

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

No. 51

N. S. E.

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



RADIO INDEX

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.

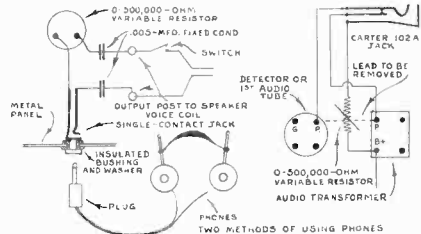
On most modern receivers no provision is made for connecting a headset and it cannot very well be connected to the regular loudspeaker terminals as the phones would soon be ruined by this practice. However, DX fans, who usually are busy fishing for far-off stations late at night, prefer the use of headphones 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 insu-



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 Compernelle, 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. EDST.

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	1565
KLRA	2626
KTRH	3657
WIBU	4517
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:

KWVG
WGCM
CMKF
KFWB
WBCM
CMCM
CMCF
CFCF
CFCH
CHCK
CKCK
CKWX
WXZY

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

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

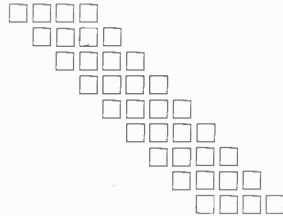
All very simple as you will readily see. Now here are four more puzzles on which you may sharpen your wits and improve your knowledge of radio stations. As

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.

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 WRAK WELK KWWG WNAC WPAW WCAC WMPC WRAW WADC CNRW WDRC KPRC WPCC.

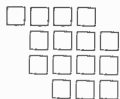


The last two puzzles this month were submitted by W. R. Anderson, 852 Manning Ave., Toronto, Ont. No. 3 is a very clever composition in code so designed that the code letters themselves form station calls. In this problem each of the letters given below stands for still another letter and when deciphered,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



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., EDST, 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 our 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

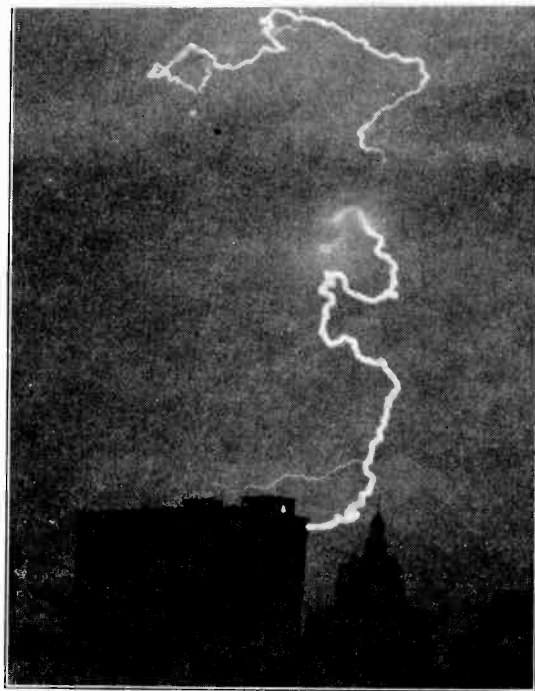
As long as the air is hot and humid, a condition prevailing during the summer season, we hear constant streams of sputtering and hissing static coming from our loud speakers. The nuisance can become so disagreeable that we are compelled frequently to forego some pleasing programs. And the sponsors of 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

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PLAIN ADVICE for the Troubled

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

Help for Balky Sets

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 aerials 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 prgrams. 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."

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."



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 2:15 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

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 covert 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, Vet 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, WFBL 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, KFJF, KSTP, KSL, etc." Stanley A. Schmuch, 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, CMCN, 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 keys. He has heard them on 1310 keys. several times. Mr. Hauss adds. "I have received a verification from 10AK, Stratford, Ont., saying that they are transmitting on about 1185 keys., with a power of 15 watts, although they are listed on 1200 keys. 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 keys.

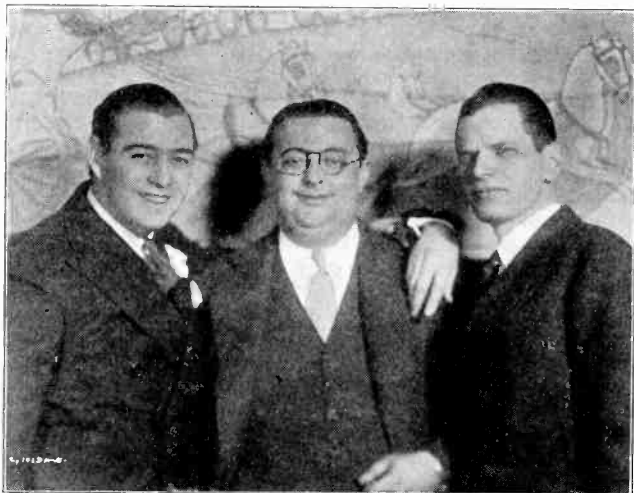
"I have a good catch for this year, which is WOCL, Jamestown, N. Y., with only 25 watts power. I pulled that station on a Bosch all-electric 7-tube, on a dynamic loud speaker. I have verifications from KGMB, Honolulu, HHK, Haiti, XEW, XEN, XETF, XES, Mexico, and WGCN, Gulfport, Miss. (this took two and 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 keys, much

(Continued on page 26)

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.





TO John S. Young, staff announcer for the National Broadcasting Company, radio announcing is more than a career. To him, it is a very good solution of the "American Tragedy"—the difficult task of combining livelihood with a pleasant job.

In his early days at Yale University, where he was a classmate of Rudy Vallee, he couldn't decide whether he should be a lawyer, playwright or actor.

By the flip of a coin and the process of elimination, he studied playwriting under George Pierce Baker at Yale.

At the start it loomed as a wonderful profession. But near his graduating days, he learned that it was more of an ordeal than anything else. For unless the playwright could produce another "Abie's Irish Rose" or something like it, he was quite out of the picture.

After being graduated from Yale, Young tried acting, but he just didn't get the breaks.

He appeared before the microphones of WBZ-WBZA frequently as an actor, and announcing caught his eye as something of a novelty. A few months later, he could be found on the fifty-yard line of the Yale Bowl with a microphone in one hand, and the line-up in the other. At last he had found a profession in which excitement and profit reigned!

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 KFFKA, sends us the information and wonders if any readers of RADEX 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	Where Time is Given as			
	EST	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	KGCX	1310	100
			Sunday, 10:45 a.m. to 12:30 p.m., MST.	
			Daily, 8 a.m.-6:30 p.m.	
Nebraska	Chay Center	KMMJ	740	1000
			Sunday, 7-9 a.m.; 12-4:30 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

Build Radio Sets—Make Extra Money!

RADIO-CRAFT

shows you HOW!

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 Kits and many other subjects described every month.

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Address
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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	Waterloo, Ont., from 1010
675	VOWR	St. Johns, 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
950	CFCL	Prescott, Ont., from 1010
965	XED	Reynosa, Mexico, from 961
1010	CHCK	Charlottetown, P.E.I., from 960
1010	CBCS	Hamilton, Ont., from 1120
1010	CKOC	Hamilton, Ont., from 1120
1010	WLAP	Louisville, Ky., from 1200
1132	XFH	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	XFTO	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
985	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	KS00	Sioux Falls, S. D., 2000 to 2500
1120	CJOC	Lethbridge, Alberta, 50 to 100
1180	WMAZ	Macon, Ga., 250 to 500
1200	KGEK	Yuma, Colo., 50 to 100
1200	KMLR	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	WBBM	Chicago, Ill., to WBBM Brdstg. Corp.
770	WJBT	Chicago, Ill., to WBBM Brdstg. Corp.
780	KELW	Burbank, Cal., to Magnolia Park, Ltd.
930	WDBJ	Roanoke, Va., to Times-World Corp.
1180	WBBI	Minneapolis, Minn., to Dr. Geo. W. Young
1200	WCAX	Burlington, Vt., to Burlington Daily News
1200	WFBE	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	Muscataine, 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. Johns, 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. Mac Keen, 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. EDST. Mary is played by Mary Sterling, and Bob by Cecil Secrest.



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 KGCX," states Ralph D. Ohlwiler, 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 kcys., 100 watts, Sun., Mon., Wed., 7-10 p.m.; 2ZL, Hastings, 1335 kcys., 100 watts, Tues., Fri., 7-10 p.m.; 2ZI, Hastings, 1335 kcys., 100 watts, Mon., Thurs., 7-10 p.m.; 2L2XY, Wellington, 1120 kcys., 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, Banes, 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; W8XK, 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 kcys. 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 kcys., 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 kcys. 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 keys., 500 watts, all night; KMCS, 1120 keys., 500 watts, all night; KGFS, 1000 keys., 100 watts, all night; KFOX, Long Beach, Calif., 1250 keys., 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 keys., 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 prowl' 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."

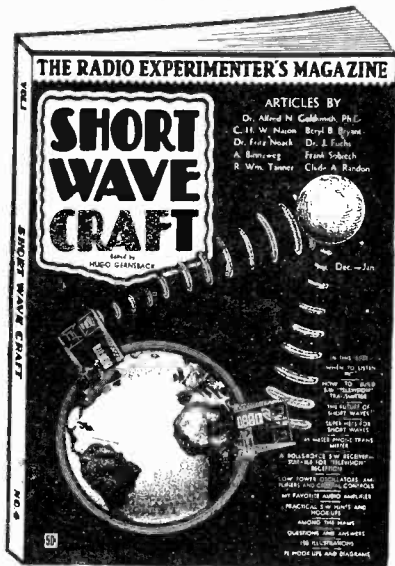
Some SOS Calls

Geo. D. Ilife, 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 keys. 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 kecs."

"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 kecs. Now we have another one that takes up everything between 1320 and 1370 kecs. 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 kecs., 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 kecs. I turn my dial to 770 and get WABC again. If, while on 770 kecs., 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 kecs. 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 kecs. The Canadian National Radio Features Magazine, with whose programs they are connected, shows them on 930 kecs. at Fort William, Ont.," says Gordon F. Blackwell, 129 Longarth St., London, Ont.

"You give XEO, Mexico City, as being on 940 kecs.," 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 kecs. to be exact."

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

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 keys., 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 keys., 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 keys.

"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 keys. 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

With the DXers

(Continued from page 15)

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.

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 Zabriske 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. Ohlweiler, 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, KG CX 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 keys., 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 keys. 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 kcs, but now they are on 730 kcs.," advises John R. Carter, 1119 W. 9th St., Erie, Pa. "I get XED regularly on 975 or 980 kcs. 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, WKAU, 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."
 KWWG "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." (?)
 WEAH "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."
 WFBR "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."
 WOOL "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."
 WBYA "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:

- One radio map of North America 25c
 One copy of the next RADEX 25c
 Trial subscription, next five issues of RADEX \$1.00
 One year's subscription to RADEX, 10 issues, and Radio Map free 1.75
 Two subscriptions to RADEX with one leatherette cover and Radio Map, both free 3.50
 One two-year subscription with leatherette cover and Radio map, both free 3.50
 Leatherette Cover50

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.

KEY TO CHAIN STATIONS

CFCF 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 1230 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
KMRC 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	WTIC 660 N
KOIL 1260 C	WBZ-A 990 N	WGST 890 C	WMAL 630 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 WBEN CKGW	5:00-5:30 The Lady Next Door WEAF WTAG WJAR KSD WRC WTAM WENR
8:00-8:15 Gene and Glenn WEAF WTAM WTIC WJAR WTAG WEEI WCSH WFI WRC WGY WCAE WBEN	6:00-6:25 Black and Gold Room Orchestra WEAF WCAE WTAM WENR WFI WRC WGY WOC WHO WDAY KSD WJAR WWJ WKY
8:15-8:30 Morning Devotions WEAF WTIC WRC WCAE WGY WHAS WCSH WJAR WWJ WPTF WIOD WFLA WSUN WTAG WGN WJAX WJDX WRVA WBEN WFI KFYP WOV WCKY WIBA	6:45-7:00 Swift Program — Stebbins Boys WEAF WCAE WTIC WTAG WEEI WJAR WCSH WFI WRC WGY WBEN WDAF
8:30-9:00 Cheerio WEAF WTIC WEEI WRC WCKY WWJ KPRC WFI WSB WSM WJAX WPTF WTAG WOAI WBEN WRVA WIOD CKGW WHAS WFLA WSUN WTAM WJDX WJAR WGY WOV WCAE WCSH WSMB WDAF KSTP WGN WDAY KFYP WAPI	6:45-7:00 Literary Digest Topics — Lowell Thomas WJZ WBZ WBAZ WHAM KDKA WLW WBAL
9:45-10:00 A. & P. Program WEAF WTIC WJAR WTAG WCSH WRC WGY WCAE WTAM WWJ WOC KSD WHO WDAF WTMJ WEEC WRVA WPTF WIOD WFLA WSUN WHAS WSM WMC WSB WSMB WJDX WOAI WKY WBEN WFI KSTP WIBO WGN WOV KPRC WEEI WFAA WAPI WJAX	7:00-7:15 Amos 'n' Andy WJZ WHAM KDKA WBZ WBZA WRC CKGW WCKY WLW WBAL CFCF WRVA WPTF WJAX WIOD WFLA WSUN
12:00-12:30 Don Bigelow and His Orchestra WABC WOKO KFBL WHEC WGR WLWZ WEAN WDRC WNAC WORC WPG WCAU WHP WJAS WLBW WMAL WCAO WTAR WDBJ WKBN WWNC WBT WTOC WDBO WXYZ WBCM WSPD WOOD WREC WLAC WBRX WDSU WISN WTAQ WFBM KSCJ KMOC KMBC KLRA KOIL KFJH KFJF KRLD K TSA WACO KFOR	7:15-7:30 Denis King and Linit Orchestra WABC WOKO WFLB WHEC WGR WEAN WDRC WNAC WORC WCAU WHP WJAS WMAL WCAO WTAR WDBJ WADC WHK WKRC WCAH WKBW WNBC WBT WTOC WQAM WDBO WDAE WXYZ WSPD WOV WMAQ KMBC WSJS
12:30-1:00 Columbia Revue WABC WOKO WFLB WHEC WGR WLWZ WEAN WDRC WNAC WORC WPG WCAU WEAN WHP WJAS WLBW WMAL WCAO WTAR WDBJ WKBW WNBC WBT WTOC WDBO WXYZ WSPD WOOD WREC WLAC WDSU WISN WTAQ WOV W KSCJ WMT KMBC KLRA KOIL KFJH KFJF KRLD K TSA WACO KDYL KLZ KFOR	7:30-7:45 Phil Cook — the Quaker Man WJZ WBZ WBZA WENR KFYP WDAY WBAL WGAR KDKA WREN KWK KFAB WTMJ KSTP WHAM WBCB WLW WRC KOA KSL
1:30-2:30 National Farm and Home Hour WJZ WHAM WJR KSTP WRVA WHAS WBC WAPI WOV WOC WMC KVOO WKY WOAI WRC WGAR WHO WDAF WJDX WBAL WSB KWK KOA WBZ WBZA KTHS WFLA WSUN WJAX KFAB KPRC KDKA WLW WPTF WSM WDAY KFYP WSMB WFAA WTMJ WIOD WIBA KYW	7:45-8:00 Camel Quarter-Hour — Morton Downey WABC WOKO WFLB WHEC WGR WLWZ WEAN WDRC WNAC WORC WCAU WHP WJAS WMAL WCAO WTAR WDBJ WADC WHK WKRC WCAH WKBW WNBC WBT WTOC WQAM WDBO WDAE WXYZ WSPD WOV WMAQ KMBC WSJS
3:00-3:30 Columbia Salon Orchestra WABC WOKO WFLB WGR WDRC WAAB WPG WTP-WFAN WHP WMAL WTOC WDBJ WHK WKBW WNBC WBT WTOC WDBO WXYZ WBCM WSPD WOOD WLAC WDSU WISN WTAQ WGL WFBM WMAQ KSCJ WMT KMBC KLRA KFJH KFJF KTRH K TSA KVI KFPY KPRC KLZ KFOR	7:45-8:00 The Goldbergs — Comedy Sketch WEAF WSAI WWJ WENR WGY WBEN WCAE
3:00-4:00 Woman's Radio Review WEAF WTIC WEEI WJAR WSAI KYW KSD WOC WTAG WCSH WFI WRC WGY WBEN WCAE WTAM WWJ WHO WOV WDAF	8:00-8:15 Pryor's Cremo Military Band WABC WOKO WFLB WHEC WGR WLWZ WEAN WDRC WNAC WORC WPG WCAU WHP WJAS WLBW WMAL WCAO WTAR WDBJ WADC WHK WKRC WCAH WNBC WBT WTOC WQAM WDBO WDAE WXYZ WSPD WNOX WTAQ KFJH WBTM
	8:00-10:45 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 WSMB WJDX KTHS KPRC WEEC KGO KHQ KOMO KGW KFSD WOAI WMC KOA KFAB WBAP WIBA
	11:15-11:30 Swift Program — Stebbins Boys KSD WHO WOC WSB WBAF WGN WSAI WTAM WFAA WWJ WMC WSMB
	11:15-11:30 Literary Digest Topics — Lowell Thomas WGAR WJR WENR KWK WREN WDAY KFYP KFAB KSTP WEEC
	11:15-11:30 Pryor's Cremo Military Band WKBW WGST WBCM WLAJ WOOD WREC WLAC WBRX WDSU WISN WOV WFBM WMAQ WCCO KSCJ WMT KMOX KMBC KLRA WNAX KOIL WBW KFJF WRR KTRH K TSA WACO KOH KMJ KFJB KOL KVI KFPY KOIN KFRC KHJ KDYL KLZ
	11:30-11:45 Camel Quarter-Hour — Morton Downey WGST WOOD WREC WLAC WNOX WRC

WDSU WISN WFBM WCCO KSCJ WMT
 KMOX KLRA WNAX KOIL WIBW KFJF
 WRR KTRH KTSB WACO KOH KOL
 KVI KFPY KOIN KFRC KHJ KDYL
 KLZ KGB

Sunday

12:15-12:30 Echoes of the Orient

WEAF WGY WTAM WDAF WCSH WCKY
 WVIC WLIT WBEN WOC WHO WCAE
 WENR WOC

12:30-1:00 Troika Bells

WJZ WBAL KWK WGAR KDKA WLW
 KFAB KFYP KOMO KFSD WHAM WTMJ
 WPTF WFLA WSUN WSM WAPI WKY
 KOA KECA KTAR KPO WHAS WSMB
 KGO KSTP

1:00-2:00 Pop Concert — Walter Logan

WEAF WVIC WEEL WJAR WCSH WFI
 WRC WGY WBEN KGW KOMO KPO
 KECA KGO KOA WHAS KFYP WDAY
 WCAE WTAM WWJ WIBO WOC WHO
 WDAF WTMJ WENR WSMB WAPI KSL

1:30-2:00 Columbia Little Symphony

WABC WOKO WFBL WGR WLBZ WDRC
 WAAB WPG WIP-WFAN WHP WJAS
 WMAL WCAO WDBJ WHK WKBN WWNC
 WBT WTOC WDBO WXYZ WBCM WDOD
 WBRC WDSU WISN WTAQ WMAQ WCCO
 KSCJ WMT KMBC KOIL KFJF KVI
 KFPY KDYL KLZ KVOR

2:15-2:30 The Caribbeans — Dance Band

WEAF WVIC WTAG WEEL WJAR WLIT
 WRC WGY WBEN WCAE WTAM WWJ
 WDAF KSTP WDAY WHAS WSM WAPI
 WSMB KOA KGO KGW KECA KFSD
 KTAR KFYP KSL

2:30-3:00 Gypsy Trail

WABC WOKO WFBL WHEC WKBW WLBZ
 WEAN WDRC WNAC WORC WPG WCAU
 WHP WJAS WMAL WDBJ WHK WKBN
 WWNC WBT WTOC WDBO WXYZ WBCM
 WSPD WDOD WREC WLAC WBRC WDSU
 WISN WTAQ WGL WMAQ WCCO KSCJ
 WMT KMOX KMBC KOIL KFJF KTRH
 KTSB KVI KFPY KDYL KLZ KVOR

2:30-3:00 NBC Artists Service Program

WEAF WVIC WOW WWJ KSD WRC
 WTAM WCSH WDAF WLIT WBEN WEEI
 CKGW

2:30-3:00 Yeast Foamers

WJZ WBAL WBZ WBZA WGAR WJR
 WLW KDKA KYW KWK WREN KFAB
 WTMJ KSTP WERC WRVA WPTF WIOD
 WFLA WSUN WSM WSB WJAX WHAS
 WAPI WJDX WSMB KTHS KVOO KOMO
 WFAA WKY WOAI KOA KSL KPO
 KECA KGW KHQ KTAR KFSD

3:00-3:30 Moonshine and Honeyuckle

WEAF WVIC WEEL WJAR WTAG WLIT
 WRC WTAM WWJ KYW KSD WOC
 WGY WBEN WHO WDAF WOW CFCF
 WCSH WCAE CKGW

3:00-4:00 Symphonic Hour

WABC WOKO WFBL WHEC WKBW WLBZ
 WEAN WDRC WAAB WCAU WHP WJAS
 WLWB WMAL WCAO WDBJ WKBN WWNC
 WBT WTOC WDBO WXYZ WBCM WSPD
 WDOD WREC WLAC WBRC WDSU WISN
 WTAQ WGL WFBM WMAQ WCCO KSCJ
 WMT KMBC KLRA KOIL KFJF KTRH
 KRLD KTRH KTSB WACO KVI KFPY
 KDYL KLZ KVOR

3:00-4:00 The Friendly Hour

WJZ WBAL KDKA KWK WREN KFAB
 WRVA WJAX KFYP WIOD KVOO WFLA
 WSUN KOA KSTP WERC WKY KHQ
 WSB WGAR WDAY WJDX WSMB WFAA
 WBZ WBZA WSM WMC KGO WOAI
 WIBO WIBA (KTHS off 3:30)

3:30-4:00 Balkan Mountain Men

WEAF WVIC WJAR WTAG WCSH WRC
 WGY WBEN WCAE WTAM WWJ WSAI
 KSD WDAF CKGW WLIT WEEI WENR

4:00-5:00 Cathedral Hour

WABC WOKO WFBL WHEC WKBW WLBZ
 WEAN WDRC WAAB WCAU WHP WJAS
 WMAL WCAO WDBJ WHK WKBN WWNC
 WBT WTOC WDBO WXYZ WBCM WSPD
 WDOD WREC WLAC WBRC WDSU WISN
 WOWO WFBM KSCJ KMOX KMBC KLRA
 KOIL KFJF KFJF KRLD KTRH WACO
 KVI KFPY KDYL KLZ KVOR

4:00-5:00 National Sunday Forum

WEAF WVIC WEEL WJAR WCSH WTAG
 KOA WOV WKY WOAI WSAI WJAX
 WHAS WJDX KPRC WERC WDAF WWJ
 WLIT WFLA WSUN KHQ KOMO WHO
 WOC WRC KGW WGY WSM WSB
 WSMB WBEN WRVA WIOD KPO WDAY
 KFYP KSD WFAA

4:00-5:00 Ravinia Opera Concert

WJZ WJR WBZ WBZA KDKA KYW
 WLW KWK WREN KFAB CKGW CFCF
 WHAM WJR WGAR

5:00-6:00 Sabbath Reveries

WJZ WBAL WHAM KWK WIOD WJDX
 KOMO WFLA WSUN KTAR KGO KHQ
 WLW WREN CKGW KGW WOAI WBZ
 WBZA WGAR WJAX WSMB WDAY WRVA
 KFAB WSM WMC WBAP WKY KDKA
 WERC WIBA

