Model-C. I have had this set about three years and always have had good reception with same, but for the last two months the tone of same has changed from a mellow tone to a high pitch tone, which does not sound so good. I have been told to try some other brand of tubes but I am not sure it would be safe, so I am asking your advice and I would appreciate it very much if you would help me out. I am using four tubes CX301-A, and CX-112-A as a detector. What I would like to know is if it would be safe to use the UX-240 tube as a detector for better tone, or any other one which you may know of.

Your question undoubtedly, leads to a long discussion as to where your trouble may lie. If your set is 3 years old it is possible that your tubes may be low although they seem to light as bright as ever. Then, your loud speaker too you must bear in mind. It is not uncommon for a speaker to lose its

*(Continued on page 9)*

# WHEN YOUR SET GOES WRONG

## Where to Look for Trouble

By ENNO RALPH HAAN

THE two preceding articles in this series have proven so popular, we have asked Mr. Haan to summarize troubles and remedies in chart form. We are sure our readers will find this summary exceedingly helpful and we suggest this issue of RADEX be preserved for use in future difficulties.

Those who did not receive either or both of the previous issues may secure back copies for ten cents each.

### TOTAL INAUDIBILITY

#### SYMPTOM

*Click heard but no signal comes in when loudspeaker is plugged in.*

#### CAUSE

- Aerial or lead-in open-circuited.
- Aerial grounded.
- Aerial and ground disconnected.
- Faulty and ineffective ground.
- Use of loop-designed receiver on outside aerial or vice versa.
- Primary and secondary windings of tuning coil short-circuited.
- Broken "pigtail" connection on variable inductance or condenser.
- Defects in radio-frequency stages.
- Short-circuited or open-circuited grid condenser.
- One or more internally open-circuited tubes.
- Improper contact of one or more tubes in sockets.
- Static blanket.
- Dead spot.
- Shielding effect of steel structure.
- Loose connection or high-resistance joint.

#### SYMPTOM

*No click heard when loudspeaker is plugged in although all tubes light.*

#### CAUSE

- Worn-out batteries.
- Disconnected or open-circuited B-supply leads.
- Defective or poorly adjusted B-eliminator.
- Internally open-circuited B-battery.
- Breakdown in eliminator—usually a condenser, or a resistor.
- Lack of A. C. supply for eliminator.
- Open circuit in grid or plate leads.
- Defective transformers or resistors.
- Reversed C-battery.
- Break in loudspeaker cord.
- Defective loudspeaker plug or jack.
- Open-circuited winding of loudspeaker.
- Loudspeaker diaphragm adjusted too tight.

#### SYMPTOM

*All tubes fail to light.*

#### CAUSE

- Discharged storage battery.
- Worn-out or broken-down storage battery.
- Discharged dry-cell A-battery.
- Defective A-eliminator.
- Disconnected or open-circuited A-supply leads.
- Too small wire used for A-supply leads causing high resistance.
- Burned-out tubes.
- Loose socket prongs not touching tube tips.
- Defective filament switch.
- Open-circuited filament wiring in receiver.

#### SYMPTOM

*Some tubes fail to light.*

#### CAUSE

- Open-circuited rheostat or ballast.
- Some burned-out tubes.
- Loose socket prongs.
- Part of wiring open-circuited.

*(Continued on page 14)*

# NEIGHBORHOOD NOISES

## Hints on Finding and Eliminating

**T**HERE is no more exasperating thing about a radio than when there comes crashing into the program that rending, tearing, roaring disturbance that completely drowns out the loudest jazz band. (Personally we think one is just about as bad as the other). George W. Leasure, of Zanesville, Ohio, writes us of such a noise in his set. "At times I get a crackling noise like the tearing of a piece of heavy canvas." Faced with the fact that such a noise almost completely destroys one's pleasure with radio, it becomes of the greatest importance to try to eliminate it. This means hard work for someone but the end is well worth the trouble.

First let us make sure the noise is from outside the set. This is demonstrated of course by the mere expedient of disconnecting the antenna from the set. If the noise stops, it comes from outside; if it continues, it is from within. In the latter case our task is simple; we should merely follow the instructions in the article by E. R. Hahn in this and preceding issues of RADEX. But we are here considering the disturbance from without.

Next let us ascertain from our neighbors if they, too, are troubled in the same way. Have them as well as yourself note the exact time at which the noise starts and ceases some particular evening (for these noises are almost always intermittent). Compare your log of noise with that of your neighbors. Of course if your neighbors do not get the noise, the trouble is still around your set. Something may be touching your aerial or the lighting arrester may be faulty or your antenna may be too near to a power line or even to a telephone line or another aerial. You may find the trouble in some electrical device in your own home—the motor in the

refrigerator or oil-burning furnace, the battery-charger, the sewing-machine, the percolator or even the bed-warmer. Your log of noise will help you here.

If, however, as is more probable, this noise annoys the neighborhood, then there is nothing to do but to go sleuthing. For this you will need a portable set with a loop. Put this in a car and drive around the neighborhood, carefully noting from the position of the loop, the point from which the maximum interference comes. Gradually you can reduce the radius of your circle and locate the immediate vicinity in which the noise is greatest. Your power company will undoubtedly help you for if, as is often found, the cause is a faulty insulator or a tree limb brushing against an uninsulated wire, then the company loses current every time the noise is on.

Use your noise-log in ascertaining if there is any electrical device used in the vicinity at times that correspond to your log. Now all of this is going to take work but by calling a meeting of the radio users in your locality, the work can be divided and the disturbance gradually run down. And as we said before the end certainly repays all the work and trouble. An extreme case is cited in a letter from Mrs. Neil E. Mott, of Bellevue, Ohio, who writes: "I am a reader and user of your publication and like it so much. I am writing to ask whether you can help out everyone in this district with the interference we receive on all electric radio sets. I own a Crosley Showbox but whatever it is affects any kind of set. There is such a terrible buzzing noise, that when it is on, it cuts off every station on the dial.

We have had the Power Company try to locate the trouble and they have

*(Continued on page 64)*

# DEAD OR ALIVE

## Radio Plays a Role in a Real Drama

By ELIZABETH S. HICKEY

MARY waved a final goodbye to her father and mother as they drove away in the family "flivver," then turned and went into the kitchen of the spacious old farmhouse. She took her long apron down from the hook, slipped it over her head and gave an appraising glance at the heap of dishes awaiting her in the sink. But first she held out the long apron in a grand dame manner and walked daintily over to the radio and turned the switch. Music came in instantly from the broadcasting station some forty miles away. Keeping time to it prettily she waltzed back and forth across the long kitchen in what she deemed the stately style of ages bygone. For Mary had recently played the stellar role in a revival of "Lady Audrey's Secret" with the high-school players and she was apt to lapse back into the nineteenth century upon the slightest provocation. A dainty lady of the realm she made with her regular features, her dark brown hair and eyes which always had a sort of glow in them.

Finally with a reproachful glance at the clock, she waltzed over to the sink and began her morning task. The radio changed to a song and Mary chimed in with her sweet soprano voice and the dishes rapidly achieved their virgin whiteness. So engrossed was she in the music and in her work, that she jumped quickly when a sharp rap was given at the screen-door. She went to the door but before she could reach it, it was opened from without and a man entered. He was not only a person she did not know but her quick glance showed her that he was a man she did not wish to know. Her first reaction was anger at the intrusion.

"How dare you come into this house?" she demanded.

"I want something to eat," growled the stranger.

"Well, stay out on the porch and I will bring you something," the girl replied, deciding that compliance was the better course.

"I'll sit right here," said the man truculently, pulling out a chair at the table. Mary looked at him angrily but again she decided to keep the peace and without a further look in his direction, she prepared some food from the cupboard and placed it before him. The man eyed her sulkily watching every movement the girl made. He continued to do this even while he gulped down great mouthfuls of the food.

Mary's mind went over her situation rapidly. She was entirely alone; the nearest neighbors were half a mile away. She thought of the telephone which hung on the kitchen wall but decided it would be of little help for the man would never let her use it. She would feed him well, she decided, and perhaps he would then leave. So she brought forth the best the house permitted and it was a great deal. The man ate on seemingly never to be surfeited.

The girl decided upon a ruse and she walked to the outer door, the man watching her every step with the intentness of a cruel cat playing with a helpless mouse. The girl opened the door and called "Father." An evil grin came out upon the sullen countenance of the stranger.

"Do you think he can hear you?" he sneered.

It was plain that he knew the girl's parents were away and so Mary fell

*(Continued on page 11)*

# OUR MAIL BOX

## Letters to the Editor

**R**AY SCHEIB, 6456 Ellis Ave., Chicago, is our first correspondent this month. He writes "I'm glad I received this expiration notice from you as I would sure miss my RADEX and most of the fun of DX without it."

And speaking of DX, John J. A. Connors, 39 Sherman Place, Jersey City, writes: "Being an ardent DX fan I have bought almost every radio log on the market and found they were incomplete. Mr. Paul Godley of Station WAAM of Newark each Sunday morning rebroadcasts distant stations and gives their data on wavelengths and kilocycles. I was surprised at the rapidity with which he gave the call letters and locations of the stations. I got in touch with him and he told me that he used the RADEX log, so I am enclosing 25 cents for an issue."

We have received a large number of requests for RADEX stating they had learned of RADEX through an announcement by Station WAAM. That several dozen people would take down an address and send away to a distant point in this way indicates two things: first, the general need for such a book as RADEX and, second, the value of station WAAM as an advertising medium. Our thanks to you, friend WAAM.

### MEXICAN STATIONS

From San Antonio, Texas, Chas. E. Whitney writes: "RADEX is my reliance in my pleasure which is DX-ing. But there are many in the southwest who find little help in getting Mexican stations as some have changed call letters and some wavelengths. Can't you give us a correct list of Mexican stations? Hundreds of us would appreciate it as some of these stations do not announce in English."

We find it most difficult to keep our Mexican stations (and this applies to Cuba also) up to the minute. There does not seem to be much if any governmental control of radio in those two countries hence no one place where we can check our lists. We are forced to rely on such data as we can get from our own government at Washington.

But, wait, here is a letter from Mexico—from A. Verastegui at Tampico—who writes "Yesterday I was lucky enough to get a copy of RADEX. This small magazine gives more useful information than any other I have seen." Perhaps our good friend in Tampico (or some of our other subscribers in Mexico) will help us in this difficulty. If he will secure for us an up-to-date list of Mexican stations with call letters, wavelength or frequency, name of owner and power, we will certainly appreciate it and so will the hundreds of listeners in our southwest to whom Mr. Whitney refers.

### WHERE IS PWX?

Several friends of RADEX write us of the trouble they have had trying to locate PWX at Havana in any one spot. It seems this station has been sampling various places in the ether this winter trying to find one where they can get through the barrage. Mr. G. W. U. Phillips of Bound Brook, N. J., sends us a printed announcement from PWX stating they are now CMC with a frequency of 840 kilocycles instead of 750. The change is being made in this issue of RADEX. Mr. Phillips also gives us correct data on 6 KW at Tuinucu, Cuba.

Claude Chapman of Seminole, Okla., also writes of his chasing PWX all over his dials until he finally called on us for help. Readers must remember that PWX—pardon, CMC—is not under our



## WANTS SHORT WAVES

Radio Commission and hence is free to shift about as it desires. Let's hope they will stay put on 840 although they surely will get all tangled up with KWKH, Shreveport, on 850 and with HHK, Haiti, on 830. Mr. Chapman adds this postscript to his letter: "By the way, RADEX is great. It has helped me to get 123 stations and getting one or two more every day." Let's all move to Oklahoma.

Next is a letter from a sailor who is going to have a RADEX in every port. Mr. Harold D. Johnson of the U. S. Fleet Naval Reserve, stationed at Woodford, Maine, writes: "I have had a great variety of so-called log-books in the past five years but the most practical publication I have yet found is your RADEX. It covers the entire band of wavelengths in such a variety of ways that everyone should welcome it as a part of their radio set."

Then one from a railroad man—Mr. A. M. Mitchell with the C. & O. Ry. at Charleston, W. Va.—"I consider myself fortunate in picking up your December RADEX and thus learning what assistance a REAL radio log is to a fan. I told several friends of this valuable book and the newsdealer has to reorder to satisfy everyone." Maybe you think letters like this don't brighten up an editor's day!

And here is a friend who says it with subscriptions: "I want my best friends to have the best Radio Tuning Book so I am enclosing three one-year subscriptions to your magazine." This was from William McDade at Selbyville, W. Va. Many thanks, Mr. McDade.

The City Clerk at Toulon, Ill., Mr. Claude L. White puts this in his order: "This is the finest thing of the kind I've ever seen and I want these copies for friends who have seen mine." You know how the rings spread out from pebbles thrown in the water, well each copy of RADEX seems to be a pebble all its own.

Here is one from away<sup>1</sup> up in Saskatchewan, from J. O. Girouard with The Pas Lumber Co. at Nipawin: "Being a subscriber to your most useful Radio Index, which renders tuning so easy for everyone, I am wondering if you also publish a short-wave index which would be of great help to me, just starting using a low-wave adapter."

We will answer this inquiry together with a similar one from Mrs. F. E. Geathard, 217 West 21st Avenue, Spokane, Washington, who writes: "I desire to express to you the satisfaction your publication has given me the past year. But *why* don't you give at least once a year a list of the foreign stations? We DX fans have to also buy another book for the stations you do not give us for the South American, Japanese, Australian and other stations we receive, when we go fishing." If Mrs. Geathard refers to stations in the broadcast band, there are enough in the countries she names not to mention those to the east, to fill half of RADEX. We are certain that the number of our friends who can get any of these stations must be very, very small and we do not feel that we should take several pages of other material away from the great majority to help so few. For Mrs. Geathard must remember that if she gets these stations in the broadcasting band, she is a very lucky person. If we were to get even one of them here in the "eastern middle west" we think we would brag about it more than we would of a hole-in-one at golf.

If, however, both of the above subscribers refer to the short-wave stations, we have to confess our inability so far to get really authentic lists of such stations in other countries. It is hard enough right here in the United States due to the fact that short-wave broadcasting is still in swaddling-clothes. Then, too, they are not arranged in steps by kilo-

cycles as are our broadcasting stations and hence we could not use the RADEX system of tuning with them. But we shall keep this matter always in mind and hope some day to provide a service that will satisfy in this regard.

#### WHO IS WHO?

Alfred H. Taylor, of Bywood, Upper Darby, Penna., wants to know where and who WWO is as he finds it, as do many others, messing up their signals. WWO is not a broadcasting station in the common use of the term although it does broadcast in the regular band. This is a station located at the big Cleveland Airport which broadcasts for a few minutes at intervals each day, the weather and landing conditions for our flyers. When they trouble you, be patient for a few minutes and remember those brave fellows away off up there in the clouds who are listening so eagerly for this information that may mean life or death to them. We mustn't forget that radio is something for more than a means for our pleasure and information.

Horace Ware of 219 Poinciana Drive, Birmingham, Ala., writes: "I am delighted with the leatherette cover for RADEX which I have just received. I wanted my subscription to begin with the February number but you sent an old October copy in the cover." We have received several such complaints and we want to say to all who are ordering those beautiful blue and gold covers that where there is no copy of RADEX due to go with the cover, we always put in an old one. There are three reasons: first, due to a peculiarity in postal rates, a cover with a book goes cheaper than a cover alone (try to figure that out!); second, a book protects the cover from being bent in the mails; third, we fold the cover of the old book to show you how to insert it into the pockets in the leatherette cover. So when you get an old book you did not order, remember we aren't charging it to your subscription.

#### A GOOD IDEA

From Eastland, Texas, A. D. Caldwell sends us the suggestion that the Index by Locations also show the power. His reason is "if one is attempting to get a station in Mexico City, when looking at this index they, at the same time, may see the size of the various stations so they may know without looking further which stations they have the greatest possibility of tuning in." This suggestion has much merit and we will consider it carefully to see if it can be carried out without making it necessary to give more space to this index.

Another friend from the far South is Juan Prieto-Quemper of 3825 Trowbridge St., El Paso, Texas, who writes: "I am very fond of RADEX which I buy every time it is issued. I am also very proud of my Brunswick Superheterodyne 9-tube, with which I have been able in two months to log 149 stations in the U. S. and Mexico. Practically all of the Pacific Coast stations have been heard and also many of the eastern ones, including Philadelphia, Baltimore, Buffalo, Atlantic City, Newark and others." Some record for RADEX and Brunswick.

One more letter and we will close Our Mail Box for this month. This is from C. K. Shepard, 134 Geneva Ave., Elmhurst, Ill.: "We are unable to get RADEX here. There are only a few come to the news stands here and one almost has to fight to obtain a copy. The magazine racks are full of all the other logs but the RADEX melt like snow in August immediately upon appearance. I can't say too much for your RADEX."

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**FREE**  
**A Leatherette Cover**  
**for your Radex**

*See Page 35*

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# QUESTION BOX

(Continued from page 2)

magnetism slightly or completely. This would change your tone considerably. I would also call special attention to your 112-A tube. Have that tested and also test your grid leak. You can use a UX240 tube as a detector but you will have to experiment with your plate voltage on this particular tube; that is, try as many different voltages as you can and listen for the one that gives most clarity and tone quality.

I would also like to know just what kind of acid to use in my Storage A6 Volt Battery which I have filled with Distillata water to keep the Plates covered as I charged the battery myself but never put any acid in.

Under no circumstances put any acid in your battery. Merely keep the plates covered with distilled water. If you should still have trouble keeping it up, take it to a competent battery man in your neighborhood.

I am constantly bothered with crackling noise in my radio. I am sure this is not due to static completely. What other trouble could there be?

Disregarding static as an interference, these noises may come from loose connections that are soldered, screwed or bolted. Go over your wiring system and look for such ailment. Cold soldered joints usually make bad connections, the soldering flux acting in this case as an insulation.

My set has suddenly lost its tone quality. By that I mean that it does not reproduce notes with usual quality. The high and low notes are also very much distorted.

Let us assume that we have already tested the loud speaker and found it efficient. The most probable cause for trouble would lie in the audio frequency transformers. This does not necessarily mean that your transformers are dead. They may be too high a ratio. The most common trouble experienced with transformers is burnt out windings. In that case it is best to replace them.

What is the approximate consumption of the average AC Radio Set?

Our laboratory engineer after making a test on twelve of the leading AC sets Manufacturers today has come to the conclusion that the average electric set will not consume any more than a 60 Watt bulb. Therefore we can readily make claim by authentic figuring that you can operate your radio for three hours each evening at the cost of 1 cent per evening or 30 cents per month increase on your present electric light bill.

I suppose my question will be considered a frequent one with you, but however, which course would you pursue in getting stations around 200 meters?

Your question is quite a frequent one, but this may solve your trouble. Remove about five to ten windings on your secondary coils of the radio frequency and tuning transformers, or use a smaller capacity tuning condenser. With many sets this is quite an easy adjustment, but on new sets it is most practical to let an experienced radio man do your job.

My radio set has given me almost more than I could expect, but still there is one condition that I would like to clear up. That is, "what is it that causes Station KDKA Pittsburgh to fade?"

Your question is as yet unanswerable. Station KDKA has spent thousands of dollars trying to discover and eliminate this condition. The trouble is not with your receiver. It is an atmospherical or geological trouble.

What advantage would I gain by using a 250 tube in place of my regular power tube?

All that you can expect from this change would be greater volume and more clarity. The 250 tube will not increase your distance capacity. It was manufactured for the sole purpose of delivering greater volume, with less distortion.

My radio which is a new AC set has developed what I would call distemper. By that I mean the slightest jar or vibration

made near the radio set comes through the speaker. This is terribly annoying. Is this caused by microphonic tubes?

Yes, your trouble is undoubtedly due to microphonic tubes. This is caused by a poorly constructed tube. It is advisable that you have these tubes exchanged as there is a compensation allowed on such tubes.

On what low wave meter does 8XAL broadcast?

8XAL the experimental station of WLW uses a low wavelength of 52.05 meters, and 500 Watts.

I have a Stewart-Warner AC 8 Tube Radio Set. I hear a lot of crackling and buzzing through my speaker. Sometimes, it goes as far as to completely eliminate the program. In this case, I tap the side of the set and the program usually starts. When it doesn't I have to shut off my switch, and turn it on again. Is the trouble in the set or the speaker?

After careful consideration, we are quite sure that your trouble is in your set. It may be due to any of the following:

- (1) A loose connection.
- (2) A short in one of your tubes.
- (3) Or a short in the circuit.

We have a 5 tube battery set with an A-Eliminator. What would cause our reception to fade every time a switch is turned on in the house, for example the switch on our electric water pump. All of our tubes are new. Now, here is another. What harm or good is there in having two fifty-foot aerials parallel to each other, instead of having one 100 foot aerial. Would it bring in more noise? We have plenty of it now.

The reason for the fading when you turn on another switch in the house, is because you are drawing more voltage from your house line. A motor turned on would therefore drop the volume considerably, because, it draws more voltage and amperage than an electric bulb. As to your aerial, I would not advise the use of two 50 foot lines. Especially when you are receiving plenty of noise now. If your noise is very bad, I would advise cutting your aerial down to about 50 or 75 feet.

I have a Crosley Showbox and have trouble getting stations under 215 Meters. Do you think a short wave convertor would help the set any by tuning sharper, also, do you think it would be satisfactory for DX?

You are probably one of a few million people who are having a great deal of trouble in tuning in stations around the 200 meter band. The best suggestion would be to stand by until further developments. I suppose you know of the trouble that is now brewing between a few broadcasting stations and Radio Commission. Regarding a short wave adapter, I would say No. They are made for stations between 20 and 100 meters.

Who was the earliest experimenter in Radio?

Your question is quite an interesting one and also a very much discussed one. Probably, the first or one of the first experimenters, was Heinrich Hertz, a German Scientist, who based his experiments on the former theories of James Maxwell. In 1887 Hertz succeeded in actually sending radio waves. Here is just how he did the almost unknown. His receiving set consisted of a small spiral of wire with a gap in it. When he sent his radio waves, a spark would jump across the gap. Little did the professor then realize what his experiment would lead to. Here the story ends; but we could go on indefinitely and tell of Marconi, De Forest, Cunningham, Armstrong, and many more, who have helped to make radio what it is.

Quite recently I have purchased an AC set with a Dynamic speaker. This combination worked beautifully until my speaker suddenly lost its clarity and then stopped completely. Is this a common trouble with Dynamic Speakers?

Your trouble is a common occurrence in one respect. That is leaving your power on your speaker when you turn your radio set off. By doing this, you cause your coil in your speaker to over heat because of the steady flow of current. Why, you may say, doesn't my

coil heat while the radio is playing? And the answer is "Yes", but, when your radio is playing, you have a large amount of fluctuation in your diaphragm. This fluctuation would offset the steadiness of the line flow and will therefore keep the coils from becoming too hot. The best way to use this dynamic speaker combination would be to have it wired to the switch on the radio set. This will turn off all the power, that is both the set and the speaker.

*(Continued on page 63)*

## A PUZZLER

For some time the writer was annoyed by the peculiar performance of his set. Even local programs would die away suddenly (not slowly as in fading) but the music would lose its volume all at once until it could scarcely be heard. Then, just as suddenly, the normal volume would return. The trouble was finally located where the wires were attached to the battery posts. Large toothed, spring clips were used for the leads from the A battery and a corrosion had taken place which could not be seen and yet which served to make the current flow intermittently. The clips were carefully scraped and filed and the annoying trouble was gone.

## MUSIC INTO LIGHT

The daily press reports an interesting experiment when Allen C. Clarke, Danville, Va., amateur, attached an electric pick-up to a phonograph and fed its output into a home-built television reproducer. Music then became curved streaks of light of varying thickness.

Low notes of the double bass and the roll of the tympani produced broad black bands. When the lower register instruments of an orchestra were eclipsed by the shrill treble of violins and highly pitched brasses, fine lines of light were drawn.

As music moved up and down the scale there was a corresponding fluctuation in the picture to left or right. During the more tempestuous passages of the music the picture assumed the appearance of a futuristic drawing.

A jazz band would probably have looked like a premature explosion of a carload of Fourth of July fireworks.

## DEAD OR ALIVE

*(Continued from page 5)*

back upon a fib assuring herself that if one were ever warranted, now was the time. "I am expecting him back every minute," she defended. "He just drove over to a neighbors."

"Yeh. Do you kiss them goodbye every time they go over to the neighbors?"

And then Mary knew that the man had been watching the house for some time. He had seen her parents drive away on their trip to the county-seat. He had watched her kiss them goodbye and had evidently reached the conclusion that the girl was entirely alone. Mary sent a fervent prayer for help into heaven but where it could come from she little knew.

During all this time, like the subdued accompaniment of the theatre orchestra, the radio had been reproducing the strains of the distant instruments, the players never dreaming that they were providing the music for a tense drama.

Mary said nothing but went on about her work. Still the man ate. With her heart pumping as if it would burst, the girl calmly finished wiping her dishes and putting them away. Finally she reached up to the hook and took down a straw hat as if she were going into the garden but as she neared the door, the man moved his huge bulk before her and said, "Oh, no, you don't." And he sat there blocking her way while he reached out for a great slice of pie which he ate, still greedy.

Mary hung the hat back upon its hook and walked around the great dining table which stood in the middle of the big kitchen. She would place this much protection between herself and him. Behind the outer door which stood open, was her father's rifle with its magazine kept loaded. But like the telephone it was of little use to her for well she knew that before she could reach and use either the man would be upon her. She could only pray that help might come from some source. Perhaps some one would drive into the yard. It was too early for the rural-delivery carrier and she could think of no one else who might come. Her parents would not return until after dark. She stood and waited. She could no longer make a pretense of working. She was thoroughly frightened.

Finally the man turned toward her, an evil leer upon his face. "Come over here and see me," he ordered. Mary did not move.

"Come over here or I will come and get you," was the demand in still rougher tones. The girl ignored the command.

Slowly the fellow rose to his feet and slowly he walked toward her. Mary moved around the table to keep it between her and the brute. The man started to follow and the thought came to Mary that she might get on his side of the table with access to the outside door. But the man grinned and moving toward the door tipped a chest of drawers across blocking the doorway. Mary was now in a panic.

The intruder turned again to the frightened girl. Darting around the table first one way and then another, he endeavored to get his coarse hands upon her. But the girl was swift and eluded him. He chased her back and forward and around. And as Mary passed the telephone on her way she reached out and knocked the receiver off the hook and then screamed "Help. Help."

With an oath the brute grasped the instrument and ripped it completely from the wall. Again he turned to the pursuit.

The distant orchestra took up the strains of "There's a Rainbow Round my Shoulder."

As Mary ran she tripped and the huge hand fell on her. She darted away again and her clothing was torn off her shoulder leaving it bare. Again she was on the opposite side of the table from her tormentor, leaning on it for support, her breath in gasps, her breasts rising and falling like the body of a dying thing. The man glared at her and if he had seemed vile before, he now was the very devil incarnate. He grasped the huge walnut table with both great hands and Mary sensed that he was about to overthrow it upon her. She closed her eyes and shuddered, almost in a faint.

"We are interrupting this program," came a voice from the loud speaker, "at the request of the state police." At the word "police" the corded muscles in the hands that gripped the edge of the table relaxed and the startled brute turned bewildered toward the speaker.

"A convicted murderer escaped from the authorities at Galesburg this morning. He is wanted for the killing of Sam Jackson and his wife at Morton."

And then feature by feature, the radio described the brute on the opposite side of the table from Mary and she knew that she faced a man not only utterly depraved and without conscience but even without fear of consequences for he was already under sentence of death. With a terrible oath the killer turned and kicked the radio instrument as though it were an informer. The table upon which it rested leaned precariously against the wall but still the loud speaker went on: "The State offers a reward of Five Thousand Dollars for the capture of this man *dead or alive*. State police are now searching in the vicinity of Cambridge where it

is believed this man was seen this morning."

With another vile imprecation, the desperado knocked the set to the floor, then ran to the outer door, pushed the chest of drawers violently out of his way and jumped out on the porch. He looked up and down the road to see if the troopers were near who were hunting in the vicinity. As he ran he pulled a vicious-looking gun from his pocket. No one was in sight for a mile or more in either direction and he turned back into the kitchen to his prey.

Too late. When he turned, he looked into a 32-calibre hole in the end of a Winchester. And back of the sights which were trained steadily upon the very center of his forehead, were the determined and blazing brown eyes of his intended victim. "Hands up!" she said, quietly but in a voice that he knew meant just what it said. Slowly the hands were lifted into the air over his head. Like participants in a tableau, the two faced each other. "What shall I do next?" thought Mary to herself. Slowly, almost imperceptibly, the revolver in the right hand of the criminal inclined. A fraction of an inch at a time it lowered until it was almost in line with the girl in the doorway. Another degree of its terrible arc would have been death but Mary saw it and simultaneously two shots rang out. One bullet imbedded itself in the door jamb above Mary's head. But the other had met its target. The revolver flew from the hand that held it and two fingers hung backward upon the upraised arm while jets of blood spurted down the wrist.

"Now whatever will I do with you?" the girl asked, this time aloud. "You would be less trouble if you were dead. 'Dead or alive'," the girl repeated slowly, pondering the situation. The desperate man misread her intentions, assuming that she would do what he would himself do in a like case. He

paled and losing all control of himself groveled like a whipped cur.

"You wouldn't kill me in cold blood?" he cried.

"Why wouldn't I?" Mary returned. "What chance did you give Mr. and Mrs. Jackson? After they gave you everything you killed them just to make it impossible for them ever to testify against you. You ought to be dead and I do not think I would have any more compunction in killing you than I would a rattle-snake."

The coward whined, really frightened, and muttered something about not meaning to harm anyone.

"Oh, no," returned the girl. "You didn't intend to harm me a few minutes ago, did you? If it hadn't been for that blessed radio . . . ." and the girl shuddered.

