

THE SEPTEMBER 1931

RADIO INDEX

The Magazine that Doubles the Pleasure of Radio



25^c

How to Attach Head-Phones to
Modern Receivers

Complete List of World Stations

Radio Sets for Direct Current

98 Changes in Station Data

RADIO THEORY AND MODERN PRACTICE

A New Book in Simple Terms—Profusely Illustrated

Just off the press, here is a book that we believe every person interested at all in Radio, ought to have. While the veriest novice can easily understand its simple explanations, yet it is a book which an experienced radiotrician will find of the greatest value.

The chapter on *Radio Principles* explains the radio wave from its birth at the transmitter to its conversion into sound at the receiver. Numerous pictures and sketches enable the reader to grasp each stage. There is a list of the necessary technical words with their definitions in simple language and a list of the symbols used in radio diagrams with their meanings fully explained.

The chapter on *Vacuum Tubes* is, we think, the most simple and yet complete exposition of the principle and operation of radio tubes we have ever seen. The difference in tubes is fully explained and the reader learns not only the use and characteristics of each tube but the purpose served by each prong. Not only is the screen-grid tube covered but the new five-element as well.

In *Principles of Receiver Circuits* ten different systems are described and explained, from "Regenerative" to "Super-heterodyne with second harmonic oscillator."

A chapter on *Radio Circuit Diagrams* gives the schematic diagrams for many of the prominent sets including Super-Zenith, General Electric, Bosch, Super-Wasp, Silver Marshall, Grebe, Stewart-Warner, RCA, Atwater Kent, Majestic, Stromberg-Carlson and others, with explanations of each and where to look and what to do for trouble.

The chapter on *Short Waves* is not only a complete treatise on short-wave theory and practice, but several well-known short wave sets are diagramed and explained. Other chapters which we can mention only as indicative are *Aerials*, *Loud Speakers*, *Radio Instruments*, *Broadcasting Transmitters*, *Radio Troubles*, *Television*, etc.

This book of 224 pages, printed in large type, bound in flexible cloth will be given to our readers

FREE For Two Annual Subscriptions

We have secured a number of these books for those of our readers who will help us in this way to increase the field of RADEX. You can earn a copy in a few minutes by telling your friends about this magazine.

Price, \$1.00 postpaid

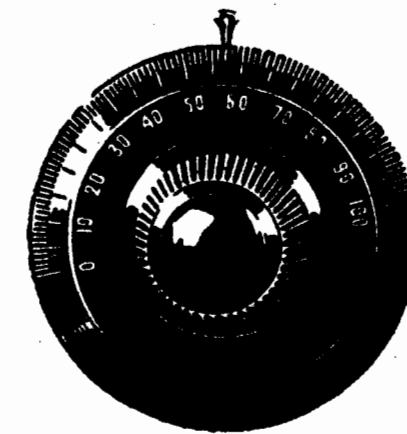
SEPTEMBER 1, 1931



RADEX

REG. U. S. PATENT OFFICE

FRED CLAYTON BUTLER
Editor and Publisher



EIGHTH YEAR

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USING PHONES with A. C. SETS

SO widespread was the interest in the article in the April, 1930, issue of RADEX on connecting head phones to modern a. c. receivers that that issue is entirely exhausted. We are therefore reprinting this article together with others on the same subject with a new diagram illustrating the procedure.

Very few modern receivers are equipped with head-phones jack and plug. We believe set manufacturers are making a mistake in omitting this connection. In the March RADEX we described a phone adapter which we can furnish to our readers for \$1.50 each. This adapter has the advantage that no change in the wiring of the set is required. The last tube ahead of the loud-speaker is removed and the plug of the adapter is placed in its socket thus taking off the signals before they are amplified to loud-speaker volume. For those who desire to change their receivers so it will be unnecessary to remove the power tube, the following article is recommended.

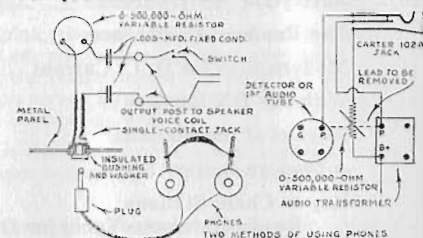
On most modern receivers no provision is made for connecting a headset and it cannot very well be connected to the regular loudspeaker terminals as the phones would soon be ruined by this practice. However, DX fans, who usually are busy fishing for far-off stations late at night, prefer the use of headphones as the signals are more readily detected than with a loudspeaker. The use of phones is also preferable at night as the raucous voice of a speaker is highly objectionable to members of the family who have already retired. The absence therefore of a headset connection, such as a jack on the panel, has given rise to a problem which many of our readers have presented to us for a solution.

Well, the solution is comparatively simple, and there are two methods that can be followed by any radio fan. Get a 500,000-ohm variable resistor, two .005-mfd. fixed condensers and a single-circuit switch of any type. One terminal of one condenser is connected to one output terminal of the set and the other condenser is similarly connected to the

How to Change Wiring

second output terminal. One terminal of the variable resistor is run to the unconnected side of the first condenser. The headphone cord is run to the unconnected side of the second condenser and to the unconnected side of the resistor. The switch is cut in one of the lines supplying the speaker, enabling the user to cut it out.

Instead of connecting the headset cord directly to the condenser and resistor, some fans may desire to install a jack on the panel, from which these connections are made, a plug on the cord making contact with the jack. Similarly, the resistor can be mounted on the panel. The jack and resistor must be well insulated from the panel if the latter is metal,



lated from the panel if the latter is metal, which is the case in most modern receivers. Special fiber bushings and washers are obtainable for the purpose. Unless carefully insulated in this way, serious trouble will result, owing to a feedback from the power stage, and a direct short-circuit between the B-negative and B-positive. If you have an output transformer installed on the subpanel of your receiver, it is not necessary to use the two condensers to protect the phones from high voltage as the transformer serves this purpose. An output choke is sometimes used instead of a transformer, and in this case, also, no condensers are required. On dynamic speakers, the switch to cut off the speaker when using the phones should, of course, be connected exactly as shown in the diagram, as this disconnects the voice coil. If your speaker continues to give a low hum

while using the phones, cut a similar switch in the leads connected to the field winding of the speaker.

A Different Hook-Up

Another method of connecting the headphones is to cut them into the circuit directly after the detector tube, or, if desired, after the first audio stage, the advantage of the latter hookup being greater amplification of the signal. Get a three-contact jack of the type that breaks a circuit between two terminals when a plug is inserted. A Carter No. 102A jack is of this type. Connect the lowest lug of the jack to the B-positive terminal of the audio transformer or resistor unit following either the detector or the first audio stage, depending on where it is desired to make the connection. The other lead to this terminal of the transformer supplying the B-positive, should be left in place.

Remove the lead running from the P-terminal of the transformer or resistor to the P-terminal on the tube socket. Run a lead from the P-terminal on the socket to the top lug of the jack, and another lead from the P-terminal of the transformer to the middle lug of the jack. The wiring is then complete. Use soldering lugs under the nuts on the transformer and socket terminals, and solder the leads to the lugs to insure good electrical contact. Inserting the phone plug in the jack disconnects the upper two jack contacts, breaking the plate circuit to the following stages and thus automatically keeping the signal from passing beyond the headphones, although the tubes will continue to light.

For a Majestic Set

A. R. Van Compennolle, 618 North Baker St., Danta Ana, Calif., has discovered a most effective method of attaching headphones to his Majestic set. He stresses the warning, however, that this is not to be undertaken by anyone who has not had experience in soldering a radio set. His description of his method follows:

It is a simple matter to attach headphones to your Majestic and silence its speaker without causing any harm to the set or decreasing its efficiency if you are "nifty" with a soldering iron and if you know how. Here's how.

To attach the phones, solder a lead to each of the G-45 tubes using the plate prong and run these two leads to your phone plug-in jack. Use a small rubber-insulated wire and solder it up against the base of the tube prong. If you attempt to wrap the wire around the prong it will make a bulky job and you will be unable to put the tube back in far enough. To ascertain which is the



Here are the Stebbins Brothers, Esley, Capt. Bill and John. The principal characters in the N.B.C. series "The Stebbins Boys." Arthur Allen is Esley, Phillips Lord is Capt. Bill, and Parker Fennelly is John. Swift program daily 6:45 p.m. EDT.

plate prong, stand behind your set and then the plate prong of the G-45 tubes is in the "upper right-hand corner." Be sure that the insulation on the wire is not peeled off beyond the base of the tube or it will short against the metal shield.

To silence the speaker, place a small snap switch in one of the voice coil leads. This will deprive the speaker of the voice output from the set but it will still be using its proper share of power from the rectifier. There is a terminal plate at the base of the speaker and the two little white wires running from the top of this terminal plate are the voice coil leads. Melt one of them loose with a soldering

(Continued on page 18)

RADIO PROBLEMS for KEEN WITS

THOSE June puzzles certainly gave our readers something to do to while away the two months RADEX was on vacation. We received many SOS calls claiming that No. 1 simply couldn't be made to work and that there must be a misprint somewhere. However, exactly twenty-four of our puzzlers were keen enough to answer all four problems correctly. "Thought I wouldn't be able to answer all the June puzzles," says a correspondent in Stevensville, Mich., George Raba, "until I found that Mexico also has 'states'."

Here are the correct solutions: For No. 1:

KSAC
WACO
KLRA
KTRH
WIBU
WLSI
WLBL
WODA

The state is Coahuila and the city Saltillo.

For No. 2:

KPSN Pasadena
WCOA Pensacola
WODA Paterson
WOAX Trenton
WSPD Toledo
CNRL London
CNRX Toronto

For No. 3:

KWWG
WGCM
CMKF
KFWE
WBCM
CMCM
CMCF
CFCH
CFCH
CKCK
CKWX
WXYZ

For No. 4: The calls spelled out by the knight in its jumps were:

KWKC-WWNC-WWL-CKCK-WKBW-KWK-WJW

All very simple as you will readily see. Now here are four more puzzles on which you may sharpen your wits and improve your knowledge of radio stations. As

Four More Call Letter Puzzles

always, the calls are taken from the main index of RADEX and do not contain foreign or obsolete calls unless specifically mentioned. Get the correct solutions to all four problems in to us before September 20th and you may have either a copy of the new RADEX map or the October issue or have your subscription extended.

No. 1 this month is another simple little exercise in cipher or code. Each of the figures given stands for a letter and these letters form four station calls.

1565
2626
3657
4517

No. 2 is a problem in cross-call composition submitted by Ivan D. Ide, Genoa, Ill. You are to take the following calls and arrange them in the squares in such a way that they may be read either vertically or horizontally. Some of the calls may be reversed. WLW CMW KREG KCRC WRAC WELK KWWG WNAC WPAW WCAK WMPC WRAW WADC CNRW WDRC KPRC WPCC.

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The last two puzzles this month were submitted by W. R. Anderson, 852 Manning Ave., Toronto, Ont. No. 3 is a very clever composition in code so designed that the code letters themselves form station calls. In this problem each of the letters given below stands for still another letter and when deciphered, eight entirely different calls will appear.

CMC XEP KGKY KGW
CMX WPG WRNY WPEN

The call indicated by WPEN does not appear in this issue as its call was

changed in May. No. 4 is similar to No. 3 of May, except that it contains fifteen squares instead of twelve. When properly filled in it should contain seven calls reading both horizontally and vertically with no call used twice and no call reversed.

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        □ □ □ □

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Columbia Goes Television

WITH civic, radio and stage celebrities participating, the Columbia Broadcasting System officially opened its experimental television station, W2XAB, at 10:15 p.m., EDT, Tuesday, July 21.

The opening of the station followed several weeks of tests in which clear reception of W2XAB's signals was reported from cities as far away as Boston, Hartford, Baltimore, Camden, Schenectady and Philadelphia. Although sight transmission of the premiere program will be limited geographically to a comparatively small section along the Eastern seaboard, the sound transmission will be carried to most of the 85 outlets on the world's largest network.

Transmitting apparatus and antennae systems are adjacent to the studio located on the 23rd floor of the Columbia Building, 485 Madison Avenue, New York. The equipment is of the most modern design, representing latest advances in the science of visual broadcasting, and is especially noteworthy for its compactness.

The station, W2XAB, is licensed experimentally by the Federal Radio Commission. It will operate in the channel from 2,750 to 2,850 kilocycles with 500 watts power. Sixty-line scanning at twenty frames per second are the picture specifications.

At the outset no attempts will be made to televise more than two performers at the same time. In the same way, musical emphasis will be placed solely on an individual instrumentalist. Experiments have been planned, however, toward the televising of trios, quartets and orches-

tras. Bill Schudt, Jr., Acting Director of Television Programs, likewise intends to attempt the transmission of numerous novelties—such as juggling, shadow pictures and dramas in pantomime.

Do We Prefer Jazz?

BY far the majority of radio listeners prefer jazz above all other kinds of music, reports *Broadcast Advertising* as the result of a recent questionnaire to broadcasting stations in which station managers were asked to list the music numbers that requests and fan mail showed to be most popular during March.

"When Your Hair Has Turned to Silver" led as the favorite piece of music of the month with most of the responding stations. Other leaders were "The Peanut Vendor" and "I'm Alone Because I Love You," which tied for second place, and "Yours and Mine" and "You're Driving Me Crazy," which were the third leading choices.

A few stations reported audiences with preferences other than dance music. Station WLS, Chicago, for example, claiming mainly a rural audience, reported that melodies like "Bury Me Out On the Prairie," "Mrs. Murphy's Chowder," "Turkey in the Straw" and "Missouri Waltz" were most popular with its audience.

Station WCCO, Minneapolis, reported that Scandinavian music was the first choice of its audience. Songs of the old west were demanded by listeners of KFDN, Caspar, Wyo., and old-time melodies were preferred by the audiences of WIBW, Topeka, Kan., and WNAX, Yankton, S. D. Station KYA, San Francisco, reported receiving very few requests for jazz, listing the following numbers as the most popular: "Bells of St. Mary's," "Song of Songs," "I'll Take You Home Again, Kathleen," "Ah, Sweet Mystery of Life" and "Lover Come Back to Me." Station KNX, Los Angeles, reported that requests for current popular hits were very much in the minority compared with old-time songs, songs of the west and ultra classics such as symphonies and operas.

Can STATIC ever be ELIMINATED?

By B. FRANCIS
DASHIELL

SEPTEMBER ushers in the welcome conclusion of our warm and sultry summer weather. Seasonal static will soon be gone, but a few of its hisses, clicks and crashes will remain to annoy us at times during the fall and winter months. And next summer, and the summer after, static will return with renewed vigor to ruin or radio reception. To most of us it seems strange that, after many years of remarkable development, radio must be rendered useless by its greatest pest—summer static.

Natural static is a creature of the atmosphere. It has existed since the beginning of things. But it was not until the coming of wireless that men learned of static. Marconi did not know that the mysterious sounds which interfered with his first code signals came from the air. Now all has changed; everyone knows that static means mysterious radio noises of ear-splitting intensity; also, the word has taken its permanent place in the modern slang of today.

Why should static be a grim reality that haunts the souls of radio engineers and tries the patience of millions of broadcast listeners? Since static is so similar to radio waves, it cannot be tuned out like broadcast signals. It endures only because science has failed to discover means to eliminate static from our radio sets. A fortune awaits the person who succeeds in this. And to further humiliate the radio expert the extreme sensitivity of modern radio receivers easily brings in more and louder static!

Lightning's Contribution

Summer static is a product of seasonal heat and humidity. Winter static develops with certain changes in the weather. Neither of these two types can be avoided. The former, however, appears with greater violence and persistence since the influencing condition exists throughout the summer with considerable intensity. Thunderstorms cause the

most severe forms of summer static. The intensity of the electro-magnetic waves created by lightning frequently are severe enough to burn out tubes and the fine windings in the receiver. And a direct stroke, happening on very rare occasions, will entirely destroy the aerial wires and radio set, as well as creating other serious damage, unless proper precautions have been taken by using lightning arresters. Lightning actually occurs at places over the world many times each second during the year, and it is therefore no surprise that static sounds are heard in sensitive sets at any time.

Static Reduces Audience

As long as the air is hot and humid, a condition prevailing during the summer season, we hear constant streams of sputtering and hissing static coming from our loud speakers. The nuisance can become so disagreeable that we are compelled frequently to forego some pleasing programs. And the sponsors of these broadcasts are financial losers, for, when static is bad, the army of listeners quickly diminishes, and the potential value of the broadcast is lost. If definite forecasts of static could be made with the degree of efficiency as our well-known weather prognostications, radio programs could be arranged to suit expected reception conditions, and radio stations, the public, and advertising sponsors would benefit more than they have during the summer season.

In summer we have a constant source of static in the powerful energy of the thunderstorm. Lightning strokes, which are but giant electric sparks or short circuits occurring between clouds, or clouds and the earth, require millions and millions of volts of potential—perhaps far more than the combined output of all broadcasting stations. Static created by the lightning of a thunderstorm actually has been heard over a distance of 1000 miles, and the location of the storm determined by the U. S. Navy radio compass equipment on a battleship!

The sound of thunder does not affect radio; it is simply a concussion following air expansion created by a stroke of lightning. Many times most of us have observed a distant flash of lightning and heard simultaneously its accompanying crash of static. But the sound of thunder did not arrive until many seconds later, or perhaps was not heard at all. This is because radio waves, static impulses, lightning strokes, light and electricity, all travel at the same velocity—186,000 miles a second! Thunder has the speed of sound, only 1100 feet a second. All the waves mentioned have many frequencies or vibrations and different wave lengths to suit certain situations. The artificial waves, such as radio, can, therefore, be separated and tuned in and out at will. But lightning waves and stray atmospheric impulses cannot be tuned nor controlled; they cover every radio wave and frequency, but to a less extent on the very short waves.

Besides the loud static created by lightning we have a milder form of persistent static that is associated with warm weather. And, in fact, this static will be found on occasion throughout the year. No one knows exactly what it is nor why it seems always to accompany certain changes in the weather. For instance, on winter nights, when radio reception happens to be perfect for the DX fan, static suddenly appears and, before many hours have passed, the weather becomes cloudy and warmer, with rain or snow. In summer, however, static is present most of the time, becoming worse as a thunderstorm begins to approach, and diminishing after the passage of the storm. But there is seldom a real let up in static noises, and when the air does become so clear that distant signals roll in until the coming of the dawn, we will find thousands of DX fans enthusiastically enjoying the greatest sport of all radio.

Static electricity breeds in the atmosphere all about us. It takes very little air friction and weather disturbances to generate this form of energy. Even the evaporation of water into the air in hot weather and the subsequent actions of the minute water droplets of vapor will



P. & A. Photo.

"Static created by lightning has been heard one thousand miles."

create tremendous electrification. For example, rub a fountain pen or rubber comb with a dry cloth; sparks will jump from the end. Touch it to a radio set or aerial and loud bursts of static will be heard. The same condition exists in the air; atmosphere is a gas and as its molecules become electrified we find free electrons drifting all about. They gather into groups, and some come into contact with the antenna or set and give up their tiny charges of electricity.

But as there is sufficient energy to influence and vary the grid potential of a sensitive radio set, the weak atmospheric impulse will pass through the radio and audio frequency amplifiers and quickly emerge as a strong static sound. Then, too, there are other and vastly more complicated situations which breed static. We find these, it is sufficient to say, in the erratic flow of earth currents passing upward into the ground wire and then through the receiver; or moving back and forth between overhead clouds and the earth and causing variations in the strength of the electric

(Continued on page 19)

PLAIN ADVICE for the Troubled

Help for Balky Sets

RADEX is happy to announce the addition to its staff of B. Francis Dashiell, Mechanical Engineer, of Washington, D. C., as Technical Editor. For many years Mr. Dashiell had charge of the United States Weather Bureau's radio work and developed the present system of weather broadcasting which are now so well known to broadcast listeners and commercial ships and planes. He is at present conducting original research in aerology for the benefit of aviation. Mr. Dashiell is an old amateur station owner, code operator, and experimenter. He is a neighbor of Mr. C. Francis Jenkins, the famous inventor of television, and has worked with the latter on tele-photo machines. Mr. Dashiell will handle the Questions and Answers department of this publication each month, as well as contribute articles of interest and information.

Readers are invited to submit questions in regard to radio and these will be answered in plain and easily understandable language. This service is rendered to readers of this magazine without cost.

That Short-Wave Adapter

The article describing a short-wave adapter published in the May, 1931, issue appears to be in error. The plug-in coils, which are built on bases of old 201-A tubes, measure $1\frac{3}{8}$ inches in diameter instead of only $1\frac{1}{8}$ inches as given. The inside of the tickler coil is given as $1\frac{3}{8}$ inches, and, for that reason it is impossible to insert the plug-in coils.

It is likely that bases of old 199 tubes instead of 201-A tubes were intended by the designer of the set for they measure $1\frac{1}{8}$ inches in diameter. However, since they are not always easy to procure, it is suggested that 201-A bases be used as was indicated, but the inner diameter

of the tickler coil be increased to $1\frac{1}{2}$ inches, and the coils be wound on tubes $1\frac{3}{8}$ inches in diameter attached to the bases. The slight increase in the length of the wire wound about the tickler because of this enlarged tube size will make no difference. But the secondary windings on the plug-in coils, which are now increased from $1\frac{1}{8}$ inches to $1\frac{3}{8}$ inches in diameter, will require shortening in order to hold to the same tuning frequency limits. The length of the wire in the total number of turns in the secondary of each coil must be reduced by nine inches.

No Ground Wires

It is said some radio sets cannot be operated with the ground wire disconnected. Is this so? Can such a set be identified by an examination of the wiring diagram? Also, what effect does static have on the tubes of a set?

Most sets can be operated after a fashion with the ground wire removed. Also, the removal of the antenna reduces the signal strength, static, and interference, and, at times such is desirable. But the removal of the ground seriously affects the capacity of the set. Then, too, certain all-electric sets must have a ground wire to operate. Some persons remove the antenna and attach the ground wire in the antenna post. This frequently gives sharp and clear tuning that cuts through local stations. But such action should be avoided in the case of electric sets. An examination of the wiring diagram will indicate to the trained engineer which sets cannot be operated without a ground wire. You should stick to the conventional circuit.

Static will injure tubes when the discharge accompanies a very severe or direct stroke of lightning. The damage consists of a burning or fusing of the parts of the tube and causing a misalignment of grids and plates.

Low Frequency Stations Are Dead

I have trouble receiving radio broadcasts

from stations operating between 670 and 560 kilocycles. I have a model 35 Arborphone receiver. Where can I procure a wiring diagram?

Your trouble in receiving on frequencies of 670 to 560 kilocycles—447 to 535 meters—is quite common among radio owners. It is seldom the fault of the set. The difficulty lies in receiving stations of higher wave lengths with the same efficiency as exhibited on low waves. A broadcasting station will transmit more energy with sharper tuning on higher frequencies than on the lower frequencies. When the power used at two stations is equal, the one operating on the lower wave can be heard much farther away than the one of higher wave length. Also, there are more sta-

tions broadcasting in the lower wave length band than on higher waves. This can be noted from the list of stations published in this issue. Perhaps one of your reasons is the fact that not many stations operate within the practical range of your set in your vicinity between the frequency limits mentioned by you. We wonder whether some reader can assist in furnishing a diagram of your Arborphone receiver?

Static and More Telephones

What size grid condenser and leak should be used in an effort to minimize static? In attaching telephones to my Majestic 72, can I fasten the leads from the phone jack to the plate of the power tube and silence the speaker with a snap

(Continued on page 19)

Col. Charles A. Lindbergh, on the eve of his flight to the Orient, is presented with a medal by the Columbia Broadcasting System, in recognition of his distinguished contribution to the art of radio. The famous flyer, with his intrepid wife, is now midway of the Pacific.



Radio CONFERENCE of RADEX Readers

Monthly Exchange of Ideas and Opinions

IN publishing the remarkable record claimed by Ollie Ross we took particular pains to explain that we were in no position to vouch for the veracity of his verifications and did not desire to enter into any dispute regarding the DX championship. We have received a number of letters criticizing us for even publishing so vast a claim as that of Mr. Ross. As we take it, these objectors do not want even to learn about any record so great even though it seems very well authenticated. RADEX can hardly assume such a position. Our readers are entitled to know what is going on in the DX world; they may do as they please about believing it.

"Mr. Ollie Ross' record log in the Midsummer issue is not consistent with the average material found in the DX Bible 'RADEX'," criticizes Wm. Dyson, 72 Cambridge Ave., Hamilton, Ont. "Although I do not doubt that Mr. Ross has heard every station he claims, I cannot understand how he can have 1309 actual verifications. You are, of course, aware that regardless of the amount of material on a program submitted, many stations send out a card thanking you for a report on the program of (date) at (time) but which says nothing that would prove reception to be correct. The letter from Norway which you have evidently reprinted for the *Los Angeles Examiner* is not a verification, although it is undoubtedly written in reply to a report of reception. Although it would be counted by anyone on their log, would you consider it an actual verification, and if so why? When other fans write in saying they have a log of so many stations with so many verified, I know they do not count replies such as the one mentioned as a verification. You will also note, and it shows the honesty of Mr. Ross, that the record-holder has experimented with grounds and aeriels in 36 states. Realizing the fact that location has a most important

bearing on the possibility of hearing stations, I cannot see that it would be fair to consider Mr. Ross as a champion because any fan could unquestionably boost his total log, particularly with low-powered and daytime stations, if his set was operated in so many different localities."

"I think that I can answer the question raised on Ross' log of 1309 stations, which is more than the total number in the world at the present time," advises, F. E. Holley, 6450 So. Lincoln St. Chicago, Ill. "The answer is that I and every DXer I know count every new set of call letters as a new station, also there were a good many stations on the air five or six years ago that no longer exist."

"Ollie Ross' great record is explained when he admits living in 36 states in four years. I admire his frankness, as there are few who would make such an admission," comments Edwin M. Prosser, 84 Saratoga Ave., Brooklyn, N. Y.

Pacific vs. Atlantic

"Some one wondered about the fact that Pacific Coast DXers receive Australia, Japan, etc., quite regularly, while Europe is very seldom heard in the east. Your correspondent's conclusion was that reception is better on the west coast. That does sound logical, but is not the real answer. The main reason why Europe is seldom heard in the United States, while west coast fans often hear Australia is time difference. Germany is six hours ahead of Eastern Standard time so naturally signs off at about 6 p.m. EST, which is midnight in Germany. Due to this fact, it is almost impossible to hear European stations on one of their evening programs. The only chance lies in catching one of the European station's early morning programs. Some stations in Europe come on at 6 a.m. EST. In summer it is then daylight and the waves die out before they hit the darkness over the Atlantic, but in winter there is a chance. If a European station comes on at 5 or 6 a.m., when it is dark there, then it is only 11 p.m. to

midnight EST. So darkness is all the way between, and it is possible and probable that on a good night an early morning European program may be heard at around midnight EST. If all U. S. stations would sign off at 9 p.m. EST time some night (it would then be 3 a.m. in Germany), and a special DX test given, there is little doubt that Europe would be heard. As to Australia, Japan, Hawaii, and others, they can be, and are, heard by west coast fans, simply because at the time darkness prevails between these countries and the U. S., it happens to be between 1 a.m. and 6 a.m. PST and they can thus be picked up without interference from locals."



Her name is Artennis Faque and she was formerly a popular favorite in musical comedy. Now she is in "Dancing By the Sea." A C.B.S. feature at five p.m. Mondays and Saturdays, and 2:45 p.m. on Wednesdays.

This advice is from Geo. Lilley, 227 West Bernard St., West Chester, Pa.

"During the last few issues of RADEX there have appeared many letters from the Western DX fans telling of their foreign reception, and I think it is about time some of us Eastern fans tell about our foreign reception," comments Mac Plung, 1425 Coney Island Ave., Brooklyn, N. Y. "So far I have succeeded in logging stations across both of the seas. I have heard two stations from across the Atlantic, namely, 2LO, London, and a station in Koenigsberg, Germany. I have both of these stations verified. I have logged two Japanese stations, JOHK and JOIK, also verified; 2YA, Wellington, N. Z., also verified, indirectly. What I consider my best catch

is 3LO, of Melbourne, Australia, verified, indirectly. I have heard KGU and LR4, verifications requested, but no answers so far. I think if you make a request for the Eastern fans to send in their reports that many will respond."

"Do you consider it anything wonderful for a North American fan to log Japan, Australia, etc., on an antenna system such as some use?" asks Wm. Dyson, 72 Cambridge Ave., Hamilton, Ont. "I was quite surprised to see the number of distant stations given by Mr. Walbrecht in the current issue of RADEX, but as usual was sorry to see his tremendous length of aerial, 325 feet, averaging 50 feet high."

What Is Wrong With DX?

"One of the big troubles hurting the DX game today is the carelessness with which some stations verify reports," complains George Lilley, 227 W. Bernard St., West Chester, Pa. "The stations using these printed form verification cards seem to be the worst offenders, and such stations as KGBU, Kethcikan, Alaska, answer most any kind of letter, whether it contains a correct report or not, with their form card saying, 'Your report checks with our log for the date mentioned.' On the other hand, such stations as KYA, San Francisco, are to be congratulated on the care they take in issuing verifications. I know of several cases where DXers have sent in flimsy

(Continued on page 21)

MODERN SETS for D.C. CURRENT

THE major development in radio receiving sets has naturally been in the use of alternating current. Many thousands of people in this country, however, are served only by direct current and we receive a great many letters from readers asking for information regarding the development of modern receivers for d. c. lines. We recently sent a questionnaire to leading manufacturers of receivers to ascertain what they had to offer our readers who have access only to direct current. From the replies we are quoting in this article.

The All-American Mohawk Corporation, North Tonawanda, N. Y., says: "While it is not easily possible to make a receiver operating on 110-volt DC, work as effectively as an AC receiver on the same voltage, it is possible to make a very satisfactory d. c. set. The first reason for an AC set on 110 being better is because the set can develop potentials of from 200 to 300 volts, thus giving increased amplification, whereas a DC 110 is limited to just 110 volts and consequently cannot get the same power in amplification as the AC. However, new tubes have been developed for DC operation on 110 volts which operate at a lower rating and consequently will develop a higher output. These tubes we are incorporating in the new DC set we are developing. This set, we have every reason to believe, will work just as well at more than 1000 kilocycles as it will below that frequency. We do not convert DC into AC but use the current as supplied by the power line. Our new DC-7 set (Model S-7) will consume about 35 to 40 watts, part of which will be used to supply the dynamic speaker field. It will be a very sensitive set and we believe will be quite satisfactory for all purposes intended."

From the Stromberg-Carlson Telephone Manufacturing Co., Rochester, N. Y., comes the following comment: "The DC receiving sets that we are manufacturing at the present time are most efficient and can be depended upon to give good service in any locality that

Neglected Field Now Being Developed

is supplied with DC current. The sensitivity of the receiver is equally as good at one end of the tuning dial as it is at the other end. Of course it is an acknowledged fact that most of the noise and interference travels on the higher frequencies and quite naturally there will be with this receiver as well as with any other, more noise in operation when stations on the lower end of the dial (or in the higher frequencies) are tuned in. This is due entirely to atmospheric and local electrical conditions."

The Colonial Radio Corporation, Buffalo, N. Y., thinks that users of DC sets cannot expect just as good results as with AC receivers because with the limitation of line voltage it is impossible to get maximum output from either audio or radio amplifiers. They feel also that DC receivers will drop slightly at the low frequency end of the scale. This company is now developing a model which will consume no more than 35 watts DC. It will be a superheterodyne employing nine tubes with four pentode tubes in push-pull output.

The Crosley Radio Corporation, Cincinnati, Ohio, lists several DC receivers which, they claim, are just as satisfactory as alternating current sets with the exception of the limitation on volume heretofore referred to. They feel, however, that their DC sets still have more volume than is required for ordinary home installation. "As far as tuning in different frequencies is concerned," writes Crosley, "A DC set will cover the same bands of frequencies as the AC sets. It has the same selectivity, sensitivity and fidelity as an AC set. Our sets work on direct current. AC sets must have a rectifier built into the circuit that changes the alternating current into direct current. With our DC receivers no rectifier is required because you already have direct current, which is the kind required for the grid and plate circuits of the tubes."

This limitation of volume in DC operation is being met by F. A. D. Andrea, Inc., Long Island City, N. Y., in a way which they believe will make their DC receivers practically parallel the performance of last year's AC receivers before the development of AC power pentodes. "It has been the practice heretofore," they write, "to deal with the DC receiver more or less with disregard of voltage limitation in an endeavor to produce a receiver having no greater number of tubes than prevails

type '24 as r. f. amplifiers, one type '27 two element detector, one type '27 detector and one type '27 audio amplifier, twelve in all.

From the Philco manufacturers, the Philadelphia Storage Battery Co., is the following: "Philco has developed a wonderful DC set which utilizes special type 14 and type 17 tubes especially designed for operation on direct current. The Philco DC receivers have a marvelous tone and the sensitivity and selectivity are up to the standards of the AC



The Three Boswell Sisters—Martha, Vel and Connie—whom you may hear at 9:45 p.m. EDST every Friday evening, 7:45 p.m. Sunday or 8:45 p.m. Thursday—a C.B.S. program.

in AC apparatus. Realizing that the voltage limitation could be overcome only by increasing the number of tubes placed in the receiver, we have made our KB chassis and provided a special speaker designed to give remarkably truthful tone without disagreeable blasting. Our r. f. transformers are of the double coupled type the same as included in our AC equipment, so that long-wave reception equals that obtained on short wave in the matter of sensitivity." The new Fada DC sets use six '71 type power tubes in two banks of three each, operated in push-pull. The other tubes used are three screen grid

sets. It has been consistently noted in the operation of these sets that stations are brought in with equal clarity over the entire broadcast band. The set does not use any conversion system for changing DC to AC, but simply has a voltage drop arrangement for the various A, B and C power supplies." Philco lists two DC receivers, a Highboy at \$76.75 and a Baby Grand at \$60.95.

The Colin B. Kennedy Corporation, South Bend, Ind., believes that the voltage limitations of DC will prevent any DC set from giving the performance of standard AC receivers. They believe

(Continued on page 28)

TALKING DX with OUR READERS

THE new DX season is just dawning and already our readers are at work adding new stations to their log. With the improved sets available a new radius of stations is open to the patient and skilful DXer. Of all the collecting hobbies, none is more fascinating than this of fishing the ether for the distant human voice. Here is what some of our readers have to say about it.

"With the receipt today of my fourth verification without stamp after having sent ten cents, I feel compelled to drop you a line in, shall we say protection, of the thousands of RADEX readers," complains G. R. Edwards, 58 Belcourt Road, Toronto, Ont. "No I am not Scotch, but I do not like to go to the bother of enclosing ten cents in cardboard, etc., expecting to get back a stamp only to get perhaps a postcard or a letter too big to go into verification book without cutting, which spoils the content and the looks. The stations to which I have sent ten cents are: CKAC, WNBO, WFBF and WBMS, all of which are marked (*) in RADEX to indicate that they send stamp for ten cents."

"I have a one-tube set which I built and I truly believe I can claim a 'blooper' DX record," states Paul V. Trice, 379 Grant St., Sharon, Pa. "My antenna (N-S direction) is only 15 feet high, but I have a special ground which is, I think, the cause of my success. With this one-tube set, since November, 1930, I have logged 197 stations. These stations are located in 39 states, 5 provinces of Canada, Cuba and Mexico. My best catch is KGCX, Wolf Point, Mont., 100 watts. I received verification from them a short time ago. WROL, Knoxville, Tenn., said they would be broadcasting a program (DX test) every first Sunday of each month early in the morning. CKPC said they will be testing every first Saturday early in morning starting 12 midnight Friday."

"Have picked up 12 Pacific Coast stations during one night, and my special reception was landing CKMO, Vancouver, B. C., having a power of 50

Fishing For Record

watts, and I am only using a 3-tube single circuit receiver, detector and two stages of audio, my aerial being strung between veranda posts and overall length is about 34 feet, and only about 8 or 10 feet above the ground. I have noticed others further west than I picking up this station on their large sets, but would like to hear from some person near me who have heard this station also." Hilliard Hamblin, Warsaw, Ont.

"I have a Crosley A. C. 7-tube set with a 90-foot antenna, 25 feet high, north-south, with lead-in at the south. I have been DXing since October, 1929, and have been collecting verifications since October, 1930. My records are: Ten 50-watt stations, the most distant being WCAZ, Carthage, Ill., and CFBO, St. John, N. B. I also have received CKPC, Preston, Ont." Francis Orcutt, 127 South Ave., Penn Yan, N. Y.

"Last Sunday morning I pulled in WSYB in Rutland, Vt., making a station in each of the 48 states in U. S. A. now. I have 582 stations on my log and have been DXing since November, 1929. I use a Scott A. C. 10 receiver and a 1930 Mastertone for my DX work. My aerial is 75 feet long and I use a buried gas pipe ground and also a chemical ground of buried B batteries. A good ground is a real essential for DX work." Ray E. Everly, 102 W. Washington St., Newton, Ill.

"Using an old 5-tube battery set, an Erla (with balloon coils) with three dials, I logged 114 stations within 24 hours. In this list were CMC, KPO, KFI, KHQ and KGA. Received during this time stations on 82 of the 96 frequencies in the regular broadcast band. Of course, none of these was received during daylight, except a few of the nearer ones in New York, New Jersey, etc. Several others, too numerous to mention, were also heard—KOA, KPFF, KSTP, KSL, etc." Stanley A. Schmuck, 94 Otis St., E. Cambridge, Mass.