5:00-6:00 Gilbert and Sullivan Gems

WEAF WVIC WJAR WTAG WRC WCSH
 WGY WWJ WFI WBEN WTAM WSAI
 WOC WHO WDAF CFCF WCAE WEEL
 WOW

6:00-7:00 Catholic Hour

WEAF WVIC WEEL WJAR WTAG WRC
 WCSH WGY WWJ WERC WIOD WKY
 WDX WSMB KSTP WCAE KOMO KSD
 KGW WOC KECA KTAR WHO WDAY
 WJAX WFLA WSUN WMC WBP WBAP
 KPRC WOI WRVA WDAF KOA KVOO
 WSM KPO WBEN WOW WENR KFYP
 WLIT KTHS WSAI

7:00-7:15 New World Symphony

WABC WOKO WFBL WHEC WGR WLBZ
 WDRC WPG WIP-WFAN WHP WJAS
 WLWB WMAL WCAO WDBJ WKBN WWNC
 WBT WTOC WDBO WXYZ WBCM WSPD
 WDOD WLAC WBRC WDSU WTAQ WFBM
 WCCO KSCJ WMT KMOX KMBC KLRA
 KOIL KFJF KFJF KTRH WACO KVI
 KFPY KPRC KDYL KLZ KVOR

7:00-7:30 Through the Opera Glass

WEAF WVIC WCSH WLIT WRC WGY
 WCAE WWJ WSAI WPTF WRVA KSD
 WOC WHO WDAF WTAG WEEL WJAR
 WTMJ WERC WIBO WIOD WHAS WSM
 WAPI WSMB WJDX KTHS KVOO WBAP
 KPRC WOAI WKY KOA KSL KGO
 KPI KGW KOMO KHQ KFSD KTAR
 WBEN WENR

7:00-7:30 Over Jordan

WJZ WHAM WJR KWK WREN KFAB
 CFCF KSTP WDAY KFYP WRVA WJAX
 WIOD WFLA WSUN WHAS WSM WSB
 WAPI WJDX KVOO KPRC WKY WIBO
 WSMB

7:30-7:45 Daddy and Rollo

WABC WFBL WGR WEAN WNAC WCAU
 WLWB WMAL WCAO WADC WHK WKRC
 WXYZ WSPD WISN WOWO WFBM WBBM
 WCCO KMOX KMBC KOIL

7:30-8:00 Iodent Club of the Air

WEAF WJAR WTAG WCSH WLIT WRC
 WGY WBEN WCAE WWJ WSAI WLS
 KSD WDAF

7:45-8:00 The Boswell Sisters

WABC WOKO WFBL WHEC WGR WLBZ
 WEAN WDRC WORC WIP-WFAN WHP
 WJAS WLWB WMAL WCAO WDBJ WHK
 WKBN WWNC WBT WTOC WDBO WXYZ
 WBCM WSPD WDOD WRF C WLAC WBRC
 WDSU WISN WOWO WFBM WCCO KSCJ
 WMT KMOX KMBC KLRA KOIL KFJF

KJFJ KTRH WACO KVI KPFP KFRC
 KDYL KLZ KVOR

8:00-8:15 Enna Jeltick Melodies
 WJZ WBZ WBZA WBAL WHAM WLW
 WJR WGAR KYW KDKA KWK WREN
 KFAB CFCE WTMJ KSTP WBCB WDAY
 KFYP WRVA WPTF WIOD WFLA WSUN
 WHAS WSM WMC WSB WAPI WSMB
 WJDX KTHS WFAA KPFC KVOO WOI
 WKY WIBA KOA KSL KPO KFI
 KGW KOMO KHQ KTRAR KFSD

8:00-8:15 Devils, Drugs and Doctors
 WABC WFBL 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 KPFP KOIN
 KFRC KHJ KLZ

8:00-9:00 Chase and Sanborn
 WEAf WTiC WJAR WTAG WcSH WRc
 WGY WCAE WJj WSAI KSD WOV
 WIOD KSTP WHO WOC WHAS WBCB
 WMC WSB WSMB KTHS KPFC WTMJ
 WTAM WJDX WFLA WSUN WDAF WBEN
 WPTF CFCE WOI WKY WLIT WLS
 KVOO WFAA WRVA

8:30-8:45 Tony Parenti and His Saxophones
 WABC WOKO WFBL WHEC WGR WLBZ
 WEAN WDRC WNAC WORC WCAU WHP
 WJAS WLBW WMAL WCAO WDBJ WKBN
 WWNC WTOC WXYZ WDOO WREC WBRC
 WDSU WISN WWOV WFBM WCCO KSCJ
 WMT KMOX KMBC KLRA WNAX KOIL
 KFJ KFJF KTRH KTSa WACO KVI
 KPFP KFRC KDYL KLZ KVOR

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 WFBL WHEC WGR WLBZ
 WEAN WDRC WNAC WORC WCAU WHP
 WJAS WLBW WMAL WCAO WDBJ WKBN
 WWNC WTOC WXYZ WSPD WDOO WREC
 WBRC WDSU WISN WWOV WFBM WCCO
 KSCJ WMT KMOX KMBC WNAX KFJ
 KFJF KTRH KTSa KPFP KFRC KDYL
 KLZ KVOR

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 KFSD KTRAR WGAR

9:00-9:15 "Our Government" - David Lawrence
 WEAf WTAG WcSH WGY KSD WSAI
 WSB WMC WOV WJDX WFLA WSUN
 WOC WHO WRC KVOO WCAE WDAY
 WJAR WENR WBEN WFI WSMB WKY
 WIOD WEEL WPTF

9:00-9:30 The Dutch Masters
 WABC WOKO WFBL 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 WBSZ WBZA WGAR

9:15-9:45 Russian Singers
 WEAf WEEL WRc WFI WGY WTAG
 WGN WJAR WJj WSAI KSD WOV
 WOC WHO WBEN CkgW WcSH WCAE
 WTAM WDAF CFCE WIOD KOA

9:30-10:30 Lewisoohn Stadium Concert
 WABC WOKO WFBL WHEC WKBW WLBZ
 WEAN WDRC WNAC WOG WPG WLW
 WFAN WCAU WHP WJAS WLBW WMAL
 WCAO WDBJ WHK WKBN WWNC WBT
 WTOC WDBO WXYZ WSPD WDOO WREC
 WLAC WBRC WDSU WISN WWOV WFBM
 WMAQ WCCO KSCJ WMT KMOX KMBC
 WNAX KOIL KFJF KRLL KTRH KTSa
 KVI KPFP KFRC KDYL KLZ KVOR

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

10:30-11:00 The Gauchos
 WABC WOKO WFBL WHEC WKBW WLBZ
 WEAN WDRC WNAC WORC WCAU WHP
 WJAS WLBW WMAL WCAO WDBJ WHK
 WWNC WBT WTOC WDBO WXYZ WSPD
 WDOO WREC WLAC WBRC WDSU WISN
 WWOV WFBM WCCO KSCJ WMT KMOX
 KMBC WNAX KOIL KFJF KRLL KTRH
 KTSa KVI KPFP KFRC KDYL KLZ

10:45-11:15 Sunday at Seth Parker's
 WEAf WEEL WcSH WRc WGY WDAF
 CKGW WTMJ KSTP WCAE WTAM WWJ
 KYW WOV WHO WEBC WMC WIOD
 WHAS WSM WJDX KPFC WKY KOA
 KGO KGB KTRAR WBS KSD WRVA
 KFSD WJAX WOC WFLA WSUN KECA
 WFL WBEN WJAR WAPI WDAY KPFP
 KHQ WPTF WOI KSL WFAA

11:00-11:30 Continental String Quartette
 WABC WOKO WFBL WHEC WKBW WLBZ
 WEAN WDRC WNAC WPG WCAU WHP
 WLBW WMAL WDBJ WWNC WBT WTOC
 WDBO WXYZ WSPD WDOO WREC WBRC
 WDSU WISN WFBM WCCO KSCJ WMT
 KMOX KLRA WNAX KOIL KFJF KRLL
 KTRH KTSa KVI KPFP KDYL KLZ

11:30-12:00 South Sea Islanders
 WEAf WcJ WGY WOV WTAM WOC
 WHO WJj KSTP WDAY KFYP WHAS
 WSB KPFC

11:30-12:00 Red Nichols and His Orchestra
 WABC WOKO WFBL WHEC WKBW WLBZ
 WEAN WDRC WNAC WPG WCAU WHP
 WLBW WMAL WCAO WTAR WDBJ WKBN
 WWNC WBT WTOC WDBO WXYZ WSPD
 WDOO WREC WLAC WBRC WDSU WISN
 WFBM WCCO KSCJ WMT KMOX KMBC
 KLRA WNAX KOIL KFJF KRLL
 KTRH KTSa KPFP KDYL KLZ KVOR

Monday

5:00-5:30 Dancing by the Sea
 WABC WOKO WFBL WGR WDRC WAAB
 WORC WPG WIP-WEAN WHK WJAS
 WLBW WMAL WCAO WDBJ WHP WWCN
 WBT WTOC WDBO WXYZ WBSM WSPD
 WDOO WREC WLAC WBRC WDSU WISN
 WTAQ WGL KSCJ WMT KMBC KOIL
 KFJF KRLL KTRH KTSa WACO KVI
 KPFP KFRC KDYL KLZ KVOR

6:15-6:45 Mormon Tabernacle Choir and Organ
 WJZ WBAL WSM KOA KOMO KFAB
 KGW CkgW KSTP KTRAR KPO KFSD
 WSMB WHAM WBO KFYP 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 WBEN WSB WAPI

7:15-7:30 Tastyest Jesters
 WJZ WcKY WHAM WBZ WBZA WREN
 KDKA WGR WRVA WPTF WJAX WIOD
 WBAL WARC WFLA WSUN

7:30-7:45 Archer Gibson Concert Organist
 WEAf WTAG KSD KOA WOV CFCE
 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 Roxy Symphony Concert
 WJZ WGAR WBAL WLS WENR CkgW
 WFLA WSUN WSM WSB WRc WJDX
 WREN WFAA KOA WIOD

8:30-8:45 Manhattan Serenaders
 WABC WOKO WFBL WHEC WGR WLBZ
 WEAN WDRC WNAC WORC WPG WIP-
 WFAN WHP WJAS WLBW WMAL WCAO
 WTAR WDBJ WWNC WBT WDBO WXYZ

WBCM WDOD WREC WLAC WBRC WDSU
 WISN WTAQ WOVW WFBM WMAQ WCCO
 KSCJ WMT KMBC KLRA WNAX KOIL
 KFJF KFJF KTRH WACO KVI KFPY
 KFRC KDYL KVOR

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. & P. Gypsies
 WFAF WTC WEEI WTAG WJAR WCSH
 WLIT WRC WGY KSD WOC WHO
 WOV WDAF WTAM WREN WWJ WSAI
 WCAE WGN

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

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

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

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

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

9:30-10:00 General Motors Program
 WFAF WTC WEEI WJAR WCSH WTAG
 WLIT WGN KSTP WMC WSB WJAX
 KPRC WQAI WKY KOA KSL KGO
 KGW KFI WSAI KOMO KHQ WHO
 WREN WTMJ KFJR WRC WGY WCAE
 WWJ WTAM KSD WOC WOW WDAF
 WHAS WSM WFAA

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

10:00-10:30 Burns Panatela Program — Gur Lombardo
 WABC WFBM WKBW WEAN WDRC WNAC
 WCAU WJAS WMAL WCAO WADC WHK
 WKRC WXYZ WSPD WOWO WFBM WMAQ
 WCCO KMOX KMBC KOIL KFJF KRLD
 KTRH KTSa KDYL KLZ

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

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

10:30-11:00 Arabesque — Desert Play
 WABC WOKO WFBM WHEC WKBW WLBZ
 WEAN WDRC WNAC WORC WCAU WHP
 WJAS WLBW WMAL WDBJ WWNC WBT
 WTOC WDBO WXYZ WBCM WSPD WDOD
 WREC WBRC WDSU WISN WFBM WMT
 WNAX KOIL KFJF KFJF KRLD KTRH
 KTSa KVI KFPY KFRK KDYL KVOR

10:45-11:00 The Simoniz Guardsmen
 WFAF WTC WEEI WJAR WCSH WLIT
 WWJ WRC WGY WREN WSAI WCAE

KSD WTAM WENR WOC WHO WOW
 WDAF CFCF WTAG

11:00-11:15 Fletcher Henderson and His Orchestra
 WABC WOKO WFBM WHEC WKBW WLBZ
 WDRC WAAB WORC WCAU WIP-WFAN WHP
 WJAS WLBW WMAL WCAO WJAR WDBJ
 WHK WKBW WWNC WBT WTOC WDBO
 WXYZ WBCM WSPD WDOD WREC WLAC
 WBRC WDSU WISN WGL WFBM WSCJ
 WMT KMOX KLRA KNAX KOIL KFJF
 KRLD KTRH KTSa WACO KVI KFPY
 KFRK KDYL KLZ KVOR

11:45-12:00 Bert Lown and His Orchestra
 WABC WOKO WFBM WHEC WKBW WLBZ
 WDRC WAAB WORC WCAU WHP WLBW
 WMAL WCAO WJAR WDBJ WWNC WBT
 WTOC WDBO WXYZ WBCM WSPD WDOD
 WREC WLAC WBRC WDSU WISN WGL
 WFBM WCCO KSCJ WMT KMBC KLRA
 WNAX KFJF KTRH KTSa WACO KDYL
 KVOR

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

Tuesday

7:00-7:30 Mid-Week Federation Hymn Sing
 WFAF WTC WTAG WFI WJAR WJDX
 KOA KGO KECA KGW WEEL WREN
 WCAE WSAI WBO WPTF WIOD WFLA
 WSUN WSB WAPI WKY

7:30-7:45 Health Products Program
 WFAF WTC WEEI WJAR WTAG WCSH
 WRC WREN WGY WFL WCAE WSAI
 WBO WOC WHO WOW WDAF

7:45-8:00 Back of the News in Washington
 WJZ WHAM WENR WREN KTAB WBCB
 KFJR WRVA KSD WPTF WIOD WFLA
 WSUN WSM WMC WSB WAPI WSBM
 KHQ WBAL WJR WIC WHAS KTHS
 WFAA KPRC KOA KGO KECA

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

8:00-8:30 Blackstone Plantation
 WFAF WTC WEEI WJAR WTAG WCSH
 WPI WRC KSD WOC WGY WREN
 WCAE WTAM WWJ WSAI WHO WDAF
 WOW WEBC KSTP KYW

8:15-8:30 Round Towners — With Irene Beasley
 WABC WFBM WHEC WGR WLBZ WEAN
 WDRC WAAB WORC WIP-WFAN WHP
 WJAS WLBW WJAR WDBJ WREN WWNC
 WBCM WSPD WDOD WLAC WBRC WDSU
 WISN WTAQ WOWO KSCJ WMT KMOX
 WMBC KLRA WNAX KOIL KPH KFJF
 KTRH WACO KVOR KVI KFPY KFRK
 KLZ

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

8:30-9:00 National Dairy Virtuoso
 WFAF WRC WFI WEEI WTC WJAR
 WJDX WSBM WAPI WMC WSM WDAF
 WHAS WSB WTAG WCSH WGY WREN
 WCAE WTAM 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 KWK WREN KTAB
 KSTP KPRC WEBC KFJR WQAI KVOO
 WHAM WLW

9:00-9:30 Henry-George
 WABC WOKO WFBM WHEC WGR WEAN
 WDRC WNAC WCAU WHP WJAS WMAL
 WCAO WADC WHK WKRC WXYZ WSPD
 WSN WOWO WBBM WCCO KMOX KMBC
 KCIL KFI

9:30-10:00 The Fuller Man
 WFAF WTC WJAR WTAG WCSH WFI
 WRC WREN WGY WTAM WWJ KSD
 WOC WHO WOW WDAF KOA WTMJ

WEBC	WBAP	WSB	WKY	WOAI	WEEI	7:30-7:45 Miller and Lyles	WFBL	WHEC	WGR	WEAN	WDRG	WNAC
WSAI	KYW	KSTP	KSL	KGO	KECA	WFBL	WHEC	WGR	WEAN	WDRG	WNAC	
KGW	KHQ	KOMO	KVVO			WORC	WHP	WJAS	WLBW	WMAL	WCAO	
						WTAR	WDBJ	WHK	WKBN	WVNO	WBT	
9:30-10:00 The Bristoleers						WTOC	WXYZ	WRCM	WSPD	WDDO	WREC	
WABC	WFBL	WKBW	WEAN	WDRG	WNAC	WLAC	WBRC	WDSU	WISN	WTAQ	WGL	
WCAU	WJAS	WMAL	WCAO	WADC	WHK	WFBM	WBBM	WCCO	KSCJ	KMOX	KMBC	
WKRC	WXYZ	WSPD	WOWO	WMAQ	KMOX	KOIL	KFH	KFJF	KTRH	KVOR	KLZ	
KMBC	KOIL											
9:30-10:30 Music of the Ages						8:00-8:15 Willard Robison	WEAF	WTAG	WEEI	WJAR	WRC	WBEN
WJZ	WBAL	WCKY	WREN	KWK	WBZ	WTAM	WSAI	WIBO	WOC	WHO	WOW	
WBZA	WHAM	WENR	KDKA	WRVA	WIOD	WDAF	WSB	WFAA	KOA	KSL	KGO	
WJAX	WPTF	KFAB	WFLA	WSUN		KGW	KTAR	WIOD	FOLA	WSUN		
10:00-10:15 Ben Bernie and His Orchestra						8:00-8:15 The Frigidarians	WJZ	WBAL	WGAR	KYW	WREN	KFAB
WABC	WFBL	WEAN	WDRG	WNAC	WCAU	WTMJ	WEBC	WDAY	WRVA	WMC	WSB	
WJAS	WMAL	WCAO	WADC	WHK	WKRC	WAPI	WSMB	WJAX	KVVO	WOAI	KOA	
WKBN	WBT	WXYZ	WSPD	WLAC	WBRC	KSL	CFCF	WPTF	WIOD	WFLA	WSUN	
WDSU	WOWO	WBBM	KMBC	KOIL	KFH	CKGW						
KFJF	KRLD	KTSA	KMJ	KOI	KVI	8:15-8:30 Barbasol Program	WABC	WOKO	WFBL	WKBW	WEAN	WDRG
KFPY	KOIN	KFRC	KHJ	KDYL	KLZ	WNAC	WCAU	WJAS	WMAL	WCAO	WADC	
10:00-11:00 Lucky Strike Dance Orchestra						WHK	WKRC	WXYZ	WSPD	WISN	WFBM	
WEAF	WTIC	WEEI	WJAR	WTAG	WCSH	WMAQ	WCCO	KMOX	KMBC	KOIL		
WFI	WRC	WCAE	WWJ	WSAI	KSD							
WOC	WHO	WTMJ	WEBC	WRVA	WJAX	8:30-9:00 Mobil Oil Concert	WEAF	WEEI	WJAR	WCSH	WTAG	WLIT
WIOD	WFLA	WSUN	WHAS	WSM	WMC	WHC	WSAI	KSD	WOW	WTAM	KOA	
WSB	WSMB	WJDX	WOAI	KOA	KGO	KVVO	WFAA	WOAI	WKY	WTIC	KSL	
WKY	KGW	KHQ	KQO	KTAR	KFSD	WGY	WEBC	WDAF	WCAE	WHC	WOC	
WDAF	KVVO	WTAM	WBEN	WOW	WDAY	WWJ	WBEN	KSTP	WTMJ	WDAY	KFYR	
KFI	KSL	KFYR	KSTP	WENR	WPTF	KYW						
WGY	WBAP	WIBA	(KPRC on 10:45 to 11:00)			8:30-9:00 Jack Frost's Melody Moments	WJZ	WBAL	WHAM	KDKA	WGAR	WJR
10:30-11:00 Savino Tone Pictures						WLW	WLS					
WABC	WOKO	WFBL	WHEC	WKBW	WLBZ	8:45-9:00 Tastyeast Gloom Chasers	WABC	WFBL	WGR	WLBZ	WEAN	WDRG
WEAN	WDRG	WNAC	WORC	WPG	WCAU	WNAC	WORC	WCAU	WJAS	WMAL	WCAO	WADC
WHP	WJAS	WLBW	WMAL	WCAO	WTAR	WHK	WCAH	WXYZ	WSPD	WDSU	WOWO	
WDBJ	WKBN	WVNO	WBT	WTOC	WDBO	WFBM	WBBM	WCCO	KMOX	KMBC		
WXYZ	WBCM	WSPD	WDDO	WLAC	WBRC	KMBC	KOIL	KFH				
WDSU	WOWO	WFBM	WCCO	KSCJ	WMT	9:00-9:30 Gold Medal Fast Freight	WABC	WOKO	WFBL	WKBW	WEAN	WDRG
KMOX	WNAX	KOIL	KFH	KFJF	KRLD	WNAC	WCAU	WJAS	WMAL	WCAO	WADC	
KTRH	KTSA	KVOR	KVI	KFPY	KFRC	WHD	WKAQ	WXYZ	WSPD	WDSU	WOWO	
KDYL	KLZ	WISN				KMBC	KOIL	KFH				
11:45-12:00 Asbury Park Casino Orchestra						9:00-9:30 The First Nighter	WJZ	WLS	KDKA	WHAM	WGAR	WREN
WABC	WOKO	WFBL	WHEC	WKBW	WLBZ	WBAL	KWK	WBZ	WBZA	WENR		
WEAN	WDRG	WNAC	WORC	WCAU	WHP	9:00-9:30 Halsey Stuart Program	WEAF	WEEI	WJAR	WTAG	WCSH	WLIT
WLBW	WMAL	WCAO	WTAR	WDBJ	WKBN	WRC	WGY	WCAE	KOA	KSL	KGO	
WVNO	WBT	WTOC	WDBO	WXYZ	WBCM	KGW	KOMO	KHQ	WSAI	KSD	WOC	
WSPD	WDDO	WREC	WLAC	WBRC	WDSU	WHO	WOW	WWJ	WSMB	KPRC	WOAI	
WISN	WGL	WFBM	WCCO	KSCJ	WMT	WTMJ	KSTP	KYW	WHAS	WRVA	WSM	
KMBC	KLRA	WNAX	KFH	KFJF	KRLD	WMC	WSB	WBEN	WTAM	KFI	CKGW	
KTRH	KTSA	WACO	KVOR	KFPY	KDYL	WJAX	KVVO					
KLZ						9:30-10:00 Eno Crime Club	WABC	WFBL	WKBW	WEAN	WDRG	WNAC
12:00-12:30 Romanelli and His Orchestra						WABC	WOKO	WFBL	WKBW	WEAN	WDRG	WNAC
WABC	WFBL	WHEC	WKBW	WLBZ	WEAN	WCAU	WJAS	WMAL	WCAO	WADC	WHK	
WNAC	WPG	WCAU	WHP	WLBW	WCAO	WKRC	WXYZ	WSPD	WOWO	WMAQ	KMOX	
WTAR	WDBJ	WKBN	WVNO	WBT	WTOC	KMBC	KOIL	CFRB				
WDBO	WXYZ	WBCM	WSPD	WDDO	WREC	9:30-10:00 Dutch Masters Program	WJZ	WBAL	WBZ	WBZA	WHAM	WGAR
WLAC	WBRC	WDSU	WISN	WGL	WFBM	KDKA	WJR	WLW	WENR	KWK	WREN	
WCCO	KSCJ	WMT	KMOX	KMBC	KLRA	9:30-10:30 Palmolive Hour	WEAF	WTIC	WEEI	WJAR	WTAG	WCSH
WNAX	KOIL	KFH	KFJF	KRLD	KTRH	WLIT	WRC	WGY	WCAE	WSAI	WGN	
KTSA	WACO	KVOR	KFPY	KFRC	KDYL	KSD	WOC	WOW	WSMB	WTMJ	KSTP	
KLZ						CKGW	WIAS	WSM	WMC	WDAF	WHO	
12:00-12:30 Rudy Vallee and His Connecticut Yankees						WSB	WOAI	KOA	KSL	KGO	KOMO	
WEAF	WTIC	WRC	WGY	WDAF	WDAY	KHQ	WWJ	WTAM	WBEN	KFI	KVVO	
WBEN	WTAM	KSD	WSB	WAPI	WWJ	WFAA	KPRC	WIBA	KGW			
WENR	WIBA	KOA				10:00-10:15 Vitality Personalities	WABC	WOKO	WFBL	WKBW	WEAN	WDRG

