THE FEBRUARY 1934

# RADEX

THE ALL-WAVE RADIO MAGAZINE







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?"

### FEBRUARY DX CALENDA

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<br>Jan. 28   |
|--|
| 2:00-3:00—CHWC, Regina, 1010 (.5)<br>4:30-5:00—CKFC, Vancover, 1410 (.05)<br>6:00-7:00—XGOA, Nanking, 660 (.75)  |
| Feb. 4<br>1:00-2:00—WWAE, Hammond, 1200 (.1)<br>2:30-4:30—CKBI, Prince Albert, 1210 (.1)<br>3:00-6:00—WGCM, Gulfport, 1210 (.25)   |
| Feb. 4-18<br>5:00-6:00—XFB, Jalapa, 1290 (1)   |
| Feb. 4-25<br>3:00-5:00—CMCU, Havana, 1100 (.5)   |
| 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—WCLO, Janesville, 1200 (.1)  |
| 4:00-5:00—CMGF, Matanzas, 971 (.1)   |
| Feb. 11-18-25<br>1:00-3:30—WIBM, Jackson, 1370 (.1)  |
| Feb. 18<br>2:00-3:00—KOH, Reno, 1380 (.5)  |
| 2:00-2:00—KREG, Santa Ana, 1500 (.1)<br>KUMA, Yuma, 1420 (.1)<br>3:00-5:00—KGNO, Dodge City, 1340 (.25)<br>3:00-5:00—KMJ, Fresno, 580 (.5)<br>3:00-7:00—KGIR, Butte, 1360 (.5)   |
| 3:00-5:00—KGNO, Dodge City, 1340 (.25)   |
| 3:00-5:00KMJ, Fresno, 580 (.5)   |
| 3:00-7:00—KGIR, Butte, 1360 (.5)   |
|  |
| Feb. 25  |
| 12:00-4:00—KFSG, Los Aligeles, 1120 (.5)   |
| 1:00-2:00—XEFW, Tampico, 1280 (.07)  |
| 3:00-5:00—WHAZ, Troy, 1300 (.5)  |
| 12:00-4:00—KFSG, Los Angeles, 1120 (.5)<br>1:00-2:00—XEFW, Tampico, 1280 (.07)<br>3:00-5:00—WHAZ, Troy, 1300 (.5)<br>4:00-5:00—WIBG, Gleuside, 970 (.1)  |
|  |
| 12:00-1:00—CMBW, Havana, 1140 (.6)<br>CMX, Havana, 875 (1)<br>XETW, Mexico City, 830 (.5)<br>12:00-1:30—WMBC, Detroit, 1420 (.1)<br>12:00-3:00—CMCD, Havana, 915 (.5)<br>WGES, Chicago, 1360 (.5)<br>1:00-2:00—WCCO, Mineapolis, 810 (50)  |
| 12:00-1:30—WMBC, Detroit, 1420 (.1)  |
| 12:00-3:00—CMCD, Havana, 915 (.5)<br>WGES Chicago, 1360 (.5)   |
| 1:00-2:00—WCCO, Minneapolis, 810 (50.)<br>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—KPJM, Prescott, 1500 (.1)  |
| 3:00-4:00—KFXM, San Bernardino, 1210 (.1)<br>KGER, Long Beach, 1360 (1)  |
| WGBS, Chicago, 1360 (.5) 1:00-2:00-WCCO, Minueapolis, 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-KPJM, 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-XEFY, Juarez, 1370 (.1) *P. 0. Box 1441, Sandego, Calif. |
| 2.00 6.00 *VEOK Timore 757 (5)   |
| 3:00-6:00—*XEOK, Tijuana, 757 (5)  |
| 4:00-5:00—CFJC, Kamloops, 1120 (.1)<br>CMJK, Camaguey, 790 (.5)  |
| 4:00-6:00—XEFV, Juarez, 1370 (.1)<br>*P. O. Box 1441, Sandiego, Calif.   |

#### MONDAY MORNINGS

Jan. 29 6:00-7:00-XGOA, Nanking, 660 (.75) Feb. 5 3:00-5:60—KPCB, Seattle, 650 (.1) 3:45-4:00—KUJ, 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. 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) 2:30-3:30-HJN, Bogota, 681 (.5) 2:00-3:00-HIZ, 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—WCAL, 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)

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

#### Feb. 7-14-21-28 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) 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) 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!

FOR
EVEN
HARDESTBOILED
D-X
HOUNDS

with

The
SCOTT
ALL:WAVE
Deluxe
15 to 550 METERS

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.



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

If, after 80 days trial in your home, you are not convinced that the SCOTT ALL-WAVE De-luxe has finer tone, greatsensitivity and lectivity, and more foreign brings stations. stations on the broadcast band and more stations on the short wave bands than any other receiver that may be com-pared with it, you can return it to us and have every cent you paid for it promptly refunded. In addition to addition to this, every part (except tubes) is guaranteed for five years.



E. H. SCOTT RADIO LABORATORIES, Inc. 4450 Ravenswood Ave., Dept. RX24, Chicago, III.



CONSOLES

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

|    |   |     | -  |       |    |     |      |      |     |
|----|---|-----|----|-------|----|-----|------|------|-----|
| A. | Д | IL. | CC | ) U F | ON | FOR | FULL | DETA | ILS |

| E. H. Scott Radio Laboratories, inc.,<br>4450 Ravenswood Ave., Dept. RX24, Chicago, III.<br>Send me at once, without obligation, all particulars rega<br>WAVE Deluxe, and PROOFS of its ability. | rding | the    | SCOTT | ALL. |
|--|-------|--------|-------|------|
| Name   |       |        |       |      |
|  |       |        |       |      |
| Address  |       | ****** |       |      |
| Town   | State |        |       |      |

#### **FEBRUARY 1, 1934**



Technical Editor

Reg. U. S. Patent Office

FRED CLAYTON BUTLER Editor and Publisher



PAGE TAYLOR Short Wave Editor

TENTH YEAR

#### **CONTENTS**

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, Tuning the Radio Frequency Circuit | 3            |
| Little Life Stories of Radio Folk, by "Betty"                     | 8            |
| The Editor and the "Family"                                       | 11           |
| With the High Frequency Fans, by Page Taylor                      | 15           |
| How to Use Microphones and Pickups, by B. Francis Dashiell        |              |
| Stories of the Log Builders, The Foreigners Are Coming In         | 23           |
| "What's Wrong with My Set?" Answered by the Technical Editor      | 33           |
| The Short Wave Stations of North America, by Frequencies          | 37           |
| Reallocation in Europe, a Grand Shift on January 15               | 38           |
| Condensed Cream of the DX Reports                                 |              |
| 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                    |              |
| 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

HILE 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 Let us take some fixed reactance. 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 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 radiofrequency 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.

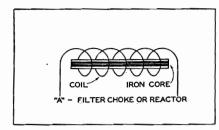
#### The "Why" of Tuning

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 Thus, these two currents · tend to oppose each other, and the secondary effect is called reactance. counter-electromotive-force, or inductance.

