

THE FEBRUARY 1934

RADIO INDEX

THE ALL-WAVE RADIO MAGAZINE



25^c

30 cents
in Canada
Including
Tax

The Short Wave Stations of North America
The Long Wave Stations of the World
Broadcast Reallocation in Europe
The Beginner's Story of Radio
"What's Wrong with My Set?"

No. 76

FEBRUARY 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 March.

SUNDAY MORNINGS

Jan. 28

2:00-3:00—CHWC, Hammond, 1010 (.5)
4:30-5:00—CKFC, Vancouver, 1410 (.05)
6:00-7:00—XGOA, Nanking, 660 (.75)

Feb. 4

1:00-2:00—WWAE, Hammond, 1200 (.1)
2:30-4:30—CKBI, Prince Albert, 1210 (.1)
3:00-6:00—WGCM, Gulfport, 1210 (.25)

Feb. 4-18

5:00-6:00—XFB, Jalapa, 1290 (1)

Feb. 4-25

3:00-5:00—CMCU, Havana, 1100 (.5)

Feb. 11

1:00-1:30—WKY, Oklahoma City, 900 (1)
1:00-2:00—KUSD, Vermillion, 890 (.5)
3:00-4:00—WOS, Jefferson City, 630 (.5)
3:00-4:30—KFOX, Long Beach, 1250 (1)
3:30-4:30—CKWX, Vancouver, 1010 (.1)
4:00-5:00—WBBZ, Ponca City, 1200 (.1)
5:00-6:00—WGLD, Janesville, 1200 (.1)

Feb. 11-25

4:00-5:00—CMGF, Matanzas, 971 (.1)

Feb. 11-18-25

1:00-3:30—WIBM, Jackson, 1370 (.1)

Feb. 18

2:00-3:00—KOH, Reno, 1380 (.5)
3:00-4:00—KREG, Santa Ana, 1500 (.1)
KUMA, Yuma, 1420 (.1)
3:00-5:00—KGNO, Dodge City, 1340 (.25)
3:00-5:00—KMJ, Fresno, 580 (.5)
3:00-7:00—KGIH, Butte, 1360 (.5)

Feb. 25

12:00-4:00—KFSG, Los Angeles, 1120 (.5)
1:00-2:00—XEPW, Tampico, 1280 (.07)
3:00-5:00—WHAZ, Troy, 1300 (.5)
4:00-5:00—WIBG, Glenside, 970 (.1)

Feb. 4-11-18-25

12:00-1:00—CMBW, Havana, 1140 (.6)
CMX, Havana, 875 (1)
XETW, Mexico City, 830 (.5)

12:00-1:30—WMBG, Detroit, 1420 (1)

12:00-3:00—CMCD, Havana, 915 (.5)

WGES, Chicago, 1360 (.5)

1:00-2:00—WCCO, Minneapolis, 810 (.50)

WDOD, Chattanooga, 1280 (1)

1:00-2:30—XEAB, Tamaulipas, 1450 (.0075)

1:00-4:00—CMBD, Havana, 965 (.25)

2:00-3:00—WMMN, Fairmont, 890 (.25)

2:00-5:00—KPFJ, Prescott, 1500 (1)

3:00-4:00—KFXM, San Bernardino, 1210 (.1)

KGER, Long Beach, 1360 (1)

3:00-5:00—CJAT, Trail, 1200 (.05)

CKOV, Kelowna, 1200 (.05)

KVL, Seattle, 1370 (1)

3:00-6:00—XEOK, Tijuana, 757 (5)

4:00-5:00—CFJC, Kamloops, 1120 (1)

CMJK, Camaguey, 790 (5)

4:00-6:00—XEFV, Juarez, 1370 (1)

*P. O. Box 1441, San Diego, Calif.

MONDAY MORNINGS

Jan. 29

6:00-7:00—XGOA, Nanking, 660 (.75)

Feb. 5

3:00-5:00—KPCB, Seattle, 650 (1)

3:45-4:00—RUJ, Walla Walla, 1370 (1)

Feb. 19

2:30-3:30—HIH, San Pedro de M., 1395 (.015)

3:30-4:30—*WHBU, Anderson, 1210 (1)

*Wants 5c for verification.

Feb. 5-12-19-26

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)

TUESDAY MORNINGS

Jan. 30

6:00-7:00—XGOA, Nanking, 660 (.75)

Feb. 6

5:00-5:30—WKFI, Greenville, 1210 (1)

Feb. 20

2:30-3:30—HJN, Bogota, 681 (.5)

Feb. 27

2:00-3:00—HIIZ, Santo Domingo, 1300 (.01)

Feb. 6-13-20-27

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—WSUI, Iowa City, 880 (.5)

4:00-5:00—WCAH, Columbus, 1430 (.5)

5:00-6:00—WAWZ, Zarephath, 1350 (.25)

WEDNESDAY MORNINGS

Feb. 7

1:00-2:30—KFYR, Bismarck, 550 (1)

4:30-5:00—WCAI, Northfield, 1250 (1)

Feb. 14

1:00-2:00—WIBG, Glenside, 970 (1)

Feb. 21

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

3:00-3:30—KSO, Des Moines, 1370 (1)

3:00-7:00—WOPI, Bristol, 1500 (1)

5:00-5:30—WIAS, Ottumwa, 1310 (1)

Feb. 28

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

Feb. 7-14-21-28

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

THURSDAY MORNINGS

Feb. 1

3:00-4:00—WRDW, Augusta, 1500 (1)

4:30-5:00—WCBS, Springfield, 1210 (1)

5:00-6:00—WRAW, Reading, 1310 (1)

Feb. 1-15

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

Feb. 8

2:00-3:00—KWCR, Cedar Rapids, 1420 (1)

3:00-3:30—KSO, Des Moines, 1370 (1)

5:00-5:30—WIAS, Ottumwa, 1310 (1)

Feb. 15

3:00-4:00—WHBQ, Memphis, 1370 (1)

Feb. 22

2:00-3:00—WRUF, Gainesville, 830 (5)

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

Feb. 1-8-15-22

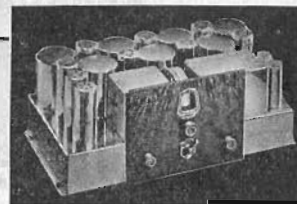
2:00-4:00—CMK, Havana, 730 (5)

2:00-4:00—WEDC, Chicago, 1210 (1)

(Continued on page 97)

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

RECEPTION *Every Day!*

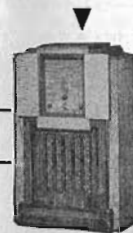


**THRILLS
FOR
EVEN
HARDEST-
BOILED
D-X
HOUNDS**

with

The
**SCOTT
ALL-WAVE
Deluxe**

15 to 550 METERS



CONSOLES

Specialty 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. RX24, Chicago, Ill.

MAIL COUPON FOR FULL DETAILS

E. H. Scott Radio Laboratories, Inc.
4450 Ravenswood Ave., Dept. RX24, Chicago, Ill.
Send me at once, without obligation, all particulars regarding the SCOTT ALL-WAVE Deluxe, and PROOFS of its ability.

Name _____

Address _____

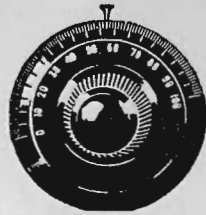
Town _____ State _____



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

If, after 80 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.



FEBRUARY 1, 1934

RADIO INDEX

Reg. U. S. Patent Office

FRED CLAYTON BUTLER

Editor and Publisher



B. FRANCIS DASHIELL
Technical Editor

TENTH YEAR

CONTENTS

PAGE TAYLOR
Short Wave Editor

NUMBER 76

Frontispiece—Portland Hoffa (Mrs. Fred Allen)
On the "Bath Club" CBS Sundays 9 p. m.

The February DX Calendar of Special Programs.....	Second Cover
The Beginners' Story of Radio, <i>Tuning the Radio Frequency Circuit</i>	3
Little Life Stories of Radio Folk, by "Betty".....	8
The Editor and the "Family".....	11
With the High Frequency Fans, by <i>Page Taylor</i>	15
How to Use Microphones and Pickups, by <i>B. Francis Dashiell</i>	21
Stories of the Log Builders, <i>The Foreigners Are Coming In</i>	23
"What's Wrong with My Set?" <i>Answered by the Technical Editor</i>	33
The Short Wave Stations of North America, by Frequencies.....	37
Reallocation in Europe, <i>a Grand Shift on January 15</i>	38
Condensed Cream of the DX Reports.....	40
The Long Wave Stations of the World.....	43
The Verification Problem Discussed by Our Readers.....	44
"What's on the Air Tonight?" The Weekly Network Programs.....	50
Classified Index to the Chain Features.....	59
The Old Reliable Index to Broadcasting Stations.....	61
Stations of North America Arranged by Locations.....	76
Index by Call Letters with Owners' Names.....	80
Short Wave Relay Broadcasters of North America.....	91
Around the Clock on the Short Waves.....	92
One Hundred Best Short Wave Stations by Calls.....	93
The Month's Changes in Station Data.....	97

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

The BEGINNERS' STORY of RADIO

PART FIVE

Tuning the Radio-Frequency Circuits

• • • By B. FRANCIS DASHIELL

WHILE studying the actions of condensers we made an interesting discovery. It was: When a condenser is set to a given capacity, it will permit an alternating current of a given frequency to pass through its circuit. Then, when the capacity is changed somewhat, another alternating current of a different frequency will flow. Therefore, because of this definite relationship between capacity and frequency, we can make use of the variable condenser to select any frequency of broadcast wave that may be desired. The selection of these certain frequencies, or radio waves, is performed only in the *radio-frequency circuit* by the act of *tuning*.

If the frequency of the broadcast wave or signal that is being received is high, a condenser of small capacity is used (a small portion of the variable condenser's total plate area); when the frequency is low, the capacity must be large (all of the variable condenser's plate area in use). For broadcast station reception, a variable condenser having a maximum capacity of .0005 microfarad (500 micro-microfarads) will permit all frequencies between 550,000 and 1,500,000 cycles (550 and 1,500 kilocycles) to pass through the circuit which it tunes.

Now we will return to the receiving set for a moment. If we adjust the dial that controls the tuning condenser, we will find that we have set the condenser to some given capacity (value unknown), and that it will then be in *tune* with some given frequency. At this setting the condenser offers little resistance to one partic-

ular electrical vibration coming down from the antenna yet to all other frequencies it presents an effective resistance. Tuning a receiver is a simple matter. Let us see how it works.

Tuning a Receiver

The resistance a condenser offers to the "apparent" flow of electricity is called *capacitive reactance*. Now, when the condenser is tuned to a state of *minimum* reactance, a given frequency will flow easily through the circuit. A tuned radio circuit, therefore, permits the passage of just one



Hi, Skippy! In real life he is Franklin Adams, aged 12 years and a student in the seventh grade at grammar school. He finds time for football and baseball when off the air and is also intensely interested in the collection of stamps. On the CBS, Mondays to Fridays at 5:00 p. m.

a.c. frequency, and prevents the flow of unwanted frequencies. This tuning effect enables us to select any particular radio signal from the chaos of vibrating waves that exists in the air about us.

But the condenser alone is not the only instrument at our command for the control of electrical vibrations in our radio sets. A single coil of wire—an *inductance*—also offers considerable resistance to the flow of an alternating current. And, like the condenser, its resistance to an alternating current is also a reactance—*inductive reactance*. Let us take some fixed inductance: The higher the frequency of the current, the greater will be the reactance of the coil; the lower the frequency, the smaller the reactance. Also, like condensers, small coils pass high frequencies; and large coils pass the low frequencies. That is why short wave receivers use small radio-frequency coils, or inductances, and broadcast receivers use larger coils.

Purpose of the Coils

Tune in a station with a fixed inductance, and then change the number of turns of wire on the coil. Immediately we vary the amount of inductance or reactance the coil presents to the flow of the given frequency, and that station is tuned out. But a new station frequency is tuned in. We have, therefore, changed the reactance so that a new radio frequency will flow easily through the coil. The coil inductance has been tuned to a given wave length or broadcast frequency. In the early days of radio, coils were tuned by means of switches and sliders. Today, in modern radio, we tune the inductances simply by means of variable condensers.

A coiled conductor, wound into an inductance, can be tuned by a variable capacity "shunted" around the coil. Such a coil is a radio-frequency coil, transformer or inductance, for all tuning is confined to the radio-frequency portion of a radio circuit. The coil must be tuned in order to find

a point where one frequency will pass through without opposition. This condition is called *resonance*. We can create hundreds of these points of resonance as we slowly turn the tuning condenser shaft. We really balance the inductive reactance of the coil by connecting the capacity reactance in parallel around the radio-frequency coil. The circuit now offers minimum reactance, and at this resonant point the tuned-in radio frequency will flow at its maximum strength. Other signals will be tuned out.

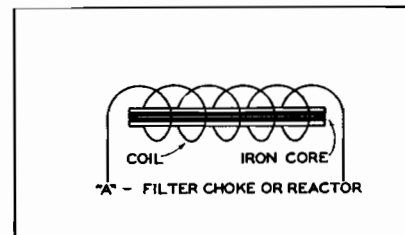
The "Why" of Tuning

What is inductive reactance? Why does it permit a single frequency of alternating current to be selected for passage through the circuit while all other frequencies, which also may be present, are choked back?

We have seen, in Part Two, that an alternating current will build up oscillating magnetic fields of force about a coil through which the current flows. This current alternates two times in every cycle, and so does the magnetic field. When the voltage drops from maximum potential at the peak of one alternation, as shown at "B," Part Two, there also is a failure of the surrounding magnetic field. There is a slight lag between the two; the magnetic lines of force collapse upon the turns of wire, and induce additional voltages in the coil, just when the next alternation of current is beginning to appear from the other direction. Thus, these two currents tend to oppose each other, and the secondary effect is called *reactance*, *counter-electromotive-force*, or *self-inductance*.

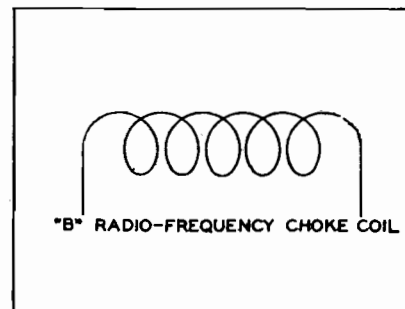
Impeding All But One Frequency

Self-inductance, then, tends to prevent the flow of alternating or pulsating currents through a coil of wire. However, there will be one certain frequency which will vibrate at the proper rate so that its self-induction and the original current will rise and fall between alternations at the proper moment. Both will be in step



or phase, and there will be no a.c. resistance, or self-induced reactance that will hinder the flow of the original current. Reactance is measured in ohms, and *impedance*, which is a certain combination of wire resistance, reactance and capacity, also is indicated in ohms.

The unit of self-inductance is called the *henry*. Smaller units are: the *millihenry*, which is one-thousandth part of a henry; and the *microhenry*, the millionth part of a henry. In a coil of considerable inductance—about 30 to 50 henries—which offers high reactance against the flow of most all alternating, pulsating, or rippling currents, the high reactance voltage developed will prevent potential changes in the current. This type of coil is called a *choke*, *reactor*, or *filter*, and the symbol used to indicate it in radio diagrams is shown at "A." Such coils have heavy iron cores with many turns of wire. The filtering effect is obtained because of the tendency of the inductance to smooth out all pulsations and ripples in the rectified current so the result-

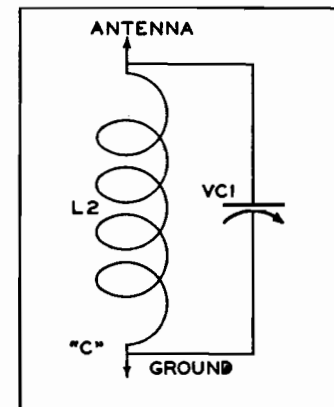


ing direct current will flow with a steady value. But we will hear more about chokes and filters when we discuss the power units of radio sets.

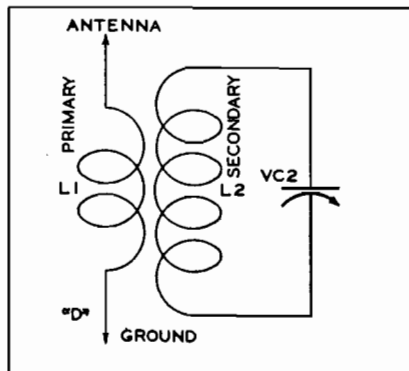
The Primary Circuit

Smaller inductances used in radio circuits, are known as *radio-frequency chokes*. The circuit diagram symbol is shown at "B." They are wound on open tubes, and have values ranging from .05 henry (50 millihenries), down to .0005 henry (500 microhenries). These tiny coils choke back the faster radio frequencies, but permit the passage of the slower audio-frequency currents.

When we tune a radio circuit we simply turn a dial and adjust the capacity of one or more variable condensers. By so doing we bring the tuning inductance and the capacitance in resonance. The high reactance of the coil is balanced by the low reactance of the condenser when tuned to some given radio frequency. Such a tuning arrangement is shown in "C."



The variable condenser VC1 is connected across the ends of the coil L2. A change of VC1 will balance its capacity against the inductive reactance of L2 (which always is a fixed value), and change the total reactance so as to tune in some other radio frequency. Any slight movement of



the condenser rotor plates will change this state of balance to another point of resonance. Each change, then, tunes in some new signal.

The Secondary Circuit

Connect a small, second coil (L1) between the antenna and ground, and couple it inductively to the inductance L2, which is tuned by the condenser VC1. We now obtain the scheme shown at "D." The small coil—about ten turns—becomes the primary; the larger coil—about 70 turns—becomes the secondary. Both, so arranged, make a radio-frequency transformer (see illustrations "G" and "H" in Part Three of this series). By tuning the secondary of this transformer we provide an *elementary radio-frequency circuit*. Only the radio-frequency circuits of a receiver are tuned to select broadcasting stations. It is here that the *selectivity* of the set is determined, and where *radio-frequency amplification* of the weak, original signals from the antenna is accomplished by the transformer action of the r.f. inductances or coils.

Hundreds of weak electrical vibrations are being constantly induced in the radio antenna by every passing radio wave. The broadcast wave, from the transmitting station, is a swinging, vibrating magnetic field. As it cuts past any metallic conductor within its range, it induces a slight current of electricity in the conductor.

This action is similar to that described in Part Three, illustrations "D" and "E." If it were not possible for us to tune our sets, all of these induced waves would pass through in a bedlam of interference. That is why, when a receiver is not selective and has poor tuning and resonance, there is much station interference.

The T. R. F. Circuit

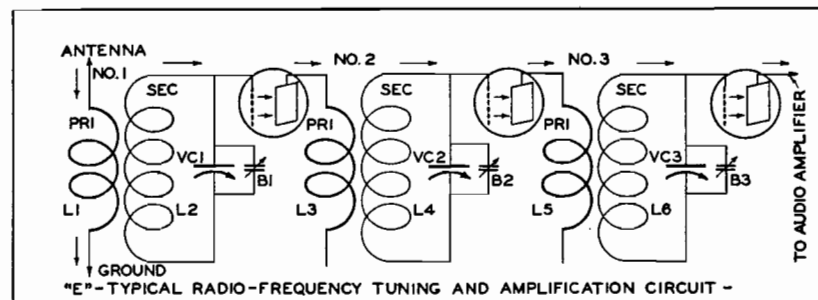
In the diagram "D," which now makes use of the radio circuit symbols shown in Part Three and Part Four, we see the primary coil L1. It permits most of the radio waves to pass down to earth because its reactance is very low; it is an *untuned* circuit. The currents passing through L1 will induce stronger currents in the secondary L2. But the inductance value of L2 is higher and, therefore, only those frequencies falling within its resonant limits—the broadcast band—will be reproduced.

It is necessary to tune out all of those frequencies induced in L2, within its resonant limits, for we wish to retain but a single wave for further amplification. This selection can be accomplished by varying the capacity reactance of the condenser VC1. The tuned signal, in this case, is stronger than the one selected by the arrangement shown in "C," for we have had the benefit of transformer action, or radio-frequency amplification.

Building Up the Signal

We can add a second radio-frequency unit, similar in all details to the first, shown at "D," and thus provide two *stages* of radio-frequency transformers and tuning. At "E" these two stages are seen. The tuned, and amplified, signal, from the coil L2, is passed to the primary coil L3 of the second r.f. transformer. It induces stronger amplification in the secondary coil, L4, which is tuned anew by the condenser, VC2.

And we can add still another unit, and there will be *three* stages of r.f. amplification and tuning, as shown completely at "E." The strong, and



now sharply tuned signal, from L4, is passed to the primary L5 of r.f. transformer No. 3. Here, it induces, in the secondary coil L6, which is tuned by VC3, a very powerful current having the modulated carrier-wave characteristics shown at "E" in Part Two. The three stages of induction, amplification and tuning, provide a sharply resonant circuit extending from L1 to L6, for one frequency only. A change of VC1 will require changes in VC2 and VC3 so as to make all three radio-frequency stages again resonant at some particular radio frequency coming from the antenna. If the coils L2, L4 and L6 are identical, and the condensers VC1, VC2 and VC3 similar, the tuning can be accomplished by placing the rotor plates of the condensers on a single shaft and turning them simultaneously with one dial. Slight variations in VC1, VC2 and VC3, can be balanced by the tiny balancing condensers B1, B2 and B3. A radio-frequency circuit, sharply tuned and balanced, will pass but one frequency at a time. The signal is increased in intensity, or *amplitude*, and is ready to be sent to the detector and thence into the audio-frequency circuit for further amplification before it will operate the loud speaker.

(Since the reader already has been introduced to the mysterious electron, in Part Four, it will be appropriate to take him, next month, on a journey through the maze of screens, grids, plates, cathodes and filaments of our radio tubes.)

Queries

1. In what two ways may one particular wave be picked out of the hundreds in the air?
2. What is the effect of adding turns of wire to a tuning coil?
3. What is the effect of meshing more plate area in a condenser?
4. How is the condenser connected to a coil for tuning?
5. How is a radio signal amplified?
6. When coil and condenser are in tune to some particular wave, what is it termed?
7. What is the unit of inductance? Of reactance? Of impedance?
8. If you were to attach phones to the r. f. circuit, what would you hear? Why?
9. How does a tuning coil differ from a choke coil?
10. Explain why, given a certain inductance and a certain capacitance, only one frequency of radio wave is permitted to pass.

Those Radio Program "Slates" fill a long-felt want. Made of heavy, coated card stock, entries may be made and erased as your favorites change. Spaces are provided for every 15-minute period of each evening of the week and for Sunday afternoon.

Make up your own slate of programs and avoid missing those things you particularly wanted to hear. Price 10c each, two for 15c, four for 25c post-paid.

Little Life Stories of RADIO FOLK

• • • by "BETTY"

WENDELL HALL, Red Headed Music Maker of radio's early days, was born in St. George, Kansas, in 1896. Except for a few years in Florida, Chicago has been Hall's home since he was three years old, and he and Mrs. Hall and the two little Halls, Wendell Woods, Jr., and Lowell Martin, now reside in Wilmette, a residential suburb on the north shore.

Wendell attended grade and high schools in Chicago, but he evinced a remarkable musical talent from the first and his parents wisely encouraged him. He sang in church choirs, quartets or wherever else he could find the opportunity until he reached the age of eighteen, whereupon he decided to take up orchestral music and proceeded to master, in turn, the clarinet, saxophone, trombone, zylophone and later the ukulele. He went on the vaudeville stage as the "Singing Xylophonist" in 1917, but the war came along and he headed for France with the Fifth Aircraft Machine Gun Corps.

After the war, Wendell came back and resumed his vaudeville tour. But a new medium of entertainment was springing up, radio. Wise enough to see its possibilities early, the young singer in 1921 trekked over to KYW, the first radio station in Chicago, and offered his services.

He Started the Thing

He was put on, singing his own songs, first without pay, and later for \$25 a week. It was while singing at KYW that Wendell composed and first sang his most popular hit, "It Ain't Gonna No More." The response was immediate, and from that time on he was "made."

Later, on his own initiative and backing, he made a nation-wide tour of thirty-five radio stations. In 1924 he married "the little girl in Chi-

cago," whom he had wooed over radio, in a radio wedding. They were married, at the demand of millions of radio listeners, in the studio of WEA, with WCAP, WJAR, and WGN plugged in, the first network ever arranged for a private citizen. The bride was Miss Marion Martin, an employe of the reference department of the Chicago Tribune.

Wendell had the first national radio advertising contract, traveling from station to station as the "Eveready entertainer." If there is one characteristic predominant in Wendell it is originality. He turned up with fifty brand new songs when he went on the Fitch program, and he wrote both words and music for every one of them. Other singers have one voice, but Wendell sings in three, and yet it is not these novelties which have made him so universally popular. It is his personality.



The Red-Headed Music Maker

A Story of Three Jacques

Two hundred and seventy-five pounds of flesh ought to make a heavyweight, but in the case of Jacques Renard it composes a musician, not a prize-fighter. This mighty maestro is heard over the Columbia network on bi-weekly programs with Col. Stoopnagle and Budd and the Sunday broadcasts of "Songs Your Mother Used to Sing."

There was a time when Jacques Renard was mistaken for a boxer. It was at Hot Springs, Ark., and a French heavyweight by the name of Jacques Renault was staying at the same hotel. By mistake the orchestra leader received and opened the fighter's mail. Renard immediately went to work and melted away sixty-four pounds, just to make sure there wouldn't be any more embarrassing cases of mistaken identity.

Several other facts about the portly Jacques, however, are of more importance than these weighty matters. Just when he was learning to play on the floors of his parents' home in Kiev, Russia, Jacques and the family moved to Boston. Shortly thereafter Jacques was able to hold a violin in his chubby hands and his father saw to it, with the aid of a flogging when necessary, that the lad practised and became proficient with the instrument in case visitors arrived who wanted to be entertained. Young Jacques not only got his musical start through the urgings of his father, but also learned to speak Italian fluently because of his parent's business. Father Renard, a former Cossack in the Imperial Army, had become an importer of Italian foods and Jacques had to help handle the foreign-speaking customers.

Between attending school and aiding the family's commercial enterprises, Jacques studied music with Jacques Hoffman. This early training created that desire to reach greater heights which Renard believes is largely responsible for shaping his career.

At the age of sixteen Renard



Monsieur Jacques Renard

toured South America as a violinist for the famous dancer Pavlova. Later he accepted the baton of a Boston dance orchestra. The new position was so interesting that he was inspired to form his own orchestra and open his own clubs, the Mayfair and the Cocoanut Grove.

Renard is married and the father of four children. The family lives happily in Forest Hills, occupying a penthouse in New York when they come to town for a change from suburban life.

Strolling About Radio Row

B. A. Rolfe, the maestro, is known as the merriest man in radio, and Julius Tannen the saddest.

Frank Black, the NBC general musical director, has the largest and strongest hands, and Victor Young, the composer-maestro, the smallest hands.

Lee Wiley is given credit for being the radio star with the most chic; Jane Froman with being the loveliest lark in radio; Gertrude Niesen with being the most alluring; Connie Boswell with being the girl who waged the greatest fight against odds; Ethel Waters with being the greatest female stylist among the singers; and

Rosaline Greene with being the best actress in radio.

George Beatty is credited with being the stage star to make the greatest overnight hit in radio since Ed Wynn's debut; Albert Spalding with being the "high brow" who became a "regular fellow" with the musicians; Bert Lahr with being a comedian utterly without conceit; The Men About Town with being the slickest handlers of comedy lyrics; and the Revelers with being the most adept male quartet in history as well as radio; Rudy Vallee with being the celeb who has stood at the top longest despite scores of efforts to dethrone him; Johnny Marvin, the lonesome singer, with having the sweetest disposition; Frank Luther with having the most friends; Eddie and Ralph "Sisters of the Skillet" with being the safest bet a sponsor can pick when he needs immediate response; Will Rogers with being the one fellow nobody—even a sponsor—can guess what he will say next; and Edwin C. Hill with being the most forceful speaker.

How They Got Their Start

Columbia has just taken a census to discover what musical instrument is most popular among the maestros themselves, and discovers that in most cases the orchestra leaders mastered the piano, fiddle or saxophone before they took up the baton.

Among the ranks of pianists are Jack Denny, Little Jack Little, Eddie Duchin, Vincent Lopez, Claude Hopkins, Isham Jones, Joe Hynes, Freddie Rich, Lennie Hayton, Don Voorhees, Nat Shilkret, and Willard Robison, who also sings. Jones also is famous on the sax.

The most retiring member of the fiddle section is Guy Lombardo, who holds one in his left arm as a "prop," but has never played it since he took lessons as a boy in London, Ontario. However, Mark Warnow, Erno Rapee, George Hall, Enoch Light, Vincent Sorey and Leon Belasco still make the strings hum.

The saxophone contingent has distinguished members in Glen Gray, Wayne King, and Carmen Lombardo, Guy's assistant and member of the sax trio of Royal Canadians.

Frank LaMarr makes a bid for originality as a xylophone manipulator, Freddy Martin and Abe Lyman turn to the drums, Louis Panico whoops it up on a trumpet, and Fess Williams the clarinet.

A Song-Writing Taxi Driver

Here's a thumbnail sketch of Abe Lyman who completes with Glen Gray as tall man of the New York Maestros and who is so broad-shouldered he threatens to burst out of his tuxedo. Abe drove the first yellow taxi to appear on the streets of his home town, Chicago . . . played drums from childhood . . . abandoned the steering wheel of his taxi to thrash out syncopation in the Windy City's movie houses for \$5.00 a week . . . always got fired . . . Abe didn't like to be bossed and solved the problem by becoming boss himself . . . Organized a band for the Ship Cafe, Venice, Calif., and his music attracted the film stars of that time—Norma and Constance Talmadge, Thomas Meighan, Gloria Swanson, Charles Ray and Bebe Daniels . . . added four men to his 5-piece band and moved into the Coconut Grove at the Ambassador Hotel in Los Angeles where he made his fame and fortune . . . since then he's played the high spots of this continent and Europe . . . has written song hits—"Mary Lou," "Mandalay," "What Can I Say, Dear, After I Say I'm Sorry?" . . . Abe once loaned \$20 to a good-looking young foreigner who had been attempting to break into pictures . . . he was the late Rudolph Valentino.

* * *

Lee Wiley, the songstress, has been worried for some time for fear that the melancholy note that inevitably creeps into her singing would not be entertaining to the lis-

(Continued on page 48)

The EDITOR and the FAMILY

A Happy New Year

TO those hundreds of readers who sent us Christmas and New Year greetings and good wishes, we give our thanks. We are sorry we cannot reply to each one in kind personally but that being quite impossible, we take this opportunity to make a most fervent wish—that 1934 may be what it now promises to be, the threshold of a new prosperity and a new happiness. The weary months through which we all have passed, like a cold and gloomy night, will only serve to make the sun more welcome and make us more deeply appreciative and worthy of our blessings.

Our hearts have been touched many times in the months gone by, with letters from our readers who frankly confessed to the hardships they were undergoing and who were yet making real sacrifices to continue their subscriptions to our magazine. One, we recall, wrote that he was sacrificing his lunch that day in order to use his lunch money for a new RADEX. Such loyalty and appreciation both humbles and exalts us.

That a new day is dawning we, at least, can no longer doubt. Our thanks go out to a great leader who dared to lead, who dared to take the offensive when weaker souls counseled caution and delay. The tide of battle has turned, the enemy is all but routed. It is at such a moment that loyalty and cooperation are needed. Let us follow our leader cheerfully and unquestioningly even into his mistakes and loyally depend upon him to lead us out of them again.

It is a matter of great satisfaction for us to mark the business improvement in our own small sphere. The month of October, 1933, was our best October since 1930. November was

the best since 1929. And December was the best month we ever had in our ten years' existence! So here's to 1934.

Confiction in Club Activities

"In the January issue, I noticed comment on the duplication of DX programs because numerous clubs arrange them ignorant of the plans of contemporaries," comments Clement Van Velsor, 1033 Sanford Ave., Irvington, N. J. "The NNRC with over 2000 members, arranges a DX program for a Sunday morning, for instance, and then a club with five or ten members arranges with another station on the same wave and about the same time. This confusion of programs is very detrimental. The NNRC has about 26 stations announc-



May we present "Happy-am-I," the Elder Solomon Lightfoot Michaux, pastor of the little church on the Potomac, who presents their unique services via WJSV and the CBS every Saturday from 7:30 to 8:00 p. m.

ing DX tips and some twelve newspapers publish them. As a result, thousands all over the country are listening for those programs and hear interference because a club with a dozen or so members has arranged a program for their benefit. It costs time and money to arrange these programs.

"Personally I think a club with a few members ought not to try to arrange programs. When it has grown to a fair size, it should cooperate with other organizations to eliminate confusion. The CDXR and the ARC are large clubs and their work as well as ours is spoiled by a small group."

It is obvious that there should be some sort of a "clearing-house" for DX programs. Each club should report its DX programs as fast as they are scheduled and when a certain wave for a certain hour has been preempted, "first come, first served," any later programs scheduled for such conflicting hour and wave, should be canceled or changed by the club reporting, upon notice from the "clearing-house." Were it not for the vast amount of work that would be involved, RADEX would offer to do this work as it now receives notice of all special programs direct from the stations involved. It is possible the cost of the work might be borne by assessment upon the clubs either in proportion to membership or to number of programs arranged. The entire matter is referred to the attention of the DX clubs in the hope that a joint committee may be appointed to work out a solution for this vexing question.

Our World-Wide Staff

We receive many comments on the accurate and up-to-the-minute data published in this magazine. Although we subscribe to radio publications from a number of foreign countries, our biggest asset is the great number of reporters we have (our readers) scattered all over the world from the northernmost shore of Alaska and Yukon to the most southerly in Chile,

Argentine, New Zealand and South Africa. To the loyalty and keen interest of these readers, we owe our success in keeping abreast of the ever-changing radio picture. As an instance, a single mail brought us five letters from New Zealand, each containing a notice of the reallocation in that country as published in our December issue. On behalf of the rest of our readers we thank these five friends for their prompt and thoughtful courtesy. They were S. N. Cartwright, Hakari, Mokou River, Mokou, N. Z.; George E. Bott, 507 Southampton St., E. Hastings; Frank Carr, 21 Lowther St., Wanganui; S. Robson, President of the NZDX Club, 100 Islington St., Invercargill; and H. B. George Lewis, 22 Union St., Palmerston N.

Says Mr. Carr: "2YA, formerly on 720 will be on 570 and 3YA will be on 720 after Dec. 1, with their new 3000 watt transmitters. I use a Philco 9-tube Model 90-E; my antenna is the four-wire type, 60 feet high, 600 feet long. I have verified over 200 American stations and others in different parts of the world. Would be pleased if any American DXer would write."

And from Mr. Robson: "Conditions for reception of American stations have been excellent during the past winter (the U. S. summer) and many new stations have been reported. Since writing last, I have verified a number of new ones among which were KWCR, WFEA, WABZ, KERN, KWG, WHBL, KGGM, KWSC, KMA, KMO, KMJ, KFBK, and KGFJ. September 10 was a great night with American stations coming in at great volume and I heard the calls of eight 100-watt: KDB, KIT, K FXM, KWG, KERN, KGFJ, KP Q and WEBR. Of these, KFBK and KGFJ were new to me and I have since received their verifications. European stations have not been quite so good in comparison with the three previous years but I have logged 20 new ones. My verifications

from European stations number 31 on the b. c. band."

Radio Buyers Beware

Another "dodge" which might well have been included in our story "Gypping the Radio Buyer" in the December issue, is that of selling a receiver that will "get the short waves" when it will only reach down to 75 meters. "I have a Fada all-wave midget set," writes F. W. Einstein, 601 West 141st Street, New York City, on which the salesman assured me I could pick up the s. w. stations. It tunes from 75 to 550 meters and all I can get on the short waves are the police, airport and television and, of course, the 'hams.' Is there anything I can do to get some of the world stations." Unfortunately, as will be seen from the lists of s. w. stations we publish, there is very little between the b. c. band and 75 meters except the amateurs, police, airport and television stations. The "world" stations are pretty well all below 60 meters and therefore entirely out of the range of this "all-wave" set. There are a number of sets on the market which "reach into" the short waves but they are not all-wave receivers by any possible stretch of the imagination and readers should thoroughly understand this when buying them.

This and That

"For the past month," complains Donald Weber, 1377 Park Ave., Plainfield, N. J., "I have been troubled with a strange buzzing noise in my set—in fact, all three sets in our house pick it up. When the antenna is removed it stops." The fact that three sets in the house pick this noise up is proof that the trouble is not in the set. This is also indicated by the noise stopping when aerial is removed. The next step is to see if the sets in neighbors' homes are troubled by the same noise. If they are it is coming from some place in the neighborhood. If they are not it is from within the house.



Blue-eyed bluesinger, Loretta Lee, with George Hall's Hotel Taft Orchestra on the Sea-Bee-Ess, Saturdays at 8:30. This raven-haired, nineteen-year-old is a fellow-native with the Boswell Sisters of N'Orleans.

Robert H. Weaver, 603 West Market Street, York, Pa., President of the National Radio Club, thinks it would be of great help if we could print a list of the mail addresses for the principal foreign stations on the b. c. band. None of the lists we receive from foreign countries contains the addresses. Can our readers help us? Send them in and we will compile them. This applies to Europe, Russia, Africa, Japan and China. We have the addresses for Oceania.

"My biggest peeve," concludes Kenneth Buxton, 282 Elgin St., Sarnia, Ont., "is that station that seems to delight to break into the middle of an overture to make a commercial announcement. Then I have to scramble all over the dial to find another station with the same program. I was listening to a band concert the other day and I had to get three sta-

tions to finish one program and then had to tune in a Canadian station to get the conclusion of an American band concert!"

From "Old Man" Henderson

Comes a letter protesting against our story in the December issue. He writes: "During the time intervening between the breakdown of the Department of Commerce and the burning of the Federal Radio Commission (which I claim was illegitimately borned), I went to Chicago and purchased the largest generator I could buy or that was manufactured at that time. Although my license, issued to me by the Department of Commerce who had been exercising authority they did not rightfully possess, called for 1000 watts, I put my power up to 3500 watts as at that particular time I had the right to do.

"I put the best coffee money could buy in a can, and the label, carton, postage on the package delivered anywhere in the United States for \$1.00. I explained that the coffee was not worth a dollar but the profit I could make on it was being used in my campaign to bring the people truths they couldn't get in the papers and leading magazines like yours.

"I did organize the Merchants' Minute Men (at a dollar a month dues) and furnished them with a card to hang in their windows, those who were not too cowardly to do so, but I furnished them with something you could or would not do—the truth. I have not consulted my books but I am sure the amount was not \$400,000.00. And—what if it was? I submitted to the Federal Radio Commission the amount of receipts and expenses of operation of the station and employing over a hundred people and I had nothing whatever to hide from them.

"Your next statement—'Henderson is now retiring from the air because of financial troubles' is only partly true. I have had my full quota of financial troubles, having been worth at least two million dollars in substantial properties which I was unable to

hold, and by paying the debts of the different lines of endeavors I was in, and actually took bankruptcy, giving up every single thing I possessed."

Mr. Henderson denies that the FRC refused to renew his license for KWKH and that, as a matter of fact, it was renewed as the "Hello World Broadcasting Corporation" with a blank of approval of transfer to the International Corp.

Last-Minute NOTES

SOME stations have evidently been excused from the frequency tests and some have been added. So far as we know, however, the tests are continuing monthly but we regret we have been unable to secure a revised list. Ray E. Everly, Newton, Ill., tells us that WEED, Greenville, N. C., on 1420 will test the first Tuesday of each month from 2:30-2:50 EST and that WOPI, Bristol, Tenn., on 1500, will test the same day from 2:50-3:10.

C. Hesterman of the CDXR, wants us to call special attention to the DX program on Feb. 24 of CFQC as this will be the first and last of the year for CFQC which has agreed to put on the program only on the assurance that they will not be flooded with requests from other clubs for specials. Again illustrating the danger of oversolicitation by clubs. Mr. Hesterman and Stan Clifton will do the announcing and the former agrees to verify personally every correct report received provided it is accompanied by Canadian postage or three pennies. His address is 610 Third Ave., E., Saskatoon, Sask.

KFLV, Rockford, Ill., on 1420 has evidently changed its call to WROK as several have reported picking it up on test and the call was clear.

CJRM writes to Harvey Kees, Beulah, N. Dak.: "The CJRM transmitter you are now hearing was originally CJRW at Fleming, Sask. We moved it out to Belle Plains, mid-

(Continued on page 47)

With the High Frequency FANS

• • • and PAGE TAYLOR

SHORT WAVE DX CALENDAR

Eastern Standard Time:

Jan. 27, 12:30 to 1:30 am, CP5
Jan. 27, 11 pm to 1:00 am, PAOASD
Jan. 28, 2:30 to 4:00 am, VE9CS
Feb. 4, 9:00 to 11:00 pm, CR7AA
Feb. 5, 5:00 to 6:30 am, PK1WK
Feb. 10, 5:00 to 6:30 am, PK1WK
Feb. 10, 9:30 to 10:30 pm, YV3BC
Feb. 15, 5:00 to 6:30 am, PK1WK
Feb. 24, 12:00 to 1:00 am, EAJ25

Station CP5, 49.3 meters or 6.080 megs., La Paz, Bolivia, will dedicate their special program of Jan. 27 to readers of RADEX. Any fan who has not yet heard the interesting programs originating from this station should take advantage of this opportunity of hearing a truly unusual program. CP5 is owned by Compañía Radio Boliviana, Casilla 637, La Paz, Bolivia. They may be identified by the expression "Radio Illimani." CP5 is on the air daily with a power of 1 kw. from 9 to 11:30 pm, EST. On Monday, Wednesday and Friday they also work from 6:30 to 7:30 pm, and on Tuesday, Thursday and Saturday from 6:30 to 8 pm.

A Dutch Amateur

PAOASD is an amateur station owned by W. F. Jacot of Euterpestraat 73, Amsterdam, Holland. The wavelength used by this station, 79.57 meters is, unfortunately, usually covered with interference and atmospherics and it is doubtful that it will be heard with the small amount of power used.

CR7AA, like PAOASD, will transmit their special program at what is perhaps the best hour for reception in this country, but on account of the long wavelength and low power, it is doubtful that this station will be heard. CR7AA works on 84.67 meters and can be addressed at Box 183, Laurence Marques, Mozambique. The programs from PAOASD and CR7AA

were arranged through the courtesy of the International DX'ers Alliance of Bloomington, Ill.

Radio Service Engineers, Ltd., 734 Davie St., Vancouver, B. C., announce that on January 28 their radio stations CKFC and VE9CS will transmit special DX programs which will be dedicated to all radio clubs. VE9CS will work on 6070 kcs. or 49.39 meters with 5 watts power from 2:30 to 4 am, EST.

Those PK1WK Specials

A letter received from Mr. de Kort and printed in the January number of this magazine states that PK1WK works on wavelengths of 49.02 and 49.5 meters, but Mr. de Kort didn't mention which of these wavelengths would be used for the special transmissions which will be dedicated es-



Howard Marsh, ranking tenor of the light operatic stage and renowned for his leading role in "The Student Prince," is now on the new Buick program via the CBS, Mondays, 9:15 to 9:30 EST.

pecially to American listeners on Feb. 5, 10 and 15. As the two waves lie in the same band, however, it will be possible to skip back and forth between 49.02 and 49.5 until the station is heard. Address reports to Mr. J. F. W. de Kort, Radiohandel, Bragaweg 34, Bandoeng, Java.

EAJ25, The Barcelona Radio Club, Barcelona, Spain, works on 6.000 meg. or 49.97 meters.

A Happy New S.W. Year

1934 promises to be a very interesting short wave year. Many new stations are scheduled to make an appearance this year, and already some of these have been reported, such as RNE and UOR3. Before the end of the year short wave listeners can expect to hear programs directly from Ceylon, New Zealand, from various French possessions in Africa, and from Christmas Island. At the present time we can record the arrival on the air of Radio Budapest HAT, which was heard and reported simultaneously by Roger D. Causse, P. O. Box 6688, Lester, Pa., and Sam Kiamie, 2857 Sampson Ave., New York City. Mr. Kiamie writes, "This is a new station and came in like a ton of bricks last Sunday. They employ a female announcer and announcements are made very rarely. She says 'Radio Budapest HAT', first in Hungarian and then in French." Mr. Causse gives the wavelength as 41.53 meters (7.220 meg.), and the time of his reception as 3.22 to 3.47 pm, EST, also on a Sunday.

Wants Our Help

The French Colonial station requests the assistance of all shortwave listeners in helping them determine how their transmissions may be improved. Several readers have received questionnaires along with their verifications from this station, but all readers of this magazine can be of assistance if they will report on their reception of the various programs offered and include in their reports the answers to the following questions:

1. What is your exact location? (Latitude, longitude, City, State, Country).

2. Are you situated in a mountainous region? wooded? dry? humid? near the seashore? What is the altitude?

3. At what time of the year and at what hour is reception best?

4. What receiving equipment do you use?

5. What other shortwave stations do you hear regularly? their wavelengths? Are they better or less well received than Radio-Coloniales Francaise?

6. Do atmospheric disturbances annoy you? When are they most annoying? Are they as bothersome on wavelengths above 50 meters?

7. What do you think of our programs?

8. What programs interest you most?

9. How much time do you spend listening to them? What hours are most convenient for you to listen to them? At the present time these stations have four transmission schedules, given below in EST.

1. 8:00 to 11:00 am, 19.68 meters (15.234 meg.)

2. 11:15 am to 2:15 pm, 25.2 meters (11.898 meg.)

3. 3:00 to 6:00 pm, 25.2 and 25.6 meters.

4. 6:15 to 9:00 pm, 25.6 meters (11.711 meg.) 10 pm to midnight, 25.2 meters.

Letters to this station should be addressed to: Ministère des Postes, Télégraphes & Téléphones, Direction de la Radiodiffusion, 103 Rue de Grenelle, Paris VII, France.

From Our Fans

"G6RX on 4302 kcs., 69.44 meters, roars in like a bear from 8 to 11 pm. This station is only testing but reception is wonderful; the volume and clearness amazes me. Records and short announcements make up the program with short intervals of dot and dash." This letter from Albert E. Lee, 30 Lakeside Ave., Pompton

Lakes, N. J., is typical of many letters received. Richard M. Carter and Charles Perdicaro give the address as Rugby Radio Station, Hillmorton, near Rugby, Warwickshire, England. Others reporting G6RX are Mrs. A. Wilbur, 80 Green St., Newark, N. J.; Bernard Remilland, 53 Washington St., Brattleboro, Vt.; Wm. Ross, Jr., 3521 Kroger Ave., Cincinnati; Robert L. Weber; Clarence Sargent; R. W. Evans; Guy R. Bigbee of Ft. Benning, Ga.; and Sam Kiamie.

"The Voice of the Prairies, Ltd.," operators of VE9CA, Calgary, Alta., hope, at some not too distant date, to resume their broadcasting on shortwaves. VE9CA works on 6.030 meg. or 49.72 meters.

The Byrd Station

Many listeners continue to hear broadcasts direct from the S. S. Jacob Rupert, which must now be close to the Antarctic ice barrier. On the arrival of the Byrd Expedition in Little America, KJTY will be removed from the ship and set up at the Main Base, at which location it will be known under the new call sign KFZ. KFZ will radiate 1000 watts power, and will work on about the same frequencies as KJTY. Another station, KFY, with only 75 watts power, will be set up at the Forward Base, using the same frequencies as KFZ. These wavelengths are given in our complete list of USA stations this month.

Listeners should be very careful, when tuning for KJTY or KFZ, not to confuse these stations with many others which are on the air at the same time relaying their transmissions. Some readers are reporting reception of KJTY on frequencies which do not tally with their Federally assigned frequencies, but which do compare with those used by stations in Bolinas, Rocky Point, Kahuku or even Buenos Aires. The complete list of stations of the United States and its Possessions given this month will aid readers in properly identifying stations which might be heard relaying KJTY or KFZ. This caution,



Here's the tiny cabin from which engineer John N. Dyer operates the radio control on the broadcasts from the Byrd Expedition aboard the good ship "Jacob Rupert." This is the only combination radio broadcasting studio and sleeping quarters in the world.

however, does not mean that KJTY cannot be directly received with good volume and clearness. Many interesting reports have been received, some of which follow.

"I have just left my receiver after picking up KJTY," writes Alfred H. Bacon, 928 13th St., New Westminster, B. C. "They were arranging Saturday's program for CBS and the position of the ship was given. They spoke of introducing the three stowaways in the program, and mentioned that their dogs also would have a part. They mentioned that the weather has been good and no icebergs have been encountered, although they expect to see some within three days. The operator said that the ship's bell and siren would be used as usual."

"Stations KEE, KKH, KKQ, KEJ and W2XBJ have been heard many times working KJTY," reports R. W. Evans, 832 Richie Ave., Lima, Ohio.