Wednesday

3:45-4:30 Dancing by the Sea						10:15-10:30 Hernandez Brothers	WABC	WOKO	WFBL	WHEC	WKBW	WLBZ
WABC	WOKO	WFBL	WGR	WLBZ	WEAN	WABC	WOKO	WFBL	WHEC	WKBW	WLBZ	
WDRG	WAAB	WPG	WCAU	WHP	WMAL	WEAN	WDRG	WNAC	WORC	WCAU	WHP	
WCAO	WDBJ	WHK	WKBN	WVNO	WBT	WBCM	WSPD	WLAP	WREC	WLAC	WBRC	
WTOC	WDBO	WXYZ	WRCM	WSPD	WDDO	WDSU	WISN	WOWO	WFBM	WBBM	KRLD	
WREC	WLAC	WBRC	WDSU	WISN	WTAQ	KMOX	KMBC	KOIL	KFH	KFJF	WGL	
WGL	WFBM	KSCJ	WMT	KMOX	KMBC	KTRH	KTSA	KOL	KVI	KFPY	KOIN	
KLRA	KOIL	KFH	KFJF	KRLD	KTRH	10:15-10:30	WABC	WOKO	WFBL	WHEC	WKBW	WLBZ
KTSA	WACO	KVOR	KVI	KFPY	KFRC	WABC	WOKO	WFBL	WHEC	WKBW	WLBZ	
KDYL	KLZ					WEAN	WDRG	WNAC	WORC	WCAU	WHP	
7:00-7:15 Snoop and Peep						7:00-7:15 Snoop and Peep	WEAF	WJAR	WCAE	KSD	WEBC	WSB
WEAF	WJAR	WCAE	KSD	WEBC	WSB	WJDX	KOA	KSL	KGO	KGW	KECA	
WJDX	KOA	KSL	KGO	KGW	KECA	7:15-7:30 Boscul Moments with Mme. Alda	WEAF	WTIC	WEEI	WJAR	WCSH	WLIT
7:15-7:30 Boscul Moments with Mme. Alda						WRC	WBEN	WENR	WCAE	WTAM		
WEAF	WTIC	WEEI	WJAR	WCSH	WLIT	7:30-7:45 Lee Morse—Crooner	WEAF	WLIT	KSD	WTAG	WHAS	WSB
WRC	WBEN	WENR	WCAE	WTAM		WEAF	WLIT	KSD	WTAG	WHAS	WSB	
7:30-7:45 Lee Morse—Crooner						WAPI	WJDX					

WJAS	WLBW	WMAL	WCAO	WTAR	WDBJ	KWK	WREN	WLW	KFAB	WLS	WJR				
WWNC	WBT	WTOC	WXYZ	WDBC	WSPD	WHAM									
WDOD	WREC	WLAC	WBRC	WDSU	WISN	8:15-8:45 The Columbian	WABC	WOKO	WFBL	WHEC	WEAN	WDRC			
WOWO	WFBM	WMAQ	WCCO	KSCJ	KMBC		WNAC	WORC	WPG	WIP-WFAN	WCAU	WDCU			
WNAX	KOIL	KFH	KFJF	KRLD	KTRH		WBT	WLBW	WTAR	WDBJ	WKBN	WWNC			
KTSA	KVOR	KVI	KFPY	KFRC	KDYL		WBP	WTOC	WDBO	WBCM	WBRC	WDSU			
KLZ							WISN	WTAQ	WFBM	WMAQ	WCCO	KSCJ			
10:30-11:00 Nit Wit Hour	WABC	WOKO	WFBL	WHEC	WKBW	WLBZ	WMT	KMBC	KLRA	WNAX	KOIL	KFH			
	WEAN	WDRC	WNAC	WORC	WCAU	WHP	KFJF	KTRH	WACO	KVOR	KVI	KFPY			
	WJAS	WLBW	WMAL	WCAO	WTAR	WDBJ	KFRC	KLZ							
	WWNC	WBT	WTOC	WXYZ	WBCM	WDOD	8:45-9:00 Sisters of the Skillet	WJZ	WREN	KFAB	WBAL	WBZ	WBZA		
	WREC	WLAC	WBRC	WDSU	WISN	WOWO		WHAM	KDKA	WGAR	WJR	WLW	WLS		
	WFBM	WCCO	KSCJ	WMT	KMBC	WNAX	8:45-9:00 The Boswell Sisters	WABC	WOKO	WFBL	WHEC	WEAN	WDRC		
	KOIL	KFH	KFJF	KRLD	KTRH	KTSA		WNAC	WORC	WCAU	WHP	WLBW	WMAL		
	WACO	KVOR	KVI	KFPY	KFRC	KDYL		WCAO	WDBJ	WHK	WKBN	WWNC	WTOC		
10:30-11:00 Coca Cola Program	WDBO	WXYZ	WBCM	WSPD	WREC	WLAC		WDBO	WXYZ	WBCM	WSPD	WREC	WLAC		
	WEAF	WEEL	WTIC	WCSH	WLIT	WRC		WBRC	WDSU	WISN	WTAQ	WFBM	WCCO		
	WCAE	WSAI	WOC	WEBC	WKY	KYW		KSCJ	KMBC	KLRA	WNAX	KOIL	KFH		
	KSD	WRVA	WJAX	KSTP	WIOD	WSM		KFJF	WACO	KVOR	KVI	KFPY	KFRC		
	KPRC	WOAI	KOA	WFAA	NLS	KGO		KDYL							
	KGW	KHQ	KOMO	KFSD	WJDX	WDAF		9:00-9:15 Premier Salad Dressers	WABC	WFBL	WKBW	WEAN	WDRC		
	WHAS	WTAM	WHO	WOW	WMC	WPTF			WCAU	WJAS	WMAL	WCAO	WADC		
	WSB	WWJ	WAPI	WREN	KFI	WGY			WKRC	WXYZ	WSPD	WOWO	WBBM		
	WTMJ	WJAR	WFLA	WSUN	KTAR	KVOO			KOIL	KTRH					
	CFCE	WSMB	WTAG					9:00-9:30 Blackstone Plantation	WJZ	WBZ	WBZA	WBAL	KDKA	WCKY	
11:00-11:15 "The Voice of Radio Digest"	WEAF	KSD	WOC	WHO	WRC	WEEL			WHAM						
	WJAR	WCSH	WGY	WIBO	WIOD	WOW			9:00-9:30 Arc0 Birthday Party	WEAF	WTIC	WEEL	WJAR	WTAG	WCSH
	WTAM									WFI	CKGW	WRC	WGY	WSM	WIOD
11:15-12:00 Vincent Lopez and His Orchestra	WEAF	WRC	WJAX	WEEL	WTAM	WDAF				WJAX	WOAI	KYK	KOA	WBAP	WRVA
	WWJ	WOC	WHO	WAPI	WOAI	WOW				WJZ	WSAI	KSD	WDAF	KYW	WEBC
	WIOD	WENR								WOW	WSM	WJDX	WOC	WHO	KGO
11:45-12:00 Bill Osborne and His Orchestra	WABC	WOKO	WFBL	WHEC	WKBW	WLBZ				WBEN	KTAR	KFSD	KSTP	WSB	WTAM
	WDRC	WAAB	WORC	WPG	WCAU	WHP				WPTF	KSL	WHAS	WCAE		WMC
	WLBW	WMAL	WCAO	WTAR	WDBJ	WWNC			9:15-9:30 The Coty Melody Girl	WABC	WFBL	WKBW	WEAN	WDRC	WNAC
	WTOC	WDBO	WXYZ	WBCM	WSPD	WDOD				WCAU	WJAS	WMAL	WCAO	WADC	KMOC
	WREC	WLAC	WBRC	WDSU	WISN	WNL				WHK	WKRC	WXYZ	WSPD	WOWO	WBBM
	WFBM	WCCO	KSCJ	WMT	KMBC	KLRA				KMBC	KOIL				
	WNAX	KFJF	KRLD	KTRH	KTSA	KVOR			9:30-10:00 Willard Robison and His Orchestra	WEAF	WTIC	WTAG	WJAR	WCSH	CKGW
	KFRC	KDYL	KLZ							WFI	WRC	WGY	WCAE	WWJ	WSAI

Thursday

4:30-5:00 Maze of Melody	WJZ	WBAL	WGAR	WJR	WLW	WENR										
	KWK	WRC	KSTP	WDAY	KFYR	WJAX										
	WSM	WMC														
7:00-7:15 Kate Smith and Her Swanee Music	WABC	WOKO	WFBL	WHEC	WDRC	WAAB										
	WORC	WCAU	WHP	WLBW	WMAL	WDBJ										
	WKBN	WWNC	WBT	WTOC	WDBO	WBCM										
	WREC	WLAC	WBRC	WDSU	WTAQ	WCCO										
	KSCJ	WMT	KLRA	KOIL	KFH	KFJF										
	KRLD	KTRH	KTSA	KVOR	KDYL	KLZ										
7:00-7:15 Vaughn de Leath	WEAF	WTIC	WEEL	WCAE	WWJ	WENR										
	KSD	WHO	KFYR	WAPI	WMC	KOA										
	KGO	KTAR														
7:45-8:00 The Frigidarians	WJZ	WGAR	KYW	WREN	KFAB	WTMJ										
	WEBC	WDAY	WIBA	WMC	WSB	WAPI										
	WSMB	WJDX	KYOO	KPRC	WOAI	KOA										
	CKGW	CFCE	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	WCSH	WEI	WRC	WGY	WHO										
	WOW	WWJ	WHAS	WMC	WSAI	WJAR										
	WSB	WSMB	WEBC	KOA	WRVA	KTHS										
	KSL	KOMO	WOAI	WSM	WOC	WAPI										
	KOA	KHQ	WTAM	KECA	KSD	CKGW										
	WGN	KGW	WBEN	KPRC	WIOD	WPTF										
	WFLA	WSUN	WCAE	CFCE	KVOO											
	(WDAF on 8:45 to 9:00)	(KSTP on 8:15)	(WKY)													
	(WJAX on 8:30)	(WTMJ on 8:30)														
8:15-8:30 Rin-Tin-Tin Thriller	WJZ	WBZ	WBZA	WBAL	KDKA	WGAR										

WREC WLAC WBRC WDSU WISN WCCO
KSCJ WMT KLRA WNAX KOIL KFJF
KRLD KTRH KTSa WACO KVOR KVI
KFPY KFRC KDYL KLZ

11:00-11:15 Little Jack Little
WEAF WTIC WOV WFI WIOD WTAM
WWJ WENR

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

Friday

7:00-7:15 Kate Smith and Her Swanee Music
WABC WOKO WFBL WHEC WDRC WAAB
WORC WCAU WHP WLBW WMAL WCAO
WDBJ WKBN WNBC WBT WTOC WDBO
WBCM WREC WLAC WBRC WDSU WTAQ
WCCO KSCJ WMT KMBC KOIL KFJF
KRLD KTRH KTSa KVOR KDYL KLZ

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

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

8:00-8:30 Nestle's Program
WJZ WBZ WBSA 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
KVOO WGY WLIT WCAE WJAR WCHS
WOW KYW WDAF KSD KSTP WTMJ
WGY WOC WERC ROA WQAI KOMO
WHO RHQ WTAG KSL CKGW WSAI
WFAA KPRC off 8:30) KTRAR

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 Lewisohn Stadium Concert
WABC WOKO WFBL WHEC WEAN WDRC
WNAC WORC WHP WLBW WMAL WCAO
WTAR WDBJ WHK WNBC WDBO WXYZ
WBCM WSPD WREC WLAC WBRC WDSU
WISN WTAQ WFBM WCCO KSCJ KMOX
KMBC WNAX KOIL KFJF KVOR KVI
KFPY KDYL KLZ

9:00-9:30 Interwoven 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
WQAI KSL EGO KOMO KHQ KFSD
KTAR WGAR KFI KOA WRVA WTMJ

9:00-9:30 Chicquot Club
WEAF WTIC WEEI WJAR WTAG WCHS
WLIT WRC WOV 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
WRC WXYZ WSPD WOWO WMAQ KMOX
KMBC KOIL

9:30-10:00 Pond's Dance Program
WEAF WTAG WJAR WCHS WLIT WRC
WCAE WFNK KSD WOC WHO WOW
WGY WBNW WTMJ WWJ

9:30-10:00 Armour Program
WJZ WBZ WBZA WJR KYW WREN
KSTP WERC WRVA WMC WSB WQAI
KOA KSL KGO WKY WHAS KGW
KHQ KOMO 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 Pillsbury 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 KFRC KHJ KDYL KLZ

10:00-10:30 Paul Whiteman's Paint Men
WJZ WBZ WBZA WBAL WHAM KDKA
WJR WGAR KYW KWK KPRC KSTP
WERC WDAY KFJR WRVA WPTF WIOD
WFLA WSUN WHAS WSM WCB WSB
WSMB WJDX WFAA WQAI KOA WKY
KSL KGO KFI EGV KOMO KHQ
WLW KFSD WJAX KTAR WAPI WTMJ

10:00-10:30 Kodak Week-End Program
WEAF WJAR WCHS WCAE WWJ KSD
WSAI WRC WBNW WLIT WTAG WTMJ
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
WRVA WJAX WIOD WMC WSB WSMB
WOC WJDX KGO KTS WQAI WKY
WRC WCHS WTMJ KOA KGW KFI
KHQ KOMO KTAR KFSD WHO WOW
WTAM KSL WFLA WSUN WBN WDAY
KFJR 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 WNBC
WBT WTOC WDBO WXYZ WBCM WSPD
WLAC WBRC WDSU WISN WCCO KSCJ
WMT KMOX KMBC WNAX KOIL KFJF
KFJF KTRH KTSa KVOR KVI KFPY
KDYL

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

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

Saturday

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

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

6:00-6:30 Vinegar's Barn Orchestra
 WABC WOKO WFBL WHEC WDRC WAAB
 WORC WIP WFAN WHP WLWB WCAO
 WDBJ WKBN WNBC WBT WTOC WDBO
 WBCM WSPD WREC WBRC WDSU WTAQ
 WCCO KSCJ WMT KMBC KOIL WFBW
 KFH KFJF KRLD KTRH K TSA KVOR
 KVI KFPY KPRC KDYL

7:00-7:15 Lee Morse—Crooner
 WFAF W TIC WPI WCAE WWJ WSB
 KOA KGO WCSH WENR KF YR KSD

7:15-7:30 Laws That Safeguard Society
 WFAF WJAR WTAG WCSH WFI WGY
 WBEN WOC WHO WIBC WOAI KOA
 KGO WEEL KECA KOMO K TAR WTIC
 WJDX WDAY WENR WOW

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

7:30-7:45 Three Mustachios
 WFAF WOC WHO WJAR WDAF WOW
 WRVA CFCF WTIC WTAG WJAR WCSH
 WFI WRC WGY WBEN WTAM WSM
 WENR

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

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

8:00-8:30 Over the Heather—Sandy MacFarlane
 WFAF WTAG WGY WCAE KSD WOC
 WHO WOW WEEL WWJ WSAI WDAF
 WJAR WCSH WFI WBEN WTAM WTIC

8:15-8:30 Henry Burbig—Brusiloff's Orchestra
 WABC WOKO WFBL WHEC WDRC WAAB
 WORC WPG WCAU WHP WLWB WMAL
 W TAR WDBJ WKBN WNBC WBT WTOC
 WDBO WXYZ WBCM WSPD WLAC WBRC
 WDSU WISN WTAQ WFBM KSCJ WMT
 KLRA WNAX KOIL KFH KJFF KTRH
 WACO KVOR KVI KFPY KPRC

8:30-8:45 Kate Smith and Her Swanee Music
 WABC WFBL WHEC WDRC WAAB WORC
 WPG WCAU WHP WLWB W TAR WDBJ
 WKBN WNBC WBT WDBO WXYZ WBCM
 WSPD WLAC WBRC WDSU WISN WTAQ
 WFBM WMAQ KSCJ WMT KMOC KMBC
 KLRA WNAX KOIL KFH KJFF KTRH
 WACO KVOR KVI KFPY KPRC KDYL

8:30-9:00 Silver Flute
 WFAF W TIC WGY KSD WDAF WOW
 WJAR WWJ WSAI WTAG WCSH WFI

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

9:00-9:15 The Boswell Sisters
 WABC WOKO WFBL WHEC WKBW WEAN
 WDRC WNAC WORC WPG WCAU WHP
 WLWB WMAL WCAO W TAR WDBJ WHK
 WKBN WNBC WBT WTOC WDBO WXYZ
 WBCM WSPD WREC WLAC WBRC WDSU
 WISN WTAQ WFBM WMAQ WCCO KSCJ
 WMT KMOC KMBC WNAX KOIL KFH
 KFJF KTRH K TSA KVOR KVI KFPY
 KPRC KDYL

9:00-9:30 General Electric Program
 WFAF W TIC WJAR WTAG WCSH WFI
 WRC WGY WBEN WCAE WTAM WWJ
 WSAI WBO KSD WOC WHO WDAF
 KSTP WIBC WRVA WJAX WFLA WSUN
 WHAS WMC WSB WAPI WSMB WBP
 KPHC WOAI KOA WTMJ KSL KGO
 KFI KGW KOMO KHQ K TAR KFSO
 WLW WOC WJDX WDAY KF YR WPTF
 WIOD

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

9:30-10:00 Club Valspar
 WFAF W TIC WJAR WTAG WCSH WFI
 WRC WGY WBEN WCAE WTAM WWJ
 WSAI WEEL KSD WOC WHO WDAF
 KSTP WIBC WRVA WJAX WHAS WMC
 WSB WAPI WSMB WBP KPRC WOAI
 WOW WTMJ CKGW WPTF WIOD WFLA
 WSUN WKY WJDX WDAY KF YR

9:30-10:00 Lewisohn Stadium Concert
 WABC WOKO WFBL WHEC WKBW WEAN
 WDRC WNAC WORC WPG WIP WLWB
 WMAL WCAO W TAR WDBJ WKBN WNBC
 WBT WTOC WDBO WXYZ WBCM WSPD
 WLAC WBRC WDSU WISN WTAQ WFBM
 WMAQ KSCJ WMT KMOC KMBC WNAX
 KOIL KFH KFJF KTRH K TSA KVOR
 KVI KFPY KPRC KDYL WCAU

10:00-11:00 Hank Simmons' Show Boat
 WABC WOKO WFBL WHEC WKBW WEAN
 WDRC WNAC WORC WPG WCAU WLWB
 WMAL W TAR WDBJ WHK WKBN WNBC
 WBT WTOC WDBO WXYZ WBCM WSPD
 WREC WLAC WBRC WDSU WISN WFBM
 WCCO KSCJ WMT KMOC KMBC WNAX
 KOIL KFH KFJF KRLD KTRH K TSA
 WACO KVOR KVI KFPY KPRC KDYL

10:00-11:00 Lucky Strike Dance Orchestra
 WFAF W TIC WEEL WJAR WTAG WCSH
 WFI WRC WGY WBEN WCAE WTAM
 WWJ WSAI WGN KSD WOC WHO
 WOW WDAF WTMJ KSTP WIBC WRVA
 WJAX WIOD WFLA WSUN WHAS WMC
 WSB WSMB WJDX KVOO WFAA WOAI
 WBY KOA KSL KGO KFI KGW
 KOMO KHQ K TAR KFSO WDAY KF YR
 WIBA KPRC

11:00-11:15 Little Jack Little
 WFAF W TIC WFI WCAE KSD WGY
 WTAM

11:00-11:15 Bert Lown and His Orchestra
 WABC WOKO WFBL WHEC WKBW WDRC
 WCAO WORC WCAU WHP WLWB WMAL
 W TAR WDBJ WHK WKBN WNBC
 WBT WTOC WDBO WXYZ WBCM WSPD
 WREC WLAC WBRC WDSU WISN WCCO
 KSCJ WMT KMOC KLRA WNAX KOIL
 KFH KFJF KRLD KTRH K TSA WACO
 KVOR KVI KFPY KPRC KDYL

11:15-12:00 Tal Henry and His Orchestra
 WFAF W TIC WRC KSD WOC WHO
 WOW WSB KPRC WEEL WFI WTAM
 WGY WWJ WDAF WCAE CFCF WIOD

11:30-12:00 Los Conquistadores
 WJZ WHAM WGAR WJR WBO WREN
 KSTP WDAY KF YR KOA KFSO K TAR

11:45-12:00 Will Osborne and His Orchestra
 WABC WOKO WFBL WHEC WKBW WDRC
 WAAB WORC WCAU WHP WLWB WMAL
 WCAO W TAR WDBJ WHK WKBN WNBC
 WBT WTOC WDBO WXYZ WBCM WSPD
 WREC WLAC WBRC WDSU WISN WFBM
 WCCO KSCJ WMT KMBC KLRA WNAX
 KOIL KFJF KRLD KTRH K TSA KVOR
 KFPY KPRC KDYL

12:00-12:30 Guy Lombardo and His Royal Canadians
 WABC WFBL WHEC WKBW WEAN WNAC
 WPG WCAU WHP WLWB WMAL WCAO
 W TAR WDBJ WHK WKBN WNBC WBT
 WTOC WDBO WXYZ WBCM WSPD WREC
 WLAC WBRC WDSU WISN WFBM WCCO
 WMT KMOC KMBC KLRA WNAX KOIL
 KFJF KRLD KTRH K TSA KVOR KFPY
 KDYL

12:00-12:30 Sherbo's Continentals
 WFAF W TIC WGY WBEN WTAM KSD
 WWJ WOW WMC KPRC KOA WRC
 WDAY WIBA

12:30-1:00 Smith Balla and His Orchestra
 WFAF W TIC WGY WBEN WWJ KSD
 WOC WHO WOW WRC WSB WRC
 KOA

INDEX BY FREQUENCIES AND DIAL NUMBERS

NOTICE OF COPYRIGHT

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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
KEY	--	101	547	Merida, Mexico

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Manitoba Telephone System
Partido Socialista Surt

550 kilocycles 545.1 meters

KFDY	†	500	1+	Brookings, S. D.
KFUO	*	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

96		
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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.
WPCC	*	500	3S	Chicago, Ill.
WQAM	*	1000	C	Miami, Fla.

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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	1C	Columbus, Ohio
WKBN	*	500	1C	Youngstown, Ohio
WMAC	--	250	2	Syracuse, N. Y.
WMCA	--	500	3	New York City
WNAJ	*	1000	C	Yankton, S. D.
WNYC	†	500	3	New York City
WSYR	†	250	2	Syracuse, N. Y.
WWNC	*	1000	C	Asheville, N. C.