"My set is a Majestic Mode 70 equipped with tubes two years old. I use an aerial 75 feet long, 30 feet high on one end and about 60 on the other. I wired the three coils of a three-circuit tuner (from an old set) together, and inserted it and a ten-year-old .002 mmf. mica fixed condenser in the aerial lead-in, and it sure has some kick. It is also variable and this enables reception of many new stations," writes Harvey Hobbs, 111 East 8th St., Covington, Ky.

"Here's a record for an RCA Radiola 18, which I have possessed since November, 1928. I have tuned in 583 stations to date, including the following: 2BL, 4QG, 6WF, 2YA, JOAK, JOBK, JOCK, CKMO, CKWX, KPQ, KUJ, KPCB, KXL, KGFJ, KJBS, KGGM, KGEK, KGEW, HJN, KGMB, TJW, CMCM, CMBR and CMGB (latter used 4½ watts when heard)," reports M. Tuchinsky, 3436 Filbert St., Philadelphia, Pa.

P. J. Hauss, 221 S. Butler Ave., Indianapolis, Ind., thinks that XETY has moved from 840 to 1310 kcs. He has heard them on 1310 kcs. several times. Mr. Hauss adds. "I have received a verification from 10AK, Stratford, Ont., saying that they are transmitting on about 1185 kcs., with a power of 15 watts, although they are listed on 1200 kcs. with 5 watts. They gave their

program to be as follows: Every evening from 6 to 7 E.S.T., and Monday night from 8:30 to 9:30 with old-time music."

C. M. Falconer, of Baltimore, has a letter from XETY stating that their new frequency is 1300 kcs.

"I have a good catch for this year, which is WOCL, Jamestown, N. Y., with only 25 watts power. I pulled that station on a Bosch all-electric 7-tube, on a dynamic loud speaker. I have verifications from KGMB, Honolulu, HHK, Haiti, XEW, XEN, XETP, XES, Mexico, and WGCM, Gulfport, Miss. (this took two and a half months to get), a 100 watt verification, KOY, Phoenix, Ariz., and many others." Louis Rewald, 483 Wilmot Ave., Burlington, Wis.

"Have had 400 stations, including 28 in California, 7 in Oregon, 6 in Washington, 27 in Canada, 3 in Mexico, 4 in Cuba, 1 in Porto Rico. Have also had fairly good, KGMB, Honolulu, KGBU, Ketchikan, and JOAK, Tokyo. Am using only a cheap two-tube battery set employing 90 volts on the plate. Use a cone speaker for a lot of my stations. Employ a triple ground, outside." H. H. Diedrich, 2420 Fifth Ave., Moline, Ill.

"I have received 262 stations since January 14th last on my Atwater Kent Model 55. I find that I can receive distant stations above 790 kcs, much

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Morton Downey, Jacques Renard and Anthony Wons of the Camel Quarter-Hour. C.B.S. daily at 7:45 p.m. EDST and 11:30 p.m. Jacques is conductor of the syncopated orchestra and Anthony is Tony of the Scrap-Book. Morton Downey is rapidly achieving radio stardom.





A year or so with the two famous New England radio stations and he came to New York as staff announcer for the National Broadcasting Company.

His rise with that organization didn't take very long. The reason, probably, was that he took his job seriously. He is now announcing several major NBC programs. He proved to radio listeners recently that he was an efficient ukulele player on the "Personalities at 711" program.

His biggest thrill came when he received a personal radiogram from Commander Richard E. Byrd, a few minutes after he had finished announcing a special short wave program broadcast to Byrd at the South Pole from the Capitol Theater.

Caught in one of his serious moments, he said: "The trust, confidence or good will of the radio listener must never be violated. The announcer's vision of the homes his voice is entering must contain an element of sanctity. Therefore nothing 'tainted' must be presented."

To John S. Young, the microphone is the mouthpiece of the world—if not today, then surely tomorrow.

A Wired Radio System

THE Minden Radio and Electric Laboratories of Minden, Nebraska, have constructed and installed a wired radio system of transmission operating on a wave length of 267.7 meters or 1120 keys. The call letters are MREL. They have been broadcasting daily programs from 12 to 1 p.m. week days and 2 to 4 p.m. Sundays.

The programs are led from the transmitter into the power lines which carry the signals into homes served by the power company. The telephone lines pick up the signals from the power wires.

Lee Ad. Richmond, of Station KFKA, sends us the information and wonders if any readers of REX have tuned station MREL.

There have been many rumors of power companies undertaking broadcasting of this sort, but this is the first instance in actual operation that has come to our attention.

THE following information regarding time on the air has been secured from the stations concerned, from newspaper clippings, and from our readers. The times shown can be quickly converted into your own time by use of the following table:

Your Zone	EST	Where Time is Given as CST	MST	PST
EST	.....	Add 1 hr.	Add 2 hrs.	Add 3 hrs.
CST	Subt. 1 hr.	.....	Add 1 hr.	Add 2 hrs.
MST	Subt. 2 hrs.	Subt. 1 hr.	.....	Add 1 hr.
PST	Subt. 3 hrs.	Subt. 2 hrs.	Subt. 1 hr.	.....

State	City	Call	Freq.	Watts
Alabama	Birmingham	WAPI	1140	5000
	Sundays, 9 a.m.-5:45 p.m.; 8:15-10:30 p.m., CST.			
	Mon.-Tues.-Wed., 6:45 a.m.-6 p.m.; 9-12 p.m.			
	Thur.-Fri.-Sat., 6:45 a.m.-9:00 p.m.			
Alaska	Juneau	KFIU	1310	10
	Sundays, 1-3 p.m.—Weekdays, 12-1 p.m., PST.			
California	El Centro	KXO	1500	100
	Sundays, 9 a.m.-2 p.m.; 6-10 p.m., PST.			
	Weekdays, 6:45 a.m.-2 p.m.; 5-10 p.m.			
Connecticut	Storrs	WCAC	600	250
	Mon.-Wed., 12:45-1:15 p.m.; 7:15-8 p.m., EST.			
Idaho	Boise	KIDO	1250	1000
	Sundays, 9 a.m.-6:30 p.m., MST.			
	Weekdays, 7:45 a.m.-10 p.m.			
	Sandpoint	KGKX	1420	100
	Sundays, 11 a.m.-3 p.m., MST.			
	Weekdays, 9:30 a.m.-9:30 p.m.			
Illinois	Carthage	WCAZ	1070	50
	Daily, 10 a.m.-4 p.m., CST.			
Louisiana	New Orleans	WDSU	1250	1000
	Daily, 7 a.m. to midnight, CST.			
Massachusetts	Fall River	WSAR	1450	250
	Thurs., 8 a.m.-3:15 p.m.; 5-9 p.m., DST.			
	Daily (except Sun. and Th.) 8 a.m.-3 p.m.; 5-9 p.m.			
Minnesota	Northfield	KFMX	1250	1000
	Daily (except Wed. and Fri.), 10:15-10:30 a.m., CST.			
	Wed.-Fri., 8-9 p.m.			
Montana	Wolf Point	KGKX	1310	100
	Sunday, 10:45 a.m. to 12:30 n., MST.			
	Daily, 8 a.m.-6:30 p.m.			
Nebraska	Clay Center	KMMJ	740	1000
	Sunday, 7-9 a.m.; 12-1:30 p.m., CST.			
	Daily, 5 a.m.-7:10 p.m.			
New Jersey	Newark	WOR	710	5000
	Sunday, 11 a.m.-12 p.m., DST.			
	Daily, 6:45 a.m.-12 p.m.			
New York	Utica	WIBX	1200	100
	Sunday, 10:20 a.m.-6:15 p.m., DST.			
	Daily, 7:45 a.m.-10:30 p.m.			
Oregon	Astoria	KFJI	1370	100
	Daily, 8 a.m.-9 p.m., PST.			
	Portland	KXL	1420	100
	Sunday, 12:01 a.m.-midnight, PST.			
	Saturday, 7:30 a.m. and all night.			
	Daily (except Sat.-Sun.), 7:30 a.m.-1 a.m.			
Pennsylvania	Seranton	WGBI	880	250
	Mon.-Wed.-Thur.-Sat., 11 a.m.-12:30 p.m.; 1:30 p.m.-3:30 p.m. (ex. Sat.); 5:50 p.m.-11 p.m., EST.			
	Tues., 11 a.m.-12:30 p.m.; 1:30 p.m.-3:30 p.m.; 5:30 p.m.-8 p.m.			
	Fri., 11 a.m.-12:30 p.m.; 1:30-3:30 p.m.			
Rhode Island	Providence	WLSI	1210	100
	Sunday, 1-6:30 p.m.—Daily, 3-6 p.m.; 9-11 p.m., DST.			
Texas	Dallas	WFAA	800	50000
	Sundays, 7:30 a.m.-9:30 p.m., CST.			
	Mon.-Wed.-Fri., 7 a.m.-9 p.m.			
	Tues.-Thur.-Sat., 7 a.m.-12 mid.			
Wisconsin	Madison	WHA	940	750
	Mon.-Wed.-Fri., 10-11 a.m.; 12-1 p.m.; 4:30-5:30 p.m., CST.			
	Tues.-Thurs.-Sat., 10-11 a.m.; 12-1:30 p.m.			
Cuba	Havana	CMX	890	500
	Daily, 12 n.-2 p.m.; 8-11 p.m.; 12 m.-1 a.m., CST.			
	Sat. night, midnight-4 a.m.			

In your Spare Time

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In RADIO-CRAFT, the magazine endorsed by thousands of Radio Service Men and Set Builders throughout the country, you will find most important articles telling how to build radio receivers. These articles are written by men outstanding in the radio profession, and among them we find John F. Rider, Sylvan Harris, Bertram M. Freed and others. RADIO-CRAFT also contains important reviews of the latest developments in Short Waves, Television, Sound Projection, Airplane Radio, Automobile Radio, Midget Sets, Construction of Test Laboratories, Cause and Cure of Interference, Service Men's Notes, New Apparatus, Money-Saving Kinks and many other subjects described every month.

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The Summer's Changes

Frequencies:

580	CFCY	Charlottetown, P.E.I., from 960
645	CKCI	Quebec, Que., from 880
645	CKCR	Quebec, Que., from 1010
675	VOWR	St. John's, N. F., from 682
690	XET	Monterrey, Mex., from 630
810	WJTL	Tifton, Ga., from 1310
900	TIC	San Jose, Costa Rica, from 750
910	XEW	Mexico City, from 780
930	CFCH	North Bay, Ont., from 1200
930	CFCL	Prescott, Ont., from 1010
965	XED	Reynosa, Mexico, from 961
1010	CHCK	Charlottetown, P.E.I., from 960
1010	CHCS	Hamilton, Ont., from 1120
1010	CKOC	Hamilton, Ont., from 1120
1010	WLAP	Louisville, Ky., from 1200
1132	XEH	Monterrey, Mexico, from 1080
1180	WMAZ	Macon, Ga., from 890
1220	KTW	Seattle, Wash., from 1270
1240	KGCU	Mandan, N. D., from 1200
1240	KLPM	Minot, N. D., from 1420
1310	WFDV	Rome, Ga., from 1370
1360	XETO	Mexico City, from 1485
1370	WJTL	Tifton, Ga., from 810

Power:

630	CFCT	Victoria, B. C., 500 to 50
640	KFI	Los Angeles, Cal., 5000 to 50,000
645	CKCI	Quebec, Que., 22.5 to 100
810	WCCO	Minneapolis, Minn., 7500 to 5000
890	WKAQ	San Juan, P. R., 500 to 250
930	CFRC	Kingston, Ont., 500 to 50
930	WIBG	Elkins Park, Pa., 50 to 25
965	CFCN	Calgary, Alta., 500 to 10,000
1010	CHCS	Hamilton, Ont., 10 to 500
1010	CKOC	Hamilton, Ont., 50 to 500
1010	WLAP	Louisville, Ky., 100 to 250
1110	KSOO	Sioux Falls, S. D., 2000 to 2500
1120	CJOC	Lethbridge, Alta., 50 to 100
1180	WMAZ	Macon, Ga., 250 to 500
1200	KGEK	Yuma, Colo., 50 to 100
1200	KMLB	Monroe, La., 50 to 100
1210	CKMC	Cobalt, Ont., 15 to 100
1210	CKPC	Preston, Ont., 25 to 50
1210	WJBY	Gadsden, Ala., 50 to 100
1210	WOCL	Jamestown, N. Y., 50 to 25
1310	KXRO	Aberdeen, Wash., 75 to 100
1320	KGMB	Honolulu, Hawaii, 500 to 250
1340	WSPD	Toledo, Ohio, 500 to 1000
1350	WEHC	Emory, Va., 100 to 500
1360	WQBC	Vicksburg, Miss., 300 to 500
1500	KGIZ	Grant City, Mo., 50 to 100

Owners:

560	WNOX	Knoxville, Tenn., to WNOX, Inc.
770	WBMM	Chicago, Ill., to WBMM Brdstg. Corp.
770	WJBT	Chicago, Ill., to WBMM Brdstg. Corp.
780	KELW	Burbank, Cal., to Magnolia Park, Ltd.
930	WDBJ	Roanoke, Va., to Times-World Corp.
1180	WHDI	Minneapolis, Minn., to Dr. Geo. W. Young
1200	WCAX	Burlington, Vt., to Burlington Daily News
1200	WPBE	Cincinnati, Ohio, to Post Publishing Co.
1200	WLBG	Petersburg, Va., to WLBG, Inc.
1200	WRBL	Columbus, Ga., to WRBL Radio Station, Inc.
1220	WCAE	Pittsburgh, Pa., to WCAE, Inc.
1280	WIBA	Madison, Wis., to Badger Brdstg. Co.
1290	KFUL	Galveston, Texas, to News Publishing Co.
1310	WBEO	Marquette, Mich., to Lake Superior Brdstg. Co.
1310	WOBT	Jackson, Tenn., to Sun Pub. Co.
1360	KGER	Long Beach, Calif., to Consolidated Brdstg. Co.
1370	KCRC	Enid, Okla., to Enid Radiophone Co.
1370	KUJ	Walla Walla, Wash., to KUJ, Inc.

1370	WRBJ	Hattiesburg, Miss., to Hattiesburg Brdstg. Co.
1370	WRDO	Augusta, Maine, to WRDO, Inc.
1380	KOH	Reno, Nevada, to The Bee, Inc.
1380	KSO	Clarinda, Iowa, to Iowa Brdstg. Co.
1420	KFXD	Nampa, Idaho, to Frank E. Hurt

Deletions:

780	WISJ	Madison, Wis.
1170	KTNT	Muscatine, Iowa
1370	KZM	Hayward, Calif.
1410	WSSH	Boston, Mass.
1420	KFQU	Holy City, Calif.
1420	KFQW	Seattle, Wash.

Locations:

590	WKZO	Kalamazoo, Mich., from Berrien Springs, Mich.
1200	WFAM	South Bend, Ind., from LaPorte, Ind.
1310	WOBT	Jackson, Tenn., from Union City, Tenn.
1420	WFDW	Anniston, Ala., from Talladega, Ala.
1420	WKBI	Cicero, Ill., from Chicago, Ill.

New:

830	WEEU	Reading, Pa.
948	NRH	Heredia, Costa Rica
1200	WBHS	Huntsville, Ala.
1420	WAGM	Presque Isle, Maine
1420	WDEV	Waterbury, Vt.
1420	WJMS	Ironwood, Mich.
1430	WFEA	Manchester, N. H.
1490	TJW	Hamilton, Bermuda

Calls:

675	VOWR	St. John's, N. F., from 8WMC
1200	WFAM	South Bend, Ind., from WRAF
1270	KVOR	Colorado Springs, Colo., from KFUM
1370	WJTL	Tifton, Ga., from WRBI
1420	KABC	San Antonio, Texas, from KTAP

Chains:

1160	WWVA	Wheeling, W. Va., new CBS
1330	KGB	San Diego, Calif., new CBS

Using Phones

(Continued from page 3)

iron, solder on another lead and run it to one side of your switch, then run a lead from the other side of the switch and solder it on to the lead which you unsoldered from the terminal plate and the job is complete. Then you can plug in your phones, switch off the speaker and DX all night without bothering anybody.

For Philcos

Stand the chassis on its side, which will give you a full view of the underwiring. Solder a wire to each plate terminal of the speaker plug socket (they are the lower ones). Run this wire to the phone post which may be attached to the metal chassis, but be sure that the screw is insulated and use fiber washers against the chassis. Disconnect the yellow wire which is in the center of the speaker and runs to meet the white wire

at the base. A snap switch may be attached to the arch on back of the cabinet which is unseen and easily snapped on and off as desired. Solder a wire to the yellow wire and carry it to one side of the switch, the other side to the white wire. Assemble the set and the job is done. Attach your phones and go to it. If you have any respect for your phones I'll advise you to disconnect them when the speaker is in high volume.

I am sure all Philco owners who love DX work will have the pleasure that I get from this little stunt, so please pass it on to them. *W. J. MacKeen, 1316 Broadway, Schenectady, N. Y.*

Summer Static

(Continued from page 5)

field between; wind friction; and other phenomena; all of which create tiny currents to flash through the radio set as characteristic forms of static.

A form of static that need not enter seriously into this discussion is the ever-present man-made static. It broadcasts constantly from commercial mechanical sources. However, its sound is not unlike much natural static. All-electric sets using house current are more likely to be affected by artificial static than the older types of battery-operated sets. Unfortunately, no one is capable of distinguishing exactly between the two forms of static, and, at times, the weather and static gets the blame when the fault lies within the set itself or some nearby interfering source.

Static will be with us always; we cannot escape its many annoyances. Then, too, no part of the world is immune. Byrd's expeditions into the Arctic and Antarctic were equipped with excellent radio apparatus, and even they reported severe static interferences in the frozen wastes at the ends of the world. Much of this was due, however, to the aurora, that brilliant and mysterious display which frequently prevents telephone, telegraph and radio operations. Any commercial radio operator will tell you that the tropics seldom have respite from a constant barrage of summer static.

The weather of the world comes and

goes in constantly changing moods, and because of the close relationship between static and conditions existing in the atmosphere, we must be prepared to endure radio static as long as weather remains. Mark Twain once so aptly remarked: "We all talk about the weather but no one ever does anything about it." And he was right; we can't do anything about the weather, nor the static it creates!

Radio Troubles

(Continued from page 9)

switch in the lead to the voice coil of the speaker? Will an output transformer be necessary if I use a 171-A tube and connect another magnetic speaker to my present set?

Additional grid leaks and condensers will not eliminate static without interfering with the signal strength and tuning of the set. There is nothing one can add to a receiver to reduce static. Telephones must not be attached directly to the output or plate circuit of the last power tube. The phones are best inserted in series with the plate circuit of the detector tube. The use of a two-circuit jack will cut out the audio-amplifiers and automatically cut off the speaker and the rest of the tubes as far as the flow of B current is concerned. Some additional information about the use of phones with the Majestic set will be found on page 5 of the March issue of RADEX. An output transformer is necessary whenever a power tube such as the 171-A is used to operate a magnetic type loud speaker as the windings should never be subjected to more than 90 volts direct current.

Using Another Speaker

Give directions for connecting an extra speaker to my set. I wish to use a magnetic speaker at a distant place in the house.

Since you do not mention any particular radio set we can give only general directions. The plate circuit of the last power tube or tubes always connect to the loud speaker coils, regardless whether the speaker is of the magnetic or dynamic type. You must determine which are these leads and then open the circuit with two extension wires reaching be-

yond the set. These two wires are then connected with the primary winding of an output transformer, and the transformer will then be in series with the power tube plate and the original speaker in the set. The two secondary terminals of the transformer are then connected to the distant magnetic loud speaker. This is rather crude, for there are other things that ought to be taken into consideration, such as impedance, voltage drop, etc. So, then, there may be some loss of power and tone in both speakers when operating together.

More DX Telephones

I have the latest Atwater-Kent No. 84, and wish occasionally to use headphones for quiet DX reception.

Information for the use of earphones in the plate circuit of the detector tube has been given elsewhere. There are many methods of making these connections, but we believe the most simple solution for the average person is to insert the telephone jack in series with the lead from the detector plate to the primary of the first audio transformer or resistance unit. A switch in the voice coil lead of the speaker will shut off that unit, or the tubes may be removed from their socket when the headset is in use.

New Power Tubes

I am contemplating replacing my present tubes with a new set before the coming DX season. Can I use -47s in place of the old -45s, and -51s or -35s instead of the old type -24s? Also, what type and make of short-wave adaptor would give best results with my Sonora receiver?

The undistorted output of the new -47 pentode tube is considerably greater than that of a single -45 tube in the last power stage. But, unfortunately, you cannot receive the benefits of the new tube, for, unlike the -45, it has a screen grid inside and one additional prong on the base for the screen connection. New sockets and additional wiring would be necessary, and this would not be very practicable. The new multi-mu tube may be placed in almost any receiver now using -24 tubes. The type number generally used for the new style screen-grid radio frequency tube is -35, but two

or three manufacturers use the number -51 for some unknown reason. The new tubes may be placed in the -24 sockets without a single change being made. The plate current drain is somewhat higher than with the -24 tubes and this may overwork the power-pack. Also, a long antenna should be used. If a strong intercepted signal current is sent into the grids of these tubes it eliminates the necessity of powerful amplification and the resulting presence of an annoying hiss, such as frequently characterized the -24 tubes. There are a number of short-wave adapters on the market suitable for your receiver. Or you could construct one as outlined in previous issues of RADEX. At best, an adapter outfit is not nearly as efficient as a separate short-wave set built with short leads and compactness.

Static From Fan Motors

I have an electric fan that interferes with reception to such an extent that I cannot use it when the radio is turned on. Yet a friend, next door, who has the same kind of receiver as mine, experiences no interference from his a. c. fan. What is wrong with my set or fan?

The radio set is not at fault. The trouble lies in the fan. It is evident that the two fans are built on differing principles. There are three kinds of electric motors and this trouble is not found entirely with fans, but any kind of machine electrically operated about the home. There is an a. c. fan that runs by induction only; another that is a combination a. c. and d. c. motor; and the a. c. fan motor with brushes and commutator. Your fan has a motor coming under the two latter classifications, while your friend has an a. c. induction motor in his fan. That type of fan has no brushes or commutator and, therefore, sparks cannot occur and make static interferences with radio reception. The remedy in your case, is to clean the commutator by polishing with emery cloth and renewing or smoothing down the brushes. This will prevent some of the static, but the best thing to do is to set aside the old fan and purchase one with nothing but an a. c. induction motor. This type of fan motor gives little or no

trouble and lasts many years. You can connect a large fixed condenser between each brush connection and the ground to absorb some of the sparks that cause static impulses, and also across the brushes and the commutator.

Readers' Conference

(Continued from page 11)

reports and would receive a reply saying that they had not given enough information for a real verification. The thing I most appreciate about KYA is that in such cases as the above they would return the dime to the writer. The majority of the stations would, I believe, have thrown in an Ekko stamp and sent it to the writer and considered themselves a dime in pocket. If any station owner sees this letter my message to them is—for the good of the honest DX fan please do not issue verifications unless in receipt of a correct report from the writer."

"It would be a forward step for the art of DXing if all stations adopted the policy of G5SW in the matter of verifying fan letters," says Eugene Martin, Belmont, Kans. "They disregard all reports, even though they be correct, which are mailed over 24 hours from the stated time of reception. This goes a long way toward combating exchange of program data among DXers who are

not strictly conscientious and whose ethics are not exactly up to par."

"I believe a black list in RADEX will greatly help the radio fan," insists Herbert V. Haussler, Box 15, Pratt Station, Brooklyn, N. Y. "WSMK and WMBA have not answered my letters with dimes enclosed, even after sending three reminders to each. Also the following have verified by letter for 10 cents, but have sent no stamps: KGJF, WJKS, WRHM, WGST, KTSL, WBCM."

"The following stations have not answered my requests for verification, although I have written twice to some: WHAT, WODA, WMBA, WAAM, WXYZ, WBZ, XEG, XEM, WSMK KTSL and WLAP," complains Edwin M. Prosser, 84 Saratoga Ave., Brooklyn, N. Y.

Defends Stations

"You can inform some of your readers," writes Richard D. Caddell, 609 Ridge Ave., Pittsburgh, Pa., "not to be too hasty in jumping to conclusions regarding stations not answering requests for verifications. Sometimes their letters get mislaid or overlooked and sometimes their guesses are wrong. I received a verification card from the so-called 'Black Sheep' KTFI, Twin Falls, Idaho, exactly ten weeks from the date I wrote them. I have written KWKC and WD1XI each eight letters and still have

Mary and Bob of the True Story Program, an N.B.C. feature Mondays at 10 p.m. EDT. Mary is played by Mary Sterling, and Bob by Cecil Seerest.



hopes for a reply. They will soon get tired of getting my letters and send me a card to get rid of me."

"During the past six weeks I have received verifications from 2YA, 2BL, also JOAK. The latter sent me a complete list of Japanese stations compiled up to February, 1931. This list shows 16 stations all being hooked up with the chain, except three. They state that at present all Japanese stations are on the air from 6:30 a.m. to 10 p.m. Japanese time. 2BL, Sydney, broadcasts boxing matches every Saturday night. I am also expecting verifications from 4QG and 2FC. Other foreign stations which I have heard during the past winter are 3LO, JOIK, JOHK and JOGK," reports Levi Rost, Cokato, Minn.

"Can you tell me how to stir up stations CMCQ and CMW in Havana, Cuba?" asks LeRoy House, Box 57, Plant City, Fla. "I checked programs of each and am sure that I have the report correct and have heard nothing from either station. I have written CMCQ about five times and CMW twice. If you know of any way to get a verification from these stations, please tell me."

"I have a log of 432 stations and have over 400 verified, a few of the best being JOAK, JOIK, KGU, KGMB, KGBU, 10 BQ (15 watts), CKCP, KONO, KFPL, WIAS and KGXC," states Ralph D. Ohlweiler, 19 Taft St., Southbridge, Mass. "I can't seem to get verifications from WMBA, WEAN, WRAX, WJBK, WEHC and WMIL."

From a New Zealand Reader

"I am enclosing 4/2 English money for a trial subscription to RADEX. I am very keen on DXing. I use a Sparton ten valve for doing the work. Here are some of the latest New Zealand stations which DXers might want to know: 2YB, New Plymouth, 1230 kcs., 100 watts, Sun., Mon., Wed., 7-10 p.m.; 2ZL, Hastings, 1335 kcs., 100 watts, Tues., Fri., 7-10 p.m.; 2ZI, Hastings, 1335 kcs., 100 watts, Mon., Thurs., 7-10 p.m.; 2L2XY, Wellington, 1120 kcs., hours irregular. In logging these stations DXers must not forget that New Zealand is nearly a day ahead of you guys, so to log 2YB, New Plymouth, on

Wednesday, you must be up at 2:30 a.m. mountain time." This interesting information is from Milton Ellis, Barrett St., New Plymouth, N. Z.

"I am a DXer," says Antonio Gomez, Box 90, Banos, Oriente, Cuba, "and if anybody wants to write to me about radio I will be very glad," and adds, "I have a RCA radiola 80 and a short-wave adapter. I have received in short wave, Radio Roma, Italy; PCJ, Holland; W8XX, Pittsburgh; W9XAA, Chicago; W3XAU, Philadelphia; W1XAZ, Springfield; VK2ME, Sydney; G5SW, England; W2XAF, Schenectady; W3XL, New York; Santa Domingo, Honduras; XDA, Mexico; HKD, Colombia."

Some Timely Tips

"For your information, Station XED, Reynosa, Mexico, is broadcasting on 965 kcs. This information I obtained last evening as they were signing off, giving the channel, as authorized by the Mexican government, together with the information that one could obtain twelve bottles of a certain brand of alcoholic beverages for a stated price, also that they were interested in hearing from listeners in the U. S. A., to whom they would send a souvenir. This station was received with tremendous volume; no fading, no interference, and very good modulation," reports G. S. Richards, Box 502, Norwalk, Conn.

"If any of your readers have never pulled in WJAZ, 1490 kcs., it comes in about 4 p.m.-5:30 p.m. They have played only classical and symphonies on phonograph records every time I have heard them, and I've never heard them use a bit of advertising yet. I can get their announcements plainly, but can barely hear their music. The reason I said they come in about 4 p.m. is that WCHI signs off at 3:30 and sometimes WJAZ comes in at 3:45 CDST," writes Harold Yehling, 534 West 60th Place, Chicago, Ill.

"Why don't you list KZRM, Manila, P.I.?" asks Don Townsend, 1421 Arch St., Berkeley, Calif. "I just got a verification from them and they state they are using 50,000 watts power and are operating on 618.5 kcs. and owned by Radio Corp. of the Philippines. They

are on the air Tuesday to Saturday, inclusive, from 1 a.m.-7 a.m. PST; from 11 p.m. Saturday-1 a.m. Sunday, and 2 a.m.-7 a.m.; Monday, 7-2 a.m. PST."

From Robert Oueton, 11240 Huston St., North Hollywood, Calif., comes the following: "Here are some of our stations for the boys, KMTR, 570 kcs., 500 watts, all night; KMCS, 1120 kcs., 500 watts, all night; KGFS, 1000 kcs., 100 watts, all night; KFOX, Long Beach, Calif., 1250 kcs., 3 a.m. PST."

"Here's a tip for DX fans," reports Ralph H. Schiller, 4 Vincent St., Hawthorne, N. J. "CKMO, a 50-watter, located at Vancouver, B. C., on 730 kcs., has special broadcasts on Sunday, Monday, Tuesday, Thursday and Friday, from 11:30 p.m. to 3 a.m. PST."

"I have a card from HHK, Haiti, advising me that there are to be no more noonday broadcasts. Their hours are from 8-9 a.m. Fridays, and 6:45-7:15 a.m. EST, Saturdays. A verification from CKMO indicates that they broadcast from 11:30 p.m.-3 a.m. PST each Sunday, Monday, Tuesday, Thursday and Friday, called 'midnight prow' for DX fans." So reports Jimmie Manners, 23 Heil Ave., Trenton, N. J.

"DXers will be fully repaid," promises A. W. Snyder, 3216 W. 38th Place, Chicago, Ill., "by tuning in WMAQ at 10:45 p.m. Monday nights of DX season. They plan to arrange special DX programs for every state next fall and winter and also have lots of other valuable information."

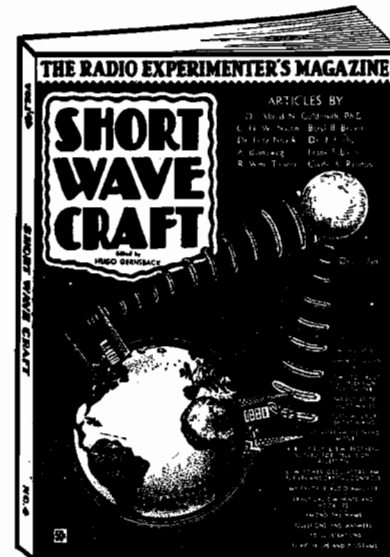
Some SOS Calls

Geo. D. Iliffe, Suite C. Baldwin Apts., Winnipeg, Man., would like to identify a station he received at 12:20 CST Saturday night, June 27th. He says: "The station came in between 1200 and 1210 kcs. and was broadcasting from the Munroe Hotel, Kansas City, Kansas. It was asking for reports on reception from time to time, but I could never catch the call letters. I wrote to the hotel asking them to turn my letter over to the station with its studio located in their building. I received a reply from the Munroe Hotel, Kansas City, Mo., stating that there was no station located

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on their premises. I assume there can be no such hotel in Kansas City, Kans., and the P. O. sent it to the Missouri City. I do not see how the station could be WLBF which I have already received at its correct frequency, 1420 kcys."

"WRHM no longer bothers us fans in the east, but WFIW seems never to be silent," comments Jackson W. Thompson, 535 Hess St., Bethlehem, Pa. "They sure crowd the dial between 930 and 950 kcys. Now we have another one that takes up everything between 1320 and 1370 kcys. and that is WJKS at Gary, Ind. They have their 'Get Acquainted Club' and lots of nonsensical phonograph records and begin at 3 a.m. EST and for two whole hours spoil reception for the fans who are after Nevada and the Pacific Coast."

"On July 1st at 4:45 a.m. EDST, I picked up a station on 780-790 kcys., testing very weak and static bad. I caught the letters OS. The announcer spoke English and said it was a new station and mentioned Italy. I don't believe it was Italy, the only OS is in CWOS on 789, but that is no new station. If you find out, please let me know," writes Roy Cattle, RFD No. 2, Paterson, N. J.

"I have bagged over 225 stations on my Radiola 32 superheterodyne. There is, however something wrong in its mechanical features. I receive almost every station on two different frequencies. The set has a twin dial. Say I get station WABC on 850 kcys. I turn my dial to 770 and get WABC again. If, while on 770 kcys., I turn the left dial towards 850, the volume increases. This spoils my DX reception, as well as local, because if there is a station broadcasting at the same time on 770, I receive a constant howl and whistle. It will please me very much if you can help me locate my trouble, or perhaps if you publish my letter in your magazine, some of our RADEX friends may be able to help me," writes Sam N. Kiamie, 2857 Sampson Ave., New York, N. Y.

Major R. L. Foster, of the U. S. Army, Washington, D. C., calls our attention to a station operating on 780 kcys. from some theatre in Albany, N. Y. Can anyone identify this station?

"Please tell me what is the best time to get stations in the West Indies," inquires Archie Ferril, 38 Humbercrest Blvd., Toronto 9, Ont.

"In your April issue CKPR is listed at Port Arthur on 890 kcys. The Canadian National Radio Features Magazine, with whose programs they are connected, shows them on 930 kcys. at Fort William, Ont.," says Gordon F. Blackwell, 129 Longarth St., London, Ont.

"You give XEO, Mexico City, as being on 940 kcys.," states Charles Huey, 312 W. Miner St., West Chester, Pa. "I heard XEO the other night loud and clear between two close stations on 930 and 940. I think it comes on 935 kcys. to be exact."

R. E. Moran, 540 Parkdale Ave., Ottawa, Canada, reports that CFLC has changed its frequency from 1010 kcys. to either 910 or 920 kcys.

DC Current Again

"On page 15 and 24 of your Midsummer edition you tell one of the persons who wrote to you for advice on the operation of an a. c. set from d. c. lines, suggesting a motor generator as the means of doing this. Well I feel sorry for the gentleman who has the a.c. set and has been used to listening to its playing from the a. c. lines and attempts to use it on the d. c. lines with the aid of the motor generator," advises Michael J. Jordan, 1641 Lexington Ave., New York City. "In the first place, the average a. c. set uses about 125 watts per hour to operate, and if one uses a motor generator to change the type of current, he will find that to get his motor generator to supply this amount of a. c. he will be passing through his converter 250 watts. Figure that out at from seven to ten cents per 1000 watts, and you have a very expensive device on your hands."

In another article in this issue we are describing some modern sets designed especially for DC voltage which do not require converters.

Answers to Inquiries

"I think Ivan D. Ide is slightly off on his Greenwich Civil Time," comments John Malone, Sparland, Ill. "This time begins at midnight as 0000; 1 a.m. is 0100, 3:49 a.m. is 0349, noon at Green-

wich is 1200, 1 p.m. 1300, 11 p.m., 2300, and so on. Central Standard is six hours earlier than Greenwich Time, so 2045, or 8:45 p.m. Greenwich time, minus 6 hours would be 2:45 p.m."

"In answer to Harris Schiestel, of Detroit, G5SW takes three or four months to reply to letters," says Clement Van Velsor, 1033 Sanford Ave., Irvington, N. J. "I waited three months for a verification and an acquaintance of mine waited four months. They use a form letter except for the last sentence, which either verifies reception or says that they can't verify it. I have a total of 57 short-wave stations with 14 countries represented; about ten are verified."

"Concerning Hedley Simmonds reports on WMBA or WNBA on 1200 kcys., located as Silver Haven, this station is WNBO, listed in RADEX as Washington, Pa. My verification gives their location as Washington also, but while listening Sunday morning, I tuned in WNBO and they gave their location as Silver Haven, from where a program of dance music was being broadcast. Evidently they broadcast by remote control from Silver Haven," advises Lester R. Reinmund, 416 68th Ave., West Allis, Wis.

"In answer to Mr. Rawstron's request for someone to identify the station he heard on 760 kcys., which mentioned missionary work in the James Range, I think the station he heard was 4QG, Brisbane, This station would be the most likely to come in at 5 a.m., and also the James Range is in Central Australia. I have had this station coming in fairly well twice and recently I received a letter of verification from them. Incidentally, I have also received verifications from JOAK and OAX," reports F. E. Holley, 6450 So. Lincoln St., Chicago, Ill.

"A reader in Paterson, N. J. mentioned that he heard 2YA in the spring and asked if this had been done so late in the year before. I heard 2YA on July 6, 1931, and this is midsummer reception," states George Lilley, 227 W. Bernard St., West Chester, Pa. "West Chester is located in the extreme southeast corner of Pennsylvania, or you

might say on the Atlantic coast. I had this midsummer reception from 2YA on my two-tube set, and have, of course, written for a verification."

