

THE JANUARY 1934

# RADIO INDEX

THE ALL-WAVE RADIO MAGAZINE



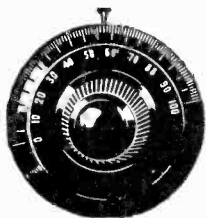
25<sup>c</sup>

30 cents  
in Canada  
Including  
Tax

The Proper Way to Verify Reception  
Using Microphone and Phonograph  
The Foreign Short Wave Stations  
A Debate on Aerials and Grounds  
The Beginners' Story of Radio

No. 75

JANUARY 1, 1934



# RADIO IN DEX

Reg. U. S. Patent Office

FRED CLAYTON BUTLER  
*Editor and Publisher*



B. FRANCIS DASHIELL  
*Technical Editor*

PAGE TAYLOR  
*Short Wave Editor*

TENTH YEAR

## CONTENTS

NUMBER 75

Frontispiece—Marion Hopkinson  
On the "March of Time"

The January DX Calendar of Special Programs.....	2
The Beginners' Story of Radio, Electrons, Capacity and Condensers.....	3
Dressing Room Gossip, by "Betty".....	7
A Little Debate on Aerials and Grounds.....	11
Proper Reports Bring Verifications, by Alfred W. Ooppel.....	13
Short Stories of the Short Waves, by Page Taylor.....	15
Using Microphones and Phonograph Pickups, by B. Francis Dashiell.....	21
The First Aid Department, by the Technical Editor.....	27
In the Wee Hours with the Radexers.....	31
With the DX Clubs.....	41
Reporting Reception in French.....	42
Gossip from Some Old-Timers.....	44
What's on the Air Tonight? Hour-by-hour Programs.....	49
The Month's Changes in Station Information.....	58
Classified Index to the Network Features.....	59
Wednesday's Time on the Air, Index by Frequencies.....	61
The Short Wave Relay Broadcasters.....	69
North American Stations by States and Cities.....	75
The Index by Call Letters with Owners' Names.....	80
Around the Clock on the Short Waves, a Tuning Table.....	92
One Hundred Best Short Wave Stations by Calls.....	93
The Foreign Short Wave Stations by Countries and Cities.....	94

Published Monthly Excepting July and August  
See Subscription Blank on Page 96

\$1.75 per Year

25c Per Copy

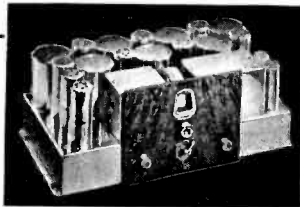
## THE RADEX PRESS, INC.

Publication Office, 404 No. Wesley Ave., Mount Morris, Illinois.  
Editorial and Executive Office, Hanna Building, Cleveland, Ohio

Entered as second-class matter November 7, 1932, at the post office at Mount Morris, Ill.,  
under the Act of March 3, 1879. Printed in U. S. A.

**ADDRESS ALL CORRESPONDENCE TO CLEVELAND OFFICE**

*A Radio* **GUARANTEED**  
to give **WORLD-**  
**WIDE**



**RECEPTION** *Every Day!*

**THRILLS  
FOR  
EVEN  
HARDEST-  
BOILED  
D-X  
HOUNDS**

with

*The*  
**SCOTT  
ALL-WAVE**  
*Deluxe*

**15 to 550 METERS**



**CONSOLES**

Specially designed cabinets  
—correct in furniture beauty  
and in scientific acoustic  
quality—are provided.

Don't envy the fellow with a big list of verifications—have a bigger collection yourself!

It's a cinch with the SCOTT ALL-WAVE Deluxe. Owners all over the face of the globe are proving it daily—and the SCOTT'S reputation as a star distance-getter has for years stood supreme.

No other radio set in the world ever hung up a record such as that of three SCOTT owners who, during a six-month period, received 3410 foreign verifications from 158 stations in more than 26 countries. During this same time, more than 200 other SCOTT owners reported reception of 15,847 other foreign programs from 320 stations in 46 foreign countries.

And distance—on the short waves alone—isn't everything. The SCOTT ALL-WAVE Deluxe provides just as remarkable performance on the regular broadcast band, with tone quality beyond compare.

On a recent voyage to Australia, for instance, Mr. Scott, using one of his ALL-WAVE Deluxe receivers, kept in constant touch with WBBM in Chicago, all the 10,000 miles to Australia and return.

You will get real thrills—real satisfaction—out of SCOTT ownership. And it costs less than you think. Send today for details.

**E. H. SCOTT RADIO LABORATORIES, Inc.**  
4450 Ravenswood Ave., Dept. 000, Chicago, Ill.



**HERE'S MY  
IRON-CLAD  
WARRANTY**

If, after 30 days trial in your home, you are not convinced that the SCOTT ALL-WAVE Deluxe has finer tone, greater sensitivity and selectivity, and brings in more foreign stations, more stations on the broadcast band and more stations on the short wave bands than any other receiver that may be compared with it, you can return it to us and have every cent you paid for it promptly refunded. In addition to this, every part (except tubes) is guaranteed for five years.

*E. H. Scott*  
President.

**MAIL COUPON FOR FULL DETAILS**

E. H. Scott Radio Laboratories, Inc.,  
4450 Ravenswood Ave., Dept. 000, Chicago, Ill.  
Send me at once, without obligation, all particulars regarding the SCOTT ALL-WAVE Deluxe, and PROOFS of its ability.

Name .....  
Address .....  
Town ..... State .....

# JANUARY DX CALENDAR

In addition to the following programs which are put on by courtesy of the stations for the benefit of distant listeners, more than 300 other stations are holding monthly frequency checks for monitoring by the Federal Radio Commission. These monthly checks appeared in the September issue by days of the week, in November by frequencies, and in December by states and cities. The following programs are arranged in order by Eastern Standard Time. Power is given in parenthesis in kilowatts. Distant readers should note that those programs which occur weekly, will probably be repeated on the same day of the week in February.

## SUNDAY MORNINGS

### Jan. 7-14-21-28

- 12:00-1:00—CMBW, Havana, 1140 (.6)  
 CMX, Havana, 890 (1)  
 XETW, Mexico City, 830 (.5)  
 12:00-1:30—WMBC, Detroit, 1420 (1)  
 12:00-3:00—CMCD, Havana, 925 (.5)  
 WGES, Chicago, 1360 (.5)  
 1:00-2:00—WCCO, Minneapolis, 810 (.50)  
 WDOO, Chattanooga, 1280 (1)  
 WWAJ, Hammond, 1200 (1)  
 1:00-2:30—XEAB, Tamaulipas, 1450 (.0075)  
 1:00-4:00—CMBD, Havana, 965 (.25)  
 2:00-3:00—CMCJ, Havana, 1185 (.5)  
 WMMN, Fairmont, 890 (.25)  
 2:00-5:00—KPJM, Prescott, 1500 (1)  
 3:00-4:00—KFXM, San Bernardino, 1210 (1.1)  
 KGER, Long Beach, 1360 (1)  
 KIT, Yakima, 1310 (1)  
 3:00-5:00—CKOV, Kelowna, 1210 (1)  
 KVL, Seattle, 1370 (1)  
 10-AT, Trail, 1155 (.025)  
 3:00-6:00—XEOK, \*Tijuana, 760 (.5)  
 4:00-5:00—CFCJ, Kamloops, 1120 (1)  
 CMJK, Camaguey, 790 (.5)  
 4:00-6:00—XEFV, Juarez, 1400 (1)  
 \*P. O. Box 1441, San Diego, Calif.

### Jan. 7

- 12:00-3:00—WCNW, Brooklyn, 1500 (1)  
 2:00-3:00—KFDY, Brookings, 550 (.5)  
 2:30-4:30—WNBX, Springfield, 1260 (.25)  
 3:00-4:00—KFQD, An-horage, 600 (.25) NNRC  
 4:00-5:00—KGKO, Wichita Falls, 570 (.25) NNRC

### Jan. 7-21

- 4:00-5:00—CMGF, Matanzas, 977 (1)  
 5:00-6:00—XFB, Jalapa, 1290 (1)

### Jan. 7-28

- 2:00-5:00—CMCU, Havana, 1100 (.5)

### Jan. 7-Feb. 4

- 2:30-4:30—10-BI, Prince Albert, 1200 (.025)

### Jan. 14-21-28

- 1:00-3:30—WIBM, Jackson, 1370 (1)

### Jan. 14

- 1:00-1:30—WKY, Oklahoma City, 900 (1)  
 1:00-2:00—KUSD, Vermillion, 890 (.5)  
 2:00-3:00—WOL, \*Washington, 1310 (1)  
 3:00-4:00—KGKL, San Angelo, 1370 (1)  
 WMAZ, Macon, 1180 (.5)  
 WOS, Jefferson City, 630 (.5)  
 3:00-4:30—KFOX, Long Beach, 1250 (1)  
 3:00-5:00—KGNQ, Dodge City, 1340 (.25)  
 3:30-4:30—CKWX, Vancouver, 1010 (1)  
 4:00-5:00—WBBZ, Ponca City, 1200 (1)  
 WNBQ, Washington, Pa. (1)

\*Must enclose postage and be postmarked not later than following Monday midnight.

### Jan. 21

- 1:00-1:45—WNBQ, Washington, Pa. (1)  
 1:00-2:00—XEFW, Tampico, 1280 (.07)  
 1:45-2:30—WJBC, LaSalle, 1200 (1)  
 2:00-3:00—KOH, Reno, 1380 (.5)  
 2:30-3:15—WJBI, Decatur, 1200 (1)  
 3:00-4:00—KREG, Santa Ana, 1500 (1)  
 3:00-5:00—KMI, Fresno, 580 (.5)  
 WHAZ, Troy, 1300 (.5)

- 3:00-7:00—KGIR, Butte, 1360 (.5)  
 3:15-4:00—KGEK, Yuma, Colo., 1200 (1)  
 3:30-4:30—WHBU, \*Anderson, 1210 (1)  
 4:00-4:45—WCLO, Janesville, 1200 (1)  
 4:45-5:30—WRBL, Columbus, 1200 (1)  
 5:30-6:15—WCAT, Rapid City, 1200 (1)  
 \*Wants 5c for verification.

### Jan. 28

- 2:00-3:00—CHWC, Regina, 1010 (.5)  
 3:00-4:00—WJED, Hagerstown, 1210 (1)  
 3:00-5:00—WFAS, White Plains, 1210 (1)  
 4:00-5:00—WIBG, Glenside, 970 (1)  
 4:00-4:30—CKFC, Vancouver, 1410 (.05) TRDXC  
 4:30-5:00—CKFC, Van over, 1410 (.05) IDA  
 5:00-5:30—CKFC, Vancouver, 1410 (.05) NNRC

### Feb. 4

- 1:00-3:00—CMCU, Havana, 965 (.15)

## MONDAY MORNINGS

### Jan. 1-8-15-22-29

- 12:00-3:00—WGES, Chicago, 1360 (.5)  
 12:30-1:00—KSOO, Sioux Falls, 1110 (2.5)  
 2:00-3:00—KFSG, Los Angeles, 1120 (.5)  
 2:00-1:00—TIGP, San Jose, 830 (.075) IDA

### Dec. 25

- 5:00-6:00—WHK, Cleveland, 1390 (1)

### Dec. 25-Jan. 1

- 1:00-2:00—CMHJ, Cienfuegos, 1125 (.06)

### Jan. 1

- 12:00-4:00—KOOS, Marshfield, 1370 (1)  
 1:00-2:00—XEPN, Piedras Negras, 585 (75)  
 3:00-5:00—KPCB, Seattle, 650 (1)  
 4:00-5:00—CHRC, Quebec, 930 (1)

### Jan. 1-Feb. 5

- 3:45-4:00—KUJ, Walla Walla, 1370 (1)

### Jan. 1-15

- 1:00-2:00—HIH, San Pedro de M., 1395 (.015)

### Jan. 8

- 2:00-2:30—KWCR, Cedar Rapids, 1420 (1)  
 3:00-3:30—KSO, Des Moines, 1370 (1)  
 5:00-5:30—WIAS, Ottumwa, 1310 (1)

### Jan. 15

- 3:00-4:00—WHBQ, Memphis, 1370 (1)

### Jan. 22

- 4:00-5:00—WSPA, Spartanburg, 1420 (.25)

## TUESDAY MORNINGS

### Jan. 2-9-16-23-30

- 12:00-1:00—XEH, Monterrey, 1132 (.25)  
 1:00-1:30—WTOC, Savannah, 1260 (.5)  
 1:00-3:00—CMCW, Havana, 965 (.15)  
 1:00-4:00—WSUL, Iowa City, 880 (.5)  
 4:00-5:00—WCAH, Columbus, 1430 (.5)  
 5:00-6:00—WAWZ, Zarephath, 1350 (.25)

### Jan. 2

- 1:00-2:00—CMHJ, Cienfuegos, 1125 (.06)  
 2:30-4:00—CHWK, Chilwell, 780 (1)  
 5:00-5:30—WKFI, Greenville, 1210 (1)

### Jan. 16

- 4:00-5:00—KFBB, Great Falls, 1280 (1)

(Continued on page 58)

# The BEGINNERS'

## STORY of RADIO

### PART FOUR

#### Electrons, Capacity and Condensers

● ● ● By B. FRANCIS DASHIELL

UP to now our interest has been held by electric currents and the phenomenon of electromagnetic induction. We have been quite unfamiliar with electricity itself. We must understand further its origin if we are to become familiar with the operation of radio tubes and condensers. Electricity is definitely a material thing, cloaked in mystery, but substantiated by one of the most amazing theories of science. It is not a liquid, such as flowing water or gas, but a movement of an actual form of energy.

Let us, then, devote a few brief moments to the romantic story of the *electron*. Here is the tiniest thing in all nature; an infinitesimal bit of pure negative electricity; a real particle or corpuscle of energy; something speedy, indestructible, and fixed in form and power. You cannot see an electron, even with the most powerful microscope, for it is so small that, if, 10,000,000,000,000 of them could be laid in a row, they would cover only one and one-half inches. Under certain conditions the electron is free to move about; or it can be held—bound—in place, as a form of potential energy.

Now we must also consider another tiny basic unit—the *atom*. It is the smallest unit particle of any one of the elements known on earth. No one has seen an atom, although most of them have diameters equal to at least 100,000 electrons! Then two or more different atoms will group together to construct a single unit, or *molecule*, of any kind of substance or matter, solid or liquid, known to man. We have often heard of water being called  $H_2O$ . This means that

two atoms of hydrogen combine with one atom of oxygen to form one molecule of water. Atoms and molecules are more or less fixed in position for they are the units of matter which, when welded together, make up masses of visible solids. But the electron, which can be made to move at will, can well be called an atom of electricity.

#### The Birth of Electricity

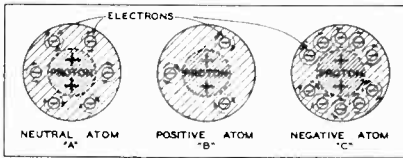
In the center of each atom, which is a tiny sphere, is a minute, but complete, solar system. The atom, being a particle of matter, has bulk and weight. Its center, however, is a core or nucleus of pure positive electricity—the *proton*. Around the center many electrons are constantly spinning—like the planets about the sun. We know that positive and negative electric charges attract each other, and, since the proton nucleus of the atom is a unit positive charge of electricity, it must, therefore, attract to its bulk a sufficient number of negative electrons exactly to balance or neutralize the proton charge. The atom, then, becomes electrically neutral or normal. This is the state of any mass of matter unless it has been affected in some way by an outside or internal influence or disturbance.

What can affect the neutral state of any mass of atoms or molecules? Friction, mechanical motion or chemical action can set the electrons free from their associated atoms. Electricity is made available simply by compelling the electrons to move away rapidly. We must realize that electricity cannot be created out of nothing. Electrons are present al-

ways in any substance; it is necessary only to set them in motion. Water, for instance, is not created by a pump; the latter simply starts the motion and keeps it going. The electric generator or battery is the pump that keeps the electrons flowing.

### The Law of Conductivity

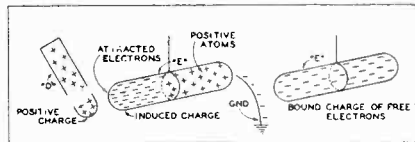
Electrons can fly with the speed of light through any conductor. The spaces between the atoms and molecules of a wire are vast when viewed by an electron. It can pass through with the ease of a fly in some great auditorium. Now, if a great many electrons are forced through a length of wire, many of them do not reach the far end, and the original current becomes reduced. If an excessive quantity of electrons try to pass through the atomic spaces of a small wire, the crowding becomes so great that the friction causes sufficient heat to melt the wire. Conductors with smaller atoms and less space between offer more resistance to the flow of electrons than material composed of larger atoms with more open spaces between. That is why some metals are good conductors while others offer high resistances.



What happens when we set free the electrons normally held within the atom's solar system, and upset the neutral state of an atomic mass? We have seen that the atom's positive, or proton, charge must remain constant. Up to now it has been neutralized by the presence of a certain number of associated electrons, as shown at "A" in the illustrations. But let us remove some of the electrons, as shown in "B," and we readily see that the proton positive charge predominates and gives to the atom a definite charge of positive electricity. Or we can thrust some additional electrons on

the neutral atom "A," and then the negative charge of the electrons predominates, as shown at "C." The work of adding to, or taking electrons from, atoms, is called *ionization*. This term, in radio, refers particularly to the atoms and molecules of air and gas.

Because of the ease with which electrons can be separated from their parent atoms we find that electric charges can be developed by induction, just as we have seen currents created by electromagnetic induction in wires and coils. This new form of induction is termed *capacitative induction*, and is one of the absolute essentials in radio work. Let us see how it is accomplished.



### Static Electricity

Rub a glass rod briskly with a piece of warm, dry flannel. The electrons will be agitated and many of them are attached to the flannel. Now, because of the resulting deficiency of electrons in the rod, the latter assumes a positive charge, as shown at "D" because the positive protons of the atoms predominate, which condition is indicated at "B." Thus a state of frictional or static electricity has been developed. This charged rod can be used to induce charges—of an opposite nature—in another, but insulated, body.

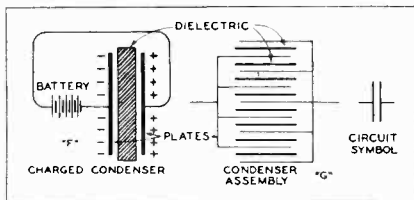
Suppose we suspend a glass tube from a silk thread, as shown in "E." This tube, or rod, is normally inactive and electrically neutral, for the electrons are in place along with each atom. But, as soon as the rod "D" is brought close to one end of "E," as shown, the positive charge on the former *attracts* as many of the electrons in "E" as are needed to make up the deficiency of electrons in "D." These freed electrons rush to the end of "E" where they are *bound* on the surface by induction. This, then, is

called a *bound charge*. But, at the other end of "E," the atoms are deficient in electrons, and a positive state persists. Some refer to this as the *repelled* positive charge—sent to the far end of "E" by the like charge on "D."

If we touch the far end of "E" with a grounded wire (GND), a number of surplus earth electrons will rush into "E" to replace those electrons bound at the end next to "D." Each positive atom receives its quota of electrons and, upon removal of the wire, we discover that "E" now has a large excess charge or supply of electrons. Remove the charged rod "D." The electrons now distribute themselves evenly over "D," which is negatively charged through the inductive effects of the positive charge on "D." Bring "D" close to "E" and, if in a dark room, a tiny spark will be seen as the surplus electrons jump off "E" to seek the positive or electronically deficient atoms of "D." There they recombine, and the charges are neutralized, with both "D" and "E" returning to their normal state. The amount of charge that can be induced on "E" is determined by the area of the surface, the kind of material, and the insulation (in this case a silk thread) which prevents the electrons from leaking off. This, then, is the *capacity* of a body to hold an electric charge. Many other interesting experiments with capacity and induction can be made by the amateur. That of the electrophorus (described in any text book or encyclopedia) is the most popular and entertaining. It is capable of producing strong shocks and brilliant sparks.

### Principle of the Condenser

At this point, we come, quite naturally, to a discussion of the *condenser*. It is a device absolutely necessary in radio, and has the ability to receive, hold, and yield a charge of electricity. A condenser is constructed by placing two parallel conducting surfaces on opposite sides of some insulating material, called the



*dielectric*, as shown in "F." This arrangement provides a *fixed condenser*. The capacity of this condenser can be increased by enlarging the area of the dielectric surface, or the addition of several units, connected as shown in "G."

When placed in an electric circuit the condenser is a *blocking* or insulating device. An electric current cannot pass. However, when connected to a battery, the condenser will store up electrons which can be later discharged into the circuit. At "F" we see a simple condenser and battery. If a billion electrons accumulate on the negative side, then the opposite side becomes equally deficient in electrons. Remove the battery. The condenser is now charged with opposite electric charges bound on the two opposite sides by attraction. There is a form of electrical strain and stress in the material used as the dielectric. This strain can be released instantly in the form of a momentary flow of electricity if the two opposite sides of "F" are touched together with a wire conductor.

A condenser can pass an alternating current although it effectively blocks a direct current. When an alternating current is impressed upon both sides of a condenser it is charged and discharged—first in one direction, then in the opposite—although the current does not actually pass through the condenser. Current really flows into and out of a condenser. The first alternation—call it negative—will give the plates a negative charge, then, as the second—the positive—alternation appears, the negatively charged condenser discharges into the circuit and prepares to receive a positive charge. Thus, current flows to and from a

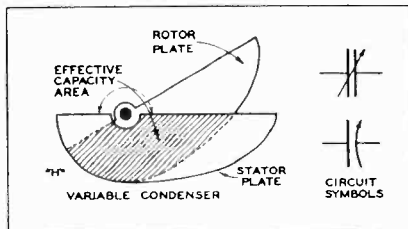
condenser at every cycle of an alternating current. Apparently, therefore, a condenser *seems* to pass a current of alternating electricity. And it is this principle that gives us a powerful device to control the tuning of our radio receivers, as we shall see in a subsequent chapter.

### Measuring Capacity

The capacity of a condenser depends upon the dimensions of its conducting surfaces or *plates*, and the type and thickness of the dielectric. This capacity is measured by a unit called the *farad*. But even one farad is too immense to use—it would make a condenser as large as a great building. So we use a unit of capacity that is more in keeping with the size of radio condensers. It is the *microfarad*, meaning one-millionth part of a farad. A still smaller unit, called the *micro-microfarad*, is one millionth of one-millionth of a farad. Thus, we write the capacity of a condenser, for instance, as 0.0005 of a microfarad (mfd), or, more conveniently, 500 micro-microfarads (mmfd).

Our radio receivers use several types of condensers. The fixed condensers are divided into the *by-pass*, *blocking*, or *filter* types. The larger filter types are more carefully constructed, most of them being known as *electrolytic* condensers. These give large capacity with the minimum use of space. The variable types are known as tuning and adjusting condensers.

The *variable condenser* is unique with radio. It is constructed of interlocking, spaced metal plates using air as the dielectric. One set of semi-circular stationary plates are connected together and form one surface of the condenser. These are the *stator* plates. Another set of spaced plates, which can be rotated between the stator plates by a shaft, is called the *rotor* plates. They are used to vary the capacity of the condenser continuously from zero to maximum by changing the area of the plates opposite each other, as shown in "H."



### Tuning a Radio Receiver

Condensers, as we have learned, pass only alternating currents. Low-frequency alternating currents pass only through large condensers. High frequencies only can be passed by small condensers, or large condensers as well. In other words, it takes a large capacity condenser to permit low or audio-frequency currents to flow, but a small capacity condenser will pass high, or radio-frequency currents. The variable condenser, therefore, can be made to pass high and low frequency alternating currents simply by adjusting it to the proper capacity. In radio sets, these condensers have sufficient size to pass the radio currents having frequencies between 1500 and 550 kilocycles or 200 and 550 meters, respectively. A number of units, placed on a single shaft and turned with one dial, simultaneously tune a similar number of inductance coils. Capacities of these condensers range from 0.00035 mfd. (350 mmfd) to 0.0005 mfd. (500 mmfd.). Short wave condensers are much smaller and range from 10 to 320 mmfds. The tiny *adjusting, balancing or trimmer* condensers, used to offset mechanical irregularities in large variable condenser construction when lined up in a *gang* unit, have capacities ranging from 3 to 35 mmfds.

Now that we understand how condenser capacity controls the frequency of the alternating current passing through the radio circuit, we shall be better able to realize how condensers are used to *tune* radio circuits to any desired frequency flowing in the receiving antenna. Next month, then,

(Continued on page 46)



# Dressing Room GOSSIP

• • • By "BETTY"

**I**NTRODUCING Katherine Carrington, singing star of "An Evening in Paris," Columbia's Sunday night musical half-hour. Good breaks and the ability to capitalize on them brought her to stardom.

Born in 1908 at South Orange, N. J., and schooled at St. Agnes Academy in Albany and at East Orange High School, Katherine always nursed stage ambitions. Her first appearance was in an amateur production of "Cinderella." She stole the show. Success with school, church and amateur productions strengthened her resolve to be an actress. After finishing high school she attended the American Academy of Dramatic Art at Carnegie Hall, New York.

Was graduated from there in 1925 with rather romantic ideas of Shakespeare and classic drama. Disillusioned by fruitless rounds of the Broadway agencies, she finally made her first professional bow with a vaudeville tabloid musical comedy in Peoria.

## On the Stage

Next came the role of a fairy in a revival of the Gilbert and Sullivan opus, "Iolanthe," followed by a small part in "Desert Song." Another vaudeville tour, then musical comedy revivals with a stock company on Long Island that prefaced her next Broadway appearance. Had a small part in the play, "Little Accident," and won its leading part on the road tour. First real break turned to heart-break when she was chosen for the prima donna part in the first "Little Show," with Fred Allen, Clifton Webb and Libby Holman. As the revue went into rehearsal, she went under the knife with appendicitis. Recovered in time to take the part on its tour of the hinterlands.

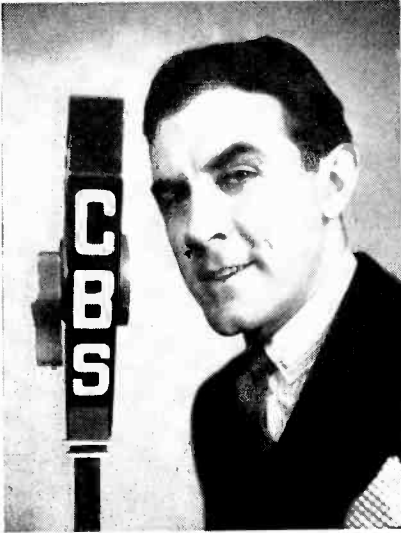
Then followed the Theatre Guild's

"Garrick Gaieties," appearances in Manhattan night-clubs, and the road again, playing the role of a French vamp in "Princess Charming"—the role which Jeanne Aubert had filled in the New York production. Later stormed Broadway booking offices, announcing, "I'm Katherine Carrington." "Oh, yeah," an agent belittled. "Never heard of you." Then she added, "You will! I'm just back from the Aubert part in 'Princess Charming.'" The agent rushed her in a cab to the stage of the Imperial Theatre, where Ed Wynn was wringing his hands and tearing his hair. Wynn's revue, "Laugh Parade," faced sudden closing, for its leading lady, Jeanne Aubert, had been taken ill. There had been no understudy for the part. Katherine had seen the show and knew the part. She pleaded for the chance to try it. For two hours she memorized script and practised songs. The show went on, the audience was won, and Katherine received an ovation when Wynn told the audience of the drama behind the scenes.

## In Musical Comedy

Then came leads in two of the most successful musicals Broadway has known—"Face the Music" and "Music in the Air." Rave notices followed and radio sought her for the "Evening in Paris" program, co-starred with Milton Watson (photographed with Katherine on page 9).

Katherine is blonde and charming. . . . Designs all of her own clothes and might have become a dress designer if she had not answered the call of the footlights. . . . Likes football and dancing. . . . Always answers fan mail, for she still remembers her bitter disappointment when one of her girlhood idols, a famous dramatic actress, never answered her letters.



*The Boy from Steubenville*  
**He Made Good in the City**

George Beatty, who likes to speak of himself as "half serious and half-wit," might have been one of a number of things—opera and concert singer, professional baseball player, cartoonist, writer or surgeon. Instead, by accident, he turned out to be a comedian and is doing very nicely with the "American Revue" Sunday night variety program, co-starring Ethel Waters, on the CBS network.

George was born at the turn of the century in Steubenville, Ohio, where he went to grammar and high school and where his father was a high member of the Board of Education. Enrico Caruso was his boyhood idol, and George planned from the beginning to be an opera singer. At school, he proved extremely versatile, playing baseball, football, basketball, tennis and boxing, drawing cartoons for the school paper, entertaining with the glee club and dramatic club, and taking part in amateur minstrel shows. On the side, he helped toward his support by working for \$4.00 a week as assistant boys' secretary of the local Y. M. C. A.

After graduation, young Beatty started toward the ideal he had chosen for himself, spending three years as a concert baritone in Chautauqua and concert tours and studying voice. Then came the accident which converted him into a comedian. A skillful pitcher, George played semi-pro baseball every now and then on Saturdays and Sundays. One afternoon, a wild ball struck him in the Adam's apple and laid him up for four months. His vocal chords were affected, so that future dreams of an operatic career were out.

### On Vaudeville Circuit

From 1921 on, Beatty devoted himself to vaudeville. For three years he was the baritone of that well known quartet, the "Big City Four," then for three years he worked with Jack King, in a piano comedy act. Since 1926, he has carried on as a single, with a comedy song and patter routine, and any dyed-in-the-wool vaudeville critic will tell you that his pantomime of a celebrating sailor trying to roll a cigarette is one of the classics of the four-a-day.

George made his first radio guest appearance this fall and displayed such a refreshingly original type of humor that he was signed as master-of-ceremonies for the "American Revue" heard over CBS every Sunday at 7:00 p. m. EST. Unlike many comedians, he writes his own material, including the music and lyrics of his comedy songs, such as "Springfield" and "I Love to Watch Steam-Shovels."

George is just six feet tall, weighs 170, and has blue eyes and brown hair. Handsome, affable and extremely well liked by all his associates. Has been married since 1921. . . . Has appeared in movie shorts written by himself. . . . Actually craves fried green tomatoes for breakfast. . . . Travels by air whenever possible. . . . Still keeps up the stamp collection he started as a boy. . . . Prefers life in the country. . . . Won't read from a radio script he

hasn't typed himself—his only superstition.

### Stories of "The Big House"

Lewis E. Lawes, Warden of Sing Sing Prison, presents half-hour dramatized stories of the men who are serving "Twenty Thousand Years in Sing Sing," every Wednesday at 9:00 p. m. EST, over an NBC (Blue) network. In the thirteen years that he has been head of the most famous prison in the United States, Warden Lawes has achieved a world-wide reputation and has become the most widely known Warden in the world.

Lawes has turned the operation of a penitentiary into a well-organized and efficient business proposition, not with a view to profit taking in the financial sense, but very definitely so in the field of turning out law-abiding citizens where law breakers had gone in.

Lawes says that the idea began to take form nearly thirty years ago, at the time that he became a guard in Clinton Prison at Dannemora, N. Y. Prior to that he had been first a newspaper reporter, and then an enlisted man in the U. S. Army.



Warden Lawes of Sing Sing



Katherine Carrington and Milton Watson

After Dannemora, Lawes passed through a number of phases of prison work, including a position of chief guard at Auburn. Then he was chosen as superintendent of the New York City Reformatory, and it was while he served in this capacity that the then Governor Alfred E. Smith made him Warden of Sing Sing.

Today his name is synonymous with prison reform. Welfare leaders, penologists, social workers throughout the country eagerly seek his aid and advice. His appearance as a speaker is always a widely heralded event, his book has served as the theme for a motion picture, and yet with these manifold activities, it is Sing Sing, and those within its walls, to which he gives the greater part of his thought and time.

\* \* \*

Ethel Shutta's two young sons are their own radio censors. Whenever a singer comes on the air to render a number their mother has done on NBC they are up in arms. "Shut her off, quick!" yells George Olsen, Jr., aged 4, and Charlie, aged 6, jumps

to obey. They think there should be a law, or something, prohibiting anybody from singing their mother's songs.

\* \* \*

Gertrude Niesen found herself pressed for time when playing at a Brooklyn theatre recently. . . . She had to get to the CBS studios in New York in a hurry for "The Big Show." . . . Gertrude didn't know how to go about getting a police escort, so she ups and hires an ambulance for \$15, arriving in it just two minutes before the dress rehearsal.

\* \* \*

There are two casts for "Just Plain Bill"—one in New York and the other in Chicago, each playing to different sections of the CBS network. . . . The same thing applies to the "Bobby Benson and Sunny Jim" scripts.

\* \* \*

The Men About Town turned down a commercial because the sponsor wanted them to add another voice and sing as a quartet. Their excuse is that they'd rather be the top trio than one of many quartets.

\* \* \*

Guy Lombardo has added another member to his Royal Canadians band which now numbers an even dozen. The latest addition is Hugo D'Ippolito who will share piano honors with Freddy Kreitzer, giving the orchestra for the first time two pianos. And like ten others in the group, he, too, hails from London, Ontario. Strangely enough, he looks more like the Lombardo brothers than they look like themselves.

\* \* \*

Ethel Waters, the great sepia singer, is probably the most honest solitaire player in the country. She calms her nerves before a broadcast by playing, keeps accurate check of how much money she wins or losses. Her losses are added to her contributions to charity. Ethel has been signed by Magna Pictures for a two-reel musical comedy, "Hot and Bothered."

In order to be in the proper mood for a broadcast, Lee Wiley, the melancholy stylist of song, always dines at one or another of the town's swankier places the evening she's going on the air.

\* \* \*

Frank Black, the maestro, is one of the casualties of the opening of Radio City. As he sat down in a chair to start the largest orchestra ever heard in New York (400 men) to rehearse, the conductor's chair toppled over backward and he sustained painful leg injuries.

\* \* \*

The name of Ann Enсле doesn't mean a thing to radio listeners. But it does to the orchestra leaders and artists. For Ann is the young lady at the Columbia offices who checks on their musical numbers and sees to it that none are repeated within specified times. She is deluged with all sorts of sheet music from the publishers. So when Ann's office was moved to another floor, she did the very natural thing. She tacked on the door a copy of "Annie Doesn't Live Here Anymore."

\* \* \*

A Washington station recently held auditions for a woman announcer. Among the candidates for the job was a young lady by the name of Helene Smith, a secretary in the Department of Justice. She passed the test with the highest average and was given her first trial program to announce. At the conclusion of her broadcast, the station manager said: "You did very nicely, Miss Smith. Now tell me, do you know anything about radio?" "Well, in a way," she replied. "I have a sister who is sort of connected with radio. Her name is Kate." Kate's sister is 26, two years older than Kate, and is a decided blonde of medium height. She is comparatively slender. Not wishing to capitalize on her sister's influence, Helene secured the position entirely unknown to Kate.

*(Continued on page 46)*

# A Little Debate on AERIALS and GROUNDS

More Important Than the Set?

**A**ERIALS and grounds, constituting as they do a most vital factor in distant reception, are an ever-present source of interest to all listeners. Of course if one is interested only in local reception any old kind of an aerial or even none at all will do. But if one wants to hear those far-distant programs then too much attention cannot be given to this important part of radio reception.

Some one has said that the total energy gathered by a million aerials would not light the bulb in a pocket flash. How true this may be we are unable to calculate but the statement does help to make clear what an infinitesimal amount of energy enters the set and how important it must be to guard at every point and in every way against the loss of the tiniest part of this tiny current.

Unfortunately neither aerial nor ground is capable of mathematical demonstration. In other words it is not possible to furnish a formula for either aerial or ground that will be *best* in every case with any receiver or even with the same receiver. The matter of location in its geographical, meteorological and geological aspects, plays too great a part.

Under these circumstances there is no way to find the *best* for any location or any receiver except through experimentation. Trying various expedients in both aerials and grounds is not only an interesting but a most profitable undertaking.

## Value of Experiments

"It is really amazing just what one can do with a bit of careful experimenting in aerial and ground connections and construction," concludes Edward W. Pew, 1151 South Broadway, Los Angeles, Calif. "Each lo-

cality, of course, presents a different problem and offers one no little pleasurable pastime and enjoyment.

"I began experimenting with different aerial and ground connections after moving into a permanent home. I settled down to an aerial of about 60 feet in length and used a seven-strand copper wire (lacquered) attached to a mast on the corner of my garage and running downward to the house where it leads in just at the window top. I carefully soldered all connections and used a metal-shielded lead-in to the set aerial post.

"For a ground I am using a coil of copper tubing (about 15 feet of it when uncoiled) buried in the ground about three feet. The lead-in from the ground is a lead-covered 16 gage twisted wire. This is also carefully soldered at all connections, window lead-in, etc. For the aerial lead-in a radio technician suggested that I use a heavier wire than the aerial. All connections I have insulated with



The Davidson twins, Harriet (left) and Gretchen (right), newly recruited to the Columbia dramatic staff, are scheduled for important roles in various sustaining features. They're nineteen years old, come from Chicago and prefaced their radio work with appearances in the late Ziegfeld's "Showboat."

a good tape and then painted with heavy auto-enamel.

"With the above construction I am able to play at full volume many of the distant stations and, with favorable weather conditions, during the winter months I get really excellent reception with no more static and noise than with local stations. I receive WJZ, WGN, WENR, WLS, WMAQ, WLW, WBBM, WBAP, WFAA, WHAS, WWL, KOA, KDKA, KMOX and several Mexican stations of the better class. With these and the California, Washington and Oregon stations of note, I am enabled to enjoy quite a variety of excellent programs."

### The Grounded Aerials

Another interesting factor which may be discovered and capitalized upon by experimenting is the directional effect. The less desirable stations may be put into the background and the desirable ones emphasized by changing the direction of the aerial. This point is brought out by Clair Calavan, Jefferson, Oregon.

"I did not discover that reception could be improved from any given direction until about two months ago when I erected an exceptionally long aerial to the east. Upon connecting it to my set in midafternoon one day, I noticed that I could easily tune in a number of the more powerful eastern stations. I then tuned in a number of the local stations to the north and found that they did not come in as strong as usual.

"I had read a number of articles in RADEX by persons who had obtained better reception and new stations by grounding the far end of their aerial. I tried grounding the end of my high aerial (about 35 feet high) but some of the results weren't so good. Then I grounded the far end of a 100-foot aerial, 15 feet high, which ran toward the north. I found that it increased the volume of the stations and, oddly enough, almost completely eliminated the loud continual static which had bothered me during the hard, sudden showers in the spring and fall.



*That sardonic haunter and villain, Beetle, who heckles Phil Baker, the Armour Jester, during their broadcast every Friday at 9:30 p. m. EST over an NBC (Blue) network, is shown here in the flesh for the first time. But he would only peck so no one could get a full view of him.*

"I believe I have found the real reason for the improved reception of some stations on these grounded aerials. It is because they possess marked directional characteristics.

"I now have seven aerials pointing in different directions. I also have an ordinary ground connected to the eight-point switch which I constructed. Thus it is a simple matter to switch to any desired direction. I am afraid this system would be impossible for those living in crowded districts but to those in the wide, open spaces, I urge the experiment if they are interested in reducing interference and increasing the signals of distant stations.

"I have found these grounded aerials a great aid in reducing interference on West Coast stations. I can listen to KORE to the south or KBPS to the north, both on the same wave, with very little interference from the other. On an ordinary ground they come in with about the same volume,

*(Continued on page 46)*

# PROPER REPORTS

## Bring Verifications

• • • By ALFRED W. OPPEL,

Executive Secretary, Newark News Radio Club

**A**LTHOUGH we are sure that you all have read many articles on the subject of radio and DXing, we venture to speak of verifying and a good method of doing so.

Strange as it may seem, very few distance seekers really know the correct way of writing a station and asking for a verification. We say "correct" advisedly since there are many legitimate ways which will usually bring the desired results.

We are presenting a form which has received better than a 99% average in station response over a period of four DX seasons and which has brought in 775 verifications. All of which leads one to think that it may have its advantages.

As part of my former duties as Assistant Secretary of the Newark News Radio Club, I had to verify reports for a local station. At least fifty per cent of these reports were written illegibly, contained no return postage or were written on post cards. Is it a wonder that they received no replies in many instances?

First of all, a DXer must be sure of his station call letters. Then he must list the musical selection or conversation by the announcer at the exact time at which it happened. He should note fading—the time period between the start of the fading and the return of the signal—as well as interference from any other station, amount of static, temperature, modulation, hum or any other bit of information in which the station operator might be interested.

This information, together with the request for verification, should be contained in the introductory part of

the letter. In a separate block, there should be listed the program and the time it was heard. And, incidentally, always indicate the time in which you are reporting the reception—E. S. T., C. S. T., etc.

The conclusion of the letter can be short with a wish for the good health of the station personnel and the hope that an early reply will be received. If you have ever been in the vicinity of the station, no matter where it is, except locally situated, inject this personal note into the letter and it will often bring results where an ordinary letter did not or would not.

It is an important thing to have



*Helene Dumas, blond stage and radio actress, plays a leading role in "The Three Musketeers" over an NBC (Blue) network each Thursday, Friday and Saturday, at 7:15 p. m. EST.*

stationery printed with your name and address prominently displayed on the letter paper as well as the return address on the envelope.

Finally, remember that return postage is a very important feature of your request for a verification.

Even so, there are times when stations will not answer, even if the above procedure has been followed carefully. The writer usually allows the station thirty days in which to answer and, if no reply is forthcoming within that period, we generally drop them a postcard and point out that, regardless of existing conditions at the station, we are entitled to the courtesy of an answer. Of course, there are some stations which won't answer a gentle hint like that and then there is only one remaining recourse.

Write to the Secretary of the Chamber of Commerce in which the station is located. Point out the prestige given the town by the radio station. Tell how they have ignored all your requests for a verification, despite your polite letters, your reminder and the return postage. Stress the civic pride involved and, in the majority of instances, the Secretary will inveigle the station into answering you when other methods had failed.

Only two stations in this country have ever failed to answer me—WMBA, Newport, R. I., and a California station which was deleted one week after I had heard it. In both instances, the Secretary of the Chamber of Commerce wrote me a letter and explained the situation satisfactorily.

When writing to a station owned and operated by a college, it is well to address your report in care of "The Registrar." That will often bring an answer where other methods would not.

When writing to Cuba, Mexico and other Spanish-speaking countries, always use the language of the country, as it will bring a reply almost without exception. Always make these let-

ters flowery in substance as the Latins seem to prefer this in the business letter.

These small details may seem familiar to most DXers, but I am sure they are seldom followed.

And now for a sample verification request form. Avoid using technical terms like QSA5, R4, etc., unless the station operator requests them. An announcer may read your letter and wonder what you are talking about.

JOHN W. SMITH  
2737 FIFTH AVENUE  
NEW YORK CITY

December 1, 1933,  
From 4:20 to  
4:40 A.M., E. S. T.

Radio Station KNMO  
Seattle, Washington

Dear Radio Friends:

On the above date and time, I had the pleasure of hearing your station transmitting on 1010 kilocycles and ask that you please send me a verification if the data below prove to be correct. Station volume was adequate, but static and interference from XYZ, on your channel, prevented better reception. Modulation was perfect and fading every two minutes for one minute. Here is what I heard:

The recording "Love Everlasting" by the Victor Salon Orchestra at 4:20 a.m., E. S. T., followed by the announcer saying, "Hello, Everybody! Why not send us a report on reception? We'll be pleased to hear from you and will verify all correct reports. We now dedicate the next number to Ted Carlton, of Hohokus, N. J. The name is . . .

"'When The Moon Comes Over The Mountain,' recorded by Kate Smith and orchestra." This at 4:26 a.m. "This is station KNMO, The Voice of the Grand Ballroom, in Seattle," etc., etc., to 4:40 a.m., when the writer left the dial setting.

Thanking you in advance for your answer and with best wishes to you and your staff, I am,

Cordially yours,  
John W. Smith.



# Short Stories of the Short Waves

All the News in High Frequencies

**T**WO of the best stations on short waves at the present time are HJ1ABB and HC2RL, and we are pleased to announce that their owners have agreed to dedicate special programs to readers of this magazine during this month.

The time chosen for the program from HJ1ABB is 5 to 6 a. m. EST, on January 14, or 1000 to 1100 GMT the same day. The address of this station is Radiodifusora "La Voz de Barranquilla" de Elias J. Pellet B., Apartado 715, Barranquilla, Colombia. Mr. Pellet sends us the following information:

"Our wavelength is 46.5 meters or 6451 kcs; power, 12 watts; schedule, daily from 11:30 a. m. to 1 p. m. and 5 to 10 p. m. EST. On Sundays we broadcast from Parque de Bolivar the concert played by the Police Band at 7:45 p. m.

## Building New Station

"In the very near future I will inaugurate a new and modern station with a power of 300 watts, Class B modulation and high grade microphones such as the Brush Crystal and RCA velocity. Tests on this new station will take place on Tuesdays and Thursdays at midnight and Sundays at 5 a. m. EST. Reports are welcome and QSL cards sent to all who send a report that is O. K. with our log."

Mr. Pellet's new card is one of the most attractive we have seen and carries the statement that for ten correct reports a beautiful set of photographs of the City of Barranquilla will gladly be sent.

## One from Ecuador

January 14 is also the date chosen for the special program from HC2RL, the time being 1015 to 11:15 p. m., EST. This time is equivalent to 0315 to 0415 GMT, January 15. Marie Piedad Castillo de Levi is the owner

of the station and Dr. Roberto Levi the Director. Letters should be addressed to Dr. Levi, P. O. Box 759, Guayaquil, Ecuador. In a letter to RADEX Dr. Levi gives the frequency of HC2RL as 6668 kcs. or 44.97 meters, and the power is 150-200 watts in the antenna. Their regular schedule is, Sundays from 5:45 to 7:45 p. m. and Tuesdays from 9:15 to 11:15 p. m., EST. These programs open and close with the playing of the Ecuadorian National Hymn, and the expression "Quinta Piedad" is used often in the announcements. The January 14 program from this station will feature primarily Ecuadorian national music, and as Dr. Levi has planned to have artists from the National Conservatory of Music and the Academia de Artistas Nacionales, we believe the program will be a very interesting one.

## And From Venezuela

YV3BC will be on the air again this month and next with special pro-



Here's an exotic type of head-gear, the latest addition to the wardrobe of Gertrude Niesen, Columbia's young songstress. Her distinctive interpretations of modern tunes are a weekly highlight of "The Big Show," with Ishan Jones' Orchestra, over CBS Mondays, 9:30 p. m. EST. In addition, she is featured in her own sustaining series of programs.

grams for RADEX. On January 10 and February 10, YV3BC, Radiodifusora Venezuela en Caracas, will broadcast on 31.52 meters from 9:30 to 10:30 p. m., EST. Any reader who has not yet received a QSL from this station should take advantage of these specials and obtain a really worth while verification card.

The International DX'ers Alliance announces that YV1BC, Broadcasting Caracas, will transmit a special program on short and long waves on January 7 from 1 to 3 a. m., EST. The wavelength will be 49.1 meters, or a frequency of 6.112 megacycles. The address, Apartado de Correos 290, Caracas, Venezuela.

#### Thanks to HIX

We take this opportunity of expressing our appreciation for the courtesy shown RADEX last month by Mr. J. R. Saladin of station HIX, Santo Domingo City. A special two hour program was transmitted on December 5th and Mr. Saladin kindly dedicated one hour of it to our readers. Although this information was received too late for inclusion in the December number, many radio fans were notified personally so the Symphonic Society of Santo Domingo could play to a good sized audience. Mr. Saladin says the schedule we give for HIX is correct except for the Sunday morning broadcast, which begins at 7:40 a. m., EST.

#### The Lisbon Station

A post card received from station CT1AA gives their complete mailing address as Estacao CT1AA, Rádio Colonial, Abilio Nunes dos Santos Junior, Av. Antonio Augusto de Aguiar 144, Lisbon, Portugal. Senhor Santos gives his schedule as 2130 to 2400 GMT on Tuesdays and Fridays, or 4:30 to 7:00 p. m., EST. This station is easily identified by its interval signal of three cuckoo calls, and by the English announcement, "Lisbon calling Rádio Colonial, Station CT1AA on 31.25 meters." CT1AA always verifies correct reception reports. 2000 watts power is used.

#### Another in Canada

A letter from the new broadcast band station VE9EK at Montmagny, Quebec, contains the information that they also work on short waves under the call CKT on 2284 kcs. and VE2DC on 3333 kcs. This is an official station of the Canadian DX Relay. Its owner is J. A. Marquis, 11 Rue St. Jean Baptiste. The power used is only 10 watts.

#### The Brazilians

The Radio Club of Brazil has made its appearance again on station PRBA. PRBA is, we believe, merely a phantom call used by this Club when they rent the facilities of the Companhia Radio Internacional do Brasil. PRBA has been reported on 36.65 and 31.58 meters, wavelengths which correspond with stations PSK and PSA. These programs generally commence near 4:30 and last until approximately 8 p. m., EST. Readers reporting PRBA are Lowell F. Barrows, 149 E. Winter St., Delaware, Ohio; Doyle E. Carpenter, R. W. Evans, Richard Carter, Wm. McDaniel, Geo Glass, Robert Weber and John Strong, all Official Auditors.

The Radio Club do Brasil generally announces in several languages in addition to their native Portuguese. Three strokes on a gong are used as an interval signal, and PRBA signs off with the Brazilian National Hymn.

#### Finds Two Rare Ones

The only report that has ever been brought to our attention on station UOR3 was received from W. T. R. Morris, 3219 Garland Ave., Richmond, Va. Mr. Morris, Official Auditor for his state, writes, "Shortly after 1 p. m., EST, I noticed that both England's and Germany's 25 meter stations were off the air, so I tuned around the 25 meter band and picked up UOR3 at Vienna, Austria, with fine volume, considering its power of only 250 watts. Then I tuned a fraction away from UOR3 and found RW50 (RNE?) with also a fair signal. I haven't any way of telling exactly the right wavelength

to the hundredth part of a meter, but I do know that these two stations are almost jammed up against DJD and GSD. Both the stations had fine quality and neither of them faded completely out at any time. Of course there was some fading, but never complete. I am positive as to the identity of UOR3 but I wouldn't swear about the Russian."

### Many Pick Up KJTY

KJTY, Admiral Byrd's flagship Jacob Ruppert, is reported by a number of readers. Doyle Carpenter, Official Auditor in Emmetsburg, Iowa, says he has heard KJTY almost nightly on their 8840 kcs. frequency from about 9 p. m., CST. "It is 9:30 p. m. and I am listening to a very interesting program from KJTY," he writes. "They are having quite a party with music and a speech by Admiral Byrd himself. I think they are practicing with WEZ for a broadcast to be given next Saturday night. I got the program a week ahead; that's what I consider good service. They rate about QSA4, R7, with some fading." Clement Van Velsor, 1033 Sanford Ave., Irvington, N. J., and Geo. W. Burns, 2466 Wahl Terrace, Cincinnati, Ohio, both heard KJTY off Easter Island, about 120 West longitude and 40 South latitude. At this time KJTY was on 31.5 meters, but as this wavelength was only assigned temporarily it is possible it will not be heard again. Other readers reporting KJTY are John Strong, R. W. Evans, Robert Weber, all Official Auditors, and W. H. Lewis, of 1328 Delaware St., Leavenworth, Kans. Mr. Lewis uses a Midwest 16-tube all wave receiver and would like to hear from other DXers.

From A. B. Baadsgaard, Ponoka, Alberta, comes this interesting report: "The past two nights between 8 and 10 p. m., MST (Thursday, Nov. 23, and Friday, Nov. 24) I had the pleasure of bringing in Station KJTY direct on 40.80 meters. The volume was like a local and it was quite distinct. The ship was reported some



*Johnny Marvin, lonesome singer of the air, presents his daily programs at 12:15 p. m. EST, over an NBC (Red) network. Marvin is assisted by Legwin Hester, guitarist (left), and Irving Miller, pianist (right). Johnny possesses that elusive and indescribable something which makes people want to write to him. In proof of this, he receives more than 8000 letters a week from listeners who have enjoyed his singing and want to tell him about it.*

4,000 miles out. The receiver used in recording this broadcast is a Canadian Marconi all-wave Model 41, 11 tubes. The December RADEX with its article on 'Listening for KJTY' made this feat possible."

### From the Netherlands

"I received a card today from PHI which was mailed from Hilversum," writes Robert L. Weber, West McHenry, Ill. "It says, in part, the PHOHI station (call letters PHI) was built by Philips' Radio, Eindhoven, and the Nederlandsche Seintoestellen-fabriek, Hilversum, Holland. The transmitter works on wavelengths of 16.88 meters (18885 kcs.) and 25.57 meters (11730 kcs.), depending on the season. Announcements are made in Dutch, Malay, German, French, English, Spanish and Portuguese.

Management and Program Department, Eindhoven. Studio, Hilversum. The schedule, Monday, Thursday and Friday, 12:30 to 14:30 GMT, and Saturday and Sunday, 12:30 to 15:00 GMT. They add that their transmissions are for the Dutch East and West Indies but they announce in seven languages to give listeners an opportunity to identify their station and enjoy their broadcasts." The schedule, given above in GMT, becomes, in EST, 7:30 to 9:30 a. m. and 7:30 to 10 a. m.

### The German Stations

Commencing January first, considerable change is expected in the transmission schedule of the German stations. A new station, DJL, should make its debut about this time, on 15.110 meg. or 19.84 meters.

Several readers have received letters from the Reichs Rundfunk Gesellschaft which, translated, reads in part, "We wish to inform you that the construction of our short wave network has progressed considerably. In January, 1934, we shall start working three more short wave aeri-als with directional effect towards South America, Africa and Eastern Asia. For each sender we will arrange programs considering each individual country." They add that they are endeavoring to compose programs which will meet with the approval of all listeners, and to accomplish this the cooperation of everyone hearing their broadcasts is necessary.

We are advised by the Chicago Short Wave Radio Club that the schedule of DJC will be advanced an hour, becoming 8 to 10:15 p. m., EST.

"DFB in Nauen, Germany was heard twice near 8:30 a. m. calling Maracay, Venezuela," reports R. W. Evans, 832 Richie Ave., Lima, Ohio. "This station has a peculiar signal by which it can be identified. Most phone stations use a single tone or whistle when they are calling another station; this station has a three-tone whistle which corresponds to the notes D, C and G on the piano. I am not sure of the call but it is a German

station and the dial reading is very close to DFB's assigned frequency, 17.520 meg."

### In Mexico and Costa Rica

"By the way," continues Mr. Evans, "I have not heard XETE for quite some time. Are they still on the air? Also, TI4NRH has changed its sked to 10 to 11 p. m. HC2RL is received regularly on its schedule. CT1AA has not been heard for some weeks. PSH on 10220 has been testing with an American phone in the early evenings."

Regarding XETE, they have been heard testing by two listeners on their original wavelength of 31.25 meters in the early mornings near 3 to 4 a. m., EST. G. W. Gilbert, 342 N. Brighton Ave., Kansas City, Mo., reports XETE interfering with VK2ME on Sunday mornings.

As for TI4NRH, we are almost inclined to list their schedule as "Irregular," because, since Mr. Evans wrote, the schedule has been changed again. At the time of writing, NRH is working from 6:30 to 8 p. m., EST.



Glen Gray, leader of the Casa Loma Orchestra, heard on the Camel program over CBS each Tuesday and Thursday at 10:00 p. m. EST.

## The Ship Stations

According to information received from Geo. W. Burns, Official Auditor, 2466 Wahl Terrace, Cincinnati, Ohio, a change in some of the ship frequencies can be expected soon. He writes that the ships will move from 4174 kcs. to 4412 kcs., and that WOO will have to give up its present frequency of 4752.5 kcs. Some time ago WOO was granted a Construction Permit for 4272.5 kcs. and it is believed that this station will soon be heard on this frequency. Mr. Burns adds that WOO will soon have a sister station WOY or WOYO, with only 500 watts power, working on the same waves as WOO. He also reports a Danish ship, OXGD, near 5600 kcs. working with OXZ in Denmark.

Several postal cards from this good correspondent contain the following assorted information: "WEF and WCG have been testing at intervals for the past week near 1 to 2 p. m. with a new Bermudan, ZFD, which is on about 10330 kcs. The U. S. Coast Guard Cutter, Dix, call NRLP, is on voice on 2315 kcs. talking to WOU frequently near 9 p. m. A new station in Portugal is CT1CT, Rua Gomez Freire 79, 2-D, Lisbon, on 24.53 meters from 4 to 6 p. m. EST, Sundays. YNOP uses only 15 watts. CQN, Macao, is reported on 48.9 meters from 5 to 9:30 a. m. WMEP, Akron, Ohio, 6615 kcs. is testing with KHIND and KHIWD. KHIWD is the airship Puritan."

## Miscellaneous Notes

"I hear EAQ, Madrid, Spain, daily from 4:30 to 7 p. m.," contributes Guy R. Bigbee, 66th Infantry, Light Tanks, Fort Benning, Ga. "In nearly every case they come in clear and loud and I especially like the hook-up with the International Broadcasting Co., London. I like the numerous stations that they take one to during this IBC broadcast. The radio I use is the new 16-tube Midwest All-Wave. I have not burned any midnight oil as yet but as soon as weather conditions are better I am going to pick up

Australia." Mr. Bigbee reports reception of EAQ in the afternoons in addition to their regular evening schedule, and also asks for information regarding station W9XQ, Chicago, which he heard testing between 6 and 7 a. m., EST. W9XQ is the experimental call for the NBC s. w. station in Chicago, or, as Mr. Van Velsor says, "it is W9XF in disguise."

"May I call your attention to the fact that station HJ4ABE, Medellin, Colombia, is not on 5879 kcs., but on 5900 kcs. and 50.6 meters," writes Manuel Alberto Cadilla, PO Box 824, San Juan, Porto Rico. "Also, they usually announce themselves as HKO, which was their former name."

A new station, WQT, New Brunswick, N. J., on 13.885 meg. is reported calling RNE by Official Auditor John E. Strong, 1436 Meridian Place, N. W., Washington, D. C. Mr. Strong also reports YVQ on the new wavelength of 44.96 meters, or 6.672 megacycles, and adds that YV1BC has returned to its original frequency of 6.112 meg.

## Station HVJ

HVJ has discontinued its experimental transmissions from 10 to 10:30 a. m. and has returned to its original schedule, according to information received from the station by C. R. Anderson, Mason City, Iowa. HVJ works on 19.84 meters from 5 to 5:15 a. m. and on 50.26 meters from 2 to 2:15 p. m., EST. On Sundays a special transmission is radiated on 50.26 meters from 5 to 5:30 a. m. This longer wavelength cannot be received in this country on the afternoon schedule, but the 19 meter wave can be heard occasionally. HVJ is easily recognized by the announcement "Radio-Vaticano," and by the ticking of a clock in the studio. Mr. Anderson's letter continues with the news that DJB now uses four strokes on a gong to identify themselves instead of the ten notes they formerly used, and that he has heard XETE testing on 31.25 meters on Sunday mornings near 3 a. m.

## Reception in Ontario

"The South Americans are beginning to come in very well," contributes E. C. Houlgate, 351 Adelaide St., London, Ontario. "Last Tuesday night I heard HIX on about 50.4, HJ1ABB on 46.5 HC2RL on 45 and HJ4ABB on 42 meters, all excellent. YV1BC is back on 49.1 meters and is heard as well as YV3BC on 48.78. EAQ is beginning to be heard on its Saturday afternoon broadcast and the League of Nations stations are becoming pretty good signals. Rabat on 37.23 meters was heard last Sunday QSA5, R7. I was also lucky enough to tune in RV59 on 50 meters R6-7 between 4:15 and 5:45 p. m. They faded badly after 5:15. This is the only time I ever heard it although I have tried for him for a year."

## And From Quebec

"I was fortunate enough to hear J1AA using a demodulated phone on about 9850 kcs. from 6 to 8 a. m., EST," contributes K. P. Williamson, 1610 Sherbrooke St., W, Montreal, Official Auditor for the Province of Quebec. "I am unable even to hear VK2ME's carrier, although 3ME was received with about R6-7 volume. The South Americans have been pretty active, notably YV1BC, YV3BC, YVQ, HJ4ABE and CP5. I heard W3XL working the Graf Zepelin but could not pick up DENNE's call, which is not extraordinary as 3XL itself was unable to hear them. I notice that WOU is coming through very strongly again about 7 p. m." Mr. Williamson has a new Bosch 10-tube All-Wave set, for which he has built a T-type doublet antenna peaked for 31 meters.

## Condensed Reports

Our Auditor P. J. Soper, 256 Burroughs Terrace, Union, N. J., advises us that the call sign of the Mexican station on 25.5 meters is XDS, and that the Canadian ship-to-shore phone on 62 meters is CZA. Mr. Soper is hearing a station transmitting music on 15.45 meters irregularly near noon-time, and would appreciate any

help readers can give him in identifying this strange station.

"The South American stations are beginning to make their appearance here in Southern California," comments Stuart Walmsley, 1316 W. 58th Place, Los Angeles, Calif. "HC2RL is a new visitor to these parts and have been coming in very well the last three Tuesday evenings from about 7 to 9 p. m., PST. YV3BC on 48.8 meters comes through between 6-7 p. m., PST, with about R6 volume. I heard TGX, Guatemala City, between 11:30 p. m., and 12:30 a. m., PST, which was evidently a special broadcast of some kind. For the past month the two European stations which I have been tuning in most regularly have been EAQ and Pontoise, the latter on 25.2 meters. GSE and GSB have been heard several times with good volume but they seem rather inconsistent here."

"I picked up LSN on 30 meters from 6:30 to 7:50 p. m. during a special broadcast by the President of Argentina," comments Jas. Woonton, R. R. No. 7, London, Ontario. "LSL was also transmitting but I did not try for it. They requested reports on their transmission. This station was very loud and clear. LSY has also been heard here with wonderful volume."

"I have heard Rabat in Morocco a few times," reports J. A. Shanks, Russellville, Tenn. "My latest catches are PHI on both its waves, HI1A between 3:30 and 4:30 p. m. CST on about 46.8 meters; YV3BC seems to me to be on about 48.2 meters, and is heard as early as 3 or 3:30 p. m., loud and clear. YV1BC is heard anywhere in the 49 meter band, never seeming to be satisfied with any one wave."

## Some More Shorts

"I have heard XAM on 25.8 working with XDC on 32.09 from 5 to 6 p. m. XDC is in Torreon, Coahuila." Richard Carter, Ann Arbor, Mich.