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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	--	500	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
WOBW	*	250	1+	Charleston, W. Va.
WSAZ	*	250	1	Huntington, W. Va.
WTAG	*	250	N	Worcester, Mass.

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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.
WOBW, Inc.
WSAZ, Inc.
Telegram Publishing Co.

INDEX BY FREQUENCIES AND DIAL NUMBERS

590 kilocycles 508.2 meters

CMW	--	1400	588	Havana, Cuba
KHQ	--	1000	+N	Spokane, Wash.
WCAJ	*	500	1	Lincoln, Nebr.
WEEL	†	1000	N	Boston, Mass.
WKZO	*	1000	D	Kalamazoo, Mich.
WOW	*	1000	1N	Omaha, Nebr.
XEZ	*	500	588	Mexico City

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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	Ottawa, Ont.
KFSD	*	500	+N	San Diego, Cal.
WCAC	†	250	2+	Storrs, Conn.
WCAO	*	250	C	Baltimore, Md.
WICC	*	250	2+	Bridgeport, Conn.
WMT	*	500	C	Waterloo, Iowa
WREC	*	500	+C	Memphis, Tenn.

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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

KFRC	*	1000	C	San Francisco, Cal.
WDAF	*	1000	N	Kansas City, Mo.
WFAN	*	500	2C	Philadelphia, Pa.
WIP	*	500	2C	Philadelphia, Pa.
WJAY	†	500	D	Cleveland, Ohio

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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	Portland, Ore.
KTAR	*	500	+N	Phoenix, Arizona
WFLA	*	1000	1+N	Clearwater, Fla.
WLBB	*	500	C	Bangor, Maine
WSUN	*	1000	1+N	St. Petersburg, Fla.
WTMJ	*	1000	+N	Milwaukee, Wis.

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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	---	Victoria, B. C.
CJGX	--	500	---	Yorkton, Sask.
CNRA	*	500	---	Moncton, N. B.
KFRU	*	500	1	Columbia, Mo.
WGBF	†	500	1	Evansville, Ind.
WMAL	*	250	+C	Washington, D. C.
WOS	*	500	1	Jefferson City, Mo.

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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	Quebec, Que.
CKCR	--	50	645	Waterloo, Ont.
CMHJ	--	40	645	Cienfuegos, Cuba
KFI	*	5000	N	Los Angeles, Cal.
WAUI	*	500	C Dn	Columbus, Ohio
WOI	*	5000	D	Ames, Iowa
XFG	--	2000	638	Mexico City

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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	Seattle, Wash.
WSM	*	5000	N	Nashville, Tenn.

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

660 kilocycles 454.3 meters

CHWK	†	100	---	Chilliwack, B. C.
CJRM	†	500	665	Moose Jaw, Sask.
CJRW	--	500	665	Fleming, Sask.
CMCO	--	225	---	Havana, Cuba
WAAW	*	500	D	Omaha, Nebr.
WEAF	†	5000	N	New York City
WTIC	*	5000	N	Hartford, Conn.

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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

WOWR	--	500	675	St. Johns, N. F.
WMAQ	*	5000	C	Chicago, Ill.
XER	--	101	674	Mexico City

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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

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

690 kilocycles 434.5 meters

CFAC	*--	500	1	Calgary, Alta.
CHCA	*	500	1	Calgary, Alta.
CJCJ	*	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	Glace Bay, N. S.
XET	†	500	---	Monterrey, Mexico

57			
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.			

700 kilocycles 428.3 meters

WLW	*	50000	N	Cincinnati, Ohio
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23			
Crosley Radio Corp.			

710 kilocycles 422.3 meters

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

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

720 kilocycles 416.4 meters

WGN	†	25000	N	Chicago, Ill.
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Chicago Tribune			

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

50			
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.			

740 kilocycles 405.2 meters

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

48 1/2			
The M. M. Johnson Co.			
Atlanta Journal Co.			

750 kilocycles 399.8 meters

WJR	†	5000	N	Detroit, Mich.
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47			
WJR, The Goodwill Station, Inc.			

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

45			
Puget Sound Broadcasting Co., Inc.			
Consolidated Gas, Elec. & Power Co.			
St. Louis University			
National Broadcasting Co., Inc.			

770 kilocycles 389.4 meters

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

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

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.

42 1/2			
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

415		
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CMBS -- 150 ---
 CMHC -- 500 ---
 KGO + 7500 N
 WGY + 50000 N

Havana, Cuba
 Tuinucu, Cuba
 San Francisco, Cal.
 Schenectady, N. Y.

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

800 kilocycles 374.8 meters

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WBAP + 10000 IXN
 WFAA + 50000 1N
 XEU -- 101 ---
 XFC -- 350 805

Fort Worth, Texas
 Dallas, Texas
 Veracruz, Mexico
 Aguascalientes, Mexico

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

810 kilocycles 370.2 meters

385		
-----	--	--

WCCO * 5000 C
 WPCB * 500 D

Minneapolis, Minn.
 New York City

Northwestern Broadcasting, Inc.
 Eastern Broadcasters, Inc.

KCYS.
 880

MTRS.
 340.7

DIAL

820 kilocycles 365.6 meters

37		
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WHAS + 10000 N
 XFI -- 1000 818

Louisville, Ky.
 Mexico City

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

830 kilocycles 361.2 meters

36		
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CMGA -- 100 834
 KOA + 12500 N
 WEEU -- 1000 DCP
 WHDH -- 1000 D
 WRUF * 5000 Dn

Colon, Cuba
 Denver, Colo.
 Reading, Pa.
 Boston, Mass.
 Gainesville, Fla.

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

840 kilocycles 356.9 meters

35		
----	--	--

CFCA + 500 1
 CHCT -- 1000 ---
 CKLC + 1000 2
 CMC * 500 ---
 CNRD + 1000 2
 CNRT * 500 1

Toronto, Ont.
 Red Deer, Alta.
 Red Deer, Alta.
 Havana, Cuba
 Red Deer, Alta.
 Toronto, Ont.

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

850 kilocycles 352.7 meters

345		
-----	--	--

KWKH * 10000 1
 WWL * 5000 1

Shreveport, La.
 New Orleans, La.

Iello World Broadcasting Corp.
 Loyola University

860 kilocycles 348.6 meters

335		
-----	--	--

CMJE -- 20 856
 KMO + 500 + Dn
 WABC * 5000 XC
 WBQQ -- 5000 ---
 WHB * 500 D
 XEJ * 101 857
 XFX -- 500 ---

Camaguey, Cuba
 Tacoma, Wash.
 New York City
 New York City
 Kansas City, Mo.
 Juarez, Mexico
 Mexico City, Mexico

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

870 kilocycles 344.6 meters

32		
----	--	--

WENR -- 5000 1N
 WLS + 50000 1XN

Chicago, Ill.
 Chicago, Ill.

National Broadcasting Co., Inc.
 Agricultural Broadcasting Co.

880 kilocycles 340.7 meters

31		
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CHML * 50 4
 CJCB * 50 ---
 CKJC + 100 3
 CKCV + 50 3
 CNRQ + 50 3
 KFKA + 500 2+
 KLX * 500 ---
 KPOF * 500 2
 WCOB * 500 +
 WGCI * 250 1
 WQAN * 250 1
 WSUI * 500 ---

Hamilton, Ont.
 Sydney, N. S.
 Quebec, Que.
 Quebec, Que.
 Quebec, Que.
 Greeley, Colo.
 Oakland, Cal.
 Denver, Colo.
 Meridian, Miss.
 Scranton, Pa.
 Scranton, Pa.
 Iowa City, Iowa

Maple Leaf Radio Co., Ltd.
 N. Nathanson
 Le "Soleil," Ltd.
 G. A. Vandy
 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

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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
KFNF	*	500	2+	Shenandoah, Iowa
KGJF	*	250	---	Little Rock, Ark.
KUSD	**	500	2+	Vermillion, S. D.
WGST	*	250	2+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

302

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

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
-WBEA	**	1000	N	Buffalo, N. Y.
WJAX	**	1000	N	Jacksonville, Fla.
WKY	**	1000	N	Oklahoma City
WLBL	*	2000	D	Stevens Point, Wis.

33

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

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

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

29

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

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	2+N	Houston, Texas
WAFF	---	500	D	Chicago, Ill.
WBSO	---	500	D	Needham, Mass.
WWJ	†	1000	N	Detroit, Mich.
XFF	---	250	915	Chihuahua, Mexico

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

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.

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Northern Supplies, Ltd.
Radio Association
Queen's University
The Edmonton Journal, Ltd.
Radio Entertainments, 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.

940 kilocycles 319.0 meters

KGU	†	1000	---	Honolulu, Hawaii
KOIN	*	1000	---	Portland, Oregon
WAAT	---	500	D	Jersey City, N. J.
WCSS	*	1000	N	Portland, Maine
WDAY	*	1000	N	Fargo, N. D.
WFIW	*	1000	N	Hopkinsville, Ky.
WHA	---	750	D+	Madison, Wis.
XEO	---	5000	---	Mexico City

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

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.

26

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

National Broadcasting Co., Inc.

INDEX BY FREQUENCIES AND DIAL NUMBERS

960 kilocycles 312.3 meters

35		
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-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
CMBD	--	150	965	Havana, Cuba
CNRR	--	500	3	Regina, Sask.
CNRRX	--	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 Airways
International Broadcasting Co.

970 kilocycles 309.1 meters

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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

24		
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CFCN	--	10000	985	Calgary, Alta.
-KDKA	--	5000	N	Pittsburgh, Pa.
XEFE	--	101	---	Laredo, Mexico

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

990 kilocycles 302.8 meters

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

Westinghouse Elec. & Mfg. Co.
Arturo Martinez

KCYS.
1050

1000 kilocycles 299.8 meters

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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.

MTRS.
285.5
DIAL

1010 kilocycles 296.8 meters

23		
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CHCK	--	100	1	Charlottetown, P. E. I.
CHCS	--	500	---	Hamilton, Ont.
CKIC	--	50	---	Wolfville, N. S.
-EKOC	*	500	3+	Hamilton, Ont.
CMBW	--	150	---	Havana, Cuba
CMZB	--	150	---	Havana, Cuba
KGGF	†	500	2	S. Coffeyville, Okla.
KQW	*	500	---	San Jose, Cal.
WHN	*	250	1	New York City
WIS	*	500	+C	Columbia, S. C.
WLAP	†	250	C+	Louisville, Ky.
WNAD	*	500	2	Norman, Okla.
WPAP	*	250	1	New York City
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

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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

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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 Buen Tono, S. A.
Ciro Molina

1040 kilocycles 288.3 meters

20		
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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

20		
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KFBI	*	5000	Dn	Milford, Kansas
KNX	*	5000	X	Hollywood, Cal.

Farmers & Bankers Life Insurance Co.
Western Broadcast Co.

INDEX BY FREQUENCIES AND DIAL NUMBERS

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.

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

1070 kilocycles 280.2 meters

CMBG	--	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

18		
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Francisco Garrigo
E. Perera
Antonio Capablanca
Julius Brunton & Sons Co.
Superior Broadcasting Service
James L. Bush
National Broadcasting Co., Inc.

1080 kilocycles 277.6 meters

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

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Station WBT, Inc.
Wilbur Glenn Voliva
Moody Bible Institute

1090 kilocycles 275.1 meters

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

17		
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Voice of St. Louis, Inc.
Antonio Garza Castro

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.

17		
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Jose Caluff
E. F. Peffer
Missionary Society of St. Paul
WPG Broadcasting Corp.

1110 kilocycles 270.1 meters

CMHH	--	15	---	Santa Clara, Cuba
KRSO	*	2500	Dn	Sioux Falls, S. D.
WRVA	*	5000	N	Richmond, Va.

16		
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Laviz y Paz
Sioux Falls Broadcasting Assn., Inc.
Larus & Bros. Co., Inc.

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.
KMCS	*	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

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N. S. Dagleish & 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
Evering Wisconsin Co.
Agricultural & Mech. College

1130 kilocycles 265.3 meters

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

15		
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Radio Service Corp. of Utah
Loyal Order of Moose
International Broadcasting Corp.
Alfonso Zorilla B.
Tarnava y Cia.

1140 kilocycles 263.0 meters

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

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

1150 kilocycles 260.7 meters

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

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

INDEX BY FREQUENCIES AND DIAL NUMBERS

1160 kilocycles 258.5 meters

WOWO * 10900 1C
 WWVA * 5000 1C

Ft. Wayne, Ind.
 Wheeling, W. Va.

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Main Auto Supply Co.
 West Virginia Broadcasting Corp.

1170 kilocycles 256.3 meters

CMKG -- 30 1176
 WCAU -- 10000 C

Santiago de Cuba
 Philadelphia, Pa.

14		
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Ricardo Arnaldo
 Universal Broadcasting Co.

1180 kilocycles 254.1 meters

CMGB -- 7.5 1185
 KEX * 5000 2
 KOB * 2000 2
 WDCY * 1000 1 Dn
 WGBS * 500 --
 WHDI * 500 1 Dn
 WMAZ + 500 --

Matanzas, Cuba
 Portland, Ore.
 State College, N. M.
 Minneapolis, Minn.
 New York City
 Minneapolis, Minn.
 Macon, Ga.

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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

1190 kilocycles 252.0 meters

WOAI * 50000 N

San Antonio, Texas

--	--	--

Southern Equipment Co.

1200 kilocycles 249.9 meters

CMKB -- 15 ---
 KBTM -- 100 D
 KFJB -- 100 +
 KFVF -- 100 5+
 KGDE * 100 +
 KGDY * 100 +
 KGDK * 100 --
 KGEV + 100 9
 KGFJ + 100 9
 KGIH -- 100 ---
 KGY + 100 +
 KMLB -- 100 D
 KSMR -- 100 ---
 KVOS -- 100 ---
 KWG * 100 ---
 WABI + 100 ---
 WABZ * 100 1
 WBBZ * 100 ---
 WBHS -- 50 10CP
 WCAT + 100 ---
 WCAX * 100 2
 WCLO + 100 ---
 WCOD + 100 3
 WEPS + 100 7
 WFAM * 100 8
 WFBC * 50 10
 WFBE -- 100 +
 WHBC + 10 4S
 WHBY + 100 ---
 WIBX * 100 +
 WIL * 100 5+
 WJBC * 100 6
 WJBL * 100 6
 WJBW * 100 1
 WKJC * 100 3
 WLBO * 100 +
 WNB0 * 100 4
 WNBW + 10 2
 WNBX + 10 2
 WORC * 100 7CX
 WRBL + 50 ---
 WVAE * 100 8
 XEA -- 101 ---

Santiago de Cuba
 Paragould, Ark.
 Marshalltown, Iowa
 St. Louis, Mo.
 Fergus Falls, Minn.
 Huron, S. D.
 Yuma, Colo.
 Fort Morgan, Colo.
 Los Angeles, Cal.
 Little Rock, Ark.
 Lacey, Wash.
 Monroe, La.
 Santa Maria, Cal.
 Bellingham, Wash.
 Stockton, Cal.
 Bangor, Maine
 New Orleans, La.
 Ponca City, Okla.
 Huntsville, Ala.
 Rapid City, S. D.
 Burlington, Vt.
 Janesville, Wis.
 Harrisburg, Pa.
 Worcester, Mass.
 South Bend, Ind.
 Knoxville, Tenn.
 Cincinnati, Ohio
 Canton, Ohio
 Green Bay, Wis.
 Utica, N. Y.
 St. Louis, Mo.
 La Salle, Ill.
 Decatur, Ill.
 New Orleans, La.
 Lancaster, Pa.
 Petersburg, Va.
 Washington, Pa.
 Carbondale, Pa.
 Springfield, Vt.
 Worcester, Mass.
 Columbus, Ga.
 Hammond, Ind.
 Guadalaajara, Mexico

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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. Marten's College
 J. C. Limer
 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.
 WLBO, 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

KCYS.
 1210
 MTRS.
 247.8
 DIAL

1210 kilocycles 247.8 meters

CFCO -- 100 ---
 CFNB * 500 ---
 CJOR * 500 ---
 CKMC -- 100 ---
 CKPC -- 50 +
 KDFN + 100 ---

Chatham, Ont.
 Fredericton, N. B.
 Sea Island, B. C.
 Cobalt, Ont.
 Preston, Ont.
 Casper, Wyo.

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

INDEX BY FREQUENCIES AND DIAL NUMBERS

KDLR	†	100	---	Devil's Lake, N. D.	KDLR, Inc.
KFOR	**	100	+	Lincoln, Nebr.	Howard A. Shuman
KFVS	**	100	6	Cape Girardeau, Mo.	Hirsch Battery & Radio Co.
KFXM	†	100	9	San Bernardino, Cal.	J. C. & E. W. Lee
KGCR	†	100	---	Watertown, S. D.	Greater Kampeska Radio Corp.
KGMP	†	100	---	Elk City, Okla.	Bryant Radio & Electric Co.
KGNO	**	100	---	Dodge City, Kansas	Dodge City Broadcasting Co.
KMJ	**	100	---	Fresno, Cal.	James McClatchy Co.
KPPC	**	50	9	Pasadena, Cal.	Pasadena Presbyterian Church
KWEA	**	100	---	Shreveport, La.	Hello World Broadcasting Corp.
WALR	**	100	---	Zanesville, Ohio	Roy W. Waller
WBAX	**	100	1	Wilkes-Barre, Pa.	John H. Stenger, Jr.
WBBL	†	100	7S	Richmond, Va.	Grace Covenant Pres. Church
WCBS	**	100	2	Springfield, Ill.	H. L. Dewing & Chas. Messter
WCOH	**	100	3	Yonkers, N. Y.	Westchester Broadcasting Corp.
WCRW	**	100	4	Chicago, Ill.	Clinton R. White
WDWF	**	100	5	Providence, R. I.	Duttee W. Flint
WEBO	**	100	6	Harrisburg, Ill.	First Trust & Savings Bank
WEDC	**	100	4	Chicago, Ill.	Emil Dememark, Inc.
WGBB	**	100	3	Freeport, N. Y.	Harry H. Carman
WGCM	**	100	---	Gulfport, Miss.	Great Southern Land Co., Inc.
WHBF	**	100	---	Rock Island, Ill.	Beardsley Specialty Co.
WHBU	†	100	---	Anderson, Ind.	Citizens Bank
WIBU	**	100	---	Poynette, Wis.	Wm. C. Forrest
WJBI	**	100	3	Red Bank, N. J.	Monmouth Broadcasting Co.
WJBU	**	100	1	Lewisburg, Pa.	Bucknell University
WJBY	**	100	---	Gadsden, Ala.	Gadsden Broadcasting Co., Inc.
WJW	**	100	---	Mansfield, Ohio	Mansfield Broadcasting Assn.
WLCI	**	50	---	Ithaca, N. Y.	Lutheran Assn. of Ithaca
WLSI	**	100	5	Providence, R. I.	The Lincoln Studios, Inc.
WMBG	**	100	7	Richmond, Va.	Havens & Martin, Inc.
WMRJ	**	100	3	Jamaica, N. Y.	Peter J. Prinz
WOCL	**	25	---	Jamestown, N. Y.	A. E. Newton
WOMT	**	100	---	Manitowoc, Wis.	Francis M. Kadow
WPAW	**	100	5	Pawtucket, R. I.	Shartenburg & Robinson Co.
WQDX	**	100	---	Thomasville, Ga.	Stevens Luke
WRBQ	†	100	+	Greenville, Miss.	J. Pat. Scully
WSBC	**	100	4	Chicago, Ill.	World Battery Co., Inc.
WSEN	†	100	---	Columbus, Ohio	Columbus Broadcasting Co.
WSIX	**	100	---	Springfield, Tenn.	638 Tire & Vulcanizing Co.
WSOC	†	100	---	Gastonia, N. C.	WSOC, Inc.
WTAX	†	100	2	Springfield, Ill.	WTAX, Inc.
XEX	--	500	---	Mexico City	Excelsior, Cia Editorial S. A.

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	
KTW	**	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	1N	Lawrence, Kansas	

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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.

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.	

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12
 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

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.	

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11 1/2
 Francisco Martinez
 Edmundo Recamier
 Mandan Radio Assn.
 John B. Cooley
 S. A. T. Broadcast Co.
 Central Texas Broadcasting Co., Inc.
 Kunsky-Trendle Broadcasting Corp.

1250 kilocycles 239.9 meters

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

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Carleton College
 Nichols & Warinner, Inc.

INDEX BY FREQUENCIES AND DIAL NUMBERS

KIDO † 1000 ---
 WAAM * 1000 1+X
 WCAL * 1000 2
 WDSU † 1000 C
 WGCP † 250 1
 WLB † 1000 2
 WODA † 1000 1
 WRHM * 1000 2
 XEFA -- 250 ---

Boise, Idaho
 Newark, N. J.
 Northfield, Minn.
 New Orleans, La.
 Newark, N. J.
 St. Paul, Minn.
 Paterson, N. J.
 Minneapolis, Minn.
 Mexico City

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

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1260 kilocycles
 KOIL * 1000 C
 KRGV * 500 1
 KVOA † 500 D
 KWWG * 500 1
 -WLBW * 500 C+
 WTOC * 500 C

238.0 meters
 Council Bluffs, Iowa
 Harlingen, Texas
 Tucson, Arizona
 Brownsville, Texas
 Oil City, Pa.
 Savannah, Ga.

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

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1270 kilocycles
 CMJB -- 20 1276
 KGCA † 50 2D
 KOL † 1000 C
 KFOR * 1000 ---
 KWLC * 100 2D
 WASH * 500 1
 WEAT * 1000 D
 WFBR -- 500 ---
 WJDX * 1000 N
 WOOD † 500 1

236.1 meters
 Ciego de Avila, Cuba
 Decorah, Iowa
 Seattle, Wash.
 Colorado Springs, Colo.
 Decorah, Iowa
 Grand Rapids, Mich.
 Ithaca, N. Y.
 Baltimore, Md.
 Jackson, Miss.
 Grand Rapids, Mich.

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.
 Kunsly-Trendle Broadcasting Corp.

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1280 kilocycles
 CMBJ -- 15 1285
 CMBM -- 15 1285
 CMCG -- 30 1285
 CMCH -- 15 1285
 CMCR -- 20 1285
 KFBB * 1000 +
 WCAM * 500 1
 WCAP * 500 1
 WDDO * 1000 +C
 WIBA * 500 +
 WOAX -- 500 1
 WRR † 500 C

234.2 meters
 Havana, Cuba
 Havana, Cuba
 Havana, Cuba
 Havana, Cuba
 Havana, Cuba
 Great Falls, Mont.
 Camden, N. J.
 Asbury Park, N. J.
 Chattanooga, Tenn.
 Madison, Wis.
 Trenton, N. J.
 Dallas, Texas

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

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1290 kilocycles
 KDYL † 1000 C
 KFUL -- 500 1
 KCLN * 50 D
 K TSA † 1000 1+C
 WEBC * 1000 +N
 -WJAS * 1000 C+
 WNBZ -- 50 D

232.4 meters
 Salt Lake City
 Galveston, Texas
 Blytheville, Ark.
 San Antonio, Texas
 Superior, Wis.
 Pittsburgh, Pa.
 Saranac Lake, N. Y.

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

KCYS.
1310
 MTRS.
228.9
 DIAL

1300 kilocycles
 KFAC * 1000 4
 KFH * 1000 2C
 KFJR * 500 3
 KGEF * 1000 4
 KTBR -- 500 3
 WBRR * 1000 1
 WEVD * 500 1
 WHAP * 1000 1
 WHAZ * 500 1
 WIOD * 1000 N
 WOQ * 1000 2
 XETY -- 2000 ---

230.6 meters
 Los Angeles, Cal.
 Wichita, Kansas
 Portland, Ore.
 Los Angeles, Cal.
 Portland, Ore.
 Brooklyn, N. Y.
 New York City
 New York City
 Troy, N. Y.
 Miami, Fla.
 Kansas City, Mo.
 Mexico City

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.