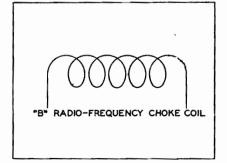
#### Impeding All But One Frequency

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 inductanceconsiderable coil of 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. 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-

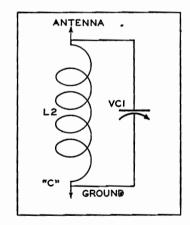


ing direct current will flow with a steady value. But we will hear more about chokes and filters when we discuss the power units of radio sets.

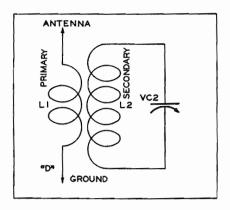
#### The Primary Circuit

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 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

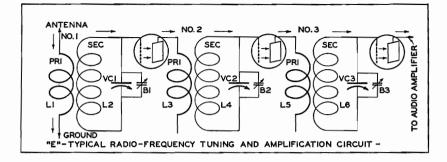
In the diagram "D," which now makes use of the radio circuit symbols shown in Part Three and Part Four, we see the primary coil L1. It permits most of the radio waves to pass down to earth because its reactance is very low; it is an untuned circuit. The currents passing through L1 will induce stronger 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 carrierwave 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 radiofrequency circuit, sharply tuned and balanced, will pass but one frequency The signal is increased at a time. 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?
- 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? actance? 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

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 postvaid.

## Little Life Stories of RADIO FOLK

• • • by "BETTY"

ENDELL 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 Anti-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 Chicago," 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 WEAF, 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 sixtyfour 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 Pavlowa. 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 Hymes, 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 Ahe 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 broadshouldered 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 5piece band and moved into the Cocoanut 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

**¬O** 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.

#### Confliction 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 This confusion of the same time. programs is very detrimental. 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. 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 lovalty 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, Mokon River, Mokon, 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, 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: 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 allwave 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 "allwave" 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 remov-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 6:30. This raven-locked, 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 hand 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 borning 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

#### a 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, VEBCS
Feb. 4, 9:00 to 11:00 pm, CR7AA
Feb. 5, 5:00 to 6:30 am, PK1WK
Feb. 10, 9:30 to 10:30 pm, YV3BC
Feb. 28, 500 to 6:30 am, PK1WK
Feb. 10, 9:30 to 10:30 pm, YV3BC
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 Compañia 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, Laurenco 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

megs. 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 megs.), 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-Coloniale Francaise?
- 6. Do atmospheric disturbances annoy you? When are they most annoying? Are they as bothersome on wavelenths 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 megs.)

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

neters (11.030 megs.)

- 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 megs.) 10 pm to midnight, 25.2 meters.

Letters to this station should be addressed to: Ministère des Postes, Télégraphs & 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 megs. 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 Ruppert." 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 fregs. 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 let-"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 FIUI. 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 recordings, as well as news flashes." The schedule is given correctly in our lists under the heading "Radio-Tenanarive."

"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. 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 Russelville, 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 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 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 20meters. 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: Commisariat du Peuple des Communications Postales et Eléctriques 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 newstands 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

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.

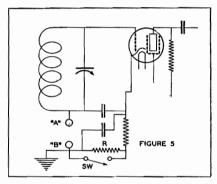
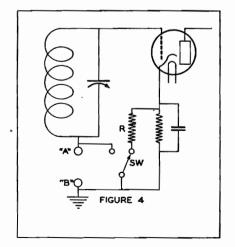
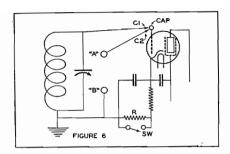


Figure 5 shows a somewhat similar method, except the switch (SW) merely shorts the resistor R. It is used when the detector grid is fed from an intermediate transformer stage (superheterodyne). When SW is closed, R is shorted, and the detector becomes an audio amplifier.

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 gridbias 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

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, WEAF, 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

CORES 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 enjoved 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 3tube 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. 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, 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 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 felfrom 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. 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. Pontoise, Santo Domingo, 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 Hark-I would be pleased to hear ness. 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 was 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, HI1A, 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 Grosvernordale, 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 dis-I have also received LR5, patches. KDFN, CMCA, CJOC, CRCS, 10-AK, CHNC, XEB, XEFO, FQN." Charles has a triangular-shaped aerial 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, Tam-"We now wish to repico, Tamps. sume 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

about 300 feet in length in all. He . 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 wav."



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 lastminute 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. Bargen, 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 kes. 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 Frenchspeaking 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 aod 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. ways 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 singe 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 receipe 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, perhaps, 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.

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 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. 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? With WH AM Ed.) right here in Rochester, I can tune in the stations on either side—KVOO 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 Instead of tuning for the 1200. 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, Georgie'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 allwave Model 16-B," goes on Mr. Mappin, "and have had very good results on both the b. c. and s. w. 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 Broawway, 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 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 expedi-At times I could hear footsteps in their radio room and I heard someone operating a typewriter. They were on about 41 m. signed off at 11:50 p. m. EST. 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 I1BA and I1TO 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 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 sea-If all DXers will concentrate sons. 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, 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. 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, Venz.,

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 On the short waves, he rewatts. ceived 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. have a new 12-tube all-wave Silvertone 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, Tennesseeans; 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 Westerwald 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," prefaces 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

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 2½ 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 A carefully made meter suspicion. 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 prob-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 shortwave 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. 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 advertized 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 inter-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, re-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 necesary 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 intermediatefrequency, 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 mfds. 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