At last she spoke sternly to the abject and cowering brute, "Right about face and march to the barn. And let me tell you I can shoot a rabbit on the hop, skip and jump. If you make one false move it will be your very last."

The man, now thoroughly cowed, did as he was bid and with hands still reaching to the sky, he turned and shambled toward the stables. At the girl's direction, he entered one of the cattle stalls which was deep with straw. Still holding the rifle at his head, she ordered him to lie down in the straw with his head in the low manger upon hay that had been left by the cattle. As he laboriously eased himself into the bed and lay over upon his back with his head between the stanchions, the girl suddenly kicked the latter to and the man was safely imprisoned with his head securely locked between the great oak bars.

With her gun slung over her forearm, the stock under her upper arm, in the hunter's "ready" position, Mary backed slowly toward the cupboard which held the remedies used on cuts suffered by the stock. Reaching into the cupboard

still with eyes alert for any untoward move on the part of the prostrate man, she found a box of carbolic salve. Her captive seemed only too willing to lie in the deep straw and await developments having indeed no other alternative. With a strip of the white undergarment hanging in shreds from her shoulder, the young girl spread on the salve and bound up the injured hand as best she could.

She smiled to herself as she addressed the scowling ruffian. "I don't suppose you ever had any idea that you were going to do one good deed before you died. But you are. You are going to send a young woman to college. Now isn't that nice? I never knew how I was going to get the money for college and here you come in and bring me five thousand dollars—sufficient for my whole education and then some. You don't look much like a fairy god-father, do you?" A horrible grimace was the only response.

At that moment, the girl paused, threw up her head and listened. She heard the sharp, staccato bark of a motorcycle. Picking up the rifle she ran to the door of the barn. A state trooper was passing at a high rate of speed. Throwing the barrel of the gun into the air, three shots rang out in quick succession. The cyclist slackened, looked around and then wheeling his machine about, he came roaring into the farm yard. With a grinding stop in front of the girl, he grinned and asked "What's all the shootin' fer?"

It was Lady Audrey who answered. "For whom are you seeking?" she inquired sweetly.

"I'm looking for an escaped murderer—the fellow who killed Mr. and Mrs. Jackson. You haven't seen anything of him have you?"

Mary nodded toward the stall. "Allow me to turn him over to you," she said.

The trooper turned and looked,

walked forward curiously and stared at the imprisoned figure. Then he turned to the girl and stammered, "Ma'am, I'm a son-of-a-gun. Excuse me, ma'am. Yes, sir, I'm a son-of-a-gun."

## If Set Goes Wrong

(Continued from page 3)

### SYMPTOM

*Inability to tune in distant stations.*

### CAUSE

Limited range of receiver.

Atmospheric conditions.

Aerial is too short.

Use of a substitute aerial, loop or indoor aerial for regular outdoor aerial.

Worn-out tubes which need reactivation.

Low A and B-batteries.

Careless tuning by operator.

### WEAK RECEPTION

#### SYMPTOM

*Occasional weak signals.*

#### CAUSE

Static conditions.

Corroded tube tips and socket prongs.

#### SYMPTOM

*Constant weak signals.*

#### CAUSE

Receiver is located a considerable distance from broadcasting stations.

Aerial is too short

Use of indoor aerial on receiver designed for outdoor aerial.

Too loose adjustment of loudspeaker unit.

One or more defective tubes.

High-resistance joint.

#### SYMPTOM

*Signal comes in louder when ground is disconnected.*

#### CAUSE

Grounded aerial.

#### SYMPTOM

*Rheostats must be turned up excessively high for fair volume.*



CAUSE

Tubes worn out and need reactivation.  
Low A-battery.

SYMPTOM

*Signal is strong when receiver is turned on but soon dies down.*

CAUSE

Low A or B-battery, or both.

SYMPTOM

*Weak signals accompanied by slight whistling or crackling noises (may also oscillate.)*

CAUSE

Low B-batteries.  
Incorrect B-voltages.

SYMPTOM

*Better volume obtained when tubes are changed.*

CAUSE

Some tubes work better for r.f. and other for a.f. amplification.

SYMPTOM

*Signal strength varies with the use of different phones and loudspeakers.*

CAUSE

Demagnetized phone or loudspeaker unit.  
One loudspeaker better designed than another.  
Reversed phone-cord connections causing wrong polarity.

SYMPTOM

*Tubes do not light up sufficiently and receiver has poor volume.*

CAUSE

Corrosion on battery terminals causing high resistance joint and preventing required amount of current from passing.

SYMPTOM

*Weak signals after battery has been changed.*

CAUSE

Reversed A-supply leads.  
Reversed C-supply leads.

SYMPTOM

*Weak signals after lead-in and ground wires have been re-connected.*

CAUSE

Lead-in and ground wires reversed on receiver binding posts.

FLUCTUATING RECEPTION

SYMPTOM

*Sporadic fading of signal strength.*

CAUSE

Atmospheric conditions.

SYMPTOM

*Intermittent fluctuations of reception.*

CAUSE

Variations in B-supply from eliminator due to line surges.

SYMPTOM

*Signal strength varies when hand is removed from tuning dial.*

CAUSE

Body capacity.

FAULTY TUNING

SYMPTOM

*Broad tuning.*

CAUSE

Proximity of receiver to broadcasting station.  
R. F. coils too closely coupled.  
Aerial is too long.  
Antenna effect of eliminator.  
Inadequate tuning circuit.

SYMPTOM

*Too sharp tuning.*

CAUSE

R. F. coils too loosely coupled.  
Aerial is too short for distant reception.  
Use of indoor aerial on receiver designed for outdoor aerial.  
High-peaked intermediate-frequency transformers of superheterodyne receivers.

SYMPTOM

*Receiver breaks into oscillation easily when tuning signals carefully, causing an "oscillation handover."*

CAUSE

Too low value of grid leak.

DISTORTED SIGNALS

SYMPTOM

*Loud notes distorted.*

CAUSE

Audio tubes overloaded.  
Poorly designed transformers.

SYMPTOM

*Metallic reproduction.*

CAUSE

Metal loudspeaker bell.

SYMPTOM

*Constant distortion, especially on high and low notes.*

CAUSE

Poorly designed and cheaply made transformers.  
Poor tubes having low mutual conductance.  
Intercoupling between non-shielding audio transformers.  
Too high transformer ratios.  
Incorrect value of defective resistors in resistance-coupled a.f. amplifier.

SYMPTOM

*Distorted signals when r.f. and detector rheostats are tuned up too high.*

CAUSE

Oscillating r.f. tube or detector.

SYMPTOM

*Distortion from certain broadcasting stations.*

CAUSE

Poor broadcasting equipment and faulty operation.

SYMPTOM

*Distortion when two stations on nearly the same wavelength are broadcasting at the same time.*

CAUSE

Overlapping wavebands prevent tuning in either one sharply, resulting in mutual interference.

SYMPTOM

*Distortion on signals from distant stations.*

CAUSE

Receiver tunes too sharp and cannot get benefit of the full waveband.

SYMPTOM

*Harsh-toned reception.*

CAUSE

Too high grid and plate voltages.  
Detector filament rheostat turned up too high.  
Incorrect resistors in resistance-coupled receiver.  
Too high grid-leak value.

SYMPTOM

*"Fuzzy" reproduction.*

CAUSE

Slow-leaking condenser in eliminator.  
Poorly adjusted eliminator.  
Incorrect value of grid-leak.

NOISY RECEPTION

SYMPTOM

*Crashing and crackling noises at certain times.*

CAUSE

Static discharges.  
Power lines grounded by trees, wet insulators, etc.  
Defective power transformer.  
Dirty commutators on electric motors causing sparking brushes.  
Passing street cars, interurbans, etc.  
Farm lighting unit.  
Defective buffer condenser of eliminator.  
Trickle charger in operation while receiver is used.

SYMPTOM

*"Motorboating" (putt-putt sounds).*

CAUSE

High internal impedance of filter section of eliminator.  
Faulty resistors and leaky condensers in eliminator.

Fluctuations of voltage of a. c. supplying eliminator.  
 Excessive voltage on r.f. and detector tubes.  
 Incorrect value of resistor in detector-plate circuit of resistance-coupled receiver.  
 Incorrect grid bias.  
 Defective grid condenser.  
 Too high grid-leak resistance.  
 Reversed winding of a.f. transformer.  
 Unmatched impedance between power tube and loudspeaker.

SYMPTOM

*Squawking noises when tuning.*

CAUSE

Set turned up too high for proper operation.

SYMPTOM

*Howling and whistling noises.*

CAUSE

Too much regeneration.  
 Pick-up from other reradiating receivers.  
 Too high grid-leak.  
 Unneutralized r.f. stages.  
 Inductive effects between parallel grid and plate lines.  
 Inductive effect of a loop.  
 Two stations at slightly different wavelengths operating simultaneously.  
 Intermediate stages of superheterodyne oscillating.  
 Incorrect value or defective filter condenser in superheterodyne.

SYMPTOM

*Clicking while tuning.*

CAUSE

Oscillating r.f. tubes.  
 Short-circuited buffer condenser in eliminator.  
 Arcing across anode leads of eliminator rectifier, across prongs of rectifier-tube socket, or across output of power transformer or eliminator.  
 Defective eliminator resistors.

SYMPTOM

*Buzzing sounds.*

CAUSE

High-frequency electrical apparatus.  
 Rotary spark gap of transmitting station.

SYMPTOM

*Rasping, spluttering or crackling noises when receiver is being tuned.*

CAUSE

Loose connection.  
 Thread-like burrs on plate of variable condensers.

SYMPTOM

*Constant crashing and crackling noises (sometimes evidenced with weak signal strength).*

CAUSE

Noisy B-battery, especially when old and nearly worn out.

SYMPTOM

*Sporadic hissing, crackling and frying noises.*

CAUSE

Internal short circuits in tubes.

SYMPTOM

*Howl, increasing gradually in pitch and volume.*

CAUSE

Microphonic detector or other tube (caused by too high plate voltage or by vibration).

SYMPTOM

*Ringing noise when receiver or cabinet is tapped.*

CAUSE

Microphonic detector.

SYMPTOM

*Steady humming sound.*

CAUSE

Aerial parallel to electric power lines.  
 Lead in or ground wire, loop, or receiver in close proximity to extension cords or electric lamps.  
 Poor filtration of eliminator.  
 Inductive effect from eliminator.

## INDEX BY FREQUENCIES AND DIAL NUMBERS

### NOTICE OF COPYRIGHT

The method of logging by wave-lengths or frequencies was devised by The Radex Press in 1924 and has been copyrighted and recopyrighted each year since that time. The arrangement of stations in groups by frequencies or wave-lengths with dial readings in connection therewith is fully covered by our copyright and all infringers will be vigorously prosecuted.

### 550 kilocycles 545.1 meters

CCY	100	Merida, Mexico
KFDY	500	Brookings, S. D.
KFJM	500	Grand Forks, N. D.
KFUO	500	St. Louis, Mo.
KFYR	500	Bismarck, N. D.
KSD	500	St. Louis, Mo.
KTAB	500	Oakland, Calif.
WEAN	250	Providence, R. I.
WEAO	750	Columbus, Ohio
WGR	1000	Buffalo, N. Y.
WKRC	500	Cincinnati, Ohio

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Socialist Party  
S. D. State College  
University of North Dakota  
Concordia Theological Seminary  
Hoskins-Meyer  
Pulitzer Publishing Co.  
Associated Broadcasters  
The Shepard Stores  
Ohio State University  
Federal Radio Corp.  
Kodel Radio Corp.

### 560 kilocycles 535.4 meters

KFDM	500	Beaumont, Texas
KFEQ	2500	St. Joseph, Mo.
KLZ	1000	Denver, Colo.
KOAC	1000	Corvallis, Ore.
WFI	500	Philadelphia, Pa.
WLIT	500	Philadelphia, Pa.
WMBF	500	Miami Beach, Fla.
WNOX	1000	Knoxville, Tenn.
WOI	3500	Ames, Iowa

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Magnolia Petroleum Co.  
Scroggin & Co. Bank  
Reynolds Radio Co., Inc.  
State Agricultural College  
Strawbridge & Clochier  
Lit Brothers  
Fleetwood Hotel Corp.  
Sterchl Bros.  
Iowa State College

### 570 kilocycles 526.0 meters

KGKO	250	Wichita Falls, Tex.
KMTR	1000	Hollywood, Calif.
KPLA	1000	Los Angeles, Calif.
KUOM	500	Missoula, Mont.
KXA	500	Seattle, Wash.
WEA	750	Madison, Wis.
WIBO	1000	Chicago, Ill.
WKBN	500	Youngstown, Ohio
WMAC	250	Cazenovia, N. Y.
WMCA	500	New York City
WNAX	1000	Yankton, S. Dak.
WNYC	500	New York City
WPGC	500	Chicago, Ill.
WSMK	200	Dayton, Ohio
WSYR	250	Syracuse, N. Y.
WWNC	1000	Asheville, N. C.

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Wichita Falls Brdcstg. Co.  
KMTR Radio Corp.  
Pacific Development Radio Co.  
University of Montana  
American Radio Tel. Co.  
University of Wisconsin  
Nelson Bros. Bond & Mtg. Co.  
W. P. Williamson, Jr.  
Clive B. Meredith  
Greeley Square Hotel Co.  
Dakota Radio Apparatus Co.  
Dept. of Plants & Structures  
North Shore Congregational Church  
Stanley M. Krohn, Jr.  
Clive B. Meredith  
Chamber of Commerce

### 580 kilocycles 516.9 meters

CFCL	500	Toronto, Ont.
CHMA	250	Edmonton, Alta.
CHNC	500	Toronto, Ont.
CJBC	500	Toronto, Ont.
CJCA	500	Edmonton, Alta.
CJSC	500	Toronto, Ont.
CKCL	500	Toronto, Ont.
CKNC	500	Toronto, Ont.
CKUA	500	Edmonton, Alta.
CNRE	500	Edmonton, Alta.
KGFX	200	Pierre, S. D.
KSAC	500	Manhattan, Kans.
WOBW	250	Charleston, W. Va.
WSAZ	250	Huntington, W. Va.
WSUI	500	Iowa City, Iowa
WTAG	250	Worcester, Mass.

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Dominion Battery Co., Ltd.  
Christian and Missionary Alliance  
Radio Research Society  
Jarvis Street Baptist Church  
The Edmonton Journal  
The Evening Telegram  
The Dominion Battery Co.  
Canadian National Carbon Co.  
University of Alberta  
Canadian National Railways  
Dana McNeil  
State Agricultural College  
Charleston Radio Brdcstg. Co.  
McKellar Electric Co.  
University of Iowa  
Telegram Publishing Co.

INDEX BY FREQUENCIES AND DIAL NUMBERS

590 kilocycles 508.2 meters

KHQ 1000 Spokane, Wash.  
 WCAJ 500 Lincoln, Nebr.  
 WEEL 500 Boston, Mass.  
 WOW 1000 Omaha, Nebr.  
 WEMC 1000 Berrien Springs, Mich.

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Louis Wasmer, Inc.  
 Nebraska Wesleyan University  
 Edison Elec. Illuminating Co.  
 Woodmen of the World  
 Emmanuel Missionary College

600 kilocycles 499.7 meters

CFGH 250 Iroquois Falls, Ont.  
 KFSO 500 San Diego, Calif.  
 KWYO 500 Laramie, Wyo.  
 WCAC 250 Storrs, Conn.  
 WCAO 250 Baltimore, Md.  
 WEBW 350 Beloit, Wis.  
 WOAN 500 Lawrenceburg, Tenn.  
 WREC 500 Memphis, Tenn.  
 WTIC 250 Hartford, Conn.

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Abitibi Power & Paper Co.  
 Airfan Radio Corp.  
 Bishop N. S. Thomas  
 Conn. Agricultural College  
 Monumental Radio Co., Inc.  
 Beloit College  
 Vaughan School of Music  
 WREC, Inc.  
 Travelers Insurance Co.

610 kilocycles 491.5 meters

KFRC 1000 San Francisco, Calif.  
 WDAF 1000 Kansas City, Mo.  
 WFAN 500 Philadelphia, Pa.  
 WIP 500 Philadelphia, Pa.  
 WOQ 1000 Kansas City, Mo.

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Don Lee, Inc.  
 Kansas City Star Co.  
 Keystone Broadcasting Co., Inc.  
 Gimbel Bros., Inc.  
 Unity School of Christianity

620 kilocycles 483.6 meters

KFAD 500 Phoenix, Ariz.  
 KGW 1000 Portland, Ore.  
 WDAE 1000 Tampa, Fla.  
 WDBO 1000 Orlando, Fla.  
 WLBZ 250 Bangor Me.  
 WTMJ 1000 Milwaukee, Wis.

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Electrical Equipment Co.  
 Oregonian Publishing Co.  
 Tampa Publishing Co.  
 Rollins College, Inc.  
 Maine Brdcastg. Co.  
 Milwaukee Journal

630 kilocycles 475.9 meters

CFGT 500 Victoria, B. C.  
 CJGX 500 Yorkton, Sask.  
 CNRA 500 Moncton, N. B.  
 CYR 250 Mazatlan, Mex.  
 KFRU 500 Columbia, Mo.  
 WGBF 500 Evansville, Ind.  
 WMAL 250 Washington, D. C.  
 WOS 500 Jefferson City, Mo.

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Victoria Broadcasting Ass'n.  
 Winnipeg Grain Exchange  
 Canadian National Railways  
 Casulo Llamas  
 Stephens College  
 Evansville on the Air, Inc.  
 M. A. Leese Co.  
 State Marketing Bureau

640 kilocycles 468.5 meters

KFI 5000 Los Angeles, Calif.  
 WAIU 5000 Columbus, Ohio

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Earle C. Anthony, Inc.  
 American Insurance Union

650 kilocycles 461.3 meters

WSM 5000 Nashville, Tenn.

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National Life & Accident Ins. Co.

660 kilocycles 454.3 meters

WAAW 500 Omaha, Nebr.  
 WEAJ 50000 New York City

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Omaha Grain Exchange  
 National Broadcasting Co., Inc.

670 kilocycles 447.5 meters

WMAO 5000 Chicago, Ill.

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Chicago Daily News, Inc.

680 kilocycles 440.9 meters

KPO 5000 San Francisco, Cal.  
 WPTF 5000 Raleigh, N. C.

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Hale Bros. & The Chronicle  
 Durham Life Insurance Co.

INDEX BY FREQUENCIES AND DIAL NUMBERS

690 kilocycles 434.5 meters

CFCAC 500 Calgary, Alta.  
 CFCN 1800 Calgary, Alta.  
 CHCA 250 Calgary, Alta.  
 CJCJ 250 Calgary, Alta.  
 CKCO 100 Ottawa, Ont.  
 CNRC 500 Calgary, Alta.  
 CNRO 500 Ottawa, Ont.  
 NAA 1000 Arlington, Va.

The Calgary Herald  
 W. W. Grant, Ltd.  
 Alvertan Publishing Co., Ltd.  
 Radio Service & Repair Shop  
 Dr. G. M. Geldert  
 Canadian National Railways  
 Canadian National Railways  
 U. S. Navy

700 kilocycles 428.3 meters

KFVD 250 Culver City, Calif.  
 WLW 50000 Cincinnati, Ohio

W. J. & C. I. McWhinnie  
 Crosley Radio Corp.

710 kilocycles 422.3 meters

CYO 100 Mexico City  
 WOR 5000 Newark, N. J.

M. Y. Zetina  
 L. Bamberger & Co.

720 kilocycles 416.4 meters

WGN 25000 Chicago, Ill.  
 WLIB 25000 Chicago, Ill.

Chicago Tribune  
 Liberty Weekly, Inc.

730 kilocycles 410.7 meters

CFCF 1650 Montreal, Que.  
 CHLS 50 Vancouver, B. C.  
 CHYC 750 Montreal, Que.  
 CKAC 1200 Montreal, Que.  
 CKCD 50 Vancouver, B. C.  
 CKFC 50 Vancouver, B. C.  
 CKMO 50 Vancouver, B. C.  
 CKWX 100 Vancouver, B. C.  
 CNRM 1650 Montreal, Que.

Canadian Marconi Co.  
 W. G. Hassell  
 Northern Electric Co.  
 La Presse Publishing Co.  
 Vancouver Daily Province  
 United Church of Canada  
 Sprout-Shaw Radio Co.  
 A. Holstead & Wm. Hanlon  
 Canadian National Railways

740 kilocycles 405.2 meters

KMMJ 1000 Clay Center, Neb.  
 WSB 10000 Atlanta, Ga.

The M. M. Johnson Co.  
 Atlanta Journal Co.

750 kilocycles 399.8 meters

CYJ 2000 Mexico City  
 CYL 500 Mexico City  
 WCX 5000 Detroit, Mich.  
 WJR 5000 Detroit, Mich.

R. Ascarraga  
 Detroit Free Press  
 WJR, Inc.

760 kilocycles 394.5 meters

WEW 1000 St. Louis, Mo.  
 WJZ 30000 New York City

St. Louis University  
 Radio Corp. of America, Inc.

770 kilocycles 389.4 meters

KFAB 5000 Lincoln, Nebr.  
 WBBM 25000 Chicago, Ill.

Nebr. Buick Automobile Co.  
 Atlas Investment Co.

780 kilocycles 384.4 meters

CKY 5000 Winnipeg, Manitoba  
 CNRW 500 Winnipeg, Man.  
 KELW 500 Burbank, Calif.  
 KTM 500 Santa Monica, Calif.  
 WBSO 250 Wellesley Hills, Mass.  
 WMC 500 Memphis, Tenn.  
 WPOR 500 Norfolk, Va.  
 WSEA 500 Portsmouth, Va.  
 WTAR 500 Norfolk, Va.

Manitoba Telephone System  
 Canadian National Railways  
 Earl L. White  
 Pickwick Brdstg. Corp.  
 Babson's Statistical Organization.  
 Memphis Commercial-Appeal  
 Reliance Electric Co.  
 Virginia Beach Brdstg. Co.  
 Reliance Electric Co., Inc.

INDEX BY FREQUENCIES AND DIAL NUMBERS

790 kilocycles 379.5 meters

KGO 7500 Oakland, Calif.  
 WGY 50000 Schenectady, N. Y.  
 6KW 1500 Tuinucu, Cuba

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General Electric Co.  
 General Electric Co.  
 Frank H. Jones

800 kilocycles 374.8 meters

CYH 100 Mexico City  
 KTHS 10000 Hot Springs, Ark.  
 WBAP 50000 Fort Worth, Tex.  
 WSAI 5000 Cincinnati, Ohio

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C. de Tarnava  
 Chamber of Commerce  
 Carter Publications, Inc.  
 Crosley Radio Corp., Lessee

810 kilocycles 370.2 meters

WCCO 15000 Minneapolis-St. Paul  
 WPCH 500 Jersey City, N. J.

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Washburn-Crosby Co.  
 Concourse Radio Corp.

820 kilocycles 365.6 meters

WHAS 10000 Louisville, Ky.

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Courier-Journal & Times

830 kilocycles 361.2 meters

HHK 1000 Port au Prince, Haiti  
 KOA 12500 Denver, Colo.  
 WHOH 1000 Gloucester, Mass.

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Republic of Haiti  
 General Electric Co.  
 Matheson Radio Co., Inc.

840 kilocycles 356.9 meters

CFCA 500 Toronto, Ont.  
 CHCT 1000 Red Deer, Alta.  
 CJBC 1000 Toronto, Ont.  
 CKLC 1000 Red Deer, Alta.  
 CKOW 1000 Toronto, Ont.  
 CMC 500 Havana, Cuba  
 CNRT 500 Toronto, Ont.

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Star Publishing & Ptg. Co.  
 C. F. Tull & Ardern, Ltd.  
 Jarvis Street Baptist Church  
 Alberta Pacific Grain Co.  
 Nestle's Food Co.  
 Cuban Telephone Co.  
 Canadian National Railways

850 kilocycles 352.7 meters

KFOZ 1000 Hollywood, Calif.  
 KWKH 20000 Shreveport, La.  
 WWL 5000 New Orleans, La.

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Leslie E. Taft  
 W. K. Henderson  
 Loyola University

860 kilocycles 348.6 meters

CZE 500 Mexico City  
 WABC 5000 New York City  
 WBOQ 5000 New York City  
 20K 100 Havana, Cuba  
 7SR 500 Ella, Cuba

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Department of Education  
 Atlantic Broadcasting Corp.  
 Atlantic Broadcasting Corp.  
 Merio G. Velez  
 Salvador Rionda

870 kilocycles 344.6 meters

WENR 25000 Chicago, Ill.  
 WLS 5000 Chicago, Ill.

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Great Lakes Brdcstg. Co.  
 The Prairie Farmer

880 kilocycles 340.7 meters

CHCS 10 Hamilton, Ont.  
 CHML 50 Hamilton, Ont.  
 CHRC 5 Quebec, Que.  
 CKCI 22.5 Quebec, Que.  
 CKCV 50 Quebec, Que.  
 CKOC 100 Hamilton, Ont.  
 CNRO 50 Quebec, Que.  
 KFKA 500 Greeley, Colo.  
 KLX 500 Oakland, Calif.  
 KPOF 500 Denver, Colo.  
 WCOC 500 Columbus, Miss.  
 WGBI 250 Scranton, Pa.  
 WQAN 250 Scranton, Pa.

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The Hamilton Spectator  
 Maple Leaf Radio Co.  
 E. Fontaine  
 LeSoleil  
 G. A. Vandry  
 Wentworth Radio Supply Co.  
 Canadian National Railways  
 State Teachers College  
 Tribune Publishing Co.  
 Pillar of Fire, Inc.  
 Crystal Oil Co.  
 Scranton Broadcasters, Inc.  
 Scranton Times

INDEX BY FREQUENCIES AND DIAL NUMBERS

890 kilocycles 336.9 meters

CFBO	50	St. John, N. B.
CYC	50	Vera Cruz, Mex.
KFNF	500	Shenandoah, Iowa
KGJF	250	Little Rock, Ark.
KUSD	500	Vermillion, S. D.
WGST	250	Atlanta, Ga.
WILL	250	Urbana, Ill.
WJAR	250	Providence, R. I.
WKAQ	500	San Juan, P. R.
WMAZ	250	Macon, Ga.
WMMN	250	Fairmont, W. Va.

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C. A. Munro, Ltd.  
M. A. Fernandez  
Henry Field Seed Co.  
Church of the Nazarene  
University of South Dakota  
Georgia School of Technology  
University of Illinois  
The Outlet Co.  
Radio Corp. of Porto Rico  
Mercer University  
Holt Rowe Novelty Co.

900 kilocycles 333.1 meters

KGBU	500	Ketchikan, Alaska
KHJ	1000	Los Angeles, Cal.
KSEI	250	Pocatello, Idaho
WFBL	750	Syracuse, N. Y.
WFLA	1000	Clearwater, Fla.
WKY	1000	Oklahoma City
WLBL	2000	Stevens Pt., Wis.
WMAK	750	Buffalo, N. Y.
WSUN	1000	St. Petersburg, Fla.

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Alaska Radio & Service Co.  
Don Lee, Inc.  
KSEI Broadcasting Assn.  
The Onondaga Co., Inc.  
Chamber of Commerce  
WKY Radiophone Co.  
Wisconsin Dept. of Markets  
WMAK Brdcastg. Station, Inc.  
Chamber of Commerce

910 kilocycles 329.6 meters

CFQC	500	Saskatoon, Sask.
CJGC	500	London, Ont.
CJHS	250	Saskatoon, Sask.
CNRS	500	Saskatoon, Sask.

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The Electric Shop  
Free Press Ptg. Co.  
Radio Service, Ltd.  
Canadian National Railways

920 kilocycles 325.9 meters

CYX	500	Mexico City
KOMO	1000	Seattle, Wash.
KPRC	1000	Houston, Texas
WAAF	500	Chicago, Ill.
WVJ	1000	Detroit, Mich.

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El Excelsior  
Fisher's Blend Station  
Houston Printing Co.  
Drovers Journal Publishing Co.  
The Detroit News

930 kilocycles 322.4 meters

CHNS	500	Halifax, N. S.
CYO	100	Tampico, Mex.
KFWI	500	San Francisco, Calif.
KFWM	500	Oakland, Calif.
KGBZ	500	York, Nebr.
KMA	500	Shenandoah, Iowa
WBRC	500	Birmingham, Ala.
WDBJ	250	Roanoke, Va.
WIBG	50	Elkins Park, Pa.

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Northern Elec. Co.-Halifax Herald  
Cipriano Sagaon S. en C.  
Radio Entertainments, Inc.  
Oakland Educational Society  
George R. Miller  
May Seed & Nursery Co.  
Birmingham Broadcasting Co.  
Richardson-Wayland Elec. Corp.  
St. Pauls P. E. Church

940 kilocycles 319.0 meters

KFEL	250	Denver, Colo.
KFXF	250	Denver, Colo.
KGU	500	Honolulu, Hawaii
KOIN	1000	Portland, Ore.
WCSH	500	Portland, Maine
WFIW	1000	Hopkinsville, Ky.

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Eugene P. O'Fallon, Inc.  
Pikes Peak Brdcastg. Co.  
Marlon A. Mulrony  
KOIN, Inc.  
Congress Square Hotel Co.  
The Acme Mills, Inc.

950 kilocycles 315.6 meters

KFWB	1000	Los Angeles, Calif.
KGHL	500	Billings, Mont.
KLDS	1000	Independence, Mo.
KMBC	1000	Independence, Mo.
KPSN	1000	Pasadena, Calif.
WHB	500	Kansas City, Mo.
WRC	500	Washington, D. C.
2RK	20	Havana, Cuba

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Warner Bros. Broadcasting Corp.  
Northwestern Auto Supply Co.  
Church of Latter Day Saints  
Midland Broadcasting Co.  
Pasadena Star-News  
Sweeney Automobile School  
Radio Corp. of America  
Raoul Karman



## INDEX BY FREQUENCIES AND DIAL NUMBERS

### 960 kilocycles 312.3 meters

CFCY	100	Charlottetown, P. E. I.
CFRB	1000	Twp. of King, Ont.
CHCK	30	Charlottetown, P. E. I.
CHWC	500	Regina, Sask.
CJBC	5000	Toronto, Ont.
CJBR	500	Regina, Sask.
CKCK	500	Regina, Sask.
CKGW	5000	Bowmanville, Ont.
CNRR	500	Regina, Sask.
CYU	100	Puebla, Mex.