LSY, Buenos Aires, 16.56 meters is broadcasting music on Saturdays  
(Continued on page 48)

# Using MICROPHONES and Phonograph PICKUPS

## Methods of Attaching to Modern Sets

**M**ANY of our readers have asked how to connect microphones and phonograph pickups to their radio receivers. It is a very simple matter to attach a microphone or phonograph pickup to any radio receiver, for only two fundamental connections are necessary. Best results, however, cannot be obtained without a good receiver, microphone, pickup, and properly altered circuit arrangement.

Most persons wish to experiment with toy microphones that are made for home entertainment. These are inexpensive devices which sell for about one to two dollars. Any microphone is nothing more than a refined type of telephone transmitter; poor ones give unsatisfactory results; while good ones help to make reproduction more nearly natural. Good microphones cost from ten to fifty dollars.

Phonograph pickups are not so expensive; they range in price from about five to ten dollars. The pickup is a magnetic device with a vibrating inner magnet attached to the needle so as to set up induced currents in a surrounding coil of wire. These currents are very weak and will not give good volume unless the audio amplifier of the radio set is capable of considerable amplification.

### The Three Radio Stages

All radio receivers provide, through their audio amplifiers, suitable means for experimenting and entertaining with microphones and phonograph pickups. A radio receiver has three essential stages in its circuit arrangement—the radio-frequency section, where inaudible radio waves are greatly amplified; the detector circuit, where r.f. signals are slowed

down by rectification to audible limits; and the audio amplifier, where the detected and rectified signals are amplified to loud speaker volume. All we do, in this case, is to cut off the first part of the receiver and make use of the audio amplifier for the boosting up of the weak currents from the microphone or pickup.

A pulsating current flows from the pickup (see article and illustration "D" on page 5, November, 1933, issue of RADEX). It has the same character of audio wave as that sent from the detector tube into the audio stages for amplification. The microphone does not produce any current; it simply varies the amount of current flowing through the resistances of its internal mechanism. The microphone must be used with a transformer in order to obtain the necessary flow of pulsating current. Now, if we attach such a pickup or microphone transformer to the receiver we can send their induced and pulsating currents into the audio amplifier for amplification. But the radio-frequency stages, feeding into the detector, must be cut off so as to prevent the radio signals from passing back into the audio end when the set is turned on for operation of its audio amplifier. This can be accomplished simply by turning down the volume control, which operates on the radio-frequency circuit, or detuning the set to a point where no signals can be heard.

### Various Degrees of Amplification

The amount of "gain" or amplification in the audio stages is far from being uniform for all makes of receivers. This depends upon the circuit and number of tubes. Some sets have the conventional first audio stage or "driver" tube feeding

into the second or output stage (one or two tubes). These, in turn, feed into the output transformer and loud speaker. Such circuits are best adapted to microphone or pickup amplification. The necessary connections are simple, but in sets having complicated circuits, such as some of the new midget dual-purpose tube receivers, the tube connections cannot be so easily converted to our purposes.

When a detector tube feeds directly into the last stage of the output without a previous audio stage, it then is best to attach the microphone or pickup to the detector tube. While the detector does not amplify the signal to any extent, its circuit can be altered without much difficulty or effort so it will work as an audio amplifier when the pickup is used. In this way we gain the power of one additional tube and actually increase the amplification and volume to a high degree.

#### Making the Connection

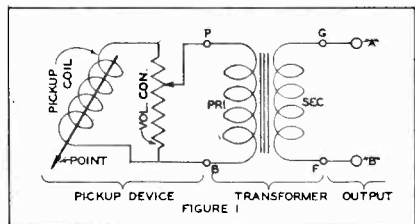
The fundamental connection of a microphone or pickup is to the grid of a tube and the grounded chassis. The grid controls the operation of the tube, for, if we vary the potential of the grid with the pulsating voltage coming from the microphone transformer or the pickup, we cause the tube to operate just as it does when in the radio circuit. However, this simple connection, while it always works, may not give perfect volume or tone. For this reason it may be necessary to make some circuit alterations. All phonograph pickup devices include volume controls in their own assembly, but such a control should be attached to the microphone to control modulation for a more pleasing reproduction and tone.

Pickups or microphones can be attached directly to the radio set with adapters, several of which are on the market. The adapter fits beneath the tube, either the detector or first or second audio. It splits the cathode lead to the tube socket and inserts the reproducing device in series with

the cathode. Other adapters connect between the grid and the cathode. If the detector is a type of tube with top grid-cap connection, this contact must be removed so as to disconnect the radio-frequency tuning coil and prevent the shorting of the microphone input voltage through the coil into the ground. The contact is replaced with one of the leads from the microphone or pickup unit; the other lead fastening to the cathode.

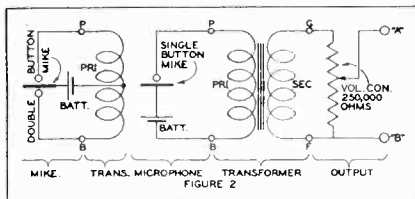
#### Using a Transformer

The foregoing applies to direct connections of the microphone or pickup. Such methods do not always give the best results and there often is complaint of "tinny," distorted and unnatural sounds. Generally both the pickup and microphone require a transformer to step up the low voltage for proper coupling to the amplifier circuit. This provision matches the low impedance of the device to the high impedance of the tube input, which is very necessary for undistorted tone and good volume at maximum amplification. The special transformers that are used have turn ratios ranging from 1:20 to 1:64; the higher ratios being used with single-button, or less expensive, types of microphones. Ordinary audio transformers are not recommended.



Connections for microphones and pickups are the same. The pickup, with its built-in volume control, is attached to the primary (P and B) of the transformer, as shown in Figure 1. And the microphone, with a  $1\frac{1}{2}$  to 3 volt battery in series, is connected also to a transformer primary, as shown in Figure 2. A 250,000 ohm potentiometer volume control is





# Wave Trap with Converter

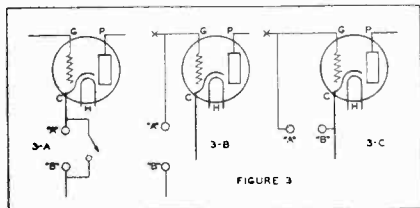
By John Strong

**M**ANY short wave listeners depend upon a converter for their reception. Most of the converters call for a quiet spot somewhere on the broadcast dial. During the winter it is very difficult to find a quiet spot. As a result the broadcast signals heterodyne the short wave signals making them very hard to understand. In some cases night reception is impossible.

shunted across the secondary (G and F), as shown in Figure 2. The output terminals are marked "A" and "B," and, in the illustrations and text, these will be referred to as the "unit output."

Let us consider a simple connection to a radio receiver. See Figure 3. In 3-A we have the unit placed in series with the cathode of a grid-leak or ordinary biased detector tube. This arrangement can be obtained with an adapter made for the purpose. The types of tubes with which it best can be used are: -24A, -27, -36, -37, 56, and 57.

If these listeners would put a simple wave trap in the antenna lead, most of this difficulty would be eliminated. Construct a coil by winding 70 turns of No. 26 enameled wire around a three inch form—a salt box will do. Connect the aerial to one end of this coil and also to a variable condenser—the one I am using is a Hammarlund 23-plate (not a mid-ge). Any standard condenser will work. If it shouldn't work properly, taking off or adding some turns will correct it. The other end of the coil and of the condenser goes to the antenna post of the set.



In 3-B we see how the output of the unit is connected to the grid of any grid-leak or biased detector, such as filament types -00A, -01A, -12A, -30, -32 and -99, in addition to the cathode types above mentioned. Or it can also be attached in this way to any filament or heater type of audio amplifying tube, such as types -01A, -12A, -10, -20, -26, -27, -30, -31, -33, -37, -41, -45, -47, -50, -56, -71A and -99. At 3-C we see another simple method that of connecting the output of the unit ("A" and "B") between the grid and cathode of any cathode type or heater tube included in the above lists.

Editor's Note: While the description given above is ample for the great majority of sets, there are some

Run the aerial also to a single-pole, single-throw switch and thence to the antenna post of the set for use in cutting the trap in and out.

Tune the condenser of the wave trap until the signals of the broadcast are at their minimum volume. This will assist materially in giving the s. w. converter signals the right of way.

The wave trap will also be useful in minimizing the signals of a local station to prevent interference with DX. It is best to use a shielded lead-in from the trap to the set to prevent any pick-up on that part of the antenna system.

circuits and some tubes which require special treatment. These will be covered by Mr. Dashiell in the February issue.

# From the Editor's VIEWPOINT

WHAT are we going to do about this duplication of effort in arranging special DX programs? Here is an instance of the trouble that is caused to the stations and all others concerned. In the first place, let us say that RADEX does not seek to arrange these special programs but only to secure advance information regarding those that have been arranged. To do this we send questionnaires to all stations that give DX programs either regularly or occasionally. In answer to such a questionnaire, station KDB at Santa Barbara notified us that they would give a DX program on Sunday, Dec. 17. We were advised by Fred W. Janssen, of the Courtesy Programs Committee of the NNRC, that this was going to interfere badly with a program he had arranged with another station for the same hours and on the same frequency. We asked KDB to change

their program to Monday, Dec. 18, and so notified Mr. Janssen who then wrote us that this, too, interfered with still another program he had arranged for KGFI, Corpus Christi, for Monday morning on 1500. As the December issue of this magazine was already out showing the program of KDB for Monday, Dec. 18, Mr. Janssen kindly said he would try to rearrange the KGFI program.

This duplication must necessarily be most annoying to the radio stations and, it may easily be foreseen, it will result in discouraging the stations from putting on any DX programs and thus prevent great numbers of listeners from logging many stations. This is a matter for the clubs to work out and we earnestly commend the matter to their careful consideration.

## Apartment House Radio

"Can you or any of your readers suggest a suitable aerial for this location?" appeals W. G. Odenwalder, Care American Tel. & Tel. Co., 32 Sixth Ave., New York, N. Y. "I am in an apartment house and the roof is cluttered with wire leaving not much room for me. What is the effect of my aerial running over the others at right angles? What is a good ground in an apartment and how far should it be from the set?"

Mr. Odenwalder is certainly in a "hot spot" but he has a great deal of company. It is a real problem for denizens of apartment houses to secure a good aerial. Some day builders of apartments will erect as an absolutely necessary part of their structure, one single high aerial equipped to serve all the tenants. The RCA-Victor people have developed such an aerial for Rockefeller Center which will give adequate antenna service to the thousands of tenants of that huge building. There are now on the market a number of aerial systems designed especially for multi-service in



Charles J. V. Murphy, production-man-announcer of the CBS, now enroute for the Antarctic with Admiral Byrd's expedition aboard the S. S. Jacob Ruppert. Murphy directs the weekly broadcasts heard over CBS each Saturday at 10:00 p. m. EST.

apartments. The best, and in fact the only, ground available to those in Mr. Odenwalder's position is the cold water pipe in kitchen or bath-room. In some apartments the attachment can be made direct to the pipes in service openings in the wall. A long ground lead to a good ground is preferable to a short lead to a poor ground such as a radiator. In no cases should a set be grounded to a gas pipe.

In spite of his handicap, Mr. Odenwalder reports 77 stations received in a month on his RCA-Victor R-22 Universal Midget. These include such catches as KFI, KFSD, KPO, XER-XEF, XEAW, XEPN, CKAC, and CFRB. On the short waves he has 68 police.

### Cutting Our Features

"I want to add my little say to the slight controversy that seems to be on tap, concerning just what you should print in your magazine. Anyone who says a certain subject should be eliminated from RADEX, is plain selfish. I seldom read the short wave section because it doesn't interest me. The same is true of 'What's on the Air Tonight.' But I'm not going to be so selfish as to say that I would like to see these cut out. Hundreds of your readers want these in the magazine and their desires are equally as important as mine. Your magazine is just about perfect and I hope you will keep it essentially as it is." This fair summary comes from Arthur E. Foerster, a member of the Courtesy Program Committee of the NNRC, 1213 Bosart Ave., Indianapolis, Ind.

And Alden P. Bowser, 358 Pleasant Street, Brockton, Mass., seconds the motion by saying, "I want to contradict that complaint on page 25 of the December issue about 'Stories of the Stars.' Don't you believe it. Give us what we're getting now and I won't kick."

### Questions DX Calendar

"A few words about the special DX calendar that you print each month," complains D. Robinson, 1114 Washington Ave., Rensselaer, N. Y., "I



*Don Voorhees, young orchestra leader who led Columbia's first jazz band back in 1927, is now on CBS again each Wednesday night at 8:30 p. m. EST, on the program featuring Albert Spalding. In addition to accompanying Spalding and the baritone soloist, Conrad Thibault, Don offers his own special arrangements of popular melodies.*

think I can safely say that at least three-fourths of them do not put on these special programs at the time specified. I do not blame you but I think the stations fall down on the job. My reason for believing this is that, on listening to the frequency checks, every station that I have wanted to hear has come in on the time specified whereas with the special DX programs, I would be lucky if I could catch half a dozen out of the whole list." It is true that the stations are obliged to put on their frequency checks without fail whereas they can postpone or abandon their DX programs without notice. But is not the real reason for the results Mr. Robinson has had due to the fact that, in the case of the checks, the way has been cleared by the FRC and all interference silenced whereas with the DX programs, the stations must be heard under ordinary operating con-

ditions with other stations on the same and adjacent channels going full blast?

### Wants Foreign Stations

"A DX experience of mine suggests what I think will be a distinct improvement in your station listings," submits Arthur Foerster, Indianapolis. "I had an interference with WHAM and after careful tuning discovered it was LRS. Why not list all the stations of 1000 watts or even 2000 watts in South America and Australia, just as you do YV1BC and HJN?" It is true that more and more of our readers are now picking up stations outside the North American continent and perhaps we shall have to follow Mr. Foerster's suggestion and list all of the principal stations of the world in all three indices. In the meantime, however, those who do receive the foreign broadcasters may have our new DX Log of the World which contains *all* the stations of the world on the broadcast band. It is issued quarterly and the price is only ten cents.



Phil Regan, debonair bachelor and tenor, heard over CBS at various times during the week. The portrait above, incidentally, is his latest.

### Cleaning Improved It

"By the way, thanks a lot for your tip in the November RADEX about dusting and cleaning up the set," thanks R. E. Monahan, 908 E. 5th St., Erie, Pa. "I gave the set a fairly satisfactory cleaning and the results are excellent. The signals are much stronger and with much less static. I even fancy that the tone is better. I had XEW on before I cleaned the set and there was so much static being pulled in that I had to get another station. Afterwards I got the same station and turned the volume almost entirely on before noticing any static. But the stations (all of them) still fade, so I'm going to get some new tubes."

"If any of your readers have small transmitters of their own, I have something which may interest them," contributes Edward Curren, Jr., New Rockford, N. Dak. "In case a person is using type 210 tubes in a transmitter and is also using a Majestic set, the plate supply for the transmitter may be obtained by hooking one of the wires from the ground terminal of the set and the other to either of the speaker field coil terminals. This gives a well-filtered plate supply without cost. Battery clips are good for making the two connections at the set."

Senor Alejandro Galindo, Manager of the Service for the Radio Club, Mexico City, advises us that conditions compel him to suspend further activities of the club. Lack of cooperation from the stations made the work too difficult in securing verifications. He regrets that circumstances prevented XETR from putting on a special program for the NNRC and tells us that station has now withdrawn from the air.

---

*The only book published that contains all the stations on the broadcast band—The DX Log of the World; price 10 cents.*

*All stations in the world listed by countries, frequencies and calls.*

# The First Aid DEPARTMENT

• • • By our TECHNICAL EDITOR

**I** AM taking the B voltage from the large prong of the -80 rectifier tube in my set to supply the plates of a Stewart-Warner short-wave converter. A serious hum is heard which cannot be reduced, and I am at a loss what to do. Can you advise me?

When you take high voltage from one of the large prongs of the -80 rectifier tube—the side connecting to the choke coils—you are using raw rectified current which is merely a vibrating or pulsating d.c. output. This rectified current hums and has as many positive impulses per second as there are cycles in the a.c. power line supplying the receiver. Such rectified current is unfit for radio use until after it is smoothed and filtered.

You should make a connection to the far side of the filter choke coil which smoothes out the d.c. impulses of the raw current into a quiet, steady flow of direct current for the plates of the tubes in the receiver. Therefore, it is best to take off the B voltage supply at the proper place on the voltage divider system or at one of the tube sockets.

## Value of Control

*Can you tell me what is the value of the volume control in my McMullan receiver?*

We regret that we are unable to determine just how the circuit of this received is arranged and advise you exactly. However, we believe the control to be a Centralab volume control No. 79005, Junior series, having 15,000 ohms resistance. Write the Central Radio Laboratories, Milwaukee, Wis., for the proper replacement unit needed by your set.

## Phones on Majestic 180

*I am having trouble with headphones and adapters on my Majestic 180 receiver. I am afraid of overloading the set and doing some dam-*

*age to the power pack and tubes. What else can I use to better advantage and with more safety?*

This set uses two -50 tubes in the power output and it is likely that the adapter used with them upsets the balancing of the circuit when the -50s are removed from their sockets. No power tubes should be removed when a set is operating.

Because of the excessive voltage of this set -425 volts—it might be best to use a hook-up as shown in Figure 3, page 3, of the February, 1933, issue of RADEX. The suggested phone attachment is shown in the lower right-hand corner of Figure 3. Attach to the plate of either of the -50 tubes with a 0.5 microfarad 500-volt test by-pass condenser between the plate terminal of one of the sockets (using a wafer adapter to make this connection) and the phones, then a 25,000-ohm resistance between the phones and the chassis or ground. Use care in making the wiring because of the dangerous voltage on the plates of these tubes. Good insulation is obviously necessary. Silence the speaker as indicated in the February article.

## Which New Tube?

*I should like to use new tubes in my Stromberg-Carlson 635A a.c. receiver. Which ones can you recommend?*

The first audio tube, type -27, can be replaced with a 56. Since the rest of the radio-frequency end of the circuit is neutralized new adjustments would be necessary if the rest of the -27s were replaced with 56s. You could use a -45 in place of the -71A with a resistor to reduce the present 5.0 volts to the 2.5 needed by the -45 tube. But the amperage drain of the -45 is six times that of the -71A and this might cause your a.c. power-pack to become overheated.

## New Tubes in Philco

*Can I change the old tubes in my Philco, model 95, to some of the newer and more efficient tubes?*

Since this receiver is a tuned-radio-frequency set using three -27s, three -24s, and two -45s, it is possible to use some of the newer types of tubes. The first audio tube, a -27 set in the corner of the chassis rear next to the two -45s, may be replaced with a 56. While using this tube try replacing the detector, another -27, next to the three -24s set in a row, and also the power detector, the last remaining -27 tube. If the replacement works well in these three positions you would feel justified in purchasing new 56s. A 57 may be used in place of a -24 in your set. These are radio-frequency tubes. We suggest that you get one 57 and one adapter and try the substitutions, one at a time, before investing in a complete set of tubes and adapters. We are sure, however, that the substitution will be beneficial.

## Load on Power Tube

*I have just learned that a constant load must be maintained on the pentode power-tube output as otherwise serious damage is likely to result. For this reason will you tell me whether head phones can be added to my set?*

A load must be maintained on this part of the radio circuit. Power pentodes must never be removed from their sockets when the set is turned on. You will note that the drawings in our February, 1933, issue of RADEX, show how headphones may be attached and that the output from the power tubes continues to pass through the primary windings of the output transformer from the plates of the power tubes. Thus the d.c. supply is maintained on the plates and the load remains constant. When the voice coil of the speaker is cut open with a switch it merely prevents the induced current from the secondary coil of the output transformer from flowing through a circuit. It is not necessary

to maintain a load on the secondary of the output transformer.

When you attach headphones to the plates of the power tubes you do not consume any of the direct-current supplied to the plates by the power pack eliminator device built into the set. The phones use only the alternating-current component and surges that pass through the blocking condensers placed in series with the phones and the ground. The use of headphones as shown in the February, 1933, issue of RADEX, does not in any way alter the normal load on the power tubes or subject the set or parts to any overloading.

## Filter Chokes

*Please tell me the values of the filter chokes in my Radiola 60. I wish to make replacements.*

You can replace either or both of the filter chokes or reactors of this set which are connected in series in the powerpack portion of the Radiola 60 receiver with single or double choke arrangement having individual values of 30 henries, 125 to 150 milliamperes, and about 200 ohms d.c. resistance, each.

## Loud Volume

*The volume control of my receiver does not reduce the volume of sound from the speaker even when it is turned down low. Why is this, and how can it be remedied?*

A defective volume control may be the cause of too much volume. It may also be that the ground end of the volume-control resistor is open thus obtaining series voltage-control of the screen voltage. In this case the relatively low value of the volume-control resistor will not allow appreciable voltage control at the screens. As soon as the screen circuit is completed by advancing the volume-control arm until contact is made the screen voltage is almost at a maximum, hence the volume is too high. You have not indicated the kind of set you have in your query, but if the set uses such a resistor at the volume control we suggest that it be tested and replaced, if necessary.

## Home-Made Set Hums

*There is an annoying hum that begins at 1060 kilocycles and continues on up to 1500 kilocycles in my two-tube home-made regenerative set. What can be done about it?*

All sets of this type employing regeneration have a decided tendency to howl and hum when regeneration becomes too critical. Such sets are an annoyance to every nearby radio neighbor unless it is far off in the country. The tendency to hum and howl is greater as the high frequencies on the dial are reached. Perhaps the tickler coil has too many turns on it. Try taking off three or four turns. The hum also can come from an inefficient A and B current source. Try using another -24 detector tube, for a defective tube will give a decided hum. Insert a 0.1 mfd. fixed condenser in series with the cathode of the -24 tube and the ground and then shunt this condenser with a 1,500-ohm self-biasing resistor.

## Silencing Dual Speakers

*How do I silence the dual speakers of my Zenith, model 410, receiver? I do not know which lead to cut for the switch. How far can the switch be placed from the cut wires?*

Dual speakers operate usually as a single speaker. From the output transformer (secondary coil) will be found two short, flexible leads. These connect to the voice coil of the first speaker, usually the largest of the pair. This coil will be found on the tip of the cone of the speaker and is the only free or unspotted winding in the speaker assembly. The two wires then continue on to the additional or smaller speaker of the dual unit.

In order to silence these speakers it is only necessary to cut into one of the speaker wires above mentioned which will immediately silence both speakers. The two ends of the cut wires may be extended any distance with additional wire. Between the



*When Mrs. Franklin D. Roosevelt went on the air over the CBS network from a banquet in Chicago recently, the announcer handling the broadcast found that the hubbub of the guests was entering his microphone. He therefore quietly crawled, microphone in hand, under a nearby table where the alert camera-man caught him. In the above composite, Mrs. Roosevelt is shown speaking at the banquet, while announcer Holland E. Engle lurks under a nearby table.*

ends of the extended wire connect any type of snap switch. When it is turned to the "off" position the speaker lead is open and the speaker silent—when turned to the "on" position the circuit is again closed and the speaker operates.

## Kolster Has a Hum

*I have a 1928 Kolster, serial 32547, model K-24. It uses five -26s, one -27, one -10 and two -81s. Can I use new tubes? Would it be possible to use a -45 or -47 in place of the -10 by using resistors to cut down the voltage? Would it be difficult to use a -80 in place of the two -81s?*

*If the volume control is turned full way on, when either local or distance switch is on, a bad hum results and the set is neither selective nor sensitive. How can I correct this fault?*

The Kolster K-24 receiver uses grid-suppressor oscillation control in the r.f. stages and when a hum as mentioned occurs it is usually caused by an open grid suppressor. All such resistors should be replaced by 2,000-ohm resistors and the small condensers shunting them should be removed for better results.

Although possible, the substitution of a -45 tube in place of the -10 in

this receiver is not recommended. However, the -81s may be replaced with an 83 or 5Z3 rectifier by using a suitable filament resistor and connecting the sockets properly. A 1-ohm resistor will be all right and the plate connection of one socket is simply connected to the blank terminal of the other—the one which will be used. There is some risk in this alteration of overloading the filament secondary and this fact should be carefully noted for if overheating becomes serious the only thing to do is to revert to the former and original method of operation. The -27 tube can be replaced with a 56. The -26s have no similar types that can be used for substitution.

### Short Wave Converter

*I have built your short-wave converter as described in the June issue of RADEX. I am using it with an Eveready model I set, and obtain fair results, but, due to the poor selectivity of the set I have difficulty finding a totally dead spot in the 1,000-1,500 kcs. range to which to tune when operating the converter. As a result I have been using the converter when the set is tuned to about 520 kcs. Are there any changes in the hook-up that will make it operate more satisfactorily at that point?*

No circuit changes are necessary to use an intermediate frequency of 520 kilocycles although your broadcast receiver is undoubtedly not as sensitive at this frequency as it would be closer to 1,500 kcs. Since the main function of the converter is to change the signal frequency so that it falls within the range of the broadcast receiver (500 to 1,500 kcs.) input, it accomplishes very little in the way of actual amplification. Some gain is provided through the detection processes, but we suggest that you improve the gain of your broadcast receiver first and then if necessary couple the converter into the receiver by means of a tuned circuit. That is, simply connect the plate of the converter output to the primary winding of a

radio-frequency transformer coil, tune the secondary with a condenser similar to the ones used within the broadcast set, and send that secondary tuned current into the grid of a radio-frequency amplifying tube. The plate of this tube is then connected to the antenna post of the broadcast set through a fixed condenser similar to that in the converter. This arrangement, while rather crude, can be refined somewhat and will sharpen the tuning of the receiver and step up the short-wave signals so that more distance and stations can be heard.

### Stewart-Warner Converter

*If I connect a Stewart-Warner short-wave converter to my RCA 60 receiver will it draw too heavily on the transformer in the set? Where do I attach the converter plate-voltage terminal tip?*

We see no reason why attaching the converter to the RCA 60 set should throw too much load on the transformer. If it does overload you will notice it when the transformer becomes much warmer than is usually the case when the RCA 60 is operated alone.

*(Continued on page 45)*

## Sweeping Changes in New Zealand

Effective December first, the broadcasting stations of New Zealand moved to new channels with a few exceptions. Following are the old and new frequencies:

1YA Auckland from 820 to 650  
 1YX Auckland (new) on 880  
 1ZB Auckland from 1420 to 1190  
 1ZH Hamilton from 630 to 770  
 1ZJ Auckland from 1320 to 1310  
 2YA Wellington from 720 to 570  
 2YB New Plymouth from 1230 to 750  
 2YC Wellington from 1010 to 840  
 2ZD Masterton from 1180 to 1170  
 2ZF Palmerston N. from 1050 to 960  
 2ZH Napier from 1370 to 820  
 2ZJ Gisborne from 1150 to 980  
 2ZL Hastings from 1400 to 1240  
 2ZO Palmerston N. from 1050 to 1400  
 2ZR Nelson from 1360 to 1110  
 2ZW Wellington from 1120 to 1060  
 3YA Christchurch from 980 to 720  
 3ZR Greymouth from 1300 to 940  
 4YA Dunedin from 650 to 790  
 4ZB Dunedin from 1080 to 1050  
 4ZM Dunedin from 1080 to 1050  
 4ZO Dunedin from 1080 to 1050  
 4ZP Invercargill from 1160 to 620  
 4ZW Dunedin from 1080 to 1470



# *In the* WEE HOURS

## *with the* RADEXERS

### *The Meeting of the Clan*

**E**VEN a casual reader of these columns must be impressed with the way in which the old world is shrinking. The reception of a single Jap or Aussie used to be good for a whole column but now the foreign stations on the broadcast band are being reported from all over the continent. No longer is this privilege restricted to the Pacific Coast. The Europeans are being reported from the West and the Trans-Pacifics from the East.

While perhaps the majority of our readers are still without the experience of the thrill of the voice from across the big waters, yet one by one they are logging the foreign station. Increase in transmitting power and the improvement of receivers is making possible in many localities almost daily reception of the other continents. Patience, perseverance and a knowledge of where and when to tune, are required.

#### **New Zealand From New York**

"I had a funny experience Sunday morning (Nov. 12)" narrates Sam Kiamie, 2857 Sampson Avenue, New York City. "I was listening to KGB on 1330, then moved my dial slightly and, right on 1328 keys., I heard a station playing concert music from 3:00 to 3:15 a. m., and a long talk positively in the French language from 3:15 to 3:30. Looking up the world list in the Midsummer RADEX, I saw that Station Normandie in Fecamp, France, was on that exact frequency. I have written them for verification. I also got my first trans-Pacific, Saturday, Oct. 28. I was fishing around 720 kcs. about 5:00 a. m. when I heard a talk with a decided British accent. I listened for a while and heard the announcer talk about

New Zealand business and also race track reports at 5:15 a. m. He gave the call as 2YA in Wellington, New Zealand. Then followed a period of dance music much of which is very popular here. What a thrill to hear that 'New Zaylander' as they say it. On the same morning I heard on several frequencies such as 820 and 900, stations broadcasting a series of sound by gongs but never heard anything else but that. I wonder who they could have been." Mr. Kiamie says he heard WKBB which recently moved to East Dubuque, Ill., on 1500 instead of 1310. How come?

#### **From the Middle West**

"What a kick I get out of reading the letters of the DX hounds and

### **Foreign Postage Rates**

Letters to the following countries, 3c each ounce or fraction: Andorra, Argentina, Balearic Island, Bolivia, Brazil, Canada, Canary Island, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Labrador, Mexico, Newfoundland, Nicaragua, Panama, Paraguay, Peru, Salvador, Spain (including Alhucemas Island, Ceuta, Chaferinas or Zafarani Islands, Melilla, Penon de Velez de la Gomera, and Tangier), Uruguay, Venezuela. For all other foreign destinations, 5c first ounce and 3c each additional ounce. Registration fee for all foreign destinations, 15c in addition to postage. When a return receipt is requested at the time of mailing there is an additional charge of 5c.

comparing my catches with theirs," exclaims Chas. Rife, 1621 Summit, Kansas City, Mo. "And what a thrill it is to sit down before the old set in the early hours and listen to stations in Japan, Australia, New Zealand, China or the Philippines. I fish for long shots and make sure of my catch but I never trouble to send for verifications. My grand total logged in two years with a 9-tube Majestic 251 super, is 485 stations. I have heard from one to 26 stations in each of the following countries: Mexico, Canada, Cuba, Venezuela, Argentine, Uruguay, Norway, Australia, New Zealand, Japan, China, and the Philippines, Hawaii and Porto Rico. I never miss one word in RADEX whether it be broadcast band or short waves. Although I have only a broadcast receiver, I am very interested in short waves and hope some day to explore those intriguing channels."

#### Dislikes Changes

"CMC was coming in nicely until they put CKLW on 840," protests Richard M. Carter, 820 McKinley Ave., Ann Arbor, Mich. "Then it was a shame to put CKY on XEW's wave. Now neither is good here. XEW had some of the best programs on the air. CMQ can be heard most any night until about 9:00 o'clock. Saturday night is a good time to try for KEYZ and XEB, between 9:00 and 11:00. KEYZ announces 'aikess-ay-ee-gree-ay-ga-thaytah' on the hour and XEB generally announces every 15 minutes, giving something like a cuckoo call before each announcement.

"My list now stands at a total of 629 of which 535 are U. S. Not bad for one year and nine months of DX-ing. There are only 100 Americans on the air now that I lack—none over 1000 watts. I'm going to get LR4 eventually. I hear them heterodyning WBZ every evening and once in a while I can catch a few words. Last Sunday morning I heard about ten T-P's—KGU, 2YA, and 2BL were the only ones coming in well enough to log though, and I already had these."

#### Out in the Desert

"I have a six-tube Majestic auto radio in my car," advises Stanley C. Schultz, 1100 Union Oil Bldg., Los Angeles, Calif. "Last Sunday morning between 2:30 and 4:30, while on the desert near Lancaster, Calif., I picked up a station on 650 kcs., which would be fairly loud for three or four minutes then fade clear out. If I am not mistaken, the language spoken was Japanese. I understand, though, that there are only two very small Japs on that frequency. Have there been any new ones placed on 650 kcs.? Between 4:00 and 4:30 the program consisted of soprano solos with piano accompaniment. Practically all the remainder was a long talk by the announcer. It seemed to me that he kept repeating a certain phrase over and over again. There was no English spoken to my knowledge.

"I also picked up another Jap (?) on approximately 765 kcs. Their program was seemingly a play with only two characters in the cast. That one was not as clear and loud as the first one. My radio is a very powerful set and capable of receiving many middle-western stations. W H O, WCCO, WENR, come in with good volume. Reception on the desert Sunday couldn't have been better. The temperature was around 38 degrees, the air was clear, and we were over 50 miles from any high tension wires."

#### A Frolic on 1200

Arthur Foerster, 1213 Bosart Ave., Indianapolis, Ind., reports his own log standing at 611 stations with 535 verified. Some of his latest are 2BL, KOOS, KRE, XEU, XEAD, KLS, KGDM, KPQ and CX26. He now holds the Superace certificate from the NNRC. He adds: "You might be interested in the DX program I have scheduled for the NNRC on Sunday morning, January 21, 1934, on 1200 kcs. Here is the schedule:

WNBO, Silverhaven, 1:00-1:45\*  
WJBC, La Salle, 1:45-2:30

WJBL, Decatur, 2:30-3:15  
KGEK, Yuma, 3:15-4:00  
WCLO, Janesville, 4:00-4:45  
WRBL, Columbus, 4:45-5:30  
WCAT, Rapid City, 5:30-6:15

All time is EST. Two yearly subscriptions to RADEX are to be offered—one for the most distant report on any one broadcast; the other for the most complete report of the entire broadcast.

"I cannot help but marvel at the wonderful reception possible with present-day receivers," postscripts Mr. Foerster. "On Saturday and Sunday, November 18 and 19, with my Majestic 340-B, 11-tube, I heard WOR, Newark, here in Indianapolis all day long with WLW and WGN on adjacent channels."

"\*To everyone picking up our signal and writing me," promises Charles A. Christopher, Production Manager of WNBO, whose address is Washington, Pa., "I will send an exact replica of Lincoln's Gettysburg Address or an exact copy of Lincoln's letter to Mrs. Bixby, the latter in Lincoln's own handwriting. Listeners must give the names of at least three selections used on the program and enclose three cents postage. No postal cards will be verified."

#### Four Nights' Work

"On Thursday, Nov. 16, I bought two new B batteries so I thought that I'd start logging all over again," reports A. Breitner, Cawston P. O., B. C. "From Thursday night to Monday, Nov. 20, at 5:00 a. m., I had logged 128 stations, including five Japs, JOBK-1, JOGK, JOIK, JOAK-1, and JOAK-2, and four Mexicans: XETA, KER, XEPN and XEYZ. My best catch was WDBO at Orlando, Fla. I pull in WABC, New York, just like a local. My radio, a five-tube t. r. f. Magnavox battery set, tunes to about 1790 kcs., enabling me to log a number of the police. I have not been able to log CJOC on their regular frequency of 840 kcs. but I have been getting them at about 1640; have they two transmitters or



*Leopold Stokowski, distinguished conductor of the Philadelphia Orchestra, heard nightly (except Sunday) over CBS at 9:00 o'clock EST. This is in addition to the regular Friday afternoon series which Stokowski now presents and will continue to present throughout the season. Above, the camera shows the conductor at the helm of his orchestra during one of the broadcasts from the Philadelphia station, WCAU.*

is this a harmonic? Cawston is about 225 miles from the Pacific and about 14 miles north of the U. S. boundary." CJOC would have a harmonic on 1660 but it is unusual to be able to pick up a station on its harmonic and not on its fundamental.

#### Going to Do Better

"Up till now I have been a rather indifferent DXer," confesses R. J. Lauria, 11903 Lenacrae Ave., Cleveland, O. "But I have finally been smitten with the fever. Beginning in October of last year up to the present time, I have logged 360 stations, none verified. Now I'm starting all over and hope to have them all verified. I am using a 7-tube Atwater Kent, Model 55, with an aerial of about 30 feet in the attic. Is there any possible way of cutting out some of the electrical noises? At times it is very bad here and it always interferes with distant stations. Can anything be done about separating stations that come in two and three at a time between 1100 and 1500 kcs.?" Your attic aerial is undoubtedly responsible for much of your noise. It is in a position to pick up a great deal of interference from the power lines in your house. Erect an out-door

aerial, by all means, if you can possibly do so. It is practically impossible to separate the stations in the upper band without a superheterodyne set.

#### Notes From New Zealand

From Hastings, New Zealand, comes this letter, George E. Bott, 507 Southhampton St.: "My first year of DXing ended October 20. In that time I have heard 99 U. S. stations, 8 Mexicans, 57 Australians, 28 Japanese, 3 Chinese, 5 Canadian, 45 here in New Zealand, 7 in Europe and one each in India, Hong Kong, Siam, French Indo-China and Argentine. I have heard three hundred-watters in your continent. I have a total of 257 stations heard of which 105 are verified. I am using a 1927 model Grebe 5-valve battery set.

"The new 3YA station at Christchurch should be on the air on 570 kcs. about November. Four new stations are also to be constructed in Australia of which two are to have a power of 20,000 watts and the other two 10,000. A new station will also be started at Auckland shortly to replace the existing 1YA. This station will have a power of 2000 watts on 600 kcs."

#### One Left In Manila

Clyde E. Lowe, 730 K St., Merced, Calif., sends us a letter from RCA Communications, Inc., stating that KZRC in the Philippines and KZKA are no longer on the air. "In three nights," says Mr. Lowe, "I picked up the following 21 stations: Z1LY, 2CO, 7ZL, 3AR, 5CK, 6WF, 5CL, 4QG, 3LO, 2BL, 4RK, 6ML, F31CD, VUC, VUB, 2YA, CE86, PRAC, KZRM, SBA, XGOA and (page Ripley) PP four times on 914 kcs. The above stations are all verified. I use a Majestic 9-tube Model 61 on the broadcast band only. I do not use phones. XGOA is good for at least three hours of reception any morning until 6:30 PST on 660 kcs., not 681 as you have it. 2YA, Wellington, usually signs off at 3:00 or 3:30 a. m. During daylight saving time, it was a common

occurrence at 10:30 p. m., PST, to hear the clock in the G. P. O. at Wellington, strike six." This is a most astonishing record that Mr. Lowe gives us and we are prepared for a deluge of criticism.

#### A Report From England

"Perhaps my experiences as a European DXer may interest you," suggests F. Wiseman, 90, Brighton Grove, Newcastle-on-Tyne, England. "DX here has been possible all summer, verified reception from WKAQ, WBT, WTIC, WPG, WCAU, WJSV, WTAM, WNAC, LR3, LR4, being received from April to the end of August. September 7th produced my best U. S. A. veri., KGO. Since August, veris have been received from WOAI, CKAC, WHAM, WAAB, KGO, WRDC, WCAM, WABC, and the NBC verified reception of their program heard from LR4, Radio Splendid. Extraordinary reception was experienced from September 30 to October 5, when I made gramophone records of the programs from 21 American stations and nine Argentines. These records have been sent to the stations concerned as evidence for verifications. I use a Midwest 16-tube and a Midwest 8-tube." Mr. Wiseman is the general European representative of the I D A.

#### Good List From Down Under

"I have substituted the 171A's in my set for the newer Pentode 47's and find that the Anzec stations are really booming in despite a lot of static," comments S. R. Lewis, Rt. 3, Box 688A, Toledo, Ohio. "Have heard the following TP's: 2CO, 7ZL, 3AR, 5CK, 2FC, 2YA, 5CL, JOBK, 4QG, JOGK, 3LO, 1YA, 2BL, 4RK, 2GB, 3HA, 2UE, 4BC. Can't seem to get any TP's any farther down the dial than about 1150 kcs. I still use my old familiar Crosley Showbox, with a wave trap attached, and many, many dials and contraptions to facilitate the balancing of the neutralizers to any particular frequency I may want to hear. Have about 300 feet of aerial out at present. Use three dif-

ferent grounds. Verifications are now about 775. Sure hope to get 800 this year, but I'm afraid not, for I need only 11 more stations in the U. S. A. and very few in Canada."

#### Luck on Tests

"This summer I bought a Philco 89-L, 6-tube super all-wave and now I have the DX fever again," admits H. A. Turner, 263 St. Clair St., Bridgeville, Pa. "I started to log on October 1st and to date I have 410 on the b. c. band. On Saturday, November 4, I got 19 out of the 20 on frequency check, Sunday morning, 9 of the 13, Monday morning 30 of the 48, Tuesday, 12 of the 30. I now have 130 with 100 watts or less. I am 12 miles southwest of Pittsburgh. I use two aerials—one is 150 feet long with 25 foot lead-in, the other is 50 feet long at a 45-degree angle with the long one. I have a switch so I can use either or both. I have all the states but two. I would like to know when either KDFN, Casper, Wyo., or either of the Delaware stations are on."

#### All Channels at Noon

"Just thought I would drop you a line to let you know what kind of daytime reception I am getting now," announces John A. Shanks, Russellville, Tenn. "Today (November 7) at 12:15 to 12:45 p. m. (noon) I tuned in a station on all the 96 channels on the b. c. band. All stations but three or four came in with full speaker volume. Even heard a Spanish speaking on 910 or 912 kcs. (a Cuban), also CMCQ on 775 kcs. and a Cuban on about 880 kcs., all with full volume. CKLW was heard on 840 and nothing on 540. What do you think of this for reception? The Midwest receiver is sure a distance-getter, never saw anything like it before."

#### Proud of His List

"I have worked for many a night trying to land an 'under-the-world' station," admits C. Leroy Custer, 2606 Dwight Way, Berkeley, Calif., "and last week I was rewarded. I guess I have not been patient enough.

I finally landed 2YA in Wellington, N. Z., and then, on the morning of October 8, from 3:00 to 6:30 PST, I had the grandest luck. I pulled in JOAK-2, JOVK, JOLK, JOKK, JOBK-1, JOGK, JOIK, JOFK, JOAK-1, JODK-2, JODK-1 and JFAK—twelve of them. I am really quite proud of that list. I never dreamed that I could catch so many in one night. I have logged 357 stations on the b. c. band. I hope this experience of mine will be of interest to those who are discouraged in their attempts to get across the Pacific."

#### One Morning's Log

"Sunday morning, November 5, I heard 2YA, 2BL, JFAK, JOBM-1, JOAK-1—in all, six Japs and two Aussies," Charles L. Clark, Physics B, 410, University of Texas, Austin, tells us. "We now have 380 stations in just two months DXing. About ten of these are illegal. Austin, in the middle of Texas, is the bootleg radio men's paradise. We have four or five here in town and as many others within 100 miles. I think my Majestic 21 is unusually good. I have received WGY on 790 while WBAP on 800 was on at the same time with the same volume. I can get the big Easterns every night while KDYL on 1290 comes in so strong it is almost a nuisance. The Physics Department here has a Western Electric 10-A t. r. f. set and I'm going to start DXing with it soon—Antenaplex, 14 tubes, mercury tubes, four-stage amplification before and after detector, etc., etc. We ought to win a prize!"

"I have six stations from Australia, two from New Zealand, and two from South America verified," reports J. Drake, 1920 Athol St., Regina, Sask. "A few days ago I picked up four stations in Japan, to whom I wrote for verification. My total verifications are now 306, and there are about 15 reports out to stations that I have picked up in the last few days. I have not as yet had a chance to work on the FRC frequency checks, but

will be in there starting tomorrow morning. All the above stations were received on the loud-speaker. Today I had phones installed on the set, but have not had a chance to try them out. I use a Philco 96, 9 tubes, and just about three years old."

#### Let Well Enough Alone

"I just got a radio October 31st to start the month of November off with a bang," enthuses Paul E. Heeley, 1220 W. Jackson St., Painesville, Ohio. "Thought I would help matters by writing you a letter. RADEX is getting better with every issue. I say to keep things balanced as they are, just a little of everything and not a lot of one thing. DX reports of the fans are my weakness. I'm using a Graybar GT7, a 1933 product. The first three mornings of the FRC tests I logged 70 out of 131 stations, including WKAQ, KFPL, KABC, KGFI, KCMC, KGHI, KGHF, KGDE, WQBC, and KBTM. This set has plenty of reserve power and sure pulls them in."

"Since last writing to you, my brother has purchased a Victor radio," advises Edmund M. Neel, Box 365, Duncan, V. I., B. C. "This little set has only five tubes and all I can say about it is that it is the best little set out. We started DXing as soon as the season opened and up to date have a total of 156 stations from all over the Western Hemisphere. Included in the log so far are the following: 15 Japs, 3 New Zealanders, 4 Australian, one Chinese, one Hawaiian, two Alaskan, 6 Mexican, and a few low wattage eastern stations. The last few nights have been marvelous. I have just installed an Ollie Ross ground which I hope will bring in far more foreign stations."

#### Two Days Old

"I am now a full-fledged DXer," admits Albert Kunigis, 1138 Pierce Ave., Niagara Falls, N. Y. "That is, since two days ago when I was introduced to your super-magazine RADEX. In these two days (of which I have spent approximately 7½ hours

at the dials) of DXing I have logged 60 stations, including 15 shortwave stations. My best are KFI, Los Angeles, and WEXL, Royal Oak, Mich., 50 watts. With this type of station on my set, which is a Crosley, 5-tube, model 167, superheterodyne, am I doing okay? I should like to hear from other DXers and also from those who have the same type of set."

"I do not know what you mean by DX," observes a new reader, Manual Alberto Cadilla, P. O. Box 824, San Juan, P. R., "but if it is something about the logging of distant stations, I want to assure you that I have already started DXing. My first night up was Saturday, Nov. 11, and from 8:00 p. m. until 5:00 a. m. Sunday I tuned in 43 stations. (Mr. Cadilla lists stations all over the U. S. and Mexico including KFRC with 1000 watts in San Francisco, 4250 miles away.) You would guess by this log that I have a costly apparatus but such is not the case because my set is a 5-tube "European" AC-DC, no ground, 75 feet antenna and omnibus traffic all night to interfere constantly."

#### A New Mexican

"I have been picking up a station in Mexico, XEWW, on 1095 kcs.," states R. B. Rolfe, 1741 Burnett, Waco, Texas. "They must have a good deal of power as they come in very strong and always interfere with KMOX, sometimes blocking them out completely. Their sustaining feature seems to be a Mexican string band with sometimes a singer with a guitar. The DX season is looking up here now with the first touch of cold weather. Since November 1, I have added 25 new stations. With WDBO I now have Florida complete." XEWW is a new station at Veracruz with 250 watts on 1100 kcs.

"I have been DXing for three weeks," sums up Foster Allen, 115 N. College St., Martinsburg, W. Va., "and you will find enclosed a log of 178 stations which I received during this period. I have an old Stewart-Warner Model 801. The set tunes

very broadly and it is hard to get the stations due to interference by more powerful stations on adjoining frequencies. My best catch is KFVD, a 250-watt station in Los Angeles. I also have four other stations in California: KGER, KFI, KPO and KNX." Foster sends us a list of stations which pretty well cover the North American continent.

### Wants a Converter

"I have a Graybar 310 and would like to know what kind of a short wave set to attach to it," inquires Frank Frazier, 225 Menomonee Street, Chicago, Ill. There are a number of short wave converters on the market at prices ranging from as low as five dollars upward. Or the R-DEX converter described in last June's issue, can be built easily and cheaply. Frank has logged a total of 267 stations and thinks the following his best: WGNV, 50 w., WJBY, 50 w., KRMD, 50 w., WOCL, 25 w., WSYB, 100 w., XES, 250 w., CKCP, 100 w., and WTAW, 500 w.

"Glad to say that I received CX26, Montevideo, Uruguay, Saturday morning, Nov. 18, on our special IDA-ARC program," writes Earl R. Roberts, 42 Burt Ave., Newark, Ohio. "Hardly expected to get it on my old battery set but I used three B batteries and was able to hear the announcement at 3:31 in English very clearly. Judging by the way it came in with 2000 watts, CP4 with 10,000 and LR5 with 27,000 should be heard very well the next two weeks. Why not include FQN, St. Pierre, Miquelon Island, in your lists? They are still broadcasting on 572 kcs. with 250 watts."

"I have a 9-tube Silvertone with which I have been DXing since September, 1933," states Frank Wheeler, 406 Eagle Point, Lakeside, Erie, Pa. "In that length of time I have received a total of 315 stations. I now have a total of 480 stations including stations received on my old set. Although I have not been able to receive any European, Australian, or

New Zealand stations, I have received stations from Mexico, South America, Central America, Cuba, Porto Rico, and Nova Scotia besides Americans and Canadians."

### Heard Aussies Unknowingly

"I have increased my log to 405 stations," announces H. Arbic, Acton, Ont. "This was done in seven months. Included are 2YA, 2BL and WKAQ. I listened to the Aussies for a couple of weeks before I realized what I was getting. I received them both from 5:00 a. m. till 6:45 a. m., when I had to go to work. I really don't know how long I could hold 2BL, if WABC didn't start warming up. I sure would like to hear from someone with a Rogers 850. A Rogers service man claims it is the most sensitive machine they have turned out. KFPM, 15 watts, came in with plenty of volume on the monthly test."

In answer to our question in the last issue as to how many had received 50 watt New Zealanders, Karl J. Halpern, 495 East 3rd Street, Brooklyn, N. Y., reminds us of his report of the reception of 2ZI which stirred up such a tempest. He also reports 1ZB with 32 watts, 2SF with 50 and 1ZH, 50. Karl has recently replaced two of the 27 tubes in his Zenith with 56s and reports volume increased 25 per cent, and sensitivity about 50 per cent.

"I operate a 12-tube Scott all-wave, which leaves nothing to be desired as far as DXing is concerned," asserts W. C. Everhart, 104 Front St., Fargo, N. D. "I have tried just about every aerial and ground from umbrella to loop in various sizes and lengths, and indoor aerials from loop to transformer, as well as combinations of these and also several of my own invention. Grounds the same way."

### A French Tip

Among his best records, and justly so, Charles Leboeuf, Box 222, North Grosvenordale, Conn., counts CX26, Montevideo, Uruguay, Radio Normandie, Fecamp, France, HHK, Port au

Prince, Haiti, and VE9EK, Mont-magny, Que. "This is the first time I have had to use the International Reply coupons, and I had bad luck in that the postmaster did not post-mark the coupon; hence it is no good. I picked up the French station, twice, both times at 2:15 a. m. This tip might help out some other DXer. My log is up to 517 stations—not bad for a four-year-old set."

"I'll say this season is going to be good for the DXer," gloats Charles Meyer, Jr., 411 Blake Street, St. Joseph, Mo. "Last night, or rather this morning, in quick succession I picked up 4QG, 2YA, JOHK and 30 other new stations for this season's log."

### A Jumping Log

"Since my last letter my log has jumped from 203 to 325," remarks Donald W. Reynolds, 34 Chambers St., Newburgh, N. Y. "I now have 19 in Canada, 15 in Mexico, 4 in Cuba, and 287 in the U. S., with 15 in California. Some of my best catches are KGGM, KTM, KMPC, KFRC, KFXJ, KIT, KVI, KFSD, KLX, KWJJ, XEW, CKY and KJBS. I have sent to CKTB, KFI, KOA KTFI, XEPN, KSL and KNX for verifications, but have not received them. Have had no luck with any off the continent yet, but here's hoping."

"I started to DX in 1924 while stationed on an island out in the Atlantic, offshore from New Hampshire and Maine, called the 'Isle of Shoals'—a coast guard station. Boy, those were the days," recalls Jack Land, 603 Milton Street, Toledo, Ohio. "WNAC was our favorite in those days. I did not verify stations from 1924 to 1933 and then I got the bug. I'm glad, too, because now I have something to look back at as the years roll by."

"I haven't been DXing very long," admits George C. Wetmore, Jr., 44 Allview Ave., So. Norwalk, Conn., "but have received some good catches. Some of my best are: CFBO, CKPR, WSPA, WJBY, WHET, WRBL, WQDX, XER and XEPN. I have also received CKTB, testing on a fre-

quency of 1200, with a power output of 100 watts, every morning until about 5:30 EST. The announcer said that all letters would be answered with an Ekko stamp. I have a Majestic, combined models 91 and 92, and would be glad to hear from anyone with a similar set, and will answer all letters."

### Uses Umbrella

"I have been DXing for the past two years," says Robert W. Botzum, 633 Moss St., Reading, Pa., "and have logged 305 stations in U. S., 33 in Canada, 13 in Mexico, 10 in Cuba, and one in South America. My best are: YV1BC, KGU, KFI, KGO, KPO, KGW, KECA, KFPY, KFRC, KFYZ, KGA, KGHL, KHJ, KHQ, KJR, CRCV, CFCN, CHLP, CHNS, CFBO, CFCY, XEN, XEW, XEPN, XEFO, all verified. Total stations logged, 362, with 190 verified. I have an 8-tube Atwater Kent and use an umbrella aerial, with an outside ground leading to my set."

"I have a nine tube Brunswick, model 5WO," comments Robert M. Musson, 35 Couch St., So. Norwalk, Conn., "and would like very much to receive letters from any other DXer with the same set, and will answer all letters. I haven't been DXing very long, but have some good catches, such as: CHNS, CKY, CMC, KGDY, KCRJ, WABI, WALR and WELL."

"I have a six-tube Majestic 31," remarks Fred Burleigh, 142 Converse Ave., Meriden, Conn., "and my present log is 427 stations. I have logged every frequency in 46 states, Canada, Cuba, Mexico, South America, Porto Rico, and one in Australia. My best catches are: 4RK, HJN, XEBF, KGFJ, KUJ, 10-BQ, KFSD, KFXJ, KDLR, KGCR, KOY, CMGF, and CMCA, all verified. I would like to hear from other DXers, especially those using this same type set."

"With my Philco 43, I have logged 364 broadcast and 68 short wave stations not including amateurs," totals Fred Wakerell, 32 Boteler St., Ottawa, Ont. "This in four weeks. The



frequency checks were fine but I still have 59 of them to log, so next month should see another big boost. My best catches were KPQ, KXO and KERN. Bob Moran and Ernest Ball both report hearing 2BL on 855 but no such luck for me. However, I have got 2CO, 2YA and 5CK."

### NNRC DX Tips

DX tips are broadcast by a number of stations for the Newark News Radio Club. Among these, according to Alfred W. Oppel, Executive Secretary, are the following: WSM every morning except Monday at 1:00 a. m., EST; WAAM every Wednesday from 9:30 to 10:15 p. m., EST; WAAT every Saturday from 5:15 to 5:45 p. m., EST; KTFI every Sunday between 1:30 and 2:15 a. m., EST; CF-CO every Sunday at 10:15 a. m., EST.

"Since January 30th, 1932, I have recorded 127 new stations, making my total 342," summarizes Rudolph N. Maxwell, Jr., Wart Street, Cincinnati, O. "My best catches are KFWI, WKAQ, KGIR, KFXD, KWSC, KGHF, CMC, KFBB, KDLR, KTM, KMPC and KFJZ. I have 107 hundred-watters and 44 states. I am using a two-tube regenerative receiver with a —24 tube detector and a —27 a. f. stage."

"Since September 5 I have received at least one station on each of the broadcast channels," reports Kenneth M. White, Rockville, Conn., "and have distinguished both call letters and location of approximately 150 stations. My Zenith set has a dial to 1750 kcs., although it is possible to tune higher to approximately 1800 kcs. in the 160 meter phone band. I have received 36 stations divided between amateur phone and police stations."

"Since you last heard from me I have increased my log to 427, including 10 police stations and one short-wave station," comments Ernest Byers, 102 W. 11th St., Waterloo, Iowa. "The frequency checks given in the September issue were an aid in logging many new stations. I have heard

from 43 states in the U. S. and 6 provinces of Canada. Has anyone heard a station on 1420 with the slogan, 'Voice of the Adirondacks?'"

### A Big Thrill

"I had a big thrill on November 5," relates Burney McClurkan, 804 N. Locust St., Denton, Texas. "I pulled in five Japs and one Zedder! I received WCSH on their special DX program for RADEX the same morning and have received a very nice verification. They were my first from the state of Maine. My total is now 380 heard and 158 verified."

"Please tell your readers to be on the lookout for HAL-2, Budapest, Hungary, which comes on the air at 4:00 a. m., EST, on 545 kes, with 120,000 watts," kindly advises Edwin E. Hatch, 5508 N. Mascher St., Philadelphia, who also says that EAJ2, Madrid, Spain, on 708 kes. are on the air after 3:00 a. m. EST.

"Will you please list our club in your next roster," asks John L. Fletcher, Secretary of the Universal DX Club, 296 Hamilton Place, Hackensack, N. J. "In our monthly bulletin we have a short wave department. We send out one or two tip cards between bulletins. Our dues are 75 cents a year."

*(Continued on page 48)*

## Changes in Canada

This official data was received too late to change our indices in this issue.

- 540 CIRM to 1000 watts
- 600 CFCC to 50 watts
- CJOR from 1210
- 690 CJCJ to 100 watts
- 730 CJCA to 1000 watts
- 780 CKPR to 50 watts
- 930 CFAC to 100 watts
- CKPC formerly 10-BQ now Brantford
- 1100 CRCV to 1000 watts
- 1120 CHGS to 50 watts
- CKOC to 500 watts
- 1200 CJAT to 100 watts; was 10-AT, 1155
- CKBI to 100 watts; was 10-BI
- 1210 CKMC to 50 watts
- 1310 CHCK to 50 watts
- CJKL, 100, Kirkland Lake, Ont., new
- CJLS, 100, Yarmouth, N. S., new
- CHPR, 100, St. John, N. B., new
- 1390 CJRC, 100, Middlechurch, Man., new
- 1420 CKGB, 100, Timmins, Ont., new
- 1450 CFCT from 1430
- 1510 CFRC from 915
- CKCR from 645

## Notes and Tips

**R**ADIO STATION CRCS, Chicoutimi, writes as follows: "This station is owned by the Canadian Marconi Company and always broadcasts programs supplied by the Canadian Radio Commission. We also have an occasional local program in the form of phonograph recordings and announcements. Both station identification and those relative to the broadcast are always given in both French and English. The French announcements are supplied locally on all programs, whereas the English is given at the point of program origin. We are willing to answer all letters for verification of reception if supplied with return postage."

\* \* \*

"KVOA is one of the old stations of the Southwest," writes D. D. Campbell, Commercial Manager of that station, at Fayetteville, Ark. "Originally, an experimental station for the Engineering Department of our State University, Mr. Lloyd Bardon, inventor of Class B Modulation, was the constructing engineer on this plant that has been in service for a good many years, until its rebuilding under Mr. Harold Albrecht. Our Chief Announcer is Mr. Alton Hart, who is also a licensed operator and a great DX fan. We will naturally appreciate hearing from any DXers on any of our frequency checks."

\* \* \*

"Your classification of KREG as 'ak' is correct," advises Station KREG, Santa Ana, Calif., "but we will verify reports in any case, provided they leave no doubt as to reception. We cannot verify on musical numbers alone, except on DX broadcasts. All letters or cards will be answered, whether or not postage is sent, but we prefer the listener to include return postage."

\* \* \*

From J. A. Chambers, Technical Supervisor of stations WLW-WSAI-

W8XAL, comes the information that WLW is now conducting tests of the new 500,000 watt transmitter during the early morning hours. It is expected that this testing will continue for the next month or two.

\* \* \*

3YA is building a new transmitting station at Gebbie's Pass which will be opened to use very soon. It is an especially advantageous location, 1100 feet above sea level, and ought to help many of our readers to log 3YA.

\* \* \*

WFIW, removed from Hopkinsville, Ky., to Louisville, now becomes WAVE. The formal opening has been set for the night of Dec. 30. WAVE will be affiliated with NBC. WAVE is said to be testing on 1120 kcs. instead of 940.

\* \* \*

KROW will take to the air the first week in December with a complete new Western Electric transmitter, new RCA studio equipment and new microphone equipment.

\* \* \*

WNBW, Carbondale, Pa., was ordered off the air by the Radio Commission Nov. 24 in a decision sustaining the recommendation of Examiner Hill. Simultaneously the Commission denied an application for involuntary assignment of the license of the 10-watt local which has operated on 1200 kcs.

## The Inquiry Division

**W**HOO CAN help me on this one," queries Richard M. Carter, 820 McKinley Ave., Ann Arbor, Mich. "Last night, Nov. 19, 10-11:30 p. m., I heard a Spanish-speaking station testing with phonograph records on 635 kcs. They announced only once during a fadeout at 10:15 and went off the air without saying a word. I thought I heard the words 'Radio Corporation of Cuba.' Is it possible that CMC has changed its wave length

to get away from CKLW? During the time I heard them, they played Drigo's 'Serenade' three times and 'Ramona' and 'Girl of My Dreams' twice each. It wasn't CMQ as they were coming in well at 638."

\* \* \*

"WLOE has never been off the air and shows no signs of going," contributes Alden P. Bowser, 358 Pleasant Street, Brockton, Mass. "They are on daily until about 2:30 p. m. and announce, as always, 'by permission of the FRC.'" The FRC definitely and finally ordered WLOE off the air on November 30th, (since Alden's letter) and we have no doubt they are now permanently off the ether.

"For George Burnett," goes on this correspondent, "LR4 is to be heard frequently after WBZ-A's sign-off. Also LR5, Radio Excelsion, comes in well on 830. Can you identify NBQ heard at 3:28 a. m. on Nov. 12? Seemed to be giving a weather forecast. What is CKAC doing on short waves? I heard him testing on about 1550 kcs. Recent catches are Rabat, Morocco, Poste Parisian, VE9EK and others bringing my total up to 765 in 32 countries." CKAC would have a harmonic on 1460; who can explain his being on 1550?

\* \* \*

"About the first of the year," prophesies Clement Van Velsor, 1033 Sanford Ave., Irvington, N. J., "WAAM, Newark, and WODA, Paterson, on 1250 kcs. will become one with the call of WBO and studios in New York City." Mr. Van Velsor concludes by answering one question and asking another. "Russell Geiger, Poland, Ohio, mentions hearing a station on 835 kcs. I have heard CMC which you list as 840, on 835. I am positive because both KOA and CKLW were on at the same time. I recently heard a station on 905 kcs. using machine-gun style Spanish. This was about Nov. 5. I listened from 8:00 to 9:15 p. m. without QRM from either WJAX or XEW, five kcs away. The signals were very strong for about twenty minutes then faded and finally

came back. I left when I found I couldn't make out anything. The signals averaged QSA-5, R-7-8. I hope someone knows who it is."

\* \* \*

Two questions from R. D. Causse, P. O. Box 6688, Lester, Pa.: "I would like to find out what station on 1280 broadcast the description, play-by-play, of a football game on Nov. 10, from 10:15 to 11:15 p. m. EST. One of the teams playing was named Oak Cliff. Second, I have written numerous times to XEAN, both to the American address and the Mexican address, but my letters always come back marked 'unclaimed' or 'party unknown.' How can I reach them?"