Lester R. Reinmund writes us that the station using the slogan 'The Voice of the Prairie,' regarding which S. D. Dorrance, Jr., of New York inquired, is CFCN which has just recently moved from 690 to 985 kcys.

"I think Edward H. Chandler heard either WWJ with an early religious program, or 5SC, Glasgow, Scotland. If the Scot has religious programs about 8 or 9 a.m., their time, it was probably it. It uses only 1000 watts," writes John Malone, Sparland, Ill.

"KOB, State College, N. M., frequently broadcasts by remote control from their studios in El Paso," reports Richard D. Caddall, 609 Ridge Ave., Pittsburgh, Pa.

Wm. Dyson, 72 Cambridge Ave., Hamilton, Ont., believes the station on 1500 kcys. referred to by Mr. Bowers is KPQ.

Some New Clubs

"I have become so interested in the collecting of radio verifications," comments Ralph H. Schiller, 4 Vincent St., Hawthorne, N. J., "that I have decided to inaugurate a new radio DX club. I have named it the Transcontinental DX Club. There are quite a few members in this club already and with your kind permission to publish this letter in your next available issue, I am sure I can create even more interest in this club. To all who write to me I will explain the objects and benefits of this club."

Ray LaRocque, 135 Highland St., Worcester, Mass., writes as follows: "I would like to have you tell RADEX readers that a DX club has been formed in New England, called the Radio Listeners' Club of Central New England. Any reader who is interested in joining this club can communicate with the Secretary L. Rushton, care Evening Gazette, Worcester, Mass."

For Foreign Postage

"Here is a real friend," says Richard Douglas, 1125 Krug Park Place, St. Joseph, Mo., "In writing to a foreign

station and enclosing postage for verification, United States fans usually send U. S. stamps, which in some places are no good. These International Response coupons may be purchased at any post office at a cost of 9 cents apiece. They are good for one full rate letter to any country in the postal union from any country in the union. They are valid for six months after the date of purchase."

"Reception is good all summer here," writes Anthony Arsenault, Box 444, 19 Spring St., Summerside, P. E. I., Canada, "My radio is a three-tube home-made set, using only 45 volts of B battery and it gives me very good loud-speaker reception. I'm very interested in getting DX stations. Have heard nearly every state in the U. S. A., also Cuba, Mexico, Porto Rico, and as far as Manitoba in Canada. I would like to receive letters from all interested in DX and promise to answer any received."

"While reading the Midsummer edition I noticed the article about the unlicensed station KTST, located at Seymour, Texas. I have a verification from this station dated April 18, 1931. It is owned by the KTST Broadcasting Co. and is located on top floor of the Harvey Hotel in Seymour. It uses 50 watts power on 1210 kcys.," reports Lester R. Reinmund, 416 68th Ave., West Allis, Wis.

Harvey Hobbs, 111 East 8th St., Covington, Ky., gives the following information: "WLAP, Louisville, has received permission from the Federal Radio Commission to operate 18 hours a day for 60 days on 1010 kcys., with a power of 250 watts. After this time has elapsed, the change will either be made permanent or they will return to 1200 kcys. and 100 watts power."

"Someone speaks of KCAA's harmonic—its second one. Have any readers experienced a sixth harmonic?" asks John Malone, Sparland, Ill., "I have, several times, of WKY on a Pilot Super Wasp."

Prof. D. Gadoury, 2215 Hood St., Montreal, Que., who has logged 309 stations, with JOBK verified, would like to know if there is a DX Club in Montreal.

With the DXers

(Continued from page 15)

better without a ground wire. With the ground disconnected, the volume control seems to act like the oscillation coil of a regenerative set. This makes the tuning much sharper above 790 kcys." Albert Byles, 227 Chatham Ave., Toronto 6, Ont.

"I have a 7-tube Crosley which was purchased October, 1929. With this set I have reached 279 stations; 8 of these in California, 9 in Texas, 2 in Oregon, 1 in the state of Washington, 2 in Mexico and 2 in Cuba. I have reached every state in the United States except five, namely, North Dakota and four states in the mountain time division." Chas. F. Kyle, 392 Preble St., So. Portland, Me.

"With regard to DX reception, we can hear several Mexican stations any night, also Havana, Cuba, quite frequently. I have verifications from 2YA, Wellington, N. Z., and 2BL, Sydney, Australia, and have also heard 3LO, Melbourne; 2FC, Sydney; 4QG, Brisbane, and others in Australia. Also several Japanese stations. All of these were heard on a loudspeaker." Edwin H. Chandler, Ranfurly, Alta.

"I have a Magnaformer 8-tube super-heterodyne which works only using a loop. Here is what I have done since the first of the year: 15 stations from Pacific coast, 6 stations from Mexico, 5 from Cuba, 23 Canadian, 3 from Nova Scotia, one Alaskan, and one Japanese (JOAK). I have heard every state but Nevada. Have received stations on every channel. Let us hear from other readers using loop antennas." Chas. Maier, Jr., 92 Zabriskie St., Jersey City, N. J.

"I have 285 Ekko verified stamps of stations received on my Grebe 7-tube t.r.f. set, getting seven stations on the west coast, 3 in Mexico, 4 in Cuba and 3 in Nova Scotia. Would like to hear from any listener who has ever heard England and France from the Atlantic side of U. S. and the time he got it," requests George J. Greene, 911 2nd Ave., Long Island City, N. Y.

"I receive the Sunday broadcast from London direct every Sunday and get quite a kick out of hearing them before-

hand making arrangements for the proper reception and tests. I also receive the Radio telephone connection between London and New York, that is one end of the connection." Chas. A. Ransom, 17th and Fairmount Ave., Philadelphia, Pa.

"I am writing this to tell you how much RADEX has helped me to log 220 stations. I am 16 years old and a cripple, so radio is my favorite hobby. I have logged 6 Mexican stations, 22 Canadian, 3 Cuban, and 189 in the United States. My best catches are a 100-watt Cuban, a 500-watt in Vancouver, and 10BP, 25-watter in Wingham, Ont." Stanley Brown, 467 Congregation St., Montreal, Que.

"Since last October I have logged 225 stations, including three in Mexico and one in Cuba. I have logged twenty-four stations on the Pacific coast since Christmas. Some of my best catches are a 50 and 100 watter in Vancouver, B. C., a 50-watt at Detroit, and two 250-watt in California." Jack C. Foster, 785 Dorchester Ave., Winnipeg, Man.

"I have logged 424 stations and have over 400 verified," reports Ralph D. Ohlwiler, 19 Taft St., Southbridge, Mass. "Among these I have JOAK, KGMB, KGU, KGBU, 16 from Cuba, 6 from Mexico, and await one from JOIK. I also have verifications from KFPL, KONO, KGCX and KOB. My aerial is 300 feet long."

"I received KFXM, WEHC, CKWX, all of which are 100-watters. The New York stations on 1500 kcys., like WWRL, WNBC, WLBX, come in so clearly it seems impossible. I would like to know when one can pick up KGBU, Ketchikan, Alaska." Robert Nickolas, 601 E. Monrow Ave., Kirkwood, Mo.

"I have verification of reception from KMTR, Los Angeles, under date of April 11th, which states, 'Yes, we are a 500-watt station now, but listen close as we are moving to our new station about the first, where we will have a complete new RCA 1000-watt transmitter,'" reports T. B. Hubbell, 330 Lafayette Ave., Lexington, Ky.

"Exactly four months ago today I got a new Radiola Superheterodyne, and I think that it is the finest and most

powerful set I have ever seen. Since I first got my set, up until today, I have logged 404 stations." Harry A. Shaffer, 301 S. Fairview St., Lock Haven, Pa.

"I have an 8-tube Philco and in about two months have picked up about 141 stations from coast to coast and in Canada, Mexico, Porto Rico and Cuba. I think this is a pretty good record considering the location I am in with power lines, garages, charging plants, etc., all around me." G. A. Wieland, 507½ Oak St., Toledo, Ohio.

"I am a DX fan and have gotten some pretty good catches. The best, I think, is KFVD, a 250-watt station in Culver City, Cal. I have received 13 in California, 3 in Oregon, 4 in Washington, 4 Mexican and two Cuban." Kenneth A. Peterson, 184 Francis Ave., Pontiac, Mich.

"Three cheers for RADEX. I bought a copy a few months ago and oh, boy, I certainly have enjoyed radio since then. RADEX has it with plenty to spare. I am just a beginner as a DXer and up to date have logged 203 stations in about four months with verifications for nearly all distant points." Del Hoisington, 35 W. Broadway, Derry, N. H.

"What do you think concerning this luck on 'Jumbo' my one-lung set? Received KNX, KGO, KFI, KECA, CMC, CMX, WKAQ, WJBY, WKDY, KSL, KVOO and KDYL. All of these are verified. Here are some I am waiting for verifications from: KOB, XEI and XED." Donald Pierce, 2844 N. Bailey St., Philadelphia, Pa.

"I have received 183 stations on our 5-tube battery set, 20 of which are Candian, 3 Mexican and 3 Cuban. My best catches are CMBS, a 150-watter in Havana, which verified, although you have not got them marked, and KTM, Los Angeles, with 500 watts." Robert C. House, 68 Dewey Ave., Buffalo, N. Y.

"I picked up W9XBR, Salina, Kans., broadcasting on 1540 kcys. and using only 5 watts, on Sunday morning, March 22nd. I have had a police station WMP located somewhere in Massachusetts. They were talking about Brookline, Mass. Does anyone know exactly where it is?" Victor J. Balt, 226 Sumner Ave., Aurora, Ill.

"I have a verification from XEM saying that they have been using 750 kcys, but now they are on 730 kcys," advises John R. Carter, 1119 W. 9th St., Erie, Pa. "I get XED regularly on 975 or 980 kcys. I have a verification from CMX giving their power as 1 kilowatt or 1000 watts."

"Speaking of records, how's this? One night last winter from 1 a.m. until 7 a.m. I listened to United States, Canada, Mexico, Cuba, Costa Rica, Peru, Argentina, Hawaii, Japan and New Zealand. I would like to know if any DXers have heard Africa and what time to listen for them." Arlo F. Kelley, 4234 W. 15th St., Amarillo, Texas.

"My ground is two four-foot lead pipes, driven into the ground about 20 feet apart, connected together with heavy copper wire. It gives 50% more volume than my old ground did," says E. J. Russell, Boscawen, N. H. "I would like advise on the best time to get station 2LO, London."

"I am using a Crosley Buddy mantel set with 5 tubes. In seven months I have heard all the states but Nevada and Wyoming," says Louis J. McVey, Route 10, Box 144B, Sparrows Point, Md.

"XEQ, Juarez, has never been on the air but one time, about a month ago, test program, then went haywire. XEJ is the only station operating in Juarez," reports Mrs. Roy Schanck, El Paso, Texas.

"I receive 10BP at Wingham and 10AR, Stratford, regularly. 10BP broadcasts from 1:30 to 2:30 p.m. every Tuesday and 10AK is on every evening from 5:30 to 7:15." Fred Wakerell, 343 Forbes St., London, Ont.

"I got lots of fun out of my radio. I have an Atwater Kent No. 47. Last week I had CMCF in Havana, which is only a 250-watt. I have had WIL in St. Louis, which is only 100 watts." Mrs. Nannie Redmond, 7 E. University Ave., Cincinnati, Ohio.

"I have received 37 stations outside the United States, including Alaska, Hawaii, Cuba, Canada, Mexico, and seven stations in Japan, I have just received a verification from JOAK. I have an 11-tube Philco," writes Joe Whiteside, 720 N. Navajo, Altus, Okla.

"My set consists of but two tubes with earphones. I have received in the last two months letters or postcards from over 125 stations in Mexico, Cuba, Canada and United States." Douglas Blackwell, 14 Walnut St., London, Ont.

"In four months of DXing I have logged 313 stations, on a 9-tube Sparton Model 593. My best recent catches include CKWX, CKMO, WKAQ, WKAV, KFVD and KGFJ." H. A. Knauff, 28 Lakeshore Drive, New Toronto, Ont.

"This winter we made a two-tube short-wave set and tuned in 107 amateur stations in two evenings." S. E. Barrett, 443 No. Colorado St., Kansas City, Mo.

Sets for D. C. Current

(Continued from page 13)

that the best answer to the problem is to be found in the use of a good rotary converter, as the combined price of receiver and converter is now probably lower than any other method giving the same efficiency.

The United American Bosch Corp. Springfield, Mass., has two receivers which are designed especially for DC use. The Model 75 employs three 224 radio frequency stages, a 227 power detector, a 227 first audio and two 245 power output tubes in push-pull. The first audio stage, which is not found on their AC model, compensates for the lower voltages necessitated by DC operation. They claim this set gives results which are directly comparable to their standard AC model.

The Pierce Airo, Inc., New York City, too, believe that they have a DC receiver which functions just as well as the average AC set on the market. The current consumption of this set is approximately 40 watts per hour.

None of the DC sets described in this article is intended for use on farm power plants developing 32 volts. On such systems a converter such as described in April, 1930, RADEX (No. 38) must be used. Such a converter changes the 32-volt current into 110-volt, thus permitting the use of the regular AC receiver.

Slogans of the Stations

FOR the following list of station slogans we are indebted to Fred Stone, Jr., (age 13), of Kintnersville, Pa.

KDKA "Pioneer Broadcasting Station of the World."
KDYL "Out On the Great Divide."
KFJM "Grand Forks, the Education Center of the State."
KFKA "The Pike's Peak Station."
KLX "Where Rail and Water Meet."
KLZ "It's a Privilege to Live in Colorado."
KMOX "The Voice of St. Louis."
KOB "The Sunshine State of America."
KOIN "Hood River Apples from Portland."
KPO "The Voice of San Francisco, City of the Golden Gate."
KPRC "Kotton Port Rail Center."
KTHS "Kum to Hot Springs."
KUSD "South Dakota University for South Dakotans."
KVOO "The Voice of Oklahoma."
KWCR "The Voice of Cedar Rapids."
KWG "Voice of San Joaquin Valley."
KWKC "Keep Watching Kansas City."
KWVG "Kum to the World's Winter Garden."
WAAW "Where Agriculture Accumulates Wealth."
WBAP "Where the West Begins."
WBAX "In Wyoming Valley, Home of Anthracite."
WCAC "From the Nutmeg State."
WCAD "The Voice of the North Country."
WCAX "The Voice of the Green Mountains."
WCCO "Service to the Northwest."
WDAE "Away Down South in the Sunshine State."
WDAY "Biggest Little City in the World."
WDBJ "Roanoke, Down in Old Virginia."
WDBO "Way Down by Orlando."
WDOD "Wonderful Dynamo of Dixie."
WEAU "The Heart of the Corn Belt." (?)
WEAF "The Voice of the Millions."
WEBR "We Extend Buffalo's Regards."

WFAA "Working For All Alike."
WFBG "The Original Gateway to the West."
WFBM "The Convention City of America."
WFBT "Home of the Star-Spangled Banner."
WFDW "The Vehicle City."
WGAL "World's Gardens at Lancaster."
WHBF "Where Historic Blackhawk Fought."
WHK "Cleveland, the Convention City."
WHN "Voice of the Great White Way."
WLW "The Nation's Station."
WIOD "Wonderful Isle of Dreams."
WCBE "Second Port of the U. S. A." (?)
WJAR "The Southern Gateway to New England."
WLBL "Wisconsin, Land of Beautiful Lakes."
WLS "World's Largest Store."
WMC "Memphis, Down in Dixie."
WNAD "Voice of Sooner Land."
WNJ "Voice of Newark."
WKAQ "The Isle of Enchantment, Where the World's Best Coffee Grows."
WOAI "The Winter Playground of America."
WOAX "Trenton Makes; the World Takes."
WOC "Where the West Begins" and "In the State Where the Tall Corn Grows."
WOCL "We're on Chautauqua Lake."
WODA "The Voice of the Silk City."
WOOD "The Furniture Capital."
WOS "Watch Our State."
WPG "The World's Playground."
WQAM "The Most Southerly Broadcasting Station in the U. S."
WQAN "The Voice of Anthracite."
WRC "The Voice of the Capital."
WRVA "Carry Me Back to Old Virginia."
WSB "The Voice of the South."
WTAG "The Voice From the Heart of the Commonwealth."
WTAQ "The Voice of the Wilderness."
WTAR "Down in Old Virginia."
WTIC "The Insurance City."

We note a few errors in this list but perhaps our readers can correct them and add other slogans to the list.

INSURE YOUR RADIO ENJOYMENT SEND THIS BLANK TODAY

The Radex Press,
5005 Euclid Avenue,
Cleveland, Ohio

Enclosed find \$_____ for which send me postpaid my choice of your offers as checked below:

- | | |
|---|--------|
| <input type="checkbox"/> One radio map of North America | 25c |
| <input type="checkbox"/> One copy of the next RADEX | 25c |
| <input type="checkbox"/> Trial subscription, next five issues of RADEX | \$1.00 |
| <input type="checkbox"/> One year's subscription to RADEX, 10 issues, and Radio Map free | 1.75 |
| <input type="checkbox"/> Two subscriptions to RADEX with one leatherette cover and Radio Map, both free | 3.50 |
| <input type="checkbox"/> One two-year subscription with leatherette cover and Radio map, both free | 3.50 |
| <input type="checkbox"/> Leatherette Cover | .50 |

Write Name Plainly

Street and Number

City and State

At LAST a MODERN BATTERY SET

Good News for the Electric-Less

IN the rush to meet the demand for modern all-electric receivers, most radio manufacturers have overlooked the thousands and perhaps millions who do not have access to electric current. Such people have therefore not shared in the great advance that has been made in receivers in the past few years.

We are glad, on account of these millions, to call attention to the Crosley Battery "Show Boy." Of this set the manufacturers say: "Here is an entirely new six-tube battery radio receiving set housed in a small, compact and truly beautiful table model cabinet and making use of the new two-volt tubes and new Air Cell battery.

"Radio manufacturers have devoted their efforts, up to now, to the development of the highly popular small size radio receiver for use on house electric light circuits. Now Crosley offers this unusual small sized table model battery receiver incorporating in its design all of the best features of the small-size electric sets. It has all the features and delivers all of the performance of the largest battery-operated set. It uses six tubes, three of which are screen grid. There are two type '32 radio amplifier tubes, one '32 detector tube, one '31 intermediate audi tube and two '31 output tubes connected in push-pull. The type '32 tubes require only 60 milliamperes for the filament—less than one-tenth of the power required by the older type tubes. The type '31 tubes require only one-fifth of the filament power heretofore required. The two-volt tubes operate on a two-volt 'A' battery as compared with the six-volt previously necessary for the operation of a battery type receiver.

"The new Air Cell battery recommended for use with the "Show Boy" has a life of approximately 1000 hours of operation of level capacity—about

three hours a day for a year. There is no fluctuation in the power delivered by this cell. It suffers no deterioration nor does it exert any power until water has been put into it. Then it begins its battery life and continues to deliver an even maximum of power until the end of 1000 hours or more. It eliminates entirely the necessity for charging the "A" battery every week or two.

"Three 45-volt "B" battery blocks are recommended for the operation of this set. Four blocks may be used when extreme sensitivity and maximum volume are required. Simplicity of construction reduces the battery connections from the usual seven or nine to only four. The circuit used permits long, useful life of the 'B' batteries as it is not susceptible to voltage changes.

"The speaker is the latest type Crosley magnetic power speaker, lending a richness and depth of tone never before found in a receiver of this type."

The price of the Crosley Battery "Show Boy" is \$47.50 complete with tubes and batteries. A circular descriptive of this set may be secured from Mr. D. J. Butler, Crosley Radio Corporation, Cincinnati, Ohio.

The Airport Stations

Guy B. Welsh submits the following airport stations which can be heard in the BE band.

WRW	Greensboro, N. C., 950 keys.
WWAP	Pittsburgh, Pa., 1250 keys.
WWAS	Cincinnati, Ohio, 1360 keys.
WWAB	Buffalo, N. Y., 1050 keys.
WWAH	Knoxville, Tenn., 1010 keys.
WWU	Hadley Field, N. J., 1010-680 keys.
WVO	Cleveland, Ohio, 1030 keys.
WWA	Albany, N. Y., 1270 keys.
WWR	Richmond, Va., 780 keys.
WVB	Baltimore, Md., 1050 keys.
WWQ	Bellefonte, Pa., 1280 keys.
WWT	Atlanta, Ga., 750 keys.
KCU	Fresno, Calif., 1040 keys.
KCAE	Winslow, Ariz., 800 keys.
KCV	Oakland, Calif., 800 keys.

N — National

KEY TO CHAIN STATIONS

C — Columbia

CFCE 1030 N	KPRC 920 N	WCCO 810 C	WHK 1390 C	WNAX 570 C
CFRB 960 C	KRLD 1040 C	WCFL 970 N	WHO 1000 N	WNOX 560 C
CKAC 730 C	KSCJ 1330 C	WCKY 1490 N	WHP 1430 C	WOAI 1190 N
CKGW 690 N	KSD 550 N	WCSH 940 N	WIBO 560 N	WOC 1000 N
KDKA 980 N	KSL 1130 N	WDAE 1220 C	WIBW 580 C	WOKO 1440 C
KDYL 1290 C	KSTP 1460 N	WDAF 610 N	WIOD 1300 N	WORC 1200 C
KECA 1430 N	KTAR 620 N	WDAY 940 N	WIP 610 C	WOW 590 N
KFAB 770 N	KTHS 1040 N	WDBJ 930 C	WIS 1010 C	WOWO 1160 C
KFH 1300 C	KTRH 1120 C	WDBO 1120 C	WISN 1120 C	WPG 1100 C
KFI 640 N	KTSA 1290 C	WDOD 1280 C	WJAR 890 N	WPTF 680 N
KFJF 1480 C	KVI 760 C	WDRC 1330 C	WJAS 1290 C	WQAM 560 C
KFKX 1020 N	KVOO 1140 N	WDSU 1250 C	WJAX 900 N	WRC 950 N
KFPY 1340 C	KWK 1350 N	WEAF 660 N	WJDX 1270 N	WREC 600 C
KFRC 610 C	KYW 1020 N	WEAN 780 C	WJJD 1130 C	WREN 1220 N
KFSD 600 N	WAAB 1410 C	WEBC 1290 N	WJR 750 N	WRR 1280 C
KFYR 550 N	WABC 860 C	WEEI 590 N	WJZ 760 N	WRVA 1110 N
KGB 1330 C	WACO 1240 C	WENR 870 N	WKBN 570 C	WSAI 1330 N
KGO 790 N	WADC 1320 C	WFAA 800 N	WKBW 1480 C	WSB 740 N
KGW 620 N	WAIU 640 C	WFAN 610 C	WKRC 550 C	WSM 650 N
KHJ 900 C	WAPI 1140 N	WFBL 1360 C	WKY 900 N	WSMB 1320 N
KHQ 590 N	WBAL 760 N	WFBM 1230 C	WLAC 1470 C	WSPD 1340 C
KLRA 1390 C	WBAP 800 N	WFI 560 N	WLAP 1010 C	WSUN 620 N
KLZ 560 C	WBBM 770 C	WFLA 620 N	WLBW 1260 C	WTAG 580 N
KMBC 950 C	WBCM 1410 C	WGAR 1450 N	WLBZ 620 C	WTAM 1070 N
KMOX 1090 C	WBEN 900 N	WGL 1370 C	WLIT 560 N	WTAQ 1330 C
KOA 830 N	WBRC 930 C	WGN 720 N	WLS 870 N	WTAR 780 C
KOH 1380 C	WBT 1080 C	WGR 550 C	WLW 700 N	WTTT 660 N
KOIL 1260 C	WBZ-A 990 N	WGST 890 C	WMAQ 670 C	WTMJ 620 N
KOIN 940 C	WCAE 1220 N	WGY 790 N	WMAQ 670 C	WTOC 1260 C
KOL 1270 C	WCAH 1430 C	WHAM 1150 N	WMC 780 N	WWJ 920 N
KOMO 920 N	WCAO 600 C	WHAS 820 N	WMT 600 C	WWNC 570 C
KPO 680 N	WCAU 1170 C	WHEC 1440 C	WNAC 1230 C	WWVA 1160 C
				WXYZ 1240 C

WHAT'S ON THE AIR TONIGHT?

A WEEKLY CALENDAR

Leading Features of the Network Programs

Time is given by Eastern Daylight Saving. For Eastern Standard time, subtract one hour; for Central Time, two hours; for Mountain Time, three hours; and for Pacific Time, four hours.
Programs of the National Broadcasting Company begin with WEAJ and WJZ; those of the Columbia Broadcasting System with WABC.

These programs are correct to date but are subject to change daily thereafter

Daily (Except Saturday and Sunday)

6:45-8:00 Tower Health Exercises WEAF WEEI WFI WGY WCAE WRC WBN CKGW	5:00-5:30 The Lady Next Door WEAF WTAG WJAR KSD WRC WTAM WENR	6:00-6:25 Black and Gold Room Orchestra WEAF WCAE WTAM WENR WFI WRC WGY WOC WHO WDAY KSD WJAR WWJ WKY	6:45-7:00 Swift Program — Stebbins Boys WEAF WCAE WTIC WTAG WEEI WJAR WCSH WFI WRC WGY WBN WDAF	6:45-7:00 Literary Digest Topics — Lowell Thomas WJZ WBZ WBZA WHAM KDKA WLW WBAL	7:00-7:15 Amos 'n' Andy WJZ WHAM KDKA WBZ WBZA WRC CKGW WCKY WLW WBAL CFCF WRA WPTF WJAX WIOD WFLA WSUN	7:15-7:30 Denis King and Linit Orchestra WABC WOKO WFBL WHEC WGR WEAN WDRG WNAE WORC WCAU WJAS WMAL WCAO WADC WKRC WSPD WBBM WCCO WMT KMOX KMBC KOIL CFB	7:30-7:45 Phil Cook — the Quaker Man WJZ WBZ WBZA WENR KFYR WDAY WBAL WGAR KDKA WREN KWK KFAB WTMJ KSTP WHAM WBC WLW WRC KOA KSL	7:45-8:00 Camel Quarter-Hour — Morton Downey WABC WOKO WFBL WHEC WGR WLW WEAN WDRG WNAE WORC WCAU WHP WJAS WMAL WCAO WJAR WDBJ WVV WADC WHK WKRC WCAH WBN WNC WBT WTCO WQAM WDBO WDAE WXYZ WSPD WOWO WMAQ KMBC WSJS	7:45-8:00 The Goldbergs — Comedy Sketch WEAF WSAI WWJ WENR WGY WBN WCAE	8:00-8:15 Pryor's Cream Military Band WABC WOKO WFBL WHEC WGR WLW WEAN WDRG WNAE WORC WPG WCAU WHP WJAS WLBW WMAL WCAO WTAR WDBJ WADC WHK WKRC WCAH WNC WBT WTCO WQAM WDBO WDAE WXYZ WSPD WNOX WTAQ KFH WBTM	10:30-10:45 Clara, Lu and Em WJZ WBAL WHAM KDKA WJR KWK WREN WGAR WBZ WBZA WGN	11:00-11:15 Amos 'n' Andy WMAQ KWK WREN WDAF WTMJ KECA KSL WHAS WSM WGAR WSB WKY WENR WJR KSTP WSBM WJDX KTHS KPRC WBC KGO KHQ KOMO KGW KFSD WOA WMC KOA KFAB WBA	11:15-11:30 Swift Program — Stebbins Boys KSD WHO WOC WSB WBA WGN WSAI WTAM WFAA WWJ WMC WSBM	11:15-11:30 Literary Digest Topics — Lowell Thomas WGAR WJR WENR KWK WREN WDAY KFI KFA KSTP WBC	11:15-11:30 Pryor's Cream Military Band WKBW WGST WBCM WLAP WDO WREC WLAC WBRG WDSU WISN WWO WFBM WMAQ WCCO KSCJ WMT KMOX KMBC KLRA WNAE KOIL WBW KFJF WRR KTRH KTS WACO KOH KMJ KFBK KOL KVI KFY KIN KFCR KHJ KDYL KLZ	11:30-11:45 Camel Quarter-Hour — Morton Downey WGST WDO WREC WLAC WNOX WBR
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WDSU	WISN	WFBM	WCCO	KSCJ	WMT
KMOX	KLRA	WNAE	WACO	WBW	KFJF
WRR	KTRH	KTS	KOH	KOL	KDYL
KVI	KFPY	KOIN	KFCR	KHJ	
KLZ	KGB				

Sunday

12:15-12:30 Echoes of the Orient WEAF WGY WTAM WDAF WCHS WCKY WTIC WLIT WBN WOC WHO WCAE WENR WOC	12:30-1:00 Troika Bella WJZ WBAL KWK WGAR KDKA WLW KFAB KFYR KOMO KFSD WHAM WTMJ WPTF WFLA WSUN WSM WAPI WKY KOA KECA KTR KPO WHAS WSBM KGO KSTP	1:00-2:00 Pop Concert — Walter Logan WEAF WTIC WEEI WJAR WCHS WFI WRC WGY WBN KGW KOMO KPO KECA KGO KOA WHAS KFYR WDAY WCAE WTAM WWJ WBO WOC WHO WDAF WTMJ WENR WSBM WAPI KSL	1:30-2:00 Columbia Little Symphony WABC WOKO WFBL WGR WLW WDRG WAAB WPG WIP-WFAN WHP WJAS WMAL WCAO WDBJ WHK WBN WNC WBT WTCO WDBO WXYZ WBCM WDO WBRG WDSU WISN WTAQ WMAQ WCCO KSCJ WMT KMBC KOIL KFJF KVI	2:15-2:30 The Caribbeans — Dance Band WEAF WTIC WTAG WEEI WJAR WLIT WRC WGY WBN WCAE WTAM WWJ WDAF KSTP WDAY WHAS WSM WAPI WSMB KOA KGO KGW KECA KFSD KTR KFYR KSL	2:30-3:00 Gypsy Trail WABC WOKO WFBL WHEC WKBW WLW WEAN WDRG WNAE WORC WPG WCAU WHP WJAS WLM WDBJ WHK WBN WNC WBT WTCO WDBO WXYZ WBCM WSPD WDO WREC WLAC WBRG WDSU WISN WTAQ WGL WMAQ WCCO KSCJ KTS KVI KFY KOL KLZ KFOR	2:30-3:00 NBC Artists Service Program WEAF WTIC WOW WWJ KSD WRC WTAM WCHS WDAF WLIT WBN WEEI CKGW	2:30-3:00 Yeast Foamers WJZ WBAL WBZ WBZA WGAR WJR WLW KDKA KWK WREN KFA WIOD WTMJ KSTP WBC WRA WPTF WIOD WFLA WSUN WSM WSB WJAX WHAS WAPI WJDX WSBM KTHS KVOO KOMO WFAA WKY WOA KOA KSL KPO KECA KGW KHQ KTR KFSD	3:00-3:30 Moonshine and Honey-suckle WEAF WTIC WEEI WJAR WTAG WLIT WRC WTAM WWJ KWK KSD WOC WGY WBN WHO WDAF WOW WOC WCHS WCAE CKGW	3:00-4:00 Symphonic Hour WABC WOKO WFBL WHEC WKBW WLW WEAN WDRG WAAB WCAU WHP WJAS WLBW WMAL WCAO WDBJ WBN WNC WBT WTCO WDBO WXYZ WBCM WSPD WDO WREC WLAC WBRG WDSU WISN WTAQ WGL WFBM WMAQ WCCO KSCJ WMT KMBC KLRA KOIL KFH KFJF KRLD KTRH KTS WACO KVI KFY	3:00-4:00 The Friendly Hour WJZ WBAL KDKA KWK WREN KFA WFLA WRA WJAX KFYR WIOD KVOO WFLA WSUN KOA KSTP WBC WKY KHQ WSB WGAR WDAY WJDX WSBM WFAA WBZ WBZA WSM WMC KGO WOA WBO WBA (KTHS off 3:30)	3:30-4:00 Balkan Mountain Men WEAF WTIC WJAR WTAG WCHS WRC WGY WBN WCAE WTAM WWJ WSAI KSD WDAF CKGW WLIT WEEI WENR
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4:00-5:00 Cathedral Hour WABC WOKO WFBL WHEC WKBW WLW WEAN WDRG WNAE WORC WPG WCAU WMAQ WCAO WDBJ WHK WBN WNC WBT WTCO WDBO WXYZ WBCM WSPD WDO WREC WLAC WBRG WDSU WISN WOWO WFBM KSCJ KMOX KMBC KLRA KOIL KFH KFJF KTRH WACO KVI KFY KDYL KLZ KFOR	4:00-5:00 National Sunday Forum WEAF WTIC WEEI WJAR WCHS WTAG KOA WOW WKY WOA WSAI WJAX WHAS WJDX KPRC WBC WDAF WJZ WLIT WFLA WSUN KHQ KOMO WHO WOC WRC KGW WGY WSM WSB WSMB WBN WRA WIOD KPO WDAY KFI KSD WFAA	4:00-5:00 Ravinia Opera Concert WJZ WJR WBN WBA KDKA KYW WLW KWK WREN KFA CKGW CFCF WHAM WJR WGAR	5:00-6:00 Sabbath Reveries WJZ WBAL WHAM WKB WIOD WJDX KOMO WFLA WSUN KTR KGO KHQ WLW WREN CKGW KGW WOA WBZ WBZA WGAR WJAX WSB WDAY WRA KFAB WSM WMC WBA WKY KDKA WBC WBA	5:00-6:00 Gilbert and Sullivan Gems WEAF WTIC WJAR WTAG WRC WCHS WGY WWJ WFI WBN WTAM WSAI WOC WHO WDAF CFCF WCAE WEEI WOW	6:00-7:00 Catholic Hour WEAF WTIC WEEI WJAR WTAG WRC WCHS WGY WWJ WBC WIOD WKY WJDX WSBM KSTP WCAE KOMO KSD KGO WOC KECA KTR WHO WDAY WJAX WFLA WSUN WMC WSB WBA KPRC WOA WRA WDAF KOA KVOO WBN KPO WBN WOV WENR KFYR WLIT KTHS WSAI	7:00-7:15 New World Symphony WABC WOKO WFBL WHEC WGR WLW WDRG WPG WIP-WFAN WHP WJAS WLBW WMAL WCAO WDBJ WBN WNC WBT WTCO WDBO WXYZ WBCM WSPD WDO WLAC WBRG WDSU WTAQ WFBM WCCO KSCJ WMT KMOX KMBC KLRA KOIL KFH KFJF KTRH WACO KVI KFI KFCR KDYL KLZ KFOR	7:00-7:30 Through the Opera Glass WEAF WTIC WCHS WLIT WRC WGY WCAE WWJ WSAI WPTF WRA KSD WOC WHO WDAF WTAG WEEI WJAR WTMJ WBC WBO WIOD WHAS WSM WAPI WSBM WJDX KTHS KVOO WBA KPRC WOA WKY KOA KSL KGO KFI KGW KOMO KHQ KFSD KTR	7:00-7:30 Over Jordan WJZ WHAM WJR KWK WREN KFA CFCF KSTP WDAY KFYR WRA WJAX WIOD WFLA WSUN WHAS WSM WSB WAPI WJDX KVOO KPRC WKY WBO WSMB	7:30-7:45 Daddy and Rollo WABC WFBL WGR WEAN WNAE WCAU WLBW WMAL WCAO WADC WHK WKRC WXY WSPD WISN WWO WFBM WBBM WCCO KMOX KMBC KOIL	7:30-8:00 Iodent Club of the Air WEAF WJAR WTAG WCHS WLIT WRC WGY WBN WCAE WWJ WSAI WLS KSD WDAF	7:45-8:00 The Boswell Sisters WABC WOKO WFBL WHEC WGR WLW WEAN WDRG WORC WIP-WFAN WHP WJAS WLBW WMAL WCAO WDBJ WHK WBN WNC WBT WTCO WDBO WXYZ WBCM WSPD WDO WREC WLAC WBRG WDSU WISN WWO WFBM WCCO KSCJ WMT KMOX KMBC KLRA KOIL KFH
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KJFF KTRH WACO KVI KFPY KFRG
KDYL KKLZ KYOR

8:00-8:15 Enna Jettick Melodies
WJZ WBZ WBZA WHAM WLW
WJR WGAR KYW KDKA WKW WREN
KFAB CFCF WTMJ KSTP WBC WDAY
KFYR WRVA WPTF WIOD WFLA WSUN
WHAS WSM WMC WSB WAPI WSBM
WJDX KTHS WFAA KPRC KVOO WOAI
WKY WIBA KOA KSL KPO KFI
KGW KOMO KHQ KTRAR KFRS

8:00-8:15 Devils, Drugs and Doctors
WABC WFLB WHEC WGR WEAN WDRC
WNAC WCAU WJAS WMAL WCAO WADC
WHK WKRC WGST WXYZ WSPD WREC
WBRC WDSU WISN WWOV WFBM WMAQ
WCCO KSCJ KMOX KMBC KOIL WIBW
WRR KTSa KOL KVI KFPY KOIN
KFRG KHL KKLZ

8:00-9:00 Chase and Sanborn
WEAF WTIC WJAR WTAG WCSH WRC
WGY WCAE WWJ WSAI KSD WOW
WIOD KSTP WHO WOC WHAS WBC
WMC WSB WSBM KTHS KPRC WTMJ
WTAM WJDX WFLA WSUN WDAF WBN
WPTF CFCF WOAI WKY WLIT WLS
KVOO WFAA WRVA