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The Island Radio Co.  
Standard Radio Mfg. Corp.  
W. E. Burke  
R. H. Williams & Sons  
Jarvis St. Baptist Church  
Cooperative Wheat Producers  
Leader Pub. Co.  
Gooderham & Worts  
Canadian Nat'l. Railways  
A. del P. Zaonz

### 970 kilocycles 309.1 meters

CZF	250	Chihuahua, Mex.
KJR	5000	Seattle Wash.
WCFL	50000	Chicago, Ill.

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State of Chihuahua  
Northwest Radio Service Co.  
Chicago Federation of Labor

### 980 kilocycles 305.9 meters

KDKA	50000	Pittsburgh, Pa.
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Westinghouse Elec. & Mfg. Co.

### 990 kilocycles 302.8 meters

WBZ	15000	Springfield, Mass.
WBZA	500	Boston, Mass.

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Westinghouse Elec. & Mfg. Co.  
Westinghouse Elec. & Mfg. Co.

### 1000 kilocycles 299.8 meters

CYA	500	Mexico City
KGFF	250	Glendale, Calif.
WHO	5000	Des Moines, Iowa
WOC	5000	Davenport, Iowa

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E. R. Gomes  
Frederick Robinson  
Bankers Life Co.  
Palmer, School of Chiropractic

### 1010 kilocycles 296.9 meters

CFLC	50	Prescott, Ont.
CJRM	500	Moose Jaw, Sask.
CJRW	500	Fleming, Sask.
CKCR	50	Brantford, Ont.
CKSH	50	St. Hyacinthe, Que.
KGGF	500	Picher, Okla.
KQW	500	San Jose, Calif.
WHN	250	New York City
WNAD	500	Norman, Okla.
WPAP	250	Cliffside, N. J.
WQAO	250	Cliffside, N. J.
WRNY	250	New York City
WSIS	250	Sarasota, Fla.

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Radio Association  
Jas. Richardson & Sons  
Jas. Richardson & Sons, Ltd.  
John Patterson  
City of St. Hyacinthe  
D. L. Connell, M. D.  
First Baptist Church  
Marcus Loew Booking Agency  
University of Oklahoma  
Pallsades Amusement Park  
Calvary Baptist Church  
Experimenter Publishing Co.  
Chamber of Commerce

### 1020 kilocycles 293.9 meters

KFKX	5000	Chicago, Ill.
KYW	5000	Chicago, Ill.
KYWA	5000	Chicago, Ill.
WRAX	250	Philadelphia, Pa.

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Westinghouse Elec. & Mfg. Co.  
Westinghouse Elec. & Mfg. Co.  
Westinghouse Elec. & Mfg. Co.  
Berachah Church, Inc.

### 1030 kilocycles 291.1 meters

CJOR	50	Sea Island, B. C.
CNRV	500	Vancouver, B. C.

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G. C. Chandler  
Canadian Nat'l Railways

### 1040 kilocycles 288.3 meters

KRLD	10000	Dallas, Texas
WFAA	5000	Dallas, Texas
WKAR	500	East Lansing, Mich.
WKEN	1000	Buffalo, N. Y.

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KRLD, Inc.  
Dallas Morning News  
Michigan Agricultural College  
Radio Station WKEN, Inc.

### 1050 kilocycles 285.5 meters

KNX	5000	Hollywood, Calif.
WFBM	25000	Indianapolis, Ind.
2MG	20	Havana, Cuba

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Western Broadcast Co.  
Indianapolis Power & Light Co.  
M. y G. Salas

INDEX BY FREQUENCIES AND DIAL NUMBERS

1060 kilocycles 282.8 meters

KWJJ 500 Portland, Ore.  
 WBAL 5000 Baltimore, Md.  
 WJAG 500 Norfolk, Nebr.  
 WTIC 5000 Hartford, Conn.

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Wilbur Jerman  
 Consolidated Gas, Elec. & Pwr. Co.  
 Norfolk Daily News  
 Travelers Insurance Co.

1070 kilocycles 280.2 meters

WAAT 300 Jersey City, N. J.  
 WCAZ 100 Carthage, Ill.  
 WDZ 100 Tuscola, Ill.  
 WEAR 1000 Cleveland, Ohio  
 WTAM 3500 Cleveland, Ohio

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Bremer Broadcasting Corp.  
 Carthage College  
 James L. Bush  
 WTAM and WEAR, Inc.  
 WTAM and WEAR, Inc.

1080 kilocycles 277.6 meters

WBT 10000 Charlotte, N. C.  
 WCBD 5000 Zion, Ill.  
 WMBI 5000 Chicago, Ill.

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C. C. Coddington  
 Wilbur Glenn Voliva  
 Moody Bible Institute

1090 kilocycles 275.1 meters

CYB 500 Mexico City  
 KMOX 5000 St. Louis, Mo.  
 ZUF 10 Havana, Cuba

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J. J. Reynosa  
 Voice of St. Louis  
 Benito V. Ferro

1100 kilocycles 272.6 meters

KJBS 100 San Francisco, Cal.  
 WLWI 5000 New York City  
 WPG 5000 Atlantic City, N. J.

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Julius Brunton & Sons Co.  
 Missionary Society of St. Paul  
 Municipality of Atlantic City

1110 kilocycles 270.1 meters

KSOO 500 Sioux Falls, S. D.  
 WRVA 5000 Richmond, Va.  
 ZTW 20 Havana, Cuba

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Sioux Falls Broadcast Assn.  
 Larus & Bros. Co., Inc.  
 Roberto E. Ramirez

1120 kilocycles 267.7 meters

CFJC 15 Kamloops, B. C.  
 CFMC 20 Kingston, Ont.  
 CFRC 500 Kingston, Ont.  
 CHGS 25 Summerside, P. E. I.  
 CJOC 50 Lethbridge, Alta.  
 CKPR 50 Midland, Ont.  
 KFSG 500 Los Angeles, Cal.  
 KMIC 500 Inglewood, Calif.  
 KRSC 50 Seattle, Wash.  
 KUT 500 Austin, Texas  
 WCOA 500 Pensacola, Fla.  
 WDEL 250 Wilmington, Del.  
 WHAD 250 Milwaukee, Wis.  
 WISN 250 Milwaukee, Wis.  
 WTAW 500 College Station, Texas

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N. S. Dalgleish & Sons  
 Monarch Battery Co.  
 Queen's University  
 R. T. Holman, Ltd.  
 J. E. Palmer  
 E. O. Swan  
 Echo Park Evang. Assn.  
 James R. Fouch  
 Radio Sales Corp.  
 University of Texas  
 City of Pensacola  
 WDEL, Inc.  
 Marquette University  
 Evening Wisconsin Co.  
 Agricultural & Mech. College

1130 kilocycles 265.3 meters

CYF 100 Oaxaca, Mex.  
 KFKB 5000 Millford, Kansas  
 KSL 5000 Salt Lake City  
 WOV 1000 New York City

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F. Zonillo  
 Dr. J. R. Brinkley  
 Radio Service Corp. of Utah  
 International Brdcastg. Corp.

1140 kilocycles 263.0 meters

KVOO 5000 Tulsa, Okla.  
 WAPI 5000 Birmingham, Ala.

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Southwestern Sales Corp.  
 Alabama Polytechnic Institute

1150 kilocycles 260.7 meters

KGDM 10 Stockton, Calif.  
 WHAM 5000 Rochester, N. Y.  
 6BY 200 Cienfuegos, Cuba

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E. F. Peffer  
 Stromberg-Carlson Tel. Mfg. Co.  
 Jose Ganduxe

## INDEX BY FREQUENCIES AND DIAL NUMBERS

### 1160 kilocycles 258.5 meters

WOWO 10000 Ft. Wayne, Ind.  
WVVA 5000 Wheeling, W. Va.

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Main Auto Supply Co.  
West Virginia Brdcastg. Corp.

### 1170 kilocycles 256.3 meters

KTNT 5000 Muscatine, Iowa  
WCAU 5000 Philadelphia, Pa.  
20L 100 Havana, Cuba

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Norman Baker  
Universal Broadcasting Co.  
Oscar C. Orta

### 1180 kilocycles 254.1 meters

KEX 5000 Portland, Ore.  
KOB 10000 State College, N. M.  
WGBS 500 New York City  
WJJD 20000 Mooseheart, Ill.

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Western Broadcasting Co.  
College of Agriculture  
General Broadcasting System  
Loyal Order of Moose

### 1190 kilocycles 252.0 meters

WICC 500 Bridgeport, Conn.  
WOAI 5000 San Antonio, Texas

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Bridgeport Broadcasting Station  
Southern Equipment Co.

### 1200 kilocycles 249.9 meters

KFHA 50 Gunnison, Colo.  
KFJB 100 Marshalltown, Iowa  
KFKZ 50 Kirksville, Mo.  
KFWC 100 Ontario, Calif.  
KFWF 100 St. Louis, Mo.  
KGCU 100 Mandan, N. Dak.  
KGDE 50 Fergus Falls, Minn.  
KGDY 15 Oldham, S. Dak.  
KGEK 50 Yuma, Colo.  
KGEW 100 Fort Morgan, Colo.  
KGFK 50 Hallock, Minn.  
KGY 50 Lacey, Wash.  
KMJ 100 Fresno, Calif.  
KPPC 50 Pasadena, Calif.  
KSMR 100 Santa Maria, Calif.  
KVOS 100 Bellingham, Wash.  
KWG 100 Stockton, Calif.  
KXO 100 El Centro, Calif.  
WABI 100 Bangor, Maine  
WABZ 100 New Orleans, La.  
WBBW 100 Norfolk, Va.  
WBBZ 75 Charleston, S. C.  
WCAT 100 Ponca City, Okla.  
WCAX 100 Rapid City, S. Dak.  
WCLO 100 Burlington, Vt.  
WEPS 100 Kenosha, Wis.  
WFBC 50 Gloucester, Mass.  
WFBE 100 Knoxville, Tenn.  
WHBC 100 Cincinnati, Ohio  
WHBY 100 Canton, Ohio  
WIBX 100 West De Pere, Wis.  
WJBC 100 Utica, N. Y.  
WJBL 100 La Salle, Ill.  
WJBW 100 Decatur, Ill.  
WKBE 100 New Orleans, La.  
WKJC 100 Webster, Mass.  
WLAP 30 Lancaster, Pa.  
WLBG 100 Louisville, Ky.  
WMAV 100 Petersburg, Va.  
WMT 100 St. Louis, Mo.  
WNBO 15 Waterloo, Iowa  
WNBW 5 Washington, Pa.  
WNBX 10 Carbondale, Pa.  
WPRC 100 Springfield, Vt.  
WBOJ 65 Harrisburg, Pa.  
WRAF 100 Clarksburg, W. Va.  
WRBL 50 La Porte, Ind.  
WWAE 100 Columbus, Ga.  
2BB 15 Hammond, Ind.  
2BB 15 Havana, Cuba

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Western College of Colorado  
Marshall Electric Co.  
State Teachers College  
James R. Fouch  
St. Louis Truth Center, Inc.  
Mandan Radio Association  
Jaren Drug Co.  
J. Albert Loesch  
Beehler Elec. Equipment Co.  
City of Fort Morgan  
Kittson County Enterprise  
St. Martin's College  
The Fresno Bee  
Pasadena Presbyterian Church  
Santa Maria Valley R. R. Co.  
L. Kessler  
Portable Wireless Tel. Co.  
E. R. Irely and F. M. Bowles  
First Universalist Church  
Coliseum Place Baptist Church  
Ruffner Junior High School  
Washington Light Infantry  
C. L. Carrell  
State School of Mines  
University of Vermont  
C. E. Whitmore  
Matheson Radio Co., Inc.  
First Baptist Church  
Park View Hotel  
St. John's Catholic Church  
St. Norbert's College  
WIBX, Inc.  
Hummer Furniture Co.  
Wm. Gushard Dry Goods Co.  
Charles C. Carlson, Jr.  
K. & B. Electric Co.  
Kirk Johnson & Co.  
American Brdcastg. Corp. of Ky.  
Robert Allen Gamble  
Kingshighway Pres. Church  
Waterloo Broadcasting Co.  
John Brownlee Sprtggs  
Home Cut Glass & China Co.  
First Congregational Church  
Wilson Printing & Radio Co.  
John Raikes  
The Radio Club, Inc.  
R. E. Martin  
Hammond-Calumet Brdcastg. Co.  
Bernardo Barrie

INDEX BY FREQUENCIES AND DIAL NUMBERS

1210 kilocycles 247.8 meters

CFCO	25	Chatham, Ont.
CFNB	50	Fredericton, N. B.
CKWK	5	Chilliwack, B. C.
CKMC	5	Cobalt, Ont.
CKPC	25	Preston, Ont.
KDLR	100	Devils Lake, N. D.
KFEY	10	Kellogg, Idaho
KFOR	100	Lincoln, Nebr.
KFVS	100	Cape Girardeau, Mo.
KGCR	100	Brookings, S. D.
KGDP	10	Pueblo, Colo.
KPCB	100	Seattle, Wash.
KPO	100	Seattle, Wash.
KWEA	100	Shreveport, La.
WBAX	100	Wilkes-Barre, Pa.
WCBS	100	Springfield, Ill.
WCOH	100	Greenville, N. Y.
WCRW	100	Chicago, Ill.
WDWF	100	Cranston, R. I.
WEBE	100	Cambridge, Ohio
WEBQ	50	Harrisburg, Ill.
WEDC	100	Chicago, Ill.
WGBB	100	Freeport, N. Y.
WGCM	100	Gulfport, Miss.
WHBF	100	Rock Island, Ill.
WHBU	100	Anderson, Ind.
WIBA	100	Madison, Wis.
WINR	100	Bay Shore, N. Y.
WJBI	100	Red Bank, N. J.
WJBU	100	Lewisburg, Pa.
WJBY	50	Gadsden, Ala.
WLBY	100	Mansfield, Ohio
WLCI	50	Ithaca, N. Y.
WLSI	100	Cranston, R. I.
WMAN	50	Columbus, Ohio
WMBG	100	Richmond, Va.
WMBR	100	Tampa, Fla.
WOCL	25	Jamestown, N. Y.
WOMT	100	Manitowoc, Wis.
WPAW	100	Pawtucket, R. I.
WRBO	100	Greenville, Miss.
WRBU	100	Gastonia, N. C.
WSBC	100	Chicago, Ill.
WSIX	100	Springfield, Tenn.
WTAX	50	Streator, Ill.
WTAZ	15	Richmond, Va.

		Western Ontario "Better Radio" club
		James S. Neff & Sons
		Chilliwack Brdcastg. Co., Ltd.
		R. L. MacAdam
		Wallace Russ
		Radio Electric Co.
		Union High School
		Howard A. Shuman
		Hirsch Battery & Radio Co.
		Cutler's Radio Brdcastg. Service
		Boy Scouts of America
		Pacific Coast Biscuit Co.
		Archie Taft & Louis Wasmer
		William E. Antony
		John H. Stenger, Jr.
		H. L. Dewing & Chas. Messter
		Westchester Brdcastg. Corp.
		Clinton R. White
		Dutee W. Flint
		Roy W. Waller
		Tate Radio Co.
		Emil Denemark, Inc.
		Harry H. Carman
		Gulf Coast Music Co.
		Beardsley Specialty Co.
		Citizens Bank
		Capital Times-Strand Theatre
		Radiolot Mfg. Co., Inc.
		Robert S. Johnson
		Bucknell University
		Electric Construction Co.
		Mansfield Broadcasting Assn.
		Lutheran Assn. of Ithaca
		The Lincoln Studios, Inc.
		W. E. Heskitt
		Havens & Martin, Inc.
		F. J. Reynolds
		A. E. Newton
		Mikadow Theatre
		Shartenburg & Robinson
		J. Pat Scully
		A. J. Kirby Music Co.
		World Battery Co., Inc.
		638 Tire & Vulcanizing Co.
		Williams Hardware Co.
		W. Reynolds & T. J. McGuire

1220 kilocycles 245.8 meters

KFKU	1000	Lawrence, Kans.
WCAD	500	Canton, N. Y.
WCAE	500	Pittsburgh, Pa.
WREN	1000	Lawrence, Kans.

		University of Kansas
		St. Lawrence University
		Kaufman & Baer Co.
		Jenny Wren Co.

1230 kilocycles 243.8 meters

KFIO	100	Spokane, Wash.
KFOD	100	Anchorage, Alaska
KYA	1000	San Francisco, Cal.
WBIS	500	Boston, Mass.
WGL	500	Ft. Wayne, Ind.
WFBM	500	Indianapolis, Ind.
WNAC	500	Boston, Mass.
WPSC	500	State College, Pa.
WSBT	500	South Bend, Ind.

		North Central High School
		Anchorage Radio Club
		Pacific Broadcasting Corp.
		The Shepard Stores
		Fred C. Zieg
		Indianapolis Power & Light Co.
		The Shepard Stores
		Pennsylvania State College
		South Bend Tribune

1240 kilocycles 241.8 meters

KTAT	1000	Ft. Worth, Texas
WGHP	750	Detroit, Mich.
WIOD	1000	Miami Beach, Fla.
WJAD	1000	Waco, Texas
WQAM	750	Miami, Fla.
WRBC	500	Valparaiso, Ind.

		Texas Air Transport Brdcast. Co.
		American Brdcastg. Corp.
		Isle of Dreams Brdcastg. Co.
		Frank P. Jackson
		Electrical Equipment Co.
		Immanuel Lutheran Church

## INDEX BY FREQUENCIES AND DIAL NUMBERS

### 1250 kilocycles 239.9 meters

KEJK	500	Los Angeles, Cal.
KFMX	1000	Northfield, Minn.
KFOX	1000	Long Beach, Cal.
KIDO	1000	Boise, Idaho
KXL	500	Portland, Ore.
WAAM	500	Newark, N. J.
WCAL	1000	Northfield, Minn.
WGCP	250	Newark, N. J.
WGM5	1000	St. Paul-Minneapolis
WLB	1000	Minneapolis, Minn.
WODA	1000	Paterson, N. J.
WRHM	1000	Minneapolis, Minn.

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R. S. MacMillan  
 Carleton College  
 Nichols & Warinner, Inc.  
 Boise Brdcstg. Station  
 KXL Broadcasters  
 WAAM, Inc.  
 St. Olaf College  
 May Radio Broadcast Corp.  
 Washburn-Crosby Co.  
 University of Minnesota  
 Richard E. O'Dea  
 Rosedale Hospital Co., Inc.

### 1260 kilocycles 238.0 meters

KOIL	1000	Council Bluffs, Iowa
KRGV	500	Harlingen, Texas
KWWG	500	Brownsville, Texas
WJAX	1000	Jacksonville, Fla.
WLBW	500	Oil City, Pa.

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Mona Motor Oil Co.  
 Harlingen Music Co.  
 Chamber of Commerce  
 City of Jacksonville  
 Petroleum Telephone Co.

### 1270 kilocycles 236.1 meters

KFUM	1000	Colorado Spgs., Colo.
KGCA	50	Decorah, Iowa
KOL	1000	Seattle, Wash.
KTW	1000	Seattle, Wash.
KWLC	50	Decorah, Iowa
WASH	250	Grand Rapids, Mich.
WDSU	1000	New Orleans, La.
WEAI	500	Ithaca, N. Y.
WFBR	250	Baltimore, Md.
WOOD	500	Grand Rapids, Mich.

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W. D. Corley  
 Charles W. Greenley  
 Rhodes Department Store  
 First Presbyterian Church  
 Luther College  
 Baxter Laundries, Inc.  
 Joseph H. Uhalt  
 Cornell University  
 Baltimore Radio Show  
 Walter B. Stiles, Inc.

### 1280 kilocycles 234.2 meters

WCAM	500	Camden, N. J.
WCAP	500	Asbury Park, N. J.
WDAY	1000	Fargo, N. Dak.
WDOD	1000	Chattanooga, Tenn.
WEBC	1000	Superior, Wis.
WOAX	500	Trenton, N. J.
WRR	500	Dallas, Texas
2LR	50	Havana, Cuba

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City of Camden  
 Radio Industries Broadcast Co.  
 WDAY, Inc.  
 Chattanooga Radio Co., Inc.  
 Head of Lakes Brdcrg. Co.  
 Franklin J. Wolff  
 City of Dallas  
 Jose Lara

### 1290 kilocycles 232.4 meters

KDYL	1000	Salt Lake City
KFUL	500	Galveston, Texas
KLCN	50	Blytheville, Ark.
KTSA	1000	San Antonio, Texas
WJAS	1000	Pittsburgh, Pa.
WNBZ	10	Saranac Lake, N. Y.

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Intermountain Brdcstg. Corp.  
 Will H. Ford  
 C. L. Lintzrnich  
 Lone Star Broadcast Co.  
 Pittsburgh Radio Supply House  
 Smith & Mace

### 1300 kilocycles 230.6 meters

KFH	1000	Wichita, Kansas
KFJR	500	Portland, Ore.
KGFB	1000	Los Angeles, Calif.
KTBI	1000	Los Angeles, Calif.
KTBR	500	Portland Ore.
WBBR	1000	Roosville, N. Y.
WEVD	500	Woodhaven, N. Y.
WHAP	1000	New York City
WHAZ	500	Troy, N. Y.
WIBW	1000	Topeka, Kansas

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Hotel Lassen  
 Ashley C. Dixon & Son  
 Trinity Methodist Church  
 Bible Institute of Los Angeles  
 M. E. Brown  
 Peoples Pulpit Association  
 Eugene V. Debs Memorial Fund  
 Defenders of Truth Society, Inc.  
 Rensselaer Polytechnic Institute  
 C. L. Carrell

INDEX BY FREQUENCIES AND DIAL NUMBERS

1310 kilocycles 228.9 meters

KFBK	100	Sacramento, Calif.
KFCB	100	Phoenix, Ariz.
KFGO	100	Boone, Iowa
KFIU	10	Juneau, Alaska
KFJY	100	Ft. Dodge, Iowa
KFPL	15	Dublin, Texas
KFPM	15	Greenville, Texas
KFUP	100	Denver, Colo.
KFXJ	50	Edgewater, Colo.
KFXR	100	Oklahoma City
KGEZ	100	KallsPELL, Mont.
KGFI	100	San Angelo, Texas
KGGH	50	Cedar Grove, La.
KGHG	50	McGehee, Ark.
KMED	50	Medford, Ore.
KRMD	50	Shreveport, La.
KWCR	100	Cedar Rapids, Iowa
WABY	50	Philadelphia, Pa.
WAGM	50	Royal Oak, Mich.
WBMH	100	Detroit, Mich.
WBOW	100	Terra Haute, Ind.
WBRE	100	Wilkes-Barre, Pa.
WCLS	100	Joliet, Ill.
WDAH	100	El Paso, Texas
WEBR	100	Buffalo, N. Y.
WEHS	100	Evanston, Ill.
WFBG	100	Altoona, Pa.
WDFD	100	Flint, Mich.
WFKD	50	Philadelphia, Pa.
WGAL	15	Lancaster, Pa.
WGH	100	Newport News, Va.
WHBP	100	Johnstown, Pa.
WHFC	100	Chicago, Ill.
WIBU	100	Poynette, Wis.
WJAK	50	Kokomo, Ind.
WKAU	100	Laconia, N. H.
WKBB	100	Joliet, Ill.
WKBC	10	Birmingham, Ala.
WKBI	50	Chicago, Ill.
WKBS	100	Galesburg, Ill.
WLBC	50	Muncie, Ind.
WLBO	100	Galesburg, Ill.
WMBL	100	Lakeland, Fla.
WNAT	100	Philadelphia, Pa.
WNBH	100	New Bedford, Mass.
WNBK	50	Knoxville, Tenn.
WOBK	15	Union City, Tenn.
WOL	150	Washington, D. C.
WRAW	100	Reading, Pa.
WRBI	20	Tifton, Ga.
WRBW	100	Columbia, S. C.
WRK	100	Hamilton, Ohio
WSAJ	100	Grove City, Pa.
WSMD	100	Salisbury, Md.
WTHS	100	Atlanta, Ga.

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Kimball-Upson Co.  
 Nielson Radio Supply Co.  
 Boone Biblical College  
 Alaska Elec. Light & Power Co.  
 C. S. Tunwall  
 C. C. Baxter  
 The New Furniture Co.  
 Fitzsimmons General Hospital  
 R. G. Howell  
 Exchange Ave. Baptist Church  
 Flathead Broadcasting Assn.  
 San Angelo Broadcasting Co.  
 Bates Radio & Electric Co.  
 Chas. W. McCollum  
 W. J. Virgin  
 Robert M. Dean  
 H. E. Paar  
 John Magaldi, Jr.  
 Robert L. Miller  
 Braun's Music House  
 Banks of Wabash Brdscgt. Assn.  
 Louis G. Baltimore  
 WCLS, Inc.  
 Trinity Methodist Church  
 H. H. Howell  
 Victor C. Carlson  
 Wm. F. Gable Co.  
 Frank D. Fallain  
 Foulkrod Radio Engineering Co.  
 Lancaster Electric Supply Co.  
 Virginia Brdscgt. Co., Inc.  
 Johnstown Automobile Co.  
 Goodson & Wilson, Inc.  
 William C. Forrest  
 J. A. Kautz-Kokomo Tribune  
 Laconia Radio Club  
 Sanders Bros.  
 H. I. Ansley  
 Fred L. Schoenwolf  
 Permil N. Nelson  
 Donald A. Burton  
 Fred A. Trebbe, Jr.  
 Benford's Radio Studios  
 Lennig Bros. Co.  
 New Bedford Broadcasting Co.  
 Lonsdale Baptist Church  
 Titsworth's Radio & Music Shop  
 American Broadcasting Co.  
 Avenue Radio & Electric Shop  
 Kent's Furniture & Music Store  
 Paul S. Pearce  
 S. W. Doron & J. C. Slade  
 Grove City College  
 Tom F. Little  
 Technical High School

1320 kilocycles 227.1 meters

KGHB	250	Honolulu, Hawaii
KGHF	250	Pueblo, Colo.
KGIO	250	Idaho Falls, Ida.
KGIQ	250	Twin Falls, Ida.
WADC	1000	Akron, Ohio
WSMB	750	New Orleans, La.

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Radio Sales Co.  
 C. P. Ritchie & J. E. Finch  
 Jack W. Duckworth, Jr.  
 Stanley M. Soule  
 Allen T. Simmons  
 Saenger Theatre & Maison Blanche

1330 kilocycles 225.4 meters

CYM	1500	Torreón, Mexico
KSCJ	1000	Sioux City, Iowa
WDRC	500	New Haven, Conn.
WTAQ	1000	Eau Claire, Wisc.

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Perkins Bros. Co.  
 Doolittle Radio Corp.  
 Gillette Rubber Co.

1340 kilocycles 223.7 meters

KFPW	50	Siloam Springs, Ark.
KMO	500	Tacoma, Wash.
KVI	1000	Tacoma, Wash.
WSPD	500	Toledo, Ohio

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Rev. Lannie W. Stewart  
 KMO, Inc.  
 Puget Sound Brdscgt. Co.  
 Toledo Broadcasting Co.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1350 kilocycles 222.1 meters

KWK 1000 St. Louis, Mo.  
 WBNY 250 New York City  
 WCDA 250 Brooklyn, N. Y.  
 WKBQ 250 New York City  
 WMSG 250 New York City

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Greater St. Louis Brdcstg. Corp.  
 Baruchrome Corp.  
 Italian Educ. Brdcstg. Co.  
 Standard Cahill Co., Inc.  
 Madison Square Garden

1360 kilocycles 220.4 meters

KFBB 250 Havre, Mont.  
 KGB 250 San Diego, Calif.  
 KGIR 250 Butte, Mont.  
 WBET 500 Boston, Mass.  
 WGES 500 Chicago, Ill.  
 WJKS 500 Gary, Ind.  
 WMAF 500 S. Dartmouth, Mass.  
 WQBC 300 Utica, Miss

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F. A. BATTERY Co.  
 Pickwick Brdcstg. Corp.  
 Symons Broadcasting Co.  
 Boston Transcript Co.  
 Oak Leaves Broadcasting Corp.  
 Johnson-Kennedy Radio Corp.  
 Round Hills Radio Corp.  
 Chamber of Commerce

1370 kilocycles 218.7 meters

KFBL 50 Everett, Wash.  
 KFEC 100 Portland, Ore.  
 KFJI 50 Astoria, Ore.  
 KFJZ 100 Ft. Worth, Texas  
 KFLX 100 Galveston, Texas  
 KFUR 50 Ogden, Utah  
 KGAR 100 Tucson, Ariz.  
 KGBX 100 St. Joseph, Mo.  
 KGCB 100 Enid, Okla.  
 KGCI 100 San Antonio, Texas  
 KGDA 15 Dell Rapids, S. D.  
 KGER 100 Long Beach, Cal.  
 KGFG 100 Oklahoma City  
 KGFL 50 Raton, N. M.  
 KGGM 100 Albuquerque, N. M.  
 KGKL 100 San Angelo, Texas  
 KGRC 100 San Antonio, Texas  
 KKP 15 Seattle, Wash.  
 KOH 100 Reno, Nevada  
 KOOS 50 Marshfield, Ore.  
 KRE 100 Berkeley, Calif.  
 KVL 100 Seattle, Wash.  
 KWKC 100 Kansas City Mo.  
 KZM 100 Hayward, Calif.  
 WBBL 100 Richmond, Va.  
 WCBM 100 Baltimore, Md.  
 WEAM 100 Plainfield, N. J.  
 WELK 100 Philadelphia, Pa.  
 WFBJ 100 Collegeville, Minn.  
 WHBD 100 Bellefontaine, Ohio  
 WHBO 100 Memphis, Tenn.  
 WHDF 100 Calumet, Mich.  
 WIBM 100 Jackson, Mich.  
 WJBK 50 Ypsilanti, Mich.  
 WJBO 100 New Orleans, La.  
 WMBO 100 Auburn, N. Y.  
 WRAK 50 Erie, Pa.  
 WRBT 50 Wilmington, N. C.  
 WRJN 100 Racine, Wis.  
 WSVS 50 Buffalo, N. Y.