"These tests usually take place on Tuesdays and Fridays from 9 pm on, and the actual broadcast is Saturday at 10 pm. KKH picks up the KJTY signal and relays it to KEE, who sends it to New York. I received KJTY on a new special freq. of 9520 kcs. at 11:40 pm. For some reason they never mention frequencies in their conversations, all mention of kilocycles being made by referring to 'No. 7' or 'No. 11', with the exception of 9520 and 11830, which don't seem to have a code number yet." These two special freqs. mentioned by Mr. Evans were assigned temporarily for a period ending January 5th.

Other readers reporting good reception of KJTY this month are A. B. Baadsgaard, Ponoka, Alta.; Robert L. Weber, Doyle E. Carpenter and Stuart Walmsley.

R. W. Evans of Lima, Ohio, includes this additional data in his letter: "Station YVQ was heard on about 6700 kcs. rebroadcasting YV1BC near 10 pm. Station XDC near 9350 kcs. has been testing with music at 5:30 pm EST. HJ1ABB seems to be working on both 6580 and 6500 kcs. now. CNR, Rabat, Morocco, was well received on 8050 kcs. on a Sunday afternoon. I received a very nice verification from CT1AA for a program I heard last July, so you see it takes quite a bit of time for them to get around to answering."

"Radio-Tananarive"

The Directeur des Postes et des Télégraphes of the Radiotelegraphic Service at Tananarive, Madagascar, advises us that the correct and only call sign of their station is "Radio Tananarive," not FIQA or FIUL. His letter reads: "The station does not have an indicative sign; the transmissions begin with a piece of recorded music entitled 'Ramona', and end with the French National Anthem. The station operates on 6000 kcs. with a power of 400 watts antenna. We transmit every day except Monday, programs consisting of musical selections rendered by artists, or record-

ings, as well as news flashes." The schedule is given correctly in our lists under the heading "Radio-Tananarive."

"Quite a few of the South Americans have been coming through with fine volume lately and there are several that I have not identified yet," advises Stuart Walmsley, 1316 W. 58th Place, Los Angeles, Calif. "I notice that YV1BC is using a new wave, just slightly below W9XF, and they come through like a ton of bricks here, with their sign-off coming at about 6:30 pm, PST. YV3BC is another very good station. They are usually on until 7 pm, and, for the benefit of those who have not tuned them in, they announce every half hour, as do practically all the S. Americans. HC2RL is coming through fairly well with their Tuesday night broadcasts and I receive them best between 7:30 and 8 pm, PST. HIX, Santo Domingo, came through here on their last special broadcast although reception conditions were not good."

"All last week I heard a station broadcasting between W9XF and YV1BC. I could not catch the location when the announcement was given but their call sounded like TGR. There is no such station listed and I have not heard it again."

A New Peruvian

TI4NRH, Heredia, Costa Rica, was recently heard near 7 pm, EST by Clarence Sargent, Dansville, N. Y. "Their signals fade a lot," he writes. "The volume of this station varies, during a single broadcast, from R4 to R8, and the quality from QSA2 to 5. I have also heard a new station on about 48 meters, OCM, Lima, Peru. They broadcast very good music and request reports from SWL."

OCM has also been reported by J. A. Shanks of Russellville, Tenn. He postcards, "Do you know of a Colombian on the Hi frequency side of HJ1ABB? His call was HJ1A—(missed the last two letters). I also hear a Colombian on GSA's freq.,



Strange folks and stranger ports are brought to you each Thursday at 8:00 p. m. EST over NBC-WJZ in Captain Diamond's Adventures. Al Swenson is the Cap'n, May Buckley plays his wife and Laddie Seaman, popular NBC juvenile, plays the part of Tommy.

which I think might be HJ4ABI."

And Other Colombian

Two readers report a new phone station in Barranquilla, Colombia, testing with WNC at Hialeah, Geo. W. Burns of 2466 Wahl Terrace, Cincinnati, stating that he believes the call letters are HJA3 and the frequency, 12.832 megs. Richard Carter, 820 McKinley, Ann Arbor, Mich., writes, "I heard a station on about 20.15 meters calling WNC and wishing to test with them. This station gave its location as Barranquilla, Colombia, and the call might have been HJS or HJF."

"My veri. from ZFS gives their address at Office of Superintendent of Telegraphs, Central Bay Street, Nassau N. P., Bahamas," contributes Mr. Carter of Ann Arbor. "Their traffic with England is irregular. Since then I've heard ZFS calling ZFV, South Africa, and a woman calling CQ to all ships. They sometimes have traffic with GYC and GYD, England, between

9 and 10 pm, EST, and have also been heard working VPSX. Tonight, 6:30 to 7:10 pm, I heard a station in Montevideo, Uruguay on approx. 29.3 calling New York. XETE was testing near 6:30 am one morning near 32 meters. IAC is coming in well again on 45.1 meters in the late afternoons. HIX has moved down to 49.5 meters to get away from the CW which seems to be ever present on 50 meters. YVR on 32.7 m. frequently works EHY, Madrid, near 4 pm. YVQ was heard relaying programs of YV1BC, and one evening they were heard on 44.96 meters rebroadcasting the German stations between 6 and 7 pm. I note that their 22.48 meter and 25.67 meter waves are almost always on at the same time."

Some Brief Reports

"I believe I have been very fortunate in reception on the short wave bands, even though a bus line runs right past my door," comments Wm. E. Lewis, 618 Quincy St., NW., Washington, D. C. "I have received six Daventry transmitters and have a very nice letter from the BBC in reply to my reports. I have also heard G6RX, Rugby. The Deutschlandsenders come in well here, so I have been able to log the four Zeesen stations. They are also very good about answering letters. I just received a verification from Mr. George Abbes, owner of HIZ, Santo Domingo. He states that HIZ is on the air daily from 4:40 to 5:40 pm EST and broadcast special DX programs every Saturday night from 10 to 12 pm, EST. They only use 20 watts power in the antenna, but their volume is very good at this point of reception. I use a Philco Model 490, 2-tube built-in converter, and it gives very faithful service, even with the aforementioned electrical interference ever present. I will answer any letters I may receive, but am especially anxious to hear from owners of Philco 490's."

Misses His European News

"A couple of Saturday nights I got the Byrd broadcast much better from

KKH than I could get it from the network," contributes D. E. Carpenter, Emmetsburg, Ia. "I suppose Byrd was using 13.2 megs. which of course had faded out here much earlier. PSK is the only one of the S. Americans which is consistently good. I2RO has deserted me while Rue de Grenelle was heard only five times this month. I have a personal grievance with London for taking GSF off the morning schedule. They were the old stand-by for the early news from Europe."

"Here is some miscellaneous information and a few observations on s.w. stations heard lately," contributed by Robert L. Weber, West McHenry, Ill. "PSK, 36.65 meters, announces that they relay programs from PRAG, and they welcome SHORT reports and will verify with a card showing views of the City of Rio de Janeiro. I have been very fortunate in receiving all three stations listed in RADEX for the Dominican Republic. Heard HIX this morning on their DX special. HI1A, according to a card received from them, work from 8 to 10 pm daily. These hours are Santo Domingo time, which is 20 minutes faster than EST."

News from Australia is contained in a letter from Clement Van Velsor, 1033 Sanford Ave., Irvington, N. J. "My Aussie friend reports that CQN, city of Macao, on 49 plus, is being heard around 4 am, EST, several mornings a week, and that ZHI, 49 plus meters, Singapore, is reported around 5 to 8 am, EST."

Some Tips

"Here's a tip for those who like to listen in on the 'ham' bands," suggests K. P. Williamson, 1610 Sherbrooke St., W., Montreal, P. Q. "On two successive Sunday afternoons I have heard K4SA, Porto Rico, on 20-meters. He comes in here with fine volume and I received a nice QSL card from him confirming my reception of his station. Prior to the bad spell on shortwaves, I was rather fortunate and added these new stations to my log: CNR, RV59, and SUZ,

which was phoning DGU near 6 am, EST."

J. A. Shanks of Russellville, Tenn., and Roy E. Robinson of Providence, R. I., have confirmations from RNE. The Director of the station, Mme. Inna Marr, told Mr. Shanks that tests between the USSR and the USA take place each Monday from 1230 to 1500 GMT. The address is given as: Commissariat du Peuple des Communications Postales et Électriques de l'URSS, No. 17 Gorki Street, Moscow, USSR.

"Less than a year ago, I received one of those wonderful Midwest 16-tube superheterodynes," writes the Rev. Jerome Shiltz, 120 Courtland Street, Wellington, Ohio. "I have received many foreign stations—EAQ, I2RO, FYA, CT1AA, GSA-B-D-E, VK3ME, DJA-C-D, YVQ, GBB-U. Also, of course, many amateurs and police from Maine to California and from Canada to Florida. I would be glad to hear from other Midwest users."

"I am using one of the Midwest 16-tube receivers which really goes after them," advises Richard F. Miller, 515 Ridgeway, Dallas, Texas. "GSA, 49.56 m., and DJC, 49.83 m., come in loud enough for rebroadcasting. I have EAQ, VK2ME and 3ME verified and will probably get one from Germany next month. GSA sent a nice card of thanks but did not verify. YV1BC and 3BC are almost like locals. LSN and KKP are very strong. But not a peep out of the Japs. Perhaps I don't get up early enough."

The second edition of the DX Log of the World will contain the reallocation in Europe and New Zealand. It will be on sale at most newsstands on February 1st. Price 10c.

Using MICROPHONES and Phonograph PICKUPS

PART 2

• • • By B. FRANCIS DASHIELL

LAST month we discussed a few simple methods of attaching phonograph pickups and microphones to radio receivers. For those readers who wish to make permanent installations, and get maximum results, we suggest three circuit alterations which are not complicated. Any reader, who is experimentally inclined, can make the connections without difficulty. A study of the circuit diagram of the receiver in question will quickly show how the unit is to be placed.

In Figure 4, the circuit at the "low" end of the grid coil of the detector tube is disconnected at the ground. One contact of a two point switch (SW) is attached to the end of the coil, then the "A" and "B" output terminals of the unit are connected in series with the coil and ground, as shown. The lever of the switch is next grounded. The second contact of SW connects to the cathode of the

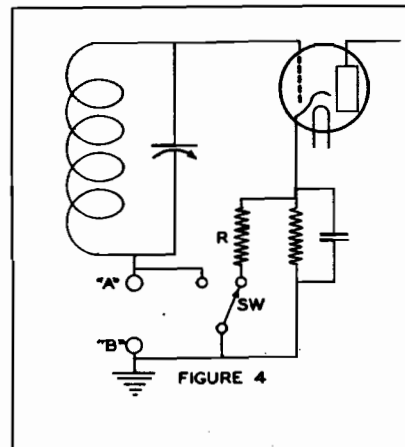


FIGURE 4

tube through a 5,000-ohm resistor (R), inserted so as to increase the bias when the unit is used. When the switch lever is set on the right-hand contact the resistor is cut in and the tube acts as a first audio amplifier, instead of biased detector. When the lever is set on the left-hand contact, the unit output is grounded, and the tube acts as the original detector for radio signals.

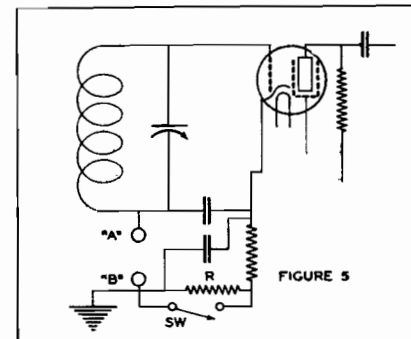
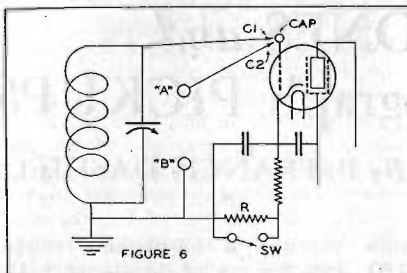


FIGURE 5

Figure 5 shows a somewhat similar method, except the switch (SW) merely shorts the resistor R. It is used when the detector grid is fed from an intermediate transformer stage (superheterodyne). When SW is closed, R is shorted, and the detector becomes an audio amplifier.

And, in Figure 6, we see an arrangement for any power detector of the tetrode type, such as a -24A, -32, -35, -36 and -51. The resistor R furnishes sufficient cathode bias so that the tube will act as an audio amplifier when the microphone unit is in use. Contacts are made to the control-grid cap of the tube. These two leads, shown at C1 and C2, must be changed whenever the unit is operated, for a



switch in the grid lead is impracticable. Similar arrangements can be made for detectors of the triode and pentode types, but changing the grid connections at the socket will be more difficult than at the top cap.

For diode tube circuits of the earlier types of tubes, the output unit ("A" and "B") can be applied to the leads across which the detected or rectified signal exists. For modern diodes, such as the -85 type of detector, the unit output is applied directly between the control grid and ground, or shunted across the grid-bias resistor. The triode section of the tube circuit is already taken care of by design, and the circuit is wired for audio amplification, so no alterations are necessary.

Radio in BELGIUM

I AM a constant reader of RADEX as my home is in Brooklyn. I am now visiting in Europe. I have over 350 stations logged from my New York residence. In Europe, my aim is not DX, though I must say I have received outstanding results without even looking for them. Twenty days out of every month, WEA, WABC, WTIC, WTAM, WCAU, KOA, WBBM, and CKAC can easily be picked up here. The general signal is QSA 3-4, and R 7-8. These stations are all of a considerably lower power than most European stations. The maximum in the U. S. thus far is 50 kw. On the continent we have Prague with 150 kw., Luxembourg

with 120 kw., Leipzig with 150 and dozens of other high-powered transmitters which should certainly make themselves heard in North America. Yet the only European I was ever able to log in N. Y. was Radio Normandie. It's really some riddle.

European local reception can in no way be compared with that in N. Y. Save for one or two stations, the rest do not come in like those in N. Y. Besides the music, background noises can always be heard. This is not judged from the receiver I am using but from at least half a dozen in various locations.

Distant reception is something very puzzling. I can't make out how Moscow can come in here all day long without interruption. Surely no one in N. Y. can claim constant reception of even Chicago. It's just one of those mysteries which goes to make radio all the more interesting.

F. Maybarduk, 217 Rue de Campine, Liege, Belgium.



Maria Silveira is the possessor of the lovely soprano voice you hear on those Saturday night broadcasts over CBS for the Byrd Antarctic Expedition. She helps William Daly and his orchestra cheer up the explorers way down at the bottom of the world.

STORIES of the Log Builders

The Foreigners Are Coming in

SCORES of readers are this month joining for the first time the "Heard-Other-Continents" Club. That program of LR5 on December 3, was the key that opened a new field for many.

"Thanks to your DX calendar, I enjoyed a whole hour of the program of LR5 this morning," writes Ray H. Zorn, Troy Grove, Ill. "They came in very well and had a nice variety of selections. This is my second S. A. on the b. c. On the morning of Nov. 18, I received CX26 at Montevideo on 1050. My log now stands at 352 with 122 using 100 watts or less. My best: KFPM, CHML, XEFV, KPCB, KXL, WSYB, XEFZ. I use two sets; an Echophone 6-tube, several years old, and a home-built 3-tube which I use for local stations. I bought the first issue of your 'DX Log of the World' the minute I saw it and shall buy each succeeding copy. It is a much-needed and valuable book."

"Thanks to RADEX for a real radio thrill," exults B. S. Hastings, 4333 Coolbrooke Ave., Montreal. "I was able this morning to receive LR5, Buenos Aires, loudly and clearly on my 8-tube Atwater Kent. Don't cut any part of RADEX out," he adds. "My only interest to date has been the b. c. band but before many weeks, that s. w. section of yours is going to have me hunting a converter."

Another who received LR5 as a result of the notice of their DX program in our Calendar (thanks to the International DXers Alliance) was Frank Hilburn, 106 Mathew Street, Yoakum, Texas. Frank has heard several Japs and would like some tips on the best time to tune in some Aussies. He has increased his aerial from 25 feet to 200 and finds much better reception.

Among others who reported good reception of LR5 were Ivor Nixon,

Room 505, 45 Richmond St., W., Toronto; C. R. Anderson, 1026 1st N. E., Mason City, Iowa; Joe Stokes, 7318 Woodlawn Ave., Swissvale, Pa.; Frank Wheeler, 406 Eagle Point, Lakeside, Erie, Pa.; Earl R. Roberts, Newark, Ohio; Paul W. Craven, 190 Commonwealth Ave., Buffalo, N. Y.

"I am an ardent DXer," confesses J. M. Forbes, Keewatin, Ont., "and my log now totals 316 counting four police on 1534 and 1574. Some of my best: 2YA, CX26, LR5, CMCW, CHAB, 10-AT, 10-BI, CHRC, CKMO, CKWX and many others. I have not been able to pull in Japan or Australia yet but hope to after receiving my Time Converter.

Defends Canadian Commission

"To the person who gives an unfavorable criticism of the Canadian Radio Commission in your December issue," continues Mr. Forbes, "I would like to say that, in my opinion, radio has never before been as well organized and of such a high standard in Canada before. I say, give the Radio Commission a chance. They've only started and I think they've made a wonderful beginning considering their handicaps and the terrible mess things were in when they started. As for the two-dollar license, I think it's cheap considering the fine entertainment sent out by the Commission with long harangues telling you what you ought to wear or eat or brush your teeth with."

And Clement Van Velsor, Irvington, N. J., adds: "The reader who complained about the set-up in Canada evidently likes the same type of program as many on this side, that is dance music and other such stuff. Whenever I cannot find anything but dance music in this country, I turn to Canadian stations where usually I can find good music."

Tries His New Set

"A new voice is joining your fellowship from North Hollywood," greets Richard L. Bullard, 5649 Irvine Ave., North Hollywood, Calif. "I am entering the season with a brand new Midwest 16-34 chassis, and I am getting all prepared to make this the greatest in my career for DX. Since I have had the set, I have just listened here and there, hit and miss, to see just what the set could do. I am more than satisfied. In the face of poor DX conditions here on the coast, I have logged in the past month YV1BC, YV3BC, YVQ, Prado, LSN, Santo Domingo, Pontoise, EAQ, W3XAU, VE9JR, W8XK, W3XL, W1XAL, W3XAL, W2XE, W9XF, VE9GW, VE9CS, W2DAF—all on the s. w. On the b. c. band, I have received all the big stations and many smaller ones. On the long waves, above the b. c. band, I have had KCD, Oakland, KLK, Reno, KCAT, KCL and several others. You are going to hear from me often as I used to be an ardent DX fan with a 2-tube Harkness. I would be pleased to hear from other owners of the Midwest 16, telling about their results, aerial and ground installations, etc."

From Alaska and Arizona

From Curry, Alaska, (Box 14) comes this report from A. J. Bubnik: "I have a Scott all-wave receiver and during the past seven weeks I have logged on short waves, W8XK, GSB-D, EAQ, W2XAF, W3XL, Pontoise, W1XAL, PSK. All these stations come here daily. I have heard a lot more but was unable to identify them. On the b. c. band, I have so far around 120 stations as far east as N. Y. I hear every night five or six different stations in New Zealand and Australia; Honolulu and Japan every night. Conditions for reception here in Alaska are very bad, however, on my Scott deluxe, I have been able to catch quite a few stations in these few weeks that I have had it."

"Perhaps my most unusual catch was KZRM, Manila, on 618.5 at 4:00

a. m. MST, on the morning of December 3," thinks Howard G. Mathis, Box 301, Holbrook, Ariz. "The program has been heard for an hour and a report has been sent in for verification. The station was strongly received but has not been heard since! On the b. c. band, I have received 384 stations including 2BL, 5CK, 2CO, 3FC, 2GB, 4QG, 4RK in Australia and 2YA in N. Z. My Japanese list has reached 22 and XGOA, Nanking, China. On the s. w., the list includes 32 b. c. stations, those outside the U. S. and Canada being GSB-C-E, DJB, EAQ, FYA, LSN, LSX, YV3BC, HJ1ABB, HJ1A, XETE, [VK2M E-3ME], RV15 and J1AA."

Readers Report Progress

"I started DXing on December 25, 1931, and in exactly two years I have built up a log of 582 stations," sums up Stuart Russell Garnett, 4131 Wolf Road, Western Springs, Ill. "Of these I have 490 verified. Some of my best catches are YV1BC, LR5, 2YA, 10-AT, CKMO, KGFJ, KREG, WKAQ and CMCU. I have all the 10-s in Canada except BU. I have logged all the states but Rhode Island and Delaware and all the Canadian provinces but New Brunswick and Nova Scotia. My biggest surprise was winning a crate of apples as one of the three farthest listeners to KPQ's dedicatory program of their new 100-watt transmitter. Incidentally, this was my first 100-watter from the Coast."

"I received a fine veri from Radio Normandie just 19 days after I sent my report," announces Charles Leboeuf, Box 222, North Grosvenordale, Conn. "I expect one from Poste Parisian soon. These two French stations are on the air every morning at 2:15. I can hear their carrier wave about five minutes before they begin to broadcast. They broadcast phonograph records and news dispatches. I have also received LR5, KDFN, CMCA, CJOC, CRCS, 10-AK, CHNC, XEB, XEFO, FQN." Charles has a triangular-shaped aerial

about 300 feet in length in all. He states that it gives him good volume and very little fading.

Through the Chicago Barrage

"Although I am located in the city of Chicago, where there are stations on many waves," begins a new reader, Blake H. Page, 3045 W. Washington Blvd., "yet I have succeeded in logging 437 stations with my 14-tube Zenith Model 103 which I have had only since last March. On December 13, between noon and 4:30 p. m., I picked up 32 stations from Mexico to Minneapolis and from New York City to Dallas. I use a cage 30-foot antenna with a shielded lead-in of about 40 feet. I am also using an ICA line filter." Mr. Page submits a list of stations received showing every channel, a number of them being completed.

"My log now includes all states with many completely verified; all channels except 1030," remarks J. Kenneth Vetter, 964 Waukegan Road, Deerfield, Ill. "I find DX practically annihilated on either 1200 or 1210 due to all-night pests. It seems to me, even though little restriction is placed on using the air from midnight until six a. m., that these stations take a very selfish attitude in the matter. My best catches so far this season are 2CO and LR5. Other fair ones are XETB, CMBK, KERN, KIEM and XEAI. Although many DXers report that CRCM refuse to verify, I received a very nice letter from them about three weeks ago."

Notes and Tips

"We were obliged to suspend our DX programs six weeks ago after putting on only two or three," writes Wendell Cox of Station XES, Tampico, Tamps. "We now wish to resume these but would like for you to advise us the best days and the best hour. We intended to use the first and third Saturday morning of each month at 1:00 a. m., or just after KYW, Chicago, also on 1020, signs off, and that time would be convenient if no other station is on 1020

at that time." We have advised XES that inasmuch as they have practically a clear channel except for KYW, these hours should be entirely satisfactory. We may not have a confirmation from them in time for this month's calendar but listeners would do well to try to tune them in at the hours they mention.

We are glad to be advised by CHAB, Moose Jaw, Sask., that the report of their death, like that of Mark Twain, was "greatly exaggerated." "We are on the air broadcasting on regular schedule," writes H. C. Buchanan, Secretary. "Our station is owned by the people of Moose Jaw." Also comes a correction from 10-BQ at Brantford: "On page 39, January issue, you state 'CKPC formerly 10BQ now Brantford.' Would you kindly make correction of the above. CKPC and 10BQ are separate stations. CKPC was formerly of Preston, Ont., is now located in Brantford. 10-BQ—"The Little Station of the Hill" is still operating in the same old way."



Here is the wicked "Ardala Valmar," the feminine villain of "Buck Rogers in the 25th Century," Monday to Thursday on the CBS. Elaine Melchior as the fascinating Ardala is plotting among the planets to rule over Venus. We're going to vote for her.

"The new radio station here in Springfield (Mo.) is to begin operating regularly at 6:00 a. m. CST, Monday (Christmas) morning. A last-minute change in call letters was made from KGIZ to KWTO ('Keep Watching The Ozarks'). It will be on 560 with 500 watts. I think they plan to use KGBX's frequency check in January." Thus reports James Owen, 1019 W. Webster, Springfield, Mo.

"Here is a tip for those who have not logged British Columbia," offers Richard M. Carter, Ann Arbor, Mich. "CRCV comes in well every night from 1:00-2:00 a. m., EST." Richard adds "Radio certainly is peculiar. I heard the harmonic of WDAS on 4,110 kcs. at 4:00 p. m. and that of WGLC on 6,850 at 8:00 p. m., both 100-watters and impossible for me to hear on the regular b. c. band at those hours."

"There are two Newfoundland stations you never list," points out Harold Canning, 617 W. Highland, San Angelo, Texas. "They are VO GT, 950 kcs. 100 watts, Bell Island, owned by the Rev. Mr. Rawlins, and Vo8A, 6800 kcs., St. Johns, owned by E. Ash." We were advised some time ago that VOGT was off the air. Can some of our eastern readers verify?

XEAE, Tijuana, B. C., on 980, has joined the all-nighters, according to Clarence C. Borgen, Mountain Lake, Minn. They will be on the air every morning except Sunday from late in the evening until 5:00 a. m., EST.

The new official list of the Canadian Radio Broadcasting Commission does not show CJ RW, Fleming, Sask. Has it been deleted or is this the new station CJRC, 1390, Middlechurch? Will some of our Saskatchewan readers please advise us?

"WCBM, Baltimore, broadcasts our DX tips every Friday morning at 12:01 EST and KDKA every Monday at 12:30 a. m.," says A. W. Oppel, Executive Secretary of the NNRC, and adds: "Radio Normandie, 1328 kcs., Fecamp, France, is coming through quite steadily every morning

except Sunday for an hour after the start of their regular broadcast at 2:15 a. m., EST."

HELP WANTED

Male or Female

WHAT good Samaritan will give these readers a helping hand in solving their problems?

"Tuesday a. m., Dec. 19, CST, I tuned in on my Majestic 131 t. r. f., a station on exactly 980 kcs. after XEAE had signed off at 1:30 a. m. This station announced they were in San Diego, Calif., and said they were the greatest little 50 watt station in the world. They played recordings and were ashamed to give their call letters. They were on until four a. m." This sounds like an outlaw. Perhaps some reader in San Diego can tell us.

"I always hear a very weak station on about 1054 kcs. at 2 to 3 a. m." resumes Mr. Jesse L. Lausman, 717 S. Shelby St., Louisville, Ky. "They broadcast stock market reports of British controls and talk about farming, wheat crops, etc. Who could this be at such an hour?" The stations in Palmerston North, N. Z., were on 1050 until December first. Since that date Dunedin stations have been on that channel—4ZM and 4ZO—but these have only 100 and 25 watts respectively. Can anyone make a better guess?

F. Wiseman, 13 Kyle Street, Scotswood, Newcastle-on-Tyne, England, proves his reception in an unmistakable way by reproducing the program on a phonograph record and mailing it immediately to the station heard. Now he is stumped with a station heard on 1000-1010 kcs., below WBZ and above KWJ. The program was organ music. The speaker said "WHA (or WAK) broadcasts for James Winston . . . New Haven." Mr. Wiseman has played his record over and over and feels sure the call is WHA.

It was not, of course, WHA on 940. Mr. Wiseman is exceedingly anxious to identify this station and if any reader can think of a solution, he should write Mr. Wiseman at the above address.

* * *

"Since last writing you, my log has increased from 414 to 508," counts up David Walton, P. O. Box 87, Picton, Ont. "My recent catches include LR5, HIX and VE9EK. In answer to Ernest Byers in the January issue, I have heard the slogan 'The Voice of the Adirondacks' used by WHDL at Tupper Lake, N. Y., on 1420. Who can tell me what station was broadcasting on 1210 on the morning of Saturday, Dec. 23, using only Spanish? (XETZ is on 1210) Does WIND ever sign off before KTAB? Every time I try for the latter I am foiled by a 'Milkman's Matinee' or something."

* * *

"On Dec. 3, I heard a French-speaking station on 1320 kcs. from 2:30 to 3 a. m.," says Paul W. Craven, 190 Commonwealth Ave., Buffalo, N. Y. "I couldn't identify him because of the heavy static. Did anyone else hear him? It wasn't a harmonic of CKAC because they weren't on at the time. (Ed. Fecamp, France, is on 1328 and has been rather widely heard in the U. S.) Am using a Stewart Warner all-wave 8-tuber. Would like to hear from anyone who has a similar set."

* * *

On Christmas morning, W. T. R. Morris, Jr., 3219 Garland Ave., Richmond, Va., picked up a mystery station on 1280 in a language he could not understand but which sounded like a mixture of German or Italian. The station faded at dawn which was another indication of its being a foreigner. He feels sure it must have been Lodz, Poland, on 1283. The program was typical of Christmas with a chorus which sang several well-known anthems. Did any other reader chance upon this program? It



If you've wondered if Rubinoff is as black as Eddie Cantor paints him—well, here they are in a studio on the movie lot in Hollywood with Eddie still in his "Roman Scandals" makeup.

was logged from 5:50 until 6:50 a. m., EST.

* * *

"My set is a Stewart-Warner, Model 102-B, with a built-in converter, Model 301-B. Six tubes are used with two more in the converter. I have not been entirely satisfied with the operation of the converter. The only stations off the continent that I can pick up are Pontoise and GSE, Daventry, both on the 25 meter band. Have also heard BSA on 49.56 m. I would like to hear from someone who is using the same models as to their results on the s. w. converter." The inquirer is Edgar W. Jones, 1250 5th Ave., S., Lethbridge, Alberta. Who can help him?

* * *

"Every morning, about 3:00 or 4:00 some weak station broadcasts on the same channel as WTAM (1070)," says Joel H. Armantrout, 602 E. Magnolia St., Fitzgerald, Ga. "I cannot catch the call as the signal is too faint. Could you tell me what station this is? I have a 1934 6-tube Philco midget. I have had it only

two months and in that time I have logged 306 stations on the regular b. c. band of which 76 are 100-watt." Joel wants to join a good DX club.

* * *

"I recently purchased a 10-tube Clarion superhet. Sunday morning, Dec. 10, around four or five a.m., EST, I turned the dial to 559 kcs. and heard a program with the announcement 'This is D9AN testing.' To make sure I listened to another selection and then the same announcement. He talked about European broadcasting but I could hold them for only ten minutes then they faded completely. Can you help me identify this one?" This query is from Paul Spachman, 13 Hillside Ave., Souderton, Pa. Who can help?

* * *

It is our understanding that the Radio Commission is excusing some of the stations from further frequency tests, perhaps after they have been successfully and correctly checked. No announcement is made of such exceptions. William Benz, 4717 Morganford Road, St. Louis, writes that he has tried hard for WKAR, East Lansing, and WJEM, Tupelo, Miss., on their checks without success and wants to know if any others have logged them during these periods.

* * *

If anyone has succeeded in sharpening the tuning of his set in the lower frequencies, Philip Mehler, 97 Champlin Ave., Liberty, N. Y., would like to hear from them. He, like many others, is greatly troubled by cross-talk and heterodyning on the channels from 550 to 610.

Some NEWSY Notes

UNDER date of December 13, Dan Davis, Principal of the High School, Maud, Okla., writes: "KO CW, formerly at Chickasha, Okla., and later moved to Tulsa, has never broadcast since the move and at present are in a U. S. bonded warehouse

waiting some kind of legal settlement. Oklahoma, long noted as a land of outlaws, seems to have an outlaw of another nature in the form of a radio station M CO at Ada, Okla. They seem to be operating on about 15 watts power and have worked up quite a commercial business by advertising. They broadcast from noon until dark and sometimes at night, operating on about 690 kcs.

"I suppose that I could not be classed as a regular DXer as I never ask for verifications but I am always sure of the station I receive. I always wait until I hear the call letters and the name of the town before I log it. At the present time, my log says 444 different stations. My best catches are JOBK-1 at Osaka, Japan, JOHK at Sendai, KGU, 10-AT, 10-AB, HHK, LR5, WKAQ, and quite a number of 50- and 100-watters. Radio is surely freakish. Since the one morning that the two Japs came in over the loudspeaker with volume sufficient for my wife to hear them in the next room, I have never been able to hear a sound at the same place on the dial. My radio is a Majestic 20; my aerial is a single wire about 100 feet long, 10 feet above the one-story house in which I live. My ground is an old automobile spring buried in rock salt."

Tuning Other Continents

"I am happy to say that I am now a regular listener to the T-P VKs and ZLs, being able to tune them in nearly every morning," Charles Meyer, Jr., 411 Blake St., St. Joseph, Mo., arises to remark. "But I wish somebody would give me a receipt on how to tune in the JOs, though, as I have heard only one, JOHK, and that very faint. My total log is now 442 with my best catches being CX26, LT1, 10-BQ and 2UE. Here are some answers to inquiries: To D. F. Mason: Your station in all probability was LR2 as I receive occasionally several of the S. A. stations in the background of the U. S. stations. To A. Belanger: I can't give you any info on YV1BC but you can, per-

haps, log KGU when they sign off at 3:00 a. m. CST. To S. B. Leland: Your station is 2BL in Sydney, on 855, which I receive quite loud from 4:00 until 6:00 a. m. CST. Following are some DX tips from the IDA 'Globe Circler':

11:30 p. m. LR4, Buenos Aires, 990 kc. 20 kw.

1:15 a. m. Poste-Parisian, 914 kc. 60 kw.

5:00 p. m. Rabat, Morocco, 721 kc. 6 kw.

12:10 a. m. Beromunster, Switz., 653 kc. 60 kw.

2:00 a. m. Bordeaux, France, 986 kc. 13 kw.

Midnight, Frankfurt, Germany, 1157 kc. 17 kw.

8:30-10 p. m. LR5, Buenos Aires, 830 kc. 27 kw.

"The times are CST. Readers should keep trying for these at about these times and perhaps they, too, will be lucky enough to pick some of them up."

Tuning All Waves

"My set is a Scott all-wave now three years old but I would not trade it for any other set except another Scott," begins Rudolph Bossert, 294 Roycroft Drive, Rochester, N. Y. "Since last year I have learned how to find the short waves and now use my set all day long on short waves only. I receive all of the English stations like locals, also the Germans. I am listening to DJD as I write this (4:15 p. m.). The South Americans come in well now. I get VK3ME and VK2ME whenever I try for them when they are on. Have logged police phones from California to Texas and from Montreal to Florida, to say nothing about amateur and airports. Answering Russel Geiger, I also receive the station he mentions; it is CMCA, 834 kcs. Colon (suburb of Havana) as I heard it announced. (Has CMCA moved from 1230? Ed.) With WH AM right here in Rochester, I can tune in the stations on either side—KVOO and WAPI on 1140, WO WO, WWVA on 1160." Mr. Bossert has

an aerial in his attic in the form of a coil, about 8 by 14 feet with 200 feet of enamel stranded wire. He says this aerial is good on long or short waves and receives equally well from all directions. The trouble, of course, with most inside aerials is that they pick up all the noises of the house wiring. Evidently Mr. Bossert is not troubled.

When Pests Are Silent

In his "first letter to any publication," J. R. Mappin, P. O. Box 1264, Avalon, Calif., says: "Regarding KGFJ, our 24-hour station, I notice some kicks from readers that it hogs the 1200 channel and prevents them from tuning in other stations on that frequency. You might publish the fact that during the monthly frequency tests, I have found KGFJ off the air." This is a good tip and applies to many other channels besides 1200. Instead of tuning for the station that is being checked, tune for others on that frequency who



Each Saturday night on the Columbia net, George Jessel features a "phoned conversation" with his mother that has become a popular radio bit. During one of his recent broadcasts, George's mother, Mrs. Charlotte Jessel, dropped in "in person."

may not be required to be silent because of distance from the station checked.

"I recently purchased a Philco all-wave Model 16-B," goes on Mr. Map-pin, "and have had very good results on both the b. c. and s. w. bands. On the s. w., my best are GSB-E-F, VK2-3ME, PRADO and YV1BC, RV15. On the b. c. I have received eight Japs and two Australians—2BL and one on 760—I only caught —KY and cannot identify it. The announcer said, 'it is 15 to 9' when it was 15 to 3 a. m. CST. This checks with Australian time. Thanks to the December RADEX, I picked up KJTY. While listening to their program over the CBS Saturday, December 2, I tuned to 6.650 megs. and was surprised to hear them with just as good quality and volume as on the rebroadcast."

KJTY Better Direct

William Mundt, 828 Broadway, Bethlehem, Pa., had a similar experience. "When the CBS program was on (Dec. 2) I decided to try to tune in KJTY direct. In less than one minute I had them; they were then a few hundred miles off the coast of N. Z. When the program started I listened on our b. c. receiver and found that the quality of the speech as it was rebroadcast by WHAS wasn't nearly as clear as what I was getting direct from the ship on s. w. After the special was over, I kept KJTY and heard some very interesting bits of news about the expedition. At times I could hear footsteps in their radio room and I heard someone operating a typewriter. They were on about 41 m. They signed off at 11:50 p. m. EST. I had held them for an hour and 55 minutes. I have a 12-tube Lafayette b. c. receiver and a Silver-Marshall s. w. set with four tubes constructed five years ago.

Gets Europe Regularly

"When I wrote you last March, I had a log of 350; it is now 672," reports Robert Hough, 26 Ellerton Ave.,

New Rochelle, N. Y. "I replaced the detector tube (27) with a 56 and made the set about 40 per cent. more sensitive and about 25 per cent. louder. The week preceding Christmas was sure swell for Europe. I have been getting Poste-Parisian regularly every morning at 2:12. From the 16th to the 23rd, inclusive, I logged: Toulouse, Bordeaux, P-P and Fecamp in France. (Incidentally P-P is having special programs for British listeners in English from 6:00-6:30 p. m. Sundays. If you can separate them from CRCM, they have excellent volume.)

"I also logged Stuttgart, Frankfurt-am-Main and Breslau in Germany and IIBA and IITO in Italy, SBH in Sweden and Hilversum, Holland—eleven in all. I find that Germany comes in best from 1 to 2 a. m., France from 2 to 3 and Italy from 2:30 to 3:30. With eleven Europeans to my credit, I seem to have no luck with the Aussies or ZLs and haven't yet been able to get either Hawaii or Alaska. One hint to DXers—tune very slowly. Fecamp comes in on a hairline and with American stations on both sides, it is easy to miss him." Robert does not tell us what set he has.

Recipe for T-P's

"In regard to the letter of Mr. Welsh of Reynoldsville, Pa., who complains that the DXers who report reception of oriental stations fail to assist others who have been unfortunate in failing to receive them," preambles Raymond C. Corbett, 619 12th St., Sacramento, Calif., "as far as I know from my own experience, there are no definite means of telling whether the Japs are coming in or not. If the Aussies are coming in well, it doesn't indicate that the Japs will also be heard. I have discovered no definite rules by the seasons. If all DXers will concentrate on 770 kcs., I am positive that, sooner or later, if they have any good location at all, they will be able to hear JOHK at Sendai, Japan. This station actually comes in as loud as

some of our Pacific Coast stations at times and their signals should penetrate the eastern part of the U. S. loud enough to be at least identified. JOCK on 830 and JOAK on 870 come in almost as well as JOHK. The best time for eastern listeners should be from 3:30 a. m. EST, on."

A Field on 1510

"In looking through RADEX, I notice you have KFQD in Anchorage, Alaska, on 600 kcs. but in the last few months I have received them on their old frequency of 1230," says D. Stevenson, 3893 38th Ave., W., Vancouver, B. C. The FRC changed KFQD some months ago. Can any other readers verify Mr. Stevenson? "Fans here in Vancouver have one radio feature that others do not have," concludes Mr. Stevenson. "That is many stations on 1510. Logging in the forests near here is extensive and a great many tugboats are employed to bring the logs to Vancouver. They are equipped with radio-phone transmitters using 50 or 100 watts power with a range of 50 miles. They are on the air at certain hours, carrying on conversations with their owners, coast stations and other tugs, about the weather, their positions, etc. It certainly makes good DXing although they cannot be verified. I have logged 20 tugs, 4 passenger ships and 3 coast stations out of 55 available."

A Tip on YV1BC

"That station Russell Geiger asks about on 835 is CMC, Havana," thinks R. B. Rolfe, 1741 Burnett, Waco, Texas. "I have picked them on three different nights and they are on 835 more nearly than 830. They always sign off with an announcement in English. The announcer talks Spanish very rapidly, so much so that, though I have been associated with Spanish-speaking people all my life, it is very difficult for me to understand him at times.

"I have at last gotten the much-received YV1BC, Caracas, Venez.,

and here is a tip for the boys in Texas who find they can't pick him up. XEAW does not come on the air until 7:30 p. m. now and, if they will tune very close around 960 kcs. between 6:00 and 7:30 p. m., they will likely hear YV1BC. I have had them three nights now with good speaker volume and a good, clear signal. My log stands at 256 with all the states but seven."

Radio DX in Haiti

From Port-au-Prince, Haiti, a fine list of stations received in that island Republic is submitted by R. A. Gravel who has concluded his diplomatic work with the treasury department of Haiti and returned to his home in Southbridge, Mass. Mr. Gravel reports that reception in Haiti is very difficult and while his pretty well covered the United States, Canada and Mexico, the stations were more or less limited to those above 10,000 watts. On the short waves, he received W3XAL in daytime and the volume of GSA would drown out Schenectady. Mr. Gravel adds: "I am sorry that my tour-of-duty in Haiti has been brought to an end at this particular time as I believe I could have registered many more stations," thus showing the true DX spirit.

T-P's in Tennessee

"It seems to me this section of the country should be ideal for DX tuning," observes a modest reader in Johnson City, Tenn. "In each issue of your magazine, I read letters from listeners who say they receive stations in Australia, Japan and New Zealand but none of them seems to be in my part of the country. I have a new 12-tube all-wave Silver-tone and can pick up any station in this country as well as many in Mexico and Canada, but never one of the Australian or Japanese. I have stayed up many a night hoping to get at least one but have had no luck. As for the short-wave end, I receive Germany and England practically every day and have received others in South America and the Bermudas. I

also picked up Byrd's ship, when it was near the Canal Zone." Come on, Tennesseans; let's see what you can do across the Pacific.

Wants All the Police

"I was glad to find that 'Just Above the 1500 Channel' in December issue," comments Bill Garrison, 122 E. William St., Bath, N. Y. "However, I believe it could be made even more useful to those of us who get coppers on our b. c. sets, if you included the police broadcasting on 1712 kcs. (In this issue you will find the s. w. stations of the U. S. by frequencies beginning with 1534 and running clear up to the Canadian police on 17,330. How's that for service? Ed.) I am sure I caught FQN on 572 between 3:26 and 5:30. They were so weak that all I could get was the time of several announcements, unidentified marches and several xylophone selections. Did anyone hear them?"

They Do Verify

B. L. Ahman, Jr., 3313 Westwald Ave., Baltimore, thinks the station D. F. Mason heard near WABC was undoubtedly CMX who is supposed to be on 890 as he picked it up between WGBI and WABC or on WENR's channel. "I think some readers demand too much haste in a verification from their reports," adds Mr. Ahman. "I have verifications from every station except two that Mr. McPhole of West Philadelphia complains do not pay any attention to reports. From WTFI, a nice card, from WTOC a card, from WLBL a picture folder with veri., from KFDM a personal letter, from KFJB a nice card, from WBTM a printed reply with a personal postscript and from WIND a letter."

Boiled Briefs

"An old variocoupler makes a good tuning coil for the antenna and even on a superhet I think it pays," suggests Ivan D. Ide, Genoa, Ill. "I use a 12-tube super and with a tuning coil like that I can find stations that otherwise I would not be able to tune

in. Then, too, I log many stations during the day time that I cannot get at night. A station like WSAZ on 1190 would be impossible for me at night because WO AI would drown them out, but in the daytime they are possible. KSOO, too, I picked up between noon and one o'clock."

Don Martinez, 1469 26th Ave., San Francisco, has received so many stations that he finds it difficult now to add new ones. He is having a s. w. converter built and is looking forward to exploring what is to him virgin territory. "The Japs have been bad lately for the first time in years," he adds, "but I have a few more Aussies on my list. XGOA is on 650 as, believe it or not, I heard their call letters in English four times on 650, three times by a man and once by a woman." (Several other readers have reported XGOA on 660.)

"Before I go into details, please refer me to a good DX club," prefates F. B. Pitts, Belle Fourche, S. Dak. "I have a Majestic 8-tube Model 90-B and a Model 15 5-tube midget Majestic. I hooked up both radios with no power on the big one and did my tuning on the 5-tube. In that way I had the same as a 13-tube set! Vancouver on 100 watts came in too strong." Mr. Pitts seems to try odd experiments. He disconnected his ground from the midget and used as an aerial a short piece of wire with the free end in a glass of water and got better results than with a regular aerial!

"I have finally identified the Cuban I heard on 635 kcs. as CMJH, Ciego de Avila," says R. M. Carter, Ann Arbor, Mich. "I have now heard them announce plainly several times." Who has anything definite from CMJH showing a change from their frequency of 1150? "I heard CFCH, North Bay, Ont., on 915 instead of 630," goes on Mr. Carter, "they were giving a DX program one morning recently. Wellington, 2YA, is being heard on their new frequency, 570, but not as well as they

(Continued on page 49)

What's *the* MATTER with My Set?

Answered by the Technical Editor

I AM using a G. M. converter (remote control unit) with a Philco 43 receiver. At present this combination does not give good selection at 535 kcs. because of local stations on 540 kcs. The control used to work fine with a Kellogg receiver when set to 535 kcs. as recommended by the makers of the unit. Can I replace the condensers in the Philco to make a better selection at 535 kilocycles and reduce station interference?

The G. M. converter is a remote control unit suitable for use with any broadcast receiver. It is arranged to form a 535 kc. beat note with any receiver when a broadcast station is feeding this beat into the input of the set. To avoid trouble with 540 kcs., local stations, the converter padding or trimmer condenser system can be adjusted from 570 to 590 kcs., and the receiver tuned to this output. There are also any number of possibilities of beat notes being formed in the various circuits because of the two oscillators working together—one in the converter and one in the receiver.

The converter should be lined up for tracking, etc., just as any superheterodyne receiver. It can then be applied directly to any receiving set without difficulty. We suggest you have the converter adjusted at the trimming condensers to increase its frequency range as mentioned above, and then set your Philco 43 on about 570-590 kcs. Changing the condensers of the Philco will not help.

Changing Rectifier Tubes

Can I use the 83 type rectifier tube in my Scott all-wave set instead of the type -80?

We do not recommend this change. The 83 is a heavy duty rectifier tube and is intended to supply large amounts of d.c. power to receivers whose requirements are in excess of

the output rating of the -80 tube. The 83 takes one ampere more of current, which perhaps your set can ill afford to give up. The -80 now gives you all the d.c. power the set requires and there is nothing to be gained by using an 83 or an -82 tube.

Power Line and Wave Trap

A nearby power transmission line gives me much constant interference. How can I combat this and to whom should I write or talk? Will you tell me how to make and use a wave trap to prevent this and other interferences?

Power line interference is a matter to be taken up with the power company. Complaint to the Radio Inspector in your district (Department of Commerce) is not likely to be effective in this case. Such interference usually is due to the electro-magnetic field that surrounds every high voltage a. c. power line. If a leaking insulator or transformer is at fault, then it is to the advantage of the company to catch the leaks.

Your aerial should be as far as possible from the line and will be less subject to interference if erected at right angles. Shielded lead-in wire, as explained in the October, 1933, issue of RADEX, will be valuable.

Wave traps can be of some little help when radio stations tend to interfere. Make such a trap by winding a coil on a tube 2 1/2 inches in diameter with 60 turns of No. 26 wire. Connect it in series between the aerial and the receiver's antenna terminal. Then attach a .0005 capacity variable condenser across the two ends of the coil for tuning.

Using Two-Volt Tubes

Is it practicable to change my Atwater-Kent, model 33, set, from -01A tubes to the 2-volt tubes?

Two-volt tubes can be used in this

set merely by substituting -30s for the 01As, and a -31 for the -12A. But the negative C battery must be increased to -22.5 volts, and the B battery for the plate of the -31 must be 135 volts. The audio fixed resistor attached to the center of the rheostat and connecting one side of the filaments of the last two, or audio, tubes, must be removed and replaced with a length of wire.

A two-volt battery is used. If other voltage is connected to the two terminal wires—red and black—a variable resistance must be inserted in series with one of the wires so that exactly two volts is impressed on the filaments when the set is operating.

Set Quits When Warmed Up

My General Electric set, model S-42, refuses to work as soon as it becomes warmed up. After a few moments of loud operation it becomes weaker and then quits. No sound from the speaker at all. The tubes have been tested and are perfect and there are no visible faults in the wiring. What shall I do?

While it is difficult to localize the exact cause of your trouble at long range it may be well to point out a few of the weaknesses in your set which tend to cause the trouble mentioned.

The trouble is characteristic of a defective high value resistor. Test or replace the 270,000 ohm resistor that connects between the positive B lead (22.5 volts) and the grid return of the first detector tube. Also, the 350,000 ohms resistor from the second detector grid return to the one just mentioned. Also look to the 350,000 ohms resistor from the second detector grid return to the negative B terminal. Test all high resistors in the second detector plate and first audio grid circuits. Other than these you must look at every resistor with suspicion. A carefully made meter test of the entire circuit will next be in order.