\* \* \*

"In December Arthur C. Gluck mentioned the moon's influence on short waves," recalls Nicholas J. Hock. "I find the same is true on the b. c. band. On clear, cool nights when the moon is bright, I always experience better reception on the b. c. band. I am considering purchasing a Postal International for work on the short waves. I would appreciate any letters from owners of this radio regarding its ability."

\* \* \*

"I fully agree with Mr. Clair Calavan (page 11, November) regarding XGOA in Nanking, China," writes Frank F. Busted, 1163-26th Ave. W., Vancouver, B. C. "I have been hearing it broadcasting regularly on 660 or 665 kcs. for the past three weeks. There is a powerful Jap on 680 which I have not been able to identify."

## *With the DX CLUBS*

THIS is to notify you that the Great Lakes Radio Club has ceased operations and has joined the Canadian DX Relay which we think has all the clubs beaten," advises Leo Shelly, 125 Lake St., St. Catharines, Ontario. And from Fred H. Dissert, President of the Canadian DX Relay, P. O. Box 339, Goderich,

Ont., comes the comment: "This consolidation brought us a fine bunch of rooters. The Relay is growing like a weed as well as our tip-sheet which is now a six-page affair. We now have a contest going in our club. Two of our Drummondville members, Elwin H. Bullard and Roderick Moffat, have donated three silver cups. One is to go to the member who verifies the most CDXR special programs from September first to May first with mileage taken into consideration. This is the "CDXR Champion DXer Cup." The winner is to be judged on the following points: Each verification to count three points with one one-hundredth of the total mileage to be added to total points. The "CDXR Specials Cup" is given for the year to the member who verifies the most specials. The winner is judged by the total mileage between his city and the stations participating. The "CDXR Seasonal Verifications Cup" goes to the member who verifies the most stations from September first to May first each year. The contests, of course, are open to members of the CDXR only. Then there is a cup that goes to the member who verifies the most foreign stations during our season.

"Already fifty stations have had programs for the CDXR, quite a number of whom have never had a DX program before. CKCO gave a very fine program. CFQC changed to 1230 kcs. just before their first DX program on October 14 making quite a mess of our advance advertising. Both CFQC and CKCO will verify all reports on their programs and both stations expect to broadcast another special DX later in the winter for the club. We will endeavor to get advance notice to RADEX."

The Transcontinental Radio DX Club, too, has ceased operations according to a notice from Ralph H. Schiller, President, Hawthorne, N. J. There is a possibility the members will join the new National Radio Club at York, Pa.

With three clubs disappearing by

merger or otherwise, news of a recent addition comes from James Reese, 2037 Seventh Ave., New York City. It is the National Radio Amateur Club and it has *three members*.

Rod La Rocque, 135 Highland Street, Worcester, Mass., has been appointed acting secretary of the New England Radio Club due to the former secretary moving elsewhere. Correspondence for this club should be addressed as above.

"Please publish particulars of the New Zealand DX Club in one of your issues," requests S. Robson, President, 100 Islington St., Invercargill, N. Z. "Applications for membership should be made to The Secretary, N. Z. DX Club, P. O. Box 1032, Wellington, N. Z. The fee is 2/6 which is about fifty to sixty cents and this entitles one to a badge, certificate and life membership. There are no annual dues. Our magazine is published monthly at a cost of about twenty cents. The membership is well over the 1000 mark."

---

## Pardon Our French!

**I**N the October issue we presented a typical report of reception in the French language. This was prepared for us by a professional translator and we assumed that it would be entirely correct. Unfortunately our own personal knowledge of French is extremely limited. Now comes a frank critic who tells that Frenchmen would read this letter with the same amusement that we did the one from the French-Canadian guide, published on page 18 of the November issue.

Not wishing to subject our readers to any embarrassment, we are giving below the corrected version of the letter in French as given us by our good correspondent, G. J. Malcolm, Toronto, Ontario. Mr. Malcolm points out the many ways in which we mixed our infinitives and our past participles and our plurals. We plead guilty and present the new version herewith:

Monsieur,

Je me suis bien divertie ce soir (ce matin, cet après-midi) en écoutant votre station de radiodiffusion XXXX en . . . kcs.

Ci-dessous je donne avec grand plaisir la liste des sélections que j'ai entendues avec quelques indications des conditions de la réception au point de vue de volume, de temps et de qualité, etc.

Voudriez vous avoir la bonté de vérifier celle-ci avec votre propre liste et de m'adresser une vérification de réception.

Vous remerciant d'avance pour votre vérification et dans l'espoir de bien pouvoir vous adresser à l'avenir un autre rapport je vous prie, Monsieur, d'agréer l'expression de mes salutations distinguées.

La Listesuit

1. Sélection d'orchestre
2. Sélection de piano
3. Sélection de violon
4. Sélection d'orgue
5. Sélection de marimba
6. Sélection d'accordéon
7. Solo vocal (Monsieur)
8. Solo vocal (Madame)
9. Choeur vocal
10. Musique classique
11. Musique populaire
12. Musique du pays
13. Musique de la danse
14. Fox trot
15. Marche
16. Valse
17. Causerie
18. Annonces de la station
19. Volume—faible
20. Volume—médium
21. Volume—fort
22. Qualité du ton—mauvaise
23. Qualité du ton—bonne
24. Conditions de l'atmosphère—bonne
25. Conditions de l'atmosphère—mauvaise
26. Musique américaine
27. Musique française
28. Guitare
29. Duo Trio
30. Le temps

The English translation appears on page 19 of the March issue, No. 67.

## Down with the Radio Mob!

“DO you think the radio stations will ever cut out this ‘visible’ audience idea and again broadcast for the invisible audience?” is the pertinent question asked us by L. D. Smith, 524 East 9th St., Erie, Pa. “I hate these programs that you hear now with their constant and everlasting laughter and hand clapping. I believe others feel as I do, that the programs now are not built for the radio fan but rather for the entertainment of the studio mob.”

It is strange that sponsors who go to great expense to put a program on the air do not sense the feeling of resentment that very naturally comes to the radio audience as a result of the type of program described by Mr. Smith. Can you remember the wave of anger that used to sweep over you when you were a child and you could hear the crowd laughing and cheering over something that you were too little to see? Were you ever a part of an overflow audience out on the sidewalk and you could hear the crowd within laughing and enjoying themselves? Well, that is exactly the reaction the radio audience gets when they hear the studio audience laughing at something they cannot see. This idea of using a studio mob was devised to “pep” up some of the high-priced stars who had to have laughs they could hear, in order to “do their stuff.”

If a star is so wedded to a visible audience that he cannot perform before a microphone without one, our advice to him is “to hire a hall,” and let someone else use the microphone who is satisfied with an audience of millions.

Texaco and other sponsors are not helping to build good-will with their radio audience when they provide laughs for their studio audience by grotesque costumes and slap-stick comedy from which the radio audience is barred.

(Continued on page 45)

# GOSSIP *from* Some Old-Timers

**R**ADIO has been my hobby for the last 16 years," recalls Clement E. Craig, 104 Vine Street, Macon, Mo. "My first set was a crystal receiver and what a set! Then I began to purchase parts such as could be had at that time, including one vacuum tube at \$9.50, and built one of the first honest-to-goodness tube sets in Macon. I remember receiving KDKA before their license and call letters were issued. Can you remember when every station would play a phonograph record for five minutes at the beginning of a program so listeners could tune and adjust their sets? Really, this present-day group of radio listeners, or most of them, can't realize what radio has gone through in the last few years. Back in 1920, I was one of three boys here that built spark transmitters and sent messages back and forth. B batteries were made from flashlight batteries held together in a cigar box.

"But to come down to the present day: I am a strong believer in listening to the other fellows' experiences in the radio field. Your RADEX certainly does print plenty of what the fans and listeners of our country as well as others are doing. I greatly appreciated your article in one of the issues on grounds. This summer I constructed a ground, using a post-hole digger, an eight-foot ground rod, a hundred pounds of rock salt and plenty of water. And did my set improve in volume! I have a transposed lead-in and advise anyone bothered with man-made static to try them. My antenna is 39 feet long on each side of the lead-in, placed about 40 feet from the ground, using Lynch transposition blocks. The aerial runs N.E. to S.W. Before erecting this aerial I used the single wire Hertz aerial with single wire lead-in and every time a car came within a block of the house, the program would be crowded out by the interference. I

believe a 1914 Ford could park under my present aerial without causing me to utter even one bad word.

"Let us have more articles by our foreign friends, such as the article on Antennae from New Zealand and 'Tuning a Radio in Britain.'"

## I Got Chicago!

Another veteran is Richard J. Southward, 1417 Oakmont St., Toledo, Ohio, who writes: "I have had a radio since early in 1922 when I built my first receiver—a one-tuber. The B batteries I constructed myself, using flash-light cells from the five-and-ten, building them into blocks of 22½ volts. Everybody in the family fought to get one of the two pairs of earphones I had attached to the set every time I turned it on. I will never forget the first time I picked up Chicago; say, there wouldn't be as much excitement today if I tuned in an Aussie at midday.

"I am now a confirmed DXer and have been for years but I never did much verifying until after the purchase of a Temple all-wave model 150 in March, 1932. This set has six tubes in the broadcast receiver and three tubes in the short wave converter. I have over 300 veries on the broadcast band with this set. My prize catch was XEFV last March. I tuned them in shortly after eleven p. m. and you know that is freakish with all the stations there are around and on the 1370 band. XEFV at that time had only 50 watts.

"My short wave stage has surprised me considering the low price of the complete receiver as I verified 2ME, 3ME, EAQ, LSN, YV1BC, DJD, DJC and an English commercial, GBB. The British Broadcasting Co. won't verify so I quit writing them after three letters. I have logged GSA, GSB, GSC, GSD and GSF. I have received many U. S. A. short wave broadcasters, commercials and amateurs as

well as in Canada, Mexico and South America. I have reports into Pontoise and I2RO. I sent a report to LSX last July and last week I got the letter back unopened. Just this morning I picked up HBP, Geneva, Switzerland, on 38.47 meters.

"A person reading your magazine would think there was a DXer in every home. Many people doubt me when I say I have logged 22 stations in California on the broadcast band so I suggest they read RADEX and they will learn that I haven't much to boast about after they read some of the letters from your readers.

"I have never seen published any report of a verification received by means of an A. R. R. L. message. I received one from Mr. Ellis of 10-BQ last winter thanking me for my report. The message was relayed through W8DVL of Cleveland and W8PP-W8UU of Monroe, Michigan, who forwarded the message by post card to me."

"I have been a DXer since 1922," states Phil E. Lockwood, 315 North 7th St., Yakima, Wash., "when I began with an outfit known as a crystal set, built by myself from a round cardboard lard box, a few brass clips, some wire and a crystal, with a telephone receiver as a phone. From that I graduated to a two-tube Radiola with WD tubes protruding from the top. Next came the Browning-Drake, then an interest in short waves which, at that time, were none too successful. At the present time I have a Midwest 16-tube superhet. And being on a long vacation due to health, I'm having one large time. I have a total of 352 stations to date and I'm only getting started. You may expect to hear from me again because there is no set that will beat a Midwest.

"This locality is generally known as none too good for radio reception, being surrounded on four sides by mountains, but I have no trouble in reaching out to New York City and all way points any night in the week with clarity and volume that make the programs enjoyable."

## A RECORD for HOME-MADE Sets

IF I don't get busy and notify you of the various catches I have made on different occasions, I will not have anything to boast about, judging by the way the stations drop off the list every now and then," concludes Clement A. Wyborski, 102 Mifflin St., Philadelphia. "Among some of the old-timers I have logged and verified and which have been deleted are KFWO, 250 watts, Avalon, Calif.; KPSN, Pasadena; KFQZ, Hollywood; KTBI and KGEF, Los Angeles; KFBU, Laramie, Wyo.; WCBE, 5-watter of New Orleans; 7SR, Elia, Cuba; CNRE, CNRC, CNRR of Canada; WMBF, WGBU of Florida; and many others.

"I became interested in radio as  
(Continued on page 91)

---

## The Radio MOB

(Continued from page 43)

Absolutely unforgiveable is the program with "hired laughers" who laugh hollowly at everything the leader says. "Who was the lady I saw you with last night? That wasn't a lady——" and the rest of the joke, be it ever so "punk," is lost in the asinine snickers of the paid mob.

Wake up, sponsors, your radio audience is dialing you off and tuning in a program which is really meant for them.

---

## First Aid Department

(Continued from page 30)

The converter's plate tip terminal should be connected to terminal 1 of the strip (brown wire), but the maximum voltage that you can obtain for the converter is about 175 volts. The makers of the converter recommend

250 volts. For this reason the converter may not operate at maximum efficiency. When the plate voltage is too low the -27 oscillator may not oscillate as it should.

### Changing Power Tubes

*Is it feasible to use -45s or -47s in the last audio stage of my Majestic, model 181 receiver? The set now uses two -50s in push-pull. Would it be practicable to insert -45s in the last stage and use a new power-pack or can the voltage of the present system be made to fit in if some resistors are inserted to take care of the voltage changes? Can you tell me the voltages of the taps on the power-pack?*

We suggest the use of -45s in the output circuit because of the design of the output transformer. To do this break the lead connecting the heater (2.5 volts) winding centertap resistor to the detector cathode, and connect a 750-ohm 5-watt resistor from this center point to the ground or chassis. Connect a 2,500-ohm, 15-watt, resistor in series with the positive B lead into the center of the push-pull output transformer and then bypass this point (transformer primary coil centertap) to ground with a 0.5 to 1.0 mfd. condenser. Connect the socket filament terminals in parallel and then to the 2.5-volt heater terminals after removing the former leads.

The voltages of the two positive B taps on the power-pack are 144 and 425 volts, respectively.

## Dressing Room Gossip

*(Continued from page 10)*

Until recently, Rosemary and Priscilla Lane always were referred to as the "kid" sisters of Lola Lane of the screen. It seemed to be their only claim to fame. Then, each was promoted to featured spots by Fred Waring. Several weeks ago, Buddy

De Sylva, songwriter and film producer, saw eighteen-year-old Rosemary's photograph in a Los Angeles newspaper. He was impressed with her beauty and when he arrived in Manhattan in search of a leading lady for a forthcoming film, he sought out Rosemary after the broadcast. Waring gave his permission for her screen test and the reel was rushed westward for the screen officials to view. Now, providing contractual matters can be arranged, it looks as if Lola's "kid" sister also is headed for screen fame.

## The Beginner's Story

*(Continued from page 6)*

we shall see how a circuit can be tuned to pass only certain frequencies by means of inductances (coils) and capacities (condensers).

### Queries

1. What is the relation of electron, atom and molecule?
2. To what may the atom and its electrons be likened?
3. What is the polarity of the electron? Of the nucleus of the atom?
4. By what means may the electrons be excited?
5. What causes an electric wire to become hot?
6. What sort of materials make the best conductors?
7. What is a dielectric?
8. How may the capacity of a condenser be changed?
9. How is capacity measured?
10. Why does turning the dial change the frequency of a receiver?

## Debate on Aerials

*(Continued from page 12)*

both at once. I can separate KMO from KGB and KGU from WJR as early as 8:30 p. m. I can receive CMAF while KPO is on the air and listen to WGY while KGO is in operation and tune in KZRM with KTAR practically on the same wave. The Japs come in best from the n. w. and the Aussies from the s. w.

"If anyone tries this system, I



would like to hear from him. I'm a 20-year-old boy away out west trying to recover from a long and severe illness for the last two years."

### The Directional Effect

Regarding this matter of the directional value of aerials, Leroy Cattell, R. F. D. 2, Paterson, N. J., take an opposing position. Mr. Calavan found that the greatest signal strength was reached when the far end of the aerial pointed directly toward the station and the least when the far or free end pointed away from the station. In Mr. Calavan's case, however, the far end of the aerial was grounded which may have altered the effects. Says Mr. Cattell:

"Marconi found in his experiments that the inverted L-type antenna was highly directional for short distances. He even proved that such an antenna could be used successfully to determine the location of a transmitter. Also in this experiment he proved that an opinion held by many DXers was false. They believe that reception is best from the direction in which the free end (the insulated end) point. On the contrary, in every experiment Marconi made in finding hidden transmitters, the receiver end of the aerial was nearest the transmitter.

"From Marconi's experiments it can be seen how an inverted L antenna can best be erected to exclude signals from a nearby transmitter. He demonstrated that signals were weakest from a direction making an angle of 70 degrees with the flat top of the antenna. That is, suppose the free end of the antenna points due south, then 70 degrees east of south and 70 degrees west of south would represent the directions from which the signals would be weakest. If, therefore, one were to erect his antenna so that his local station would be 70 degrees to either side of it, that station would be in the point of least possible interference.

"In regard to grounds, there is one important factor—that is to get as much substance in connection with the earth as possible. To illustrate: a cer-

tain weight of copper in wire form would be much better than the same weight in a lump. The ground should be placed in the wettest place possible or kept well-watered through a pipe that runs down to the buried metal."

### The Ground Waves

Finally we have the phenomenon of the increase of signals due to the use of the ground on the aerial post in place of the antenna. An instance of this is pointed out by Joe Tamele, 13201 Coath Ave., Cleveland, Ohio, who says:

"A strange thing happened to me the other night. I tuned in KPO and it came in weak with static. I disconnected my outside aerial and attached to the aerial post, the wire that comes from a pipe that is buried under the cellar floor—and KPO came in with fine volume and no static."

All in all, a wealth of information can be gathered by experimenting with your ground and aerial construction.

### Changing Aerial Adds Sixteen

"As far as I am concerned," says Kenneth Buxton, 282 Elgin St., Sarnia, Ont., "the New Zealand Times has the right dope on aerials. I always considered that I had one of the best aerials in the neighborhood. It is 60 feet high at one end and 40 feet at the other and 65 feet long without the lead-in. I had the lead tapped 18 inches from the insulator and cut across the roof to make it as short as possible.

"After reading the article in the December RADEX, I put another insulator where the lead-in was tapped and brought the same wire through the insulator making the aerial and lead-in one piece. I then brought the lead-in straight down to a stand-off three feet from the eave-trough and brought the lead around the corner of the building instead of cutting across the roof. Well, I was simply amazed at the difference. It was raining and there was plenty of static yet I added 16 stations to a log that already stood at 186 (since August

of this year). Among the new ones were CMQ, 10-BQ and KALE.

"For a ground, I dug down to water then took a heavy copper cable and put it through a pipe nine feet long which I drove in the ground. This gives me a ground that is permanently in water. I find I do not get as much static on this ground as on a water pipe.

"I use a De Forest-Crosley 7-tube Canvendis model and a Sparton S. W. converter. I am more than pleased with it. It not only brings in foreign stations but it is a pleasure to listen to them."

---

## The Short Waves

*(Continued from page 20)*

from noon to 2 p. m., EST. Clarence Sargent, Dansville, N. Y.

XIZ, Mexico City, 6300 kcs. is reported near 6 p. m. EST by Wm. McDaniel, Charleston, W. Va.

R. N. Shaw in "Wireless Weekly," (Australia) confirms RNE. This telegram was received from him and appeared in his magazine: "Mystery station 25 meters creating such widespread interest definitely identified RNE Moscow, heard towards 2:30 a. m. exchanging test programs American signals maximum speaker announcements English Russian."

LCL, 6.990 megs. (42.87 meters), Jeløy, Norway, Relays the Oslo program to the new station at Vadso from 1 to 5 p. m., EST. "Dipole", from World-Radio.

### From Bandoeng

A letter of interest to our readers comes to us as we are about to go to press, from Mr. J. F. W. de Kort, Bragaweg 34, Bandoeng, Java, D. E. I. "We can inform you that we are transmitting daily except on Sundays and holidays from 11:45 p. m., to 00:03 a. m. on a wavelength of 49.5 meters (6.070 kcs.) and from 9:15 a. m. to 11:00 a. m. on a wavelength of 49.02 meters (6.120 kcs.) The

times given are in GMT. Besides, we can inform you that we shall have the pleasure in transmitting specially for the listeners in America on the 5th, 10th and 15th of February, from 10:00 a. m. to 11:30 a. m., GMT. The last half-hour of these transmissions we shall be broadcasting native music."

"I have just received a QSL from HIZ on 47.5 meters," reports Edward C. Houlgate, 351 Adelaide Street, London, Ont. "This gives me the long-distance record for their station. They use 20 watts and are on the air daily from 4:40-5:40 p. m. and until 6:40 p. m. on Sundays."

"On Nov. 19, 3:15-4:00 p. m., I heard a HKS or HJS on about 20.2 meters testing with WNC," reports Richard M. Carter, 820 McKinley, Ann Arbor, Mich. "They announced as being in Barranquilla, Colombia. They did not come in on the same dial setting as HJB. The Brazilian on 36.65 m. is announcing regularly now as PSK instead of PRBA. Heard ZFD on 10,355 kcs. again."

"The San Joaquin Valley reports again," begins R. M. Ballard, 409 Watson Ave., Visalia, Calif. "Nov. 1, I listened to Pontoise on 25.6 meters at 9:00 a. m. Have also heard KAZ, Manila, on 31 m. and HJ1ABB on 45 m. with PRADO, Riobamba, Ecuador, the same week."

---

## The DX Clan

*(Continued from page 39)*

"With a five-tube Bosch and in my third year of DXing, I have 370 stations, 95 of them being 100 watts or less," summarizes Philip Guernsey, 157 Atkins St., Meriden, Conn. "Best catches are KFD, KVOR, KG CX, 10-BQ, KGKB, KFVD."

"I have picked up and verified ten Japanese, seven Australians and two Zealanders to say nothing about a lot of the little 50 and 100 watt stations in Hawaii, Cuba and the U. S." reports H. Connacher, 506 4th Ave. N., Saskatoon, Sask.

# WHAT'S ON THE AIR TONIGHT?

Fill in calls and dial numbers for those stations through which you best receive the three chains. You can then turn quickly to the one one that has the feature you want.

COLUMBIA.....(C)	
Call	Dial

NATIONAL, Red (R)	
Call	Dial

NATIONAL, Blue.(B)	
Call	Dial

**TIME: E Eastern; C Central; M Mountain; P Pacific.**

**RADEX is the only publication listing stations in alphabetical order for your convenience.**

**While these programs are correct at the time of going to press changes are made from time to time.**

## MONDAY

**E-8:00 p.m., C-5:00, M-4:00, P-3:00**  
**C — Buck Rogers in 26th Century**

CKLW WAAB WABC WADC WBT  
WCAO WCAU WDRC WEAN WHK  
WJSV WKBW WOKO

**R — Waldorf Astoria Orchestra**

KDYL KFJR KOA KPO KPRC KSD  
KSTP KTBS KTHS KVOO WAPI  
WBEN WCAE WCSH WDAF WDAY  
WEAF WEBC WFAA WFLA WHO  
WIBA WIOD WIS WJAR WJAX  
WJDX WKY WMAQ WMC WOAI  
WOC WRC WRVA WSAL WSB WSM  
WSMB WSOE WTAG WWJ WWNC

**B — U. S. Army Band**

KOIL KSO KWCR KWK KYW WBAL  
WZ WBZA WCKY WENR WHAM  
WJZ WMAL WREN WYSR

**E-8:15 p.m., C-5:15, M-4:15, P-3:15**  
**C — Bobby Benson; Sunny Jim**

WAAB WABC WCAU WDRC WEAN  
WFBL WGR WHEC WHK WLWB  
WMAS WOKO WORC

**E-8:30 p.m., C-5:30, M-4:30, P-3:30**

**C — Vera Van, Contralto**

CFRB CKLW KLRA WAAB WABC  
WADC WBIG WBRC WCAO WDBJ  
WDRC WDSU WFEA WGST WHEC  
WHK WHP WJSV WKBW WLAC  
WLWB WMBG WOKO WORC WQAM  
WREC WSEA WSJS WVAR WTOG

**R — Irene Bassley, Songs**

GO KOA WAPI WBEN WCKY  
WEAF WFBR WGY WHO WJDX  
WMC WOC WSAI WSB WSM WSMB  
WSOC WTAG WWJ

**E-8:45 p.m., C-5:45, M-4:45, P-3:45**

**R — Horsesense Philosophy; Andrew Kelly**

KOA WAPI WBEN WCAE WCKY  
WEAF WFAA WFBR WGY WHO  
WJDX WMAQ WMC WOC WSAI  
WSB WSM WSMB WTAG WWJ

**B — Lowell Thomas**

CRCT KDKA WBAL WBZ WZA  
WFLA WGAR WHAM WIOD WJAX  
WJR WJZ WLW WYSR

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**

**C — Myrt and Marge**

CKLW KRLD WABC WADC WBT  
WCAO WCAU WDAE WDBO WDRC  
WEAN WFBL WGR WHK WJAS  
WJSV WKRC WNAC WOKO WQAM  
WSPD WTOG WWVA

**R — Mollie Show**

KSD WBEN WCAE WCSH WDAF  
WEAF WEEL WGY WHO WJAR  
WLIT WMAQ WOC WOW WRC

WJAR WLIT WMAQ WOC WOW

WRC WTAG WTAM WTIC WWJ

**B — Amos 'n' Andy**

CRCT KDKA WBAL WBZ WBZA  
WCKY WFLA WGAR WHAM WIOD  
WJR WJZ WLW WMAL WPTT  
WRVA

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**

**C — Just Plain Bill**

CFRB CKLW WABC WCAO WCAU  
WGR WHK WJSV WKRC WNAC  
**R — Billy Bachelor; Ray Knight**  
WEAF WGY WJAR WRC WTAG  
WTAM WWJ

**B — Baby Rose Marie, Songs**

KDKA WBAL WBZ WBZA WHAM  
WJZ WMAL WYSR

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**

**C — Music in the Air**

WABC WCAO WCAU WDRC WEAN  
WFBL WFEA WGR WHEC WICC  
WJAS WJSV WLWB WSNAC WOKO  
WORC

**R — Lum and Abner**

KSD WBEN WCAE WCSH WDAF  
WEAF WEEL WFBR WGY WJAR  
WLW WRC WTAG

**B — Potash and Perlmutter**

KDKA KOIL KSO KWCR KWK  
WBAL WBZ WBZA WCKY WENR  
WHAM WJR WJZ WMAL WREN  
WYSR

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**

**C — Baske Carter; Philco**

CKLW KMBC KMOX WABC WBBM  
WBT WCAO WCAU WCCO WGR  
WHAS WHK WJAS WJSV WNAC

**R — The Goldbergs**

WBEN WCAE WCSH WDAF WEAF  
WEEL WENR WFBR WGY WJAR  
WLIT WOW WRC WSAI WTAG  
WTAM WWJ

**B — Mme. Frances Alda**

KDKA KDYL KFL KFJR KGO  
KGW KHQ KOA KOIL KOMO  
KPRC KTBS KTHS KWCR KWK  
KXW WBAL WPAP WBZ WBZA  
WHAM WIBA WJDX WJZ WKY  
WMAL WOAI WSMB WYSR

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**

**C — Happy Bakers**

CKLW WABC WADC WCAH WDRC  
WFBR WGN WGR WHEC WHK  
WICC WJSV WMAS WMBG WMT  
WNAC WORC WSPD WWVA

**R — Soconyland Sketches—Drama**

WBEN WCSH WEAF WEEL WGY  
WJAR WTAG WTIC

**B — Sealed Power Side Show**

KDKA KFJR KOIL KPRC KSO

KSTP KTBS KTHS KVOO KWCR

KWK WBAL WBZ WBZA WDAY

WEBC WFAA WGAR WHAM WIBA

WJDX WJR WJZ WKY WLS WMAL

WMC WOAI WSB WSM WSMB

WSYR WTMJ

**E-8:15 p.m., C-7:15, M-6:15, P-5:15**

**C — Edwin C. Hill**

CKLW KMBC KMOX WABC WADC

WCAO WCAU WCCO WDRC WEAN

WFBL WFBR WGN WGR WHK

WJAS WJSV WKRC WNAC WOKO

WSPD

**E-8:30 p.m., C-7:30, M-6:30, P-5:30**

**C — Bing Crosby**

CKLW KDB KERN KFBK KFPY

KFRC KGB KHJ KLZ KMBC KMJ

KMOX KOIN KOL KSL KVI KWG

WABC WADC WCAO WCAU WDRC

WEAN WFBL WFBR WGN WGR

WHAS WHK WJAS WJSV WKRC

WNAC WOKO WOWO WSPD

**R — Father Finn Chirsters**

KDKA KOIL KSO KSTP KWCR

KWK WBAL WCKY WEBC WGAR

WHAM WIBA WJR WJZ WLS WMAL

WREN WYSR

**R — Voice of Firestone**

CFRC CRCT KFJR KPRC KSD

KFSB KTHS KVOO WBEN WCSH

WDAF WDAY WEAF WEBC WEEL

WFAA WFBR WFLA WGY WHO

WIOD WIS WJAR WJAX WJDX

WKY WLIT WLW WMAQ WMC

WOAI WOC WOW WRC WRVA WSB

WSM WSMB WSOE WTAG WTAM

WTIC WTMJ WWJ WWNC

**E-8:45 p.m., C-7:45, M-6:45, P-5:45**

**B — Red Davis—Dramatic Sketch**

KDKA WBAL WBZ WBZA WHAM

WJR WJZ WLS WYSR

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**

**C — Philadelphia Symphony Orchestra**

CKLW KDB KERN KFBK KFH

KFPY KFRC KGB KHJ KLRA KLZ

KMBC KMJ KMOX KOH KOIN

KOL KOMA KSL KTRH KTSA

KVI KWG WABC WADC WBBM

WBRC WBT WCAE WCAU WCAU

WCCO WDAE WDBJ WDBO WDRC

WDSU WEAN WFBL WFBR WGR

WGST WHAS WHEC WHK WICC

WISN WJAS WJSV WKRC WLAC

WLWB WMBG WMT WNAC WOKO

WOWO WPG WQAM WREC WRR

WSPD WTAR WTOG

**R — A. & P. Gypsies**

KSD WBEN WCAE WCSH WDAF

WEAF WEEL WGY WHO WJAR

WLIT WMAQ WOC WOW WRC

**MONDAY—(Continued)**

WSAI WTAG WTAM WTIC WWJ  
**B—Sinclair Minstrels**  
 KDKA KFYP KOA KOIL KPRC  
 KSO KSTP KTBS KTHS KVOO  
 KWCR KWK WBAL WBZ WBZA  
 WDAY WEBC WFAA WFLA WGAR  
 WHAM WIBA WIOD WJW WJAX  
 WJDX WJR WJZ WKY WLS WLW  
 WMC WOAI WPTF WREN WRVA  
 WSB WSM WSBM WTMJ WWNC

**E-9:15 p.m., C-8:15, M-7:15, P-6:15**  
**C—Alexander Woolcott**  
 CFRB CKLW KFH KLRA KLZ  
 KMBC KTRH KTSB KFOR WABC  
 WACO WADC WBIG WBT WCAH  
 WCAO WCAU WCCO WDAE WDBJ  
 WDBO WDOD WEAN WFBL WFBM  
 WFEA WGST WHAS WHK WHP  
 WICC WISN WJAS WJSV WKWB  
 WLWB WLWB WMAS WMBD WMBG  
 WNAC WODX WORC WPG WQAM  
 WREC WSBT WSPD WTOG

**E-9:30 p.m., C-8:30, M-7:30, P-6:30**  
**C—Isham Jones; Lulu McConnell**  
 CFRB CKLW KDB KERN KFBC  
 KFYP KPRC KGB KHJ KLZ KMBC  
 KMJ KMOX KOIN KOL KRLD  
 KSL KVI KWG WABC WADC  
 WBBM WBT WCAH WCAO WCAU  
 WCCO WDRS WDSU WEAN WFBL  
 WFBM WHAS WHK WJW WJAX  
 WJSV WKWB WKRC WLAC WNAC  
 WOKO WOWO WREC WSPD WTAR  
**R—Del Monte Ship of Joy**  
 KDYL KOA KPRC KSD KSTP  
 KTBS KVOO WBEW WCAE WCSH  
 WFAE WEBC WEI WFAA WFBZ  
 WFLA WGY WHO WIOD WIS  
 WJAR WJAX WKFB WKY WLIT  
 WMAQ WOAI WOC WOW WRC  
 WRVA WSAI WTAG WTAM WTMJ  
 WWJ WWNC  
**B—Jack Frost's Melody Moments**  
 KDKA WBAL WENR WGAR WHAM  
 WJR WJZ WLW

**E-10:00 p.m., C-9:00, M-8:00, P-7:00**  
**C—Wayne King and Orchestra**  
 CKLW KALE KDB KERN KFRC  
 KGB KHJ KLZ KMBC KMOX  
 KOIN KOL KSL KGW WAAB WABC  
 WADC WBBM WCAO WCAU WCCO  
 WDRS WEAN WFBL WFBM WGR  
 WHAS WHK WJAS WJSV WKRC  
 WOKO WOWO WSPD  
**R—Contented Program**  
 CFBC CRCT KDYL KFI KFYP  
 KGO KGW KHQ KOA KOMO KPRC  
 KSTP WCHS WFAE WEBC WEI  
 WFBZ WJAR WLIT WMC WOAI  
 WRC WSR WSM WTAG  
**B—Marcel Rodrigo, Baritone**  
 KDKA KOIL KSO KWCR KWK  
 WBAL WBZ WBZA WHAM WJZ  
 WMAL WSYR

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**  
**C—Columbia News Service**  
 CKAC CKLW KLRA KRLD KTRH  
 KTSB KFOR WAAB WABC WACO  
 WBIG WBT WCAH WCAO WCAU  
 WDAE WDBJ WDRO WDOD WDRS  
 WEAN WFBL WFAA WGR WGST  
 WHAS WHFC WHP WISN WJAS  
 WJSV WKBN WLAC WLWB WLZ  
 WMAS WMT WODX WOKO WORC  
 WQAM WREC WSJS WSPD WTOG  
**R—Kay-Seven, Drama**  
 CRCT KSD WBEW WCAE WCHS  
 WDAF WFAE WEI WFBZ WGY

WJO WJAR WLIT WLW WMAQ  
 WOC WOW WRC WTAG WTAM  
 WTIC WWJ  
**B—Henri Deering, Concert Pianist**  
 KFYP KOIL KPRC KSO KSTP  
 KTBS KVOO KWCR WBAL WBZ  
 WBZA WKY WEBC WFAA WHAM  
 WBA WJDX WJZ WKY WMAL  
 WOAI WREN WSB WSM WSBM  
 WSYR

**E-10:45 p.m., C-9:45, M-8:45, P-7:45**  
**C—Myrt and Marge**  
 KDB KERN KFBC KFYP KFRC  
 KGB KHJ KLRA KLZ KMBC KMJ  
 KMOX KOIN KOL KOMA KSL  
 KVI KGW WBBM WBRC WCCO  
 WDSU WFBM WGST WHAS WLAC  
 WODX WREC  
**B—Planned Recovery**  
 KFYP KOIL KPRC KSO KSTP  
 KTBS KVOO KWCR WBAL WBZA  
 WKY WEBC WFLA WHAM WBA  
 WIS WJAX WJDX WJZ WKY WMAL  
 WOAI WREN WSB WSM WSBM  
 WSYR WWNC

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**  
**C—Willard Robison and Orchestra**  
 CKLW KFH KLZ KMBC KOMA  
 KSCJ KTRH KTSB KFOR WAAB  
 WABC WADC WBRC WBT WCAH  
 WCAO WDAE WDBJ WDRS WDSU  
 WEAN WFEA WGST WHAS WHFC  
 WHP WIBW WICC WIP WISN WJAS  
 WJSV WKBN WKWB WLZ WMAS  
 WMBD WMBG WMT WODX WOKO  
 WORC WOWO WQAM WREC WSJS  
 WSPD WTOG  
**B—Amos 'n' Andy**  
 KDYL KFI KGO KGW KHQ KOA  
 KOIL KOMO KPRC KSTP KTHS  
 KWK WHAP WDAF WENR WKY  
 WMAQ WMC WOAI WREN WSB  
 WSM WSBM WTMJ

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**  
**C—Boswell Sisters**  
 CFRB CKLW KFAB KFH KLRA  
 KLZ KMBC KTRH KTSB KFOR  
 WAAB WABC WACO WADC WBT  
 WCAH WDAE WCCO WDAE WDBJ  
 WDBO WDOD WDRS WEAN WFBM  
 WFEA WGST WHP WIBW WIP  
 WISN WJAS WJSV WKBN WKWB  
 WLAC WLWB WLZ WMAS WMBD  
 WMT WODX WORC WPG WQAM  
 WREC WSBT WSJS WSPD WTOG  
**R—Lum and Abner**  
 KFYP KSD WDAF WENR WHO  
 WBA WKFB WOC WOW WTAM  
 WTMJ

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**  
**C—Glen Gray and Orchestra**  
 CFRB CKLW KFH KLRA KLZ  
 KMBC KOMA KTRH KTSB KFOR  
 WABC WADC WBRC WCAO WCAU  
 WDBJ WDRS WDSU WEAN WFBL  
 WFBM WGST WHAS WHK WHP  
 WIBW WICC WISN WJSV WKWB  
 WLAC WLWB WLZ WMAS WMBD  
 WNAC WOKO WORC WPG WQAM  
 WREC WSBT WSJS WTAR WTOG  
**R—Voice of Firestone**  
 KDYL KFI KFSD KGHL KGIR KGO  
 KGU KGW KHQ KOA KOMO KTAR

**E-12:00 p.m., C-11:00, M-10:00, P-9:00**  
**B—Sealed Power Side Show**  
 KDYL KFI KGHL KGIR KGO KGW  
 KHQ KOA KOMO KTAR

**TUESDAY**

**E-6:00 p.m., C-5:00, M-4:00, P-3:00**  
**C—Buck Rogers, See Monday**  
**R—Waldorf Astoria, See Monday**  
**B—Richard Himber and Orchestra**  
 KOIL KSO KWCR WBAL WKY  
 WENR WHAM WJR WJZ WMAL  
 WREN

**E-6:15 p.m., C-5:15, M-4:15, P-3:15**  
**C—Bobby Benson, See Monday**

**E-6:30 p.m., C-5:30, M-4:30, P-3:30**  
**R—Mid-Week Hymn Sing**  
 KDYL KFYP KGIR KPO KPRC  
 KTBS KTHS KVOO WDAY WFAE  
 WFAA WFI WGY WHO WIBA WIS  
 WJAX WJDX WMAQ WOAI WOC  
 WRC WSAI WTAG WWNC  
**B—Mary Small, Juvenile Singer**  
 KSO KWCR WBAL WKY WENR  
 WHAM WJZ WREN WSYR  
**C—The Dictators**  
 CKLW WAAB WABC WBIG WBRC  
 WBT WDAE WDBJ WDRS WDSU  
 WFEA WGST WHFC WHP WJSV  
 WKBN WLWB WMAS WMBG WOKO  
 WORC WQAM WREC WFAA WSJS  
 WSPD WTOG

**E-6:45 p.m., C-5:45, M-4:45, P-3:45**  
**C—Little Italy**  
 WAAB WABC WCAO WCAU WDRS  
 WEAN WHFC WIP WKWB WOKO  
**R—Cherio Musical Mosaics**  
 KDYL KOA KPO KSD WKY  
 WEAF WEI WFBR WFLA WGY  
 WHO WIOD WIS WJAR WJAX  
 WJDX WMAQ WOC WOW WRVA  
 WSAI WSM WSOC WTAG WWJ  
 WWNC  
**B—Lowell Thomas, See Monday**

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**  
**C—Myrt and Marge, See Monday**  
**B—Amos 'n' Andy, See Monday**

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**  
**C—Just Plain Bill, See Monday**  
**R—Billy Bachelor, See Monday**  
**B—Radio in Education**  
 KDKA KECA KEX KFSD KFYP  
 KGA KHL KGIR KJR KOA KOIL  
 KPRC KTAR KTBS KTHS KVOO  
 KWCR KWK KYA WAPI WBAP  
 WBZ WBZA WKY WFLA WHAM  
 WIBA WIS WJDX WJZ WMAL  
 WOAI WPTF WREN WSM WWNC

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**  
**C—Deli Campo, Songs**  
 WABC WBIG WBT WDAE WDBJ  
 WDRS WDSU WFEA WGST WLZ  
 WMBG WORC WQAM WREC WSPA  
 WSJS WTOG  
**R—Lum and Abner, See Monday**

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**  
**C—Boake Carter, See Monday**  
**R—Goldbers, See Monday**  
**B—Rhythm String Quartet**  
 KDKA WBZ WBZA WENR WGAR  
 WHAM WJZ WMAL WSYR

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**  
**C—Elmer Everett Yess; Comedy**  
 CKLW KFAB KFH KMBC KMOX  
 KOMA KSCJ KTRH KTSB WAAB  
 WABC WADC WBBM WBIG WCCO  
 WBT WCAH WCAO WCAU WDRS  
 WDAE WDOD WDRS WDSU  
 WEAN WFBL WFBM WGR WGST  
 WHAS WHFC WHK WIBW WICC

**TUESDAY—(Continued)**

WJAS WJSV WKBN WKRC WLAC  
WMAS WMBG WMT WOKO WOPC  
WOWO WQAM WREC WRR WSCA  
WSPD WTAR WWVA

**R — Blackstone; Sanderson-Crumit**  
WBEN WCAS WCSH WEAF WEEL  
WFI WGY WJAR WRC WTAG  
WTAM WWJ

**B — Eno Crime Clues**  
KDKA KWK WBAL WJBZ WBZA  
WGAR WHAM WJR WJZ WLW  
WMAL WMAQ WREN

**E-8:15 p.m., C-7:15, M-6:15, P-5:15**  
**C — Edwin C. Hill, See Monday**

**E-8:30 p.m., C-7:30, M-6:30, P-5:30**  
**C — Voice of Experience**  
CKLW KMBC KMOX WABC WBBM  
WBT WCAO WCAU WDRC WEAN  
WGR WHAS WHK WJAS WJSV  
WKRC WNAC

**R — Wayne King and Orchestra**  
KPRC KSD KSTP WBEN WCAE  
WCBS WDAF WEAF WEEL WFAA  
WFI WGY WHO WJAR WKBF  
WKY WMAQ WMC WQAI WOC  
WOW WRC WSAI WSB WSM WSMB  
WTAG WTAM WTMJ WWJ

**B — Horlick's Adventures in Health**  
CROC KDKA KOIL KSO KWK  
WBAL WBJ WBZA WGAR WHAM  
WJR WJZ WLS WLW WREN

**E-8:45 p.m., C-7:45, M-6:45, P-5:45**  
**C — Columbian; Freddie Rich**  
CKLW KFH KILZ KMBC KOMA KSCJ  
KSL KTRH KTSa KVOA WABC  
WADC WBIG WBRC WBT WCAH  
WCAO WCAU WCCO WDAE WDBJ  
WDR WDSU WEAN WFBL WFEA  
WGR WGST WHAS WHP WIBW  
WICC WISN WJAS WJSV WKBN  
WLBB WMAS WMBG WMT WNAC  
WODX WOKO WORC WOWO WPG  
WQAM WREC WSBT WSJS WSPD  
WTAQ WTOC

**B — Smith Bros.—Trade and Mark**  
KDKA KOIL KSO KWCR KWK  
WBAL WBJ WBZA WGAR WHAM  
WJR WJZ WLS WLW WMAL WREN  
WSYR

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**  
**R — Ben Bernie and Orchestra**  
KFYR KOA KPRC KSD KSTP  
WBAP WBEN WCAE WCBS WDAF  
WEAF WEEL WFBP WFI WGY  
WHO WJAR WKY WLW WMAQ  
WMC WQAI WOC WOW WRC  
WRVA WSB WSM WSMB WTAG  
WTAM WTMJ WWJ

**B — Household Musical Memories**  
KDKA KSO KWK WBAL WBJ WBZA  
WHAM WJR WJZ WKBF WLS  
WREN WSYR  
**C — Phila. Symphony, See Monday**

**E-9:15 p.m., C-8:15, M-7:15, P-6:15**  
**C — Mystery Guild**  
CKLW KFH KILZ KMBC KOMA KSL  
KTRH KTSa KVOA WABC WADC  
WBIG WBRC WBT WCAH WCAO  
WCAU WCCO WDAE WDBJ WDRC  
WDSU WEAN WFBL WFEA WGST  
WHAS WHC WHK WHP WIBW  
WICC WISN WJAS WJSV WKBN  
WLBB WLW WMAS WMBD WMBG  
WMT WNAC WODX WOKO WORC  
WOWO WPG WQAM WREC WSBT  
WSJS WSPD WTOC

**E-9:30 p.m., C-8:30, M-7:30, P-6:30**  
**C — California Melodies**  
CFRB CKLW KFAB KFH KLV  
KMBC KOMA KRLD KSCJ KSL  
KTRH KTSa KVOA WABC WADC  
WBIG WBRC WBT WCAH WCAO  
WCCO WDAE WDBJ WDRC WDSU  
WEAN WFBL WFEA WGST WHAS  
WHC WHP WIBW WICC WJAS  
WJSV WKBN WKBW WLBB WMAS  
WMBD WMBG WMT WNAC WODX  
WOKO WORC WOWO WPG WQAM  
WREC WSBT WSJS WSPD WTOC

**R — Texaco Fire Chief Program**  
KDYL KFI KFSB KFYR KGH  
KGIR KGO KGW KHQ KOA KOMO  
KPRC KSD KSTP KTR KTB  
KVOO WBAP WBEN WCAE WCBS  
WDAF WDAY WEAF WEBC WEEL  
WFBP WFI WFLA WGY WHO WIBA  
WIOD WIS WJAR WJAX WJDX  
WKY WLW WMAQ WMC WQAI  
WOC WOW WPTF WRC WRVA  
WSB WSM WSMB WTAG WTAM  
WTMJ WWJ WNNC

**E-10:00 p.m., C-9:00, M-8:00, P-7:00**  
**C — Camel; Glen Gray's Orchestra**  
CKLW KDB KERN KFRB KFH  
KFYR KPRC KGB KHJ KIRA KLZ  
KMBC KMI KMOX KOIN KOL  
KOMA KRLD KSCJ KSL KTRH  
KTSa KVI KWG WAAB WABC  
WACO WADC WBBM WBIG WBRC  
WBT WCAH WCAO WCAU WCCO  
WDAE WDBJ WDBO WDOO WDRC  
WDSU WFBL WFBM WFEA WGST  
WHAS WHC WHK WHP WIBW  
WICC WJAS WJSV WKBW WKBN  
WKRW WJRC WLAC WLBB WMAS  
WMBD WMBG WMT WNAC WODX  
WOKO WORC WOWO WPG WQAM  
WREC WSJS WSPD WTAR WTOC

**R — Cruise of Seth Parker**  
KDYL KFI KFSB KFYR KGH  
KGIR KGO KGW KHQ KOA KOMO  
KPRC KSD KSTP KTR KTB  
KVOO WBAP WBEN WCAE WDB  
WDAY WEAF WEBC WEEL WFBP  
WFI WFLA WGY WHO WIBA  
WIOD WIS WJAR WJAX WJDX  
WKY WLW WMAQ WMC WQAI  
WOC WOW WRC WRVA WSB WSM  
WSMB WTAG WTAM WWJ WNNC

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**  
**R — Madams Sylvia—Beauty Talk**  
KDYL KFI KGO KGW KHQ KOA  
KOMO KSD KSTP WBEN WEAF  
WEBC WEEL WGY WHO WIBA  
WMAQ WOC WRC WTAG WWJ  
**C — News Service, See Monday**

**E-10:45 p.m., C-9:45, M-8:45, P-7:45**  
**C — Myrt and Marge, See Monday**

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**  
**B — Amos 'n' Andy, See Monday**  
**C — Evan Evans, Baritone**  
CKLW KFH KMBC KSCJ KSL KTSa  
KVOA WABC WADC WBRC  
WBT WCAO WDAE WDBJ WDRC  
WDSU WEAN WGST WHAS WHC  
WHK WIBW WICC WJAS WJSV  
WKBN WKBW WLBB WMAS WMBD  
WMT WODX WOKO WORC WQAM  
WSJS WSPD WTOC WWVA

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**  
**C — Gertrude Niesen, Songs**  
CFRB CKLW WAAB WABC WADC  
WBRC WBT WCAH WCAU WDAE  
WDBJ WDRC WDSU WEAN WFBL  
WGST WHC WHP WJAS WJSV

WKBN WKBW WLBB WMAS WMBD  
WMBG WMT WODX WOKO WORC  
WPG WQAM WREC WSJS WSPD  
WTOC WWVA

**C — Elmer Everett Yess; Comedy**  
KALE KDB KERN KPRC KGB  
KHJ KLZ KMJ KOIN KOL KSL  
KWG

**R — Lum and Abner, See Monday**

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**  
**C — Isham Jones and Orchestra**  
CFRB CKLW KFH KLRA KLZ  
KMBC KOMA KSL KTRH KTSa  
WABC WADC WBRC WCAO WDBJ  
WDRC WDSU WEAN WFBL WFEM  
WGST WHK WHP WIBW WISN  
WJSV WKBW WLAC WLBB WMBD  
WMBG WMT WNAC WOKO WORC  
WQAM WREC WSBT WSJS WTAR  
WTOC WWVA

**B — Meyer Davis and Orchestra**  
CFRC KDYL KFYR KOIL KPO K30  
KSTP KWCR KWK WAPI WBAL  
WBZ WBZA WCKY WDAY WE3C  
WENR WFLA WHAM WIBA WIOD  
WIS WJDX WJZ WMAL WMC  
WREN WRVA WSB WSM WSMB  
WSYR WNNC

**E-11:45 p.m., C-10:45, M-9:45, P-8:45**  
**C — Voice of Experience**  
KDB KERN KFRB KFYR KPRC  
KGB KHJ KLZ KMJ KOIN KOL  
KSL KVI KWG

**E-12:00 mid., C-11:00, M-10:00 P-9:00**  
**R — Ben Bernie and Orchestra**  
KFI KGO KGW KHQ KOMO

**WEDNESDAY**

**E-8:00 p.m., C-5:00, M-4:00, P-3:00**  
**C — Buck Rogers, See Monday**  
**R — Waldorf Astoria, See Monday**

**B — Westminster Choir**  
KOIL KSO KWCR KWK WBAL  
WCKY WGAR WHAM WJZ WMAL  
WREN WSYR

**E-8:15 p.m., C-5:15, M-4:15, P-3:15**  
**C — Bobby Benson, See Monday**

**E-8:30 p.m., C-5:30, M-4:30, P-3:30**  
**C — Vera Van, See Monday**  
**R — Back of News**  
KFYR WEAF WFBP WGY WIBA  
WIS WJAR WJDX WRC WSAI  
WSB WSM WWJ WNNC

**B — Irene Beasley, Contralto**  
KGO KOA KPRC KSO KTB KVOO  
KWCR WBAL WBAP WCKY WENR  
WGAR WJZ WQAI WREN

**E-8:45 p.m., C-5:45, M-4:45, P-3:45**  
**B — Lowell Thomas, See Monday**

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**  
**C — Myrt and Marge, See Monday**  
**R — Mollie Show, See Monday**  
**B — Amos 'n' Andy, See Monday**

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**  
**C — Just Plain Bill, See Monday**  
**R — Billy Bachelor, See Monday**  
**B — John Harrick, Baritone**  
KDKA KOIL KSO KWCR KWK  
WBAL WBJ WBZA WCKY WENR  
WHAM WJZ WMAL WSYR

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**  
**C — Music in Air, See Monday**

# WEDNESDAY—(Cont'd)

R — Lum and Abner, See Monday  
B — Potash and Perlmutter, See Mon.

**E-7:45 p.m., C-8:45, M-5:45, P-4:45**  
C — Boake Carter, See Monday  
R — Goldbergs, See Monday

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**  
C — Happy Bakers, See Monday  
R — George Olsen; Bert Lahr  
CFCF CRCT KSD WBEN WCAE  
WKCY WCSH WDAF WFAF WEEI  
WFBF WGY WJAR WLIT  
WLS WOC WOW WRC WSAI WTAM  
WTAM WTIC WWJ  
B — Eno Crime, See Tuesday

**E-8:15 p.m., C-7:15, M-6:15, P-5:15**  
C — Edwin C. Hill, See Monday

**E-8:30 p.m., C-7:30, M-6:30, P-5:30**  
C — Albert Spalding; Conrad Thibault  
CFRB CKAC CKLW KDB KERN  
KFBK KFPY KFRC KGB KHJ  
KLRA KLZ KMBC KMJ KMOX  
KGIN KOL KOMA KSL KTAT  
KTRH K TSA KVI KWG WABC  
WBRC WCAO WCAU WCCO WDDO  
WDRC WDSU WEAN WFBL WFBM  
WGN WGR WGST WHAS WHK  
WJAS WJSV WKRC WLAC WMT  
WNAC WOKO WORC WOW WREC  
WRR

B — Dangerous Paradise, Drama  
CFCF KDKA KOIL KSO KWCR  
KWK WBAL WBZ WBSA WGAR  
WHAM WJR WJZ WLS WMAL  
WREN WSYR

R — Wayne King and Orchestra  
KSD WBEN WCAE WCSH WFAF  
WFBF WGY WJAR WBSF WLIT  
WMAQ WOW WRC WSAI WTAM  
WTAM WWJ

**E-8:45 p.m., C-7:45, M-6:45, P-5:45**  
B — Red Davis, See Monday

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**  
R — Ipana Troubadours  
KDYL KFI KGO KGW KHQ KOA  
KOMO KPRC KSD KSTP KTBS  
KTHS KVOO WAPI WBAP WBEN  
WCAE WCSH WDAF WFAF WFAA  
WFBF WGY WHO WIOD WIS  
WJAR WJAX WKY WLIT WMAQ  
WMC WOAI WOC WOW WRC  
WRVA WSAI WSB WSM WSMB  
WTAG WTAM WTMJ WWJ

B — Warden Lawes; Sing Drama  
KDKA KOIL KSO KWCR KWK  
WBAL WBZ WBSA WKY WGAR  
WHAM WJR WJZ WLS WMAL  
WREN WSYR  
C — Philadelphia Symphony, See Mon.

**E-9:15 p.m., C-8:15, M-7:15, P-6:15**  
C — Col. Stoenpagle and Budd

CKLW KDB KERN KFBK KFH  
KFPY KFRC KGB KHJ KLRA KLZ  
KMCB KMJ KMOX KGIN KOL  
KOMA KRLD KSCJ KSL KTRH  
K TSA KVI KWG WABC WADC  
WBMB WBRC WBT WCAH WCAO  
WCAU WCCO WDAE WDRC WDSU  
WEAN WFBL WFBM WGST WHAS  
WHAC WHK WIBW WICW WISN  
WJAS WJSV WKBW WKRC WLAC  
WMBD WMT WNAC WOKO WOWO  
WQAM WREC WSPD WTAR WTOG

**E-9:30 p.m., C-8:30, M-7:30, P-6:30**  
C — Guy Lombardo—Burns and Allen  
CKLW KDB KERN KFBK KFPY

KFRC KGB KHJ KLZ KMBC KMJ  
KMOX KOIN KOL KOMA KRLD  
KSL KTRH K TSA KVI KWG WABC  
WADC WBT WCAO WCAU WCCO  
WDRC WEAN WFBL WFBM WGN  
WHK WJAS WJSV WKBW WKRC  
WNAC WOKO WORC WOWO WSPD

R — Leo Reisman's Orchestra  
KSD KSTP WBEN WCAE WCSH  
WDAF WFAF WFBF WGY WJAR  
WLIT WMAQ WOW WRC WSAI  
WTAG WTAM WTMJ WWJ

B — John McCormack, Tenor  
KDKA KDYL KFI KGO KGW KHQ  
KOA KOIL KOMO KSO KWCR  
KWK WBAL WBZ WBSA WKY  
WENR WGAR WHAM WJR WJZ  
WMAL WREN WSYR

**E-10:00 p.m., C-9:00, M-8:00, P-7:00**

C — Old Gold—Fred Waring's Orchestra  
CKLW KDB KERN KFBK KFOR  
KFPY KFRC KGB KHJ KLRA KLZ  
KMBC KMJ KMOX KOH KOIL  
KOL KOMA KRLD KSCJ KSL  
KTRH K TSA KVI KWCR KWG  
WABC WACO WADC WBG WBRC  
WBT WCAH WCAO WCAU WCCO  
WDAE WDBJ WDBO WDDO WDRC  
WDSU WEAN WFBL WFBM WFEA  
WGN WGST WHAS WHEC WHK  
WHP WIBW WICW WISN WJAS  
WJSV WKBW WKBW WKRC WLAC  
WLWB WLZB WMAS WMBD WMBG  
WMT WNAC WNAX WOC WORC  
WOWO WPG WQAM WREC WSPD  
WTAR WTOG

R — Corn Cob Pipe Club  
KDYL KFI KFYR KGHL KGIR  
KGO KGW KHQ KOA KOMO KSD  
KSTP WBEN WCAE WCSH WDAF  
WDAF WFAF WFBF WEEI WENR  
WFBF WGY WHO WIBA WJAR  
WLIT WLW WOC WOW WRC  
WRVA WTAM WTAM WTIC WTMJ  
WWJ

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**

R — National Radio Forum  
KDYL KFI KFYR KGHL KGIR  
KGO KGW KHQ KOA KOMO KSD  
KSTP WBEN WCAE WCSH WDAF  
WDAF WFAF WFBF WEEI WENR  
WFBF WGY WHO WIBA WJAR  
WLIT WLW WOC WOW WRC  
WRVA WTAM WSAI WSB WSM  
WSMB WTAG WTAM WTIC WWJ  
WWNC

C — News Service, See Monday

**E-10:45 p.m., C-9:45, M-8:45, P-7:45**

C — Myrt and Marge, See Monday

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**

B — Amos 'n' Andy, See Monday

C — Mark Warnow Presents

CKLW KFH KLRA KLZ KMBC  
KSL KTRH K TSA KVOR WAAB  
WABC WACO WADC WBG WBTV  
WCAH WCAO WCCO WDAE WDBJ  
WDBO WDDO WDRC WEAN WFBL  
WFEA WGST WHEC WHK WHIP  
WIBW WICW WIP WISN WJAS  
WJSV WKBW WLAC WLWB WLZB  
WMAS WMBD WMBG WMT WODX  
WOKO WORC WPG WQAM WBSJ  
WSPD WTOG

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**

R — Lum and Abner, See Monday

B — Poet Prince, Songs

KDYL KFI KFYR KGO KGW KHQ  
KOA KOIL KOMO KSO KSTP KTBS

KTHS KWCR KWK WAPI WBAL  
WKY WDAY WVEC WFAA WIBA  
WJDX WJR WJZ WKY WMAL  
WMAQ WMC WREN WSB WSYR

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**

C — Ozzie Nelson and Orchestra  
KLRA WABC WBRC WDBJ WDRC  
WDSU WEAN WGST WICC WLAC  
WMBG WNAC WORC WQAM WREC  
WSJS WTAR WTOG  
C — Edwin C. Hill

KDB KERN KFBK KFPY KFRC  
KGB KHJ KLZ KMJ KOIN KOL KSL  
KVI KWG

# THURSDAY

**E-8:00 p.m., C-5:00, M-4:00, P-3:00**

C — Buck Rogers, See Monday

R — Waldorf Astoria, See Monday

B — Richard Himber and Orchestra

KOIL KSO KWCR WBAL WBZ  
WBA WCKY WENR WHAM WJR  
WJZ WMAL WREN WSYR

**E-8:15 p.m., C-5:15, M-4:15, P-3:15**

C — Bobby Benson, See Monday

**E-8:30 p.m., C-5:30, M-4:30, P-3:30**

R — John B. Kennedy

KDYL KFYR KOA KPO KPRC KSD  
KTBS KTHS KVOO WAPI WDAY  
WFAF WFBF WFI WGY WHO WIBA  
WIS WJAX WJDX WMAQ WMC  
WOR WRC WSAI WSB WSMB WTAG  
WJR WWNC

C — Edith Murray, Songs

WAAB WABC WBG WBRC WBT  
WCAO WDAE WDBJ WDSU WFEA  
WGST WHEC WHP WJSV WKBW  
WLWB WMAS WMBG WORC WQAM  
WREC WSAF WSJS WTOG

**E-8:45 p.m., C-5:45, M-4:45, P-3:45**

R — Sixlers Trio

KFYR KOA KPRC KSD KSTP  
KTBS KVOO WAPI WBEN WCKY  
WDAY WFAF WVEC WVEI WFAA  
WFBF WFI WGY WHO WIBA WJAR  
WJDX WKY WMC WOAI WOC WOW  
WSAI WSB WSM WSMB WTAG  
WWJ

C — Lowell Thomas, See Monday

B — Little Italy, See Tuesday

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**

C — Myrt and Marge, See Monday

B — Amos 'n' Andy, See Monday

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**

B — Three Musketeers, Drama

CRCT WBAL WBZ WBSA WHAM  
WJZ WMAL WSYR

C — Just Plain Bill, See Monday

R — Billy Bachelor, See Monday

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**

R — Lum and Abner, See Monday

C — Mildred Bailey, Songs

WABC WBT WDAE WDBJ WDRC  
WDSU WEAN WGST WLWB WMAS  
WMBG WNAC WORC WQAM WREC  
WSPA WSJS WTOG

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**

B — Concert Favorites

KDKA KDYL KFYR KOA KPO  
KPRC KSO KSTP KTBS KTHS KVOO  
KWCR WBZ WBSA WCKY WECB  
WJAX WHAM WIBA WIOD WIS  
WJAZ WJDX WJZ WKY WMAL

### THURSDAY—(Cont'd)

WMC WOAI WREN WSB WSBM  
 WNNC  
 C — Boake Carter, See Monday  
 R — Goldbergs, See Monday

E-8:00 p. m., C-7:00, M-6:00, P-5:00

C — Elmer E. Yess, See Tuesday  
 R — Rudy Vallee and Orchestra  
 CFCF CRCT KDYL KFI KFYR KGO  
 KGW KHQ KOA KOMO KPRC KSD  
 KSTP KTR KTB WAPI WBAP  
 WBEW WCAE WDBE WDFW WDAY  
 WFEA WFGD WHEE WIFR WFLA  
 WFLW WGY WHO WIOD WJAR  
 WJAX WJDX WKY WLW WMAQ  
 WMC WOAI WOC WOV WTFF WRC  
 WRVA WSB WSM WSBM WTAG  
 WTM WTMJ WWJ

E-8:15 p. m., C-7:15, M-6:15, P-5:15  
 C — Edwin C. Hill, See Monday

E-8:30 p. m., C-7:30, M-6:30, P-5:30  
 C — Voice of America

CKLW KMBC KMOX WABC WADC  
 WBMM WCAO WCAU WDRG WEAN  
 WFBL WGR WHAS WHK WJAX  
 WJSV WKRC WNAC WOKO WOWO  
 WSPD  
 B — Horlick's, See Tuesday

E-8:00 p. m., C-8:00, M-7:00, P-6:00

R — Maxwell House Showboat  
 KDYL KFI KFSD KGO KGW KHQ  
 KOA KOMO KPRC KSD KSTP KTR  
 KTB WAPI WBAP WBEW WCAE  
 WCKY WCSH WDAF WFEA WEEI  
 WFRB WFI WFLA WGY WHO WIOD  
 WIS WJAR WJAX WJDX WKY  
 WMAQ WMC WOAI WOC WOW  
 WRC WRVA WSAI WSB WSM WSBM  
 WTAG WTAM WTMJ WJW WNNC  
 B — Death Valley Days—Drama  
 KDKA KOIL KSO KWCR KWK  
 WBAL WBZ WBZA WGAR WHAM  
 WJR WJZ WLS WLW WMAL WREN  
 WSYR

C — Philadelphia Symphony, See Mon.