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Leese Bros.  
 Meier & Frank Co.  
 George Kincaid  
 Henry C. Allison  
 George Roy Clough  
 Peery Building Co.  
 Citizens Publishing Co.  
 Foster-Hall Tire Co.  
 Champlin Refining Co.  
 Liberto Radio Sales  
 Home Auto Co.  
 C. Merwin Dobyns  
 Faith Tabernacle Assn.  
 N. L. Cotter  
 Jay Peters  
 KGKL, Inc., Oper. by Ragsdale Auto Co.  
 Eugene Roth  
 City of Seattle  
 Jay Peters  
 H. H. Hanseth  
 Firat Congregational Church  
 Arthur C. Dalley  
 Willson Duncan Brdcstg. Co.  
 Leon P. Tolley  
 Grace Covenant Presbyterian Church  
 Hotel Chateau  
 W. J. Butterfield  
 Howard R. Miller  
 St. John's University  
 Firat Presbyterian Church  
 Broadcasting Station WHBQ, Inc.  
 Chas. C. MacLeod  
 C. L. Carrell  
 Ernest F. Goodwin  
 Valdemar Jensen  
 Radio Service Laboratories  
 C. R. Cummins  
 Wilmington Radio Association  
 Racine Broadcasting Corp.  
 Seneca Vocational School

1380 kilocycles 217.3 meters

KQV 500 Pittsburg, Pa.  
 KO 1000 Clarinda, Iowa  
 WCOS 500 Springfield, Ohio  
 WKBH 1000 La Crosse, Wisc.

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Doubleday-Hill Electric Co.  
 Berry Seed Co.  
 Wittenberg College  
 Callaway Music Co.

1390 kilocycles 215.7 meters

KFPY 500 Spokane, Wash.  
 KLRA 1000 Little Rock, Ark.  
 KOW 500 Denver, Colo.  
 KUOA 1000 Fayetteville, Ark.  
 KWSC 500 Pullman, Wash.  
 WDCY 500 Minneapolis, Minn.  
 WHDI 500 Minneapolis, Minn.  
 WHK 1000 Cleveland, Ohio

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Symons Investment Co.  
 Arkansas Broadcasting Co.  
 Associated Industries, Inc.  
 University of Arkansas  
 State College of Washington  
 Dr. George W. Young  
 Wm. Hood Dunwoody Indus. Institute  
 Radio Air Service Corp.

## INDEX BY FREQUENCIES AND DIAL NUMBERS

### 1400 kilocycles 214.2 meters

WBAA	500	Lafayette, Ind.
WBBC	250	Brooklyn, N. Y.
WCGU	500	Coney Island, N. Y.
WCMA	500	Culver, Ind.
WKBF	500	Indianapolis, Ind.
WLTH	500	Brooklyn, N. Y.
WSGH	500	Brooklyn, N. Y.

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Purdue University  
Brooklyn Broadcasting Corp.  
U. S. Broadcasting Corp.  
Culver Military Academy  
Noble Butler Watson  
The Voice of Brooklyn, Inc.  
Amateur Radio Specialty Co.

### 1410 kilocycles 212.6 meters

KFLV	500	Rockford, Ill.
KGRS	1000	Amarillo, Tex.
WDAG	1000	Amarillo, Texas
WHBL	500	Sheboygan, Wis.
WBCM	500	Bay City, Mich.

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A. T. Frykman  
Gish Radio Service  
J. Laurence Martin  
Press Pub. Co. & C. L. Carrell  
World's Star Knitting Co.

### 1420 kilocycles 211.1 meters

KFIF	50	Portland, Ore.
KFIZ	100	Fond du Lac, Wis
KFOU	100	Holy City, Calif.
KFOW	100	Seattle, Wash.
KFXD	50	Jerome, Idaho
KFXV	100	Flagstaff, Ariz.
KFYO	100	Abilene, Tex.
KGCN	50	Concordia, Kansas
KGCX	10	Vida, Mont.
KGFF	100	Alva, Okla.
KGFJ	100	Los Angeles, Calif.
KGFV	50	Ravenna, Nebr.
KGHD	50	Missoula, Mont.
KGIW	100	Trinidad, Colo.
KGKX	15	Sandpoint, Idaho
KGTT	50	San Francisco, Cal.
KICK	100	Red Oak, Iowa
KOCW	100	Chickasha, Okla.
KORE	100	Eugene, Ore.
KTAP	100	San Antonio, Tex.
KTUE	5	Houston, Texas
KXRO	75	Aberdeen, Wash.
WAAD	25	Cincinnati, Ohio
WEDH	30	Erie, Pa.
WHDL	10	Tupper Lake, N. Y.
WHPP	10	New York City
WIAS	100	Ottumwa, Iowa
WIBR	50	Steubenville, Ohio
WIL	100	St. Louis, Mo.
WKBP	50	Battle Creek, Mich.
WLBK	100	Kansas City, Mo.
WLBH	30	Farmingdale, N. Y.
WLEX	100	Lexington, Mass.
WMBC	100	Detroit, Mich.
WMBH	100	Joplin, Mo.
WMRJ	10	Jamalca, N. Y.
WQBZ	60	Weirton, W. Va.
WSRO	100	Middletown, Ohio
WSSH	100	Boston, Mass.
WTBO	50	Cumberland, Md.

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Benson Polytechnic Institute  
Commonwealth-Reporter  
W. E. Riker  
KFQW, Inc.  
Service Radio Co.  
Mary M. Costigan  
T. E. Kirksey  
Concordia Broadcasting Co.  
First State Bank  
Earl E. Hampshire  
Ben S. McGlashan  
Otto F. Sothman  
Elmore-Nash Broadcasting Corp.  
Trinidad Creamery Co., Inc.  
C. E. Twiss  
Glad Tidings Temple  
Atlantic Automobile Co.  
College for Women  
Eugene Broadcasting Station  
Robert B. Bridge  
Uhalt Electric  
KXRO, Inc.  
Ohio Mechanics Institute  
Erie Dispatch-Herald  
George Franklin Bissell  
Bronx Broadcasting Co.  
Poling Electric Co.  
Thurman A. Owings  
WIL Broadcasting Corp.  
Enquirer-News Co.  
Everett L. Dillard  
Joseph J. Lombardi  
Lexington Air Station  
Michigan Broadcasting Co., Inc.  
Edwin Dudley Aber  
Peter J. Prinz  
J. H. Thompson  
Harry W. Fahrlander  
Tremont Temple Baptist Church  
Cumberland Electric Co.

### 1430 kilocycles 209.7 meters

WBAK	500	Harrisburg, Pa.
WBRL	500	Hilton, N. H.
WCAH	250	Columbus, Ohio
WGBC	500	Memphis, Tenn.
WMBS	500	Lemoynne, Pa.
WNBR	500	Memphis, Tenn.

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Penna. State Police  
Booth Radio Laboratories  
Commercial Radio Service Co.  
First Baptist Church  
Mack's Battery Co.  
John Ulrich

### 1440 kilocycles 208.2 meters

KLS	250	Oakland, Calif.
WABF	250	Kingston, Pa.
WABO	500	Rochester, N. Y.
WCBA	250	Allentown, Pa.
WHCC	500	Rochester, N. Y.

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Warner Bros.  
Markle Broadcasting Corp.  
Lake Ave. Baptist Church  
B. B. Musselman  
Hickson Electric Co.



## INDEX BY FREQUENCIES AND DIAL NUMBERS

**WMBD** 500 Peoria Heights, Ill.  
**WNRC** 500 Greensboro, N. C.  
**WOKO** 500 Peekskill, N. Y.  
**WSAN** 250 Allentown, Pa.  
**WTAD** 500 Quincy, Ill.

Peoria Heights Radio Laboratory  
 Wayne M. Nelson  
 Harold E. Smith  
 Allentown Call Publishing Co.  
 Ills. Stock Medicine Brcdstg. Corp.

### 1450 kilocycles 206.8 meters

**KSBA** 1000 Shreveport, La.  
**WBMS** 250 Union City, N. J.  
**WFJC** 500 Akron, Ohio  
**WIBS** 250 Elizabeth, N. J.  
**WJAY** 500 Cleveland, Ohio  
**WKBO** 250 Jersey City, N. J.  
**WNJ** 250 Newark, N. J.  
**WSAR** 250 Fall River, Mass.  
**WTFI** 500 Toccoa, Ga.

W. G. Patterson  
 WBMS Broadcasting Corp.  
 W. F. Jones Broadcast, Inc.  
 New Jersey Broadcasting Corp.  
 Cleveland Radio Brcdcatg. Corp.  
 Camith Corp.  
 Radio Investment Co.  
 Doughty & Welch Electric Co.  
 Toccoa Falls Institute

### 1460 kilocycles 205.4 meters

**KSTP** 10000 St. Paul, Minn.  
**WJSV** 10000 Washington, D. C.

National Battery Brcdstg. Co.  
 Independent Publishing Co.

### 1470 kilocycles 204.0 meters

**KJFP** 1000 Oklahoma City  
**KGA** 5000 Spokane, Wash.  
**WKBW** 5000 Buffalo, N. Y.  
**WRUF** 5000 Gainesville, Fla.

National Radio Mfg. Co.  
 Northwest Radio Service Co.  
 Churchill Evangelistic Assn.  
 University of Florida

### 1480 kilocycles 202.6 meters

**WJAZ** 5000 Chicago, Ill.  
**WORD** 5000 Batavia, Ill.  
**WHT** 5000 Chicago, Ill.

Zenith Radio Corp.  
 People's Pulpit Association  
 Radiophone Brcdstg. Corp.

### 1490 kilocycles 201.2 meters

**KPWF** 50000 Westminster, Calif.  
**WBAW** 5000 Nashville, Tenn.  
**WLAC** 5000 Nashville, Tenn.  
**WFBL** 1000 Syracuse, N. Y.

Pacific Western Brcdstg. Fed.  
 Waldrum Drug Co.  
 Life & Casualty Insurance Co.  
 The Onondaga Co.

### 1500 kilocycles 199.9 meters

**KFCR** 100 Santa Barbara, Cal.  
**KGDR** 100 San Antonio, Tex.  
**KGKB** 100 Brownwood, Tex.  
**KGHI** 100 Little Rock, Ark.  
**KGHX** 50 Richmond, Texas  
**KPJM** 100 Prescott, Ariz.  
**KUJ** 10 Longview, Wash.  
**KWBS** 15 Portland, Ore.  
**KWTC** 100 Santa Ana, Calif.  
**WAFD** 100 Detroit, Mich.  
**WALK** 50 Willow Grove, Pa.  
**WCLB** 100 Brooklyn, N. Y.  
**WHBW** 100 Philadelphia, Pa.  
**WIBZ** 15 Montgomery, Ala.  
**WILM** 100 Wilmington, Del.  
**WKBV** 100 Brookville, Ind.  
**WKBZ** 50 Ludington, Mich.  
**WLBX** 100 Long Island City, N. Y.  
**WLOE** 100 Chelsea, Mass.  
**WMBA** 100 Newport, R. I.  
**WMBJ** 100 Wilkinsburg, Pa.  
**WMBM** 10 Memphis, Tenn.  
**WMBQ** 100 Brooklyn, N. Y.  
**WMES** 50 Boston, Mass.  
**WMPC** 30 Lapeer, Mich.  
**WNBF** 50 Binghamton, N. Y.  
**WNBO** 15 Rochester, N. Y.  
**WOO** 100 Philadelphia, Pa.  
**WPSW** 50 Philadelphia, Pa.  
**WRBJ** 10 Hattiesburg, Miss.  
**WWRL** 100 Woodside, N. Y.

Santa Barbara Brcdstg. Co.  
 Joe B. McShane  
 Eagle Publishing Co.  
 Berean Bible Class  
 Ft. Bend County School Board  
 Frank Wilburn  
 Lovejoy & Kerfoot  
 Schaeffer Radio Co.  
 Pacific Broadcasting Foundation  
 Albert B. Parfet Co.  
 Albert A. Walker  
 Arthur Faske  
 D. R. Kienzle  
 Alexander D. Trum  
 Delaware Brcdstg. Co.  
 Knox Battery & Electric Co.  
 K. L. Ashbacher  
 John N. Brahy  
 William S. Pote  
 LeRoy Joseph Beebe  
 Rev. John W. Sproul  
 Seventh Day Adventist Church  
 Paul J. Gollhofer  
 Mass. Educational Society  
 First M. E. Church  
 Howitt-Wood Radio Co.  
 Gordon P. Brown  
 John Wanamaker  
 School of Wireless Telegraphy  
 Woodruff Furniture Co.  
 Wm. H. Reuman

# AIR-LINE DISTANCES

FROM TO	Albuquerque, N. Mex.	Atlanta, Ga.	Baltimore, Md.	Boise, Idaho	Boston, Mass.	Brownsville, Tex.	Buffalo, N. Y.	Chicago, Ill.	Cincinnati, Ohio	Cleveland, Ohio	Denver, Colo.	Des Moines, Iowa	Detroit, Mich.	El Paso, Tex.	Fargo, N. Dak.	Fort Worth, Tex.	Galveston, Tex.	Harlingen, Nebr.	Hot Springs, Ark.	Houghton, Mich.	Jacksonville, Fla.	Kansas City, Mo.	Los Angeles, Calif.	
Albuquerque, N. Mex.	----	1273	1670	774	1567	635	1577	1126	1248	1417	332	833	1360	228	968	561	603	588	773	1252	1492	717	663	
Atlanta, Ga.	1273	----	575	1830	933	1900	675	583	368	550	1208	738	595	1293	1112	750	688	901	498	947	285	675	1939	
Baltimore, Md.	1670	575	----	2055	358	1525	275	603	423	305	1505	813	398	1750	1142	1239	1245	1154	964	808	682	962	2314	
Boise, Idaho	774	1830	2055	----	2266	1610	1372	1453	1653	1754	637	1155	1571	969	975	1263	1538	934	1384	1367	2098	1158	674	
Boston, Mass.	1967	933	358	2266	----	1881	398	849	737	550	1766	1159	613	2067	1304	1574	1598	1415	1303	922	1015	1250	2590	
Brownsville, Tex.	635	1577	1525	1610	1881	----	1575	1234	1184	1402	1047	1102	1398	638	1445	471	487	1013	650	1543	1025	923	1370	
Buffalo, N. Y.	1577	675	275	1872	398	1575	----	454	392	175	369	762	218	1690	923	1221	1289	1019	956	560	860	862	2195	
Chicago, Ill.	1126	583	603	1453	849	1234	454	----	249	307	918	310	236	1249	571	820	954	565	565	367	861	413	1742	
Cincinnati, Ohio	1248	358	423	1653	737	1184	392	249	----	218	1090	509	234	1333	818	839	897	742	569	589	628	541	1801	
Cleveland, Ohio	1417	550	305	1754	550	1402	175	307	218	----	1223	617	94	1521	838	1046	1116	871	787	518	768	700	2044	
Denver, Colo.	332	1208	1505	637	1766	1047	1368	918	1090	1223	----	607	1153	554	642	643	925	353	749	170	1468	555	828	
Des Moines, Iowa	833	738	913	1155	1159	1042	762	310	509	617	607	----	945	980	397	640	651	256	498	458	1034	180	1438	
Detroit, Mich.	1360	595	398	1671	613	1398	218	236	334	94	1144	545	----	1475	745	1018	1111	800	761	427	832	643	1976	
El Paso, Tex.	228	1293	1750	969	2067	682	1630	1249	1333	1521	554	980	1475	----	1161	543	723	757	802	1422	1481	636	702	
Fargo, N. Dak.	968	1112	1143	975	1304	1445	923	571	816	838	642	337	745	1161	----	973	1216	440	875	393	1400	548	1226	
Fort Worth, Tex.	561	750	1239	1263	1574	471	1221	820	839	1046	643	640	1018	543	973	----	283	544	273	1093	943	460	1212	
Galveston, Tex.	803	688	1245	1538	1598	1287	1289	954	897	1116	925	851	1111	723	1218	283	----	868	375	1277	779	677	1453	
Harlingen, Nebr.	588	901	1154	934	1415	1013	1019	566	742	871	935	256	800	757	440	544	808	----	513	666	1178	276	1171	
Hot Springs, Ark.	773	498	964	1384	1502	650	556	585	565	787	749	688	761	802	675	1093	975	513	----	901	728	326	1457	
Houghton, Mich.	1252	947	808	1367	922	1245	960	367	569	518	970	458	427	1422	393	1073	1277	666	901	----	1216	633	1757	
Jacksonville, Fla.	1492	286	682	2098	1015	1025	880	861	628	768	1488	1024	832	1481	1400	943	799	1178	728	1216	----	952	2133	
Kansas City, Mo.	717	675	942	1158	1250	1022	862	413	541	700	555	160	643	836	548	460	677	226	326	633	952	----	1352	
Los Angeles, Calif.	663	1935	2313	663	2590	1370	2195	1741	1892	2044	828	1433	1976	702	1426	1212	1423	1177	1437	1767	1253	1352	----	2154
Louisville, Ky.	1174	317	498	1623	623	1093	483	268	92	309	1035	477	315	1253	818	751	807	693	480	636	595	480	1625	----
Memphis, Tenn.	938	325	792	1506	1133	797	802	481	410	627	718	485	621	978	882	448	492	591	176	830	591	370	1602	----
Miami, Fla.	1710	610	958	2368	1258	1100	1154	1190	957	1088	1732	1338	1156	1662	1721	1150	941	1468	983	1545	1328	1247	2355	----
Minneapolis, Minn.	980	905	948	1140	1125	1335	713	356	603	632	699	235	542	1156	219	970	1087	399	722	272	1192	413	1522	----
Missoula, Mont.	895	1790	1947	252	2124	1706	1740	1340	1578	1640	670	1074	1552	1115	819	1312	1595	891	1385	1208	2070	1117	910	----
Newark, N. J.	1115	1178	597	1341	941	952	626	394	239	456	1018	523	468	1169	904	643	666	697	370	760	502	472	1777	----
New Orleans, La.	1030	427	1001	1713	1359	536	1087	831	700	922	1079	825	938	986	1221	470	288	870	358	1187	511	678	1675	----
New York, N. Y.	1810	747	170	2153	188	1695	291	711	568	44	1628	1023	483	1402	1211	1398	1415	1275	1125	849	838	1097	2446	----
Norfolk, Va.	1696	507	167	2137	467	1465	435	696	474	429	1652	983	522	1755	1258	1286	1195	1216	955	946	548	1009	2312	----
Oklahoma, Okla.	518	753	1173	1138	1490	650	1117	689	755	946	503	469	905	578	795	188	456	357	260	926	988	293	1162	----
Omaha, Nebr.	1748	663	1026	1044	1280	1061	883	432	620	738	485	122	666	875	390	590	828	135	490	547	1098	165	1312	----
Philadelphia, Pa.	1748	663	90	2113	268	1614	278	664	501	243	575	972	444	1834	1186	1324	1335	1222	1051	827	758	1037	2388	----
Phoenix, Ariz.	330	1592	2002	733	2395	1023	1904	1451	1578	1745	565	1154	1685	347	1225	1588	1035	901	1094	1550	1600	1045	577	----
Pittsburgh, Pa.	1498	520	194	1863	478	1424	178	411	258	115	1320	718	208	1592	952	1097	1140	967	825	330	703	784	2135	----
Portland, Me.	2015	1022	446	2282	100	1961	438	892	802	605	1803	1197	657	2126	1313	1642	1678	1454	1371	924	1111	1300	2631	----
Portland, Ore.	1107	2172	2367	349	2553	1944	2167	1765	1987	2063	985	1579	1975	1286	1246	1132	1685	1271	1733	1638	2442	1397	625	----
Richmond, Va.	1629	470	128	2060	471	1428	375	618	393	353	1498	905	445	1655	1150	1170	1154	1142	897	670	953	917	2283	----
St. Louis, Mo.	938	467	731	1399	1036	975	682	259	308	490	793	270	452	1033	658	568	697	455	325	591	735	238	1585	----
Salt Lake City, Utah	483	1580	1858	292	2099	1317	1701	1280	1450	1567	372	952	1490	609	865	977	1249	708	1118	1242	1640	922	577	----
San Francisco, Calif.	893	2133	2451	516	2696	1675	2298	1855	2037	2163	645	1547	2087	933	1447	1654	1693	1297	1648	1833	2375	1500	341	----
Seattle, N. Y.	1823	840	278	2120	150	1770	249	702	605	408	1618	1012	407	1930	1517	1445	1387	1267	1175	776	960	1107	2445	----
Seattle, Wash.	1178	2180	2441	405	2508	2015	2130	1743	1974	2035	1022	1470	1945	1372	1206	1658	1938	1288	1759	1588	2450	1505	956	----
Shreveport, La.	764	546	1064	1433	1410	1310	1080	725	688	904	799	624	891	752	1002	209	233	415	142	1043	733	325	1420	----
Spokane, Wash.	1028	1950	2110	290	2270	1853	1900	1514	1746	1804	827	1243	1715	1230	975	1470	1753	1061	1552	1360	2329	1286	999	----
Springfield, Mass.	1889	863	282	2196	79	1865	325	774	659	673	1692	1085	540	1990	1240	1475	1524	1240	1224	660	957	1173	2515	----
Vermillion, S. Dak.	742	917	1033	973	1311	1151	915	479	694	785	486	187	705	920	264	893	938	167	605	510	1203	202	1891	----
Washington, D. C.	1580	542	33	2045	392	1493	290	594	403	303	1490	895	397	1726	1141	1210	1214	1139	936	613	647	943	2295	----

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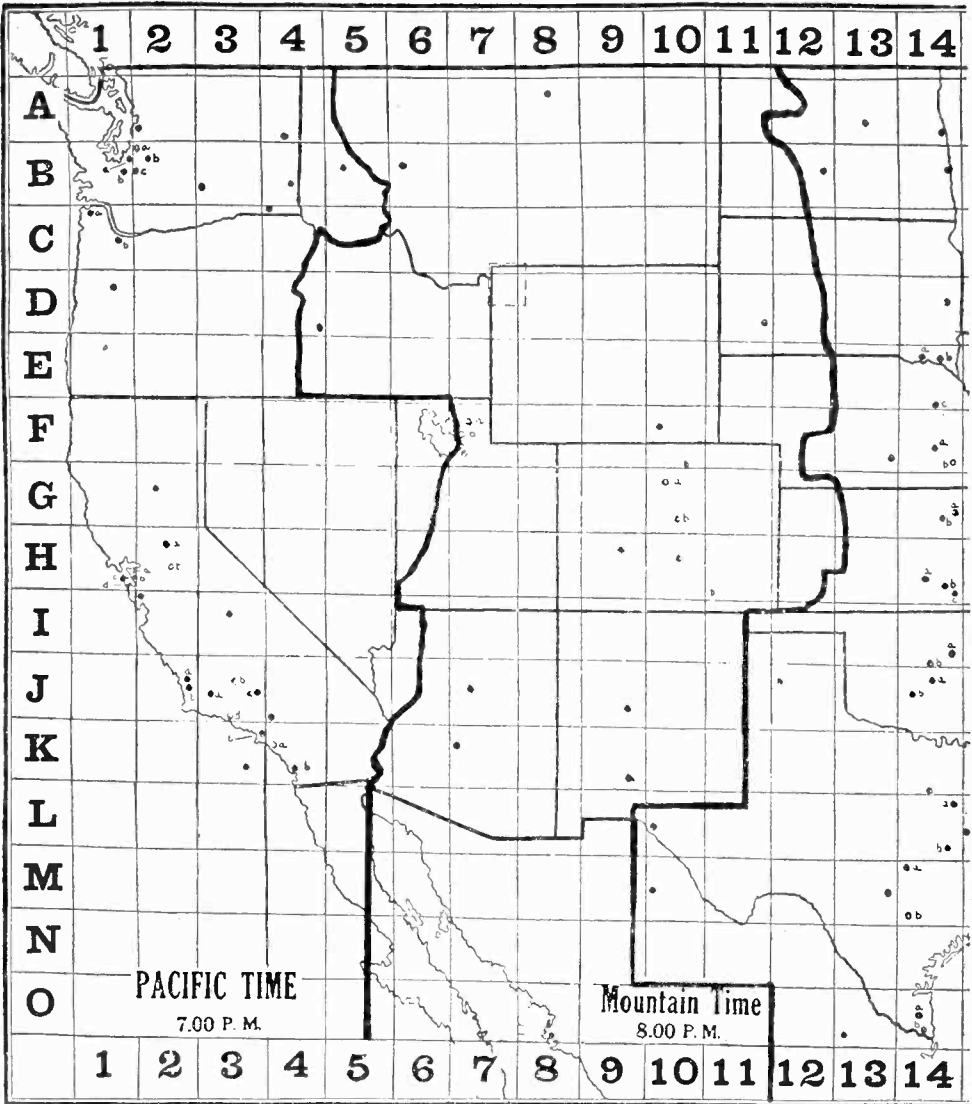
(Continued from Inside Cover)

71-69 our set will be tuned to 640 keys. and at that point KFI of Los Angeles will be heard, always assuming of course that it is on the air and within range of our particular set.