Hum and Motor-Boating

I have a Pilot a.c. Super-Wasp

short-wave receiver. I get a very bad hum. Also, when the set is turned on it has a motor boating or jumpy sound. Outside of this the set is perfect. I use a regular Pilot power pack unit.

Usually this trouble can be traced to the detector plate circuit. A plate series resistor of 20,000 to 50,000 ohms shunted with a 0.5 to 2.0 mfd. fixed condenser will serve as a filter to eliminate the motor boating sounds. A radio-frequency choke in the detector plate circuit, properly bypassed, is often very helpful. Some of the Pilot models have these chokes.

The hum ordinarily will be reduced by lowering the grid leak valve, but as the sensitivity will also be reduced it is not well to carry this method too far. If the hum increases with the degree of regeneration it will be well to shield the lead-in wire and see that the shielding of the set is adequate and properly fitted. Loose shield cans which need refastening and cleaning at contact surfaces may cause hum and chattering noises or undue oscillation. See that the tubes are testing perfectly.

Certain Short Waves Weak

I have a Philco, model 43, which suddenly lost its pep on the 9 to 20 megacycles band. Until a few days ago I have been receiving European stations regularly on strength R9. Overnight, the set lost its ability to pick up these stations. A service man claimed to have found that the set was unbalanced. But still the receiver is weak on that particular band to voice, and most of the c.w. code signals are not quite as good as formerly, but still do not seem poor enough to account for the sudden absence of the voice stations. The set is perfectly normal on all the other bands. I cannot even hear the carrier wave of EAQ—a station which has been heard every night for the past ten months. Can you advise me what is wrong?

Sometimes the oscillator tube will fail at the very high frequencies and

make one or more of the short-wave bands almost totally dead. It is therefore best to try several tubes until one is found which will oscillate strong enough to bring in the signals. An unbalanced condition of the circuits in this set under the circumstances outlined by you is hardly probable. One likely trouble is that of dirty contacts on the short wave band selector switch. The slightest resistance in one of these contacts will cause great trouble at high frequencies. This set is very sensitive to changes in antenna length or height and also to various ground connections. At very high frequencies the ground is usually unimportant, and in some cases even weakens reception. If any change was made in either the aerial or ground system this should be considered a possible source of trouble.

Of course, some changes in the condenser and balancing system could throw some part of the band out of adjustment in reference to the tuning dial but hardly prevent reception at all. Since you have had the set rebalanced this question can be ignored. Be sure that the first detector is a good tube, because any weakness here will first be noticeable on the highest frequencies.

Band Spreading

Can I use the "band spread" coil system on my National a.c. 45 short-wave receiver so as to make tuning easier?

Band spreading consists of opening the tuning dial spaces so that the wave bands are farther apart so as to make tuning easier and not crowded with interfering stations. Coils of smaller range or tuning limits that do not cover wide wave bands, together with smaller variable condensers, open the crowding and widen the tuning spaces between stations on the dial. But, in order to cover the entire wave band from lower to higher limits, it is necessary to have several more coils than usually utilized.

National band-spread coils are made particularly for amateur reception on the 20, 40, 80 and 160 meter bands

which are so crowded with interfering operators. These coils have limits that range from just below to just above the wave lengths given above and will spread the amateurs over a large portion of the dial, some of them being as much as 50 points on the dial apart. These band spread coils are interchangeable with other plug-in coils in the National Thrill Box short wave receivers as well as some other types of short wave sets.

Using 6.3-Volt Tubes

Can either -37 or -44 type tubes be used in the RADEX short-wave converter in place of the 56 and 58 types? My Philco 91 receiver uses the 6.3-volt tubes instead of the 2.5-volt types.

The converter was designed particularly for the 2.5-volt tubes—56s and 58s. You may use it with a Philco 91 or any set having 6.3-volt tubes merely by inserting 1-ohm resistors in series with each of the two filament wires of the converter leading from the wafer adapter that is slipped beneath one of the 6.3-volt tubes in your receiver.

Power-Line Filter

I am uncertain about winding the coils for the power line filtering device described in the April issue of RADEX. Is there a continuous wire laid in two layers or two separate layers with dead ends?

Each tube has two layers wound on it with a single piece of wire, making up the full winding required. There will then be two ends to the length of wire. Start near the end of the tube and wind a layer of 100 turns evenly and smoothly, then return to the starting point after backwinding another 100 turns in the same direction—always away from you. One end of the coil connects to a plug prong of the plug used to attach to the 110-volt lighting socket; the other end connects to one hole of the outlet socket terminal used to receive the plug of the radio set cord. There are no dead or blank ends of the windings.

Headphones on Zenith WH

Can I attach headphones to my Zenith, model WH, receiver and still retain the volume and tone as it now is? Also, how about using new tubes in this set?

See the February, 1933, issue of RADEX for information about using headphones. The original tone and volume will be retained in this way for weak signals. Since your receiver uses one power tube, a -47, you may attach the phones as shown in Figure 3, page 3, of the February issue of RADEX, following the arrangement indicated by the lower right-hand corner of the diagram.

If you do not care to break the speaker lead and insert a silencing switch, for all practicable purposes one of the headset adapters advertised in RADEX will give you all the volume you will need for headphone reception. It does not make use of the last stage, or the power tube.

New Tubes and Noises

Nearby street cars cause much interference in my Majestic, model 52, receiver, and I wish to know whether new type tubes will help.

You can try a new 57 in place of the -24 first radio-frequency tube that is located first in the row of tubes, just in front of the -45 that is next to the -80. You will need a special adapter for this purpose. No other changes are recommended. But this will not decrease the street-car interference. That is picked up by the aerial, and a proper antenna location, shielding with a noise-reducing antenna, as described in the October, 1933, issue of RADEX, will be of value. Place your aerial itself as far from the street cars as may be possible; the length of lead-in wire when shielded will make little or no difference.

Tubes Light; No Sound

My Philco set, model 513, seems to be dead although the tubes all light up. The old tubes have been replaced with new ones that are good. Can you help me?

We believe you have made an error in the model number; model 531 seems to be your receiver. First, we suspect the windings of the two audio-frequency transformers. The primary windings are likely to burn out, and they should be tested for conductivity with a battery and voltmeter. If no current passes, the transformer must be replaced. Test the speaker windings to see that no breaks in the wires are present. If the windings are o.k., we suggest that you take a pair of phones or a d.c. voltmeter and place one of the contacts on the chassis of the set and touch the other contact to each of the plate springs of the tube sockets with the set turned on and all the tubes, except the rectifier, removed. Each contact of the plates should give a reading or click in the phones. If a dead point is found then look for a defect in the resistor some place in the circuit leading to that particular plate contact. It is quite apparent that some plate circuit in the set is not getting the proper plate direct-current supply from the power system.

Automatic Volume Control

I wish to have automatic volume control installed in my RCA model 80 receiver. Can this be done; if so will you tell me what to do? This set has a number of -24 tubes and I would like to replace them with 57s or 58s, if practicable.

The RCA 80 can be fitted with a.v.c. A 56 tube is necessary for this purpose, and it should be placed within the set at a convenient place close to the first intermediate-frequency tube. The grid return circuits of the first radio-frequency, the first intermediate-frequency, and the second intermediate-frequency tubes, are opened at the bottom of the coils connecting to the grid caps of those tubes, and fixed condensers of 0.1 mfd. capacity are inserted in series in the break in the circuit just made. Then three 250,000 ohms resistors are attached to these grid returns, at the bottom of the coils where the condensers were just at

(Continued on page 48)

The Short Wave Stations of North America

Arranged by Frequencies

This list includes all the American transmitters except the United States Airways stations which were published in November. Readers are advised not to request verifications from any of the commercial stations listed below. The foreign S. W. Stations appeared in the January issue.

United States and Possessions

Mega.	Meters				
1.534	195.45	KGHO, Des Moines, Iowa, State police	2.416	124.09	KGPB, Minneapolis, Minn., police
		WPGC, S. Schenectady, N.Y., State police			WPDS, St. Paul, Minn.
1.558	192.43	KGPD, San Francisco, Calif., Marine Fire	2.422	123.79	KGPE, Kansas City, Mo., police
		WEY, Boston, Mass., Marine Fire			KGPG, Vallejo, Calif.
		WKDT, Detroit, Mich., Marine Fire			KGZC, Topeka, Kans.
1.570	191.08	WPQE, Baton Rouge, La., police			KSW, Berkeley, Calif.
		WPEW, Northampton, Mass., police			WMJ, Buffalo, N. Y.
1.574	190.48	KGPY, Shreveport, La., police			WPDW, Washington, D. C.
		WMP, Framingham, Mass., State police			WPEK, New Orleans, La.
		WPEL, W. Bridgewater, Mass., police	2.430	123.45	WPFU, Portland, Me.
		WPEV, Portable in Mass.			KGZD, San Diego, Calif., police
		WRDS, E. Lansing, Mich., State police			KGZJ, Phoenix, Ariz.
1.596	187.85	WCF, New York, N. Y., police			WPDJ, Columbus, Ohio
		WRDU, Brooklyn, N. Y., police			WPDN, Dayton, Ohio
1.658	180.83	KSW, Berkeley, Calif., police			WPFH, Highland Park, Ill.
1.674	179.10	 Harrisburg, Pa., State police			WPFK, Hackensack, N. J.
1.712	175.13	KGJX, Pasadena, Calif., police			WPGI, Portsmouth, Ohio
		KGPC, St. Louis, Mo.			 Little Rock, Ark.
		KGPJ, Beaumont, Texas			 Long Beach, Calif.
		KGPL, Los Angeles, Calif.			 Minneapolis, Minn.
		KGPR, Fort Worth, Texas			 Santa Ana, Calif.
		KGZB, Houston, Texas	2.442	122.77	KGPP, Portland, Ore., police
		KGZI, Wichita Falls, Texas			KGPX, Denver, Colo.
		KGZL, Shreveport, La.			KGZH, Klamath Falls, Ore.
		KGZQ, Waco, Texas			KGZR, Salem, Ore.
		KVP, Dallas, Texas			WMDZ, Indianapolis, Ind.
		WKDU, Cincinnati, Ohio			WPDE, Louisville, Ky.
		WPDB, Chicago, Ill.			WPDE, Flint, Mich.
		WPDC, Chicago, Ill.			WPDH, Richmond, Ind.
		WPDD, Chicago, Ill.			WPDJ, Lansing, Mich.
		WPDU, Pittsburgh, Pa.			WPEB, Grand Rapids, Mich.
		WPED, Arlington, Mass.			WPES, Saginaw, Mich.
		WPEH, Somerville, Mass.			WPFC, Muskegon, Mich.
		WPEI, E. Providence, R. I.			WPFE, Reading, Pa.
		WPEJ, Brookline, Mass.			WPFH, Jacksonville, Fla.
		WPEK, Lexington, Ky.			WFFT, Lakeland, Fla.
		WPFA, Newton, Mass.			WPFJ, Town of Palm Beach, Fla.
		WPFJ, Hammond, Ind.			WPFZ, Miami, Fla.
		WPFN, Fairhaven, Mass.			WPGA, Bay City, Mich.
		 Providence, R. I.	2.450	122.40	 Binghamton, N. Y.
		 San Bernardino, Calif.			KGPH, Oklahoma City, Okla., police
2.414	124.20	KGPA, Seattle, Wash., police			KGPO, Tulsa, Okla.
		KGPS, Bakersfield, Calif.			KGPO, Honolulu, Hawaii
		KGZA, Fresno, Calif.			KGZP, Wichita, Kans.
		KGZM, El Paso, Texas			KGZF, Chanute, Kans.
		KGZN, Tacoma, Wash.			KGZP, Coffeyville, Kans.
		KGZO, Santa Barbara, Calif.			WPKK, Milwaukee, Wis.
		KGZV, Aberdeen, Wash.			WPEE, Brooklyn, N. Y.
		KGZX, Albuquerque, N. Mex.			WPEF, Bronx, N. Y.
		WCK, Detroit, Mich.	2.458	121.97	WPEG, New York, N. Y.
		WMO, Highland Park, Mich.			KGHS, Spokane, Wash., police
		WPDJ, Tulare, Calif.			KGZW, Lubbock, Texas
		WPDJ, Passaic, N. J.			WPDG, Youngstown, Ohio
		WPDJ, Detroit, Mich.			WPDN, Auburn, N. Y.
		WPDY, Atlanta, Ga.			WPDO, Akron, Ohio
		WPFH, Baltimore, Md.			WPDH, Rochester, N. Y.
		WPFH, Columbus, Ga.			WPDV, Charlotte, N. C.
		WPFH, Birmingham, Ala.			WPEA, Syracuse, N. Y.
		WPFH, Clarksburg, W. Va.			WPFH, Asheville, N. C.
		WPFY, Yonkers, N. Y.			WPGD, Rockford, Ill.
		WPGH, Port Huron, Mich.			WRBH, Cleveland, Ohio
		WPGJ, Utica, N. Y.	2.470	121.40	KGZO, Cedar Rapids, Iowa, police
		WPGS, Mineola, N. Y.			KGPD, San Francisco, Calif.
		WRDR, Grosse Pointe, Mich.			KGPI, Omaha, Neb.
		 La Grange, Ga.			KGPK, Sioux City, Iowa
		 Santa Fe, N. Mex.			KGPM, San Jose, Calif.

(Continued on page 94)

REALLOCATION in Europe

Grand Shift on January 15

THE "Plan de Lucerne" which resulted from the conference in that city in May of the present year, went into effect on January 15, 1934. This Plan was signed by 27 European states. Seven countries—Finland, Greece, Holland, Hungary, Lithuania, Poland and Sweden—did not sign the Convention at the time but it is generally felt that they too will be guided by the new arrangement.

The Plan covers 232 stations which are allotted 130 channels of which 55 are exclusive while the remainder are shared. Roughly, those stations allotted frequencies between 1500 and 1250 kcs. are given a maximum power of 30 kw. Between 1250 and 1100, the maximum is 60 kw. Between 1100 and 550, 100 kw. For frequencies below 300 kcs the maximum is 150 kw. with the exception of Moscow-1 which has 500 kw.

Only a few of the more important stations with their new frequencies can be given here. The complete list of stations with their revised wavelength will appear in the January-February-March issue of the DX Log of the World. While many of the stations will not at first be found with the higher power to which they are entitled, many countries, notably Germany and France, are preparing to transmit on these higher powers.

The interesting notes regarding the stations given here, were sent us by an English reader, W. H. Turner, 144 Parrswood Road, N., Withington, Manchester. Times mentioned are G. M. T.

Long Wave Stations

Huizen and Hilversum, 223 and 995

The power of Hilversum is raised to 20 k.w. from 5-40 p.m., and that of Huizen to 50 k.w. from 3-40 p.m. daily, the latter transmission being from the new Government station at Kootwyk. These two stations change wavelengths every three months, i. e., in January, April, July and October.

Radio Paris, 75 k.w., 167

A favorite French station for British listeners. In January it becomes the French long-wave National station, with a power of 100 kilowatts. Provision is being made for a further increase to 150 k.w. if required.

Berlin (Deutschlandsender), 60 k. w., 191

This German long-wave station (formerly Zeezen) has now its own programmes, and also relays concerts and other features from other cities. Its power is to be raised to 150 kilowatts in January.

Eiffel Tower (Paris), 13 k.w.

One of the first European broadcasters, this station will close down in January, being afterwards used for Government and commercial transmissions.

Warsaw (Poland), 120 k.w., 230

First European station to use over 100 k.w. Has high-class concerts and frequent transmissions of Chopin pianoforte music. It is announced as "Varshava."

Motala (Sweden), 30 k.w., 216

Relays the Stockholm programmes and takes concerts occasionally from Goteborg and Horby.

Radio Luxembourg, 200 k.w., 1249

May not accept low wavelength allotted under Lucerne plan. Broadcasts sponsored programmes, varied by gramophone and other music.

Kalundborg (Denmark), 30 k.w., 238

Recently raised from 7 k.w., and is now a favourite day and night station in this country. Relays Copenhagen.

Monte Ceneri (Switzerland), 15 k.w., 126.8

A new Swiss station designed to serve the Italian-speaking population of the country. Announces frequently in Italian, and relays Italian opera.

Oslo (Norway), 60 k.w., 253

Gives an orchestral concert every night, and also features instrumental music.

BROADCAST BAND

Budapest (Hungary) 18.5 k.w., 546

Is just within tuning range of majority of receivers. Announces "Hallo, Hier Radio Budapest!" frequently, and is easily recognized by its unique instrumental music.

Munich (Germany), 60 k.w., 740

This main German station may shortly increase its power to 100 k.w. Provides many of its own programmes, and is relayed by Augsburg and Nurnberg.

Vienna (Austria), 100 k.w., 592

Has recently increased its power. Broadcasts many popular orchestral programmes, including the waltzes of Strauss and other Viennese composers.

Brussels No. 1 (Belgium), 15 k.w., 620

Provides continuous orchestral music from eight to ten almost every evening. Announces

ments are made only in French, its sister station being reserved for Flemish listeners.

Prague (Czecho-Slovakia), 120 k.w., 638

Broadcasts first-class orchestral, military band, string and pianoforte music, and frequently relays grand opera.

Lyons (France), 1½ k.w., 648

Though of very small power is often well received in this country. Plans to go up to 60 k.w. in near future.

Langenburg (Germany) 60 k.w., 658

Will shortly raise its power to 100 k.w. Will be less than 7 metres from North Regional in January, but fortunately has an exclusive wavelength.

Beromunster (Switzerland), 60 k.w., 556

"On the air" at 5-50 a.m. daily with music for gymnastic exercises. Relays the best of the Berne, Basle, and Zurich programmes.

Rome (Italy), 50 k.w., 713

Famous for opera and orchestral broadcasts, which are relayed by the 25.4 metres transmitter and Milan and Naples.

Stockholm (Sweden), 55 k.w., 704

Often broadcasts old English dance music, and gives prominence to popular orchestral, string, and instrumental music.

Madrid (Spain), 2 k.w.

Often transmits until well into the morning hours and, in spite of its low rating and great distance, comes over at good volume when other stations have closed down.

Funkstunde (Berlin), 1.5 k.w., 841

German National station, replacing Witzleben. Will transmit on 60 k.w. when changing wavelength.

Athlone (Irish Free State) 60 k.w., 565

An established favourite with many listeners, and one of the strongest outside stations received in the north of England. Will be outside the wavelength range of many receivers in January, but can be brought in by a small condenser across aerial and earth.

Katowice (Poland), 16 k.w., 758

Has a large following owing to their Radio Club including so many British listeners. Many of these are replied to over the ether.

Sottens (Switzerland), 25 k.w., 677

Takes its programmes from Lausanne and Geneva, and gives occasional relays from Eiffel Tower and Strasbourg.

Leipzig (Germany), 120 k.w., 785

One of Germany's most powerful stations, famous for orchestral concerts by the Leipzig Symphony and Dresden Orchestras, and also its frequent transmission of old and new dances.

Toulouse (France), 8 k.w., 776

Popular station with British listeners on account of its short and bright programmes, many of which only last fifteen minutes, and rarely exceeding half an hour. Will shortly raise its power to 60 k.w.

Hamburg (Germany), 1.5 k.w., 776

One of the lowest-powered German stations regularly received in this country. Will shortly increase its power to 100 k.w. under the German reorganization scheme.

Stuttgart (Germany), 60 k.w., 576

Another station which will shortly increase its power to 100 k.w. On its new wavelength it should be one of the best German stations received in this country.

Barcelona EAJ1 (Spain), 8 k. w.

Gives very little original orchestral music, mostly using gramophone records. Occasionally broadcasts plays, and gives tango dance music after midnight.

Strasbourg (France), 11.5 k.w., 859

Gives an orchestral concert at 5 p. m. daily, and probably broadcasts more orchestral, trio and string quartet music than any other European station.

Brno (Czecho-Slovakia), 35 k.w., 922

Relays the best of the Prague programme items. Announcements are made in Czech, German, French, and English.

Brussels No. 2 (Belgium), 15 k.w., 932

Broadcasts excellent orchestral music. A two-hour concert at noon, and another of the same length figure in the programmes almost every day.

Milan (Italy), 50 k.w., 814

A powerful Italian relay station taking the majority of its programmes from Turin. Relayed also by Genoa, Trieste, and Florence.

Post-Parisian, 60 k.w., 959

Is "on the air" at 7-10 a. m., and gives bright and varied programmes for sixteen hours daily. Is one of the few foreigners on the broadcast band receivable at good strength in daylight.

Breslau (Germany), 60 k.w., 950

Comes on the air at 5 a. m., and continues with music and talks until nearly midnight. The talks are often of a scientific nature, dealing with astrology, astronomy, everyday science, and a weekly talk on wireless.

Genoa (Italy), 10 k.w., 986

A medium-power station, working in conjunction with Milan, Turin, Trieste, and Florence.

Bordeaux-Lafayette, 13 k.w., 1077

One of the French Government stations, relaying programmes from Eiffel Tower and Grenoble, Lyons and Strasbourg.

Hilversum and Huizen, 8.5 k.w., 995-223

The power of Hilversum is increased to 20 k.w. from 5-40 p. m., and that of Huizen to 50 k.w. from 3-40 p. m. daily. These stations change wave-lengths in January, April, July and October.

Lisbon (Portugal), 20 k.w., 629

A new station just beginning its tests. Can be easily located between Heilsberg and Hilversum. Call sign, Radio Lisbon.

Heilsberg (Germany), 60 k.w., 1031

Transmissions from 5-15 a. m., and features concerts by the Konisberg Opera House and Dresden Symphony Orchestras.

Turin (Italy), 7 k.w., 1140

Small power but important Italian station. Gives relays of opera, which are taken by Milan, Genoa, Trieste, and Florence.

Moravska-Ostrava (Cz.), 11 k.w., 1158

Comes on the air at 5-15 a. m. Gives its own afternoon concerts, afterwards relaying the Prague programme.

(Continued on page 48)

Condensed CREAM of the DX Reports

FROM a Californian, Jack Watrous, 113 North Orange St., Los Angeles: "I am using a Zenith all-wave, 9-tube and have received 199 stations on the b. c. b. Some of my best are 2YA, WCLO, WMBH, KFPL, and numerous Japs. I have just erected a new aerial about 70 feet long and am using the ground described in the October RADEX and find that it helps in pulling in the 100-watters. For the benefit of those who want Oregon, KALE is on from midnight to one each Sunday morning with an organ program. The RADEX Time Converter is marvelous; how I did without it is more than I can see?" Jack wants to join a Coast DX Club.

"Last Columbus Day, I purchased my first RADEX and that evening I started to do a bit of DXing," reports Walter C. Birch, 189 Essex Street, Lynn, Mass. "To date I have logged 361 stations. I have every station of 5000 watts and over on the continent except WOI and WCB. I have every state but Wyoming and every province in Canada. I use an RCA-Victor 10-tube biacoustic super, Model R-90 and I would like to hear from others using a similar set. To me it is unbeatable for tone quality and as to selectivity, I am able to bring in a station on every channel at 6:45 p. m."

"Here is our record on a Midwest 16-tube all-wave set," submits R. W. Putnam, 1857 Nelson Ave., Grand Rapids, Mich. "Amateurs whose call, city and state were distinctly heard, 275; stations on the b. c. band, including 44 states, Cuba, Mexico and Canada, 267; weather stations 13; short wave, foreign and U. S., 43; police 66; a total of 664. This was all in six weeks." Among his short wave catches, Mr. Putnam lists: PRADO, JTS, JW9, HJ5ABF, HJ5ABB, LSN-X, PSF, YV1BC, YVR, XETE, VK3ME, VE9GW, EAQ, GSA-B-D, DJA-D.

"My log has grown to 475 thanks to the DX calendar," says Lloyd Harrison, 130, S. Hague Ave., Columbus, Ohio. "I have verified only 50 as I have just started to verify in earnest but even now verify only what I consider extra good catches, 250 watts or under and over 1000 miles. Have every state but Wyoming and all channels. I think the FRC checks are a snap especially for beginners building a log. I would like to get in touch with someone who has the same set as mine, a McMillan 9-tube superhet."

"Have you any information on the Cuban station on 1030 kcs.?" asks Earl R. Roberts, 42 Burt Ave., Newark, Ohio. "I heard it Monday night (Dec. 18) and the call in Spanish sounded like CMVT or CMBT and the city almost like Havana but more like LaHavana. It came in with good volume. CKCR on 1510 comes in very well. LR4 seems to be on about 992 instead of 990. HIX was received about 598 instead of 579. It was quite weak. XEAE on 980 has been coming in fine lately until three a. m. or later."

"What is the address of Poste-Parisian," asks Robert Hough, 26 Ellenton Ave., New Rochelle, N. Y. "At present I have 624 stations, my latest being KIEM, KGIW, KIDW, KFPL, KGFI and KFXJ which I tried for for a year. Other good catches were XEFV, CMQ, CMCD, YV1BC and YV3BC. Poste-Parisian came in Nov. 24, 25 and 27. They seem to be on every morning except Sunday. They come on at 2:12 a. m. on the dot with good volume. At 2:30 they start to fade and by 2:58 they are gone."

"I once noted in RADEX a fellow with a log of over 200 and no T-Ps," says Ernest Ball, 39 Delaware Ave., Ottawa, Ont. "My record is worse than that. I have over 550 logged with no T-Ps, not even KGU. However, I have P-P, VONF, LR5, HJN, YV1BC, HIX, WKAQ and CMCW. In the low power I have two 10-watters, VE9EK and WHBC, two 15-

watters, 10-AK and 10-BQ, two 25s, WIBG and 10-BP. Have all the states and all the provinces but one each."

"My log of stations heard has increased to 715 with 552 verified and letters out to LR5, CX26, KGU, KGBU and Poste-Parisian," writes Lloyd S. Hahn, P. R. R. Y. M. C. A., New York City. "I heeded the admonition to clean up my set contained in the article in the November RADEX. When I removed the shield around the condensers I found a mouse so dead that it crumbled. It had evidently gotten in there when the set stood in the salesroom."

Writes Donald W. Shields, Roseville, Ohio, "I have 318 stations on the regular b. c. band with every state in the union except Delaware. My best are HJN, LR5, KVOA, KMPC, KTM, KFSG, KFVD, KGEK, KPOF, KGCX, KOH, KEX, KJR, KOMO and KGA. On the s. w. I have VK2-3ME, GSD-B-F, GCB, GBS, DENNE, EAQ, VE9GW, HJB, CGA, ZFB, LSN and LSX. I have a Philco 16-B 11-tube, all-wave. Would like to hear from other owners of that model."

"I have been DXing but a few months but my scrapbook of verifications is growing," writes George Butts, 2 Beach Drive, Medina, N. Y. "I have received every station of 5000 watts and over in the U. S., except KOB. I have veries from HJN and VE9EK. My log stands at 342. My best catch in the U. S. is that 25-watter in Los Angeles, KFVD. I use a Sonora, Model A31. Would like to hear from others using this set."

"I have been DXing since 1931 and now have logged 443 stations," summarizes John L. Taggart, Jr., 19 Robie Street, Bath, N. Y. "My best are YV1BC, LR5, HJN, KGIR, WKAQ, FQN, KALE, KVOA, KGHL and several other 100-watters. I have a Majestic, Model 92, and it sure has a good wallop for an old-timer." John is a member of the National Radio Club and would like to hear

from DXers anywhere.

"After six months, my log shows 226 stations," says Grant Ricksecker, 1318 West 111th St., Cleveland. "I lack six states; Kentucky is the only complete state but have had four out of five in West Virginia and 17 of 20 in Ohio. I have 10 in California, 3 in Oregon and 3 in Washington, making 16 on the west coast. In Chicago I have 12 out of 14 and in New York City 11 out of 15."

"I have a 5-tube, 75 to 550 meter Simplex Model P," contributes Stanley Mattheson, R. 1, Box 14, Stafford Springs, Conn. "I have received 176 stations between 540 and 1500 kcs. About the first night I had the set, I tuned in KFI. On the s. w. I have 30 police stations. I have listened to airport stations hours on end but have never heard one of them announce his call letters."

"The only book worth having on the radio" is the compliment of Marvin D. Dixon, Ora Mill R. 74, Shelby, N. C., who now has around 600 stations on his log. He is proud of 10-AK, BI, BQ and BP, CKIC, KFPM, HJN, CX18, CX26, LR5, 2CO, 2B1, 2YA and KGU. His set is a Philco 11-tube Model 15-X and his aerial 350 feet long and 40 feet high. He would like to correspond with DXers.

"Have logged about 225 stations on the b. c. band and about 30 on s. w.," adds up C. Ray Trask, 3475 West 22nd Ave., Vancouver, B. C. "I hear EAQ quite regularly. My best catches are 2YA, VK2ME, GSD-E, DJD, RV15, YV3BC, VE9HX and six Japs. I use an RCA Radiola 60 with a Sparton s. w. converter. Glad to hear from any DXers and will answer all letters."

"Look at this record," proclaims Harold J. Curran, Box 75, Wappinger's Falls, N. Y. "A grand total of 616 stations, 212 of them being 100-watt or less. Every station in the Union verified. Among them HIX, RUS, LR5, FQN and my best of all, 2YA. All these stations were heard on an Atwater Kent Model 55.

Would like to hear from others using this model."

"In one month, with my 8-tube Radiola 60 superheterodyne, I have logged 150 stations," reports "A New DXer," F. Britton Buser, Cambridge City, Ind. "I find I have been missing a lot in not verifying my catches. I intend to start right away. Among my best are WENC, WGNV, KMO, WSPA, KFVD, KGH, WNBO, KGFG and KARK."

"I received an Emerson 4-tube radio one year ago today," recalls S. W. Sullivan, 114 So. Kenilworth, Oak Park, Ill. "In that time I have logged 419 stations on the b. c. band—20 Californians, 15 Canadians, 6 Mexicans and two Cubans. I consider CMCW, KXA, and 10-BP my best. Would like to hear from other owners of Emersons."

"I have increased my log to 287 stations," says Foster Allen, 115 N. College St., Martinsburg, W. Va. "I have just started sending for veries in the last two weeks. Fourteen of my stations are on the Pacific Coast. I have trouble receiving any Cubans. I have a Model 801 Stewart-Warner receiver."

"I have received about 20 Japanese stations already this winter although radio reception is said to be poor in Victoria because of the large amount of cloudiness and rain we have here," reports W. Pollard, 60 San Juan Ave., Victoria, B. C. "I have also received KZRM, 2CO, 3AR, 3LO, 5CK, 2FC, 2BI, 2GB, 2UE, 4RK, 4BC and 4QG."

Donald W. Reynolds, 34 Chambers St., Newburgh, N. Y., submits this report: "My log is now 497. This morning, Dec. 28, four T-Ps rolled in—2YA, 5CL, 4GQ and JOIK. I have all the states but Wyoming and at least one station on every continent except Africa. I heard LR5 with good volume."

"My DX record is nothing to brag about," thinks Anthony Misunas, 319 Grand Ave., Rockford, Ill. "Last year and this, I have compiled a list

of 410 stations with my best: CMCY, KGU, 10-AB and BQ, CKOV, XEFV, KGBU, CMDE and XEJ. Am still hoping for T-Ps. I have a Stewart-Warner, 9-tube set."

Writes Adam Gretchen, 1593 East 45th St., Cleveland: "My log totals 576 including 20 police. Have any readers received T-Ps on Atwater Kent receivers? My best catch was Poste-Parisian which I heard on three successive mornings last winter but have not heard them since."

From Manchester, England, W. H. Turner writes: "I am listening to your stations nightly. I have had WEA, WCAU, WTAM, WTIC, WPG, WBZ, WABC, WIOD, KMOX, WRVA and my best, I think was today, Dec. 15, WOAI San Antonio. My best program, I think, is Friday night with Pond's Drama."

"My set is a Philco bought about six weeks ago," says Wilbur Cadmus, R. D. 1, Millville, N. J. "I already have 250 stations including LR5 in Buenos Aires."

"I have a 5-tube Cosmopolitan and would like to hear from others with the same set." Guilford W. Hamilton, 112 Orchard Ave., Punxsutawney, Pa.

"Since last April I have logged 323 stations. My best: CMQ, XEN, KGKO, KFJB, KMLB and WIBG." H. Searles, 349 Broadway, Rochester, N. Y.

"Here are five I value a good deal," submits Harry M. Gordon, 317 East 10th St., Erie, Pa. "They are 5CK, Crystal Brook, Australia, KGW, Honolulu, 2CO, Corowa, Australia, 4QG, Brisbane, Australia, and 2BL, Sydney. I had 4QG five straight mornings before I found out who they were, so when I wrote to them I gave the five days' log. I think that is as nice a catch as a person can get."

"I, too, hear the outlaw, WWSP," remarks Bernard E. Lorch, 8360 Ohio Ave., Glassport, Pa. "They seem to have no definite time on the air but when they announce it is 'WWSP, South Hills, Pittsburgh.' I get them at 820 kcs."

The LONG WAVE STATIONS

The Channels from 18 kcs. to 536 kcs.

Frequencies are shown in Kilocycles and wavelengths in meters. The symbols in the fourth column represent the type of service, as follows:

A, Airways
AE, airway experimental
AW, airway weather reports
B, Broadcast
Exp, Experimental
HF, Harbor police
IP, Inter-Island phone
P, Police
tAt, trans-Atlantic Phone

Kcs.	Meters	Call	Type	Location
18.00	16,656.67	KIE	Exp.	Kahuku, Hawaii
18.22	16,455.54	WQK	Exp.	Rocky Point, N. Y.
18.60	16,118.27	KGI	Exp.	Kahuku, Hawaii
45 to 75	6,662.67 to 3,997.60	W2XA	Exp.	Rocky Point, N. Y.
50 to 70	5,996.40 to 4,283.14	W1XR	Exp. tAt	Houlton, Me.
50 to 75	5,996.40 to 3,997.60	W1XQ	Exp. tAt	Bradley, Me.
66.5 to 89.5	4,508.57 to 3,313.95	WOH	tAt	Bradley, Me.
155.00	1,934.32	.....	B.	Kaunas, Lithuania
160.00	1,873.87	.....	B.	Huizen, Holland
.....	.....	.....	B.	Radio-Kootwijk, Holland
167.00	1,795.32	.....	B.	Lahiti, Finland
170.00	1,763.54	WQM	.....	Rocky Point, N. Y.
174.00	1,723.10	.....	B.	Radio-Paris, France
183.50	1,633.89	.....	B.	Deutschlandsender, Germany
188.00	1,594.78	RW14	B.	Irkutsk, USSR
190.00	1,578.00	WBA	P.	Harrisburg, Pa.
.....	.....	WBR	P.	Butler, Pa.
.....	.....	WDX	P.	Wyoming, Pa.
.....	.....	WJL	P.	Greensburg, Pa.
.....	.....	WMB	P.	W. Reading, Pa.
193.00	1,553.47	.....	B.	Davenport National, England
195.00	1,537.53	.....	B.	Ankara, Turkey
202.50	1,480.59	RW1	B.	Moscow (Komin-tern), USSR
207.50	1,444.91	.....	B.	Eiffel Tower, Paris, France
212.50	1,410.91	.....	B.	Warsaw No. 1, Poland
217.50	1,378.48	RW76	B.	Novosibirsk, USSR
222.50	1,347.50	.....	B.	Motala, Sweden
230.00	1,303.56	.....	B.	Moscow (Trades Union), USSR
235.00	1,275.83	.....	B.	Kashah, Tunis
238.00	1,259.75	RW8	B.	Baku, USSR
.....	.....	RW43	B.	Baku, USSR
240.00	1,249.25	.....	B.	Vienna Exp., Austria
242.00	1,238.92	.....	B.	Boden, Sweden
248.00	1,209.35	WFT	AW.	Spartanburg, S. C.
250.00	1,199.28	.....	B.	Istanbul, Turkey
.....	.....	.....	B.	Reykjavik, Iceland
252.00	1,189.76	.....	B.	Luxembourg
254.00	1,180.39	KLK	AW.	Reno, Nevada
.....	.....	WSG	AW.	La Crosse, Wis.
.....	.....	WWAP	AW.	Pittsburg, Pa.
260.00	1,153.15	WNR	AW.	Richmond, Va.
.....	.....	.....	B.	Kalundborg, Denmark
265.00	1,131.39	.....	B.	Monte Ceneri, Switzerland

266.00	1,127.14	KCAI	AW.	Waynoka, Okla.
.....	.....	KCX	AW.	Medford, Ore.
.....	.....	WHZ	AW.	Atlanta, Ga.
.....	.....	WSX	AW.	Boston, Mass.
.....	.....	WWAB	AW.	Buffalo, N. Y.
269.00	1,114.57	RW58	B.	Moscow (Popoff), USSR
271.50	1,104.29	RV10	B.	Minsk Kolodistchi, USSR
272.00	1,102.28	WWX	AW.	Washington, D. C.
277.00	1,082.38	.....	B.	Oslo, Norway
278.00	1,078.48	W2XAH	Exp.	S. Plainfield, N. J.
.....	.....	W3XR	Exp.	Mendham, N. J.
.....	.....	W3XY	Exp.	Mendham, N. J.
.....	.....	W8XAA	AE.	Cleveland, Ohio
280.00	1,070.78	.....	B.	Seheveningen, Holland
.....	.....	.....	B.	Tiflis, USSR
284.00	1,055.70	KCAC	AW.	Butte, Mont.
.....	.....	KCT	AW.	Los Angeles, Calif.
.....	.....	KCY	AW.	Portland, Ore.
.....	.....	KVM	AW.	North Platte, Neb.
290.00	1,033.86	WWQ	AW.	Bellefonte, Pa.
.....	.....	KCQ	AW.	St. Louis, Mo.
.....	.....	KGD	AW.	Salt Lake City, Utah
296.00	1,012.90	RV9	B.	Kiev, USSR
.....	.....	KCAA	AW.	Tulsa, Okla.
.....	.....	KCAF	AW.	Albuquerque, N. M.
300.00	999.40	RW53	AW.	Leningrad, USSR
302.00	992.78	KCAH	AW.	Kingman, Ariz.
308.00	973.44	KCR	AW.	Boise, Idaho
309.00	970.29	.....	B.	Soro, Denmark
310.00	967.16	RW60	B.	Alma Ata, USSR
314.00	954.84	KJF	AW.	Omaha, Neb.
.....	.....	KJL	AW.	Eiko, Nev.
320.00	936.93	KCS	AW.	Pasco, Wash.
.....	.....	WRW	AW.	Greensboro, N. C.
.....	.....	WWAH	AW.	Albany, N. Y.
321.00	934.01	WWAR	AW.	Jackson, Mich.
326.00	919.69	RW4	B.	Kharkov, USSR
.....	.....	KIS	AW.	Iowa City, Iowa
.....	.....	KSG	AW.	Cheyenne, Wyo.
.....	.....	WWAU	AW.	Memphis, Tenn.
332.00	903.07	KCV	AW.	Oakland, Calif.
.....	.....	WEK	AW.	Wichita, Kans.
.....	.....	WWAS	AW.	Cincinnati, Ohio
333.00	900.36	WKDL	A.	Miami, Fla.
334.00	897.66	RW19	B.	Achkhabad, USSR
338.00	887.04	KCAD	AW.	Idaho Falls, Idaho
.....	.....	WBP	AW.	Key West, Fla.
.....	.....	WWAC	AW.	Nashville, Tenn.
.....	.....	WWU	AW.	New Brunswick, N. J.
344.00	871.56	KCU	AW.	Fresno, Calif.
.....	.....	KCZ	AW.	Seattle, Wash.
.....	.....	KRC	AW.	Kansas City, Mo.
.....	.....	WVO	AW.	Cleveland, Ohio
350.00	856.62	KCAE	AW.	Winslow, Ariz.
.....	.....	KDA	AW.	Maywood, Ill.
.....	.....	KDN	AW.	Rock Springs, Wyo.
.....	.....	KKJ	AW.	Fort Worth, Texas
.....	.....	RW70	B.	Leningrad, USSR
.....	.....	.....	B.	Budapest No. 2, Hungary
364.00	823.68	RV5	B.	Sverdlovsk, USSR
368.00	814.73	RW9	B.	Kiev, USSR
393.00	762.90	WAFF	AW.	Newark, N. J.
.....	.....	WHG	A.	Columbus, Ohio
.....	.....	WQDQ	A.	Dearborn, Mich.
400.00	749.55	RA8	B.	Bogorodsk, USSR
.....	.....	WAFF	A.	Newark, N. J.
.....	.....	WHM	A.	Indianapolis, Ind.
.....	.....	.....	B.	Geneva, Switzerland

402.00	745.82	.....	B.	Ostersund, Sweden
406.00	738.47	KOG	A...	Honolulu, Hawaii
414.00	724.20	WAEF	A.	Newark, N. J.
		WCQ	A.	Lansing, Ill.
		WKDL	A.	Miami, Fla.
416.60	719.70	.....	Exp.	Moscow, USSR.
420.00	713.85	WAEF	A.	Newark, N. J.
434.70	689.71	.....	B.	Oulu, Uleaborg, Finland
435.00	689.24	RW35	B.	Astrakhan, USSR.
438.00	684.52	WPK	HP.	New York, N. Y.
442.00	678.32	KHL	IP.	Wailuku, Hawaii
		KHM	IP.	Lihue, Hawaii
		KHN	IP.	Lanai, Hawaii
		KHO	IP.	Kaunakakai, Hawaii
		KLN	IP.	Hilo, Hawaii
500.00	599.64	WKDL	A.	Miami, Fla.
511.00	586.73	WPK	HP.	New York, N. Y.
		RW30	B.	Dnepropetrovsk, USSR.
515.00	582.17	.....	B.	Tartu, Estonia
521.00	575.47	RA34	B.	Koursk, USSR.
522.00	574.36	.....	B.	Hamar, Norway
		.....	B.	Ljubljana, Yugoslavia
526.00	570.00	.....	B.	Grenoble (PTT), France
527.00	568.91	.....	B.	Freiburg-im-Breisgau, Germany
530.00	565.60	.....	B.	Wilno, Poland
536.00	559.36	.....	B.	Augsburg, Germany
		.....	B.	Kaiserslautern, Germany
		.....	B.	Tampere, Finland

The Verification PROBLEM

OBVIOUSLY if reports coming in to the radio stations from listeners, are to do the stations any good they should contain some information of value to the station. While some stations might desire different information from others, it would seem that it would be of mutual benefit to the broadcasters and to the listeners-in if some uniform form of report were devised and published in your magazine either regularly or on frequent occasions. Then novices in DX work might get started without delay and with the greatest efficiency. I have just received a new Atwater Kent with short wave stage and was so interested in the possibilities of DX after reading your magazine that I have decided to see what I can do in that line during the coming winter. You folks who publish the magazine have been working so long that you are away down in its intricacies by this time but you should not lose sight of the fact that there

are beginners starting in after you all the time and you could materially assist them." This pertinent letter comes from Chester E. Ross, Hollister, California.

The points Mr. Ross makes seem to be very well taken. Surely a uniform report of reception would make it easier for the stations and save them from wading through long and rambling letters. Secondly, if stations are to continue to verify they must receive as well as give and listeners must learn how to give intelligible and helpful reports of the quality of reception. It seems to us, therefore, that it might be better—instead of publishing a model form of report—for us to provide a supply of printed forms which our readers could secure at a reasonable price. On these forms we might print a personal word from this magazine to the broadcasters urging them to make prompt verification if justified. We might point out the fact that many of the reports made are in competition and hence a matter of the utmost importance to the listener.

Defends Stations

George W. Haskell, Box 58, South Paris, Maine, points out: "We often hear complaints in regard to radio stations not answering requests for verification. Considering the amount of correspondence which reaches a station, it doesn't surprise me that some letters get laid by and remain unanswered for some time. In praise of the stations, I wish to say that I have sent for verifications to 235 stations in a little over one year and have received replies from 233. The other two were written but a few days ago and it is hardly time for a reply. I think a respectfully worded letter, with a little patience if it is not answered at once, with a second letter after a reasonable time just as respectfully worded, will bring results every time provided due care has been exercised to give a complete report of the program heard. This has been my experience and I

would recommend this course to others."

Another point is stressed by Francis Eugene Andrew, 104 North 19th Street, Wheeling, W. Va. "The 24-hour mailing rule enforced by many stations should be impressed upon the minds of new (and some old) Radexers. Failure to obey this rule is one of the chief reasons why many reports reach 'ye old ash-can.' The readability code, etc., should be given on every message sent to a station. Local conditions, interference and any other information one might think the station engineer would appreciate, should be included in reports. If this is done, I feel certain that he will look upon DX letters as more of a necessity than as a bother. Merely giving selections or announcements does not help a station nearly so much as stating under what conditions those selections or announcements were heard."

Too Much Dedication?

Still another phase of the problem is discussed by Abe Cohen, of the Library Department of the Seattle Post-Intelligencer. "I was on the Courtesy Programs Committee of the Transcontinental DX Club and it has puzzled me from time to time how the stations were able to comply with these incessant requests from radio clubs and still maintain as decent a front to DXers as they do. The selfishness of these DXers (and I have been just as bad as anyone else). 'We just *have* to have a program dedicated to *our* club.' No matter that the club has only twelve members—two of whom will stay up to listen to the broadcast—we must have the program dedicated to us. Personally I think all soliciting of stations by clubs should stop. The DX programs ought to be available to all and not just to *our* members. The suggestion may be a trifle radical but I feel that it is the only way DXing can be saved for the future."

The injustice of blacklisting or even condemning stations for a failure to

verify based upon individual experiences, is pointed out by W. T. R. Morris, Jr., 3219 Garland Ave., Richmond, Va. "In your December issue Harry McPoyle of West Philadelphia, complained about WTFI of Athens, Ga., saying that it was the worst offender in the matter of failure to verify. On the other hand, I received one of my very best verifications from this station. They sent me not only a verification card and a souvenir card but wrote me a personal letter in which they said: 'We are always extremely glad to hear from our friends regardless of where they are located but this letter of yours meant quite a great deal to us, especially the information you gave as to the clarity and quality of our station. Keep in touch with us; we will always be glad to hear from you; it takes just such letters as yours to help us make a success of our station.' I am afraid Mr. McPoyle did not give them the valuable information which *all* stations desire. Clarity, Quality, Fading and Volume are the main things to check on any station that the listener expects to receive a verification from."

Station WBTM, too, objects to being included in Mr. McPoyle's complaint. A good letter from W. P. Heffernan, Program Director of WBTM, states: "It is not true that this station ignores DX mail. During the first few months of this station's operation, more than three and one-half years ago, much fan mail was not answered; due to the press of business and the fact that the station was understaffed. However, when the undersigned took this desk over, he personally saw to it that all back mail, which was carefully filed, by the way, was answered.

"This station has never sold ekko stamps—has never asked for dimes and has certainly never 'collected dimes.'"

"May I state here that station WBTM is glad to hear from its listeners always, particularly on DX broadcasts, of which we have very

few and on our regular frequency check programs. I am sure that I echo the sentiments of the broadcasting industry, when I call attention of your readers to the fact that postage, particularly to a small station, is a very heavy burden and it is greatly appreciated whenever a return stamp or self addressed stamped envelope is included in the report of reception.

"It might be well to state here, that many so-called reports of reception do not give sufficient information to justify the station's verifying same. And a great many letters come in so many weeks behind the date of broadcast that we cannot help thinking, at least, that the writer obtained his 'dope' from some friend with whom he is swapping stations for their logs. If this is the case, the practice should be discouraged."

Radio vs Fishing

RADIO never fails to surprise and delight me. When younger, I fished a great deal. DXing supplies thrills fully equal to the older sport. When a distant station or a low-powered one first begins to come in, the sensation is as pleasurable as the first tug at the line. Then, manipulating the controls, power, volume, etc., until the call letters come in clearly and distinctly, is equal to the landing process and requires just as much skill and often more patience.

Before I new about DX, I often sat up nights and cruised about the radio dial. I carefully logged the stations heard until I had 207. With a new receiver, I raised my log to 300 but this seemed to be about the limit at the time. Then I heard of the DX clubs and decided to devote still more effort. I purchased a Philco, 111, 11-tubes, and settled down to DXing in earnest. That was more than two years ago. My log now stands at 709. Everyone of these stations has been heard on the loudspeaker and on the regular b. c. band. I have not veri-

fied but I have never logged a station until I had heard the call letters, the location and often the frequency distinctly. When all this checks with the latest copy of RAdex, I need no verification. Of course I heard many stations that I was not able to identify. The only duplications are those stations which materially changed their location, their frequency or decreased their power.

*Chas. C. Mann, Science Teacher,
David Worth Dennis Junior High
School, Richmond, Ind.*

EUROPEAN Reallocation

(Continued from page 39)

Frankfurt (Germany), 17 k.w., 1195

Supplies many concerts and programme items to the more powerful German stations. The Frankfurt Symphony Orchestra is one of the best in Europe.

Trieste (Italy), 10 k.w., 1222

Received at tremendous strength at times. Transmits its own programmes from early morning until early evening, afterwards relaying those of Turin and Milan.

Fecamp (France), 10 k.w., 1456-1393

A French station with a great following in this country. Special daily transmissions from 11 p. m. to 3 a. m. with announcements in English and French.

Note: Slight errors may be found as the frequencies given above were converted from meters. For the correct frequencies see the new issue of the DK Log of the World.