|                |                  |   |       |        | •  |
|----------------|------------------|---|-------|--------|--|
| Megs.<br>1.534 | Meters<br>195.45 | KGHO, Des Moines, Iowa, State police  |       | 124.09 | KGPB, Minneapolis, Minn., police<br>WPDS, St. Paul, Minn.  |
| 1.558          | 192.43           | KGHO, Des Moines, Iowa, State police<br>WPGC, S. Schenectady, N.Y., State police<br>KGPD, San Francisco, Calif., Marine Fire<br>WEY, Boston, Mass., Marine Fire                                   | 2.422 | 123.79 | MYPEK, New Orleans, La. WPDEK, Y. New Orleans, La. WPDEK, Yallejo, Calif. WMJ, Buffalo, N. Y. WPDW, Washington, D. C. WPEK, New Orleans, La. WPEK, Devtlend, Me. |
|                |                  | WEY, Boston, Mass., Marine Fire   |       |        | KGZC, Topeka, Kans.  |
| 1.570          | 191.08           |   |       |        | WMJ Buffalo, N. Y.   |
| 1.010          | 101.00           | WPEQ, Baton Rouge, I.a., police WPEW, Northampton, Mass., police KGPY, Shrevport, I.a., police WMP, Framingham, Mass., State police WMP, W. B. Baton, Mass., State police WMP, W. B. Baton, Mass. |       |        | WPDW, Washington, D. C.  |
| 1.574          | 190.48           | KGPY, Shreveport, La., police   |       |        | WPEK, New Orleans, La.   |
|                |                  | WPEL W Bridgeweter Mass, State police   | 2.430 | 123.45 | KGZD San Dlego Cal f. police   |
|                |                  | WPEL, W. Bridgewater, Mass., police<br>WPEV, Portable in Mass.  |       | 120.10 | WPFU, Portland, Me. KGZD, San Dlego, Cal f., police KGZJ, Phoenix, Ariz. WPDI, Columbus, Ohio  |
| 1 500          | 107 05           | WRDS, E. Lansing, Mich., State police   |       |        | WPDI, Columbus, Ohio   |
| 1.596          | 187.85           | WRDS, E. Lansing, Mich., State police<br>WCF, New York, N. Y., police<br>WRDU, Brooklyn, N. Y., police<br>KSW, Berkeley, Calif., police   |       |        | WPDM, Dayton, Ohio<br>WPFD, Highland Park, Ill.  |
| 1.658          | 180.83           | KSW, Berkeley, Calif., police   |       |        | WPFD, Highland Park, III.<br>WPFK, Hackensack, N. J.<br>WPGI, Portsmouth, Ohio   |
| 1.674          | 179.10           | Harrisburg, Pa., State police KGJX, Pasadena, Calif., police KGDC, St. Levis, Mo.   |       |        | WPGI, Portsmouth, Ohio   |
| 1.712          | 175.13           | KGPC, St. Louis, Mo.  |       |        | Little Rock, Ark.<br>Long Beach, Calif.  |
|                |                  | KGPJ, Beaumont, Texas.  |       |        | Minneapolis, Minn.   |
|                |                  | KGPL, Los Angeles, Calif.   | 2.442 | 122.77 | Santa Ana, Calif.  |
|                |                  | KGPR, Fort Worth, Texas. KGZB, Houston, Texas KGZI, Wichita Falls, Texas  | 2.412 | 144.11 | KGPX. Denver. Colo.  |
|                |                  | KGZI, Wichita Falls, Texas  |       |        | KGZH, Klamath Falls, Ore.  |
|                |                  | KGZL, Shreveport, La.   |       |        | KGZR, Salem, Ore.  |
|                |                  | KGZL, Shreveport, La.<br>KGZQ, Waco, Texas<br>KYP, Dallas, Texas  |       |        | KGPP, Portland, Ore., police KGPX, Denver, Colo. KGZH, Klamath Falls, Ore. KGZR, Salem, Ore. WMDZ, Indianapolis, Ind. WPDE, Louisville, Ky.                      |
|                |                  | WKDH Cingingsti Obio  |       |        | WPDF, Flint, Mich.   |
|                |                  | WPDC Chicago, Ill.  |       |        | WPDH, Richmond, Ind.   |
|                |                  | WPDB, Chicago, III. WPDC, Chicago, III. WPDU, Chicago, III. WPDU, Pittsburgh, Pa.   |       |        | WPEB, Grand Rapids, Mich.  |
|                |                  | WPDU, Pittsburgh, Pa.   |       |        | WPES, Saginaw, Mich.   |
|                |                  | WPED, Arlington, Mass.<br>WPEH, Somerville, Mass.   |       |        | WPDL, Lansing, Mich. WPEB, Grand Rapids, Mich. WPES, Saginaw, Mich. WPFC, Muskegon, Mich. WPFE, Reading, Pa. WPFG, Legsconville, Ele                             |
|                |                  | WPEI, E. Providence, R. I.  |       |        |  |
|                |                  | WPEJ, Brookline, Mass.<br>WPET, Lexington, Ky.  |       |        | WPFT, Lakeland, Fla.<br>WPFX, Town of Palm Beach, Fla.   |
|                |                  | WPFA, Newton, Mass.   |       |        |  |
|                |                  | WPFA, Newton, Mass.<br>WPFJ, Hammond, Ind.<br>WPFN, Fairhaven, Mass.  |       |        | WPGA, Bay City, Mich Binghamton, N. Y. KGPH, Oklahoma City, Okla, police KGPO, Tulsa, Okla.  |
|                |                  | Providence, R. I.   | 2.450 | 122.40 | KGPH, Oklahoma City, Okla, police  |
|                | 101.00           | San Bernardino, Calif.  |       |        | KGPO, Tulsa, Okla.   |
| 2.414          | 124.20           | KGPA, Seattle, Wash., police<br>KGPS, Bakersfield, Calif.   |       |        | KCPZ Wighita Kana  |
|                |                  | KGZA, Fresno, Calif.  |       |        | KGZF, Chanute, Kans. KGZP, Coffeyville, Kans. WPDK, Milwaukee, Wis. WPEE, Brooklyn, N. Y. WPEF, Bronx, N. Y. WPEG, Naw York, N. Y.                               |
|                |                  | KGZA, Fresno, Calif.<br>KGZM, El Paso, Texas<br>KGZM, Tacoma, Wash.   |       |        | KGZP, Coffeyville, Kans.   |
|                |                  | KGZN, Facoma, Wash.<br>KGZO, Santa Barbara, Calif.  |       |        | WPEE Brooklyn N. V.  |
|                |                  | KGZV. Aberdeen, Wash.   |       |        | WPEF, Bronx, N. Y.   |
|                |                  | KGZX, Albuquerque, N. Mex.  | 2.458 | 121.97 | WPEG, New York, N. Y.  |
|                |                  | KGZX, Albuquerque, N. Mex.<br>WCK, Detroit, Mich.<br>WMO, Highland Park, Mich.  | 2.400 | 121.97 | KGHS, Spokane, Wash., police<br>KGZW, Lubbock, Texas<br>WPDG, Youngstown, Ohio<br>WPDN, Auburn, N. Y.  |
|                |                  | WPDA Injare Calif.  |       |        | WPDG, Youngstown, Ohio   |
|                |                  | WPDJ, Passaic, N. J.  |       |        | WPDN, Auburn, N. Y.<br>WPDO, Akron, Ohio   |
|                |                  | WPDY Atlanta Ga.  |       |        | WPDP Rochaston M V   |
|                |                  | WPDJ, Passaic, N. J.<br>WPDX, Detroit, Mich.<br>WPDY, Atlanta, Ga.<br>WPFH, Baltimore, Md.  |       |        | WPDV, Charlotte, N. C.   |
|                |                  | W I I I, Columbus, Ga.  |       |        | WPES Ashaville N. C.   |
|                |                  | WPFM, Birmingham, Ala.<br>WPFP, Clarksburg, W. Va.  |       |        | WPDV, Charlotte, N. C. WPEA, Syracuse, N. Y. WPFS, Asheville, N. C. WPGD, Rockford, Ill. WRBH, Cleveland, Ohio   |
|                |                  | WPFP, Clarksburg, W. Va.<br>WPFY, Yonkers, N. Y.<br>WPGB, Port Huron, Mich.   | 0.470 | 101.40 | WRBH, Cleveland, Ohio  |
|                |                  | WPGB, Port Huron, Mich.<br>WPGJ, Utica, N. Y.   | 2.470 | 121.40 | KGOZ, Cedar Rapids, Iowa, police<br>KGPD, San Francisco, Calif.  |
|                |                  | WPGS, Mineola, N. Y. °  |       |        | KGPI, Omaha, Nebr.<br>KGPK, Sioux City, Iowa   |
|                |                  | WRDR, Grosse Pointe, Mich.  |       |        | KGPK, Sioux City, Iowa   |
|                |                  | La Grange, Ga.  |       |        | KGPM, San Jose, Calif.   |
|                |                  | Santa Fe, N. Mex.   |       | (0     | Continued on page 94)  |
|                |                  |   |       |        |  |

# REALLOCATION in Europe

#### Grand Shift on January 15

HE "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 give 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 longwave 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 it 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 Augsberg 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. Announce-

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 46)

# Condensed CREAM of the DX Reports

 $\mathbf{F}_{113}^{ ext{ROM}}$  a Californian, Jack Watrous, les: "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 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 WCBD. I have every state but Wyoming and every province in Canada. I use an RCA-Victor 10-tube biacoustic Model R-90 and I would like to hear from others using a similar set. 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, JT8, 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, WGNY, KMO, WSPA, KFVD, KGHL, 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."