Now we tune in some other station, proceeding as before,

# IN STATUTE MILES

Louisville, Ky.	74	938	1710	960	895	1117	1030	1610	1695	518	718	1748	330	1498	2015	1107	1628	938	463	893	1823	1178	764	1028	1889	742	1648
Memphis, Tenn.	317	335	610	905	1790	218	427	747	507	753	815	663	1592	520	1022	2172	470	467	1580	2133	840	2180	548	1960	663	917	542
Miami, Fla.	498	792	958	948	1947	597	1001	170	167	1173	1026	50	2002	104	436	2367	128	731	1058	2451	278	2341	1044	2110	282	1083	33
Minneapolis, Minn.	1623	1506	2368	1140	252	1631	1713	2153	2137	1138	1044	2113	733	1663	2262	349	2060	1389	292	516	2120	405	1333	290	2196	973	2045
Missoula, Mont.	1233	1133	1259	1128	2124	941	1359	168	467	1490	1280	268	2295	478	100	2553	471	1036	2099	2696	150	2508	1410	2279	79	1314	892
Nashville, Tenn.	1093	777	1100	1335	1705	952	536	1695	1465	659	1061	1614	1023	1424	1961	1944	1428	975	1317	1675	1770	2015	510	1853	1205	1161	1493
New Orleans, La.	483	802	1164	733	1740	626	1087	291	435	1117	883	278	1904	178	438	2167	375	662	1701	2298	249	8130	1080	1900	325	916	200
New York, N. Y.	268	461	1190	356	1948	394	831	711	696	689	432	664	1951	411	892	1765	618	259	1260	1855	702	1743	725	1514	774	479	594
Norfolk, Va.	92	410	957	603	1578	239	708	568	474	755	620	501	1578	258	802	1987	399	308	1450	2037	605	1974	688	1746	659	694	403
Oklahoma, Okla.	309	627	1088	632	1640	436	922	404	429	945	738	343	1745	115	603	2063	353	490	1567	2163	408	2025	904	1604	478	785	303
Omaha, Neb.	1035	878	1732	699	670	1018	1079	1628	1562	503	482	1575	585	1320	1803	985	1468	793	372	946	1618	2020	799	827	1692	468	1490
Philadelphia, Pa.	477	405	1338	235	1074	523	825	1023	903	469	122	972	1154	718	1197	1479	905	270	352	1547	1012	1470	624	1243	1085	187	695
Phoenix, Ariz.	315	621	1155	542	1552	468	938	483	522	905	666	444	1685	208	657	1975	445	452	1490	2087	467	1945	891	1715	540	705	397
Pittsburgh, Pa.	1253	978	1662	1156	1115	1169	966	1902	1755	578	875	1834	547	1592	2126	1826	1695	1033	689	93	1930	1373	752	1283	1990	920	1726
Portland, Me.	818	862	1721	219	1819	900	1221	1213	1258	786	390	1186	1225	952	1313	1248	1180	658	865	1447	1157	1206	1002	976	1260	284	1161
Portland, Ore.	751	448	1150	870	1312	643	470	1318	1225	168	590	1324	658	1097	1642	1412	1160	570	977	1454	1415	1658	209	1470	1465	689	1210
Richmond, Va.	807	492	941	1087	1555	646	298	1495	1195	456	828	1335	1065	1140	1678	1865	1154	697	1249	1693	1487	1938	233	1753	1534	938	1214
St. Louis, Mo.	693	591	1468	399	691	697	870	1275	1216	357	135	1822	901	967	1454	1271	1142	455	708	1297	1867	1288	615	1061	1340	187	1339
Salt Lake City, Utah	480	176	963	122	1385	370	358	1125	955	260	490	1051	1094	825	1371	1733	897	325	1116	1648	1175	1759	142	1552	1824	605	936
San Francisco, Calif.	636	630	1545	272	1208	760	1137	849	946	926	547	827	1550	630	924	1638	870	591	1242	1833	766	1588	1043	1300	860	510	813
Schenectady, N. Y.	595	591	323	1192	2070	502	511	838	540	968	1098	756	1800	703	1113	2442	953	755	1840	2375	960	2450	733	2339	957	1203	647
Seattle, Wash.	420	370	1247	413	1117	472	678	1977	1009	293	165	1307	1045	784	1300	1597	937	238	922	1500	1107	2505	326	1386	1173	290	943
Shreveport, La.	1625	1602	2355	1522	910	1777	1675	2446	2352	1182	1312	2388	357	2135	2631	1825	2283	1585	577	345	2445	556	1420	939	2515	1291	2295
Spokane, Wash.	---	319	623	605	1550	153	623	650	523	675	579	870	1512	345	892	1953	457	242	1400	1983	693	1864	598	1720	745	683	443
Springfield, Mass.	---	319	---	876	700	1483	195	658	778	422	529	870	1264	660	1205	1852	722	242	1250	1800	1010	1867	797	1652	1055	642	763
Vermillion, S. Dak.	923	878	---	1516	2359	821	681	1095	807	1233	1402	1023	1998	1014	1357	2716	631	1067	2098	2603	1229	2740	950	2528	1210	1510	927
Washington, D.C.	605	700	1516	---	1010	465	1050	1019	1047	692	291	985	1279	745	1145	1435	968	644	908	1585	975	2403	859	1173	1056	238	936
	1550	1483	2359	1010	---	1582	1733	2030	2455	1162	978	1997	982	1754	2193	340	1967	1331	435	762	1978	395	1457	170	2060	897	1940
	153	195	821	695	1582	---	470	758	586	602	604	663	1445	472	1015	1970	526	253	1330	1958	820	1973	470	1752	863	704	567
	623	358	681	1050	1733	470	---	1173	932	575	845	1090	1318	923	1445	2063	899	599	1439	1923	1259	2098	280	1098	1287	560	968
	650	953	1095	1019	2030	758	1173	---	293	1324	1144	03	2142	313	277	2455	287	873	1972	2560	142	2419	1230	1910	120	1189	200
	528	778	807	1047	2045	586	932	293	---	1186	1095	220	3127	316	565	2458	79	771	1925	2510	426	2440	1037	2211	411	1166	145
	675	422	1033	692	1162	602	575	1324	1186	---	405	1256	843	1013	1550	1488	1122	456	862	1386	1354	1523	297	1324	1412	502	1150
	579	529	1402	291	978	604	845	1124	1095	405	---	1094	1032	637	1310	1373	1020	352	837	1525	1133	1372	617	1149	1205	115	1012
	580	878	1023	985	1997	683	1090	83	720	1256	1034	---	2079	254	360	2119	205	808	1923	2518	205	2388	1153	2159	801	1143	122
	1512	1264	1998	1279	932	1445	1318	2142	2027	843	1032	2079	---	1829	2345	1007	1960	1270	504	652	2152	1112	1067	1020	2220	1043	1990
	345	660	1014	745	1754	472	923	313	316	1013	897	254	1829	---	545	2174	242	561	1670	2364	350	2145	939	1918	400	891	188
	482	1207	1357	1145	2133	1015	1445	277	565	1550	1218	360	2345	545	---	2563	565	1094	2127	2725	197	2513	1484	2285	159	1345	480
	1853	1852	2716	1435	430	1970	2063	2455	2458	1488	1373	2419	1007	2174	2563	---	2381	1723	636	536	2405	141	1783	293	2488	1293	2360
	457	722	831	968	1967	526	699	287	79	1122	1020	205	1960	242	565	2381	---	689	1850	2436	406	2462	965	2133	407	1089	96
	843	242	1067	464	1331	535	599	673	771	456	352	808	1270	561	1094	1723	699	---	1158	1738	898	1722	466	2100	958	450	710
	1400	1250	2096	988	435	1390	1433	1972	1925	862	1383	1923	561	1670	2127	636	1850	1158	---	592	1950	697	1155	548	2027	785	1845
	1983	1900	2601	1585	762	1959	1423	2568	2510	1386	1425	2119	652	2264	2725	536	2436	1738	592	---	2548	680	1655	730	2525	1383	2437
	695	1010	1226	975	1978	820	1259	142	426	1354	1133	205	2152	550	197	2405	408	898	1950	2548	---	2363	1290	2139	86	1165	313
	1245	1867	2740	1402	293	1973	2098	2419	2440	1523	1372	2388	1182	2145	2513	143	2362	1722	897	680	2363	---	1820	229	2445	1282	2335
	598	279	950	859	1457	470	260	1220	1037	297	617	1153	1067	939													



The Radex Press,  
P. O. Box 143, Cleveland, Ohio.

Begin With No. 27  
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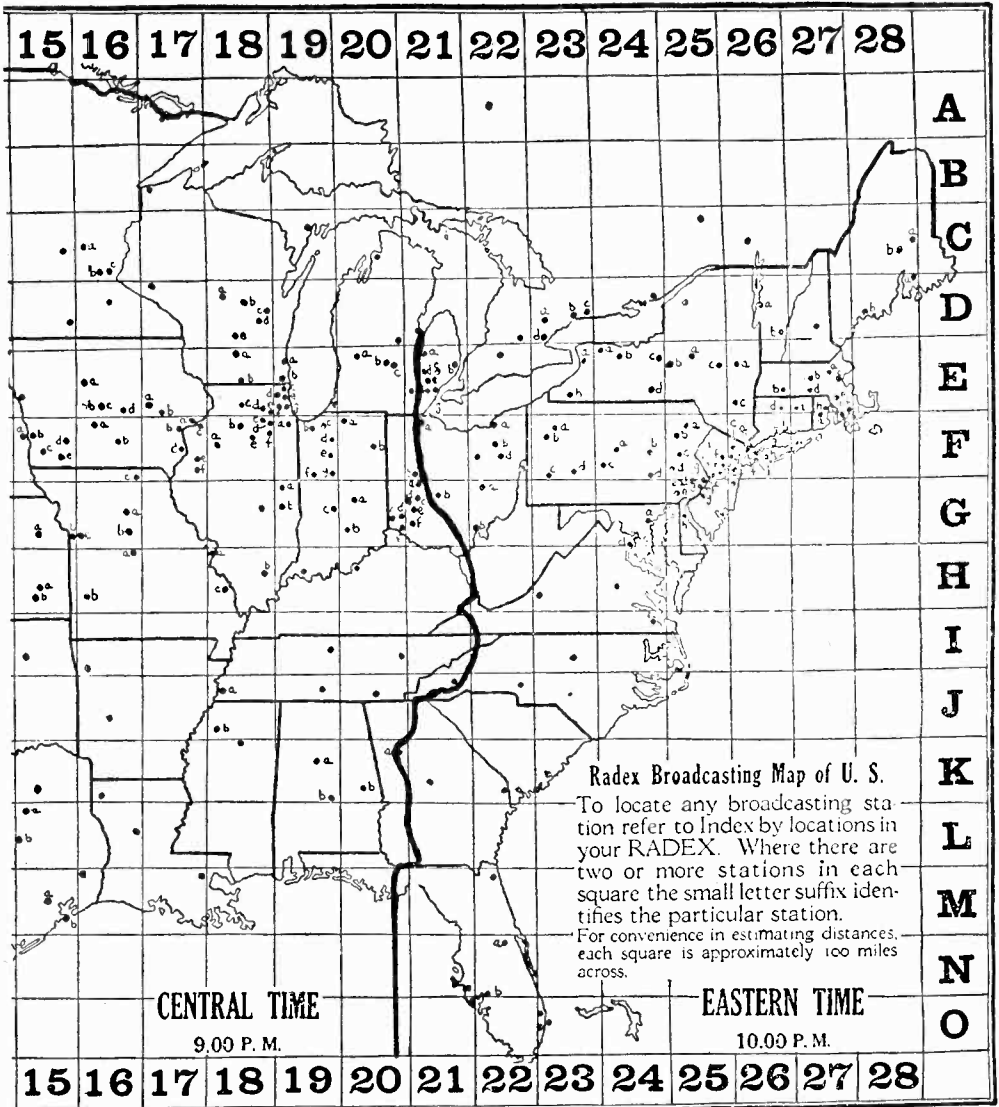
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CFAC	690				CHYC	730			
Calgary, Alta.					Montreal, Que.				
CFBO	890				CJBC	580-840-960			
St. John, N. B.					Toronto, Ont.				
CFCA	840				CJBR	960			
Toronto, Ont.					Regina, Sask.				
CFCF	730				CJCA	580			
Montreal, Que.					Edmonton, Alta.				
CFCH	600				CJCJ	690			
Iroquois Falls, Ont.					Calgary, Alta.				
CFCL	580				CJGC	910			
Toronto, Ont.					London, Ont.				
CFCN	690				CJGX	630			
Calgary, Alta.					Yorkton, Sask.				
CFCO	1210				CJHS	910			
Chatham, Ont.					Saskatoon, Sask.				
CFCT	630				CJOC	1120			
Victoria, B. C.					Lethbridge, Alta.				
CFCY	960				CJOR	1030			
Charlottetown, P.E.I.					Sea Island, B. C.				
CFJC	1120				CJRM	1010			
Kamloops, B. C.					Moose Jaw, Sask.				
CFLC	1010				CJRW	1010			
Prescott, Ont.					Fleming, Sask.				
CFMC	1120				CJSC	580			
Kingston, Ont.					Toronto, Ont.				
CFNB	1210				CKAC	730			
Fredericton, N. B.					Montreal, Que.				
CFQC	910				CKCD	730			
Saskatoon, Sask.					Vancouver, B. C.				
CFRB	960				CKCI	880			
Twp. of King, Ont.					Quebec, Que.				
CFRC	1120				CKCK	960			
Kingston, Ont.					Regina, Sask.				
CHCA	690				CKCL	580			
Calgary, Alta.					Toronto, Ont.				
CHCK	960				CKCO	690			
Charlottetown, P.E.I.					Ottawa, Ont.				
CHCS	880				CKCR	1010			
Hamilton, Ont.					Brantford, Ont.				
CHCT	840				CKCV	880			
Red Deer, Alta.					Quebec, Que.				
CHGS	1120				CKFC	730			
Summerside, P. E. I.					Vancouver, B. C.				
CHLS	730				CKGW	960			
Vancouver, B. C.					Bowmanville, Ont.				
CHMA	580				CKLC	840			
Edmonton, Alta.					Red Deer, Alta.				
CHML	880				CKMC	1210			
Hamilton, Ont.					Cobalt, Ont.				
CHNC	580				CKMO	730			
Toronto, Ont.					Vancouver, B. C.				
CHNS	930				CKNC	580			
Halifax, N. S.					Toronto, Ont.				
CHRC	880				CKOC	880			
Quebec, Que.					Hamilton, Ont.				
CHWC	960				CKOW	840			
Regina, Sask.					Toronto, Ont.				
CHWK	1210				CKPC	1210			
Chilliwack, B. C.					Preston, Ont.				

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CKPR	1120				CYY	550			
Midland, Ont.					Merida, Mex.				
CKSH	1010				CZE	860			
St. Hyacinthe, Que.					Mexico City				
CKUA	580				CZF	970			
Edmonton, Alta.					Chihuahua, Mex.				
CKWX	730				HHK	830			
Vancouver, B. C.					Port au Prince, Haiti				
CKY	780				KDKA	980			
Winnipeg, Man.					Pittsburgh, Pa.				
CMC	840				KDLR	1210			
Havana, Cuba					Devils Lake, N. D.				
CNRA	630				KDYL	1290			
Moncton, N. B.					Salt Lake City				
CNRC	690				KEJK	1250			
Calgary, Alta.					Los Angeles, Calif.				
CNRE	580				KELW	780			
Edmonton, Alta.					Burbank, Calif.				
CNRM	730				KEX	1180			
Montreal, Que.					Portland, Ore.				
CNRO	690				KFAB	770			
Ottawa, Ont.					Lincoln, Nebr.				
CNRQ	880				KFAD	620			
Quebec, Que.					Phoenix, Ariz.				
CNRR	960				KFBB	1360			
Regina, Sask.					Havre, Mont.				
CNRS	910				KFBK	1310			
Saskatoon, Sask.					Sacramento, Calif.				
CNRT	840				KFBL	1370			
Toronto, Ont.					Everett, Wash.				
CNRV	1030				KFCB	1310			
Vancouver, B. C.					Phoenix, Ariz.				
CNRW	780				KFCR	1500			
Winnipeg, Man.					Santa Barbara, Calif.				
CYA	1000				KFDM	560			
Mexico City					Beaumont, Texas				
CYB	1090				KFDX	1210			
Mexico City					Shreveport, La.				
CYC	890				KFEC	1370			
Vera Cruz, Mex.					Portland, Ore.				
CYF	1130				KFEL	940			
Oaxaca, Mex.					Denver, Colo.				
CYH	800				KFEQ	560			
Mexico City					St. Joseph, Mo.				
CYJ	750				KFEY	1210			
Mexico City					Kellogg, Idaho				
CYL	750				KFGQ	1310			
Mexico City					Boone, Iowa				
CYM	1330				KFH	1300			
Torreón, Mex.					Wichita, Kansas				
CYO	710				KFHA	1200			
Mexico City					Gunnison, Colo.				
CYQ	930				KFI	640			
Tampico, Mex.					Los Angeles, Calif.				
CYR	630				KFIF	1420			
Mazatlan, Mex.					Portland, Ore.				
CYU	960				KFIO	1230			
Puebla, Mex.					Spokane, Wash.				
CYX	920								
Mexico City									

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KFIU	1310				KFRU	630			
Juneau, Alaska					Columbia, Mo.				
KFIZ	1420				KFSD	600			
Fond du Lac, Wis.					San Diego, Calif.				
KFJB	1200				KFSG	1120			
Marshalltown, Iowa					Los Angeles, Calif.				
KFJF	1470				KFUL	1290			
Oklahoma City					Galveston, Texas				
KFJI	1370				KFUM	1270			
Astoria, Ore.					Colorado Spgs., Colo.				
KFJM	550				KFUO	550			
Grand Forks, N. D.					St. Louis, Mo.				
KFJR	1300				KFUP	1310			
Portland, Ore.					Denver, Colo.				
KFJY	1310				KFUR	1370			
Fort Dodge, Iowa					Ogden, Utah				
KFJZ	1370				KFVD	700			
Ft. Worth, Texas					Culver City, Calif.				
KFKA	880				KFVS	1210			
Greeley, Colo.					Cape Girardeau, Mo.				
KFKB	1130				KFWB	950			
Milford, Kansas					Los Angeles, Calif.				
KFKU	1220				KFWC	1200			
Lawrence, Kans.					Ontario, Cal.				
KFKX	1020				KFWF	1200			
Chicago, Ill.					St. Louis, Mo.				
KFKZ	1200				KFWI	930			
Kirksville, Mo.					San Francisco, Calif.				
KFLV	1410				KFWM	930			
Rockford, Ill.					Oakland, Calif.				
KFLX	1370				KFXD	1420			
Galveston, Texas					Jerome, Idaho				
KFMX	1250				KFXF	940			
Northfield, Minn.					Denver, Colo.				
KFNF	890				KFXJ	1310			
Shenandoah, Iowa					Edgewater, Colo.				
KFOR	1210				KFXR	1310			
Lincoln, Nebr.					Oklahoma City				
KFOX	1250				KFXY	1420			
Long Beach, Calif.					Flagstaff, Ariz.				
KFPL	1310				KFYO	1420			
Dublin, Texas					Abilene, Texas				
KFPM	1310				KFYR	550			
Greenville, Texas					Bismarck, N. Dak.				
KFPW	1340				KGA	1470			
Siloam Spgs., Ark.					Spokane, Wash.				
KFPY	1390				KGAR	1370			
Spokane, Wash.					Tucson, Ariz.				
KFQD	1230				KGB	1360			
Anchorage, Alaska					San Diego, Calif.				
KFQU	1420				KGBU	900			
Holy City, Calif.					Ketchikan, Alaska				
KFQW	1420				KGBX	1370			
Seattle, Wash.					St. Joseph, Mo.				
KFQZ	850				KGBZ	930			
Hollywood, Calif.					York, Nebr.				
KFRC	610				KGCA	1270			
San Francisco, Cal.					Decorah, Iowa				



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KGCB	1370				KGHB	1320			
Oklahoma City					Honolulu, Hawaii				
KGCI	1370				KGHD	1420			
San Antonio, Texas					Missoula, Mont.				
KGCM	1420				KGHF	1320			
Concordia, Kans.					Pueblo, Colo.				
KGCR	1210				KGHG	1310			
Brookings, S. Dak.					McGehee, Ark.				
KGCU	1200				KGHI	1500			
Mandan, N. Dak.					Little Rock, Ark.				
KGCX	1420				KGHL	950			
Vida, Mont.					Billings, Mont.				
KGDA	1370				KGHX	1500			
Dell Rapids, S. D.					Richmond, Texas				
KGDB	1200				KGIO	1320			
Fergus Falls, Minn.					Idaho Falls, Ida.				
KGDM	1150				KGIO	1320			
Stockton, Calif.					Twin Falls, Ida.				
KGDP	1210				KGIR	1360			
Pueblo, Colo.					Butte, Mont.				
KGDR	1500				KGIW	1420			
San Antonio, Texas					Trinidad, Colo.				
KGDY	1200				KGJF	890			
Oldham, S. Dak.					Little Rock, Ark.				
KGEF	1300				KGKB	1500			
Los Angeles, Calif.					Brownwood, Texas				
KGEK	1200				KGKL	1370			
Yuma, Colo.					San Angelo, Texas				
KGER	1370				KGKO	570			
Long Beach, Calif.					Wichita Falls, Texas				
KGEW	1200				KGKX	1420			
Fort Morgan, Colo.					Sandpoint, Idaho				
KGBZ	1310				KGO	790			
Kalispell, Mont.					Oakland, Calif.				
KGFF	1420				KGRC	1370			
Alva, Okla.					San Antonio, Texas				
KGFG	1370				KGRS	1410			
Oklahoma City					Amarillo, Texas				
KGFH	1000				KGTT	1420			
Glendale, Calif.					San Francisco, Calif.				
KGFI	1310				KGU	940			
San Angelo, Texas					Honolulu, Hawaii				
KGFI	1420				KGW	620			
Los Angeles, Calif.					Portland, Ore.				
KGFK	1200				KGX	1200			
Hallock, Minn.					Lacey, Wash.				
KGFL	1370				KHJ	900			
Raton, N. M.					Los Angeles, Calif.				
KGFW	1420				KHQ	590			
Ravenna, Nebr.					Spokane, Wash.				
KGFX	580				KICK	1420			
Pierre, S. Dak.					Red Oak, Iowa				
KGGF	1010				KIDO	1250			
Picher, Okla.					Boise, Idaho				
KGGH	1310				KJBS	1100			
Cedar Grove, La.					San Francisco, Calif.				
KGGM	1370				KJR	970			
Albuquerque, N. M.					Seattle, Wash.				

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<b>KKP</b> 1370 Seattle, Wash.				<b>KPJM</b> 1500 Prescott, Ariz.			
<b>KLCN</b> 1290 Blytheville, Ark.				<b>KPLA</b> 570 Los Angeles, Calif.			
<b>KLDS</b> 950 Independence, Mo.				<b>KPO</b> 680 San Francisco, Calif.			
<b>KLRA</b> 1390 Little Rock, Ark.				<b>KPOF</b> 880 Denver, Colo.			
<b>KLS</b> 1440 Oakland, Calif.				<b>KPPC</b> 1200 Pasadena, Calif.			
<b>KLX</b> 880 Oakland, Calif.				<b>KPQ</b> 1210 Seattle, Wash.			
<b>KLZ</b> 560 Denver, Colo.	95			<b>KPRC</b> 920 Houston, Texas			
<b>KMA</b> 930 Shenandoah, Iowa				<b>KPSN</b> 950 Pasadena, Calif.			
<b>KMBC</b> 950 Independence, Mo.	33			<b>KQV</b> 1380 Pittsburgh, Pa.			
<b>KMED</b> 1310 Medford, Ore.				<b>KQW</b> 1010 San Jose, Calif.			
<b>KMIC</b> 1120 Inglewood, Calif.				<b>KPWF</b> 1490 Westminster, Calif.			
<b>KMJ</b> 1200 Fresno, Calif.				<b>KRE</b> 1370 Berkeley, Calif.			
<b>KMMJ</b> 740 Clay Center, Nebr.				<b>KRGV</b> 1260 Harlingen, Texas			
<b>KMO</b> 1340 Tacoma, Wash.				<b>KRLD</b> 1040 Dallas, Texas			
<b>KMOX</b> 1090 St. Louis, Mo.				<b>KRMD</b> 1310 Shreveport, La.			
<b>KMTR</b> 570 Hollywood, Calif.				<b>KRSC</b> 1120 Seattle, Wash.			
<b>KNX</b> 1050 Los Angeles, Calif.	26			<b>KSAC</b> 580 Manhattan, Kans.			
<b>KOA</b> 830 Denver, Colo.	45			<b>KSBA</b> 1450 Shreveport, La.			
<b>KOAC</b> 560 Corvallis, Ore.				<b>KSCJ</b> 1330 Sioux City, Iowa			
<b>KOB</b> 1180 State College, N. M.				<b>KSD</b> 550 St. Louis, Mo.			
<b>KOCW</b> 1420 Chickasha, Okla.				<b>KSEI</b> 900 Pocatello, Idaho			
<b>KOH</b> 1370 Reno, Nevada				<b>KSL</b> 1130 Salt Lake City			
<b>KOIL</b> 1260 Council Bluffs, Iowa				<b>KSMR</b> 1200 Santa Maria, Calif.			
<b>KOIN</b> 940 Portland, Ore.				<b>KSO</b> 1380 Clarinda, Iowa			
<b>KOL</b> 1270 Seattle, Wash.				<b>KSOO</b> 1110 Sioux Falls, S. Dak.			
<b>KOMO</b> 920 Seattle, Wash.				<b>KSTP</b> 1460 St. Paul, Minn.			
<b>KOOS</b> 1370 Marshfield, Ore.				<b>KTAB</b> 550 Oakland, Calif.			
<b>KORE</b> 1420 Eugene, Ore.				<b>KTAP</b> 1420 San Antonio, Texas			
<b>KOW</b> 1390 Denver, Colo.				<b>KTAT</b> 1240 Ft. Worth, Texas			
<b>KPCB</b> 1210 Seattle, Wash.				<b>KTBI</b> 1300 Los Angeles, Calif.			

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KTBR	1300					KXL	1250				
Portland, Ore.						Portland, Ore.					
KTHS	800					KXO	1200				
Hot Springs, Ark.						El Centro, Cal.					
KTM	780					KXRO	1420				
Santa Monica, Cal.						Aberdeen, Wash.					
KTNT	1170					KYA	1230				
Muscatine, Iowa		18				San Francisco, Calif.					
KTSA	1290					KYW	1020				
San Antonio, Texas						Chicago, Ill.					
KTUE	1420					KYWA	1020				
Houston, Texas						Chicago, Ill.					
KTW	1270					KZM	1370				
Seattle, Wash.						Hayward, Calif.					
KUJ	1500					NAA	690				
Longview, Wash.						Arlington, Va.					
KUOA	1390					WAAD	1420				
Fayetteville, Ark.						Cincinnati, Ohio					
KUOM	570					WAAF	920				
Missoula, Mont.						Chicago, Ill.					
KUSD	890					WAAM	1250				
Vermillion, S. Dak.						Newark, N. J.					
KUT	1120					WAAT	1070				
Austin, Texas						Jersey City, N. J.					
KVI	1340					WAAW	660				
Tacoma, Wash.						Omaha, Nebr.					
KVL	1370					WABC	860				
Seattle, Wash.						New York City					
KVOO	1140					WABF	1440				
Tulsa, Okla.		20				Kingston, Pa.					
KVOS	1200					WABI	1200				
Bellingham, Wash.						Bangor, Maine					
KWBS	1500					WABO	1440				
Portland, Ore.						Rochester, N. Y.					
KWCR	1310					WABY	1310				
Cedar Rapids, Iowa						Philadelphia, Pa.					
KWEA	1210					WABZ	1200				
Shreveport, La.						New Orleans, La.					
KWG	1200					WADC	1320				
Stockton, Calif.						Akron, Ohio					
KWJJ	1060					WAFD	1500				
Portland, Ore.						Detroit, Mich.					
KWK	1350					WAGM	1310				
St. Louis, Mo.						Royal Oak, Mich.					
KWKC	1370					WAIU	640				
Kansas City, Mo.						Columbus, Ohio					
KWKH	850					WALK	1500				
Shreveport, La.						Willow Grove, Pa.					
KWLC	1270					WAPI	1140				
Decorah, Iowa						Birmingham, Ala.		20			
KWSC	1390					WASH	1270				
Pullman, Wash.						Grand Rapids, Mich.					
KWTC	1500					WBAA	1400				
Santa Ana, Calif.						Lafayette, Ind.					
KWWG	1260					WBAK	1430				
Brownsville, Texas						Harrisburg, Pa.					
KWYO	600					WBAL	1060				
Laramie, Wyo.						Baltimore, Md.					
KXA	570					WBAP	800				
Seattle, Wash.						Fort Worth, Texas					

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WBAW 1490 Nashville, Tenn.	5				WCAM 1280 Camden, N. J.				
WBAX 1210 Wilkes-Barre, Pa.					WCAO 600 Baltimore, Md.				
WBBC 1400 Brooklyn, N. Y.					WCAP 1280 Asbury Park, N. J.				
WBBL 1370 Richmond, Va.					WCAT 1200 Rapid City, S. D.				
WBBM 770 Chicago, Ill.					WCAU 1170 Philadelphia, Pa.				
WBCM 1410 Bay City, Mich.					WCAX 1200 Burlington, Vt.				
WBBR 1300 Rossville, N. Y.					WCAZ 1070 Carthage, Ill.				
WBBW 1200 Norfolk, Va.					WCBA 1440 Allentown, Pa.				
WBBY 1200 Charleston, S. C.					WCBD 1080 Zion, Ill.				
WBBZ 1200 Ponca City, Okla.					WCBM 1370 Baltimore, Md.				
WBET 1360 Boston, Mass.					WCBS 1210 Springfield, Ill.				
WBIS 1230 Boston, Mass.					WCCO 810 Minneapolis-St. Paul				
WBMH 1310 Detroit, Mich.					WCDA 1350 Brooklyn, N. Y.				
WBMS 1450 Union City, N. J.					WCFL 970 Chicago, Ill.				
WBNY 1350 New York City					WCGU 1400 Coney Island, N. Y.				
WBOQ 860 New York City					WCLB 1500 Brooklyn, N. Y.				
WBOW 1310 Terre Haute, Ind.					WCLO 1200 Kenosha, Wis.				
WBRC 930 Birmingham, Ala.					WCLS 1310 Joliet, Ill.				
WBRE 1310 Wilkes-Barre, Pa.					WCMA 1400 Culver, Ind.				
WBRL 1430 Tilton, N. H.					WCOA 1120 Pensacola, Fla.				
WBSO 780 Wellesley H'ls, Mass.					WCOC 880 Columbus, Miss.				
WBT 1080 Charlotte, N. C.					WCOH 1210 Greenville, N. Y.				
WBZ 990 Springfield, Mass.					WCRW 1210 Chicago, Ill.				
WBZA 990 Boston, Mass.					WCSH 940 Portland, Maine				
WCAC 600 Storrs, Conn.					WCSD 1380 Springfield, Ohio				
WCAD 1220 Canton, N. Y.					WCX 750 Detroit, Mich.				
WCAE 1220 Pittsburgh, Pa.					WDAE 620 Tampa, Fla.				
WCAH 1430 Columbus, Ohio					WDAF 610 Kansas City, Mo.		20		
WCAJ 590 Lincoln, Nebr.					WDAG 1410 Amarillo, Texas				
WCAL 1250 Northfield, Minn.					WDAH 1310 El Paso, Texas				

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WDAY	1280					WEW	760				
Fargo, N. D.						St. Louis, Mo.					
WDBJ	930	35				WFAA	1040				
Roanoke, Va.						Dallas, Texas					
WDBO	620					WFAN	610				
Orlando, Fla.		77				Philadelphia, Pa.					
WDEL	1120					WFBC	1200				
Wilmington, Del.						Knoxville, Tenn.					
WDGY	1390					WFBE	1200				
Minneapolis, Minn.						Cincinnati, Ohio					
WDOD	1280					WFBG	1310				
Chattanooga, Tenn.						Altoona, Pa.					
WDRC	1330					WFBJ	1370				
New Haven, Conn.						Collegeville, Minn.					
WDSU	1270					WFBL	900-1490				
New Orleans, La.						Syracuse, N. Y.					
WDWF	1210					WFBM 1050-1230					
Cranston, R. I.						Indianapolis, Ind.			15		
WDZ	1070					WFBR	1270				
Tuscola, Ill.						Baltimore, Md.					
WEAF	660					WFDF	1310				
New York City						Flint, Mich.					
WEAI	1270					WFI	560				
Ithaca, N. Y.						Philadelphia, Pa.					
WEAM	1370					WFIW	940				
Plainfield, N. J.						Hopkinsville, Ky.					
WEAN	550					WFJC	1450				
Providence, R. I.		97				Akron, Ohio					
WEAO	550					WFKD	1310				
Columbus, Ohio						Philadelphia, Pa.					
WEAR	1070					WFLA	900				
Cleveland, Ohio						Clearwater, Fla.					
WEBC	1280					WGAL	1310				
Superior, Wis.						Lancaster, Pa.					
WEBE	1210					WGBB	1210				
Cambridge, Ohio						Freeport, N. Y.					
WEBQ	1210					WIBC	1430				
Harrisburg, Ill.						Memphis, Tenn.					
WEBR	1310					WGBF	630				
Buffalo, N. Y.						Evansville, Ind.					
WEBW	600					WGBI	880				
Beloit, Wisc.						Scranton, Pa.					
WEDC	1210					WGBS	1180				
Chicago, Ill.						New York City					
WEDH	1420					WGCM	1210				
Erie, Pa.						Gulfport, Miss.					
WEBI	590					WGCP	1250				
Boston, Mass.						Newark, N. J.					
WEHS	1310					WGES	1360				
Evanston, Ill.						Chicago, Ill.					
WELK	1370					WGH	1310				
Philadelphia, Pa.						Newport News, Va.					
WEMC	590					WGHP	1240				
Berrien Spgs., Mich.						Detroit, Mich.					
WENR	870					WGL	1230				
Chicago, Ill.						Ft. Wayne, Ind.					
WEPS	1200					WGMS	1250				
Gloucester, Mass.						St. Paul-Minneapolis					
WEVD	1300					WGN	720				
Woodhaven, N. Y.						Chicago, Ill.					