8:30-8:45 Tony Parenti and His Saxophones
WABC WOKO WFLB WHEC WGR WLW
WEAN WDRC WNAC WORC WCAU WHP
WJAS WLBW WMAL WCAO WDBJ WKBN
WNNC WIOC WXYZ WDOO WREC WBRC
WDSU WISN WWOV WFBM WCCO KSCJ
WMT KMOX KMBC KLRA WNAK KOIL
KFH KJFF KTRH KTSa WACO KVI
KFPY KFRG KDYL KKLZ KYOR

8:30-9:00 Harbor Lights
WJZ WBAL WHAM KDKA WJR WLW
KWK KOA KGO KFI WREN KSL
KGW

8:45-9:00 Modern Male Chorus
WABC WOKO WFLB WHEC WGR WLW
WEAN WDRC WNAC WORC WCAU WHP
WJAS WLBW WMAL WCAO WDBJ WKBN
WNNC WIOC WXYZ WDOO WREC WBRC
WDSU WISN WWOV WFBM WCCO KSCJ
WMT KMOX KMBC WNAK KFH
KJFF KTRH KTSa KFPY KFRG KDYL
KKLZ KYOR

9:00-9:15 Heel Hugger Harmonies
WJZ WBAL WBZ WBZA WHAM KDKA
WJR WLW KWK WENR WREN KFAB
KSTP KOA KSL KPO KFI KGW
KOMO KHQ KFSK KTRAR WGAR

9:00-9:15 "Our Government"—David Lawrence
WEAF WTAG WCSH WGY KSD WSAI
WSB WMC WOW WJDX WFLA WSUN
WOC WHO WRC KVOO WCAE WDAY
WJAR WENR WBN WFI WSBM WKY
WIOD WEEI WPTF

9:00-9:30 The Dutch Masters
WABC WOKO WFLB WHEC WGR WEAN
WDRC WNAC WCAU WMAL WCAO WADC
WHK WKRC WCAH WXYZ WSPD WWOV
WFBM WBBM WCCO KMOX KMBC KOIL

9:15-9:45 Bayuk Stag Party
WJZ WBAL WLW KWK WREN WJR
KYW WHAM KDKA WBZ WBZA WGAR

9:15-9:45 Russian Singers
WEAF WEEI WRC WFI WGY WTAG
WGN WJAR WWJ WSAI KSD WOW
WOC WHO WBN CKGW WCSH WCAE
WTAM WDAF CFCF WIOD KOA

9:30-10:30 Lewishohn Stadium Concert
WABC WOKO WFLB WHEC WKBW WLW
WEAN WDRC WNAC WORC WPG WIP-
WFAN WCAU WHP WJAS WLBW WMAL
WCAO WDBJ WHK WKBW WNNC WBT
WIOC WDOO WXYZ WSPD WDOO WREC
WLAC WBRC WDSU WISN WWOV WFBM
WMAQ WCCO KSCJ WMT KMOX KMBC
WNAK KOIL KJFF KTRH KTSa KFRG
KVI KFPY KFRG KDYL KKLZ KYOR

9:45-10:15 Kellogg Slumber Music
WJZ WBAL WBZ WBZA WHAM KDKA
WJR WKB WREN WLW WGAR KYW

10:30-11:00 The Gauchos
WABC WOKO WFLB WHEC WKBW WLW
WEAN WDRC WNAC WORC WCAU WHP
WJAS WLBW WMAL WCAO WDBJ WHK
WNNC WBT WIOC WDOO WXYZ WSPD
WDOO WREC WLAC WBRC WDSU WISN
WOWO WFBM WCCO KSCJ WMT KMOX
KMBC WNAK KOIL KJFF KTRH KTSa
KVI KFPY KFRG KDYL KKLZ

10:45-11:15 Sunday at Seth Parker's
WEAF WEEI WCSH WRC WGY WDAF
CKGW WTMJ KSTP WCAE WTAM WWJ
KYW WOW WHO WBC WMC WIOD
WHAS WSM WJDX KPRC WKY KOA
KGO KGW KTRAR WSB KSD WRVA
KFSK WJAS WOC WFLA WSUN KECA
WFI WBN WJAR WAPI WDAY KFYR
KHQ WPTF WOAI KSL WFAA

11:00-11:30 Continental String Quartette
WABC WOKO WFLB WHEC WKBW WLW
WEAN WDRC WNAC WPG WCAU WHP
WLBW WMAL WDBJ WNNC WBT WIOC
WDOO WXYZ WSPD WDOO WREC WBRC
WDSU WISN WFBM WCCO KSCJ WMT
KMOX KLRA WNAK KOIL KJFF KTRH
KTSa KVI KFPY KDYL KKLZ

11:30-12:00 South Sea Islanders
WEAF WRC WGY WOW WTAM WOC
WHO WWJ KSTP WDAY KFYR WHAS
WSB KPRC

11:30-12:00 Red Nichola and His Orchestra
WABC WOKO WFLB WHEC WKBW WLW
WEAN WDRC WNAC WPG WCAU WHP
WLBW WMAL WCAO WDBJ WKBN
WNNC WBT WIOC WDOO WXYZ WSPD
WDOO WREC WLAC WBRC WDSU WISN
WFBM WCCO KSCJ WMT KMOX KMBC
KLRA WNAK KOIL KFH KJFF KTRH
KTSa KFPY KDYL KKLZ KVR

Monday

5:00-5:30 Dancing by the Sea
WABC WOKO WFLB WGR WDRC WAAB
WORC WPG WIP-WFAN WHP WJAS
WLBW WMAL WCAO WDBJ WHK WNNC
WBT WIOC WDOO WXYZ WBSM WSPD
WDOO WREC WLAC WBRC WDSU WISN
WTAQ WGL KSCJ WMT KMBC KOIL
KJFF KTRH KTRH KTSa WACO KVI
KFPY KFRG KDYL KKLZ KVR

6:15-6:45 Mormon Tabernacle Choir and Organ
WJZ WBAL WSM KOA KOMO KFAB
KGW CKGW KSTP KTRAR KPO KFSK
WSMB WHAM WIO KFYR KGO KWK
WREN WDAY WJDX KECA WRC WLW
KSL

7:00-7:30 Teddy Black and His Orchestra
WEAF WJAR WJDX WSAI KOA KGO
KECA WTAG KCSH WBN WSB WAPI

7:15-7:30 Tastyest Jesters
WJZ WCKY WHAM WBZ WBZA WREN
KDKA WRC WRVA WPTF WJAX WIOD
WBAL WGAR WFLA WSUN

7:30-7:45 Archer Gibson Concert Organist
WEAF WTAG KSD KOA WOW CFCF
WHAS WJAR KSL KGO WJDX

7:45-8:00 Paris Night Life
WJZ WBAL WHAM WJR WGAR WLW
KWK WREN KYW KFAB

8:00-8:30 Romy Symphony Concert
WJZ WGAR WBAL WLS WENR CKGW
WFLA WSUN WSM WSB WRC WJDX
WREN WFAA KOA WIOD

8:30-8:45 Manhattan Sereaders
WABC WOKO WFLB WHEC WGR WLW
WEAN WDRC WNAC WORC WPG WIP-
WFAN WHP WJAS WLBW WMAL WCAO
WDBJ WHK WKBW WNNC WBT WIOC
WDOO WXYZ WSPD WDOO WREC
WLAC WBRC WDSU WISN WWOV WFBM
WMAQ WCCO KSCJ WMT KMOX KMBC
WNAK KOIL KJFF KTRH KTSa KFRG
KVI KFPY KFRG KDYL KKLZ KYOR

WBCW WDOD WREC WLAC WBRC WDSU
WISN WTAQ WWOV WFBM WMAQ WCCO
KSCJ WMT WMC KLRA WNAK KOIL
KPRC KJFF KTRH WACO KVI KFPY
KFRG KDYL KVR

8:30-9:00 Death Valley Days
WJZ WBZ WBZA WBAL WHAM KDKA
WGAR WJR WCKY WLS WREN KWK
KFAB CKGW CFCF

8:30-9:30 A. & F. Gypsies
WEAF WTIC WEEI WTAG WJAR WCSH
WLIT WRC WGY KSD WOC WHO
WOW WDAF WTAM WBN WWJ WSAI
WCAE WGN

8:45-9:00 Tastyest Gloom Chasers
WABC WFLB WGR WLW WEAN WDRC
WNAC WORC WCAU WJAS WCAO WADC
WHK KCAH WXYZ WSPD WDSU WWOV
WFBM WBBM WCCO KMOX KMBC

9:00-9:30 Eno Crime Club
WABC WFLB WKBW WEAN WDRC WNAK
WCAU WJAS WMAQ WADK WHK
WKRC WXYZ WSPD WWOV WMAQ KMOX
KMBC KOIL CFCF

9:00-9:30 Maytag Orchestra
WJZ WBZ WBZA WHAM KDKA WJR
KWK WREN KSTP WBC WKY WOA
KYW KOA KSL KGO KECA KGW
KHQ KOMO KVOO WLW WFAA KPRC
WGAR WDAY KFYR WSM WMC WBAL
WTMJ

9:30-9:45 The Bourjois Orchestra
WABC WFLB WHEC WKBW WEAN WNAK
WCAU WJAS WMAL WCAO WADC WHK
WKRC WXYZ WSPD WWOV WBBM KMOX
KMBC KOIL

9:30-10:00 Chesebrough Real Folks
WJZ WBZ WBZA WHAM KDKA WLW
KWK KYW WREN WJR CKGW WGAR
WBAL

9:30-10:00 General Motors Program
WEAF WTIC WEEI WJAR WCSH WTAG
WLIT WGN KSTP WMC WSB WJAX
KPRC WOAI WKY KOA KSL KGO
KGW KFI WSAI KOMO KHQ WHO
WBN WTMJ KFYR WRC WGY WCAE
WHAS WSM WFAA WOC WOW WDAF

10:00-10:30 Gold Medal Express
WJZ WBAL WBZ WBZA WHAM KDKA
WGAR WJR WLW KYW KWK WREN
KSTP WBC WRVA WPTF WJAX WIOD
WFLA WSUN WSM WMC WSB WJDX
KVOO WFAA WCAE WKY KOA KSL
KGO KFI KGW KOMO KHQ KFSK
KTRAR

10:00-10:30 Burns Panatela Program—Guy Lombardo
WABC WFLB WKBW WEAN WDRC WNAK
WCAU WJAS WMAL WCAO WADC WHK
WKRC WXYZ WSPD WWOV WFBM WMAQ
WCCO KMOX KMBC KOIL KJFF KTRH
KTRH KTSa KDYL KKLZ

10:00-10:45 True Story
WEAF WJAR WEEI WTAG WCSH WLIT
WRC WGY WBN WCAE WTAM WWJ
WSAI WENR WOC KSD WHO WOW
WDAF

10:30-11:00 Mr. Bones and Company
WJZ WBAL WBAL WHAM KDKA WJR
WGAR WREN WBC KFYR WJAX WFLA
WSUN WSM WMC WSB WJDX WFAA
KPRC KOA KSL WSB

10:30-11:00 Arabesque—Desert Play
WABC WOKO WFLB WHEC WKBW WLW
WEAN WDRC WNAC WORC WCAU WHP
WJAS WLBW WMAL WDBJ WNNC WBT
WIOC WDOO WXYZ WBC WSPD WDOO
WREC WBRC WDSU WISN WFBM WMT
WNAK KOIL KFH KJFF KTRH KTRH
KTSa KVI KFPY KFRG KDYL KVR

10:45-11:00 The Simonis Guardsmen
WEAF WTIC WEEI WJAR WCSH WLIT
WWJ WRC WGY WBN WSAI WCAE

KSD WTAM WENR WOC WHO WOW
WDAF CFCF WTAG

11:00-11:15 Fletcher Henderson and His Orchestra
WABC WOKO WFLB WHEC WKBW WLW
WDRC WAAB WORC WCAU WIP-WFAN
WJAS WLBW WMAL WCAO WDBJ WBN
WHK WKBW WNNC WBT WIOC WDOO
WXYZ WBC WSPD WDOO WREC WLAC
WBRC WDSU WISN WGL WFBM WSCJ
WMT KMOX KLRA KNAK KOIL KJFF
KTRH KTRH KTSa WACO KVI KFPY
KFRG KDYL KKLZ KVR

11:45-12:00 Bert Lown and His Orchestra
WABC WOKO WFLB WHEC WKBW WLW
WDRC WAAB WORC WCAU WHP WLW
WMAL WCAO WDBJ WNNC WBT
WIOC WDOO WXYZ WBC WSPD WDOO
WREC WLAC WBRC WDSU WISN WGL
WFBM WCCO KSCJ WMT KMBC KLRA
WNAK KJFF KTRH KTSa WACO KDYL
KVR

12:00-12:30 Paul Whiteman and His Orchestra
WEAF WRC KYW WTMJ WSM WOW
WSB WGY WAPI

Tuesday

7:00-7:30 Mid-Week Federation Hymn Sing
WEAF WTIC WTAG WFI KSD WJDX
KOA KGO KECA KGW WEEI WBN
WCAE WSAI WIO WPTF WIOD WFLA
WSUN WSB WAPI WKY

7:30-7:45 Health Products Program
WEAF WTIC WEEI WJAR WTAG WCSH
WRC WBN WGY WFI WCAE WSAI
WIO WOC WHO WOW WDAF

7:45-8:00 Back of the News in Washington
WJZ WHAM WENR WREN KFAB WBC
KJFF WRVA KFSK WPTF WIOD WFLA
WSUN WSM WMC WSB WAPI WSBM
KHQ WBAL WJR WRC WHAS KTHS
WFAA KPRC KOA KGO KECA

8:00-8:30 Armstrong Quakers
WJZ WBAL WBZ WBZA WHAM KDKA
WJR KWK WREN WLW WLS KFAB

8:00-8:30 Blackstone Plantation
WEAF WTIC WEEI WJAR WTAG WCSH
WFI WRC KSD WOC WGY WBN
WCAE WTAG WWJ WSAI WHO WDAF
WOW WBC KSTP KYW

8:15-8:30 Round Towners—With Irene Beasley
WABC WFLB WHEC WGR WLW WEAN
WDRC WAAB WORC WIP-WFAN WHP
WJAS WLBW WTR WDBJ WKBN WNNC
WBC WSPD WDOO WLAC WBRC WDSU
WISN WTAG WWOV KSCJ WMT KMOX
WMBC KLRA WNAK KOIL KFH KJFF
KTRH WACO KVR KVI KFPY KFRG
KKLZ

8:30-8:45 Ponce Sisters
WJZ WREN CFCF WGAR WLS WIOD
KGO KTRAR KGW KOA WBZ WBZA
WHAM WJR

8:30-9:00 National Dairy Virtuoso
WEAF WRC WFI WEEI WTAG WJAR
WJDX WSB WAPI WMC WSM WDAF
WHAS WSB WTAG WCSH WGY WBN
WCAE WTAG WWJ WSAI KSD WOC
WHO WOW KPRC KYW

8:45-9:00 Sisters of the Skillet
WJZ WBZ WBZA KDKA WTMJ WDAY
WGAR WJR WLS WKB WREN KFAB
KSTP KPRC WBC KFYR WOAI KVOO
WHAM WLW

9:00-9:30 Henry-George
WABC WOKO WFLB WHEC WGR WEAN
WDRC WNAC WCAU WHP WJAS WMAL
WCAO WADC WHK WKRC WXYZ WSPD
WISN WWOV WBBM WCCO KMOX KMBC
KOIL KFH

9:30-10:00 The Fuller Man
WEAF WTIC WEEI WJAR WTAG WCSH WFI
WRC WBN WGY WTAG WWJ KSD
WOC WHO WOW WDAF KOA WTMJ

WEBC WBAP WSB WKY WOAI WEEI
WSAI KYW KSTP KSL KGO KECA
KGW KHQ KOMO KVOO

9:30-10:10 The Bristlecoats
WABC WFBL WKBW WEAN WDRC WNAC
WCAU WJAS WMAL WCAO WADC WHK
WKRC WXYZ WSPD WOWO WMAQ KMBC
KMBC KOIL

9:30-10:30 Music of the Ages
WJZ WBAL WCKY WREN KWK WBZ
WBZA WHAM WENR KDKA WRVA WIOD
WJAX WPTF KFAB WFLA WSUN

10:00-10:15 Ben Bernie and His Orchestra
WABC WFBL WEAN WDRC WNAC WCAU
WJAS WMAL WCAO WADC WHK WKRC
WKBN WBT WXYZ WSPD WLAC WBRC
WDSU WOWO WBBM KMBC KOIL KFH
KFJF KRLD KTSa KMJ KOIL KVI
KFPY KOIN KFRK KHL KDYL

10:00-11:00 Lucky Strike Dance Orchestra
WEAF WTIC WEEL WJAR WTAG WCHS
WFI WRC WCAE WWJ WSAI KSD
WOC WHO WTMJ WBCB WRVA WJAX
WIOD WFLA WSUN WHAS WSM WMC
WSB WSMB WJDX WOAI KOA KGO
WKY KGW KHQ KOMO KTAR KFSB
WDAF KVOO WTAM WBBN WOV WDAY
KFI KSL KFYR KSTP WENR WPTF
WGY WBAP WIBA (KPRC on 10:45 to 11:00)

10:30-11:00 Savino Tone Pictures
WABC WOKO WFBL WHEC WKBW WLBZ
WEAN WDRC WNAC WORC WPG WCAU
WHP WJAS WLBW WMAL WCAO WTAR
WDBJ WKBN WNNC WBT WTOC WDBO
WXYZ WBCM WSPD WDOD WLAC WBRC
WDSU WOWO WFBM WCCO KSCJ WMT
KMBC WNAX KOIL KFH KFJF KRLD
KTRH KTSa KVR KVI KFPY KFRK
KDYL KLS WISN

11:45-12:00 Asbury Park Casino Orchestra
WABC WOKO WFBL WHEC WKBW WLBZ
WEAN WDRC WAAB WORC WCAU WHP
WLBW WMAL WCAO WTAR WDBJ WKBN
WNNC WBT WTOC WDBO WXYZ WBCM
WSPD WDOD WREC WLAC WBRC WDSU
WISN WGL WFBM WCCO KSCJ WMT
KMBC KLRa WNAK KFH KFJF KRLD
KTRH KTSa WACO KVR KFPY KDYL
KLS

12:00-12:30 Romanelli and His Orchestra
WABC WFBL WHEC WKBW WLBZ WEAN
WNAC WPG WCAU WHP WLBW WCAO
WTAR WDBJ WKBN WNNC WBT WTOC
WDBO WXYZ WBCM WSPD WDOD WREC
WLAC WBRC WDSU WISN WGL WFBM
WCCO KSCJ WMT KMOX KMBC KLRa
WNAX KOIL KFH KFJF KRLD KTRH
KTSa WACO KVR KFPY KFRK KDYL
KLS

12:00-12:30 Rudy Vallee and His Connecticut Yankees
WEAF WTIC WRC WGY WDAF WDAY
WBBN WTAM KSD WSB WAPI WWJ
WENR WIBA KOA

Wednesday

3:45-4:30 Dancing by the Sea
WABC WOKO WFBL WGR WLBZ WEAN
WDRC WAAB WPG WCAU WHP WMAL
WCAO WDBJ WHK WKBN WNNC WBT
WTOC WDBO WXYZ WBCM WSPD WDOD
WREC WLAC WBRC WDSU WISN WTAQ
WGL WFBM KSCJ WMT KMOX KMBC
KLRa KOIL KFH KFJF KRLD KTRH
KTSa WACO KVR KVI KFPY KFRK
KDYL KLS

7:00-7:15 Snoop and Peep
WEAF WJAR WCAE KSD WBCB WSB
WJDX KOA KSL KGO KGW KECA

7:15-7:30 Besoul Moments with Mame. Aka
WEAF WTIC WEEL WJAR WCHS WLIT
WRC WBBN WENR WCAE WTAM

7:30-7:45 Lee Morse—Crooner
WEAF WLIT KSD WTAG WHAS WSB
WAPI WJDX

7:30-7:45 Miller and Lyles
WFBL WHEC WGR WEAN WDRC WNAC
WORC WHP WJAS WLBW WMAL WCAO
WTAR WDBJ WHK WKBN WNNC WBT
WTOC WXYZ WBCM WSPD WDOD WREC
WLAC WBRC WDSU WISN WTAQ WGL
WFBM WBBM WCCO KSCJ KMOX KMBC
KOIL KFH KFJF KTRH KVR KLS

8:00-8:15 Willard Robinson
WEAF WTAG WEEL WJAR WRC WBBN
WTAM WSAI WBO WOC WHO WOV
WDAF WSB WFAA KOA KSL KGO
KGW KTAR WIOD WFLA WSUN

8:00-8:15 The Frigidarians
WJZ WBAL WGR KYW WREN KFAB
WTMJ WBCB WDAY WRVA WMC WSB
WAPI WSMB WJAX KVOO WOAI KOA
KSL CFCF WPTF WIOD WFLA WSUN
CKGW

8:15-8:30 Barbasol Program
WABC WOKO WFBL WKBW WEAN WDRC
WNAC WCAU WJAS WMAL WCAO WADC
WHK WKRC WXYZ WSPD WISN WFBM
WMAQ WCCO KMOX KMBC KOIL

8:30-9:00 Mobil Oil Concert
WEAF WEEL WJAR WCHS WTAG WLIT
WRC WSAI KSD WOV WTAM KOA
WGO WFAA WOAI WKY WTIC KSL
WGY WBCB WDAF WCAE WHO WOC
WWJ WBBN KSTP WTMJ WDAY KFYR
KYW

8:30-9:00 Jack Frost's Melody Moments
WJZ WBAL WHAM KDKA WGAR WJR
WLW WLS

8:45-9:00 Tastyest Gloom Chasers
WABC WFBL WGR WLBZ WEAN WDRC
WNAC WORC WCAU WJAS WADC WBCB
WHK WCAH WXYZ WSPD WDSU WOWO
WFBM WBBM WCCO KMOX KMBC

9:00-9:30 Gold Medal Fast Freight
WABC WOKO WFBL WKBW WEAN WDRC
WNAC WCAU WJAS WMAL WCAO WDBJ
WADC WHK WKRC WXYZ WSPD WOWO
WFBM WMAQ WCCO KSCJ WMT KMOX
KMBC KOIL KFH

9:00-9:30 The First Nighter
WJZ WLS KDKA WHAM WGAR WREN
WBAL KWK WLB WBZA WENR

9:00-9:30 Halsey Stuart Program
WEAF WEEL WJAR WTAG WCHS WLIT
WRC WGY WCAE KOA KSL KGO
KGW KOMO KHQ WSAI KSD WOC
WHO WOV WWJ WSMB KPRC WOAI
WTMJ KSTP KYW WHAS WRVA WSM
WMC WSB WBBN WTAM KFI CKGW
WJAX KVOO

9:30-10:00 Eno Crime Club
WABC WFBL WKBW WEAN WDRC WNAC
WCAU WJAS WMAL WCAO WADC WHK
WKRC WXYZ WSPD WOWO WMAQ KMOX
KMBC KOIL CFB

9:30-10:00 Dutch Masters Program
WJZ WBAL WBZ WBZA WHAM WGAR
KDKA WJR WLW WENR KWK WREN

9:30-10:30 Palmolive Hour
WEAF WTIC WEEL WJAR WTAG WCHS
WFI WRC WGY WCAE WSAI WGN
KSD WOC WOV WSMB WTMJ KSTP
CKGW WHAS WSM WMC WDAF WHO
WSB WOAI KOA KSL KGO KOMO
KHQ WWJ WTAM WBBN KFI KVOO
WFAA KPRC WIBA KGW

10:00-10:15 Vitality Personalities
WABC WOKO WFBL WKBW WEAN WDRC
WNAC WCAU WJAS WMAL WCAO WADC
WHK WKRC WCAH WBT WGST WXYZ
WBCM WSPD WLA WREC WLAC WBRC
WDSU WISN WOWO WFBM WBBM WCCO
KMOX KMBC KOIL KFH KFJF KRLD
KTRH KTSa KOI KVI KFPY KOIN
KFRK KHL KDYL KLS

10:15-10:30 Hernandez Brothers
WABC WOKO WFBL WHEC WKBW WLBZ
WEAN WDRC WNAC WORC WCAU WHP

WJAS WLBW WMAL WCAO WTAR WDBJ
WWNC WBT WTOC WXYZ WBCM WSPD
WDOD WREC WLAC WBRC WDSU WISN
WOWO WFBM WMAQ WCCO KSCJ KMBC
WNAX KOIL KFH KFJF KRLD KTRH
KTSa KVR KVI KFPY KFRK KDYL
KLS

10:30-11:00 Nit Wit Hour
WABC WOKO WFBL WHEC WKBW WLBZ
WEAN WDRC WNAC WORC WCAU WHP
WJAS WLBW WMAL WCAO WTAR WDBJ
WWNC WBT WTOC WXYZ WBCM WSPD
WREC WLAC WBRC WDSU WISN WOV
WFBM WCCO KSCJ WMT KMBC WNAX
KOIL KFH KFJF KRLD KTRH KTSa
WACO KVR KVI KFPY KFRK KDYL
KLS

10:30-11:00 Coca Cola Program
WEAF WEEL WTIC WCHS WLIT WRC
WCAE WSAI WOC WBCB WKY KYW
KSD WRVA WJAX KSTP WIOD WSM
KPRC WOAI KOA WFAA KSL KGO
KGW KHQ KOMO KFSB WJDX WDAF
WHAS WTAM WHO WOV WMC WPTF
WSB WWJ WAPI WBBN KFI WGY
WTMJ WJAR WFLA WSUN KTAR KVOO
CFCF WSMB WTAG

11:00-11:15 "The Voice of Radio Digest"
WEAF KSD WOC WHO WRC WEEL
WJAR WCHS WGY WBO WIOD WOV
WTAM

11:15-12:00 Vincent Lopez and His Orchestra
WEAF WRC WJAX WEEL WTAM WDAF
WWJ WOC WHO WAPI WOAI WOV
WIOD WENR

11:45-12:00 Will Osborne and His Orchestra
WABC WOKO WFBL WHEC WKBW WLBZ
WDRC WAAB WORC WPG WCAU WHP
WLBW WMAL WCAO WTAR WDBJ WNNC
WTOC WDBO WXYZ WBCM WSPD WDOD
WREC WLAC WBRC WDSU WISN WGL
WFBM WCCO KSCJ WMT KMBC KLRa
WNAX KFJF KRLD KTRH KTSa KVR
KFRK KDYL KLS

Thursday

4:30-5:00 Maze of Melody
WJZ WBAL WGR WJR WLW WENR
KWK WRC KSTP WDAY KFYR WJAX
WSM WMC

7:00-7:15 Kate Smith and Her Swane Music
WABC WOKO WFBL WHEC WDRC WAAB
WORC WCAU WHP WLBW WMAL WDBJ
WKBN WNNC WBT WTOC WDBO WBCM
WREC WLAC WBRC WDSU WTAQ WCCO
KSCJ WMT KLRa KOIL KFH KFJF
KRLD KTRH KTSa KVR KDYL KLS

7:00-7:15 Vaughn de Leath
WEAF WTIC WFI WCAE WWJ WENR
KSD WHO KFYR WAPI WMC KOA
KGO KTAR

7:45-8:00 The Frigidarians
WJZ WGR KYW WREN KFAB WTMJ
WBCB WDAY WBA WMC WSB WAPI
WSMB WJDX KVOO KPRC WOAI KOA
CKGW CFCF WPTF WJAX WIOD WFLA
WSUN KSL

8:00-8:15 Dixie Spiritual Singers
WJZ WBZ WBZA KFAB KWK WREN
WBAL KDKA WGAR WJR WCKY WHAM
WENR WLS WRVA

8:00-9:00 Fleischmann Hour—Rudy Vallee
WEAF WTIC WEEL WTAG WJAX WJDX
WJAR WCHS WFI WRC WGY WHO
WOW WWJ WHAS WMC WSAI WJAR
WSB WSMB WBCB WCA WFAA KTHS
KSL KOMO WOAI WSM WOC WAPI
KOI KHQ WTMJ KECA KSD CKGW
WGN KGW WBBN KPRC WIOD WPTF
WFLA WSUN WCAE CFCF KVOO
(WDAF on 8:45 to 9:00) (KSTP on 8:15) (WKY,
WBAP off 8:30) (WTMJ on 8:30)

8:15-8:30 Rin-Tin-Tin Thriller
WJZ WBZ WBZA WBAL KDKA WGAR

KWK WREN WLW KFAB WLS WJR
WHAM

8:15-8:45 The Columbians
WABC WOKO WFBL WHEC WEAN WDRC
WNAC WORC WPG WIP-WFAN WHP
WLBW WTAR WDBJ WKBN WNNC
WBT WTOC WDBO WBCM WBRC WDSU
WISN WTAQ WFBM WMAQ WCCO KSCJ
WMT KMBC KLRa WNAK KOIL KFH
KFJF KTRH WACO KVR KVI KFPY
KFRK KLS

8:45-9:00 Sisters of the Skillet
WJZ WREN KFAB WBAL WBZ WBZA
WHAM KDKA WGAR WJR WLW WLS
KWK

8:45-9:00 The Boswell Sisters
WABC WOKO WFBL WHEC WEAN WDRC
WNAC WORC WCAU WHP WLBW WMAL
WCAO WDBJ WHK WKBN WNNC WTOC
WDBO WXYZ WBCM WSPD WREC WLAC
WBRC WDSU WISN WTAQ WFBM WCCO
KSCJ KMBC KLRa WNAK KOIL KFH
KFJF WACO KVR KVI KFPY KFRK
KDYL

9:00-9:15 Premier Salad Dressers
WABC WOKO WFBL WKBW WEAN WDRC WNAC
WCAU WJAS WMAL WCAO WADC WHK
WKRC WXYZ WSPD WOWO WBBM KMBC
KOIL KTRH

9:00-9:30 Blackstone Plantation
WJZ WBZ WBZA WBAL KDKA WCKY
WHAM

9:00-9:30 Arco Birthday Party
WEAF WTIC WEEL WJAR WTAG WCHS
WFI CKGW WRC WGY WSM WIOD
WJAX WOAI WKY KOA WBAP WRVA
WWJ WSAI KSD WDAF KYW WBCB
WOW WSM WJDX WOC WHO KGO
KECA KOMO KHQ KGW WAPI WTM
WBBN KTAR KFSB KSTP WSB WCAE
WPTF KSL WHAS WCAE

9:15-9:30 The Cozy Melody Girl
WABC WFBL WKBW WEAN WDRC WNAC
WCAU WJAS WMAL WCAO WADC KMOX
WHK WKRC WXYZ WSPD WOWO WBBM
KMBC KOIL

9:30-10:00 Willard Robinson and His Orchestra
WEAF WTIC WTAG WJAR WCHS CKGW
WFI WRC WGY WCAE WWJ WSAI
WENR

9:30-10:00 Maxwell House Ensemble
WJZ WBZ WBZA WBAL WKY WTMJ
WBCB WHAS WSM WJAX KPRC KOA
WRVA KSTP WSB WAPI WREN KWK
WIOD WJR WSMB WOAI KECA KGW
KOMO KHQ WAPI WMC WHAM WJDX
WSUN WFLA KDKA KSL KGO KTAR
KFSB KYW

9:30-10:30 Lewishohn Stadium Concert
WABC WOKO WFBL WHEC WKBW WEAN
WDRC WAC WORC WPG WIP-WFAN
WHP WLBW WMAL WCAO WTAR WDBJ
WHK WKBN WNNC WBT WTOC WDBO
WXYZ WBCM WSPD WLAC WBRC WDSU
WISN WTAQ WFBM WCCO KSCJ WMT
KMOX KMBC WNAK KOIL KFH KFJF
KTRH KTSa KVR KVI KFPY KFRK
KDYL KLS KRLD

10:00-11:00 Lucky Strike Dance Orchestra
WEAF WTIC WEEL WJAR WTAG WCHS
WFI WRC WGY WCAE WWJ WSAI
WBBN WBAP KSD WOV WKY WOAI
KOI KSL WTMJ WIOD WHAS WSM
WMC WSMB WJDX KVOO WDAF WJAX
KPRC WTAM WBCB WRVA WFLA WSUN
WSB WPTF WFAA KGO KGW WOC
WHO KFI KOMO KHQ KFSB KTAR
WENR WDAY KFYR WAPI (KTHS on 10:30)
WIBA (KSTP WHAS WSM KPRC off 10:30)

11:00-11:15 St. Moritz Orchestra
WABC WOKO WFBL WHEC WKBW WDRC
WAAB WORC WIP-WFAN WHP WLBW
WMAL WCAO WTAR WDBJ WKBN WNNC
WBT WTOC WDBO WXYZ WBCM WSPD

WREC WLAC WBRC WDSU WISN WCCO
JSCJ WMT KLRA WNAX KOIL KFJF
ICRLD KTRH KTSa WACO KFOR KVI
KFPY KFRK KDYL KLZ

11:00-11:15 Little Jack Little
WEAF WTIC WOW
WWJ WENR

11:45-12:00 Radio Roundup
WABC WOKO WFBL WHEC WKBW WDRC
WAAB WORC WCAU WHP WLBW WMAL
WCAO WTAR WDBJ WNNC WTOC WDBO
WXYZ WBCM WSPD WREC WLAC WBRC
WDSU WISN WCCO KSCJ WMT KMBC
KLRA WNAX KOIL KFJF KRLD KTRH
KTSa KFOR KFPY KDYL KLZ

12:00-12:30 Guy Lombardo and Royal Canadians
WABC WFBL WHEC WKBW WEAN WNAC
WPG WCAU WHP WLBW WMAL WCAO
WTAR WDBJ WHK WKBW WNNC WTOC
WDBO WXYZ WBCM WSPD WREC WLAC
WBRC WDSU WISN WFBM WCCO WMT
KMBC KLRA WNAX KOIL KFH KFJF
KRLD KTRH KTSa KFOR KFPY KDYL
KLZ

Friday

7:00-7:15 Kate Smith and Her Swane Music
WABC WOKO WFBL WHEC WDRC WAAB
WORC WCAU WHP WLBW WMAL WCAO
WDBJ WKBW WNNC WBT WTOC WDBO
WBCM WREC WLAC WBRC WDSU WTAQ
WCCO KSCJ WMT KMOX KOIL KFH
KFJF KRLD KTRH KTSa KFOR KDYL
KLZ

7:00-7:45 Major Bowes' Family
WEAF WJAR WCHS WCAE WWJ WENR
WOC WHO KOA WSMB WOW KSD
WDAF KFYR

7:30-7:45 Red Nichols and His Orchestra
WFBL WDRC WORC WCAU WHP WLBW
WCAO WTAR WDBJ WKBW WNNC WBT
WTOC WDBO WXYZ WBCM WSPD WREC
WLAC WBRC WDSU WISN WTAQ WFBM
KSCJ KMBC KOIL KFH KFJF KTRH
KFOR KLZ

8:00-8:30 Nestle's Program
WJZ WBZ WBZA WHAM KDKA WREN
KFAB WJR WLW KWK WGAR WBAL
WLS WCKY

8:00-9:00 Cities Service Concert Orchestra
WEAF WTIC WEEI WRC KTHS KGW
KVOD WGY WLIT WCAE WJAR WCHS
WOW KYW WDAF KSD KSTP WTMJ
WXY WOC WECB KOA WOI KMO
KGO KHQ WTAG KSL CKGW WSAI
WHO KECA WTM WBN WWJ KTHS
(WFAA KPRC off 8:30) KTR

8:15-8:30 Barbasol Program
WABC WOKO WFBL WHEC WKBW WEAN WDRC
WNAC WCAU WJAS WMAL WCAO WADC
WHK WKRC WXYZ WSPD WISN WFBM
WMAQ WCCO KMOX KMBC KOIL

8:30-9:00 Lewisohn Stadium Concert
WABC WOKO WFBL WHEC WEAN WDRC
WNAC WCAU WHP WLBW WMAL WCAO
WTAR WDBJ WHK WKBW WNNC WBT
WBCM WSPD WREC WLAC WBRC WDSU
WISN WTAQ WFBM WCCO KSCJ KMOX
KMBC WNAX KOIL KFJF KFOR KVI
KFPY KDYL KLZ

9:00-9:30 Intervenor Program
WJZ WHAM WMC KDKA WJAX WKY
WREN KPRC KWK WBZ WBZA WSMB
KGW WIOD WFLA WSUN KSTP WHAS
KYW WECB WCKY WSB WAPI WBAL
WOAI KSL KGO KOMO KHQ KFSD
KTR WGAR KFI KOA WRYA WTMJ

9:00-9:30 Clignot Club
WEAF WTIC WEEI WJAR WTAG WCHS
WLIT WRC WOW WCAE WSAI KSD
WIBO WWJ WDAF WOC WHO WGY
WBEN

9:00-9:45 Liberty Magazine Hour
WABC WFBL WKBW WEAN WDRC WNAC
WCAU WJAS WMAL WCAO WADC WHK
WKRC WXYZ WSPD WOWO WMAQ KMOX
KMBC KOIL