Write's 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 WEAF, 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.

| wavelen                                       |                         | meters.                                 | The             | Kilocycles and<br>symbols in the<br>type of service,                     | 266.00           | 1,127.14             | KCAI<br>KCX<br>WHZ<br>WSX<br>WWAB        | AW.<br>AW.<br>AW.<br>AW. | Waynoka, Okla.<br>Medford, Ore.<br>Atlanta, Ga.<br>Boston, Mass.<br>Buffalo, N. Y.<br>Moscow (Popoff), |
|---|-------------------------|---|-----------------|--|------------------|----------------------|--|--------------------------|--|
|   | A,<br>AE,               | Airway<br>airway                        | exper           | imental  | 269.00           | 1,114.57             | RW58                                     | В.                       | USSR.  |
|   | AW,<br>B,               | airway<br>Broadca                       | weat<br>ast     | her reports  | 271.50           | 1,104.29             | RV10                                     | В.                       | Minsk Kolodistchi,<br>USSR.  |
|   | Exp,<br>HP,             | Experii<br>Harbor                       | nenta:<br>polic | l<br>e   | 272.00<br>277.00 | 1,102.28<br>1,082.38 | wwx                                      | AW.<br>B.                | Washington, D. C.  |
|   | IP.                     | Harbor<br>Inter-Is<br>Police            | sland           | phone  | 278.00           | 1,078.48             | W2XAH<br>W3XR                            | Exp.<br>Exp.             | Oslo, Norway<br>S. Plainfield, N. J.<br>Mendham, N. J.   |
|   | P,<br>tAt,              | trans-A                                 | tlanti          | c Phone  |                  |                      | W3XY<br>W8XAA                            | Exp.<br>AE.              | Mendham, N. J.<br>Cleveland, Ohio  |
| Kcs.<br>18.00                                 | Meters<br>16,656.67     | Call<br>KIE                             | Type            | Kahuku, Hawaii   | 280.00           | 1,070.78             | •••••                                    | В.                       | Scheveningen, Hol-<br>land   |
| $18.22 \\ 18.60$                              | 16,455.54<br>16,118.27  | WQK<br>KGI                              | Exp.            | Rocky Point, N. Y.<br>Kahuku, Hawaii                                     | 284.00           | 1,055.70             | KCAC                                     | B.<br>AW.                | Tiflis, USSR.<br>Butte, Mont.  |
| 45 to<br>75                                   | 6,662.67 to<br>3,997.60 | W2XA                                    | Exp.            | Rocky Point, N. Y.   |                  |                      | KCT<br>KCY                               | AW.                      | Los Angeles, Calif.<br>Portland, Ore.  |
| 50 to<br>70                                   | 5,996.40 to<br>4,283.14 | W1XR                                    | Exp.            | tAt  |                  |                      | KVM<br>WWQ                               | AW.                      | North Platte, Neb.<br>Bellefonte, Pa.  |
| 50 to   | 5,996.40 to             | )                                       | -               | Houlton, Me.   | 290.00           | 1,033.86             | KCQ<br>KGD                               | AW.                      | Bellefonte, Pa.<br>St. Louis, Mo.<br>Salt Lake City,   |
| 75  | 3,997.60                | W1XQ                                    | Exp.            | tAt<br>Bradley, Me.  |                  |                      | RV9                                      | В.                       | Utah<br>Kiev. USSR.  |
| 66.5 to                                       | 4,508.57 to             | WOH                                     |                 | -  | 296.00           | 1,012.90             | KCAA<br>KCAF                             | B.<br>AW.<br>AW.         | Kiev, USSR. Tulsa, Okla.   |
| $\begin{array}{c} 69.5 \\ 155.00 \end{array}$ | 4,313.95<br>1,934.32    | WOH                                     | tAt<br>B.       | Bradley, Me.<br>Kaunas, Lithuania<br>Huizen, Holland<br>Radio-Kootwijk,  | 300.00           | 999.40               | RW53                                     | В.                       | Albuquerque, N. M<br>Leningrad, USSR.  |
| 160.00  | 1,873.87                | •••••                                   | В.<br>В.        | Huizen, Holland  | 302.00<br>308.00 | 992.78<br>973.44     | KCAH<br>KCR                              | AW.                      | Kingman, Arız.   |
|   |                         | • |                 | Holland  | 309.00           | 970.29               |  | В.                       | Boise, Idaho<br>Soro, Denmark  |
| 167.00<br>170.00                              | 1,795.32<br>1,763.64    | WQM                                     | В.              | Lahti, Finland<br>Rocky Point, N. Y.                                     | 310.00<br>314.00 | 967.16<br>954.84     | RW60<br>KJF                              | B.<br>AW.                | Alma Ata, USSR.<br>Omaha, Neb.   |
| 174.00  | 1,723.10                | .7                                      | В.<br>В.        | Rocky Point, N. Y.<br>Radio-Paris, France<br>Deutschlandsender,          | 320.00           | 936.93               | KOJ<br>KCS                               | AW.                      | Elko, Nev.<br>Pasco, Wash.   |
| 183.50  | 1,633.89                |   |                 | Germany  | 820.00           | 900.95               | WRW                                      | AW.                      | Greensboro, N. C.<br>Albany, N. Y.   |
| 188.00<br>190.00                              | 1,594.78<br>1,578.00    | RW14<br>WBA                             | В.<br>Р.        | Irkutsk, USSR.<br>Harrisburg, Pa.  |                  |                      | WWAH<br>WWAR                             | AW.<br>AW.               | Albany, N. Y.<br>Jackson, Mich.  |
|   | -,                      | WBR<br>WDX                              | P.              | Butler, Pa.  | 321.00           | 934.01               | RW4<br>KIS                               | B.<br>AW.                | Kharkov, USSR.   |
|   |                         | WJL                                     | P.<br>P.        | Wyoming, Pa.<br>Greensburg, Pa.  | 326.00           | 919.69               | KSG                                      | AW.                      | Iowa City, Iowa<br>Cheyenne, Wyo.<br>Memphis, Tenn.<br>Oakland, Calif.                                 |
| 193.00  | 1,553.47                | WMB                                     | P.<br>B.        | W. Reading, Pa.<br>Dayentry National,                                    | 332.00           | 903.07               | WWAU<br>KCV                              | AW.                      | Memphis, Tenn.   |
|   | •                       |   |                 | Hingland   | 002.00           | 500.01               | $\mathbf{wek}$                           | AW.                      | Wichita, Kans.<br>Cincinnati, Ohio   |
| $195.00 \\ 202.50$                            | 1,537.53<br>1,480.59    | RW1                                     | В.<br>В.        | Moscow (Komin-   | 333.00           | 900.36               | WWAS<br>WKDL                             | AW.<br>A.                | Miami, Fla.  |
| 207.50  | 1,444.91                |   | В.              | Ankara, Turkey<br>Moscow (Komin-<br>tern), USSR.<br>Eiffel Tower, Paris, | 334.00<br>338.00 | 897.66<br>887.04     | RW19<br>KCAD                             | B.<br>AW.                | Achkhabad, USSR<br>Idaho Falls, Idaho  |
|   | -                       | •••••                                   |                 | France   | 555.00           | 001.01               | WBP                                      | AW.                      | Key West, Fla.<br>Nashville, Tenn.   |
| 212.50  | 1,410.91                | DITTE                                   | В.              | Warsaw No. 1,<br>Poland  |                  |                      | WWAC<br>WWU                              | AW.<br>AW.               | New Brunswick,   |
| $217.50 \\ 222.50$                            | 1,378.48<br>1,347.50    | RW76                                    | В.<br>В.        | Novosibirsk, USSR<br>Motala, Sweden                                      | 344.00           | 871.56               | KCU                                      | AW.                      | N. J.<br>Fresno, Calif.  |
| 230.00  | 1,303.56                | •••••                                   | В.              | Moscow (Trades<br>Union), USSR.<br>Kasbah, Tunis                         | •                |                      | $rac{\mathbf{KCZ}}{\mathbf{KRC}}$       | AW.<br>AW.               | Seattle, Wash.<br>Kansas City, Mo.   |
| 235.00<br>238.00                              | 1,275.83<br>1,259.75    | RW8                                     | В.<br>В.        | Kasbah, Tunis<br>Baku, USSR.   | 350.00           | 856.62               | WWO<br>KCAE                              | AW.                      | Cleveland, Ohio<br>Winslow, Ariz.  |
|   |                         | RW43                                    | В.<br>В.        | Baku, USSK.  | 000.00           | 000.02               | KDA<br>KDN                               | AW.<br>AW.<br>AW.        | Maywood, Ill.  |
| 240.00  | 1,249.25                | •••••                                   | -               | Vienna Exp.,<br>Austria  |                  |                      | KKJ                                      | AW.                      | Rock Springs, Wyo.<br>Fort Worth, Texas<br>Leningrad, USSR.  |
| $242.00 \\ 248.00$                            | 1,238.92<br>1,209.35    | WFT.                                    | B.<br>AW.       | Boden, Sweden<br>Spartanburg, S. C.                                      | 351.00<br>355.00 | 854.19<br>844.56     | RW70                                     | В.<br>В.                 | Budapest No. 2,  |
| 250.00  | 1,199.28                |   | B.<br>B.        | Istanbul, Turkey<br>Reykjavik, Iceland                                   | 364.00           | 823.68               | RV5                                      | В.                       | Hungary<br>Sverdlovsk, USSR  |
| <b>2</b> 52.00                                | 1,189.76                |   | В.              | Luxembourg   | 368.00           | 814.73               | RW9                                      | В.                       | Kiev, USSR.  |
| 254.00  | 1,180.39                | KLK<br>WSG                              | AW.             | Reno, Nevada<br>La Crosse, Wis.  | 393.00           | 762.90               | WAEF<br>WHG                              | A.<br>A.                 | Newark, N. J.<br>Columbus, Ohio  |
| 260.00  | 1,153.15                | $\overline{	ext{WWAP}}$                 | AW.<br>AW.      | Pittsburg, Pa.<br>Richmond. Va.  | 400.00           | 749.55               | $egin{array}{c} WQDQ \\ RA8 \end{array}$ | A.<br>B.                 | Dearborn, Mich.<br>Bogorodsk, USSR.  |
| 200.00  | -1-00-10                |   | В.              | Kalundborg.  | 100.00           | . 10.00              | WAEF                                     | A.                       | Newark, N. J.  |
| 265.00  | 1,131.39                |   | В.              | Denmark<br>Monte Ceneri,   |                  |                      | WHM                                      | А.<br>В.                 | Indianapolis, Ind.<br>Geneva,  |
|   |                         |   |                 | Switzerland  |                  |                      |  |                          | Switzerland  |