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1310 kilocycles
 KCRJ † 100 ---
 KFBK † 100 ---
 KFGQ † 100 7
 KFIU * 10 ---
 KFJY * 100 7
 KFPL † 100 ---
 KFPM * 15 ---
 KFUP -- 100 8
 KFXJ † 100 8

228.9 meters
 Jerome, Arizona
 Sacramento, Cal.
 Boone, Iowa
 Juneau, Alaska
 Ft. Dodge, Iowa
 Dublin, Texas
 Greenville, Texas
 Denver, Colo.
 Grand Junction, Colo.

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.

INDEX BY FREQUENCIES AND DIAL NUMBERS

KFXR	†	100	+	Oklahoma City	
KGBX	*	100	---	St. Joseph, Mo.	Exchange Ave. Baptist Church
KGCX	†	100	+	Wolf Point, Minn.	KGBX, Inc.
KGEZ	†	100	---	Kalispell, Mont.	First State Bank of Vida
KGFV	†	100	---	Ravenna, Nebr.	Treloar-Church Broadcasting Co.
KIT	†	50	---	Yakima, Wash.	Central Nebraska Broadcasting Corp.
KMED	†	100	---	Medford, Ore.	Carl E. Haymond
KRMD	†	50	9	Shreveport, La.	Mrs. W. J. Virgin
KTLC	*	100	---	Houston, Texas	Robert M. Dean
KTSL	---	100	9	Shreveport, La.	Houston Broadcasting Co.
KTSM	*	100	2	El Paso, Texas	G. A. Houseman
KWCR	†	100	7	Cedar Rapids, Iowa	W. S. Bledsoe & W. T. Blackwell
KXRO	†	100	---	Aberdeen, Wash.	Harry F. Paar
WBEO	---	100	CP	Marquette, Mich.	KXRO, Inc.
WBOW	*	100	---	Terre Haute, Ind.	Lake Superior Broadcasting Co.
WBRE	---	100	---	Wilkes-Barre, Pa.	Banks of Wabash, Inc.
WCLS	*	100	1	Joliet, Ill.	Louis G. Baltimore
WDAH	†	100	2	El Paso, Texas	WCLS, Inc.
WEBR	*	100	+	Buffalo, N. Y.	Bledsoe & Blackwell
WEXL	†	50	---	Royal Oak, Mich.	Howell Broadcasting Co., Inc.
WFBG	*	100	3X	Altoona, Pa.	Royal Oak Broadcasting Co.
WFDF	*	100	---	Flint, Mich.	Wm. F. Gable Co.
WFDV	†	100	D	Rome, Ga.	Frank D. Fallain
WGAL	*	100	5	Lancaster, Pa.	Dolies Goings
WGH	*	100	---	Newport News, Va.	WGAL, Inc.
WHAT	†	100	4	Philadelphia, Pa.	Hampton Roads Broadcasting Corp.
WJAC	*	100	3	Johnstown, Pa.	Independence Broadcasting Co.
WJAK	*	50	6	Marion, Ind.	Johnstown Automobile Co.
WKAV	*	100	---	Laconia, N. H.	Marion Broadcasting Co.
WKBB	*	100	1	Joliet, Ill.	Laconia Radio Club
WKBC	*	100	---	Birmingham, Ala.	Sanders Bros. Radio Station
WKBS	*	100	---	Galesburg, Ill.	R. B. Broyles Furniture Co.
WLBC	†	50	6	Muncie, Ind.	Permil N. Nelson
WMBO	†	100	---	Auburn, N. Y.	Donald A. Burton
WNBH	*	100	---	New Bedford, Mass.	Radio Service Laboratories
WOBT	†	100	+	Jackson, Tenn.	New Bedford Broadcasting Co.
WOL	---	100	---	Washington, D. C.	Sun Publishing Co.
WRAW	*	100	5X	Reading, Pa.	American Broadcasting Co.
WROL	†	100	---	Knoxville, Tenn.	Reading Broadcasting Co.
WSAJ	*	100	---	Grove City, Pa.	Stewart Broadcasting Co.
WSJS	*	100	---	Winston-Salem, N. C.	Grove City College
WTEL	*	100	4	Philadelphia, Pa.	Winston-Salem Journal Co.

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.	

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.		

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	

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

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	
KFPV	†	50	D	Fort Smith, Ark.	
KFPY	*	1000	C	Spokane, Wash.	
WCOA	*	500	---	Pensacola, Fla.	
WSPD	*	1000	C	Toledo, Ohio	

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

1350 kilocycles 222.1 meters

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

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
KGER	*	1000	---
KGIR	†	500	---
WCSC	*	500	---
WFBL	*	1000	CX
WGES	*	500	1+
WJKS	*	1000	1+
WQBC	†	500	D
XETO	--	101	---

Holguin, Cuba
Long Beach, Cal.
Butte, Montana
Charleston, S. C.
Syracuse, N. Y.
Chicago, Ill.
Gary, Ind.
Vicksburg, Miss.
Mexico City

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

1370 kilocycles 218.7 meters

CMAC	--	30	1375
CMGE	--	30	1375
KCRC	†	100	2+
KFBL	*	50	3
KFJI	†	100	---
KFJM	†	100	---
KFJZ	*	100	---
KFLX	*	100	---
KGAR	*	100	+
KGDA	†	100	---
KGFG	†	100	2
KGFL	†	50	---
KGKL	†	100	---
KMAC	†	100	5
KONO	†	100	5
KOOS	*	100	---
KRE	--	100	6
KUJ	†	100	---
KVL	--	100	3
KWKC	--	100	---
WBGF	†	50	---
WBTM	†	100	7
WCBM	*	100	+Z
WELK	†	100	+
WGL	*	100	C
WHBD	†	100	---
WHBQ	†	100	---
WHDF	†	100	+
WIBM	--	100	1
WJBK	*	50	1
WJTL	--	100	---
WLEY	--	100	+
WLVA	†	100	7
WMBR	†	100	---
WPOE	†	100	---
WQDM	†	100	D
WRAC	*	100	---
WRAM	*	100	---
WRBJ	†	10	---
WRDO	†	100	CP
WRJN	†	100	---
WSVS	*	50	---

Pinar del Rio, Cuba
Cardenas, Cuba
Enid, Okla.
Everett, Wash.
Astoria, Ore.
Grand Forks, N. D.
Ft. Worth, Texas
Galveston, Texas
Tucson, Arizona
Mitchell, S. D.
Oklahoma City
Raton, N. M.
San Angelo, Texas
San Antonio, Texas
San Antonio, Texas
Marshfield, Ore.
Berkeley, Cal.
Walla Walla, Wash.
Seattle, Wash.
Kansas City, Mo.
Glens Falls, N. Y.
Danville, Va.
Baltimore, Md.
Philadelphia, Pa.
Fort Wayne, Ind.
Mount Orab, Ohio
Memphis, Tenn.
Calumet, Mich.
Jackson, Mich.
Detroit, Mich.
Tifton, Ga.
Lexington, Mass.
Lynchburg, Va.
Tampa, Fla.
Patchogue, N. Y.
St. Albans, Vt.
Williamsport, Pa.
Wilmington, N. C.
Hattiesburg, Miss.
Augusta, Maine
Racine, Wis.
Buffalo, N. Y.

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Oscar S. Mechoso
Genaro Sebater
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

1380 kilocycles 217.3 meters

KOH	†	500	C
KQV	†	500	2
KSO	*	500	1
WKBH	*	1000	1
WSMK	*	200	2

Reno, Nevada
Pittsburgh, Pa.
Clarinda, Iowa
La Crosse, Wis.
Dayton, Ohio

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

KCYS.

1400

MTRS.

214.2

DIAL

1390 kilocycles 215.7 meters

KLRA	*	1000	1C
KOY	*	500	---
KUOA	†	1000	1
WHK	*	1000	C

Little Rock, Ark.
Phoenix, Arizona
Fayetteville, Ark.
Cleveland, Ohio

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

1400 kilocycles 214.2 meters

CMBI	--	30	1405
CMBK	--	15	1405
CMBN	--	30	1405
CMBQ	--	50	1405
CMBX	--	30	1405
CMBY	--	100	1405
KLO	*	500	---

Havana, Cuba
Havana, Cuba
Havana, Cuba
Havana, Cuba
Havana, Cuba
Havana, Cuba
Ogden, Utah

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

INDEX BY FREQUENCIES AND DIAL NUMBERS

KOCW	*	250	+	Chickasha, Okla.
WBAA	†	500	1+	Lafayette, Ind.
WBBC	*	500	2	Brooklyn, N. Y.
WCGU	*	500	2	Brooklyn, N. Y.
WCMA	†	500	1	Culver, Ind.
WFOX	--	500	2	Brooklyn, N. Y.
WKBF	†	500	1	Indianapolis, Ind.
WLTH	*	500	2	Brooklyn, N. Y.
XEP	--	2500	--	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

1410 kilocycles 212.6 meters

KFLV	†	500	4	Rockford, Ill.
KGRS	*	1000	1	Amarillo, Texas
WAAB	*	500	C	Boston, Mass.
WBCM	*	500	C	Bay City, Mich.
WDAG	*	1000	1	Amarillo, Texas
WHBL	*	500	4	Sheboygan, Wis.
WHIS	†	250	--	Bluefield, W. Va.
WODX	*	500	3	Mobile, Ala.
WRBX	*	250	--	Roanoke, Va.
WSFA	†	500	3	Montgomery, Ala.

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.

1420 kilocycles 211.1 meters

KABC	†	100	--	San Antonio, Texas
KBPS	--	100	4	Portland, Ore.
KFTZ	*	100	--	Fond du Lac, Wis.
KEFD	*	100	--	Nampa, Idaho
KFNX	--	100	--	Flagstaff, Arizona
KFYO	†	100	+	Abilene, Texas
KGFF	†	100	--	Shawnee, Okla.
KGCC	†	100	5	San Francisco, Cal.
KGIV	†	100	--	Trinidad, Colo.
KGIX	†	100	--	Las Vegas, Nevada
KGKX	†	100	--	Sand Point, Idaho
KGVO	†	100	D	Missoula, Montana
KICK	*	100	--	Red Oak, Iowa
KOREJ	*	100	--	Eugene, Ore.
KXL	*	100	4	Portland, Ore.
KXYZ	--	100	--	Houston, Texas
WAGM	--	100	CP	Presque Isle, Maine
WDEV	--	50	D	Waterbury, Vt.
WEDH	*	100	--	Eric, Pa.
WEHS	--	100	2	Cicero, Ill.
WELL	†	50	X	Battle Creek, Mich.
WFDW	*	100	--	Anniston, Ala.
WHDL	*	100	D	Tupper Lake, N. Y.
WHFC	†	100	2	Cicero, Ill.
WIAS	†	100	--	Ottumwa, Iowa
WIBR	*	50	--	Steubenville, Ohio
WILM	*	100	--	Wilmington, Del.
WJBO	*	100	--	New Orleans, La.†
WJMS	--	100	CPD	Ironwood, Mich.
WKBI	*	100	2	Cicero, Ill.
WLBF	†	100	--	Kansas City, Kansas
WMBG	*	100	+	Detroit, Mich.
WMBH	--	100	+	Joplin, Mo.
WPAD	†	100	--	Paducah, Ky.
WSPA	*	100	+	Spartanburg, S. C.
WTBO	*	100	+	Cumberland, Md.

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
Eric 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.
WLBF Broadcasting Co.
Michigan Broadcasting Co., Inc.
Edwin Dudley Aber
Paducah Broadcasting Co.
Voice of South Carolina
Associated Broadcasting Corp.

1430 kilocycles 209.7 meters

KECA	†	1000	N	Los Angeles, Cal.
KGNF	†	500	D	North Platte, Nebr.
WBKA	†	500	1+	Harrisburg, Pa.
WCAH	*	500	C	Columbus, Ohio
WFEA	--	500	CP	Manchester, N. H.
WGBC	*	500	2S	Memphis, Tenn.
WHP	*	500	1C+	Harrisburg, Pa.
WNBR	*	500	2	Memphis, Tenn.

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.

1440 kilocycles 208.2 meters

KLS	*	250	D	Oakland, Cal.
WBIG	*	500	--	Greensboro, N. C.
WCBA	*	250	1	Allentown, Pa.
WHEC	*	500	2C	Rochester, N. Y.

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

INDEX BY FREQUENCIES AND DIAL NUMBERS

WMBD	*	500	3+	Peoria Heights, Ill.
WOKO	†	500	2C	Albany, N. Y.
WSAN	*	250	1	Allentown, Pa.
WTAD	†	500	3	Quincy, Ill.

Peoria Broadcasting Co.
WOKO, Inc.
Allentown Call Publishing Co., Inc.
Ills. Stock Medicine Broadcasting Co.

1450 kilocycles 206.8 meters

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CMKA		20	---	Santiago de Cuba
KTBS	*	1000	---	Shreveport, La.
WBMS	*	250	1	Hackensack, N. J.
WGAR	†	500	N	Cleveland, Ohio
WHOM	*	500	1	Jersey City, N. J.
WKBO	*	250	1	Jersey City, N. J.
WNJ	*	250	1	Newark, N. J.
WSAR	*	250	---	Fall River, Mass.
WTFI	--	500	Y	Toccoa, Ga.

Arturio 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

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KSTP	*	10000	N	St. Paul, Minn.
WJSV	*	10000	---	Alexandria, Va.

National Battery Broadcasting Co.
Independent Publishing Co.

1470 kilocycles 204.0 meters

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KGA	†	5000	---	Spokane, Wash.
WLAC	*	5000	C	Nashville, Tenn.

Northwest Broadcasting System, Inc.
Life & Casualty Insurance Co.

1480 kilocycles 202.6 meters

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KFJF	*	5000	C	Oklahoma City
WKBW	*	5000	C	Buffalo, N. Y.

National Radio Mfg. Co.
Buffalo Broadcasting Co., Lessees

1490 kilocycles 201.2 meters

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TJW	--	7.5	---	Hamilton, Bermuda
WCHI	*	5000	1	Chicago, Ill.
WCKY	*	5000	1N	Covington, Ky.
WJAZ	--	5000	1	Chicago, Ill.

People's Pulpit Association
L. B. Wilson, Inc.
Zenith Radio Corp.

1500 kilocycles 199.9 meters

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CMBL	--	15	---	Havana, Cuba
CMBR	--	15	---	Havana, Cuba
CMCM	--	15	---	Havana, Cuba
CMCT	--	5	---	Havana, Cuba
KDB	*	100	---	Santa Barbara, Cal.
KGFI	*	100	+	Corpus Christi, Texas
KGFK	†	50	---	Moorhead, Minn.
KGIZ	†	100	---	Grant City, Mo.
KGKB	--	100	---	Tyler, Texas
KGKY	--	100	---	Scottsbluff, Nebr.
KPJM	*	100	---	Prescott, Arizona
KPO	†	50	---	Wenatchee, Wash.
KREG	†	100	---	Santa Ana, Cal.
KUT	†	100	---	Austin, Texas
KXO	*	100	---	El Centro, Cal.
WDIX	--	100	---	Tupelo, Miss.
WKBV	†	100	+	Connersville, Ind.
WKBZ	†	50	---	Ludington, Mich.
WLBX	*	100	1	Long Island City, N. Y.
WLOE	*	100	+	Boston, Mass.
WMBA	†	100	---	Newport, R. I.
WMBQ	*	100	1	Brooklyn, N. Y.
WMIL	--	100	1	Brooklyn, N. Y.
WMPC	†	100	---	Lapeer, Mich.
WNOF	*	100	---	Binghamton, N. Y.
WOPJ	*	100	---	Bristol, Tenn.
WPEN	*	100	+	Philadelphia, Pa.
WRDW	*	100	---	Augusta, Ga.
WSYB	†	100	---	Rutland, Vt.
WWRJ	*	100	1	Woodside, N. Y.
WWSW	--	100	---	Pittsburgh, Pa.

Julio C. Hidalgo
Tomas Basail
Martinez y Madico
Alberto Fernandez
Dwight Faulding
Eagle Broadcasting Co., Inc.
Red River Broadcasting Co., Inc.
Grant City Park Corp.
Eagle Publishing Co.
Hilliard Co., Inc.
A. P. Miller
Wescoast Broadcasting Co.
Pacific Western Broadcasting
Driskill Hotel
E. R. Irey and F. M. Bowles
North Mississippi Broadcasting Corp.
Knox Battery & Electric Co.
K. L. Ashbacher
John N. Brahy
Boston Broadcasting Co.
LeRoy Joseph Beebe
Paul J. Gollhofer
Arthur Faske
First M. P. Church
Howitt, Wood Radio Co., Inc.
Radiophone Brdcastg. Station, Inc.
Wm. Penn Broadcasting Co.
Musicove, Inc.
Philip Weiss Music Co.
Long Island Broadcasting Corp.
William S. Walker

KCY.S.
1500
MTRS.
199.9
DIAL

INDEX BY LOCATIONS WITH MAP KEY

ALABAMA		Watts	Kcys.		
Anniston O-22	100	WFDW	1420	San Jose J-1	500 KQW 1010
Birmingham O-21	5000	WAPI	1140	Santa Ana M-3	100 KREG 1500
	500	WBRC	930	Santa Barbara M-2	100 KDB 1500
	100	WKBC	1310	Santa Maria L-2	100 KSMR 1200
Gadsen O-21	100	WJBY	1210	Stockton J-2	250 KGDM 1100
Huntsville N-21	50	WBHS	1200		100 KWG 1200
Mobile Q-20	500	WODX	1410	COLORADO	
Montgomery P-21	500	WSFA	1410	Colorado Springs K-11	1000 KVOR 1270
ALASKA				Denver K-11	500 KFEL 920
Anchorage	100	KFQD	1230		100 KFUP 1310
Juneau	10	KFIU	1310		500 KFXF 920
Ketchikan	500	KGBU	900		1000 KLZ 560
ARIZONA					12500 KOA 830
Flagstaff M-7	100	KFXY	1420		500 KPOF 880
Jerome M-6	100	KCRJ	1310	Fort Morgan J-11	100 KGEW 1200
Phoenix N-6	500	KOY	1390	Grand Junction K-9	100 KFJX 1310
	500	KTAR	620	Greeley J-11	500 KFKA 880
Prescott M-6	100	KPJM	1500	Pueblo L-11	250 KGHF 1320
Tucson O-7	100	KGAR	1370	Trinidad L-11	100 KGIV 1420
	500	KVOA	1260	Yuma J-12	100 KGEK 1200
ARKANSAS				CONNECTICUT	
Blytheville M-19	50	KLCN	1290	Bridgeport H-27	250 WICC 600
Fayetteville M-16	1000	KUOA	1390	Hartford H-27	500 WDRC 1330
Fort Smith N-16	50	KFPW	1340		50000 WTIC 660-1060
Hot Springs N-17	10000	KTHS	1040	Storrs H-28	250 WCAC 600
Little Rock N-17	100	KGHI	1200	DELAWARE	
	250	KGJF	890	Wilmington J-26	250 WDEL 1120
	1000	KLRA	1390		100 WILM 1420
Paragould M-18	100	KBTM	1200	DISTRICT OF COLUMBIA	
CALIFORNIA				Washington J-26	250 WMAL 630
Berkeley J-2	100	KRE	1370		500 WRC 950
Burbank M-3	500	KELW	780		100 WOL 1310
Culver City M-3	250	KFVD	1000	FLORIDA	
El Centro N-4	100	KXO	1500	Clearwater R-24	1000 WFLA 620
Fresno K-2	100	KMJ	1210	Gainesville Q-24	5000 WRUF 830
Hollywood M-3	1000	KFWB	950	Jacksonville Q-24	1000 WJAX 900
	500	KNX	1050	Miami T-25	1000 WIOD 1300
Inglewood M-3	500	KMCS	1120		1000 WQAM 560
Long Beach M-3	1000	KFOX	1250	Orlando R-24	500 WDBO 1120
	1000	KGER	1360	Pensacola Q-21	500 WCOA 1340
Los Angeles M-3	1000	KECA	1430	St. Petersburg S-24	1000 WSUN 620
	1000	KFAC	1300	Tampa R-24	1000 WDAE 1220
	50000	KFI	640		100 WMBR 1370
	500	KFSG	1120	GEORGIA	
	1000	KGEF	1300	Atlanta O-22	250 WGST 890
	100	KGfJ	1200		5000 WSB 740
	1000	KHJ	900	Augusta O-23	100 WRDW 1500
	500	KMPC	710	Columbus O-22	50 WRBL 1200
	500	KMTR	570	Macon O-23	500 WMAZ 1180
	500	KTM	780	Rome N-22	100 WFVZ 1310
Oakland J-1	250	KLS	1440	Savannah O-24	500 WTOG 1260
	500	KLX	880	Thomasville Q-22	100 WQDX 1210
	500	KROW	930	Tifton P-23	100 WJTL 1370
	50	KPPC	1210	Toccoa N-23	500 WTFI 1450
Pasadena M-3	100	KFBK	1310	HAWAII	
Sacramento J-2	100	KFXM	1210	Honolulu	250 KGMB 1320
San Bernardino M-3	500	KFSD	600		1000 KGU 940
San Diego N-3	500	KGB	1330	IDAHO	
San Francisco J-1	1000	KFRC	610	Boise G-5	1000 KIDO 1250
	500	KFWI	930	Idaho Falls G-7	250 KID 1320
	100	KGCC	1420	Nampa G-5	50 KFND 1420
	7500	KGO	790	Pocatello H-7	250 KSEI 900
	100	KJBS	1070	Sand Point D-6	100 KGKX 1420
	5000	KPO	680	Twin Falls H-6	250 KTFI 1320
	1000	KTAB	560		
	1000	KYA	1230		