9:30-10:00 Pend's Dance Program
WEAF WTAG WJAR WCHS WLIT WRC
WCAE WENR KSD WOC WHO WOW
WGY WBN WTM WJJ

9:30-10:00 Armour Program
WJZ WBZ WBZA WJR KYW WREN
KSTP WECB WCAU WMC WSB WOI
KOA KSL KGO WMY WHAS KGW
KHQ KSM KDKA WJAX WJDX WPTF
WIOD WTMJ WAPI WHAM KFI WSM
WLW WSMB WGAR WBAL WFAA KWK
KPRC

9:45-10:00 Friendly Five Footnotes
WABC WFBL WKBW WEAN WNAC WCAU
WJAS WMAL WCAO WHK WKRC WBT
WXYZ WREC WLAC WNOX WDSU WFBM
WMAQ WCCO KMOX KMBC KOIL KRLD
KLZ

10:00-10:30 Pillbury Pageant
WABC WOKO WFBL WKBW WEAN WDRC
WNAC WCAU WJAS WMAL WCAO WTAR
WDBJ WADC WHK WKRC WGST WXYZ
WSPD WREC WOWO WMAQ WCCO KMOX
KMBC KOIL KFJF KRLD KOL KVI
KFPY KOIN KFRK KHJ KDYL KLZ

10:00-10:30 Paul Whiteman's Paint Men
WJZ WBZ WBZA WBAL WHAM KDKA
WJR WGAR KYW KWK KPRC KSTP
WECB WDAY KFYR WSA WPTF WIOD
WFLA WSUN WHAS WSM WMC WSB
WSMB WJDX WFAA WOI KOA WKY
KSL KGO KFI KGW KOMO KHQ
WLW KFSD WJAX KTR WAPI WTMJ

10:00-10:30 Kodak Week-End Program
WEAF WJAR WCHS WCAE WWJ KSD
WSAI WRC WBN WLIT WTAG WTM
WGY WOW WENR WEEI WOC WHO

10:30-11:00 RKO Theater of the Air
WEAF WTIC WJAR WTAG WLIT WGY
WCAE WWJ WSAI WBO KSD WDAF
WRYA WJAX WIOD WMC WSB WSMB
WOC WJDX KGO KTS WOI WKY
WRC WCHS WTMJ KOA KGW KFI
KHQ KOMO KTR KFSD WHO WOW
WTAM KSL WFLA WSUN WBN WDAY
KFPY WEEI WPTF WAPI WENR WHAS
WIBA

10:30-11:00 Around the Samovar
WABC WOKO WFBL WHEC WKBW WEAN
WDRC WNAC WORC WCAU WHP WLBW
WMAL WCAO WTAR WDBJ WHK WNNC
WBT WTOC WDBO WXYZ WBCM WSPD
WLAC WBRC WDSU WISN WCCO KSCJ
WMT KMOX KMBC WNAX KOIL KFH
KFJF KTRH KTSa KFOR KVI KFPY
KDYL

11:00-12:00 Vincent Lopez and His Orchestra
WEAF WOC WHO (WDAY on 11:15) (WOW on
11:45) (WGY WCAE off 11:30) (WTAM KSD WWJ
WSB on 11:30) KVOD WEEI WBN KFYR
WDAF WFLA WSUN

11:30-12:00 Lew White Organ Recital
WJZ WGAR WENR KFAB CKGW WBAL
WHAM WREN WRC KVOD

Saturday

5:15-5:45 Dancing by the Sea
WABC WOKO WFBL WHEC WDRC WAAB
WORC WPG WIP-WEAN WHP WLBW
WMAL WCAO WDBJ WHK WNNC WBT
WTOC WDBO WBCM WSPD WREC WLAC
WBRC WDSU WISN KSCJ WMT KMBC
KOIL KFJF KRLD KTRH KTSa WACO
KFOR KVI KFPY KPRC KDYL

5:30-5:45 Song Shoppe
WEAF WTIC WWJ WCAE KSTP WRC
WBN KSD WJAR WENR WTAG KOA
WSB WTM WOW WDAY KFYR

6:00-6:30 Winegar's Barn Orchestra
WABC WOKO WFBL WHEC WDRC WAAB
WORC WIP-WEAN WHP WLBW WCAO
WDBJ WKBW WNNC WBT WTOC WDBO
WBCM WSPD WREC WBRC WDSU WTAQ
WCCO KSCJ WMT KMBC KOIL WIBW
KFH KFJF KRLD KTRH KTSa KFOR
KVI KFPY KFRK KDYL WLAC

7:00-7:15 Lee Morse-Crooner
WEAF WTIC WFI WCAE WWJ WSB
KOA KGO WCHS WENR KFYR KSD

7:15-7:30 Laws That Safeguard Society
WEAF WJAR WTAG WCHS WFI WGY
WBN WOC WHO WECB WOI KOA
KGO WEEI KECA KOMO KTR WTC
WJDX WDAY WENR WOW

7:15-7:30 Tastyest Jesters
WJZ WHAM WCKY WREN KDKA WBZ
WBZA WBAL WRC WLW WGAR WRYA
WPTF WJAX WIOD WFLA WSUN

7:30-7:45 Three Mustachios
WEAF WOC WHO WJAR WDAF WOW
WRYA CFCF WTIC WTAG WJAR WCHS
WFI WRC WGY WBN WTM WSM

7:30-7:45 Sonata Recital
WJZ WHAM WREN WGAR KGO WLW
KDKA KWK KFAB KOA KPO KGW
KECA KFSD

8:00-8:30 Rudy Vallee and His Connecticut Yankees
WJZ WBAL WHAM WJR KWK WREN
CKGW CFCF WBO WFVA WFLA WSUN
WMC KTHS WOI KOA KSL

8:00-8:30 Over the Heather-Sandy MacFarlane
WEAF WTAG WGY WCAE KSD WOC
WHO WOV WEEI WWJ WSAI WDAF
WJAR WCHS WFI WBN WTM WTMJ

8:15-8:30 Henry Burdig-Brusloff's Orchestra
WABC WOKO WFBL WHEC WDRC WAAB
WORC WPG WCAU WHP WLBW WMAL
WTAR WDBJ WKBW WNNC WBT WTOC
WDBO WXYZ WBCM WSPD WLAC WBRC
WDSU WISN WTAQ WFBM KSCJ WMT
KLRA WNAX KOIL KFH KFJF KTRH
WACO KFOR KVI KFPY KFRK

8:30-8:45 Kate Smith and Her Swane Music
WABC WFBL WHEC WDRC WAAB WORC
WPG WCAU WHP WLBW WTAG WDBJ
WKBW WNNC WBT WDBO WXYZ WBCM
WSPD WLAC WBRC WDSU WISN WTAQ
WFBM WCAU KSCJ WMT KMOX KMBC
KLRA WNAX KOIL KFH KFJF KTRH
WACO KFOR KVI KFPY KFRK KDYL

8:30-9:00 Silver Flute
WEAF WTIC WGY KSD WDAF WOW
WJAR WWJ WSAI WTAG WCHS WFI

8:45-9:00 Tastyest Gloom Chasers
WABC WFBL WGR WLBZ WEAN WDRC
WNAC WORC WCAU WJAS WCAO WADC
WHK WCAH WXYZ WSPD WDSU WOWO
WFBM WBBM WCCO KMOX KMBC

9:00-9:15 The Boswell Sisters
WABC WOKO WFBL WHEC WKBW WEAN
WDRC WNAC WORC WPG WCAU WHP
WLBW WMAL WCAO WTAR WDBJ WHK
WKBW WNNC WBT WTOC WDBO WXYZ
WBCM WSPD WREC WLAC WBRC WDSU
WISN WTAQ WFBM WMAQ WCCO KSCJ
WMT KMOX KMBC WNAX KOIL KFH
KFJF KTRH KTSa KFOR KVI KFPY
KFRK KDYL

9:00-9:30 General Electric Program
WEAF WTIC WJAR WTAG WCHS WFI
WRC WGY WBN WCAE WTM WWJ
WSAI WBO KSD WOC WHO WDAF
KSTP WECB WRYA WJAX WFLA WSUN
WHAS WMC WSB WAPI WSMB WBP
KPRC WOI KOA WTMJ KSL KGO
KFI KGW KOMO KHQ KTR KFSD
WLW WOC WJDX WDAY KFYR WPTF
WIOD

9:30-10:00 The Domino Orchestra
WJZ WBZ WBZA WBAL WHAM KDKA
WGAR WJR WLW KYW WREN KWK

9:30-10:00 Club Valspar
WEAF WTIC WJAR WTAG WCHS WFI
WRC WGY WBN WCAE WTM WWJ
WSAI WEEI KSD WOC WHO WDAF
KSTP WECB WRYA WJAX WHAS WMC
WSB WAPI WSMB WBP KPRC WOI
WOW WTMJ CKGW WPTF WIOD WFLA
WSUN WKY WJDX WDAY KFYR

9:30-10:00 Lewisohn Stadium Concert
WABC WOKO WFBL WHEC WKBW WEAN
WDRC WNAC WORC WPG WHP WLBW
WMAL WCAO WTAR WDBJ WKBW WNNC
WBT WTOC WDBO WXYZ WBCM WSPD
WLAC WBRC WDSU WISN WTAQ WFBM
WMAQ KSCJ WMT KMOX KMBC WNAX
KOIL KFH KFJF KTRH KTSa KFOR
KVI KFPY KFRK KDYL WCAU

10:00-11:00 Hank Simmons' Show Boat
WABC WOKO WFBL WHEC WKBW WEAN
WDRC WNAC WORC WPG WCAU WLBW
WMAL WTAR WDBJ WHK WKBW WNNC
WBT WTOC WDBO WXYZ WBCM WSPD
WREC WLAC WBRC WDSU WISN WFBM
WCCO KSCJ WMT KMOX KMBC WNAX
KOIL KFH KFJF KRLD KTRH KT A
WACO KFOR KVI KFPY KFRK KDYL

10:00-11:00 Lucky Strike Dance Orchestra
WEAF WTIC WEEI WJAR WTAG WCHS
WFI WRC WGY WBN WCAE WTM
WWJ WSAI WGN KSD WOC WHO
WOW WDAF WTMJ KSTP WECB WRYA
WJAX WIOD WFLA WSUN WHAS WMC
WSB WSMB WJDX KVOO WFAA WOI
WKY KOA KSL KGO KFI KGW
KOMO KHQ KTR KFSD WDAY KFYR
WIBA KPRC

11:00-11:15 Little Jack Little
WEAF WTIC WFI WCAE KSD WGY

11:00-11:15 Bert Low and His Orchestra
WABC WOKO WFBL WHEC WKBW WDRC
WAAB WORC WCAU WHP WLBW WMAL
WCAO WTAR WDBJ WHK WKBW WNNC
WBT WTOC WDBO WXYZ WBCM WSPD
WREC WLAC WBRC WDSU WISN WCCO
KSCJ WMT KMOX KLRA WNAX KOIL
KFH KFJF KRLD KTRH KTSa WACO
KFOR KVI KFPY KFRK KDYL

11:15-12:00 Tal Henry and His Orchestra
WEAF WTIC WRC KSD WOC WHO
WOW WSB KPRC WEEI WFI WTM
WGY WWJ WDAF WCAE CFCF WIOD

11:30-12:00 Los Conquistadores
WJZ WHAM WGAR WJR WBO WREN
KSTP WDAY KFYR KOA KFSD KTR

11:45-12:00 Will Osborne and His Orchestra
WABC WOKO WFBL WHEC WKBW WDRC
WAAB WORC WCAU WHP WLBW WMAL
WCAO WTAR WDBJ WHK WKBW WNNC
WBT WTOC WDBO WXYZ WBCM WSPD
WREC WLAC WBRC WDSU WISN WFBM
WCCO KSCJ WMT KMBC KLRA WNAX
KOIL KFJF KRLD KTRH KTSa KFOR
KFPY KFRK KDYL

12:00-12:30 Guy Lombardo and His Royal Canadians
WABC WFBL WHEC WKBW WEAN WNAC
WPG WCAU WHP WLBW WMAL WCAO
WTAR WDBJ WHK WKBW WNNC WBT
WTOC WDBO WXYZ WBCM WSPD WREC
WLAC WBRC WDSU WISN WFBM WCCO
WMT KMOX KMBC KLRA WNAX KOIL
KFJF KRLD KTRH KTSa KFOR KFPY
KDYL

12:00-12:30 Sherbo's Continentals
WEAF WTIC WGY WBN WTM KSD
WWJ WOV WMC KPRC KOA WRC
WDAY WIBA

12:30-1:00 Smith Ballew and His Orchestra
WEAF WTIC WGY WBN WWJ KSD
WOC WHO WOV WRC WSB WRC
KOA

INDEX BY FREQUENCIES AND DIAL NUMBERS

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KEY

Frequency in kilocycles. Wave lengths in meters. Second column symbols: * Verifies receptions 2c; sends station stamp 10c; † Verifies 2c; no stamp; ‡ Sends stamp but does not verify otherwise; † Does not verify; § Did not reply. \$ Verification 25c, reply card 10c. Third column shows night power in watts. Fourth column symbols: D, daytime only; S, Sunday only; Stations dividing time have same small figures; X means station has been granted permit to increase power; + means station has greater power during day; CP indicates station has construction permit only; Some Cuban and Mexican stations have odd frequencies; Correct kilocycles shown in small figures; N means NBC chain; C means Columbia chain; Z has been granted permit to change frequencies; Y given permit to move to another city. Dn — This daylight station may use evening hours under certain conditions. Dashes (—) have no meaning.

540 kilocycles 555.6 meters

CKX	†	500		Brandon, Manitoba
XEY	--	101	547	Merida, Mexico

Manitoba Telephone System
Partido Socialista Sur

550 kilocycles 545.1 meters

KFDY	†	500	1+	Brookings, S. D.
KFOU	†	500	2+	St. Louis, Mo.
KFYR	†	1000	1+N	Bismarck, N. D.
KOAC	†	1000		Corvallis, Ore.
KSD	†	500	2N	St. Louis, Mo.
WGR	†	1000	C	Buffalo, N. Y.
WKRC	†	1000	C	Cincinnati, Ohio

S. D. State College
Concordia Theological Seminary
Meyer Broadcasting Co.
State Agricultural College
Pulitzer Publishing Co.
Buffalo Broadcasting Co.
WKRC Incorporated

560 kilocycles 535.4 meters

KFDM	*	500	X+	Beaumont, Texas
KLZ	*	1000	C	Denver, Colo.
KTAB	*	1000		San Francisco, Cal.
WFI	*	500	1N	Philadelphia, Pa.
WIBO	*	1000	3+N	Chicago, Ill.
WLIT	†	500	1N	Philadelphia, Pa.
WNOX	*	1000	X+C	Knoxville, Tenn.
WPC	*	500	3S	Chicago, Ill.
WQAM	*	1000	C	Miami, Fla.

Magnolia Petroleum Co.
Reynolds Radio Co., Inc.
Associated Broadcasters
Strawbridge & Clothier
Nelson Bros. Bond & Mortgage Co.
Lit Brothers
WNOX, Inc.
North Shore Congregational Church
Miami Broadcasting Co.

570 kilocycles 526.0 meters

KGKO	*	250	+	Wichita Falls, Texas
KMTR	*	500	---	Los Angeles, Cal.
KXA	*	500	---	Seattle, Wash.
WEAO	†	750	1	Columbus, Ohio
WKBN	*	500	1C	Youngstown, Ohio
WMAC	--	250	2	Syracuse, N. Y.
WMCA	*	500	3	New York City
WNAX	*	1000	C	Yankton, S. D.
WNYC	†	500	3	New York City
WSYR	--	250	2	Syracuse, N. Y.
WWNC	*	1000	C	Asheville, N. C.

Wichita Falls Broadcasting Co.
KMTR Radio Corp.
American Radio Tel. Co.
Ohio State University
WKBN Broadcasting Corp.
Clive B. Meredith
Knickerbocker Broadcasting Co., Inc.
House of Gurney, Inc.
Dept. of Plants and Structures
Clive B. Meredith
Citizens Broadcasting Co., Inc.

580 kilocycles 516.9 meters

CFCL	--	500	3S	Toronto, Ont.
CFCY	*	250	1	Charlottetown, P. E. I.
CHMA	--	250	4S	Edmonton, Alta.
CKCL	--	500	3	Toronto, Ont.
CKNC	--	500	3	Toronto, Ont.
CKUA	†	500	4	Edmonton, Alta.
KGFX	†	200	D	Pierre, S. D.
KSAC	†	500	2+	Manhattan, Kans.
WBW	*	1000	2+C	Topeka, Kansas
WOBU	*	250	1+	Charleston, W. Va.
WSAZ	*	250	1	Huntington, W. Va.
WTAG	*	250	N	Worcester, Mass.

Dominion Battery Co.
The Island Radio Co.
Christian and Missionary Alliance
The Dominion Battery Co.
Canadian National Carbon Co., Ltd.
University of Alberta
Dana McNeil
State Agricultural College
Topeka Broadcasting Assn., Inc.
WOBU, Inc.
WSAZ, Inc.
Telegram Publishing Co.

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590 kilocycles 508.2 meters

CMW	--	1400	588
KHO	--	1000	+N
WCAJ	*	500	1
WEEL	†	1000	N
WKZO	*	1000	D
WOW	*	1000	1N
XEZ	*	500	588

Havana, Cuba
Spokane, Wash.
Lincoln, Nebr.
Boston, Mass.
Kalamazoo, Mich.
Omaha, Nebr.
Mexico City

Columbus Commercial & Radio Co.
Louis Wasmer, Inc.
Nebraska Wesleyan University
Edison Elec. Illuminating Co.
WKZO, Inc.
Woodmen of the World
Gonzales Zamacona y Cia.

KCYs.
670
MTRS.
447.5
DIAL

600 kilocycles 499.7 meters

CNRO	†	500	3
KFS	†	500	+N
WCAC	†	250	2+
WCAO	*	250	C
WICC	*	250	2+
WMT	*	500	C
WREC	*	500	+C

Ottawa, Ont.
San Diego, Cal.
Storrs, Conn.
Baltimore, Md.
Bridgeport, Conn.
Waterloo, Iowa
Memphis, Tenn.

Canadian National Railways
Airfan Radio Corp.
Conn. Agricultural College
Monumental Radio, Inc.
Bridgeport Broadcasting Station, Inc.
Waterloo Broadcasting Co.
WREC, Inc.

610 kilocycles 491.5 meters

KFCR	*	1000	C
WDAF	*	1000	N
WFAN	*	500	2C
WIP	*	500	2C
WJAY	†	500	D

San Francisco, Cal.
Kansas City, Mo.
Philadelphia, Pa.
Philadelphia, Pa.
Cleveland, Ohio

Don Lee, Inc.
Kansas City Star Co.
Keystone Broadcasting Co., Inc.
Gimbel Bros. Co.
Cleveland Radio Broadcasting Corp.

620 kilocycles 483.6 meters

KGW	*	1000	+N
KTAR	*	500	+N
WFLA	*	1000	1+N
WLBZ	*	500	C
WSUN	*	1000	1+N
WTMJ	*	1000	+N

Portland, Ore.
Phoenix, Arizona
Clearwater, Fla.
Bangor, Maine
St. Petersburg, Fla.
Milwaukee, Wis.

Oregonian Publishing Co.
KTAR Broadcasting Co.
Chamber of Commerce
Maine Broadcasting Co., Inc.
Chamber of Commerce
Milwaukee Journal

630 kilocycles 475.9 meters

CFCT	*	50	---
CJGX	--	500	---
CNRA	--	500	---
KFRU	*	500	1
WGBF	†	500	1
WMAL	*	250	+C
WOS	*	500	1

Victoria, B. C.
Yorkton, Sask.
Moncton, N. B.
Columbia, Mo.
Evansville, Ind.
Washington, D. C.
Jefferson City, Mo.

Victoria Broadcasting Association
Winnipeg Grain Exchange
Canadian National Railways
Stephens College
Evansville on the Air, Inc.
M. A. Leese
State Marketing Bureau

640 kilocycles 468.5 meters

CHRC	--	100	645
CKCR	--	50	645
CMHJ	--	40	645
KFI	*	50000	N
KAU	*	500	C Dn
WOI	*	5000	D
XFG	--	2000	638

Quebec, Que.
Waterloo, Ont.
Cienfuegos, Cuba
Los Angeles, Cal.
Columbus, Ohio
Ames, Iowa
Mexico City

E. Fontaine
John Patterson
Arturo Hernandez
Earle C. Anthony, Inc.
American Insurance Union
State College of Agriculture
Secretaria de Guerra y Marina

650 kilocycles 461.3 meters

KPCB	*	100	Dn
WSM	*	5000	N

Seattle, Wash.
Nashville, Tenn.

Queen City Broadcasting Co.
National Life & Accident Ins. Co.

660 kilocycles 454.3 meters

CHWK	†	100	---
CJRM	†	500	665
CJRW	--	500	665
CMCO	--	225	---
WAOW	*	500	D
WEAF	†	50000	N
WTIC	*	5000	N

Chilliwack, B. C.
Moose Jaw, Sask.
Fleming, Sask.
Havana, Cuba
Omaha, Nebr.
New York City
Hartford, Conn.

Chilliwack Broadcasting Co., Ltd.
Jas. Richardson & Sons, Ltd.
Jas. Richardson & Sons, Ltd.
J. L. Stowers
Omaha Grain Exchange
National Broadcasting Co., Inc.
Travelers Broadcasting Service, Inc.

670 kilocycles 447.5 meters

VOWR	--	500	675
WMAQ	*	5000	C
XER	--	101	674

St. Johns, N. F.
Chicago, Ill.
Mexico City

Wesley United Church
WMAQ, Inc.
Armida y Cia.

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680 kilocycles 440.9 meters

KFEQ	*	2500	D	St. Joseph, Mo.
KPO	†	5000	N	San Francisco, Cal.
WPTF	*	1000	N Dn	Raleigh, N. C.
XETF	---	500	---	Veracruz, Mexico

690 kilocycles 434.5 meters

CFAC	---	500	1	Calgary, Alta.
CHCA	*	500	1	Calgary, Alta.
CJCT	*	500	1	Calgary, Alta.
CKGW	*	5000	2N	Toronto, Ont.
CNRC	---	500	1	Calgary, Ont.
CPRY	---	5000	2	Toronto, Ont.
NAA	---	1000	---	Arlington, Va.
VAS	†	10000	685	Glance Bay, N. S.
XET	†	500	---	Monterrey, Mexico

700 kilocycles 428.3 meters

WLW	*	50000	N	Cincinnati, Ohio
-----	---	-------	---	------------------

710 kilocycles 422.3 meters

KMPC	*	500	Dn	Los Angeles, Cal.
WOR	*	5000	---	Newark, N. J.
XEN	†	1000	711	Mexico City

720 kilocycles 416.4 meters

WGN	†	25000	N	Chicago, Ill.
-----	---	-------	---	---------------

730 kilocycles 410.7 meters

CHLS	---	50	1	Vancouver, B. C.
CHYC	*	5000	2S	Montreal, Que.
CKAC	*	5000	2C	Montreal, Que.
CKCD	---	50	1	Vancouver, B. C.
CKFC	†	50	1	Vancouver, B. C.
CKMO	---	50	1	Vancouver, B. C.
CKWX	†	100	1	Vancouver, B. C.
CMK	---	3150	---	Havana, Cuba
CNRM	*	5000	2	Montreal, Que.
XEM	†	500	---	Tampico, Mexico

740 kilocycles 405.2 meters

KMMJ	*	1000	Dn	Clay Center, Nebr.
WSB	---	5000	N	Atlanta, Ga.

750 kilocycles 399.8 meters

WJR	†	5000	N	Detroit, Mich.
-----	---	------	---	----------------

760 kilocycles 394.5 meters

KVI	*	1000	C Dn	Tacoma, Wash.
WBAL	*	1000	N	Baltimore, Md.
WEW	*	1000	D	St. Louis, Mo.
WJZ	†	30000	N	New York City

770 kilocycles 389.4 meters

KFAB	*	5000	1N	Lincoln, Nebr.
WBBM	*	25000	1C	Chicago, Ill.
WJBT	---	25000	1S	Chicago, Ill.

780 kilocycles 384.4 meters

CKY	---	5000	3	Winnipeg, Manitoba
CMGH	---	60	---	Matanzas, Cuba
CNRW	---	5000	3	Winnipeg, Manitoba
KELW	*	500	2	Burbank, Cal.
KTM	*	500	2+	Los Angeles, Cal.
WEAN	*	250	+C	Providence, R. I.
WMC	---	500	+N	Memphis, Tenn.
WPOR	---	500	1	Norfolk, Va.
WTAR	*	500	1C	Norfolk Va.

Scroggin & Co., Bank
Hale Bros. & The Chronicle
Durham Life Insurance Co.
Manuel Angel Fernandez & Cia

The Calgary Herald
The Western Farmer
Albertan Publishing Co., Ltd.
Gooderham & Worts, Ltd.
Canadian National Railways
Canadian Pacific Railways
U. S. Navy
Canadian Marconi Co.
Mexico Music Co., S. A.

Crosley Radio Corp.

R. S. MacMillan
Bamberger Broadcasting Service, Inc
Cia. Civil de Inversiones

Chicago Tribune

W. G. Hassell
Northern Electric Co., Ltd.
La Presse Publishing Co., Ltd.
Vancouver Daily Province
United Church of Canada
Sprott-Shaw Radio Co.
A. Holstead & Wm. Hanlon
Cuban Broadcasting Co., Hotel Plaza
Canadian National Railways
Herbert H. Denny y Cia.

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

WJR, The Goodwill Station, Inc.

Puget Sound Broadcasting Co., Inc.
Consolidated Gas, Elec. & Power Co.
St. Louis University
National Broadcasting Co., Inc.

KFAB Broadcasting Co.
WBBM Broadcasting Corp.
WBBM Broadcasting Corp.

Manitoba Telephone System
Alberto Alvarez
Canadian National Railways
Magnolia Park, Ltd.
Pickwick Broadcasting Corp.
Shepard Broadcasting Service, Inc.
Memphis Commercial-Appeal, Inc.
WTAR Radio Corp.
WTAR Radio Corp.

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790 kilocycles 379.5 meters

CMBS	---	150	---	Havana, Cuba
CMHC	---	500	---	Tuinucu, Cuba
KGO	†	7500	N	San Francisco, Cal.
WGY	†	50000	N	Schenectady, N. Y.

800 kilocycles 374.8 meters

WBAP	†	10000	IXN	Fort Worth, Texas
WFAA	†	50000	1N	Dallas, Texas
XEU	---	101	---	Veracruz, Mexico
XFC	---	350	805	Aguascalientes, Mexico

810 kilocycles 370.2 meters

WCCO	*	5000	C	Minneapolis, Minn.
WPCH	*	500	D	New York City

820 kilocycles 365.6 meters

WHAS	†	10000	N	Louisville, Ky.
XFI	---	1000	818	Mexico City

830 kilocycles 361.2 meters

CMGA	---	100	834	Colon, Cuba
KOA	†	12500	N	Denver, Colo.
WEEU	---	1000	DCP	Reading, Pa.
WHDH	---	1000	D	Boston, Mass.
WRUF	*	5000	Dn	Gainesville, Fla.

840 kilocycles 356.9 meters

CFCA	†	500	1	Toronto, Ont.
CHCT	---	1000	---	Red Deer, Alta.
CKLC	†	1000	2	Red Deer, Alta.
CMC	*	500	---	Havana, Cuba
CNRD	†	1000	2	Red Deer, Alta.
CNRT	*	500	1	Toronto, Ont.

850 kilocycles 352.7 meters

KWKH	*	10000	1	Shreveport, La.
WWL	*	5000	1	New Orleans, La.

860 kilocycles 348.6 meters

CMJE	---	20	856	Camaguey, Cuba
KMO	†	500	+ Dn	Tacoma, Wash.
WABC	*	5000	XC	New York City
WBOQ	---	5000	---	New York City
WHB	*	500	D	Kansas City, Mo.
XBJ	*	101	857	Juarez, Mexico
XFX	---	500	---	Mexico City, Mexico

870 kilocycles 344.6 meters

WENR	---	50000	1N	Chicago, Ill.
WLS	†	50000	1XN	Chicago, Ill.

880 kilocycles 340.7 meters

CHML	*	50	4	Hamilton, Ont.
CJCB	*	50	---	Sydney, N. S.
CKCI	†	100	3	Quebec, Que.
CKCV	†	50	3	Quebec, Que.
CNRQ	†	50	3	Quebec, Que.
KFKA	†	500	2+	Greeley, Colo.
KLX	---	500	---	Oakland, Cal.
KPOF	*	500	2	Denver, Colo.
WCOC	*	500	+	Meridian, Miss.
WGBI	*	250	1	Scranton, Pa.
WQAN	*	250	1	Scranton, Pa.
WSUI	*	500	---	Iowa City, Iowa

E. Artalejo
Frank H. Jones
National Broadcasting Co., Inc.
General Electric Co.

Carter Publications, Inc.
News & Journal
Fernando Pazos
Gobierno del Estado de Aguascalientes

Northwestern Broadcasting, Inc.
Eastern Broadcasters, Inc.

Courier-Journal & Times
Sria. de Ind., Comercio y Trabajo

Leopoldo V. Figueros
National Broadcasting Co., Inc.
Berks Broadcasting Co.
Matheson Radio Co., Inc.
University of Florida

Star Publishing & Ptg. Co.
G. F. Tull & Ardern, Ltd.
Alberta Pacific Grain Co., Ltd.
Cuban Telephone Co.
Canadian National Railways
Canadian National Railways

Hello World Broadcasting Corp.
Loyola University

Manuel Fernandez
KMO, Inc.
Atlantic Broadcasting Corp.
Atlantic Broadcasting Corp.
WHB Broadcasting Co.
Juan Buttner
Secretaria de Educacion Publica

National Broadcasting Co., Inc.
Agricultural Broadcasting Co.

Maple Leaf Radio Co., Ltd.
N. Nathanson
Le "Soleil," Ltd.
G. A. Vandry
Canadian National Railways
Midwestern Radio Corp.
Tribune Publishing Co.
Pillar of Fire, Inc.
Mississippi Broadcasting Co., Inc.
Scranton Broadcasters, Inc.
Scranton Times
University of Iowa

KCYS.

880

MTRS.

340.7

DIAL

CUT OUT ON DOTTED LINES

INDEX BY FREQUENCIES AND DIAL NUMBERS

890 kilocycles 336.9 meters

CFBO	*	500	---	St. John, N. B.
CKCO	†	100	---	Ottawa, Ont.
CKPR	†	50	---	Port Arthur, Ont.
CMCF	†	250	---	Havana, Cuba
CMX	*	500	---	Havana, Cuba
KFNH	*	500	2+	Shenandoah, Iowa
KGJF	*	250	---	Little Rock, Ark.
KUSD	*	500	2+	Vermillion, S. D.
WGST	*	250	+C	Atlanta, Ga.
WILL	*	250	2+	Urbana, Ill.
WJAR	*	250	+N	Providence, R. I.
WKAQ	*	250	---	San Juan, P. R.
WMMN	*	250	+	Fairmount, W. Va.
XES	\$	500	---	Tampico, Mexico

900 kilocycles 333.1 meters

KGBU	†	500	---	Ketchikan, Alaska
KHJ	*	1000	C	Los Angeles, Cal.
KSEI	*	250	---	Pocatello, Idaho
TIC	---	50	---	San Jose, Costa Rica
WBEN	*	1000	N	Buffalo, N. Y.
WJAX	*	1000	N	Jacksonville, Fla.
WKY	*	1000	N	Oklahoma City
WLBL	*	2000	D	Stevens Point, Wis.

910 kilocycles 329.6 meters

CFQC	---	500	1	Saskatoon, Sask.
CHNS	---	500	3	Halifax, N. S.
CJGC	*	5000	2	London, Ont.
CNRH	*	500	3	Halifax, N. S.
CNRL	*	500	2	London, Ont.
CNRS	---	500	1	Saskatoon, Sask.
XEW	†	5000	---	Mexico City

920 kilocycles 325.9 meters

HHK	*	1000	---	Port au Prince, Haiti
KFEL	†	500	1	Denver, Colo.
KFXF	*	500	1	Denver, Colo.
KOMO	†	1000	N	Seattle, Wash.
KPRC	*	1000	+N	Houston, Texas
WAAF	---	500	D	Chicago, Ill.
WBOS	---	500	D	Needham, Mass.
WWJ	†	1000	N	Detroit, Mich.
XFF	---	250	915	Chihuahua, Mexico

930 kilocycles 322.4 meters

CFCH	---	50	---	North Bay, Ont.
CFLC	---	50	3	Prescott, Ont.
CFRC	---	50	3	Kingston, Ont.
CJCA	---	500	4	Edmonton, Alta.
KFWI	†	500	1	San Francisco, Cal.
KGBZ	---	500	2+	York, Nebr.
KMA	---	500	2+	Shenandoah, Iowa
KROW	*	500	1+C	Oakland, Cal.
WBRC	*	500	+C	Birmingham, Ala.
WDBJ	*	250	+C	Roanoke, Va.
WIBG	*	25	S	Elkins Park, Pa.

940 kilocycles 319.0 meters

KGU	†	1000	---	Honolulu, Hawaii
KOIN	*	1000	C	Portland, Oregon
WAAT	---	300	D	Jersey City, N. J.
WCSH	*	1000	N	Portland, Maine
WDAY	*	1000	N	Fargo, N. D.
WFIW	*	1000	---	Hopkinsville, Ky.
WHA	---	750	D+	Madison, Wis.
XEO	---	5000	---	Mexico City

950 kilocycles 315.6 meters

KFWB	*	1000	---	Hollywood, Cal.
KGHL	---	1000	---	Billings, Mont.
KMBC	*	1000	C	Kansas City, Mo.
NRH	---	75	948	Heredia, C. R.
WRC	†	500	N	Washington, D. C.

C. A. Munro, Ltd.
Dr. G. M. Geldert
Dougall Motor Car Corp.
Raoul Karman
Francisco Lavin
Henry Field Co.
Church of the Nazarene
University of South Dakota
Georgia School of Technology
University of Illinois
The Outlet Co.
Radio Corp. of Porto Rico
Holt-Rowe Broadcasting Co.
Difusora Portena XES

Alaska Radio & Service Co.
Don Lee, Inc.
KSEI Broadcasting Association, Inc.

Buffalo Evening News
City of Jacksonville
WKY Radiophone Co.
Wisconsin Dept. of Markets

The Electric Shop, Ltd.
Halifax Herald, Ltd.
Free Press Printing Co., Ltd.
Canadian National Railways
Canadian National Railways
Canadian National Railways
Mexico Music Co.

Republic of Haiti
Eugene P. O'Fallon, Inc.
Colorado Radio Corp.
Fisher's Blend Station, Inc.
Houston Printing Co.
Drovers' Journal Publishing Co.
Babson Statistical Organization, Inc.
The Detroit News
Gobierno del Estado de Chihuahua

Northern Supplies, Ltd.
Radio Association
Queen's University
The Edmonton Journal, Ltd.
Radio Entertainment, Inc.
Dr. George R. Miller
May Seed & Nursery Co.
Educational Broadcasting Corp.
Birmingham Broadcasting Co., Inc.
Times-World Corp.
St. Paul's P. E. Church.

Marion A. Mulrony
KOIN, Inc.
Bremer Broadcasting Corp.
Congress Square Hotel Co.
WDAY, Inc.
WFIW, Inc.
University of Wisconsin
National Revolucionario Party

Warner Bros. Broadcasting Corp.
Northwestern Auto Supply Co., Inc.
Midland Broadcasting Co., Inc.

National Broadcasting Co., Inc.

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960 kilocycles 312.3 meters

CFRB	*	5000	2C	Toronto, Ont.
CHWC	*	500	3	Regina, Sask.
CJBR	---	500	3	Regina, Sask.
CKCK	†	500	3	Regina, Sask.
CMBC	---	150	965	Havana, Cuba
CMDB	---	150	965	Havana, Cuba
CNRR	---	500	3	Regina, Sask.
CNRX	*	5000	2	Toronto, Ont.
XED	*	10000	965	Reynosa, Mexico

Rogers-Majestic Corp., Ltd.
R. H. Williams & Sons, Ltd.
Cooperative Wheat Producers, Ltd.
Leader Publishing Co., Ltd.
Domingo Fernandez
Luis Perez Garcia
Canadian National Railways
Canadian National Railways
International Broadcasting Co.

970 kilocycles 309.1 meters

CMGF	---	50	977	Matanzas, Cuba
KJR	*	5000	---	Seattle, Wash.
WCFL	---	1500	N Dn	Chicago, Ill.

Bernabe R. de la Torre
Northwest Broadcasting System, Inc.
Chicago Federation of Labor

980 kilocycles 305.9 meters

CFCN	---	10000	985	Calgary, Alta.
KDKA	---	50000	N	Pittsburgh, Pa.
XEFE	---	101	---	Laredo, Mexico

Western Broadcasting Co.
Westinghouse Elec. & Mfg. Co.
Rafael T. Carranza

990 kilocycles 302.8 meters

WBZ-A	†	15000	1N	Springfield-Boston
XEK	---	101	---	Mexico City

Westinghouse Elec. & Mfg. Co.
Arturo Martinez

1000 kilocycles 299.8 meters

KFVD	*	250	Dn	Culver City, Cal.
WHO	*	5000	1N	Des Moines, Iowa
WOC	*	5000	1N	Davenport, Iowa
XEI	*	101	---	Morelia, Mexico

Los Angeles Broadcasting Co.
Central Broadcasting Co.
Central Broadcasting Co.
Carlos Gutierrez M.