| 402.00         | 745.82 |           | В.   | Ostersund, Sweden                 |
|----------------|--------|-----------|------|-----------------------------------|
| 406.00         | 738.47 | KOG       |      | Honolulu, Hawaii<br>Newark, N. J. |
| 414.00         | 724.20 | WAEF      | A.   | Newark, N. J.                     |
| 111.00         |        | WCQ       | Ā.   | Lansing, Ill.                     |
|                |        | WKĎL      | Ā.   | 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,                   |
| 101110         | 000112 |           |      | Finland                           |
| 435.00         | 689.24 | RW35      | В.   | Astrakhan, USSR.                  |
| 438.00         | 684.52 | WPY       | HP.  | New York, N. Y.                   |
| 442.00         | 678.32 | KHL       | IP.  | Wailuku, Hawaii                   |
| 112.00         | 0.0.02 | KHM       | ÎP.  | Lihue, Hawaii                     |
|                |        | KHN       | ÎP.  | Lanai, Hawaii                     |
|                |        | KHO       | ÎP.  | Kaunakaki, Hawaii                 |
|                |        | KLN       | ÎP.  | Hilo, Hawaii                      |
| 500.00         | 599.64 | WKDL      | Ä.   | Miami, Fla.                       |
| 300.00         | 333.04 | WPY       | ĤP.  | New York, N. Y.                   |
| 511.00         | 586.73 | RW30      | В.   | Dneipropetrovsk,                  |
| 311.00         | 000.10 | 161130    | ь.   | USSR.                             |
| 515.00         | 582.17 |           | В.   | Tartu, Estonia                    |
| 521.00         | 575.47 | RA34      | В.   | Koursk, USSR.                     |
| 522.00         | 574.36 |           | В.   | Hamar, Norway                     |
| 522.00         | 374.30 |           | B:   | Tamar, Norway                     |
|                |        |           | ь.   | Ljubljana,                        |
| #0¢ 00         | 570.00 |           | В.   | Yugoslavia<br>Grenoble (PTT),     |
| <b>5</b> 26.00 | 570.00 | • • • • • | ь.   |                                   |
| F07 00         | ECO 01 |           | В.   | France                            |
| <b>527.00</b>  | 568.91 |           | ь.   | Freiburg-im-Breis-                |
| F20.00         | FCE CO |           | D    | gau, Germany                      |
| 530.00         | 565.69 |           | В.   | Wilno, Poland                     |
| <b>5</b> 36.00 | 559.36 |           | В.   | Augsburg,                         |
|                |        |           | ъ    | Germany                           |
|                |        |           | В.   | Kaiserlautern,                    |
|                |        |           | n    | Germany                           |
|                |        |           | В.   | Tampere, Finland                  |

# The Verification PROBLEM

BVIOUSLY 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. 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 24hour 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.' readibility 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. 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. 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 On the other hand, I reverify. ceived 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. 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. Director Heffernan. Program 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 onehalf 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

HAD 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 WKEU, Grange, Ga.
Sunday Morning, Feb. 11
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 WKBB, East Dubuque, Ill.
Wednesday Morning, Feb. 15
3:00-4:00 WKBF, Binghamton, N. Y.
Friday Morning, Feb. 16
3:00-4:00 WWBL, Woodside, N. Y.
Saturday Morning, Feb. 17
3:00-4:00 WMPC, Lapeer, Mich.
Sunday Morning, Feb. 18
3:00-4:00 KREG, Santa Ana, Calif.
4:00-5:00 KRJM, Prescott, Ariz.
Monday Morning, Feb. 19
3:00-4:00 WFDV, Rome, Ga.
Tuesday Morning, Feb. 20
3:00-4:00 WRDV, Augusta, Ga.