INDEX BY LOCATIONS WITH MAP KEY

ILLINOIS		Watts	Keys.			Shenandoah J-16	500	KFNF	890
Carthage J-18	50	WCAZ	1070	Sioux City I-15	1000	KSCJ	1330		
Chicago I-20	10000	KFKX	1020	Waterloo I-17	500	WMT	600		
	10000	KYW	1020	KANSAS					
	500	WAAF	920	Dodge City L-13	100	KGNO	1210		
	25000	WBBM	770	Kansas City K-16	100	WLFB	1420		
	1500	WCFI	970	Lawrence K-16	500	KFKU	1220		
	5000	WCHI	1490		1000	WREN	1220		
	100	WCRW	1210	Manhattan K-15	500	KSAC	580		
	100	WEDC	1210	Milford K-14	5000	KFBI	1050		
	50000	WENR	870	Topeka K-16	1000	WIBW	580		
	500	WGES	1360	Wichita L-15	1000	KFH	1300		
	25000	WGN	720	KENTUCKY					
	1000	WIBO	560	Covington K-22	5000	WCKY	1490		
	5000	WJAZ	1490	Hopkinsville M-20	1000	WFIW	940		
	25000	WJBT	770	Louisville L-21	10000	WLAS	820		
	5000	WLS	870		250	WLP	1010		
	5000	WMAQ	670	Paducah M-19	100	WPAD	1420		
	5000	WMBI	1080	LOUISIANA					
	500	WPCC	560	Monroe P-18	100	KMLB	1200		
	100	WBCB	1210	New Orleans R-19	100	WABZ	1200		
Cicero I-20	100	WEHS	1420		1000	WDSU	1250		
	100	WHFC	1420		100	WJBO	1420		
	100	WKBI	1420		100	WJBW	1200		
Decatur K-19	100	WJBL	1200		500	WSMB	1320		
Galesburg J-18	100	WKBS	1310		5000	WML	850		
Harrisburg L-19	100	WBEQ	1210	Shreveport P-17	50	KRMD	1310		
Joliet I-19	100	WCLS	1310		1000	KTBS	1450		
	100	WKBB	1310		100	KTSL	1310		
La Salle J-19	100	WJBC	1200		100	KWEA	1210		
Mooseheart I-19	20000	WJJD	1130		10000	KWKH	850		
Peoria Heights J-19	500	WMBD	1440	MAINE					
Quincy K-18	500	WTAD	1440	Augusta F-28	100	WRDO	1370		
Rockford I-19	500	KFLV	1410	Bangor F-29	100	WABI	1200		
Rock Island I-18	100	WHBF	1210		500	WLBZ	620		
Springfield K-19	100	WCBS	1210	Portland F-28	1000	WCSH	940		
	100	WTAX	1210	Presque Isle D-29	100	WAGM	1420		
	100	WDZ	1070	MARYLAND					
Tuscola K-20	200	WILL	890	Baltimore J-26	10000	WBAL	760-1060		
Urbana J-20	250	WCB	1080		250	WCAO	600		
Zion I-20	5000	WCB	1080		100	WCBM	1370		
					500	WFBR	1270		
				Cumberland J-25	100	WTBO	1420		
INDIANA				MASSACHUSETTS					
Anderson J-21	100	WHBU	1210	Boston G-28	500	WAAB	1410		
Connersville K-21	100	WKBY	1500		1000	WBIS	1230		
Culver I-20	500	WCMA	1400		1000	WEEL	590		
Evansville L-20	500	WGBF	630		1000	WHDH	830		
Fort Wayne J-21	100	WGL	1370		100	WLOE	1500		
	10000	WOWO	1160		1000	WNAC	1230		
Gary I-20	1000	WJKS	1360	Fall River H-28	250	WSAR	1450		
Hammond I-20	100	WVAE	1200		100	WLEY	1370		
Indianapolis J-21	1000	WFBN	1230		500	WBSO	920		
	500	WKBF	1400	Needham G-28	500	WNBH	1310		
Lafayette J-20	500	WBA	1400	New Bedford H-28	100	WBZ-A	990		
Marion J-21	50	WJAK	1310	Springfield H-27	15000	WEPS	1200		
Muncie J-21	50	WLCB	1310	Worcester G-28	100	WORC	1200		
South Bend I-20	100	WFAM	1200		250	WTAG	580		
	500	WSBT	1230	MICHIGAN					
Terre Haute K-20	100	WBOW	1310	Battle Creek I-21	50	WELL	1420		
				Bay City H-22	500	WBCM	1410		
IOWA				Calumet E-19	100	WHDF	1370		
Ames I-17	5000	WOI	640	Detroit H-22	50	WJBK	1370		
Boone I-17	100	KFGQ	1310		5000	WJR	750		
Cedar Rapids I-18	100	KWCR	1310		100	WMBC	1420		
Clarinda J-16	500	KSO	1380						
Council Bluffs J-16	1000	KOIL	1260						
Davenport I-18	5000	WOC	1000						
Decorah H-18	50	KGCA	1270						
	100	KWLC	1270						
Des Moines I-17	5000	WHO	1000						
Fort Dodge I-16	100	KFJY	1310						
Iowa City I-18	500	WSUI	880						
Marshalltown I-17	100	KFJB	1200						
Ottumwa J-17	100	WIAS	1420						
Red Oak J-16	100	KICK	1420						

INDEX BY LOCATIONS WITH MAP KEY

Detroit H-22	1000	WWJ	920
	1000	WXYZ	1240
East Lansing H-21	1000	WKAR	1040
Flint H-22	100	WDFD	1310
Grand Rapids H-21	500	WASH	1270
	500	WOOD	1270
Ironwood F-18	100	WJMS	1420
Jackson I-21	100	WIBM	1370
Kalamazoo I-21	1000	WKZO	590
Lapeer H-22	100	WMPG	1500
Ludington H-20	50	WKBB	1500
Marquette F-19	100	WBEO	1310
Royal Oak H-22	50	WEXL	1310

MINNESOTA

Fergus Falls F-15	100	KGDE	1200
Minneapolis G-17	5000	WCCO	810
	1000	WDGY	1180
	500	WHDI	1180
	1000	WRHM	1250
Moorhead F-15	50	KGFK	1500
Northfield G-17	1000	KFMX	1250
	1000	WCAL	1250
St. Paul G-17	1000	WLB	1250
	10000	KSTP	1460

MISSISSIPPI

Greenville O-18	100	WRBQ	1210
Gulfport Q-19	100	WGCM	1210
Hattiesburg Q-19	10	WRBJ	1370
Jackson P-19	1000	WJDX	1270
Meridian P-20	500	WCOC	880
Tupelo N-20	100	WDIX	1500
Vicksburg P-18	500	WQBC	1360

MISSOURI

Cp. Girardeau L-19	100	KFVS	1210
Columbia K-17	500	KFRU	630
Grant City J-16	100	KGIZ	1500
Jefferson City L-17	500	WOS	630
Joplin M-16	100	WMBH	1420
Kansas City K-16	1000	KMBC	950
	100	KWKC	1370
	1000	WDAF	610
	500	WHB	860
	1000	WOO	1300
St. Joseph K-16	2500	KFEQ	680
	100	KGBX	1310
St. Louis L-18	500	KFUO	550
	100	KFWF	1200
	50000	KMOX	1090
	500	KSD	550
	1000	KWK	1350
	1000	WEW	760
	100	WIL	1200

MONTANA

Billings F-9	1000	KGHL	950
Butte F-7	500	KGIR	1360
Great Falls E-8	1000	KFBB	1280
Kalispell D-7	100	KGEZ	1310
Missoula E-7	100	KGVO	1420
Wolf Point E-11	100	KGCX	1310

NEBRASKA

Clay Center J-14	1000	KMMJ	740
Lincoln J-15	5000	KFAB	770
	100	KFOR	1210
	500	WCAJ	590
Norfolk I-15	1000	WJAG	1060
North Platte J-13	500	KGNF	1430
Omaha J-15	500	WAAW	660
	1000	WOW	590
Ravenna J-14	100	KGEW	1310
Scottsbluff I-11	100	KGKY	1500
York J-15	500	KGBZ	930

NEVADA

Las Vegas L-5	100	KGIX	1420
Reno I-3	500	KOH	1380

NEW HAMPSHIRE

Laconia G-28	100	WKAV	1310
Manchester G-28	500	WFEA	1430

NEW JERSEY

Asbury Park I-27	500	WCAP	1280
Atlantic City J-27	5000	WPG	1100
Camden I-26	500	WCAM	1280
Hackensack I-27	250	WBMS	1450
Jersey City I-27	300	WAAT	940
	500	WHOM	1450
	250	WKBO	1450
Newark I-27	1000	WAAM	1250
	250	WGCP	1250
	250	WNJ	1450
	5000	WOR	710
Paterson I-27	1000	WODA	1250
Red Bank I-27	100	WJBI	1210
Trenton I-26	500	WOAX	1280
Zarephath I-27	250	WAWZ	1350

NEW MEXICO

Albuquerque N-7	250	KGGM	1230
Raton M-11	50	KGFL	1370
State College P-9	20000	KOB	1180

NEW YORK

Albany H-27	500	WOKO	1440
Auburn H-25	100	WMBO	1310
Binghamton H-26	100	WNBF	1500
Brooklyn I-27	500	WBBC	1400
	1000	WBRR	1300
	500	WCGU	1400
	500	WFOX	1400
	500	WLTH	1400
	100	WMBQ	1500
	100	WMIL	1500
Buffalo H-24	1000	WBEN	900
	100	WBR	1310
	1000	WGR	550
	5000	WKBW	1480
	1000	WMAK	1040
	50	WSVS	1370
Canton F-26	500	WCAD	1220
Freeport I-27	100	WGBB	1210
Glens Falls G-27	50	WBGF	1370
Ithaca H-25	1000	WEAT	1270
	50	WLGI	1210
	100	WMRJ	1210
Jamaica H-27	25	WOCL	1210
Jamestown H-24	100	WLTX	1500
Long Island City I-27	5000	WABC	860
New York City I-27	250	WBNX	1350
	5000	WBOQ	860
	250	WCDA	1350
	50000	WEAF	660
	500	WEVD	1300
	500	WGBS	1180
	1000	WHAP	1300
	250	WHN	1010
	30000	WJZ	760
	5000	WLWL	1100
	500	WMCA	570
	250	WMSG	1350
	500	WNYC	570
	1000	WOV	1130
	250	WPAP	1010
	500	WPCH	810
	250	WQAO	1010
	250	WRNY	1010

INDEX BY LOCATIONS WITH MAP KEY

Patchogue I-27	100	WPOE	1370
Rochester G-25	5000	WHAM	1150
	500	WHEC	1440
Saranac Lake F-26	50	WNBZ	1290
Schenectady G-27	50000	WGY	790
Syracuse G-25	1000	WFBL	1360
	250	WMAC	570
	250	WSYR	570
Troy G-27	500	WHAZ	1300
Tupper Lake F-26	100	WHDL	1420
Utica G-26	100	WIBX	1200
Woodside I-27	100	WWRL	1500
Yonkers I-27	100	WCOH	1210

NORTH CAROLINA

Asheville M-23	1000	WWNC	570
Charlotte M-24	5000	WBT	1080
Gastonia M-24	100	WSOC	1210
Greensboro M-24	500	WBG	1440
Raleigh M-25	1000	WPTF	680
Wilmington N-26	100	WRAM	1370
Winston-Salem M-24	100	WSJS	1310

NORTH DAKOTA

Bismarck F-13	1000	KFYR	550
Devils Lake E-14	100	KDLR	1210
Fargo F-15	1000	WDAY	940
Grand Forks E-15	100	KFJM	1370
Mandan F-13	100	KGCU	1240
Minot E-13	100	KLPM	1240

OHIO

Akron I-23	1000	WADC	1320
Canton I-23	10	WHCB	1200
Cincinnati K-22	100	WBFE	1200
	1000	WKRC	550
	50000	WLW	700
Cleveland I-23	500	WSAI	1330
	500	WGAR	1450
	1000	WHK	1390
	500	WJAY	610
Columbus J-22	50000	WTAM	1070
	500	WAIU	640
	500	WCAH	1430
	750	WEO	570
	100	WSEN	1210
Dayton J-22	200	WSMK	1380
Mansfield J-22	100	WJW	1210
Mount Orab K-22	100	WHBD	1370
Steuvenville J-23	50	WIBR	1420
Toledo I-22	1000	WSPD	1340
Youngstown I-23	500	WKBN	570
Zanesville J-23	100	WALR	1210

OKLAHOMA

Chickasha N-14	250	KOCW	1400
Elk City N-13	100	KGMP	1210
Enid M-14	100	KCRC	1370
Norman N-15	500	WNAD	1010
Oklahoma N-15	5000	KFJF	1480
	100	KFXR	1310
	100	KGFG	1370
	1000	WKY	900
Ponca City M-15	100	WBBZ	1200
S. Coffeyville M-15	500	KGGF	1010
Shawnee N-15	100	KGGF	1420
Tulsa M-15	5000	KVOO	1140

OREGON

Astoria D-2	100	KFJI	1370
Corvallis E-2	1000	KOAC	550
Eugene F-2	100	KORE	1420
Marshfield F-1	100	KOOS	1370

Medford G-2	100	KMED	1310
Portland E-3	5000	KEX	1180
	100	KBPS	1420
	500	KFJR	1300
	1000	KGW	620
	1000	KOIN	940
	500	KTBR	1300
	500	KWJJ	1060
	100	KXL	1420

PENNSYLVANIA

Allentown I-26	250	WCBA	1440
	250	WSAN	1440
Altoona I-25	100	WFBG	1310
Carbondale H-26	10	WNBW	1200
Elkins Park I-26	25	WIBG	930
Erie H-24	100	WEDH	1420
Grove City I-24	100	WSAJ	1310
Harrisburg I-25	500	WBAK	1430
	100	WCOD	1200
	500	WHIP	1430
Johnstown J-24	100	WJAC	1310
Lancaster I-26	100	WGAL	1310
	100	WKJC	1200
Lewisburg I-26	100	WJBU	1210
Oil City I-24	500	WLBW	1260
Philadelphia I-26	10000	WCAU	1170
	100	WELK	1370
	500	WFAN	610
	500	WFI	560
	100	WHAT	1310
	500	WIP	610
	500	WLIT	560
	100	WPEN	1500
	250	WRAX	1020
	100	WTEL	1310
Pittsburgh J-24	50000	KDKA	980
	500	KQV	1380
	1000	WCAE	1220
	1000	WJAS	1290
	100	WVSW	1500
Reading I-26	1000	WEEU	830
	100	WRAW	1310
Scranton H-26	250	WGBI	880
	250	WQAN	880
State College I-25	500	WPSC	1230
Washington J-24	100	WNBO	1200
Wilkes-Barre I-26	100	WBAX	1210
	100	WBRE	1310
Williamsport I-25	100	WRAC	1370

PORTO RICO

San Juan W-34	250	WKAQ	890
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RHODE ISLAND

Newport H-28	100	WMBA	1500
Pawtucket H-28	100	WPAW	1210
Providence H-28	100	WDWF	1210
	250	WEAN	780
	250	WJAR	890
	100	WLSI	1210

SOUTH CAROLINA

Charleston O-25	500	WCSC	1360
Columbia N-24	500	WIS	1010
Spartanburg N-23	100	WSPA	1420

SOUTH DAKOTA

Brookings H-15	500	KFDY	550
Huron H-14	100	KGDY	1200
Mitchell H-14	100	KGDA	1370
Pierre G-13	200	KGFX	550
Rapid City H-12	100	WCAT	1200
Sioux Falls H-15	2500	KSOO	1110

INDEX BY LOCATIONS WITH MAP KEY

Vermillion I-15	500	KUSD	890
Watertown G-15	100	KGCR	1210
Yankton I-15	1000	WNAX	570

TENNESSEE

Bristol L-23	100	WOPI	1500
Chattanooga N-21	1000	WDOD	1280
Jackson N-20	100	WOBT	1310
Knoxville M-22	50	WFBC	1200
	1000	WNOX	560
	100	WROL	1310
Memphis N-19	500	WGBC	1430
	100	WHBQ	1370
	500	WMC	780
	500	WNBR	1430
	500	WREC	600
Nashville M-21	5000	WLAC	1470
	5000	WSM	650
Springfield M-20	100	WSIX	1210

TEXAS

Abilene P-13	100	KFYO	1420
Amarillo N-12	1000	KGRS	1410
	1000	WDAG	1410
	100	KUT	1500
Austin Q-14	500	KFDM	560
Beaumont R-17	500	KWWG	1260
Brownsville U-15	500	WTAW	1120
College Sta. Q-15	100	KGFI	1500
Corpus Christi S-14	10000	KRLD	1040
Dallas P-15	50000	WFAA	800
	500	WRR	1280
Dublin P-14	100	KFPL	1310
El Paso P-9	100	KTSM	1310
	100	WDAH	1310
Fort Worth P-15	100	KFJZ	1370
	1000	KTAT	1240
	10000	WBAP	800
Galveston R-16	100	KFLX	1370
	500	KFUL	1290
Greenville Q-15	15	KFPM	1310
Harlingen T-14	500	KRGV	1260
Houston R-16	1000	KPRC	920
	100	KTLC	1310
	500	KTRH	1120
	100	KXYZ	1420
San Angelo Q-13	100	KGKL	1370
San Antonio R-14	100	KABC	1420
	100	KMAC	1370
	100	KONO	1370
	1000	KTSA	1290
	50000	WOAI	1190
Tyler P-16	100	KGKB	1500
Waco Q-15	1000	WACO	1240
Wichita Falls O-14	250	KGKO	570

UTAH

Ogden I-7	500	KLO	1400
Salt Lake City I-7	1000	KDYL	1290
	5000	KSL	1130

VERMONT

Burlington F-27	100	WCAX	1200
Rutland G-27	100	WSYB	1500
St. Albans F-27	100	WQDM	1370
Springfield G-27	10	WNBX	1200
Waterbury F-27	50	WDEV	1420

VIRGINIA

Alexandria K-26	10000	WJSV	1460
Arlington J-25	1000	NAA	690
Danville L-25	100	WBTM	1370
Emory L-23	500	WBHT	1350
Lynchburg L-25	100	WLVA	1370
Newport News L-26	100	WGH	1310
Norfolk L-26	500	WPOR	780
	500	WTAR	780

Petersburg L-26	100	WLBG	1200
Richmond K-26	100	WBBL	1210
	100	WMBG	1210
	5000	WRVA	1110
Roanoke L-24	250	WDBJ	930
	250	WRBX	1410

WASHINGTON

Aberdeen D-2	100	KXRO	1310
Bellingham C-3	100	KVOS	1200
Everett C-3	50	KFBL	1370
Lacey D-3	10	KGy	1200
Pullman E-5	1000	KWSC	1220
Seattle C-3	5000	KJR	970
	1000	KOL	1270
	1000	KOMO	920
	100	KPCB	650
	50	KRSC	1120
	1000	KTW	1220
	100	KVL	1370
	500	KXA	570
Spokane D-5	100	KFIO	1120
	1000	KFPY	1340
	5000	KGA	1470
	1000	KHQ	590
Tacoma D-3	500	KMO	860
	1000	KVI	760
Walla Walla E-5	100	KUJ	1370
Wenatchee D-4	50	KPQ	1500
Yakima D-4	50	KIT	1310

WEST VIRGINIA

Bluefield L-24	250	WHIS	1410
Charleston K-23	250	WOBu	580
Fairmount J-24	250	WMMN	890
Huntington K-23	250	WSAZ	580
Wheeling J-24	5000	WWVA	1160

WISCONSIN

Eau Claire G-18	1000	WTAQ	1330
Fond du Lac H-10	100	KFIZ	1420
Green Bay G-14	100	WHBY	1200
Janesville I-19	100	Wclo	1200
La Crosse H-18	1000	WKBI	1380
Madison H-19	750	WHA	940
	500	WIBA	1280
Manitowoc H-20	100	WOMT	1210
Milwaukee H-19	250	WHD	1120
	250	WISN	1120
	1000	WTMJ	620
Poyntette H-19	100	WIBU	1210
Racine I-20	100	WRJN	1370
Sheboygan H-20	500	WIBL	1410
Stevens Pt. G-19	2000	WLBL	900
Superior F-17	1000	WEBC	1290

WYOMING

Casper H-10	100	KDFN	1210
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CANADA

ALBERTA			
Calgary B-7	500	CFAC	690
	10000	CFCN	985
	500	CHCA	690
	500	CJCJ	690
	500	CNRC	690
Edmonton A-8	250	CHMA	580
	500	CJCA	930
	500	CKUA	580
Lethbridge C-8	100	CJOC	1120
Red Deer A-8	1000	CHCT	840
	1000	CKLC	840
	1000	CNRD	840

CFAC 690	CJRW 665	CMBS 790	CMKD 1100
Calgary, Alta.	Fleming, Sask.	Havana, Cuba	Santiago, Cuba
CFBO 890	CKAK 730	CMBT 1070	CMKE 1249
St. John, N. B.	Montreal, Que.	Havana, Cuba	Santiago, Cuba
CFCA 840	CKCD 730	CMBW 1010	CMKF 1363
Toronto, Ont.	Vancouver, B. C.	Havana, Cuba	Holguin, Cuba
CFCF 1030	CKCI 880	CMBX 1405	CMKG 1176
Montreal, Que.	Quebec, Que.	Havana, Cuba	Santiago, Cuba
CFCH 930	CKCK 960	CMBY 1405	CMKH 1327
North Bay, Ont.	Regina, Sask.	Havana, Cuba	Santiago, Cuba
CFCL 580	CKCL 580	CMBZ 1010	CMQ 1150
Toronto, Ont.	Toronto, Ont.	Havana, Cuba	Havana, Cuba
CFCN 985	CKCO 890	CMC 840	CMW 588
Calgary, Alta.	Ottawa, Ont.	Havana, Cuba	Havana, Cuba
CFCO 1210	CKCR 645	CMCA 1225	CMX 890
Chatham, Ont.	Waterloo, Ont.	Havana, Cuba	Havana, Cuba
CFCT 630	CKCV 880	CMCB 1070	CNRA 630
Victoria, B. C.	Quebec, Que.	Havana, Cuba	Moncton, N. B.
CFCY 580	CKCF 730	CMCD 1225	CNRC 690
Ch'lottet'n, P. E. I.	Vancouver, B. C.	Havana, Cuba	Calgary, Alta.
CFJC 1120	CKGW 690	CMCF 890	CNRD 840
Kamloops, B. C.	Toronto, Ont.	Havana, Cuba	Red Deer, Alta.
CFLC 930	CKIK 1010	CMCG 1285	CNRH 910
Prescott, Ont.	Wolfville, N. S.	Havana, Cuba	Halifax, N. S.
CFNB 1210	CKLC 840	CMCH 1285	CNRL 910
Fredericton, N. B.	Red Deer, Alta.	Havana, Cuba	London, Ont.
CFQC 910	CKMC 1210	CMCM 1500	CNRM 730
Saskatoon, Sask.	Cobalt, Ont.	Havana, Cuba	Montreal, Que.
CFRB 960	CKMO 730	CMCN 1225	CNRO 600
Toronto, Ont.	Vancouver, B. C.	Havana, Cuba	Ottawa, Ont.
CFRC 930	CKNC 580	CMCO 660	CNRQ 880
Kingston, Ont.	Toronto, Ont.	Havana, Cuba	Quebec, Que.
CHCA 690	CKOC 1010	CMCQ 1150	CNRR 960
Calgary, Alta.	Hamilton, Ont.	Havana, Cuba	Regina, Sask.
CHCK 1010	CKPC 1210	CMCR 1285	CNRS 910
Ch'lottet'n, P. E. I.	Preston, Ont.	Havana, Cuba	Saskatoon, Sask.
CHCS 1010	CKPR 890	CMCT 1500	CNRT 840
Hamilton, Ont.	Port Arthur, Ont.	Havana, Cuba	Toronto, Ont.
CHCT 840	CKUA 580	CMCU 1345	CNRV 1030
Red Deer, Alta.	Edmonton, Alta.	Havana, Cuba	Vancouver, B. C.
CHGS 1120	CKWX 730	CMCY 1345	CNRW 780
Sum'rside, P. E. I.	Vancouver, B. C.	Havana, Cuba	Winnipeg, Man.
CHLS 730	CKX 540	CMGA 834	CNRX 960
Vancouver, B. C.	Brandon, Man.	Colon, Cuba	Toronto, Ont.
CHMA 580	CKY 780	CMGB 1185	CPRY 690
Edmonton, Alta.	Winnipeg, Man.	Matanzas, Cuba	Toronto, Ont.
CHML 880	CMAB 1249	CMGD 1140	HHK 920
Hamilton, Ont.	Pinar del Rio, Cu	Matanzas, Cuba	Port au Prince, H.
CHNS 910	CMAC 1375	CMGE 1375	KABC 1420
Halifax, N. S.	Pinar del Rio, Cu	Cardenas, Cuba	San Antonio, Tex.
CHRC 645	CMBA 1345	CMGF 977	KBPS 1420
Quebec, Que.	Havana, Cuba	Matanzas, Cuba	Portland, Ore.
CHWC 960	CMBC 965	CMGH 780	KBTM 1200
Regina, Sask.	Havana, Cuba	Matanzas, Cuba	Paragould, Ark.
CHWK 665	CMBD 965	CMHA 1154	KCRC 1370
Chilliwack, B. C.	Havana, Cuba	Cienfuegos, Cuba	Enid, Okla.
CHYC 730	CMBF 1345	CMHC 790	KCRJ 1310
Montreal, Que.	Havana, Cuba	Tuinucu, Cuba	Jerome, Ariz.
CJBR 960	CMBG 1070	CMHI 1110	KDB 1500
Regina, Sask.	Havana, Cuba	Santa Clara, Cu	S. Barbara, Cal.
CJCA 930	CMBI 1405	CMHJ 645	KDFN 1210
Edmonton, Alta.	Havana, Cuba	Cienfuegos, Cuba	Casper, Wyo.
CJCB 880	CMBJ 1285	CMJB 1276	KDKA 980
Sydney, N. S.	Havana, Cuba	Ciego de Avila	Pittsburgh, Pa.
CJCC 690	CMBK 1405	CMJC 1321	KDLR 1210
Calgary, Alta.	Havana, Cuba	Camaguey, Cuba	Devils Lake, N. D.
CJGC 910	CMBL 1500	CMJE 856	KDYL 1290
London, Ont.	Havana, Cuba	Camaguey, Cuba	Salt Lake City
CJGX 630	CMBM 1285	CMK 730	KECA 1430
Yorkton, Sask.	Havana, Cuba	Havana, Cuba	Los Angeles, Cal.
CJOC 1120	CMBN 1405	CMKA 1450	KELW 780
Lethbridge, Alta.	Havana, Cuba	Santiago, Cuba	Burbank, Cal.
CJOR 1210	CMBQ 1405	CMKB 1200	KEX 1180
Sea Island, B. C.	Havana, Cuba	Santiago, Cuba	Portland, Ore.
CJRM 665	CMBR 1500	CMKC 1034	KFAB 770
Moose Jaw, Sask.	Havana, Cuba	Santiago, Cuba	Lincoln, Nebr.