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WGR	550				WIAS	1420			
Buffalo, N. Y.					Ottumwa, Iowa				
WGST	890				WIBA	1210			
Atlanta, Ga.					Madison, Wis.				
WGY	790				WIBG	930			
Schenectady, N. Y.					Elkins Park, Pa.				
WHA	570				WIBM	1370			
Madison, Wisc.					Jackson, Mich.				
WHAD	1120				WIBO	570			
Milwaukee, Wisc.		77			Chicago, Ill.				
WHAM	1150				WIBR	1420			
Rochester, N. Y.					Steubenville, Ohio				
WHAP	1300				WIBS	1450			
New York City					Elizabeth, N. J.				
WHAS	820				WIBU	1310			
Louisville, Ky.		45			Poynette, Wisc.				
WHAZ	1300				WIBW	1300			
Troy, N. Y.					Topeka, Kansas				
WHB	950				WIBX	1200			
Kansas City, Mo.					Utica, N. Y.				
WHBC	1200				WIBZ	1500			
Canton, Ohio					Montgomery, Ala.				
WHBD	1370				WICC	1190			
Bellefontaine, Ohio					Bridgeport, Conn.				
WHBF	1210				WIL	1420			
Rock Island, Ill.					St. Louis, Mo.				
WHBL	1410				WILL	890			
Sheboygan, Wisc.					Urbana, Ill.				
WHBP	1310				WILM	1500			
Johnstown, Pa.					Wilmington, Del.				
WHBQ	1370				WINR	1210			
Memphis, Tenn.					Bay Shore, N. Y.				
WHBU	1210				WIOD	1240			
Anderson, Ind.					Miami Beach, Fla.				
WHBW	1500				WIP	610			
Philadelphia, Pa.					Philadelphia, Pa.				
WHBY	1200				WISN	1120			
West De Pere, Wisc.					Milwaukee, Wisc.				
WHDI	1390				WJAD	1240			
Minneapolis, Minn.					Waco, Texas				
WHDF	1370				WJAG	1060			
Calumet, Mich.					Norfolk, Nebr.				
WHDL	1420				WJAK	1310			
Tupper Lake, N. Y.					Kokomo, Ind.				
WHEC	1440				WJAR	890			
Rochester, N. Y.					Providence, R. I.				
WHFC	1310				WJAS	1290			
Chicago, Ill.					Pittsburgh, Pa.				
WHK	1390				WJAX	1260			
Cleveland, Ohio					Jacksonville, Fla.				
WHN	1010				WJAY	1450			
New York City					Cleveland, Ohio				
WHO	1000				WJAZ	1480			
Des Moines, Iowa					Chicago, Ill.				
WHOH	830				WJBC	1200			
Gloucester, Mass.					La Salle, Ill.				
WHPP	1420				WJBI	1210			
New York City					Red Bank, N. J.				
WHT	1480				WJBK	1370			
Chicago, Ill.					Ypsilanti, Mich.				

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WJBL 1200				WKY 900			
Decatur, Ill.				Oklahoma City			
WJBO 1370				WLAC 1490			
New Orleans, La.				Nashville, Tenn.			
WJBU 1210				WLAP 1200			
Lewisburg, Pa.				Louisville, Ky.			
WJBW 1200				WLB 1250			
New Orleans, La.				Minneapolis, Minn.			
WJBY 1210				WLBC 1310			
Gadsden, Ala.				Muncie, Ind.			
WJJD 1180				WLBFB 1420			
Mooseheart, Ill.				Kansas City, Mo.			
WJKS 1360				WLBG 1200			
Gary, Ind.				Petersburg, Va.			
WJR 750				WLBH 1420			
Detroit, Mich.				Farmingdale, N. Y.			
WJSV 1460				WLBL 900			
Washington, D. C.				Stevens Point, Wisc.			
WJZ 760				WLBO 1310			
New York City				Galesburg, Ill.			
WKAQ 890				WLBV 1210			
San Juan, P. R.				Mansfield, Ohio			
WKAR 1040				WLBW 1260			
East Lansing, Mich.				Oil City, Pa.			
WKAV 1310				WLBX 1500			
Laconia, N. H.				Long Island City, N. Y.			
WKBB 1310				WLBZ 620			
Joliet, Ill.				Bangor, Me.			
WKBC 1310				WLCI 1210			
Birmingham, Ala.				Ithaca, N. Y.			
WKBE 1200				WLEX 1420			
Webster, Mass.				Lexington, Mass.			
WKBFB 1400				WLIB 720			
Indianapolis, Ind.				Chicago, Ill.			
WKBH 1380				WLIT 560			
La Crosse, Wisc.	42			Philadelphia, Pa.			
WKBI 1310				WLOE 1500			
Chicago, Ill.				Chelsea, Mass.			
WKBN 570				WLS 870			
Youngstown, Ohio				Chicago, Ill.			
WKBO 1450				WLSI 1210			
Jersey City, N. J.				Cranston, R. I.			
WKBP 1420				WLTH 1400			
Battle Creek, Mich.				Brooklyn, N. Y.			
WKBQ 1350				WLW 700			
New York City				Cincinnati, Ohio			
WKBS 1310				WLWL 1100			
Galesburg, Ill.				New York City			
WKBV 1500				WMAC 570			
Brookville, Ind.				Cazenovia, N. Y.			
WKBW 1470				WMAF 1360			
Buffalo, N. Y.				S. Dartmouth, Mass.			
WKBZ 1500				WMAK 900			
Ludington, Mich.				Buffalo, N. Y.			
WKEN 1040				WMAL 630			
Grand Island, N. Y.				Washington, D. C.			
WKJC 1200				WMAN 1210			
Lancaster, Pa.				Columbus, Ohio			
WKRC 550				WMAQ 670			
Cincinnati, Ohio				Chicago, Ill.			

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WMAY 1200					WNBJ 1310				
St. Louis, Mo.					Knoxville, Tenn.				
WMAZ 890					WNBO 1200				
Macon, Ga.					Washington, Pa.				
WMBA 1500					WNBQ 1500				
Newport, R. I.					Rochester, N. Y.				
WMBC 1420					WNBR 1430				
Detroit, Mich.					Memphis, Tenn.				
WMBD 1440					WNBW 1200				
Peoria Heights, Ill.					Carbondale, Pa.				
WMBF 560					WNBX 1200				
Miami Beach, Fla.					Springfield, Vt.				
WMBG 1210					WNBZ 1290				
Richmond, Va.					Saranac Lake, N. Y.				
WMBH 1420					WNJ 1450				
Joplin, Mo.					Newark, N. J.				
WMBI 1080					WNOX 560				
Chicago, Ill.					Knoxville, Tenn.				
WMBJ 1500					WNRC 1440				
Wilkinsburg, Pa.					Greensboro, N. C.				
WMBL 1310					WNYC 570				
Lakeland, Fla.					New York City				
WMBM 1500					WOAI 1190				
Memphis, Tenn.					San Antonio, Texas				
WMBO 1370					WOAN 600				
Auburn, N. Y.					Lawrenceburg, Tenn.				
WMBQ 1500					WOAX 1280				
Brooklyn, N. Y.					Trenton, N. J.				
WMBR 1210					WOBT 1310				
Tampa, Fla.					Union City, Tenn.				
WMBS 1430					WOBU 580				
Lemoyne, Pa.					Charleston, W. Va.				
WMC 780					WOC 1000				
Memphis, Tenn.					Davenport, Iowa				
WMCA 570					WOCL 1210				
New York City					Jamestown, N. Y.				
WMES 1500					WODA 1250				
Boston, Mass.					Paterson, N. J.				
WMMN 890					WOI 560				
Fairmont, W. Va.					Ames, Iowa				
WMPC 1500					WOKO 1440				
Lapeer, Mich.					Peekskill, N. Y.				
WMRJ 1420					WOL 1310				
Jamaica, N. Y.					Washington, D. C.				
WMSG 1350					WOMT 1210				
New York City					Manitowoc, Wis.				
WMT 1200					WOO 1500				
Waterloo, Iowa					Philadelphia, Pa.				
WNAC 1230					WOOD 1270				
Boston, Mass.					Grand Rapids, Mich.				
WNAD 1010					WOQ 610				
Norman, Okla.					Kansas City, Mo.				
WNAT 1310					WOR 710				
Philadelphia, Pa.					Newark, N. J.				
WNAX 570					WORD 1480				
Yankton, S. D.	89				Batavia, Ill.				
WNB 1500					WOS 630				
Binghamton, N. Y.					Jefferson City, Mo.				
WNBH 1310					WOV 1130				
New Bedford, Mass.					New York City				



**A COMPLETE INDEX BY CALL LETTERS**

<b>WOW</b> 590				<b>WRC</b> 950			
Omaha, Nebr.				Washington, D. C.			
<b>WOWO</b> 1160				<b>WREC</b> 600			
Fort Wayne, Ind.				Memphis, Tenn.			
<b>WPAP</b> 1010				<b>WREN</b> 1220			
Cliffside, N. J.				Lawrence, Kansas			
<b>WPAW</b> 1210				<b>WRHM</b> 1250			
Pawtucket, R. I.				Minneapolis, Minn.			
<b>WPCC</b> 570				<b>WRJN</b> 1370			
Chicago, Ill.				Racine, Wis.			
<b>WPCH</b> 810				<b>WRK</b> 1310			
Jersey City, N. J.				Hamilton, Ohio			
<b>WPG</b> 1100				<b>WRNY</b> 1010			
Atlantic City, N. J.				New York City			
<b>WPOR</b> 780				<b>WRR</b> 1280			
Norfolk, Va.				Dallas, Texas			
<b>WPRC</b> 1200				<b>WRUF</b> 1470			
Harrisburg, Pa.				Gainesville, Fla.			
<b>WPSC</b> 1230				<b>WRVA</b> 1110		21	
State College, Pa.				Richmond, Va.			
<b>WPSW</b> 1500				<b>WSAI</b> 800		11	
Philadelphia, Pa.				Cincinnati, Ohio			
<b>WPTF</b> 680				<b>WSAJ</b> 1310			
Raleigh, N. C.				Grove City, Pa.			
<b>WQAM</b> 1240				<b>WSAN</b> 1440			
Miami, Fla.				Allentown, Pa.			
<b>WQAN</b> 880				<b>WSAR</b> 1450			
Scranton, Pa.				Fall River, Mass.			
<b>WQAO</b> 1010				<b>WSAZ</b> 580			
Cliffside, N. J.				Huntington, W. Va.			
<b>WQBC</b> 1360				<b>WSB</b> 740		33-	
Utica, Miss.				Atlanta, Ga.			
<b>WQBJ</b> 1200				<b>WSBC</b> 1210			
Clarksburg, W. Va.				Chicago, Ill.			
<b>WQBZ</b> 1420				<b>WSBT</b> 1230			
Weirton, W. Va.				South Bend, Ind.			
<b>WRAF</b> 1200				<b>WSEA</b> 780			
La Porte, Ind.				Portsmouth, Va.			
<b>WRAK</b> 1370				<b>WSGH</b> 1400			
Erie, Pa.				Brooklyn, N. Y.			
<b>WRAW</b> 1310				<b>WSIS</b> 1010			
Reading, Pa.				Sarasota, Fla.			
<b>WRAX</b> 1010				<b>WSIX</b> 1210			
Philadelphia, Pa.				Springfield, Tenn.			
<b>WRBC</b> 1240				<b>WSM</b> 650			
Valparaiso, Ind.				Nashville, Tenn.			
<b>WRBI</b> 1310				<b>WSMB</b> 1320			
Tifton, Ga.				New Orleans, La.			
<b>WRBJ</b> 1500				<b>WSMD</b> 1310			
Hattiesburg, Miss.				Salisbury, Md.			
<b>WRBL</b> 1200				<b>WSMK</b> 570			
Columbus, Ga.				Dayton, Ohio			
<b>WRBQ</b> 1210				<b>WSPD</b> 1340			
Greenville, Miss.				Toledo, Ohio			
<b>WRBT</b> 1370				<b>WSRO</b> 1420			
Wilmington, N. C.				Middletown, Ohio			
<b>WRBU</b> 1210				<b>WSSH</b> 1420			
Gastonia, N. C.				Boston, Mass.			
<b>WRBW</b> 1310				<b>WSUI</b> 580			
Columbia, S. C.				Iowa City, Iowa			

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<b>WSUN</b> 900 St. Petersburg, Fla.	<b>WWJ</b> 920 Detroit, Mich.
<b>WSVS</b> 1370	<b>WWL</b> 850
Buffalo, N. Y.	New Orleans, La.
<b>WSYR</b> 570	<b>WWNC</b> 570
Syracuse, N. Y.	Asheville, N. C.
<b>WTAD</b> 1440	<b>WWRL</b> 1500
Quincy, Ill.	Woodside, N. Y.
<b>WTAG</b> 580	<b>WWVA</b> 1160
Worcester, Mass.	Wheeling, W. Va. 2.0
<b>WTAM</b> 1070	<b>2BB</b> 1200
Cleveland, Ohio	Havana, Cuba
<b>WTAQ</b> 1330	<b>2LR</b> 1280
Eau Claire, Wis.	Havana, Cuba
<b>WTAR</b> 780	<b>2MG</b> 1050
Norfolk, Va.	Havana, Cuba
<b>WTAW</b> 1120	<b>2OK</b> 860
College Station, Tex.	Havana, Cuba
<b>WTAX</b> 1210	<b>2OL</b> 1170
Streator, Ill.	Havana, Cuba
<b>WTAZ</b> 1210	<b>2RK</b> 950
Richmond, Va.	Havana, Cuba
<b>WTBO</b> 1420	<b>2TW</b> 1110
Cumberland, Md.	Havana, Cuba
<b>WTFI</b> 1450	<b>2UF</b> 1090
Toccoa, Ga.	Havana, Cuba
<b>WTHS</b> 1310	<b>6BY</b> 1150
Atlanta, Ga.	Cienfuegos, Cuba
<b>WTIC</b> 600-1060	<b>6KW</b> 790
Hartford, Conn.	Tuinucu, Cuba
<b>WTMJ</b> 620	<b>7SR</b> 860
Milwaukee, Wis.	Elia, Cuba
<b>WWAE</b> 1370	
Hammond, Ind.	

## THE OUTPUT TRANSFORMER

The writer's set gave him some trouble by a gradual loss of volume until after a week or two it finally died altogether. Batteries and tubes tested OK and everything seemed right clear up to the loud-speaker unit. Putting on a set of head-phones each of the cord-tips was applied to the wires leading to the loud-speaker coil and the "program came in fine." This coil was therefore replaced and everything was as it should be but about a year later the thing happened again. It was not only expensive buying new speaker-coils but it was a lot of trouble tearing down the unit. An output transformer was purchased for \$3.50 and the speaker leads of the set were attached to this transformer while the leads of the transformer were attached to the speaker. The

results were gratifying beyond all hopes. Not only was the speaker unit protected from the voltage of the B battery as the current that entered this coil was now an inductance from the transformer, but the volume was increased greatly. Before, the set had seemed to choke up with too much volume and the filament rheostat would have to be turned back to clear up the tone. But with the output transformer, it would take all the current there was without choking while the volume would rouse the dead, even with distant stations. Of course it was not volume we wanted but a good clear tone and with the transformer we got not only this but a far better tone as well, with a deeper resonance in the bass notes than this set had ever given before.

INDEX BY LOCATIONS WITH MAP KEY

<b>ALABAMA</b>			Ontario	KFWC	1200
Birmingham K-19-a	WAPI	1140	Pasadena J-4	KPPC	1200
	WBRC	930		KPSN	950
	WKBC	1310	Sacramento H-2-a	KFBK	1310
Gadsden K-20-a	WJBY	1210	San Diego K-4-b	KFSD	600
Montgomery K-19-b	WIBZ	1500		KGB	1360
<b>ALASKA</b>			San Francisco H-1-c	KFRG	610
Anchorage	KFQD	1230		KFWI	930
Juneau	KFIU	1310		KGTT	1420
Ketchikan	KGBU	900		KJBS	1100
<b>ARIZONA</b>				KPO	680
Flagstaff J-7	KFXV	1420		KYA	1230
Phoenix K-7	KFAD	620	San Jose I-2	KQW	1010
	KFCB	1310	Santa Ana K-4	KWTC	1500
	KPJM	1500	Santa Barbara J-3	KFCR	1500
Prescott J-6	KGAR	1370	Santa Maria J-2-b	KSMR	1200
Tucson L-7			Santa Monica K-3	KTM	780
<b>ARKANSAS</b>			Stockton H-2-b	KGDM	1150
Blytheville I-18	KLCN	1290		KWG	1200
Fayetteville I-16	KUOA	1390	Westminster	KPWF	1490
Hot Springs J-16	KTHS	800			
Little Rock J-17	KGHI	1500	<b>COLORADO</b>		
	KGJF	890	Colorado Springs H-10	KFUM	1270
	KLRA	1390	Denver G-10-b	KFEL	940
	KGHG	1310		KFUP	1310
McGehee K-17	KFPW	1340		KFXF	940
Siloam Springs I-16				KLZ	560
<b>CALIFORNIA</b>				KOA	830
Berkeley H-1-a	KRE	1370		KOW	1390
Burbank J-4	KELW	780	Edgewater G-10	KPOF	880
Culver City K-3	KFVD	700	Fort Morgan G-11	KFXJ	1310
El Centro K-5	KXO	1200	Greeley F-10	KGW	1200
Fresno I-3	KMJ	1200	Gunnison H-9	KFKA	880
Glendale K-3	KGFB	1000	Pueblo H-11	KFHA	1200
Hayward H-2	KZM	1370		KGDP	1210
Hollywood K-3	KFQZ	850		KGHF	1320
	KMTR	570	Trinidad H-10	KGIW	1420
	KFQU	1420	Yuma G-11	KGEK	1200
Holy City I-2	KMIC	1120			
Inglewood K-4	KFOX	1250	<b>CONNECTICUT</b>		
Long Beach K-4-a	KGER	1370	Bridgeport F-26	WICC	1190
	KEJK	1250	Hartford E-26-d	WTIC	1060
	KFI	640	Mansfield E-27-i	WCAC	600
	KFSG	1120	New Haven F-26-b	WDRC	1330
	KFWB	950	<b>DELAWARE</b>		
	KGEF	1300	Wilmington G-25	WDEL	1120
	KGJF	1420		WILM	1500
	KHJ	900			
	KNX	1050	<b>DISTRICT OF COLUMBIA</b>		
	KPLA	570	Washington G-24-c	WMAL	630
	KTBI	1300		WRC	950
Oakland H-1-b	KFWM	930		WJSV	1460
	KGO	790		WOL	1310
	KLS	1440	<b>FLORIDA</b>		
	KLX	880	Clearwater N-21	WFLA	900
	KTAB	550	Gainesville M-21	WRUF	1470
			Jacksonville M-22	WJAX	1260

INDEX BY LOCATIONS WITH MAP KEY

Lakeland N-22	WMBL	1310	Decatur G-18	WJBL	1200
Miami O-23	WQAM	1240	Evanston E-19	WEHS	1390
Miami Beach O-23	WIOD	1240	Galesburg F-18-a	WKBS	1310
	WMBF	560		WLBO	1310
Orlando N-22	WDBO	620	Harrisburg H-18-b	WEBQ	1210
Pensacola L-19	WCOA	1120	Joliet E-19-f	WCLS	1310
Sarasota N-22	WSIS	1010		WKBB	1310
St. Petersburg N-21	WSUN	900	La Salle F-18-d	WJBC	1200
Tampa N-22-b	WDAE	620	Mooseheart E-18-e	WJJD	1180
	WMBR	1210	Peoria Heights G-18	WMBD	1440
<b>GEORGIA</b>			Quincy G-17	WTAD	1440
Atlanta K-20-a	WGST	890	Rockford E-18-c	KFLV	1410
	WSB	740	Rock Island F-17-c	WHBF	1210
	WTHS	1310	Springfield G-18	WCBS	1210
Columbus K-20	WRBL	1200	Streator F-18-e	WTAX	1210
Macon K-21	WMAZ	890	Tuscola G-19-b	WDZ	1070
Tifton L-21	WRBI	1310	Urbana G-19-a	WILL	890
Toccoa J-21	WTFI	1450	Zion E-19-c	WCBD	1080
<b>HAWAII</b>					
Honolulu	KGHB	1320	<b>INDIANA</b>		
	KGU	940	Anderson G-20-a	WHBU	1210
<b>IDAHO</b>			Brookville G-20	WKBV	1500
Boise D-4	KIDO	1250	Culver F-19-d	WCMA	1400
Idaho Falls D-7	KGIO	1320	Evansville H-19	WGBF	630
Jerome E-5	KFXD	1420	Fort Wayne F-20-b	WGL	1230
Kellogg B-5	KFEY	1210		WOWO	1160
Pocatello E-7	KSEI	900	Gary F-19	WJKS	1360
Sand Point A-4	KGKX	1420	Hammond F-19	WWAE	1200
Twin Falls E-5	KGIQ	1320	Indianapolis G-19-c	WFBM	1230
				WKBF	1400
<b>ILLINOIS</b>			Kokomo F-19-g	WJAK	1310
Batavia F-18-c	WORD	1480	Lafayette F-19-f	WBAA	1400
Carthage F-17-e	WCAZ	1070	La Porte F-19-c	WRAF	1200
Chicago E-19-g	KFKX	1020	Muncie G-20	WLBC	1310
	KYW	1020	South Bend F-20-a	WSBT	1230
	KYWA	1020	Terre Haute G-19	WBOW	1310
	WAAF	920	Valparaiso F-19-b	WRBC	1240
	WBBM	770			
	WCFL	970	<b>IOWA</b>		
	WCRW	1210	Ames E-16-c	WOI	560
	WEDC	1210	Boone E-16	KFGQ	1310
	WENR	870	Cedar Rapids E-17-a	KWCR	1310
	WGES	1360	Clarinda E-15-c	KSO	1380
	WGN	720	Council Bluffs F-15-b	KOIL	1260
	WHFC	1310	Davenport F-17-a	WOC	1000
	WHT	1480	Decorah D-17	KGCA	1270
	WIBO	570		KWLC	1270
	WJAZ	1480	Des Moines F-16-a	WHO	1000
	WKBI	1310	Fort Dodge E-16-a	KFJY	1310
	WLIB	720	Iowa City E-17-b	WSUI	580
	WLS	870	Marshalltown E-16-d	KFJB	1200
	WMAQ	670	Muscatine F-17-b	KTNT	1170
	WMBI	1080	Ottumwa F-17	WIAS	1420
	WPCC	570			
	WSBC	1210			

INDEX BY LOCATIONS WITH MAP KEY

Red Oak F-15	KICK	1420	Chelsea E-27	WLOE	1500
Shenandoah F-15-c	KFNF	890	Fall River E-27	WSAR	1450
	KMA	930	Gloucester E-27	WEPS	1200
Sioux City E-15	KSCJ	1330		WHOH	830
Waterloo F-17	WMT	1200	Lexington E-27	WLEX	1420
<b>KANSAS</b>			New Bedford E-27-g	WNBH	1310
Concordia G-14	KGCN	1420	South Dartmouth E-27	WMAF	1360
Lawrence G-15-a	KFKU	1220	Springfield E-26-b	WBZ	990
	WREN	1220	Webster E-27-d	WKBE	1200
Manhattan G-14-a	KSAC	580	Wellesley Hills E-27	WBSO	780
Milford G-14	KFKB	1130	Worcester E-27-b	WTAG	580
Topeka G-14	WIBW	1300	<b>MICHIGAN</b>		
Wichita H-14-a	KFH	1300	Battle Creek E-20	WKBP	1420
<b>KENTUCKY</b>			Bay City D-21	WBCM	1410
Hopkinsville I-19	WFIW	940	Berrien Springs E-19	WEMC	590
Louisville H-20	WHAS	820	Calumet B-18	WHDF	1370
	WLAP	1200	Detroit E-21-g	WAFD	1500
<b>LOUISIANA</b>				WBMH	1310
Cedar Grove M-17	KGGH	1310		WCX	750
New Orleans M-17	WABZ	1200		WGHP	1240
	WDSU	1270		WJR	750
	WJBO	1370		WMBC	1420
	WJBW	1200		WWJ	920
	WSMB	1320	East Lansing E-20-b	WKAR	1040
	WWL	850	Flint E-21-a	WDFD	1310
Shreveport K-16	KRMD	1310	Grand Rapids E-20-a	WASH	1270
	KSBA	1450		WOOD	1270
	KWEA	1210	Jackson E-20	WIBM	1370
	KWKH	850	Lapeer E-21	WMPC	1500
<b>MAINE</b>			Ludington D-19	WKBZ	1500
Bangor C-28-b	WABI	1200	Royal Oak E-21-e	WAGM	1310
	WLBZ	620	Ypsilanti E-21-f	WJBK	1370
Portland D-28-b	WCSH	940	<b>MINNESOTA</b>		
<b>MARYLAND</b>			Collegeville C-15	WFBJ	1370
Baltimore G-24-a	WBAL	1060	Fergus Falls B-15	KGDE	1200
	WCAO	600	Hallock A-14	KGFK	1200
	WCBM	1370	Minneapolis C-16-B	WCCO	810
	WFBR	1270		WDGY	1390
Cumberland G-23	WTBO	1420		WGMS	1250
Salisbury G-25	WSMD	1310		WHDI	1390
<b>MASSACHUSETTS</b>				WLB	1250
Boston E-27-c	WBET	1360		WRHM	1250
	WBIS	1230	Northfield D-16	KFMX	1250
	WBZA	990		WCAL	1250
	WEEL	590	St. Paul C-16-c	KSTP	1460
	WMES	1500		WCCO	810
	WNAC	1230		WGMS	1250
	WSSH	1420	<b>MISSISSIPPI</b>		
			Columbus K-18	WCOC	880
			Greenville K-17	WRBQ	1210
			Gulfport M-18	WGCM	1210
			Hattiesburg L-18	WRBJ	1500
			Utica L-17	WQBC	1360

INDEX BY LOCATIONS WITH MAP KEY

MISSOURI

Cape Girardeau H-18-c	KFVS	1210
Columbia G-16-b	KFRU	630
Independence G-16-c	KLDS	950
	KMBC	950
Jefferson City H-16-a	WOS	630
Joplin H-16	WMBH	1420
Kansas City G-15-b	KWKC	1370
	WDAF	610
	WHB	950
	WLBK	1420
	WOQ	610
Kirksville F-16-c	KFKZ	1200
St. Joseph G-15	KFEQ	560
	KGBX	1370
St. Louis H-18-a	KFUO	550
	KFWF	1200
	KMOX	1090
	KSD	550
	KWK	1350
	WEW	760
	WIL	1420
	WMAY	1200

MONTANA

Billings C-8	KGHL	950
Butte C-7	KGIR	1360
Havre A-8	KFBB	1360
Kalispell A-5	KGEZ	1310
Missoula B-6	KGHD	1420
	KUOM	570
Vida B-10	KGCC	1420

NEBRASKA

Clay Center G-14	KMMJ	740
Lincoln F-14-b	KFAB	770
	KFOR	1210
	WCAJ	590
Norfolk E-14-c	WJAG	1060
Omaha F-15-a	WAAW	660
	WOW	590
Ravenna F-13	KGFW	1420
York F-13	KGBZ	930

NEVADA

Reno G-3	KOH	1370
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NEW HAMPSHIRE

Laconia D-27	WKAU	1310
Tilton E-27	WBRL	1430

NEW JERSEY

Asbury Park G-26	WCAP	1280
Atlantic City G-25	WPG	1100
Camden F-25-f	WCAM	1280
Cliffside F-26	WPAP	1010
	WQAO	1010
Elizabeth F-26-h	WBS	1450
Jersey City F-26-d	WAAT	1070
	WKBO	1450
	WPCH	810
Newark F-25-h	WAAM	1250
	WGCP	1250
	WNJ	1450
	WOR	710
Paterson F-26-c	WODA	1250
Plainfield F-25	WEAM	1370
Red Bank G-26	WJBI	1210
Trenton F-25	WOAX	1280
Union City F-26	WBMS	1450

NEW MEXICO

Albuquerque	KGGM	1370
Raton I-11	KGFL	1370
State College K-9	KOB	1180

NEW YORK

Auburn E-24	WMBO	1370
Bay Shore F-26-h	WINR	1210
Binghamton E-25	WCGU	1400
Brooklyn F-26-f	WBBC	1400
	WCDA	1350
	WCLB	1500
	WLTH	1400
	WMBQ	1500
	WSGH	1400
Buffalo E-23-a	WEBR	1310
	WGR	550
	WKBW	1470
	WKEN	1040
	WMAK	900
	WSVS	1370
Canton D-25	WCAD	1220
Cazenovia E-25-b	WMAC	570
Coney Island F-26	WNBF	1500
Farmingdale F-26	WLBH	1420
Freeport F-26-i	WGBB	1210
Grand Island E-23	WCOH	1210
Greenville E-26	WEAI	1270
Ithaca E-24-d	WLCI	1210
	WMRJ	1420
Jamaica F-26-f	WOCL	1210
Jamestown E-23-b	WLBX	1500
Long Island City F-26		