Wednesday Morning, Feb. 21
3:00-7:00 WOFI, 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 KDB, Sonta Barbara, N. Y.
4:00-5:00 WOKW, Brocklyn, 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 KNOW, 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. 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 connected 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 Fave 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 She'll be off till Sepbroadcasting. tember 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. "with one Chinese, Winkley, 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.

| COLUMBI | A(C) |
|---------|------|
| Call    | Dial |
|         |      |
|         |      |
|         |      |

| NATIONA | L. Red (R) |
|---------|------------|
| Call    | Dial       |
|         |            |
|         |            |
|         |            |

| NATIONA | L, 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-6:00 p.m., C-5:00, M-4:00, P-8:00 C — Buck Rogers in 25th Century

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

R — Waldorf Astoria Orchestra R—Waldorf Astoria Orchestra
KDYL KFYR KOA KPO KPRC KSD
KSTP KTBS KTHS KVOO WAPI
WBEN WCAE WCSH WDAF WDAF
WEAF WEBC WFAA WFLA WHO
WIBA WIOD WIS WJAR WJAX
WJDX WKY WMAQ WMC WOAI
WOC WRC WRVA WSAI WSB WSM
WSMB WSOC WTAG WWJ WWNC
B—ILS, Army Band

B — U. S. Army Band
KOIL KSO KWCR KWK KYW WBAL
WBZ WBZA WCKY WENR WHAM
WJZ WMAL WREN WSYR

E-6:15 p.m., C-5:15, M-4:15, P-8:16 C — Bobby Benson; Sunny Jim WAAB WABC WCAU WDRC WEAN WFBL WGR WHEC WHK WLBZ WMAS WOKO WORC

E-6:30 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
WGLC WGST WHEC WHP WICC
WKBN WKBW WLBZ WMAS WMBG
WOKO WORC WQAM WSJS WSPD
WTAR WTOC

R— Irene Beasley, Songs
KGO KOA WAPI WBEN WCKY
WEAF WFBR WGY WHO WJDX
WMC WOC WSAI WSB WSM WSMB WSOC WTAG WWJ

E-6:45 p.m., C-5:45, M-4:45, P-8:46 R — Horsesense Philosophy; Andrew

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

B - Lowell Thomas
CRCT KDKA WBAL WBZ WPZA
WFLA WGAR WHAM WIOD WJAX WJR WJZ WLW WSYR

WJR WJZ WAYR

C — Mildred Bailey, Songs
CFRB CKLW KLRA KLZ KMBC
KOMA KRLD KSCJ KTRH WAB
WABC WBIG WBRC WCAH WCAO
WCAU WDAE WDBJ WDOD WDRC
WDSU WEAN WFBL WFBM WFEA
WGLC WGST WHAS WHBC WHP
WIBW WICC WISN WJSV WKBN
WKRW WIRZ WAAS WMBC WMT WKBW WLBZ WMAS WMBG WMT WOKO WORC WQAM W8JS WSPD WTAR WTOC WWVA

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Myrt and Marge CKLW KRLD WABC WADC WBT WCAO WOAU WDAE WDBO WDRC WEAN WFBL WGR WHK WJAS WJSV WKRC WNAC WOKO WQAM WSPD WTOC WWVA

R - Molle Show WEAF WEEL WFBR WGY WHO
WJAR WLIT WMAQ WOC WOW
WRC WTAG WTAM WTIC WWJ

B — Amos 'n' Andy
CRCT KDKA WBAL WBZ WBZA
WCKY WFLA WGAR WHAM WIOD
WJR WJZ WLW WMAL WPTF WRVA

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — Just Plain Bill CFRB CKLW WABC WCAO WCAU WGR WHK WJSV WKRC WNAC

R — Billy Bachelor; Ray Knight WEAF WGY WJAR WRC WTAM WWJ

WIAM WWJ B — Baby Rose Marie, Songs KDKA WBAL WBZ WBZA WHAM WJZ WMAL WSYR

E-7:30 p.m., C-6:30, M-5:30, P-4:80 C -- Music in the Air

WABC WCAO WCAU WDRC WEAN
WFBL WFEA WGR WHEC WICC
WJAS WJSV WLBZ WNAC WOKO WORC

R - Lum and Abner KSD WBEN WCAE WCSH WDAF WEAF WEEI WFBR WGY WJAR WLW WRC WTAG

B — Potash and Perimutter

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

E-7:45 p.m., C-6:45, 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

R - The Goldbergs WBEN WCAE WCSH WDAF WEAF WEEI WENR WFBR WGY WJAR WLIT WOW WRC WSAI WTAG WTAM WWJ

B --- Mme. Frances Alda B — Mme. Frances Aida
KDKA KDYL KFI, KFYR, KGO
KGW KHQ KOA KOIL KOMO
KPRC KTBS KTHS KWCR KWK
KYW WBAL WBAP WBZ WBZA
WHAM WIBA WJDX WJZ WKY
WMAL WOAI WSMB WSYR

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 WHEC WHK WICC WJSV WMAS WMBG WNAC WSPD WWVA

WHAC WORD WSFD WWYAM R - Soconyland Sketches-Drama WBEN WCSH WEAF WEEI WGY WJAR WTAG WTIC

B - Sealed Power Side Show B — Sealed Power Side Show
KDKA KFYR KOIL KPRC KSO
KSTP KTBS KTHS KVOO KWCR
KWK WBAL WBZ WBZA WDAY
WEBC WFAA WGAR WHAM WIBA
WJDX WJR WJZ WKY WLS WMAL
WMC WOAL WSB WSM WSMB WTMJ WSYR

E-8:15 p.m., C-7:15, M-6:15, P-5:16 C — Edwin C, Hill CKLW KMBC KMOX WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGR 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

C—BING Crossy
KERN KFBK KFPY
KFRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KSL KVJ KWG
WABC WADC WCAO WCAU WDRC
WEAN WFBL WFBM WGN WGR
WHAS WHK WJAS WJSV WKRC
WNAC WOKO WOWO WSPD

B— Vicia of Eiceten

R — Voice of Firestone R — Voice of Firestone
CFCF CRCT KFYR KPRC KSD
KTBS KTBS KVOO WBEN WCSH
WDAF WDAY WEAF WEBC WEEL
WFAA WFBR WFLA WGY WHO
WIOD WIS WJAR WJAX WJDX
WKY WLIT WLW WMAQ WMC
WOAI WOC WOW WRC WRVA WSB
WSM WSMB WSOC WTAG WTAM
WTIC WTMJ WWJ WWNC

B — Djer Kiss Recital
KDKA KOLL KSO KWCR KWK
WBAL WBZ WBZA WCKY WGAR
WJZ WLS WMAL WREN WSYR

E-8:45 p.m., C-7:45, M-6:45, P-6:46 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-8:03
C — Philadelphia Symphony Orchestra
CKLW KDB KERN KFBK KFH
KFPY KFRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOH KOIN
KOL KOMA KSI. KTRH KTSA
KVI KWG WABC WADC WBBM
WBRC WBT WCAH WOAO WCAU
WCCO WDAE WDBJ WDBO WDRC