KFAC 1300
Los Angeles, Cal.
KFBB 1280
Great Fis., Mont.
KFBI 1050
Milford, Kans.
KFBB 1310
Sacramento, Cal.
KFBL 1370
Everett, Wash.
KFDM 560
Beaumont, Tex.
KFDD 550
Brookings, S. D.
KFEL 920
Denver, Colo.
KFEE 680
St. Joseph, Mo.
KFGQ 1310
Boone, Iowa
KFH 1300
Wichita, Kansas
KFI 640
Los Angeles, Cal.
KFIO 1120
Spokane, Wash.
KFIU 1310
Juneau, Alaska
KFJZ 1420
Fond du Lac, Wis.
KFJB 1200
Marshalltown, Ia.
KFJF 1480
Oklahoma City
KFJI 1370
Astoria, Ore.
KFJM 1370
Grd. Forks, N.D.
KFJR 1300
Portland, Ore.
KFJJ 1310
Fort Dodge Ia.
KFJZ 1370
Ft. Worth, Tex.
KFKA 880
Greeley, Colo.
KFKU 1220
Lawrence, Kans.
KFKA 1020
Chicago, Ill.
KFLV 1410
Rockford, Ill.
KFLX 1370
Galveston, Tex.
KFMX 1250
N'thfield, Minn.
KFNF 890
Shenandoah, Ia.
KFOR 1210
Lincoln, Nebr.
KFOX 1250
Long Beach, Cal.
KFPL 1310
Dublin, Texas
KFPM 1310
Greenville, Texas
KFPW 1340
Ft. Smith, Ark.
KFPY 1340
Spokane, Wash.
KFQD 1230
Anchorage, Alas.
KFRC 610
San F'nscisco, Cal.
KFRU 630
Columbia, Mo.

KFSD 600
Los Angeles, Cal.
KFSG 1120
Los Angeles, Cal.
KFUL 1290
Galveston, Texas
KFUO 550
St. Louis, Mo.
KFUP 1310
Denver, Colo.
KFVD 1000
Culver City, Cal.
KFVS 1210
Cape Gir'd'u, Mo
KFWB 950
Hollywood, Cal.
KFWF 1200
St. Louis, Mo.
KFWI 930
San F'nscisco, Cal.
KFXD 1420
Nampa, Idaho
KFXF 920
Denver, Colo.
KFXX 1310
Grand Junc., Cal.
KFXM 1210
San Ber'd no, Cal.
KFXR 1310
Oklahoma City
KFXY 1420
Flagstaff, Ariz.
KFYO 1420
Abilene, Texas
KFYR 550
Bismarck, N. D.
KGA 1470
Spokane, Wash.
KGAR 1370
Tucson, Arizona
KGB 1330
San Diego, Cal.
KGBU 900
Ketchikan, Al'ka
KGBX 1310
St. Joseph, Mo.
KGBZ 930
York, Nebr.
KGCA 1270
Decorah, Iowa
KGCR 1210
Watertown, S. D.
KGCU 1240
Mandan, N. D.
KGCX 1310
Wolf P't, Mont.
KGDA 1370
Mitchell, S. D.
KGDE 1200
Fergus Falls, Minn
KGDH 1100
Stockton, Cal.
KGDY 1200
Huron, S. D.
KGEF 1300
Los Angeles, Cal.
KGEK 1200
Yuma, Colo.
KGER 1360
Long Beach, Cal.
KGEW 1200
Ft. Morgan, Colo.
KGEZ 1310
Kalispell, Mont.
KGFF 1420
Shawnee, Okla.

KGGG 1370
Oklahoma City
KGFI 1500
Corp's Ch'sti, Tex
KGFJ 1200
Los Angeles, Cal.
KGFK 1500
Moorhead, Minn.
KGFL 1370
Raton, N. M.
KGFV 1310
Ravenna, Nebr.
KGFX 580
Pierre, S. D.
KGGC 1420
San F'nscisco, Cal.
KGGF 1010
Coffeyville, Okla.
KGGM 1230
Albuq'rque, N.M.
KGHF 1320
Pueblo, Colo.
KGHI 1200
Little Rock, Ark.
KGHL 950
Billings, Mont.
KGRJ 1360
Butte, Mont.
KGIW 1420
Trinidad, Colo.
KGIX 1420
Las Vegas, Nev.
KGIZ 1500
Grant City, Mo.
KGFJ 890
Little Rock, Ark.
KGBK 1500
Tyler, Texas
KGGK 1370
San Angelo, Tex.
KGGO 570
Wichita Flls., Tex.
KGGX 1420
Sand Point, Idaho
KGGY 1500
Scottsbluff, Nebr.
KGBM 1320
Honolulu, T. H.
KGMP 1210
Elk City, Okla.
KGNF 1430
No. Platte, Nebr.
KGNU 1210
Dodge City, Kas.
KGO 790
San F'nscisco, Cal.
KGRS 1410
Amarillo, Texas
KGU 940
Honolulu, Hawaii
KGVV 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'nscisco, Cal.
KJR 970
Seattle, Wash.
KLON 1290
Blytheville, Ark.
KLO 1400
Ogden, Utah
KLPM 1240
Minot, N. Dak.
KLRA 1390
Little Rock, Ark.
KLS 1440
Oakland, Cal.
KLX 880
Oakland, Cal.
KLZ 560
Denver, Colo.
KMA 930
Shenandoah, Ia.
KMAC 1370
San Antonio, Tex.
KMBC 950
Kan. City, Mo.
KMCS 1120
Ingleswood, Cal.
KMED 1310
Medford, Ore.
KMJ 1210
Fresno, Cal.
KMLB 1200
Monroe, La.
KMMJ 740
Clay Ctr., Nebr.
KMO 860
Tacoma, Wash.
KMOX 1090
St. Louis, Mo.
KMPC 710
Los Angeles, Cal.
KMTR 570
Los Angeles, Cal.
KNX 1050
Los Angeles, Cal.
KOA 830
Denver, Colo.
KOAC 550
Corvallis, Ore.
KOB 1180
State Coll., N.M.
KOCW 1400
Chickasha, Okla.
KOH 1380
Reno, Nevada
KOIL 1260
Council Bluffs, Ia.
KOIN 940
Portland, Ore.
KOL 1270
Seattle, Wash.
KOMO 920
Seattle, Wash.
KONO 1370
San Antonio, Tex.
KOOS 1370
Marshfield, Ore.
KORE 1420
Eugene, Ore.
KOY 1390
Phoenix, Arizona
KPCB 650
Seattle, Wash.
KPJM 1500
Prescott, Ariz.

KPO 680	KUOA 1390	WACO 1240	WCAH 1430
San F'nisco, Cal.	Fayetteville, Ark.	Waco, Texas	Columbus, Ohio
KPOF 880	KUSD 890	WADC - 1320	WCAJ 590
Denver, Colo.	Vermillion, S. D.	Akron, Ohio	Lincoln, Nebr.
KPPC 1210	KUT 1500	WAGM 1420	WCAL 1250
Pasadena, Cal.	Austin, Texas	Presque Isle, Me.	Northfield, Minn.
KPQ 1500	KVI 760	WAU 640	WCAM 1280
Wenatchee, Wash.	Tacoma, Wash.	Columbus, Ohio	Camden, N. J.
KPRC 920	KVL 1370	WALR 1210	WCAO 600
Houston, Texas	Seattle, Wash.	Zanesville, Ohio	Baltimore, Md.
KQV 1380	KVOA 1260	WAPI 1140	WCAP 1280
Pittsburgh, Pa.	Tucson, Arizona	Birmingham, Ala.	Asbury Pk., N. J.
KQW 1010	KVOO 1140	WASH 1270	WCAT 1200
San Jose, Cal.	Tulsa, Okla.	Gr. Rapids, Mich.	Rapid City, S. D.
KRE 1370	KVOR 1270	WAWZ 1350	WCAU 1170
Berkeley, Cal.	Col. Sp'gs, Colo.	Zarephath, N. J.	Philadelphia, Pa.
KREG 1500	KVOS 1200	WBAA 1400	WCAX 1200
Santa Ana, Cal.	Bellingh'm, Wash.	Lafayette, Ind.	Burlington, Vt.
KRGV 1260	KWCR 1310	WBAK 1430	WCAZ 1070
Harlingen, Texas	Cedar Rapids, Ia.	Harrisburg, Pa.	Carthage, Ill.
KRLD 1040	KWEA 1210	WBAL 760-1060	WCBA 1440
Dallas, Texas	Shreveport, La.	Baltimore, Md.	Allentown, Pa.
KRMD 1310	KWG 1200	WBAP 800	WCBD 1080
Shreveport, La.	Stockton, Cal.	Fort Worth, Tex.	Zion, Ill.
KROW 930	KWJJ 1060	WBAX 1210	WCRM 1370
Oakland, Cal.	Portland, Ore.	Wilkes-Barre, Pa.	Baltimore, Md.
KRSC 1120	KWK 1350	WBBC 1400	WCBS 1210
Seattle, Wash.	St. Louis, Mo.	Brooklyn, N. Y.	Springfield, Ill.
KSAC 580	KWKC 1370	WBBL 1210	WCCO 810
Manh'tt'n, Kans.	Kansas City, Mo.	Richmond, Va.	WCCD 1350
KSCJ 1330	KWKH 850	WBBM 770	New York City
Sioux City, Ia.	Shreveport, La.	Chicago, Ill.	WCFL 970
KSD 550	KWLC 1270	WBBR 1300	Chicago, Ill.
St. Louis, Mo.	Decorah, Iowa	Brooklyn, N. Y.	WCGU 1400
KSEI 900	KWSC 1220	WBBZ 1200	Brooklyn, N. Y.
Pocatello, Idaho	Pullman, Wash.	Ponca City, Okla.	WCHI 1490
KSL 1130	KWWG 1260	WBCM 1410	Chicago, Ill.
Salt Lake City	Brownsville, Tex.	Bay City, Mich.	WCKY 1490
KSMR 1200	KXA 570	WBEN 900	Covington, Ky.
Santa Maria, Cal.	Seattle, Wash.	Buffalo, N. Y.	WCLO 1200
KSO 1380	KXL 1420	WBEO 1310	Janesville, Wis.
Karinda, Iowa	Portland, Ore.	Marquette, Mich.	WCLS 1310
KSOO 1110	KXO 1500	WBGF 1370	Joliet, Ill.
Sioux Falls, S. D.	El Centro, Cal.	Glens Falls, N. Y.	WCMA 1400
KSTP 1460	KYRO 1310	WBHS 1200	Culver, Ind.
St. Paul, Minn.	Aberdeen, Wash.	Huntsville, Ala.	WCOA 1340
KTAB 560	KXYZ 1420	WBIG 1440	Pensacola, Fla.
San F'nisco, Cal.	Houston, Texas	Greensboro, N.C.	WCOC 880
KTAR 620	KYA 1230	WBIS 1230	Meridian, Miss.
Phoenix, Ariz.	San F'nisco, Cal.	Boston, Mass.	WCOD 1200
KTAT 1240	KYW 1020	WBMS 1450	Harrisburg, Pa.
Ft. Worth, Tex.	Chicago, Ill.	Hackensack, N.J.	WCOH 1210
KTBR 1300	NAA 690	WBNX 1350	Yonkers, N. Y.
Portland, Ore.	Arlington, Va.	New York City	WCRW 1210
KTBS 1450	TIC 900	WBOQ 860	Chicago, Ill.
Shreveport, La.	San Jose, C. R.	New York City	WCSC 1360
KTFI 1320	VAS 585	WBOW 1310	Charleston, S. C.
Twin Falls, Ida.	Glace Bay, N. S.	Terre Haute, Ind.	WCSH 940
KTHS 1040	VOVR 675	WBRC 930	Portland, Maine
Hot Spgs., Ark.	St. Johns, N. F.	Birmingham, Ala.	WDAE 1220
KTLC 1310	WAAB 1410	WBRE 1310	Tampa, Fla.
Houston, Texas	Boston, Mass.	Wilkes-Barre, Pa.	WDAF 610
KTM 780	WAAF 920	WBSO 920	Kansas City, Mo.
Los Angeles, Cal.	Chicago, Ill.	Needham, Mass.	WDAG 1410
KTRH 1120	WAAM 1250	WBT 1080	Amarillo, Texas
Houston, Texas	Newark, N. J.	Charlotte, N. C.	WDAH 1310
KTSA 1290	WAAT 940	WBTM 1370	El Paso, Texas
San Antonio, Tex.	Jersey City, N. J.	Danville, Va.	WDAY 940
KTSL 1310	WAAW 660	WBZ-A 990	Fargo, N. D.
Shreveport, La.	Omaha, Nebr.	Springfield, Mass.	WDBJ 930
KTSM 1310	WABC 860	WCAC 600	Roanoke, Va.
El Paso, Texas	New York City	WCAD 1220	WDBO 1120
KTW 1220	WABI 1200	Canton, N. Y.	WDEL 1120
Seattle, Wash.	Bangor, Maine	WCAE 1220	Wilmington, Del.
KUJ 1370	WABZ 1200	Pittsburgh, Pa.	
Walla Wall., Wash.	New Orleans, La.		

WDEV 1420 Waterbury, Vt.	WFDW 1420 Anniston, Ala.	WHDI 1180 Minneap., Minn.	WJBO 1420 New Orleans, La.
WDGY 1180 Minneap., Minn.	WFEA 1430 Manchester, N.H.	WHDL 1420 Tupp'r L'ke, N.Y.	WJBT 770 Chicago, Ill.
WDIX 1500 Tupelo, Miss.	WFI 560 Philadelphia, Pa.	WHEC 1440 Rochester, N. Y.	WJBU 1210 Lewishurg, Pa.
WDOO 1280 Chattanooga, Tenn	WFIW 940 Hopkinsville, Ky.	WHFC 1420 Cicero, Ill.	WJBW 1200 New Orleans, La.
WDRC 1330 Hartford, Conn.	WFLA 620 Clearwater, Fla.	WHIS 1410 Bluefield, W. Va.	WJBY 1210 Gadsden, Ala.
WDSU 1250 New Orleans, La.	WFOX 1400 Brooklyn, N. Y.	WHK 1390 Cleveland, Ohio	WJDX 1270 Jackson, Miss.
WDWF 1210 Providence, R. I.	WGAL 1310 Lancaster, Pa.	WHN 1010 New York City	WJDD 1130 Mooseheart, Ill.
WDZ 1070 Tuscola, Ill.	WGAR 1450 Cleveland, Ohio	WHO 1000 Des Moines, Ia.	WJKS 1360 Gary, Ind.
WEAF 660 New York City	WGBB 1210 Freeport, N. Y.	WHOM 1450 Jersey City, N. J.	WJMS 1420 Ironwood, Mich.
WEAI 1270 Ithaca, N. Y.	WGBC 1430 Memphis, Tenn.	WHP 1430 Harrisburg, Pa.	WJR 750 Detroit, Mich.
WEAN 780 Providence, R. I.	WGBF 630 Evansville, Ind.	WIAS 1420 Ottumwa, Iowa	WJSV 1460 Alexandria, Va.
WEOA 570 Columbus, Ohio	WGBI 880 Scranton, Pa.	WIBA 1280 Madison, Wis.	WJTL 1370 Tifton, Ga.
WEBC 1290 Superior, Wis.	WGBS 1180 New York City	WIBG 930 Elkins Park, Pa.	WJW 1210 Mansfield, Ohio
WEBC 1210 Harrisburg, Ill.	WGCM 1210 Gulfport, Miss.	WIBM 1370 Jackson, Mich.	WJZ 760 New York City
WEHR 1310 Buffalo, N. Y.	WGCP 1250 Newark, N. J.	WIBO 560 Chicago, Ill.	WKAQ 890 San Juan, P. R.
WEDC 1210 Chicago, Ill.	WGES 1360 Chicago, Ill.	WIBR 1420 Steubenville, O.	WKAR 1040 E. Lansing, Mich.
WEDH 1420 Erie, Pa.	WGH 1310 Newp't News, Va.	WIRU 1210 Poynette, Wis.	WKAV 1310 Laconia, N. H.
WEI 590 Boston, Mass.	WGL 1370 Ft. Wayne, Ind.	WIBW 580 Topeka, Kansas	WKBB 1310 Joliet, Ill.
WEU 830 Reading, Pa.	WGN 720 Chicago, Ill.	WIHX 1200 Utica, N. Y.	WKBC 1310 Birmingham, Ala.
WEHC 1350 Emory, Va.	WGR 550 Buffalo, N. Y.	WICC 600 Bridgeport, Conn	WKBF 1400 Indianapolis, Ind.
WEHS 1420 Cicero, Ill.	WGST 890 Atlanta, Ga.	WIL 1200 St. Louis, Mo.	WKBH 1380 La Crosse, Wis.
WELK 1370 Philadelphia, Pa.	WGY 790 Schenech'dy, N. Y.	WILL 890 Urbana, Ill.	WKBI 1420 Cicero, Ill.
WELL 1420 Battle C'k, Mich.	WHA 940 Madison, Wis.	WILM 1420 Wilmington, Del.	WKBN 570 Youngstown, O.
WENR 870 Chicago, Ill.	WHAD 1120 Milwaukee, Wis.	WIOD 1300 Miami, Fla.	WKBO 1450 Jersey City, N. J.
WEPS 1200 Worcester, Mass.	WHAM 1150 Rochester, N. Y.	WIP 610 Philadelphia, Pa.	WKBS 1310 Galesburg, Ill.
WEVD 1300 New York City	WHAP 1300 New York City	WIS 1010 Columbia, S. C.	WKBV 1500 Connersville, Ind.
WEW 760 St. Louis, Mo.	WHAS 820 Louisville, Ky.	WISN 1120 Milwaukee, Wis.	WKBW 1480 Buffalo, N. Y.
WEXL 1310 Royal Oak, Mich.	WHAT 1310 Philadelphia, Pa.	WJAC 1310 Johnstown, Pa.	WKBBZ 1500 Ludington, Mich.
WFAA 800 Dallas, Texas	WHAZ 1300 Troy, N. Y.	WJAG 1060 Norfolk, Nebr.	WKJC 1200 Lancaster, Pa.
WFAM 1200 So. Bend, Ind.	WHB 860 Kansas City, Mo.	WJAK 1310 Marion, Ind.	WKRC 550 Cincinnati, Ohio
WFAN 610 Philadelphia, Pa.	WHBC 1200 Canton, Ohio	WJAR 890 Providence, R. I.	WKY 900 Oklahoma City
WFBC 1200 Knoxville, Tenn	WHBD 1370 Mt. Orab, Ohio	WJAS 1290 Pittsburgh, Pa.	WKZO 590 Kalamazoo, Mich.
WFBE 1200 Cincinnati, Ohio	WHBF 1210 Rock Island, Ill.	WJAX 900 Jacksonville, Fla.	WLAC 1470 Nashville, Tenn.
WFBG 1310 Altoona, Pa.	WHBL 1410 Sheboygan, Wis.	WJAY 610 Cleveland, Ohio	WLAP 1010 Louisville, Ky.
WFBL 1360 Syracuse, N. Y.	WHBQ 1370 Memphis, Tenn.	WJAZ 1490 Chicago, Ill.	WLB 1250 St. Paul, Minn.
WFBM 1230 Indianapolis, Ind.	WHBU 1210 Anderson, Ind.	WJBC 1200 La Salle, Ill.	WLBC 1310 Muncie, Ind.
WFR 1270 Baltimore, Md.	WHBY 1200 Green Bay, Wis.	WJBI 1210 Red Bank, N. J.	WLBFB 1420 Kansas City, Ks.
WFDF 1310 Flint, Mich.	WHDF 1370 Calumet, Mich.	WJBK 1370 Detroit, Mich.	WLBG 1200 Etrick, Va.
WFDV 1310 Rome, Ga.	WHDH 830 Boston, Mass	WJBL 1200 Decatur, Ill.	WLBL 900 Stevens Pt., Wis.