On KNOWING HOW

IHAD a very interesting experience this morning," narrates Richard M. Carter, 820 McKinley Ave., Ann Arbor, Mich. "A friend of mine purchased an Airline receiver with Stewart-Warner converter a few weeks ago. He hadn't been able to pull in VK2ME or 3ME or any foreigners on the regular b. c. band. Knowing of my success, he asked me to come over and give his dials a few twirls. I made no promises especially since it was raining here and seemed

like a poor morning for reception. I arrived at his house at 1:30 this morning and immediately proceeded to pull in VK2ME—not loud but perfectly clear. I then pulled in two 100-watters in California—KDB and KERN, and one in Rhode Island, WPRO, all with plenty of volume.

"A few minutes before two I turned to 830 and waited for KOA to sign off. Before the announcer finished speaking, we heard a voice in the background say 'Buenos Aires.' And then for an hour we listened to LR5. It came in QSA 4 to 5, R6 to 7. Not bad. I then picked up CJCA and CHGS and several faint signals which I insisted were 2CO, 5CK, KGU, 4QG, and 2BL. My friend didn't take much stock in my theories about these and was on his way to bed when I called him back to hear 2BL come in with room-filling volume. And they announced plainly right at that time. I wouldn't be that lucky again in a hundred years."

Last-Minute NOTES

(Continued from page 14)

way between Moose Jaw and Regina and scrapped our old 500-watt CJRM machine. VE9JR is still operating on 25.6 meters but only in the evenings. VE9CL on 48.58 is not in operation at present but we expect to have it going simultaneously with VE9JR in the near future. We shall shortly open a new 100-watt transmitter in Winnipeg and this will operate on a frequency of 1390 kcs."

B. C. Band Widened

Widening of the broadcast band to embrace three new channels in the 1500-1600 kc. band was announced by the Radio Commission Dec. 19, with an indication that a dozen stations of not more than 1000 watts will be licensed for operation on these waves under rigid limitations but with full authority to broadcast commercial

programs. The channels designated are 1530, 1550 and 1570 kc., each 20 kc. wide instead of ten. This is about the only tangible result coming out of the late-lamented Mexico City conference. Further details regarding this new move will appear in later issues of this magazine.

A DX Calendar for 1500 Channel

"Am sending you a copy of the 1500 kc. schedule for the month of February that we have arranged," writes Fred W. Janssen, of the CPC of the NNRC, 220 South Santa Cruz St., Venura, Calif. "Would appreciate it very much if you would cooperate with us for February and not ask any of the 1500-kc. stations to come on so that they might conflict with this schedule. It would be mighty nice for everyone if we could get the cooperation of all the clubs in putting this schedule over." We think this an excellent idea and hope that the stations invited to participate will do so. In view of the fact that they have not as yet accepted as we go to press, we deem it best to publish this calendar separately. Time is in EST.

Thursday Morning, Feb. 8
3:00-4:00 WSYB, Rutland, Vt.
Friday Morning, Feb. 9
3:00-4:00 CRCS, Chicoutimi, Que.
Saturday Morning, Feb. 10
3:00-4:00 WKEU, La Grange, Ga.
Sunday Morning, Feb. 11
3:00-4:00 KPQ, Wenatchee, Wash.
Monday Morning, Feb. 12
3:00-4:00 WKBV, Richmond, Ind.
Tuesday Morning, Feb. 13
3:00-4:00 WKBB, East Dubuque, Ill.
Wednesday Morning, Feb. 14
3:00-4:00 KGFI, Corpus Christi, Tex.
Thursday Morning, Feb. 15
3:00-4:00 WBNF, Binghamton, N. Y.
Friday Morning, Feb. 16
3:00-4:00 WWRL, Woodside, N. Y.
Saturday Morning, Feb. 17
3:00-4:00 WMFC, Lapeer, Mich.
Sunday Morning, Feb. 18
3:00-4:00 KREG, Santa Ana, Calif.
4:00-5:00 KPJM, Prescott, Ariz.
Monday Morning, Feb. 19
3:00-4:00 WFDV, Rome, Ga.
Tuesday Morning, Feb. 20
3:00-4:00 WRDW, Augusta, Ga.

Wednesday Morning, Feb. 21
3:00-7:00 WOPI, Bristol, Tenn.
Thursday Morning, Feb. 22
3:00-4:00 KGKB, Tyler, Tex.
Friday Morning, Feb. 23
3:00-4:00 KDB, Santa Barbara, Calif.
Saturday Morning, Feb. 24
3:00-4:00 WMBQ, Brooklyn, N. Y.
4:00-5:00 WCNW, Brooklyn, N. Y.
Sunday Morning, Feb. 25
3:00-4:00 KXO, El Centro, Calif.
4:00-5:00 WKBZ, Ludington, Mich.
Monday Morning, Feb. 26
3:00-4:00 KNOX, Austin, Tex.
Tuesday Morning, Feb. 27
3:00-4:00 WWSW, Pittsburgh, Pa.
Wednesday Morning, Feb. 28
3:00-4:00 WHEF, Kosciusko, Miss.

"Help Yourself to Better Reception" is the title of an article which will appear in the March issue. It covers the subject of street noises and how to erect an aerial that will block them out.

What's Wrong with Set

(Continued from page 36)

tached, and connected together to a common terminal which, in turn, is connected to the plate of the 56 a.v.c. tube just placed within the set.

The cathode terminal, on the socket, of this tube, is connected, through a 25,000 to 50,000 ohms resistor (selected by experimentation) to the tap on the first filter choke that connects to the speaker field coil. This resistor in the cathode is shunted with a 0.1 mfd. fixed by-pass condenser. The grid of the a.v.c. tube is then connected to the plate of the second intermediate-frequency tube through a .00025 mfd. condenser inserted in series. The grid of the a.v.c. tube (56) also is returned to the cathode circuit of the same tube through a 2 megohm resistor placed in series. The plate of the a.v.c. tube, which is also con-

nected to the lower ends of the three stages above mentioned through the 250,000 ohms resistors, is by-passed to the cathode through a 0.5 by-pass condenser.

The heater of the a.v.c. tube is connected to the common heater winding of the power unit furnishing any of the 2.5-volt tubes. The plate of the a.v.c. tube, also is grounded through a resistor that is variable between 10,000 and 150,000 ohms.

After this work has been done the entire set may require readjusting for proper r.f. and i.f. alignment. We do not advise the use of new tubes of the 50 series in this circuit.

BETTY'S Gossip Page

(Continued from page 10)

teners. Finally she went to a psychoanalyst with her trouble and received this opinion from him; Her melancholy tones are of a type that make the men want to comfort her and at the same time woman listeners feel sorry for her!

George Hall's father, a classical musician who used to play with Victor Herbert, won't listen to his son broadcast . . . can't get over George turning to dance music when he might have been a classical artist himself.

Albert Spalding, America's foremost violinist, knocks on the rare wood of his \$35,000 Guarnerius fiddle for luck before he starts his broadcast over Columbia every Wednesday at 8:30 p.m., EST.

Isham Jones is the only one to hold cards in both the musicians' and coal miners' unions. He himself once labored in Ohio mines and each year renews his affiliation. Incidentally, Isham has a one-year-old adopted son named David, and the boys in the

band have taught this small youngster to deliver a Bronx cheer upon request.

Rudy Vallee, still in a predicting mood, picks Gertrude Niesen, Barbara Blair (Snoony), Joe Penner and Alice Faye as the most promising prospects in radio.

Jane Froman, who's as good looking as she sings, will leave the air in April after two years of continuous broadcasting. She'll be off till September for a well-earned rest.

Joe Morrison, who started "The Last Round Up" on its dizzy radio ride, is leaving George Olsen's Orchestra to enter the movies. Lanny Ross is also another radio star to break into the movies.

Tea Little—that's really her name—is Jack Little's wife and manager, and she's just as Little as he is.

DX Notes and Tips

(Continued from page 32)

were on 720. None of the T-Ps except 2BL have been good here this winter."

"Thanks for the tip on HIX," postcards Guy R. Bigbee, Hq. Co., 66th Inf., Fort Benning, Ga. "I was not able to turn on the radio at the beginning of the program but heard it from about 8:30 to 10 p.m. CST. Program was excellent although the static kept me from hearing all that was said. I did hear the call and that part of the announcement dedicating the program to RADEX."

"Is there anyone more lonesome than a DX fan without a radio," queries Robert R. Rawstron, 296 Main St., Claremont, N. H. "Have now sold my Eveready after four years service bringing in some 770 veries in 23 countries. Its last was LR5 in Argentine. Now I have a

new B-16 Midwest somewhere on the rails between here and Cincinnati. I would like to hear from other Midwest owners in the East and will acknowledge all letters."

"Years ago, I used to be a DX fan but not until last month did I again become interested," observes Madison Letts, 1515 R st., Lincoln, Nebr. "Last night I sat down at the radio and in five minutes pulled in my 300th catch—XEW of Mexico City. I am using a 29 model Victor-RCA, model RE-45. I have just installed the Ollie Ross ground—it makes a definite improvement in reception."

With the Clubs

From Warren E. Winkley, Box 12, Hughson, Calif., comes the information that the late Transcontinental Radio DX Club has been reorganized and renamed the Universal Radio DX Club with Charles C. Norton, 2559 Polk St., San Francisco, as president. Station KPCB, two of whose officers are directors of the Club, is putting on a DX program for the new club "every other first Monday of each month from midnight to 2 a.m., PST. My log is now at 428," says Mr. Winkley, "with one Chinese, five Aussies, one Zedder, 29 Japs and F31CD. On the night of Oct. 21 I picked up 22 Japs—the best night I ever experienced. I can start listening to them as early as 10:30 p.m., PST."

The Universal Radio DX Club, said to be the only club of its kind in the West, is putting out a news sheet every ten days. They hope to put on many special programs by stations that are rarely heard in the East. The membership fee is 35 cents and the dues 95 cents a year. Club news and tips will be given out over station KPCB on the first Monday morning of each month from midnight to 2 a.m., PST.

"KDKA has a DX club now," postcards Joe Stokes, 7318 Woodlawn Ave., Swissvale, Pa. "They are broadcasting tips and news every Sunday night at 12:30 a.m., EST."

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 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 25th Century

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

R — Waldorf Astoria Orchestra
KDYL KFYR KOA KPO KPRC KSD

KSTP KTBS KTHS KVOO WAPI
WBEN WCAE WCHS WDAF WDAY
WEAF WECB WFAA WFLA WHO

WIBA WIOD WIS WJAR WJAX
WJDX WKY WMAQ WMC WOAI
WOC WRC WRVA WSAI WSM WSM

WSMB WSOB WTAG WWJ WNNC
B — U. S. Army Band

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

E-8:15 p.m., C-6:15, M-4:15, P-3:15
C — Bobby Benson; Sunny Jim

WAAB WABC WCAU WDRC WEAN
WFBL WGR WHC WHK WLBZ
WMAS WOKO WORC

E-8:30 p.m., C-5:30, M-4:30, P-3:30
C — Enoch Light and Orchestra

CKLW KLRA WAAB WADC WBIG
WBRC WCAO WCAU WDAE WDBO
WDOD WDRC WDSU WFBL WFEA

WGIC WGST WHEC WHP WICC
WKBN WKWB WLBZ WMAS WMBG
WOKO WORC WQAM WJSV WSPD

WTAR WTCO
R — Irene Besseley Songs

KGO KOA WAPI WBEN WCKY
WEAF WFER 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 — Horsensense Philosophy; Andrew Kelly

KOA WAPI WBEN WCAE WCKY
WEAF WFAA WFER WGY WHO
WJDX WMAQ WMC WOC WSAI

WSB WSM WSMB WTAG WWJ
B — Lowell Thomas
CRCT KDKA WBAL WBZ WBZA

WFLA WGAR WHAM WIOD WJAX
WJR WJZ WLW WSYR
C — Mildred Bailey, Songs

CFRB CKLW KLRA KLZ KMBC
KOMA KRLD KSCJ KTRH WAAB
WABC WBIG WBRC WCAH WCAU

WCAU WDAE WDBJ WDOD WDRC
WDSU WEAN WFBL WFBM WFEA
WGIC WGST WHAS WHEC WHP

WIBW WICC WISN WJSV WKBN
WKWB WLBZ WMAS WMBG WMT
WOKO WORC WQAM WJSV WSPD

WTAR WTCO WWVA
E-7:00 p.m., C-8:00, 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 WTCO WWVA
R — Mollie Show
KSD WBEN WCAE WCHS WDAF

WEAF WEEI WFER WGY WHO
WJAR WLIT WMAQ WOC WOV
WRC WTAG WTAM WTCO WWJ

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 WSYR
E-7:30 p.m., C-8:30, M-5:30, P-4:30
C — Music in the Air

WABC WCAO WCAU WDRC WEAN
WFBL WFBM WGR WHC WHK
WJAS WJSV WLBZ WNAC WOKO

WORC
R — Lum and Abner
KSD WBEN WCAE WCHS WDAF

WEAF WEEI WFER WGY WHO
WJAR WLIT WMAQ WOC WOV
WRC WTAG WTAM WTCO WWJ

B — Potash and Perlmutter
KDKA KOIL KSO KWCR KWK
WBAL WBZ WBZA WCKY WENR

WHAM WJR WJZ WMAL WREN
WSYR
E-7:45 p.m., C-8:45, M-5:45, P-4:45
C — Boake Carter; Philco

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

WORC
R — The Goldbergs
WBEN WCAE WCHS WDAF WEAF

WEEI WENR WFER WGY WJAR
WLIT WOV WRC WSAI WTAG
WTAM WWJ

B — Mmo. Frances Alda
KDKA KDYL KFI, KFYR, KGO
KGW KHQ KOA KOIL KOMO

KPRC KTBS KTHS KWCR KWK
KYW WBAL WBAF WBZ WBZA
WHAM WIBA WJDX WJZ WKY

WMAL WOAI WSMB WSYR
E-7:00 p.m., C-8:00, M-7:00, P-6:00
C — Philadelphia Symphony Orchestra

CKLW KDB KERN KFBK KFH
KFPY KPRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOH KOIN

KOL KOMA KSL KTRH KTSB
KVI KWG WABC WADC WBBM
WBRC WBT WCAH WCAU WCAU

WCCO WDAE WDBJ WDOD WDRC
E-8:00 p.m., C-7:00, M-6:00, P-5:00
C — Happy Bakers

CKLW WABC WADC WCAH WDRC
WFBM WGN WGR WHC WHK
WICC WJSV WMAS WMBG WMT

WNAC WORC WSPD WWVA
R — Soonyland Sketches—Drama
WBEN WCHS WEAF WEEI WGY

WJAR WTAG WTCO
B — Sealed Power Side Show
KDKA KFYR KOIL KPRC KSO

KSTP KTBS KTHS KVOO KWCR
KWK WBAL WBZ WBZA WDAY
WECB WFAA WGAR WHAM WIBA

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 WFBM 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
KPRC KGB KHJ KLZ KMBC KVI
KMOX KOIN KOL KSL KVI KWG

WABC WADC WCAO WCAU WDRC
WEAN WFBL WFBM WGN WGR
WHAS WHK WJAS WJSV WKRC

WNAC WOKO WOV WSPD
R — Voice of Firestone
CFRC CRCT KFYR KPRC KSD

KTBS KTHS KVOO WBEN WCHS
WDAF WDAY WEAF WECB WEEI
WFAA WFER WFLA WGY WHO

WIOD WIS WJAR WJAX WJDX
WKY WLIT WLW WMAQ WMC
WOAI WOC WOV WRC WRVA WSM

WSM WSMB WSOB WTAG WTAM
WTCO WTMJ WTVN WYR
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 WSYR
E-9:00 p.m., C-8:00, M-7:00, P-6:00
C — Philadelphia Symphony Orchestra

CKLW KDB KERN KFBK KFH
KFPY KPRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOH KOIN

KOL KOMA KSL KTRH KTSB
KVI KWG WABC WADC WBBM
WBRC WBT WCAH WCAU WCAU

WCCO WDAE WDBJ WDOD WDRC
E-9:15 p.m., C-8:15, M-7:15, P-6:15
C — Buick; Andre Kostelanetz

CKLW KDB KERN KFBK KFH
KFPY KPRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOIN KOL

KOMA KSCJ KSL KTRH KTSB
KVI KWG WABC WADC WBBM
WBRC WBT WCAH WCAU WCAU

WCCO WDAE WDBJ WDOD WDRC
E-9:30 p.m., C-8:30, M-7:30, P-6:30
C — Isham Jones; Gertrude Niesen

CFRB CKLW KDB KERN KFBK
KFPY KPRC KGB KHJ KLZ KMBC
KMJ KMOX KOIN KOL KRLD

KSL KVI KWG WABC WADC
WBBM WBT WCAH WCAU WCAU
WCCO WDAE WDBJ WDOD WDRC

WJAS WJSV WKBN WKWB WLBZ
WMAS WMBD WMBG WMT WODX
WOKO WORC WQAM WJSV WSPD

WTAR WTCO
B — Amos 'n' Andy
KDYL KFI KGO KGW KHQ KOA

KOIL KOMO KPRC KSTP KTHS
KWK WBAF WDAF WENR WKY
WMAQ WMC WOAI WREN WSB

WSM WSMB WTMJ
E-10:00 p.m., C-9:00, M-8:00, P-7:00
C — Wayne King and Orchestra

CKLW KALE KDB KERN KPRC
KGB KHJ KLZ KMBC KMOX
KOIN KOL KSL KWG WABC WABC

MONDAY—(Continued)

WDSU WEAN WFBL WFBM WGR
WGST WHAS WHEC WHK WICO
WISN WJAS WJSV WKRC WLAC

WLBZ WMBG WMT WNAC WOKO
WOW WPG WQAM WREC WRR
WSPD WTCO WTCO

R — A. & P. Gypsy
KSD WBEN WCAE WCHS WDAF
WEAF WEEI WGY WHO WJAR

WLIT WMAQ WOC WOV WRC
WSAI WTAG WTAM WTCO WWJ
B — Sinclair Minutemen

KDKA KFYR KOA KOIL KPRC
KSO KSTP KTBS KTHS KVOO
KWCR KWK WBAL WBZ WBZA

WDAY WECB WFAA WFLA WGAR
WHAM WIBA WIOD WIS WJAX
WJDX WJR WJZ WKY WLS WLW

WMC WSM WPTF WREN WRVA
WSB WSOB WSMB WTMJ WYR
E-9:15 p.m., C-8:15, M-7:15, P-6:15
C — Buick; Andre Kostelanetz

CKLW KDB KERN KFBK KFH
KFPY KPRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOIN KOL

KOMA KSCJ KSL KTRH KTSB
KVI KWG WABC WADC WBBM
WBRC WBT WCAH WCAU WCAU

WCCO WDAE WDRC WDSU WEAN
WFBL WFBM WGST WHAS WHEC
WHK WIBW WICC WISN WJAS

WJSV WKWB WKRC WLAC WMBD
WMT WNAC WOKO WOV WQAM
WREC WRR WSPD WTAR WTCO

E-9:30 p.m., C-8:30, M-7:30, P-6:30
C — Isham Jones; Gertrude Niesen

CFRB CKLW KDB KERN KFBK
KFPY KPRC KGB KHJ KLZ KMBC
KMJ KMOX KOIN KOL KRLD

KSL KVI KWG WABC WADC
WBBM WBT WCAH WCAU WCAU
WCCO WDRC WDSU WEAN WFBL

WFBM WHAS WHK WICC WJAS
WJSV WKWB WKRC WLAC WNAC
WOKO WOV WREC WSPD WTAR

R — Del Monte Ship of Joy
KDYL KOA KPRC KSD KSTP
KTBS KVOO WBEN WCAE WCHS

WEAF WECB WEEI WFAA WFER
WFLA WGY WHO WIOD WIS
WJAR WJAX WKBF WKY WLIT

WMAQ WOAI WOC WOV WRC
WRVA WSAI WTAG WTAM WTMJ
WTVN WYR

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 KPRC
KGB KHJ KLZ KMBC KMOX
KOIN KOL KSL KWG WABC WABC

WADC WBBM WCAO WCAU WCCO
WDRC WEAN WFBL WFBM WGR
WHAS WHK WJAS WJSV WKRC

WOKO WOV WSPD
R — Contented Program
CFRC CRCT KDYL KFI KFYR

KGO KGW KHQ KOA KOMO KPRC
KSTP KTHS WEAF WECB WEEI
WFER 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
E-10:45 p.m., C-9:45, M-8:45, P-7:45
C — Myrt and Marge

KDB KERN KPRC KFPY KPRC
KGB KHJ KLRA KLZ KMBC KMJ

KMOX KOIL KOL KOMA KSL
KVI KWG WBBM WBRC WCCO
KDSU WFBM WGST WHAS WLAC

WODX WREC
E-10:45 p.m., C-9:45, M-8:45, P-7:45
C — Myrt and Marge

KDB KERN KPRC KFPY KPRC
KGB KHJ KLRA KLZ KMBC KMJ
KMOX KOIL KOL KOMA KSL

KVI KWG WBBM WBRC WCCO
KDSU WFBM WGST WHAS WLAC
WODX WREC

E-11:00 p.m., C-10:00, M-9:00, P-8:00
C — Evan Evans, Baritone

CKLW KFH KLRA KLZ KMBC
KSCJ KTRH WAAB WABC WADC
WBRC WCAH WCAU WDAE WDBJ

WDBO WDOD WDRC WDSU WEAN
WFEA WGLC WGST WHAS WHEC
WHK WHP WIBW WICC WIP WISN

WJAS WJSV WKBN WKWB WLBZ
WMAS WMBD WMBG WMT WODX
WOKO WORC WQAM WJSV WSPD

WTAR WTCO
B — Amos 'n' Andy
KDYL KFI KGO KGW KHQ KOA

KOIL KOMO KPRC KSTP KTHS
KWK WBAF WDAF WENR WKY
WMAQ WMC WOAI WREN WSB

WSM WSMB 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 KVOA
WAAB WABC WACO WADC WBT

WCAH WCAU WCCO WDAE WDBJ
WDBO WDOD WDRC WEAN WFBM
WFEA WGST WHP WIBW WIP

WISN WJAS WJSV WKBN WKWB
WLBZ WMBD WMBG WMT WODX
WOKO WORC WQAM WJSV WSPD

WTAR WTCO
E-11:30 p.m., C-10:30, M-9:30, P-8:30
C — Abe Lyman and Orchestra

CFRB CKLW KFH KLRA KLZ
KMBC KOMA KTRH KTSB KVOA
WABC WADC WBRC WCAU WCAU

WDBJ WDRC WDSU WEAN WFBL
WFBM WGST WHAS WHK WHP
WIBW WICC WISN WJSV WKWB

WLAC WLBW WMBD WMBG WMT
WNAC WOKO WORC WPG WQAM
WREC WSBT WJSV WTCO WTCO

E-11:30 p.m., C-10:30, M-9:30, P-8:30
C — Abe Lyman and Orchestra

CFRB CKLW KFH KLRA KLZ
KMBC KOMA KTRH KTSB KVOA
WABC WADC WBRC WCAU WCAU

WDBJ WDRC WDSU WEAN WFBL
WFBM WGST WHAS WHK WHP
WIBW WICC WISN WJSV WKWB

WLAC WLBW WMBD WMBG WMT
WNAC WOKO WORC WPG WQAM
WREC WSBT WJSV WTCO WTCO

R — Voice of Firestone
KDYL KFI KFSB KGLH KGIR KGO
KGU KGW KHQ KOA KOMO KTRH

E-12:00 p.m., C-11:00, M-10:00, P-9:00
B — Sealed Power Side Show

KDYL KFI KGLH KGIR KGO KGW
KHQ KOA KOMO KTRH

TUESDAY

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 WCKY
WENR WHAM WJR WJZ WMAL
WREN

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 — Mid-Week Hymn Sing

KDYL KFYR KGIR KPO KPRC
KTBS KTHS KVOO WDAY WEAF
WFAA WFI WGY WHO WIBA WIS

WJAX WJDX WMAQ WOAI WOC
WRC WSAI WTAG WYR
B — Mary Small, Juvenile Singer

KSO KWCR WBAL WCKY WENR
WHAM WJZ WREN WSYR
C — Betty Barthel, Songs

CKLW KLRA WAAB WABC WADC
WBRC WCAO WCAU WCCO WDAE
WDBJ WDOD WDRC WDSU

WFBL WFEA WGLC WGR WGST
WHEC WHP WICC WKBN WLBZ
WMAS WMBG WOKO WORC WQAM

WJSV WSPD WTAR
E-8:45 p.m., C-5:45, M-4:45, P-3:45
C — Little Italy

WAAB WABC WCAO WCAU WDRC
WEAN WHEC WHP WKWB WOKO
R — Choeiro Musical Messia

KDYL KOA KPO KSD WCKY
WEAF WEEI WFER WFLA WGY
WHO WIOD WIS WJAR WJAX

WJDX WMAQ WOC WOV WRVA
WSAI WSM WSOB WTAG WWJ
WWNC

B — Lowell Thomas, See Monday
E-7:00 p.m., C-8:00, M-5:00, P-4:00
C — Myrt and Marge, See Monday

B — Amos 'n' Andy, See Monday
E-7:15 p.m., C-8:15, M-5:15, P-4:15
C — Just Plain Bill, See Monday

R — Billy Bachelor, See Monday
B — Radio in Education
KDKA KECA KEX KFSB KFYR

KGA KGLH KGIR KJR KOA KOIL
KPRC KTRH KTBS KTHS KVOO
KWCR KWK KYA WAPI WBAF

WBZ WBZA WYB WFLA WHAM
WIBA WIS WJDX WJZ WMAL
WOAI WPTF WREN WSMB WYR

E-7:30 p.m., C-6:30, M-5:30, P-4:30
C — Silver Dust Serenaders

WABC WCAU WDRC WFBL WGR
WHAC WHAS WMAS WOKO WORC
WYR

E-7:45 p.m., C-6:45, M-5:45, P-4:45
B — Phil Harris and Orchestra

KDKA KFYR KOIL KPRC KSTP
KTBS KWCR KWK WBAF WBZ
WBZA WENR WFLA WGAR WHAM

WIBA WIS WJZ WKY WMAL WRVA
WSYR WWNC
C — Boake Carter, See Monday

C — Goldbergs, See Monday
E-8:00 p.m., C-7:00, M-6:00, P-5:00
C — Columbians; Freddie Rich

CKLW KFH KLRA KMBC KOMA
KSCJ KTRH WABC WADC WBBM
WBIG WBRC WCAH WCAU WCAU

WCCO WDAE WDBJ WDOD WDRC
WDS

TUESDAY—(Continued)

WHCC WHP WBW WICC WISN
WJAS WKBN WLBZ WMAS WMBG
WMT WNAC WOKO WORC WPG
WQAM WSBT WSJS WSPD WTAZ
WVVA

R—Lae Reisman and Orchestra
WHEN WCAE WCHS WEAF WEEI
WFI WGY WJAR WRC WTAG
WTAM WWJ

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

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

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

CKLW KMBC KMOX WABC WBBM
WBT WCAO WCAU WDRC WEAN
WGR WHAS WHK WJAS WJSV
WKRZ WNAC

R—Wayne King and Orchestra
KPRC KSD KSTP WBEN WCAE
WCHS WDAF WEAF WEEI WFAA
WFI WGY WHO WJAR WKBF
WKY WMAQ WMC WOAI WOC
WOW WRC WSAI WBS WSM WSBM
WTAG WTAM WTMJ WWJ

B—Harlick's Adventures in Health
CRCT KDKA KOIL KSO KWK
WBAL WBZ WBZA WGAR WHAM
WJR WJZ WLS WLW WREN

E-6:45 p.m., C-7:45, M-8:45, P-5:45
C—Fray and Braggiotti

CKLW KFH KLRA KOMA WABC
WADC WBIG WBRC WCAH WCAO
WCAU WCCO WDAE WDBJ WDOD
WDSU WEAN WFBL WFEA WGLC
WGR WGST WHCC WHK WIBW
WISN WJAS WKBN WLBZ WMAS
WMBG WMT WOKO WQAM WSJS
WSPD

B—Nat Shilkret and Orchestra
KDKA KOIL KSO KWCR KWK
WBAL WBZ WBZA WGAR WHAM
WJR WJZ WLS WLW WMAL WREN
WSYR

E-9:00 p.m., C-8:00, M-7:00, P-8:00
R—Ben Bernie and Orchestra

KFYR KOA KPRC KSD KSTP
WBAP WBEN WCAE WCHS WDAY
WEAF WEEI WFBW WFI WGY
WHO WJAR WKY WLW WMAQ
WMC WOAI WOC WOW WRC
WRVA WBS WSM WSBM WTAG
WTAM WTMJ WWJ

B—Household Musical Memories
KDKA KSO KWK WBAL WBZ 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-8:15
C—Alexander Woolcott

CKLW KFH KLRA KLZ KMBC
KOMA KSCJ KTRH WABC WBIG
WBRC WCAH WCAO WCAU WCCO
WDAE WDBJ WDOD WDOD WDRC
WDSU WEAN WFBL WFEA WGLC
WGR WGST WHAS WHEC WHP
WIBW WICC WJAS WKBN WLBZ
WMAS WMBG WMT WNAC WODX
WOKO WORC WPG WQAM WSBT
WSJS WTAZ

E-9:30 p.m., C-8:30, M-7:30, P-8:30
C—George Jessel
CFRB CKLW KFH KLRA KLZ

KMBC KOMA KRLD KSCJ WABC
WADC WBIG WBRC WCAH WCAO
WCAU WCCO WDAE WDBJ WDOD
WDOD WDRC WDSU WEAN WFBL
WFEA WGLC WGST WHAS WHEC
WHP WIBW WICC WJAS WJSV
WKBN WKBW WLBZ WMAS WMBD
WMT WNAC WODX WOKO WORC
WPG WQAM WSJS WSPD WTAZ

R—Tessie Fire Chief Program
KDYL KFI KFSD KFYR KGH
KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KTRH KTBS
KVOO WBAP WBEN WCAE WCHS
WDAF WDAY WEAF WEEI WFBW
WFI WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WJDX
WKY WLW WMAQ WMC WOAI
WOC WOW WPTF WRC WRVA
WSB WSM WSBM WTAG WTAM
WTMJ WWJ WWNC

E-10:30 p.m., C-9:00, M-8:00, P-7:00
C—Camel; Glen Gray's Orchestra

CKLW KDB KERN KFBK KFH
KFYR KPRC KGB KHJ KLRA KLZ
KPRC KSD KSTP KTRH KTBS
KOMA KRLD KSCJ KSL KTRH
KTSA KVI KWG WAAB WABC
WAGO WADC WBBM WBIG WBRC
WBT WCAH WCAO WCAU WCCO
WDAE WDBJ WDOD WDOD WDRC
WDSU WFBL WFBM WFEA WGST
WHAS WHEC WHK WHP WIBW
WICC WJAS WJSV WKBW WKBN
WKBW WJRC WLAC WLWZ WMAS
WMBD WMBG WMT WNAX WODX
WOKO WORC WOW WPG WQAM
WREB WSJS WSPD WTAZ WTCO

R—Cruise of Seth Parker
KDYL KFI KFSD KFYR KGH
KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KTRH KTBS
WBAP WBEN WCAE WCHS WDAF
WDAY WEAF WEEI WFBW
WFI WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WJDX
WKY WLW WMAQ WMC WOAI WOC
WOW WRC WRVA WBS WSM
WSMB WTAG WTAM WWJ WWNC

E-10:30 p.m., C-9:30, M-8:30, P-7:30
R—Madame Sylvia—Beauty Talk

KDYL KFI KGO KGW KHQ KOA
KOMO KSD KSTP WBEN WEAF
WEEI 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—Ames 'n' Andy, See Monday

C—Harlem Sarnada
CKLW KFH KLRA KLZ KMBC
KSCJ KTRH WAAB WABC WADC
WBRC WCAH WCAO WDAE WDBJ
WDOD WDOD WDRC WDSU WEAN
WFBM WFEA WGLC WGST WHAS
WHEC WHP WIBW WICC WISN
WJAS WKBN WKBW WLBZ WMAS
WMBD WMBG WMT WODX WOKO
WORC WQAM WSBT WSJS WSPD
WTAZ WWVA

E-11:15 p.m., C-10:15, M-9:15, P-8:15
C—Doll Campo, Songs
CFRB CKLW KFH KLRA KLZ
KMBC KSCJ WAAB WABC WADC
WBRC WCAH WCAO WCAU WCCO
WDAE WDBJ WDOD WDOD WDRC
WDSU WEAN WFBL WFBM WGLC
WGST WHAS WHEC WHK WHP

WIBW WISN WJAS WKBN WKBW
WLBZ WMBD WMT WODX WOKO
WORC WPG WQAM WSBT WSJS
WSPD WTAZ

E-11:30 p.m., C-10:30, M-9:30, P-8:30
C—Ozzie Nelson and Orchestra

CFRB CKLW KFH KLRA KLZ
KMBC KOMA KSL KTRH KTSA
WABC WADC WBRC WCAO WDBJ
WDRC WDSU WEAN WFBL WFBM
WGST WHK WHP WIBW WISN
WJSV WKBW WLAC WLWZ WMBD
WMBG WMT WNAC WOKO WORC
WQAM WREC WSBT WSJS WTAZ
WTAC WWVA

B—Meyer Davis and Orchestra
CFRC KDYL KFYR KOIL KPO KSO
KSTP KWCR KWK WAPI WBAL
WBZ WBZA WCKY WDAY WEBC
WENR WFLA WHAM WIBA WIOD
WIS WJDX WJZ WMAL WMC
WREN WRVA WBS WSM WSMB
WSYR WWNC

E-11:45 p.m., C-10:45, M-9:45, P-8:45
C—Valce of Experience

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

E-12:00 mid., C-11:00, M-10:00 P-8:00
R—Ben Bernie and Orchestra
KFI KGO KGW KHQ KOMO

WEDNESDAY

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

E-9:15 p.m., C-8:15, M-7:15, P-8:15
C—Bobby Benson, See Monday

E-9:30 p.m., C-8:30, M-7:30, P-8:30
R—Book of News

KFYR WEAF WFBW WGY WIBA
WIS WJAR WJDX WRC WSAI
WSB WSM WWJ WWNC

B—Irene Beasley, Contralto
KGO KOA KPRC KSO KTBS KVOO
KWCR WBAL WBAP WCKY WENR
WGAR WJZ WOA WREN
C—Enoch Light, See Monday

E-9:45 p.m., C-8:45, M-7:45, P-8:45
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—Mellie Show, See Monday
B—Ames '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 Herlick, Baritone
KDKA KOIL KSO KWCR KWK
WBAL WBZ 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

B—Patash and Perlmutter, See Mon.
E-7:45 p.m., C-6:45, M-5:45, P-4:45
C—Beake Carter, See Monday
R—Goldbergs, See Monday

WEDNESDAY—(Cont'd)

B—Irene Rich in Hollywood
KDKA WBAL WBZ WBZA WCKY
WENR WJZ WMAL WMC WSB WSM
WSMB WSYR

E-8:00 p.m., C-7:00, M-6:00, P-5:00
C—Happy Bakers, See Monday

R—Jack Pearl
CFRC CRCT KSD WBEN WCAE

WCKY WCHS WDAF WEAF WEEI
WFBW WGY WHO WJAR WLIT
WLS WOC WOW WRC WSAI WTAG
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 CKLW KDB KERN KFBK
KFYR KPRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOH KOIN
KOL KOMA KRLD KSCJ KSL
KTRH KTSA KVI KFOR KWG
WABC WACO WADC WBIG WBRC
WBT WCAE WCAO WCAU WCCO
WDAE WDBJ WDOD WDOD WDRC
WDSU WEAN WFBL WFBM WFEA
WGN WGST WHAS WHEC WHK
WHP WIBW WICC WISN WJAS
WJSV WKBW WKBW WKRC WLAC
WLWZ WLBZ WMAS WMBD WMBG
WMT WNAC WNAX WOKO WORC
WOWO WPG WQAM WREC WSPD
WTAZ WTCO

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

R—Wayne King and Orchestra
KSD WBEN WCAE WCHS WEAF
WFBW WGY WJAR WKBF WLIT
WMAQ WOW WRC WSAI WTAG
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-8:00
R—Ivana Toubadours

KDYL KFI KGO KGW KHQ KOA
KOMO KPRC KSD KSTP KTBS
KTBS KVOO WAPI WBAP WBEN
WCAE WCHS WDAF WEAF WFAA
WFBW WGY WHO WIOD WIS
WJAR WJAX WKY WLIT WMAQ
WMC WOAI WOC WOW WRC
WRVA WSAI WBS WSM WSMB
WTAG WTAM WTMJ WWJ
B—Warden Lawes; Sing Sing Drama
KDKA KOIL KSO KWCR KWK
WBAL WBZ WBZA WCKY 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-8:15
C—Col. Stoopnagle and Budd

CKLW KDB KERN KFBK KFH
KFYR KPRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOIN KOL
KOMA KRLD KSCJ KSL KTRH
KTSA KVI KWG WABC WADC
WBMB WBRC WBT WCAH WCAU
WCAU WCCO WDAE WDRC WDSU
WEAN WFBL WFBM WGST WHAS
WHEC WHK WIBW WICC WISN
WJAS WJSV WKBW WKRC WLAC
WMBD WMT WNAC WOKO WOWO
WQAM WREC WSPD WTAZ WTCO

E-9:30 p.m., C-8:30, M-7:30, P-8:30
C—Guy Lombardo—Burns and Allen
CKLW KDB KERN KFBK KFPY
KFRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KOMA KRLD

KSL KTRH KTSA KVI KWG WABC
WADC WBT WCAO WCAU WCCO
WDRC WEAN WFBL WFBM WGN
WHK WJAS WJSV WKBW WKRC
WNAC WOKO WORC WOWC WSPD

R—Fred Allen's Revue
KSD KSTP WBEN WCAE WCHS

WDAF WEAF WFBW WGY WJAR
WLIT WMAQ WGW WRC WSAI
WTAG WTAM WTMJ WWJ

B—John McCormack, Tenor
KDKA KDYL KFI KGO KGW KHQ
KOA KOIL KOMO KSO KWCR
KWK WBAL WBZ WBZA WCKY
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—Ted Fiorito and Orch.

CKLW KDB KERN KFBK KFOR
KFYR KPRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOH KOIN
KOL KOMA KRLD KSCJ KSL
KTRH KTSA KVI KFOR KWG
WABC WACO WADC WBIG WBRC
WBT WCAE WCAO WCAU WCCO
WDAE WDBJ WDOD WDOD WDRC
WDSU WEAN WFBL WFBM WFEA
WGN WGST WHAS WHEC WHK
WHP WIBW WICC WISN WJAS
WJSV WKBW WKBW WKRC WLAC
WLWZ WLBZ WMAS WMBD WMBG
WMT WNAC WNAX WOKO WORC
WOWO WPG WQAM WREC WSPD
WTAZ WTCO

R—Corn Cob Pipe Club
KDYL KFI KFYR KGH KGR

KGO KGW KHQ KOA KOMO KSD
KSTP WBEN WCAE WCHS WDAF
WDAY WEAF WEBC WEEI WENR
WFBW WGY WHO WIBA WJAR
WLIT WLW WOC WOW WRC
WRVA WTAG WTAM WTIC WTMJ
WWJ

B—Sonny Meroff Revue
KDKA KOIL KPRC KSO KTBS

KWCR KWK WAPI WAVE WBAL
WBZ WBZA WFAA WFLA WGAR
WHAM WIOD WIS WJAX WJDX
WJZ WKY WMAL WMC WOAI
WREN WBS WSM WSMB WSOE
WWNC

E-9:00 p.m., C-8:00, M-7:00, P-8:00
R—National Radio Forum

KFYR KPRC KSD KSTP KTBS
KVOO WBEN WCAE WCHS WDAY
WEAF WEEI WFAA WFBW WFLA
WGY WHO WIBA WIS WJAR WJAX
WJDX WKY WMAQ WOAI WOC
WOW WRC WRVA WSAI WBS WSM
WSMB WTAG WTAM WTIC WWJ
WWNC

E-10:30 p.m., C-9:30, M-8:30, P-7:30
R—National Radio Forum

KFYR KPRC KSD KSTP KTBS
KVOO WBEN WCAE WCHS WDAY
WEAF WEEI WFAA WFBW WFLA
WGY WHO WIBA WIS WJAR WJAX
WJDX WKY WMAQ WOAI WOC
WOW WRC WRVA WSAI WBS WSM
WSMB WTAG WTAM WTIC WWJ
WWNC

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—Ames 'n' Andy, See Monday

C—Andre Kostelanetz
CKLW KFH KLRA KLZ KMBC
KSCJ KTRH KTSA WAAB WABC
WACO WADC WBRC WCAH WCAO
WDAE WDBJ WDOD WDOD WDRC
WDSU WEAN WFBM WFEA WGLC
WGST WHAS WHEC WHK WHP
WIBW WICC WISN WJAS WKBW
WLAC WLWZ WLBZ WMAS WMBD
WMBG WMT WNAX WODX WOKO
WORC WPG WQAM WREC WSBT
WSJS WSPD WTAZ WTCO

E-7:00 p.m., C-6:00, M-5:00, P-4:00
C—Myrt and Marge, See Monday

B—Ames '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

E-11:15 p.m., C-10:15, M-9:15, P-8:15
C—Isham Jones and Orchestra
CFRB CKLW KFH KLRA KLZ
KMBC KSCJ KTRH KTSA WAAB
WABC WACO WADC WBRC WCAH
WCAO WCCO WDAE WDBJ WDOD
WDOD WDRC WDSU WEAN WFBL
WFBM WGLC WGST WHAS WHEC
WHP WIBW WIP WISN WJAS
WKBW WLAC WLWZ WLBZ WMAS
WMBD WMBG WMT WNAX WODX
WOKO WORC WPG WQAM WREC
WSBT WSJS WSPD WTAZ WTCO

B—Warden Lawes; Sing Sing Drama
KDYL KFI KGO KGW KHQ KOA
KOMO KPRC KTBS KTBS KVOO
WAPI WBAP WJDX WKY WMC
WOAI WBS WSM WSMB

B—Peet Prince, Songs
KDYL KFI KFYR KGO KGW KHQ

KOA KOIL KOMO KSO KSTP KTBS
KTBS KTRH KWK WAPI WBAL
WCKY WDAY WEBC WFAA WIBA
WJDX WJR WJZ WKY WMAL
WMAQ WMC WREN WBS WSYR

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

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

E-12:30 a.m., C-11:30, M-10:30, P-9:30
R—Fred Allen's Revue
KDYL KFI KGO KGW KHQ KOA
KOMO

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—Henry King and Orchestra
KOIL KSO KWCR WBAL WBZ
WBZA WCKY WENR WHAM WJR
WJZ WMAL WREN WSYR

E-9:15 p.m., C-8:15, M-7:15, P-8:15
C—Bobby Benson, See Monday

E-9:30 p.m., C-8:30, M-7:30, P-8:30
R—John B. Kennedy

KDYL KFYR KOA KPO KPRC KSD
KTBS KTBS KVOO WAPI WDAY
WJAX WFBW WFI WGY WHO WIBA
WIS WJAX WJDX WMAQ WMC
WOR WRC WSAI WBS WSBM WTAG
WWJ WWNC

C—Edith Murray, Songs
WAAB WABC WBIG WBRC WBT
WCAO WDAE WDBJ WDSU WFEA
WGST WHEC WHP WJSV WKBW
WLBZ WMAS WMBG WORC WQAM
WREC WSPA WSJS WTCO

E-8:45 p.m., C-7:45, M-6:45, P-5:45
B—Lowell Thomas, See Monday

C—Little Italy, See Tuesday

R—Southernaires; Negro Quartet
KDYL KOA KPO KSD WEAF WFBW
WFI WGY WHO WIS WJAX WMAQ
WOC WRC WSAI WTAG WWJ
WWNC

E-7:00 p.m., C-6:00, M-5:00, P-4:00
C—Myrt and Marge, See Monday

B—Ames '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

THURSDAY—(Cont'd)

B—Robin Hood, Drama
CROT WBAL WBZ WBZA WHAM
WJZ WMAL WSYR

E-7:30 p.m., C-6:30, M-5:30, P-4:30
B—Eddie Duchin and Orchestra
KDKA WBAL WBZ WBZA WJZ
WSYR

C—Silver Dust, See Tuesday

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-8:00, P-5:00

R—Rudy Vallee and Orchestra
CFCF CROT KDYL KFI KFPR KGO
KGW KHQ KOA KOMO KPRC KSD
KSTP KTAR KTHS WAPI WBAP
WBEN WCAE WCHS WDAF WDAY
WEAF WEBC WEEI WFBP WFI
WFLA WGY WHO WIOD WJAR
WJAX WJDX WKY WLW WMAQ
WMC WOAI WOC WOW WPTF WRC
WRVA WSB WSM WSMB WTAG
WTAM WTMJ WWJ

C—Morton Downey, Tenor
KCLW KFH KLRA KMBC KOMA
KSCJ KSL KTRH KTSB WABC
WACO WADC WBIG WBRC WCAH
WCAO WCAU WCCO WDAE WDBJ
WDBO WDOD WDRC WDSU WEAN
WFBL WFBM WFLA WGLC WGR
WGST WHAS WHEC WHP WIBW
WICG WISN WJAS WKBN WLC
WLWB WLWZ WMAS WMBG WMT
WNAC WOKO WORC WQAM WREC
WSJS WSPD WTAZ WTOG WVVV

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

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

C—Voice of America
KCLW KMBC KMOX WABC WADC
WBMM WCAO WCAU WDRC WEAN
WFBL WGR WHAS WHK WJAS
WJSV WKRC WNAC WOKO WOWO
WSPD

B—Horlick's, See Tuesday

E-9:00 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 KTAR
KTHS WAPI WBAP WBEN WCAE
WCKY WCHS WDAF WEAF WEEI
WFBP WFI WFLA WGY WHO WIOD
WIS WJAR WJAX WJDX WKY
WMAQ WMC WOAI WOC WOW
WRC WRVA WSAI WSB WSM WSMB
WTAG WTAM WTMJ WWSJ WWSN
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—Buick Program, See Monday

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

C—California Melodies
KCLW KFH KLRA KLZ KMBC
KOMA KRLD KSCJ KTSB WABC
WACO WADC WBIG WBRC WCAO
WCCO WDAE WDBJ WDOD WDOD
WDRC WDSU WEAN WFBL WFLA
WGLC WGST WHEC WHK WHP
WIBW WICC WIP WJAS WKBN

WKBW WLAC WLWB WLWZ WMAS
WMBD WMBG WMT WNAC WNAX
WODX WOKO WORC WQAM WREC
WSBT WSJS WSPD WTAZ WTOG
B—Richard Himber 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 KFPR KGO KGW KHQ
KOA KOMO KPRC KSD KSTP KTBS
KTHS KVOO WBAP WBEN WCAE
WCHS WDAF WDAY WEAF WEBC
WEEI WFBP WFLA WGY WHO
WIBA WIOD WIS WJAR WJAX
WJDX WKY WLW WMAQ WMO
WOAI WOC WOW WRC WRVA WSB
WSM WSMB WTAG WTAM WTMJ
WWJ WWSN

B—Hands Across the Border
CFCF CFCB CFCF CFCF CFCN
CFCO CFCY CFCF CFCB CFCF
CFCO CHAB CHGS CHNS CHRC
CHWC CHWK CJCA CJCB CJCJ
CJGX CJOC CJRM CJRW CKCH
CKCK CKNC CKOC CKOV CKPC
CKPR CKUA CKX CKY CROC CROC
CROT CROC CFCF KDKA 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

B—Ames 'n' Andy, See Monday
R—Viola Philo, Soprano
WCAE WCHS WEAF WFI WFLA
WGY WIOD WIS WOW WRVA
WTAM WWSN

C—Presenting Mark Warnow
KCLW KFH KLRA KLZ KMBC
KSCJ KTSB WAAB WABC WACO
WADC WCAH WCAU WDAE WDBJ
WDBO WDOD WDRC WDSU WFBM
WFLA WGLC WGST WHAS WHEC
WHEK WHP WIBW WICC WISN
WJAS WKBN WKBW WLAC WLWB
WLWZ WMAS WMBD WMBG WMT
WNAX WODX WOKO WORC WQAM
WREC WSJS WSPD WTAZ WTOG

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

C—Charles Carille, Tenor
CFCF KCLW KFH KLRA KLZ
KMBC KSCJ KSL KTSB WAAB
WABC WACO WADC WBRC WCAH
WCAO WCCO WDAE WDBJ WDOD
WDOD WDRC WDSU WEAN WFBL
WFBM WGLC WGST WHAS WHEC
WHP WIBW WISN WJAS WKBN
WKBW WLAC WLWB WLWZ WMAS
WMBD WMBG WMT WNAX WODX
WOKO WORC WPG WQAM WREC
WSJS WSPD WTAZ WTOG

B—Poet Prince, See Wednesday

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

R—Enric Madriguera and Orchestra
KSD WBEN WCAE WCHS WDAF
WEAF WEEI WFBP WFI WGY
WHO WJAR WOC WOW WSAI
WTAG WTAM