MONDAY—(Continued)

WDSU WEAN WFBL WFBM WGR WGST WHAS WHEC WHK WICC WISN WJAS WJSV WKRC WLAC WLBZ WMBG WMT WNAC WOKO WOWO WPG WQAM WREC WRR WSPD WTAR WTOC

15

WSPD WTAR WTOC

R— A. & P. Gypsies

KSD WBEN WCAE WCSH WDAF

WEAF WEEI WGY WOW WAR

WILIT WMAQ WOC WOW WRC

WSAI WTAG WTAM WTIC WWJ

B— Sinclar Minstrels

KDKA KFYR KOA KOIL KPRC

KSO KSTP KTBS KTHS KVOO

KWCR KWK WBAL WBZ WBAA

WDAY WEBC WFAA WFLA WGAR

WHAM WIRA WIOD WIS WJAX WHAM WIBA WIOD WIS WJAX WJDX WJR WJZ WKY WLS WLW WMC WOAI WPTF WREN WRVA WSB WSM WSMB WTMJ WWNC

E-9:15 p.m., C-8:15, M-7:15, P-8:15 C — Buick; Andre Kostelanetz CKLW KDB KERN KFBK KFH KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KSCJ KSL KTAT KTSA KMBC KMJ KMOX KOIN KOLK
KOMA KSCJ KSL KTAT KTSA
KVI KWG WABC WADC WBBM
WBRC WBT WCAH WCAO 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 WRR WSPD WTAR WTOC

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 KFRC KGB KHJ KLZ KMBC
KMJ KMOX KOIN KOL
KSL KVI KWG WABC
WADC
WBBM WBT WCAH WCAO WCAU
WCCO WDRC WDSU WEAN WFBL
WFBM WHAS WHK WICC
WJAS
WJSV WKBW WKRC WLAC WJAS
WJSV WKBW WKRC WLAC WJAS
WJSV WKBW WKRC WLAC WJAS
WJSV WKBW WKRC KAL
WFBM
WFBM WHAS WHK WICC
WJAS
WJSV KRPW WKRC WLAC
WJAS
WJSV WKBW WKRC WLAC
WOKO WOWO WREC WSPD
WTAR
R — Del Monte Ship of Joy
KDYL
KOA KPRC KSD
KSTP
KTBS KVOO WBEN WCAE WCSB
WEAF WEBC WEEI WFAA WFBR
WFLA WGY WHO WIOD WIS
WJAR WJAX WKBF WKY WLIT

WJAR WJAX WKBF WKY WLIT WMAQ WOAI WOC WOW WRC WRYA WSAI WTAG WTAM WTMJ WWJ WWNC

B — Jack Frost's Melody Moments KDKA WBAL WENR WGAR WHAM WJR WJZ WLW

E-10:00 p.m., C-9:00, M-8:00, P-7:00
C — Wayne King and Orchestra
CKLW KALE KDB KERN KFRC
KGB KHJ KLZ KMBC KMOX
KOIN KOL KSL KWG WAAB WABC
WADC WBBM WCAO WCAU WCCO
WDRC WEAN WFBL WFBM WGR
WHAS WHK WJAS WJSV WKRC
WOKO WOWO WSPD
E-Controled Program

WOKO WOWO WSPD

R — Contented Program

CFCF CRCT KDYL KF1 KFYR

KGO KGW KHQ KOA KOMO KPRC

KSTP WCSH WEAF WEBC WEEI

WFBR WJAR WLIT WMC WOAI

WRC WSP WSM WTAG

WHC WOR WISH WILLIAM
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

KTSA KVOR WAAB WABC WACO WBIG WBT WCAH WCAO WCAU WDAE WDBJ WDBO WDOD WDRC WEAN WFBL WFFA WGR WGST WHAS WHEC WHP WISN WJAS WJSV WKBN WLAC WLBW WLBS WAMAS WMT WODX WOKO WORC WQAM WREC WSJS WSPD WTOC R — Kay-Seven, Drama CRCT KSD WBEN WCAE WCSH WDAF WEAF WEEI WFBR WGY WHO WAAR WLIT WLW WMAQ WOC WOW WRC WTAG WTAM WTIC WWJ Capacit Piniet

B — Henri Deering, Concert Pianist KFYR KOIL KPRC KSO KSTP KTBS KVOO KWCR WBAL WBZ WBZA WCKY WEBC WFAA WHAM WIBA WJDX WJZ WKY WMAL WOAL WREN WSB WSM WSMB WSYR

E-10:45 p.m., C-9:45, M-8:45, P-7:45
C — Myrt and Marge
RDB KERN KFBK KFPY KFRC
KGB KHJ KLRA KLZ KMBC KMJ
KMOX KOIN KOL KOMA KSL
KVI KWG WBBM WBRC WCCO
WDSU 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 KTH WAAB WABC WADC
WBRC WCAH WCAO WDAE WDBJ
WDBO WDOD WDRC WDSU WEAN
WFEA WGLC WGST WHAS WHEC
WHK WHP WIBW WICC WIP WISN
WJAS WJSV WKBN WKBW WLBZ
WMAS WMBD WMBG WMT WODX
WOKO WORC WQAM WSJS WSPD
WTAR WTOC

B – Amos 'n' Andy KDYL KFI KGO KGW KHQ KOA KOIL KOMO KPRC KSTP KTHS KWK WBAP 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 KTSA KVOR
WAAB WABC WACO WADC WBT
WCAH WCAO WCCO WDAE WDBJ
WDBO WDOD WDRC WEAN WFBM
WFEA WGST WHP WIBW WIP
WISN WIAS WJSV WKBN WKBW
WLAC WLBW WLBZ WMAS WMBD
WMT WODX WORC WPG WQAM
WREC WSBT WSJS WSPD WTOC

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 KTHE KTSA KVOR
WABC WADC WBRC WCAO WCAU
WDBJ WDRC WDSU WEAN WFBM
WFBM WGST WHAS WHK WHP
WIBW WICC WISN WJSV WKBW
WLAC WLBW WMBD WMBG WMT
WNAC WOKO WORC WPG WQAM
WREC WSBT WSJS WTAR WTOC R - Voice of Firestone

KDYL KFI KFSD KGHL KGIR KGO KGU KGW KHQ KOA KOMO KTAR

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

#### TUESDAY

E-6:00 p.m., C-5:00, M-4:00, P-3:08 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-6:15 p.m., C-5:15, M-4:15, P-3:15 C — Bohby Benson, See Monday

E-6:30 p.m., C-5:30, M-4:30, P-3:39 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 WWNC

WRC WSAI WIAG WWNC

B - Mary Small, Juvenile Singer

KSO KWCR WBAL WCKY W.