INDEX BY LOCATIONS WITH MAP KEY

New York City F-26	WABC	860	Cincinnati G-20-e	WAAD	1420
	WBNY	1350		WFBE	1200
	WBCQ	860		WKRC	550
	WEAF	660		WLW	700
	WGES	1180		WSAI	800
	WHAP	1300	Cleveland F-22-a	WEAR	1070
	WHN	1010		WHK	1390
	WHPP	1420		WJAY	1450
	WJZ	760		WTAM	1070
	WKBQ	1350	Columbus G-21-b	WAIU	640
	WLWL	1100		WCAH	1430
	WMCA	570		WEAO	550
	WMSG	1350		WMAN	1210
	WNYC	570	Dayton G-21-e	WSMK	570
	WOV	1130	Hamilton G-20-d	WRK	1310
	WRNY	1010	Mansfield F-21	WLBV	1210
Peekskill F-26-a	WOKO	1440	Middletown G-20	WSRO	1420
Rochester E-24-b	WABO	1440	Springfield G-21-c	WCSO	1380
	WHAM	1150	Steubenville F-22	WIBR	1420
	WHEC	1440	Toledo F-21-a	WSPD	1340
	WNBQ	1500	Youngstown F-22	WKBN	570
Rossville F-26	WBBR	1300			
Saranac Lake D-26	WNBZ	1290	OKLAHOMA		
Schenectady E-25-c	WGY	790	Alva I-13	KGFF	1420
Syracuse E-24-c	WFBL	900	Chickasha J-14-b	KOCW	1420
	WSYR	570	Enid I-14	KGCB	1370
Troy E-21-a	WHAZ	1300	Norman J-14-a	WNAD	1010
Tupper Lake D-25	WHDL	1420	Oklahoma City I-14-b	KFJF	1470
Utica E-25-a	WIBX	1200		KFXR	1310
Woodhaven F-26	WEVD	1300		KGFG	1370
Woodside F-26	WWRL	1500		WKY	900
			Picher I-15	KGGF	1010
			Ponca City I-14	WBBZ	1200
			Tulsa I-15	KVOO	1140
NORTH CAROLINA					
Asheville J-21	WWNC	570	OREGON		
Charlotte J-22	WBT	1080	Astoria C-1-a	KFJI	1370
Gastonia J-22	WRBU	1210	Corvallis D-1	KOAC	560
Greensboro I-22	WNRC	1440	Eugene D-1	KORE	1420
Raleigh I-23	WPTF	680	Marshfield E-1	KOOS	1370
Wilmington J-24	WRBT	1370	Medford E-1	KMED	1310
			Portland C-1-b	KEX	1180
NORTH DAKOTA				KFEC	1370
Bismarck B-12	KFYR	550		KFIF	1420
Devils Lake A-13	KDLR	1210		KFJR	1300
Fargo B-14	WDAY	1280		KGW	620
Grand Forks A-14	KFJM	550		KOIN	940
Mandan B-12	KGCU	1200		KTBR	1300
				KWBS	1500
OHIO				KWJJ	1060
Akron F-22-b	WADC	1320		KXL	1250
	WFJC	1450	PENNSYLVANIA		
	WHBD	1370	Allentown F-25-c	WCBA	1440
Bellefontaine G-21-a	WEBE	1210		WSAN	1440
Cambridge F-22	WHBC	1200	Altoona F-24-c	WFBG	1310
Canton F-22-d			Carbondale F-25	WNBW	1200

INDEX BY LOCATIONS WITH MAP KEY

Elkins Park G-25-c	WIBG	930
Erie E-23	WEDH	1420
	WRAK	1370
Grove City F-23-b	WSAJ	1310
Harrisburg F-24-d	WBAK	1430
	WPRC	1200
Johnstown F-23-d	WHBP	1310
Kingston F-24	WABF	1440
Lancaster G-25-a	WGAL	1310
	WKJC	1200
Lemoyne G-24	WMB5	1430
Lewisburg F-24-b	WJBU	1210
Oil City F-23-a	WLBW	1260
Philadelphia G-25-d	WABY	1310
	WCAU	1170
	WELK	1370
	WFAN	610
	WFI	560
	WFKD	1310
	WHBW	1500
	WIP	610
	WLIT	560
	WNAT	1310
	WOO	1500
	WPSW	1500
	WRAX	1020
Pittsburgh F-23-c	KDKA	980
	KQV	1380
	WCAE	1220
	WJAS	1290
Reading F-25-d	WRAW	1310
Scranton F-25-a	WGBI	880
	WQAN	880
State College F-24-a	WPSC	1230
Washington F-23	WNBO	1200
Wilkes-Barre F-25-b	WBAX	1210
	WBRE	1310
Wilkesburg F-23	WMBJ	1500
Willow Grove G-25	WALK	1500
<b>PORTO RICO</b>		
San Juan	WKAQ	890
<b>RHODE ISLAND</b>		
Cranston F-27-a	WDWF	1210
	WLSI	1210
Newport F-27	WMBA	1500
Pawtucket E-27	WPAW	1210
Providence E-27-b	WEAN	550
	WJAR	890
<b>SOUTH CAROLINA</b>		
Charlestown K-23	WBBY	1200
Columbia K-22	WRBW	1310

<b>SOUTH DAKOTA</b>		
Brookings D-14	KFDY	550
	KGCR	1210
Dell Rapids D-14	KGDA	1370
Oldham D-14	KGDY	1200
Pierre D-12	KGFX	580
Rapid City D-11	WCAT	1200
Sioux Falls D-14	KSOO	1110
Vermillion E-14-b	KUSD	890
Yankton E-14-a	WNAX	570
<b>TENNESSEE</b>		
Chattanooga J-20	WDOD	1280
Knoxville I-20	WFBC	1200
	WNBj	1310
	WNOX	560
Lawrenceburg J-19	WOAN	600
Memphis J-18-a	WGBC	1430
	WHBQ	1370
	WMBM	1500
	WMC	780
	WNBR	1430
	WREC	600
Nashville I-19	WBAW	1490
	WLAC	1490
	WSM	650
Springfield I-19	WSIX	1210
Union City I-18	WOBT	1310
<b>TEXAS</b>		
Amarillo J-12	KGRS	1410
	WDAG	1410
	KUT	1120
Austin L-14-b	KFDM	560
Beaumont M-16	KFYO	1420
Breckenridge K-13	KWVG	1260
Brownsville O-14-b	KGKB	1500
Brownwood L-13	WTAW	1120
College Station M-13	KRLD	1040
Dallas L-15-a	WFAA	1040
	WRR	1280
	KFPL	1310
Dublin K-14	WDAH	1310
El Paso L-10	KFJZ	1370
Fort Worth L-14-a	KTAT	1240
	WBAP	800
Galveston M-15-b	KFLX	1370
	KFUL	1290
	KFPM	1310
Greenville K-15	KRGV	1260
Harlingen O-14	KPRC	920
Houston M-15-a	KTUE	1420
Richmond M-15	KGHX	1500



INDEX BY LOCATIONS WITH MAP KEY

San Angelo M-12	KGFI	1310
	KGKL	1370
San Antonio M-14-a	KGCI	1370
	KGDR	1500
	KGRC	1370
	KTAP	1420
	KTSA	1290
	WOAI	1190
Waco L-15-b	WJAD	1240
Wichita Falls K-14	KGKO	570

UTAH

Ogden F-7-b	KFUR	1370
Salt Lake City F-7-c	KDYL	1290
	KSL	1130

VERMONT

Burlington D-26-a	WCAX	1200
Springfield D-26-b	WNBX	1200

VIRGINIA

Arlington G-24-d	NAA	690
Newport News	WGH	1310
Norfolk I-24	WBBW	1200
	WPOR	780
	WTAR	780
Petersburg I-24	WLBG	1200
Portsmouth I-24	WSEA	780
Richmond H-24	WBBL	1370
	WMBG	1210
	WRVA	1110
	WTAZ	1210
Roanoke H-23	WDBJ	930

WASHINGTON

Aberdeen B-1	KXRO	1420
Bellingham A-1	KVOS	1200
Everett A-2	KFBL	1370
Lacey B-2-b	KGJ	1200
Longview B-1	KUJ	1500
Pullman B-4	KWSC	1390
Seattle B-2-a	KFQW	1420
	KJR	970
	KKP	1370
	KOL	1270
	KOMO	920
	KPCB	1210
	KPQ	1210
	KRSC	1120
	KTW	1270
	KVL	1370
	KXA	570
Spokane A-4	KFIO	1230
	KFPY	1390
	KGA	1470
	KHQ	590

Tacoma B-1-a	KMO	1340
	KVI	1340

WEST VIRGINIA

Charleston H-22	WOBU	580
Clarksburg G-22	WQBJ	1200
Fairmont G-23	WMMN	890
Huntington G-22	WSAZ	580
Weirton G-22	WQBZ	1420
Wheeling G-22	WWVA	1160

WISCONSIN

Beloit E-18-b	WEBW	600
Eau Claire D-17	WTAQ	1330
Fond du Lac D-18-d	KFIZ	1420
Kenosha E-19	WCLO	1200
La Crosse E-17	WKBH	1380
Madison E-18-2	WHA	570
	WIBA	1210
Manitowoc D-19	WOMT	1210
Milwaukee E-19-a	WHAD	1120
	WISN	1120
	WTMJ	620
Poynette D-18-e	WIBU	1310
Racine E-19	WRJN	1370
Sheboygan C-18	WHBL	1410
Stevens Point D-18-b	WLBL	900
Superior B-17	WEBC	1280
West De Pere D-19	WHBY	1200

WYOMING

Laramie F-10	KWYO	600
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CANADA  
ALBERTA

Calgary	CFAC	690
	CFCN	690
	CHCA	690
	CJCI	690
	CNRC	690
Edmonton	CHMA	580
	CJCA	580
	CKUA	580
	CNRE	580
Lethbridge	CJOC	1120
Red Deer	CHCT	840
	CKLC	840

BRITISH COLUMBIA

Chilliwack	CHWK	1210
Kamloops	CFJC	1120

INDEX BY LOCATIONS WITH MAP KEY

Sea Island	CJOR	1030	QUEBEC		
Vancouver	CHLS	730	Montreal	CFCF	730
	CKCD	730		CHYC	730
	CKFC	730		CKAC	730
	CKMO	730		CNRM	730
	CKWX	730	Quebec	CHRC	880
Victoria	CNRV	1030		CKCI	880
	CFCT	630		CKCV	880
			St. Hyacinthe	CNRQ	880
MANITOBA				CKSH	1010
Winnipeg	CKY	780	SASKATCHEWAN		
	CNRW	780	Fleming	CJRW	1010
NEW BRUNSWICK			Moose Jaw	CJRM	1010
Fredericton	CFNB	1210	Regina	CHWC	960
Moncton	CNRA	630		CJBR	960
St. John	CFBO	890		CKCK	960
				CNRR	960
NOVA SCOTIA			Saskatoon	CFQC	910
Halifax	CHNS	930		CJHS	910
				CNRS	910
ONTARIO			Yorkton	CJGX	630
Bowmanville	CKGW	960	HAITI		
Brantford	CKCR	1010	Port au Prince	HHK	830
Chatham	CFCO	1210	MEXICO		
Cobalt	CKMC	1210	Chihuahua	CZF	970
Hamilton	CHCS	880	Mazatlan	CYR	630
	CHML	880	Merida	CYY	550
	CKOC	880	Mexico City	CYA	1000
Iroquois Falls	CFCH	600		CYB	1090
King Twp.	CFRB	960		CYH	800
Kingston	CFMC	1120		CYJ	750
	CFRC	1120		CYL	750
London	CJGC	910		CYO	710
Midland	CKPR	1120		CYX	920
Ottawa	CKCO	690		CZE	860
	CNRO	690	Oaxaca	CYF	1130
Prescott	CFLC	1010	Puebla	CYU	960
Preston	CKPC	1210	Tampico	CYQ	930
Toronto	CFCA	840	Torreon	CYM	1330
	CFCL	580	Vera Cruz	CYC	890
	CHNC	580	CUBA		
	CJBC	580	Cienfuegos	6BY	1150
	CJBC	840	Elia	7SR	860
	CJBC	960	Havana	CMC	840
	CJSC	580		2BB	1200
	CKCL	580		2LR	1280
	CKNC	580		2MG	1050
	CKOW	840		2OK	860
	CNRT	840		2OL	1170
PRINCE EDWARD ISLAND				2RK	950
Charlottetown	CFCY	960		2TW	1110
	CHCK	960		2UF	1090
Summerside	CHGS	1120	Tuinucu	6KW	790

# WHAT'S ON THE AIR TONIGHT?

## A Weekly Calendar

### Leading Features of the Network Programs

Time is given by Eastern Standard. For Central Time, subtract one hour, for Mountain Time, two hours and for Pacific Time, three hours.

Station lists beginning with WEAf and WJZ are the National Broadcasting Co. Inc., while those beginning with WABC and WOR are the Columbia Broadcasting System.

#### Every Morning

**6:45-8:00 Tower Health Exercises**  
WEAF WEEI WFI WRC WGY  
WGR WCAE

**8:00-8:15 Rastus' Musical Menagerie**  
WEAF WEEI WGY

**8:15-8:30 Morning Devotions**  
WEAF WRC WGY WGR

**8:30-8:50 Cheerio**  
WEAF WEEI WRC WGY

**8:50-9:00 Parnassus Trio**  
WEAF WEEI WRC

**9:00-9:15 Virginia Arnold, Pianist**  
WJZ KWK WREN

**9:00-10:00 U. S. Navy Band**  
WEAF WEEI WRC WOC

**9:15-10:00 Three Little Maids**  
WJZ KWK WREN

**10:00-10:30 Dr. Royal S. Copeland**  
WJZ WBZ WBZA WHAM KDKA  
WLW WJR KFKX WREN WRC

**11:15-11:30 Radio Household Institute**  
WEAF WEEI WTIC WIAR WTAG  
WCSH SLIT WRC WGY WGR  
WCAE WTAM WWJ WSAI KSD  
KSTP WTMJ KVOO

#### Sunday

**1:30-2:00 Peerless Reproducers**  
WEAF WLIT WWJ WOV WTMJ  
WEFI WRC WSAI WDAF WTIC  
WGY KSD KVOO WSM WJAR  
WGR WOAI WFAA WTAG WCAE  
KYW KPRC WCS WTAM WSB  
KSTP

**2:00-3:00 Roxy Symphonic Concert**  
WJZ WBZ WBZA WBAL KYW  
KDKA WJR WTMJ WREN WLW  
WBC

**2:00-2:30 Biblical Drama**  
WEAF WTIC WCAE WSAI KSD  
WOW WDAF KVOO WFAA WHAS

**3:00-4:00 Symphonic Hour**  
WABC WOV WSPD WNAC WCAO  
WKRC KMOX WHK WEAN WJAS  
WGHP KMBC WCAU WFBL WADC  
WMAQ KOIL WLBW WMAL WKBW  
WCCO WISN

**3:00-4:00 Young People's Conference**  
WJZ WLW KWK WBT WBAL  
WSB KVOO KSTP WREN WTMJ

**3:00-4:00 Dr. Stephen S. Wise**  
WEAF WTIC WJAR WRC WSAI  
WGR

**4:00-5:00 Cathedral Hour**  
WABC KMOX WHK WNAC WCAO  
WKRC KMBC WMAQ WEAN WJAS  
WGHP KOIL WCAU WFBL WADC  
WOW WSPD WLBW WMAL WKBW  
WCCO

**4:00-5:00 Dr. S. Parkes Cadman**  
WEAF WEEI WTIC WJAR WTAG  
WHAS WCSH WLIT WGY WBT  
WGR WCAE WSAI WSB WFAA  
WOW KVOO WSM KOA WKY

**4:30-5:00 McKinney Musicians**  
WJZ WBZ WBZA WBAL WHAM  
KDKA WJR WLW KYW KWK  
WREN

**5:30-6:00 Dr. Harry Emerson Fosdick**  
WBZ WBZA WBAL WLW  
KWK WREN WHAM

**5:30-6:00 Rev. Donald Grey Barnhouse**  
WABC WCAU WNAC WEAN WFBL  
WJAS WADC WKRC WGHP WMAQ  
WOW KMOX KOIL WMAL WKBW  
WKBW

**6:00-6:30 The Stetson Parade**  
WEAF WTIC WJAR WTAG WCSH  
WEI WRC WGY WGF WCAE  
WTAM WWJ KSD WEEI WGN  
WOW WDAF KVOO WFAA KPRC  
WOAI WHAS WSM WSB WTMJ  
KSTP KOA WHO

**6:30-7:00 Acousticon Hour**  
WEAF WEEI WRC WGY WDAF  
WCAE WTAM WWJ WOV WCSH  
WFI WGR KSD WTIC WJAR  
WTAG WHO

**6:30-7:00 Whittall Anglo-Persians**  
WJZ WBZ WBZA WBAL WHAM  
KDKA WLW WJR KYW KWK  
WREN KOA WCCO WTMJ KSTP  
WBC KSL KPO KGO KFI  
KGW KOMO KHQ

**7:00-7:30 Old Company's Program**  
WEAF WEEI WTIC WJAR WTAG  
WCS WFI WRC WGY WGR

**7:30-8:00 At the Baldwin**  
WJZ WBZ WBZA WBAL WHAM  
WJR WLW KWK WREN KOA  
WHAS WSM WSB WFAA KPRC  
WOAI KYW WKY

**7:30-9:00 Major Bowes' Family**  
WEAF WTIC WRC WJAR WGY  
WCAE WTAM WHAS WSM WMC  
WGR

**8:00-8:15 The Enna Jettick Melodies**  
WJZ WBZ WBZA WBAL WHAM  
KDKA WTMJ WJR KYW KWK  
WREN WSB WHAS WSM WKY  
KVOO WFAA WOAI KSTP KPRC

8:00-8:30 Around the Samovar

WABC WFBL WCAO KMOX KOIL  
WBK WLBW WMAL WCCO

8:15-9:15 Colliers Radio Hour

WJZ WBZ WBZA WBAL WHAM  
KDKA WJR WLW KYW KWK  
WREN KOA KSTP

8:30-9:00 La Paliaa Hour

WABC WFBL WADC WOWO WSPD  
WNAC WKRC WGHP KMBC KMOX  
WEAN WJAS KOIL WHK WCAU  
WCAO WBBM WLBW WMAL WCCO

9:00-9:15 David Lawrence

WEAF WTIC WJAR WFAA WSB  
WTAG WCSH WRC WOW WGR  
WCAE KSD KVOO WHAS WGY  
WHO WOAI WBT WTMJ WKY

9:00-10:00 Majestic Theatre of the Air

WABC WMAK WKRC KMOX WNAC  
WCAO WGHP KMBC WEAN WJAS  
WOWO KOIL WHK WFBL WADC  
WSPD KGA WMAL WBBM WLBW  
WCAU KYA KMTR KEX KJR  
WCCO WTAR WNNC WDOD WBRC  
WREK KLZ KDYL KFJF WRR  
WBW KTSA WISN WDSU KLRA  
WDBJ

9:15-9:30 Utica Jubilee Singers

WJZ WBAL KDKA KWK WHAM

9:15-10:15 Atwater Kent Radio Hour

WEAF WEEI WRC WGR KSD  
WCAE WWJ WGN WGY WHO  
WOAI WFI WTAM WOW KVOO  
WFAA KPRC WSM WSB WBT  
KSTP KOA KPO KGO KFI  
KGW KOMO KHQ WKY KSL

9:45-10:00 El Tango Romantico

WJZ KDKA KWK WREN WBZ  
WBZA WHAM

10:00-10:30 De Forest Audions

WABC WCAU WNAC WEAN WFBL  
WMAK WCAO WJAS WADC KMOX  
WKRC WGHP WBBM WOWO WHK  
KMBC KOIL WSPD WLBW WMAL

10:15-10:45 Morley Singers

WJZ WLW KWK

10:15-11:00 National Light Opera

WEAF WFI WGY WTAM WHAS  
WSB KSTP KOA WHO

10:30-11:00 Souvenir

WABC WCAU WNAC WEAN WFBL  
WMAK WCAO WJAS WADC KMOX  
WKRC WGHP WSPD WOWO WHK  
KMBC KOIL WLBW WMAL WMAQ

Monday

10:30-11:30 Blue Birds Novelty

WJZ KFKX WREN KWK

12:45-1:45 Palais d'Or Orchestra

WEAF KSD WWJ

4:00-5:00 U. S. Marine Band

WJZ KWK WRC WJR WBZ  
WBZA

6:00-6:25 Waldorf-Astoria Music

WEAF WCAE WRC

7:00-7:30 South Sea Islanders

WJZ WBAL KWK

7:30-7:45 "The World Today,"

WEAF WLIT WFAA WOW WKY  
WTMJ

7:30-8:30 Roxy and his Gang

WJZ WBZ WBZA WHAM KDKA  
KWK WJR WSM WSB WBAL  
WREN WBT WRC KOA WLS  
WEBC

7:45-8:00 The Piano Twins

WEAF WOW WKY

8:00-8:30 School Daze

WOR WNAC WEAN WFBL WMAK  
WJAS WADC WKRC WMAQ KMOX  
KMBC KOIL WMAL WHK WLBW  
WCAU WGL WISN

8:00-8:30 Voice of Firestone

WEAF WEEI WTIC WJAR WTAG  
WCSH WLIT WRC WGY WGR  
WCAE WWJ KSD WOW WDAF  
KVOO WFAA KPRC WOAI WEEC  
WTMJ KYW WHAS WSM WSB  
WBT WRVA WJAX WTAM KSTP  
WOC WKY

8:30-9:00 Ceco Couriers

WOR WNAC WEAN WFBL WMAK  
WCAO WJAS WADC WKRC WGHP  
WMAQ KMOX KMBC KOIL WCAU  
WHK WSPD WMAL WGL WLBW

8:30-9:30 A. & P. Gypsies

WEAF WTIC WJAR WCSH WLIT  
WGY WCAE WTAM WWJ WGN  
KSD WDAF WRC WTAG WGR  
WEEI WOC

8:30-9:00 Automatic Duo Disc Duo

WJZ WBZ WBZA WBAL WHAM  
KDKA WLW KYW KWK WREN  
KOA WJR

9:00-9:30 Physical Culture Magazine

WOR WCAU WNAC WEAN WFBL  
WMAK WCAO WJAS WADC WKRC  
WGHP WMAQ KMOX KMBC WSPD  
WHN WLBW KOIL WMAL WGL

9:30-10:00 General Motors Party

WEAF WEEI WJAR WCSH WLIT  
WTAG WRC WGY WGR WCAE  
WTAM WWJ WGN WTMJ KSD  
WOW WDAF WFAA KPRC WOAI  
WHAS WSM WSB WBT WJAX  
KHQ KGO KFI KGW KSTP  
KOA KSL KPO KOMO

9:30-10:00 Vitaphone Jubilee

WOR WCAU WNAC WEAN WFBL  
WMAK WCAO WJAS WADC WKRC  
WGHP WMAQ KMOX KMBC WSPD  
WHK WLBW KOIL WMAL WGL  
KLZ KDYL KYA KEX KJR  
KGA KMTR

9:30-10:00 Real Folks

WJZ WBZ WBZA WBAL WHAM  
KDKA WJR WLW KYW KWK  
WREN

10:00-11:00 Show Boat

WOR WCAU WNAC WEAN WFBL  
WMAK WCAO WJAS WADC WKRC  
WGHP WMAQ KMOX KOIL WSPD  
WHK WLBW WMAL WOWO WCCO  
WISN

10:30-11:00 Empire Builders

WEAF WEEI WJAR WTAG WCSH  
WLIT WRC WGY WGR WCAE  
WTAM WWJ KYW KSD WOC  
WOW KSTP WTMJ WEEC WHAS  
WSB WBT WFAA KPRC WOAI  
WKY KOA KSL KPO KFI  
KGO KGW KOMO KHQ

11:00-11:30 National Grand Opera

WEAF WGR WWJ KSD WRC  
WFAA WSAI WRVA WJAX WKY

## Tuesday

**9:15-10:00 Harry Merker's Orchestra**  
WEAF WEEI WRC

**10:00-10:30 Ida Bailey Allen**  
WABC WCAU WNAC WEAN WFBL  
WKBW WCAO WJAS WADC WGHP  
WOWO KMOX KMBC KOIL WSPD  
WHK WMAL WBBM

**10:30-11:00 Blue Birds Novelty**  
WJZ KFXX WJR KWK WREN

**10:30-11:00 Jewel Radio Hour**  
WABC WFBL WCAO WJAS WADC  
WGHP WBBM KOIL WHK WMAL  
WKBW WOWO KMOX

**10:45-11:00 Harriet Wilson Food Club**  
WEAF WTC WJAR WTAG WCSH  
WFI WRC WGY WGR WTAM  
WVJ WSAI KYW KSD WOC  
WOW WDAF WTMJ WHAS WMC  
WSB WBT KVOO WFAA KPRC  
WOAI KSTP

**11:00-11:15 Parnassus Trio**  
WEAF WRC WGY KSD

**11:00-11:30 Radio School of Cookery**  
WJZ WBZ WBZA WHAM KDKA  
WLW WJR KWK

**2:15-3:15 Orpheus String Trio**  
WEAF WRC WGR

**4:30-5:00 Auction Bridge Game**  
WEAF WEEI WTC WJAR WTAG  
WCSH WLIT WRC WGY WGR  
WCAE WTAM WVJ WSAI WGN  
WTMJ KSD KOA WOW WDAF  
KVOO WFAA KPRC WOAI WHAS  
WSM WSB WBT WOC

**6:00-6:55 Waldorf-Astoria Music**  
WEAF WRC WCAE WFI

**6:30-7:00 Savannah Liner's Orchestra**  
WJZ WBZ WBZA

**7:00-7:30 Voters Service**  
WEAF WTC WJAR WTAG WCSH  
WFI WRC WGY WCAE KSD  
WOW WDAF KOA WHAS WBT  
WFAA WTMJ WMC

**7:30-8:00 Soconyland Sketches**  
WEAF WEEI WTC WJAR WTAG  
WCSH WGY WGR

**7:30-8:00 Fundamentals of the Law**  
WJZ WHAM WRVA WKY KWK  
KOA WHAS WOAI KSTP

**8:00-8:30 Genia Fonarova, Soprano**  
WEAF WFI WRC KSD

**8:00-8:30 Sweethearts**  
WABC WFAN WNAC WEAN WFBL  
WJAS KMOX WLBW WKBW WISN

**8:00-8:30 Stromberg-Carlson Sextet**  
WJZ WBZ WBZA WBAL WHAM  
KDKA WJR KYW KWK WREN  
WTMJ KSTP KVOO WFAA KPRC  
WOAI WHAS WSB WBT KOA  
WKY WSM

**8:30-9:00 Music Room**  
WABC WFAN WNAC WEAN WFBL  
WJAS KMOX WLBW WKBW

**8:30-9:00 Prophylactic Program**  
WEAF WEEI WTC WJAR WTAG  
WCSH WFI WRC WGY WGR  
WCAE WVJ KSD WOW WDAF  
WHO

**8:30-9:00 Michelin Hour**  
WJZ WBZ WBZA WBAL WHAM  
KVOO WFAA KPRC WOAI WJR  
KDKA KYW KWK WREN

**9:00-9:30 Three-In-One-Theatre**  
WJZ WBZ WBZA WBAL WHAM  
KDKA KYW KWK WREN WLW

**9:00-10:00 Eveready Hour**  
WEAF WEEI WJAR WFI WRC  
WGY WGR WCAE WTAM WVJ  
WGN KSD WMC WSB WDAF  
WHAS WSM KOMO KHQ KVOO  
WOAI KGO KFI KGW KOA  
KPO WHO KSTP WBC KSL

**9:00-10:00 Old Gold—Paul Whiteman**  
WABC WFAN WNAC WEAN WFBL  
WCAO WJAS WADC WKRC WGHP  
WOWO KMOX KMBC KOIL WSPD  
WHK WMAL WKBW WLBW WBBM  
WCCO WDBJ WTAR WREC KFJF  
WISN WDSU KLRA KEX KJR  
KGA KFH KTSA WWNC WLAC  
WDOD WBRC WRR KLZ KDYL  
KYA KMTR

**9:30-10:00 Dutch Masters Minstrel**  
WJZ WT MJ WBZ WBZA WBAL  
WHAM KDKA WLW KYW WREN  
WJR KWK WTMJ

**10:00-10:30 Clicquot Club Eskimos**  
WEAF WEEI WTC WJAR WCSH  
WFI WRC WGY WCAE WTAM  
WVJ WTMJ KSD WMC WDAF  
WFAA KPRC WOAI WHAS WSM  
WSB WBT KOA WTAG WGR  
KYW WOW KSTP WHO KSL  
KPO KGO KFI KGW KOMO  
KHQ

**10:00-11:00 Curtis Institute of Music**  
WABC WFAN WNAC WEAN WFBL  
WCAO WJAS WADC WKRC WGHP  
WOWO KMOX KMBC KOIL WSPD  
WMAL WKBW WLBW WBBM WTAR  
WWNC WLAC WDOD WBRC WREC  
KLZ KYA KMTR KJR  
KEX KGA KFJF KRLD KTSA  
WC WISN KLRA WDSU WDBJ  
WIBW

**10:30-11:00 The Contraltones**  
WEAF WFI WCAE WHO WRVA  
WJAX

**10:30-11:00 Orchestradians**  
WJZ WBZ WBZA WBAL WHAM  
KDKA WJR KYW KWK WREN  
KSTP KOA KSL KGO KPO  
KGW KFI KOMO KHQ

**11:00-12:00 Wrigley—Guy Lombardo**  
WABC WNAC WEAN WFBL WCAO  
WJAS WADC WCAU WGHP WBBM  
WOWO KMOX KMBC KOIL WSPD  
WHK WKBW WLBW WMAL KLZ  
KDYL KYA KMTR KJR KEX