C—Edwin C. Hill, See Wednesday
C—Isham Jones and Orchestra
KCLW KLRA WABC WBRC WCAO
WDAE WDBJ WDOD WDOD WDRC
WDSU WEAN WGST WICC WIP
WLAC WLWB WMAS WMBG WNAC
WORC WQAM WREC WSJS WSPD
WTAZ WTOG

FRIDAY

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

C—H. V. Kaltenborn
CFCF KCLW KLRA WAAB WABC
WADC WBIG WBT WCAO WCAU
WDAE WDBJ WDOD WDOD WDRC
WFLA WGST WHEC WHK WICC
WJSV WLAC WLWB WLWZ WMBG
WOKO WORC WQAM WREC WSFA
WSJS WSPD WTOG

R—Waldorf Astoria, See Monday

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

B—Three X Sisters
KDKA KOIL KWCR KWK WBAL
WBZ WBZA WCKY WENR WHAM
WJZ WMAL WREN WSYR

R—Irene Beasley, See Monday

C—Tito Guizar, Tenor
CFCF KCLW WAAB WABC WBIG
WBRC WBT WCAO WDAE WDBJ
WDRC WDSU WFLA WGST WHEC
WKBW WKBW WLWZ WMAS WMBG
WOKO WORC WQAM WREC WSFA
WSJS WTOG

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

C—Zoei Parenteau's Orchestra
KCLW WAAB WABC WBT WCAU
WDRC WEAN WFBL WFLA WHEC
WJSV WKBW WLWZ WOKO

B—Lowell Thomas, See Monday
R—Mountain Music
KDYL KOA KSD WCAE WCKY
WEAF WEEI WJDX WMAQ WOW
WSB WTAG WWJ

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

C—Myrt and Marge, See Monday
B—Ames '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—Dramatic Sketch, See Thursday

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

R—Scott's Circus Day
KSD WCHS WDAF WEAF WEEI
WGY WJAR WKBW WLW WMAQ
WOW WRC WTAG WTAM WTIC
B—Potash 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
B—Morton Lowe, Tenor
KDKA WBAL WBZ WBZA WCKY
WENR WJZ WMC WSB WSM WSMB
WSYR

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

C—Happy Bakers, See Monday
R—Cities Service Concert
CROT KDYL KOA KPRC KSD KTBS
KTHS KYW WBEN WCAE WCHS
WDAF WEAF WEBC WEEI WFAA
WFBP WGY WHO WJAR WKY WLIT
WOAI WOC WOW WRC WRVA WSAI
WTAG WTAM WTMJ WWJ

FRIDAY—(Continued)

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
KCLW KDB KERN KFBK KFPY
KFRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KSL KTRH KVI
KMG WABC WCAO WCAU WCCO
WDRC WDSU WEAN WFBL WFBM
WGN WGR WGST WHAS WHK WJAS
WJSV WKRC WNAC WOKO 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
KGRG KGO KGW KHQ KOA KOIL
KOMO KSO KWCR KWK WAPI
WBAL WBZ WBZA WCKY WFAA
WGAR WJZ WKY WLS WMAL
WOAI WREN WSB WSM WSMB
WSYR

C—Philadelphia Symphony, See Mon.
R—Frank Munn; Abe Lyman
KSD WBEN WCHS WEAF WEEI
WFBP 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—Alexander Woolcott, See Tuesday

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

C—Melodic Strings
CFCF KCLW KFH KLRA KLZ
KMBC KOMA KRLD KSCJ KSL
KTRH KTSB KVR WABC WACO
WADC WBIG WBRC WCAH WCAO
WCAU WCCO WDAE WDBJ WDOD
WDOD WDRC WDSU WEAN WFBL
WFBM WFLA WGLC WGST WHAS
WHEC WHP WIBW WICC WJAS
WJSV WKBW WLAC WLWB WLWZ
WMAS WMBD WMBG WMT WNAC
WNAX WODX WOKO WORC WQAM
WREC WSBT WSJS WSPD WTAZ
WTOG

R—Pond's Program; Lee Wiley
KSD WBEN WCAE WCHS WDAF
WEAF WFBP WGY WHO WJAR
WLIT WMAQ WOC WOW WRC WSAI
WTAG WTAM WTIC WWJ

B—Armour Program; Phil Baker
KDKA KDYL KFI KGO KGW KHQ
KOA KOIL KOMO KPRC KSD KSTP
KTAR KWK WAPI WBAL WBZ
WBZA WEBC WENR WFAA WGAR
WHAM WIOD WJAX WJR WJZ
WKY WMC WOAI WENR WRVA
WSB WSM WSMB WTMJ WWSN

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

C—Swift Revue—Olson and Johnson
KCLW KDB KERN KFBK KFPY
KFRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KOMA KRLD
KSCJ KSL KTRH KVI KGW WABC
WADC WBBM WBRC WBT WCAO
WCAU WCCO WDRC WEAN WFBL
WGST WHAS WHK WJAS WJSV
WKBW WKRC WNAC WOKO WOWO
WREC

R—First Nighter—Drama
CROT KDYL KFI KGO KGW KHQ
KOA KOMO KPRC KSD KSTP
WAPI WBEN WCAE WCHS WDAF
WEAF WEBC WEEI WFBP WGY
WHO WJAR WKY WLIT WMAQ
WOAI WOC WOW WRC WSAI WSB
WSM WSMB WTAG WTAM WTIC
WTMJ WWJ

B—Armed 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
B—Mario Corri, Baritone
KDKA KFPR KOIL KSO WAPI
WBAL WBZ WBZA WCKY WDAY
WEAF WFLA WHAM WIBA WICD
WIS WJAX WJR WJZ WREN WSE
WSM WSYR WWSN

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—Mary Eastman, Soprano
KCLW KFH KLZ KMBC KSCJ KTRH
KTSB KVR WAAB WABC WADC
WBRC WBT WCAH WCAU WDAE
WDBJ WDRC WDSU WEAN WFLA
WGST WHAS WHEC WHK WHP
WIBW WICC WISN WJAS WJSV
WKBW WLWB WLWZ WMAS WMBD
WMBG WMT WODX WOKO WORC
WOWO WPG WQAM WREC WSJS
WSPD WTOG

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 Thursday
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
CFCF KCLW KFH KLRA KMBC
KOMA KSL KTRH KTSB KVR
WAAB WABC WACO WADC WBMM
WBIG WBRC WCAO WCCO WDBJ
WDSU WFBL WFLA WGR WGST
WHAS WHEC WHK WHP WIBW
WICC WIP WISN WJAS WJSV
WLAC WLWB WLWZ WMBG WMT
WOKO WQAM WREC WSBT WSFA
WSJS WTAQ WTAR WTOG WVVV

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 KCLW KFAB KFH KLRA
KLZ KMBC KRLD KSL KTRH KTSB
KVR WAAB WABC WACO WBIG
WBT WCAH WCAO WCCO WDAE
WDBJ WDOD WDOD WDRC WEAN
WFLA WGR WGST WHEC WHK
WHP WIBW WICC WIP WISN
WJAS WJSV WLAC WLWB WLWZ
WMBG WMT WOKO WORC WQAM
WREC WSBT WSFA WSJS WSPD
WTAQ WTOG WVVV

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

B—Mary Small, See Tuesday
C—Frederic William Wile
KCLW KLRA WAAB WABC WBIG
WBRC WCAO WCAU WDAE WDBJ
WDOD WDOD WDRC WDSU WFBL
WFLA WGLC WGST WHEC WHP
WJSV WKBW WLAC WLWB WLWZ
WMBG WQAM WOKO WORC WQAM
WREC WSJS WSPD WTAZ WTOG

R—Richard Himber and Orchestra
KDYL KFI KFPR KGO KGW KHQ
KOA KOMO KPRC KSD KSTP KTBS
KTHS KVOO WCAE WDAF WDAY
WEAF WEBC WFLA WHO WIBA
WIOD WIS WJAR WJAX WJDX
WKY WMAQ WMC WOAI WOC
WRC WSB WSM WTAG WTAM
WWJ WWSN

E-8:45 p.m., C-6:45, 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
WCHS WEAF WEEI WGY WJAR
WTAG

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

B—John Merrick, Baritone
KDKA KOIL KSO KWCR KWK
WBAL WKCY WGAR WJZ WKBW
WMAL WMAQ

C—Elder Michaux Congregation
CFCF KCLW KFH KLRA KLZ
KSCJ KSL KTRH KTSB KVR
WABC WACO WADC WBIG WBRC
WCAO WCAU WDAE WDBJ WDOD
WDOD WDRC WDSU WFBL WFLA
WGLC WGR WGST WHEC WHP
WIBW WICC WJAS WJSV WLWB
WLWZ WMAS WMBG WMT WOKO
WORC WQAM WREC WSJS WSPD
WTAZ WTOG WVVV

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

B—Dramatic Sketch, See Thursday
R—Religion in the News
KFI KFPR KGO KGW KHQ KOA
KOMO KSD KTBS WAPI WBEN
WCAE WDAF WEAF WEEI WFAA
WFBP WFI WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WLW
WMC WOAI WOC WRC WSM WSMB
WTAG WTAM

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

R—Circus Days, See Friday
C—Silver Dust, See Tuesday
B—Eddie Duchin, See Thursday

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

C—Tito Guizar, Tenor
KCLW KFH KLRA KLZ KSCJ KSL
KTRH KTSB KVR WABC WACO
WADC WBIG WBRC WCAH WCAO
WCAU WCCO WDAE WDBJ WDOD
WDOD WDRC WDSU WEAN WFBL
WFBM WFLA WGLC WGR WGST
WHAS WHEC WHK WHP WIBW
WICC WISN WJAS WJSV WLAC
WLWB WLWZ WMAS WMBG WMT
WNAC WOKO WORC WQAM WREC
WSBT WSJS WSPD WTAZ WTOG
WVVV

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

C—45 Minutes in Hollywood
KCLW KLZ KMBC KMOX KSL
KTAT KTRH KTSB WABC WACO
WBMM WCAH WCAU WCAU WCCO

SUNDAY—(Continued)

WDAY WEAF WEBC WEEI WENR
WBBR WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WJDX
WKY WLIT WMC WOAI WOC WOW
WRC WRVA WSAI WSB WSM
WSMB WTAG WTAM WWJ WYNN
B—Cadillac Concert
KDKA KOIL KSO KWCW KWK
WBAL WBZ WBZA WENR WGAR
WHAM WJR WJZ WLW WMAL
WREN WSYR

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

C—Smiling Ed McConnell
CKLW KDB KERN KFAB KFBK
KFH KFPY KFCR KGB KHJ KLZ
KMBC KMOX KOIN KOL KRLD
KSL KVI KWG WAAB WABC WBBM
WBT WCAH WCAU WCCO WDSU
WEAN WFBL WHAS WHEC WHP
WJAS WJSV WKBW WKRC WLAC
WMT WOV WQAM WSPD WTAR
WWVA

R—Our American Schools

CFRC CRCT KDYL KECA KFSD
KFYR KGW KOMO KPO KPRC KSD
KSTP KTRT KTBS KVOC WAPI
WBAP WBBN WCAE WCBH WDAF
WDAF WEAF WEBC WEEI WFBR
WFLA WGY WHO WIBA WIOD
WJAR WJAX WJDX WKY WLIT
WMAQ WMC WOAI WOC WRC
WRVA WSAI WSB WSM WSMB
WTAG WTAM WWJ WYNN

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

C—Charles Carlie, Tenor
CKLW KDB KERN KFBK KFPY
KFCR KGB KHJ KLRA KLZ KMBC
KMJ KMOX KOIN KOL KSL KVI
KWG WAAB WABC WADC WBBM
WBIG WBRC WCAU WCAU WCCO
WDAE WDBO WDRC WDSU WEAN
WGST WHAS WHK WIP WJAS
WJSV WKBB WKBW WKRC WPG
WSJS WTAR WTCO

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

R—True Story Court
WBEN WCAE WCBH WEAF WFBR
WGY WJAR WMAQ WOW WRC
WSAI WTAG WTAM WWJ
C—Ethel Waters; George Beatty
WABC WBT WCAU WCAU WDAE
WDBO WDRC WEAN WFEA WGST
WHK WJAS WJSV WKBN WLBT
WNAC WPG WQAM WTAR WWVA

B—Realistic; Ted Weems' Orchestra

KDKA KDYL KFI KGO KGW KHQ
KOA KOIL KOMO KSO KWCW 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

B—Ozzie Nelson; Joe Penner
KDKA KDYL KFI KFCR KGO KGW
KHQ KOA KOIL KOMO KPRC KSO
KSTP KTRT KTBS KVOC WAPI
WBAL WBZ WBZA WDAF WEBC
WFAA WFLA WGAR WHAM WIBA
WIOD WJAX WJDX WJR WJZ WLY
WLS WLW WMAL WMC WOAI
WPTF WREN WRVA WSB WSM
WSMB WTMJ WYNN

C—H. V. Kallenborn

CKLW KFH KLRA KLZ KOMA
KSCJ KTRH WABC WADC WBIG
WBRC WCAH WCAU WCAU WDAE
WDBJ WDBO WDOD WDRC WDSU
WEAN WFEA WGLC WGR WGST
WHAS WHEC WHP WIBW WISN

WJAS WKBN WLBZ WMAS WOKO
WORC WQAM WSBT WSJS WSPD
WTAR WTCO WWVA

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

C—Rin Tin Tin Thriller
CKLW KMOX WABC WCAU WFBL
WFBR WGN WGR WHAS WHK
WJAS WJSV WKRC WNAC
R—Fitch Program; Wendell Hall
CFRC KSD WBBN WCAE WCBH
WDAF WEAF WFBR WGY WHO
WJAR WLIT WMAQ WOC WOW
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 KTRT KTBS KVOC WBBN
WCAE WCBH WDAF WDAF WEAF
WEBC WFAA WFBR WFLA WGY
WHO WIOD WIS WJAR WJAX
WJDX WKY WLIT WLW WMAQ
WMC WOAI WOC WOW WPTF WRC
WRVA WSB WSM WSMB WTAG
WTAM WTMJ WTMJ WYNN

C—Evening in Paris

CKLW KDB KERN KFBK KFPY
KFCR KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KSL KVI KWG
WAAB WABC WCAU WCAU WCCO
WDBO WDBO WDRC WDSU WEAN
WFBL WFBM WGR WGST WHS WHK
WJAS WJSV WKRC WOKO WSPD

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

C—Ford; Fred Waring's Orchestra
CFRB CKAC CKLW KFAB KFH
KLRA KLZ KMBC KMOX KOH
KOMA KRLD KSL KTRH KTSB
KVOR WAAB WABC WACO WADC
WBBM WBIG WBRC WBT WCAH
WCAU WCAU WCCO WDAE WDBJ
WDBO WDOD WDRC WDSU WEAN
WFBL WFBM WFEA WGST WHAS
WHEC WHK WHP WIBW WICC
WISN WJAS WJSV WKBN WKBW
WKRC WLAC WLWB WLWB WMAS
WMBD WMBG WMT WOKO WORC
WOW WPG WQAM WREC WSFA
WSPD WTAQ WTAR WTCO WWVA

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

C—Erno Rapee; Nino Martini
CKLW KDB KERN KFBK KFPY
KFCR KGB KHJ KLRA KLZ KMBC
KMJ KMOX KOIN KOL KOMA
KRLD KSCJ KSL KTRH KVI KWG
WABC WADC WBBM WCAU WCAU
WCCO WDRC WDSU WEAN WFBL
WFBR WGR WGST WHAS WHK
WISN WJAS WJSV WKRC WMT
WNAC WNAX WOKO WORC WOWO
WREC WSPD WTAR

R—Manhattan Merry-Go-Round

KDYL KFI KGO KGW KHQ KOA
KOMO KSD WDAF WEAF WFBR
WPI WGY WHO WJAR WMAQ WOC
WOW WRC WSAI WTAM WTMJ
WYNN

B—Gulf Headliners

KAKA KFCR KTBS WBAL WBZ
WBZA WFAA WFLA WGAR WHAM
WIOD WIS WJAX WJDX WJR WJZ
WLW WMAL WMC WOAI WRVA
WSB WSM WSMB WSYR WYNN

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 WBBN WCAE WCKY WCBH
WDAF WEAF WEEI WFAA WFBR
WFI WFLA WGY WHO WIOD WJAR
WJAX WJDX WKY WMAQ WMC
WOAI WOC WOW WPTF WRC

WRVA WSAI WSB WSM WSMB
WTAG WTAM WTMJ WWJ
B—Walter Winchell
KDKA KOIL KSO KWCW 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 Shafter Piano Duo
KDKA KOIL KSO KWCW 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 KFSO KFYR KGHL
KGIR KGO KGW KHQ KOA KOMO
KPRC KSTP KTRT KTBS WAPI
WBAP WBBN WCAE WCBH WDAF
WDAF WEAF WEBC WEEI WFBR
WFI WFLA WGY WIBA WIOD WIS
WJAR WJDX WKY WMAQ WMC
WOAI WOW WRC WRVA WSB WSM
WSMB WTAG WTAM WTMJ WTMJ
WWJ WYNN

C—Pat's Childhood Dramas

CKLW KDB KERN KFBK KFPY
KFCR KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KSL KVI KWG
WAAB WABC WCAU WCAU WCCO
WDBO WDBO WDRC WGR WHAS WHK
WJAS WJSV WKRC WOKO

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

R—Hall of Fame
KDYL KFI KGO KGW KHQ KOA
KOMO KPRC KTBS KTHS WAPI
WBAP WBBN WCAE WCBH WDAF
WDAF WEAF WFBR WFI WGY
WJAR WJDX WKY WLW WMAQ
WMC WOAI WOW WRC WSM
WTAG WTAM WTMJ WYNN

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

C—Little Jack Little and Orchestra
CFRB CKAC CKLW KFH KLRA
KLZ KTRH KTSB KVOR WABC
WACO WBIG WBRC WCAH WCAU
WDAE WDBJ WDBO WDOD WDRC
WDSU WEAN WGST WHAS WHEC
WHP WICC WIP WISN WJAS WJSV
WKBN WLAC WLWB WMAS WMBD
WNAC WODX WOKO WPG WQAM
WREC WSFA WSJS WSPD WTAR
WTCO

B—John Fogarty, Tenor

KDKA KGHL KOIL KSO KWCW
KWK WBAL WBZ WBZA WCKY
WGAR WJR WJZ WLW WREN

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

B—Walter Winchell
KDYL KFI KFSO KGHL KGIR
KGO KGW KHQ KOA KOMO KPRC
KTRT KTBS KTHS WAPI WBAP
WJDX WKY WMC WOAI WSB WSM
WSMB

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

C—Leon Belasco and Orchestra
CFRB CKLW KFH KLZ KOMA
KSCJ KTRH KTSB KVOR WABC
WADC WBBN WBT WCAH WCAU
WCAU WDAE WDBJ WDRC WDSU
WEAN WFBL WFBM WGR WGST
WHEC WHK WHP WIBW WICC
WISN WJAS WJSV WKBN WLWB
WMAS WMBD WMT WNAC WOKO
WQAM WREC WSBT WSJS WSPD
WTCO

B—Paul Whiteman and Orchestra

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

CLASSIFIED INDEX TO CHAIN PROGRAMS

Time in Eastern Standard

CONCERTS

Armed Ironmaster Program, 10:00 p.m., Friday, B.
Boston Symphony, 8:30 p.m., Saturday, B.
Cadillac Concert, 6:00 p.m., Sunday, B.
Hoover Sentinels, 4:30 p.m., Sunday, R.
Metropolitan Opera, 9:00 p.m., Saturday, R.
New York Philharmonic Symphony, 3:00 p.m., Sunday, C.
Philadelphia Symphony, 9:00 p.m., daily, except Sunday, C.
Roxie Concert, 12:30 p.m., Sunday, B.
Russian Symphonic Choir, 1:00 p.m., Sunday, R.
Sous Les Ponts de Paris, 8:30 p.m., Saturday, R.
Albert Spalding, 8:30 p.m., Wednesday, C.
Trio Romantic, 6:00 p.m., Saturday, B.
Waldorf-Astoria, 6:00 p.m., daily, except Sunday, R.

DANCE BANDS

Leon Belasco, 11:30 p.m., Sunday, C.
Ben Bernie, 9:00 p.m., and 12 Mid., Tuesday, R.
Don Bestor, 8:00 p.m., Friday, B.
Jack Denny, 7:00 p.m., Sunday, C.
Eddie Duchin, 7:30 p.m., Thurs. and Sat. B.
Ted Fiorito, 11:00 p.m., Wed.; 11:30 p.m., Sat., C.
Jan Garber, 8:30 p.m., Sunday, B.
Glen Gray, 10:00 p.m., Tues. and Thurs., C; 11:30 p.m.,
Wed.; 12 mid., Sat., C.
Phil Harris, 7:45 p.m., Tues.; 9:00 p.m., Fri. B.
Richard Himber, 6:00 p.m., Tues.; 9:30 p.m., Thurs., B;
6:30 p.m., Saturday, R.
Isham Jones, 9:30 p.m., Mon.; 11:15 p.m., Wed.; 11:30
p.m., Tues. and Fri., C.
Henry King, 6:00 p.m., Thursday, B.
Wayne King, 3:00 p.m., Sun.; 8:30 p.m., Tues. and Wed., R;
10:00 p.m., Monday, C.
Enoch Light, 6:30 p.m., Mon. and Wed., C.
Guy Lombardo, 9:30 p.m., Wed.; 11:00 p.m., Sat., C.
Abe Lyman, 2:30 p.m., Sun.; 11:30 p.m., Mon., C; 9:00 p.m.,
Fri., R.
Freddie Martin, 12:00 mid., Saturday, B.
Benny Meroff, 10:00 p.m., Wednesday, B.
Ozzie Nelson, 7:30 p.m., Sun., B; 11:30 p.m., Tues., C.
George Olsen, 8:00 p.m., Saturday, R.
Raymond Paige, 9:30 p.m., Thursday, C.
Leo Reisman, 8:00 p.m., Tuesday, R.
Jacques Renard, 6:00 p.m., Sunday, C.
B. A. Rolfe, 10:00 p.m., Saturday, R.
Nat Shilkret, 8:45 p.m., Tuesday, B.
Rudy Vallee, 8:00 p.m., Thursday, R.
Fred Waring, 8:30 p.m., Sunday, C.
Mark Warnow, 10:45 p.m., Thursday, C.
Ted Weems, 7:00 p.m., Sunday, B.
Paul Whiteman, 10:00 p.m., Thursday, R.

DIALOG

Fred Allen, 9:30 p.m. and 12:20 a.m., Wednesday, R.
Amos 'n' Andy, 7:00 and 11:00 p.m., daily, except Sat. and
Sun., B.
Phil Baker, 9:30 p.m., Friday, B.
Jack Benny, 10:00 p.m., Sunday, R.
Burns and Allen, 9:30 p.m., Wednesday, C.
Olsen and Johnson, 10:00 p.m., Friday, C.
Jack Pearl, 8:00 p.m., Wednesday, R.
Joe Penner, 7:30 p.m., Sunday, B.
Potash and Permuter, 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.

DRAMA

Bar X Days, 2:00 p.m., Sunday, B.
Billy Batchelor, 7:15 p.m., daily, ex. Sat. and Sun., R.
Bobby Benson, 6:15 p.m., daily, except Sat. and Sun., C.
Big Ben, 5:00 p.m., Sunday, R.
Cruise of Seth Parker, 10:00 p.m., Tuesday, R.
Dangerous Paradise, 8:30 p.m., Wed. and Fri., B.
Death Valley Days, 9:00 p.m., Thursday, B.
Dramatic Sketch, 7:15 p.m., Thurs. and Fri., B.
Eno Crime Clues, 8:00 p.m., Tues. and Wed., B.
First Nighter, 10:00 p.m., Friday, R.
Goldbergs, 7:45 p.m., daily, ex. Sat. and Sun., R.
Grand Hotel, 5:30 p.m., Sunday, B.
Just Plain Bill, 7:15 p.m., daily, ex. Sat. and Sun., C.

Kay Seven, 10:30 p.m., Monday, R.
Warden Lawes, 9:00 and 11:15 p.m., Wednesday, B.
Little Italy, 6:45 p.m., Tues. and Thurs., C.
March of Time, 8:30 p.m., Friday, C.
Myrt and Marge, 7:00 and 10:45 p.m., daily, ex. Sat. and
Sun., C.
One Man's Family, 11:00 p.m., Saturday, R.
Princess Pat Pageant, 4:30 p.m., Sunday, B.
Red Davis, 8:45 p.m., Mon., Wed., Fri., B.
Irene Rich, 3:15 p.m., Sun., 7:45 p.m., Wed., B.
Rin Tin Tin Thriller, 7:45 p.m., Sunday, C.
Buck Rogers, 6:00 p.m., Mon. to Thurs., inc., C.
Romances of Europe, 5:15 p.m., Sunday, R.
Roses and Drums, 5:00 p.m., Sunday, C.
Scott's Circus Days, 7:30 p.m., Fri. and Sat., R.
Soconyland Sketches, 8:00 p.m., Monday, R.
Talkie Picture Time, 5:30 p.m., Sunday, R.
True Story Court, 7:00 p.m., Sunday, R.

PIANO AND ORGAN

Fray and Braggiotti, 8:45 p.m., Tuesday, C.
Archer Gibson, 10:30 p.m., Thursday, B.
Gould and Shafter, 9:45 p.m., Sunday, B.
Dion Kennedy, 4:00 p.m., Sunday, B.
Ohman and Arden, 9:30 p.m., Sunday, R.

POPULAR PROGRAMS

A. & P. Gypsies, 9:00 p.m., Monday, R.
Album of Familiar Music, 9:30 p.m., Sunday, R.
American Revue, 7:00 p.m., Sunday, C.
Armour Program, 9:30 p.m., Friday, B.
Major Bowes, 11:15 a.m., Sunday, R.
Broadway Melodies, 2:00 p.m., Sunday, C.
Buick Program, 9:15 p.m., Mon. and Thurs., C.
Byrd Expedition, 10:00 p.m., Saturday, C.
California Melodies, 9:30 p.m., Thursday, C.
Camel Program, 10:00 p.m., Tues. and Thurs., 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.
F. O. B. Detroit, 10:30 p.m., Saturday, B.
Fiddlers Three, 4:00 p.m., Sunday, R.
Fitch Program, 7:45 p.m., Sunday, R.
Fleischmann Hour, 8:00 p.m., Thursday, R.
Forty-Five Minutes in Hollywood, 8:00 p.m., Saturday, C.
Jack Frost's Melody, 9:30 p.m., Monday, B.
Grenadier Guards, 2:30 p.m., Sunday, B.
Gulf Headliners, 9:00 p.m., Sunday, B.
Hall of Fame, 10:30 p.m., Sunday, R.
Hollywood on the Air, 11:30 p.m., Saturday, R.
Household Musical, 9:00 p.m., Tuesday, B.
International Tid-Bits, 3:00 p.m., Sunday, B.
Ipana Troubadours, 9:00 p.m., Wednesday, 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., Mon. and Wed., R.
Music On the Air, 7:30 p.m., Mon., Wed. and Fri., C.
Needle'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.
Pontia Program, 9:15 p.m., Wed. and Sat., C.
Real Silk Show, 7:00 p.m., Sunday, B.
Royal Gelatine, 8:00 p.m., Wednesday, R.
Sealed Power Show, 8:00 p.m., and 12 mid., Monday, B.
Seven Star Revue, 9:00 p.m., Sunday, C.
Sinclair Minstrels, 9:00 p.m., Monday, B.
Spartan Triolians, 3:30 p.m., Sunday R.
Swift Revue, 10:00 p.m., Friday, C.
Texaco Fire Chief, 9:30 p.m., Tuesday, R.
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 Institute 4:15 p.m., Sunday, R.
WLS Barn Dance, 11:00 p.m., Saturday, B.
Yeast Foamers, 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, 7:00 p.m., Saturday, C.
Mid-Week Hymn Sing, 6:30 p.m., Tuesday, R.
National Vespers, 5:00 p.m., Sunday, B.
National Youth Conference, 1:30 p.m., Sunday, B.
Religion in News, 7:15 p.m., Saturday, R.
Salt Lake Choir, 11:30 a.m., Sunday, C.

SINGERS

Frances Alda, 7:45 p.m., Monday, B; 6:00 p.m., Tuesday, R.
Baby Rose Marie, 7:15 p.m., Monday, B.
Mildred Bailey, 6:45 p.m., Mon.; 6:15 p.m., Saturday, C.
Betty Barthell, 6:30 p.m., Tuesday, C.
Irene Beasley, 6:30 p.m., Monday and Friday, R; 6:30 p.m., Wednesday, B.
Boswell Sisters, 11:15 p.m., Monday and Friday, C.
Morton Bowe, 7:45 p.m., Friday, B.
Dell Campo, 11:15 p.m., Tuesday, C.
Eddie Cantor, 8:00 p.m., Sunday, R.
Charles Carlisle, 6:45 p.m., Sunday; 11:15 p.m., Thurs., C.
Columbians, 8:00 p.m., Tuesday, C.
Richard Crooks, 8:30 and 11:30 p.m., every other Mon., R.
Bing Crosby, 8:30 p.m., Monday, C.
Jessica Dragonette, 8:00 p.m., Friday, R.
Morton Downey, 8:00 p.m., Thursday, C.
Mary Eastman, 11:00 p.m., Friday, C.
Evan Evans, 11:00 p.m., Monday, C.
John Fogarty, 11:00 p.m., Sunday, B.
Four Eton Boys, 9:30 p.m., Tuesday, C.
Jane Froman, 9:00 p.m., Sunday, C.
Connie Gates, 10:45 p.m., Thursday, C.
Alex Gray, 8:30 p.m., Thursday, C.
Tito Guizar, 12:30 p.m., Sunday; 6:30 p.m., Friday; 7:45 p.m., Saturday, C.
Wendell Hall, 7:45 p.m., Sunday, R.
Annette Hanshaw, 9:00 p.m., Thursday, R.
Happy Bakers, 8:00 p.m., Monday, Wednesday, Friday, C.
Harlem Serenade, 11:00 p.m., Tuesday, C.
John Herrick, 7:15 p.m., Wednesday; 7:00 p.m., Sat., B.
George Jessel, 9:30 p.m., Tuesday, C.
Theo. Karle, 6:45 p.m., Wednesday, C.
Frances Langford, 8:30 p.m., Sunday, R.
Lazy Dan, 1:30 p.m., Sunday, C.
Elizabeth Lennox, 2:30 p.m., Sunday, R.
Little Jack Little, 11:00 p.m., Sunday, C.
Howard Marsh, 9:15 p.m., Monday and Thursday, C.

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 100; letter 250.
- 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.
- l 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 Broadcast Commission.
- G All Canadian networks.

John McCormack, 9:30 p.m., Wednesday, B.
Helen Morgan, 2:00 p.m., Sunday, C.
Morin Sisters, 4:15 p.m., Sunday, B.
Frank Munn, 9:30 p.m., Sunday; 9:00 p.m., Friday, R.
Edith Murray, 6:30 p.m., Thursday, C.
Gertrude Niesen, 9:30 p.m., Monday, C.
Viola Philo, 11:00 p.m., Thursday, R.
Virginia Rea, 9:30 p.m., Sunday, R.
Vivien Ruth, 8:00 p.m., Monday, Wednesday, Friday, C.
Sanderson-Crumit, 5:30 p.m., Sunday, C.
Ethel Shutta, 8:00 p.m., Friday, B.
Silver Dust Serenaders, 7:30 p.m., Tues., Thurs., Sat., C.
Sixteen Male Voices, 10:15 p.m., Sat., B.
Mary Small, 6:30 p.m., Saturday, B.
Smiling Ed McConnell, 6:30 p.m., Sunday, C.
Songs Mother Used to Sing, 6:00 p.m., Sunday, C.
Southernaires, 6:45 p.m., Thursday, R.
Irene Taylor, 10:00 p.m., Tuesday and Thursday, C.
Conrad Thibault, 8:30 p.m., Wed., C; 9:00 p.m., Thurs., R.
Lawrence Tibbett, 8:30 and 11:30 p.m., every other Mon., R.
Trade and Mark, 8:45 p.m., Saturday, C.
Cyrena Van Gordon, 8:30 p.m., Monday, B.
Vee and Johnny, 4:15 p.m., Sunday, R.
Ethel Waters, 7:00 p.m., Sunday, C.
Lee Wiley, 9:30 p.m., Friday, R.
Muriel Wilson, 2:45 p.m., Sunday, R.

TALKS

Back of the News, 6:30 p.m., Wednesday, R.
Dale Carnegie, 1:30 p.m., Sunday, R.
Boake Carter, 7:45 p.m., daily, ex. Sat. and Sun., C.
Chicago Round Table, 12:30 p.m., Sunday, R.
Columbia News Service, 10:30 p.m., daily, ex. Sunday, 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 daily, ex. Sat. and Sun.; 11:30 p.m., Wed., Thurs., Fri., C.
H. V. Kaltenborn, 7:30 p.m., Sunday; 6:00 p.m., Friday 10:45 p.m., Saturday, C.
Andrew Kelly, 6:45 p.m., Monday, R.
John B. Kennedy, 6:30 p.m., Thursday, R.
Meet the Artist, 6:00 p.m., Saturday, C.
National Radio Forum, 10:30 p.m., Wednesday, R.
Our American Schools, 6:30 p.m., Sunday, R.
Patri's Childhood, 10:00 p.m., Sunday, C.
Radio in Education, 7:15 p.m., Tuesday, B.
Lowell Thomas, 6:45 p.m., daily, except Sat. and Sun., B.
Voice of Experience, 6:30 and 11:45 p.m., Tuesday, C.
Frederic William Wile, 6:30 p.m., Saturday, C.
Walter Winchell, 9:30 and 11:15 p.m., Sunday, B.
Alexander Woolcott, 9:15 p.m., Tuesday and Friday, C.

As Shown in the Index by
Frequencies and Dial Numbers

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 Tuesday's Time on the Air

540 kilocycles 555.2 meters

CJRM z 1000 F
CJRW ak 500 F
XEY z 105 546.8

Moose Jaw, Sask. M
Flerning, Sask. C—8:00-9:00; 10:00-10:45; 1:00-1:15; 2:15-2:30;
5:30-7:30
Merida, Yuc.

550 kilocycles 545.1 meters

KFDY ae 500 1 (1)
KFUO ae 500 2 (1)
KFYR ah 1000 1N (2.5)
KOAC ak 1000
KSD ak 500 2R
TISO ak 250
WDEV ae 500 D
WGR ae 1000 C
WKRC ak 1000 C

Brookings, S. D. C—12:30-2:00
St. Louis, Mo. C—7-8; 9:25-9:45; 12:15-12:45; 3-3:45; 10-11
Bismarck, N. D. C—7:00-12:30; 2:00-11:30
Corvallis, Ore. P—6:30-4:00; 6:30-9:00
St. Louis, Mo. C—8-9:25; 9:45-12:15; 12:45-3; 3:45-10; 11-mid.
San Jose, C. R. C—10:00-1:00; 4:00-11:00
Waterbury, Vt. E—7:30-10:00; 11:30-2:00; 3:00-7:00
Buffalo, N. Y. E—7:30-mid.
Cincinnati, Ohio. E—7:00-1:00

560 kilocycles 535.4 meters

KFDM ak 500 (1)
KLZ ak 1000 C
KTAB ak 1000
KTWO ak 500 D
WFI ae 500 1R (1)
WIND ak 1000 C
WLIT ak 500 1R (1)
WNOX ak 1000 C (2)
WQAM ae 1000 CW
XEAO ak 100 (.15)

Beaumont, Texas. C—7:00-10:00
Denver, Colo. M—6:45-11:30
San Francisco, Calif. P—7:00-1:00
Springfield, Mo. C—7:00-7:00
Philadelphia, Pa. E—6:45-9; 9:45-11; 1-2; 3-4:30; 6-mid.
Gary, Ind. C—5:30-3:30
Philadelphia, Pa. E—9-9:45; 11-1; 2-3; 4:30-6
Knoxville, Tenn. C
Miami, Fla. E—7:15-mid.
Mexicali, B. C. P—8:00-10:00

570 kilocycles 526.0 meters

FON z 250 572
KGKO ak 250 (.5)
KMTR ak 500
KVI ak 500
WKBN ae 500 1C
WMCA ak 500
WNAX ak 1000 C (2.5)
WOSU ae 750 1 (1)
WSYR ak 250 B
WWNC ae 1000 N

St. Pierre, Miquelon, Isl. A
Wichita Falls, Texas. C—7:00-10:00
Hollywood, Calif. P—6:00-12:15
Tacoma, Wash. P—6:00-mid.
Youngstown, Ohio. E—7:30-9:00; 11:00-1:00; 3:00-mid.
New York, N. Y. E—8:00-1:00
Yankton, S. D. C—6:00-mid.
Columbus, Ohio. E—9-11; 1-3
Syracuse, N. Y. E—7:30-1. (WSYU)
Asheville, N. C. E—8:00-1:00

580 kilocycles 516.9 meters

CKCL aj 100 M
CKUA ak 500
CMDD z 150 588
HIX ak 1500
KMJ ak 500 CT
KSAC ak 500 2 (1)
WDBO ae 250 CW
WIBW ae 1000 C2
WOBW ae 750
WTAG ae 750 R
XEPN ak 7500 585

Toronto, Ont. E—8:00-11:30 (CFCL)
Edmonton, Alta. M
Havana, Cuba. E
Santo Domingo, D. R. E—8:10-10:30
Fresno, Calif. P—7:00-mid.
Manhattan, Kans. C—8:00-9:00; 10:00-10:30; 12:30-1:30; 4:30-5:30
Orlando, Fla. E—7:00-mid.
Topeka, Kans. C—6:00-mid.
Charleston, W. Va. E—8-mid.
Worcester, Mass. E—8-mid.
Piedras Negras, Coah. C—6:00-8:00; 11:00-1:00; 7:00-11:00

590 kilocycles 508.2 meters

CMW ae 1400 595
KHQ ak 1000 N (2.5)
WEEI ak 1000 R
WKZO ae 1000 DK
WOW ae 1000 R

Havana, Cuba. E—11:00-10:00
Spokane, Wash. P—7-mid.
Boston, Mass. E—6:45-1. (W1XAL)
Kalamazoo, Mich. E—7:00-7:00
Omaha, Neb. C—7:00-10:00; 10:45-3:15; 4:00-mid.

600 kilocycles 499.7 meters

CFCF ae 500 F
CFCO ak 50 FL
CJOR ak 500
KFQD ak 250
KFSD ah 1000 N
WCAC ae 250 2
WCAO ae 250 C
WICC ae 250 2 CH (.5)
WMT af 500 C
WREC ak 500 C (1)

Montreal, Que. E—7:30-mid. (VE9DR)
Chatham, Ont. E—7:15-10
Vancouver, B. C. P—7:30-10:30
Anchorage, Alaska. L—6:00-mid.
San Diego, Calif. P—7:30-mid.
Storrs, Conn. E—12:30-1; 7-8
Baltimore, Md. E—7:00-mid.
Bridgeport, Conn. E—7:45-1:00
Waterloo, Iowa. C—6:00-mid.
Memphis, Tenn. C—6:30-mid.

KCYB.
600
DIAL

CUT OUT ON DOTTED LINES

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

610 kilocycles 491.5 meters

KFRC ae 1000 CT San Francisco, Calif. P-7-mid.
KZEG ak 1000 618.5 Manila, P. I. L-7:30-12:15; 1:15-5:00
KZRM ak 50000 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 (1) Philadelphia, Pa. E-8:30-12:30
WJAY ak 500 D Cleveland, Ohio. E-6-sunset

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
WLBZ 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 Charlotte, N. C. 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; 7:30-9:00
CMQ z 500 2 Havana, Cuba. E
KFRU ak 500 D Columbia, Mo. C-6:9; 4-sunset; 7-9
KGFX z 200 D Pierre, S. D. C-9:30-sunset
WGBF ae 500 I Evansville, Ind. C
WMAL ak 250 B (5) Washington, D. C. E-6:45-mid.
WOS ak 500 1D Jefferson City, Mo. C-9:00-4:0
XBX z 50 Monterrey, N. L.
XEZ ak 500 Merida, Yuc. C-1-5
XFG z 2000 638.3 Mexico City, F. C

640 kilocycles 468.5 meters

KFI ak 50000 1N Los Angeles, Calif. P-6:30-mid.
WAIU ae 500 1 Columbus, Ohio. E-6:15-5:45
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; 10-4
WSM ae 50000 N Nashville, Tenn. C-6:30-mid.

660 kilocycles 454.3 meters

RUS z 500 664 San Salvador, E. S.
WAAW af 500 D Omaha, Neb. C-6:00-sunset
WEAF ak 50000 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; 7-9
KFQ ak 2500 D St. Joseph, Mo. C-9:30-4:50
KPO ak 50000 N San Francisco, Calif. P-7:30-mid.
VAS z 2000 685 Glace Bay, N. S. A-1:00-1:15; 1:00-1:15
WPTF ae 1000 DnN Raleigh, N. C. E-7:30-sunset

690 kilocycles 434.5 meters

CFRB ak 10000 C Toronto, Ont. E-8:00-mid.
CJCJ ak 100 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 50000 NX Cincinnati, Ohio. E-6:30-2. (W8XO; W8XAL)

710 kilocycles 422.3 meters

KMPC ae 500 Dn Beverly Hills, Calif. P-6:45-12:30

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday'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 1000 F Edmonton, Alta. M
CKAK ak 5000 C Montreal, Que. E-7:30-11:30
CMK ae 3150 Havana, Cuba. E-11:00-1:00; 7:00-mid.
XEF-ak 150000 735 Villa Acuna, Coah. C-7:15-5:00

740 kilocycles 405.2 meters

KMMJ ae 1000 D Clay Center, Neb. C-5:00-sunset
WHBB ah 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

CMBS ak 200 765 Havana, Cuba. E-10:00-noon; 3:30-6
KXA ae 250 (5) Seattle, Wash. P-5:30-mid.
WBAL ae 10000 BSy Baltimore, Md. (See 1060 Kcys.)
WEW ae 1000 D St. Louis, Mo. C-8-sunset
WJZ ck 50000 BSy New York, N. Y. E-8-1. (W3XL; W3XAL)
XEYZ z 10000 Mexico City, D. F. C

770 kilocycles 389.4 meters

CMCQ z 1000 775 Havana, Cuba. E
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 50 FE Fort William, Ont. E-10-2; 5-11
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.
WTR 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. (W2XAD; W2XAF)

800 kilocycles 374.8 meters

TIGP z 75 San Jose, C. R.
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; 7-10
WFAA ak 50000 Na Dallas, Tex. C-7-8:30; 10:30-12:30; 3-5:30; 6:30-7; 10-mid.
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.

KCYS.
820
DIAL

CUT OUT ON DOTTED LINES

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

830 kilocycles 361.2 meters

CMC	ae	500	835	Havana, Cuba.	E-10:30-11:30; 7:00-11:00
CMGA	z	100	834	Colon, Cuba.	E
KOA	ak	12500	N	Denver, Colo.	M-7:00-mid.
LRS	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
WHDH	ae	1000	Dn	Boston, Mass.	E-7:00-sunset in Denver
WRUF	ae	5000	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
XFX	ak	500	.....	Mexico City, D. F.	C-7:12-30; 6:30-10:00

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) (W2XE)
WHB	ae	500	D	Kansas City, Mo.	C-6:00-6:00
XETH	ak	100	.....	Puebla, Pue.	C-8:30-11:00; 1:00-3:00; 6:30-11:00

870 kilocycles 344.6 meters

CMCF	ak	250	873	Havana, Cuba.	E-5:00-8:00; 9:00-11:00
CMX	ae	1000	875	Havana, Cuba.	E-Noon-2:00; 8:00-9:00
WENR	ak	50000	Na	Chicago, Ill.	C-(W9XF)
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; 4:30-6; 8-mid.
KLX	ae	1000	.....	Oakland, Calif.	P-8:00-11:00
KPOF	ae	500	2	Denver, Colo.	M-7:30-9:00; 2:30-4:00; 6:00-8:00
WCOC	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; 5:30-8:00
WQAN	ae	250	1	Scranton, Pa.	E-9:00-9:30; 12:30-1:30; 4:30-5:30; 8-11:00
WSUI	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

KARK	ak	250	.....	Little Rock, Ark.	C-7:00-2:30; 4:30-9:00
KKNF	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 (1)	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-mid.
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	ak	1000	CT	Los Angeles, Calif.	P-7:00-1:00
VOWR	ak	500	S	St. John's, Nfld.	L-Silent
WBEN	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

CKY	ak	5000	F	Winnipeg, Man.	C-8:30-1:30; 4:00-11:00
-----	----	------	---	----------------	-------------------------

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

CMCD	ah	500	915	Havana, Cuba.	E-Noon-9:00
CMJF	z	200	.....	Camaguey, Cuba	E
CRCM	ck	5000	F	Montreal, Que.	E
TICR	z	75	911	San Jose, C. R.	C-6:30-10:00
XBW	ak	5000	.....	Mexico City, D. F.	C

920 kilocycles 325.9 meters

CMDB	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; 6-7:30; 9-Mid.
KFXF	ak	500	1	Denver, Colo.	M-8:30-10; 12:30-3; 4:30-6; 7:30-9:00; mid.-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	100	.....	Calgary, Alta.	M
CFCH	ak	100	F	North Bay, Ont.	E-Noon-1:30; 5:30-mid.
CFCL	ae	100	.....	Prescott, Ont.	E-8:00-10:00; noon-2:00; 5:00-10:00
CHRC	ak	100	F	Quebec, Que.	E-9:00-12:30
CKPC	ae	100	FG	Brantford, Ont.	E-6:45-mid.
KFWI	ak	500	1	San Francisco, Calif.	P-Silent till further notice
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-mid.
KMA	ak	500	2 (1)	Shenandoah, Iowa.	C-6-7:30; 9:30-11; 12:30-2; 3:30-5; 6:30-8:30
KROW	ak	500	1 (1)	Oakland, Calif.	P-7:00-mid.
WBRC	ak	500	C (1)	Birmingham, Ala.	C-7:00-11:00
WDBJ	ae	250	C (.5)	Roanoke, Va.	E-8:00-mid.

940 kilocycles 319.0 meters

CMHD	dk	500	945.5	Caibarien, Cuba.	E-8:00-9:00
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

KFWB	ak	1000	.....	Hollywood, Calif.	P-7:30-12:30
KGHL	ak	1000	NJ (2.5)	Billings, Mont.	M-8:00-11:00
KMEC	ak	1000	C	Kansas City, Mo.	C-6:00-mid.
VOGY	ak	75	.....	St. John's, Nfld.	L-10:30-11:30; 1:00-2:00; 6:15-8:00
WRC	ae	500	R	Washington, D. C.	E-6:30-1:00

960 kilocycles 312.3 meters

CMDB	z	250	965	Havana, Cuba.	E-6:00-11:00
CMCW	ak	150	965	Havana, Cuba.	E-1:00-3:00; noon-6:00
CMJL	z	50	.....	Camaguey, Cuba.	
CRCT	ak	5000	NF	Toronto, Ont.	E-6:45-mid. (VE9GW)
XEAW	ak	10000	965	Reynosa, Tams.	C-5:00-1:00
YVIBC	ak	5000	.....	Caracas, Venez.	L-11:00-1:30; 5:30-10:15

970 kilocycles 309.1 meters

CMGF	ak	100	971.5	Mantanzas, Cuba.	E-3:00-5:00; 8:00-10:30
KJR	z	5000	N	Seattle, Wash.	P-7:30-mid.
WCFL	ae	1500	BX	Chicago, Ill.	C-7:00-mid. (W9XAA)
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. (W8XK)
XEAE	ak	800	.....	Tijuana, B. C.	P-9:00-mid.
XEFE	z	100	985	Nuevo Laredo, Tams.	C

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	BSy	Boston, Mass.	E-7:00-1:00. (W1XAZ)
WBZA	ak	1000	BSy	Springfield, Mass.	E-7:00-1:00
WJEM	z	500	D	Tupelo, Miss.	C

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

XEAF z 750 Nogales, Son.
XEX ak 100 Mexico City, D. F. C-11:00-4:00; 6:00-2:00

1000 kilocycles 299.8 meters

CMBZ ak 150 1005 Havana, Cuba. E-11-1; 4-6; 8:30-11
KFVD ae 250 Dn Los Angeles, Calif. P-6:30-sunset; 10:00-mid.
WHO- ak 50000 R Des Moines, Iowa. C-7:00-mid.
WOC ak 1000 D York, Pa. E-8:00-6:45
WORK ak 250 Guadalajara, Jal. C-8:30-9:00; 6:00-11:00
XEA ak 50 Toluca, D. F. C
XEC z 50 Monterrey, N. L. C-11:00-2:00; 7:00-10:00
XEFJ ak 100 Queretaro, Qro. C-8:00-10:00
XEFs ak 40 Saltillo, Coah. C-10:30-1:00; 6:00-9:00
XEL ak 40

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; 3:30-6:30
CKCD ak 100 Vancouver, B. C. P-7:30-11:30
CKCK ak 500 3F Regina, Sask. M-9-10; 11-noon; 1-3:30; 5:30-11
CKCO z 100 Ottawa, Ont. E
CKIC ak 50 Wolfville, N. S. A-Noon-1:00; 6:00-7:00
CKWX aeh 100 L Vancouver, B. C. P-7:30
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; 3:45-7:15
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-1:30-5:30
WIS ae 500 N (1) Columbia, S. C. E-8:00-mid.
WNAD ae 500 2 Norman, Okla. C-7:15-9:15
WPAP ae 250 1 New York, N. Y. E-11-1
WQAO ae 250 1 New York, N. Y. E-Silent
WRNY ae 250 1 New York, N. Y. E-9:30-1:30; 5:30-11
XEXJ 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 10000 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-8-11. (VE9CB)
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 iC 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.
CMBG z 225 1052a Havana, Cuba. E
CMCB ak 150 1052a Havana, Cuba. E
CMJG z 50 Camaguey, Cuba. E
KFBI ak 5000 Dn Abilene, Kans. C-6:00-sunset
KNX ak 25000 Hollywood, Calif. P-6:45-11:00
XEFC ak 100 Merida, Yuc. C-7-10

1060 kilocycles 282.8 meters

KWJJ ak 500 Portland, Ore. P-6:00-8:00; 9:00-2:00
WBAL ae 10000 iB Baltimore, Md. E-3-mid.
WJAG ak 1000 D Norfolk, Neb. C-6:45-sunset
WTIC ak 50000 iR Hartford, Conn. E-7:30-3

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

1070 kilocycles 280.2 meters

KJBS ae 100 D San Francisco, Calif. P-12:01-sunset
WCAZ ae 50 D Carthage, Ill. C
WDZ ak 100 D Tuscola, Ill. C-8:00-4:00
WTAM ck 50000 R Cleveland, Ohio. E-6:30-1:00

1080 kilocycles 277.6 meters

VOKW z 30 1085 St. John's, Nfld. L-Noon-2:00
WBT ae 50000 CU Charlotte, N. C. E-7:00-mid.
WCBG ae 5000 1Dn Zion, Ill. C-7:30-10:30; 1:30-sunset
WMBI ae 5000 1Dn Chicago, Ill. C-7:00-7:30; 10:30-1:30; 3:00-4:00
XEFG ak 500 1085 Mexico City, D. F. C-10:30-4:00; 7:00-mid.