E-9:15 p. m., C-8:15, M-7:15, P-6:15

C — Alex. Woolcott, See Monday

E-9:30 p. m., C-8:30, M-7:30, P-6:30

C — Andre Kostelanetz Presents  
 CKLW KFH KLZ KMBC KOMA  
 KRLD KSCJ KTRH KTSB KVOR  
 WABC WADC WBGD WBRG WBT  
 WCAH WCAO WCO WDAE WDBJ  
 WDRG WDSU WEAN WFBL WFEA  
 WGST WHAS WHEC WHK WHF  
 WIBW WICG WJAS WJSV WKBN  
 WKBW WLW WMA WMBD WMBG  
 WMT WNAC WOKO WOV WOWO  
 WQAM WREC WSBT WSSJ WSPD  
 WTCO

B — Wayne King and Orchestra  
 KDKA KOIL KSO KWCR KWK  
 WBAL WBZ WBZA WENR WGAR  
 WHAM WJR WJZ WREN

E-10:00 p. m., C-9:00, M-8:00, P-7:00

R — Paul Whiteman and Orchestra  
 KDYL KFI KFYR KGO KGW KHQ  
 KOA KOMO KPRC KSD KSTP KTB  
 KTHS KVOO WBAE WBEW WCAE  
 WCSH WDAF WDAY WFEA WBCB  
 WEEI WFRB WFLA WGY WHO  
 WIBW WIOD WIS WJAR WJAX  
 WJDX WKY WLW WMAQ WMC  
 WOAI WOC WOW WRC WRVA WSB

WSM WSBM WTAG WTAM WTMJ

WJL WNNC  
 B — Hands Across the Border  
 CFCF CFCO CFCF CFCF CFCN  
 CFCO CFCY CFCF CFCB CFFL  
 CFCO CHAB CHGS CHNS CHRC  
 CHWC CHWK GICA GJCB CJCJ  
 CJGJ CJOC CJRM CJRW CKCH  
 CKCK CHNC CKOC CKOV CKPC  
 CKPR CKUA CKX CKY CRCO CRCS  
 CRCT CRCT CFCF CKDK KOIL KSO  
 KWCR WBAL WBZ WBZA WCKY  
 WGAR WHAM WJR WJZ WMAQ  
 WREN WSYR  
 C — Camel Program, See Tuesday

E-10:30 p. m., C-9:30, M-8:30, P-7:30

B — Archer Gibson, Organist  
 KDKA KSO KWCR KYW WBAL WBZ  
 WBZA WCKY WGAR WHAM WJZ  
 WMAL WREN

C — News Service, See Monday

E-10:45 p. m., C-9:45, M-8:45, P-7:45

C — Myrt and Marge, See Monday

E-11:00 p. m., C:10:00, M-9:00, P-8:00

C — Harlem Serenade  
 CKLW KFH KLZ KMBC KSCJ  
 KTRH KTSB KVOR WAAB WABC  
 WADC WDAE WDBJ WDRG WDSU  
 WEAN WFEA WGST WHAS WHEC  
 WHP WIBW WICG WISN WJAS  
 WJSV WKBW WLW WMA WMBD  
 WMBG WMT WODX WOKO WORC  
 WQAM WREC WJSJ WSPD WTCO  
 WWVA  
 B — Ames 'n' Andy, See Monday  
 R — Viola Philo, Soprano  
 WCAE WCSH WFAE WFI WFLA  
 WGY WIOD WIS WOW WRVA  
 WTAM WNNC

E-11:15 p. m., C-10:15, M-9:15, P-8:15

C — Phil Regan, Tenor  
 CFRB CKLW KLRA WAAB WABC  
 WADC WBGD WBRG WBT WCAO  
 WCO WDAE WDBJ WDO D WOD  
 WEAN WFBM WFLA WGST  
 WHP WIP WJAS WJSV WKBN  
 WKBW WLAC WLW WLBZ WMAS  
 WMBG WMBD WMT WODX WORC  
 WPG WQAM WREC WSBT WJSJ  
 WSPD WTCO  
 C — Elmer E. Yess, See Tuesday  
 R — Lum and Abner, See Monday  
 B — Poet Prince, See Wednesday

E-11:30 p. m., C-10:30, M-9:30, P-8:30

C — Isham Jones, See Tuesday  
 R — Enric Madriguera and Orchestra  
 KSD WBEN WCAE WCSH WDAF  
 WFAE WEEI WFRB WFI WGY  
 WHO WJAR WOC WOW WSAI  
 WTAG WTAM  
 C — Edwin C. Hill, See Wednesday

### FRIDAY

E-6:00 p. m., C-5:00, M-4:00, P-3:00

C — H. V. Kaltenborn  
 CFRB CKLW KLRA WAAB WABC  
 WADC WBGD WBT WCAO WCAU  
 WDAE WDBJ WDO D WDRG  
 WFEA WGST WHEC WHK WICC  
 WJSV WLAC WLW WLBZ WMBG  
 WOKO WORC WQAM WREC WSPA  
 WJSJ WSPD WTCO  
 R — Waldorf Astoria, See Monday

E-6:15 p. m., C-5:15, M-4:15, P-3:15

C — Bobby Benson, See Monday

E-6:30 p. m., C-5:30, M-4:30, P-3:30

B — Three X Sisters  
 KDKA KOIL KWCR KWK WBAL  
 WBZ WBZA WCKY WENR WHAM  
 WJZ WMAL WREN WSYR  
 R — Irene Beasley, See Monday  
 C — Toto Guitar, Tenor  
 CFRB CKLW WAAB WABC WBIG  
 WBRG WBT WCAO WDAE WDBJ  
 WDRG WDSU WFEA WGST WHEC  
 WKBN WKBW WLBZ WMA WMBG  
 WOKO WORC WQAM WREC WSPA  
 WJSJ WTCO

E-6:45 p. m., C-5:45, M-4:45, P-3:45

C — Zoel Parenteau's Orchestra  
 CKLW WAAB WABC WBT WCAU  
 WDRG WEAN WFBL WFEA WHEC  
 WJSV WKBW WLW WOKO  
 B — Lowell Thomas, See Monday

E-7:00 p. m., C-6:00, M-5:00, P-4:00

C — Myrt and Marge, See Monday  
 R — Mollie Show, See Monday  
 B — Amos 'n' Andy, See Monday

E-7:15 p. m., C-6:15, M-5:15, P-4:15

C — Just Plain Bill, See Monday  
 R — Billy Bachelor, See Monday  
 B — Three Musketeers, See Thursday

E-7:30 p. m., C-6:30, M-5:30, P-4:30

R — Scott's Circus Day  
 KSD WSH WDAF WFAE WEEI  
 WGY WJAR WKBF WLW WMAQ  
 WOW WRC WTAG WTAM WTIC  
 B — Polish and Perlmutter, See Mon.  
 C — Music in Air, See Monday

E-7:45 p. m., C-6:45, M-5:45, P-4:45

C — Boake Carter, See Monday  
 R — Goldbergs, See Monday

E-8:00 p. m., C-7:00, M-6:00, P-5:00

C — Happy Bakers, See Monday  
 R — Cities Service Concert  
 CRCT KDYL KOA KPRC KSD KTB  
 KTHS KYW WBEN WCAE WCSH  
 WDAF WFAE WBCB WEEI WFAA  
 WFRB WGY WHO WJAR WKY WLIT  
 WOAI WOC WOW WVR WRVA WSAI  
 WTAG WTAM WTIC WTMJ WWJ  
 B — Nestle's with Ethel Shutta  
 KDKA KWK WBAL WBZ WBZA  
 WCKY WGAR WJR WJZ WLS WMAL  
 WSYR

E-8:15 p. m., C-7:15, M-6:15, P-5:15

C — Edwin C. Hill, See Monday

E-8:30 p. m., C-7:30, M-6:30, P-5:30

C — March of Time  
 CKLW KDB KERN KFBK KFPY  
 KPRC KGB KHJ KJZ KMBC KMJ  
 KMOX KORN KOL KSL KTRH KVI  
 KWG WABC WCAO WCAU WCCO  
 WDRG WDSU WEAN WFBL WFBM  
 WGN WGR WGST WHAS WHK WJAS  
 WJSV WKRC WNAC WOW WSPD  
 B — Dangerous Paradise, See Wed.

E-8:45 p. m., C-7:45, M-6:45, P-5:45

B — Red Davis, See Monday

E-9:00 p. m., C-8:00, M-7:00, P-6:00

B — Phil Harris and Orchestra  
 CFCF KDKA KDYL KFI KGHL  
 KGIR KGO KGW KHQ KOA KOL  
 KOMO KSO KWCR KWK WAPI  
 WBAL WBZ WBZA WCKY WFAA  
 WGAR WJZ WKY WLS WMAL  
 WOAI WREN WSB WSM WSBM  
 WSYR

## FRIDAY—(Continued)

**C** — Philadelphia Symphony, See Mon.  
**C** — Frank Munn; Abe Lyman  
KSD WBEN WCSH WFAE WEEL  
WFBR WGY WJAR WLIT WMAQ  
WOW WRC WSAI WTAG WTAM  
WWJ

**E-9:15 p. m., C-8:15, M-7:15, P-6:15**

**C** — Trends of Happiness  
CKLW KDB KERN KFBK KFH  
KPFY KFCR KGB KHJ KLRA KIZ  
KMBC KMJ KMOX KOIN KOL  
KOMA KSL KTRH KTAI KTSIA KVI  
KWG WABC WADC WBER WBT  
WCAO WCAU WCCO WDAE WDRG  
WDSU WEAN WFBL WFBM WGN  
WGST WHAS WHK WJAS WJSV  
WKBW WKRC WLAC WNCN WOKO  
WOWO WREC WRR WSPD WTAR  
WTOC

**E-9:30 p. m., C-8:30, M-7:30, P-6:30**

**R** — POND'S Program; Lee Wiley  
KSD WBEN WCAE WCSH WDAF  
WEAF WFBF WGY WJO WJAR  
WLIT WMAQ WOC WOV WRC WSAI  
WTAG WTAM WTIC WWJ  
**B** — Armour Program; Phil Baker  
KDKA KDYL KFI KGO KGW KHQ  
KOA KOIL KOMO KPRC KSO KSTP  
KTAR KWK WAPI WBAL WBZ  
WBZA WBCB WENR WFAA WGAR  
WHAM WIOD WJAX WJR WJZ  
WJY WMC WOAI WREN WRVA  
WSB WSM WSMB WTMJ WNNC

**E-10:00 p. m., C-9:00, M-8:00, P-7:00**

**C** — Swift Revue—Olson and Johnson  
CKLW KDB KERN KFBK KPFY  
KFCR KGB KHJ KLZ KMBC KMJ  
KMOX KOIN KOL KOMA KRLL  
KSCJ KSL KTRH KVI KWG WABC  
WADC WBBM WBRG WBT WCAO  
WCAU WCCO WDRG WEAN WFBL  
WGST WHAS WHK WJAS WJSV  
WKBW WKRC WNCN WOKO WOWO  
WREC

**R** — First Nighter—Drama

CRCT KDYL KFI KGO KGW KHQ  
KOA KOMO KPRC KSO KSTP  
WAPI WBEN WCAE WCSH WDAF  
WEAF WBCB WEEL WFBR WGY  
WJO WJAR WKY WLIT WMAQ  
WOAI WOC WOV WRC WSAI WSB  
WSM WSMB WTAG WTAM WTIC  
WTMJ WWJ

**B** — Armco Ironmaster Program

KDKA KOIL KSO KWCR WBAL  
WBZ WBZA WENR WGAR WHAM  
WJR WJZ WLW WMAL WREN  
WSYR

**E-10:30 p. m., C-9:30, M-8:30, P-7:30**

**R** — Lum and Abner's Sociable  
KPFY KSD WBEN WCAE WCSH  
WDAF WDAY WEAF WEEL WENR  
WFBR WGY WJO WIBA WJAR  
WKBF WLIT WLW WOC WOV  
WRC WTAG WTAM WTIC WTMJ  
**B** — Mario Cozzi, Baritone

KDKA KPFY KOIL KSO WAPI  
WBAL WBZ WBZA WCKY WDAY  
WBCB WFLA WHAM WIBA WICD  
WIS WJAX WJR WJZ WREN WSE  
WSM WSYR WYVNC

**C** — News Service, See Monday

**E-10:45 p. m., C-9:45, M-8:45, P-7:45**

**C** — Myrt and Marge, See Monday

**E-11:00 p. m., C-10:00, M-9:00, P-8:00**

**B** — Amos 'n' Andy, See Monday  
**C** — Gladys Rice, Soprano

CKLW KFH KLZ KMBC KSCJ KTRH  
KTSIA KFOR WAAB WABC WADC  
WBRG WBT WCAH WCAO WDAE  
WDBJ WDRG WDSU WEAN WFEA  
WGST WHAS WHCC WHK WHF  
WIBW WICC WISN WJSV WJYV  
WKBW WLWB WLZ WMAS WMBD  
WMBG WMT WODX WOKO WORC  
WOWO WPG WQAM WREC WSJS  
WSPD WTOC

**E-11:15 p. m., C-10:15, M-9:15, P-8:15**

**C** — Boswell Sisters, See Monday

**E-11:30 p. m., C-10:30, M-9:30, P-8:30**

**C** — Isham Jones, See Tuesday  
**C** — Edwin C. Hill, See Wednesday

## SATURDAY

**E-6:00 p. m., C-5:00, M-4:00, P-3:00**

**C** — Meet the Artist  
CFRB CKLW KFH KLRA KMBC  
KOMA KSL KTRH KTSIA KFOR  
WAAB WABC WACO WADC WBBM  
WBIG WBRG WCAO WCCO WDBJ  
WDSU WFBL WFLA WGR WGST  
WHAS WHCC WHK WHP WIBW  
WICC WIP WISN WJAS WJSV WLAC  
WLWB WLWB WMBG WMT WOKO  
WQAM WREC WBSY WSPA WSJS  
WTAQ WTAR WTOC WWVA

**R** — Waldorf Astoria, See Monday

**B** — Trio Romantique

KOIL KSO KWCR KYW WBAL WBZ  
WBZA WCKY WHAM WJR WJZ  
WMAL WREN WSYR

**E-6:15 p. m., C-5:15, M-4:15, P-3:15**

**C** — Mildred Bailey, Songs  
CKAC CKLW KFAB KFH KLRA  
KLZ KMBC KRLL KSL KTRH KTSIA  
KFOR WAAB WABC WACO WBIG  
WBT WCAH WCAO WCCO WDAE  
WDBJ WDBO WDOO WDRG WEAN  
WFEA WGR WGST WHCC WHK  
WHP WIBW WICC WIP WISN  
WJSV WJYV WLAC WLWB WLZ  
WMBG WMT WOKO WORC WQAM  
WREC WBSY WSPA WSJS WSPD  
WTAQ WTOC WWVA

**B** — O'Leary's Irish Minstrels

KOIL KSO KWCR KYW WBAL WBZ  
WBZA WCKY WHAM WJR WJZ  
WMAL WREN WSYR

**E-6:30 p. m., C-5:30, M-4:30, P-3:30**

**C** — George Hall and Orchestra  
CKLW WAAB WABC WBIG WBRG  
WBT WCAO WDAE WDBJ WDRG  
WDSU WEAN WFEA WGST WHCC  
WHP WICC WJSV WLWB WLZ  
WMAS WMBG WOKO WORC WQAM  
WREC WSPA WSJS WSPD WTOC  
**B** — Mary Small, See Tuesday

**E-6:45 p. m., C-5:45, M-4:45, P-3:45**

**B** — Flying with Capt. Al Williams  
WBAL WBZ WBZA WCKY WGAR  
WHAM WJR WJZ WSYR

**R** — J. C. Nugent—Male Quartet

WCSH WEAF WEEL WGY WJAR  
WTAG

**E-7:00 p. m., C-6:00, M-5:00, P-4:00**

**C** — Frederic William Nile  
CKLW KFH KLRA KLZ KMBC  
KRLL KSL KTRH KTSIA KFOR  
WAAB WACO WADC WBBM WBIG  
WBRG WCAO WCAU WDBJ WDBZ  
WEAN WFBL WFLA WGR WGST  
WHCC WHK WIBW WICC WISN  
WJAS WJSV WLAC WLWB WLZ

WMBG WMT WOKO WQAM WREC  
WSBT WSFA WSJS WTAQ WTAR  
WTOC WWVA

**B** — John Herrick, Baritone  
KDKA KOIL KSO KWCR KWK  
WBAL WCKY WGAR WJZ WKBV  
WMAL WMAQ

**E-7:15 p. m., C-6:15, M-5:15, P-4:15**

**C** — Tito Guizar, Tenor  
CFRB CKLW KFH KLZ KOMA KSCJ  
KTRH KTSIA KFOR WAAB WABC  
WBIG WBRG WBT WCAO WCAU  
WCCO WDBJ WDRG WDSU WFBL  
WFEA WGR WGST WHCC WHP  
WIBW WISN WJAS WLWB WLZ  
WMAS WMBG WMT WOKO WORC  
WQAM WREC WSPA WSJS WSPD  
WTAQ WWVA

**R** — Religion in the News

KFI KFYR KGO KGW KHQ KOA  
KOMO KSD KTBS WAPI WBEN  
WCAE WDAF WEAF WEEL WFAA  
WFBF WFI WFLA WGY WJO WIBA  
WIOD WIS WJAR WJAX WLW  
WMC WOAI WOC WRC WSM WSMB  
WTAG WTAM

**B** — Three Musketeers, See Thursday

**E-7:30 p. m., C-6:30, M-5:30, P-4:30**

**C** — Elder Michaux's Congregation  
CFRB CKLW KFH KLZ KMBC  
KOMA KSCJ KSL KTRH KTSIA  
KFOR WABC WADC WBIG WBT  
WCAH WCAO WCCO WDBJ WDRG  
WDSU WEAN WFBL WFEA WGR  
WGST WHAS WHP WIBW WICC  
WIP WISN WJAS WJSV WLWB  
WLWB WMAS WMBG WMT WNCN  
WOKO WORC WQAM WREC WSJS  
WSPD WTAQ WTOC WWVA

**B** — Richard Humber and Orchestra

CFPF KFI KFO KGW KHQ KOA  
KOIL KOMO KPRC KSO KTBS  
KTHS KWCR WBAL WBAF WCKY  
WENR WHAM WIOD WIS WJR WJZ  
WKY WMAL WMC WOAI WREN  
WRVA WSB WSM WSMB WSYR  
WNNC

**R** — Circus Days, See Friday

**E-8:00 p. m., C-7:00, M-6:00, P-5:00**

**R** — George Olsen and Orchestra  
KDYL KFI KFYR KGO KGW KHQ  
KOA KOMO KPRC KSO KSTP KTBS  
KVOO KYW WBEN WCSH WDAF  
WEAF WEBC WEEL WFBR WFLA  
WGY WIBA WIOV WIS WJAR WJAX  
WJDX WOAI WOV WRC WSB WSM  
WSMB WTAG WTAM WWJ WNNC  
**B** — Economics in the New Deal  
KOIL KSO KWCR WBAL WCKY  
WENR WHAM WJR WJZ WMAL  
WREN WSYR

**C** — Elmer E. Yess, See Tuesday

**E-8:15 p. m., C-7:15, M-6:15, P-5:15**

**C** — Fray and Braggiotti  
CFRB CKAC KFLW KFH KLRA  
KLZ KMBC KSL KTRH KTSIA  
KFOR WABC WACO WADC WBIG  
WBT WCAH WCAO WCAU WCCO  
WDAE WDBJ WDBO WDOO WDRG  
WEAN WFBL WFEA WGR WGST  
WHAS WHCC WHP WIBW WICC  
WISN WJAS WJSV WLAC WLWB  
WLWB WMAS WMBG WMT WNCN  
WOKO WORC WPG WQAM WREC  
WBSY WSPA WSJS WSPD WTAQ  
WTOC WWVA

**E-8:30 p. m., C-7:30, M-6:30, P-5:30**

**R** — Antibal's Cubans  
KDYL KFI KGO KGW KHQ KOA



**SATURDAY—(Continued)**

KOMO KPRC KSD KTBS KTHS  
KVOO WCSH WDAF WDAY WFAF  
WIBC WFAA WFSB WFLA WGY  
WHO WIBA WIS WJAR WJAX  
WJDX WKY WMAQ WMC WOAI  
WOC WRC WRVA WSAI WSB WSM  
WSMB WTAG WTAM WWJ WNNC

**B — Sous les Ponts de Paris**  
CFBO CFCB CFCN CFCC CFCY  
CFJC CFIN CFPL CFQC CHAB  
CHGS CHNC CHNS CHWC CHWK  
CJCA CJCB CJCK CJOC CJRM  
CJRW CKCH CKJK CKNC CKOC  
CKOV CKPC CKPR CKUA CKK  
CKY CRCM CRCO CRCS CRCT  
CRCV KDKA KOIL KSO KWCR  
KYW WBAL WBLZ WBSA WCKY  
WGAR WHAM WJRW WJZ WMAL  
WREN WYSR

**C — George Jessel**  
CFRB CKLW KFL KLRA KLZ  
KMBC KMOX KOMA KRLL KTRH  
KTSB KVOR WAAB WABC WADC  
WDBG WBRK WCAO WCAU WCCO  
WDRJ WDSU WEAN WFBM WFEA  
WGST WHAS WHC WHK WHP  
WIBW WICC WISN WJAS WJSV  
WKBW WLAC WLWB WLBZ WMBD  
WMBG WQAM WPG WQAM WREC  
WSBT WSJS WTAR WTOC WWVA

**E-9:00 p. m., C-8:00, M-7:00, P-6:00**

**R — Lucky Strike — Jack Pearl**  
KDYL KFSB KFYR KGO KGU KGW  
KHQ KOA KOMO KPRC KSD KSTP  
KTAR KTBS KTHS WAPI WBAF  
WBEN WCAE WCSH WDAF WDAY  
WEAF WEEB WEEL WFSB WFI  
WFLA WGY WIBA WIOD WIS WJAR  
WJAX WJDX WKY WLW WMAQ  
WMC WOAI WOW WRC WRVA WSB  
WSMB WTAG WTAM WTMJ WWJ  
WNNC

**C — Philadelphia Symphony, See Mon. B**  
**Jamboree—Variety Show**  
CFBC KDKA KDYL KFI KFYR  
KGO KGW KHQ KOA KOIL KOMO  
KPRC KSO KSTP KTBS KWCR  
KWK KYW WAPI WBAF WCKY  
WDAY WEBC WFLA WGAR WHAM  
WIBW WIOD WIS WJAX WJDX WJR  
WJZ WKY WMAL WMC WREN  
WRVA WSB WSM WSMB WYSR  
WNNC

**E-9:15 p. m., C-8:15, M-7:15, P-6:15**

**C — Stoopnagle-Budd, See Wednesday**

**E-9:30 p. m., C-8:30, M-7:30, P-6:30**

**C — Carborundum Band**  
CKLW KMBC KMOX WAAB WABC  
WBBM WBT WCAO WCAU WCCO  
WHAS WHK WJAS WKBW WKRC  
**R — Leo Reis man; Yacht Club Boys**  
WBEN WCAE WCSH WDAF WFAF  
WEEL WFSB WFI WGY WHO WJAR  
WMAQ WOC WOW WRC WSAI  
WTAG WTAM WWJ

**E-10:00 p. m., C-9:00, M-8:00, P-7:00**

**R — B. A. Rolfe and Orchestra**  
CRCT KDYL KFI KGO KGW KOA  
KOMO KSD KSTP WBAF WBEN  
WCAE WCSH WDAF WFAF WEEL  
WFSB WFI WGY WHO WJAR WJAX  
WLW WMAQ WOAI WOC WOW  
WRC WRVA WSB WSMB WTAG  
WTAM WTMJ WWJ

**B — Tales of the Titans—Drama**

KDKA KOIL KWCR KWK KYW  
WBAL WBLZ WBSA WCKY WGAR  
WHAM WJR WJZ WMAL WREN  
WYSR

**C — Byrd Expedition**  
CKLW KDB KERN KFBK KFH  
KFPY KPRC KGB KHJ KLRA  
KMBC KMJ KMOX KOIN KOL  
KOMA KRLL KTRH KTSB KVI  
KWG WAAB WABC WACO WADC  
WBBM WBRK WBT WCAO WCAU  
WCCO WDAE WEAN WGST WHAS  
WHCC WHK WHP WIBW WJSV  
WKBW WKRC WLAC WLBZ WMBG  
WMT WOKO WORC WQAM WREC

**E-10:30 p. m., C-9:30, M-8:30, P-7:30**

**C — News Service, See Monday**  
**B — Cuckoo — Ray Knight**  
KOIL KSO KWCR KYW WBAL WBLZ  
WBSA WCKY WGAR WJZ WMAL  
WREN WYSR

**E-10:45 p. m., C-9:45, M-8:45, P-7:45**

**C — H. V. Kaltenborn**  
CFRB CKLW KLZ KMBC KOMA  
KRLL KSCJ KSL KTRH KTSB  
KVOR WAAB WABC WADC WBIG  
WBRK WBT WCAH WCAO WDBJ  
WDRK WDSU WEAN WFBM WFEA  
WGST WHCC WHP WIBW WIP  
WISN WJAS WJSV WKBW WLWB  
WLBZ WMAS WMBD WMBG WMT  
WODX WOHC WPG WQAM WREC  
WSBT WSJS WSPD WTAQ WTOC  
WWVA

**E-11:00 p. m., C-10:00, M-9:00, P-8:00**

**C — Glen Gray and Orchestra**  
CFRB CKLW KLRA KLZ KMBC  
KMOX KOMA KTRH KTSB KVOR  
WAAB WABC WADC WBIG WBRK  
WCAO WCAU WCCO WDRJ WDSU  
WEAN WFBM WFBM WGST WHAS  
WHP WIBW WICC WISN WJAS  
WJSV WKBW WLAC WLWB WLBZ  
WMBD WMBG WMT WOKO WPG  
WQAM WREC WSBT WSJS WTAR  
WTOC

**R — One Man's Family—Sketch**

CFBC KDYL KFI KFYR KGO KGW  
KHQ KOA KOMO KPO KPRC KSD  
KSTP KTBS KTHS KVOO WBEN  
WCAE WDAF WDAY WFAF WFSB  
WFI WFLA WGY WHO WIBA WIOD  
WIS WJAR WJAX WJDX WKY  
WMAQ WMC WOAI WOC WOW  
WRC WRVA WSAI WSB WSMB  
WTAG WTAM WWJ WNNC

**B — WLS Barn Dance**

KDKA KOIL KSO KWCR KWK WBLZ  
WBSA WGAR WHAM WJR WJZ  
WLS WLW WMAL WREN WYSR

**E-11:15 p. m., C-10:15, M-9:15, P-8:15**

**C — Elmer E. Yess, See Tuesday**

**E-11:30 p. m., C-10:30, M-9:30, P-8:30**

**C — Abe Lyman and Orchestra**  
CFRB CKLW KLRA KLZ KMBC  
KOMA KSL KTRH KTSB KVOR  
WABC WADC WBRK WCAO WDBJ  
WDSU WEAN WFBM WFBM WGST  
WHCC WHP WIBW WIP WISN  
WJSV WKBW WLAC WLWB WLBZ  
WMBD WMBG WMT WNAC WOKO  
WPG WQAM WREC WSBT WSJS  
WTOC

**R — Hollywood on the Air**

CFBC KDYL KFYR KOA KPO KPRC  
KSD KSTP KTBS KTHS KVOO  
WBEN WCAE WDAF WDAY WFAF  
WFSB WFI WFLA WGY WHO WIBA  
WIOD WIS WJAR WJAX WJDX  
WKY WMAQ WMC WOAI WOC  
WOW WRC WRVA WSAI WSB  
WSMB WTAG WTAM WWJ WNNC

**E-12:00 p. m., C-11:00, M-10:00, P-9:00**

**C — Little Jack Little**  
CKLW KFH KLZ KMBC KMOX  
KOMA KRLL KSCJ KTRH LTSA  
WABC WCAU WEAN WFBM WHAS  
WHP WIBW WICC WISN WJSV  
WKBW WLWB WMAS WMBD  
WNAC WOKO WSBT WSPD

**B — Freddie Martin and Orchestra**

KOIL KSO KWCR KWK KYW WBAL  
WBLZ WBSA WCKY WGAR WHAM  
WJZ WLW WMAL WREN WYSR

**E-12:30 p. m., C-11:30, M-10:30, P-9:30**

**B — William Scotti and Orchestra**  
KDKA KOIL KSO KWCR KWK  
KYW WBAL WBLZ WBSA WCKY  
WGAR WJR WJZ WLW WMAL  
WREN WYSR

**SUNDAY**

**E-11:15 a. m., C-10:15, M-9:15, P-8:15**

**R — Major Bowes' Capitol Family**  
KDYL KFYR KOA KPRC KSTP  
KTBS KVOO WAPI WCAE WDAF  
WDAY WEAF WIBC WFAA WFSB  
WFLA WGY WHO WIOD WJAR  
WJAX WKY WMAQ WMC WOAI  
WOC WRC WRVA WSAI WSMB  
WTAG WTAM WNNC

**E-11:30 a. m., C-10:30, M-9:30, P-8:30**

**C — Salt Lake Tabernacle Choir**  
CKLW KLRA KLZ KMBC KOMA  
KSL KTRH KTSB KVOR WABC  
WACO WADC WBIG WBRK WCAO  
WCCO WDBJ WDRK WDSU WEAN  
WFBM WFEA WGN WGR WGST  
WHAS WHCC WHP WIBW WICC  
WISN WJAS WJSV WLBZ WLWB  
WMBD WMT WNAC WOKO WORC  
WPG WQAM WSBT WSPA WSJS  
WTAQ WTAR WWVA

**E-12:15 p. m., C-11:15, M-10:15, P-9:15**

**R — Morning Home Circle**  
WCSH WEAF WEEI WFSB WFI  
WJAR WRC WTAG

**E-12:30 p. m., C-11:30, M-10:30, P-9:30**

**B — Radio City Concert**  
CFBC CRCT KDKA KDYL KFI  
KFYR KGO KGW KHQ KOA KOIL  
KOMO KPRC KSO KVOO WAPI  
WBAL WBLZ WBSA WCKY WDAY  
WEBC WGAR WHAM WIS WJDX  
WJR WJZ WKY WMAL WOAI WREN  
WSMB WYSR WNNC

**R — Chicago Round Table**

WBEN WCH WDAF WEAF WEEI  
WFSB WFI WGY WHO WJAR  
WOC WOW WRC WSAI WTAG  
WTAM WWJ

**C — Madison Ensemble**

CFRB CKLW KLRA KLZ KMBC  
KOMA KSL KTRH KVOR WACO  
WADC WBIG WCAO WCAU WDBJ  
WDRK WDSU WEAN WFBM WFLA  
WGR WGST WHAS WHCC WIBW  
WISN WJAS WJSV WLAC WLWB  
WMBD WMT WNAC WOKO WPG  
WQAM WREC WSBT WSJS WTAQ  
WTAR WTOC WWVA

**E-1:00 p. m., C-12:00, M-11:00, P-10:00**

**C — Church of the Air**

CFRB CKLW KLRA KLZ KOMA  
KTRH KTSB KVOR WAAB WABC  
WACO WADC WCCO WDBJ WDRK  
WDSU WFBM WGR WGST WHAS  
WHCC WHP WIBW WJAS WJSV  
WLAC WLWB WMT WOKO WPG  
WQAM WREC WSBT WSJS WTAQ  
WTAR WTOC WWVA

**SUNDAY—(Continued)**

**R — Russian Symphonic Choir**  
 WBNB WCAE WDAF WEAF WEEI  
 WFI WGY WHO WJAR WLW WMAQ  
 WOC WRC WSAI WTAG WTAM  
 WWJ

**E-1:30 p.m., C-12:30, M-11:30, P-10:30**

**R — Little Known Facts**  
 WBNB WCSH WEAF WEEI WFI  
 WGY WJAR WTAG WTAM WWJ

**B — National Youth Conference**  
 KDKA KFI KFSD KFYR KGH  
 KGIR KGO KGW KHQ KOA KOIL  
 KOMO KPRC KSO KTAI KTBS  
 KVOO KWCR KWK WAPI WBAL  
 WBZ WBZA WDAY WEBC WFAA  
 WGAR WIBA WIOD WIS WJAX  
 WJDX WJR WJZ WMAL WQAM  
 WREN WRVA WSB WSM WSMB  
 WSYR WWNC

**C — Lazy Dan, Minstrel Man**  
 CKLW KMBC KMOX KRLL WABC  
 WBBM WCAH WCAO WCCO WCO  
 WHAS WHK WJAS WJSV WKBW  
 WKRC WMBG

**E-2:00 p.m., C-1:00, M-12:00, P-11:00**

**C — Broadway Melodies; Helen Morgan**

CFRB CKLW KDB KFPY KFRC  
 KGB KHT KLZ KMBC KMOX KOIN  
 KOL KRLL KSL KVI WABC WBBM  
 WCAO WCAU WCCO WDSU WHK  
 WJAS WJSV WKBW WKRC WLAC  
 WNAC

**R — Gene Arnold and Commodores**  
 KDYL KFI KGO KGW KHQ KOA  
 KOMO KPRC KVOO WBNB WCAE  
 WCSH WEAF WEBC WEEI WFAA  
 WFBR WGY WIBA WJAR WKY  
 WLW WMAQ WOAI WOW WPTF  
 WRC WRVA WTAG WTAM WWJ  
 WWNC

**B — Bar X Days and Nights**  
 CFRC CRCT KDKA KOIL KSO  
 KWCR KWK KYW WBAL WBZ  
 WBZA WCKY WFLA WGAR WHAM  
 WIOD WIS WJAX WJDX WJR WJZ  
 WMAL WMC WRVA WSB WSM  
 WSMB WSYR WWNC

**E-2:30 p.m., C-1:30, M-12:30, P-11:30**

**C — Abe Lyman's Orchestra**  
 CFRB CKLW KMBC KMOX WABC  
 WBBM WCAO WCAU WCCO WDR  
 WEAN WFBL WFBM WHCC WHK  
 WJSV WKBW WKRC WNAC WOKO

**R — John B. Kennedy**  
 CFRC CRCT KSD WBNB WCAE  
 WCKY WDAF WEAF WEEI WFBR  
 WGY WJAR WMAQ WOW WRC  
 WSAI WTAG WTAM WWJ

**B — Grenadier Guards Band**  
 CFRC CRCT KDKA KOIL KSO  
 KWCR KWK WAPI WBAL WBZ  
 WBZA WCKY WFLA WGAR WHAM  
 WIOD WIS WJAX WJDX WJR WJZ  
 WMAL WMC WRVA WSB WSM  
 WSMB WSYR WWNC

**E-2:45 p.m., C-1:45, M-12:45, P-11:45**

**R — Gems of Melody; Muriel Wilson**  
 WBNB WCAE WCSH WDAF WEAF  
 WEEI WFBR WGY WIO WJAR  
 WMAQ WOC WOW WRC WSAI  
 WTAG WTAM WWJ

**E-3:00 p.m., C-4:00, M-1:00, P-12:00**

**C — New York Philharmonic Orch.**  
 CFAC CFBO CFCC CFCH CFCL  
 CFCC CFCC CFIC CFNB CFPL  
 CFQC CHAB CHGS CHNS CHRC  
 CHWC CHWK CJCA CJCB CJCJ  
 CJGX CJOC CJRM CJRW CJKJ

CKCK CHNC CKOC CKOV CKPC  
 CKPR CKUA CKX CKY CRCA  
 CRCO CRCS CRCT CRCV CFRB  
 CKLW KFH KLRA KLZ KMBC  
 KMOX KOMA KSL KTRH K TSA  
 KVOR WABC WADC WBIW WBR  
 WCAO WCAU WCCO WDBJ WDRC  
 WDSU WEAN WFBM WFEA WGN  
 WGR WGST WHAS WHEC WHK  
 WHP WIBW WICC WIP WISN WJAS  
 WJSV WLAC WLWB WMBD WMBG  
 WMT WNAC WOKO WORC WQAM  
 WREC WSBT WJSJ WTAQ WTAR  
 WTOC WWVA

**R — Wayne King and Orchestra**  
 KDYL KFI KGO KGW KHQ KOA  
 KOMO KPRC KSD KSTP KVOO  
 WBNB WCAE WCSH WDAF WEAF  
 WEEI WFAA WGY WHO WJAR  
 WKBF WKY WLIT WLS WLW  
 WOAI WOC WOW WRC WTAG  
 WTAM WTMJ WWJ

**B — International Tid-bits**  
 CFRC CRCT KDKA KOIL KSO  
 KWCR KWK WAPI WBAL WBZ  
 WBZA WCKY WFLA WGAR WHAM  
 WIOD WIS WJAX WJDX WJR WJZ  
 WMAL WMC WRVA WSB WSM  
 WSMB WSYR WWNC

**E-3:30 p.m., C-2:30, M-1:30, P-12:30**

**R — Singing Sailors—Male Quartet**  
 KSD KYW WBNB WCAE WCSH  
 WDAF WEAF WFBR WGY WJAR  
 WLIT WOW WRC WSAI WTAG  
 WTAM WWJ

**B — Yeast Foamers; Jan Garber**  
 KDKA KDYL KFI KFSD KFYR  
 KGHG KGIR KGO KGW KHQ KOA  
 KOIL KOMO KPRC KSO KTAI  
 KTBS KTHS KVOO KWCR KWK  
 KYW WAPI WBAL WBZ WBZA  
 WDAY WEBC WFAA WFLA WGAR  
 WHAM WIBA WIOD WIS WJAX  
 WJDX WJZ WKBK WKY WLW  
 WMAL WMC WPTF WREN WRVA  
 WSB WSM WSMB WSYR WTMJ  
 WWNC

**E-3:45 p.m., C-2:45, M-1:45, P-12:45**

**R — Subarine G-10; Drama**  
 KSD KYW WBNB WCAE WCSH  
 WDAF WEAF WFBR WGY WJAR  
 WLIT WOW WRC WSAI WTAG  
 WTAM WWJ

**E-4:00 p.m., C-3:00, M-2:00, P-1:00**

**R — Fiddlers Three**  
 CFRC CRCT KDYL KFI KFSD  
 KFYR KGO KGW KHQ KOA KOMO  
 KSD KSTP KTAI KTBS KYW  
 WAPI WBNB WQAE WDAF WDAY  
 WEAF WEBC WEEI WFLA WGY  
 WHO WIBA WIOD WIS WJAR  
 WJDX WKY WLIT WOAI WOC  
 WOW WRC WRVA WSAI WSB WSM  
 WTAG WTAM WWJ WWNC

**Rev. Charles E. Coughlin**  
 KMOX KSTP KYW WCAO WCAU  
 WDRS WEAN WPBL WFLA WGAR  
 WGR WHB WHO WICC WJAS WJR  
 WLZ WLW WMAS WNAC WOC  
 WOL WOR WORC WCKY WOKO

**B — Railroad Adventures, Drama**  
 KDKA KDYL KFI KFYR KGHG  
 KGIR KGO KGW KHQ KOA KOIL  
 KOMO KPRC KSO KSTP KTBS  
 KTHS KVOO KWCR KWK WAPI  
 WBAL WBPB WBZ WBZA WCKY  
 WDAY WEBC WENR WFLA WGAR  
 WHAM WIBA WIOD WIS WJAX  
 WJDX WJR WJZ WKBK WKY  
 WMC WOAI WPTF WREN WRVA

WSB WSM WSMB WSYR WTMJ  
 WWNC

**E-4:15 p.m., C-3:15, M-2:15, P-1:15**

**R — Wildroot; Vee and Johnny**  
 KDYL KFI KFYR KGO KGW KHQ  
 KOA KOMO KPRC KTBS KVOO  
 WBNB WCAE WCSH WDAF WDAY  
 WEAF WEBC WEEI WFAA WFBR  
 WGY WIBA WJAR WKY WLIT WLS  
 WOAI WOW WRC WSAI WTAG  
 WTAM WTMJ WWJ

**B — Morin Sisters, Harmony Trio**  
 CFRC CRCT KDKA KOIL KSO  
 KWCR KWK KYW WBAL WBZ  
 WBZA WCKY WFLA WGAR WHAM  
 WIOD WJAX WJDX WJR WJZ WLW  
 WMAL WREN WRVA WSB WSM  
 WSYR WWNC

**E-4:30 p.m., C-3:30, M-2:30, P-1:30**

**R — Hoover Sentinels**  
 CFRC CRCT KDYL KFI KGO KGW  
 KHQ KOA KOMO KPRC KVOO  
 WBPB WBNB WCAE WCSH WDAF  
 WEAF WEBC WEEI WFBR WFI  
 WGY WIBA WJAR WKY WMAQ  
 WOAI WOW WRC WTAG WTAM  
 WWJ

**B — Dion Kennedy, Organist**  
 CFRC CRCT KDKA KFSD KFYR  
 KGO KGW KHQ KOA KOIL KOMO  
 KPRC KSO KSTP KTBS KVOO  
 KWCR KWK KYW WBAL WBZ  
 WBZA WCKY WDAY WEBC WFAA  
 WFLA WGAR WHAM WIBA WIOD  
 WIS WJAX WJDX WJR WJZ WKY  
 WMAL WMC WOAI WREN WRVA  
 WSB WSM WSYR WWNC

**E-5:00 p.m., C-4:00, M-3:00, P-2:00**

**C — Roses and Drums, Drama**  
 CKLW KFAB KLRA KLZ KMBC  
 KMOX KOMA KRLL KTRH K TSA  
 WAAB WABC WADC WBBM WBR  
 WCCO WDSU WGST WHAS WHK  
 WJAS WJSV WKRC WREC

**R — Big Ben Dream Drama**  
 WBNB WCAE WCSH WDAF WEAF  
 WEEI WFBR WGY WJAR WMAQ  
 WOW WRC WSAI WTAG WTAM  
 WWJ

**B — National Vespers**  
 KDYL KECA KFSD KFYR KGHG  
 KGIR KGO KGW KHQ KOA KOIL  
 KPRC KSO KSTP KTAI KTBS  
 KVOO KWCR KWK WAPI WBAL  
 WBZ WBZA WCFI WCKY WDAY  
 WEBC WFLA WGAR WHAM WIBA  
 WIOD WIS WJAX WJDX WJR WJZ  
 WKY WMAL WMC WOAI WPTF  
 WREN WRVA WSB WSM WSMB  
 WWNC

**E-5:15 p.m., C-4:15, M-3:15, P-2:15**

**R — Achievements in Science, Drama**  
 CFRC CRCT WBNB WCAE WCSH  
 WDAF WEAF WENR WFBR WGY  
 WJAR WOW WRC WSAI WTAG  
 WTAM WWJ

**E-5:30 p.m., C-4:30, M-3:30, P-2:30**

**C — Frank Crumit; Julia Sanderson**  
 CKLW KFAB KFH KMBC KMOX  
 KOMA WAAB WABC WADC WCAH  
 WCAO WCAU WDRS WDSU WEAN  
 WFBP WFBM WGR WHCC WHK  
 WICC WJSV WMAS WOKO WORC  
 WSPD WTAR WWVA

**R — Talkie Picture Time—Sketch**  
 WCAE WCSH WDAF WEAF WEEI  
 WFBR WFI WGY WJAR WMAQ  
 WMC WOW WRC WSAI WSM WTAM

SUNDAY—(Continued)

B — Grand Hotel—Drama

KDKA KDYL KFI KGO KGW KHQ KOA KOIL KOMO KSO KSTP KWRC KWK WBAL WBZ WBZA WCKY WEBC WENR WGAR WHAM WJR WJZ WKBK WMAL WREN WSYR WTMJ

E-6:00 p.m., C-5:00, M-4:00, P-3:00

C — Jacques Renard's Orchestra  
CKLW KMBC KMOX WABC WBBM WCAO WCAU WCCO WFBM WGR WHK WJAS WJSV WKRC

R — Catholic Hour

KDYL KECA KFYR KGHL KGIR KGW KOA KOMO KPO KPRC KSTP KTAR KTBS KVOO WAPI WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEI WENR WFRB WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLIT WMC WOAI WOC WOV WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WWJ WUNC

E-6:30 p.m., C-6:30, M-4:30, P-3:30

C — Smiling Ed McConnell  
CKLW KDB KERN KFAB KFBK KPH KPY KPRC KGB KHJ KLZ KMBC KMOX KOIN KOL KRLD KSL KVI KWG WAAB WABC WBBM WBT WCAH WCAU WCCO WDSU WEAN WFBL WHAS WHFC WHP WJAS WJSV WKWB WKRC WLAC WMT WOKO WQAM WSPD WTAR WVVA

R — Our American Schools

CFRC CRCT KDYL KECA KFSB KFYR KGO KOMO KPO KPRC KSD KSTP KTAR KTBS KVOO WAPI WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEI WFRB WFLA WGY WHO WIBA WIOD WJAR WJAX WJDX WKY WLIT WMAQ WMC WOAI WOC WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WWJ WUNC

E-8:45 p.m., C-5:45, M-4:45, P-3:45

C — H. V. Kaltenborn  
CKAC CKLW KLRA KLZ KMBC KTRH KTSa KVOA WAAB WABC WACO WBIG WBRB WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WEAN WFEA WGST WHAS WHFC WHP WICW WJAS WJSV WKWB WLAC WLWB WMAS WOKO WQAM WREC WSFA WSPD WTAR WTTC

E-7:00 p.m., C-6:00, M-5:00, P-4:00

R — Blue Coal Program  
CRCT WBEN WEAF WEI WFRB WGY WJAR WLIT WRC WTAG  
C — Ethel Waters; George Beatty  
WABC WBT WCAO WCAU WDAE WDBO WDRC WEAN WFEA WGST WHK WJAS WJSV WKBN WLZ WNAK WPG WQAM WTAR WVVA

B — Realistic; Ted Weems' Orchestra  
KDKA KDYL KFI KGO KGW KHQ KOA KOIL KOMO KSO KWCR KWK WBAL WBZ WBZA WFLA WGAR WHAM WIS WJR WJZ WLS WLW WMAL WPTF WREN WRVA WSYR

E-7:30 p.m., C-6:30, M-5:30, P-4:30

C — Willard Ronison's Orchestra  
CKLW KFH KLZ KMBC KSCJ KTRH KTSa WABC WADC WBIG WBRB WBT WCAH WDAE WBBM

WDSU WEAN WFBM WFEA WGR WGST WHAS WHFC WHP WIBW WISN WJAS WKBN WLZB WMAS WMT WOKO WORC WQAM WREC WSFA WSJS WSPD WTCC WVVVA

B — Ozzie Nelson; Joe Penner

KDKA KDYL KFI KFYR KGO KGW KHQ KOA KOIL KOMO KPRC KSO KSTP KTAR KVOO KWCR KWK WBAL WBZ WBZA WDAY WEBC WFAA WFLA WGAR WHAM WIBA WIOD WJAX WJDX WJR WJZ WKY WLS WLW WMAL WMC WOAI WPTF WREN WRVA WSB WSM WSMB WTMJ WUNC

E-7:45 p.m., C-6:45, M-5:45, P-4:45

C — Rin Tin Tin Thriller  
CKLW KMOX WABC WCAU WFBL WFBM WGN WGR WHAS WHK WJAS WJSV WKRC WNAK

R — Fitch Program; Wendell Hall

CFRC KSD WBEN WCAE WCSH WDAF WEAF WFRB WGY WHO WJAR WLIT WMAQ WOC WOV WRC WSAI WTAG WTAM WWJ

E-8:00 p.m., C-7:00, M-6:00, P-5:00

R — Chase and Sanborn Hour  
CFRC CRCT KDYL KFI KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTAR KTHS KVOO WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFAA WFRB WFLA WGY WHO WIOD WIS WJAR WJAX WJDX WKY WLIT WLW WMAQ WMC WOAI WOC WOV WPTF WRC WRVA WSB WSM WSMB WTAG WTAM WTTC WTMJ WWJ WUNC

C — Evening in Paris

CKLW KLZ KMBC KMOX KOMA KSL WABC WADC WBBM WCAO WCAU WCCO WDSU WEAN WFBL WFBM WGR WGST WHAS WHK WJAS WJSV WKRC WOKO WSPD

E-8:30 p.m., C-7:30, M-6:30, P-5:30

C — Columbia Dramatic Guild  
CFRB CKLW KFH KLZ KOMA KRLD KSCJ KTRH KTSa KVOA WAAB WABC WADC WBIG WBRB WBT WCAH WCAO WCAU WCCO WDAE WDBJ WDRC WDSU WEAN WFBL WFEA WGST WHAS WHFC WHK WHP WIBW WIOC WISN WJAS WJSV WKBN WKBW WLZB WMAS WMBD WMT WDX WOKO WORC WOV WPG WQAM WREC WSJS WSPD WTCC

E-9:00 p.m., C-8:00, M-7:00, P-6:00

C — Erno Rapee; Nino Martini  
CKLW KDB KERN KFBK KFPY KFYR KGB KHJ KLRA KLZ KMBC KRLD KSCJ KSL KTRH KVI KWG WABC WADC WBBM WCAO WCAU WCCO WDRC WDSU WEAN WFBL WFBM WGR WGST WHAS WHK WISN WJAS WJSV WKRC WMT WNAK WNAX WOKO WORC WOV WREC WSPD WTAR

R — Manhattan Merry-Go-Round  
KDYL KFI KGO KGW KHQ KOA KOMO KSD WDAF WEAF WFRB WFI WGY WHO WJAR WMAQ WOC WOV WRC WSAI WTAM WTTC WWJ

B — Gulf Headlines

KAKA KPRC KTBS WBAL WBZ WBZA WFAA WFLA WGAR WHAM WIOD WIS WJAX WJDX WJR WJZ WLW WMAL WMC WOAI WRVA WBS WSM WSMB WSYR WUNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30

R — Album of Familiar Music  
CFRC CRCT KDYL KFI KGO KGW KHQ KOA KOMO KPRC KSD KSTP WAPI WBEN WCAE WCKY WCSB WDAF WEAF WEI WFAA WFRB WFI WFLA WGY WHO WIOD WJAR WJAX WJDX WKY WMAQ WMC WOC WOV WOV WPTF WRC WRVA WSAI WBS WSM WSMB WTAG WTAM WTMJ WWJ

B — Walter Winchell

KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WENR WGAR WHAM WJR WJZ WLW WMAL WREN WSYR

E-9:45 p.m., C-8:45, M-7:45, P-6:45

B — Gould and Sheffer Piano Duo  
KDKA KOIL KSO KWCR KWK KYW WBAL WBZ WBZA WGAR WHAM WJR WJZ WMAL WREN WSYR

E-10:00 p.m., C-9:00, M-8:00, P-7:00

R — Chevrolet; Jack Benny  
KDYL KFI KFSB KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KPRC KSTP KTAR KTBS WAPI WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEI WFRB WFI WFLA WGY WIBA WIOD WIS WJAR WJDX WKY WMAQ WMC WOAI WOV WRC WRVA WBS WSM WSMB WTAG WTAM WTTC WTMJ WWJ WUNC

C — Patri's Childhood Dramas

CKLW KDB KERN KFBK KFPY KPRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KSL KVI KWG WAAB WABC WCAO WCAU WCCO WDRC WFBL WGR WHAS WEA WJAS WJSV WKRC WOKO

E-10:30 p.m., C-9:30, M-8:30, P-7:30

B — Mary Small—Green Bros. Orch.  
CFRC KDKA KOIL KSO KWCR WBAL WENR WGAR WHAM WJZ WMAL WREN

E-11:00 p.m., C-10:00, M-9:00, P-8:00

C — Guy Lombardo and Orchestra  
CFRB CKAC CKLW KFH KLRA KLZ KTRH KTSa KVOA WABC WACO WBIG WBRB WCAH WCAO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WGST WHAS WHFC WHP WICC WIP WISN WJAS WJSV WKBN WLAC WLWB WMAS WMBD WNAK WODX WOKO WPG WQAM WREC WSFA WSJS WSPD WTAR WTTC

B — Walter Winchell

KDYL KFI KFSB KGHL KGIR KGO KGW KHQ KOA KOMO KTAR

E-11:30 p.m., C-10:30, M-9:30, P-8:30

C — Eddie Duchin and Orchestra  
CFRB CKLW KFH KLZ KOMA KSCJ KTRH KTSa KVOA WABC WADC WBRB WBT WCAH WCAO WCAU WDAE WDBJ WDRC WDSU WEAN WFBL WFBM WGR WGST WHFC WHK WHP WIBW WIOC WISN WJAS WJSV WKBN WLZB WMAS WMBD WMT WNAK WOKO WQAM WREC WSBT WSJS WSPD WTTC

B — Paul Whiteman and Orchestra

KDKA KFYR KOIL KSO KSTP KWCR KWK WBAL WBZ WBZA WCKY WDAY WEBC WGAR WIBA WJR WJZ WLW WREN

# JANUARY DX CALENDAR

(Continued from page 2)

## WEDNESDAY MORNINGS

Jan. 3-10-17-24-31

6:00-7:00—WOOD, Grand Rapids, 1270 (.5)

Jan. 3

1:00-2:30—KFYR, Bismarck, 550 (1)

4:30-5:00—WCAL, Northfield, 1250 (1)

Jan. 10

1:00-2:00—WTBG, Glenside, 970 (1)

4:30-6:00—10-BP, Wingham, 1200 (.015)

Jan. 17

2:00-2:30—KWCR, Cedar Rapids, 1420 (1)

3:00-3:30—KSO, Des Moines, 1370 (1)

5:00-5:30—WIAS, Ottumwa, 1310 (1)

Jan. 24

3:00-7:00—WOPI, Bristol, 1500 (1)

Jan. 31

2:00-4:00—WNRA, Muscle Shoals, 1420 (1)

## THURSDAY MORNINGS

Jan. 4-11-18-25

2:00-4:00—CMK, Havana, 730 (5)

WEDC, Chicago, 1210 (1)

Jan. 4

1:00-2:00—KFYO Lubbock, 1310 (1)

Jan. 4, Feb. 1

3:00-4:00—WRDW, Augusta, 1500 (1)

4:30-5:00—WCBS, Springfield, 1210 (1)

5:30-7:00—KGGF, Shawnee, 1420 (1)

Jan. 11

2:00-3:00—WRUF, Gainesville, 830 (5)

Feb. 1

2:00-3:00—WRAW, Reading, 1310 (1)

## FRIDAY MORNINGS

Jan. 5-12-19-26

12:00-1:00—KOIL, Council Bluffs, 1260 (1)

12:00-2:00—CFCN, Calgary, 1030 (10)

12:00-6:00—WJAX,\* Jacksonville, 900 (1)

1:00-1:30—WRAM, Wilmington, 1370 (1)

1:00-2:00—WBBX, New Orleans, 1200 (1)

\*Prizes to most distant.

Jan. 26

4:00-5:00—KPOF, Denver, 880 (.5)

Feb. 2

2:30-4:00—CHWK, Chilliwack, 780 (1)

## SATURDAY MORNINGS

Jan. 6-13-20-27

1:00-2:00—WGNV, Chester, 1210 (1)

2:00-3:00—CMBS, Havana, 780 (2)

4:00-5:00—XEAO, Mexicali, 560 (1)

Jan. 13-20-27

1:00-3:00—CMCW, Havana, 965 (15)

2:00-3:00—WGLC, Hudson Falls, 1370 (1)

Jan. 6

3:00-4:00—WJBC, LaSalle, 1200 (1)

4:00-6:00—KVOA, Tucson, 1260 (5)

4:30-5:30—WCAC, Storrs, 600 (.25)

Jan. 6-20

2:00-3:00—XES, Tampico, 1020 (.5)

Jan. 6, Feb. 3

4:00-5:00—WIS, Columbia, 1010 (5)

4:15-4:45—WGNV, Chester, 1210 (1)

Jan. 13

3:15-4:15—WMBQ, Brooklyn, 1500 (1)

4:00-5:00—10-BQ, Brantford, 1200 (.005)

Jan. 20

2:00-3:00—WCLO, Jonesville, 1200 (1)

WHA, Madison, 940 (1)

WQQ, Kansas City, 1300 (1)

Jan. 27

1:00-7:00—WHET, Troy, 1210 (1)

Short Wave Special Sunday, Jan. 28

2:30-4:00—VE9CS, Vancouver, 6070 (.005)

# THE MONTH'S CHANGES

## POWER

580 WOBW Charleston, W. Va., 250 to 500  
 580 WTAG Worcester, Mass., 250 to 500  
 720 WGN Chicago, Ill., 25000 to 50000  
 820 WHAS Louisville, Ky., 25000 to 50000  
 970 WIBG Glenside, Pa., 25 to 100  
 990 WBZ Boston, Mass., 25000 to 50000  
 1080 WBT Charlotte, N. C., 25000 to 50000  
 1140 KVOO Tulsa, Okla., 5000 to 25000  
 1150 WHAM Rochester, N. Y., 25000 to 50000  
 1250 WGCP Newark, N. J., 250 to 1000

## DELETED

580 CRCA Moncton, N. B.  
 610 XETR Mexico City, D. F.  
 630 XEZ Merida, Yuc.  
 750 XEAN Jaurez, Chih.  
 870 XEAD Mexico City, D. F.  
 1070 XEG Mexico City, D. F.  
 1180 HIJK Santo Domingo, D. R.  
 1180 XETA Mexico City, D. F.  
 1200 CHAB Moose Jaw, Sask.  
 1330 XEQ Mexico City, D. F.

## NEW

572 FQN St. Pierre, Miquelon Isl.  
 630 XEX Monterrey, N. L.  
 830 LR5 Buenos Aires, Arg.  
 990 XEAF Nogales, Son.  
 1100 XEWV Vera Cruz, Ver.  
 1200 CMHW Cienfuegos, Cuba  
 1210 XETZ Mexico City, D. F.  
 1300 HIZ Santo Domingo, D. R.

## FREQUENCIES

600 CFCO Chatham, Ont., from 1210  
 760 XEYZ Mexico City, from 780  
 970 WIBG Glenside, Pa., from 930  
 1210 CKOV Kelowna, B. C., from 1200  
 1335 CMJI Ciego de Avila, Cuba, from 1280  
 1400 XEFV Jaurez, Chih., from 1370  
 1485 CMBK Havana, Cuba, from 1445

## CALLS

757 XFOK Tijuana, B. C., formerly XEFD  
 940 WAVE Louisville, Ky., formerly WFIW  
 1400 KTUL Tulsa, Okla., formerly KOCW  
 1400 WVFW Brooklyn, N. Y., formerly WFOX

## OWNERS

760 XEYZ Mexico City, to Angel M. Diez  
 890 XETU Pachuca, Hgo., to Benito Castillo  
 1030 CFCN Calgary, Alta., to Voice of Prairies, Ltd.  
 1370 XEFZ Mexico City, to Manuel Zetina

## REINSTATED

588 CMDD Havana, Cuba

## PERMIT TO CHANGE LOCATION

1200 KBMT Paragouid, Ark., to Jonesboro, Ark.  
 1210 WHET Troy, Ala., to Dothan, Ala.

## PERMIT TO CHANGE FREQUENCY

1210 WHET Troy, Ala., to 1370

# CLASSIFIED INDEX TO CHAIN PROGRAMS

*Time in Eastern Standard*

## CONCERTS

Armeo Program, 10:00 p. m., Friday, B.  
Ennio Bolognini, 'Cellisti, 11:15 p. m., Sunday, B.  
Concert Footlights, 7:45 p. m., Thursday, B.  
N. Y. Philharmonic, 3:00 p. m., Sunday, C.  
Philadelphia Symphony, 9:00 p. m., daily, except Sun., C.  
Radio City, 12:30 p. m., Sunday, B.  
Russian Symphonic Choir, 1:00 p. m., Sunday, R.  
Albert Spalding, 8:30 p. m., Wednesday, C.  
Trio Romantique, 8:00 p. m., Saturday, B.  
Waldorf-Astoria, 6:00 p. m., daily, except Sunday, R.

## DANCE BANDS

Ben Bernie, 9:00 p. m. and 12 Mid., Tuesday, R.  
Don Bestor, 8:00 p. m., Friday, B.  
Henry Busse, 12:00 Mid., Sunday, C.  
Jack Denny, 7:00 p. m., Sunday, C.  
Eddie Duchin, 11:30 p. m., Sunday, 12:00 Mid., Wed., C.  
Jan Garber, 3:00 p. m., Sunday, B.  
Al Goodman, 9:00 p. m., Sunday, B.  
Glen Gray, 11:30 p. m., Monday; 10:00 p. m., Tuesday and Thursday; 11:00 p. m., Saturday, C.  
Green Bros., 10:30 p. m., Sunday, B.  
George Hall, 6:30 p. m., Saturday, C.  
Phil Harris, 9:00 p. m., Friday, B.  
Lennie Hayton, 8:30 p. m., Monday, C.  
Richard Himber, 6:00 p. m.; Tues. and Thurs., 7:30 p. m., Saturday, B.  
Isham Jones, 9:30 p. m., Monday; 11:30 p. m., Tuesday, Thursday, Friday, C.  
Wayne King, 10:00 p. m., Monday, B; 3:00 p. m., Sunday; 8:30 p. m., Tues. and Wed., R; 9:30 p. m., Thurs., B.  
Guy Lombardo, 11:00 p. m., Sunday; 9:30 p. m., Wed., C.  
Vincent Lopez, 12:00 Mid., Tuesday, C.  
Abe Lyman, 2:30 p. m., Sunday; 11:30 p. m., Saturday, C; 9:00 p. m., Friday, R.  
Freddie Martin, 12 Mid., Saturday, B.  
Ozzie Nelson, 11:30 p. m., Wednesday; 12:00 Mid., Thurs., C; 7:30 p. m., Sunday, B.  
George Olsen, 8:00 p. m., Wednesday and Saturday, R.  
Raymond Paige, 9:30 p. m., Tuesday, C.  
Leo Reisman, 9:30 p. m., Wednesday, R.  
Willard Robison, 7:30 p. m., Sun.; 11:00 p. m., Mon., C.  
B. A. Rolfe, 10:00 p. m., Saturday, R.  
Rudy Vallee, 8:00 p. m., Thursday, R.  
Ted Weems, 7:00 p. m., Sunday, B.  
Paul Whiteman, 10:00 p. m., Thurs., R; 11:30 p. m., Sun., B.