1010 kilocycles 296.8 meters

CHCK	---	100	1	Charlottetown, P. E. I.
CHCS	---	500	---	Hamilton, Ont.
CKIC	---	50	---	Wolfville, N. S.
CKOC	*	500	3+	Hamilton, Ont.
CMBW	---	150	---	Havana, Cuba
CMZ	---	150	---	Havana, Cuba
KCGF	---	500	2	S. Coffeyville, Okla.
KOW	*	500	---	San Jose, Cal.
WFIN	*	250	1	New York City
WIS	†	500	+C	Columbia, S. C.
WLAP	---	500	2	Louisville, Ky.
WPAP	*	250	1	Norman, Okla.
WQAO	---	250	1	New York City
WRNY	---	250	1	New York City
XEQ	---	1000	1015	Juarez, Mexico

W. E. Burke
The Hamilton Spectator
Acadia University
Wentworth Radio Broadcasting Co.
M. Alvarez
Manual y Salas
Powell & Platz
Pacific Agricultural Foundation, Ltd.
Marcus Loew Booking Agency
South Carolina Broadcasting Co., Inc.
American Broadcasting Corp. of Ky.
University of Oklahoma
Palisades Amusement Park
Calvary Baptist Church
Aviation Radio Station, Inc.
Feliciano Lopez Islas

1020 kilocycles 293.9 meters

KFKX	*	10000	1N	Chicago, Ill.
KYW	*	10000	1N	Chicago, Ill.
WRAX	†	250	D	Philadelphia, Pa.

Westinghouse Elec. & Mfg. Co.
Westinghouse Elec. & Mfg. Co.
WRAX Broadcasting Co.

1030 kilocycles 291.1 meters

CFCF	---	1650	N	Montreal, Que.
CMKC	*	150	1034	Santiago de Cuba
CNRV	†	500	---	Vancouver, B. C.
XEB	†	1000	---	Mexico City, Mexico
XEV	---	101	1034	Puebla, Mexico

Canadian Marconi Co.
M. P. Martinez
Canadian National Railways
El Bazen Tono, S. A.
Ciro Molina

1040 kilocycles 288.3 meters

KRLD	*	10000	1C	Dallas, Texas
KTHS	†	10000	1N	Hot Springs, Ark.
WKAR	*	1000	D	East Lansing, Mich.
WMAK	*	1000	Dn	Buffalo, N. Y.

KRLD Radio Corp.
Chamber of Commerce
Michigan State College
Buffalo Broadcasting Corp.

1050 kilocycles 285.5 meters

KFBI	*	5000	Dn	Milford, Kansas
KNX	*	5000	X	Hollywood, Cal.

Farmers & Bankers Life Insurance Co.
Western Broadcast Co.

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1060 kilocycles 282.8 meters

KWJJ	500	Dn	Portland, Ore.
WBAL	10000	1N	Baltimore, Md.
WJAG	1000	Dn	Norfolk, Nebr.
WTIC	50000	1N	Hartford, Conn.

1070 kilocycles 280.2 meters

CMGB	150	---	Havana, Cuba
CMBT	150	---	Havana, Cuba
CMCB	150	---	Havana, Cuba
KJBS	100	D	San Francisco, Cal.
WCAZ	50	D	Carthage, Ill.
WDZ	100	D	Tuscola, Ill.
WTAM	50000	N	Cleveland, Ohio

1080 kilocycles 277.6 meters

WBT	5000	C	Charlotte, N. C.
WCBD	5000	1 Dn	Zion, Ill.
WMBI	5000	1 Dn	Chicago, Ill.

1090 kilocycles 275.1 meters

KMOX	50000	C	St. Louis, Mo.
XEL	10	1091	Saltillo, Mexico

1100 kilocycles 272.6 meters

CMKD	20	---	Santiago, Cuba
KGDM	250	DX	Stockton, Cal.
WLWL	5000	1	New York City
WPG	5000	1C	Atlantic City, N. J.

1110 kilocycles 270.1 meters

CMHI	15	---	Santa Clara, Cuba
KSOO	2500	Dn	Sioux Falls, S. D.
WRVA	5000	N	Richmond, Va.

1120 kilocycles 267.7 meters

CFJC	100	---	Kamloops, B. C.
CHGS	100	---	Summerside, P. E. I.
CJOC	100	---	Lethbridge, Alta.
KFIO	100	D	Spokane, Wash.
KFSG	500	3	Los Angeles, Cal.
CMCS	500	3Y	Inglewood, Cal.
KRSC	50	D	Seattle, Wash.
KTRH	500	2C	Houston, Texas
WDBO	500	+C	Orlando, Fla.
WDEL	250	+X	Wilmington, Del.
WHAD	250	1	Milwaukee, Wis.
WISN	250	1C	Milwaukee, Wis.
WTAW	500	2	College Station, Texas

1130 kilocycles 265.3 meters

KSL	5000	N	Salt Lake City
WJJD	20000	C Dn	Mooseheart, Ill.
WOW	1000	D	New York City
XEE	105	---	Oaxaca, Mexico
XEH	5000	1132	Monterrey, Mexico

1140 kilocycles 263.0 meters

CMGD	5	---	Matanzas, Cuba
KVOO	5000	1N	Tulsa, Okla.
WAPI	5000	1N	Birmingham, Ala.
XETA	500	---	Mexico City

1150 kilocycles 260.7 meters

CMCQ	600	---	Havana, Cuba
CMHA	200	1154	Cienfuegos, Cuba
CMQ	250	---	Havana, Cuba
WHAM	5000	N	Rochester, N. Y.

KWJJ Broadcast Co., Inc.
Consolidated Gas Elec. & Pwr. Co.
Norfolk Daily News
Travelers Broadcasting Service Corp.

Francisco Garrigo
E. Perera
Antonio Capablanca
Julius Brunton & Sons Co.
Superior Broadcasting Service
James L. Bush
National Broadcasting Co., Inc.

Station WBT, Inc.
Wilbur Glenn Voliva
Moody Bible Institute

Voice of St. Louis, Inc.
Antonio Garza Castro

Jose Caluff
E. F. Pfeffer
Missionary Society of St. Paul
WPG Broadcasting Corp.

Laviz y Paz
Sioux Falls Broadcasting Assn., Inc.
Larus & Bros. Co., Inc.

N. S. Dalgleish & Sons
R. T. Holman, Ltd.
Harold R. Carson
Spokane Broadcasting Corp.
Echo Park Evang. Assn.
Dalton's, Inc.
Radio Sales Corp.
Rice Hotel
Orlando Broadcasting Co., Inc.
WDEL, Inc.
Marquette University
Evening Wisconsin Co.
Agricultural & Mech. College

Radio Service Corp. of Utah
Loyal Order of Moose
International Broadcasting Corp.
Alfonso Zorilla B.
Tarnava y Cia.

Rafael Rodriguez
Southwestern Sales Corp.
Alabama Polytechnic Institute
Manuel Espinosa Tagle

Andres Martinez
Fox Bros. Co.
Jose Fernandez
Stromberg-Carlson Tel. Mfg. Co.

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1160 kilocycles 258.5 meters

WOWO	10000	1C	Ft. Wayne, Ind.
WWVA	5000	1C	Wheeling, W. Va.

1170 kilocycles 256.3 meters

CMKG	30	1176	Santiago de Cuba
WCAU	10000	C	Philadelphia, Pa.

1180 kilocycles 254.1 meters

CMGB	7.5	1185	Matanzas, Cuba
KEX	5000	2	Portland, Ore.
KOB	20000	2	State College, N. M.
WDGY	1000	1 Dn	Minneapolis, Minn.
WGBS	500	---	New York City
WHDI	500	1 Dn	Minneapolis, Minn.
WMAZ	500	---	Macon, Ga.

1190 kilocycles 252.0 meters

WOAI	50000	N	San Antonio, Texas
------	-------	---	--------------------

1200 kilocycles 249.9 meters

CMKB	15	---	Santiago de Cuba
KBTM	100	D	Paragould, Ark.
KFJB	100	+	Marshalltown, Iowa
KFWF	100	5+	St. Louis, Mo.
KGDE	100	+	Fergus Falls, Minn.
KGDY	100	---	Huron, S. D.
KGEK	100	9	Yuma, Colo.
KGEW	100	9	Fort Morgan, Colo.
KGFJ	100	---	Los Angeles, Cal.
KGHI	100	---	Little Rock, Ark.
KGY	10	+	Lacey, Wash.
KMLB	100	D	Monroe, La.
KSMR	100	---	Santa Maria, Cal.
KVOS	100	---	Bellingham, Wash.
KWG	100	---	Stockton, Cal.
WABI	100	---	Bangor, Maine
WABZ	100	1	New Orleans, La.
WBBZ	100	---	Ponca City, Okla.
WBHS	50	10CP	Huntsville, Ala.
WCAT	100	---	Rapid City, S. D.
WCAX	100	2	Burlington, Vt.
WCLO	100	---	Janesville, Wis.
WCOD	100	3	Harrisburg, Pa.
WEPS	100	7	Worcester, Mass.
WFAM	100	8	South Bend, Ind.
WFBC	50	10	Knoxville, Tenn.
WFBE	100	+	Cincinnati, Ohio
WHBC	10	4S	Canton, Ohio
WHBY	100	---	Green Bay, Wis.
WIBX	100	+	Utica, N. Y.
WIL	100	5+	St. Louis, Mo.
WJBC	100	6	La Salle, Ill.
WJBL	100	6	Decatur, Ill.
WJBW	100	1	New Orleans, La.
WKJC	100	3	Lancaster, Pa.
WLBG	100	+	Petersburg, Va.
WNBO	100	4	Washington, Pa.
WNBW	10	---	Carbondale, Pa.
WNBX	10	2	Springfield, Vt.
WORC	100	7CX	Worcester, Mass.
WRBL	50	---	Columbus, Ga.
WWAE	100	8	Hammond, Ind.
XEA	101	---	Guadalajara, Mexico

1210 kilocycles 247.8 meters

CFCO	100	---	Chatham, Ont.
CFNB	500	---	Fredericton, N. B.
CJOR	500	---	Sea Island, B. C.
CKMC	100	---	Cobalt, Ont.
CKPC	50	+	Preston, Ont.
KDFN	100	---	Casper, Wyo.

Main Auto Supply Co.
West Virginia Broadcasting Corp.

Ricardo Arnaldo
Universal Broadcasting Co.

Jose Anorga
Western Broadcasting Co.
College of Agriculture & Mech. Arts
Dr. George W. Young
General Broadcasting System, Inc.
Dr. George W. Young
Junior Chamber of Commerce

Southern Equipment Co.

Melchor Aguero
W. J. Beard's Temple of Music
Marshall Electric Co., Inc.
St. Louis Truth Center, Inc.
Jaren Drug Co.
Voice of South Dakota
Beehler Elec. Equipment Co.
City of Fort Morgan
Ben S. McGlashan
Berean Bible Class
St. Martin's College
J. C. Liner
Santa Maria Radio
KVOS, Inc.
Portable Wireless Tel. Co., Inc.
Pine Tree Broadcasting Corp.
Samuel D. Reeks
C. L. Carrell
The Hutchens Co.
State School of Mines
Burlington Daily News
WCLO Radio Corp.
Keystone Broadcasting Corp.
Alfred Frank Kleindienst
South Bend Tribune
First Baptist Church
Post Publishing Co.
St. John's Catholic Church
St. Norbert's College
WIBX, Inc.
Missouri Broadcasting Corp.
Kaskaskia Broadcasting Co.
Commodore Broadcasting, Inc.
Charles C. Carlson, Jr.
Kirk, Johnson & Co.
WLBG, Inc.
John Brownlee Spriggs
Home Cut Glass & China Co.
First Congregational Church
Alfred Frank Kleindienst
WRBL Radio Station, Inc.
Hammond-Calumet, Broad. Corp.
Alberto Palos Sauza

Western Ontario "Better Radio" Club
James S. Neill & Sons, Ltd.
G. C. Chandler
R. L. MacAdam
Metal Shingle & Siding Co.
Donald Lewis Hathaway

KCYS.
1210
MTRS.
247.8
DIAL

CUT OUT ON DOTTED LINE

INDEX BY FREQUENCIES AND DIAL NUMBERS

KDLR	+	100	---	Devil's Lake, N. D.
KFOR	+	100	+	Lincoln, Nebr.
KFVS	*	100	6	Cape Girardeau, Mo.
KFXM	+	100	9	San Bernardino, Cal.
KGCR	+	100	---	Watertown, S. D.
KGMP	+	100	---	Elk City, Okla.
KGNO	+	100	---	Dodge City, Kansas
KMJ	+	100	---	Fresno, Cal.
KPPC	\$	50	9	Pasadena, Cal.
KWEA	+	100	---	Shreveport, La.
WALR	+	100	---	Zanesville, Ohio
WBAX	+	100	1	Wilkes-Barre, Pa.
WBBL	+	100	7S	Richmond, Va.
WCBS	+	100	2	Springfield, Ill.
WCOH	+	100	3	Yonkers, N. Y.
WCRW	+	100	4	Chicago, Ill.
WDWF	+	100	5	Providence, R. I.
WEBQ	+	100	6	Harrisburg, Ill.
WEDC	+	100	4	Chicago, Ill.
WGBB	+	100	3	Freeport, N. Y.
WGCM	+	100	---	Gulfport, Miss.
WHBF	+	100	---	Rock Island, Ill.
WHBU	+	100	---	Anderson, Ind.
WIBU	+	100	---	Poynette, Wis.
WJBI	+	100	3	Red Bank, N. J.
WJBU	+	100	1	Lewisburg, Pa.
WJBY	+	100	---	Gadsden, Ala.
WJW	+	100	---	Mansfield, Ohio
WLCI	+	50	---	Ithaca, N. Y.
WLSI	+	100	5	Providence, R. I.
WMBG	+	100	7	Richmond, Va.
WMRJ	+	100	3	Jamaica, N. Y.
WOCL	+	25	---	Jamestown, N. Y.
WOMT	+	100	---	Manitowoc, Wis.
WPAW	+	100	5	Pawtucket, R. I.
WQDX	+	100	---	Thomasville, Ga.
WRBQ	+	100	+	Greenville, Miss.
WSBC	+	100	4	Chicago, Ill.
WSEN	+	100	---	Columbus, Ohio
WSIX	+	100	---	Springfield, Tenn.
WSOC	+	100	---	Gastonia, N. C.
WTAX	+	100	2	Springfield, Ill.
XEX	---	500	---	Mexico City

1220 kilocycles 245.8 meters

CMCA	---	150	1225	Havana, Cuba
CMCD	---	250	1225	Havana, Cuba
CMCN	---	250	1225	Havana, Cuba
KFKU	+	500	1	Lawrence, Kansas
KFTW	---	1000	---	Seattle, Wash.
KWSC	+	1000	+	Pullman, Wash.
WCAD	+	500	D	Canton, N. Y.
WCAE	+	1000	N	Pittsburgh, Pa.
WDAE	+	1000	C	Tampa, Fla.
WREN	+	1000	IN	Lawrence, Kansas

1230 kilocycles 243.8 meters

KFQD	---	100	---	Anchorage, Alaska
KGGM	+	250	+	Albuquerque, N. Mex.
KYA	+	1000	---	San Francisco, Cal.
WBIS	+	1000	2	Boston, Mass.
WFBM	+	1000	1C	Indianapolis, Ind.
WNAC	+	1000	2C	Boston, Mass.
WPSC	+	500	D	State College, Pa.
WSBT	+	500	1	South Bend, Ind.

1240 kilocycles 241.8 meters

CMAB	---	20	1249	Pinar del Rio, Cuba
CMKE	---	250	1249	Santiago de Cuba
KGCU	---	250	3	Mandan, N. D.
KLPM	+	250	3	Minot, N. D.
KTAT	+	1000	1	Ft. Worth, Texas
WACO	+	1000	1C	Waco, Texas
WXYZ	+	1000	C	Detroit, Mich.

1250 kilocycles 239.9 meters

KFMX	+	1000	2	Northfield, Minn.
KFOX	+	1000	---	Long Beach, Cal.

KDLR, Inc.	
Howard A. Shuman	
Hirsch Battery & Radio Co.	
J. C. & E. W. Lee	
Greater Kampeska Radio Corp.	
Bryant Radio & Electric Co.	
Dodge City Broadcasting Co.	
James McClatchy Co.	
Pasadena Presbyterian Church	
Hello World Broadcasting Corp.	
Roy W. Waller	
John H. Stenger, Jr.	
Grace Covenant Pres. Church	
H. L. Dewing & Chas. Messter	
Westchester Broadcasting Corp.	
Clinton R. White	
Dutree W. Flint	
First Trust & Savings Bank	
Emil Denemark, Inc.	
Harry H. Carman	
Great Southern Land Co., Inc.	
Beardsley Specialty Co.	
Citizens Bank	
Wm. C. Forrest	
Monmouth Broadcasting Co.	
Bucknell University	
Gadsden Broadcasting Co., Inc.	
Mansfield Broadcasting Assn.	
Lutheran Assn. of Ithaca	
The Lincoln Studios, Inc.	
Havens & Martin, Inc.	
Peter J. Prinz	
A. E. Newton	
Francis M. Kadow	
Shartenburg & Robinson Co.	
Stevens Luke	
J. Pat. Scully	
World Battery Co., Inc.	
Columbus Broadcasting Co.	
638 Tire & Vulcanizing Co.	
WSOC, Inc.	
WTAX, Inc.	
Excelsior, Cia Editorial S. A.	

M. Cruz	
Angel Bertamaty	
Antonio Ginard	
University of Kansas	
First Presbyterian Church	
State College of Washington	
St. Lawrence University	
WCAE, Inc.	
Tampa Publishing Co.	
Jenny Wren Co.	

Anchorage Radio Club	
New Mexico Broadcasting Co.	
Pacific Broadcasting Corp.	
Shepard Broadcasting Service, Inc.	
Indianapolis Power & Light Co.	
Shepard Broadcasting Service, Inc.	
Pennsylvania State College	
South Bend Tribune	

Francisco Martinez	
Edmundo Recamier	
Mandan Radio Assn.	
John B. Cooley	
S. A. T. Broadcast Co.	
Central Texas Broadcasting Co., Inc.	
Kunsky-Trendle Broadcasting Corp.	

Carleton College	
Nichols & Warinner, Inc.	

INDEX BY FREQUENCIES AND DIAL NUMBERS

KIDO	+	1000	---	Boise, Idaho
WAAM	+	1000	1+X	Newark, N. J.
WAL	+	1000	2	Northfield, Minn.
WDSU	+	1000	C	New Orleans, La.
WGCP	+	250	1	Newark, N. J.
WLB	+	1000	2	St. Paul, Minn.
WODA	+	1000	1	Paterson, N. J.
WRHM	+	1000	2	Minneapolis, Minn.
XEFA	---	250	---	Mexico City

1260 kilocycles 238.0 meters

KOIL	+	1000	C	Council Bluffs, Iowa
KRGV	+	500	1	Harlingen, Texas
KVOA	+	500	D	Tucson, Arizona
KWWG	+	500	1	Brownsville, Texas
WLBW	+	500	C+	Oil City, Pa.
WTOC	+	500	C	Savannah, Ga.

1270 kilocycles 236.1 meters

CMJB	---	20	1276	Ciego de Avila, Cuba
KGCA	---	50	2D	Decorah, Iowa
KOL	+	1000	C	Seattle, Wash.
KVOR	+	1000	---	Colorado Springs, Colo.
KWLC	+	100	2D	Decorah, Iowa
WASH	+	500	1	Grand Rapids, Mich.
WEAI	+	1000	D	Ithaca, N. Y.
WFBR	+	500	---	Baltimore, Md.
WJDX	+	1000	N	Jackson, Miss.
WOOD	+	500	1	Grand Rapids, Mich.

1280 kilocycles 234.2 meters

CMBJ	---	15	1285	Havana, Cuba
CMBM	---	15	1285	Havana, Cuba
CMCG	---	30	1285	Havana, Cuba
CMCH	---	15	1285	Havana, Cuba
CMCR	---	20	1285	Havana, Cuba
KFBB	+	1000	+	Great Falls, Mont.
WCAM	+	500	1	Camden, N. J.
WCAP	+	500	1	Asbury Park, N. J.
WDOD	+	1000	+C	Chattanooga, Tenn.
WIBA	+	500	+	Madison, Wis.
WOAX	---	500	1	Trenton, N. J.
WRR	---	500	C	Dallas, Texas

1290 kilocycles 232.4 meters

KDYL	+	1000	C	Salt Lake City
KFUL	---	500	1	Galveston, Texas
KLCN	---	50	D	Blytheville, Ark.
KTSA	+	1000	1+C	San Antonio, Texas
WEBC	+	1000	+N	Superior, Wis.
WJAS	+	1000	C+	Pittsburgh, Pa.
WNBZ	---	50	D	Saranac Lake, N. Y.

1300 kilocycles 230.6 meters

KFAC	+	1000	4	Los Angeles, Cal.
KFH	+	1000	2C	Wichita, Kansas
KFJR	+	500	3	Portland, Ore.
KGEF	+	1000	4	Los Angeles, Cal.
KTBR	---	500	3	Portland, Ore.
WBRR	+	1000	1	Brooklyn, N. Y.
WEVD	+	500	1	New York City
WHAP	+	1000	1	New York City
WHAZ	+	500	1	Troy, N. Y.
WIOD	+	1000	N	Miami, Fla.
WOQ	+	1000	2	Kansas City, Mo.
XETY	---	2000	---	Mexico City

1310 kilocycles 228.9 meters

KCRJ	+	100	---	Jerome, Arizona
KFBK	+	100	---	Sacramento, Cal.
KFCQ	+	100	7	Boone, Iowa
KFIU	+	10	---	Juneau, Alaska
KFJY	+	100	7	Ft. Dodge, Iowa
KFPL	+	100	---	Dublin, Texas
KFPM	+	15	---	Greenville, Texas
KFUP	---	100	8	Denver, Colo.
KFXJ	+	100	8	Grand Junction, Colo.

Boise Broadcasting Station	
WAAM, Inc.	
St. Olaf College	
Jos. H. Uhalt	
May Radio Broadcast Corp.	
University of Minnesota	
Richard E. O'Dea	
Minnesota Broadcasting Corp.	
Luis F. Murguia	

Mona Motor Oil Co.	
KRGV, Inc.	
Robert M. Riculfi	
Herald Pub. Co.	
Radio-Wire Program Corp.	
Savannah Broadcasting Co.	

Eduardo V. Figueroa	
Charles W. Greenley	
Seattle Broadcasting Co., Inc.	
Reynolds Radio Co., Inc.	
Luther College	
WASH Broadcasting Corp.	
Cornell University	
Baltimore Radio Show, Inc.	
Lamar Life Insurance Co.	
Kunsky-Trendle Broadcasting Corp.	

Jesus Lopez	
Jose Leiro	
Jose Justo Moran	
Hernani Torralbas	
Aurelio Hernandez	
Buttrey Broadcast, Inc.	
City of Camden	
Radio Industries Broadcast Co.	
WDOD Broadcasting Corp.	
Badger Broadcasting Co.	
WOAX, Inc.	
City of Dallas	

Intermountain Broadcasting Corp.	
News Publishing Co.	
C. L. Lintzenich	
Lone Star Broadcast Co.	
Head of Lake Broadcasting Co.	
Pittsburgh Radio Supply House	
Smith & Mace	

Los Angeles Broadcasting Co.	
Radio Station KFH Co.	
Ashley C. Dixon & Son	
Trinity Methodist Church	
M. E. Brown	
People's Pulpit Association	
Debs Memorial Radio Fund, Inc.	
Defenders of Truth Society, Inc.	
Rensselaer Polytechnic Institute	
Isle of Dreams Broadcasting Corp.	
Unity School of Christianity	
Juan Gutierrez, Jr.	

Chas. C. Robinson	
Jas. McClatchy Co.	
Boone Biblical College	
Alaska Electric Light & Power Co.	
C. S. Tunwall	
C. C. Baxter	
The New Furniture Co.	
Fitzsimmons General Hospital	
Western Slope Broadcasting Co.	

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KFXR	+	100	+	Oklahoma City
KGBX	*	100	+	St. Joseph, Mo.
KGCX	+	100	+	Wolf Point, Minn.
KGEZ	+	100	---	Kalispell, Mont.
KGFW	+	100	---	Ravenna, Nebr.
KIT	+	50	---	Yakima, Wash.
KMED	+	100	---	Medford, Ore.
KRMD	+	50	9	Shreveport, La.
KTLC	*	100	---	Houston, Texas
KTSL	+	100	9	Shreveport, La.
KTSM	+	100	2	El Paso, Texas
KWCR	+	100	7	Cedar Rapids, Iowa
KXRO	+	100	---	Aberdeen, Wash.
WBEO	+	100	CP	Marquette, Mich.
WBOW	+	100	---	Terre Haute, Ind.
WBRE	+	100	---	Wilkes-Barre, Pa.
WCLS	+	100	1	Joliet, Ill.
WDAH	+	100	2	El Paso, Texas
WEBR	+	100	+	Buffalo, N. Y.
WEXL	+	50	---	Royal Oak, Mich.
WFBG	+	100	3X	Altoona, Pa.
WFDF	+	100	---	Flint, Mich.
WFDV	+	100	D	Rome, Ga.
WGAL	+	100	5	Lancaster, Pa.
WGH	+	100	---	Newport News, Va.
WHAT	+	100	4	Philadelphia, Pa.
WIAC	+	100	3	Johnstown, Pa.
WJAK	+	50	6	Marion, Ind.
WKAV	+	100	---	Laconia, N. H.
WKBB	+	100	1	Joliet, Ill.
WKBC	+	100	---	Birmingham, Ala.
WKBS	+	100	---	Galesburg, Ill.
WLBC	+	50	6	Muncie, Ind.
WMBO	+	100	---	Auburn, N. Y.
WNBH	+	100	---	New Bedford, Mass.
WOBT	+	100	+	Jackson, Tenn.
WOL	+	100	+	Washington, D. C.
WRAW	+	100	5X	Reading, Pa.
WROL	+	100	---	Knoxville, Tenn.
WSA	+	100	---	Grove City, Pa.
WSJS	+	100	---	Winston-Salem, N. C.
WTCL	+	100	4	Philadelphia, Pa.

1320 kilocycles 227.1 meters

CMJC	--	15	1321	Camaguey, Cuba
CMKH	--	250	1327	Santiago de Cuba
KGHF	+	250	+	Pueblo, Colo.
KGMB	+	250	---	Honolulu, Hawaii
KID	+	250	1+	Idaho Falls, Idaho
KTFI	+	250	1X	Twin Falls, Idaho
WADC	+	1000	C	Akron, Ohio
WSMB	+	500	N	New Orleans, La.

1330 kilocycles 225.4 meters

KGB	*	500	C	San Diego, Cal.
KSCJ	*	1000	1+C	Sioux City, Iowa
WDRC	*	500	C	Hartford, Conn.
WSAI	*	500	N	Cincinnati, Ohio
WTAQ	*	1000	1C	Eau Claire, Wis.
XEC	--	50	1333	Toluca, Mexico

1340 kilocycles 223.7 meters

CMBA	--	50	1345	Havana, Cuba
CMBF	--	7.5	1345	Havana, Cuba
CMCU	--	50	1345	Havana, Cuba
CMCY	--	15	1345	Havana, Cuba
KFPW	+	50	D	Fort Smith, Ark.
KFPY	+	1000	C	Spokane, Wash.
WCOA	+	500	---	Pensacola, Fla.
WSPD	+	1000	C	Toledo, Ohio

1350 kilocycles 222.1 meters

KWK	*	1000	N	St. Louis, Mo.
WAWZ	*	250	1	Zarephath, N. J.
WBNX	---	250	1	New York City
WCDA	*	250	1	New York City
WEHC	*	500	D	Emory, Va.
WMSG	---	250	1	New York City

Exchange Ave. Baptist Church
KGBX, Inc.
First State Bank of Vida
Treloar-Church Broadcasting Co.
Central Nebraska Broadcasting Corp.
Carl E. Haymond
Mrs. W. J. Virgin
Robert M. Dean
Houston Broadcasting Co.
G. A. Houseman
W. S. Bledsoe & W. T. Blackwell
Harry F. Paar
KXRO, Inc.
Lake Superior Broadcasting Co.
Banks of Wabash, Inc.
Louis G. Baltimore
WCLS, Inc.
Bledsoe & Blackwell
Howell Broadcasting Co., Inc.
Royal Oak Broadcasting Co.
Wm. F. Gable Co.
Frank D. Fallain
Dolies Goings
WGAL, Inc.
Hampton Roads Broadcasting Corp.
Independence Broadcasting Co.
Johnstown Automobile Co.
Marion Broadcasting Co.
Laconia Radio Club
Sanders Bros. Radio Station
R. B. Broyles Furniture Co.
Permil N. Nelson
Donald A. Burton
Radio Service Laboratories
New Bedford Broadcasting Co.
Sun Publishing Co.
American Broadcasting Co.
Reading Broadcasting Co.
Stewart Broadcasting Co.
Grove City College
Winston-Salem Journal Co.
Foulkrod Radio Engineering Co.

Feliciano Isaac
Alberto Ravelo
C. P. Ritchie & J. E. Finch
Honolulu Broadcasting Co., Ltd.
KID Broadcasting Co.
Radio Broadcasting Corp.
Allen T. Simmons
Saenger Theatre & Maison Blanche Co.

Don Lee, Inc.
Perkins Bros. Co.
WDRC, Inc.
Crosley Radio Corp., Lessee
Gillette Rubber Co.
Jesus R. Benavides

Oscar Montenegro
Jose G. Reigada
Jorge Garcia Serra
M. D. Autran
Southwestern Hotels Co.
Symons Broadcasting Co.
City of Pensacola
Toledo Broadcasting Co.

Greater St. Louis Broadcasting Corp.
Pillar of Fire
Standard Cahill Co., Inc.
Italian Educ. Broadcasting Co., Inc.
Emory & Henry College
Madison Sq. Garden Brdctg. Corp.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1360 kilocycles 220.4 meters

CMKF	--	30	1363	Holguin, Cuba
KGER	*	1000	---	Long Beach, Cal.
KGR	+	500	---	Butte, Montana
WCSC	*	500	---	Charleston, S. C.
WFBL	*	1000	CX	Syracuse, N. Y.
WGES	*	500	1+	Chicago, Ill.
WJKS	*	1000	1+	Gary, Ind.
WQBC	+	500	D	Vicksburg, Miss.
XETO	---	101	---	Mexico City

1370 kilocycles 218.7 meters

CMAC	--	30	1375	Pinar del Rio, Cuba
CMGE	--	30	1375	Cardenas, Cuba
KCRC	+	100	2+	Enid, Okla.
KFBL	*	50	3	Everett, Wash.
KFJI	+	100	---	Astoria, Ore.
KEFM	+	100	---	Grand Forks, N. D.
KEFZ	+	100	---	Ft. Worth, Texas
KFLX	+	100	---	Galveston, Texas
KGAR	*	100	+	Tucson, Arizona
KGDA	+	100	---	Mitchell, S. D.
KGFG	+	100	2	Oklahoma City
KGFL	+	50	---	Raton, N. M.
KGKL	+	100	---	San Angelo, Texas
KMAC	+	100	5	San Antonio, Texas
KONO	+	100	5	San Antonio, Texas
KOOS	*	100	---	Marshfield, Ore.
KRE	+	100	6	Berkeley, Cal.
KUJ	+	100	---	Walla Walla, Wash.
KVL	+	100	3	Seattle, Wash.
KWKC	---	100	---	Kansas City, Mo.
WBGF	+	50	---	Glens Falls, N. Y.
WBTM	+	100	7	Danville, Va.
WCBM	+	100	+	Baltimore, Md.
WELK	+	100	+	Philadelphia, Pa.
WGL	+	100	C	Fort Wayne, Ind.
WHBD	+	100	---	Mount Orab, Ohio
WHBQ	+	100	---	Memphis, Tenn.
WHDF	+	100	+	Calumet, Mich.
WIBM	+	100	1	Jackson, Mich.
WJBK	*	50	1	Detroit, Mich.
WJTL	---	100	---	Tifton, Ga.
WLEY	---	100	---	Lexington, Mass.
WLVA	+	100	7	Lynchburg, Va.
WMBR	+	100	---	Tampa, Fla.
WPOE	+	100	---	Patchogue, N. Y.
WQDM	*	100	D	St. Albans, Vt.
WRAC	*	100	---	Williamsport, Pa.
WRAM	*	100	---	Wilmington, N. C.
WRBJ	+	10	---	Hattiesburg, Miss.
WRDO	+	100	CP	Augusta, Maine
WRJN	---	100	---	Racine, Wis.
WSYS	---	50	---	Buffalo, N. Y.

1380 kilocycles 217.3 meters

KOH	+	500	C	Reno, Nevada
KQV	+	500	2	Pittsburgh, Pa.
KSO	*	500	1	Clarinda, Iowa
WKBH	*	1000	1	La Crosse, Wis.
WSMK	*	200	2	Dayton, Ohio

1390 kilocycles 215.7 meters

KLRA	*	1000	1C	Little Rock, Ark.
KOY	*	500	---	Phoenix, Arizona
KUOA	+	1000	1	Fayetteville, Ark.
WHK	*	1000	C	Cleveland, Ohio

1400 kilocycles 214.2 meters

CMBI	--	30	1405	Havana, Cuba
CMBK	--	15	1405	Havana, Cuba
CMBN	--	30	1405	Havana, Cuba
CMBQ	--	50	1405	Havana, Cuba
CMBX	--	30	1405	Havana, Cuba
CMBY	--	100	1405	Havana, Cuba
KLO	*	500	---	Ogden, Utah

Manuel J. de Gongora
Consolidated Broadcasting Corp.
KGR, Inc.
Jordan & Burk
Omondaga Radio Broadcasting Corp.
Oak Leaves Broadcasting Station, Inc.
Johnson-Kennedy Radio Corp.
Delta Broadcasting Co., Inc.
Ricardo Gonzales Montero

Oscar S. Mechoso
Genaro Seaber
Enid Radiophone Co.
Leese Bros.
KFJI Broadcasters, Inc.
University of North Dakota
Estate of H. C. Meachem
George Roy Clough
Tucson Motor Service Co.
Mitchell Broadcasting Corp.
Oklahoma Broadcasting Co., Inc.
W. E. Whitmore
KGKL, Inc.
W. W. McAllister
Mission Broadcasting Co.
H. H. Hanseth, Inc.
First Congregational Church
KUJ, Inc.
KVL, Inc.
Wilson Duncan Broadcasting Co.
W. N. Parker and H. H. Metcalfe
Clarke Electric Co.
Baltimore Broadcasting Corp.
WELK Broadcasting Station, Inc.
Fred Z. Zieg
F. P. Moler
Broadcasting Station WHBQ, Inc.
Upper Michigan Broadcasting Co.
WIBM, Inc.
James F. Hopkins, Inc.
Oglethorpe University
Lexington Air Stations
Lynchburg Broadcasting Corp.
F. J. Reynolds
Nassau Broadcasting Corp.
A. J. St. Antoine
C. R. Cummins
Wilmington Radio Association
Hattiesburg Broadcasting Co.
WRDO, Inc.
Racine Broadcasting Corp.
Seneca Vocational School

The Bee, Inc.
KQV Broadcasting Co.
Iowa Broadcasting Co.
WKBH, Inc.
Stanley M. Krohn, Jr.

Arkansas Broadcasting Co.
Nielson Radio & Sporting Goods Co.
University of Arkansas
Radio Air Service Corp.

Heriberto Meireles
Jose L. Ferriol
Armado Romeu
Emilio Salas
Bertin Fernandez
Lino E. Cosculluela
Peery Building Co.