1090 kilocycles 275.1 meters

KMOX ak 50000 C St. Louis, Mo. C-6:30-12:30
XEAI z 100 Mexico City, D. F. (All mail returned)

1100 kilocycles 272.6 meters

CMCU ak 500 Havana, Cuba. E-Noon-6
CRCV ak 1000 F Vancouver, B. C. P-Noon-1; 5:30-11
KGDm ak 250 D Stockton, Calif. P-6-sunset
TIRCA ak 500 San Jose, C. R. C-11:00-1:00; 5:00-10:30
WLWL ae 5000 1 New York, N. Y. E-6:00-8:00
WPG ak 5000 1C Atlantic City, N. J. E-9:00-6:00; 8:00-1:00
XEWw z 250 Veracruz, Ver. C

1110 kilocycles 270.1 meters

KSOO ae 1000 Dn (2.5) Sioux Falls, S. D. C-6:00-6:30
WRVA ae 5000 N Richmond, Va. E-7:00-mid.
XENT ak 150000 1115 Nuevo Laredo, Tams. C-6:00-8:00; 10:00-2:00; 5:00-10:00

1120 kilocycles 267.7 meters

CFTF z 100 Edmonton, Alta. M
CHGS ae 50 F Summerside, P. E. I. A-7:30-8:30; 10:30-2; 4:30-11
CHLP z 100 Montreal, Que. E-9:00-mid.
CKOC ae 500 F (1) Hamilton, Ont. E-7:45-11:30
CMHJ ae 60 1125 Cienfuegos, Cuba. E-11:00-2:00; 6:00-9:00
KFIO ae 100 D Spokane, Wash. P-7:00-sunset
KFSG ag 500 a Los Angeles, Calif. P-6:30-7:15; 7:30-mid.
KRKD ae 500 a Los Angeles, Calif. P-7:45-7:30
KRSC ak 100 D Seattle, Wash. P-6:45-6:30
KTRH z 1000 2C Houston, Texas. C-6:30-11:30
WDEL ak 250 (.5) Wilmington, Del. E-9:00-10:00
WHAD ak 250 1C Milwaukee, Wis. C-9:30-10:15; 3:00-4:00; 8:30-9:30
WISN ak 250 1 Milwaukee, Wis. C
WTAW ae 500 2 College Station, Tex. C-8-9

1130 kilocycles 265.3 meters

KSL ae 50000 C Salt Lake City, Utah. M-6:45-mid.
WJJD ae 20000 Dn Chicago, Ill. C-6:30-10:00
WOW ag 1000 D New York, N. Y. E-8:00-6:00
XEH ak 250 1132 Monterrey, N. L. C-8:00-1:30; 5:00-10:00

1140 kilocycles 263.0 meters

CMBJ z 500 Havana, Cuba. E-8-11; 7-11
CMBW ak 600 Havana, Cuba. E-6-11
KVOO ae 25000 iN Tulsa, Okla. C-6:30-9
WAPI ae 5000 iN Birmingham, Ala. C-6:00-sunset; 9:00-mid.

1150 kilocycles 260.7 meters

CMJH ak 50 Ciego de Avila, Cuba. E-8:00-8:30; 10:00-3:00; 5:30-10:30
WHAM ae 50000 B Rochester, N. Y. E-8:00-mid.
XED ak 500 1155 Guadalajara, Jal. C-Noon-3:30; 7:00-mid.

1160 kilocycles 258.5 meters

WOWO ae 10000 1C Fort Wayne, Ind. C-8:30-5:15; 7:30-10
WWVA ae 5000 1C Wheeling, W. Va. E-6:30-8:30; 10-mid.

KCYs.

1160

DIAL

CUT OUT ON DOTTED LINES

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

1170 kilocycles 256.3 meters

CMJE z 50 Camaguey, Cuba. E
WCAU ae 50000 C Philadelphia, Pa. E-8:00-1:00 (W3XAU)

1180 kilocycles 254.1 meters

CMBN ak 150 1185 Havana, Cuba. E
CMCJ ak 500 Havana, Cuba. E-7:53:00; 8-mid.
KEX ak 5000 2N Portland, Ore. E-7:53:00; 8-mid.
KOB ak 10000 2 Albuquerque, N. M. M-7:00-1:00; 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

HUJ z 15 1195 Santo Domingo, D. R. E-12:30-2:30; 6:30-8:30
VE9BK ak 10 1195 Montmagny, Que. E
VONF ak 400 1195 St. John's, Nfld. L-Noon-2:00; 6:00-9:00
WQAI 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

CHAB ak 100 F Moose Jaw, Sask. M-5:30-7
CJAT ak 50 Trail, B. C. P-9:30-9
CKTB ae 100 G St. Catharines, Ont. E
CMGB z 30 1205 Matanzas, Cuba. E
CMHW z 100 Cienfuegos, Cuba. E
KBTM ak 100 DT Jonesboro, 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
KFJD ak 100 Nampa, Idaho. M-7:00-9:00
KFJX ak 100 Grand Junction, Colo. M
KGDE ak 100 (.25) Fergus Falls, Minn. C-7:00-9:00
KGEK ak 100 Yuma, Colo. M-11:30-1:30; 7:15-8:45
KGFJ ak 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
WBBX ak 100 1 New Orleans, La. C-Noon-5:00; 8:00-11:00
WBBZ ak 100 Ponca City, Okla. C-6:30-9
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
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
WIBX ae 100 (.3) Utica, N. Y. E-8:00-11:00
WIL ak 100 8 (.25) St. Louis, Mo. C-7:00-mid.
WJBC ae 100 6 LaSalle, Ill. C-8-9; 10-12:30; 3-6:30
WJBL ae 100 6 Decatur, Ill. C-6:30-8; 9-10; 12:30-3; 6:30-10
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
WNBW ae 100 2 Silverhaven, Pa. E-9:00-noon; 3:00-6:00; 9:00-mid.
WPHR z 10 (.1) Carbondale, Pa. E
WRBL z 100 (.25) Petersburg, Va. E-8:00-5:00; 6:00-9:00
WRBL z 100 Columbus, Ga. C-7:00-11:00
YV3BC ae 100 8 Hammond, Ind. C-7-8:30; 11-1; 4-5; 6-mid.
10-AK ak 100 Caracas, Venez. L-11:00-2:00; 5:00-10:30
10-BP ak 15 Stratford, Ont. E-Noon-1:00; 5:30-7:00
10-BQ ak 15 Wingham, Ont. E-Noon-1
10-BU z 15 Brantford, Ont. E-11-8
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.
CKBI ak 100 Prince Albert, Sask. M

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

CKCH z 100 Hull, Que. E
CKMC ak 50 Cobalt, Ont. E
CKOV ak 50 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
KFVW ak 100 Fort Smith, Ark. C-7:00-2:00; 5:00-10:00
KFVS ae 100 6 Cape Girardeau, Mo. C-9-noon; 4-7:30; 9-mid.
KFXM ak 100 9 San Bernardino, Calif. P-6-mid.
KGCX ak 100 Watertown, S. D. C-7:00-3:00; 5:00-9:00
KGY ak 100 Olympia, Wash. P-7-7
KIEM ak 100 Eureka, Calif. P-7:45-sunset
KPPC ak 50 9 Pasadena, Calif. P-Silent
KWEA z 100 Shreveport, La. C
KWVW 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
WCBS 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-6-9; noon-4; 7:30-9
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-9-11; 9-mid.
WGBB ae 100 3 Freeport, N. Y. E-7-9
WGCN 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-7-10
WTBU a 100 Poyntette, Wis. C
WJBI ak 100 3 Red Bank, N. J. E-4-7
WJBY ak 100 Gadsden, Ala. C-9:00-9:00
WJEJ 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

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-6:45-8; 10:30-9:30
WCAD ak 500 D Canton, N. Y. E-12:30-1:30
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 Tuesday's Time on the Air

KTFI	ae	1000	.....	Twin Falls, Idaho.	M—6:00-mid.
WKAO	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

KFOX	ae	1000	.....	Long Beach, Calif.	P—6:00-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—8-9
WNEW	ae	1000	(2.5)	Newark, N. J.	E—7-2; 5-8; 10-mid.
WRHM	ak	1000	2	Minneapolis, Minn.	C—6:15-9:45; 10:35-8; 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	ak	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, Tex.	C—Silent till April 1st
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
KWLC	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.
WBR	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. Y.	E—2-5
WCAP	ae	500	1	Asbury Park, N. J.	E—9-1; 8-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.	
XFB	ak	1000	.....	Jalapa, Ver.	C—8:00-9:00; 1:00-2:30; 8:00-11:30
.....	z	500	P	San Juan, P. R.	

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—7:30; 9-11; 11:30-2; 3-11
KFJR	ag	500	3	Portland, Ore.	P—10:30-2:30; 5-6; 7-11
WBR	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—Silent
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. (W4XB)
WOQ	ae	1000	2	Kansas City, Mo.	C—6-7; 8:35-9:05; 11-11:30; 2-3; 11-mid.

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

1310 kilocycles 228.9 meters

CFJC	ak	100	FLE	Kamloops, B. C.	P—7:30-10:30; noon-2:00; 6:00-7:30
CHCK	ak	50	.....	Charlottetown, P. E. I.	A—Noon-1:30
CJCL	z	100	.....	Kirkland Lake, Ont.	E
CJLS	z	100	.....	Yarmouth, N. S.	A
KCKV	ak	50	.....	Quebec, Que.	E—Noon-2:00; 6:30-11:00
KCRJ	ak	100	D	Jerome, Ariz.	M—7:30-9:30; noon-1:00; 4:30-6:00
KFBK	ak	100	C	Sacramento, Calif.	P—7:00-11:00
KFGQ	ak	100	7	Boone, Iowa.	C
KEPL	ak	100	.....	Dublin, Texas.	C—6:30-8:30; 9:00-3:15; 7:00-10:45
KFPFM	ae	15	.....	Greenville, Texas.	C—7:45-9:00; 1:00-2:45; 6:00-9:00
KFXR	ak	100	(25)	Oklahoma City, Okla.	C—7:30-2:00; 4:30-11:00
KFOY	ak	100	(25)	Lubbock, Texas.	C—7:00-2:00; 4:00-10:00
KGBX	ae	100	.....	Springfield, Mo.	C
KGCX	ak	100	(25)	Wolf Point, Mont.	M—7:30-9:00; 11:30-3:00; 6:00-7:00
KGEZ	aj	100	.....	Kalispell, Mont.	M—8:00-9:00
KGFV	ak	100	.....	Kearney, Neb.	C—7:00-9:00
KIFH	z	100	.....	Juneau, Alaska.	L
KIT	ak	100	.....	Yakima, Wash.	P—7:00-11:00
KMED	ck	100	.....	Medford, Ore.	P—8:00-8:00
KRMD	ak	100	.....	Shreveport, La.	C—7:00-1:00; 5:00-8:00
KTSM	ak	100	a	El Paso, Texas.	M—7:00-1:30; 3:00-10:00
KXRO	ak	100	.....	Aberdeen, Wash.	P—7:30-10:00
WAML	ak	100	.....	Laurel, Miss.	C—7:00-10:00; 11:00-2:00; 4:00-7:00
WBEO	ae	100	.....	Marquette, Mich.	C—9:30-1:15; 5:00-7:00
WBOW	ak	100	.....	Terre Haute, Ind.	C—7:00-11:00
WBRE	ak	100	.....	Wilkes Barre, Pa.	E—8:00-11:30
WCLS	ae	100	b	Joliet, Ill.	C—9:30-1:00; 5:00-8:00
WDAH	ck	100	Sa	El Paso, Texas.	M—Silent
WBR	aej	100	(25)	Buffalo, N. Y.	E—7:00-1:00
WEXL	ak	50	.....	Royal Oak, Mich.	E—7:30-5:00
WFBG	ae	100	3	Altoona, Pa.	E—10:30-4:30; 7:00-10:00
WDFD	ak	100	K	Flint, Mich.	E—7:00-mid
WGAL	ae	100	5	Lancaster, Pa.	E—9:30-2:30; 4:30-6:00
WGH	ae	100	.....	Newport News, Va.	E—7:00-1:00; 5:00-11:00
WHAT	ak	100	4	Philadelphia, Pa.	E—9:00-11:00; 1:00-2:00; 8:30-mid.
WIAS	ak	100	7	Ottumwa, Iowa.	C—7:00-11:00
WJAC	ae	100	3	Johnstown, Pa.	E—9:00-10:30; 4:30-7:00
WKBC	ak	100	(2.5)	Birmingham, Ala.	C—7:00-10:00
WLBC	ak	100	6	Muncie, Ind.	C—7:00-10:00
WMBO	ak	10	.....	Auburn, N. Y.	E—9:00-9:00
WNBH	ae	100	(25)	New Bedford, Mass.	E—8:00-2:00; 4:00-10:00
WOL	ae	100	.....	Washington, D. C.	E—7:00-mid.
WRAW	ak	100	5	Reading, Pa.	E—7:00-9:30; 6:00-mid.
WROL	ak	100	.....	Knoxville, Tenn.	C—7:00-1:00; 4:00-11:00
WSAJ	ae	100	.....	Grove City, Pa.	E—7:15-8:15
WSJS	ak	100	C	Winston-Salem, N. C.	E—7:45-mid.
WTEL	ah	100	4	Philadelphia, Pa.	E—7:00-9:00; noon-1:00; 5:00-8:30
WTJS	ak	100	(25)	Jackson, Tenn.	C—7:00-2:00; 4:00-10:00
WTRC	ak	50	6 (1)	Elkhart, Ind.	C—6:00-7:30
XEFB	ak	100	1315	Monterrey, N. L.	C—11:00-2:00; 6:00-11:00
XBI	ak	250	.....	Morelia, Mich.	C—2:00-3:30; 9:00-10:00

1320 kilocycles 227.1 meters

CMCY	ak	500	1325	Havana, Cuba.	E
KGHF	ak	250	(5)	Pueblo, Colo.	M—6:30-9:30
KGMB	ak	250	C	Honolulu, T. H.	L—6:00-11:00
KID	ae	250	(5)	Idaho Falls, Idaho.	M—6:00-11:00
WADC	ae	1000	C	Akron, Ohio.	E—8:00-mid.
WSMB	ak	500	N	New Orleans, La.	C—7:00-mid.

1330 kilocycles 225.4 meters

CMJI	ak	45	1335	Ciego de Avila, Cuba.	E
KGB	agj	1000	CT	San Diego, Calif.	P—7:00-1:00
KMO	ak	250	.....	Tacoma, Wash.	P—6:45-11:00
KSCJ	aj	1000	1C(2.5)	Sioux City, Iowa.	C—7:30-11:00
WDRK	ae	1000	CH	Hartford, Conn.	E—8:00-mid.
WSAI	ak	1000	R(2.5)	Cincinnati, Ohio.	E—8:00-mid.
WTAQ	ae	1000	1C	Eau Claire, Wis.	C—7:00-8:00

1340 kilocycles 223.7 meters

KFPY	ak	1000	C	Spokane, Wash.	P—6:45-mid.
KGDY	ak	250	.....	Huron, S. D.	C
KGNO	ak	250	.....	Dodge City, Kans.	C—6:30-9:00
WCOA	ae	500	.....	Pensacola, Fla.	E—9:00-10:00
WLBC	z	250	(5)	Portland, Maine.	E—(Mail returned)
WSPD	ae	1000	C	Toledo, Ohio.	E—7:00-1:00

KCYs.

1340

DIAL

CUT OUT
ON DOTTED LINES

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday's Time on the Air

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday'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—7:45-8:45; 5:00-6:30
WBNX	ae	250	1	New York, N. Y.	E—6:00-7:30; 9:00-1:00
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

CHPR	z	100	.....	St. John, N. B.	A
CMCN	z	250	1375	Havana, Cuba.	E
CMCR	ak	150	1375	Havana, Cuba.	E—Noon-1:00; 4:00-6:00; 8:00-9:00
CMGE	z	30	1375	Cardenas, Cuba.	E
KCRK	ak	100	2(.25)	Enid, Okla.	C—6:00-9:00; 11:00-2:00; 5:00-7:45; 10:00-mid.
KFBL	ae	50	3	Everett, Wash.	P—9:00-noon; 3:00-6:00; 9:00-mid.
KFJM	ak	100	.....	Grand Forks, N. D.	C—7:00-9:00
KFJZ	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	4	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	z	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; 7:00-8:00; 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(.25)	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—11:00-1:00; 6:30-10:00
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.
WGCL	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
WHET	ak	100	.....	Dothan, Ala.	C—9:00-sunset
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—7:00-11:00; 1:00-6:30
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	ae	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
KQV	ak	500	2C	Pittsburgh, Pa.	E—7:00-10:30
TGX	z	75	.....	Guatemala City, Guatemala.	
WKBH	ae	1000	C	LaCrosse, Wis.	C—7:30-10:00
WSMK	ak	200	2	Dayton, Ohio.	E—7:00-8:00; 10:00-mid.
XETB	z	125	.....	Torreón, Coah.	

1390 kilocycles 215.7 meters

CJRC	z	100	.....	Middlechurch, Man.	C
HIH	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

KLO	ah	500	C	Ogden, Utah.	M—8:30-10:30
KTLU	z	250	(.5)	Tulsa, Okla.	C
WARD	ak	500	2	Brooklyn, N. Y.	E
WBAA	z	500	1	Lafayette, Ind.	C—Silent
WBBC	ae	500	2	Brooklyn, N. Y.	E—7:11:30; 6-7:30
WKBF	ak	500	1N	Indianapolis, Ind.	C—6:00-mid.
WLTH	ak	500	2	Brooklyn, N. Y.	E—11:30-1:30; 7:30-9
WVFW	ak	500	2	Brooklyn, N. Y.	E
XEFW	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—3-4:30; 8:30-10:30
CKMO	z	100	5	Vancouver, B. C.	P—7:30-3; 4:30-11
CMCH	ak	50	.....	Havana, Cuba.	E
CMCM	z	15	.....	Havana, Cuba.	E
KFLV	ak	500	4	Rockford, Ill.	C—9-12:30; 4-6; 8:30-mid.
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.
WBCM	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

CKGB	z	100	.....	Timmons, Ont.	E
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—(Mail returned)
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.
KXL	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	.....	Annisston, Ala.	C—7:00-9:00
WAZL	ak	100	.....	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	DY	Americus, Ga.	C—7-6:15
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.
WMBC	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

1430 kilocycles 209.7 meters

KECA	ak	1000	N	Los Angeles, Calif.	P—7:00-11:00
------	----	------	---	---------------------	--------------

INDEX BY FREQUENCIES AND DIAL NUMBERS

With Tuesday'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
WNBR	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
WCBA	ae	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

CFCT	ae	50	.....	Victoria, B. C.	P—8:00-12:30; 6-8; mid.-2:00
CKX	ak	500	F	Brandon, Man.	C—7:00-10:30
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—6:30-1:00
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

IKSTP	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—8:00-9:00; 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
WCNV	ak	100	i	Brooklyn, N. Y.	E—2:00-6:00
WFDV	ak	100	.....	Rome, Ga.	C—7:00-10:00; noon-3:00; 6:00-9:00
WHEF	z	100	P (.25)	Kosciusko, Miss.	C
WKBB	ae	100	.....	East Dubuque, Ill.	C—7:00-10:15; 11:45-1:30; 5:30-9:00
WKVB	z	100	.....	Richmond, Ind.	C
WKWB	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	i	Brooklyn, N. Y.	E—9:00-11:00; 8:00-mid.
WMPC	ak	100	.....	Lapeer, Mich.	E—10:00-2:00; 3:30-6:00; 7:00-10:30
WNBF	ae	100	.....	Binghamton, N. Y.	E—7:30-10:00
WOPJ	ae	100	.....	Bristol, Tenn.	E—7:00-2:00; 3:00-8:00
WPN	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
WWRL	ak	100	i	Woodside, N. Y.	E—8-9; 11-2; 6-8

(Continued on page 91)

INDEX BY LOCATIONS

Frequency in kilocycles in second column. Night power in watts in third column. Network affiliations in fourth column: C Columbia, E National Red, B National Blue, N National Red and Blue. F Canadian.

ALABAMA	Fresno	CONNECTICUT	Twin Falls
Anniston	KMJ 580 500 C	Bridgeport	KTFI 1240 1000
WAMC 1420	Glendale	WICC 600 250 C	ILLINOIS
Birmingham	KIEV 850 100	Hartford	Carthage
WAPI 1140 5000 N	Hollywood	WDR 1330 1000 C	WCAZ 1070 50
WBRC 930 500 C	KFWB 950 1000	WTRC 1060 5000 R	Chicago
WKBC 1310 100	KMTR 570 500	Storrs	KYW 1020 10000 N
Dothan	KNX 1050 25000	WCAZ 600 250	WAAF 920 500
WHET 1370 100	Long Beach	DELAWARE	WBBM 770 25000 C
Gadsden	KFOK 1250 1000	Wilmington	WCFL 970 1500 B
WJBY 1210 100	KGER 1360 1000	WDEL 1120 250	WCRW 1210 100
Huntsville	Los Angeles	WILM 1420 100	WEDC 1210 100
WBHS 1200 100	KECA 1430 1000 N	DISTRICT OF COLUMBIA	WENR 870 50000 N
Mobile	KFAC 1300 1000	Washington	WGES 1360 500
WODX 1410 500 C	KFI 640 50000 N	WISV 1450 10000 C	WGN 720 50000
Montgomery	KFSG 1120 500	WMAL 630 250 B	WJJD 1130 20000
WSFA 1410 500 C	KFVD 1000 250	WOL 1310 100	WLS 870 50000 N
Muscle Shoals	KGFJ 1200 100	WRC 950 500 R	WMAQ 670 5000 N
WNRA 1420 100	KHJ 900 1000 C	FLORIDA	WMBI 1080 5000
ALASKA	KRKD 1120 500	Clearwater	WSBC 1210 100
Anchorage	KTM 780 500	WFLA 620 1000 N	Cicero
KFOD 600 250	Oakland	Gainesville	WEHS 1420 100
Juneau	KLS 1440 250	WRUF 830 5000	WHFC 1420 100
KIFH 1310 100	KLX 880 1000	Jacksonville	WKBI 1420 100
Ketchikan	KROW 930 500	WJAX 900 1000 N	Decatur
KGBU 900 500	Pasadena	Miami	WJBL 1200 100
ARIZONA	KPPC 1210 50	WIOD 1300 1000 N	East Dubuque
Jerome	KFBK 1310 100 C	WQAM 560 1000 C	WKBB 1500 100
KCRJ 1310 100	San Bernardino	Orlando	Harrisburg
Lowell	KFXM 1210 100	WDBO 580 250 C	WEBQ 1210 100
KSUN 1200 100	San Diego	Pensacola	Joliet
Phoenix	KPSD 600 1000 N	WCOA 1340 500	WCLS 1310 100
KOY 1390 500	KGB 1330 1000 C	St. Petersburg	LaSalle
KTAR 620 500 N	San Francisco	WSUN 620 1000 N	WJBC 1200 100
Prescott	KFRC 610 1000 C	Tampa	Peoria
KPJM 1500 100	KFWI 930 500	WDAE 1220 1000 C	WMBD 1440 500 C
Tucson	KGCC 1420 100	WMBR 1370 100	Quincy
KGAR 1370 100	KGO 790 7500 N	GEORGIA	WTAD 1440 500
KVOA 1260 500	KJBS 1070 100	Americus	Rock Island
Yuma	KPO 680 50000 N	WENC 1420 100	KFLV 1410 500
KUMA 1420 100	KTAB 560 1000	Athens	Rock Island
ARKANSAS	KYA 1230 1000 N	WTFI 1450 500	WHBF 1210 100
Blytheville	San Jose	Atlanta	Springfield
KLCN 1290 100	KQW 1010 500	WJTL 1370 100	WCBS 1210 100
Fayetteville	Santa Ana	WSB 740 50000 N	WTAX 1210 100
KUOA 1260 1000	KREG 1500 100	Augusta	Tuscola
Fort Smith	KDB 1500 100 C	WRDW 1500 100	WDZ 1070 100
KFPW 1210 100	Stockton	Columbus	Urbana
Hot Springs	KGDM 1100 250	LaGrange	WILL 890 250
KTHS 1040 10000 N	KWG 1200 100 C	WRLB 1200 100	Zion
..... 1500 100	COLORADO	WKB 1500 100	WCB 1080 5000
Jonesboro	Alamosa	MACON	INDIANA
KBTM 1200 100	KGIW 1420 100	WMAZ 1180 500	Anderson
Little Rock	Colorado Springs	Rome	WBHU 1210 100
KARK 890 250	KVOR 1270 1000 C	WDFV 1500 100	Elkhart
KGHI 1200 100	Denver	Savannah	WTRC 1310 50
KLRA 1390 1000 C	KEEL 920 500	WTOC 1260 500 C	Evansville
Texarkana	KEXF 920 500	Thomasville	WGBF 630 500
KCMC 1420 100	KLA 830 12500 N	WQDX 1210 100	Fort Wayne
CALIFORNIA	KPOF 880 500	HAWAII	WGL 1370 100 C
Bakersfield	Grand Junction	Hilo	WOWO 1160 10000 C
KERN 1200 100 C	KFXJ 1200 100	KWVF 1210 100	Gary
Berkeley	Greely	Honolulu	WIND 560 1000 C
KRE 1370 100	KFKA 880 500	KGMB 1320 250 C	Hammond
Beverly Hills	Lamar	KGU 750 2500 N	WWAE 1200 100
KMPK 710 500	KIDW 1420 100	IDAHO	Indianapolis
Burbank	Pueblo	KIDO 1350 1000	WBFB 1230 1000 C
KELW 780 500	KGHF 1320 250	KID 1320 250	WKBF 1400 500 N
El Centro	Yuma	Nampa	Muncie
KXO 1500 100	KGEK 1200 100	KFXD 1200 100	Richmond
Eureka	San Francisco	Pocatello	WKBV 1500 100
KIEM 1210 100	KSEI 890 250	South Bend	WFAM 1200 100 C

INDEX BY LOCATIONS

WSBT 1230 500 C	KWEA 1210 100	MINNESOTA	KFOR 1210 100
Terre Haute	KWKH 850 10000	Fergus Falls	Norfolk
WBOW 1310 100	MAINE	KGDE 1200 100	WJAG 1060 1000
West Lafayette	Augusta	Minneapolis	North Platte
WBAA 1400 500	WRDO 1370 100	WCCO 810 50000 C	KGNE 1430 500
IOWA	Bangor	WDGY 1180 1000	Omaha
Ames	WABI 1200 100	WLB 1250 1000	WAAW 660 500
WOI 640 5000	WLBZ 620 500 C	WRHM 1250 1000	WOW 590 1000 R
Boone	Portland	WCSH 940 1000 R	Scottsbluff
KFGQ 1310 100	WLEA 1340 250	WLEC 1340 250	KGKY 1500 100
Cartor Lake	Presque Isle	WAGM 1420 100	York
KICK 1420 100	WAGM 1420 100	MARYLAND	KBZ 930 500
Cedar Rapids	MARYLAND	Baltimore	NEVADA
KWCR 1420 100 B	KBZ 930 500	Greenville	Las Vegas
Council Bluffs	KBZ 930 500	WBAI 1060 10000 B	KGIX 1420 100
KOIL 1260 1000 B	KBZ 930 500	WCAO 600 250 C	Reno
Decorah	KBZ 930 500	WCBM 1370 100	KOH 1380 500 C
KGCA 1270 100	KBZ 930 500	WCBM 1370 100	NEW HAMPSHIRE
KWLC 1270 100	KBZ 930 500	WCBM 1370 100	Manchester
Des Moines	KBZ 930 500	WCBM 1370 100	WFEA 1430 500 C
KSD 1000 50000 R	KBZ 930 500	WCBM 1370 100	Portsmouth
WOC 1300 50000 R	KBZ 930 500	WCBM 1370 100	WHEB 740 250
WHO	KBZ 930 500	WCBM 1370 100	NEW JERSEY
Iowa City	KBZ 930 500	WCBM 1370 100	Asbury Park
WSUI 880 500	KBZ 930 500	WCBM 1370 100	WCAP 1280 500 A
Marshalltown	KBZ 930 500	WCBM 1370 100	Atlantic City
KFJB 1200 100	KBZ 930 500	WCBM 1370 100	WPG 1100 5000 C
Ottumwa	KBZ 930 500	WCBM 1370 100	Camden
WIAS 1310 100	KBZ 930 500	WCBM 1370 100	WCAM 1280 500
Shenandoah	KBZ 930 500	WCBM 1370 100	Jersey City
KFNE 890 500	KBZ 930 500	WCBM 1370 100	WAAT 940 300
KMA 930 500	KBZ 930 500	WCBM 1370 100	WHOM 1450 250
Sioux City	KBZ 930 500	WCBM 1370 100	Newark
KSCJ 1330 1000 C	KBZ 930 500	WCBM 1370 100	WGCP 1250 1000
Waterloo	KBZ 930 500	WCBM 1370 100	WNEW 1250 1000
WMT 600 500 C	KBZ 930 500	WCBM 1370 100	WOR 710 5000
KANSAS	KBZ 930 500	WCBM 1370 100	Utica
Abilene	KBZ 930 500	WCBM 1370 100	WIBX 1200 100
KFBI 1050 5000	KBZ 930 500	WCBM 1370 100	White Plains
Coffeyville	KBZ 930 500	WCBM 1370 100	WFS 1210 100
KGGE 1010 500	KBZ 930 500	WCBM 1370 100	Woodside
Dodge City	KBZ 930 500	WCBM 1370 100	WWRL 1500 100
KGNO 1340 250	KBZ 930 500	WCBM 1370 100	NORTH CAROLINA
Kansas City	KBZ 930 500	WCBM 1370 100	Asheville
WLBZ 1420 100	KBZ 930 500	WCBM 1370 100	WWNC 570 1000 N
Lawrence	KBZ 930 500	WCBM 1370 100	Charlotte
KFKU 1220 500	KBZ 930 500	WCBM 1370 100	WBT 1080 50000 C
WREN 1220 1000 B	KBZ 930 500	WCBM 1370 100	WSOC 1210 100 N
Manhattan	KBZ 930 500	WCBM 1370 100	Greensboro
KSAC 580 500	KBZ 930 500	WCBM 1370 100	WBIG 1440 500 C
Tepeka	KBZ 930 500	WCBM 1370 100	Raleigh
WIBW 580 1000 C	KBZ 930 500	WCBM 1370 100	WPTF 680 5000 N
Wichita	KBZ 930 500	WCBM 1370 100	Wilmington
KFH 1300 1000 C	KBZ 930 500	WCBM 1370 100	WRAM 1370 100
KENTUCKY	KBZ 930 500	WCBM 1370 100	Winston-Salem
Covington	KBZ 930 500	WCBM 1370 100	WSJS 1310 100 C
WCKY 1490 5000 B	KBZ 930 500	WCBM 1370 100	NORTH DAKOTA
Louisville	KBZ 930 500	WCBM 1370 100	Bismarck
WAVE 940 1000	KBZ 930 500	WCBM 1370 100	KFYR 550 1000 N
WHAS 820 50000 C	KBZ 930 500	WCBM 1370 100	Devils Lake
WLAP 1200 100	KBZ 930 500	WCBM 1370 100	KDLR 1210 100
Paducah	KBZ 930 500	WCBM 1370 100	Fargo
WPAD 1420 100	KBZ 930 500	WCBM 1370 100	WDAY 940 1000 N
LOUISIANA	KBZ 930 500	WCBM 1370 100	Grand Forks
Baton Rouge	KBZ 930 500	WCBM 1370 100	KFJM 1370 100
WJBO 1420 100	KBZ 930 500	WCBM 1370 100	Mandan
Monroe	KBZ 930 500	WCBM 1370 100	KGCU 1240 250
KMLB 1200 100	KBZ 930 500	WCBM 1370 100	Minot
New Orleans	KBZ 930 500	WCBM 1370 100	KLPM 1240 250
WBBX 1200 100	KBZ 930 500	WCBM 1370 100	OHIO
WDSU 1250 1000 C	KBZ 930 500	WCBM 1370 100	Akron
WJBW 1200 100	KBZ 930 500	WCBM 1370 100	WADC 1320 1000 C
WSMB 1320 500 N	KBZ 930 500	WCBM 1370 100	WJW 1210 100
WWL 850 10000	KBZ 930 500	WCBM 1370 100	Elimira
Shreveport	KBZ 930 500	WCBM 1370 100	WESG 1040 1000
KRMD 1310 100	KBZ 930 500	WCBM 1370 100	
KTBS 1450 1000 N	KBZ 930 500	WCBM 1370 100	

INDEX BY LOCATIONS

Freeport	Canton	Grove City	Sioux Falls
WGBB 1210 100	WHBC 1200 100	WSAJ 1310 100	KSOO 1110 1000
Hudson Falls	Cincinnati	Harrisburg	Vermillion
WGLC 1370 100 C	WFBB 1200 100	WBAK 1430 1000	KUSD 890 500
Jamestown	WKRC 550 1000 C	WHP 1430 500 C	Watertown
WOCL 1210 50	WLW 700 50000 N	WKBO 1200 100	KGCR 1210 100
New York	WSAI 1330 1000 R	Hazelton	Yankton
WABC 860 50000 C	WCAH 1450 500 B	WAZL 1420 100	WNAX 570 1000 C
WBNX 1350 250	WHK 1390 1000 C	Johnstown	TENNESSEE
WBOQ 860 50000 R	WJAY 610 500	WJAC 1310 100	WOPI 1500 100
WEAF 660 50000 R	WTAM 1070 50000 R	Lancaster	Chattanooga
WEVD 1300 500	Columbus	WGAL 1310 100	WDDO 1280 1000 C
WFAB 1300 1000	WAIU 640 500	WKJC 1200 100	Jackson
WHN 1010 250	WCAH 1430 500 C	Philadelphia	WTJS 1310 100
WINS 1180 500	WOSU 570 750	WCAU 1170 50000 C	Knoxville
WJZ 760 50000 B	WSEN 1210 100	WDAS 1370 100	WNOX 560 1000 C
WLWL 1100 5000	Dayton	WFI 860 500 R	WROL 1310 100
WMCA 570 500	WSMK 1380 200	WHAT 1310 100	Memphis
WNYC 810 500	Mount Orab	WIP 610 500 C	WHBQ 1370 100
WOV 1130 1000	WHBD 1370 100	WLIT 560 500 R	WMC 780 500 N
WPAW 1010 250	Toledo	WPN 1500 100	WNR 1430 500
WQAO 1010 250	WSPD 1340 1000 C	WRAX 1020 250	WREC 600 500 C
WRNY 1010 250	Youngstown	WTEL 1310 100	Nashville
Rochester	WKBN 570 500 C	Pittsburgh	WLAC 1470 5000 C
WHAM 1150 50000 B	Zanesville	KDKA 980 50000 B	WSM 650 50000 N
WHCC 1430 500 C	WALR 1210 100	KOK 1380 500 C	Springfield
Sarasota Lake	OKLAHOMA	WCAB 1220 1000 R	WSIX 1210 100
WNBZ 1290 50	Eik City	WJAS 1250 1000 C	TEXAS
Schenectady	KASA 1210 100	WWSW 1500 100	Amarillo
WGY 790 50000 R	Enid	Reading	KGRS 1410 1000
Syracuse	KCRC 1370 100	WEU 830 1000	WDAG 1410 1000
WFBL 1360 1000 C	Norman	WIAW 1310 100	Austin
WSYR 570 250 B	WNAF 1010 500	WGBI 880 250	KNOW 1500 100
Troy	Oklahoma City	WQAN 880 250	Beaumont
WHAZ 1300 500	KFXR 1310 100	Silverhaven	KFDM 560 500
Upper Lake	KGFG 1370 100	WNB0 1200 100	Brownsville
WHDL 1420 100	KOMA 1480 5000 C	Sunbury	KWWG 1260 500
Utica	WKY 900 1000 N	Wilkes-Barre	College Station
WIBX 1200 100	Ponca City	WBAX 1210 100	WTAW 1120 500
White Plains	WBBZ 1200 100	WBRE 1310 100	Corpus Christi
WFS 1210 100	Shawnee	WRAC 1370 100	KGFI 1500 100
Woodside	KGFF 1420 100	Willamport	Dallas
WWRL 1500 100	Tulsa	WRAC 1370 100	KRLD 1040 10000 C
NORTH CAROLINA	KTUL 1400 250	YORK	WFAA 800 50000 N
Asheville	KVOO 1140 25000 N	WORK 1000 1000	WRR 1280 500 C
WWNC 570 1000 N	OREGON	PHILIPPINES	Dublin
Charlotte	Corvallis	Manila	KFPL 1310 100
WBT 1080 50000 C	KOAC 550 1000	KZEG 618.5 1000	El Paso
WSOC 1210 100 N	Eugene	KZRM 618.5 50000	KTSM 1310 100
Greensboro	KORE 1420 100	PORTO RICO	WDAH 1310 100
WBIG 1440 500 C	Klamath Falls	San Juan	Fort Worth
Raleigh	KFJI 1210 100	WKAQ 1240 1000	KFJZ 1370 100
WPTF 680 5000 N	Marshfield	 1290 500	KTAT 1240 1000 C
Wilmington	KOOS 1370 100	RHODE ISLAND	WBAP 800 50000 N
WRAM 1370 100	KMED 1310 100	Providence	KLUF 1370 100
Winston-Salem	KALE 1300 500 C	WEAN 780 500 C	Greenville
WSJS 1310 100 C	KBPS 1420 100	WJAR 890 500 R	KFPM 1310 15
NORTH DAKOTA	KEX 1180 5000 N	WPRO 1210 100	Harrington
Bismarck	KFJR 1300 500	SOUTH CAROLINA	KRGV 1260 500
KFYR 550 1000 N	KGW 620 1000 N	Charleston	Houston
Devils Lake	KOIN 940 1000 C	WCSC 1360 500	KPRC 920 1000 N
KDLR 1210 100	KWJJ 1060 500	Columbia	KTRH 1120 1000 C
Fargo	KXL 1420 100	WIS 1010 500 N	KXYZ 1440 250
WDAY 940 1000 N	PENNSYLVANIA	Greenville	Lubbock
Grand Forks	Allentown	WFBC 1200 100	KFYO 1310 100
KFJM 1370 100	WBCA 1440 250	Spartanburg	San Angelo
Mandan	WSAN 1440 250	WSPA 1420 100	KGKL 1370 100
KGCU 1240 250	Altoona	SOUTH DAKOTA	San Antonio
Minot	WFBG 1310 100	Brookings	KABC 1420 100
KLPM 1240 250	Carbondale	KFDY 550 500	KMAC 1370 100
OHIO	WNBW 1200 10	Huron	KONO 1370 100
Akron	Erie	KGDI 1340 250	KTSA 1290 1000 C
WADC 1320 1000 C	WLBW 1260 500 C	Pierre	WOAI 1190 50000 N
WJW 1210 100	Glenview	KGFX 630 200	Tyler
	WIBG 970 100	Rapid City	KGKB 1500 100
		WCAT 1200 100	Waco
			WACO 1420 100 C

INDEX BY LOCATIONS

Wichita Falls
KGKO 570 250

UTAH
Ogden
KLO 1400 500 C
Salt Lake City
KDYL 1290 1000 N
KSL 1130 50000 C

VERMONT
Burlington
WCAX 1200 100
Rutland
WSYB 1500 100
St. Albans
WQDM 1370 100
Springfield
WNBX 1260 250
Waterbury
WDEV 550 500

VIRGINIA
Arlington
NAA 690 1000
Charlottesville
WEHC 1350 500
Danville
WBTM 1370 100
Lynchburg
WLVA 1370 100
Newport News
WGH 1310 100
Norfolk
WTAR 780 500 C
Petersburg
WPHR 1200 100
Richmond
WBBL 1210 100
WMBG 1210 100 C
WRVA 1110 5000 N
Roanoke
WDBJ 930 250 C
WRBX 1410 250

WASHINGTON
Aberdeen
KXRO 1310 100
Bellingham
KVOS 1200 100
Everett
KFBL 1370 50
Olympia
KGY 1210 100
Pullman
KWSC 1220 1000
Seattle
KJR 970 5000 N
KOL 1270 1000 C
KOMO 920 1000 N
KPCB 650 100
KRSC 1120 100
KTVL 1220 1000
KWL 1370 100
KXA 760 250
Spokane
KFIO 1120 100
KFPY 1340 1000 C
KGA 1470 5000 N
KHQ 590 1000 N
Tacoma
KMO 1330 250
KVI 570 500 C
Walla Walla
KUJ 1370 100
Wenatchee
KPQ 1500 100
Yakima
KIT 1310 100

WEST VIRGINIA
Bluefield
WHIS 1410 250
Charleston
WOBW 580 750
Fairmont
WMMN 890 250
Huntington
WSAZ 1190 1000
Wheeling
WWVA 1160 5000 C

WISCONSIN
Eau Claire
WTAQ 1330 1000 C
Fond du Lac
KFIZ 1420 100
Green Bay
WBHY 1200 100
Janesville
WCLQ 1200 100
LaCrosse
WKBH 1380 1000 C
Madison
WHA 940 1000
WIBA 1280 500 N
Manitowoc
WOMT 1210 100
Milwaukee
WHAD 1120 250 C
WISN 1120 250 C
WTMJ 620 1000 N
Poynette
WIBU 1210 100
Racine
WRJN 1370 100
Sheboygan
WHBL 1410 500
Stevens Point
WLBL 900 2500
Superior
WEBE 1290 1000 N
WYOMING
Casper
KDFN 1440 500

CANADA
ALBERTA
Calgary
CFAC 930 100
CFCN 1030 10000 F
CJCL 690 100
Edmonton
CFPT 1120 100
CJCA 730 1000 F
CKUA 580 500
Lehridge
CJOC 840 100 F
BRT. COLUMBIA
Chilliwack
CHWK 780 100 F
Kamloops
CFJC 1310 100 F
Kelowna
CKOV 1210 50 F
Trail
CJAT 1200 50
Vancouver
CJOR 600 500
CKCD 1010 100
CKFC 1410 50
CKMO 1410 100
CKWX 1010 100
CRCV 1100 1000 F
Victoria
CFCT 1450 50
MANITOBA
Brandon
CKX 1450 500 F

Middlechurch
CJRC 1390 100
Winnipeg
CKY 910 5000 F

NEW BRUNSWICK
Fredericton
CFNB 1030 500 F
St. John
CFBO 1210 100 F
CHPR 1370 100

NOVA SCOTIA
Gloucester
VAS 685 2000
Halifax
CHNS 1050 500 F
Sydney
CJCB 880 50 F
Wolfville
CKIC 1010 50
Yarmouth
CJLS 1310 100

ONTARIO
Brantford
CKPC 930 100 F
10-BQ 1200 15
Chatham
CFCO 600 50 F
Cobalt
CKMC 1210 50
Fort William
CKPR 780 50 F
Hamilton
CHML 1010 50
CKOC 1120 500 F
Kingston
CFRC 1510 100
Kirkland Lake
CJKL 1310 100
Kitchener
CKCR 1510 100
London
CFPL 730 100 F
North Bay
CFCH 930 100 F
Ottawa
CKCO 1010 100
CRCO 880 1000 F
Prescott
CFLC 930 100
St. Catharines
CKTB 1200 100
Stratford
10-AK 1200 15
Sudbury
CJCS 780 500
Timmins
CKGB 1420 100
Toronto
CFRB 690 10000 C
CKCL 580 100
CRCT 960 5000 N
CKNC 1030 100 F
Windsor
CKLW 840 5000 C
Wingham
10-BP 1200 15

PRINCE EDWARD ISLAND
Charlottetown
CFY 630 500 F
CHCK 1410 50
Summerside
CHGS 1120 50 F

QUEBEC
Chicoutimi
CRCS 1500 100 F
Hull
CKCH 1210 100 F

Montmagny
VE9EK 1195 10

Montreal
CFCF 600 500 N
CHLP 1120 100
CKAC 730 5000 C
CRCM 910 5000 F

New Carlisle
CHNC 1210 100 F
Quebec
CHRC 930 100 F
CKCV 1310 50

SASKATCHEWAN
Canora
10-BU 1200 15
Fleming
CJRW 540 500 F
Moose Jaw
CHAB 1200 100
CJRM 540 1000 F
Prince Albert
CKBI 1210 100
Regina
CHWC 1010 500 F
CKCK 1010 500 F
Saskatoon
CFQC 1230 500 F
Yorkton
CJGX 630 500 F

NEWFOUNDLAND
St. John's
VOAC 800 40
VOAS 810 100
VOGY 950 75
VOKW 1085 30
VONF 1195 400
VOWR 900 500

MIQUELON
St. Pierre
FQN 572 250

CENTRAL AMERICA
COSTA RICA
Cartago
TIFS 1441 7.5
TIGA 1014 30
San Jose
TICR 912 75
TIEA 833 7.5
TIEP 1450 7.5
TIFB 714 30
TIGP 800 75
TIRCA 1100 500
TISO 550 250
TITV 999 7.5
TIVL 869 30
TIXA 614 7.5

GUATEMALA
Guatemala City
TGW 1350 500
TGX 1380 75

EL SALVADOR
San Salvador
RUS 664 500

MEXICO
AGUASCALIENTES
Aguascalientes
XFC 805 350
BAJA CALIFORNIA
Mexicali
XEAQ 560 100
Tijuana
XEAE 980 800
XEOK 757 5000

CHIHUAHUA
Chihuahua
XEFI 1260 250
Juarez
XEFV 1400 100
XEJ 1015 500

COAHUILA
Piedras Negras
XEPN 585 75000
Saltillo
XEL 1000 40
Torreón
XETB 1380 125
Villa Acuna
XER- 735 150000
XEF

D. F.
Mexico City
XEA1 1090 100
XEB 1030 10000
XEFA 1250 500
XEFQ 1085 500
XEFZ 1370 100
XEK 990 100
XEN 711 1000
XEO 940 5000
XEP 780 500
XETW 830 500
XETZ 1210 50
XEWV 1100 250
XEW 010 5000
XEYZ 760 10000
XFG 638 2000
XFO 940 5000
XFX 840 500

Toluca
XEC 1000 50

HIDALGO
Pachuca
XETU 890 100

JALISCO
Guadalajara
XEA 1000 250
XED 1155 500

MICHOACAN
Morelia
XEI 1310 250

NUEVO LEON
Monterrey
XEFB 1315 100
XEFJ 1000 100
XEH 1132 250
XET 690 500
XEX 630 50

PUEBLA
Puebla
XETH 860 100

QUERETARO
Queretaro
XEFS 1000 40
SAN LUIS POTOSI
San Luis Potosi
XEAC 1295 100

SONORA
Nogales
XEA 990 750
TAMAULIPAS
Nuevo Laredo
XEAB 1450 7.5
XEFE 985 100
XENT 1115 150000
Reynosa
XEA 965 10000
Tampico
XEFW 1280 70
XES 1020 250

VERACRUZ
Jalapa
XFB 1290 1000
Veracruz
XEU 1010 100

YUCATAN
Merida
XEFC 1050 100
XEY 546.8 10
XEZ 630 500

WEST INDIES
CUBA
Calbarien
CMHD 945.5 500
Camaguey
CMJC 1382 150
CMJE 1170 50
CMJF 910 200

CMJG 1050 50
CMJK 790 500
CMJL 960 50
CMJN 1240 50

Cardenas
CMGE 1375 30

Ciego de Avila
CMJH 1150 50
CMJI 1335 45
CMJO 1010 50

Cienfuegos
CMHJ 1125 60
CMHL 1290 20
CMHW 1200 100

Colon
CMGA 834 100

Cruces
CMHK 1225 50

Guantanamo
CMKJ 1300 20

Havana
CMAF 680 1000
CMBC 1270 150
CMBD 965 250
CMBG 1052 225
CMBJ 1140 500
CMBK 1485 15
CMBL 1445 200
CMBN 1185 150
CMBS 765 200
CMBW 1140 600
CMBY 1230 250
CMCZ 1005 150
CMC 835 500
CMCA 1230 150
CMCB 1052 150
CMCD 915 500
CMCF 873 250
CMCH 1410 50
CMCJ 1180 500
CMCN 1410 15
CMCN 1375 250
CMCP 1270 150
CMCQ 775 1000
CMCR 1375 150
CMCU 1100 500

CMCW 965 150
CMCY 1320 500
CMDD 588 150
CMDE 925 150
CMK 730 5000
CMQ 630 500
CMW 595 1400
CMX 875 1000

Matanzas
CMGB 1205 30
CMGC 820 30
CMGF 971.5 100
CMGH 1040 15

Moron
CMJP 1360 75

Pinar del Rio
CMAB 1249 20

Santa Clara
CMHI 1037 250

Santiago
CMKC 1034 150

DOMINICAN REPUBLIC
San Pedro de Macoris
HH 1395 15
Santo Domingo
HJ 1195 15
HIX 580 1500
HIZ 1300 10

HAITI
Port-au-Prince
HHK 920 1000

SOUTH AMERICA
ARGENTINA
Buenos Aires
LR5 830 20000

COLOMBIA
Bogota
HJN 681 500

VENEZUELA
Caracas
YV1BC 960 5000
YV2BC 882 100
YV3BC 1200 1000

The harmonious Morin Sisters, left to right, Marge, Pauline and Evelyn, heard on the Sealed Air Sideshow over an NBC (Blue) network on Mondays at 8:00 p. m. EST. These sisters hail from Indiana, but got their first real start over WLW. Paul White man heard them there and advised them to try their fortunes at the Chicago NBC studios, where they immediately clicked.