WLBW 1260 Oil City, Pa.	WNBH 1310 New B'd'fd, Mass.	WPSC 1230 State College, Pa.	WSJS 1310 Winst.-Sal., N. C.
WLBX 1500 L. I. City, N. Y.	WNBO 1200 Washington, Pa.	WPTF 680 Raleigh, N. C.	WSM 650 Nashville, Tenn.
WLBZ 620 Bangor, Maine	WNBR 1430 Memphis, Tenn.	WQAM 560 Miami, Fla.	WSMB 1320 New Orleans, La.
WLCI 1210 Ithaca, N. Y.	WNBW 1200 Carbondale, Pa.	WQAN 880 Scranton, Pa.	WSMK 1380 Dayton, Ohio
WLEY 1370 Lexington, Mass.	WNBX 1200 Springfield, Vt.	WQAO 1010 New York City	WSOC 1210 Gastonia, N. C.
WLIT 560 Philadelphia, Pa.	WNBZ 1290 Sar'n e L'ke, N. Y.	WQBC 1360 Vicksburg, Miss.	WSPA 1420 Spartanburg, S. C.
WLOE 1500 Boston, Mass.	WNJ 1450 Newark, N. J.	WQDM 1370 St. Albans, Vt.	WSPD 1340 Toledo, Ohio
WLS 870 Chicago, Ill.	WNOX 560 Knoxville, Tenn.	WQDX 1210 Thomasville, Ga.	WSUI 880 Iowa City, Iowa
WLSI 1210 Providence, R. I.	WNYC 570 New York City	WRAK 1370 Williamsport, Pa.	WSUN 620 St. Petersburg, Fla.
WLTH 1400 Brooklyn, N. Y.	WQAI 1190 San Antonio, Tex.	WRAM 1370 Wilmington, N. C.	WSVS 1370 Buffalo, N. Y.
WLVA 1370 Lynchburg, Va.	WQAX 1280 Trenton, N. J.	WRAW 1310 Reading, Pa.	WSYB 1500 Rutland, Vt.
WLW 700 Cincinnati, Ohio	WQBT 1310 Jackson, Tenn.	WRAX 1020 Philadelphia, Pa.	WSYR 570 Syracuse, N. Y.
WLWL 1100 New York City	WQBU 580 Charlest'n, W. Va.	WRBJ 1370 Hattiesburg, Miss.	WTAD 1440 Quincy, Ill.
WMAC 570 Syracuse, N. Y.	WQCV 1000 Davenport, Iowa	WRBL 1200 Columbus, Ga.	WTAG 580 Worcester, Mass.
WMAK 1040 Buffalo, N. Y.	WQCL 1210 Jamestown, N. Y.	WRBQ 1210 Greenville, Miss.	WTAM 1070 Cleveland, Ohio
WMAL 630 Washington, D. C.	WODA 1250 Paterson, N. J.	WRBX 1410 Roanoke, Va.	WTAQ 1330 Eau Claire, Wis.
WMAQ 670 Chicago, Ill.	WODX 1410 Mobile, Ala.	WRC 950 Washington, D. C.	WTAR 780 Norfolk, Va.
WMAZ 1180 Macon, Ga.	WOI 640 Ames, Iowa	WRDO 1370 Augusta, Maine	WTAW 1120 College Sta., Tex.
WMBA 1500 Newport, R. I.	WOKO 1440 Albany, N. Y.	WRDW 1500 Augusta, Ga.	WTAX 1210 Springfield, Ill.
WMBC 1420 Detroit, Mich.	WOL 1310 Washington, D. C.	WREC 600 Memphis, Tenn.	WTBO 1420 Cumberland, Md.
WMBD 1440 Peoria Hghts., Ill.	WOMT 1210 Manitowoc, Wis.	WREN 1220 Lawrence, Kans.	WTFL 1310 Philadelphia, Pa.
WMBC 1210 Richmond, Va.	WOOD 1270 Gr. Rapids, Mich.	WRHM 1250 Minneapolis, Minn.	WTFI 1450 Toccoa, Ga.
WMBH 1420 Joplin, Mo.	WOPI 1500 Bristol, Tenn.	WRJN 1370 Racine, Wis.	WTC 660-1060 Hartford, Conn.
WMBI 1080 Chicago, Ill.	WOQ 1300 Kansas City, Mo.	WRNY 1010 New York City	WTMJ 620 Milwaukee, Wis.
WMBO 1310 Auburn, N. Y.	WOR 710 Newark, N. J.	WROL 1310 Knoxville, Tenn.	WTOC 1260 Savannah, Ga.
WMBQ 1500 Brooklyn, N. Y.	WORC 1200 Worcester, Mass.	WRR 1280 Dallas, Texas	WWAE 1200 Hammond, Ind.
WMBR 1370 Tampa, Fla.	WOS 630 Jeff's'n City, Mo.	WRUF 830 Gainesville, Fla.	WWJ 920 Detroit, Mich.
WMC 780 Memphis, Tenn.	WOV 1130 New York City	WRVA 1110 Richmond, Va.	WWL 850 New Orleans, La.
WMCA 570 New York City	WOW 590 Omaha, Nebr.	WSAI 1330 Cincinnati, Ohio	WWNC 570 Asheville, N. C.
WMIL 1500 Brooklyn, N. Y.	WOWO 1160 Ft. Wayne, Ind.	WSAJ 1310 Grove City, Pa.	WWRL 1500 Woodside, N. Y.
WMMN 890 Fairmont, W. Va.	WPAD 1420 Paducah, Ky.	WSAN 1440 Allentown, Pa.	WWSW 1500 Pittsburgh, Pa.
WMPC 1500 Lapeer, Mich.	WPAP 1010 New York City	WSAR 1450 Fall River, Mass.	WWVA 1160 Wheeling, W. Va.
WMRJ 1210 Jamaica, N. Y.	WPAW 1210 Pawtucket, R. I.	WSAZ 580 Hunt'gton, W. Va.	WXYZ 1240 Detroit, Mich.
WMSG 1350 New York City	WPCC 560 Chicago, Ill.	WSB 740 Atlanta, Ga.	XEA 1200 Guad'ljara, Mex.
WMT 600 Waterloo, Iowa	WPCH 810 New York City	WSBC 1210 Chicago, Ill.	XEB 1030 Mexico City
WNAC 1230 Boston, Mass.	WPEN 1500 Philadelphia, Pa.	WSBT 1230 South Bend, Ind.	XEC 1333 Toluca, Mexico
WNAD 1010 Norman, Okla.	WPG 1100 Atlantic City, N. J.	WSEN 1210 Columbus, Ohio	XED 965 Reynosa, Mexico
WNAX 570 Yankton, S. D.	WPOE 1370 Patchogue, N. Y.	WSFA 1410 Montgomery, Ala.	XEE 1132 Oaxaco, Mexico
WNBFB 1500 Bingh'm't'n, N. Y.	WPOR 780 Norfolk, Va.	WSIX 1210 Springfield, Tenn.	XEFA 1250 Mexico City

XEFE 980	XEO 940	XETO 1360	XFC 805
Laredo, Mexico	Mexico City	Mexico City	Aguascalntes, M.
XEH 1132	XEP 1400	XETY 1300	XFF 915
Monterrey, Mex.	Laredo, Mexico	Mexico City	Chihuahua, Mex.
XEI 1000	XEQ 1015	XEU 800	XFG 638
Morelia, Mexico	Juarez, Mexico	Veracruz, Mex.	Mexico City
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
XEL 1091	XET 690	XEX 1210	
Saltillo, Mexico	Monterrey, Mex.	Mexico City	
XEM 730	XETA 1140	XEY 547	
Tampico, Mexico	Mexico City	Merida, Mexico	
XEN 711	XETF 680	MEXO 588	
Mexico City	Veracruz, Mex.	Mexico City	

INDEX BY LOCATIONS WITH MAP KEY

(Continued from page 55)

CUBA				Holguin W-27	30	CMKF	1363
Havana W-23	150	CMBS	790	Matanzas W-24	7.5	CMGB	1185
	150	CMBT	1070		5	CMGD	1140
	150	CMBW	1010		50	CMGF	977
	30	CMBX	1405	Pinar del Rio W-22	60	CMGH	780
	100	CMBY	1405		20	CMIA	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				
	5	CMCT	1500	Hamilton M-35	7.5	TJW	1490
	50	CMCU	1345				
	15	CMCY	1345	COSTA RICA			
	3150	CMK	730				
	250	CMQ	1150	Heredia FF-23	75	NRH	948
	1400	CMW	588	San Jose FF-23	50	TIC	900
	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 Wester-	.....	260	1153.8	.....	Soro	Denmark
			hausen	Germany	260	1153.8	OXO	Skamlebak	Denmark
187.5	1600	RW14	Irkoutsk	Russia	270	1111.1	SP1	Warsaw	Poland
193	1554	TAE	Angora	Turkey	272.7	1100	RW58	Moskva Imeni	Russia
193	1554	SXX	Daventry	Great Britain	280	1071	.....	Hilversum	Holland
202.6	1481	RW1	Moskva Noginsk	Russia	280	1071	PCF	Scheveningen	Holland
207.5	1444	.....	Paris	France	284.9	1053	RW7	Tiflis	Russia
222.5	1348	SBG	Motala	Sweden	297	1010	.....	Basel	Switzerland
230.1	1304	RW49	Moskva Stchel-	.....	300	1000	RW3	Leningrad	Russia
			kovo	Russia	300	1000	RW53	Leningrad	Russia
235.2	1275	.....	Tunis-Kasbah	Tunis	310	967.7	RW60	Alma-Ata	Russia
238	1260.5	RW8	Bakou	Russia	320	937.5	RW4	Kharkov	Russia
238	1260.5	RW43	Bakou	Russia	333.7	899.1	RW19	Achkhabad	Russia
238.1	1260	RW6	Novosibirsk	Russia	342.8	875	RW18	Samarkand	Russia
250	1200	SBE	Boden	Sweden	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 Gubernski	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	Minsk	Russia
434.8	690	RW35	Astrakhan	Russia
441	680	.....	Lausanne	Switzerland
444.4	675	RW22	Oufa	Russia
461.5	650	RW45	Orenburg	Russia
468.7	640	RW29	Petrozavodsk	Russia
471.7	636	RW44	Omsk	Russia

500

Kcys.	Meters	Call	City	Country
511	587.1	RW30	Dnepropetrovsk	Russia
521.7	575	RW16	Samara	Russia
527	569	.....	Freiburg Breisgau	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	ZZL	Hobart	Australia
581	516.3	.....	Wien-Rosenhugel	Austria
587.1	511	RW50	Armarvir	Russia
590	508.5	ON4RB	Brussels	Belgium
599	500.8	1M1	Milano	Italy

600

Kcys.	Meters	Call	City	Country
600	500	ZZG	Wanganui	New Zealand
600	500	ZZK	Wanganui	New Zealand
600	500	ZZR	Wanganui	New Zealand
603.6	497	RW31	Ivanovo-Voznesensk	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 Kringkaester	Norway
662	453	LKM	Tromso	Norway
662	453	LKP	Porsgrund	Norway
662	453	LKT	Trondelag	Norway
662	453	SCT	Uppsala	Sweden
662	453	1BZ	Bolzano	Italy

Kcys.	Meters	Call	City	Country
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	Nottodden	Norway
671	447	LKR	Rjukan	Norway
673	445.9	1BO	Bolzano	Italy
675	444	VOWR	St. Johns	Newfound'ld
676	443.8	RW23	Groznyj	Russia
680	441	JOLK	Fukuoka	Japan
680	441	1RO	Rome	Italy
684.9	437	HJN	Bogota	Colombia
686.5	437	RW46	Petropavlovsk	Russia
689	435	SBA	Stockholm	Sweden
689	435	SCN	Malmberget	Sweden
690	434.7	JODK	Keiji	Japan
690	434.7	SP5	Wilno	Poland
690	434.7	6WF	Perth	Australia

700

Kcys.	Meters	Call	City	Country
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	JQAK	Dairen	Japan
760	395	4QG	Brisbane	Australia
761	394.2	.....	Bucuresti	Roumania
769	390	VUM	Madras	British India
770	390	.....	Frankfurt, Main	Germany
770	390	CX12	Montevideo	Uruguay
770	390	JOHK	Sendai	Japan
770	390	RW36	Arkhaugshelsk	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	JOGK	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

Kcys.	Meters	Call	City	Country
800	375	ZTC	Capetown	South Africa
800	375	3LO	Melbourne	Australia
806	372	.....	Hamburg	Germany
803.9	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

Kcys.	Meters	Call	City	Country	Kcys.	Meters	Call	City	Country
825	363.7		Alger	France	1022	293		Limoges	France
830	361	JOIK	Sapporo	Japan	1025	292.6	2UE	Sydney	Australia
830	361	LR5	Buenos Aires	Argentina	1030	291.3	LR9	Buenos Aires	Argentina
833	360		Stuttgart	Germany	1035	290	EB4BQ	Keups Marchienne-Docherie	Belgium
833.3	360	PRAC	Rio de Janeiro	Brazil				Dundee	Great Britain
838	358	RW57	Tiraspol	Russia	1040	288.5	2DE	Edinburgh	Great Britain
840	357.1	VUB	Bombay	British India	1040	288.5	2EH	Bradford	Great Britain
842	356	2LO	London	Great Britain	1040	288.5	2LS	Plymouth	Great Britain
850	353	CX16	Montevideo	Uruguay	1040	288.5	5PY	Swansea	Great Britain
850	353	JOFK	Hiroshima	Japan	1040	288.5	5SX	Bournemouth	Great Britain
851	352.5		Graz	Austria	1040	288.5	6BM	Sheffield	Great Britain
855	350.8	2BL	Sydney	Australia	1040	288.5	6FL	Hull	Great Britain
857	350	ZBW	Hongkong	China	1040	283.5	6KH	Liverpool	Great Britain
857.1	350	HSP1	Bangkok	Siam	1040	288.5	6LV	Stoke on Trent	Great Britain
857.1	350	PRAE	Sao Paulo	Brazil	1040	288.5	6ST	Montpelier	France
857.1	350	PRAH	Bahia	Brazil	1049	286		Tartu	Estonia
857.1	350	PRAJ	Juiz de Fora	Brazil	1050	285.7		Montevideo	Uruguay
864.5	347	RW24	Piatigorsk	Russia	1050	285.7	CX26	Palmerston	New Zealand
869	345.2		Strasbourg	France	1050	285.7	ZZF	Lyon	France
869.5	345		Shanghai	China	1051	285.8		Khabarovsk	Russia
870	345	JOAK	Tokio	Japan	1052.6	285	RW54	Innsbruck	Austria
870	345	LR2	Buenos Aires	Argentina	1058	284		Berlin	Germany
875	342.9	SP2	Poznan	Poland	1058	284		Magdeburg	Germany
878	342		Brno	Czechoslovakia	1058	284		Stettin	Germany
					1058	284		Uddevalla	Sweden
882	340	PRAN	Curityba	Brazil	1058	284	SCR	Valberg	Sweden
882	340	VUL	Lahore	British India	1058	284	SCU	Kobenhavn	Denmark
890	337	CX18	Montevideo	Uruguay	1067	281.2		Liege	Belgium
890	337	VOGT	Bell Island	Newfound'ld	1070	280	EB4RW	Buenos Aires	Argentina
890	337	7HO	Hobart	Australia	1070	280	LS5	Sydney	Australia
					1070	280	2KY	Shanghai	China
					1071	280	XGX	Bratislava	Czechoslovakia
					1076	279			
900									
900	333.3	1YA	Auckland	New Zealand	1080	277.8	4ZB	Dunedin	New Zealand
905	331.4	1NA	Napoli	Italy	1080	277.8	4ZM	Dunedin	New Zealand
910	330	LR6	Buenos Aires	Argentina	1080	277.8	4ZO	Dunedin	New Zealand
914	328.2		Grenoble	France	1080	277.8	7LA	Launceston	Australia
919	326		Petit Parisien	France	1083	277	KSMS	Shanghai	China
920	326	PRAD	Pelotas	Brazil	1090	275	EB4RG	Gand	Belgium
923	325		Breslau	Germany	1090	275	PRAQ	Bello Horizonte	Brazil
930	322.6	CX20	Montevideo	Uruguay	1090	275	1ZB	Auckland	New Zealand
930	322.6	3UZ	Melbourne	Australia	1090.9	275	PRAG	Porto Alegre	Brazil
932	322	SBB	Goteborg	Sweden	1094	273.2	1TO	Torino	Italy
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 Bangkok	Siam	1100	272.7	7LA	Launceston	Australia
937.5	320	KZRC	Cebu	Philippine Is.	1103	272		Rennes	France
937.5	320	XGAH	Shanghai	China	1110	270.3	KZKA	Manila	Philippine Is.
940	319	KGU	Honolulu	Hawaii	1111	270	PRAZ	Franka	Brazil
940	319	2RN	Dublin	Ireland	1112	270		Kaiserslautern	Germany
941	319		Dresden	Germany	1112	270	SCF	Hudiksvall	Sweden
950	315.8		Marseilles	France	1112	270	SCO	Norrkoping	Sweden
950	315.8		Bremen	Germany	1112	270	SCQ	Trollhattan	Sweden
950	315.8	LR3	Buenos Aires	Argentina	1125	266.6	2UW	Sydney	Australia
950	315.8	VONA	St. Johns	Newfound'ld	1130	265.5		Lille	France
950	315.8	2GB	Sydney	Australia	1130	265.5	CX30	Montevideo	Uruguay
952	315	NKS	Shanghai	China	1139	263		Moravska Ostrava	Czechoslovakia
960	312.5	5DN	Adelaide	Australia					
963	311.5		Agen	France					
968	310	5WA	Cardiff	Great Britain	1140	263.2	CW30	Tacuareambo	Uruguay
970	309.3	CX22	Montevideo	Uruguay	1145	262	4BC	Brisbane	Australia
971	309		Vitus	France	1148	261	5NO	Newcastle-on-Tyne	Great Britain
980	306.1	3YA	Christchurch	New Zealand	1150	260	EB4GT	Brussels	Belgium
986	304.3		Bordeaux	France	1150	260.9	LR8	Buenos Aires	Argentina
990	303	LR4	Buenos Aires	Argentina	1153	260	2ZM	Gisborne	New Zealand
995	301	2BD	Aberdeen	Great Britain	1153	260	KZ1B	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
1000	300	GEC	Tientsin	China	1160	258	4Z1	Invercargill	New Zealand
1000	300	PRAS	Santos	Brazil	1160	258	4ZP	Invercargill	New Zealand
1000	300	PRAY	Mogy das Cruzes	Brazil	1160	258	7HO	Hobart	Australia
1004	298.8		Hilversum	Holland	1160	258	SBH	Horby	Sweden
1010	297	6ML	Perth	Australia	1166	257	CX32	Montevideo	Uruguay
1016.9	295	PRAR	Sao Paulo	Brazil	1170	256		Toulouse	France
1020	294	4GR	Toowoomba	Australia	1175	255.3	CW32	Salto	Uruguay
1022	293		Kosice	Czechoslovakia	1180	254.2	2ZD	Masterton	New Zealand
					1180	254.2			
1000									

Kcys.	Meters	Call	City	Country	Kcys.	Meters	Call	City	Country
1180	254.2	2ZQ	Masterton	New Zealand	1373	218	.....	Flensburg	Germany
1180	254.2	3DB	Melbourne	Australia	1373	218	SKK	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

1200

1200	250	EB4ED	DeLaloue	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	Manureva	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	.....	Bloenendaal	Holland
1220	246	CW34	Salto	Uruguay
1220	246	SCB	Eskilstuna	Sweden
1220	246	SCI	Kalmar	Sweden
1220	246	SCL	Kiruna	Sweden
1220	246	SCP	Saffle	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	.....	Nimes	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	.....	Sud Ouest	France
1265	237	SCV	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	Ballaret	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 Brussels	Belgium
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	2ZJ	Hastings	New Zealand
1330	225.6	2ZL	Hastings	New Zealand
1335	225	EB4EX	Houben Ottomont	Belgium
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	PRAF	Rio de Janeiro	Brazil
1365	220	EB4CE	Lucas Chatelineau	Belgium

1400

1400	214	SP8	Warsaw	Poland
1400	214	VOX	St. Johns	Newfound'ld
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	Karlskrona	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 Stchelkovo	Russia
6072	49.41	UOR2	Wien	Austria
6250	48	HKC	Bogota	Colombia
7300	41	HSP2	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 WEFW in New York. First we must ascertain the frequency for this station. Look it up under WEFW 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 WEFW is 660. Now we turn to 660 kilocycles in the Index by Frequencies and Dial Numbers. Here we find that WEFW 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 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 600 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
KFO 1000 Spokane, Wash.	Leite Weaver, Inc.
WCAJ 300 Lincoln, Neb.	Nebraska Wesleyan University
WJAN 300 Philadelphia, Pa.	Radio Elec. Illuminating Co.
WOW 1000 Omaha, Neb.	Woodmen of the World
WEMC 1000 Serrice Springs, Mich.	Emmanuel Missionary College
600 kilocycles 499.7 meters	75 73
CFCH 250 Ingoona Falls, Ont.	Abilati Power & Paper Co.
EFUC 600 Erie, Pa.	Alphug M. S. Thomas
BFSD 300 San Diego, Calif.	Alvan Radio Corp.
WCAO 300 Baltimore, Md.	Central Radio Co., Inc.
WEFW 250 Detroit, Mich.	Radio Colling
WJAY 300 Knoxville, Tenn.	Southern School of Music
WISC 300 Memphis, Tenn.	W.R.C., Inc.
WTC 300 Hartford, Conn.	Yerkes Insurance Co.
610 kilocycles 491.5 meters	74 72
EPFC 1000 San Francisco, Calif.	Don Lee, Inc.
WDAF 600 Kansas City, Mo.	Greene Radio Sales Co.
WFLA 300 Philadelphia, Pa.	Raytheon Broadcasting Co., Inc.
WUG 1000 Kansas City, Mo.	Clifton Bros., Inc.
620 kilocycles 483.6 meters	73 71
EPAD 300 Phoenix, Ariz.	Electrical Equipment Co.
EFUC 600 Erie, Pa.	Oregonian Publishing Co.
WJAE 1000 Tampa, Fla.	Temple Publishing Co.
WDRD 1000 Columbia, S. C.	Radio Colling, Inc.
WJBY 300 Dover, Pa.	Thompson L. Channing
WJAZ 1000 Milwaukee, Wis.	Milwaukee Journal
630 kilocycles 475.9 meters	72 70
CFCH 300 Victoria, B. C.	Victoria Broadcasting Assn.
CFJA 300 Jackson, Miss.	Winston-Cain Radio Sales
CVR 300 Monroeville, N. B.	Canadian National Railways
WJAY 300 Columbia, S. C.	Carroll Radio
WJBY 300 Columbia, S. C.	Stephen Colling
WJAL 300 Jacksonville, Fla.	Emergency on the Air, Inc.
WOS 300 Jefferson City, Mo.	W. A. Laver, Inc.
	State-Nebraska Bureau
640 kilocycles 468.5 meters	71 69
EPI 1000 Los Angeles, Calif.	State Co. Anthony, Inc.
WAIU 3000 Columbus, Ohio	American Insurance Union
650 kilocycles 461.3 meters	70 68
WSM 5000 Nashville, Tenn.	National Life & Accident Ins. Co.
660 kilocycles 454.3 meters	69 67
WAW 5000 Omaha, Neb.	Omaha Radio Exchange
WJAY 5000 New York City	National Broadcasting Co., Inc.
670 kilocycles 447.5 meters	68 66
WMAO 3000 Chicago, Ill.	Chicago Daily News, Inc.
680 kilocycles 440.9 meters	67 65
EPFC 1000 San Francisco, Calif.	State Bro. & The Chronicle
WJBY 3000 Raleigh, N. C.	Northwest Life Insurance Co.

I Will Train You at Home

to fill a

DIG PAY

Radio Job!



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

Here's Proof

850 a week
 "My earnings in Radio are many times greater than I ever expected they would be when I enrolled. They average well under \$100 a week."
E. R. WINBORG,
 1414 W. 40th St.,
 Norfolk, Va.

Jumped from 95¢ to \$100 a week
 "Before I entered Radio I was making 95¢ a week. Last week I earned \$114 receiving and selling Radio."
 I send my access to N. R. I.
J. A. VAUGHN
 2715 S. Kingshighway,
 St. Louis, Mo.

\$500 extra in 6 months
 "I had made \$200 from January to May in my spare time. My best week brought me \$167. I should have taken it long ago."
HOYT MOORE,
 R. R. 3, Box 319,
 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 \$10 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 800,000 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 \$1,500 to \$5,000 a year. Manufacturers continually need testers, inspectors, foremen, engineers, service men, buyers, for jobs paying up to \$12,000 a year. Shipping companies use hundreds of Radio operators, give them world wide travel at practically no expense and a salary of \$85 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.

50 many opportunities many N. R. I. men make 55 to 525 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 serving 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.

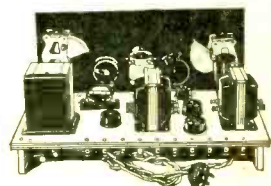
Talking Movies, Television, Wired Radio are also included

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.

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