KCYS.
1400
MTRS.
214.2
DIAL

CUT OUT ON
DOTTED LINES

INDEX BY FREQUENCIES AND DIAL NUMBERS

KOCW	*	250	+
WBAA	†	500	1+
WBB	*	500	2
WCCU	*	500	2
WCMA	†	500	1
WFO	*	500	2
WKBF	†	500	1
WLTH	*	500	2
XEP	--	2500	--

1410 kilocycles 212.6 meters

KFLV	†	500	4
KGRS	*	1000	1
WAAB	*	500	C
WBCM	*	500	C
WDAG	*	1000	1
WHBL	*	500	4
WHIS	†	250	--
WODX	*	500	3
WRBX	*	250	--
WSFA	†	500	3

1420 kilocycles 211.1 meters

KABC	†	100	--
KBPS	--	100	4
KFLZ	*	100	--
KFXD	*	100	--
KFXV	--	100	--
KFY	†	100	+
KGFF	†	100	--
KGGC	†	100	5
KGIW	†	100	--
KGIX	†	100	--
KGKX	†	100	--
KGVO	†	100	D
KICK	*	100	--
KORE	*	100	--
KXL	*	100	4
KXY	--	100	--
WAGM	--	100	CP
WDEV	--	50	D
WEDH	*	100	--
WEHS	--	100	2
WELL	†	50	X
WFDW	*	100	--
WHDL	*	100	D
WHFC	--	100	2
WIAS	†	100	--
WIBR	*	50	--
WILM	*	100	--
WTBO	*	100	--
WTMS	--	100	CPD
WKBI	*	100	2
WLB	†	100	--
WMB	*	100	+
WMBH	--	100	+
WPAD	†	100	--
WSPA	*	100	+
WTBO	*	100	+

1430 kilocycles 209.7 meters

KECA	†	1000	N
KGNF	†	500	D
WBAK	†	500	1+
WCAH	*	500	C
WFEA	--	500	CP
WGB	*	500	2S
WHP	*	500	1C+
WNB	*	500	2

1440 kilocycles 208.2 meters

KLS	*	250	D
WBG	*	500	--
WCB	*	250	1
WHEC	*	500	2C

Chickasha, Okla.
Lafayette, Ind.
Brooklyn, N. Y.
Brooklyn, N. Y.
Culver, Ind.
Brooklyn, N. Y.
Indianapolis, Ind.
Brooklyn, N. Y.
Laredo, Mexico

College for Women
Purdue University
Brooklyn Broadcasting Corp.
U. S. Broadcasting Corp.
General Broadcasting Corp.
Paramount Broadcasting Co.
Indianapolis Broadcasting, Inc.
The Voice of Brooklyn, Inc.
La Voz Latino

Rockford Broadcasters, Inc.
Gish Radio Service
Bay State Broadcasting Corp.
James E. Davidson
National Radio & Broadcasting Corp.
Press Pub. Co.
Daily Telegraph
Mobile Broadcasting Corp.
Richmond Development Corp.
Montgomery Broadcasting Co., Inc.

Alamo Broadcasting Co.
Benson Polytechnic Institute
Reporter Printing Co.
Frank E. Hurt
Mary M. Costigan
T. E. Kirksey
KGFF Broadcasting Co.
Golden Gate Broadcasting Co.
Leonard E. Wilson
Las Vegas, Nevada, Radio Corp.
C. E. Twiss and F. H. McCann
Mosby's Incorporated
Red Oak Radio Corp.
Eugene Broadcasting Station
KXL Broadcasters, Inc.
Harris County Broadcast Co.
Aroostook Broadcasting Corp.
Harry C. Whitehill
Erie Dispatch-Herald
WEHS, Inc.
Enquirer-News Co.
Raymond G. Hammett
Tupper Lake Broadcasting Co., Inc.
WHFC, Inc.
Iowa Broadcasting Co.
George W. Robinson
Delaware Broadcasting Co., Inc.
Valdemar Jensen
Marius Johnson
WKBI, Inc.
WLB Broadcasting Co.
Michigan Broadcasting Co., Inc.
Edwin Dudley Aber
Paducah Broadcasting Co.
Voice of South Carolina
Associated Broadcasting Corp.

Earle C. Anthony, Inc.
Great Plains Broadcasting Co.
Penna. State Police
Commercial Radio Service Co.
Rines Hotel Co.
Memphis Broadcasting Co.
WHP, Inc.
Memphis Broadcasting Co.

Warner Bros.
North Carolina Broadcasting Co.
B. B. Musselman
Hickson Electric & Radio Corp.

INDEX BY FREQUENCIES AND DIAL NUMBERS

WMBD	*	500	3+
WOKO	†	500	2C
WSAN	*	250	1
WTAD	†	500	3

1450 kilocycles 206.8 meters

CMKA	--	20	--
KTBS	*	1000	--
WBMS	*	250	1
WGAR	†	500	N
WHOM	*	500	1
WKBO	*	250	1
WNJ	*	250	1
WSAR	*	250	--
WTFI	--	500	Y

Peoria Heights, Ill.
Albany, N. Y.
Allentown, Pa.
Quincy, Ill.

Arturo C. de Ribas
Tri-State Broadcasting System, Inc.
WBMS Broadcasting Corp.
WGAR Broadcasting Co.
New Jersey Broadcasting Corp.
Camith Corp.
Radio Investment Co.
Doughty & Welch Electric Co., Inc.
Toccoa Falls Broadcasting Co.

1460 kilocycles 205.4 meters

KSTP	*	10000	N
WJSV	*	10000	--

St. Paul, Minn.
Alexandria, Va.

1470 kilocycles 204.0 meters

KGA	†	5000	--
WLAC	*	5000	C

Spokane, Wash.
Nashville, Tenn.

1480 kilocycles 202.6 meters

KFJF	*	5000	C
WKBW	*	5000	C

Oklahoma City
Buffalo, N. Y.

1490 kilocycles 201.2 meters

TJW	--	7.5	--
WCHI	*	5000	1
WCKY	*	5000	1N
WJAZ	--	5000	1

Hamilton, Bermuda
Chicago, Ill.
Covington, Ky.
Chicago, Ill.

1500 kilocycles 199.9 meters

CMBL	--	15	--
CMBR	--	15	--
CMCM	--	15	--
CMCT	--	5	--
KDB	*	100	--
KGFI	*	100	+
KGFK	†	50	--
KGIZ	†	100	--
KGKB	--	100	--
KGKY	--	100	--
KPJM	*	100	--
KPO	†	50	--
KREG	†	100	--
KUT	†	100	--
KXO	*	100	--
WDIX	--	100	--
WKBV	*	100	+
WKBZ	†	50	--
WLXB	*	100	1
WLOE	*	100	+
WMB	†	100	--
WMBQ	†	100	1
WMIL	--	100	1
WMPC	†	100	--
WNB	*	100	--
WOPI	*	100	--
WPEN	*	100	+
WRDW	*	100	--
WSYB	†	100	--
WWRL	*	100	1
WWSW	--	100	--

Havana, Cuba
Havana, Cuba
Havana, Cuba
Havana, Cuba
Santa Barbara, Cal.
Corpus Christi, Texas
Moorhead, Minn.
Grant City, Mo.
Tyler, Texas
Scottsbluff, Nebr.
Prescott, Arizona
Wenatchee, Wash.
Santa Ana, Cal.
Austin, Texas
El Centro, Cal.
Tupelo, Miss.
Connersville, Ind.
Ludington, Mich.
Long Island City, N. Y.
Boston, Mass.
Newport, R. I.
Brooklyn, N. Y.
Brooklyn, N. Y.
Lapeer, Mich.
Binghamton, N. Y.
Bristol, Tenn.
Philadelphia, Pa.
Augusta, Ga.
Rutland, Vt.
Woodside, N. Y.
Pittsburgh, Pa.

KCYs.
1500
MTRS.
199.9
DIAL

INDEX BY LOCATIONS WITH MAP KEY

ALABAMA			San Jose J-1		
Anniston O-22	100	WFDW	500	KQW	1010
Birmingham O-21	5000	WAPI	100	KREG	1500
	500	WBRC	100	KDB	1500
	100	WKBC	100	KSMR	1200
Gadsden O-21	100	WJBY	250	KGDM	1100
Huntsville N-21	50	WBHS	100	KWG	1200
Mobile Q-20	500	WODX			
Montgomery P-21	500	WSFA			
ALASKA			COLORADO		
Anchorage	100	KFQD	1000	KVOR	1270
Juneau	10	KFIU	500	KFEL	920
Ketchikan	500	KGBU	100	KFUP	1310
ARIZONA			500	KLXF	920
Flagstaff M-7	100	KFXV	1000	KLZ	560
Jerome M-6	100	KCRJ	12500	KOA	880
Phoenix N-6	500	KOY	500	KPOF	880
	500	KTAR	100	KGEW	1200
Prescott M-6	100	KPJM	100	KFXJ	1310
Tucson O-7	100	KGAR	500	KFKA	880
	500	KVOA	250	KGHF	1320
			100	KGIW	1420
			100	KGEK	1200
ARKANSAS			CONNECTICUT		
Blytheville M-19	50	KLCN	250	WICC	600
Fayetteville M-16	1000	KUOA	500	WDRG	1330
Fort Smith N-16	50	KFPW	50000	WTIC	660-1060
Hot Springs N-17	10000	KTHS	250	WCAC	600
Little Rock N-17	100	KGHI			
	250	KGJF			
	1000	KLRA			
Paragould M-18	100	KBTM			
CALIFORNIA			DELAWARE		
Berkeley J-2	100	KRE	250	WDEL	1120
Burbank M-3	500	KELW	100	WILM	1420
Culver City M-3	250	KFVD			
El Centro N-4	100	KXO			
Fresno K-2	100	KMJ			
Hollywood M-3	1000	KFWB			
	5000	KNX			
Inglewood M-3	500	KMCS			
Long Beach M-3	1000	KFOX			
	1000	KGER			
Los Angeles M-3	1000	KECA			
	1000	KFAC			
	50000	KFI			
	500	KFSG			
	1000	KGEF			
	100	KGFJ			
	1000	KHJ			
	500	KMPC			
	500	KMTR			
	500	KTM			
Oakland J-1	250	KLS			
	500	KLX			
	500	KROW			
	50	KPPC			
Pasadena M-3	100	KFBK			
Sacramento J-2	100	KFXM			
San Bernardino M-3	500	KFSO			
San Diego N-3	500	KGB			
	1000	KFRC			
San Francisco J-1	500	KFWI			
	100	KGGC			
	7500	KGO			
	100	KJBS			
	5000	KPO			
	1000	KTAB			
	1000	KYA			
FLORIDA			DISTRICT OF COLUMBIA		
Clearwater R-24	1000	WFLA	250	WMAL	630
Gainesville Q-24	5000	WRUF	500	WRC	950
Jacksonville Q-24	1000	WJAX	100	WOL	1310
Miami T-25	1000	WIOD			
	1000	WQAM			
Orlando R-24	500	WDBO			
Pensacola Q-21	500	WCOA			
St. Petersburg S-24	1000	WSUN			
Tampa R-24	1000	WDAE			
	100	WMBR			
GEORGIA			ILLINOIS		
Atlanta O-22	250	WGST	50	WCAZ	1070
	5000	WSB	10000	KFKX	1020
Augusta O-23	100	WRDW	10000	KYW	1020
Columbus O-22	50	WRBL	500	WAAF	920
Macon O-23	500	WMAZ	25000	WBMM	770
Rome N-22	100	WFDV	1500	WCFL	970
Savannah O-24	500	WTOG	5000	WCHI	1490
Thomasville Q-22	100	WQDX	100	WCRW	1210
Tifton P-23	100	WJTL	100	WEDC	1210
Toccoa N-23	500	WTFI	50000	WENR	870
HAWAII			500	WGES	1360
Honolulu	250	KGMB	25000	WGN	720
	1000	KGU	1000	WIBO	560
IDAHO			5000	WJAZ	1490
Boise G-5	1000	KIDO	25000	WJBT	770
Idaho Falls G-7	250	KID	50000	WLS	870
Nampa G-5	50	KFXD	5000	WMAQ	670
Pocatello H-7	250	KSEI	5000	WMBI	1080
Sand Point D-6	100	KGKX	500	WPCC	560
Twin Falls H-6	250	KTFI	100	WBCB	1210
			100	WEHS	1420
			100	WHFC	1420
			100	WKBI	1420
			100	WJBL	1200
			100	WKBS	1310
			100	WEBQ	1210
			100	WCLS	1310
			100	WKBB	1310
			100	WJBC	1200
			20000	WJJD	1130
			500	WMBD	1440
			500	WTAD	1440
			500	KFLV	1410
			100	WHBF	1210
			100	WCBS	1210
			100	WTAX	1210
			100	WDZ	1070
			250	WILL	890
			5000	WCBD	1080
INDIANA			KANSAS		
Anderson J-21	100	WHBU	100	KGNO	1210
Connersville K-21	100	WKBV	100	WLBF	1420
Culver I-20	500	WCMA	100	KFKU	1220
Evansville L-20	500	WGBF	1000	WREN	1220
Fort Wayne J-21	100	WGL	500	KSAC	580
	10000	WOWO	5000	KFBI	1050
Gary I-20	1000	WJKS	1000	WIBW	580
Hammond I-20	100	WVAE	1000	KFH	1300
Indianapolis J-21	1000	WFBM			
	500	WKBF			
Lafayette J-20	500	WBAA			
Marion J-21	50	WJAK			
Muncie J-21	50	WLBC			
South Bend I-20	100	WFAM			
	500	WSBT			
Terre Haute K-20	100	WBOW			
IOWA			KENTUCKY		
Ames I-17	5000	WOI	5000	WCKY	1490
Boone I-17	100	KFGQ	1000	WFTW	940
Cedar Rapids I-18	100	KWCR	10000	WHAS	820
Clarinda J-16	500	KSO	250	WLAP	1010
Council Bluffs J-16	1000	KOIL	100	WPAD	1420
Davenport I-18	5000	WOC			
Decorah H-18	50	KGCA			
	100	KWLC			
Des Moines I-17	5000	WHO			
Fort Dodge I-16	100	KFJO			
Iowa City I-18	500	WSUI			
Marshalltown I-17	100	KFJB			
Ottumwa J-17	100	WIAS			
Red Oak J-16	100	KICK			
LOUISIANA			LOUISIANA		
Decatur K-19	100	WJBL	100	KMLB	1200
Galesburg J-18	100	WKBS	100	WABZ	1200
Harrisburg L-19	100	WEBQ	1000	WDSU	1250
Joliet I-19	100	WCLS	100	WJBO	1420
	100	WKBB	100	WJBW	1200
La Salle J-19	100	WJBC	500	WSMB	1320
Mooseheart I-19	20000	WJJD	5000	WWL	850
Peoria Heights J-19	500	WMBD	50	KRMD	1310
Quincy K-18	500	WTAD	1000	KTBS	1450
Rockford I-19	500	KFLV	100	KTSL	1310
Rock Island I-18	100	WHBF	100	KWEA	1210
Springfield K-19	100	WCBS	10000	KWKH	850
	100	WTAX			
	100	WDZ			
	250	WILL			
	5000	WCBD			
Tuscola K-20	100	WJBL			
Urbana J-20	250	WKBS			
Zion I-20	5000	WEBQ			
MAINE			MARYLAND		
Augusta F-28	100	WRDO	10000	WBAL	760-1060
Bangor F-29	100	WABI	250	WCAO	600
	500	WLBZ	100	WCBM	1370
Portland F-28	1000	WCSH	500	WFBF	1270
Presque Isle D-29	100	WAGM	100	WTBO	1420
MASSACHUSETTS			MASSACHUSETTS		
Boston G-28	500	WAAB	500	WAAB	1410
	1000	WBIS	1000	WBIS	1230
	1000	WEEL	1000	WEEL	590
	1000	WHDH	1000	WHDH	830
	1000	WLOE	1000	WLOE	1500
	1000	WNAC	1000	WNAC	1230
Fall River H-28	250	WSAR	250	WSAR	1450
	100	WLEY	100	WLEY	1370
Needham G-28	500	WBSO	500	WBSO	920
New Bedford H-28	100	WNBH	100	WNBH	1310
Springfield H-27	15000	WBZ-A	1000	WBZ-A	990
Worcester G-28	100	WEPS	100	WEPS	1200
	250	WORC	100	WORC	1200
		WTAG	250	WTAG	580
MICHIGAN			MICHIGAN		
Battle Creek I-21	50	WELL	50	WELL	1420
Bay City H-22	500	WBCM	500	WBCM	1410
Calumet E-19	100	WHDF	100	WHDF	1370
Detroit H-22	50	WJBK	50	WJBK	1370
	5000	WJR	5000	WJR	750
	100	WMBC	100	WMBC	1420

INDEX BY LOCATIONS WITH MAP KEY

ILLINOIS			Shenandoah J-16		
Carthage J-18	50	WCAZ	500	KFNF	890
Chicago I-20	10000	KFKX	500	KMA	930
	10000	KYW	1000	KSCJ	1330
	500	WAAF	500	WMT	600
	25000	WBMM			
	1500	WCFL			
	5000	WCHI			
	100	WCRW			
	100	WEDC			
	50000	WENR			
	500	WGES			
	25000	WGN			
	1000	WIBO			
	5000	WJAZ			
	25000	WJBT			
	50000	WLS			
	5000	WMAQ			
	5000	WMBI			
	500	WPCC			
	100	WSBC			
	100	WEHS			
	100	WHFC			
	100	WKBI			
	100	WJBL			
	100	WKBS			
	100	WEBQ			
	100	WCLS			
	100	WKBB			
	100	WJBC			
	20000	WJJD			
	500	WMBD			
	500	WTAD			
	500	KFLV			
	100	WHBF			
	100	WCBS			
	100	WTAX			
	100	WDZ			
	250	WILL			
	5000	WCBD			
Cicero I-20					
Decatur K-19					
Galesburg J-18					
Harrisburg L-19					
Joliet I-19					
La Salle J-19					
Mooseheart I-19					
Peoria Heights J-19					
Quincy K-18					
Rockford I-19					
Rock Island I-18					
Springfield K-19					
Tuscola K-20					
Urbana J-20					
Zion I-20					
INDIANA			KANSAS		
Anderson J-21	100	WHBU	Dodge City L-13	100	KGNO
Connersville K-21	100	WKBV	Kansas City K-16	100	WLBF
Culver I-20	500	WCMA	Lawrence K-16	500	KFKU
Evansville L-20	500	WGBF	Manhattan K-15	500	KSAC
Fort Wayne J-21	100	WGL	Milford K-14	5000	KFBI
	10000	WOWO	Topeka K-16	1000	WIBW
Gary I-20	1000	WJKS	Wichita L-15	1000	KFH
Hammond I-20	100	WWAE			
Indianapolis J-21	1000	WFBM			
	500	WKBF			
	500	WBAA			
	50	WJAK			
	50	WLBC			
	100	WFAM			
	500	WSBT			
	100	WBOW			
</					

INDEX BY LOCATIONS WITH MAP KEY

Detroit H-22	1000	WWJ	920	NEVADA		Watts	Keys.
East Lansing H-21	1000	WKYZ	1240	Las Vegas L-5	100	KGIX	1420
Flint H-22	100	WKAR	1040	Reno I-3	500	KOH	1380
Grand Rapids H-21	500	WDFD	1310	NEW HAMPSHIRE			
Ironwood F-18	500	WASH	1270	Laconia G-28	100	WKAU	1310
Jackson I-21	500	WOOD	1270	Manchester G-28	500	WFEA	1430
Kalamazoo I-21	100	WJMS	1420	NEW JERSEY			
Lapeer H-22	100	WIBM	1370	Asbury Park I-27	500	WCAP	1280
Ludington H-20	1000	WKZO	590	Atlantic City J-27	5000	WPG	1100
Marquette F-19	100	WMPD	1500	Camden I-26	500	WCAM	1280
Royal Oak H-22	50	WKBE	1500	Hackensack I-27	250	WBMS	1450
	50	WBEQ	1310	Jersey City I-27	300	WAAT	940
	50	WEXL	1310		500	WHOM	1450
MINNESOTA				Newark I-27	1000	WAAM	1250
Fergus Falls F-15	100	KGDE	1200		250	WGCP	1250
Minneapolis G-17	5000	WCCO	810		250	WNJ	1450
	1000	WDGY	1180		5000	WOR	710
	500	WHDI	1180	Paterson I-27	1000	WODA	1250
	1000	WRHM	1250	Red Bank I-27	100	WJBI	1210
Moorhead F-15	50	KGFK	1500	Trenton I-26	500	WOAX	1280
Northfield G-17	1000	KFMX	1250	Zarephath I-27	250	WAWZ	1350
St. Paul G-17	1000	WCAL	1250	NEW MEXICO			
	10000	WLB	1250	Albuquerque N-7	250	KGGM	1230
		KSTP	1460	Raton M-11	50	KGFL	1370
				State College P-9	20000	KOB	1180
MISSISSIPPI				NEW YORK			
Greenville O-18	100	WRBQ	1210	Albany H-27	500	WOKO	1440
Gulfport Q-19	100	WGCM	1210	Auburn H-25	100	WMBO	1310
Hattiesburg Q-19	10	WRBJ	1370	Binghamton H-26	100	WBNF	1500
Jackson P-19	1000	WJDX	1270	Brooklyn I-27	500	WBBC	1400
Meridian P-20	500	WCOC	880		1000	WBRR	1300
Tupelo N-20	100	WDIX	1500		500	WCCU	1400
Vicksburg P-18	500	WQBC	1360		500	WFOG	1400
					500	WLTH	1400
MISSOURI					100	WMBQ	1500
Cp. Girardeau L-19	100	KFVS	1210		100	WMIL	1500
Columbia K-17	500	KFRU	630	Buffalo H-24	1000	WBEN	900
Grant City J-16	100	KGIZ	1500		100	WEBR	1310
Jefferson City L-17	500	WOS	630		1000	WGR	550
Joplin M-16	100	WMBH	1420		5000	WKBW	1480
Kansas City K-16	1000	KMBC	950		1000	WMAK	1040
	100	KWKC	1370		50	WSVS	1370
	1000	WDAF	610	Canton F-26	500	WCAD	1220
	500	WHB	860	Freeport I-27	100	WGBB	1210
	1000	WQQ	1300	Glens Falls G-27	50	WBCF	1370
St. Joseph K-16	2500	KFEQ	680	Ithaca H-25	1000	WEAI	1270
	100	KGBX	1310		50	WLCI	1210
St. Louis L-18	500	KFUO	550	Jamaica H-27	100	WMRJ	1210
	100	KFWF	1200	Jamestown H-24	25	WOCL	1210
	50000	KMOX	1090	Long Island City I-27	100	WLTX	1500
	500	KSD	550	New York City I-27	5000	WABC	860
	1000	KWK	1350		250	WBNX	1350
	1000	WEW	760		5000	WBOQ	860
	100	WIL	1200		250	WCDA	1350
MONTANA					50000	WEAF	660
Billings F-9	1000	KGHL	950		500	WEVD	1300
Butte F-7	500	KGIR	1360		500	WGBS	1180
Great Falls E-8	1000	KFBF	1280		1000	WHAP	1300
Kalispell D-7	100	KGEZ	1310		250	WHN	1010
Missoula E-7	100	KGVO	1420		30000	WJZ	760
Wolf Point E-11	100	KGCK	1310		5000	WLWL	1100
NEBRASKA					500	WMCA	570
Clay Center J-14	1000	KMMJ	740		250	WMSG	1350
Lincoln J-15	5000	KFAB	770		500	WNYC	570
	100	KFOR	1210		1000	WVO	1130
	500	WCAJ	590		250	WPAP	1010
Norfolk I-15	1000	WJAG	1060		500	WPCB	810
North Platte J-13	500	KGNF	1430		250	WQAO	1010
Omaha J-15	500	WAAW	660		250	WRNY	1010
	1000	WOW	590				
Ravenna J-14	100	KGFW	1310				
Scottsbluff I-11	100	KGKY	1500				
York J-15	500	KGBZ	930				

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Patchogue I-27	100	WPOE	1370	Medford G-2	100	KMED	1310
Rochester G-25	5000	WHAM	1150	Portland E-3	5000	KEX	1180
	500	WHEC	1440		100	KBPS	1420
Saranac Lake F-26	50	WNBZ	1290		500	KFJR	1300
Schenectady G-27	50000	WGY	790		1000	KGW	620
Syracuse G-25	1000	WFBL	1360		1000	KOIN	940
	250	WMAC	570		500	KTBR	1300
	250	WSYR	570		500	KWJJ	1060
Troy G-27	500	WHAZ	1300		100	KXL	1420
Tupper Lake F-26	100	WHDL	1420	PENNSYLVANIA			
Utica G-26	100	WIBX	1200	Allentown I-26	250	WCBA	1440
Woodside I-27	100	WWRL	1500		250	WSAN	1440
Yonkers I-27	100	WCOH	1210	Altoona I-25	100	WFBG	1310
NORTH CAROLINA							
Asheville M-23	1000	WWNC	570	Carbondale H-26	10	WNBW	1200
Charlotte M-24	5000	WBT	1080	Elkins Park I-26	25	WIBC	930
Gastonia M-24	100	WSOC	1210	Erie H-24	100	WEDH	1420
Greensboro M-24	500	WBIG	1440	Grove City I-24	100	WSAJ	1310
Raleigh M-25	1000	WPTF	680	Harrisburg I-25	500	WBAK	1430
Wilmington N-26	100	WRAM	1370		500	WOOD	1200
Winston-Salem M-24	100	WSJS	1310		100	WJAC	1310
NORTH DAKOTA							
Bismarck F-13	1000	KFYR	550	Johnstown J-24	100	WGAL	1310
Devils Lake E-14	100	KDLR	1210	Lancaster I-26	100	WJBU	1210
Fargo F-15	1000	WDAY	940		100	WLBW	1250
Grand Forks E-15	100	KFJM	1370	Lewisburg I-26	500	WLBW	1250
Mandan F-13	100	KGCU	1240	Oil City I-24	10000	WCAU	1170
Minot E-13	100	KLPM	1240	Philadelphia I-26	100	WELK	1370
OHIO							
Akron I-23	1000	WADC	1320		500	WFAN	610
Canton I-23	10	WHBC	1200		500	WFI	560
Cincinnati K-22	100	WFBE	1200		100	WFLAT	1310
	1000	WKRC	550		500	WIP	610
	50000	WLW	700		500	WLIT	560
	500	WSAI	1330		100	WPN	1500
Cleveland I-23	500	WGAR	1450		250	WRAX	1020
	1000	WHK	1390		100	WTEL	1310
	500	WJAY	610	Pittsburgh J-24	50000	KDKA	980
	50000	WTAM	1070		500	KQV	1380
	500	WUW	640		1000	WCAE	1220
	500	WCAH	1430		1000	WIAS	1290
	750	WEAO	570		100	WISW	1500
	100	WSEN	1210	Reading I-26	1000	WBEU	830
	200	WSMK	1380		100	WBRA	1310
Dayton J-22	100	WTW	1210	Scranton H-26	250	WGBI	880
Mansfield J-22	100	WHBD	1370		250	WGAN	880
Mount Orab K-22	50	WIBR	1420	State College I-25	500	WPSC	1230
Steubenville J-23	1000	WSPD	1340	Washington J-24	100	WNBC	1200
Toledo I-22	500	WKBN	570	Wilkes-Barre I-26	100	WBAX	1210
Youngstown I-23	100	WALR	1210		100	WBRE	1310
Zanesville J-23	100	WALR	1210	Williamsport I-25	100	WRAC	1370
OKLAHOMA							
Chickasha N-14	250	KOCW	1400	PORTO RICO			
Elk City N-13	100	KGMP	1210	San Juan W-34	250	WKAQ	890
Enid M-14	100	KCRC	1370	RHODE ISLAND			
Norman N-15	500	WNAD	1010	Newport H-28	100	WMBA	1500
Oklahoma N-15	5000	KFFJ	1480	Pawtucket H-28	100	WPWA	1210
	100	KFFR	1310	Providence H-28	100	WDWF	1210
	100	KGFG	1370		250	WEAN	780
	1000	WKY	900		250	WJAR	890
	100	WBBZ	1200		100	WLSI	1210
Ponca City M-15	5000	KGGF	1010	SOUTH CAROLINA			
S. Coffeyville M-15	100	KGFF	1420	Charleston O-25	500	WCSC	1360
Shawnee N-15	5000	KVOO	1140	Columbia N-24	500	WIS	1010
Tulsa M-15	5000	KVOO	1140	Spartanburg N-23	100	WSPA	1420
OREGON							
Astoria D-2	100	KFJI	1370	SOUTH DAKOTA			
Corvallis E-2	1000	KOAC	550	Brookings H-15	500	KFDY	550
Eugene F-2	100	KORE	1420	Huron H-14	100	KGDY	1200
Marshfield F-1	100	KOOS	1370	Mitchell H-14	100	KGDA	1370
				Pierre G-13	200	KGFX	580
				Rapid City H-12	100	WCAT	1200
				Sioux Falls H-15	2500	KSOO	1110

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BRITISH COLUMBIA			
Chilliwack B-3	100	CHWK	665
Kamloops B-5	100	CFJC	1210
Sea Island	500	CJOR	730
Vancouver B-3	50	CHLS	730
	50	CKCD	730
	50	CKFC	730
	50	CKMO	730
	100	CKWX	730
	500	CNRV	1030
Victoria C-3	50	CFCT	630
MANITOBA			
Brandon D-14	500	CKX	540
Winnipeg D-15	5000	CKY	780
	5000	CNRW	780
NEW BRUNSWICK			
Fredericton D-29	500	CFNB	1210
Moncton D-30	500	CNRA	630
St. John D-30	500	CFBO	890
NEWFOUNDLAND			
St. Johns A-35	500	VOWR	675
NOVA SCOTIA			
Glace Bay C-32	10000	VAS	685
Halifax E-31	500	CHNS	910
	500	CNRH	910
Sydney C-32	50	CJCB	880
Wolfville D-31	50	CKIC	1010
ONTARIO			
Chatham H-22	100	CFCO	1210
Cobalt E-23	100	CKMC	1210
Hamilton H-24	500	CHCS	1010
	50	CHML	880
	500	CKOC	1010
Kingston G-25	50	CFRC	930
London H-23	5000	CJGC	910
	500	CNRL	910
North Bay	50	CFCH	930
Ottawa F-25	100	CKCO	890
	500	CNRO	600
Port Arthur E-19	50	CKPR	890
Prescott F-25	50	CFCL	930
Preston H-23	50	CKPC	1210
Toronto G-24	500	CFCA	840
	500	CFCL	580
	5000	CFRB	960
	500	CKCL	580
	5000	CKGW	690
	500	CKNC	580
	500	CNRT	840
	5000	CNRX	960
	5000	CPRY	690
Waterloo G-23	50	CKCR	645
PRINCE EDWARDS ISLAND			
Charlottetown C-31	250	CFCY	580
	100	CHCK	1010
Summerside C-31	100	CHGS	1120
QUEBEC			
Montreal E-26	1650	CFCF	1030
	5000	CHYC	730
	5000	CKAC	730
	5000	CNRM	730
Quebec D-27	100	CHRC	645
	100	CKCI	880
	50	CKCV	880
	50	CNRO	880

SASKATCHEWAN			
Fleming C-13	500	CJRW	665
Moose Jaw C-11	500	CJRM	665
Regina C-12	500	CHWC	960
	500	CJBR	960
	500	CKCK	960
	500	CNRR	960
Saskatoon B-11	500	CFQC	910
	500	CNRS	910
Yorkton B-13	500	CJGX	630
HAITI			
Port au Prince X-30	1000	HHK	920
MEXICO			
Aguascalientes W-10	350	XFC	805
Chihuahua, Chih. R-9	250	XFF	915
Guadalajara, Jal. X-10	101	XEA	1200
Juarez P-9	101	XEJ	857
	1000	XEQ	1015
Laredo, N. L. S-13	101	XEFE	980
	2500	XEP	1400
Merida, Yuc. X-19	105	XEY	547
Mexico City Y-13j	1000	XEB	1030
	250	XEFA	1250
	101	XEK	990
	1000	XEN	711
	5000	XEO	940
	101	XER	674
	500	XETA	1140
	100	XETO	1360
	2000	XETY	1300
	500	XEX	1210
	5000	XEW	910
	500	XEZ	588
	2000	XFG	638
	1000	XFI	818
	500	AFX	860
Monterrey N. L. U-13	5000	XEH	1132
	500	XET	690
Morelia, Mich. Y-12	101	XEIJ	1000
Oaxaca, Oak. AA-14	105	XEJ	1132
Puebla Z-13	101	XEV	1034
Reynosa, Tams. T-14	1000	XED	965
Saltillo, Coah. U-12	10	XEL	1091
Tampico, Tams. W-14	500	XEM	730
	500	XES	890
Toluca. Y-12	50	XEC	1333
Veracruz, Ver. Z-14	500	XETF	680
	101	XEU	800
CUBA			
Cardenas W-24	30	CMGE	1375
Camaguey W-26	15	CMJC	1321
	20	CMJE	856
Ciego de Avila W-26	20	CMJB	1276
Cienfuegos W-25	200	CMHA	1154
	40	CMHJ	645
Colon W-24	100	CMGA	834
Havana W-23	50	CMBA	1345
	150	CMBC	965
	150	CMBD	965
	7.5	CMBF	1345
	150	CMBG	1070
	30	CMBI	1405
	15	CMBJ	1285
	15	CMBK	1405
	15	CMBL	1500
	15	CMBM	1285
	30	CMBN	1405
Havana W-23	50	CMBO	1405
	15	CMBR	1500

CFAC

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KFAB

KFAC

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KGBZ 930
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KGC 1270
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KGCY 1210
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KGCU 1240
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KGCX 1310
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KGDE 1200
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KGDH 1100
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KGW 1200
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KGF 1300
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KGEK 1200
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KGEW 1200
Ft. Morgan, Colo.
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KGF 1420
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KGFI 1500
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KGHL 950
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Butte, Mont.
KGIW 1420
Trinidad, Colo.
KGLX 1420
Las Vegas, Nev.
KGIZ 1500
Grant City, Mo.
KGJF 890
Little Rock, Ark.
KGBK 1500
Tyler, Texas
KGLK 1370
San Angelo, Tex.
KGGK 570
Wichita Falls, Tex.
KGGX 1420
Sand Point, Idaho
KGGY 1500
Scottsbluff, Nebr.
KGBM 1320
Honolulu, T. H.
KGNP 1210
Elk City, Okla.
KGNF 1430
No. Platte, Nebr.
KGNL 1210
Dodge City, Kas.
KGO 790
San F'nisco, Cal.
KGRS 1410
Amarillo, Texas
KGR 940
Honolulu, Hawaii
KGOV 1420
Missoula, Mont.
KGW 620
Portland, Ore.
KGY 1200
Lacey, Wash.
KHJ 900
Los Angeles, Cal.
KHQ 590
Spokane, Wash.
KICK 1420
Red Oak, Iowa
KID 1320
Idaho Falls, Ida.
KIDO 1250
Boise, Idaho

KIT 1310
Yakima, Wash.
KJBS 1070
San F'nisco, Cal.
KJR 970
Seattle, Wash.
KLCN 1290
Blytheville, Ark.
KLO 1400
Ogden, Utah
KLPM 1240
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KLRA 1390
Little Rock, Ark.
KLS 1440
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KLZ 560
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KMA 930
Shenandoah, Ia.
KMFC 1370
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KMBC 950
Kan. City, Mo.
KMCS 1120
Inglewood, Cal.
KMED 1310
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KMJ 1210
Fresno, Cal.
KMLB 1200
Monroe, La.
KMMJ 740
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KMO 860
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KMOX 1090
St. Louis, Mo.
KMPC 710
Los Angeles, Cal.
KMTR 570
Los Angeles, Cal.
KNX 1050
Los Angeles, Cal.
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KOAC 550
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KOB 1180
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KOCW 1400
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KOH 1380
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KOIL 1260
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KOIN 940
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KOMO 920
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KOOS 1370
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KPRC 920
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KQV 1380
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KQW 1010
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KRE 1370
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KREG 1500
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KRGV 1260
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KRDL 1040
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KRMD 1310
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KROW 930
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KRSC 1120
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KSD 550
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KSEI 900
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KSL 1130
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KSMR 1200
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KSO 1380
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KSOO 1110
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KSTP 1460
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KTAB 560
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KTAR 620
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KTAT 1240
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KTBS 1450
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KTPI 1320
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KTLK 1310
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KTM 780
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KTRH 1120
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KTSM 1310
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KVI 760
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KVOS 1200
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KWCR 1310
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KWG 1200
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KWJJ 1060
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KWKH 850
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KWWG 1260
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WCBM 1370
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WGCP 1250
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WGN 720
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WGR 550
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WGST 890
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WGY 790
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WHA 940
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WHAD 1120
Milwaukee, Wis.
WHAM 1150
Rochester, N. Y.
WHAP 1300
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WHAS 820
Louisville, Ky.
WHAT 1310
Philadelphia, Pa.
WHAZ 1300
Troy, N. Y.
WHB 860
Kansas City, Mo.
WHBC 1200
Canton, Ohio
WHBD 1370
Mt. Orab, Ohio
WHBF 1210
Rock Island, Ill.
WHBL 1410
Sheboygan, Wis.
WHBQ 1370
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WHBY 1200
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WHDH 830
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WHCC 1440
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WHFC 1420
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WGBI 880
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WIBG 930
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WIBR 1420
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WIBX 1200
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WICC 600
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WIL 1200
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WILL 890
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WIOD 1300
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WJAG 1060
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WJBO 1420
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WJBT 770
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WJBU 1210
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WJBW 1200
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WJDX 1270
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WJJD 1130
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WJZ 760
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WKAQ 890
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WKBB 1310
Joliet, Ill.
WKBC 1310
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WKBF 1400
Indianapolis, Ind.
WKBH 1380
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WKBI 1420
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WKBN 570
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WKBO 1450
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WKBS 1310
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WKBY 1500
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WKBW 1480
Buffalo, N. Y.
WKBZ 1500
Ludington, Mich.
WKJC 1200
Lancaster, Pa.
WKRC 550
Cincinnati, Ohio
WKY 900
Oklahoma City
WKZO 590
Kalamazoo, Mich.
WLAC 1470
Nashville, Tenn.
WLAP 1010
Louisville, Ky.
WLB 1250
St. Paul, Minn.
WLCB 1310
Muncie, Ind.
WLBK 1420
Kansas City, Mo.
WLBG 1200
Etrick, Va.
WLBL 900
Stevens Pt., Wis.