## DIALOG

Amos 'n' Andy, 7:00 and 11:00 p. m., daily, except Saturday and Sunday, B.  
Phil Baker, 9:00 p. m., Friday, B.  
Jack Benny, 10:00 p. m., Sunday, R.  
Burns and Allen, 9:30 p. m., Wednesday, C.  
Cuckoo Program, 10:30 p. m., Saturday, B.  
Andrew Kelly, 6:45 p. m., Monday, R.  
Bert Lahr, 8:00 p. m., Wednesday, R.  
Lum and Abner, 7:30 and 11:15 p. m., Monday to Thursday, Inc., 10:30 p. m., Friday, R.  
Lulu McConnell, 9:30 p. m., Monday, C.  
Olsen and Johnson, 10:00 p. m., Friday, C.  
Jack Pearl, 9:00 p. m., Saturday, R.  
Joe Penner, 7:30 p. m., Sunday, B.  
Potash and Perlmutter, 7:30 p. m., Mon., Wed., Fri., B.  
Stoopnagle and Budd, 9:15 p. m., Wed. and Sat., C.  
Ed Wynn, 9:30 p. m., Tuesday, R.  
Elmer Everett Yess, 8:00 and 11:15 p. m., Tuesday, Thursday, Saturday, C.

## DRAMA

Bar X Days, 2:00 p. m., Sunday, B.  
Bobby Benson, 6:15 p. m., daily, except Sat. and Sun., C.  
Big Ben, 5:00 p. m., Sunday, R.  
Billy Batchelor, 7:15 p. m., daily, except Sat. and Sun., R.  
Columbia Dramatic Guild, 8:30 p. m., Sunday, C.  
Dangerous Paradise, 8:30 p. m., Wednesday and Friday, B.  
Death Valley, 9:00 p. m., Thursday, B.  
Eno Crime Clues, 8:00 p. m., Tuesday and Wednesday, B.

First Nighter, 10:00 p. m., Friday, R.  
Gold, 8:00 p. m., Sunday, B.  
Goldbergs, 7:45 p. m., daily except Sat. and Sun., R.  
Grand Hotel, 6:30 p. m., Sunday, B.  
Just Plain Bill, 7:15 p. m., daily, except Sat. and Sun., C.  
Kay-Seven, 10:30 p. m., Monday, R.  
Little Italy, 6:45 p. m., Tuesday and Thursday, C.  
March of Time, 8:30 p. m., Friday, C.  
Myrt and Marge, 7:00 and 10:45 p. m., daily, except Saturday and Sunday, C.  
Mystery Guild, 9:15 p. m., Tuesday, C.  
One Man's Family, 11:00 p. m., Saturday, R.  
Seth Parker's Cruise, 10:00 p. m., Tuesday, R.  
Patri's Childhood Drama, 10:00 p. m., Sunday, C.  
Red Davis, 8:45 p. m., Monday, Wednesday, Friday, B.  
Rin Tin Tin, 7:45 p. m., Sunday, C.  
Buck Rogers, 6:00 p. m., Monday to Thursday, inc., C.  
Romances of Science, 5:15 p. m., Sunday, R.  
Roses and Drums, 5:00 p. m., Sunday, C.  
Scott's Circus Days, 7:30 p. m., Friday and Saturday, R.  
Coconyland Sketches, 8:00 p. m., Monday, R.  
Submarine, G-10, 3:45 p. m., Sunday, R.  
Tales of the Titans, 10:00 p. m., Saturday, B.  
Talkie Picture Time, 5:30 p. m., Sunday, R.  
Three Musketeers, 7:15 p. m., Thurs., Fri., Sat., B.  
True Railroad Adventures, 4:00 p. m., Sunday, B.  
Warden Lawes, 9:00 p. m., Wednesday, B.

## PIANO AND ORGAN

Henry Deering, 10:30 p. m., Monday, B.  
Fray and Braggiotti, 8:15 p. m., Saturday, C.  
Archer Gibson, 10:30 p. m., Thursday, B.  
Gould and Selter, 9:45 p. m., Sunday, B.  
Dion Kennedy, 4:30 p. m., Sunday, B.

## POPULAR PROGRAMS

A. & P. Gypsies, 9:00 p. m., Monday, R.  
Album Familiar Music, 9:30 p. m., Sunday, R.  
Antonia's Cutans, 8:30 p. m., Saturday, R.  
Armour Program, 9:30 p. m., Friday, B.  
Gene Arnold, 2:00 p. m., Sunday, R.  
Blue Coal Program, 7:00 p. m., Sunday, R.  
Major Bowes' Family, 11:15 a. m., Sunday, R.  
Broadway Melodies, 2:00 p. m., Sunday, C.  
Byrd Expedition, 10:00 p. m., Saturday, C.  
California Melodies, 9:30 p. m., Tuesday, C.  
Camel Program, 10:00 p. m., Tuesday and Thursday, C.  
Carborundum Band, 9:30 p. m., Saturday, C.  
Chase and Sanborn, 8:00 p. m., Sunday, R.  
Cheerio, 6:45 p. m., Tuesday, R.  
Chevrolet Program, 10:00 p. m., Sunday, R.  
Cities Service, 8:00 p. m., Friday, R.  
Contented Program, 10:00 p. m., Monday, R.  
Corn Cob Pipe Club, 10:00 p. m., Wednesday, R.  
Del Monte Ship of Joy, 9:30 p. m., Monday, R.  
Evening in Paris, 8:00 p. m., Sunday, C.  
Fiddlers Three, 4:00 p. m., Sunday, R.  
Fleischmann Hour, 8:00 p. m., Thursday, R.  
Jack Frost's Melody, 9:30 p. m., Monday, B.  
Gems of Melody, 2:45 p. m., Sunday, R.  
Grenadier Guards, 2:30 p. m., Sunday, B.  
Gulf Headliners, 9:00 p. m., Sunday, B.  
Hands Across the Border, 10:00 p. m., Thursday, B.  
Hollywood on the Air, 11:30 p. m., Saturday, R.  
Hoover Sentinels, 4:30 p. m., Sunday, R.  
Household Musical, 9:00 p. m., Tuesday, B.  
Ipana Troubadours, 9:00 p. m., Wednesday, R.  
Jamboree Variety Show, 9:00 p. m., Saturday, B.  
Lucky Strike, 9:00 p. m., Saturday, R.  
Lum and Abner Sociable, 10:30 p. m., Friday, R.  
Manhattan Merry-Go-Round, 9:00 p. m., Sunday, R.  
Maxwell House Showboat, 9:00 p. m., Thursday, R.  
Molle Show, 7:00 p. m., Monday, Wednesday, Friday, R.  
Music on the Air, 7:30 p. m., Mon., Wed., Fri., C.  
Nestle's Chocolaters, 8:00 p. m., Friday, B.  
Old Gold, 10:00 p. m., Wednesday, C.  
O'Leary's Irish Minstrels, 6:15 p. m., Saturday, B.  
Pond's Program, 9:30 p. m., Friday, R.

Realsilk Show, 7:00 p. m., Sunday, B.  
 Sinclair Minstrels, 9:00 p. m., Monday, B.  
 Sealed Power Sideshow, 8:00 and 12:00 p. m., Monday, B.  
 Swift Revue, 10:00 p. m., Friday, C.  
 Threads of Happiness, 9:15 p. m., Friday, C.  
 U. S. Army Band, 6:00 p. m., Monday, B.  
 Voice of America, 8:30 p. m., Thursday, C.  
 Voice of Firestone, 8:30 and 11:30 p. m., Monday, R.  
 Wildroot, 4:15 p. m., Sunday, R.  
 WLS Barn Dance, 11:00 p. m., Saturday, B.  
 Yeast Peasners, 3:30 p. m., Sunday, B.

**RELIGIOUS**

Catholic Hour, 6:00 p. m., Sunday, R.  
 Church of the Air, 1:00 p. m., Sunday, C.  
 Elder Michaux, 7:30 p. m., Saturday, C.  
 Mid-Week Hymn Sing, 6:30 p. m., Tuesday, R.  
 National Vespers, 5:00 p. m., Sunday, B.  
 Salt Lake Choir, 11:30 a. m., Sunday, C.

**SINGERS**

Frances Alda, 7:45 p. m., Mon., B.; 6:00 p. m., Tues., R.  
 Baby Rose Marie, 7:15 p. m., Monday, B.  
 Mildred Bailey, 7:30 p. m., Thurs., 6:15 p. m., Sat., C.  
 Irene Beasley, 6:30 p. m., Mon. and Fri., R.; 6:30 p. m.,  
 Wednesday, B.  
 Boswell Sisters, 11:15 p. m., Mon. and Friday, C.  
 Dell Campo, 7:30 p. m., Tuesday, C.  
 Eddie Cantor, 8:00 p. m., Sunday, R.  
 Richard Crooks, 8:30 and 11:30 p. m., every other Mon. R.  
 Bing Crosby, 8:30 p. m., Monday, C.  
 Dictators, 6:30 p. m., Tuesday, C.  
 Jessica Dragonette, 8:00 p. m., Friday, R.  
 Evan Evans, 11:00 p. m., Tuesday, C.  
 Father Finn's Choir, 8:30 p. m., Monday, B.  
 John Fogarty, 11:00 p. m., Sunday, B.  
 Jane Froman, 9:00 p. m., Sunday, C.  
 Alex Gray, 8:30 p. m., Thursday, C.  
 Tito Guizar, 6:30 p. m., Friday; 7:15 p. m., Saturday, C.  
 Hall Johnson, Singers, 11:00 p. m., Thursday, C.  
 Wendell Hall, 7:45 p. m., Sunday, R.  
 Happy Bakers, 8:00 p. m., Monday, Wednesday, Friday, C.  
 John Herrick, 7:15 p. m., Wed.; 7:00 p. m., Sat., B.  
 George Jessel, 8:30 p. m., Saturday, C.  
 Lazy Dan, 1:30 p. m., Sunday, C.  
 Little Jack Little, 12:00 Mid., Friday and Saturday, C.  
 Madison Ensemble, 12:30 p. m., Sunday, C.  
 Nino Martini, 9:00 p. m., Sunday, C.  
 John McCormack, 9:30 p. m., Wednesday, B.  
 Modern Male Chorus, 11:15 p. m., Wednesday, C.  
 Helen Morgan, 2:00 p. m., Sunday, C.  
 Morin Sisters, 4:15 p. m., Sunday, B.  
 Frank Munn, 9:30 p. m., Sun.; 9:00 p. m., Fri., R.  
 Edith Murray, 6:30 p. m., Thursday, C.  
 Gertrude Niesen, 9:30 p. m., Mon.; 11:15 p. m., Tues., C.  
 Viola Philo, 11:00 p. m., Thursday, R.  
 Virginia Rea, 9:30 p. m., Sunday, R.

Phil Regan, 11:15 p. m., Thursday, C.  
 Revelers Quartet, 9:00 p. m., Sunday, B.  
 Gladys Rice, 11:00 p. m., Friday, C.  
 Carson Robinson, 2:00 p. m., Sunday, B.  
 Marcel Rodrigo, 10:00 p. m., Monday, B.  
 Lanny Ross, 9:00 p. m., Thursday, R.  
 Vivien Ruth, 8:00 p. m., Monday, Wednesday, Friday, C.  
 Sanderson-Crumit, 5:30 p. m., Sun., C.; 8:00 p. m., Tues., R.  
 Ethel Shutta, 8:00 p. m., Friday, B.  
 Singing Sailors, 3:30 p. m., Sunday, R.  
 Sizzlers Trio, 6:45 p. m., Thursday, R.  
 Mary Small, 10:30 p. m., Sunday; 6:30 p. m., Tuesday and  
 Saturday, B.  
 Smiling Ed McConnell, 6:30 p. m., Sunday, C.  
 Smith Bros., 8:45 p. m., Tuesday, B.  
 Songs Mother Used to Sing, 6:00 p. m., Sunday, C.  
 Tamara, 9:00 p. m., Sunday, R.  
 Irene Taylor, 10:00 p. m., Tuesday and Thursday, C.  
 Conrad Thibault, 8:30 p. m., Wednesday, C.; 9:00 p. m.,  
 Thursday, R.  
 Lawrence Tibbett, 8:30 and 11:30 p. m., every other Monday,  
 R.  
 Vera Van, 6:30 p. m., Monday and Wednesday; 9:15 p. m.,  
 Wednesday and Saturday, C.  
 Vee and Johnny, 4:15 p. m., Sunday, R.  
 Ethel Waters, 7:00 p. m., Sunday, C.  
 Westminster Choir, 6:00 p. m., Wednesday, B.  
 Lee Wiley, 9:30 p. m., Friday, R.

**TALKS**

Back of News, 6:30 p. m., Wednesday, R.  
 Byrd Expedition, 10:00 p. m., Saturday, C.  
 Dale Carnegie, 1:30 p. m., Sunday, R.  
 Boake Carter, 7:45 p. m., daily, except Sat. and Sun., C.  
 Chicago Round Table, 12:30 p. m., Sunday, R.  
 Columbia News Service, 10:30 p. m., daily, except Sun., C  
 Conclave of Nations, 10:30 p. m., Sunday, C.  
 Father Coughlin, 4:00 p. m., Sunday.  
 Economics in New Deal, 8:00 p. m., Saturday, B.  
 Flying Capt. Williams, 6:45 p. m., Saturday, B.  
 Edwin C. Hill, 8:15 p. m., daily, except Sat. and Sun.; 11:30  
 p. m., Wednesday, Thursday, Friday, C.  
 Horlick's Health, 8:30 p. m., Tuesday and Thursday, B.  
 H. V. Kaltenborn, 6:45 p. m., Sunday; 6:00 p. m., Friday;  
 10:45 p. m., Saturday, C.  
 John B. Kennedy, 2:30 p. m., Sun.; 6:30 p. m., Thurs., R.  
 Meet the Artist, 6:00 p. m., Saturday, C.  
 National Radio Forum, 10:30 p. m., Wednesday, R.  
 National Youth Conference, 1:30 p. m., Sunday, B.  
 Our American Schools, 6:30 p. m., Sunday, R.  
 Planned Recovery, 10:45 p. m., Monday, B.  
 Radio in Education, 7:15 p. m., Tuesday, B.  
 Mme. Sylvia, 10:30 p. m., Tuesday, R.  
 Lowell Thomas, 6:45 p. m., daily except Sat. and Sun., B.  
 Voice of Experience, 8:30 and 11:45 p. m., Tuesday, C.  
 Frederic William Wile, 7:00 p. m., Saturday, C.  
 Walter Winchell, 9:30 and 11:15 p. m., Sunday, B.  
 Alexander Woolcott, 9:15 p. m., Mon. and Thurs., C.

As Shown in the Index by  
 Frequencies and Dial Numbers

**KEY TO SYMBOLS**

Frequency is given in kilocycles; wavelength in meters. Night power is shown in watts in third column. Daytime power is shown in parenthesis in fourth column in kilowatts, thus (25) indicating 250 watts. Some stations outside the United States use a "split frequency." Their exact frequency is shown in fourth column. Time Zones: A—Atlantic, E—Eastern, C—Central, M—Mountain, P—Pacific, L—Local. A. M. time is shown in light face type.

**Second Column Symbols**

- a Verifies reception for return postage.
- b Verifies only occasionally.
- c Does not verify.
- d Verification 10c; letter 25c.
- e Sends Ekko stamp for 10c.
- f Sends Ekko stamp for 5c.
- g Sends Ekko stamp for postage.
- h Sends own station stamp for 10c.
- i Sends own station stamp for 5c.
- j Sends own station stamp for postage.
- k Has no stamps.
- s No information available.

**Fourth Column Symbols**

- B National "Blue" network.
- C Columbia network.
- D Daytime only.
- Dn Daytime with occasional evening hours.
- E Trans-Canada network.
- F Canadian Radio Brcstg. Commission.
- G All Canadian networks.

- H Yankee network.
- J Orange network.
- K Michigan network.
- L Canadian Pacific Ry. network.
- M Central Canada network.
- N National "Red" and "Blue" networks.
- P Has construction permit only.
- Q Great Lakes network.
- R National "Red" network.
- S Sunday only.
- Sy Synchronized.
- T Don Lee System.
- U Dixie network.
- V Maritime Broadcasting network.
- W All-Florida network.
- W Curtis-Indiana network.
- X Has permit to increase power.
- Y Has permit to change location.
- Z Has permit to change frequency.

a-b-c. Small letters show stations using same transmitter  
 1-2-3. Figures denote stations sharing time.  
 ..... No information.

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

**KCYS.  
600  
DIAL**

## 542 kilocycles 555.2 meters

CJRM	z	500	F	Moose Jaw, Sask.	C			
CJRW	ak	500	F	Fleming, Sask.	C	8:00-9:00;	10:00-10:45;	1:00-1:15;
						5:30-7:30		
KEY	z	105	546.8	Merida, Yuc.				

## 550 kilocycles 545.1 meters

KFDY	ae	500	1 (1)	Brookings, S. D.	C	12:30-2:00		
KFUO	ae	500	2 (1)	St. Louis, Mo.	C			
KFYR	ah	1000	1N (2.5)	Bismarck, N. D.	C	7:00-12:30;	2:00-11:30	
KOAC	ak	1000	.....	Corvallis, Ore.	P	6:30-4:00;	6:30-9:00	
KSD	ak	500	2R	St. Louis, Mo.	C			
TISO	ak	250	.....	San Jose, C. R.	C	10:00-1:00;	4:00-11:00	
WDEV	ae	500	D	Waterbury, Vt.	E	7:30-10:00;	11:30-2:00;	3:00-7:00
WGR	ae	1000	C	Buffalo, N. Y.	E	7:30-mid.		
WKRK	ak	1000	C	Cincinnati, Ohio.	E	7:00-1:00		

## 560 kilocycles 535.4 meters

KFDK	ak	500	(1)	Beaumont, Texas.	C	7:00-10:00		
KGIZ	ak	500	D	Springfield, Mo.	C	7:00-7:00		
KLZ	ak	1000	C	Denver, Colo.	M	6:45-11:30		
KTAB	ak	1000	.....	San Francisco, Calif.	P	7:00-1:00		
WFI	ae	500	1R	Philadelphia, Pa.	E	6:45-9;	9:45-11;	1-2;
WIND	ak	1000	C	Gary, Ind.	C	5:30-3:30		
WLIT	ak	500	1R	Philadelphia, Pa.	E	9:45;	11-1;	2-3;
WNOX	ak	1000	C (2)	Knoxville, Tenn.	C			
WQAM	ae	1000	CW	Miami, Fla.	E	7:15-mid.		
XEAO	ak	100	(.15)	Mexicali, B. C.	P	8:00-10:00		

## 570 kilocycles 526.0 meters

FQN	z	250	572	St. Pierre, Miquelon, Isl.	A			
KGKO	ak	250	(.5)	Wichita Falls, Texas.	C	7:00-10:00		
KMTR	ak	500	.....	Hollywood, Calif.	P	6:00-12:15		
KVI	ak	500	.....	Tacoma, Wash.	P	6:00-mid.		
WKBN	ae	500	1C	Youngstown, Ohio.	E	7:30-9:00;	11:00-1:00;	3:00-8:00
WMCA	ak	500	.....	New York, N. Y.	E	8:00-1:00		
WNAX	ak	1000	C (2.5)	Yankton, S. D.	C	6:00-mid.		
WOSU	ae	750	1 (1)	Columbus, Ohio.	E	9:00-11:00;	1:00-3:00;	8-11
WSYR	ak	250	B	Syracuse, N. Y.	E	7:30-1:00		
WWNC	ae	1000	N	Asheville, N. C.	E	8:00-1:00		

## 580 kilocycles 516.9 meters

CHMA	ak	250	S	Edmonton, Alta.				
CKCL	aj	100	M	Toronto, Ont.	E	8:00-11:30 (CFCL)		
CKUA	ak	500	.....	Edmonton, Alta.	M			
CMDD	z	150	588	Havana, Cuba.	E			
HIX	ak	1500	.....	Santo Domingo, D. R.	E	Silent		
KMJ	ak	500	CT	Fresno, Calif.	P	7:00-mid.		
KSAC	ak	500	2 (1)	Manhattan, Kans.	C	8:00-9:00;	10:00-10:30;	12:30-1:30;
						5:30		
WDBO	ae	250	CW	Orlando, Fla.	E	7:00-mid.		
WIBW	ae	1000	C2	Topeka, Kans.	C	6:00-mid.		
WOBW	ak	500	.....	Charleston, W. Va.	E	8:00-mid.		
WTAG	a e	500	R	Worcester, Mass.	E	8:00-mid.		
WXP	ak	75000	585	Piedras Negras, Coah.	C	6:00-8:00;	11:00-1:00;	7:00-11:00

## 590 kilocycles 508.2 meters

CMW	ae	1400	.....	Havana, Cuba.	E			
KHQ	ak	1000	N (2.5)	Spokane, Wash.	P	7:00-1:00		
WEEI	ak	1000	R	Boston, Mass.	E			
WKZO	ae	1000	DK	Kalamazoo, Mich.	E	7:00-7:00		
V.O.W.	ae	1000	R	Omaha, Neb.	C	7:00-10:00;	10:45-3:15;	4:00-mid.

## 600 kilocycles 499.7 meters

CFCF	ae	500	F	Montreal, Que.	E	7:30-mid.		
CFCO	ak	100	FL	Chatham, Ont.	E	7:15-10:00		
KFOD	ck	250	.....	Anchorage, Alaska.	L	6:00-mid.		
KFSD	ah	1000	N	San Diego, Calif.	P	7:30-mid.		
WCAC	ae	250	2	Storrs, Conn.	E	12:30-1:00;	4:30-5;	7-8
WCAO	ae	250	C	Baltimore, Md.	E	7:00-mid.		
WICC	ae	250	2 CH (.5)	Bridgeport, Conn.	E	7:45-1:00		
WMT	af	500	C	Waterloo, Iowa.	C	6:00-mid.		
WREC	ak	500	C (1)	Memphis, Tenn.	C	6:30-mid.		

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

610 kilocycles 491.5 meters

--	--	--

KFRC	ae	1000	CT	San Francisco, Calif.	P—7:00-1:00
KZEG	ak	1000	618.5	Manila, P. I.	L—7:30-12:15; 1:15-5:00
KZRM	ak	5000	618.5	Manila, P. I.	L—6:30-7:30; 12:15-1:15; 5:10-10:30
TIXA	z	7.5	614	San Jose, C. R.	
WDAF	ak	1000	R	Kansas City, Mo.	C—7:56-12:30
WIP	ae	500	C	Philadelphia, Pa.	E—8:30-12:30
WJAY	ak	500	D	Cleveland, Ohio.	E

620 kilocycles 483.6 meters

--	--	--

KGW	ae	1000	NJ	Portland, Ore.	P—7:00-mid.
KTAR	ae	500	NJ (1)	Phoenix, Ariz.	M—7:00-11:15
WFLA	ae	1000	Na (2.5)	Clearwater, Fla.	E—7:30-1:00
WLBY	ak	500	C	Bangor, Maine.	E
WSUN	ae	1000	Na (2.5)	St. Petersburg, Fla.	E—7:30-1:00
WTMJ	ae	1000	N (2.5)	Milwaukee, Wis.	C—6:45-1:00

630 kilocycles 475.9 meters

--	--	--

CFCY	ae	500	FVE	Charlottestown, P. E. I.	A—12:00-1:30; 6:00-11:30
CJGX	ck	500	F	Yorkton, Sask.	C—8:30-9:15; 10:30-11:45; 12:40-1:15; 7:30-8:30
CMQ	z	500	2	Havana, Cuba	E
KFRU	ak	500	1	Columbia, Mo.	C—6:00-9:00; 4:00-sunset; 7:00-mid.
KGFX	z	200	D	Pierre, S. D.	C—9:30-sunset
WGBF	ae	500	1	Evansville, Ind.	C
WMAL	ak	250	B (.5)	Washington, D. C.	E—6:45-mid.
WOS	ak	500	1D	Jefferson City, Mo.	C—9:00-4:00
XEX	z	50	638.3	Monterrey, N. L.	
XFG	z	2000	638.3	Mexico City, F.	C

640 kilocycles 468.5 meters

--	--	--

CKCR	ak	100	M645	Kitchener, Ont.	E—10:00-1:30; 4:00-11:00
KFI	ak	5000	1N	Los Angeles, Calif.	P—6:30-mid.
WAU	ae	500	1	Columbus, Ohio.	E—6:15-5:00
WOI	ae	5000	D	Ames, Iowa.	C—6:30-11:30; noon-1:45; 3:30-5:00

650 kilocycles 461.3 meters

--	--	--

KPCB	ae	100	.....	Seattle, Wash.	P—5:30-sunset; 10:00-4:00
WPM	aej	5000	N	Nashville, Tenn.	C—6:30-mid.

660 kilocycles 454.3 meters

--	--	--

TIGP	z	75	666	San Jose, C. R.	
WAAW	af	500	D	Omaha, Neb.	C—6:00-sunset
WEAF	ak	5000	R	New York, N. Y.	E—8:00-1:00

670 kilocycles 447.5 meters

--	--	--

WMAQ	ck	5000	N	Chicago, Ill.	C—7:30-1:00
------	----	------	---	---------------	-------------

680 kilocycles 440.9 meters

--	--	--

CMAF	ak	1000	.....	Havana, Cuba.	E—5:30-11:30
HJN	ak	500	681	Bogota, Colombia.	L—Noon-1:30; 8:00-10:00
KFEQ	ae	2500	D	St. Joseph, Mo.	C—9:30-4:50
KPO	ak	5000	N	San Francisco, Calif.	P—7:30-mid.
VAS	z	2.40	685	Glance Bay, N. S.	A—1:00-1:15; 1:00-1:15
WPTF	ae	1010	DnN	Raleigh, N. C.	E—7:30-sunset

690 kilocycles 434.5 meters

--	--	--

CFRB	ak	10000	C	Toronto, Ont.	E—8:00-mid.
CJ CJ	ak	500	.....	Calgary, Alta.	M
NAA	ak	1000	.....	Arlington, Va.	E—11:55-noon; 9:55-10:00
XET	ck	500	.....	Monterrey, N. L.	C—Noon-2:00; 4:00-10:00

700 kilocycles 428.3 meters

--	--	--

WLW	ak	5000	NX	Cincinnati, Ohio.	E—6:30-2:00
-----	----	------	----	-------------------	-------------

710 kilocycles 422.3 meters

--	--	--

KMPC	ae	500	Dn	Beverly Hills, Calif.	P—6:45-12:30
------	----	-----	----	-----------------------	--------------



# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

TIFB	z	30	714	San Jose, C. R.	C—6:00-10:00
WOR	ak	5000	.....	Newark, N. J.	E—6:45-12:30
XEN	ak	1000	711	Mexico City, D. F.	C—9:00-noon; 1:00-4:00; 5:00-mid.

**720 kilocycles 416.4 meters**

WGN	ck	50000	.....	Chicago, Ill.	C—7:00-1:30
-----	----	-------	-------	---------------	-------------

**730 kilocycles 410.7 meters**

CFPL	z	100	F	London, Ont.	E
CJCA	ah	500	F	Edmonton, Alta.	M
CKAC	ak	5000	C	Montreal, Que.	E—7:30-11:30
CMK	ae	3150	.....	Havana, Cuba.	E—11:00-1:00; 7:00-mid.
XEF-					
XER	ak	150000	735	Villa Acuna, Coah.	C—7:15-5:00

**KCYS.  
820  
DIAL**

**740 kilocycles 405.2 meters**

KMMJ	ae	1000	D	Clay Center, Neb.	C—5:00-sunset
WHEB	ak	250	D	Portsmouth, N. H.	E—8:30-1:30; 3:30-7:45
WSB	ah	50000	NX	Atlanta, Ga.	C—6:55-mid.

**750 kilocycles 399.8 meters**

KGU	aj	2500	N	Honolulu, T. H.	L—6:30-10:30
WJR	ak	10000	B	Detroit, Mich.	E—7:00-1:00
XEOk	ak	5000	757	Tijuana, B. C.	P—7:00-mid.

**760 kilocycles 394.5 meters**

KXA	ae	250	(.5)	Seattle, Wash.	P
WBAL	ae	10000	BSy	Baltimore, Md.	(See 1060 Kcys.)
WEW	ae	1000	D	St. Louis, Mo.	C—7:30-6:00
WJZ	ck	50000	BSy	New York, N. Y.	E—8:00-1:00
XEYZ	z	10000	.....	Mexico City, D. F.	C

**770 kilocycles 389.4 meters**

KFAB	ae	5000	CSy	Lincoln, Neb.	C—5:00-6:45; 9:00-mid.
WBBM	ae	25000	CSy	Chicago, Ill.	C

**780 kilocycles 384.4 meters**

CHWK	ak	100	F	Chilliwack, B. C.	P—9:00-10:00; 12:00-1:00; 5:30-8:30
CJCS	ae	500	(1) P	Sudbury, Ont.	E—8:00-mid.
CKPR	ak	100	FE	Fort William, Ont.	E—10:00-2:00; 5:00-11:00
CMBS	ag	200	1 (.15)	Havana, Cuba.	E—10:00-noon; 7:00-11:00
CMCQ	z	1000	1	Havana, Cuba.	E
KELW	ae	500	2	Burbank, Calif.	P—10:00-1:00; 5:00-8:00; 4:00-6:00
KTM	ae	500	2 (1)	Los Angeles, Calif.	P—6:00-10:00; 1:00-5:00; 8:00-4:00
WEAN	ae	500	CH	Providence, R. I.	E—7:30-1:00
WMC	ak	500	N (1)	Memphis, Tenn.	C—7:00-mid.
WJAR	ae	500	C	Norfolk, Va.	E—7:00-mid.
XEP	z	1000	.....	Mexico City, D. F.	C

**790 kilocycles 379.5 meters**

CMJK	ak	500	.....	Camaguey, Cuba.	E—11:30-12:30; 5:00-11:00
KGO	ak	7500	N	San Francisco, Calif.	P—7:00-mid.
WGY	ak	50000	R	Schenectady, N. Y.	E—6:45-1:00

**800 kilocycles 374.8 meters**

VOAC	z	40	.....	St. John's, Newfoundland.	L
WBAP	ak	50000	Na	Fort Worth, Tex.	C—6:30-7; 8:30-10:30; 12:30-3; 5:30-6:30; 10-mid.
WFAA	ak	50000	Na	Dallas, Texas.	C—7-8:30; 10:30-12:30; 3-5:30; 6:30-7; 7-10
XFC	z	350	805	Aguascalientes, Ags.	

**810 kilocycles 370.2 meters**

VOAS	ak	100	.....	St. John's, Nfld.	L—11:00-12:30; 4:00-5:30
WCCO	ae	50000	C	Minneapolis, Minn.	C—7:00-mid.
WNYC	ak	500	N	New York, N. Y.	E—10:00-7:30

**820 kilocycles 365.6 meters**

CMGC	z	30	.....	Matanzas, Cuba.	E
WHAS	aj	50000	C	Louisville, Ky.	C—7:00-mid.

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

## 830 kilocycles 361.2 meters

CMGA	z	100	834	Colon, Cuba.	E			
KOA	ak	12500	N	Denver, Colo.	M—7:00-mid.			
LR5	z	20000	.....	Buenos Aires, Arg.	L			
TIEA	z	7.5	833	San Jose, C. R.	L			
WEEU	ak	1000	D	Reading, Pa.	E—8:00-6:15			
WHDF	ae	1000	Dn	Boston, Mass.	E—7:00-sunset in Denver			
WRUF	ae	500	Dn	Gainesville, Fla.	E—8:00-7:00			
XETW	dk	500	.....	Mexico City, D. F.	C—Noon-11:00			

## 840 kilocycles 356.9 meters

CJOC	ak	100	F	Lethbridge, Alta.	M—7:30-8:00			
CKLW	ae	5000	C	Windsor, Ont.	E—7:00-1:00			
CMC	ae	500	.....	Havana, Cuba.	E—10:30-11:30; 6:45-11:00			
XFX	ak	500	.....	Mexico City, D. F.	C—7-10:30; 6:00-10:00			

## 850 kilocycles 352.7 meters

KIEV	ak	100	D	Glendale, Calif.	P—6:00-sunset			
*KWKH	ae	10000	1	Shreveport, La.	C			
WWL	ae	10000	1Dn	New Orleans, La.	C—8:00-8:30			

## 860 kilocycles 348.6 meters

TIVL	z	30	869	San Jose, C. R.	C—11:00-1:00; 7:00-10:00			
WABC	ae	50000	C	New York, N. Y.	E—7:30-2:00 (WBOQ)			
WHB	ae	500	D	Kansas City, Mo.	C—6:00-5:00			
XETH	ak	100	.....	Puebla, Pue.	C—8:30-11:00; 1:00-3:00; 6:30-11:00			

## 870 kilocycles 344.6 meters

WENR	ak	50000	Na	Chicago, Ill.	C			
WLS	ae	50000	Na	Chicago, Ill.	C—5:30-9:15; 10:45-2:30; 6:00-7:30			

## 880 kilocycles 340.7 meters

CJCB	ak	50	F	Sydney, N. S.	A—10:00-11:00; noon-2:00; 5:00-10:00			
CRCO	ak	1000	F	Ottawa, Ont.	E—Noon-1:30; 5:30-11:30			
KFKA	ak	500	2 (1)	Greeley, Colo.	M—6:00-7:30; 9:00-2:30; 4:30-7:30; 9:00-mid.			
KLX	ae	1000	.....	Oakland, Calif.	P—8:00-11:00			
KPOF	ae	500	2	Denver, Colo.	M—7:30-9:00; 2:30-4:30; 7:30-9:00			
WCOE	ae	500	(1)	Meridian, Miss.	C—7:30-2:00; 5:00-10:30			
WGBI	ae	250	1	Scranton, Pa.	E—9:30-12:30; 1:30-4:30; 5:30-10:30			
WQAN	ae	250	1	Scranton, Pa.	E—9:00-9:30 12:30-1:30; 4:30-5:30			
WSUJ	ae	500	.....	Iowa City, Iowa.	C—9:00-10:00; 11:00-12:30; 2:00-4:00; 6:00-10:00			
YV2BC	z	100	882	Caracas, Venez.	L			

## 890 kilocycles 336.9 meters

CMCF	ak	250	1	Havana, Cuba.	E—5:00-8:00			
CMX	ae	1000	1	Havana, Cuba.	E—Noon-2:00; 8:00-11:00			
KARK	ak	250	.....	Little Rock, Ark.	C—7:00-2:30; 4:30-9:00			
KFNK	ak	500	2 (1)	Shenandoah, Iowa.	C—5:00-10:00; 11:00-5:00; 6:00-10:00			
KSEI	ck	250	(.5)	Pocatello, Idaho.	M—7:30-11:00			
KUSD	ae	500	2	Vermillion, S. D.	C—Silent			
WGST	ae	250	C (.5)	Atlanta, Ga.	C—7:00-mid.			
WILL	ak	250	2 (.1)	Urbana, Ill.	C—10:00-12:15; 5:00-6:00			
WJAR	ae	500	R	Providence, R. I.	E—8:00-1:00			
WMMN	ae	250	(.5)	Fairmont, W. Va.	E—7:00-9:30			
XETU	z	100	.....	Pachuca, Hdo.				

## 900 kilocycles 333.1 meters

KGBU	ak	500	.....	Ketchikan, Alaska.	L			
KHJ	ae	1000	ST	Los Angeles, Calif.	P—7:00-1:00			
VOWR	ak	500	S	St. John's, Nfld.	L—Silent			
WBEA	ae	1000	R	Buffalo, N. Y.	E—6:45-Mid.			
WJAX	ae	1000	N	Jacksonville, Fla.	E—7:00-12:30			
WKY	ak	1000	N	Oklahoma City, Okla.	C—6:45-mid.			
WLBL	ae	2500	D	Stevens Point, Wis.	C—8:00-sunset			

## 910 kilocycles 329.6 meters

CFRC	ak	100	915	Kingston, Ont.	E			
------	----	-----	-----	----------------	---	--	--	--

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

CKY	ak	5000	F	Winnipeg, Man.	C—8:30-1:30; 4:00-11:00
CRCM	ck	5000	F	Montreal, Que.	E
TICR	z	75	911	San Jose, C. R.	C—6:30-10:00
XEW	ak	5000	.....	Mexico City, D. F.	C

## 920 kilocycles 325.9 meters

--	--	--

CMCD	ah	500	(.25)	Havana, Cuba.	E—Noon-11:30
CMDE	z	150	925	Havana, Cuba.	E
HHK	ae	1000	.....	Port-au-Prince, Haiti.	E—Silent
KFEL	ak	500	1	Denver, Colo.	M—6:30-8:30; 10:00-12:30; 3:00-4:30
KFXF	ae	500	1	Denver, Colo.	M—8:30-10:12:30-3; 4:30-6; 7:30-1:00
KOMO	ak	1000	N	Seattle, Wash.	P—6:55-mid.
KPRC	ae	1000	N (2.5)	Houston, Texas.	C—6:30-mid.
WAAF	ak	500	D	Chicago, Ill.	C—6:00-sunset
WBSO	ae	500	D	Babson Park, Mass.	E—8:30-5:15
WWJ	ae	1000	R	Detroit, Mich.	E—7:30-mid.

## 930 kilocycles 322.4 meters

--	--	--

CFAC	ak	500	.....	Calgary, Alta.	M
CFCH	ak	100	F	North Bay, Ont.	E—Noon-1:30; 5:30-mid.
CFLC	ae	100	.....	Prescott, Ont.	E—8:00-10:00; noon-2:00; 5:00-7:30
CHRC	ak	100	F	Quebec, Que.	E—9:00-12:30
CKPC	ae	100	FG	Preston, Ont.	E—6:45-mid.
CMJF	z	200	.....	Camaguey, Cuba.	E
KFWI	ak	500	1	San Francisco, Calif.	P
KGBZ	ak	500	2 (1)	York, Neb.	C—5-6; 7:30-9:30; 11-12:30; 2-3:30; 5-6:30; 8:30-10
KMA	ak	500	2 (1)	Shenandoah, Iowa.	C—6-7:30; 9:30-11; 12:30-2; 3:30-5; 6:30-8:30; 10-mid.
KROW	ak	500	1 (1)	Oakland, Calif.	P—8:00-9:00; 1:00-6:00; 7:30-8:30
WBRC	ak	500	C (1)	Birmingham, Ala.	C—7:00-11:00
WDBJ	ae	250	C (.5)	Roanoke, Va.	E—8:00-mid.

**KCY5.**  
**990**  
**DIAL**

## 940 kilocycles 319.0 meters

--	--	--

KOIN	ak	1000	CT	Portland, Ore.	P—6:30-mid.
WAAT	ae	300	D	Jersey City, N. J.	E—6:00-6:00
WAVE	ak	1000	.....	Louisville, Ky.	C—Silent
WCSH	ae	1000	R (2.5)	Portland, Maine.	E—8:00-mid.
WDAY	ae	1000	N	Fargo, N. D.	C—7:00-mid.
WHA	ak	1000	D	Madison, Wis.	C—8:00-sunset
XEFO	ak	5000	.....	Mexico City, D. F.	C—1:00-3:00; 6:25-mid. (XEO)

## 950 kilocycles 315.6 meters

--	--	--

CMHD	dk	500	(.25)	Caibarien, Cuba.	E—8:00-9:00
KFWB	ak	1000	.....	Hollywood, Calif.	P—7:30-12:30
KGHL	ak	1000	NJ (2.5)	Billings, Mont.	M—8:00-11:00
KMBC	ak	1000	C	Kansas City, Mo.	C—6:00-mid.
WRC	ae	500	R	Washington, D. C.	E—6:30-1:00

## 960 kilocycles 312.3 meters

--	--	--

CMBD	z	250	965	Havana, Cuba.	E—Noon-6:00
CMCW	ak	150	965	Havana, Cuba.	E—6:00-mid.
CMJL	z	50	.....	Camaguey, Cuba.	E
CRCT	ak	5000	NF	Toronto, Ont.	E—6:45-mid.
XEAW	ak	10000	965	Reynosa, Tams.	C—5:00-1:00
YV1BC	ak	5000	.....	Caracas, Venez.	L—11:00-1:30; 5:30-10:15

## 970 kilocycles 309.1 meters

--	--	--

CMGF	ak	100	977	Matanzas, Cuba.	E—3:00-5:00; 8:00-10:30
KJR	z	5000	N	Seattle, Wash.	P—6:55-mid.
WCFL	ae	1500	BX	Chicago, Ill.	C—7:00-mid.
WIBG	ae	100	D	Glenside, Pa.	E—9:00-sunset

## 980 kilocycles 303.9 meters

--	--	--

KDKA	ak	50000	B	Pittsburgh, Pa.	E—7:00-1:00
XEAB	ak	800	.....	Tijuana, B. C.	P—9:00-mid.

## 990 kilocycles 302.8 meters

--	--	--

TITV	z	7.5	999	San Jose, C. R.	C—3:00-5:00; 7:00-11:00
WBZ	ak	50000	B5y	Boston, Mass.	E
WBZA	ak	1000	B5y	Springfield, Mass.	E
WJEM	z	500	D	Tupelo, Miss.	C
XEAF	z	750	.....	Nogales, Son.	
XEK	ak	100	.....	Mexico City, D. F.	C—11:00-4:00; 6:00-2:00

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

## 1000 kilocycles 299.8 meters

KFVD	ae	250	Dr	Los Angeles, Calif.	P—6:30-sunset; 10:00-mid.
WHO-					
WOC	ak	5000	R	Des Moines, Iowa.	C—7:00-mid.
WORK	ak	1000	D	York, Pa.	E—8:00-6:45
XEA	ak	250	.....	Guadalajara, Jal.	C—8:30-9:00; 6:00-11:00
XEC	z	50	.....	Toluca, D. F.	C
XEFE	z	100	.....	Nuevo Laredo, Tams.	C
XEFJ	ak	100	.....	Monterrey, N. L.	C—11:00-2:00; 7:00-10:00
XEFS	ak	40	.....	Queretaro, Qro.	C—8:00-10:00
XEL	ak	40	.....	Saltillo, Coah.	C—10:30-1:00; 6:00-9:00

## 1010 kilocycles 296.9 meters

CHML	aei	50	M	Hamilton, Ont.	E—8:00-11:00
CHWC	ae	500	3F	Regina, Sask.	M—7-9; 10-11; noon-1; 3:30-11
CKCD	ak	100	.....	Vancouver, B. C.	P—8:30-9:00
CKCK	ak	500	3F	Regina, Sask.	M—9:00-10:00; 11:00-noon; 1:00-3:30
CKCO	z	100	.....	Ottawa, Ont.	E
CKIC	ak	50	.....	Wolfville, N. S.	A—Noon-1:00; 6:00-7:00
CKWX	ach	100	LZ	Vancouver, B. C.	P—7:00-8:30; 9:00-1:00
CMBZ	ak	150	.....	Havana, Cuba.	E—11:00-1:00; 4:00-6:00; 8:30-11:00
CMJO	ak	50	.....	Ciego de Avila, Cuba.	E—9:00-1:00; 6:00-10:00
KGGF	ak	500	2 (1)	Coffeyville, Kans.	C—7:30-2:00; 5:00-8:00; 9:15-10:30
KQW	ae	500	.....	San Jose, Calif.	P—7:00-8:00; 9:00-3:00; 4:30-10:00
TIGA	z	30	1014	Cartago, C. R.	
WHN	ae	250	1	New York, N. Y.	E—4:00-mid.
WIS	ae	500	N (1)	Columbia, S. C.	E—8:00-mid.
WNAD	ae	500	2	Norman, Okla.	C—8:15-9:15
WPAP	ae	250	1	New York, N. Y.	E—9:30-1:00
WQAO	ae	250	1	New York, N. Y.	E—7:30-8:30
WRNY	ae	250	1	New York, N. Y.	E—1:00-4:00
XEJ	ak	500	1015	Juarez, Chih.	C
XEU	ak	100	.....	Veracruz, Ver.	C—7:00-9:00; 10:00-2:00; 5:00-11:00

## 1020 kilocycles 293.9 meters

KYW	ae	1000	NY	Chicago, Ill.	C—8:00-1:00
WRAX	ak	250	DZ	Philadelphia, Pa.	E—7:00-7:00
XES	dk	250	.....	Tampico, Tams.	E—10:00-2:30; 5:00-10:00

## 1030 kilocycles 291.1 meters

CFCN	ak	10000	F	Calgary, Alta.	M—7:30-1:30; 5:00-11:00
CFNB	ae	500	FE	Fredericton, N. B.	A—8:30-9:30; 12:30-2:00; 7:30-10:00
CKNC	ak	100	F	Toronto, Ont.	E—8:00-11:00
CMHI	ak	250	1037	Santa Clara, Cuba.	E—11:00-noon; 8:00-9:00
CMKC	z	150	1034	Santiago, Cuba.	E
XEB	ak	10000	.....	Mexico City, D. F.	C—9:30-10:00

## 1040 kilocycles 288.3 meters

CMGH	ak	15	.....	Matanzas, Cuba.	E—2:00-3:00; 5:00-6:00; 7:30-8:30
KRLD	ae	10000	1C	Dallas, Texas.	C
KTHS	ae	10000	DN	Hot Springs, Ark.	C
WESG	ak	1000	D	Elmira, N. Y.	E—8:00-6:00
WKAR	ak	1000	D	East Lansing, Mich.	E

## 1050 kilocycles 285.5 meters

CHNS	ae	500	FL	Halifax, N. S.	A—8:00-1:30; 6:00-mid.
CMJG	z	50	.....	Camaguey, Cuba.	E
KFBF	ak	5000	Dr	Abilene, Kans.	C—6:00-sunset
KNX	ak	25000	.....	Hollywood, Calif.	P—6:45-11:00
XEFC	ak	100	.....	Merida, Yuc.	C—8:00-10:00

## 1060 kilocycles 282.8 meters

KWJJ	ak	500	.....	Portland, Ore.	P—6:00-8:00; 9:00-2:00
WBAL	ae	10000	1B	Baltimore, Md.	E—7:30-3:00
WJAG	ak	1000	D	Norfolk, Neb.	C—6:45-sunset
WTIC	ak	50000	1R	Hartford, Conn.	E—3:00-mid.

## 1070 kilocycles 280.2 meters

CMBG	z	225	.....	Havana, Cuba.	E
CMCB	ak	150	.....	Havana, Cuba.	E

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

KJBS ae 100 D  
WCAZ ae 50 D  
WDZ ak 100 D  
WTAM ck 50000 R

San Francisco, Calif. P-12:01-sunset  
Carthage, Ill. C  
Tuscola, Ill. C-8:00-4:00  
Cleveland, Ohio. E-6:30-1:00

## 1080 kilocycles 277.6 meters

VOKW z 30 1085  
WBT ae 50000 CU  
WCBF ae 5000 1Dn  
WMBI ae 5000 1Dn  
XEFG ak 500 1085

St. John's, Nfld. L-Noon-2:00  
Charlotte, N. C. E-7:00-mid.  
Zion, Ill. C-7:30-10:30; 1:30-sunset  
Chicago, Ill. C-7:00-7:30; 10:30-1:30; 3:00-4:00  
Mexico City, D. F. C-10:30-4:00; 7:00-mid.

## 1090 kilocycles 275.1 meters

KMOX ak 50000 C  
XEAI z 100 .....

St. Louis, Mo. C-6:30-12:30  
Mexico City, D. F. (Ail mail returned)

## 1100 kilocycles 272.6 meters

CMCU ak 500 .....  
CRCV ak 500 F  
KGDH ak 250 D  
TIRCA ak 500 .....  
WLWL ae 5000 1  
WPG ak 5000 1C  
XEWW z 250 .....

Havana, Cuba. E-6:00-mid.  
Vancouver, B. C. P-Noon-1:00; 5:30-11:00  
Stockton, Calif. P-6:00-6:30  
San Jose, C. R. C-11:00-1:00; 5:00-10:30  
New York, N. Y. E-6:00-8:00  
Atlantic City, N. J. E-9:00-6:00; 8:00-1:00  
Veracruz, Ver. C

## 1110 kilocycles 270.1 meters

KSOO ae 1000 Dn (2.5)  
WRVA ae 5000 N  
XENT ak 150000 1115

Sioux Falls, S. D. C-6:00-6:30  
Richmond, Va. E-7:00-mid.  
Nuevo Laredo, Tams. C-6:00-8:00; 10:00-2:00; 5:00-10:00

KCYS.  
1160  
DIAL

## 1120 kilocycles 267.7 meters

CHGS ae 100 F  
CHLP z 100 .....  
CKOK ae 1000 F  
CMHJ ae 60 1125  
KFIO ae 100 D  
KFSG ag 500 a  
KRKD ae 500 a  
KRSC ak 100 D  
KTRH z 1000 2C  
WDEL ak 250 (5)  
WHAD ak 250 1C  
WISN ak 250 1  
WTAW ae 500 2

Summerside, P. E. I. A-7:30-8:45; 10:30-2:00; 4:30-7:30; 9:00-11:00  
Montreal, Que. E-9:00-mid.  
Hamilton, Ont. E-7:45-11:30  
Cienfuegos, Cuba. E-11:00-2:00; 6:00-9:00  
Spokane, Wash. P-7:00-sunset  
Los Angeles, Calif. P-6:30-7:15; 7:30-10:00  
Los Angeles, Calif. P-7:45-7:30; 10:00-mid.  
Seattle, Wash. P-6:45-6:30  
Houston, Texas. C-6:30-11:30  
Wilmington, Del. E-9:00-10:00  
Milwaukee, Wis. C-9:30-10:15; 3:00-4:00; 8:30-9:30  
Milwaukee, Wis. C  
College Station, Texas. C-Silent

## 1130 kilocycles 265.3 meters

KSL ae 50000 C  
WJJD ae 20000 Dn  
WVOV ag 1000 D  
XEHI ak 250 1132

Salt Lake City, Utah. M-6:45-mid.  
Chicago, Ill. C-6:30-10:00  
New York, N. Y. E-8:00-6:00  
Monterrey, N. L. C-8:00-1:30; 5:00-10:00

## 1140 kilocycles 263.0 meters

CMBJ z 500 .....  
CMBW ak 600 .....  
KVVO ae 25000 1N  
WAPI ae 5000 1N

Havana, Cuba. E-Noon-7:00  
Havana, Cuba. E-Silent  
Tulsa, Okla. C-6:30-7:00  
Birmingham, Ala. C-6:00-sunset; 9:00-mid.

## 1150 kilocycles 260.7 meters

CMJH ak 50 .....  
WHAM ae 50000 B  
XED ak 500 1155  
10-AT ak 25 1155

Ciego de Avila, Cuba. E-8:00-8:30; 10:00-3:00; 5:30-10:30  
Rochester, N. Y. E-8:00-mid.  
Guadalajara, Jal. C-Noon-3:30; 7:00-mid.  
Trail, B. C. P-9:30-9:00

## 1160 kilocycles 258.5 meters

WOWO ae 10000 1C  
WVVA ae 5000 1C

Fort Wayne, Ind. C-8:30-4:30; 7:30-mid.  
Wheeling, W. Va. E-6:30-8:30

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

## 1170 kilocycles 256.3 meters

CMJE	z	50	1175	Camaguey, Cuba.	E.
WCAU	ae	50000	C	Philadelphia, Pa.	E-8:00-1:00

## 1180 kilocycles 254.1 meters

CMBN	ak	150	1185	Havana, Cuba.	E
CMCJ	ak	500	1185	Havana, Cuba.	E-Noon-2:00; 4:00-6:00; 7:00-10:00
KEX	ak	5000	2N	Portland, Ore.	P-7:00-4:45; 8:00-mid.
KOB	ae	10000	2	Albuquerque, N. M.	M-Noon-1:00; 5:00-9:00
WDGY	ak	1000	Dn	Minneapolis, Minn.	C-6:30-8:15
WINS	ae	500	.....	New York, N. Y.	E-6:00-7:00
WMAZ	ak	500	.....	Macon, Ga.	E-7:30-3:00; 5:00-8:15

## 1190 kilocycles 252.0 meters

HIJ	z	15	1195	Santo Domingo, D. R.	E-12:30-2:30; 6:30-8:30
VE9EK	ak	10	1195	Montmagny, Que.	E
VONF	ak	400	1195	St. John's, Nfld.	L-Noon-2:00; 6:00-9:00
WOAI	ae	50000	N	San Antonio, Texas.	C-6:30-11:30
WSAZ	ak	1000	.....	Huntington, W. Va.	E-8:00-8:00

## 1200 kilocycles 249.9 meters

CKTB	ae	100	G	St. Catharines, Ont.	E
CMGB	z	30	1205	Matanzas, Cuba.	E
CMHW	z	100	.....	Cienfuegas, Cuba	E
KBTM	ak	100	DY	Paragould, Ark.	C-7:30-1:30; 2:30-5:30
KERN	ak	100	CT	Bakersfield, Calif.	P-7:00-mid.
KFJB	ak	100	(25)	Marshalltown, Iowa.	C-6:00-9:00; noon-3:00; 6:00-9:00
KFXD	ae	100	.....	Nampa, Idaho.	M-7:00-9:00
KFFJ	ak	100	.....	Grand Junction, Colo.	M
KGDE	ak	100	(25)	Fergus Falls, Minn.	C-7:00-9:00
KGKE	ak	100	.....	Yuma, Colo.	M-11:30-1:30
KGJF	ae	100	.....	Los Angeles, Calif.	P-24 hours
KGHI	ak	100	(25)	Little Rock, Ark.	C-7:00-1:00; 4:00-10:00
KGVO	ak	100	.....	Missoula, Mont.	M-8:00-8:30
KMLB	ak	100	.....	Monroe, La.	C
KSUN	ae	100	D	Lowell, Ariz.	M-Sunrise-sunset
KVOS	ak	100	.....	Bellingham, Wash.	P-7:00-10:00
KWG	ae	100	CT	Stockton, Calif.	P-7:00-mid.
WABI	ak	100	.....	Bangor, Maine.	E-9:00-2:00; 6:00-10:00
WBXB	ak	100	1	New Orleans, La.	C-Noon-5:00; 8:00-11:00
WBZZ	ak	100	.....	Ponca City, Okla.	C-6:30-10:00
WBHS	z	100	4	Huntsville, Ala.	C
WCAT	ak	100	D	Rapid City, S. D.	C-12:30-1:30
WCAX	ak	100	.....	Burlington, Vt.	E-Noon-1:00; 6:00-8:00
WCLO	ak	100	.....	Janesville, Wis.	C-7:30-2:00; 5:00-8:30
WFAM	ak	100	8C	South Bend, Ind.	C-6:30-mid.
WFBC	ak	100	4 (25)	Greenville, S. C.	E-7:30-2:30; 5:30-10:30
WFBE	ak	100	(25)	Cincinnati, Ohio.	E-7:00-11:30
WHBC	ak	100	2	Canton, Ohio.	E-7:00-9:00; noon-3:00; 6:00-9:00
WHBY	ak	100	.....	Green Bay, Wis.	C-7:30-9:45
WBIX	ae	100	(3)	Utica, N. Y.	E-8:00-11:00
WIL	ak	100	5 (25)	St. Louis, Mo.	C-7:00-mid.
WJBC	ae	100	6	LaSalle, Ill.	C-8:00-9:00; 10:00-12:30; 6:30-10:30
WJBL	ae	100	6	Decatur, Ill.	C-6:30-8:00; 9:00-10:00; 12:30-3:00; 4:30-6:30
WJBW	ak	100	1	New Orleans, La.	C-8:00-noon; 5:00-8:00
WKBO	ak	100	3	Harrisburg, Pa.	E-7:00-10:00; 2:00-5:00; 7:00-11:00
WKJC	ae	100	3	Lancaster, Pa.	E-11:00-3:00; 6:00-9:00
WLAP	ae	100	(25)	Louisville, Ky.	C-7:30-11:30
WNBO	ae	100	2	Silverhaven, Pa.	E-9:00-noon; 3:00-6:00; 9:00-mid.
WNBW	z	10	(1)	Carbondale, Pa.	E
WPBR	ak	100	(25)	Petersburg, Va.	E-8:00-5:00; 6:00-9:00
WRBL	z	100	.....	Columbus, Ga.	C-7:00-11:00
WWAE	ae	100	8	Hammond, Ind.	C-7:00-8:30; 11:00-1:00; 4:00-7:00; 8:00-mid.
YV3BC	ak	1000	.....	Caracas, Venez.	L-11:00-2:00; 5:00-10:30
10-AK	ak	15	.....	Stratford, Ont.	E-Noon-1:00; 5:30-7:00
10-BI	ak	25	.....	Prince Albert, Sask.	M
10-BP	ak	15	.....	Wingham, Ont.	E-Silent
10-BQ	ak	5	.....	Brantford, Ont.	E-11:00-8:00
10-BU	z	15	.....	Canora, Sask.	C

## 1210 kilocycles 247.8 meters

CFBO	z	100	F	St. John, N. B.	A
CHNC	ak	100	PF	New Carlisle, Que.	A-1:00-mid.
CJOR	ak	500	.....	Vancouver, B. C.	P-7:30-10:30

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

CKCH	z	100	.....	Hull, Que.	E
CKMC	ak	100	.....	Cobalt, Ont.	E
CKOV	ak	100	F	Kelowna, B. C.	P
KASA	ak	100	.....	Elk City, Okla.	C-6:30-1:30; 5:00-7:00
KDLR	ak	100	.....	Devils Lake, N. D.	C-8:00-2:15; 6:00-8:00
KFJI	ak	100	.....	Klamath Falls, Ore.	P-8:30-9:00
KFOR	ak	100	(.25)	Lincoln, Neb.	C-7:00-10:00
KFPW	ak	100	.....	Fort Smith, Ark.	C-7:00-2:00; 5:00-10:00
KFVS	ae	100	6	Cape Girardeau, Mo.	C-9:00-noon; 4:00-8:30
KFXM	ak	100	9	San Bernardino, Calif.	P-6:00-7:00; 9:15-mid.
KGCR	ak	100	.....	Watertown, S. D.	C-7:00-3:00; 5:00-9:00
KGY	ak	100	.....	Olympia, Wash.	P-6:00-mid.
KIEM	ak	106	.....	Eureka, Calif.	P-7:45-sunset
KPPC	ak	50	9	Pasadena, Calif.	P-7:00-5:15
KWEA	z	100	.....	Shreveport, La.	C
KWV	z	100	.....	Hilo, Hawaii.	L
WALR	ae	100	.....	Zanesville, Ohio.	E
WBAX	ae	100	1	Wilkes Barre, Pa.	E
WBBL	ak	100	7S	Richmond, Va.	E-Silent
WBBS	ak	100	2	Springfield, Ill.	C-11:15-3:00; 6:45-9:00
WCRW	ae	100	4	Chicago, Ill.	C-11:00-2:00; 5:00-7:00
WEBQ	ae	100	6	Harrisburg, Ill.	C-6:00-9:00; noon-4:00; 8:30-mid.
WEDC	ae	100	4	Chicago, Ill.	C-8:30-10:00; 3:30-5; 7-8; 10-11; mid-2:00
WFAS	ak	100	3	White Plains, N. Y.	E-3:00-5:00
WGBB	ae	100	3	Freeport, N. Y.	E-9:00-noon; 8:00-mid.
WGCM	ae	100	(.25)	Mississippi City, Miss.	C-9:00-1:00; 7:00-9:00
WGNV	ak	100	.....	Chester, N. Y.	E
WHBF	ak	100	.....	Rock Island, Ill.	C-7:30-10:00
WHBU	ah	100	.....	Anderson, Ind.	C-7:00-7:15
WHET	ak	100	DZY	Troy, Ala.	C-9:00-sunset
WIBU	a	100	.....	Poynette, Wis.	C
WJBI	ak	100	3A	Red Bank, N. J.	E-5:00-8:00
WJBY	ak	100	.....	Gadsden, Ala.	C-9:00-9:00
WJEB	ah	100	D	Hagerstown, Md.	E-7:00-1:00; 4:00-7:45
WJW	ak	100	.....	Akron, Ohio.	E-9:00-11:30
WKFI	ak	100	Y	Greenville, Miss.	C-7:00-7:00
WKOK	ak	100	1P	Sunbury, Pa.	E
WMBG	ak	100	7C	Richmond, Va.	E-7:00-mid.
WOCL	ak	50	.....	Jamestown, N. Y.	E-Noon-mid.
WOMT	ae	100	.....	Manitowoc, Wis.	C
WPRO	ak	100	.....	Providence, R. I.	E-9:00-2:00; 4:00-11:15
WQDX	ae	100	.....	Thomasville, Ga.	E-8:00-9:00
WSBC	ae	100	4	Chicago, Ill.	C-6:00-8:30; 10:00-11:00; 2:00-3:30; 8:00-10:00; 11:00-mid.
WSEN	ak	100	.....	Columbus, Ohio.	E-8:00-mid.
WSIX	ak	100	.....	Springfield, Tenn.	C-6:00-4:00; 6:00-9:00
WSOC	ae	100	N	Charlotte, N. C.	E
WTAX	ae	100	2	Springfield, Ill.	C
XETZ	z	500	.....	Mexico City, D. F.	C

**KCYS.**  
**1240**  
**DIAL**

## 1220 kilocycles 245.8 meters

--	--	--

CMHK	ak	50	1225	Cruces, Cuba.	E-10:00-11:30
KFKU	ae	500	a	Lawrence, Kans.	C-2:30-3:00; 6:00-6:15
KTW	ak	1000	S2	Seattle, Wash.	P-Silent
KWSC	ae	1000	2(2)	Pullman, Wash.	P-Noon-2:30; 4:30-8:00
WCAD	ak	500	D	Canton, N. Y.	E-12:30-1:30; 3:00-4:00
WCAE	ae	1000	R	Pittsburgh, Pa.	E-6:45-1:00
WDAE	ae	1000	CW	Tampa, Fla.	E-8:00-mid.
WREN	ak	1000	Ba	Lawrence, Kas.	C-7:00-mid.