INDEX BY CALL LETTERS

CFAC 830 100 Calgary, Alta. Calgary Herald.	CJOR 600 500 Vancouver, B. C. G. O. Chandler.
CFBO 1210 100 St. John, N. B. C. A. Munro, Ltd.	CJRC 1390 100 Middlechurch, Man. James Richardson & Sons.
CFCF 600 500 Montreal, Que. Canadian Marconi Co.	CJRM 540 1000 Moose Jaw, Sask. James Richardson & Sons, Ltd.
CFCH 930 100 North Bay, Ont. Northern Broadcasting Co., Ltd.	CJRW 540 500 Fleming, Sask. James Richardson & Sons, Ltd.
CFCH 1030 10000 Calgary, Alta. Voice of the Prairies, Ltd.	CKAC 730 5000 Montreal, Que. LaPresse Publishing Co., Ltd.
CFGO 000 50 Chatham, Ont. John Beardsall.	CKBI 1210 100 Prince Albert, Sask. Prince Albert Radio Club.
CFGT 1450 50 Victoria, B. C. Victoria Broadcasting Assn.	CKGD 1010 100 Vancouver, B. C. Vancouver Daily Province.
CFGY 630 500 Charlottetown, P. E. I. Island Radio Broadcasting Co., Ltd.	CKH 1210 100 Hull, Que. Dr. J. L. Chabot.
CFJC 1310 100 Kamloops, B. C. Review Publishing Co., Ltd.	CKCK 1010 500 Regina, Sask. Leader-Post, Ltd.
CFLC 630 100 Prescott, Ont. Radio Assn. of Prescott.	SKGL 500 100 Toronto, Ont. Dominion Battery Co., Ltd.
CFNB 1030 500 Fredericton, N. B. James S. Nell & Sons, Ltd.	CKGO 1010 100 Ottawa, Ont. Dr. G. M. Geldert.
CFPL 730 100 London, Ont. Free Press & Printing Co., Ltd.	CKGR 1510 100 Kitchener, Ont. William C. Mitchell and G. Liddle.
CFQC 1230 500 Saskatoon, Sask. Electric Shop, Ltd.	CKGV 1510 50 Quebec, Que. Vandry, Inc.
CFRB 600 10000 Toronto, Ont. Canadian Radio Corp., Ltd.	CKFC 1410 50 Vancouver, B. C. Radio Service Engineers, Ltd.
CFRC 1510 100 Kingston, Ont. Queens University.	CKGB 1420 100 Timmins, Ont. R. H. Thompson.
CFTF 1120 100 Edmonton, Alta. Taylor & Pearson, Ltd.	CKIC 1010 50 Wolfville, N. S. Acadia University.
CHAB 1200 100 Moose Jaw, Sask. Moose Jaw Radio Assn.	CKLW 840 5000 Windsor, Ont. Western Ontario Broadcasting Co., Ltd.
CHCK 1310 50 Charlottetown, P. E. I. J. A. Gesner.	CKMC 1210 50 Cobalt, Ont. R. L. MacAdam.
CHGS 1120 50 Summerside, P. E. I. R. T. Holman, Ltd.	CKMO 1410 100 Vancouver, B. C. Sprott-Shaw Radio Co.
CHLP 1120 100 Montreal, Que. La Patrie Publishing Co., Ltd.	CKNC 1030 100 Toronto, Ont. Canadian National Carbon Co., Ltd.
CHML 1010 50 Hamilton, Ont. Maple Leaf Radio Co., Ltd.	CKOC 1120 500 Hamilton, Ont. Westworth Radio Broadcasting Co., Ltd.
CHNC 1210 100 New Carlisle, Que. Dr. Charles Houde.	CKOV 1210 50 Kellewina, B. C. Okanagan Broadcasters, Ltd., Box 243.
CHNS 1050 500 Halifax, N. S. Maritime Broadcasting Co., Ltd.	CKPC 930 100 Brantford, Ont. Cyrus Dolph.
CHPR 1370 100 St. John, N. B. H. P. Robinson.	CKPR 780 50 Fort William, Ont. Dougall Motor Co., Ltd.
CHRC 930 100 Quebec, Que. CHRC, Ltd.	CKTB 1200 100 St. Catharines, Ont. E. T. Sandell.
CHWC 1010 500 Regina, Sask. R. H. Williams & Sons, Ltd.	CKUA 530 500 Edmonton, Alta. University of Alberta.
CHWK 780 100 Chilliwack, B. C. Chilliwack Broadcasting Co., Ltd.	CKWX 1010 100 Vancouver, B. C. Western Broadcasting Co., Ltd.
CJAT 1200 50 Trail, B. C. Trail Amateur Radio Assn.	CKX 1450 500 Brandon, Man. Manitoba Telephone System.
CJCA 730 1000 Edmonton, Alta. Edmonton Journal, Ltd.	CKY 910 500 Winnipeg, Man. Manitoba Telephone System.
CJCB 830 50 Sydney, N. S. Nathanson's Radio Headquarters.	CMAB 1240 20 Pinar del Rio, Cuba. Jose Silveira, Marti No. 101.
CJCC 630 100 Calgary, Alta. Albertan Publishing Co., Ltd.	CMAC 630 1000 Havana, Cuba. International Broadcasting Co., Miramar.
CJCS 780 500 Sudbury, Ont. George McLeod Coates.	CMBC 1270 150 Havana, Cuba. Domingo Fernandez, Maximo Gomes No. 139.
CJGX 930 500 Yorkton, Sask. Winnipeg Grain Exchange.	CMBD 935 250 Havana, Cuba. Luis Perez Garcia, Enamorados y Flores.
CKL 1310 100 Kirkland Lake, Ont. O. J. Thorpe & Branchaud.	CMBG 1062 225 Havana, Cuba. John L. Stowers, Hospital No. 100.
CJLS 1310 100 Yarmouth, N. S. Laurie L. Smith.	CMBJ 1140 500 Havana, Cuba. Emilio Perez, Consulado y Virtudes.
CJOC 640 100 Lethbridge, Alta. H. R. Carson, Ltd.	CMBK 1485 15 Havana, Cuba. Alberto Alveres, Paula y Oficio.

INDEX BY CALL LETTERS

CMBL 1445 200 Havana, Cuba. Julio C. Hidalgo, Vedado.	CMJE 1170 50 Camaguey, Cuba. Manuel Fernandez, Plaza de Maceo.
CMBN 1105 150 Havana, Cuba. G. de Sequeira, Agrimonte No. 32.	CMJF 910 200 Camaguey, Cuba. John L. Stowers, Hotel Plaza.
CMBB 785 200 Havana, Cuba. Enrique Artalejo, Calzada y H. St.	CMJG 1050 50 Camaguey, Cuba. Jose Antonio Lefran, Martires 133.
CMBW 1140 600 Havana, Cuba. Alvares, Morla y Cia, Obrapia No. 13.	CMJH 1150 50 Ciego de Avila, Cuba. Luis Marauri Mendosa.
CMBY 1230 250 Havana, Cuba. Callejas-Estefani, Principe No. 33.	CMJI 1335 45 Ciego de Avila, Cuba. Gilberto Gessa Lopez, Independencia 95.
CMBZ 1005 150 Havana, Cuba. Manuel y G. Salas, San Rafael No. 14.	CMJK 700 500 Camaguey, Cuba. Compania Cubana Nacional de Radio S. A.
CMC 835 500 Havana, Cuba. Radio Corp. of Cuba.	CMJL 900 50 Camaguey, Cuba. Enrique Artalejo, Cuba No. 27.
CMCA 1230 150 Havana, Cuba. Manuel Cruz, Ave. de Italia No. 102.	CMJN 1240 50 Camaguey, Cuba. Ernesto de Ugarriz, Martires 11.
CMCB 1052 150 Havana, Cuba. Metropolitan-Radio de Cuba.	CMJO 1010 50 Ciego de Avila, Cuba. Jose M. Roy, C. Central & Maceo.
CMCD 815 500 Havana, Cuba. Angel Bortemati.	CMJP 1350 75 Meron, Cuba. Cesar Canall, Callejas No. 28.
CMCF 873 250 Havana, Cuba. Raul Karmann.	CMK 730 5000 Havana, Cuba. National Broadcasting Co. of Cuba.
CMCH 1410 50 Havana, Cuba. Wifredo y Humberto Fontanella Sanchez.	CMKC 1034 150 Santiago, Cuba. Pinol Batlle y Co.
CMCJ 1130 500 Havana, Cuba. Rafael Rodriguez, Esteves No. 4.	CMKJ 1300 20 Guantanamo, Cuba. Luis Morlote, East Giro 11.
CMCM 1410 15 Havana, Cuba. Aurelio Balino, Belas Coain No. 639.	CMQ 930 500 Havana, Cuba. Jose Fernandez, 25 Numero 445.
CMCN 1375 250 Havana, Cuba. Antonio Gharad, Reina y Ave. Buen Retiro.	CMW 595 1400 Havana, Cuba. Troncoso y Gil, Paseo de Marti 103.
CMCP 1270 150 Havana, Cuba. Jose A. Yanis.	CMX 875 1000 Havana, Cuba. Casa "Lavin," Ave. de la Republica 99A.
CMCQ 775 1000 Havana, Cuba. Andres Martinez, Vista Alegre No. 80.	CMY 910 5000 Montreal, Que. Canadian Radio Broadcasting Commission.
CMCR 1375 150 Havana, Cuba. Aurelio Hernandez.	CMZ 880 1000 Ottawa, Ont. Canadian Radio Broadcasting Commission.
CMCU 1100 500 Havana, Cuba. Jorge Garcia Serra.	CMCS 1500 100 Chicoutimi, Que. Canadian Marconi Co., Ltd.
CMCW 905 150 Havana, Cuba. Vilarino y Cervantes.	CMCT 900 5000 Toronto, Ont. Canadian Radio Broadcasting Commission.
CMCY 1325 500 Havana, Cuba. Manuel D. Autran, Ave. de la Pdt. e. 215.	CMCV 1100 1000 Vancouver, B. C. Canadian Radio Broadcasting Commission.
CMDD 535 150 Havana, Cuba. G. de Sequeira.	FQN 572 250 St. Pierre, Mig.
CMDE 825 150 Havana, Cuba. Radio Aerial Ad.	HHK 020 1000 Port-au-Prince, Haiti. Haitian Government.
CMGA 834 100 Colon, Cuba. L. Valdes Figueroa, Marti No. 10.	HHH 1385 15 San Pedro de M., D. R. Domingo Dominguez.
CMGB 1295 30 Matanzas, Cuba. Jose Anorga, Magdalena No. 1.	HJJ 1105 15 Santo Domingo, D. R. Tuto Baes, Hostes 34.
CMGC 820 30 Matanzas, Cuba. Oscar S. Mechoso, Independencia No. 58.	HIX 580 1500 Santo Domingo, D. R. J. R. Saladin, Director General.
CMGE 1375 30 Cardenas, Cuba. Genaro Beter, Céspedes No. 180.	HIZ 1300 10 Santo Domingo, D. R. Abbes and Garcia.
CMGF 971.5 100 Matanzas, Cuba. Bernabe R. de la Torre.	HJN 881 500 Bogota, Colombia. Government of Colombia, National Library.
CMGH 1040 15 Matanzas, Cuba. Octavio y Julio Alvares.	KABC 1420 100 San Antonio, Texas. Alamo Broadcasting Co., Inc.
CMHD 945.5 500 Calbarien, Cuba. Manuel Alvares, M. Escobar 17.	KALE 1300 500 Portland, Ore. Kale, Inc., New Heathman Hotel.
CMHI 1037 250 Santa Clara, Cuba. Lavia y Pas.	KARK 630 250 Little Rock, Ark. Arkansas Radio & Equipment Co.
CMHJ 1125 50 Cienfuegos, Cuba. Victorino Lopez Hontanon.	KASA 1210 100 Elk City, Okla. E. M. Woody, Casa Grande Hotel.
CMHK 1225 50 Cienfuegos, Cuba. Virgilio Villaneuva Fernandez.	KBPS 1420 100 Portland, Ore. Benson Polytechnic School.
CMHL 1200 20 Cienfuegos, Cuba. Oscar Zayas, San Carlos 143.	KBTM 1200 100 Jonesboro, Ark. Jay P. Beard.
CMHW 1200 100 Cienfuegos, Cuba. San Carlos No. 106.	KCMC 1420 100 Texarkana, Ark. M. P. Mima, Box 865.
CMJO 1332 150 Camaguey, Cuba. Feliciano Isaac, Cameros y G. Gomes.	KCRC 1370 100 Enid, Okla. Enid Radiophone Co.

INDEX BY CALL LETTERS

KCRJ 1310 100 Jerome, Ariz.
Chas. C. Robinson, Drawer D.

KDB 1500 100 Santa Barbara, Calif.
Santa Barbara Broadcasters, Ltd.

KDFN 1440 500 Casper, Wyo.
Donald Lewis Hathaway.

KDKA 990 5000 Pittsburgh, Pa.
Westinghouse Electric & Mfg. Co.

KDLR 1210 100 Devils Lake, N. D.
KDLR, Inc., 1025 3rd Street.

KDYL 1200 1000 Salt Lake City, Utah.
Intermountain Broadcasting Corp.

KECA 1430 1000 Los Angeles, Calif.
Earle C. Anthony, Inc.

KELW 780 500 Burbank, Calif.
Magnolia Park, Ltd., 3702 Magnolia

KERN 1200 100 Bakersfield, Calif.
Bee Bakersfield Broadcasting Co.

KEX 1190 5000 Portland, Ore.
National Broadcasting Co.

KFAB 770 5000 Lincoln, Neb.
KFAB Broadcasting Co.

KFAC 1300 1000 Los Angeles, Calif.
E. L. Cord, 645 So. Mariposa.

KFBB 1280 1000 Great Falls, Mont.
Buttrey Broadcast, Inc.

KFBI 1050 5000 Abilene, Kans.
Farmers & Bankers Life Ins. Co.

KFBK 1310 100 Sacramento, Calif.
James McClatchy Publishing Co.

KFBL 1370 50 Everett, Wash.
Leese Bros., 2814 Rucker Ave.

KFDM 580 500 Beaumont, Texas.
Sabine Broadcasting Co.

KFDY 550 500 Brookings, S. D.
South Dakota State College.

KFEL 920 500 Denver, Colo.
Eugene P. O'Fallon, Inc.

KFEQ 580 2500 St. Joseph, Mo.
Scroggin & Co. Bank

KFGQ 1310 100 Boone, Iowa.
Boone Biblical College.

KFH 1300 1000 Wichita, Kans.
Radio Station KFH Co.

KFI 840 50000 Los Angeles, Calif.
Earle C. Anthony, Inc.

KFIO 1120 100 Spokane, Wash.
Spokane Broadcasting Corp.

KFIZ 1420 100 Fond du Lac, Wis.
Reporter Printing Co.

KFJB 1200 100 Marshalltown, Iowa.
Marshall Electric Co.

KFJI 1210 100 Klamath Falls, Ora.
KFJI Broadcasters, Inc., Willard Hotel.

KFJM 1370 100 Grand Forks, N. D.
University of North Dakota.

KFJR 1300 500 Portland, Ore.
Ashley C. Dixon-KFJR, Inc.

KFJZ 1370 100 Fort Worth, Texas.
Fort Worth Broadcasters, Inc.

KFA 880 500 Greeley, Colo.
Mid-Western Radio Corp.

KFKU 1220 500 Lawrence, Kans.
University of Kansas.

KFLV 1410 500 Rockford, Ill.
Rockford Broadcasters, Inc.

KFNF 890 500 Shenandoah, Iowa.
Henry Field Co.

KFOR 1210 100 Lincoln, Neb.
Howard Shuman

KFOX 1250 1000 Long Beach, Calif.
Nicholas & Warinner, Inc.

KFPL 1310 100 Dublin, Texas.
C. C. Baxter, Box 176

KFPM 1310 15 Greenville, Texas.
New Furniture Co.

KFPW 1210 100 Fort Smith, Ark.
Southwestern Hotel Co.

KFPY 1340 1000 Spokane, Wash.
Symons Broadcasting Co.

KFQD 900 250 Anchorage, Alaska
Anchorage Radio Club, Inc.

KFRC 810 1000 San Francisco, Calif.
Don Lee, Inc.

KFRU 930 500 Columbia, Mo.
KFRU, Inc., 9th and Elm Sts.

KFSB 900 1000 San Diego, Calif.
Airfan Radio Corp., Ltd.

KFSQ 1120 500 Los Angeles, Calif.
Echo Park Evangelistic Assn.

KFUO 550 500 St. Louis, Mo.
Evangelical Lutheran Church.

KFVD 1000 250 Los Angeles, Calif.
E. L. Cord, 645 S. Mariposa.

KFVS 1210 100 Cape Girardeau, Mo.
Oscar C. Hirsch, Box 275.

KFWB 950 1000 Hollywood, Calif.
Warner Bros. Motion Pictures, Inc.

KFWI 930 500 San Francisco, Calif.
Radio Entertainments, Ltd.

KFXD 1200 100 Nampa, Idaho.
Frank E. Hurt, 1024 12th Ave., S.

KFXF 920 500 Denver, Colo.
Colorado Radio Corp.

KFXJ 1200 100 Grand Jct., Colo.
Western Slope Broadcasting Co.

KFXM 1210 100 San Bernardino, Calif.
Lee Bros. Broadcasting Co.

KFXR 1310 100 Oklahoma City, Okla.
Exchange Avenue Baptist Church.

KFYO 1310 100 Lubbock, Texas.
Kirksey Bros., Hotel Lubbock.

KFYR 550 1000 Bismarck, N. D.
Mayer Broadcasting Co.

KGA 1470 5000 Spokane, Wash.
Northwest Broadcasting Co., Inc.

KGAR 1370 100 Tucson, Ariz.
Tucson Motor Service Co.

KGB 1330 1000 San Diego, Calif.
Don Lee Broadcasting System

KGBU 900 500 Ketchikan, Alaska.
Alaska Radio & Service Co., Inc.

KGBX 1310 100 Springfield, Mo.
KGBX, Inc.

KGBZ 930 500 Yerk, Neb.
KGBZ Broadcasting Co., 715 Grant Ave.

KGCA 1270 100 Decorah, Iowa
Charles W. Greenley

KGCR 1210 100 Watertown, S. D.
Greater Kampeska Radio Corp.

KGCU 1240 250 Mandan, N. D.
Mandan Radio Assn.

KGCX 1310 100 Wolf Point, Mont.
E. E. Krebsbach.

KGDE 1200 100 Fergus Falls, Minn.
C. L. Jaren.

KGDM 1100 250 Stockton, Calif.
E. F. Peffer, 42 S. Calif. St.

KGDY 1340 250 Huron, S. D.
Voice of S. D., Inc., 347 Dakota Ave.

KGEK 1200 100 Yuma, Colo.
Elmer G. Beehler, 109 W. 2nd St.

KGER 1360 1000 Long Beach, Calif.
Consolidated Broadcasting Co.

INDEX BY CALL LETTERS

KGEZ 1310 100 Kalispell, Mont.
Donald C. Treloar, Box 1.

KGFF 1420 100 Shawnee, Okla.
KGFF Broadcasting Co., Inc.

KGFG 1370 100 Oklahoma City, Okla.
Oklahoma Broadcasting Co., 1113 N. Broadway

KGFI 1500 100 Corpus Christi, Texas.
Eagle Broadcasting Co., Inc.

KGFJ 1200 100 Los Angeles, Calif.
Ben S. McGlashan, 1417 S. Figueroa.

KGFK 1500 100 Moorhead, Minn.
Red River Broadcasting Co., Inc.

KGFL 1370 100 Roswell, N. M.
KGFL, Inc., 507 N. Main St.

KGFV 1310 100 Kearney, Neb.
Central Nebraska Broadcasting Corp.

KGFX 830 200 Pierre, S. D.
Dana McNeil, 510 Summit Ave.

KGGC 1420 100 San Francisco, Calif.
Golden Gate Broadcasting Co.

KGGF 1010 500 Coffeyville, Kans.
Hugh J. Powell and Stanley Plaza.

KGGM 1230 250 Albuquerque, N. M.
New Mexico Broadcasting Co.

KGHF 1320 250 Pueblo, Colo.
C. P. Ritchie & Geo. J. Ikeman

KGHI 1200 100 Little Rock, Ark.
Lloyd Judd Co., Marion Hotel.

KGHL 050 1000 Billings, Mont.
Northwestern Auto Supply Co.

KGIR 1380 500 Butte, Mont.
KGR, Inc., 121 W. Broadway.

KGIW 1420 100 Alamosa, Colo.
Leonard E. Wilson, 326 N. Commercial

KGIX 1420 100 Las Vegas, Nev.
J. M. Heaton, Box 555.

KGKB 1500 100 Tyler, Texas.
East Texas Broadcasting Co.

KGKL 1370 100 San Angelo, Texas.
KGKL, Inc., St. Angelo Hotel.

KGKO 570 250 Wichita Falls, Texas.
Wichita Falls Broadcasting Co.

KGKY 1500 100 Scottsbluff, Neb.
Hilliard Co., Inc., 1517 1/2 Broadway.

KGMB 1320 250 Honolulu, T. H.
Honolulu Broadcasting Co., 119 Merchant St.

KGNF 1430 500 North Platte, Neb.
Great Plains Broadcasting Co.

KGNO 1340 250 Dodge City, Kans.
KGNO Broadcasting Station

KGO 780 7500 San Francisco, Calif.
National Broadcasting Co., Inc.

KGRS 1410 1000 Amarillo, Texas.
E. B. Glah, Bellaire Park.

KGU 750 2500 Honolulu, T. H.
Advertiser Publishing Co., Ltd.

KGYO 1200 100 Missoula, Mont.
Mosby, Inc., 240 N. Higgins.

KGW 820 1000 Portland, Ore.
Oregonian Publishing Co.

KGY 1210 100 Olympia, Wash.
KGY, Inc., 11th and Capitol Way.

KHJ 900 1000 Los Angeles, Calif.
Don Lee Broadcasting System.

KHQ 590 1000 Spokane, Wash.
Louis Wasmmer, Inc.

KICA 1370 100 Clevis, N. M.
Southwest Broadcasting Co.

KICK 1420 100 Carter Lake, Iowa.
Red Oak Radio Corp.

KID 1320 250 Idaho Falls, Idaho.
KID Broadcasting Co., Inc.

KIDO 1350 1000 Boise, Idaho.
C. G. Phillips & Frank L. Hill.

KIDW 1420 100 Lamar, Colo.
Lamar Broadcasting Co., Box 688

KIEM 1210 100 Eureka, Calif.
Harold H. Hanseth, Vance Hotel.

KIEV 850 100 Glendale, Calif.
Cannon System, Ltd., Glendale Hotel.

KIFH 1310 100 Juneau, Alaska
Juneau Broadcasting Co.

KIT 1310 100 Yakima, Wash.
Valley Broadcasters, Inc.

KJBS 1070 100 San Francisco, Calif.
Julius Brunton & Sons Co.

KJB 970 5000 Seattle, Wash.
Fishers Blend Station, Inc.

KLCN 1290 100 Blytheville, Ark.
C. L. Lintzenleh, Main and Division St.

KLO 1400 500 Ogden, Utah.
Interstate Broadcasting Co.

KLPM 1240 250 Minot, N. D.
John B. Cooley.

KLRA 1390 1000 Little Rock, Ark.
Arkansas Broadcasting Co.

KLS 1440 250 Oakland, Calif.
Warner Bros., 2201 Telegraph Ave.

KLUF 1370 100 Galveston, Texas.
Geo. R. Clough, 3327 Ave. F.

KLX 880 1000 Oakland, Calif.
Tribune Building Co.

KLZ 580 1000 Denver, Colo.
Reynolds Radio Co., Inc.

KMA 930 500 Shenandoah, Iowa.
Earl E. May Seed & Nursery Co.

KMAC 1370 100 San Antonio, Texas.
W. W. McAllister, Blue Bonnet Hotel.

KMBC 950 1000 Kansas City, Mo.
Midland Broadcasting Co.

KMED 1310 100 Medford, Ore.
Mrs. W. J. Virgin, Sparta Bldg.

KMJ 580 500 Fresno, Calif.
James McClatchy Co.

KMLB 1200 100 Menzies, La.
Liners Broadcasting Station, Inc.

KMMJ 740 1000 Clay Center, Neb.
The M. M. Johnson Co.

KMO 1330 250 Tacoma, Wash.
KMO, Inc., Hotel Winthrop.

KMOX 1090 5000 St. Louis, Mo.
The Voice of St. Louis, Inc.

KMPG 710 500 Beverly Hills, Calif.
Beverly Hills Broadcasting Corp.

KMTR 570 500 Hollywood, Calif.
KMTR Radio Corp., 915 N. Formosa Ave.

KNOW 1500 100 Austin, Texas.
Southwest Broadcasting Co.

KNX 1050 25000 Hollywood, Calif.
Western Broadcast Co., Inc.

KOA 830 12,500 Denver, Colo.
General Electric Co., 1370 Krameria St.

KOAC 550 1000 Corvallis, Ore.
Oregon State Agricultural College.

KOB 1180 10000 Albuquerque, N. M.
Albuquerque Journal, Box 667.

KOH 1330 500 Reno, Nev.
The Bee, Inc.

KOIL 1250 1000 Council Bluffs, Iowa.
Mona Motor Oil Co.

KOIN 940 1000 Portland, Ore.
KOIN, Inc., New Heathman Hotel.

KOL 1270 1000 Seattle, Wash.
Seattle Broadcasting Co.

INDEX BY CALL LETTERS

KOMA 1480 6000 Oklahoma City, Okla. National Radio Manufacturing Co.	KTFI 1240 1000 Twin Falls, Idaho. Radio Broadcasting Corp.
KOMO 920 1000 Seattle, Wash. Fishers Blend Station, Inc.	KTHS 1040 10000 Hot Springs, Ark. Chamber of Commerce.
KONO 1370 100 San Antonio, Texas. Mission Broadcasting Co., St. Anthony Hotel.	KTM 780 500 Los Angeles, Calif. Pickwick Broadcasting Corp., Ltd.
KOOS 1370 100 Marshfield, Ore. H. H. Hanseth, Hall Bldg.	KTRH 1120 1000 Houston, Texas. KTRH Broadcasting Co., Rice Hotel.
KORE 1420 100 Eugene, Ore. Frank L. Hill and Curtis G. Phillips.	KTSA 1200 1000 San Antonio, Texas. Southwest Broadcasting Co.
KOY 1390 500 Phoenix, Ariz. Nielsen Radio & Sporting Goods Co.	KTSM 1310 100 El Paso, Texas. Tri-State Broadcasting Co., Inc.
KPCB 650 100 Seattle, Wash. Queen City Broadcasting Co.	KTUL 1400 250 Tulsa, Okla. J. T. Griffin
KPJM 1500 100 Prescott, Ariz. Frank Mauthe, Box 852	KTW 1220 1000 Seattle, Wash. First Presbyterian Church.
KPO 880 50000 San Francisco, Calif. National Broadcasting Co., Inc.	KUJ 1370 100 Walla Walla, Wash. KUJ, Inc., Marcus Whitman Hotel.
KPOF 880 500 Denver, Colo. Pillar of Fire, 1845 Champa St.	KUMA 1420 100 Yuma, Ariz. Dr. A. H. Schermann, Box 267.
KPPC 1210 50 Pasadena, Calif. Pasadena Presbyterian Church.	KUOA 1280 1000 Fayetteville, Ark. KUOA, Inc., Washington Hotel.
KPQ 1500 100 Wenatchee, Wash. Westcoast Broadcasting Co.	KUSD 890 500 Vermillion, S. D. University of South Dakota.
KPRC 820 1000 Houston, Texas. Houston Printing Co.	KVI 670 500 Tacoma, Wash. Puget Sound Broadcasting Co., Tacoma Hotel.
KQV 1380 500 Pittsburgh, Pa. KQV Broadcasting Co., Investment Bldg.	KVL 1370 100 Seattle, Wash. KVL, Inc., 5th and Virginia St.
KQW 1010 500 San Jose, Calif. Pacific Agricultural Foundation, Ltd.	KVOA 1280 500 Tucson, Ariz. Arizona Broadcasting Co., Inc.
KRE 1370 100 Berkeley, Calif. First Congregational Church.	KVOO 1140 25000 Tulsa, Okla. Southwestern Sales Corp.
KREG 1500 100 Santa Ana, Calif. The Voice of the Orange Empire, Inc.	KVOR 1270 1000 Colorado Springs, Colo. S. H. Patterson
KRGV 1280 500 Harlingen, Texas. KRGV, Inc.	KVOS 1200 100 Bellingham, Wash. KVOS, Inc., Bellingham Hotel.
KRKD 1120 500 Los Angeles, Calif. Firestone Broadcasting Corp.	KWCR 1420 100 Cedar Rapids, Iowa. Cedar Rapids Broadcast Co.
KRLD 1040 10000 Dallas, Texas. KRLD Radio Corp., Adolphus Hotel.	KWEA 1210 100 Shreveport, La. International Broadcasting Corp.
KRMD 1310 100 Shreveport, La. Radio Station KRMD, Inc.	KWFF 1210 100 Hilo, Hawaii Hilo Broadcasting Co., Ltd.
KROW 830 500 Oakland, Calif. Educational Broadcasting Corp.	KWG 1200 100 Stockton, Calif. McClatchy Newspapers, Inc.
KRSC 1120 100 Seattle, Wash. Radio Sales Corp., Washington Athletic Club.	KWJJ 1080 500 Portland, Ore. KWJJ Broadcast Co., Inc., 328 Salmon St.
KSAC 580 500 Manhattan, Kans. State College of Agriculture.	KWK 1350 1000 St. Louis, Mo. Thomas Patrick, Inc., Hotel Chase.
KSCJ 1330 1000 Sioux City, Iowa. Perkins Bros. Co., 415 Douglas St.	KWKC 1370 100 Kansas City, Mo. Wilson Duncan Broadcasting Co.
KSD 550 500 St. Louis, Mo. Pulitzer Publishing Co.	KWKH 850 10000 Shreveport, La. International Broadcasting Corp.
KSEI 890 250 Pocatello, Idaho. Radio Service Corp., 141 S. 8th Ave.	KWLC 1270 100 Decorah, Iowa. Luther College.
KSL 1130 50000 Salt Lake City, Utah. Radio Service Corp. of Utah.	KWSC 1220 1000 Pullman, Wash. State College of Washington.
KSO 1370 100 Des Moines, Iowa. Des Moines Register & Tribune.	KWTO 560 500 Springfield, Mo. KGBX Inc.
KSOO 1110 1000 Sioux Falls, S. D. Jos. Henkin, 1613 S. Duluth Ave.	KWWG 1280 500 Brownsville, Texas. Frank P. Jackson.
KSTP 1480 10000 St. Paul, Minn. National Battery Broadcasting Co.	KXA 780 250 Seattle, Wash. American Radio Tel. Co., 218 Bigelow Bldg.
KSUN 1200 100 Lowell, Ariz. Copper Electrical Co.	KXL 1420 100 Portland, Ore. KXL Broadcasters, 289 Pine St.
KTAB 500 1000 San Francisco, Calif. Associated Broadcasters, Inc.	KXO 1500 100 El Centro, Calif. E. R. Irey and F. M. Bowles.
KTAR 820 500 Phoenix, Ariz. KTAR Broadcasting Co.	KXRO 1310 100 Aberdeen, Wash. KXRO, Inc., Hotel Morek.
KTAT 1240 1000 Fort Worth, Texas. Southwest Broadcasting Co.	KXYZ 1440 250 Houston, Texas. Harris County Broadcast Co.
KTBS 1450 1000 Shreveport, La. Tri-State Broadcasting System.	KYA 1230 1000 San Francisco, Calif. Pacific Broadcasting Corp.

INDEX BY CALL LETTERS

KYW 1020 10000 Chicago, Ill. Westinghouse Elec. & Mfg. Co.	WAIU 840 500 Columbus, Ohio. Associated Radio Broadcasting Corp.
KZRM 918.5 50000 Manila, P. I. Erlanger and Galing, Inc. (KZEG)	WALR 1210 100 Zanesville, Ohio. WALR Broadcasting Corp.
LR5 830 25000 Buenos Aires, Arg.	WAMC 1420 100 Anniston, Ala. R. C. Hammett, 1200 Noble St.
NAA 800 1000 Arlington, Va. United States Navy.	WAML 1310 100 Laurel, Miss. Southland Radio Corp.
RUS 684 500 San Salvador, E. S. Republic of El Salvador.	WAPI 1140 5000 Birmingham, Ala. WAPI Broadcasting Corp.
TGW 1350 500 Guatemala, Gua. Gobierno de Guatemala.	WARD 1400 500 Brooklyn, N. Y. United States Broadcasting Corp.
TGX 1380 75 Guatemala City	WASH 1270 500 Grand Rapids, Mich. Kunsky-Trendle Broadcasting Corp.
TIGR 812 75 San Jose, C. R. Government of Costa Rica.	WAVE 840 1000 Louisville, Ky. WFIW, Inc.
TIEA 833 7.5 San Jose, C. R.	WAWZ 1350 250 Zarephath, N. J. Pillar of Fire.
TIEP 1450 7.5 San Jose, C. R.	WAZL 1420 100 Hazleton, Pa. Hazleton Broadcasting Service, Inc.
TIFB 714 30 San Jose, C. R.	WBAA 1400 500 West Lafayette, Ind. Purdue University.
TIFS 1441 7.5 Cartago, C. R.	WBAK 1430 1000 Harrisburg, Pa. Commonwealth of Pennsylvania.
TIGA 1014 30 Cartago, C. R.	WBAL 1080 10000 Baltimore, Md. Consolidated Gas, Elec. Light & Power Co.
TIGP 800 75 San Jose, C. R. Gonzalo Pinto H. Apt. 225.	WBAP 800 50000 Fort Worth, Texas. Carter Publications, Inc.
TIRCA 1100 500 San Jose, C. R. Perry Gorton, Apt. 225.	WBAX 1210 100 Wilkes-Barre, Pa. John H. Stenger, Jr., 70 S. Main St.
TISO 550 250 San Jose, C. R. P. F. Saborio, Apt. 1354	WBBC 1400 500 Brooklyn, N. Y. Brooklyn Broadcasting Corp.
TITV 899 7.5 San Jose, C. R.	WBBL 1210 100 Richmond, Va. Grace Covenant Presbyterian Church.
TIVL 889 30 San Jose, C. R.	WBBM 770 25000 Chicago, Ill. WBBM Broadcasting Corp., Wrigley Bldg.
TIXA 014 7.5 San Jose, C. R. J	WBBR 1300 1000 Brooklyn, N. Y. Peoples Pulpit Assn.
VAS 685 2000 Glace Bay, N. S. Canadian Maroon Co., Ltd.	WBSX 1200 100 New Orleans, La. Samuel D. Reeks, Marbers Hotel.
VESEK 1195 10 Montmagny, Que. J. A. Marquis, P. O. Box 57	WBSZ 1200 100 Ponce City, Okla. C. L. Carrell.
VOAC 000 40 St. John's, Nfld.	WBCM 1410 500 Bay City, Mich. James E. Davidson, Hotel Wrenn.
VOAS 010 100 St. John's, N. F.	WBEN 900 1000 Buffalo, N. Y. WBEN, Inc. (Buffalo Evening News.)
VOBS 010 100 St. John's, N. F.	WBEO 1310 100 Marquette, Mich. Lake Superior Broadcasting Co., Inc.
VOBY 950 75 St. John's, N. F. Newfoundland Broadcasting Co.	WBHS 1200 100 Huntsville, Ala. Radio Station WBHS, Inc.
VOKW 1085 30 St. John's, N. F. Cyril L. Parkins.	WBIS 1440 500 Greensboro, N. C. North Carolina Broadcasting Co., Inc.
VONF 1195 400 St. John's, N. F. Dominion Broadcasting Co., Ltd., Box 1355.	WBNX 1350 250 New York, N. Y. Standard Cahill Co., Inc.
VOWR 000 500 St. John's, N. F. Weeley United Church, Box 157.	WBOQ 800 50000 New York, N. Y. Atlantic Broadcasting Corp.
WAAB 1410 500 Boston, Mass. Bay State Broadcasting Corp., 1 Winter Pl.	WBOW 1310 100 Terre Haute, Ind. Banks of Wabash, Inc., 24 1/2 S. 8th.
WAFF 020 500 Chicago, Ill. Chicago Daily Drivers Journal.	WBRC 030 500 Birmingham, Ala. Frank M. King, Receiver.
WAAT 840 300 Jersey City, N. J. Bremer Broadcasting Corp., 50 Journal Sq.	WBRE 1310 100 Wilkes-Barre, Pa. Louis G. Baltimore, 16 N. Main.
WAAW 800 500 Omaha, Neb. Omaha Grain Exchange.	WBSO 820 500 Babylon Park, Mass. Broadcasting Service Organization, Inc.
WABC 880 50000 New York, N. Y. Atlantic Broadcasting Corp.	WBT 1080 50000 Charlotte, N. C. Station WBT, Inc., Wilder Bldg.
WABI 1200 100 Bangor, Maine. First Universalist Society.	WBTV 1370 100 Danville, Va. Fiedmont Broadcasting Corp.
WACO 1420 100 Waco, Texas. Southwest Broadcasting Co.	WBZ 890 50000 Boston, Mass. Westinghouse Elec. & Mfg. Co.
WADC 1320 1000 Akron, Ohio. Allen T. Simmons, P. O. Box 29.	WBZA 890 1000 Springfield, Mass. Westinghouse Elec. & Mfg. Co.
WAGM 1420 100 Presque Isle, Me. Aroostook Broadcasting Corp.	

INDEX BY CALL LETTERS

WCAC 800 250 Storrs, Conn. Connecticut Agricultural College.	WDEV 550 500 Waterbury, Vt. Harry C. Whitehill, Stowe St.
WCAD 1220 500 Canton, N. Y. St. Lawrence University.	WDGY 1190 1000 Minneapolis, Minn. Dr. Geo. W. Young, 909 W. Broadway.
WCAE 1220 1000 Pittsburgh, Pa. WCAE, Inc., Sun-Telegraph.	WDOD 1280 1000 Chattanooga, Tenn. WDOD Broadcasting Corp., Hotel Patten.
WCAH 1430 500 Columbus, Ohio. International Bible Students Assn.	WDRC 1330 1000 Hartford, Conn. WDRC, Inc., Corning Bldg., 11 Asylum St.
WCAL 1250 1000 Northfield, Minn. St. Olaf College.	WDSU 1250 1000 New Orleans, La. Jos. H. Uhalt, On Hotel DeSoto.
WCAM 1280 500 Camden, N. J. City of Camden, City Hall.	WDZ 1070 100 Tuscola, Ill. James L. Bush.
WCAO 600 250 Baltimore, Md. Monumental Radio Co.	WEAF 880 50000 New York, N. Y. National Broadcasting Co., Inc.
WCAP 1280 500 Asbury Park, N. J. Radio Industries Broadcast Co.	WEAN 700 500 Providence, R. I. Shepard Broadcasting Service, Inc.
WCAT 1200 100 Rapid City S. D. South Dakota State School of Mines.	WESC 1290 1000 Superior, Wis. Head of the Lakes Broadcasting Co.
WCAU 1170 50000 Philadelphia, Pa. WCAU Broadcasting Co., 1622 Chestnut.	WEBQ 1210 100 Harrisburg, Ill. Harrisburg Broadcasting Co.
WCAX 1200 100 Burlington, Vt. Burlington Daily News, Inc.	WEBS 1310 100 Buffalo, N. Y. Howell Broadcasting Co., Inc., 735 Main.
WCAZ 1070 50 Carthage, Ill. Superior Broadcasting Service, Inc.	WEDC 1210 100 Chicago, Ill. Emil Denmark, 3860 Ogden Ave.
WCBA 1440 250 Allentown, Pa. B. Bryan Musselman, 39-41 10th St.	WEED 1420 100 Greenville, N. C. Wm. Avera Wynne.
WCBD 1080 5000 Zion, Ill. Wilbur Glenn Voliva.	WEEI 590 1000 Boston, Mass. Edison Elec. Illuminating Co.
WCBM 1370 100 Baltimore, Md. Baltimore Broadcasting Corp.	WEEU 830 1000 Reading, Pa. Berks Broadcasting Co., 533 Penn.
WCBS 1210 100 Springfield, Ill. WCBS, Inc., 208½ S. 5th.	WEHC 1350 500 Charlottesville, Va. Community Brdcastg. Corp.
WCCO 810 50000 Minneapolis, Minn. Northwestern Broadcasting, Inc.	WEHS 1420 100 Cicero, Ill. WEHS, Inc., 6138 W. 22nd St.
WCFL 870 1600 Chicago, Ill. Chicago Federation of Labor.	WELL 1420 500 Battle Creek, Mich. Enquirer News Co., 7 N. McCamly St.
WCKY 1490 5000 Covington, Ky. L. B. Wilson, Inc.	WENG 1420 100 Americus, Ga. Americus Broadcast Corp.
WCLO 1200 100 Janesville, Wis. WCLO Radio Corp.	WENR 870 50000 Chicago, Ill. Great Lakes Broadcasting Co.
WCLS 1310 100 Joliet, Ill. WCLS, Inc., 301 E. Jefferson St.	WESG 1040 1000 Elmira, N. Y. Elmira Star Gazette, Inc.
WCNW 1500 100 Brooklyn, N. Y. Arthur Fiske, 1525 Pitkin Ave.	WEVD 1300 500 New York, N. Y. Jewish Daily Forward, Hotel Claridge.
WCOA 1340 500 Pensacola, Fla. Pensacola Broadcasting Co.	WEW 760 1000 St. Louis, Mo. St. Louis University, 221 N. Grand Blvd.
WCOC 890 500 Meridian, Miss. Mississippi Broadcasting Co., Inc.	WEXL 1310 50 Royal Oak, Mich. Royal Oak Broadcasting Co.
WCRW 1210 100 Chicago, Ill. Clinton R. White, 2756 Pine Grove Ave.	WFAA 890 50000 Dallas, Texas. Morning News and Journal
WCSC 1300 500 Charleston, S. C. South Carolina Broadcasting Co., Inc.	WFAB 1300 1000 New York, N. Y. Fifth Avenue Broadcasting Corp.
WCSH 940 1000 Portland, Mo. Congress Square Hotel Co., 157 High.	WFAM 1200 100 South Bend, Ind. South Bend Tribune, 200 W. Colfax.
WDAE 1220 1000 Tampa, Fla. Tampa Publishing Co., Tampa Terrace.	WFAA 1210 100 White Plains, N. Y. Westchester Broadcasting Corp.
WDAF 810 1000 Kansas City, Mo. Kansas City Star Co.	WFBC 1200 100 Greenville, S. C. Greenville News-Piedmont Co.
WDAG 1410 1000 Amarillo, Texas. National Radio & Broadcasting Corp.	WFBE 1200 100 Cincinnati, Ohio. WFBE, Inc., Hotel Sinton.
WDAH 1310 100 El Paso, Texas. Tri-State Broadcasting Co., Inc.	WFBG 1310 100 Altoona, Pa. Gable Broadcasting Co., 12th Av. & 13th St.
WDAS 1370 100 Philadelphia, Pa. WDAS Broadcastg. Co., Inc., Broadwood Hotel.	WFBL 1360 1000 Syracuse, N. Y. Onondaga Radio Broadcasting Corp.
WDAY 840 1000 Fargo, N. D. WDAY, Inc., Black Bldg., 118 Broadway.	WFBM 1230 1000 Indianapolis, Ind. Indianapolis Power & Light Co.
WDBJ 830 250 Roanoke, Va. Times World Corp., 122 W. Church Ave.	WFRB 1270 500 Baltimore, Md. Baltimore Radio Show, Inc.
WDSO 580 250 Orlando, Fla. Orlando Broadcasting Co., Inc.	WFDL 1310 100 Flint, Mich. Flint Broadcasting Co.
WDEL 1120 250 Wilmington, Del. WDEL, Inc., 10th and King Sts.	WFDV 1500 100 Rome, Ga. Rome Broadcasting Corp., 10 3rd Ave.