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Oil City, Pa.	New B'rd, Mass.	State College, Pa.	Winst.-Sal., N. C.
WLBX 1500	WNBO 1200	WPTF 680	WSM 650
L. I. City, N. Y.	Washington, Pa.	Raleigh, N. C.	Nashville, Tenn.
WLBZ 620	WNBR 1430	WQAM 560	WSMB 1320
Bangor, Maine	Memphis, Tenn.	Miami, Fla.	New Orleans, La.
WLCI 1210	WNBW 1200	WQAN 880	WSMK 1380
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WLEY 1370	WNBX 1200	WQAO 1010	WSOC 1210
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WLIT 560	WNBZ 1290	WQBC 1360	WSPA 1420
Philadelphia, Pa.	Sar'n'e L'ke, N.Y.	Vicksburg, Miss.	Spartanburg, S.C.
WLOE 1500	WNJ 1450	WQDM 1370	WSPD 1340
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WLS 870	WNOX 560	WQDX 1210	WSUI 880
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WLSI 1210	WNYC 570	WRAK 1370	WSUN 620
Providence, R. I.	New York City	Williamsport, Pa.	St. Petersburg, Fla.
WLTH 1400	WOAI 1190	WRAM 1370	WSVS 1370
Brooklyn, N. Y.	San Antonio, Tex.	Wilmington, N.C.	Buffalo, N. Y.
WLVA 1370	WOAX 1280	WRBW 1310	WSYB 1500
Lynchburg, Va.	Trenton, N. J.	Reading, Pa.	Rutland, Vt.
WLW 700	WOBT 1310	WRAX 1020	WSYR 570
Cincinnati, Ohio	Jackson, Tenn.	Philadelphia, Pa.	Syracuse, N. Y.
WLWL 1100	WOBU 580	WRBJ 1370	WTAD 1440
New York City	Charlest'n, W. Va.	Hattiesburg, Miss.	Quincy, Ill.
WMAC 570	WOC 1000	WRBL 1200	WTAG 580
Syracuse, N. Y.	Davenport, Iowa	Columbus, Ga.	Worcester, Mass.
WMAK 1040	WOCL 1210	WRBQ 1210	WTAM 1070
Buffalo, N. Y.	Jamestown, N. Y.	Greenville, Miss.	Cleveland, Ohio
WMAL 630	WODA 1250	WRBX 1410	WTAQ 1330
Washington, D.C.	Patterson, N. J.	Roanoke, Va.	Eau Claire, Wis.
WMAQ 670	WODX 1410	WRC 950	WTAR 780
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WMAZ 1180	WOI 640	WRDO 1370	WTAW 1120
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WMBB 1500	WOKO 1440	WRDW 1500	WTAX 1210
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WMBG 1420	WOL 1310	WREC 600	WTBO 1420
Detroit, Mich.	Washington, D.C.	Memphis, Tenn.	Cumberland, Md.
WMBD 1440	WOMT 1210	WREN 1220	WTEL 1310
Peoria Hghts., Ill.	Manitowoc, Wis.	Lawrence, Kans.	Philadelphia, Pa.
WMBG 1210	WOOD 1270	WRHM 1250	WTFI 1450
Richmond, Va.	Gr. Rapids, Mich.	Minneapolis, Minn.	Toccoa, Ga.
WMBH 1420	WOPI 1500	WRJN 1370	WTIC 660-1060
Joplin, Mo.	Bristol, Tenn.	Racine, Wis.	Hartford, Conn.
WMBI 1080	WOQ 1300	WRNY 1010	WTMJ 620
Chicago, Ill.	Kansas City, Mo.	New York City	Milwaukee, Wis.
WMBQ 1310	WOR 710	WROL 1310	WTOC 1260
Auburn, N. Y.	Newark, N. J.	Knoxville, Tenn.	Savannah, Ga.
WMBQ 1500	WORC 1200	WRR 1280	WWAE 1200
Brooklyn, N. Y.	Worcester, Mass.	Dallas, Texas	Hammond, Ind.
WMBR 1370	WOS 630	WRUF 830	WWJ 920
Tampa, Fla.	Jeff's'n City, Mo.	Gainesville, Fla.	Detroit, Mich.
WMC 780	WOW 1130	WRVA 1110	WWL 850
Memphis, Tenn.	New York City	Richmond, Va.	New Orleans, La.
WMCB 570	WOW 590	WSAI 1330	WWNC 570
New York City	Omaha, Nebr.	Cincinnati, Ohio	Asheville, N. C.
WMIL 1500	WOWO 1160	WSAJ 1310	WWRL 1500
Brooklyn, N. Y.	Ft. Wayne, Ind.	Grove City, Pa.	Woodside, N. Y.
WMMN 890	WPAD 1420	WSAN 1440	WWSW 1500
Fairmont, W. Va.	Paducah, Ky.	Allentown, Pa.	Pittsburgh, Pa.
WMPC 1500	WPAP 1010	WSAR 1450	WWVA 1160
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Jamaica, N. Y.	Pawtucket, R. I.	Hunt'gton, W. Va.	Detroit, Mich.
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WMT 600	WPCH 810	WSBC 1210	XEB 1030
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WNAC 1230	WPEN 1500	WSBT 1230	XEC 1333
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WNAD 1010	WPG 1100	WSEN 1210	XED 965
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WNAX 570	WPOE 1370	WSFA 1410	XEE 1132
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WNBF 1500	WPOR 780	WSIX 1210	XEFA 1250
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XEJ 857	XER 674	XEV 1034	XFI 818
Juarez, Mexico	Mexico City	Puebla, Mexico	Mexico City
XEK 990	XES 890	XEW 910	XFX 860
Mexico City	Tampico, Mexico	Mexico City	Mexico City
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	150	CMBW	1010		50	CMGF	977
	30	CMBX	1405	Pinar del Rio W-22	60	CMGH	780
	100	CMBY	1405		20	CMAB	1249
	150	CMBZ	1010		30	CMAC	1375
	500	CMC	840	Santa Clara W-25	15	CMHI	1110
	150	CMCA	1225	Santiago X-28	20	CMKA	1450
	150	CMCB	1070		15	CMKB	1200
	250	CMCD	1225		150	CMKC	1034
	250	CMCF	890		20	CMKD	1100
	30	CMCG	1285		250	CMKE	1249
	15	CMCH	1285		30	CMKG	1176
	15	CMCM	1500	Tuinucu	250	CMKH	1327
	250	CMCN	1225		500	CMHC	790
	225	CMCO	660				
	600	CMCQ	1150	BERMUDA			
	20	CMCR	1285	Hamilton M-35	7.5	TJW	1490
	5	CMCT	1500				
	50	CMCU	1345	COSTA RICA			
	15	CMCY	1345	Heredia FF-23	75	NRH	948
	3150	CMK	730	San Jose FF-23	50	TIC	900
	250	CMQ	1150				
	1400	CMW	588				
	500	CMX	890				

Principal Broadcasting Stations of the World

Fill in your dial numbers and you will then know where these foreign stations should be received on your set

Keys.	Meters	Call	City	Country	Keys.	Meters	Call	City	Country
150	2000	RYK	Kaunas	Lithuania	250	1200	TAL	Istanbul	Turkey
160	1875	.....	Huizen	Holland	256.4	1170	RW11	Tachkent	Russia
174	1724	.....	Paris	France	260	1153.8	.....	Kalundborg	Denmark
183.5	1635	.....	Konigs Westerhausen	Germany	260	1153.8	.....	Soro	Denmark
187.5	1600	RW14	Irkoutsk	Russia	260	1153.8	OXO	Skamlebak	Denmark
193	1554	.....	Angora	Turkey	270	1111.1	.....	Tiflis	Poland
193	1554	5XX	Daventry	Great Britain	272.7	1100	RW58	Moskva Imeni	Russia
202.6	1481	RW1	Moskva Noginsk	Russia	280	1071	.....	Hilversum	Holland
207.5	1444	.....	Paris	France	280	1071	PCF	Scheveningen	Holland
222.5	1348	SBG	Motala	Sweden	284.9	1053	RW7	Tiflis	Russia
230.1	1304	RW49	Moskva Stchelkovo	Russia	297	1010	.....	Basel	Switzerland
235.2	1275	.....	Tunis-Kasbah	Tunis	300	1000	RW3	Leningrad	Russia
238	1260.5	RW8	Bakou	Russia	300	1000	RW53	Leningrad	Russia
238	1260.5	RW43	Bakou	Russia	310	967.7	RW60	Alma-Ata	Russia
238.1	1260	RW6	Novosibirsk	Russia	320	937.5	RW4	Kharkov	Russia
250	1200	SBE	Boden	Sweden	333.7	899.1	RW19	Achkhabad	Russia
					342.8	875	RW18	Sarkhland	Russia
					343	874.6	RW21	Erivan	Russia

Kcys.	Meters	Call	City	Country
353.5	848.7	RW12	Rostov-sur-le-Don	Russia
363.6	825	RW5	Sverdlovsk	Russia
368.1	815	RW9	Kiev	Russia
385.6	778	RW25	Voronej Goubern- ski	Russia
389	770	SBF	Ostersund	Sweden
394	761.4	RW42	Nijni-Novgorod	Russia
395	760	.....	Geneva	Switzerland
414	724.6	.....	Rabat	Morocco
416.7	720	RW2	Moskva Opytnaia	Russia
421.3	712	RW47	Tachkent	Russia
428.6	700	RW10	Minak	Russia
434.8	690	RW35	Astrakhan	Russia
441	680	.....	Lausanne	Switzerland
444.4	675	RW22	Oufa	Russia
461.5	650	RW45	Orenbourg	Russia
468.7	640	RW29	Petrozavodsk	Russia
471.7	636	RW44	Omsk	Russia

500

511	587.1	RW30	Dnepropetrovsk	Russia
521.7	575	RW16	Samara	Russia
527	569	.....	Freiburg Breis- gau	Germany
527	569	LKH	Hamar	Norway
530	566	SP3	Krakow	Poland
531	565	RW24	Smolensk	Russia
536	560	.....	Augsburg	Germany
536	560	.....	Hanover	Germany
550	545	HAL	Lakihegy	Hungary
550.5	545	RW17	Kazan	Russia
554	542	SBD	Sundsvall	Sweden
560	535.7	RW41	Veliki Oustug	Russia
563	533	.....	Munchen	Germany
572	524.6	YLZ	Riga	Latvia
580	517	7ZL	Hobart	Australia
581	516.3	.....	Wien-Rosenhugel	Austria
587.1	511	RW50	Armarville	Russia
590	508.5	ON4RB	Brussels	Belgium
599	500.8	1M1	Milano	Italy

600

600	500	ZZG	Wanganui	New Zealand
600	500	ZZK	Wanganui	New Zealand
600	500	ZZR	Wanganui	New Zealand
603.6	497	RW31	Ivanovo-Voz- nesensk	Russia
608	493.4	LKO	Oslo	Norway
608	493.4	RW32	Stavropol	Russia
617	487	.....	Praha	Czechoslovakia
618.5	484	KZRM	Manilla	Philippine Is.
620	484	3AR	Melbourne	Australia
621.1	483	RW40	Gomel	Russia
625	480	KZRM	Manila	Philippine Is.
626	479	5GB	Daventry	Great Britain
630	476.1	1ZH	Hamilton	New Zealand
630.2	476	RW52	Simferopol	Russia
635	472	.....	Langenberg	Germany
635	472	JONK	Nagano	Japan
635.6	472	RW28	Vladivostok	Russia
640	468.8	RW56	Penza	Russia
644	465.8	OO	Lyon	France
645.2	465	RW48	Tomsk	Russia
650	461.5	CX6	Montevideo	Uruguay
650	461.5	RW33	Krasnodar	Russia
650	461.5	4YA	Dunedin	New Zealand
653	459	.....	Zurich	Switzerland
662	453	.....	Klagenfurt	Austria
662	453	.....	Danzig	Germany
662	453	LKD	Bodo Kringkaster	Norway
662	453	LKM	Tromso	Norway
662	453	LKP	Forgrund	Norway
662	453	LKT	Trondelag	Norway
662	453	SCT	Uppsala	Sweden
662	453	1BZ	Bolzano	Italy

665	451	2FC	Sydney	Australia
666.7	450	RW13	Odessa	Russia
666.7	450	ZTJ	Johannesburg	South Africa
670	448	LP4	Buenos Aires	Argentina
671	447	.....	Ecole Superieure	France
671	447	LKA	Alesund	Norway
671	447	LKN	Tottdoden	Norway
671	447	LKR	Rjukan	Norway
673	445.9	1BO	Bolzano	Italy
675	444	VOWR	St. Johns	Newfoundl'd
676	443.8	RW23	Groznyi	Russia
680	441	JOLK	Fukuoka	Japan
680	441	1RO	Rome	Italy
684.9	437	HJN	Bogota	Colombia
686.5	437	RW46	Petrovsk	Russia
689	435	SBA	Akmolinsk	Russia
689	435	SCN	Stockholm	Sweden
690	434.7	JODK	Malmberget	Sweden
690	434.7	SP5	Keiji	Japan
690	434.7	6WF	Wilno	Poland
690	434.7	.....	Perth	Australia

700

700	428.5	JOKK	Okayama	Japan
700	428.5	VPB	Colombo	Ceylon
704.2	426	RW20	Kharkov	Russia
710	423	JOJK	Kanazawa	Japan
710	423	LS1	Buenos Aires	Argentina
710	423	SP4	Katowice	Poland
716	419	.....	Berlin	Germany
720	416.7	2YA	Wellington	New Zealand
720	416.7	5AD	Adelaide	Australia
729.9	411	RW55	Pokrovsk	Russia
730	411	CX10	Montevideo	Uruguay
730	411	SCL	Adelaide	Australia
738	406.5	ZTD	Durban	South Africa
743	403	.....	Berne	Switzerland
747.5	401	.....	Tallinn	Estonia
748.1	401	RW51	Naltchek	Russia
750	400	.....	Mont de Marsan	France
750	400	JOBK	Osaka	Japan
750	400	LR7	Buenos Aires	Argentina
750	400	PRAA	Rio de Janeiro	Brazil
750	400	PRAL	Sao Paulo	Brazil
750	400	PRAP	Recife	Brazil
750	400	6CK	Cork	Ireland
752	399	SSC	Glasgow	Great Britain
760	395	JOAK	Dairen	Japan
760	395	4QG	Brisbane	Australia
761	394.2	.....	Bucuresti	Romania
769	390	VUM	Madras	British India
770	390	.....	Frankfurt, Main	Germany
770	390	CX12	Montevideo	Uruguay
770	390	JOHK	Sendai	Japan
770	390	RW36	Akhaugshelsk	Russia
778	386	JOPK	Shizuoka	Japan
779	385.1	SP6	Lwow	Poland
779	385.1	1GE	Genoa	Italy
788	380.7	.....	Toulouse	France
790	380	JOJK	Kumamoto	Japan
790	380	LR1	Buenos Aires	Argentina
790	380	OAX	Lima	Peru
792.5	378.5	RW37	Moskva Mosps	Russia
792.5	378.5	RW39	Moskva	Russia
795.8	377	RW27	Makhatch Kala	Russia
797	377	ZZY	Manchester	Great Britain

800

800	375	ZTC	Capetown	South Africa
800	375	3LO	Melbourne	Australia
806	372	.....	Hamburg	Germany
809.9	370.4	VUC	Calcutta	British India
810	370	CX14	Montevideo	Uruguay
810	370	JOCK	Nagoya	Japan
810.8	370	RW26	Stalino	Russia
815	368.1	LKF	Fredrikstad	Norway
820	366	ZZP	Wairoa	New Zealand
824	364.1	LKB	Bergen	Norway

825	363.7	.....	Alger	France
830	361	JOIK	Sapporo	Japan
830	361	LR5	Buenos Aires	Argentina
833	360	.....	Stuttgart	Germany
833.3	360	PRAC	Rio de Janeiro	Brazil
838	358	RW57	Tiraspol	Russia
840	357.1	VUB	Bombay	British India
842	356	2LO	London	Great Britain
850	353	CX16	Montevideo	Uruguay
850	353	JOFK	Hiroshima	Japan
851	352.5	.....	Graz	Austria
855	350.8	2BL	Sydney	Australia
857	350	ZBW	Hongkong	China
857.1	350	HSP1	Bangkok	Siam
857.1	350	PRAE	Sao Paulo	Brazil
857.1	350	PRAH	Bahia	Brazil
857.1	350	PRAJ	Juiz de Fora	Brazil
864.5	347	RW24	Piatigorsk	Russia
869	345.2	.....	Strasbourg	France
869.5	345	.....	Shanghai	China
870	345	JOAK	Tokio	Japan
870	345	LR2	Buenos Aires	Argentina
875	342.9	SP2	Poznan	Poland
878	342	.....	Brno	Czechoslovakia
882	340	PRAN	Curitiba	Brazil
882	340	VUL	Lahore	British India
890	337	CX18	Montevideo	Uruguay
890	337	VOGT	Bell Island	Newfoundl'd
890	337	7HO	Hobart	Australia

900

900	333.3	1YA	Auckland	New Zealand
905	331.4	1NA	Napoli	Italy
910	330	LR6	Buenos Aires	Argentina
914	328.2	.....	Grenoble	France
919	326	.....	Petit Parisien	France
920	326	PRAD	Polotas	Brazil
923	325	.....	Breslau	Germany
930	322.6	CX20	Montevideo	Uruguay
932	322	3UZ	Melbourne	Australia
932	322	SBB	Goteborg	Sweden
932	322	SCC	Falun	Sweden
934.3	320	PRAB	Rio de Janeiro	Brazil
934.3	320	PRAO	Sao Paulo	Brazil
937.5	320	HSP3	Saladeng Bang- kok	Siam
937.5	320	KZRC	Cebu	Philippine Is.
937.5	320	XGAH	Shanghai	China
940	319	KGU	Honolulu	Hawaii
940	319	2RN	Dublin	Ireland
941	319	.....	Dresden	Germany
950	315.8	.....	Marseilles	France
950	315.8	.....	Bremen	Germany
950	315.8	LR3	Buenos Aires	Argentina
950	315.8	VONA	St. Johns	Newfoundl'd
950	315.8	2GB	Sydney	Australia
952	315	NKS	Shanghai	China
960	312.5	5DN	Adelaide	Australia
963	311.5	.....	Agan	France
968	310	5WA	Cardiff	Great Britain
970	309.3	CX22	Montevideo	Uruguay
971	309	.....	Vitus	France
980	306.1	3YA	Christchurch	New Zealand
986	304.3	.....	Bordeaux	France
990	303	LR4	Buenos Aires	Argentina
995	301	2BD	Aberdeen	Great Britain

1000

1000	300	GEC	Tientsin	China
1000	300	PRAS	Santos	Brazil
1000	300	PRAY	Mogy das Cruzes	Brazil
1004	298.8	.....	Hilversum	Holland
1010	297	6ML	Perth	Australia
1016.9	295	PRAR	Sao Paulo	Brazil
1020	294	4GR	Toowoomba	Australia
1022	293	.....	Kosice	Czechoslovakia

1022	293	.....	Limoges	France
1025	292.6	2UE	Sydney	Australia
1030	291.3	LR9	Buenos Aires	Argentina
1035	290	EB4BQ	Keups Marchienne- Docherie	Belgium
1040	288.5	2DE	Dundee	Great Britain
1040	288.5	2EH	Edinburgh	Great Britain
1040	288.5	2LS	Bradford	Great Britain
1040	288.5	5PY	Plymouth	Great Britain
1040	288.5	5SX	Swansea	Great Britain
1040	288.5	6BM	Bournemouth	Great Britain
1040	288.5	6FL	Sheffield	Great Britain
1040	288.5	6KH	Hull	Great Britain
1040	288.5	6LV	Liverpool	Great Britain
1040	288.5	6ST	Stoke on Trent	Great Britain
1049	286	.....	Montpelier	France
1050	285.7	.....	Tartu	Estonia
1050	285.7	CX26	Montevideo	Uruguay
1050	285.7	2ZF	Palmerston	New Zealand
1051	285.8	.....	Lyon	France
1052.6	285	RW54	Khabarovsk	Russia
1058	284	.....	Innsbruck	Austria
1058	284	.....	Berlin	Germany
1058	284	.....	Magdeburg	Germany
1058	284	.....	Stettin	Germany
1058	284	SCR	Uddevalla	Sweden
1058	284	SCU	Varberg	Sweden
1067	281.2	.....	Kobenhavn	Denmark
1070	280	EB4RW	Liege	Belgium
1070	280	LS5	Buenos Aires	Argentina
1070	280	2KY	Sydney	Australia
1071	280	XXG	Shanghai	China
1076	279	.....	Bratislava	Czechoslovakia
1080	277.8	4ZB	Dunedin	New Zealand
1080	277.8	4ZM	Dunedin	New Zealand
1080	277.8	4ZO	Dunedin	New Zealand
1080	277.8	7LA	Launceston	Australia
1083	277	KSMS	Shanghai	China
1090	275	EB4RG	Gand	Belgium
1090	275	PRAQ	Bello Horizonte	Brazil
1090	275	1ZB	Auckland	New Zealand
1090.9	275	PRAG	Porto Alegre	Brazil
1094	273.2	1TO	Torino	Italy

1100

1100	272.7	7LA	Launceston	Australia
1103	272		Rennes	France
1110	270.3	KZKA	Manila	Philippine Is.
1111	270	PRAZ	France	Brazil
1112	270		Kaiserslautern	Germany
1112	270	SCF	Hudiksvall	Sweden
1112	270	SCO	Norrkoping	Sweden
1112	270	SCQ	Trollhattan	Sweden
1125	266.6	2UW	Sydney	Australia
1130	265.5		Lille	France
1130	265.5	CX30	Montevideo	Uruguay
1139	263		Moravska Os- trava	Czecho- slovakia
1140	263.2	CW30	Tacuarembó	Uruguay
1145	262	4BC	Brisbane	Australia
1148	261	5NO	Newcastle-on- Tyne	Great Britain
1150	260	EB4GT	Brussels	Belgium
1150	260.9	LR3	Buenos Aires	Argentina
1150	260.9	2ZM	Gisborne	New Zealand
1153	260	KZIB	Manila	Philippine Is.
1153.8	260	PRAI	Ribeirao Preto	Brazil
1153.8	260	PRAK	Rio de Janeiro	Brazil
1155	260	2MK	Bathurst	Australia
1157	259		Leipzig	Germany
1160	258	4ZI	Invercargill	New Zealand
1160	258	4ZP	Invercargill	New Zealand
1160	258	7HO	Hobart	Australia
1166	257	SBH	Horby	Sweden
1170	256	CX32	Montevideo	Uruguay
1175	255.3		Toulouse	France
1180	254.2	CW32	Salto	Uruguay
1180	254.2	2ZD	Masterton	New Zealand

Keys.	Meters	Call	City	Country	Keys.	Meters	Call	City	Country
1180	254.2	2ZQ	Masteron	New Zealand	1373	218		Flensburg	Germany
1180	254.2	3DB	Melbourne	Australia	1373	218	SCK	Karlstad	Sweden
1180	254.2	6ML	Perth	Australia	1373	218	SCW	Ornskoldsvik	Sweden
1184	253		Gleiwitz	Germany	1382	217		Konigsberg	Germany
1190	252.1	LS2	Buenos Aires	Argentina	1390	215.8	LS9	Buenos Aires	Argentina
1190	252.1	1ZQ	Auckland	New Zealand	1391	216	SCE	Halmstad	Sweden
1195	250.1		Montpelier	France	1395	215	EB4CF	Masson Verviers	Belgium
					1395	215	EB4RC	Schaerbeek	Belgium

1200

1200	230	EB4ED	DeCaluwe	Belgium
1200	250	3ZC	Christchurch	New Zealand
1200	250	5KA	Adelaide	Australia
1206	248		Juan les Pins	France
1210	247.9	CX34	Montevideo	Uruguay
1210	247.9	1ZM	Manurewa	New Zealand
1210	247.9	2ZE	Eketahuna	New Zealand
1211	247.7	1TR	Trieste	Italy
1220	246		Linz Donau	Austria
1220	246		Kassel	Germany
1220	246		Bloemendaal	Holland
1220	246	CW34	Salto	Uruguay
1220	246	SCB	Eskilstuna	Sweden
1220	246	SCI	Kalmar	Sweden
1220	246	SCL	Kiruna	Sweden
1220	246	SCP	Saife	Sweden
1220	246	2MV	Moss Vale	Australia
1220	246	4ZL	Dunedin	New Zealand
1229	233.8	SP7	Lodz	Poland
1230	243.9	LS8	Buenos Aires	Argentina
1230	243.9	2YB	New Plymouth	New Zealand
1238	242	2BE	Belfast	Great Britain
1245	241	2NC	Newcastle	Australia
1247	240		Nimos	France
1247	240	LKS	Stavanger	Norway
1250	240	CX36	Montevideo	Uruguay
1256	239		Nurnberg	Germany
1260	238.1	CW36	Salto	Uruguay
1260	238.1	2ZH	Napier	New Zealand
1260	238.1	3WR	Wangaratta	Australia
1264	237.2	SCV	Sud Ouest	France
1265	237		Orebro	Sweden
1270	236.2	LS3	Buenos Aires	Argentina
1274	235.5	LKK	Kristiansand	Norway
1276.5	235		Shanghai	China
1290	232.6	CX38	Montevideo	Uruguay
1290	232.6	4BK	Brisbane	Australia
1292	232		Kiel	Germany

1300

1300	230.8	CW38	Salto	Uruguay
1300	230.8	KZRC	Cebu	Philippine Is.
1300	230.8	3BA	Ballarat	Australia
1301	231	SCA	Boras	Sweden
1301	231	SBC	Malmo	Sweden
1301	231	SCG	Halsingborg	Sweden
1301	231	SCS	Umea	Sweden
1304	230	PRAM	Sao Paulo	Brazil
1305	230	EB4FO	Schaerbeek Brus-	Belgium
			sels	
1310	229	5AD	Adelaide	Australia
1319	227		Aachen	Germany
1319	227		Koln	Germany
1319	227		Munster	Germany
1320	227.3	KGMB	Honolulu	Hawaii
1320	227.3	2AY	Albury	Australia
1330	225.6	CX40	Montevideo	Uruguay
1330	225.6	2ZI	Hastings	New Zealand
1330	225.6	2ZL	Hastings	New Zealand
1335	225	EB4EX	Houben Otto-	Belgium
			mont	
1340	223.9	CW40	Paysandu	Uruguay
1340	223.9	2XN	Lismore	Australia
1350	222.2	LS6	Buenos Aires	Argentina
1350	222.2	3KZ	Melbourne	Australia
1363.6	220	PRAF	Belem Para	Brazil
1364	220	PRAX	Rio de Janeiro	Brazil
1365	220	EB4CE	Lucas Chatelin-	Belgium
			eau	

1400

1400	214	SP8	Warsaw	Poland
1400	214	VOX	St. Johns	Newfound'd
1400	214	3GL	Geelong Victoria	Australia
1408	213.5		Normandie	France
1410	212.8	CX44	Montevideo	Uruguay
1410	212.8	1PA	Palermo	Italy
1413	212		Beziers	France
1415	212	2HD	Newcastle	Australia
1420	211.3	CW44	Paysandu	Uruguay
1430	210	EB4FG	Andre Dampremy	Belgium
1450	206.9	CX46	Montevideo	Uruguay
1460	205.4	2MV	Moss Vale	Australia
1470	204.1	SCD	Gavle	Sweden
1480	202.7	SCM	Kristinehamn	Sweden
1480	202.7	2AY	Albury	Australia
1490	201.3	CX48	Montevideo	Uruguay
1490	201.3	SCH	Jonkoping	Sweden

1500

1500	200	2LS	Leeds	Great Britain
1530	196	SCJ	Karlakrona	Sweden
4273.5	70.2	RW15	Khabarovsk	Russia
5000	60	XCTE	Shanghai	China
5514.7	54.4	RW38	Moskva Mosps	Russia
6000	50	RW59	Moskva Stchel-	Russia
			kovo	
6072	49.41	UOR2	Wien	Austria
6250	48	HKC	Bogota	Colombia
7300	41	HSF2	Bangkok	Siam
9520	31.51		Lyngby	Denmark
9520	31.51	OXZ	Skamlebak	Denmark
9590	31.28	PCJ	Hilversum	Holland
11750	25.5	5SW	Chelmsford	Great Britain
14991	19.84	HVJ	Rome	Italy
17775	16.88	PHI	Huizen	Holland
51724	5.8	RW61	Moskva Vei	Russia

WGM Owner Arrested

Lee Elton Spencer, owner and operator of Station WGM, Jeanette, charged with operating without a license either for the station or himself, has been arrested upon charges filed by Federal radio inspectors.

The offense carries a possible sentence of five years' imprisonment, \$5,000 fine, or both.

Spencer is said to have been indicted last September at Erie on similar charges and was freed under \$2,500 bond. The station was quiet for a time, but soon became active again.

WGM has caused a decided howl in many receiving sets particularly with WABC, New York, and WHAS, Louisville.

HOW TO TUNE A SET CORRECTLY

Read This Page Carefully and You Can Set Your
Dials Accurately for Any Station in America

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 WEF in New York. First we must ascertain the frequency for this station. Look it up under WEF 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 WEF is 660. Now we turn to 660 kilocycles in the Index by Frequencies and Dial Numbers. Here we find that WEF is one of the two stations which have been assigned the 660 keys, 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.

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

clear that if we reset our dials at 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 until after an evening or two, we have blanks filled on every page. We are now able to set our dials for any frequency we desire and consequently any station we may want whether we have ever received it before or not.

Our index now becomes of great value to us in identifying programs. Let us say that we hear music at 67-65 on our dials. We refer to our Index by Frequencies and Dial Numbers and we find that we are in tune to 680 kilocycles. On this wave there are two stations: KPO at San Francisco and WPTF at Raleigh, N. C. Both of these stations have 5000 watts in power. But knowing which is the closer to our set, we can tell almost invariably which station we are hearing. The Radio Commission has had to give the same frequency in most cases to several stations but they have distributed them geographically so they should not interfere. When two stations in the same locality have the same frequency, they are required to divide the

time. In this case, of course, it is not possible to tell which one of the two stations is broadcasting at the particular moment we hear it, but we do know it is one or the other of them.

The second column in the Index by Frequencies, as we have seen, gives the power of the station as measured in watts. This power also aids us in identifying stations as we will not ordinarily hear those stations with 500 watts or less unless they are close to our home city.

The Index by Call Letters also has spaces providing for logging dial numbers, but these are provided merely for the convenience of those who want to be able to turn instantly to some favorite station. They may or may not be used as you desire. Remember that it is the Index by Frequencies that we must use to get the most value and pleasure out of our radios.

The Index by Frequencies is now printed with marginal tabs. If you will fill in under the word "dial" your reading for this particular frequency, you can then turn instantly to any frequency desired. Take a pair of shears and cut along the dotted line, as shown.

INDEX BY FREQUENCIES AND DIAL NUMBERS

590 kilocycles 508.2 meters	76 74
KHO 1900 Spokane, Wash.	Radio Station, Inc.
WUJ 1900 Lincoln, Neb.	Lincoln Radio Co.
WUJ 1900 Boston, Mass.	Worcester Radio Co., Inc.
WUJ 1900 Omaha, Neb.	WUJ, Inc.
WUJ 1900 Saratoga Springs, Mich.	WUJ, Inc.
600 kilocycles 499.7 meters	75 73
CFCH 1900 Escondido, Calif.	Abilene Radio Co.
CFCH 1900 San Diego, Calif.	San Diego Radio Co.
CFCH 1900 Baltimore, Md.	Alfred Radio Corp.
WUJ 1900 Detroit, Mich.	WUJ, Inc.
WUJ 1900 Memphis, Tenn.	WUJ, Inc.
WUJ 1900 Hartford, Conn.	WUJ, Inc.
610 kilocycles 491.5 meters	74 72
CFCH 1900 San Francisco, Calif.	San Francisco Radio Co.
CFCH 1900 Kansas City, Mo.	Kansas City Radio Co.
CFCH 1900 Philadelphia, Pa.	Philadelphia Radio Co.
CFCH 1900 Kansas City, Mo.	Kansas City Radio Co.
620 kilocycles 483.6 meters	73 71
CFCH 1900 Phoenix, Ariz.	Phoenix Radio Co.
CFCH 1900 Portland, Ore.	Portland Radio Co.
CFCH 1900 Tampa, Fla.	Tampa Radio Co.
CFCH 1900 St. Louis, Mo.	St. Louis Radio Co.
CFCH 1900 Denver, Colo.	Denver Radio Co.
CFCH 1900 Minneapolis, Minn.	Minneapolis Radio Co.
630 kilocycles 475.9 meters	72 70
CFCH 1900 Victoria, B. C.	Victoria Radio Co.
CFCH 1900 Portland, Ore.	Portland Radio Co.
CFCH 1900 Memphis, Tenn.	Memphis Radio Co.
CFCH 1900 St. Louis, Mo.	St. Louis Radio Co.
CFCH 1900 Denver, Colo.	Denver Radio Co.
CFCH 1900 Minneapolis, Minn.	Minneapolis Radio Co.
CFCH 1900 St. Louis, Mo.	St. Louis Radio Co.
640 kilocycles 468.5 meters	71 69
CFCH 1900 Los Angeles, Calif.	Los Angeles Radio Co.
CFCH 1900 Columbus, Ohio	Columbus Radio Co.
650 kilocycles 461.3 meters	70 68
WGM 6000 Nashville, Tenn.	Nashville Radio Co.
660 kilocycles 454.3 meters	69 67
WGM 6000 Omaha, Neb.	Omaha Radio Co.
WGM 6000 New York City	New York Radio Co.
670 kilocycles 447.5 meters	68 66
WGM 6000 Chicago, Ill.	Chicago Radio Co.
680 kilocycles 440.9 meters	67 65
WGM 6000 San Francisco, Calif.	San Francisco Radio Co.
WGM 6000 Raleigh, N. C.	Raleigh Radio Co.

I Will Train You at Home

to fill a

BIG PAID



Radio Job!



I will give you my new 8 OUTFITS of RADIO PARTS for a home Experimental Laboratory

Here's Proof



\$100 a week

"My earnings in Radio are many times greater than I ever expected they would be when I enrolled. They seldom fall under \$100 a week!"
E. E. WINDBORNE,
1414 W. 4th St.,
Norfolk, Va.



Jumped from \$35 to \$100 a week

"Before I entered Radio I was making \$35 a week. Last week I earned \$110 reviewing and selling Radio. I owe my success to N. R. I."
J. A. VAUGHN
8713 S. Kingshighway,
St. Louis, Mo.



\$500 extra in 6 months

"I had 7 months \$500 from January to May in my spare time. My last week brought me \$107. I should have taken it long ago!"
BOYD MOORE
N. R. I. Box 312,
Indianapolis, Ind.

If you are earning a penny less than \$50 a week, send for my book of information on the opportunities in Radio. It is free. Clip the coupon NOW. Why be satisfied with \$25, \$30 or \$40 a week for longer than the short time it takes to get ready for Radio.

Radio's growth opening hundreds of \$50, \$75, \$100 a week jobs every year

In about ten years Radio has grown from a \$2,000,000 to a \$1,000,000,000 industry. Over 600,000 jobs have been created. Hundreds more are being opened every year by its continued growth. Men and young men with the right training—the kind of training I give you—are needed continually.

You have many jobs to choose from

Broadcasting stations use engineers, operators, station managers and pay \$1,000 to \$5,000 a year. Manufacturers continually need testers, inspectors, foremen, engineers, service men, buyers, for jobs paying up to \$15,000 a year. Shipping companies use hundreds of Radio operators, give them world wide travel at practically no expense and a salary of \$35 to \$200 a month. Dealers and jobbers employ service men, salesmen, buyers, managers, and pay \$30 to \$100 a week. There are many other opportunities too.

So many opportunities many N. R. I. men make \$5 to \$25 a week extra while learning

The day you enroll with me I'll show you how to do 10 jobs, common in most every neighborhood, for spare time money. Throughout your course I send you information on service, popular makes of sets. I give you the plans and ideas that are making \$200 to \$1,000 for hundreds of N. R. I. students in their spare time while studying.

Talking Movies, Television, Wired Radio are also included

Radio principles as used in Talking Movies, Television and home Television experiments, Wired Radio, Radio's use in Aviation, are all given. I am so sure that I can train you satisfactorily that I will agree in writing to refund every penny of your tuition if you are not satisfied with my Lessons and Instruction Service upon completing.

64-page book of information FREE

Get your copy today. It tells you where Radio's good jobs are, what they pay, tells you about my course, what others who have taken it are doing and making. Find out what Radio offers you, without the slightest obligation. ACT NOW.

J. E. SMITH, President
National Radio Institute Dept. 1JO
Washington, D. C.

I am doubling and tripling the salaries of many in one year and less Find out about this quick way to BIGGER PAY



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National Radio Institute, Dept. 1JO
Washington, D. C.
Dear Mr. Smith: Send me your book.
This request does not obligate me.

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Lifetime Employment Service to all Graduates

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