## 1230 kilocycles 243.8 meters

--	--	--

CFQC	z	500	F	Saskatoon, Sask.	C
CMBY	z	250	2	Havana, Cuba.	E
CMCA	z	150	2	Havana, Cuba.	E
KGGM	ak	250	(.5)	Albuquerque, N. M.	M-6:00-noon; 4:00-8:00
KYA	ae	1000	N	San Francisco, Calif.	P-7:30-mid.
WFBM	ae	1000	1C	Indianapolis, Ind.	C-7:30-10:15; noon-3:00; 5:30-11:30
WNAC	ak	1000	CH	Boston, Mass.	E-6:30-1:00
WSBT	ak	500	1C	South Bend, Ind.	C-6:30-mid.

## 1240 kilocycles 241.8 meters

--	--	--

CMAB	z	20	1249	Pinar del Rio, Cuba.	E
CMJN	z	50	.....	Camaguey, Cuba.	E
KGCU	ak	250	1	Mandan, N. D.	M-Noon-5:00; 6:45-9:00
KLPM	ak	250	1	Minot, N. D.	C-7:00-1:00; 6:00-7:45
KTAT	ak	1000	C	Fort Worth, Texas.	C-7:00-mid.

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

KTFI	ae	1000	.....	Twin Falls, Idaho.	M—6:00-mid.
WKAQ	ae	1000	.....	San Juan, P. R.	A—12:15-3:15; 6:30-10:00
WXYZ	ak	1000	K	Detroit, Mich.	E—7:30-mid.

## 1250 kilocycles 239.9 meters

--	--	--

KFOK	ae	1000	.....	Long Beach, Calif.	P—6:00-mid.
WAAM	ae	1000	1a (2.5)	Newark, N. J.	E—7:00-9:00; 10:00-noon; 2:00-4:30; 9:00-mid.
WCAL	ah	1000	2	Northfield, Minn.	C—9:45-10:15; 8:00-10:00
WDSU	ak	1000	C	New Orleans, La.	C—7:00-11:45
WGCP	ak	1000	1 (2.5)	Newark, N. J.	E—2:00-5:00; 8:00-10:00
WLB	ak	1000	2	Minneapolis, Minn.	C—10:35-11:30; 12:30-1:00
WODA	z	1000	1a (2.5)	Paterson, N. J.	E
WRHM	ak	1000	2	Minneapolis, Minn.	C—6:15-9:45; 11:30-12:30; 1-8; 9-mid.
XEFA	z	500	.....	Mexico City, D. F.	C

## 1260 kilocycles 238.0 meters

--	--	--

KOIL	ak	1000	B	Council Bluffs, Iowa.	C—6:00-1:00
KRGV	ae	500	1	Harlingen, Texas.	C—7:00-9:30; 12:30-3:30; 6:30-9:30
KUOA	ak	1000	.....	Fayetteville, Ark.	C—7:00-6:30
KVOA	ak	500	.....	Tucson, Ariz.	M—6:00-9:00; noon-3:00; 6:00-9:00
KWWG	z	500	1	Brownsville, Texas.	C
WLBW	ae	500	C(1)	Erie, Pa.	E—8:00-1:00
WNBX	ak	250	D	Springfield, Vt.	E—7:30-sunset
WTOC	ae	500	C	Savannah, Ga.	E—7:00-1:00
XEFI	ak	250	.....	Chihuahua, Chih.	C—1:00-3:00; 8:00-10:30

## 1270 kilocycles 236.1 meters

--	--	--

CMBC	ae	150	1	Havana, Cuba.	E
CMCP	z	150	1	Havana, Cuba.	E
KGCA	ak	100	2D	Decorah, Iowa.	C—8:30-9:45; 10:45-11:30; 12:30-2:30
KOL	ae	1000	CT	Seattle, Wash.	P—6:45-mid.
KVOR	ae	1000	C	Colorado Springs, Colo.	M—7:00-11:00
KWLK	ak	100	2D	Decorah, Iowa.	C—7:30-8:30; 9:45-10:45; 11:30-12:30; 2:30-3:30
WASH	ak	500	Ka	Grand Rapids, Mich.	E—7:00-mid.
WFBP	ae	500	R	Baltimore, Md.	E—7:10-1:00
WJDX	ae	1000	N	Jackson, Miss.	C—7:00-11:00
WOOD	ak	500	Ka	Grand Rapids, Mich.	E—7:00-mid.

## 1280 kilocycles 234.2 meters

--	--	--

KFBB	ae	1000	(2.5)	Great Falls, Mont.	M—8:00-3:00; 5:00-10:00
WCAM	ae	500	1	Camden, N. J.	E—11:00-noon; 2:00-5:00
WCAP	ae	500	1	Asbury Park, N. J.	E—9:00-11:00; noon-1:00; 9:00-mid.
WDOD	ae	1000	C(2.5)	Chattanooga, Tenn.	C—7:00-11:00
WIBA	ae	500	N (1)	Madison, Wis.	C—7:30-mid.
WORC	ak	500	CH	Worcester, Mass.	E—8:00-mid.
WRR	ak	500	C	Dallas, Texas.	C—7:00-11:00
WTNJ	ak	500	1	Trenton, N. J.	E—1:00-2:00; 5:00-8:00
XEFW	ak	70	.....	Tampico, Tams.	E—8:00-10:00; noon-2:00; 5:00-6:00; 7:00-10

## 1290 kilocycles 232.4 meters

--	--	--

CMHL	ak	20	.....	Cienfuegos, Cuba.	E—10:00-noon; 6:00-9:00
KDYL	ae	1000	NJ	Salt Lake City, Utah.	M—6:30-1:00
KLCN	z	100	D	Blytheville, Ark.	C
KTSA	ak	1000	C	San Antonio, Texas.	C—7:00-mid.
WEBC	ae	1000	N (2.5)	Superior, Wis.	C—7:00-mid.
WJAS	ak	1000	C (2.5)	Pittsburgh, Pa.	E—7:30-12:30
WNBZ	z	50	D	Saranac Lake, N. Y.	E
XEAC	z	100	1295	San Luis Potosi, S. L. P.	E
XFB	ak	1000	.....	Jalapa, Ver.	C—8:00-9:00; 1:00-2:30; 8:00-11:30

## 1300 kilocycles 230.6 meters

--	--	--

CMKJ	z	20	.....	Guantanamo, Cuba.	E
HIZ	z	10	.....	Santo Domingo, D. R.	L
KALE	ak	500	3CT	Portland, Ore.	P—7:00-10:30; 2:30-5:00; 6:00-7:00
KFAC	ae	1000	.....	Los Angeles, Calif.	P—7:00-mid.
KFH	ak	1000	C2	Wichita, Kans.	C—7-8:30; 9-11; 11:30-2; 3-6; 7-9; 10-11
KFJR	ag	500	3	Portland, Ore.	P—10:30-2:30; 5:00-6:00; 7:00-mid.
WBBR	aej	1000	1	Brooklyn, N. Y.	E—6:00-7:00; 10:00-noon; 6:00-8:00
WEVD	ak	500	1	New York, N. Y.	E—5:00-6:00
WFAB	ae	1000	1	New York, N. Y.	E—9:00-10:00; noon-3:00; 9:00-10:00
WHAZ	ae	500	1	Troy, N. Y.	E—Silent
WIOD	ae	1000	N	Miami, Fla.	E—7:15-mid.
WOQ	ae	1000	2	Kansas City, Mo.	C—6-7; 8:35-9:05; 11-11:30; 2-3; 6-7; 9-10; 11-mid



INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

1310 kilocycles 228.9 meters

[Empty box for frequency/dial number]

Table listing radio stations and their frequencies for the 1310 kilocycles band. Includes call letters, frequency, and broadcast times for stations like KFJC, KFCK, CKCV, etc.

1320 kilocycles 227.1 meters

[Empty box for frequency/dial number]

Table listing radio stations and their frequencies for the 1320 kilocycles band. Includes call letters, frequency, and broadcast times for stations like CMCY, KGHF, KGMB, etc.

KCY.S. 1340 DIAL

1330 kilocycles 225.4 meters

[Empty box for frequency/dial number]

Table listing radio stations and their frequencies for the 1330 kilocycles band. Includes call letters, frequency, and broadcast times for stations like CMJI, KGB, KMO, etc.

1340 kilocycles 223.7 meters

[Empty box for frequency/dial number]

Table listing radio stations and their frequencies for the 1340 kilocycles band. Includes call letters, frequency, and broadcast times for stations like KFPY, KGDY, KGNO, etc.

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

## 1350 kilocycles 222.1 meters

--	--	--

KIDO	ak	1000	.....	Boise, Idaho.	M—8:00-9:30
KWK	ak	1000	B	St. Louis, Mo.	C—7:00-mid.
TGW	ak	500	.....	Guatemala City, Gua	L—Noon-1:00; 6:00-7:00; 9:00-11:00
WAWZ	ae	250	1	Zarephath, N. J.	E—6:00-9:00; 5:00-6:30
WBNX	ae	250	1	New York, N. Y.	E—9:00-11:30
WEHC	ae	500	D	Charlottesville, Va.	E

## 1360 kilocycles 220.4 meters

--	--	--

CMJP	ak	75	.....	Moron, Cuba.	E—10:00-noon; 8:00-10:00
KGER	ak	1000	.....	Long Beach, Calif.	P—6:00-mid.
KGIR	ak	500	N (1)	Butte, Mont.	M—7:00-mid.
WCSC	ae	500	.....	Charleston, S. C.	E—8:00-10:30; noon-2:00; 7:00-10:00
WFBL	ak	1000	C (2.5)	Syracuse, N. Y.	E—8:00-1:00
WGES	ae	500	.....	Chicago, Ill.	C—5:45-11:00; 5:00-8:00
WQBC	ak	500	.....	Vicksburg, Miss.	C

## 1370 kilocycles 218.8 meters

--	--	--

CMCN	z	250	1375	Havana, Cuba.	E
CMCR	ak	150	1375	Havana, Cuba.	E—Noon-1:00; 4:00-5:00; 9:00-11:00
CMGC	z	30	1375	Cardenas, Cuba.	E
KCRC	ak	100	2 (2.5)	Enid, Okla.	C—6:00-9:00; 11:00-2:00; 5:00-7:45; 10:00-mid.
KEFL	ae	50	3	Everett, Wash.	P—9:00-noon; 3:00-6:00; 9:00-mid.
KEFM	ak	100	.....	Grand Forks, N. D.	C—7:00-9:00
KEFJ	ae	100	.....	Fort Worth, Texas.	C—7:00-11:00
KGAR	ae	100	(.25)	Tucson, Ariz.	M—7:00-9:00
KGFG	bk	100	2	Oklahoma City, Okla.	C
KGFL	ak	100	.....	Roswell, N. M.	M—6:00-9:30; 2:00-7:30
KGKL	ak	100	.....	San Angelo, Texas.	C—8:00-4:30; 6:00-10:00
KICA	ak	100	4	Clovis, N. M.	M—9:30-2:00; 7:30-9:30
KLUF	z	100	.....	Galveston, Texas.	C
KMAC	ak	100	5	San Antonio, Texas.	C—7:00-8:30; 10:00-11:00; noon-1:30; 4:00-6:00; 7:00-8:30; 10:00-12:30
KONO	ak	100	5	San Antonio, Texas.	C—6:00-7:00; 8:00-10:00; 11:00-noon; 1:30-4:00; 6:00-7:00; 8:00-10:00
KOOS	ae	100	.....	Marshfield, Ore.	P—7:00-9:00
KRE	ak	100	.....	Berkeley, Calif.	P—6:30-9:30; noon-3:00; 6:00-9:00
KSO	ak	100	B (2.5)	Des Moines, Iowa.	C—6:30-1:00
KUJ	ak	100	.....	Walla Walla, Wash.	P—6:45-9:00
KVL	ak	100	3	Seattle, Wash.	P—6:00-9:00; noon-3:00; 6:00-9:00; mid.-1:30
KWKC	z	100	.....	Kansas City, Mo.	C
WBTM	ak	100	7	Danville, Va.	E—8:00-1:00; 4:00-6:30
WCBM	ae	100	(.25)	Baltimore, Md.	E—7:00-mid.
WDAS	ae	100	(.25)	Philadelphia, Pa.	E—9:00-11:00
WGL	ae	100	C	Fort Wayne, Ind.	C—6:30-mid.
WGLC	ak	100	C	Hudson Falls, N. Y.	E—7:30-mid.
WHBD	ak	100	.....	Mount Orab, Ohio.	E—8:00-11:30; noon-9:00
WHBQ	ak	100	.....	Memphis, Tenn.	C—7:55-2:00; 4:00-10:30
WHDF	ak	100	(.25)	Calumet, Mich.	E—7:00-9:00; 11:30-1:30; 5:30-8:30
WIBM	ae	100	1K	Jackson, Mich.	E—7:30-9:00
WJBK	ae	50	1	Detroit, Mich.	E—7:00-sunset; 9:00-mid.
WJTL	ae	100	.....	Atlanta, Ga.	E
WLEY	ak	100	(.25)	Lexington, Mass.	E—Noon-3:00; 6:00-9:00
WLVA	ck	100	7	Lynchburg, Va.	E—1:00-3:00; 6:30-11:00
WMBR	ak	100	.....	Tampa, Fla.	E—7:00-9:30
WPFB	ak	100	.....	Hattiesburg, Miss.	C
WQDM	ae	100	D	St. Albans, Vt.	E
WRAK	ak	100	.....	Williamsport, Pa.	E—8:30-3:00; 5:00-10:30
WRAM	ak	100	.....	Wilmington, N. C.	E—7:30-mid.
WRDO	ae	100	.....	Augusta, Maine.	E—9:00-1:00; 4:30-8:30
WRJN	ae	100	.....	Racine, Wis.	C—9:00-2:30; 4:00-10:30
WSVS	ak	50	D	Buffalo, N. Y.	E—8:30-10:00; 2:00-3:00
XEFZ	ae	100	.....	Mexico City, D. F.	C

## 1380 kilocycles 217.3 meters

--	--	--

CMJC	z	150	1382	Camaguey, Cuba.	E
KOH	ak	500	C	Reno, Nev.	P—8:00-10:00
KOV	ak	500	2C	Pittsburgh, Pa.	E—7:00-10:00
TOX	z	75	.....	Guatemala City, Gua	t
WKBK	ae	1000	C	LaCrosse, Wis.	C—7:30-10:00
WMSK	ak	200	2	Dayton, Ohio.	E—7:00-8:00; 10:00-mid.
XETB	z	125	.....	Torreón, Coah.	

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

## 1390 kilocycles 215.7 meters

HHH	ak	15	1395	San Pedro de Macoris, D. R.	L-12:15-2:00
KLRA	ae	1000	C	Little Rock, Ark.	C-7:00-mid.
KOY	ae	500	(1)	Phoenix, Ariz.	M
WHK	ae	1000	C(2.5)	Cleveland, Ohio.	E-7:00-mid.

## 1400 kilocycles 214.2 meters 75

KLO	ah	500	C	Ogden, Utah.	M-8:30-10:30
KTUL	z	250	(.5)	Tulsa, Okla.	C
VOGY	ak	75	.....	St. John's, Nfld.	L-10:30-11:30; 1:00-2:00; 6:15-8:00
WARD	ak	500	2	Brooklyn, N. Y.	E
WBAA	z	500	1	Lafayette, Ind.	C-Silent
WBBC	ae	500	2	Brooklyn, N. Y.	E-1:30-4:00; 9:00-10:00
WKBFB	ak	500	1N	Indianapolis, Ind.	C-6:00-mid.
WLTH	ak	500	2	Brooklyn, N. Y.	E-4:00-6:00; 10:00-mid.
WVFW	ak	500	2	Brooklyn, N. Y.	E
XEFV	ae	100	.....	Jaurex, Chih.	C-9:00-3:00; 5:00-11:00

## 1410 kilocycles 212.6 meters

CKFC	ak	50	5	Vancouver, B. C.	P-3:00-4:30
CKMO	z	100	5	Vancouver, B. C.	P
CMCH	ak	50	.....	Havana, Cuba.	E
CMCM	z	15	.....	Havana, Cuba.	E
KFLV	ak	500	4	Rockford, Ill.	C-10:00-12:30; 3:00-6:00; 8:00-10:00
KGRS	ae	1000	1	Amarillo, Texas.	C-6-8; 10-12:30; 3-4:30; 6-7; 9-10
WAAB	ae	500	CH	Boston, Mass.	E-8:30-mid.
WBMC	ae	500	K	Bay City, Mich.	E-8:00-mid.
WDAG	ae	1000	1	Amarillo, Texas.	C-8-10; 12:30-3; 4:30-6; 7:30-9; 10-mid.
WHBL	ae	500	4	Sheboygan, Wis.	C-7-10; 12:30-3; 6-8; 10-mid.
WHIS	ak	250	2	Bluefield, W. Va.	E-7:00-9:00; noon-3:00; 6:00-8:00
WODX	ae	500	3C	Mobile, Ala.	C-7:00-6:15; 7:45-10:30
WRBX	ae	250	2	Roanoke, Va.	E
WSFA	ck	500	3C	Montgomery, Ala.	C-6:00-7:45

## 1420 kilocycles 211.1 meters

KABC	ak	100	.....	San Antonio, Texas.	C-6:00-mid.
KBPS	aj	100	4	Portland, Ore.	P-11:00-12:30; 3:00-5:00
KCMC	ak	100	.....	Texarkana, Ark.	C-7:00-2:00; 4:00-9:00
KFIJ	ak	100	.....	Fond du Lac, Wis.	C-10:00-1:00; 4:00-10:00
KGFF	ak	100	.....	Shawnee, Okla.	C-7:30-3:00; 5:00-9:00
KGGC	ak	100	.....	San Francisco, Calif.	P-9:00-1:00; 4:00-9:00
KGIW	ak	100	1	Alamosa, Colo.	M
KGIX	ak	100	.....	Las Vegas, Nev.	M
KICK	z	100	.....	Carter Lake, Iowa.	C
KIDW	z	100	1	Lamar, Colo.	M-8:00-10:00; 7:00-10:00
KORE	ae	100	.....	Eugene, Ore.	P-7:45-9:00
KUMA	ak	100	.....	Yuma, Ariz.	M-7:00-9:00; 11:00-2:00; 6:00-10:00
KWCR	ak	100	B(.25)	Cedar Rapids, Iowa.	C-7:00-Mid.
KXIL	ae	100	4	Portland, Ore.	P-7:00-1:00
WACO	ak	100	C	Waco, Texas.	C-8:00-2:00; 5:00-10:30
WAGM	ae	100	.....	Presque Isle, Maine.	E-11:00-1:00; 4:00-7:00
WAMC	ae	100	.....	Anniston, Ala.	C-7:00-9:00
WAZL	ak	100	2	Hazleton, Pa.	E-11:00-9:00
WEED	ak	100	D	Greenville, N. C.	E-9:00-6:00
WEHS	ak	100	a	Cicero, Ill.	C-4:00-6:00
WELL	ak	50	.....	Battle Creek, Mich.	E-9:00-9:30
WENC	ak	100	D	Americus, Ga.	C-7:00-6:15
WHDL	ae	100	D	Tupper Lake, N. Y.	E
WHFC	ae	100	a	Cicero, Ill.	C-7:00-1:30; 6:00-9:00; 11:00-1:00
WILM	aj	100	2	Wilmington, Del.	E-7:00-11:00; 2:00-5:00; 9:00-mid.
WJBO	z	100	D	Baton Rouge, La.	C
WJMS	ak	100	.....	Ironwood, Mich.	C-7:30-1:30; 4:30-7:00
WKBI	ak	100	a	Cicero, Ill.	C-1:30-4:00
WLBF	ak	100	.....	Kansas City, Kans.	C-7:00-11:00
WMAS	ak	100	CH(.25)	Springfield, Mass.	E-8:00-mid.
WMBG	ag	100	(.25)	Detroit, Mich.	E-7:30-mid.
WMBH	ak	100	(.25)	Joplin, Mo.	C-7:30-2:00; 6:00-9:30
WNRA	ak	100	D	Muscle Shoals, Ala.	C-7:00-10:00
WPAD	ak	100	.....	Paducah, Ky.	C
WSPA	ae	100	(.25)	Spartanburg, S. C.	E-7:30-2:00; 4:00-9:30
WTBO	ae	100	(.25)	Cumberland, Md.	E-9:00-7:00

**KCYs.  
1430  
DIAL**

## 1430 kilocycles 209.7 meters

CFCT	ae	50	.....	Victoria, B. C.	P-8:00-12:30; 6:00-8:00; mid.-2:00
KECA	ak	1000	N	Los Angeles, Calif.	P-7:00-11:00

# INDEX BY FREQUENCIES AND DIAL NUMBERS

With Wednesday's Time on the Air

KGNF	ak	500	D	North Platte, Neb.	C—7:00-sunset
WBAK	ak	500	1 (1)	Harrisburg, Pa.	E
WCAH	ae	500	1C	Columbus, Ohio.	E—8:00-mid.
WFEA	ae	500	CH	Manchester, N. H.	E—7:30-11:00
WHEC	ae	500	C	Rochester, N. Y.	E
WHP	ak	500	1C(1)	Harrisburg, Pa.	E—8:30-10:30; 11:30-1:30; 2:30-4:00; 4:30-1:00
WNBK	ae	500	.....	Memphis, Tenn.	C—8:00-1:00; 3:00-10:00
WOKO	ae	500	C	Albany, N. Y.	E—7:30-1:00

## 1440 kilocycles 208.2 meters

CMBL	ak	200	1445	Havana, Cuba.	E—Mail returned
KDFN	ak	500	.....	Casper, Wyo.	M—7:30-2:00; 3:30-9:00
KLS	ae	250	D	Oakland, Calif.	P—8:00-sunset
KXYZ	ak	250	.....	Houston, Texas.	C—6:30-1:00; 2:30-11:00
TIFS	z	7.5	1441	Cartago, C. R.	L
WBIG	ae	500	C(1)	Greensboro, N. C.	E—8:00-11:00
WBCA	aj	250	a	Allentown, Pa.	E—7:30-mid.
WMBD	ae	500	3C(1)	Peoria, Ill.	C—6:00-11:00; 8:00-mid.
WSAN	aj	250	a	Allentown, Pa.	E—7:30-mid.
WTAD	ak	500	3	Quincy, Ill.	C—11:00-8:00

## 1450 kilocycles 206.8 meters

CKX	ak	500	F	Brandon, Man.	C
KTBS	ck	1000	N	Shreveport, La.	C—7:00-mid.
TIEP	z	7.5	.....	San Jose, C. R.	L
WGAR	ak	500	B(1)	Cleveland, Ohio.	E—6:00-1:00
WHOM	ae	250	.....	Jersey City, N. J.	E—8:00-mid.
WSAR	ae	250	.....	Fall River, Mass.	E—8:00-3:30; 5:00-10:00
WTFI	ak	500	.....	Athens, Ga.	E—8:00-9:00
XEAB	ak	7.5	.....	Neuvo Laredo, Tams.	C—10:00-3:00; 4:00-7:00

## 1460 kilocycles 205.4 meters

KSTP	ae	10000	N (25)	St. Paul, Minn.	C—6:45-12:30
WJSV	ak	10000	C	Washington, D. C.	E—6:30-mid.

## 1470 kilocycles 204.0 meters

KGA	ak	5000	N	Spokane, Wash.	P—6:00-mid.
WLAC	ae	5000	C	Nashville, Tenn.	C—7:00-mid.

## 1480 kilocycles 202.6 meters

CMBK	z	15	1485	Havana, Cuba.	E
KOMA	ak	5000	C	Oklahoma City, Okla.	C—6:30-mid.
WKBW	ae	5000	C	Buffalo, N. Y.	E—10:00-1:00

## 1490 kilocycles 201.2 meters

WCKY	ae	5000	BY	Covington, Ky.	E—7:00-mid.
------	----	------	----	----------------	-------------

## 1500 kilocycles 199.9 meters

CRCS	z	100	F	Chicoutimi, Que.	E—6:30-11:30
KDB	ak	100	CT	Santa Barbara, Calif.	P—7:30-mid.
KGFI	ak	100	(.25)	Corpus Christi, Tex.	C—7:00-3:00; 6:00-10:00
KGFK	ak	100	.....	Moorhead, Minn.	C—8:00-9:00
KGKB	ak	100	.....	Tyler, Texas.	C—8:00-10:00; noon-2:00; 5:00-6:00; 7:30-9:00
KGKY	ck	100	.....	Scottsbluff, Neb.	M—9:00-1:30; 5:30-9:00
KNOW	ak	100	.....	Austin, Texas.	C—7:30-2:00; 4:00-10:00
KPJM	ak	100	.....	Prescott, Ariz.	M—7:00-8:00
KPO	aj	100	.....	Wenatchee, Wash.	P—7:00-10:00
KREG	ak	100	.....	Santa Ana, Calif.	P—9:00-11:00
KXO	al	100	.....	El Centro, Calif.	P—7:00-2:00; 4:00-9:00
WCNW	ak	100	1	Brooklyn, N. Y.	E—2:00-6:00; 10:00-1:00
WFDW	ak	100	.....	Rome, Ga.	C—7:00-10:00; noon-3:00; 6:00-9:00
WHEF	z	100	P (.25)	Kosciusko, Miss.	C
WKBV	z	100	.....	Richmond, Ind.	C
WKBZ	ak	100	.....	Ludington, Mich.	E—9:00-9:00
WKEU	ak	100	.....	LaGrange, Ga.	C—10:00-noon; 3:00-6:00
WMBQ	ae	100	1	Brooklyn, N. Y.	E—9:00-10:00; 6:00-8:00
WMPC	ak	100	.....	Lapeer, Mich.	E—10:00-2:00; 3:30-6:00; 7:00-10:30
WNBV	ae	100	.....	Binghamton, N. Y.	E—7:30-10:00
WOPI	ae	100	.....	Bristol, Tenn.	E—7:00-2:00; 3:00-8:00
WPEN	ck	100	(.25)AZ	Philadelphia, Pa.	E—7:30-10:00
WRDW	ae	100	.....	Augusta, Ga.	E
WSYB	ae	100	.....	Rutland, Vt.	E—10:00-1:00; 5:00-9:00
WRRL	ak	100	1	Woodside, N. Y.	E—8-9; 11-2; 8-10
WWSW	ae	100	(.25)	Pittsburgh, Pa.	E—8:00-11:45

## INDEX BY LOCATIONS

Frequency in kilocycles in second column. Night power in watts in third column. Network affiliations in fourth column: C Columbia, R National Red, B National Blue, N National Red and Blue. F Canadian.

<b>ALABAMA</b>	<b>Hollywood</b>	<b>WTIC</b> 1060 5000 R	<b>Chicago</b>
Anniston	KFWB 950 1000	Storrs	KYW 1020 10000 N
WAMC 1420 100	KMTR 570 500	WCAC 600 250	WAAF 920 500
<b>Birmingham</b>	KNX 1050 25000	<b>DELAWARE</b>	WBBM 770 25000 C
WAPI 1140 5000 N	<b>Long Beach</b>	<b>Wilmington</b>	WCFL 970 1500 B
WBRC 930 500 C	KFOX 1250 1000	WDEL 1210 250	WCRW 1210 100
WKBC 1310 100	KGER 1360 1000	WILM 1420 100	WEDC 1210 100
<b>Gadsden</b>	<b>Los Angeles</b>	<b>DISTRICT OF COLUMBIA</b>	WENR 870 50000 N
WJBY 1210 100	KECA 1430 1000 N	<b>Washington</b>	WGES 1360 500
Huntsville	KFAC 1300 1000	WJVS 1460 10000 C	WGN 720 50000
WBHS 1200 100	KFI 640 50000 N	WMAL 630 250 B	WJJD 1130 20000
<b>Mobile</b>	KFSG 1120 500	WOL 1310 100	WLS 870 50000 N
WODX 1410 500 C	KFVD 1000 250	WRC 950 500 R	WMAQ 670 5000 N
<b>Montgomery</b>	KGFJ 1200 100	<b>FLORIDA</b>	WMBI 1080 5000
WSFA 1410 500 C	KHJ 900 1000 C	<b>Clearwater</b>	WSBC 1210 100
<b>Muscle Shoals</b>	KRKD 1120 500	WFLA 620 1000 N	<b>Cleora</b>
WNRA 1420 100	KTM 780 500	Gainesville	WEHS 1420 100
<b>Troy</b>	<b>Oakland</b>	WRUF 830 5000	WHFC 1420 100
WHET 1210 100	KLS 1440 250	Jacksonville	WKBI 1420 100
<b>ALASKA</b>	KLX 880 1000	WJAX 900 1000 N	<b>Decatur</b>
Anchorage	KROW 930 500	<b>Miami</b>	WJBL 1200 100
KFQD 600 250	<b>Pasadena</b>	WIOD 1300 1000 N	<b>East Dubuque</b>
Juneau	KPPC 1210 50	WQAM 560 1000 C	WKBB 1310 100
KIFH 1310 100	<b>Sacramento</b>	<b>Orlando</b>	Harrisburg
<b>Ketchikan</b>	KFBK 1310 100 C	WDBO 580 250 C	WEBQ 1210 100
KGBU 900 500	<b>San Bernardino</b>	<b>Pensacola</b>	Joliet
<b>ARIZONA</b>	KFXM 1210 100	WCOA 1340 500	WCLS 1310 100
Jerome	<b>San Diego</b>	<b>St. Petersburg</b>	<b>LaSalle</b>
KCRJ 1310 100	KFSD 600 1000 N	WSUN 620 1000 N	WJBC 1200 100
<b>Lowell</b>	KGB 1330 1000 C	<b>Tampa</b>	<b>Peoria</b>
KSUN 1200 100	<b>San Francisco</b>	WDAE 1220 1000 C	WMBD 1440 500 C
<b>Phoenix</b>	KFRC 610 1000 C	WMBR 1370 100	<b>Quincy</b>
KOY 1390 500	KFWI 930 500	<b>GEORGIA</b>	WTAD 1440 500
KTAR 620 500 N	KGGC 1420 100	<b>Americus</b>	<b>Rockford</b>
<b>Prescott</b>	KGO 790 7500 N	WENC 1420 100	KFLV 1410 500
KPJM 1500 100	KJBS 1070 100	<b>Athens</b>	<b>Rock Island</b>
<b>Tucson</b>	KPO 680 50000 N	WTFI 1450 500	WHBF 1210 100
KGAR 1370 100	KTAB 560 1000	<b>Atlanta</b>	<b>Springfield</b>
KVOA 1260 500	KYA 1230 1000 N	WGST 890 250 C	WCBS 1210 100
<b>Yuma</b>	<b>San Jose</b>	WJTL 1370 100	WTAX 1210 100
KUMA 1420 100	KQW 1010 500	WSB 740 50000 N	<b>Tuscola</b>
<b>ARKANSAS</b>	<b>Santa Ana</b>	<b>Augusta</b>	WDZ 1070 100
Blytheville	KREG 1500 100	WRDW 1500 100	<b>Urbana</b>
KLCN 1290 100	<b>Santa Barbara</b>	<b>Columbus</b>	WILL 890 250
<b>Fayetteville</b>	KDB 1500 100 C	WRBL 1200 100	Zion
KUOA 1260 1000	<b>Stockton</b>	<b>LaGrange</b>	WCB D 1080 5000
<b>Fort Smith</b>	KGDM 1100 250	WKEU 1500 100	<b>INDIANA</b>
KFPW 1210 100	KWG 1200 100 C	<b>Macon</b>	<b>Anderson</b>
<b>Hot Springs</b>	<b>COLORADO</b>	WMAZ 1180 500	WHBU 1210 100
KTHS 1040 10000 N	<b>Alamosa</b>	<b>Rome</b>	<b>Elkhart</b>
<b>Little Rock</b>	KGIV 1420 100	WFDV 1500 100	WTRC 1310 50
KARK 890 250	<b>Colorado Springs</b>	<b>Savannah</b>	<b>Evansville</b>
KGHI 1200 100	KVOR 1270 1000 C	WTOC 1260 500 C	WGBF 630 500
KLRA 1390 1000 C	<b>Denver</b>	<b>Thomasville</b>	<b>Fort Wayne</b>
<b>Paragould</b>	KFEL 920 500	WQDX 1210 100	WGL 1370 100 C
KBTM 1200 100	KFXF 920 500	<b>HAWAII</b>	WOWO 1160 10000 C
<b>Texarkana</b>	KLZ 560 1000 C	<b>Hilo</b>	<b>Gary</b>
KCMC 1420 100	KOA 830 12500 N	KWFV 1210 100	WIND 560 1000 C
<b>CALIFORNIA</b>	KPOF 880 500	<b>Honolulu</b>	<b>Hammond</b>
Bakersfield	<b>Grand Junction</b>	KGMB 1320 250 C	WVAE 1200 100
KERN 1200 100 C	KFXJ 1200 100	KGU 750 2500 N	<b>Indianapolis</b>
<b>Berkeley</b>	<b>Greeley</b>	<b>IDAHO</b>	WFBM 1230 1000 C
KRE 1370 100	KFKA 880 500	<b>Boise</b>	WKBF 1400 500 N
<b>Beverly Hills</b>	<b>Lamar</b>	KIDO 1350 1000	<b>Muncie</b>
KMPC 710 500	KIDW 1420 100	<b>Idaho Falls</b>	WLBC 1310 100
<b>Burbank</b>	<b>Pueblo</b>	KID 1320 250	<b>Richmond</b>
KELW 780 500	KGHF 1320 250	<b>Nampa</b>	WKBV 1500 100
<b>El Centro</b>	<b>Yuma</b>	KFXD 1200 100	<b>South Bend</b>
KXO 1500 100	KGEK 1200 100	<b>Pocatello</b>	WFAM 1200 100 C
<b>Eureka</b>	<b>CONNECTICUT</b>	KSEI 890 250	WSBT 1230 500 C
KIEM 1210 100	<b>Bridgeport</b>	<b>Twain Falls</b>	<b>Terre Haute</b>
<b>Fresno</b>	WICC 600 250 C	KTFI 1240 1000	WBOW 1310 100
KMJ 580 500 C	<b>Hartford</b>	<b>ILLINOIS</b>	<b>West Lafayette</b>
<b>Glendale</b>	WDRC 1330 1000 C	WCAZ 1070 50	WBAA 1400 500
KIEV 850 100			

# INDEX BY LOCATIONS

## IOWA

Ames  
 WOI 640 5000  
 Boone  
 KFGQ 1310 100  
 Carter Lake  
 KICK 1420 100  
 Cedar Rapids  
 KWCR 1420 100 B  
 Council Bluffs  
 KOIL 1260 1000 B  
 Decorah  
 KGCA 1270 100  
 KWLC 1270 100  
 Des Moines  
 KSO 1370 100 B  
 WOC- 1000 5000 R  
 WHO  
 Iowa City  
 WSUI 880 500  
 Marshalltown  
 KFJB 1200 100  
 Ottumwa  
 WIAS 1310 100  
 Shenandoah  
 KFNF 890 500  
 KMA 930 500  
 Sioux City  
 KSCJ 1330 1000 C  
 Waterloo  
 WMT 600 500 C

## KANSAS

Abilene  
 KFBI 1050 5000  
 Coffeyville  
 KGGF 1010 500  
 Dodge City  
 KGNO 1340 250  
 Kansas City  
 WLBF 1420 100  
 Lawrence  
 KFKU 1220 500  
 WREN 1220 1000 B  
 Manhattan  
 KSAC 580 500  
 Topeka  
 WIBW 580 1000 C  
 Wichita  
 KFHF 1300 1000 C

## KENTUCKY

Covington  
 WKY 1490 5000 B  
 Louisville  
 WAVE 940 1000  
 WHAS 820 50000 C  
 WLAP 1200 100  
 Paducah  
 WPAD 1420 100  
 LOUISIANA  
 Baton Rouge  
 WJBO 1420 100  
 Monroe  
 KMLB 1200 100  
 New Orleans  
 WBBX 1200 100  
 WDSU 1250 1000 C  
 WJBW 1200 100  
 WSMB 1320 500 N  
 WWL 850 10000  
 Shreveport  
 KRMD 1310 100  
 KTBS 1450 1000 N  
 KWEA 1210 100  
 KWKH 850 10000

## MAINE

Augusta  
 WRDO 1370 100

Bangor  
 WABI 1200 100  
 WLBZ 620 500 C  
 Portland  
 WCSH 940 1000 R  
 WLEC 1340 250  
 Presque Isle  
 WAGM 1420 100

## MARYLAND

Baltimore  
 WBAL 1060 10000 B  
 WCAO 600 250 C  
 WCBM 1370 100  
 WFBR 1270 500 R  
 Cumberland  
 WTBO 1420 100  
 Hagerstown  
 WJEJ 1210 100

## MASSACHUSETTS

Babson Park  
 WBOS 920 500  
 Boston  
 WAAB 1410 500 C  
 WBZ 990 50000 B  
 WEEI 590 1000 R  
 WHDH 830 1000  
 WNAC 1230 1000 C  
 Fall River  
 WSAR 1450 250  
 Lexington  
 WLEY 1370 100  
 New Bedford  
 WNBH 1310 100  
 Springfield  
 WBZA 990 1000 B  
 WMAZ 1420 100 C  
 Worcester  
 WORC 1280 500 C  
 WTAG 580 500 R

## MICHIGAN

Battle Creek  
 WELL 1420 50  
 Bay City  
 WBCM 1410 500  
 Calumet  
 WHDF 1370 100  
 Detroit  
 WJBK 1370 50  
 WJR 750 10000 B  
 WMBC 1420 100  
 WWJ 920 1000 R  
 WXYZ 1240 1000  
 East Lansing  
 WKAR 1040 1000

## FLINT

WFDK 1310 100  
 Grand Rapids  
 WASH 1270 500  
 WOOD 1270 500  
 Ironwood  
 WJMS 1420 100

## JACKSON

WIBM 1370 100  
 Kalamazoo  
 WKZO 590 1000  
 Lapeer  
 WMPG 1500 100  
 Ludington  
 WKBZ 1500 100  
 Marquette  
 WBOE 1310 100  
 Royal Oak  
 WEXL 1310 50

## MINNESOTA

Fergus Falls  
 KGDE 1200 100  
 Minneapolis  
 WCCO 810 50000 C  
 WDGY 1180 1000  
 WLB 1250 1000

WRHM 1250 1000  
 Moorhead  
 KGFK 1500 100  
 Northfield  
 WCAL 1250 1000  
 St. Paul  
 KSTP 1460 10000 N

## MISSISSIPPI

Greenville  
 WKFI 1210 100  
 Hattiesburg  
 WPFB 1370 100  
 Jackson  
 WJDX 1270 1000 N  
 Kosciusko  
 WHEF 1500 100  
 Laurel  
 WAML 1310 100  
 Meridian  
 WCOC 880 500  
 Mississippi City  
 WCGM 1210 100  
 Tupelo  
 WJEM 990 500  
 Vicksburg  
 WQBC 1360 500

## MISSOURI

Cape Girardeau  
 KFVS 1210 100  
 Columbia  
 KFRR 630 500  
 Jefferson City  
 WOS 630 500  
 Joplin  
 WMBH 1420 100  
 Kansas City  
 KMBC 950 1000 C  
 KWKC 1370 100  
 WDAF 610 1000 R  
 WHB 860 500  
 WQO 1300 1000  
 St. Joseph  
 KFEO 680 2500  
 St. Louis  
 KFMO 550 500  
 KMOX 1090 50000 C  
 KSD 550 500 R  
 KWK 1350 1000 B  
 WEW 760 1000  
 WIL 1200 100  
 Springfield  
 KGBX 1310 100  
 KGIZ 560 500

## MONTANA

Billings  
 KGHL 950 1000 N  
 Butte  
 KGIR 1360 500 N  
 Great Falls  
 KFBB 1280 1000  
 Kalispell  
 KGEZ 1310 100  
 Missoula  
 KGVO 1200 100  
 Wolf Point  
 KGCX 1310 100

## NEBRASKA

Clay Center  
 KMMJ 740 1000  
 Kearney  
 KGEG 1310 100  
 Lincoln  
 KFAB 770 5000 C  
 KFOR 1210 100  
 Norfolk  
 WJAG 1060 1000  
 North Platte  
 KGNF 1430 500  
 Omaha  
 WAAW 660 500

WOW 590 1000 R  
 Scottsbluff  
 KGKY 1500 100  
 York  
 KGBZ 930 500

## NEVADA

Las Vegas  
 KGIX 1420 100  
 Reno  
 KOH 1380 500 C  
 NEW HAMPSHIRE  
 Manchester  
 WFEA 1430 500 C  
 Portsmouth  
 WHEB 740 250

## NEW JERSEY

Asbury Park  
 WCAP 1280 500 A  
 Atlantic City  
 WPG 1100 5000 C  
 Camden  
 WCAM 1280 500  
 Jersey City  
 WAAT 940 300  
 WHOM 1450 250  
 Newark  
 WAAM 1250 1000  
 WGGP 1250 1000  
 WOR 710 5000  
 Paterson  
 WODA 1250 1000  
 Red Bank  
 WJBI 1210 100  
 Trenton  
 WTNJ 1280 500  
 Zarephath  
 WAWZ 1350 250

## NEW MEXICO

Albuquerque  
 KCGM 1230 250  
 KOB 1180 10000  
 Clovis  
 KICA 1370 100  
 Roswell  
 KGFL 1370 100  
 NEW YORK  
 Albany  
 WOKO 1430 500 C  
 Auburn  
 WMBO 1310 100  
 Binghamton  
 WNBZ 1500 100

Brooklyn  
 WARD 1400 500  
 WBBC 1400 500  
 WBBR 1300 1000  
 WCNW 1500 100  
 WLTH 1400 500  
 WMBQ 1500 100  
 WVFW 1400 500

## BUFFALO

WBEN 900 1000 R  
 WEBR 1310 100  
 WGR 550 1000 C  
 WKBW 1480 5000 C  
 WSVS 1370 50

## CANTON

WCAD 1220 500  
 Chester  
 WGNV 1210 100  
 Elmira  
 WESG 1040 1000  
 Freeport  
 WGBB 1210 100  
 Hudson Falls  
 WGLC 1370 100 C  
 Jamestown  
 WOCL 1210 50

# INDEX BY LOCATIONS

**New York**  
WABC 860 50000 C  
WBNX 1350 250  
WBOQ 860 50000  
WEAF 660 50000 R  
WEVD 1300 500  
WFAB 1300 1000  
WHN 1010 250  
WINS 1180 500  
WJZ 760 50000 B  
WLWL 1100 5000  
WMCA 570 500  
WNYC 810 500  
WOV 1130 1000  
WPAP 1010 250  
WQAO 1010 250  
WRNY 1010 250

**Rochester**  
WHAM 1150 50000 B  
WHEC 1430 500 C

**Saranac Lake**  
WNBZ 1290 50

**Schenectady**  
WGY 790 50000 R

**Syracuse**  
WFBL 1360 1000 C  
WSYR 570 250 B

**Troy**  
WHAZ 1300 500

**Tupper Lake**  
WHDL 1420 100

**Utica**  
WIBX 1200 100

**White Plains**  
WFAS 1210 100

**Woodside**  
WWRL 1500 100

**NORTH CAROLINA**  
**Asheville**  
WWNC 570 1000 N

**Charlotte**  
WBT 1080 50000 C  
WSOC 1210 100 N

**Greensboro**  
WBIG 1440 500 C

**Greenville**  
WEED 1420 100

**Raleigh**  
WPTF 680 5000 N

**Wilmington**  
WRAM 1370 100

**Winston-Salem**  
WSJS 1310 100 C

**NORTH DAKOTA**  
**Bismarck**  
KFYR 550 1000 N

**Devils Lake**  
KDLR 1210 100

**Fargo**  
WDAY 940 1000 N

**Grand Forks**  
KFJM 1370 100

**Mandan**  
KGCU 1240 250

**Minot**  
KLPM 1240 250

**OHIO**  
**Akron**  
WADC 1320 1000 C  
WJW 1210 100

**Canton**  
WHBC 1200 100

**Cincinnati**  
WFBE 1200 100  
WKRC 550 1000 C  
WLW 700 50000 N

WSAI 1330 1000 R

**Cleveland**  
WGAR 1450 500 B  
WHK 1390 1000 C  
WJAY 610 500  
WTAM 1370 50000 R

**Columbus**  
WAJU 640 500  
WCAH 1430 500 C  
WOSU 570 750  
WSEN 1210 100

**Dayton**  
WSMK 1380 200

**Mount Orab**  
WHBD 1370 100

**Toledo**  
WSPD 1340 1000 C

**Youngstown**  
WKBN 570 500 C

**Zanesville**  
WALR 1210 100

**OKLAHOMA**  
**Elk City**  
KASA 1210 100

**Enid**  
KCRC 1370 100

**Norman**  
WNAD 1010 500

**Oklahoma City**  
KFXR 1310 100  
KGFG 1370 100  
KOMA 1480 5000 C  
WKY 900 1000 N

**Ponca City**  
WBBZ 1200 100

**Shawnee**  
KGFF 1420 100

**Tulsa**  
KTUL 1440 250  
KVOO 1100 25000 N

**OREGON**  
**Corvallis**  
KOAC 550 1000

**Eugene**  
KORE 1420 100

**Klamath Falls**  
KFJI 1210 100

**Marshfield**  
KOOS 1370 100

**Medford**  
KMED 1310 100

**Portland**  
KALE 1300 500 C  
KBPS 1420 100  
KEX 1180 5000 N  
KFJR 1300 500  
KGW 620 1000 N  
KOIN 940 1000 C  
KWJJ 1060 500  
KXL 1420 100

**PENNSYLVANIA**  
**Allentown**  
WCBA 1440 250  
WSAN 1440 250

**Altoona**  
WFBG 1310 100

**Carbondale**  
WNBW 1200 10

**Erie**  
WLBW 1260 500 C

**Glenside**  
WIBG 970 100

**Grove City**  
WSAJ 1310 100

**Harrisburg**  
WBAK 1430 1000  
WHP 1430 500 C  
WKBO 1200 100

**Hazelton**  
WAZL 1420 100

**Johnstown**  
WJAC 1310 100

**Lancaster**  
WGAL 1310 100  
WKJC 1200 100

**Philadelphia**  
WCAU 1170 50000 C  
WDAS 1370 100  
WFI 560 500 R  
WHAT 1310 100  
WIP 610 500 C  
WLIT 560 500 R  
WPEN 1500 100  
WRAX 1020 250  
WTEL 1310 100

**Pittsburgh**  
KDKA 980 50000 B  
KQV 1380 500 C  
WCAE 1220 1000 R  
WJAS 1290 1000 C  
WWSW 1500 100

**Reading**  
WEEU 830 1000  
WRAP 1310 100

**Scranton**  
WGBI 880 250  
WQAN 880 250

**Silverhaven**  
WNBO 1200 100

**Sunbury**  
WKOK 1210 100

**Wilkes-Barre**  
WBAX 1210 100  
WBRE 1310 100

**Williamsport**  
WRAC 1370 100

**York**  
WORK 1000 1000

**PHILIPPINES**  
**Manila**  
KZEG 618.5 1000  
KZRM 618.5 50000

**PORTO RICO**  
**San Juan**  
WKAQ 1240 1000

**RHODE ISLAND**  
**Providence**  
WEAN 780 500 C  
WJAR 890 500 R  
WPRO 1210 100

**SOUTH CAROLINA**  
**Charleston**  
WCSC 1360 500

**Columbia**  
WIS 1010 500 N

**Greenville**  
WFBC 1200 100

**Spartanburg**  
WSPA 1420 100

**SOUTH DAKOTA**  
**Brookings**  
KFDY 550 500

**Huron**  
KGDY 1340 250

**Pierre**  
KGFX 630 200

**Rapid City**  
WCAT 1200 100

**Sioux Falls**  
KSOO 1110 1000

**Vermillion**  
KUSD 890 500

**Watertown**  
KGCR 1210 100

**Yankton**  
WNAX 570 1000 C

**TENNESSEE**  
**Bristol**  
WOPJ 1500 100

**Chattanooga**  
WDOD 1280 1000 C

**Jackson**  
WTJS 1310 100

**Knoxville**  
WNOX 560 1000 C  
WROL 1310 100

**Memphis**  
WHBQ 1370 100  
WMC 780 500 N  
WNBR 1430 500  
WREC 600 500 C

**Nashville**  
WLAC 1470 5000 C  
WSM 650 50000 N

**Springfield**  
WSIX 1210 100

**TEXAS**  
**Amarillo**  
KGRS 1410 1000  
WDAG 1410 1000

**Austin**  
KNOW 1500 100

**Beaumont**  
KFDM 560 500

**Brownsville**  
KWWG 1260 500

**College Station**  
WTAW 1120 500

**Corpus Christi**  
KGFI 1500 100

**Dallas**  
KRLD 1040 10000 C  
WFAA 800 50000 N  
WRR 1280 500 C

**Dublin**  
KFPL 1310 100

**El Paso**  
KTSM 1310 100  
WDAA 1310 100

**Fort Worth**  
KFJZ 1370 100  
KTAT 1240 1000 C  
WBAP 800 50000 N

**Galveston**  
KLUF 1370 100

**Greenville**  
KFPM 1310 15

**Harlingen**  
KRGV 1260 500

**Houston**  
KPRC 920 1000 N  
KTRH 1120 1000 C  
KXYZ 1440 250

**Lubbock**  
KFYO 1310 100

**San Angelo**  
KGKL 1370 100

**San Antonio**  
KABC 1420 100  
KMAC 1370 100  
KONO 1370 100  
KTSA 1290 1000 C  
WOAI 1190 50000 N

**Tyler**  
KGKB 1500 100

**Waco**  
WACO 1420 100 C

**Wichita Falls**  
KGKO 570 250

**UTAH**  
**Ogden**  
KLO 1400 500 C

INDEX BY LOCATIONS

<b>Salt Lake City</b> KDYL 1290 1000 N KSL 1130 50000 C	<b>Huntington</b> WSAZ 1190 1000 <b>Wheeling</b> WWVA 1160 5000 C	<b>NOVA SCOTIA</b> <b>Glace Bay</b> VAS 685 2000 <b>Halifax</b> CHNS 1050 500 F <b>Sydney</b> CJCB 880 50 F <b>Wolfville</b> CKIC 1010 50	<b>Montmagny</b> VE9EK 1195 10 <b>Moose Jaw</b> CJRM 540 500 F <b>Prince Albert</b> 10-BI 1200 25 <b>Regina</b> CHWC 1010 500 F CKCK 1010 500 F <b>Saskatoon</b> CFQC 1230 500 F <b>Yorkton</b> CJGX 630 500 F
<b>VERMONT</b> <b>Burlington</b> WCAX 1200 100 <b>Rutland</b> WSYB 1500 100 <b>St. Albans</b> WQDM 1370 100 <b>Springfield</b> WNBX 1260 250 <b>Waterbury</b> WDEV 550 500	<b>WISCONSIN</b> <b>Eau Claire</b> WTAQ 1330 1000 C <b>Fond du Lac</b> KFIZ 1420 100 <b>Green Bay</b> WHBY 1200 100 <b>Janesville</b> WCLO 1200 100 <b>LaCrosse</b> WKBH 1380 1000 C <b>Madison</b> WHA 940 1000 WIBA 1280 500 N <b>Manitowoc</b> WOMT 1210 100 <b>Milwaukee</b> WHAD 1120 250 C WISN 1120 250 C WTMJ 620 1000 N <b>Poynette</b> WIBU 1210 100 <b>Racine</b> WRJN 1370 100 <b>Sheboygan</b> WHBL 1410 500 <b>Stevens Point</b> WLBL 900 2500 <b>Superior</b> WEBC 1290 1000 N	<b>ONTARIO</b> <b>Brantford</b> 10-BQ 1200 <b>Chatham</b> CFCO 600 100 F <b>Cobalt</b> CKMC 1210 100 <b>Fort William</b> CKPR 780 100 F <b>Hamilton</b> CHML 1010 50 CKOC 1120 1000 F <b>Kingston</b> CFRC 915 100 <b>Kitchener</b> CKCR 645 100 <b>London</b> CFPL 730 100 F <b>North Bay</b> CFCH 930 100 F <b>Ottawa</b> CKCO 1010 100 CRCO 880 1000 F <b>Prescott</b> CFLC 930 100 <b>Preston</b> CKPC 930 100 F <b>St. Catharines</b> CKTB 1200 100 <b>Stratford</b> 10-AK 1200 15 <b>Sudbury</b> CJCS 780 500 <b>Toronto</b> CFRB 690 10000 C CKCL 580 100 CRCT 960 5000 N CKNC 1030 100 F <b>Windsor</b> CKLW 840 5000 C <b>Wingham</b> 10-BP 1200 15	<b>NEWFOUNDLAND</b> <b>St. John's</b> VOAC 800 40 VOAS 810 100 VOGY 1400 75 VOKW 1085 30 VONF 1195 400 VOWR 900 500 <b>MIQUELON</b> <b>St. Pierre</b> FQN 572 250
<b>VIRGINIA</b> <b>Arlington</b> NAA 690 1000 <b>Charlottesville</b> WEHC 1350 500 <b>Danville</b> WBTM 1370 100 <b>Lynchburg</b> WLVA 1370 100 <b>Newport News</b> WGH 1310 100 <b>Norfolk</b> WTRN 780 500 C <b>Petersburg</b> WPHR 1200 100 <b>Richmond</b> WBBL 1210 100 WMBG 1210 100 C WRVA 1110 5000 N <b>Roanoke</b> WDBJ 930 250 C WRBX 1410 250	<b>WYOMING</b> <b>Casper</b> KDFN 1440 500	<b>CENTRAL AMERICA</b> <b>COSTA RICA</b> <b>Cartago</b> TIFS 1441 7.5 TIGA 1014 30 <b>San Jose</b> TICR 912 75 TIEA 833 7.5 TIEP 1450 7.5 TIFB 714 30 TIGP 666 75 TIRCA 1100 500 TISO 550 250 TITV 999 7.5 TIVL 869 30 TIXA 614 7.5	<b>GUATEMALA</b> <b>Guatemala City</b> TGW 1350 500 TGX 1380 75 <b>EL SALVADOR</b> <b>San Salvador</b> RUS 664 500
<b>WASHINGTON</b> <b>Aberdeen</b> KXRO 1310 100 <b>Bellingham</b> KVOS 1200 100 <b>Everett</b> KFBL 1370 50 <b>Olympia</b> KGY 1210 100 <b>Pullman</b> KWSC 1220 1000 <b>Seattle</b> KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPBC 650 100 KRSC 1120 100 KITW 1220 1000 KVL 1370 100 KXA 760 250 <b>Spokane</b> KFIO 1120 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N <b>Tacoma</b> KMO 1330 250 KVI 570 500 C <b>Walla Walla</b> KUJ 1370 100 <b>Wenatchee</b> KPQ 1500 100 <b>Yakima</b> KIT 1310 100	<b>CANADA</b> <b>ALBERTA</b> <b>Calgary</b> CFAC 930 500 CFCN 1030 10000 F CJJC 690 500 <b>Edmonton</b> CHMA 580 250 CJCA 730 500 F CKUA 580 500 <b>Lethbridge</b> CJOC 840 100 F <b>BRT. COLUMBIA</b> <b>Chilliwack</b> CHWK 780 100 F <b>Kamloops</b> CFJC 1310 100 F <b>Kelowna</b> CKOV 1210 100 F <b>Trail</b> 10-AT 1155 25 <b>Vancouver</b> CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMO 1410 100 CKWX 1010 100 CRCV 1100 500 F <b>Victoria</b> CFCT 1430 50 <b>MANITOBA</b> <b>Brandon</b> CKX 1450 500 F <b>Winnipeg</b> CKY 910 5000 F	<b>PRINCE EDWARD ISLAND</b> <b>Charlottetown</b> CFCY 630 500 F CHCK 1310 100 <b>Summerside</b> CHGS 1120 100 F	<b>MEXICO</b> <b>AGUASCALIENTES</b> <b>Aguascalientes</b> XFC 805 350 <b>BAJA CALIFORNIA</b> <b>Mexicali</b> XEAO 560 100 <b>Tijuana</b> XEAE 980 800 XEOK 757 5000 <b>CHIHUAHUA</b> <b>Chihuahua</b> XEFI 1260 250 <b>Juarez</b> XEFV 1400 100 XEJ 1015 500 <b>COAHUILA</b> <b>Piedras Negras</b> XEPN 585 75000 <b>Saltito</b> XEL 1000 40 <b>Torreón</b> XETB 1380 125 <b>Villa Acuna</b> XER- 735 150000 XEF
<b>WEST VIRGINIA</b> <b>Bluefield</b> WHIS 1410 250 <b>Charleston</b> WOBU 580 500 <b>Fairmont</b> WMMN 890 250	<b>NEW BRUNSWICK</b> <b>Fredericton</b> CFNB 1030 500 F <b>St. John</b> CFBO 1210 100 F	<b>QUEBEC</b> <b>Chicoutimi</b> CRCS 1500 100 F <b>Hull</b> CKCH 1210 100 F <b>Montreal</b> CFCF 600 500 N CHLP 1120 100 CKAC 730 5000 C CRCM 910 5000 F <b>New Carlisle</b> CHNC 1210 100 F <b>Quebec</b> CHRC 930 100 F CKVC 1310 50 <b>SASKATCHEWAN</b> <b>Canora</b> 10-BU 1200 15 <b>Fleming</b> CJRW 540 500 F	



## INDEX BY LOCATIONS

<p><b>D. F.</b> <b>Mexico City</b></p> <p>XEAI 1090 100 XEB 1030 1000 XEFA 1250 500 XEFB 1085 500 XEFZ 1370 100 XEK 990 100 XEN 711 1000 XEO 940 5000 XEP 780 500 XETW 830 500 XETZ 1210 50 XEW 1100 250 XEW 010 5000 XEYZ 760 10000 XFG 638 2000 XFO 940 5000 XFX 840 500</p> <p><b>Toluca</b></p> <p>XEC 1000 50</p> <p><b>HIDALGO</b> <b>Pachuca</b></p> <p>XETU 890 100</p> <p><b>JALISCO</b> <b>Guadalajara</b></p> <p>XEA 1000 250 XED 1155 500</p> <p><b>MICHOACAN</b> <b>Morelia</b></p> <p>XEI 1310 250</p> <p><b>NUEVO LEON</b> <b>Monterrey</b></p> <p>XEFB 1315 100 XEFJ 1000 100 XEH 1132 250 XET 690 500 XEX 630 50</p> <p><b>PUEBLA</b> <b>Puebla</b></p> <p>XETH 860 100</p> <p><b>QUERETARO</b> <b>Queretaro</b></p> <p>XEFS 1000 40</p>	<p><b>SAN LUIS POTOSI</b> <b>San Luis Potosi</b></p> <p>XEAC 1295 100</p> <p><b>SONORA</b> <b>Nogales</b></p> <p>XEAF 990 750</p> <p><b>TAMAULIPAS</b> <b>Nuevo Laredo</b></p> <p>XEAB 1450 7.5 XEFE 1000 100 XENT 1115 150000</p> <p><b>Reynosa</b></p> <p>XEAW 965 10000</p> <p><b>Tampico</b></p> <p>XEFW 1280 70 XES 1020 250</p> <p><b>VERACRUZ</b> <b>Jalapa</b></p> <p>XFB 1290 1000</p> <p><b>Veracruz</b></p> <p>XEU 1010 100</p> <p><b>YUCATAN</b> <b>Merida</b></p> <p>XEFC 1050 100 XEY 546.8 10</p>	<p><b>Ciego de Avilla</b></p> <p>CMJH 1150 50 CMJI 1335 45 CMJO 1010 50</p> <p><b>Cienfuegos</b></p> <p>CMHJ 1125 60 CMHL 1290 20 CMHW 1200 100</p> <p><b>Colon</b></p> <p>CMGA 834 100</p> <p><b>Cruces</b></p> <p>CMHK 1225 50</p> <p><b>Guantanamo</b></p> <p>CMKJ 1300 20</p> <p><b>Havana</b></p> <p>CMAF 680 1000 CMBC 1270 150 CMBD 965 250 CMBG 1070 225 CMBJ 1140 500 CMBK 1485 15 CMBL 1445 200 CMBN 1185 150 CMBS 780 200 CMBW 1140 600 CMBY 1230 250 CMBZ 1010 150 CMC 840 500 CMCA 1230 150 CMCB 1070 150 CMCD 925 500 CMCF 890 250 CMCH 1410 50 CMCJ 1185 500 CMCM 1410 15 CMCN 1375 250 CMCP 1270 150 CMCQ 780 1000 CMCR 1375 150 CMCU 1100 500 CMCW 965 150 CMCY 1320 500 CMDD 588 150</p>	<p>CMDE 925 150 CMK 730 5000 CMQ 630 500 CMW 590 1400 CMX 890 1000</p> <p><b>Matanzas</b></p> <p>CMGB 1205 30 CMGC 820 30 CMGF 977 100 CMGH 1040 15</p> <p><b>Moron</b></p> <p>CMJP 1360 75</p> <p><b>Pinar del Rio</b></p> <p>CMAB 1249 20</p> <p><b>Santa Clara</b></p> <p>CMHI 1037 250</p> <p><b>Santiago</b></p> <p>CMKC 1034 150</p> <p><b>DOMINICAN REPUBLIC</b> <b>San Pedro de Macoris</b></p> <p>HHH 1395 15</p> <p><b>Santo Domingo</b></p> <p>HIJ 1195 15 HIX 580 1500 HIZ 1300 10</p> <p><b>HAITI</b> <b>Port-au-Prince</b></p> <p>HHK 920 1000</p> <p><b>SOUTH AMERICA</b> <b>ARGENTINE</b> <b>Buenos Aires</b></p> <p>LR5 830 20000</p> <p><b>COLOMBIA</b> <b>Bogota</b></p> <p>HJN 681 500</p> <p><b>VENEZUELA</b> <b>Caracas</b></p> <p>YVIB 960 5000 YV2BC 882 100 YV3BC 1200 1000</p>
---	--	--	--

## SHORT WAVE RELAY BROADCASTING STATIONS

### *Grouped According to Network Programs Transmitted*

Frequency in megacycles in first column, wavelength in meters in second column, schedule in third column, time being EST. The location of the broadcast band station is given in parentheses following the geographical location of the short wave transmitter.

#### COLUMBIA BROADCASTING SYSTEM

W2XE-WABC, Wayne, N. J. (New York, N. Y.)	15.258 19.65 11 a.m. to 1 p.m.
	11.823 25.36 3 p.m. to 5 p.m.
	6.116 49.02 6 to 11 p.m.
W3XAU-WCAU, Byberry, Pa. (Philadelphia, Pa.)	9.585 31.28 Noon to 6 p.m.
	6.057 49.50 8 p.m. to 1 a.m.