**11:00-12:00 Radio Keith-Orpheum**  
WEAF WEEI WTC WJAR WTAG  
WCSH WFI WRC WGY WGR  
WCAE WTAM WVJ KYW KSD  
WHO WDAF KSTP WTMJ WBCB  
WJAX WHAS WSM WSB WMC  
WBT WRVA WFAA KPRC WOAI  
WKY KOA KSL KPO KGO  
KFI KGW KOMO KHQ

**11:00-12:00 Slumber Music**  
WJZ WRC WJAX

## Wednesday

**9:15-10:00 Harry Merker's Orchestra**  
WEAF WEEI WRC

**10:00-11:00 National Home Hour**  
WEAF WEEI WTIC WJAR WTAG  
WCSH WFI WRC WGR WGY  
WCAE WEAR WWJ WSAI WTMJ  
KSD KFKX WHO

**10:00-10:30 Ida Bailey Allen**  
WABC WCAU WNAC WEAN WFBL  
WMAK WCAO WJAS WADC WGHP  
WBBM WOWO KMOX KMBC  
WSPD WHK WMAL WRHM

**10:30-11:00 Blue Birds Novelty**  
WJZ KWK WREN WJR

**11:00-11:15 Parnassus Trio**  
WEAF WRC WGY KFKX KSD

**11:00-11:30 Radio School of Cookery**  
WJZ WBZ WBZA WHAM KDKA  
WLW KWK WJR

**12:45-1:45 Palais d'Or Orchestra**  
WEAF WWJ KSD

**2:15-3:15 Orpheus Trio**  
WEAF WRC WHO WGR

**4:00-5:00 U. S. Navy Band**  
WJZ WLW WRC WREN WBZ  
WBZA

**6:00-6:25 Waldorf-Astoria Music**  
WEAF WRC WCAE WTAG

**7:30-8:00 La Touraine Tableaux**  
WEAF WEEI WTIC WJAR WTAG  
WCSH WGY WGR WCAE WWJ  
WTAM WHAS WSB

**7:45-8:00 Frederic William Wile**  
WRC WJZ WBAL KDKA WLW  
WJR KWK WBZ WBZA

**8:00-8:30 Mobiloil Orchestra**  
WJZ WBZ WBZA WBAL WHAM  
KDKA WJR WLW KYW WREN  
KSTP WTMJ KOA KVOO WFAA  
KPRC WOAI WEBC

**8:00-8:30 The Crystal Gazer**  
WOR WNAC WEAN WFBL WMAK  
WCAO WJAS WADC WMAQ KMOX  
KOIL WLBW WCCO WISN

**8:30-9:00 Sylvania Foresters**  
WJZ KDKA WBZ WBZA WBAL  
WHAM WLW WJR KWK KYW  
WREN

**8:30-9:00 Thirty Minute Men**  
WOR WNAC WEAN WFBL WMAK  
WJAS WADC WMAQ KMOX KOIL  
WLBW WMAL WCAU

**8:30-9:00 The Intimate Musicals**  
WEAF WTIC WTAG WCSH WLIT  
WCAE KSD WWJ WRC KSD  
WOC WOW WMC

**9:00-9:30 Smith Brothers**  
WJZ WBZ WBZA WBAL WHAM  
WJR KYW KWK WREN KDKA

**9:00-9:30 Ipana Troubadours**  
WEAF WEEI WTIC WJAR WTAG  
WCSH WRC WGY WGR WCAE  
WTAM WWJ KPRC WOAI WHAS  
WSM WSB WBT KOA WTMJ  
KSD WOW WDAF WBAP WGN  
KSTP WOC KVOO

**9:00-9:30 Daguerreotypes**  
WOR WCAU WNAC WEAN WFBL  
WMAL WCAO WJAS WADC WLBW  
WKRC WGHP WMAQ KMOX KMBC  
WSPD KOIL WHK WMAK WGL  
WISN

**9:30-10:00 La Palina Smoker**  
WOR WCAU WNAC WEAN WFBL  
WMAK WCAO WJAS WADC KMOX  
WKRC WGHP WMAQ WOWO KOIL  
KMBC WSPD WHK WMAL WLBW  
WCCO

**9:30-10:30 Palmolive Hour**  
WEAF WJAX WSM WBT WEEI  
WRC WTIC WGY WGN WDAF  
WJAR WGR KSD KVOO WTAG  
WCAE KPRC WFAA WCS WTAM  
WOAI KOA WLIT WWJ WOW  
WTMJ WHAS KSTP WOC KPO  
KGO KFI KGW KOMO KHQ  
KSL

**9:30-10:00 The Cabin Door**  
WJZ WBAL KDKA WREN WJR

**10:00-10:30 Kolster Radio Hour**  
WOR WFBL WADC WOWO WHK  
WCAU WMAK WKRC KMOX KOIL  
WNAC WCAO WGHP KMBC WMAL  
WEAN WJAS WMAQ WSPD WLBW  
WCCO KLZ KDYL KYA KEX  
KJR KGA KMYR

**10:30-11:00 Night Club Romances**  
WOR WMAK WFBL WOWO WSPD  
WCAU WCAO WKRC KMOX WHK  
WNAC WJAS WGHP WLBW WEAN  
WADC WMAQ KOIL WMAL WCCO  
WISN

**11:00-12:00 Hal Kemp's Orchestra**  
WEAF KSD WOW WKY WCAE

**11:00-12:00 Slumber Music**  
WJZ WHAM WRC

## Thursday

**10:00-10:15 Harry Merker's Orchestra**  
WEAF WGR WOC

**10:00-10:30 Ida Bailey Allen**  
WABC WCAU WFBL WKBW WCAO  
WJAS WADC WGHP WBBM WOWO  
KMOX WSPD WHK WMAL WNAC  
WEAN

**10:30-11:00 Rit Program**  
WABC WCAU WFBL WKBW WCAO  
WJAS WADC WGHP WBBM WOWO  
KMOX WSPD WHK WMAL WNAC  
WEAN

**11:00-11:30 Radio School of Cookery**  
WJZ WBZ WBZA WHAM KDKA  
WLW WJR KWK

**4:00-5:00 U. S. Army Band**  
WJZ WRC WJR WREN

**6:00-6:55 Waldorf-Astoria Music**  
WEAF WRC WCAE WTAG WFI

**7:00-8:00 Ben Pollack's Orchestra**  
WJZ WKY WREN

**7:30-8:00 Coward Comfort Hour**  
WEAF WEEI WTIC WJAR WTAG  
WCSH

**8:00-8:30 The Song Shop**  
WEAF WTIC WJAR WTAG WCSH  
WFI WRC WGY WGR WCAE  
WTAM WWJ WTMJ WRHM WOW  
WDAF KOA WEEI KSD WHO  
KSTP

**8:00-8:30 Lehn and Fink Serenade**

WIZ	WBZ	WBZA	WBAL	WHAM
KDKA	WOAI	WLW	WIR	WFAA
KYW	KWK	KVOO	WFAA	KPRC
WREN	WKY			

**8:00-9:00 United Opera Company**

WABC	WNAC	WEAN	WFBL	WIAS
KMOX	KOIL	WLBW	WMAL	WKBW

**8:30-9:00 Hoover Sentinels**

WEAF	WEEI	WTAM	WFI	WRC
WGY	WCAE	WVI	KSD	WHAS
WSM	WOW	WSB	WFAA	WDAF
WGN	WGR	WHO	WKY	KSTP

**8:30-9:00 Champion Sparkers**

WIZ	WBZ	WBZA	WBAL	WHAM
KDKA	WLW	WREN	KWK	KYW
WJR				

**9:00-9:30 Seiberling Singers**

WEAF	WEEI	WTIC	WIAR	WTAG
WCSH	WFI	WRC	WGY	WGR
KPO	WVI	KFI	KSD	KHQ
KOA	WBT	WOW	WDAF	WFAA
KPRC	WHAS	WSM	WMC	WSB
WTMJ	KGO	KGW	WTAM	KYW
WHD	WJAX	KSTP	KOMO	WKY

**9:00-9:30 Aunt Jemima**

WABC	WFAN	WNAC	WEAN	WFBL
WCAO	WJAS	WADC	WKRC	WGHP
WBBM	WOWO	KMOX	KMBC	KOIL
WSPD	WHK	WLBW	WMAL	WKBW

**9:30-10:00 Sonora Phonograph Hour**

WABC	WFAN	WNAC	WEAN	WFBL
WMAL	WJAS	WADC	WKRC	WBBM
WGHP	WOWO	KMOX	KMBC	WSPD
WKBW	WHK	WLBW	KOIL	WCAO
WCCO	KEX	KJR	KFJF	WRR
KLZ	KDYL	KMTR	KYA	KGA
WTAR	WVNC	WLAC	WDOD	WREC
KLRA	KTSA	WDSU	WISN	WDBJ
WBRC	KFH			

**9:30-10:00 Maxwell House Hour**

WIZ	WBZ	WBZA	WBAL	WHAM
KDKA	WLW	WJR	KYW	KSD
WHO	WDAF	KVOO	WBAP	KPRC
WHAS	WSM	WSB	WBT	KOA
WOW	WEBC	WJAX	WTMJ	KSTP
WRVA				

**10:00-10:30 Columbians**

WABC	WFAN	WEAN	WNAC	WFBL
WJAS	WADC	WKRC	WGHP	WMAL
WOWO	KMOX	KMBC	WSPD	WKBW
WHK	WLBW	KOIL	WCAO	WBBM
WCCO	KLZ	KDYL	KMTR	KYA
KEX	KJR	KGA	WTAR	WVNC
WLAC	WDOD	WREC	KLRA	KFJF
KRLD	KTSA	WDSU	WISN	WDBJ
WBRC	KFH			

**10:00-10:30 Halsey Stuart Hour**

WEAF	WEEI	WTIC	WIAR	WTAG
WCSH	WFI	WRC	WGY	WGR
WCAE	WTMJ	KSD	WOW	KVOO
WFAA	WOAI	WHAS	WBT	KOA
WSB	WWJ	KYW	WHO	KPRC
KSTP				

**10:30-11:30 Palais d'Or Orchestra**

WEAF	WTIC	WFI	WGY	WWJ
WHO				

**10:30-11:00 Close-Ups**

WABC	WFAN	WNAC	WEAN	WCAO
WKRC	WGHP	KMBC	WSPD	WHK
WLBW	WMAL	WJAS	WADC	WOWO
KMOX	KOIL	WKBW	WFBL	WBBM
WISN				

**Friday****9:15-10:00 Harry Merker's Orchestra**

WFAF	WEEI	WRC
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**10:00-10:30 Ida Bailey Allen**

WABC	WNAC	WEAN	WCAO	WADC
WGHP	WBBM	KMOX	WMAL	WOWO
WMAK	KMBC	KOIL	WSPD	WHK
WCAU	WFBL	WJAS		

**10:00-11:00 National Home Hour**

WEAF	WEEI	WTIC	WTMJ	KSD
WIAR	WTAG	WCSH	WFI	WRC
WGY	WGR	WCAE	WWJ	WSAI
WEAR	KFKX	WHO		

**11:00-12:00 RCA Educational Hour**

WIZ	WBZ	WBZA	WBAL	WHAM
KDKA	WIR	WLW	KWK	KYW
WOW	WDAF	KVOO	WFAA	KPRC
WOAI	KOA	WTMJ	WHAS	WSM
WSB	WRVA	WSMB	WBT	KFKX
WRC	WHO	KSTP	WJAX	

**12:00-12:15 Jean Carroll**

WOR	WCAU	WNAC	WEAN	WFBL
WMAK	WCAO	WJAS	WADC	WKRC
WGHP	WMBC	WHK	WMAL	WBBM
WOWO	KOIL			

**12:00-12:15 Teeth and Health**

WEAF	WEEI	WTIC	WIAR	WTAG
WCSH	WLIT	WRC	WOW	WCAE
WTMJ	WSAI	WWJ	WGY	WGR
WEAR	KFKX	KSD	KSTP	WHO
WGR				

**12:45-1:45 Palais d'Or Orchestra**

WEAF	WWJ	KSD	WRC
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**4:00-5:00 U. S. Marine Band**

WIZ	WBZ	WBZA	WLW	WJR
KWK	KOA	WRC		

**5:00-5:30 Florida Citrus Growers**

WEAF	WEEI	WTIC	WIAR	WTAG
WCSH	WRC	WGY	WGR	WCAE
WTAM	WWJ	WSAI	KYW	KSD

**6:00-6:55 Waldorf-Astoria Music**

WEAF	WRC	WCAE
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**6:30-7:00 Raybestos Twins**

WEAF	WTIC	WIAR	WTAG	WCS
WFI	WRC	WGY	WGR	WCAE
WTAM	WWJ	KSD	WOW	WDAF
WOC	KOA	KSL	KPO	KGO
KFI	KGW	KOMO	KHQ	

**6:45-7:00 Enna Jettick Melodies**

WABC	WCAU	WNAC	WEAN	WFBL
WMAK	WJAS	WADC	WBBM	WOWO
KMOX	KOIL	KMBC	WHK	WLBW
WMAL	WRHM			

**7:00-7:30 Happy Wonder Bakers**

WEAF	WRC	WGR
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**7:15-7:30 Squibbs Health Talk**

WIZ	WBZ	WBZA	WHAM	KDKA
WJR	WLW	KYW	KWK	WREN
KSTP	WTMJ	KOA		

**7:30-8:00 Dixies Circus**

WIZ	WBZ	WBZA	WBAL	KDKA
WJR	WLW	KYW	WBT	WSB
WSM	WHAS			

**8:00-8:30 The Crystal Gazer**

WOR	WNAC	WEAN	WFBL	WMAK
WJAS	WKRC	WMAQ	KMOX	KOIL
WLBW	WMAL	WCAO	WGHP	WADC
WCAO	WHK	WISN		

**8:00-9:00 Cities Service Orchestra**

WEAF WEEL WLIT WRC WDAF  
 WCAE WTAM WWJ KSD WGR  
 WFAA KOA KYW WOC WKY  
 KSTP WGR

**8:30-9:00 The Armstrong Quakers**

WJZ WEAL WJR KWK WSB  
 WBZ WHAM WLW WREN WBZA  
 KDKA WBT WHAS WSM WLS

**8:30-9:00 Then and Now**

WOR WCAU WNAC WEAN WFBL  
 WMAK WJAS WKRC WMAQ KMOX  
 KOIL WLW WMAL WCCO WADC  
 WHK WKBW

**9:00-9:30 An Evening in Paris**

WEAF WEEL WTIC WRC WGR  
 WCAE WTAM WWJ WCSH WDAF  
 KSD WJAR WTAG WGN WLIT  
 WGY WOW WOC

**9:00-10:00 True Story Hour**

WOR WMAK WOWO WSPD WLBW  
 WCAU WCAO WKRC KMOX WMAL  
 WNAC WJAS WGHP KMBC WFBL  
 WEAN WADC WMAQ KOIL WHK

**9:00-10:00 Wrigley Review**

WJZ WBZ WBZA WBAL WHAM  
 KDKA WLW WJR KYW WREN  
 WHAS WSM WSB WBT WRVA  
 WJAX KGO WFAA WOAI KPO  
 KFI KGW KOMO KHQ KPRC  
 KOA KSD KSTP

**9:30-10:00 Schradertown Brass Band**

WEAF WEEL WDAF WTIC WJAR  
 WTAG WCSH WLIT WGY WGR  
 WCAE WWJ WOC KSD WOW

**9:30-10:00 Philco Hour**

WJZ WBZ WBZA WBAL WHAM  
 KDKA WLW WJR KYW KWK  
 WREN WFAA KPRC WOAI WHAS  
 WSM WSB WBT WTMJ

**10:00-10:30 United Choral Singers**

WOR WFBL WADC WMAQ WSPD  
 WCAU WMAK KOIL WHK WNAC  
 WCAO WKRC KMOX WLBW WEAN  
 WJAS WGHP KMBC WMAL WCCO  
 WISN

**10:00-11:00 Concert Bureau Hour**

WEAF WEEL WTIC WTAG WLIT  
 WRC WCAE WWJ KSD WGR  
 WOW WKY WGY WRVA WCSH  
 WRC

**10:00-10:30 Hudson-Essex Challengers**

WJZ WBZ WBZA WBAL WHAM  
 WRVA KDKA WLW WJR KYW  
 KWK WREN KVOO WFAA KPRC  
 WOAI WHAS WSM WBT WTMJ  
 KSTP WFCB KOA KSL KPO  
 KCO KFI KGW KOMO KHQ  
 WKY WSB WJAX

**10:30-11:00 Thirty Minute Men**

WOR WCAU WNAC WEAN WFBL  
 WMAK WCAO WJAS WADC WKRC  
 WGHP KMOX KMBC KOIL WSPD  
 WHK WLBW WMAL WMAQ WCCO  
 WISN

**11:00-12:00 Hotel St. Regis Orchestra**

WEAF WCAE WWJ KOA WOW  
 KSD WKY

**11:00-12:00 Slumber Music**

WJZ WLW WRC WTMJ WHAS

**Saturday**

**9:15-9:30 Harry Merker's Orchestra**

WEAF WEEL WRC

**9:30-10:30 U. S. Army Band**

WEAF WRC WEEL WGR WOC  
 KDKA

**12:30-1:30 Waldorf-Astoria Orchestra**

WEAF WEEL WRC WWJ

**3:30-4:30 RCA Demonstration Hour**

WBZ WBZA WJZ WHAM KDKA  
 WLW WJR KYW KWK KOA  
 WOAI WHAS WSB KPRC WFAA  
 KVOO WDAF WOW WTMJ WRC  
 WBT WOC KSTP

**6:30-7:00 Gold Spot Orchestra**

WJZ WBZ WBZA KDKA WLW

**6:30-7:00 White House Dinner Music**

WEAF WEEL WTIC WJAR WSB  
 WTAG WCSH WFI WRC WGY  
 WGR WCAE WTAM WWJ WLS  
 WBT WTMJ KSTP

**7:00-7:30 Phil Spitalny's Music**

WEAF WFI WRC WGY WSB

**7:30-8:00 Romance Isle**

WEAF WEEL WTIC WJAR WTAG  
 WCSH

**7:45-8:00 The World's Business**

WJZ WBAL WSM KDKA KWK  
 KOA WFAA WTMJ WRC

**8:00-8:30 Lew White Organ Recital**

WEAF WTIC WCAE WSAI KSD

**8:00-8:30 Pure Oil Band**

WJZ WBAL WHAM KDKA WJR  
 WLW KYW KWK WREN WTMJ  
 WHAS WSM WMC WSB WBT  
 WFAA KPRC WOAI WKY WRVA  
 WJAX WEBC KSTP

**8:30-9:00 Interwoven Entertainers**

WJZ WBZ WBZA WBAL WHAM  
 KDKA WJR WLW KYW KWK  
 WREN WHAS WMC WSB WBT  
 WFAA KPRC WOAI WKY WRVA  
 WJAX

**8:30-9:00 Marimba Orchestra**

WEAF WGY WCAE WWJ KSD  
 WHO WTIC WJAR WTAG

**9:00-10:00 General Electric Hour**

WEAF WEEL WTIC WJAR WTAG  
 WCSH WFI WRC WGY WGR  
 WCAE WTAM WWJ KSD WHO  
 WOW WDAF WTMJ KOA WHAS  
 WMC WSB WBT WFAA KPRC  
 WOAI WKY WJAX WRVA WEBC  
 KSL KPO KGO KHQ KGW  
 KOMO KFI

**10:00-11:00 Lucky Strike Orchestra**

WEAF KOA WRC KSD WEEL  
 WGR KPO WTMJ KSL WTIC  
 WCAE WOW KHQ WJAR WTAM  
 WDAF KGO WTAG WWJ KVOO  
 KFI WCSH WFAA WSB KGW  
 WFI WGN KPRC WBT KOMO  
 WGY WHO WOAI WJAX KSTP  
 WKY

**11:00-11:15 Penee Sisters**

WEAF WFI WCAE WWJ KSD  
 WHO WOW WKY

**11:15-12:00 Ben Pollack's Orchestra**

WEAF WCAE WWJ KSD WHO  
 WDAF WKY



## Those Short Waves

**T**HE following letter from J. Carroll Hay, Huntsville, Ala., is typical of many that we receive: "I am a subscriber to your magazine and think it a wonderful little book. I am now getting stations that I have never gotten before. I have a Kolster AC set with a Western Electric magnetic loud speaker. I have ordered the larger set with dynamic speaker. My first set was splendid and I am expecting big things out of the latter. I have been told that by a very simple plug-in attachment I would be able to get the principal foreign stations. Can you give me any information in regard to this attachment, its cost, where I can get parts or where I can buy one already built?"

There are now on the market parts for short-wave sets, kits for their construction and sets built ready for use by manufacturers. Any of these can be arranged to lead the signals to a plug which fits into the detector socket of any broadcast receiver. These signals then go through the audio amplification system of the regular set and out through head phones or loud speaker. Using the regular set in this way will of course do it no harm.

But this can certainly not be described as a simple "plug-in attachment" for the short-wave receiver is not only a complete radio set in itself but is much more delicate, sensitive and tricky than an ordinary set. In fact the short-wave receiver may be said to be today where the broadcast receiver was back in 1923.

*(Continued on page 64)*

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**LESTER L. SARGENT**

*Registered Patent Attorney*

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## QUESTION BOX

*(Continued from page 11)*

I am using a super-heterodyne receiver, tone quality and DX reception are wonderful. I still find some difficulty in tuning distance because of the numerous whistles that are always prevalent at many points on the dial. These are not re-generative whistles caused by my own receiver because I get them when the intermediate amplifier is not oscillating. During daylight I have much less trouble from this source and also after midnight the number of whistles gradually diminish. The receiver is a straight seven tube super with a loop antenna.

Your trouble lies in the fact that your loop circuit tunes too broadly. As a result several signals are present in your first tube circuit at the same time that you are trying to tune in signals. These frequencies or beats between some of these frequencies and the fundamental or harmonic frequencies of your oscillator combine to give you heterodyne beats of audible frequency. Check over the circuit of your first tube to make sure that there are no poor connections that might provide high resistance and therefore give you broad tuning. In the event that you cannot eliminate this trouble yourself, I suggest that you call a radio service man to repair your set.

When I tune in station KDKA Pittsburgh, I hear a constant whistle which in my estimation cannot be a heterodyne, because there isn't another station on the same wavelength.

The station that is heterodyning is not necessarily on the same wavelength that you are tuned to. It can be 10 kilocycles above or below this station.

The whistle that you are receiving may be somebody tuned to the same station that you are tuned to. In this event, the set is of an oscillating type.

The interference that you are receiving can be on the same frequency that you are tuned to. It may be your light line, electrical apparatus in your neighborhood, poor wiring in your dwell-

*(Continued on page 64)*

ing, or power transformers on light poles.

How much would it cost to electrify my six tube set? First, If I do the work? Second, If I have it done?

Cost of the necessary parts, tubes, etc., assuming that you have none of these on hand, will be in excess of \$60. If you have the work done, about \$15 additional charge will be made for labor. You must remember that you do not then have an electric set but a re-built battery set.

Can a charger used for large radio batteries be used to charge my automobile battery?

Yes. Providing its charging rate is two amperes or more. You will generally find this charging rate on the plate attached to the charger. Care must be taken to connect the charger to the battery correctly.

## Those Short Waves

*(Continued from page 63)*

The short-wave receiver is of course simplified to some extent and consequently cheapened when the audio-frequency portion of the regular set is used.

Many radio users, being accustomed to the present-day efficiency and simplicity of the broadcast set, lose all patience with the short-wave receiver and some give it up as a bad job. We have had subscribers write us that they bought a nationally known short-wave receiver and after weeks of trial had been unable to hear a single signal. Any radio user knows how much more careful one must be in tuning in stations at the lower end of a dial. That is, the lower the wave the more critical the tuning. Well, this principle is intensified a hundred-fold in the extreme short waves.

We do not want to discourage our listeners from experimenting in the short-wave field for we believe that is

where the great progress of the next decade is going to be made but we do want them to know that it is an experiment when they work in the vast space below the broadcast band. The ether there is full of signals of all sorts, most of which of course are utterly unintelligible to one who cannot read code, with here and there a broadcast station and foreign short-wave station. It is a fascinating job for the technically-minded but it's no place like home for the fellow with scant patience who wants to spin the dials and get his results quickly and certainly.

RADEX does not deal in the technical side of radio. For the technically-minded interested in short waves, we recommend the numerous articles on this subject which have appeared in the magazine *Radio Broadcast*.

## Neighborhood Noises

*(Continued from page 4)*

checked over every known electrical device in the neighborhood but have not located it. Can you suggest what we can do? A radio around here is almost useless because the noise is only off for a few hours at a time every few days."

Such a situation as described here is maddening and only the most careful and systematic search will locate it. We know of one such noise that caused a whole town to rage which was finally located in the telephone-central in a ringing device. In another town the interurban cars could be heard clicking in the loud speaker while they were still several miles away but, oddly enough, when they were going the other way there was no noise at all. This indicates that we cannot lay down any set rules for finding the causes of electrical disturbances of the ether. Patience, determination and work are the only tools.

# *When You Write a Letter*

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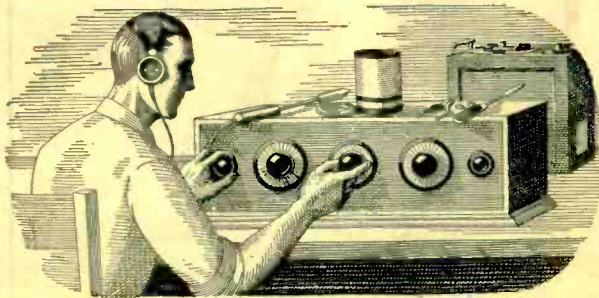
Brookline, Massachusetts

Style B

Mrs. David Harry Moore

3424 North Tenth Street

Philadelphia, Pennsylvania



*If all the Radio sets I've "fooled" with in my time were piled on top of each other, they'd reach about halfway to Mars. The trouble with me was that I thought I knew so much about Radio that I really didn't know the first thing. I thought Radio was a plaything — that was all I could see in it for me.*

## I Thought Radio Was a Plaything

*But Now My Eyes Are Opened, and I'm Making Over \$100 a Week!*

\$50 a week! Man alive, just one year ago a salary that big would have been the height of my ambition.

Twelve months ago I was skimming along on starvation wages, just barely making both ends meet. It was the same old story—a little job, a salary just as small as the job.

If you'd told me a year ago that in twelve months time I would be making \$100 and more every week in the Radio business—whew! I know I'd have thought you were crazy. But that's the sort of money I'm pulling down right now—and in the future I expect even more. Why, only today—

But I am getting ahead of my story. I was hard up a year ago because I was kidding myself, that's all—not because I had to be.

When broadcasting first became the rage, I first began dabbling with Radio. There's a fascination—something that grabs hold of a fellow—about twirling a little knob and suddenly listening to a voice speaking a thousand miles away!

Up to a year ago, I was just a dabbler—I thought Radio was a plaything. I never realized what an enormous, fast-growing industry Radio had come to be—employing thousands and thousands of trained men. I usually stayed home in the evenings after work, because I didn't make enough money to go out very much.

And as for the idea that a splendid Radio job might be mine, if I made a little effort to prepare for it—such an idea never entered my mind. When a friend suggested it to me one year ago I laughed at him.

"You're kidding me," I said.

"I'm not," he replied. "Take a look at this ad."

He pointed to a page ad in a magazine I'd seen many times but just passed up. This time I read the ad carefully. It told of many big opportunities for trained men to succeed in the great new Radio field. With the advertisement was a coupon. I sent the coupon in, and in a few days received a handsome 64-page book, telling about the opportunities in the Radio field and how a man can prepare quickly and easily at home to take advantage of these opportunities. Well, it was a revelation to me. I read the book carefully, and when I finished it I made my decision.

What's happened in the twelve months since that day, seems almost like a dream to me now. For ten of those twelve months, I've had a Radio business of my own. At first, of course, I started it as a little proposition on the side, under the guidance of the National Radio Institute. It wasn't long before I was getting so much to do that I quit my measly little clerical job, and devoted my full time to my Radio business.

Since that time I've gone right on up. They would have given me just as much help, too, if I had wanted to follow some other line of Radio besides building my

own retail business—such as broadcasting, manufacturing, experimenting, sea operating, or any one of the score of lines they prepare for you. And to think that until that day I sent for their eye-opening book, I'd been wailing, "I never had a chance."

Now I'm making, as I told you before, over \$100 a week. And I know the future holds even more, for Radio is one of the most progressive, fastest-growing businesses in the world today. And it's work that I like—work a man can get interested in.

You may not be as bad off as I was. But think it over—are you satisfied? Are you making enough money, at work that you like? Would you sign a contract to stay where you are now for the next ten years—making the same money? If not, you'd better be doing something about it.

This new Radio game is a live-wire field of golden rewards. The work is fascinating, absorbing, well paid. The National Radio Institute—oldest and largest Radio home-study school in the world—will train you inexpensively in your own home to know Radio from A to Z.

Take another tip—No matter what your plans are, no matter how much or how little you know about Radio—clip the coupon below and look their free book over. It is filled with interesting facts, figures, and photos, and the information it will give you is worth a few minutes of anybody's time. You will place yourself under no obligation—the book is free, and is gladly sent to anyone who wants to know about Radio. Just address J. E. Smith, President, National Radio Institute, Dept. 9P91, Washington, D. C.

J. E. SMITH, President,  
National Radio Institute, Dept. 9P91,  
Washington, D. C.

Dear Mr. Smith:—Please send me your 64-page free book, giving all information about the opportunities in Radio and how I can learn quickly and easily at home to take advantage of them. I understand this request places me under no obligation, and that no salesman will call on me.

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