INDEX BY CALL LETTERS

WFEA 1430 500 Manchester, N. H. New Hampshire Broadcasting Co.	WHEB 740 250 Portsmouth, N. H. Granite State Broadcasting Corp.
WFI 500 500 Philadelphia, Pa. WFI Broadcasting Co., 801 Market.	WHEC 1430 500 Rochester, N. Y. WHEC, Inc., 40 Franklin St.
WFLA 920 1000 Clearwater, Fla. Florida West Coast Broadcasting Co., Inc.	WHEF 1600 100 Keesauke, Miss. Attala Milling & Produce Co.
WQAL 1310 100 Lancaster, Pa. WQAL, Inc., 8 W. King St.	WHET 1370 100 Dothan, Ala. Troy Broadcasting Co.
WGAR 1450 500 Cleveland, Ohio. WGAR Broadcasting Co., Hotel Statler.	WHFC 1420 100 Cicero, Ill. WHFC, Inc., 6138 W. 22nd St.
WGBB 1210 100 Freeport, N. Y. H. H. Carman, 64 S. Grove St.	WHIS 1410 250 Bluefield, W. Va. Daily Telegraph Printing Co., Inc.
WGBF 830 500 Evansville, Ind. Evansville On the Air, Inc.	WHK 1390 1000 Cleveland, Ohio. Radio Air Service Corp.
WGBI 830 250 Scranton, Pa. Scranton Broadcasters, Inc.	WHN 1010 250 New York, N. Y. Marcus Loew Booking Agency.
WGCM 1210 100 Mississippi City, Miss. Great Southern Land Co., Gulfport, Miss.	WHOM 1450 250 Jersey City, N. J. New Jersey Broadcasting Corp.
WGCP 1250 1000 Newark, N. J. May Radio Broadcasting Co.	WHP 1430 500 Harrisburg, Pa. WHP, Inc., Harrisburg Telegraph.
WGES 1360 500 Chicago, Ill. Oak Leaves Broadcasting Station, Inc.	WIAS 1310 100 Ottumwa, Iowa. Iowa Broadcasting Co., Hotel Ottumwa.
WGH 1310 100 Newport News, Va. Hampton Roads Broadcasting Corp.	WIBA 1280 500 Madison, Wis. Badger Broadcasting Co., Inc.
WGL 1370 100 Fort Wayne, Ind. F. C. Zieg, 213 W. Main St.	WIBG 870 100 Glenside, Pa. WIBG, Inc., Kewick Bldg.
WGLC 1370 100 Hudson Falls, N. Y. O. T. Griffin & G. F. Bissell.	WIBM 1370 100 Jackson, Mich. WIBM, Inc., Otsego Hotel.
WGN 720 50000 Chicago, Ill. WGN, Inc., Tribune Tower.	WIBU 1210 100 Payson, Wis. Wm. C. Forrest, R. F. D. No. 3.
WGNV 1210 100 Chester, N. Y. Peter Goellet (Orange County).	WIBW 500 1000 Topeka, Kans. Topeka Broadcasting Assn. Inc.
WGR 550 1000 Buffalo, N. Y. Buffalo Broadcasting Corp.	WIBX 1200 100 Utica, N. Y. WIBX, Inc., 1st Natl. Bank Bldg.
WGST 890 250 Atlanta, Ga. Georgia School of Technology.	WICC 600 250 Bridgeport, Conn. Shepard Broadcasting Service, Inc.
WGY 790 50000 Schenectady, N. Y. National Broadcasting Co., Inc.	WIL 1200 100 St. Louis, Mo. Missouri Broadcasting Corp.
WHA 940 1000 Madison, Wis. University of Wisconsin.	WILL 890 250 Urbana, Ill. University of Illinois.
WHAD 1120 250 Milwaukee, Wis. Marquette University.	WILM 1420 100 Wilmington, Del. Delaware Broadcasting Co., Inc.
WHAM 1150 50000 Rochester, N. Y. Stromberg-Carlson Tel. Mfg. Co.	WIND 560 1000 Gary, Ind. Johnson-Kennedy Broadcasting Corp.
WHAS 820 50000 Louisville, Ky. Courier Journal & Louisville Times.	WINS 1100 500 New York, N. Y. American Radio News Corp.
WHAT 1310 100 Philadelphia, Pa. Curtis-Martin Newspapers, Inc.	WIOD 1300 1000 Miami, Fla. Isle of Dreams Broadcasting Corp.
WHAZ 1300 500 Troy, N. Y. Rensselaer Polytechnic Institute.	WIP 010 500 Philadelphia, Pa. Pennsylvania Broadcasting Co.
WHB 860 500 Kansas City, Mo. WHB Broadcasting Co., Scarritt Bldg.	WIS 1010 500 Columbia, S. C. Station WIS, Inc., 1811 Main St.
WHBC 1200 100 Canton, Ohio. Edw. P. Graham, 319 Tusc. St., W.	WISN 1120 250 Milwaukee, Wis. American Radio News Corp.
WHBD 1370 100 Mount Orah, Ohio. F. P. Moler.	WJAC 1310 100 Johnstown, Pa. WJAC, Inc., Tribune Bldg. Annex.
WHBF 1210 100 Rock Island, Ill. Rock Island Broadcasting Co.	WJAG 1060 1000 Norfolk, Neb. Norfolk Daily News.
WHBL 1410 500 Sheboygan, Wis. Press Publishing Co.	WJAN 890 500 Providence, R. I. Outlet Co., Weybossett St.
WHBQ 1370 100 Memphis, Tenn. Broadcasting Sta. WNBQ, Inc., Hotel Claridge.	WJAS 1200 1000 Pittsburgh, Pa. Pittsburgh Radio Supply House.
WHBU 1210 100 Anderson, Ind. Anderson Broadcasting Corp.	WJAX 000 1000 Jacksonville, Fla. City of Jacksonville.
WHBY 1200 100 Green Bay, Wis. WHBY, Inc., Bellin Bldg.	WJAY 010 500 Cleveland, Ohio. Cleveland Radio Broadcasting Corp.
WHDF 1370 100 Calumet, Mich. Upper Michigan Broadcasting Co.	WJBC 1200 100 LaSalle, Ill. Kaskaskia Broadcasting Co.
WHDH 030 1000 Boston, Mass. Matheon Radio Co., 62 Boylston.	WJBI 1210 100 Red Bank, N. J. Monmouth Broadcasting Co., Inc.
WHDL 1420 100 Tupper Lake, N. Y. Tupper Lake Broadcasting Co.	WJBK 1370 50 Detroit, Mich. James F. Hopkins, Inc., Curtis Bldg.

INDEX BY CALL LETTERS

WJBL 1290 100 Decatur, Ill. Commodore Broadcasting, Inc.	WLSC 1318 100 Muncie, Ind. D. A. Burton, Anthony Bldg.
WJBO 1420 100 Baton Rouge, La. Baton Rouge Broadcasting Co., Inc.	WLSF 1420 100 Kansas City, Kans. WLSF Broadcasting Co., Huron Bldg.
WJBW 1290 100 New Orleans, La. C. C. Carlson, 2743 Dumaine St.	WLSL 900 2500 Stevens Point, Wis. Wisconsin Dept. of Agriculture and Markets.
WJBY 1210 100 Gadsden, Ala. Gadsden Broadcasting Co., 112 N. 8th St.	WLSW 1290 500 Erie, Pa. Broadcasters of Pennsylvania, Inc.
WJDX 1278 1000 Jackson, Miss. Lamar Life Insurance Co.	WLSZ 620 500 Sengor, Me. Maine Broadcasting Co., Inc., 100 Main.
WJEJ 1218 100 Hagerstown, Md. Hagerstown Broadcasting Co., Inc.	WLEC 1340 250 Portland, Me. Casco Bay Broadcasting Co.
WJEM 990 500 Tupelo, Miss. Britt A. Rogers, Jr.	WLEY 1270 100 Lexington, Mass. Albert S. Moffat
WJJD 1130 25000 Chicago, Ill. WJJD, Inc., 201 N. Wells St.	WLIT 590 500 Philadelphia, Pa. Lit Bros. Broadcasting System, Inc.
WJMS 1420 130 Ironwood, Mich. WJMS, Inc., St. James Hotel.	WLS 870 50000 Chicago, Ill. Agricultural Broadcasting Co.
WJR 760 10000 Detroit, Mich. WJR, Inc., Fisher Bldg.	WLTH 1400 500 Brooklyn, N. Y. Voices of Brooklyn, Inc.
WJSV 1460 10000 Washington, D. C. Old Dominion Broadcasting Co.	WLVA 1270 100 Lynchburg, Va. Lynchburg Broadcasting Corp.
WJTL 1370 100 Atlanta, Ga. Oglethorpe University.	WLW 700 50000 Cincinnati, Ohio. Crosley Radio Corp.
WJW 1210 180 Akron, Ohio. WJW, Inc., 41 S. High St.	WLWL 1100 5000 New York, N. Y. Missionary Society of St. Paul.
WJZ 730 50000 New York, N. Y. National Broadcasting Co., Inc.	WMAL 630 250 Washington, D. C. National Broadcasting Co., Inc.
WKAQ 1248 1000 San Juan, P. R. Radio Corp. of Porto Rico.	WMAQ 870 5000 Chicago, Ill. National Broadcasting Co., Inc.
WKAR 1840 1000 East Lansing, Mich. Michigan State College.	WMAS 1420 100 Springfield, Mass. WMAS, Inc., Hotel Stonehaven.
WKBB 1500 100 East Dubuque, Ill. Richard W. Hoffman	WMAZ 1130 500 Macon, Ga. Southeastern Broadcasting Co.
WKBC 1310 100 Birmingham, Ala. R. B. Broyles, Tutwiler Hotel.	WMBC 1420 100 Detroit, Mich. Michigan Broadcasting Co.
WKBF 1400 600 Indianapolis, Ind. Indianapolis Broadcasting, Inc.	WMBD 1440 500 Peoria, Ill. Peoria Broadcasting Co.
WKBH 1380 1000 LaCrosse, Wis. WKBH, Inc., 409 Main St.	WMBS 1210 100 Richmond, Va. Havens and Martin, Inc.
WKBH 1420 100 Cicero, Ill. WKBH, Inc., 6138 W. 22nd St.	WMBH 1420 100 Joplin, Mo. W. M. Robertson.
WKBN 570 500 Youngstown, Ohio. WKBN Broadcasting Corp.	WMBI 1090 5000 Chicago, Ill. Moody Bible Institute.
WKBO 1200 100 Harrisburg, Pa. Keystone Broadcasting Corp.	WMBO 1310 100 Auburn, N. Y. WMBO, Inc., Metcalf Bldg.
WKBV 1500 100 Richmond, Ind. Wm. O. Knox, Box 286	WMBQ 1500 100 Brooklyn, N. Y. Paul J. Gollhofer, 95 Leonard St.
WKBW 1480 5000 Buffalo, N. Y. Buffalo Broadcasting Corp.	WMBR 1370 100 Tampa, Fla. F. J. Reynolds, 907 Florida Ave.
WKBZ 1500 100 Ludington, Mich. Karl L. Ashbaker & Sons.	WMC 790 500 Memphis, Tenn. WMC, Inc., Hotel Gayoso.
WKEU 1500 100 LaGrange, Ga. Radio Station WKEU, 906 Hill St.	WMCA 570 500 New York, N. Y. Kleckerbocker Broadcasting Co.
WKFI 1210 100 Greenville, Miss. J. Pat Scully, Box 302.	WMNN 590 250 Fairmont, W. Va. A. M. Rowe, Inc., 325 Main St.
WKJC 1200 100 Lancaster, Pa. Lancaster Broadcasting Service, Inc.	WMPC 1500 100 Lapeer, Mich. First Methodist Protestant Church.
WKOK 1210 100 Sunbury, Pa. Sunbury Broadcasting Co.	WMT 800 500 Waterloo, Iowa. Waterloo Broadcasting Co.
WKRC 550 1000 Cincinnati, Ohio. WKRC, Inc., Hotel Alma.	WNAC 1230 1000 Boston, Mass. Shepard Broadcasting Service, Inc.
WKY 900 1000 Oklahoma City, Okla. Oklahoma Publishing Co.	WNAD 1010 500 Norman, Okla. University of Oklahoma.
WKZO 590 1000 Kalamazoo, Mich. John E. Fetser, Burdick Hotel.	WNAX 570 1000 Yankton, S. D. The House of Gurney, Inc., 2nd and Capital St.
WLAC 1470 5000 Nashville, Tenn. Life & Casualty Insurance Co.	WNBF 1500 100 Binghamton, N. Y. Howitt-Wood Radio Co., Inc.
WLAP 1200 100 Louisville, Ky. American Broadcasting Corp. of Ky.	WNBH 1310 100 New Bedford, Mass. New Bedford Broadcasting Co.
WLS 1250 1000 Minneapolis, Minn. University of Minnesota.	WNBO 1200 100 Silver Haven, Pa. John Brownlee Spriggs. (Washington, Pa.)

INDEX BY CALL LETTERS

WMBR 1430 500 Memphis, Tenn. Memphis Broadcasting Co., Hotel DeVoy.	WQAM 560 1000 Miami, Fla. Miami Broadcasting Co., Inc., 327 N. E. 1st Ave.
WNBW 1200 18 Carbondale, Pa. WNBW, Inc., 50 Main St., N.	WQAN 880 250 Scranton, Pa. Scranton Times, 149 Penn Ave.
WNBX 1290 250 Springfield, Vt. WNBX Broadcasting Corp., 39 Main St.	WQAO 1610 250 New York, N. Y. Marcus Loew Booking Agency.
WNBZ 1290 50 Saranac Lake, N. Y. Smith & Mace, 70 Broadway.	WQBC 1580 500 Vicksburg, Miss. Delta Broadcasting Co., Hotel Vicksburg.
WNEW 1250 1000 Newark, N. J. Wodaam Corp., 1060 Broad.	WQDM 1370 100 St. Albans, Vt. A. J. St. Antoine and E. J. Regan.
WNOX 580 1000 Knoxville, Tenn. WNOX, Inc.	WQDX 1210 100 Thomasville, Ga. Stevens Luke, 135 E. Jackson St.
WNRA 1420 100 Muscle Shoals, Ala. Kathryn Jones	WRAC 1370 100 Williamsport, Pa. WRAC, Inc., 244 W. 4th St.
WNYC 910 500 New York, N. Y. Dept. of Plant and Structures.	WRAM 1370 100 Wilmington, N. C. Wilmington Radio Assn., Princess St.
WOAI 1100 50000 San Antonio, Texas. Southern Industries, Inc., 1038 Navarro.	WRAY 1310 100 Reading, Pa. Reading Broadcasting Co., 533 Penn St.
WOBU 580 750 Charleston, W. Va. WOBU, Inc., Ruffner Hotel.	WRAX 1020 250 Philadelphia, Pa. WRAX Broadcasting Co., 217 S. Broad St.
WOC 1090 50000 Des Moines, Iowa. WHO Central Broadcast. Co., 914 Walnut St.	WRBL 1200 100 Columbus, Ga. WRBL Radio Station, Inc.
WOCL 1210 50 Jamestown, N. Y. A. E. Newton, 840 N. Main St.	WRBX 1410 250 Roanoke, Va. Richmond Development Corp.
WODX 1410 500 Mobile, Ala. Mobile Broadcasting Corp., Battle House.	WRC 850 500 Washington, D. C. National Broadcasting Co., Inc.
WOI 840 5000 Ames, Iowa. Iowa State College.	WRDO 1370 100 Augusta, Me. WRDO, Inc., Augusta House.
WOKO 1430 500 Albany, N. Y. WOKO, Inc., Hotel Ten Eyck.	WRDW 1500 100 Augusta, Ga. Virgil V. Evans Co., 309 8th St.
WOL 1310 100 Washington, D. C. American Broadcasting Co., Annapolis Hotel.	WREC 800 500 Memphis, Tenn. WREC, Inc., Hotel Peabody.
WOMT 1210 100 Manitowoc, Wis. Francis M. Kadow, Box 328.	WREN 1220 1000 Lawrence, Kans. Jenny Wren Co., 8th and Vermont St.
WOOD 1270 500 Grand Rapids, Mich. Kunsky-Trendle Broadcasting Corp.	WRHM 1250 1000 Minneapolis, Minn. Minnesota Broadcasting Corp., 115 E. Grant
WOPI 1500 100 Bristol, Tenn. Radiophone Broadcasting Station WOPI, Inc.	WRJN 1370 100 Racine, Wis. Racine Broadcasting Corp., Hotel Racine.
WOQ 1300 1000 Kansas City, Mo. Unity School of Christianity.	WRNY 1010 250 New York, N. Y. Marcus Loew Booking Agency.
WOR 710 5000 Newark, N. J. Bamberger Broadcasting Service, Inc.	WROL 1310 100 Knoxville, Tenn. Stuart Broadcasting Corp., 524 S. Gay.
WORC 1250 500 Worcester, Mass. Alfred F. Kleindienst, 60 Franklin St.	WRR 1250 500 Dallas, Texas. City of Dallas, Hilton Hotel.
WORK 1000 1000 York, Pa. York Broadcasting Co., 15 S. Beaver St.	WRUF 830 5000 Gainesville, Fla. State University.
WOS 630 500 Jefferson City, Mo. State Highway Control, Capitol Bldg.	WRVA 1110 5000 Richmond, Va. Larus & Bro. Co., Inc., 22nd and Gary St.
WOSU 570 750 Columbus, Ohio. Ohio State University.	WSAI 1330 1000 Cincinnati, Ohio. Crosley Radio Corp., 1329 Arlington.
WOV 1130 1000 New York, N. Y. International Broadcasting Corp.	WSAJ 1310 100 Grove City, Pa. Grove City College.
WOW 590 1000 Omaha, Neb. Woodmen of the World, 4th and Farnam.	WSAN 1440 250 Allentown, Pa. WSAN, Inc., 39 10th St.
WOWO 1100 10000 Fort Wayne, Ind. Main Auto Supply Co., 213 W. Main.	WSAR 1460 250 Fall River, Mass. Doughty & Welch Electric Co., Inc.
WPAD 1420 100 Paducah, Ky. Paducah Broadcasting Co., Inc.	WSAZ 1190 1000 Huntington, W. Va. WSAZ, Inc., 929 1/2 4th Ave.
WPAP 1010 250 New York, N. Y. Marcus Loew Booking Agency.	WSB 740 50000 Atlanta, Ga. Atlanta Journal, 7 N. Forsyth St.
WPEN 1500 100 Philadelphia, Pa. William Penn Broadcasting Co.	WSBC 1210 100 Chicago, Ill. Gene T. Dyer, 1258 S. Michigan Ave.
WPFB 1370 100 Hattiesburg, Miss. Otis P. Eure, Box 530.	WST 1230 500 South Bend, Ind. South Bend Tribune.
WPG 1100 5000 Atlantic City, N. J. Columbia Broadcasting System.	WSEN 1210 100 Columbus, Ohio. Columbus Broadcasting Corp., 144 S. High.
WPBR 1200 100 Petersburg, Va. WLBG, Inc., Medical Arts Bldg.	WSFA 1410 500 Montgomery, Ala. Montgomery Bldg. Co., Inc., Jeff. Dav. Bldg.
WPRO 1210 100 Providence, R. I. Cherry & Webb Broadcasting Co., 15 Chestnut.	WSIX 1210 100 Springfield, Tenn. 638 Tire & Vulcanizing Co.
WPTF 830 5000 Raleigh, N. C. Durham Life Insurance Co.	WSJS 1310 100 Winston-Salem, N. C. Winston-Salem Journal Co., 416 N. Marshall.

INDEX BY CALL LETTERS

WSM 050 50000 Nashville, Tenn.
National Life & Accident Insurance Co.
WSMB 1320 500 New Orleans, La.
WSMB, Inc., Malson Blanche Bldg.
WSMK 1380 200 Dayton, Ohio.
S. M. Krohn, Jr., 4th and Main St.
WSOC 1218 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.
WSUN 820 1000 St. Petersburg, Fla.
Florida Westcoast Broadcasting Co., Inc.
WSVS 1370 50 Buffalo, N. Y.
Seneca Vocational High School.
WSYB 1500 100 Rutland, Vt.
Phillip Weiss Music Co., 80 West St.
WSYR 570 250 Syracuse, N. Y.
Central New York Broadcasting Corp.
WTAD 1440 500 Quincy, Ill.
Illinois Broadcasting Corp., State and 6th.
WTAQ 580 750 Worcester, Mass.
Worcester Telegram Publishing Co.
WTAM 1070 50000 Cleveland, Ohio.
National Broadcasting Co., Inc.
WTAQ 1330 1000 Eau Claire, Wis.
Gillette Rubber Co., Hotel Eau Claire.
WTAR 760 500 Norfolk, Va.
WTAR Radio Corp., Walnwright Bldg.
WTAW 1120 500 College Station, Texas.
Agricultural and Mechanical College.
WTAX 1210 100 Springfield, Ill.
WTAX, Inc., 416 E. Capitol Ave.
WTBO 1420 100 Cumberland, Md.
Associated Broadcasting Corp., Box 794.
WTEL 1310 100 Philadelphia, Pa.
Foulkrod Radio Engineering Co., Inc.
WTFI 1450 500 Athens, Ga.
Liberty Broadcasting Co., Costa Bldg.
WTIC 1060 50000 Hartford, Conn.
Travelers Broadcasting Service Corp.
WTJS 1310 100 Jackson, Tenn.
Sun Publishing Co., Sun Bldg.
WTMJ 820 1000 Milwaukee, Wis.
The Journal Co., 333 W. State St.
WTNJ 1200 500 Trenton, N. J.
Trenton Broadcasting Co., Stacy Trent Hotel
WTOC 1200 500 Savannah, Ga.
Savannah Broadcasting Co., Inc., DeSoto Hotel.
WTRC 1310 50 Elkhart, Ind.
Truth Radio Corp., Hotel Elkhart.
WVFW 1400 500 Brooklyn, N. Y.
Paramount Brdcastg. Co., 1 Nevins St.
WWAE 1200 100 Hammond, Ind.
Hammond Calumet Broadcasting Corp.
WWJ 820 1000 Detroit, Mich.
Evening News Assn., 616 Lafayette Blvd.
WWL 850 10000 New Orleans, La.
Loyola University, Roosevelt Hotel.
WWNC 570 1000 Asheville, N. C.
Citizen Broadcasting Co., Inc., Flatiron Bldg.
WWRL 1500 100 Woodside, N. Y.
Long Island Broadcasting Corp.
WWSW 1500 100 Pittsburgh, Pa.
Walker & Downing Radio Corp.
WWVA 1160 5000 Wheeling, W. Va.
West Virginia Broadcasting Corp.
WXYZ 1240 1000 Detroit, Mich.
Kunsky-Trendle Broadcasting Corp.

XE 1000 250 Guadalajara, Jal.
Alberto Pales Souza, Juan Manuel 383
XEAB 1450 7.5 Nuevo Laredo, Tama.
Homberto Garcia.
XEAC 1295 100 San Luis Potosi, S. L. P.
Francisco de P. Cabrera.
XEAE 880 800 Tijuana, B. C.
Adolfo Labastida, Jr., Ave. D 542.
XEAF 990 750 Nogales, Son.
Manuel Mascareñas M., Hotel Central.
XEAI 1090 100 Mexico City, D. F.
Carlos Gonzalez Caballero, Insurgentes 360.
XEAO 580 100 Mexicali, B. C.
Luis L. Castro, C. Altamirano 156.
XEAW 885 10000 Reynosa, Tama.
Internacional Broadcasting Co., S. A.
XEB 1030 10000 Mexico City, D. F.
El Buen Tono, S. A., Buen Tono No. 6.
XEC 1000 50 Toluca, D. F.
Jesus R. Benavides, Independencia 76.
XED 1155 500 Guadalajara, Jal.
Radiofonografica de Guadalajara, S. A.
XEF 735 150000 Villa Acuna, Coah.
Compania Radiodifusora de Acuna, S. A.
XEFA 1250 500 Mexico City, D. F.
Eduardo Limon Segui, Meditarraneo 236
XEFB 1315 100 Monterrey, N. L.
Jesus Quintanilla, 5 de Mayo Oriente 112.
XEFC 1050 100 Merida, Yuc.
J. Molina Font, Calle 59, 517.
XEFE 985 100 Laredo, Tama.
Rafael T. Carranza.
XEFG 1085 500 Mexico City, D. F.
Ricardo Gonzalez Montero, Tepic 48
XEFI 1290 250 Chihuahua, Chih.
Feliciano Lopez Isles, Ap. 157.
XEFJ 1000 100 Monterrey, N. L.
R. Juncos de la Vega, C. Morelos Oriente 759.
XEFO 840 5000 Mexico City, D. F.
Partido Nacional Revolucionario.
XEFS 1800 40 Queretaro, Qro.
Salvador Sanchez, Calle Montes 23.
XEFV 1400 100 Juarez, Chih.
J. Onofre Meza, Ave. Lerdo Norte 521.
XEFW 1290 70 Tampico, Tama.
J. Expedito Martinez, C. Madero Poniente 19.
XEFZ 1370 100 Mexico City, D. F.
Manuel Zetina
XEH 1132 250 Monterrey, N. L.
Tarnava y Cia, P. Mier 215.
XEI 1310 250 Morelia, Mich.
Carlos Gutierrez M., F. I. Madero 545
XEJ 1015 500 Juarez, Chih.
Juan G. Buttner, Ave. Lerdo 309.
XEK 990 100 Mexico City, D. F.
Arturo Martinez, Jalapa No. 51
XEL 1000 40 Saltillo, Coah.
Antonio Garza Castro, Aldama 59
XEN 711 1000 Mexico City, D. F.
Cerveceria Modelo S. A., Motolinia 22.
XENT 1115 150000 Nueva Laredo, Tama.
Cia Industrial Universal S. A., Apt. 47.
XEO 840 5000 Mexico City, D. F.
Partido Nacional Revolucionario.
XEOK 760 2500 Tijuana, B. C.
Carlos de la Sierra, (Box 1441, San Diego).
XEP 780 500 Mexico City, D. F.
Cia Difusora de Mexico S. A., Durango 74.
XEPN 585 75000 Piedras Negras, Coah.
Piedras Negras Broadcasting Co.
XER 735 150000 Villa Acuna, Coah.
Compania Radiodifusora de Acuna, S. A.

INDEX BY CALL LETTERS

XES 1020 250 Tampico, Tama.
Fernando Sada, Hotel Inglaterra.
XET 690 500 Monterrey, N. L.
Cadena Radiodifusora Mexicana, S. A.
XETB 1390 125 Torreon, Coah.
Jose A. Burmen, R. Corona 317.
XETH 880 100 Puebla, Pua.
Ramon Huerta G., Calle 17, Oriente 6.
XETU 800 100 Pachuca, Hgo.
Benito Castillo
XETW 830 500 Mexico City, O. F.
Rafael M. Pena, Gante 4, 3er piso
XETZ 1210 500 Mexico City, D. F.
Jose Alvarez del Villar, 92 Londres 190.
XEU 1010 100 Veracruz, Ver.
Fernando Pazos Sosa, Vicario 12.
XEW 810 5000 Mexico City, D. F.
Cadena Radiodifusora Mexicana S. A.
XEWV 1100 250 Veracruz, Ver.
Horacio Remes, Calle Canal 42.
XEX 630 50 Monterrey, N. L.
Luis F. Petit Jean, Aldama 932 Sur.
XEY 548.8 10 Merida, Yuc.
Partido Socialista del Surest.
XEYZ 760 10000 Mexico City, D. F.
Angel M. Diez, Ave. Juarez 48.

XEZ 630 500 Merida, Yuc.
Bartolome Garcia Correa, Calle 58 No. 497.
XFB 1290 1000 Jalapa, Ver.
Gobierno del Estado de Veracruz.
XFC 805 350 Aguascalientes, Ags.
Gobierno del Estado de Aguascalientes.
XFG 838.3 2000 Mexico City, D. F.
Secretaria de Guerra y Marina.
XFO 840 5000 Mexico City, D. F.
National Revolucionario Party.
XFX 840 500 Mexico City, D. F.
Secretaria de Educacion Publica.
YVIB 060 5000 Caracas, Venz.
Cia Ama Alamaen Americana.
YVIB 882 100 Caracas, Venz.
YVIB 1200 1000 Caracas, Venz.
Degwitz & Sibies.
10-AK 1200 15 Stratford, Ont.
M. I. Higgins, 151 Ontario St.
10-BP 1200 15 Wingham, Ont.
W. T. Cruickshank.
10-BQ 1200 15 Brantford, Ont.
Tom and Harold Brown.
10-BU 1200 15 Canara, Sask.
Canara Radio Assn.

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 19.67 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, WBAZ, 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., 6 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 49.43 Irregular
W9XP-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 Frequencies and Dial Numbers

(Continued from page 74)

Call Letters	Frequency	Dial Number	Location
WWSW	ae	100 (25)	Pittsburgh, Pa. E-8:00-11:45
.....	z	100 P (25)	Chelsea, Mass. E
.....	z	100 DP	Hot Springs, Ark. C

1510 kilocycles 198.6 meters

CFRC	ak	100	Kingston, Ont. E
CKCR	ak	100	Kitchener, Ont. E-10:1:30; 4-11

The Short Wave Stations

(Continued from page 37)

			6.718	44.62	KFY, Forward Base, Little America	14.830	20.21	WKU, Rocky Point, N. Y., Exp.	21.260	14.10	WBU, Rocky Point, N. Y., Exp.
			6.725	44.57	KFZ, Main Base, Little America	14.980	20.01	KAY, Manila, P. I., phone	21.300	14.07	WQW, Rocky Point, N. Y., Exp.
			6.733	44.53	WDB, Rocky Point, N. Y., Exp.	15.040	19.93	WQG, Rocky Point, N. Y., Exp.	21.410	14.00	WKK, Lawrenceville, N. J., phone
			6.740	44.48	WQO, Rocky Point, N. Y., Exp.	15.055	19.91	WNC, Hialeah, Fla., phone	21.451	13.93	W8XK, Pittsburg, Pa. (Saxonburg)
			6.755	44.53	KEQ, Kahuku, Hawaii, phone	15.204	19.72	W8XK, Pittsburg, Pa. (Saxonburg)	21.575	13.89	KFY, Forward Base, Little America
			6.762	44.53	WEJ, Rocky Point, N. Y., Exp.	15.242	19.67	W1XAL, Boston, Mass.			KFY, Main Base, Little America
			6.770	44.48	WOA, Lawrenceville, N. J., phone	15.258	19.65	W2XE, New York, N. Y. (Wayne, N. J.)	21.600	13.88	KFY, Forward Base, Little America
			6.785	44.38	KEL, Bolinas, Calif., Exp.	15.320	19.57	W2XAD, Schenectady, N. Y.	21.625	13.86	KFY, Main Base, Little America
			6.792	43.71	WEZ, Rocky Point, N. Y., Exp.	15.410	19.46	KWO, Dixon, Calif., phone			KFY, Forward Base, Little America
			6.800	43.27	WEB, Rocky Point, N. Y., Exp.	15.445	19.41	WKO, Rocky Point, N. Y., Exp.	35.200	8.52	High frequency inter-island phones of the
			6.835	43.23	WKP, Rocky Point, N. Y., Exp.	15.970	18.77	WQR, Rocky Point, N. Y., Exp.	to		Mutual Telephone Co., Hawaii
			6.850	43.13	WEO, Rocky Point, N. Y., Exp.	16.015	18.72	WKK, Kahuku, Hawaii, phone	54.000	5.55	Call letters as follows:
			6.858	43.09	KEB, Bolinas, Calif., Exp.	16.030	18.71	WKO, Lawrenceville, N. J., phone			Manawabua, Island of Oahu, KGXA-B-C-D-E-F-G
			7.370	40.67	WJN, Rocky Point, N. Y., Exp.	16.260	18.44	WOO, Ocean Gate, N. J., Ship phone			Ulupakua, Island of Maui, KGXH-J
					WEM, Rocky Point, N. Y., Exp.	17.120	17.51	KFY, Forward Base, Little America			Waikii, Island of Hawaii, KGXK-L-M
			7.400	40.51	WEG, Rocky Point, N. Y., Exp.	17.600	17.04	KFY, Main Base, Little America			Kaunakaki, Island of Molokai, KGXN
			7.415	40.43	KDK-KKH, Kahuku, Hawaii, phone	17.620	17.01	KFY, Forward Base, Little America			Kalepa, Island of Kauai, KGXO
			7.520	39.87	KWX, Dixon, Calif., phone			W3XAL, New York, N. Y. (Boundbrook			Lanai Island, KGXP
			7.610	39.40	KEE, Bolinas, Calif., Exp.	17.772	16.87	N. J.)			
			7.715	38.86	WOO, Ocean Gate, N. J., Ship phone			WQC, Rocky Point, N. Y., Exp.			
			8.630	33.99	KFY, Forward Base, Little America	17.860	16.78	WQI, Rocky Point, N. Y., Exp.			
			8.820	33.99	KFZ, Main Base, Little America	17.880	16.76	WLL, Rocky Point, N. Y., Exp.			
					KFY, Forward Base, Little America	17.900	16.75	WQF, Rocky Point, N. Y., Exp.			
			8.840	33.92	KFZ, Main Base, Little America	17.920	16.73	WQB, Rocky Point, N. Y., Exp.			
					WAD-WEC, Rocky Point, N. Y., Exp.	17.940	16.71	WQB, Rocky Point, N. Y., Exp.			
			8.930	33.57	KZGG, Cebu, P. I., Inter-island phone	18.020	16.64	KQJ, Bolinas, Calif., Exp.			
			8.940	33.54	WKL, Rocky Point, N. Y., Exp.	18.050	16.34	WLA, Lawrenceville, N. J., phone			
					WEL, Rocky Point, N. Y., Exp.	18.350	15.89	WKM, Rocky Point, N. Y., Exp.			
			8.950	33.50	KFJ, Bolinas, Calif., Exp.	18.860	15.88	WQH, Rocky Point, N. Y., Exp.			
			9.010	32.78	KZGF, Manila, P. I., Inter-island phone	18.880	15.88	WDS, Rocky Point, N. Y., Exp.			
			9.170	32.30	WNA, Lawrenceville, N. J., phone	18.900	15.86	WQS, Rocky Point, N. Y., Exp.			
					WES, Rocky Point, N. Y., Exp.	18.920	15.84	WTT, Rocky Point, N. Y., Exp.			
			9.448	31.74	WKT, New Brunswick, N. J., phone	18.940	15.83	WTD, Rocky Point, N. Y., Exp.			
			9.460	31.79	WET, Rocky Point, N. Y., Exp.	18.960	15.81	WTF, Rocky Point, N. Y., Exp.			
			9.470	31.66	WDA, Rocky Point, N. Y., Exp.	18.980	15.79	WFX, Rocky Point, N. Y., Exp.			
			9.480	31.62	KZGH, Iloilo, P. I., Inter-island phone	19.020	15.60	WFK, Lawrenceville, N. J., phone			
			9.490	31.59	WEF, Rocky Point, N. Y., Exp.	19.816	15.14	WKN, Lawrenceville, N. J., phone			
					W2XAF, Schenectady, N. Y.	19.860	15.01	KAX, Manila, P. I., phone			
			9.530	31.46	W3XAU, Philadelphia, Pa. (Byberry)	20.100	14.91	WQY, Rocky Point, N. Y., Exp.			
			9.585	31.28	WOF, Lawrenceville, N. J., phone	20.180	14.85	WQY, Rocky Point, N. Y., Exp.			
			9.750	30.75	WON, Lawrenceville, N. J., phone	20.260	14.79	WQQ, Rocky Point, N. Y., Exp.			
			9.870	30.38	KAZ, Manila, P. I., phone	21.054	14.24	WKA, Lawrenceville, N. J., phone			
			9.900	30.01	WNB, Lawrenceville, N. J., phone	21.060	14.24	KWN, Dixon, Calif., phone			
			10.317	28.09	WCG, Rocky Point, N. Y., Exp.	21.220	14.13	WQA, Rocky Point, N. Y., Exp.			
			10.370	28.91	KEZ, Bolinas, Calif., Exp.	21.240	14.12	WQJ, Rocky Point, N. Y., Exp.			
			10.400	28.83	KES, Bolinas, Calif., Exp.						
			10.410	28.80	WOK, Lawrenceville, N. J., phone						
			10.550	28.42	WEA, Rocky Point, N. Y., Exp.						
			10.610	28.25	WED, Rocky Point, N. Y., Exp.						
			10.630	28.20	KWV, Dixon, Calif., phone						
			10.630	27.68	KIO, Kahuku, Hawaii, Exp.						
			10.830	25.67	W1XAL, Boston, Mass.						
			11.780	25.45	W2XE, New York, N. Y. (Wayne, N. J.)						
			11.823	25.36	W8XK, Pittsburg, Pa. (Saxonburg)						
			11.870	25.25	KKQ, Bolinas, Calif., Exp.						
			11.950	25.08	WOO, Ocean Gate, N. J., Ship phone						
			12.840	23.35	WAW, Hialeah, Fla., phone						
			12.930	23.18	KFY, Forward Base, Little America						
			13.185	22.74	KFZ, Main Base, Little America						
					KFY, Forward Base, Little America						
			13.200	22.71	KFZ, Main Base, Little America						
			13.245	22.64	KFY, Forward Base, Little America						
					KFZ, Main Base, Little America						
			13.260	22.61	KFY, Forward Base, Little America						
					KFZ, Main Base, Little America						
			13.390	22.39	WMA, Lawrenceville, N. J., phone						
			13.420	22.34	WHR, Rocky Point, N. Y., Exp.						
			13.435	22.31	WKD, Rocky Point, N. Y., Exp.						
			13.450	22.28	WEX, Rocky Point, N. Y., Exp.						
			13.465	22.26	WKC, Rocky Point, N. Y., Exp.						
			13.480	22.24	WAJ, Rocky Point, N. Y., Exp.						
			13.690	21.90	KKZ, Bolinas, Calif., Exp.						
			13.780	21.75	KKW, Bolinas, Calif., Exp.						
			13.840	21.66	WPE, Rocky Point, N. Y., Exp.						
			13.855	21.63	WQU, Rocky Point, N. Y., Exp.						
			13.870	21.61	WUY, Rocky Point, N. Y., Exp.						
			13.900	21.57	WQF, Rocky Point, N. Y., Exp.						
			13.915	21.54	WQS, Rocky Point, N. Y., Exp.						
			14.470	20.72	WME, Lawrenceville, N. J., phone						
			14.590	20.55	WMN, Lawrenceville, N. J., phone						
			14.800	20.26	WQV, Rocky Point, N. Y., Exp.						
			14.815	20.23	WQL, Rocky Point, N. Y., Exp.						

POSTSCRIPTS from Our Readers

"I get radio magazines from all parts of the world but I can truly say that I have never seen one that can compare with RADEX in any respect. The information contained between its covers is exactly what a radio magazine should give to its readers."

S. H. Crowe, 157 Catharine St., N., Hamilton, Ont.

"Want to congratulate you on the November RADEX. It's the best magazine I have seen for any radio fan."

D. D. Campbell, Station KUOA, Fayetteville, Ark.

"I have been a reader of RADEX since 1930. I think it is one of the best of radio magazines. It is edited in a way that it can be easily understood by the non-technical radio fan such as myself."

Hubert H. Davis, 214 N. Green Street, Henderson, Ky.

"I am looking forward to the next issue and will certainly count the days till its arrival."

Robert M. Pybus, 4 Highfield Rd., Chorlton-cum-Hardy, Manchester, England.

"We have always considered your publica-

tion as filling one field of the radio industry and will cooperate with you to the best of our ability."

J. E. Roberts, Engineer in Charge, Station CRCS, Chicoutimi, Que.

"I have been a reader of your excellent radio magazine for the past three years and enjoy it very much. I know of no other that contains as much usable information."

Everett R. Clark, Box 313, Goodwell, Okla.

"I think RADEX is the best magazine on the market and I have a standing order for it at the newsstand. Why don't you issue, it at least twice a month or possibly oftener?"

Harold Gasper, RFD 7, St. Joseph, Mo.

"I have just discovered your valuable publication and, believe me, it fills a long-felt yearning on my part for a radio magazine that a layman is 'able to understand.'"

Charles Aloysius Steele, 3119 Seventh St., Port Arthur, Tex.

"As an old-timer who has subscribed to fourteen radio publications, I declare that your magazine is the one I would take if I were, somehow, restricted to only one."

Dr. Donald M. Gildersleeve, 2518 Webb Ave., Bronx, New York.

		UZI, Nelson, B. C.	4.942	62.70	CZA, Drummondville, P. Q., Ship phone
		UZN, Prince George, B. C.	6.005	49.93	VE9DR, Montreal, P. Q.
		UZN, Cranbrook, B. C.	6.015	49.85	VE9CX, Wolfville, N. S.
2.481	120.80	CGK, Ft. Chipewyan, Alta., Airway	6.030	49.72	VE9CA, Calgary, Alta.
		UYM, Ft. Rae, N. W. T., Airway	6.070	49.39	VE9CS, Vancouver, B. C.
		UYN, Ft. McMurray, Alta., Airway	6.090	49.23	VE9BJ, St. John, N. B.
		UYO, Echo Bay, N. W. T., Airway	6.092	49.22	VE9GW, Toronto, Ont. (Bowmanville)
2.735	109.62	VE9CI, London, Ont., Broadcast	6.110	49.07	VE9HX, Halifax, N. S.
3.068	97.70	CJU, Winnipeg, Man., Airway	6.150	48.75	VE9CL, Winnipeg, Man.
3.331	90.00	VE9AA, Montreal, P. Q., Exp.	6.335	47.35	VE9AF, Drummondville, P. Q., Exp.
3.450	86.90	CGK, Ft. Chipewyan, Alta., Airway	6.420	46.70	CFN, Grande Prairie, Alta., Police
		CJU, Winnipeg, Man., Airway			CFO, Lethbridge, Alta.
		UYM, Ft. Rae, N. W. T., Airway			CGJ, Peace River, Alta.
		UYN, Ft. McMurray, Alta., Airway			CGJ, Edmonton, Alta.
		UYO, Echo Bay, N. W. T., Airway			CGS, Calgary, Alta.
3.458	86.70	CFN, Grande Prairie, Alta., Police			CKT, Penticton, B. C.
		CFO, Lethbridge, Alta.			UZE, Victoria, B. C.
		CFU, Peace River, Alta.			UZF, Vancouver, B. C.
		CGJ, Edmonton, Alta.			UZG, Prince Rupert, B. C.
		CGS, Calgary, Alta.			UZH, Kamloops, B. C.
		CKT, Penticton, B. C.			UZI, Nelson, B. C.
		UZE, Victoria, B. C.			UZN, Prince George, B. C.
		UZF, Vancouver, B. C.			UZN, Cranbrook, B. C.
		UZG, Prince Rupert, B. C.	6.840	43.82	CFA, Drummondville, P. Q., phone
		UZH, Kamloops, B. C.	7.456	40.21	CKT, Penticton, B. C., Police
		UZI, Nelson, B. C.			UZE, Victoria, B. C.
		UZN, Prince George, B. C.			UZF, Vancouver, B. C.
		UZN, Cranbrook, B. C.			UZG, Prince Rupert, B. C.
4.751	63.10	CGK, Ft. Chipewyan, Alta., Airway			UZH, Kamloops, B. C.
		UYM, Ft. Rae, N. W. T., Airway			UZI, Nelson, B. C.
		UYN, Ft. McMurray, Alta., Airway			UZN, Prince George, B. C.
		UYO, Echo Bay, N. W. T., Airway			UZN, Cranbrook, B. C.
4.772	62.82	CFN, Grande Prairie, Alta., Police	8.353	35.89	CGK, Ft. Chipewyan, Alta., Airway
		CFO, Lethbridge, Alta.			UYM, Ft. Rae, N. W. T., Airway
		CFU, Peace River, Alta.			UYN, Ft. McMurray, Alta., Airway
		CGJ, Edmonton, Alta.			UYO, Echo Bay, N. W. T., Airway
		CGS, Calgary, Alta.	9.340	32.10	CGA, Drummondville, P. Q., phone
		CKT, Penticton, B. C.	11.720	25.58	VE9JR, Winnipeg, Man. (Middlechurch)
		UZE, Victoria, B. C.	12.951	23.15	CGK, Ft. Chipewyan, Alta., Airway
		UZF, Vancouver, B. C.			UYM, Ft. Rae, N. W. T., Airway
		UZG, Prince Rupert, B. C.			UYN, Ft. McMurray, Alta., Airway
		UZH, Kamloops, B. C.			UYO, Echo Bay, N. W. T., Airway
		UZI, Nelson, B. C.	13.296	22.55	CGA, Drummondville, P. Q., phone
		UZN, Prince George, B. C.	13.740	21.82	CGA, Drummondville, P. Q., phone
		UZN, Cranbrook, B. C.	17.330	17.30	CGS, Calgary, Alta., Police

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 "States" ☐ 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.....

No extra charge outside the U. S. A.

February DX Calendar

(Continued from second cover)

FRIDAY MORNINGS

Feb. 2

2:30-4:00—CHWK, Chilliwick, 780 (1)

Feb. 23

4:00-5:00—KPOF, Denver, 880 (5)

Feb. 2-9-18-23

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 listeners.

SATURDAY MORNINGS

Feb. 3

4:00-5:00—WIS, Columbia, 1010 (5)
4:15-4:45—WGNV, Chester, 1210 (1)

Feb. 3-17

2:00-3:00—XES, Tampico, 1020 (.5)

Feb. 10

2:30-4:00—10-BQ, Brantford, 1200 (.005)
3:00-4:00—WJEJ, Hagerstown, 1210 (1)
3:15-4:15—WMBQ, Brooklyn, 1500 (1)
4:30-6:00—10-BP, Wingham, 1200 (.015)

Feb. 17-24

1:00-3:00—CMCW, Havana, 965 (15)
2:00-3:00—WGLC, Hudson Falls, 1370 (1)

Feb. 17

2:00-3:00—WHA, Madison, 940 (1)
2:00-3:00—WOQ, Kansas City, 1300 (1)
3:00-9:00—KPPC, Pasadena, 1210 (.05)

Feb. 24

1:00-2:00—CMHJ, Cienfuegos, 1125 (.06)
4:00-5:00—CFQC, Saskatoon, 1250 (5)

Feb. 3-10-17-24

1:00-2:00—WGNV, Chester, 1210 (1)
2:00-3:00—CMBS, Havana, 785 (2)
4:00-5:00—XEAO, Mexicali, 560 (1)

THE MONTH'S CHANGES

FREQUENCIES

595	CMW	Havana, Cuba, from 590	1100	CRCV	Vancouver, B. C., 500 to 1000
600	CGOR	Vancouver, B. C., from 1210	1120	CHGS	Summerside, P. E. I., 100 to 50
765	CMBS	Havana, Cuba, from 780	1120	CKOC	Hamilton, Ont., 1000 to 500
775	CMCQ	Havana, Cuba, from 780	1200	CJAT	Trail, B. C., 25 to 50
800	TIGP	San Jose, C. R., from 686	1200	10-BQ	Brantford, Ont., 5 to 15
835	CMC	Havana, Cuba, from 840	1210	CKBI	Prince Albert, Sask., 25 to 100
850	CMCF	Havana, Cuba, from 890	1210	CKMC	Cobalt, Ont., 100 to 50
875	CMX	Havana, Cuba, from 890	1210	CKOV	Kelowna, B. C., 100 to 50
910	CMJF	Camaguey, Cuba, from 930	1310	CHCK	Charlottetown, P. E. I., 100 to 50
915	CMCD	Havana, Cuba, from 925			
945.5	CMHD	Caibarien, Cuba, from 950	1290	.....	San Juan, P. R.
950	VOGY	St. John's, Nfld., from 1400	1310	CJKL	Kirkland Lake, Ont.
971.5	CMGF	Matanzas, Cuba, from 977	1310	CJLS	Yarmouth, N. S.
985	XEFE	Nuevo Laredo, Tams., from 1000	1370	CHPR	St. John, N. B.
1005	CMBZ	Havana, Cuba, from 1010	1390	CJRC	Middlechurch, Man.
1052	CMBG	Havana, Cuba, from 1070	1420	CKGB	Timmins, Ont.
1052	CMCB	Havana, Cuba, from 1070	1500	.....	Chelsea, Mass.
1120	CFTP	Edmonton, Alta., from 580	1500	.....	Hot Springs, Ark.
1170	CMJE	Camaguey, Cuba, from 1175			
1180	CMCJ	Havana, Cuba, from 1185	560	KTWO	Springfield, Mo., formerly KGIZ
1200	CJAT	Trail, B. C., from 1155	580	CFTP	Edmonton, Alta., formerly CHMA
1210	CKBI	Prince Albert, Sask., from 1200	1200	CJAT	Trail, B. C., formerly 10-AT
1370	WHET	Dothan, Ala., from 1210	1210	CKBI	Prince Albert, Sask., formerly 10-BI
1450	CFCT	Victoria, B. C., from 1430	1250	WNEW	Newark, N. J., formerly WAAM-WODA
1500	WKBB	E. Dubuque, Ill., from 1310			
1510	CFRC	Kingston, Ont., from 915			
1510	CKCR	Kitchener, Ont., from 645			

POWER

540	CJRM	Moose Jaw, Sask., 500 to 1000
580	WOBV	Charleston, W. Va., 500 to 750
580	WTAG	Worcester, Mass., 500 to 750
800	CFCO	Chatham, Ont., 100 to 50
890	CJGJ	Calgary, Alta., 500 to 100
730	CJCA	Edmonton, Alta., 500 to 1000
780	CKPR	Fort William, Ont., 100 to 50
930	CFAC	Calgary, Alta., 500 to 100

1370 WMBR Tampa, Fla., to Jacksonville, Fla.
1420 WENC Americus, Ga., to Albany, Ga.

REINSTATED

630 XEZ Merida, Yuc.
1200 CHAB Moose Jaw, Sask.

LOCATION

Brantford, Ont., from Preston, Ont.
Jonestown, Ark., from Paragould, Ark.
Dothan, Ala., from Troy, Ala.

PERMIT TO CHANGE LOCATION

Tampa, Fla., to Jacksonville, Fla.
Americus, Ga., to Albany, Ga.

Where one uses RADEX frequently, one of those Leatherette slip covers adds greatly to appearance and convenience. It protects the magazine from wear and provides a stiff backing for making entries. Beautifully embossed in gold with silk string for holding copy securely. Price 50c postpaid.

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

BEFORE you buy any radio, write for this big new FREE Midwest catalog . . . printed 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 deluxe 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.

... 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 Circuits, No-Immure 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.

DEAL DIRECT WITH LABORATORIES

AMAZING FOREIGN RECEPTION
AKRON, 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 meterband. L. H. MOELLER 703 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—as little as \$5.00 down puts a Midwest radio in your home.

SAVE UP TO
50%

MIDWEST RADIO CORP.

DEPT. 483 - CINCINNATI, OHIO, U. S. A.

Established 1920

Cable Address Mireco, ABC 5th Edition

WORLD'S GREATEST RADIO VALUE

\$49.50
with New
Deluxe Auditorium Type
SPEAKER

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 color! 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!



MAIL COUPON TODAY! FOR AMAZING 30-DAY FREE TRIAL OFFER AND NEW 1934 CATALOG

MIDWEST RADIO CORP.,
Dept. 483
Cincinnati, Ohio.

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.

AGENTS!
Make Easy
Extra Money

Check Here
for Details ☐

Name _____

Address _____

City _____ State _____