#### NATIONAL "RED" NETWORK

W1XAL-WEEI, Boston, Mass. (Boston, Mass.)	15.242 18.67 Sunday, 10 a.m. to 1 p.m.
	11.780 25.45 Sat., 5:30 to 11 p.m.; Sun., 6:30-8:30 p.m.
W2XAD-WGY, Schenectady, N. Y. (Schenectady, N. Y.)	15.320 19.57 Mon., Wed., Fri., Sun., 4-5 p.m.
W2XAF-WGY, Schenectady, N. Y. (Schenectady, N. Y.)	9.530 31.46 7:45 to 11 p.m.
W9XAA-WCFL, Chicago, Ill. (Chicago, Ill.)	17.780 16.86 Very Irregular
	11.840 25.35 Irregular
	6.076 49.34 3 to 6 p.m.

#### NATIONAL "BLUE" NETWORK

W1XAZ-WBZ-WBZA, Millis, Mass. (Boston and Springfield, Mass.)	9.560 31.36 6 a.m. to midnight
---	--------------------------------

W3XAL-WJZ, Boundbrook, N. J. (New York, N. Y.)	17.772 16.87 12:30 to 6:30 p.m., except Sat.
	6.096 49.17 Saturday 3 p.m. to midnight
W3XL-WJZ, Boundbrook, N. J. (New York, N. Y.)	6.425 46.66 Fri., 5 p.m. to 1 a.m.
W8XK-KDKA, Saxonburg, Pa. (Pittsburgh, Pa.)	21.451 13.93 7 a.m. to 2 p.m.
	15.204 19.72 10 a.m. to 4:15 p.m.
	11.870 25.25 4:30 to 10 p.m.
	6.140 48.83 4:30 p.m. to 12:30 a.m.

#### NATIONAL "RED" AND "BLUE" NETWORK

VE9DR-CFCF, Montreal, Quebec (Montreal, Quebec)	6.005 49.93 Sun., noon to 11:15 p.m. Other days, 7:30 a.m. to midnight
VE9GW-CRCT, Bowmanville, Ont. (Toronto, Ontario)	6.092 49.22 Thurs., 7 a.m. to 4 p.m.; Fri. and Sat., 3 to 11 p.m.; Sun., 11 a.m. to 8 p.m.
W4XB-WIOD, Miami Beach, Fla. (Miami Beach, Fla.)	6.036 49.67 Irregular
W8XAL-WLW, Mason, Ohio (Cincinnati, Ohio)	6.060 48.48 Irregular
W9XF-WENR, Downer's Grove, Ill. (Chicago, Ill.)	6.100 49.15 Sat., silent; Sun., 1 to 2:30 p.m., 4:30 to 7 p.m., 9 p.m. to 2 a.m.; other days, 4:30 to 8 p.m.; 9:30 p.m. to 2 a.m.

## INDEX BY CALL LETTERS

<b>CFAC</b> 930 500 Calgary, Alta. Calgary Herald.	<b>CKCH</b> 1210 100 Hull, Que. Dr. J. L. Chabot.
<b>CFBO</b> 1210 100 St. John, N. B. C. A. Munro, Ltd.	<b>CKCK</b> 1010 600 Regina, Sask. Leader-Post, Ltd.
<b>CFCF</b> 600 500 Montreal, Que. Canadian Marconi Co.	<b>CKCL</b> 580 100 Toronto, Ont. Dominion Battery Co., Ltd.
<b>CFCH</b> 930 100 North Bay, Ont. Northern Broadcasting Co., Ltd.	<b>CKCO</b> 1010 100 Ottawa, Ont. Dr. G. M. Geldert.
<b>CFCN</b> 1030 10000 Calgary, Alta. Voice of the Prairies, Ltd.	<b>CKCR</b> 645 100 Kitchener, Ont. William C. Mitchell and G. Liddle.
<b>CFCO</b> 600 100 Chatham, Ont. John Beardall.	<b>CKCV</b> 1310 50 Quebec, Que. Vandry, Inc.
<b>CFCT</b> 1430 50 Victoria, B. C. Victoria Broadcasting Assn.	<b>CKFC</b> 1410 50 Vancouver, B. C. Radio Service Engineers, Ltd.
<b>CFCY</b> 630 500 Charlottetown, P. E. I. Island Radio Broadcasting Co., Ltd.	<b>CKIC</b> 1010 50 Wolfville, N. S. Acadia University.
<b>CFJC</b> 1310 100 Kamloops, B. C. Review Publishing Co., Ltd.	<b>CKLW</b> 840 5000 Windsor, Ont. Western Ontario Broadcasting Co., Ltd.
<b>CFLC</b> 930 100 Prescott, Ont. Radio Assn. of Prescott.	<b>CKMC</b> 1210 100 Cobalt, Ont. R. L. MacAdam.
<b>CFNB</b> 1030 500 Fredericton, N. B. James S. Neill & Sons, Ltd.	<b>CKMO</b> 1410 100 Vancouver, B. C. Sprott-Shaw Radio Co.
<b>CFPL</b> 780 100 London, Ont. Free Press & Printing Co., Ltd.	<b>CKNC</b> 1030 100 Toronto, Ont. Canadian National Carbon Co., Ltd.
<b>CFQC</b> 1230 500 Saskatoon, Sask. Electric Shop, Ltd.	<b>CKOC</b> 1120 1000 Hamilton, Ont. Wentworth Radio Broadcasting Co., Ltd.
<b>CFRB</b> 690 10000 Toronto, Ont. Canadian Radio Corp., Ltd.	<b>CKOV</b> 1210 100 Kellowna, B. C. Okanagan Broadcasters, Ltd., Box 243.
<b>CFRC</b> 915 100 Kingston, Ont. Queens University.	<b>CKPC</b> 930 100 Preston, Ont. Cyrus Dolph.
<b>CHCK</b> 1310 100 Charlottetown, P. E. I. J. A. Gesner.	<b>CKPR</b> 780 100 Fort William, Ont. Dougall Motor Co., Ltd.
<b>CHGS</b> 1120 100 Summerside, P. E. I. R. T. Holman, Ltd.	<b>CKTB</b> 1200 100 St. Catharines, Ont. E. T. Sandell.
<b>CHLP</b> 1120 100 Montreal, Que. La Patric Publishing Co., Ltd.	<b>CKUA</b> 580 500 Edmonton, Alta. University of Alberta.
<b>CHMA</b> 580 250 Edmonton, Alta. Christian and Missionary Alliance.	<b>CKWX</b> 1010 100 Vancouver, B. C. Western Broadcasting Co., Ltd.
<b>CHML</b> 1010 50 Hamilton, Ont. Maple Leaf Radio Co., Ltd.	<b>CKX</b> 1450 500 Brandon, Man. Manitoba Telephone System.
<b>CHNC</b> 1210 100 New Carlisle, Que. Dr. Charles Houde.	<b>CKY</b> 910 5000 Winnipeg, Man. Manitoba Telephone System.
<b>CHNS</b> 1050 500 Halifax, N. S. Maritime Broadcasting Co., Ltd.	<b>CMAB</b> 1249 20 Pinar del Rio, Cuba. Jose Silveira, Marti No. 101.
<b>CHRC</b> 930 100 Quebec, Que. CHRC, Ltd.	<b>CMAF</b> 680 1000 Havana, Cuba. International Broadcasting Co., Miramar.
<b>CHWC</b> 1010 500 Regina, Sask. R. H. Williams & Sons, Ltd.	<b>CMBC</b> 1270 150 Havana, Cuba. Domingo Fernandez, Maximo Gomez No. 139
<b>CHWK</b> 780 100 Chilliwack, B. C. Chilliwack Broadcasting Co., Ltd.	<b>CMBD</b> 965 250 Havana, Cuba. Luis Perez Garcia, Enamorados y Flores.
<b>CJCA</b> 730 500 Edmonton, Alta. Edmonton Journal, Ltd.	<b>CMBG</b> 1070 225 Havana, Cuba. John L. Stowers, Hospital No. 100
<b>CJCB</b> 880 50 Sydney, N. S. Nathanson's Radio Headquarters.	<b>CMBJ</b> 1140 500 Havana, Cuba. Emilio Perera, Consulado y Virtudes.
<b>CJCJ</b> 690 500 Calgary, Alta. Albertan Publishing Co., Ltd.	<b>CMBK</b> 1485 15 Havana, Cuba. Alberto Alvarez, Paula y Oficio.
<b>CJCS</b> 780 500 Sudbury, Ont. George McLeod Cootes	<b>CMBL</b> 1445 200 Havana, Cuba. Julio C. Hidalgo, Vedado.
<b>CJGX</b> 630 500 Yorkton, Sask. Winnipeg Grain Exchange.	<b>CMBN</b> 1185 150 Havana, Cuba. G. de Sequeira, Agrimonte No. 32
<b>CJOC</b> 840 100 Lethbridge, Alta. H. R. Carson, Ltd.	<b>CMBS</b> 780 200 Havana, Cuba. Enrique Artalejo, Calzada y H. St.
<b>CJOR</b> 1210 500 Vancouver, B. C. G. C. Chandler.	<b>CMBW</b> 1140 600 Havana, Cuba. Alvarez, Moris y Cia, Obrapia No. 13.
<b>CJRM</b> 540 500 Moose Jaw, Sask. James Richardson & Sons, Ltd.	<b>CMBY</b> 1230 250 Havana, Cuba. Callejaa-Estefani, Principe No. 33.
<b>CJRW</b> 540 500 Fleming, Sask. James Richardson & Sons, Ltd.	<b>CMCZ</b> 1010 150 Havana, Cuba. Manuel y G. Salas, San Rafael No. 14.
<b>CKAC</b> 730 5000 Montreal, Que. LaPresse Publishing Co., Ltd.	<b>CMC</b> 840 500 Havana, Cuba. Radio Corp. of Cuba.
<b>CKCD</b> 1010 100 Vancouver, B. C. Vancouver Daily Province.	<b>CMCA</b> 1230 150 Havana, Cuba. Manuel Cruz, Ave. de Italia No. 102.

## INDEX BY CALL LETTERS

<b>CMCB</b> 1070	150	Havana, Cuba.
Metropolitan-Radio de Cuba.		
<b>CMCD</b> 926	500	Havana, Cuba.
Angel Bertematy.		
<b>CMCF</b> 890	250	Havana, Cuba.
Raoul Karman.		
<b>CMCH</b> 1410	60	Havana, Cuba.
Wifredo y Humberto Fontanale Sanchez.		
<b>CMCJ</b> 1185	500	Havana, Cuba.
Rafael Rodriguez, Esteves No. 4.		
<b>CMCM</b> 1410	15	Havana, Cuba.
Aurelio Balino, Belas Coslin No. 639.		
<b>CMCN</b> 1375	250	Havana, Cuba.
Antonio Ginard, Reina y Ave. Buen Retiroe		
<b>CMCP</b> 1270	150	Havana, Cuba.
Jose A. Yanis		
<b>CMCQ</b> 780	1000	Havana, Cuba.
Andres Martinez, Vista Alegre No. 80.		
<b>CMCR</b> 1375	150	Havana, Cuba.
Aurelio Hernandez.		
<b>CMCU</b> 1100	500	Havana, Cuba.
Jorge Garcia Serra.		
<b>CMCW</b> 985	150	Havana, Cuba.
Vilarino y Cervantes.		
<b>CMCY</b> 1325	500	Havana, Cuba.
Manuel D. Autran, Ave. de La Pdt a.215.		
<b>CMDD</b> 588	150	Havana, Cuba.
G. de Sequira		
<b>CMDE</b> 925	150	Havana, Cuba.
Radio Aerial Ad.		
<b>CMGA</b> 834	100	Colon, Cuba.
L. Valdes Figueroa, Marti No. 19.		
<b>CMQB</b> 1205	30	Matanzas, Cuba.
Jose Anorga, Magdalena No. 1.		
<b>CMGC</b> 820	30	Matanzas, Cuba.
Oscar S. Mechoso, Independencia No. 56.		
<b>CMGE</b> 1375	30	Cardenas, Cuba.
Genaro Sebater, Cespedes No. 180.		
<b>CMGF</b> 977	100	Matanzas, Cuba.
Bernabe R. de la Torre.		
<b>CMGH</b> 1040	15	Matanzas, Cuba.
Octavio y Julio Alvarez.		
<b>CMHD</b> 950	500	Caibarien, Cuba.
Manuel Alvarez, M. Escobar 17.		
<b>CMHI</b> 1037	250	Santa Clara, Cuba.
Lavis y Paz.		
<b>CMHJ</b> 1125	60	Cienfuegos, Cuba.
Victorino Lopes Hontanon.		
<b>CMHK</b> 1225	50	Cruces, Cuba.
Virgilio Villaneuva Fernandez.		
<b>CMHL</b> 1290	20	Cienfuegos, Cuba.
Oscar Zayas, San Carlos 143.		
<b>CMHW</b> 1200	100	Cienfuegos, Cuba.
San Carlos No. 106		
<b>CMJC</b> 1382	150	Camaguey, Cuba.
Feliciano Isaac, Cieneros y G. Gomes.		
<b>CMJE</b> 1175	50	Camaguey, Cuba.
Manuel Fernandez, Plaza de Maceo.		
<b>CMJF</b> 930	200	Camaguey, Cuba.
John L. Stowers, Hotel Plaza.		
<b>CMJG</b> 1050	50	Camaguey, Cuba.
Jose Antonio Lefran, Martires 133.		
<b>CMJH</b> 1150	50	Ciego de Avila, Cuba.
Luis Maraurl Mendosa.		
<b>CMJI</b> 1335	45	Ciego de Avila, Cuba.
Gilberto Gessa Lopez, Independencia 95.		
<b>CMJK</b> 780	500	Camaguey, Cuba.
Compania Cubana Nacional de Radio S. A.		
<b>CMJL</b> 980	50	Camaguey, Cuba.
Enrique Artime, Cuba No. 27.		
<b>CMJN</b> 1240	50	Camaguey, Cuba.
Ernesto de Ugariza, Martires 11.		

<b>CMJO</b> 1010	50	Ciego de Avila, Cuba.
Jose M. Rey, C. Central & Maceo.		
<b>CMJP</b> 1360	75	Moron, Cuba.
Cesar Canail, Callejas No. 28.		
<b>CMK</b> 730	5000	Havana, Cuba.
National Broadcasting Co. of Cuba.		
<b>CMKC</b> 1034	150	Santiago, Cuba.
Pinol Batlle y Co.		
<b>CMKJ</b> 1300	20	Guantanamo, Cuba.
Luis Morlote, East Glo 11.		
<b>CMQ</b> 830	500	Havana, Cuba.
Jose Fernandez, 25 Numero 445.		
<b>CMW</b> 590	1400	Havana, Cuba.
Troncoso y Gil, Paseo de Marti 103.		
<b>CMX</b> 890	1000	Havana, Cuba.
Casa "Lavin," Ave. de la Republica 99A.		
<b>CRCM</b> 910	5000	Montreal, Que.
Canadian Radio Broadcasting Commission		
<b>CRCO</b> 890	1000	Ottawa, Ont.
Canadian Radio Broadcasting Commission.		
<b>CRCS</b> 1500	100	Chicoutimi, Que.
Canadian Marconi Co., Ltd.		
<b>CRCT</b> 960	5000	Toronto, Ont.
Canadian Radio Broadcasting Commission.		
<b>CRCV</b> 1100	500	Vancouver, B. C.
Canadian Radio Broadcasting Commission.		
<b>FQN</b> 572	250	St. Pierre, Miq.
<b>HHK</b> 920	1000	Port-au-Prince, Haiti.
Haitian Government.		
<b>HIH</b> 1395	15	San Pedro de M., D. R.
Domingo Dominguez		
<b>HIJ</b> 1195	15	Santo Domingo, D. R.
Tuto Baes, Hostos 34		
<b>HIX</b> 580	1500	Santo Domingo, D. R.
J. R. Saladin, Director General		
<b>HIZ</b> 1300	10	Santo Domingo, D. R.
Abbes and Garcia		
<b>HJN</b> 681	500	Bogota, Colombia
Government of Colombia, National Library.		
<b>KABC</b> 1420	100	San Antonio, Texas.
Alamo Broadcasting Co., Inc.		
<b>KALE</b> 1300	500	Portland, Ore.
Kale, Inc., New Heathman Hotel		
<b>KARK</b> 890	250	Little Rock, Ark.
Arkansas Radio & Equipment Co.		
<b>KASA</b> 1210	100	Elk City, Okla.
E. M. Woody, Casa Grande Hotel.		
<b>KBPS</b> 1420	100	Portland, Ore.
Benson Polytechnic School		
<b>KBTM</b> 1200	100	Paragould, Ark.
Jay P. Beard.		
<b>KCMC</b> 1420	100	Texarkana, Ark.
M. P. Mims, Box 865.		
<b>KCRC</b> 1370	100	Enid, Okla.
Enid Radlphone Co.		
<b>KCRJ</b> 1310	100	Jerome, Ariz.
Chas. C. Robinson, Drawer D.		
<b>KDB</b> 1590	100	Santa Barbara, Calif.
Santa Barbara Broadcasters, Ltd.		
<b>KDFN</b> 1440	500	Casper, Wyo.
Donald Lewis Hathaway.		
<b>KDKA</b> 990	50000	Pittsburgh, Pa.
Westinghouse Electric & Mfg. Co.		
<b>KDLR</b> 1210	100	Devis Lake, N. D.
KDLR, Inc., 1025 3rd Street.		
<b>KDYL</b> 1290	1000	Salt Lake City, Utah.
Intermountain Broadcasting Corp.		
<b>KECA</b> 1430	1000	Los Angeles, Calif.
Earle C. Anthony, Inc.		
<b>KELW</b> 780	500	Burbank, Calif.
Magnolia Park, Ltd., 3702 Magnolia		

## INDEX BY CALL LETTERS

<b>KERN 1200 100</b>	Bakersfield, Calif. Bee Bakersfield Broadcasting Co.	<b>KFSG 1120 500</b>	Los Angeles, Calif. Echo Park Evangelistic Assn.
<b>KEX 1180 5000</b>	Portland, Ore. National Broadcasting Co.	<b>KFUO 550 500</b>	St. Louis, Mo. Evangelical Lutheran Church.
<b>KFAB 770 5000</b>	Lincoln, Neb. KFAB Broadcasting Co.	<b>KFVD 1000 250</b>	Los Angeles, Calif. E. L. Cord, 645 S. Mariposa.
<b>KFAC 1300 1000</b>	Los Angeles, Calif. E. L. Cord, 645 So. Mariposa.	<b>KFVS 1210 100</b>	Cape Girardeau, Mo. Oscar C. Hirsch, Box 275.
<b>KFBB 1280 1000</b>	Great Falls, Mont. Buttrey Broadcast, Inc.	<b>KFWB 950 1000</b>	Hollywood, Calif. Warner Bros. Motion Pictures, Inc.
<b>KFBI 1060 5000</b>	Abilene, Kans. Farmers & Bankers Life Ins. Co.	<b>KFWI 930 500</b>	San Francisco, Calif. Radio Entertainments, Ltd.
<b>KFBK 1310 100</b>	Sacramento, Calif. James McClatchy Publishing Co.	<b>KFXD 1200 100</b>	Nampa, Idaho. Frank E. Hurt, 1024 12th Ave., S.
<b>KFBL 1370 50</b>	Everett, Wash. Leese Bros., 2814 Rucker Ave.	<b>KFXF 920 500</b>	Denver, Colo. Colorado Radio Corp.
<b>KFDM 560 500</b>	Beaumont, Texas. Sabine Broadcasting Co.	<b>KFXJ 1200 100</b>	Grand Jct., Colo. Western Slope Broadcasting Co.
<b>KFDY 550 500</b>	Brookings, S. D. South Dakota State College.	<b>KFXM 1210 100</b>	San Bernardino, Calif. Lee Bros. Broadcasting Co.
<b>KFEL 920 500</b>	Denver, Colo. Eugene P. O'Fallon, Inc.	<b>KFXR 1310 100</b>	Oklahoma City, Okla. Exchange Avenue Baptist Church.
<b>KFEQ 680 2500</b>	St. Joseph, Mo. Seroggin & Co. Bank	<b>KFYO 1310 100</b>	Lubbock, Texas. Kirksey Bros., Hotel Lubbock.
<b>KFGQ 1310 100</b>	Boone, Iowa. Boone Biblical College.	<b>KFYR 550 1000</b>	Bismarck, N. D. Mayer Broadcasting Co.
<b>KFH 1300 1000</b>	Wichita, Kans. Radio Station KFH Co.	<b>KGA 1470 5000</b>	Spokane, Wash. Northwest Broadcasting Co., Inc.
<b>KFI 840 50000</b>	Los Angeles, Calif. Earle C. Anthony, Inc.	<b>KGAR 1370 100</b>	Tucson, Ariz. Tucson Motor Service Co.
<b>KFIO 1120 100</b>	Spokane, Wash. Spokane Broadcasting Corp.	<b>KGB 1330 1000</b>	San Diego, Calif. Don Lee Broadcasting System
<b>KFIZ 1420 100</b>	Fond du Lac, Wis. Reporter Printing Co.	<b>KGBU 900 500</b>	Ketchikan, Alaska. Alaska Radio & Service Co., Inc.
<b>KFJB 1200 100</b>	Marshalltown, Iowa. Marshall Electric Co.	<b>KGBX 1310 100</b>	Springfield, Mo. KGBX, Inc.
<b>KFJI 1210 100</b>	Klamath Falls, Ore. KFJI Broadcasters, Inc., Willard Hotel.	<b>KGBZ 930 500</b>	Yark, Neb. Dr. Geo. R. Miller, 715 Grant Ave.
<b>KFJM 1370 100</b>	Grand Forks, N. D. University of North Dakota.	<b>KGC 1270 100</b>	Decorah, Iowa Charles W. Greenley
<b>KFJR 1300 500</b>	Portland, Ore. Ashley C. Dixon-KFJR, Inc.	<b>KGCR 1210 100</b>	Watertown, S. D. Greater Kampeeka Radio Corp.
<b>KFJZ 1370 100</b>	Fort Worth, Texas. Fort Worth Broadcasters, Inc.	<b>KGCU 1240 250</b>	Mandan, N. D. Mandan Radio Assn.
<b>KFKA 880 500</b>	Greeley, Colo. Mid-Western Radio Corp.	<b>KGCX 1310 100</b>	Wolf Point, Mont. E. E. Krebsbach.
<b>KFKU 1220 500</b>	Lawrence, Kans. University of Kansas.	<b>KGDE 1200 100</b>	Fergus Falls, Minn. C. L. Jaren.
<b>KFLV 1410 500</b>	Rockford, Ill. Rockford Broadcasters, Inc.	<b>KQDM 1100 250</b>	Stockton, Calif. E. F. Pepper, 42 S. Calif. St.
<b>KFNF 890 500</b>	Shenandoah, Iowa. Henry Field Co.	<b>KGDY 1340 250</b>	Huron, S. D. Voice of S. D., Inc., 347 Dakota Ave.
<b>KFOR 1210 100</b>	Lincoln, Neb. Howard Shuman	<b>KGEK 1200 100</b>	Yuma, Colo. Elmer G. Beehler, 109 W. 2nd St.
<b>KFOX 1250 1000</b>	Long Beach, Calif. Nicholas & Warinner, Inc.	<b>KGER 1360 1000</b>	Long Beach, Calif. Consolidated Broadcasting Co.
<b>KFPL 1310 100</b>	Dublin, Texas. C. C. Baxter, Box 176	<b>KGEZ 1310 100</b>	Kalispell, Mont. Donald C. Treloar, Box 1.
<b>KFPM 1310 15</b>	Greenville, Texas. New Furniture Co.	<b>KGFF 1420 100</b>	Shawnee, Okla. KGFF Broadcasting Co., Inc.
<b>KFPW 1210 100</b>	Fort Smith, Ark. Southwestern Hotel Co.	<b>KGFQ 1370 100</b>	Oklahoma City, Okla. Oklahoma Broadcasting Co., 1113 N. Broadway.
<b>KFPY 1340 1000</b>	Spokane, Wash. Symons Broadcasting Co.	<b>KGFI 1500 100</b>	Corpus Christi, Texas. Eagle Broadcasting Co., Inc.
<b>KFQD 600 250</b>	Anchorage, Alaska Anchorage Radio Club, Inc.	<b>KGFJ 1200 100</b>	Los Angeles, Calif. Ben S. McGlashan, 1417 S. Figueroa.
<b>KFRC 810 1000</b>	San Francisco, Calif. Don Lee, Inc.	<b>KGFK 1500 100</b>	Moorhead, Minn. Red River Broadcasting Co., Inc.
<b>KFRU 830 500</b>	Columbia, Mo. KFRU, Inc., 9th and Elm Sts.	<b>KGFL 1370 100</b>	Roswell, N. M. KGFL, Inc., 507 N. Main St.
<b>KFSD 600 1000</b>	San Diego, Calif. Airfan Radio Corp., Ltd.	<b>KGFW 1310 100</b>	Kearney, Neb. Central Nebraska Broadcasting Corp.

## INDEX BY CALL LETTERS

<b>KGFX</b> 630 200 Pierre, S. D. Dana McNeil, 510 Summit Ave.	<b>KGHC</b> 1420 100 San Francisco, Calif. Golden Gate Broadcasting Co.
<b>KGFF</b> 1010 500 Coffeyville, Kans. Hugh J. Powell and Stanley Platz.	<b>KGGM</b> 1230 250 Albuquerque, N. M. New Mexico Broadcasting Co.
<b>KGHF</b> 1320 250 Pueblo, Colo. C. P. Ritchie & Geo. J. Ikelman	<b>KGHI</b> 1200 100 Little Rock, Ark. Lloyd Judd Co., Marion Hotel.
<b>KGHL</b> 950 1000 Billings, Mont. Northwestern Auto Supply Co.	<b>KGIR</b> 1360 500 Butte, Mont. KGIR, Inc., 121 W. Broadway.
<b>KGIW</b> 1420 100 Alamosa, Colo. Leonard E. Wilson, 326 N. Commercial	<b>KGIX</b> 1420 100 Las Vegas, Nev. J. M. Heaton, Box 656.
<b>KGIZ</b> 560 500 Springfield, Mo. Grant City Park Corp.	<b>KGKB</b> 1500 100 Tyler, Texas. East Texas Broadcasting Co.
<b>KGKL</b> 1370 100 San Angelo, Texas. KGKL, Inc., St. Angelus Hotel.	<b>KGKO</b> 570 250 Wichita Falls, Texas. Wichita Falls Broadcasting Co.
<b>KGKY</b> 1600 100 Scottsbluff, Neb. Hilliard Co., Inc., 1517½ Broadway.	<b>KGMB</b> 1320 260 Honolulu, T. H. Honolulu Broadcasting Co., 119 Merchant St.
<b>KGNF</b> 1430 500 North Platte, Neb. Great Plains Broadcasting Co.	<b>KGNO</b> 1340 250 Dodge City, Kans. KGNO Broadcasting Station
<b>KGO</b> 790 7500 San Francisco, Calif. National Broadcasting Co., Inc.	<b>KGRS</b> 1410 1000 Amarillo, Texas. E. B. Gish, Bellaire Park.
<b>KGU</b> 750 2500 Honolulu, T. H. Advertiser Publishing Co., Ltd.	<b>KGVO</b> 1200 100 Missoula, Mont. Mosby, Inc., 240 N. Higgins.
<b>KGW</b> 820 1000 Portland, Ore. Oregonian Publishing Co.	<b>KGY</b> 1210 100 Olympia, Wash. KGY, Inc., 11th and Capitol Way.
<b>KHJ</b> 900 1000 Los Angeles, Calif. Don Lee Broadcasting System.	<b>KHQ</b> 690 1000 Spokane, Wash. Louis Wasmer, Inc.
<b>KICA</b> 1370 100 Clevis, N. M. Southwest Broadcasting Co.	<b>KICK</b> 1420 100 Carter Lake, Iowa. Red Oak Radio Corp.
<b>KID</b> 1320 250 Idaho Falls, Idaho. KID Broadcasting Co., Inc.	<b>KIDO</b> 1350 1000 Boise, Idaho. C. G. Phillips & Frank L. Hill.
<b>KIDW</b> 1420 100 Lamar, Colo. Lamar Broadcasting Co., Box 688	<b>KIEM</b> 1210 100 Eureka, Calif. Harold H. Hanseth, Vance Hotel.
<b>KIEV</b> 850 100 Glendale, Calif. Cannon System, Ltd., Glendale Hotel.	<b>KIFH</b> 1310 100 Juneau, Alaska Juneau Broadcasting Co.
<b>KIT</b> 1310 100 Yakima, Wash. Valley Broadcasters, Inc.	<b>KJBS</b> 1070 100 San Francisco, Calif. Julius Brunton & Sons Co.

<b>KJB</b> 970 5000 Seattle, Wash. Fishers Blend Station, Inc.	<b>KLCM</b> 1290 100 Blytheville, Ark. C. L. Lintzenich, Main and Division St.
<b>KLO</b> 1400 500 Ogden, Utah. Interstate Broadcasting Co.	<b>KLPM</b> 1240 250 Minot, N. D. John B. Cooley.
<b>KLRA</b> 1390 1000 Little Rock, Ark. Arkansas Broadcasting Co.	<b>KLS</b> 1440 250 Oakland, Calif. Warner Bros., 2201 Telegraph Ave.
<b>KLUF</b> 1370 100 Galveston, Texas. Geo. R. Clough, 3327 Ave. P.	<b>KLX</b> 880 1000 Oakland, Calif. Tribune Building Co.
<b>KLZ</b> 560 1000 Denver, Colo. Reynolds Radio Co., Inc.	<b>KMA</b> 930 500 Shenandoah, Iowa. Earl E. May Seed & Nursery Co.
<b>KMAC</b> 1370 100 San Antonio, Texas. W. W. McAllister, Blue Bonnet Hotel.	<b>KMBC</b> 950 1000 Kansas City, Mo. Midland Broadcasting Co.
<b>KMED</b> 1310 100 Medford, Ore. Mrs. W. J. Virgin, Sparta Bldg.	<b>KMJ</b> 580 500 Fresno, Calif. James McClatchy Co.
<b>KMLB</b> 1200 100 Monroe, La. Linera Broadcasting Station, Inc.	<b>KMMM</b> 740 1000 Clay Center, Neb. The M. M. Johnson Co.
<b>KMO</b> 1330 250 Tacoma, Wash. KMO, Inc., Hotel Winthrop.	<b>KMOX</b> 1090 50000 St. Louis, Mo. The Voice of St. Louis, Inc.
<b>KMPC</b> 710 580 Beverly Hills, Calif. Beverly Hills Broadcasting Corp.	<b>KMTR</b> 570 500 Hollywood, Calif. KMTR Radio Corp., 915 N. Formosa Ave.
<b>KNOW</b> 1500 100 Austin, Texas. Southwest Broadcasting Co.	<b>KNX</b> 1050 25000 Hollywood, Calif. Western Broadcast Co., Inc.
<b>KOA</b> 830 12,500 Denver, Colo. General Electric Co., 1370 Krameria St.	<b>KOAC</b> 550 1000 Corvallis, Ore. Oregon State Agricultural College.
<b>KOB</b> 1180 10000 Albuquerque, N. M. Albuquerque Journal, Box 667.	<b>KOH</b> 1380 500 Reno, Nev. The Bee, Inc.
<b>KOIL</b> 1260 1000 Council Bluffs, Iowa. Mona Motor Oil Co.	<b>KOIN</b> 940 1000 Portland, Ore. KOIN, Inc., New Heathman Hotel.
<b>KOL</b> 1270 1000 Seattle, Wash. Seattle Broadcasting Co.	<b>KOMA</b> 1480 5000 Oklahoma City, Okla. National Radio Manufacturing Co.
<b>KOMO</b> 920 1080 Seattle, Wash. Fishers Blend Station, Inc.	<b>KONO</b> 1370 100 San Antonio, Texas. Morton Broadcasting Co., St. Anthony Hotel.
<b>KOOS</b> 1370 100 Marshfield, Ore. H. H. Hanseth, Hall Bldg.	<b>KORE</b> 1420 100 Eugene, Ore. Frank L. Hill and Curtis G. Phillipps.
<b>KOY</b> 1390 500 Phoenix, Ariz. Nielsen Radio & Sporting Goods Co.	<b>KPCB</b> 650 100 Seattle, Wash. Queen City Broadcasting Co.

## INDEX BY CALL LETTERS

<b>KPJM 1500 100 Prescott, Ariz.</b> Frank Mauthe, Box 852	<b>KTW 1220 1000 Seattle, Wash.</b> First Presbyterian Church.
<b>KPO 680 50000 San Francisco, Calif.</b> National Broadcasting Co., Inc.	<b>KUJ 1370 100 Walla Walla, Wash.</b> KUJ, Inc., Marcus Whitman Hotel.
<b>KPOF 880 500 Denver, Colo.</b> Pillar Of Fire, 1845 Champa St.	<b>KUMA 1420 100 Yuma, Ariz.</b> Dr. A. H. Schermann, Box 267.
<b>KPPC 1210 50 Pasadena, Calif.</b> Pasadena Presbyterian Church.	<b>KUOA 1280 1000 Fayetteville, Ark.</b> KUOA, Inc., Washington Hotel.
<b>KPQ 1500 100 Wenatchee, Wash.</b> Westcoast Broadcasting Co.	<b>KUSD 890 500 Vermillion, S. D.</b> University of South Dakota.
<b>KPRC 920 1000 Houston, Texas.</b> Houston Printing Co.	<b>KVI 590 500 Tacoma, Wash.</b> Puget Sound Broadcasting Co., Tacoma Hotel.
<b>KQV 1380 500 Pittsburgh, Pa.</b> KQV Broadcasting Co., Investment Bldg.	<b>KVL 1370 100 Seattle, Wash.</b> KVL, Inc., 5th and Virginia St.
<b>KQW 1010 500 San Jose, Calif.</b> Pacific Agricultural Foundation, Ltd.	<b>KVOA 1280 500 Tucson, Ariz.</b> Arizona Broadcasting Co., Inc.
<b>KRE 1370 100 Berkeley, Calif.</b> First Congregational Church.	<b>KVOO 1140 25000 Tulsa, Okla.</b> Southwestern Sales Corp.
<b>KREG 1500 100 Santa Ana, Calif.</b> The Voice of the Orange Empire, Inc.	<b>KVOR 1270 1000 Colorado Springs, Colo.</b> S. H. Paterson
<b>KRGV 1280 500 Harlingen, Texas.</b> KRGV, Inc.	<b>KVOS 1200 100 Bellingham, Wash.</b> KVOS, Inc., Bellingham Hotel.
<b>KRKD 1120 500 Los Angeles, Calif.</b> Fireside Broadcasting Corp.	<b>KWCR 1420 100 Cedar Rapids, Iowa.</b> Cedar Rapids Broadcast Co.
<b>KRLD 1040 10000 Dallas, Texas.</b> KRLD Radio Corp., Adolphus Hotel.	<b>KWEA 1210 100 Shreveport, La.</b> International Broadcasting Corp.
<b>KRMD 1310 100 Shreveport, La.</b> Radio Station KRMD, Inc.	<b>KWFF 1210 100 Hilo, Hawaii</b> Hilo Broadcasting Co., Ltd.
<b>KROW 930 500 Oakland, Calif.</b> Educational Broadcasting Corp.	<b>KWG 1200 100 Stockton, Calif.</b> McClatchy Newspapers, Inc.
<b>KRSC 1120 100 Seattle, Wash.</b> Radio Sales Corp., Washington Athletic Club.	<b>KWJJ 1080 500 Portland, Ore.</b> KWJJ Broadcast Co., Inc., 328 Salmon St.
<b>KSAC 580 500 Manhattan, Kans.</b> State College of Agriculture.	<b>KWK 1350 1000 St. Louis, Mo.</b> Thomas Patrick, Inc., Hotel Chase.
<b>KSCJ 1330 1000 Sioux City, Iowa.</b> Perkins Bros. Co., 415 Douglas St.	<b>KWKC 1370 100 Kansas City, Mo.</b> Wilson Duncan Broadcasting Co.
<b>KSD 550 500 St. Louis, Mo.</b> Pulitzer Publishing Co.	<b>KWKH 850 10000 Shreveport, La.</b> International Broadcasting Corp.
<b>KSEI 890 250 Pocatello, Idaho.</b> Radio Service Corp., 141 S. 6th Ave.	<b>KWLC 1270 100 Decorah, Iowa.</b> Luther College.
<b>KSL 1130 50000 Salt Lake City, Utah.</b> Radio Service Corp. of Utah.	<b>KWSC 1220 1000 Pullman, Wash.</b> State College of Washington.
<b>KSO 1370 100 Des Moines, Iowa.</b> Des Moines Register & Tribune.	<b>KWWG 1260 500 Brownsville, Texas.</b> Frank P. Jackson.
<b>KSOO 1110 1000 Sioux Falls, S. D.</b> Jos. Henkin, 1613 S. Duluth Ave.	<b>KXA 780 250 Seattle, Wash.</b> American Radio Tel. Co., 218 Bigelow Bldg.
<b>KSTP 1450 10000 St. Paul, Minn.</b> National Battery Broadcasting Co.	<b>KXL 1420 100 Portland, Ore.</b> KXL Broadcasters, 289 Pine St.
<b>KSUN 1200 100 Lowell, Ariz.</b> Copper Electrical Co.	<b>KXO 1500 100 El Centro, Calif.</b> E. R. Irey and F. M. Bowles.
<b>KTAB 580 1000 San Francisco, Calif.</b> Associated Broadcasters, Inc.	<b>KXRO 1310 100 Aberdeen, Wash.</b> KXRO, Inc., Hotel Morok.
<b>KTAR 620 500 Phoenix, Ariz.</b> KTAR Broadcasting Co.	<b>KXYZ 1440 250 Houston, Texas.</b> Harris County Broadcast Co.
<b>KTAT 1240 1000 Fort Worth, Texas.</b> Southwest Broadcasting Co.	<b>KYA 1230 1000 San Francisco, Calif.</b> Pacific Broadcasting Corp.
<b>KTBS 1450 1000 Shreveport, La.</b> Tri-State Broadcasting System.	<b>KYW 1020 10000 Chicago, Ill.</b> Westinghouse Elec. & Mfg. Co.
<b>KTFI 1240 1000 Twin Falls, Idaho.</b> Radio Broadcasting Corp.	<b>KZRM 618.5 50000 Manila, P. I.</b> Erlanger and Galingler, Inc. (KZEG)
<b>KTHS 1040 10000 Hot Springs, Ark.</b> Chamber of Commerce.	<b>LR5 830 20000 Buenos Aires, Arg.</b>
<b>KTM 780 500 Los Angeles, Calif.</b> Pickwick Broadcasting Corp., Ltd.	<b>NAA 690 1000 Arlington, Va.</b> United States Navy.
<b>KTRH 1120 1000 Houston, Texas.</b> KTRH Broadcasting Co., Rice Hotel.	<b>RUS 664 500 San Salvador, E. S.</b> Republic of El Salvador.
<b>KTSA 1290 1000 San Antonio, Texas.</b> Southwest Broadcasting Co.	<b>TGW 1350 500 Guatemala, Gua.</b> Gobierno de Guatemala.
<b>KTSM 1310 100 El Paso, Texas.</b> Tri-State Broadcasting Co., Inc.	<b>TGX 1380 75 Guatemala City</b>
<b>KTUL 1400 250 Tulsa, Okla.</b> J. T. Griffin	<b>TICR 912 75 San Jose, C. R.</b> Government of Costa Rica.

## INDEX BY CALL LETTERS

<b>TIEA</b> 833 7.5 San Jose, C. R.	<b>WAVE</b> 840 1000 Louisville, Ky. WFIW, Inc.
<b>TIEP</b> 1450 7.5 San Jose, C. R.	<b>WAWZ</b> 1350 250 Zarephath, N. J. Pillar of Fire.
<b>TIFB</b> 714 30 San Jose, C. R.	<b>WAZL</b> 1420 100 Hazleton, Pa. Hazleton Broadcasting Service, Inc.
<b>TIFS</b> 1441 7.5 Cartago, C. R.	<b>WBAA</b> 1400 500 West Lafayette, Ind. Purdue University.
<b>TIGA</b> 1014 30 Cartago, C. R.	<b>WBAK</b> 1430 1000 Harrisburg, Pa. Commonwealth of Pennsylvania.
<b>TIGP</b> 666 75 San Jose, C. R.	<b>WBAL</b> 1060 10000 Baltimore, Md. Consolidated Gas, Elec. Light & Power Co.
<b>TIRCA</b> 1100 600 San Jose, C. R. Perry Girtan, Apt. 225.	<b>WBAP</b> 800 50000 Fort Worth, Texas. Carter Publications, Inc.
<b>TISO</b> 650 250 San Jose, C. R. P. F. Saborio, Apt. 1354	<b>WBAX</b> 1210 100 Wilkes-Barre, Pa. John H. Stenger, Jr., 70 S. Main St.
<b>TITV</b> 999 7.5 San Jose, C. R.	<b>WBBC</b> 1400 500 Brooklyn, N. Y. Brooklyn Broadcasting Corp.
<b>TIVL</b> 859 30 San Jose, C. R.	<b>WBBL</b> 1210 100 Richmond, Va. Grace Covenant Presbyterian Church.
<b>TIXA</b> 814 7.5 San Jose, C. R. ]	<b>WBBM</b> 770 25000 Chicago, Ill. WBBM Broadcasting Corp., Wrigley Bldg.
<b>VAS</b> 685 2000 Glace Bay, N. S. Canadian Marconi Co., Ltd.	<b>WBBR</b> 1300 1000 Brooklyn, N. Y. Peoples Pulpit Assn.
<b>VE9EK</b> 1195 10 Montmagny, Que. J. A. Marquis, P. O. Box 57	<b>WBBX</b> 1200 100 New Orleans, La. Samuel D. Reeks, Marberc Hotel.
<b>VOAC</b> 800 40 St. John's, Nfld.	<b>WBBZ</b> 1200 100 Ponca City, Okla. C. L. Carrell.
<b>VOAS</b> 810 100 St. John's, N. F. Ayre & Sons, Ltd.	<b>WBCM</b> 1410 500 Bay City, Mich. James E. Davidson, Hotel Wenonah.
<b>VOGY</b> 1400 75 St. John's, N. F. Newfoundland Broadcasting Co.	<b>WBEN</b> 800 1000 Buffalo, N. Y. WBEN, Inc. (Buffalo Evening News.)
<b>VOKW</b> 1085 30 St. John's, N. F. Cyril L. Parkins.	<b>WBEO</b> 1310 100 Marquette, Mich. Lake Superior Broadcasting Co., Inc.
<b>VONF</b> 1195 400 St. John's, N. F. Dominion Broadcasting Co., Ltd., Box 1355.	<b>WBHS</b> 1200 100 Huntsville, Ala. Radio Station WBHS, Inc.
<b>VOWR</b> 900 500 St. John's, N. F. Wesley United Church, Box 157.	<b>WBIG</b> 1440 500 Greensboro, N. C. North Carolina Broadcasting Co., Inc.
<b>WAAB</b> 1410 500 Boston, Mass. Bay State Broadcasting Corp., 1 Winter Pl.	<b>WBIX</b> 1350 250 New York, N. Y. Standard Cahll Co., Inc.
<b>WAAF</b> 820 500 Chicago, Ill. Chicago Daily Drovers Journal.	<b>WBOQ</b> 860 50000 New York, N. Y. Atlantic Broadcasting Corp.
<b>WAAM</b> 1250 1000 Newark, N. J. WODAAM Corp., 1060 Broad St.	<b>WBOW</b> 1310 100 Terre Haute, Ind. Banks of Wabash, Inc., 24½ S. 6th.
<b>WAAT</b> 840 300 Jersey City, N. J. Bremer Broadcasting Corp., 50 Journal Sq.	<b>WBRC</b> 980 500 Birmingham, Ala. Frank M. King, Receiver.
<b>WAAW</b> 680 500 Omaha, Neb. Omaha Grain Exchange.	<b>WBRE</b> 1310 100 Wilkes-Barre, Pa. Louis G. Baltimore, 16 N. Main.
<b>WABC</b> 880 50000 New York, N. Y. Atlantic Broadcasting Corp.	<b>WBRO</b> 920 500 Babson Park, Mass. Broadcasting Service Organization, Inc.
<b>WABI</b> 1200 100 Bangor, Maine. First Universalist Society.	<b>WBT</b> 1080 50000 Charlotte, N. C. Station WBT, Inc., Wilder Bldg.
<b>WACO</b> 1420 100 Waco, Texas. Southwest Broadcasting Co.	<b>WBTM</b> 1370 100 Danville, Va. Piedmont Broadcasting Corp.
<b>WADC</b> 1320 1000 Akron, Ohio. Allen T. Simmons, P. O. Box 29.	<b>WBZ</b> 990 50000 Boston, Mass. Westinghouse Elec. & Mfg. Co.
<b>WAGM</b> 1420 100 Presque Isle, Me. Aroostook Broadcasting Corp.	<b>WBZA</b> 990 1000 Springfield, Mass. Westinghouse Elec. & Mfg. Co.
<b>WAIU</b> 840 500 Columbus, Ohio. Associated Radlocasting Corp.	<b>WCAC</b> 600 250 Storrs, Conn. Connecticut Agricultural College.
<b>WALR</b> 1210 100 Zanesville, Ohio. WALR Broadcasting Corp.	<b>WCAD</b> 1220 500 Canton, N. Y. St. Lawrence University.
<b>WAMC</b> 1420 100 Anniston, Ala. R. C. Hammett, 1200 Noble St.	<b>WCAE</b> 1220 1000 Pittsburgh, Pa. WCAE, Inc., Sun-Telegraph.
<b>WAML</b> 1310 100 Laurel, Miss. Southland Radio Corp.	<b>WCAH</b> 1430 500 Columbus, Ohio. International Bible Students Assn.
<b>WAPI</b> 1140 5000 Birmingham, Ala. WAPI Broadcasting Corp.	<b>WCAL</b> 1250 1000 Northfield, Minn. St. Olaf College.
<b>WARD</b> 1400 500 Brooklyn, N. Y. United States Broadcasting Corp.	<b>WCAM</b> 1280 500 Camden, N. J. City of Camden, City Hall.
<b>WASH</b> 1270 500 Grand Rapids, Mich. Kunsky-Trendle Broadcasting Corp.	<b>WCAO</b> 600 250 Baltimore, Md. Monumental Radio Co.

## INDEX BY CALL LETTERS

<b>WCAP 1280 500 Asbury Park, N. J.</b> Radio Industries Broadcast Co.	<b>WEAN 780 500 Providence, R. I.</b> Shepard Broadcasting Service, Inc.
<b>WCAT 1200 100 Rapid City, S. D.</b> South Dakota State School of Mines.	<b>WEBC 1290 1000 Superior, Wis.</b> Head of the Lakes Broadcasting Co.
<b>WCAU 1170 50000 Philadelphia, Pa.</b> WCAU Broadcasting Co., 1622 Chestnut.	<b>WEBQ 1210 100 Harrisburg, Ill.</b> Harrisburg Broadcasting Co.
<b>WCAX 1200 100 Burlington, Vt.</b> Burlington Daily News, Inc.	<b>WEBR 1310 100 Buffalo, N. Y.</b> Howell Broadcasting Co., Inc., 735 Main.
<b>WCAT 1070 50 Carthage, Ill.</b> Superior Broadcasting Service, Inc.	<b>WEOC 1210 100 Chicago, Ill.</b> Emil Denmark, 3860 Ogden Ave.
<b>WCBA 1440 250 Allentown, Pa.</b> B. Bryan Musselman, 39-41 10th St.	<b>WEED 1420 100 Greenville, N. C.</b> Wm. Avera Wynne.
<b>WCBD 1080 5000 Zion, Ill.</b> Wilbur Glenn Voliva.	<b>WEEL 590 1000 Boston, Mass.</b> Edison Elec. Illuminating Co.
<b>WCBM 1370 100 Baltimore, Md.</b> Baltimore Broadcasting Corp.	<b>WEEU 830 1000 Reading, Pa.</b> Berks Broadcasting Co., 533 Penn.
<b>WCBS 1210 100 Springfield, Ill.</b> WCBS, Inc., 208½ S. 5th.	<b>WEHC 1350 500 Charlottesville, Va.</b> Community Brdcastg. Corp.
<b>WCCO 810 50000 Minneapolis, Minn.</b> Northwestern Broadcasting, Inc.	<b>WEHS 1420 100 Cicero, Ill.</b> WEHS, Inc., 6138 W. 22nd St.
<b>WCFL 970 1500 Chicago, Ill.</b> Chicago Federation of Labor.	<b>WELL 1420 50 Battle Creek, Mich.</b> Enquirer News Co., 7 N. McCamly St.
<b>WCKY 1490 5000 Covington, Ky.</b> L. B. Wilson, Inc.	<b>WENC 1420 100 Americus, Ga.</b> Americus Broadcast Corp.
<b>WCLO 1200 100 Janesville, Wis.</b> WCLO Radio Corp.	<b>WENR 870 50000 Chicago, Ill.</b> Great Lakes Broadcasting Co.
<b>WCLS 1310 100 Joliet, Ill.</b> WCLS, Inc., 301 E. Jefferson St.	<b>WESG 1040 1000 Elmira, N. Y.</b> Elmira Star Gazette, Inc.
<b>WCNW 1500 100 Brooklyn, N. Y.</b> Arthur Paeko, 1525 Pitkin Ave.	<b>WEVO 1300 500 New York, N. Y.</b> Jewish Daily Forward, Hotel Claridge.
<b>WCOA 1340 500 Pensacola, Fla.</b> Pensacola Broadcasting Co.	<b>WEW 760 1000 St. Louis, Mo.</b> St. Louis University, 221 N. Grand Blvd.
<b>WCOC 880 500 Meridian, Miss.</b> Mississippi Broadcasting Co., Inc.	<b>WEXL 1310 50 Royal Oak, Mich.</b> Royal Oak Broadcasting Co.
<b>WCRW 1210 100 Chicago, Ill.</b> Clinton R. White, 2756 Pine Grove Ave.	<b>WFAA 800 50000 Dallas, Texas.</b> Morning News and Journal
<b>WCSC 1360 500 Charleston, S. C.</b> South Carolina Broadcasting Co., Inc.	<b>WFAB 1300 1000 New York, N. Y.</b> Fifth Avenue Broadcasting Corp.
<b>WCSH 940 1000 Portland, Me.</b> Congress Square Hotel Co., 157 High.	<b>WFAM 1200 100 South Bend, Ind.</b> South Bend Tribune, 200 W. Colfax.
<b>WDAE 1220 1000 Tampa, Fla.</b> Tampa Publishing Co., Tampa Terrace.	<b>WFAS 1210 100 White Plains, N. Y.</b> Westchester Broadcasting Corp.
<b>WOAF 810 1000 Kansas City, Mo.</b> Kansas City Star Co.	<b>WFBC 1200 100 Greenville, S. C.</b> Greenville News-Piedmont Co.
<b>WDAQ 1410 1000 Amarillo, Texas.</b> National Radio & Broadcasting Corp.	<b>WFBE 1200 100 Cincinnati, Ohio.</b> WFBE, Inc., Hotel Sinton.
<b>WOAH 1310 100 El Paso, Texas.</b> Tri-State Broadcasting Co., Inc.	<b>WFBG 1310 100 Altoona, Pa.</b> Gable Broadcasting Co. 12th Av. & 13th St.
<b>WDAS 1370 100 Philadelphia, Pa.</b> WDAS Broadcastg. Co., Inc., Broadwood Hotel.	<b>WFBL 1360 1000 Syracuse, N. Y.</b> Onondaga Radio Broadcasting Corp.
<b>WDAY 940 1000 Fargo, N. D.</b> WDAY, Inc., Black Bldg., 118 Broadway.	<b>WFBM 1230 1000 Indianapolis, Ind.</b> Indianapolis Power & Light Co.
<b>WDBJ 930 250 Roanoke, Va.</b> Times World Corp., 122 W. Church Ave.	<b>WFBR 1270 500 Baltimore, Md.</b> Baltimore Radio Show, Inc.
<b>WDBO 580 250 Orlando, Fla.</b> Orlando Broadcasting Co., Inc.	<b>WFOF 1310 100 Flint, Mich.</b> Flint Broadcasting Co.
<b>WDEL 1120 250 Wilmington, Del.</b> WDEL, Inc., 10th and King Sts.	<b>WFOV 1500 100 Rome, Ga.</b> Rome Broadcasting Corp., 10 3rd Ave.
<b>WDEY 550 500 Waterbury, Vt.</b> Harry C. Whitehill, Stowe St.	<b>WFEA 1430 500 Manchester, N. H.</b> New Hampshire Broadcasting Co.
<b>WDGY 1180 1000 Minneapolis, Minn.</b> Dr. Geo. W. Young, 909 W. Broadway.	<b>WFI 560 500 Philadelphia, Pa.</b> WFI Broadcasting Co., 801 Market.
<b>WOOD 1280 1000 Chattanooga, Tenn.</b> WDOD Broadcasting Corp., Hotel Patten.	<b>WFLA 620 1000 Clearwater, Fla.</b> Florida West Coast Broadcasting Co., Inc.
<b>WDRG 1330 1000 Hartford, Conn.</b> WDRG, Inc., Corning Bldg., 11 Asylum St.	<b>WGAL 1310 100 Lancaster, Pa.</b> WGAL, Inc., 8 W. King St.
<b>WDSU 1250 1000 New Orleans, La.</b> Jos. H. Uhalt, On Hotel DeSoto.	<b>WGAR 1450 500 Cleveland, Ohio.</b> WGAR Broadcasting Co., Hotel Statler.
<b>WDZ 1070 100 Tuscola, Ill.</b> James L. Bueh.	<b>WGBB 1210 100 Freeport, N. Y.</b> H. H. Carman, 64 S. Grove St.
<b>WEAF 680 50000 New York, N. Y.</b> National Broadcasting Co., Inc.	<b>WGBF 830 500 Evansville, Ind.</b> Evansville On the Air, Inc.



## INDEX BY CALL LETTERS

<b>WGBI 280 250</b> Scranton, Pa. Scranton Broadcasters, Inc.	<b>WHN 1010 250</b> New York, N. Y. Marcus Loew Booking Agency.
<b>WGCM 1210 100</b> Mississippi City, Miss. Great Southern Land Co., Gulfport, Miss.	<b>WHOM 1450 250</b> Jersey City, N. J. New Jersey Broadcasting Corp.
<b>WGCP 1250 1000</b> Newark, N. J. May Radio Broadcasting Co.	<b>WHP 1430 500</b> Harrisburg, Pa. WHP, Inc., Harrisburg Telegraph.
<b>WGES 1360 500</b> Chicago, Ill. Oak Leaves Broadcasting Station, Inc.	<b>WIAS 1310 100</b> Ottumwa, Iowa. Iowa Broadcasting Co., Hotel Ottumwa.
<b>WGH 1310 100</b> Newport News, Va. Hampton Roads Broadcasting Corp.	<b>WIBA 1280 500</b> Madison, Wis. Badger Broadcasting Co., Inc.
<b>WGL 1370 100</b> Fort Wayne, Ind. F. C. Zieg, 213 W. Main St.	<b>WIBG 970 100</b> Glenside, Pa. WIBG, Inc., Keswick Bldg.
<b>WGLC 1370 100</b> Hudson Falls, N. Y. O. T. Griffin & G. F. Blaisell.	<b>WIBM 1370 100</b> Jackson, Mich. WIBM, Inc., Otsego Hotel.
<b>WGN 720 50000</b> Chicago, Ill. WGN, Inc., Tribune Tower.	<b>WIBU 1210 100</b> Poynette, Wis. Wm. C. Forrest, R. F. D. No. 3.
<b>WGNV 1210 100</b> Chester, N. Y. Peter Goelet (Orange County).	<b>WIBW 580 1000</b> Topeka, Kans. Topeka Broadcasting Assn. Inc.
<b>WGR 550 1000</b> Buffalo, N. Y. Buffalo Broadcasting Corp.	<b>WIBX 1200 100</b> Utica, N. Y. WIBX, Inc., 1st Natl. Bank Bldg.
<b>WGST 890 250</b> Atlanta, Ga. Georgia School of Technology.	<b>WICC 600 250</b> Bridgeport, Conn. Shepard Broadcasting Service, Inc.
<b>WGY 790 50000</b> Schenectady, N. Y. National Broadcasting Co., Inc.	<b>WIL 1200 100</b> St. Louis, Mo. Missouri Broadcasting Corp.
<b>WHA 940 1000</b> Madison, Wis. University of Wisconsin.	<b>WILL 890 250</b> Urbana, Ill. University of Illinois.
<b>WHAD 1120 250</b> Milwaukee, Wis. Marquette University.	<b>WILM 1420 100</b> Wilmington, Del. Delaware Broadcasting Co., Inc.
<b>WHAM 1150 50000</b> Rochester, N. Y. Stromberg-Carlson Tel. Mfg. Co.	<b>WIND 580 1000</b> Gary, Ind. Johnson-Kennedy Broadcasting Corp.
<b>WHAS 820 50000</b> Louisville, Ky. Courier Journal & Louisville Times.	<b>WINS 1180 500</b> New York, N. Y. American Radio News Corp.
<b>WHAT 1310 100</b> Philadelphia, Pa. Curtis-Martin Newspapers, Inc.	<b>WIOO 1300 1000</b> Miami, Fla. Isle of Dreams Broadcasting Corp.
<b>WHAZ 1300 500</b> Troy, N. Y. Rensselaer Polytechnic Institute.	<b>WIP 610 500</b> Philadelphia, Pa. Pennsylvania Broadcasting Co.
<b>WHB 860 500</b> Kansas City, Mo. WHB Broadcasting Co., Scarritt Bldg.	<b>WIS 1010 500</b> Columbia, S. C. Station WIS, Inc., 1811 Main St.
<b>WHBC 1200 100</b> Canton, Ohio. Edw. P. Graham, 319 Tusc. St., W.	<b>WISN 1120 250</b> Milwaukee, Wis. American Radio News Corp.
<b>WHBD 1370 100</b> Mount Orab, Ohio. F. P. Moler.	<b>WJAC 1310 100</b> Johnstown, Pa. WJAC, Inc., Tribune Bldg. Annex.
<b>WHBF 1210 100</b> Rock Island, Ill. Rock Island Broadcasting Co.	<b>WJAG 1060 1000</b> Norfolk, Neb. Norfolk Daily News.
<b>WHBL 1410 500</b> Sheboygan, Wis. Press Publishing Co.	<b>WJAR 890 500</b> Providence, R. I. Outlet Co., Weybossett St.
<b>WHBQ 1370 100</b> Memphis, Tenn. Broadcasting Sta. WNBQ, Inc., Hotel Claridge.	<b>WJAS 1290 1000</b> Pittsburgh, Pa. Pittsburgh Radio Supply House.
<b>WHBU 1210 100</b> Anderson, Ind. Anderson Broadcasting Corp.	<b>WJAX 900 1000</b> Jacksonville, Fla. City of Jacksonville.
<b>WHBY 1200 100</b> Green Bay, Wis. WHBY, Inc., Bellin Bldg.	<b>WJAY 610 500</b> Cleveland, Ohio. Cleveland Radio Broadcasting Corp.
<b>WHDF 1370 100</b> Calumet, Mich. Upper Michigan Broadcasting Co.	<b>WJBC 1200 100</b> LaSalle, Ill. Kaaskaska Broadcasting Co.
<b>WHDH 830 1000</b> Boston, Mass. Matheson Radio Co., 62 Boylston.	<b>WJBI 1210 100</b> Red Bank, N. J. Monmouth Broadcasting Co., Inc.
<b>WHDL 1420 100</b> Tupper Lake, N. Y. Tupper Lake Broadcasting Co.	<b>WJBK 1370 50</b> Detroit, Mich. James F. Hopkins, Inc., Curtiss Bldg.
<b>WHEB 740 250</b> Portsmouth, N. H. Granite State Broadcasting Corp.	<b>WJBL 1200 100</b> Decatur, Ill. Commodore Broadcasting, Inc.
<b>WHEC 1430 500</b> Rochester, N. Y. WHEC, Inc., 40 Franklin St.	<b>WJBO 1420 100</b> Baton Rouge, La. Baton Rouge Broadcasting Co., Inc.
<b>WHEF 1500 100</b> Kosciusko, Miss. Attala Milling & Produce Co.	<b>WJBW 1200 100</b> New Orleans, La. C. C. Carlson, 2743 Dumaine St.
<b>WHET 1210 100</b> Troy, Ala. Troy Broadcasting Co.	<b>WJBY 1210 100</b> Gadsden, Ala. Gadsden Broadcasting Co., 112 N. 8th St.
<b>WHFC 1420 100</b> Cicero, Ill. WHFC, Inc., 6138 W. 22nd St.	<b>WJDX 1270 1000</b> Jackson, Miss. Lamar Life Insurance Co.
<b>WHIS 1410 250</b> Bluefield, W. Va. Daily Telegraph Printing Co., Inc.	<b>WJEJ 1210 100</b> Hagerstown, Md. Hagerstown Broadcasting Co., Inc.
<b>WHK 1390 1000</b> Cleveland, Ohio. Radio Air Service Corp.	<b>WJEM 990 500</b> Tupelo, Miss. Britt A. Rogers, Jr.

## INDEX BY CALL LETTERS

<b>WJJD</b> 1130 20000 Chicago, Ill. WJJD, Inc., 201 N. Wells St.	<b>WLIT</b> 560 600 Philadelphia, Pa. Lit Bros. Broadcasting System, Inc.
<b>WJMS</b> 1420 100 Ironwood, Mich. WJMS, Inc., St. James Hotel.	<b>WLS</b> 870 60000 Chicago, Ill. Agricultural Broadcasting Co.
<b>WJR</b> 750 10000 Detroit, Mich. WJR, Inc., Fisher Bldg.	<b>WLTH</b> 1400 600 Brooklyn, N. Y. Voice of Brooklyn, Inc.
<b>WJSV</b> 1460 10000 Washington, D. C. Old Dominion Broadcasting Co.	<b>WLVA</b> 1370 100 Lynchburg, Va. Lynchburg Broadcasting Corp.
<b>WJTL</b> 1370 100 Atlanta, Ga. Oglethorpe University.	<b>WLW</b> 700 60000 Cincinnati, Ohio. Croesley Radio Corp.
<b>WJW</b> 1210 100 Akron, Ohio. WJW, Inc., 41 S. High St.	<b>WLWL</b> 1100 6000 New York, N. Y. Missionary Society of St. Paul.
<b>WJZ</b> 760 60000 New York, N. Y. National Broadcasting Co., Inc.	<b>WMAL</b> 630 250 Washington, D. C. National Broadcasting Co., Inc.
<b>WKAQ</b> 1240 1000 San Juan, P. R. Radio Corp. of Porto Rico.	<b>WMAQ</b> 670 6000 Chicago, Ill. National Broadcasting Co., Inc.
<b>WKAR</b> 1040 1000 East Lansing, Mich. Michigan State College.	<b>WMAS</b> 1420 100 Springfield, Mass. WMAS, Inc., Hotel Stonehaven.
<b>WKBB</b> 1310 100 East Dubque, Ill. Richard W. Hoffman	<b>WMAZ</b> 1180 600 Macon, Ga. Southeastern Broadcasting Co.
<b>WKBC</b> 1310 100 Birmingham, Ala. R. B. Broyles, Tutwiler Hotel.	<b>WMBC</b> 1420 100 Detroit, Mich. Michigan Broadcasting Co.
<b>WKBF</b> 1400 600 Indianapolis, Ind. Indianapolis Broadcasting, Inc.	<b>WMBD</b> 1440 600 Peoria, Ill. Peoria Broadcasting Co.
<b>WKBH</b> 1380 1000 LaCrosse, Wis. WKBH, Inc., 409 Main St.	<b>WMBG</b> 1210 100 Richmond, Va. Havens and Martha, Inc.
<b>WKBI</b> 1420 100 Cicero, Ill. WKBI, Inc., 6138 W. 22nd St.	<b>WMBH</b> 1420 100 Joplin, Mo. W. M. Robertson.
<b>WKBN</b> 670 600 Youngstown, Ohio. WKBN Broadcasting Corp.	<b>WMBI</b> 1080 6000 Chicago, Ill. Moody Bible Institute.
<b>WKBO</b> 1200 100 Harrisburg, Pa. Keystone Broadcasting Corp.	<b>WMBO</b> 1310 100 Auburn, N. Y. WMBO, Inc., Metcalf Bldg.
<b>WKBV</b> 1500 100 Richmond, Ind. Wm. O. Knox, Box 286	<b>WMBQ</b> 1600 100 Brooklyn, N. Y. Paul J. Gollhofer, 95 Leonard St.
<b>WKBW</b> 1480 6000 Buffalo, N. Y. Buffalo Broadcasting Corp.	<b>WMBR</b> 1370 100 Tampa, Fla. F. J. Reynolda, 907 Florida Ave.
<b>WKBZ</b> 1600 100 Ludington, Mich. Karl L. Ashbacher & Sons.	<b>WMC</b> 780 600 Memphis, Tenn. WMC, Inc., Hotel Gayoso.
<b>WKEU</b> 1600 100 LaGrange, Ga. Radio Station WKEU, 906 Hill St.	<b>WMCA</b> 670 600 New York, N. Y. Knickerbocker Broadcasting Co.
<b>WKFI</b> 1210 100 Greenville, Miss. J. Pat Scully, Box 302.	<b>WMNN</b> 890 250 Fairmont, W. Va. A. M. Rowe, Inc., 325 Main St.
<b>WKJC</b> 1200 100 Lancaster, Pa. Lancaster Broadcasting Service, Inc.	<b>WMPC</b> 1500 100 Lapeer, Mich. First Methodist Protestant Church.
<b>WKOK</b> 1210 100 Sunbury, Pa. Sunbury Broadcasting Co.	<b>WMT</b> 600 600 Waterloo, Iowa. Waterloo Broadcasting Co.
<b>WKRC</b> 660 1000 Cincinnati, Ohio. WKRC, Inc., Hotel Alma.	<b>WNAC</b> 1230 1000 Boston, Mass. Shepard Broadcasting Service, Inc.
<b>WKY</b> 900 1000 Oklahoma City, Okla. Oklahoma Publishing Co.	<b>WNAD</b> 1010 600 Norman, Okla. University of Oklahoma.
<b>WKZO</b> 690 1000 Kalamazoo, Mich. John E. Fetzer, Burdick Hotel.	<b>WNAX</b> 670 1000 Yankton, S. D. The House of Gurney, Inc., 2nd and Capital St.
<b>WLAC</b> 1470 6000 Nashville, Tenn. Life & Casualty Insurance Co.	<b>WNB</b> 1600 100 Binghamton, N. Y. Howitt-Wood Radio Co., Inc.
<b>WLAP</b> 1200 100 Louisville, Ky. American Broadcasting Corp. of Ky.	<b>WNBH</b> 1310 100 New Bedford, Mass. New Bedford Broadcasting Co.
<b>WLB</b> 1250 1000 Minneapolis, Minn. University of Minnesota.	<b>WNBO</b> 1200 100 Silver Haven, Pa. John Brownlee Spriggs. (Washington, Pa.)
<b>WLBC</b> 1310 100 Muncie, Ind. D. A. Burton, Anthony Bldg.	<b>WNB</b> 1430 600 Memphis, Tenn. Memphis Broadcasting Co., Hotel DeVoy.
<b>WLB</b> 1420 100 Kansas City, Kans. WLB Broadcasting Co., Huron Bldg.	<b>WNBW</b> 1200 10 Carbondale, Pa. WNBW, Inc., 50 Main St., N.
<b>WLBL</b> 900 2500 Stevens Point, Wis. Wisconsin Dept. of Agriculture and Markets.	<b>WNBX</b> 1260 250 Springfield, Vt. WNBX Broadcasting Corp., 39 Main St.
<b>WLBW</b> 1280 600 Erie, Pa. Broadcasters of Pennsylvania, Inc.	<b>WNBZ</b> 1290 60 Saranac Lake, N. Y. Smith & Mace, 70 Broadway.
<b>WLBZ</b> 820 600 Bangor, Me. Maine Broadcasting Co., Inc., 100 Main.	<b>WNOX</b> 660 1000 Knoxville, Tenn. WNOX, Inc.
<b>WLEC</b> 1340 260 Portland, Me. Casco Bay Broadcasting Co.	<b>WNRA</b> 1420 100 Muscle Shoals, Ala. Kathryn Jones
<b>WLEY</b> 1370 100 Lexington, Mass. Albert S. Moffat	<b>WNYC</b> 810 500 New York, N. Y. Dept. of Plant and Structures.

# INDEX BY CALL LETTERS

**WQAI 1190 50000 San Antonio, Texas.**  
 Southern Industries, Inc., 1038 Navarro.  
**WOBU 580 500 Charleston, W. Va.**  
 WOBU, Inc., Ruffner Hotel.  
**WOC- 1000 50000 Des Moines, Iowa.**  
**WHO 1000 50000 Central Broadcastg. Co., 914 Walnut St.**  
**WOCL 1210 50 Jamestown, N. Y.**  
 A. E. Newton, 840 N. Main St.  
**WODA 1250 1000 Paterson, N. J.**  
 WODAAM Corp., 115 Ellison St.  
**WODX 1410 500 Mobile, Ala.**  
 Mobile Broadcasting Corp., Battle House.  
**WOI 640 5000 Ames, Iowa.**  
 Iowa State College.  
**WOKO 1430 500 Albany, N. Y.**  
 WOKO, Inc., Hotel Ten Eyck.  
**WOL 1310 100 Washington, D. C.**  
 American Broadcasting Co., Annapolis Hotel.  
**WOMT 1210 100 Manitowoc, Wis.**  
 Francis M. Kadow, Box 326.  
**WOOD 1270 500 Grand Rapids, Mich.**  
 Kunsky-Trendle Broadcasting Corp.  
**WOPI 1500 100 Bristol, Tenn.**  
 Radiophone Broadcasting Station WOPI, Inc.  
**WOQ 1300 1000 Kansas City, Mo.**  
 Unity School of Christianity.  
**WOR 710 5000 Newark, N. J.**  
 Bamberger Broadcasting Service, Inc.  
**WORC 1280 500 Worcester, Mass.**  
 Alfred F. Kleindienst, 60 Franklin St.  
**WORK 1000 1080 York, Pa.**  
 York Broadcasting Co., 15 S. Beaver St.  
**WOS 630 500 Jefferson City, Mo.**  
 State Highway Control, Capitol Bldg.  
**WOSU 570 750 Columbus, Ohio.**  
 Ohio State University.  
**WOV 1130 1000 New York, N. Y.**  
 International Broadcasting Corp.  
**WOW 590 1000 Omaha, Neb.**  
 Woodmen of the World, 4th and Farnam.  
**WOWO 1160 10000 Fort Wayne, Ind.**  
 Main Auto Supply Co., 213 W. Main.  
**WPAD 1420 100 Paducah, Ky.**  
 Paducah Broadcasting Co., Inc.  
**WPAP 1010 250 New York, N. Y.**  
 Marcus Loew Booking Agency.  
**WPEN 1500 100 Philadelphia, Pa.**  
 William Penn Broadcasting Co.  
**WPFB 1370 100 Hattiesburg, Miss.**  
 Otis P. Eure, Box 530.  
**WPG 1100 5000 Atlantic City, N. J.**  
 Columbia Broadcasting System.  
**WPHR 1200 100 Petersburg, Va.**  
 WLBG, Inc., Medical Arts Bldg.  
**WPRO 1210 100 Providence, R. I.**  
 Cherry & Webb Broadcasting Co., 15 Chestnut.  
**WPTF 680 5000 Raleigh, N. C.**  
 Durham Life Insurance Co.  
**WQAM 580 1000 Miami, Fla.**  
 Miami Broadcasting Co., Inc., 327 N. E. 1st Ave.  
**WQAN 880 250 Scranton, Pa.**  
 Scranton Times, 149 Penn Ave.  
**WQAO 1010 250 New York, N. Y.**  
 Marcus Loew Booking Agency.  
**WQBC 1360 500 Vicksburg, Miss.**  
 Delta Broadcasting Co., Hotel Vicksburg.  
**WQDM 1370 100 St. Albans, Vt.**  
 A. J. St. Antoine and E. J. Regan.  
**WQDX 1210 100 Thomasville, Ga.**  
 Stevens Luke, 135 E. Jackson St.  
**WRAK 1370 100 Williamsport, Pa.**  
 WRAK, Inc., 244 W. 4th St.

**WRAM 1370 100 Wilmington, N. C.**  
 Wilmington Radio Assn., Princess St.  
**WRAW 1310 100 Reading, Pa.**  
 Reading Broadcasting Co., 533 Penn St.  
**WRAX 1020 250 Philadelphia, Pa.**  
 WRAX Broadcasting Co., 217 S. Broad St.  
**WRBL 1200 100 Columbus, Ga.**  
 WRBL Radio Station, Inc.  
**WRBX 1410 250 Roanoke, Va.**  
 Richmond Development Corp.  
**WRC 950 500 Washington, D. C.**  
 National Broadcasting Co., Inc.  
**WRDO 1370 100 Augusta, Me.**  
 WRDO, Inc., Augusta House.  
**WRDW 1500 100 Augusta, Ga.**  
 Virgil V. Evans Co., 309 8th St.  
**WREC 600 500 Memphis, Tenn.**  
 WREC, Inc., Hotel Peabody.  
**WREN 1220 1000 Lawrence, Kans.**  
 Jenny Wren Co., 8th and Vermont St.  
**WRHM 1250 1000 Minneapolis, Minn.**  
 Minnesota Broadcasting Corp., 115 E. Grant.  
**WRJN 1370 100 Racine, Wis.**  
 Racine Broadcasting Corp., Hotel Racine.  
**WRNY 1010 250 New York, N. Y.**  
 Marcus Loew Booking Agency.  
**WROL 1310 100 Knoxville, Tenn.**  
 Stuart Broadcasting Corp., 524 S. Gay.  
**WRR 1280 500 Dallas, Texas.**  
 City of Dallas, Hilton Hotel.  
**WRUF 830 5000 Gainesville, Fla.**  
 State University.  
**WRVA 1110 5000 Richmond, Va.**  
 Larus & Bro. Co., Inc., 22nd and Gary St.  
**WSAI 1330 1000 Cincinnati, Ohio.**  
 Crosley Radio Corp., 1329 Arlington.  
**WSAJ 1310 100 Grove City, Pa.**  
 Grove City College.  
**WSAN 1440 250 Allentown, Pa.**  
 WSAN, Inc., 39 10th St.  
**WSAR 1450 250 Fall River, Mass.**  
 Doughty & Welch Electric Co., Inc.  
**WSAZ 1190 1000 Huntington, W. Va.**  
 WSAZ, Inc., 929½ 4th Ave.  
**WSB 740 50000 Atlanta, Ga.**  
 Atlanta Journal, 7 N. Forsyth St.  
**WSBC 1210 100 Chicago, Ill.**  
 Gene T. Dyer, 1258 S. Michigan Ave.  
**WSBT 1230 500 South Bend, Ind.**  
 South Bend Tribune.  
**WSEN 1210 100 Columbus, Ohio.**  
 Columbia Broadcasting Corp., 144 S. High.  
**WSFA 1410 500 Montgomery, Ala.**  
 Montgomery Brdg. Co., Inc., Jeff. Dav. H'l.  
**WSIX 1210 100 Springfield, Tenn.**  
 638 Tire & Vulcanizing Co.  
**WSJS 1310 100 Winston-Salem, N. C.**  
 Winston-Salem Journal Co., 416 N. Marshall.  
**WSM 550 50000 Nashville, Tenn.**  
 National Life & Accident Insurance Co.  
**WSMB 1320 500 New Orleans, La.**  
 WSMB, Inc., Maison Blanche Bldg.  
**WSMK 1380 200 Dayton, Ohio.**  
 S. M. Krohn, Jr., 4th and Main St.  
**WSOC 1210 100 Charlotte, N. C.**  
 WSOC, Inc., Box 730.  
**WSPA 1420 100 Spartanburg, S. C.**  
 Virgil V. Evans, Ravenel and Avant St.  
**WSPD 1340 1000 Toledo, Ohio.**  
 Toledo Broadcasting Co., 505 Jefferson  
**WSUI 880 500 Iowa City, Iowa.**  
 State University of Iowa.

INDEX BY CALL LETTERS

<b>WSUN 820 1000 St. Petersburg, Fla.</b> Florida Westcoast Broadcasting Co., Inc.	<b>XEAW 985 10000 Reynosa, Tams.</b> Internacional Broadcasting Co., S. A.
<b>WWSV 1370 50 Buffalo, N. Y.</b> Seneca Vocational High School.	<b>XEB 1930 10000 Mexico City, D. F.</b> El Buen Tono, S. A., Buen Tono No. 8.
<b>WWSY 1500 100 Rutland, Vt.</b> Philip Welles Music Co., 80 West St.	<b>XEC 1000 50 Toluca, D. F.</b> Jesus R. Benavides, Independencia 76.
<b>WSYR 570 250 Syracuse, N. Y.</b> Central New York Broadcasting Corp.	<b>XED 1155 500 Guadajajara, Jal.</b> Radiofonografica de Guadajajara, S. A.
<b>WTAD 1440 500 Quincy, Ill.</b> Illinois Broadcasting Corp., State and 6th.	<b>XEF 735 150000 Villa Acuna, Coah.</b> Compania Radiodifusora de Acuna, S. A.
<b>WTAG 580 500 Worcester, Mass.</b> Worcester Telegram Publishing Co.	<b>XEFA 1250 500 Mexico City, D. F.</b> Eduardo Limon Segui, Meditarraneo 236
<b>WTAM 1070 50000 Cleveland, Ohio.</b> National Broadcasting Co., Inc.	<b>XEFB 1315 100 Monterrey, N. L.</b> Jesus Quintanilla, 5 de Mayo Oriente 112.
<b>WTAQ 1330 1000 Eau Claire, Wis.</b> Gillette Rubber Co., Hotel Eau Claire.	<b>XEFC 1050 100 Merida, Yuc.</b> J. Molina Font, Calle 59, 517.
<b>WTAR 780 500 Norfolk, Va.</b> WTAR Radio Corp., Walnwright Bldg.	<b>XEFE 1000 100 Laredo, Tams.</b> Rafael T. Carranza.
<b>WTAW 1120 500 College Station, Texas.</b> Agricultural and Mechanical College.	<b>XEFG 1085 500 Mexico City, D. F.</b> Ricardo Gonzales Montero, Tepic 48
<b>WTAX 1210 100 Springfield, Ill.</b> WTAX, Inc., 416 E. Capitol Ave.	<b>XEFI 1260 250 Chihuahua, Chih.</b> Feliciano Lopez Isles, Ap. 157.
<b>WTBO 1420 100 Cumberland, Md.</b> Associated Broadcasting Corp., Box 794.	<b>XEFJ 1000 100 Monterrey, N. L.</b> R. Junco de la Vega, C. Morelos Oriente 759.
<b>WTEL 1310 100 Philadelphia, Pa.</b> Foulkrod Radio Engineering Co., Inc.	<b>XEFO 840 5000 Mexico City, D. F.</b> Partido Nacional Revolucionario.
<b>WTFI 1450 500 Athens, Ga.</b> Liberty Broadcasting Co., Costa Bldg.	<b>XEFS 1000 40 Queretaro, Qro.</b> Salvador Sanchez, Calle Montes 23.
<b>WTIC 1060 50000 Hartford, Conn.</b> Travelers Broadcasting Service Corp.	<b>XEFV 1400 100 Jaurez, Chih.</b> J. Onofre Meza, Ave. Lerdo Norte 521.
<b>WTJS 1310 100 Jackson, Tenn.</b> Sun Publishing Co., Sun Bldg.	<b>XEFW 1280 70 Tampico, Tams.</b> J. Expedito Martinez, C. Madero Poniente 19.
<b>WTMJ 820 1000 Milwaukee, Wis.</b> The Journal Co., 333 W. State St.	<b>XEFZ 1370 100 Mexico City, D. F.</b> Manuel Zetina
<b>WTNJ 1280 500 Trenton, N. J.</b> Trenton Broadcasting Co., Stacy Trent Hotel.	<b>XEH 1132 250 Monterrey, N. L.</b> Tarnava y Cia, P. Mier 215.
<b>WTOC 1280 500 Savannah, Ga.</b> Savannah Broadcasting Co., Inc., DeSoto Hotel.	<b>XEI 1310 250 Morelia, Mich.</b> Carlos Gutierrez M., F. I. Madero 545
<b>WTRC 1310 50 Elkhart, Ind.</b> Truth Radio Corp., Hotel Elkhart.	<b>XEJ 1015 500 Juarez, Chih.</b> Juan G. Buttner, Ave. Lerdo 309.
<b>WVFW 1400 500 Brooklyn, N. Y.</b> Paramount Brdcastg. Co., 1 Nevins St.	<b>XEK 990 100 Mexico City, D. F.</b> Arturo Martines, Jalapa No. 51
<b>WVAE 1200 100 Hammond, Ind.</b> Hammond Calumet Broadcasting Corp.	<b>XEL 1000 40 Saltillo, Coah.</b> Antonio Garza Castro, Aldama 59
<b>WWJ 920 1000 Detroit, Mich.</b> Evening News Assn., 616 Lafayette Blvd.	<b>XEN 711 1000 Mexico City, D. F.</b> Cerveceria Modelo S. A., Motolinia 22.
<b>WWL 850 10000 New Orleans, La.</b> Loyola University, Roosevelt Hotel.	<b>XENT 1115 150000 Nuevo Laredo, Tams.</b> Cia Industrial Universal S. A., Apt. 47.
<b>WWNC 570 1000 Asheville, N. C.</b> Citizen Broadcasting Co., Inc., Flatiron Bldg.	<b>XEO 940 5000 Mexico City, D. F.</b> Partido Nacional Revolucionario.
<b>WWRL 1500 100 Woodside, N. Y.</b> Long Island Broadcasting Corp.	<b>XEOK 750 2500 Tijuana, B. C.</b> Carlos de la Sierra, (Box 1441, San Diego).
<b>WWSW 1500 100 Pittsburgh, Pa.</b> Walker & Downing Radio Corp.	<b>XEP 780 500 Mexico City, D. F.</b> Cia Difusora de Mexico S. A., Durango 74.
<b>WWVA 1160 5000 Wheeling, W. Va.</b> West Virginia Broadcasting Corp.	<b>XEPN 585 75000 Piedras Negras, Coah</b> Piedras Negras Broadcasting Co.
<b>WXYZ 1240 1000 Detroit, Mich.</b> Kunsky-Trendle Broadcasting Corp.	<b>XER 735 150000 Villa Acuna, Coah.</b> Compania Radiodifusora de Acuna, S. A.
<b>XEA 1000 250 Guadajajara, Jal.</b> Alberto Palos Souza, Juan Manuel 383	<b>XES 1020 250 Tampico, Tams.</b> Fernando Sada, Hotel Inglaterra.
<b>XEAB 1450 7.5 Nuevo Laredo, Tams.</b> Homberto Garcia.	<b>XET 690 500 Monterrey, N. L.</b> Cadena Radiodifusora Mexicana, S. A.
<b>XEAC 1295 100 San Luis Potosi, S. L. P.</b> Francisco de P. Cabrera.	<b>XETB 1380 125 Torreon, Coah.</b> Jose A. Berumen, R. Corona 317.
<b>XEAE 980 800 Tijuana, B. C.</b> Adolfo Labastida, Jr., Ave. D 542.	<b>XETH 880 100 Puebla, Pua.</b> Ramon Huerta G., Calle 17, Oriente 6.
<b>XEAF 990 750 Nogales, Son.</b> Manuel Mascarenas M., Hotel Central.	<b>XETU 890 100 Pachuca, Hdgo.</b> Benito Castillo
<b>XEAI 1090 100 Mexico City, D. F.</b> Carlos Gonzales Caballero, Insurgentes 366.	<b>XETW 830 500 Mexico City, D. F.</b> Rafael M. Pena, Gante 4, 3er piso
<b>XEAO 560 100 Mexicali, B. C.</b> Luis L. Castro, C. Altamirano 156.	

## INDEX BY CALL LETTERS

<b>XETZ</b>	<b>1210</b>	<b>500</b>	<b>Mexico City, D. F.</b> Jose Alvarez del Villar, 92 Londres 190.
<b>XEU</b>	<b>1010</b>	<b>100</b>	<b>Veracruz, Ver.</b> Fernando Pazos Sosa, Vicario 12.
<b>XEW</b>	<b>910</b>	<b>5000</b>	<b>Mexico City, D. F.</b> Cadena Radiodifusora Mexicana S. A.
<b>XEWW</b>	<b>1100</b>	<b>250</b>	<b>Veracruz, Ver.</b> Horacio Remes, Calle Canal 42.
<b>XEX</b>	<b>630</b>	<b>50</b>	<b>Monterrey, N. L.</b> Luis F. Petit Jean, Aldama 932 Sur.
<b>XEY</b>	<b>546.8</b>	<b>10</b>	<b>Merida, Yuc.</b> Partido Socialista del Surest.
<b>KEYZ</b>	<b>760</b>	<b>10000</b>	<b>Mexico City, D. F.</b> Angel M. Diez, Ave. Juarez 48.
<b>XFB</b>	<b>1290</b>	<b>1000</b>	<b>Jalapa, Ver.</b> Gobierno del Estado de Veracruz.
<b>XFC</b>	<b>805</b>	<b>350</b>	<b>Aguascalientes, Ags.</b> Gobierno del Estado de Aguascalientes.
<b>XFG</b>	<b>638.3</b>	<b>2000</b>	<b>Mexico City, D. F.</b> Secretaria de Guerra y Marina.
<b>XFO</b>	<b>940</b>	<b>5000</b>	<b>Mexico City, D. F.</b> National Revolucionario Party.
<b>XFX</b>	<b>840</b>	<b>500</b>	<b>Mexico City, D. F.</b> Secretaria de Educacion Publica.

<b>YV1BC</b>	<b>960</b>	<b>5000</b>	<b>Caracas, Venez.</b> Cla Ama Alamacen Americana.
<b>YV2BC</b>	<b>882</b>	<b>100</b>	<b>Caracas, Venez.</b>
<b>YY3BC</b>	<b>1200</b>	<b>1000</b>	<b>Caracas, Venez.</b> Degwitz & Sibless.
<b>10-AK</b>	<b>1200</b>	<b>15</b>	<b>Stratford, Ont.</b> M. I. Higgins, 151 Ontario St.
<b>10-AT</b>	<b>1155</b>	<b>25</b>	<b>Trill, B. C.</b> Trill Amateur Radio Assn.
<b>10-BI</b>	<b>1200</b>	<b>25</b>	<b>Prince Albert, Sask.</b> Prince Albert Radio Club.
<b>10-BP</b>	<b>1200</b>	<b>16</b>	<b>Wingham, Ont.</b> W. T. Cruickshank.
<b>10-BQ</b>	<b>1200</b>	<b>5</b>	<b>Brantford, Ont.</b> Tom and Harold Brown.
<b>10-BU</b>	<b>1200</b>	<b>15</b>	<b>Canora, Sask.</b> Canora Radio Assn.

## A Home Made Set

*(Continued from page 45)*

early as 1923 when I first started with a simple home-made crystal set. A year later I began assembling various one-tube circuits such as regenerative, super-regenerative, etc. Then I started to build various multi-tube sets. I experimented with the newly developed neutrodyne circuit which I found to give stable control of oscillation but not as much volume on DX stations. But I did not get set for proper DXing until 1925. It was in August of that year when I began fishing around for stations which I thought would never come through my receiver. After various adjustments of my three-dial set and very much to my surprise, the very first DX station I picked up was KFI, followed on the same evening by WFAA and WBAP. As the winter came on, my list grew bigger. Then I became an avowed DXer—a victim of the scourge that makes one wait up for the sunrise. I have now received all stations in the U. S. A. except 40 which I hope to pick up in the future. In addition I have logged 19 foreign

countries.

"The receiver through which these receptions were accomplished I constructed myself, improving it as time went on until now I believe it has reached its peak of performance. The circuit is of my design also. It is a kind of three-tube hookup, consisting of two 201-A tubes as radio frequency amplifiers, followed by 112-A amplification. There are two stages of audio frequency amplification but I use only the first three tubes and phones for all DX work. The power is supplied by a storage battery and a B Eliminator."

We can only summarize the long list of stations which Mr. Wyborski sends us. According to this he has received the following: Alaska, 1; Arizona, 2; California, 35; Colorado, 10; Hawaii, 2; Idaho, 5; Montana, 4; Nevada, 1; New Mexico, 3; Oregon, 8; Philippines, 1; Texas, 31; Utah, 3; Washington, 15; Wyoming, 1; Canada, 60; Costa Rica, 1; Salvador, 1; Mexico, 26; Cuba, 26; D. R. 1; Haiti, 1; Argentine, 2; Columbia, 1; Venezuela, 3; France, 1; Germany, 1; England, 1; Australia, 2; New Foundland, 1.

# AROUND *the* CLOCK on the SHORT WAVES

MIDNIGHT TO NOON (EST)

GMT	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
AST	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00
EST	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
CST	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00
MST	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00
PST	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
	W8XK W9XF	VK2ME W9XF	GSD GSF VK2ME	RV15 GSD GSF	RV15	J1AA RV15 VK2ME VK3ME	J1AA RV15 VK2ME VK3ME W1XAZ ZGE	EAR58 GSE GSG PHI Rabat RV15 VE9DR VE9GW VK2ME W1XAZ W8XK ZGE	DJB EAR58 GSE GSG PHI H11A PHI Rabat VE9DR VE9GW W1XAZ W8XK YV2AM YV3BC ZGE	DJB GSE GSF PHI Pont. VE9DR VE9GW VE9JR VK2ME W1XAZ W8XK YV2AM YV3BC	CT3AQ DJB DJD GSB GSF Pont. VE9DR VE9GW W1XAL W1XAZ W8XK YV3BC	CT3AQ DJB DJD GSB GSF I2RO Pont. VE9DR VE9GW VE9JR W1XAL W1XAZ W8XK YV3BC

NOON TO MIDNIGHT (EST)

GMT	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	1:00	2:00	3:00	4:00
AST	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00
EST	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
CST	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00
MST	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00
PST	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
	DJB DJD GSB GSF H11A I2RO Pont. TGW VE9DR VE9GW VE9JR VE9JR W1XAL W1XAZ W2XE W3XAL W3XAU W8XK	DJB DJD GSC GSD H11A I2RO Pont. VE9DR VE9GW VE9JR VE9JR W1XAL W3XAL W3XAU W8XK W9XF	DJB DJD GSC GSD I2RO OXY Rabat VE9DR VE9GW VE9JR VE9JR W1XAL W3XAL W3XAU W8XK W9XF	DJB DJD GSC GSD H14ABB I2RO OXY Pont. Rabat RV59 VE9DR VE9GW VE9JR VE9JR W1XAL W2XE W3XAL W3XAU W8XK	CT1AA DJD GSC GSD OXY Pont. Rabat RV59 VE9DR VE9GW HIZ HJ1ABB I2RO OXY RV59 VE9DR VE9GW W8XK W9XF YV3BC	CT1AA CT3AQ DJA DJD EAQ GSA GSC HBL HBP HJ1ABB OXY VE9DR VE9GW W1XAL W1XAZ W2XAF W3XAL W8XK W9XF XETE YV1BC YV3BC	CT1AA CT3AQ DJA EAQ GSA GSC HBL HBP HJ1ABB OXY VE9DR VE9GW W1XAL W1XAZ W2XAF W3XAL W8XK W9XF XETE YV1BC YV3BC	DJA EAQ GSA GSA GSC HJ1ABB HJ2ABA HJ4ABE LSX Pont. VE9DR VE9GW W1XAL W1XAZ W2XAF W2XE W3XAL W8XK W9XF XETE YV1BC YV3BC	DJA DJC HJ1A 1ABB 2ABA 3ABB 4ABB 4ABB PRADO TGW VE9DR VE9GW VE9JR VE9JR W1XAL W2XAF W2XAF W2XE W3XAL W3XAU W8XK W9XF YV3BC	HC2RL HJ 1ABB 2ABA 3ABB 4ABB PRADO TGW VE9DR VE9GW VE9JR VE9JR W1XAL W2XAF W2XAF W2XE W3XAL W3XAU W8XK W9XF YV3BC	HC2RL HJ 3ABB Pont. PRADO TGW NRH VE9DR VE9GW W1XAL W1XAZ W2XE W3XAL W3XAU W8XK XETE	HJ 4ABB Pont. VE9DR W1XAZ W3XAL W3XAU W8XK W9XF XETE

# One Hundred Best Short Wave Stations

## Arranged Alphabetically

Stations marked with an asterisk (\*) will not verify. Frequencies are given in megacycles. Times are given in Eastern Standard.

- \*British Ships, 13.220, 8.831, 4.174  
 \*CEC, Chile, 19.678, 15.865  
 CGA, Canada, 13.296, 9.340  
 CNR, Morocco, 12.820  
 CP5, Bolivia, 6.081  
 CT1AA, Portugal, 9.592. Tues. and Fri., 4:30-7 p.m.  
 CT3AQ, Madeira, Tues., Thurs., 5-6:30 p.m.; Sun. 10:30 a.m.-noon.  
 DAF, Germany, 12.394  
 DFB, Germany, 17.512  
 DIQ, Germany, 10.285  
 DJA, Germany, 9.552. 5 to 9:15 p.m.  
 DJB, Germany, 15.190. 8 a.m. to 4:30 p.m.  
 DJC, Germany, 6.017. 8 to 10:15 p.m.  
 DJD, Germany, 11.753. 10 a.m. to 6 p.m.  
 DJL, Germany, 15.110  
 EAQ, Spain, 9.862. 5:30 to 7:30 p.m.  
 EAR58, Canaries, 7.207. 5 to 6:30 p.m.  
 EHY, Spain, 10.164  
 FTK, France, 15.863  
 FTM, France, 19.282  
 FZS, Indo-China, 11.983  
 \*German Ships, 13.135, 10.163, 8.328, 4.174  
 GAB, England, 18.304  
 GBB, England, 13.500  
 GBB, England, 12.148  
 GBW, England, 14.450  
 GSA, England, 6.050. 6 to 8 p.m.  
 GSB, England, 9.510. 11 a.m. to 1 p.m.  
 GSC, England, 9.585. 1:15 to 5:45 p.m.; 6 to 8 p.m.  
 GSD, England, 11.750. 2 to 4 a.m.; 1:15 to 5:45 p.m.  
 GSE, England, 11.865. 7 to 8:45 a.m.; 9 to 11 a.m.  
 GSF, England, 15.140. 2 to 4 a.m.; 9 a.m. to 1 p.m.  
 GSG, England, 17.770. 7 to 8:45 a.m.  
 G6RX, England, 4.972. Testing nights  
 HBL, Switzerland, 9.580. Sat., 5:30 to 6:15 p.m.  
 HBP, Switzerland, 7.872. Sat., 5:30 to 6:15 p.m.  
 HC2JB, Ecuador, 4.283. 9 to 11 p.m.  
 HC2RL, Ecuador, 6.659. Tues., 9:14 to 11:14 p.m.; Sun., 5:45 to 7:45 p.m.  
 HCJB, Ecuador, 3.998. 8:14 to 10:14 daily, exc. Mon.  
 HCK, Ecuador, 5.694. 8 to 11 p.m.  
 HIX, Santo Domingo, 5.948. Tues. and Fri., 8 to 10 p.m.; Sun., 7:40 a.m.  
 HIZ, Santo Domingo, 6.379. 5-6 p.m.  
 HI-1-A, Santo Domingo, 6.272. 8-8:30 a.m.; 12:30-1:30 p.m.; 8-9 p.m.  
 \*HJB, Colombia, 14.930  
 \*HJY, Colombia, 18.444  
 HJ1ABB, Colombia, 6.447. 5 to 10 p.m.  
 HJ2ABA, Colombia, 5.879. 7:30 to 10 p.m.  
 HJ3ABD, Colombia, 7.402. 9-11:15 p.m., daily  
 HJ4ABB, Colombia, 7.139. Sat., 11 p.m. to Mid.; Sun. 3-5 p.m.; Wed., 8-10 p.m.  
 HJ4ABE, Colombia, 5.879. Mon., Wed., Fri., 7:30-9:30 p.m.  
 HJ5ABB, Colombia, 3.278  
 HJ5ABF, Colombia, 8.271  
 HKN, Colombia, 7.138. 8-10 p.m., daily  
 \*HPF, Panama, 14.545.  
 HSP, Siam, 17.719  
 HVJ, Vatican City, 15.120. 5 to 5:15 a.m.  
 IAC, Italy, 12.785  
 I2RO, Italy, 11.800. 11:30 a.m. to 12:30 p.m.; 1:15 to 6 p.m.  
 J1AA, Japan, 9.862. 5 to 8 a.m.  
 KAY, Philippines, 14.980  
 KAZ, Philippines, 9.990  
 \*KKP, Hawaii, 16.024  
 LSN, Argentina, 9.895  
 LSX, Argentina, 10.345  
 LSY, Argentina, 18.116  
 \*OCI, Peru, 18.670  
 OXY, Denmark, 9.520. 2 to 6:30 p.m.  
 PHI, Holland, 11.725. 7:30 to 10 a.m., except Tues. and Wed.  
 PLE, Java, 18.820  
 PLV, Java, 9.410  
 Pontoise, France, 15.454  
 Pontoise, France, 15.234. 8-11 a.m.  
 11.898. 11:15 a.m. to 2:15 p.m.; 3 to 6 p.m.  
 11.711. 3 to 9 p.m.; 10 p.m. to mid.  
 \*PPU, Brazil, 19.270  
 PRADO, Ecuador, 6.618. Thursday, 9-11 p.m.  
 \*PSF, Brazil, 14.682  
 Rabat, Morocco, 12.820. Sun, 7:30 to 9 a.m.  
 8.218. Sun, 2:30 to 5 p.m.  
 RNE, USSR., 11.923. Testing irregularly  
 RV15, Siberia, 4.273. 3-9 a.m., daily  
 RV59, USSR, 5.996. 3-6 p.m., daily  
 SRI, Poland, 9.488. 1-3 p.m., Tues.; 8-9 a.m., Wed.  
 TGA, Guatemala, 14.545  
 TIN-TIU, Costa Rica, 14.545  
 T14NRH, Costa Rica, 9.670. 10-11 p.m., daily  
 UOR2, Austria, 6.072. 8:30-9 a.m.; 10 a.m.-1 p.m. and 2-4 p.m. on Tuesdays.  
 UOR3, Austria, 11.800  
 VE9BJ, Canada, 6.090  
 VE9CS, Canada, 6.074  
 VE9DR, Canada, 6.005. 7:30 a.m. to Midnight; Sun., noon to 11:15 p.m.  
 VE9GW, Canada, 6.092. 3 p.m.-midnight  
 VE9HX, Canada, 6.110. 5-11 p.m., daily  
 VE9JR, Canada, 11.710. Sun., 9-10 p.m.; Sat., 9:30-10 a.m.; 11-11:30 a.m.; 12:45-1:15 p.m.; 7-8:30 p.m.; 9-10:30 p.m. Other days: 9:30-10 a.m.; 11-11:35 a.m.; 2-2:15 p.m.; 3:15-3:35 p.m.; 7-10:30 p.m.  
 VK2ME, Australia, 10.520. 9.585. Sun., 1 to 3 a.m.; 5 to 11 a.m.  
 VK3ME, Australia, 9.503. Wed., 5-6:30 a.m.; Sat., 5-7 a.m.  
 VWZ, India, 17.533  
 \*WNC, U. S. A., 15.055  
 W1XAL, U. S. A., 15.242. Sunday, 10 a.m.-1 p.m.  
 11.780. Sat., 5:30-11 p.m.; Sun., 6:30-8:30 p.m.  
 W2XAD, USA, 15.320. Sun., Mon., Wed., Fri., 4-5 p.m.  
 W2XAF, USA, 9.530. 7:45 to 11 p.m.  
 W2XE, U. S. A., 15.258. 11 a.m. to 1 p.m.  
 11.823. 3 to 5 p.m.  
 6.116. 6 to 11 p.m.  
 W3XAL, U. S. A., 17.772. 12:30 to 6:30 p.m. except Sat.  
 6.096. 3 p.m. to midnight, Saturday  
 W3XAU, USA, 9.585. Noon to 6 p.m.  
 6.057. 8 p.m. to 1 a.m.  
 W3XL, U. S. A., 6.421. Irregular  
 W8XK, U. S. A., 21.451. 7 a.m. to 2 p.m.  
 15.204. 10 a.m. to 4:15 p.m.  
 11.870. 4:30-10 p.m.  
 6.140. 4:30 p.m. to 12:30 a.m.  
 W9XAA, U. S. A., 6.076. 3 to 6 p.m.  
 W9XF, U. S. A., 6.100. Silent Sat.; Sun, 1-2:30 p.m.; 4:30-7 p.m.; 9 p.m. to 2 a.m.; other days, 4:30-8 p.m.; 9:30 p.m. to 2 a.m.  
 XAM, Mexico, 11.187  
 XDS, Mexico, 11.760  
 XETE, Mexico, 9.610. 2:30-5 p.m.; 6:30 p.m. to midnight  
 \*YNA, Nicaragua, 14.480. Phones Hialeah.  
 \*YVQ, Venezuela, 13.337. Phones Hialeah  
 \*YVR, Venezuela, 18.296 and 9.168  
 YV1BC, Venezuela, 6.112. 5:15 to 10 p.m.  
 YV2AM, Venezuela, 7.138. Sun., 8-10 a.m.  
 YV3BC, Venezuela, 9.510. 9:30 to 10 p.m.  
 6.150. 10:30 a.m. to 1 p.m. and 4:30-9:30 p.m.; Sun., 8:30 a.m. to noon and 3-6:30 p.m.  
 \*ZFA, Bermuda, 5.045  
 \*ZFB, Bermuda, 10.060  
 ZFS, Bahamas, 4.513.  
 ZGE, Malaya, 5.996. Tues., Fri., 6:30-8:30 a.m. and Sun., 7-9 a.m.

# The FOREIGN Short Wave Stations

With frequencies in megacycles, wavelengths in meters. Letters in parentheses are the calls assigned to the country by international agreement. The zone given is for use with the RAREX Time Converter. The North American Stations will appear in the February issue.

City	Call	Megs.	Meters	City	Call	Megs.	Meters	City	Call	Megs.	Meters	
ARGENTINA, South America (LOA-LVZ) Zone 18				CANARY ISLANDS, Africa (EAA-EHZ) Zone 24				PLE 18.820 15.93				
Buenos Aires	LQA	9.702	30.90	Santa Cruz de Tenerife	PLF	17.850	16.80		PLG	15.950	18.80	
	LQA	9.600	31.23		EAR58	7.207	41.60		PLM	12.290	24.40	
	LSA	14.530	20.65	CHILE, South America (CAA-CEZ) Zone 16					PLV	9.410	31.86	
	LSA	9.890	30.32	Santiago	CEC	19.678	15.24		PLW	9.480	31.63	
	LSG	19.895	15.07		CEC	15.855	18.91		PMB	20.606	14.55	
	LSI	9.830	30.50		CEC	10.664	28.12		PMC	18.170	16.50	
	LSL	21.129	14.18	CHINA, Asia (XGA-XUZ) Zone 42					PMN	10.250	29.25	
	LSL	10.296	29.12	Shanghai	XGK	18.692	16.04		PMY	5.143	58.30	
	LSL	9.993	30.00		XGL	7.963	37.65	Macassar (Celebes) PNI 8.769 34.19				
	LSM	21.128	14.19		XGN	16.383	18.30	Medan (Sumatra) UIG 10.410 28.80				
	LSM	19.121	15.68		XGO	7.575	39.58	ECUADOR, South America (HCA-HCZ) Zone 16				
	LSN	21.020	14.27	COLOMBIA, South America (HJA-HKZ) Zone 16					HC2JSB	4.283	70.00	
	LSN	14.480	20.70	Barranquilla	HJABB	6.447	46.50		HC2RL	6.659	45.02	
	LSN	9.895	30.00	Bogota	HJB	14.930	20.08	Guayaquil H2CZ				
	LSR	18.958	15.82		HJP	7.465	40.16		HCJBB	4.107	73.00	
	LST	9.104	32.93		HJY	18.444	16.25		HCK	5.694	52.65	
	LST	10.345	28.98		HJY	9.928	30.20	Prado 6.618 45.31				
	LSY	20.820	14.40		HJ3ABD	7.402	40.50	EGYPT, Africa (STA-SUZ) Zone 30				
	LSY	18.116	16.55		HJ3ABF	6.246	48.00		SUV	10.064	29.84	
AUSTRALIA, Oceania (VHA-VMZ) Zones 42-45-46					HKI	7.402	40.50		SUZ	13.816	21.70	
Ballan, Victoria	VY	12.017	24.95	Cali	HJ5ABB	6.378	47.00	FEDERATED MALAY STATES, Asia (VPA-VSZ, ZBA-ZJZ) Zone 40				
Melbourne, Vic.	VK3LR	5.678	52.80	Manizales	HJ4ABB	7.139	42.00	Kuala Lumpur ZGE 5.996 50.00				
	VK3ME	9.503	31.55	Medellin	HJ4ABE	5.879	51.00	FRANCE, Europe (F) Zone 26				
Sydney, N. S. W.	VK2ME	10.520	28.50		HKN	7.138	42.00	Pontoise (Call letters not used)				
	VK2ME	9.750	30.75	Popayan	HJ5ABF	8.271	36.25		(FYA)	15.454	19.40	
	VK2ME	9.585	31.28		HJ2ABA	5.879	51.00		(FYA)	15.234	19.68	
	VK2ME	7.940	37.76	CONGO, BELGIAN (Africa) (ONA-OTZ) Zones 28-30					(FYA)	11.898	25.20	
	VLJ	9.756	30.73	Leopoldville	OPL	20.028	14.97		(FYA)	11.711	25.60	
	VLJ	7.177	37.59		OPM	10.135	29.58	Ste. Assise				
	VLK	10.520	28.50		OPL	10.135	29.58		PRO	19.400	15.45	
	VLK	8.090	37.06	COSTA RICA, Central America (TIA-TIZ) Zone 14					FTA	11.935	25.12	
AUSTRIA, Europe (UOA-UOZ) Zone 28					TIN-TIU	14.545	20.69		FTD	19.830	15.12	
Vienna (Wein)	UOR2	6.072	49.37	Cartago	TIR	8.784	34.13		FTE	18.237	16.44	
	UOR3	11.800	25.41		TIR	7.685	39.01		FTI	9.840	30.47	
BAHAMAS, North America (VPA-VSZ, ZBA-ZJZ) Zone 16					Heredia	TI4NRH	9.670	31.00		FTK	15.863	18.90
Nassau	ZFS	4.513	66.43	CZECHOSLOVAKIA, Europe (OKA-OKZ) Zone 28					FTM	19.282	15.55	
BELGIUM, Europe (ONL-OTZ) Zone 26					Poděbrady	OKI	21.000	14.28	FRENCH INDO-CHINA, Asia (F) Zone 40			
Brussels	ORG	19.182	15.63		OKI	21.000	14.28		Saigon	FZR	16.200	18.51
	ORK	10.324	29.04		DENMARK, Europe (OUA-OZZ) Zone 28				FZS	18.342	16.35	
BERMUDA, North America (VPA-VSZ, ZBA-ZJZ) Zone 18					Skamlebaek	OKY	9.520	31.49		FZY	11.983	25.02
St. George (Hamilton)	ZFA	5.045	59.42		OKY	6.069	49.40	GERMANY, Europe (D) Zone 28				
	ZFB	10.060	29.80	DOMINICAN REPUBLIC, North America (HIA-HIZ) Zone 16					Koenigswusterhausen	DIQ	10.285	29.15
	ZFD	10.330	29.02	Santiago de los Caballeros	HIIA	6.272	47.80		Nauen	DEL	6.813	44.00
BOLIVIA, South America (CPA-CPZ) Zone 18					Santo Domingo	HIX	5.948	50.40		DAF	19.240	15.58
La Paz	CP5	6.081	49.30		HIZ	6.379	47.50		DFB	17.512	17.12	
BRAZIL, South America (PPA-PYZ) Zones 18-20					DUTCH EAST INDIES, Oceania (UIA-UKZ, PKA-POZ) Zones 40-44					DGK	6.675	44.91
Rio de Janeiro	PPQ	11.644	25.75	Bandong (Java)	PKIWK	6.116	49.02		DGU	9.609	31.20	
	PPU	19.270	15.57						DHO	20.028	14.97	
	PSA	21.069	14.23	Norden					DIF	19.950	15.04	
	PSA	16.162	18.55						DAF	17.260	17.37	
	PSF	14.682	20.42						DAF	12.394	24.19	
	PSH	10.212	29.35						DAF	8.464	35.42	
	PSK	8.180	36.65	Zeeseen					DAF	4.398	68.18	
									DJA	9.552	31.38	
									DJB	15.190	19.73	
									DJC	6.017	49.83	



City	Call	Megs.	Meters	City	Call	Megs.	Meters	City	Call	Megs.	Meters
DJD	11.753	25.51		Guatemala City				Kemikawa-Cho (Tokio)			
DJE	17.760	16.88		TGA	14.545	20.69		JIAA	15.760	19.02	
DJL	15.110	19.84		TGW	6.611	45.35		JIAA	13.074	22.94	
GREAT BRITAIN, Europe (G-M) Zone 26				TGX	8.950	33.50		JIAA	9.862	30.40	
								JIAA	7.875	38.07	
Bodmin				HONGKONG, Asia (VPA-VSZ, ZBA-ZJZ) Zone 42				KENYA, Africa (VPA-VSZ) Zone 31			
GBJ	18.620	16.10		Cape D'Aguiar				Nairobi			
Daventry				YPS	10.631	28.20		VQ7LO	6.060	49.48	
GSA	6.050	49.56		VPS	5.972	50.20		MACAO, Asia (CSA-CUZ) Zone 42			
GSB	9.510	31.53		Victoria Peak				Macao			
GSC	9.585	31.28		ZBW	8.645	34.68		CQH	5.996	50.00	
GSD	11.750	25.51		ZBW	5.972	50.20		CQN	6.018	49.80	
GSE	11.865	25.27		HUNGARY, Europe (HAA-HAZ) Zone 28				MADAGASCAR, Africa (F) Zone 32			
GSF	15.140	19.81		Skekesfehevar				Tananarive			
GSG	17.770	16.88		IAS	13.671	21.93		FIU	5.689	52.70	
GSH	21.470	13.96		HAS	6.207	48.30		MADEIRA ISLANDS, Africa (CSA-CUZ) Zone 24			
Rugby				HAT	17.122	17.51		Funchal			
GAA	20.368	14.72		HAT	7.220	41.53		CT3AQ	11.174	26.83	
GAG	18.963	15.81		INDIA, Asia (VTA-VWZ) Zones 37-38				MEXICO, North America (XAA-XFZ) Zone 14			
GAS	18.304	16.38		Calcutta				Chapultepec, D. F.			
GAU	18.611	16.11		VUC	6.110	49.10		XDA	5.879	51.00	
GAW	18.193	16.48		Poona				XDM	11.760	25.50	
GBA	13.984	21.44		VWZ	17.533	17.10		Merida, Yucatan			
GBB	13.500	22.09		IRAQ, Asia (YIA-YIZ) Zone 32				XAM	11.187	26.80	
GBC	17.080	17.55		Bagdad				XAM	5.766	52.00	
GBC	12.780	23.46		YID	4.467	67.11		Mexico City, D. F.			
GBC	8.646	34.56		ITALY, Europe (I) Zone 28				XDA	14.630	20.50	
GBC	4.975	60.27		Coltano (Piza)				XDA	9.375	31.97	
GBP	10.761	27.86		IAC	17.770	16.89		XETE	9.600	31.23	
GBS	12.148	24.68		IAC	12.785	23.46		XFD	11.111	26.98	
GBU	22.291	13.45		IAC	6.648	45.10		XFD	9.091	32.97	
GBU	12.241	24.41		Fiumicino				Torreón, Coahuila			
GBW	14.450	20.75		IAF	29.803	10.06		XDC	9.343	32.09	
GBX	16.150	18.56		Golfo Aranei				MOROCCO, Africa (CNA-CNZ) Zone 26			
GCA	9.702	30.90		IRAG	30.593	9.80		Rabat			
GCB	9.273	32.33		Rome				CNR	12.820	23.38	
GCS	9.014	33.26		IMA	6.900	43.45		.....	8.218	36.36	
GCU	9.942	30.15		IRW	19.506	15.37		NETHERLANDS, Europe (PAA-PIZ) Zone 26			
GCW	9.798	30.60		LR0	11.800	25.40					
GDB	6.791	44.15		LR0	3.750	79.95					
GDS	6.900	43.45		JAPAN, Asia (J) Zone 44							
GDW	4.835	62.00									
G6RX	4.972	60.30									
GUATEMALA, Central America (TGA-TGZ) Zone 14											

## THIS is What THEY SAY

"I am sorry your publication was not brought to my attention sooner as I am persuaded I have missed much valuable information. However from now on it will find a place on my radio every month."

J. Henry Scheidegger, Chief Pharmacist Mate, USN., U. S. S. Bridge, Care Postmaster, San Francisco, Calif.

"I have found RADEX of more assistance in DXing than any other magazine I have ever read. I used to buy ten or twelve different kinds but now I buy RADEX and 'save the difference.' It is the most complete and up-to-date published."

Harold T. Hammond, Box 111, Marblehead, Mass.

"RADEX is the most interesting, the most absorbing, radio magazine that I have ever known. It has simplified many troubles I've had."

John J. Wojcik, 2842 West 25th Place, Chicago, Ill.

"I've read a good many radio magazines but have yet to see the equal of RADEX. I like particularly the news about DXers."

Victor Strinck, Jr., 5941 Leithgow, St., Philadelphia.

"Since my article 'Tuning a Radio in Britain' appeared in the May RADEX, I have been literally stormed under with letters from enthusiasts and I am still receiving them. I never imagined any radio magazine had such an immense circulation."

Percy Dodson, 12 Old Bridge Terrace, Grimsby, England.

"RADEX is the best radio magazine I have ever had and I would not be without it. My radio friends here all get it now and have thanked me many times for telling them about RADEX."

Theron G. Fiske, 744 East Cimarron, Colorado Springs, Colo.

"I am writing to express my appreciation for RADEX. It is easily the most complete, most plainly worded and happiest medium between listeners that I have come across."

W. G. Odenwalder, American Tel. & Tel. Co., New York, N. Y.

"For me, you cram more entertainment between the covers of RADEX than does one of the so-called adventure magazines."

Phil E. Lockwood, 315 North 7th St., Yakima, Wash.

City	Call	Megs.	Meters	City	Call	Megs.	Meters	City	Call	Megs.	Meters
Huizen	PHI	17.761	16.88		PORTUGAL, Europe (CSA-CUZ) Zone 26				RV59	5.996	50.00
	PHI	11.725	25.57	Lisbon	CTIAA	9.592	31.25	Odessa	RDA	6.662	45.00
Kootwijk	PCK	18.400	16.29		CTICT	12.222	24.53	Tashkent	RAU	15.104	19.85
	PCV	17.830	16.82		SIAM, Asia (HSA-HSZ) Zone 40			Tiflis	RIS	6.870	43.64
	PKD	10.410	28.80	Bangkok	HSJ	7.973	37.60		VATICAN CITY, Europe (HYA-HVZ) Zone 28		
	PDM	18.600	16.12		HSP	17.719	16.92		HVJ	15.120	19.83
	PDV	12.051	24.88		SPAIN, Europe (EAA-EHZ) Zone 26				HVJ	5.968	50.26
	PDV	7.830	38.29	Madrid	EAM	9.772	30.68	VENEZUELA, South America (YVA-YVZ) Zone 19			
The Hague	PCM	6.430	46.63		EAQ	19.684	15.23	Caracas	YV1AC	3.998	75.00
	NEW ZEALAND, Oceania (ZKA-ZMZ) Zone 49				EAQ	9.862	30.40		YV1BC	11.695	25.54
Wellington	ZLT	7.384	40.60		EHY-EDM	20.849	14.38		YV1BC	6.112	49.10
	ZLW	18.340	16.35		EDN-EDX	19.519	15.36		YV2BC	6.000	49.97
	ZLW	12.290	24.40		EDN-EDX	10.613	28.25		YV3BC	9.510	31.52
	ZLW	10.980	27.30		EHY	10.164	29.79		YV3BC	6.150	48.78
	NICARAGUA, Central America (YNA-YNZ) Zone 14				SWITZERLAND, Europe (HBA-HBZ) Zone 28				YV5BC	9.609	31.20
Managua	YNA	14.480	20.70	Geneva	HBF	18.892	15.87		YV7BC	6.143	48.80
	YNOP	9.670	31.00		HBJ	14.550	20.60		YV8BC	9.548	31.40
	NORWAY, Europe (LAA-LNZ) Zone 28				HBL	9.580	31.30		YV9BC	6.131	48.90
Jeløy	LCL	6.985	42.92		HBP	7.872	38.47		YV10BC	11.766	25.48
	PANAMA, Central America (HPA-HPZ) Zone 16				UNION OF SOUTH AFRICA, Africa (ZSA-ZUZ) Zone 30				YV14BC	6.094	49.20
Panama City	HPF	15.545	20.69	Capetown	ZSS	18.856	15.90	Ciudad Bolivar	YV13BOL	9.518	31.50
	PERU, South America (OAA-OCZ) Zone 16				UNION OF SOCIALIST SOVIET REPUBLICS, Europe-Asia (RAA-RUZ) Zones 30-50			Maracaibo	YV2AM	7.138	42.00
Lima	OCI	18.670	16.06	Irkutsk	RIM	7.621	39.34		YV11BMO	6.125	48.95
	OCI	10.962	27.35		RKS	12.492	24.00	Maracay	YVQ	13.337	22.48
	OCI	15.821	18.95	Khabarovsk	RV15	4.273	70.65		YVQ	11.680	25.67
	POLAND, Europe (SPA-SRZ) Zone 28			Moscow	REN	6.433	46.60		YVQ	6.672	44.96
Poznan	SRI	9.488	31.60		RKI	7.501	39.97		YVR	18.296	16.39
					RNE	11.923	25.16		YVR	9.168	32.70
									YV6BM	9.503	31.55
									YV12BM	6.069	49.40
								Valencia	YV4BV	11.620	25.80

**INSURE YOUR RADIO ENJOYMENT  
SEND THIS BLANK TODAY**

The Radex Press, Inc.  
Hanna Building  
Cleveland, Ohio.

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

- Program "Slates"  1 for 10c  2 for 15c  4 for 25c
- One radio map of North America..... 15c
- One Radio World Map and Time Converter..... 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..... 1.75
- Two subscriptions to RADEX with one leatherette cover, free..... 3.50
- One two-year subscription with leatherette cover, free..... 3.50
- Leatherette Cover..... .50

Write Name plainly.....

Street and Number.....

City and State.....

75

*No extra charge outside the U. S. A.*

# Do You Want to Use Phones—

and log those distant stations you can't quite identify with the loud speaker?

or enjoy your radio after the rest of the family have retired?

## Use the Perfect Phone Adapter for All Receivers

Don't run the risk of unbalancing your set by making any change in the wiring.

Don't change the load on the speaker by using set without all its tubes.

Don't be annoyed by taking tubes out and putting them back in every time you use phones.

The Perfect Phone Adapter is entirely automatic. Pushing in the phone plug cuts out speaker. Phone signals are taken off before amplification by power tubes thus giving volume suitable for the ears and preventing phones from burning out.

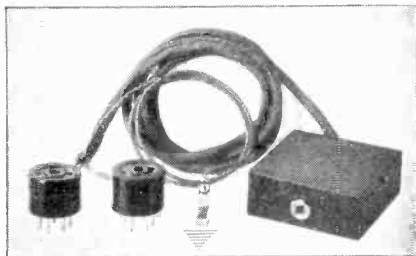
The adapter (or adapters) are placed under the power tube (or tubes) and left there. The little clamp goes to ground. Sufficient cable is furnished so little box can be placed in back of set or screwed to underside out of sight but readily accessible.

*The use of the Perfect Phone Adapter does not change the load or interfere with use of speaker in any way. Not recommended for midgut sets, but otherwise fully guaranteed.*

**SPECIAL NOTE:** With a few sets, it is necessary to use a B battery in series with the ground to provide bias.

### MODELS

- 14—One socket, four holes
- 15—One socket, five holes
- 16—One socket, six holes
- 17—One socket, seven holes
- 24—Two sockets, four holes
- 25—Two sockets, five holes
- 26—Two sockets, six holes
- 27—Two sockets, seven holes



Price of  
any Model  
Postpaid.....

**\$3<sup>95</sup>**

Complete with  
DX Phones and  
Plug.....

**\$6<sup>70</sup>**

When ordering give make and model of receiver and number and type of power tubes. It will help us if you will send diagram of set or sketch of tube layout.

## RADIO PARTS CO.

1401 Prospect Ave.

Cleveland, Ohio

I saved 1/2 by buying direct from the Midwest Laboratories

Yes, and it gives you WORLD-WIDE Reception!

Amazing New  
SUPER Deluxe

# 16-TUBE ALL-WAVE Radio

9 TO 2,000 METERS

**30  
DAYS  
FREE  
TRIAL**



WRITE FOR NEW  
**FREE CATALOG**

**B**EFORE you buy any radio, write for this big new FREE Midwest catalog . . . printed in four colors. It has helped thousands of satisfied customers save from 1/2 to 1/2 on their radios by buying direct from the Midwest Laboratories. You, too, can make a positive saving of 30% to 50% by buying a Midwest 16-tube de luxe ALL-WAVE radio at sensationally low direct-from-laboratory prices. You'll be amazed and delighted with its super performance! Broadcasts from stations 10,000 miles and more away are brought in . . . "clear as locals." You get complete wave

length coverage of 9 to 2,000 meters (33 megacycles to 150 KC). Now you can enjoy the new DXing hobby . . . and secure verifications from world's most distant stations. These bigger, better, more powerful, clearer-toned, super-selective radios have FIVE distinct wave bands: ultra-short, short, medium, broadcast and long . . . putting the whole world of radio at your finger tips. Now listen in on all U. S. programs . . . Canadian police, amateur, commercial, airplane and ship broadcasts . . . and programs from the four corners of the earth.

**WORLD'S GREATEST RADIO VALUE**

**\$49.50**  
with New  
**Deluxe Auditorium Type SPEAKER**

... 40 NEW 1934 FEATURES ...

Try this Midwest radio . . . in your own home . . . for thirty days before you decide. See for yourself the 40 new 1934 features that insure amazing performance. Other features include: Automatic Select-O-Band, Amplified Automatic Volume Control, 16 New Type Tubes, Balanced Unit Superheterodyne Circuit, Super-Power Class "A" Amplifier, 29 Tuned Circuits, No-Image Heterodynes, Variable Tone Blender, Centralized Tuning, 7 KC Selectivity, New Thermionic Rectifier, Automatic Tone Compensation, Auditorium Type Speaker, etc. These features are usually found only in sets selling from \$100 to \$150.

**TERMS AS LOW AS \$5.00 DOWN**

**NEW STYLE CONSOLES**

Write quickly for your FREE copy of the new Midwest catalog. It pictures a complete line of beautiful, artistic de luxe consoles and chassis . . . in four colors! You

can order your Midwest radio from this catalog with as much certainty of satisfaction as if you were to select it personally at our great radio laboratories. Write TODAY!



## DEAL DIRECT WITH LABORATORIES



### AMAZING FOREIGN RECEPTION

ANON, OHIO—My Midwest-16 is a real go-getter for distance. Received 205 stations on regular wave band . . . including U. S., Canadian, Mexican, Cuban, Hawaiian and South American stations. Have logged England, France, Germany, Madrid, Rome, on 15-30 meter band. L. H. Morsler 793 N. South St.

Increasing costs are sure to result in higher radio prices soon. Buy NOW, while you can take advantage of Midwest's amazingly low prices. You save from 30% to 50% when you buy direct from Midwest Laboratories . . . you get 30 days FREE trial—us little as \$5.00 down puts a Midwest radio in your home.

**SAVE UP TO 50%**

**MAIL COUPON TODAY! FOR AMAZING 30-DAY FREE TRIAL OFFER AND NEW 1934 CATALOG**

MIDWEST RADIO CORP., Dept. 408 Cincinnati, Ohio.

AGENTS! Make Easy Extra Money

Without obligation on my part send me your new FREE 1934 catalog, and complete details of your liberal 30-day FREE trial offer. This is NOT an order.

Check Here for Details

Name . . . . .

Address . . . . .

City . . . . .

State . . . . .

**MIDWEST RADIO CORP.**  
DEPT. 408 — CINCINNATI, OHIO, U. S. A.

Established 1920

Cable Address: Miraco, ABC 5th Edition