WHAM WJZ WREN WSYR

WHAM WJZ WREN WSYR C — Betty Barthell, Songs CKLW KLRA WAAB WAAC WADC WBRC WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WFBL WFEA WGLC WGR WGST WHEC WHP WICC WKBN WLBZ WMAS WMBG WOKO WORC WQAM WSIS WSDD WTAB WSJS WSPD WTAR

E-6:45 p.m., C-5:45, M-4:45, P-3:45 C — Little Italy WAAB WABC WCAO WCAU WDRC WEAN WHEC WHP WKBW WOKO R — Cheerio Musical Mosaics

K — Uneerio Musicai Wosaics KDYL KOA KPO KSD WCKY WEAF WEEI WFBR WFLA WGY WHO WIOD WIS WJAR WJAX WJDX WMAQ WOC WOW WRVA WSAI WSM WSOC WTAG WWJ WWNC

B - Lowell Thomas, See Monday

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

E-7:15 p.m., C-8:15, M-5:15, P-4:16 C — Just Plain Bill, See Monday R — Billy Bachelor, See Monday B — Radio in Education KDKA KECA KEX KPSD KFYR KGA KGHL KGIR KJR KOA KOLL

KGA KGHL KGIK KJR KOA KOIL
KPRC KTAR KTBS KTBS KVOO
KWCR KWK KYA WAPI WBAP
WBZ WBZA WCKY WFLA WHAM
WIBA WIS WJDX WJZ WMAL
WOAI WPTF WREN WSMB WWNC

E-7:30 p.m., C-6:30, M-5:30, P-4:30 C — Silver Dust Serenaders WABC WCAU WDRC WFBL WGR WHEC WJAS WMAS WOKO WORC

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

KDKA KFYR KOIL KPRC KTBS KWCR KWK WBAP WBZA WENR WFLA WGAR WHAM WIBA WIS WJZ WKY WMAL WRVA WSYR WWNC

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

E-8:00 p.m., C-7:00, M-6:00, P-5:00 C—Columbians; Freddie Rich CKLW KFH KJRA KMBC KOMA KSCJ KTRH WABC WADC WBBM WBIG WBRC WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFBM WFEA WGLC WGR WGST WHAS

TUESDAY—(Continued)

WHEC WHP WIBW WICC WISN WJAS WKBN WLBZ WMAS WMBG WMT WNAC WOKO WORC WPG WQAM WSBT WSJS WSPD WTAR WWVA

R — Leo Reisman and Orchestra WBEN WCAE WCSH WEAF WEEI WFI WGY WJAR WRC WTAG

WF1 WGY WJAR WRC WTAG
WTAM WWJ

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

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

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

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

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

E-8:45 p.m., C-7:45, M-6:45, P-5:45
C — Fray and Braggiotti
CKLW KFH KLRA KOMA WABC
WADC WBIG WBRC WCAH WCAO
WCAU WCCO WDAE WDBJ WODO
WOBU WEAN WFBL WFBJ WOLC
WGR WGST WHEC 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 R—Ben Bernie and Urchestra KFYR KOA KPRC KSD KSTP WBAP WBEN WCAE WCSH WDAY WEAF WEEI WFBR WFI WGY WHO WJAR WKY WLW WMAQ WMC WOAI WOC WOW WRC WRVA WSB WSM WSMB WTAG WTAM WTMJ WWJ

B — Household Musical Memories KDKA KSO KWK WBAL WBZ WBZA WHAM WJR WJZ WKBF WLS WHAM WJL. WHAM WSYR

C - Phila. Symphony, See Monday

E-8:15 p.m., C-8:15, M-7:15, P-8:16 C — Alexander Woollcott CKLW KFH KLRA KLZ KMBC KOMA KSCJ KTRH WABC WBIG WBRC WCAH WCAO WCAU WCCO WBRC WCAH WCAO WCAU WCCO
WDAE WDBJ WDBO WDDO WDRC
WDSU WEAN WFBL WFEA WGLC
WGR WGST WHAS WHEC WHP
WIBW WICC WJAS WKBN WHBZ
WMAS WMBG WMT WNAC WODX
WOKO WORC WPG WQAM WSBT
WSJS WTAR

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 WDBO
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 WTAR

WPG WQAM WSIS WSPD WTAR
R — Texace Fire Chief Program
KDYL KFI KFSD KFYR KGHL
KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KTAR KTBS
KVOO WBAP WBEN WCAE WCSH
WDAF WDAY WEAF WEBC WEEL
WFBR WFI WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WJDX
WKY WLW WMAQ WMC WOAI
WOC WOW WPTF WRC WRVA
WSB WSM WSMB WTAG WTAM
WTMJ WWJ WWNC

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

C— Camel; Glen Gray's Orchestra
CKLW KDB KERN KFBK KFH
KFPY KFRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOIN KOL
KOMA KRLD KSCJ KSL KTRH
KTSA KVI KWG WAAB WABC
WACO WADC WBBM WBIG WBRC
WBT WCAH WCAO WCAU WCO
WDAE WBJ WDBO WDOD WDC
WDSU WFBL WFBM WFFA WGSV
WHOS WHEC WHK WHP WST
WHAS WHEC WHK WHP WST
WHOS WJSC WJAS WJSV WKBH WKBN
WKBW WJRC WJAC WLBZ WMAS
WMBD WMBG WMT WNAX WODX
WOKO WORC WOWO WPG WQAM
WREC WJSS WSPD WTAR WTOC
R— Cruise of Seth Parker

WREC WSJS WSPD WTAR WTOC

R—Cruise of Seth Parker

KDYL KFI KFSD KFYR KGHL

KGIR KGO KGW KHQ KOA KOMO

KPRC KSD KSTP KTAR KTBS

WAPI WBAP WBEN WCSH WDAF

WDAY WEAF WEBC WEEI WFBR

WFI WFLA WGY WHO WIBA WIOD

WIS WJAR WJAX WJDX WKY

WLW WMAQ WMC WOAI

WOW WRC WRVA WSB 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 KHG KOA
KOMO KSD KSTP WBEN WEAF
WEBE 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-9:00 B — Amos 'n' Andy, See Monday C — Harlem Serenade

C — Harlem Serenade
CKLW KFH KLRA KLZ KMBC
KSCJ KTRH WAAB WABC WADC
WBRC WCAH WCAO WDAE WDBV
WDBO 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
WTAR WWVA

E-11:15 p.m., C-10:15, M-9:15, P-8:15
C — Dell Campo, Songs
CFRB CKLW KFH KLRA KLZ
KMBC KSCJ WAAB WABC WADC
WBRC WCAH WCAO WCAU WCCO
WDAE WDBJ WDBO WDOD WDRO
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 WTAR

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 WLBW WMBD
WMBG WMT WNAC WOKO WORC
WQAM WREC WSBT WSJS WTAR
WTOC WWVA WTOC WWVA

(6)

B — Meyer Davis and Orchestra
CFCF 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 WSB WSM WSMB
WSYR WWNC

E-11:45 p.m., C-10:45, M-9:45, P-8:45 C — Voice of Experience KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMJ KOIN KOL KSL KYI KWG

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

#### WEDNESDAY

E-6:00 p.m., C-5:00, M-4:00, P-8:00 C — Buck Rogers. See Monday R - Walderf Asteria. See Monday

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

E-6:15 p.m., C-5:15, M-4:15, P-8:16 C — Bobby Benson, See Monday

E-8:30 p.m., C-5:30, M-4:30, P-3:30 R — Back of News KFYR WEAF WFBR WGY WIBA WIS WJAR WJDX WRC WSAI WSB WSM WWJ WWNC

B— Irene Beassey, Contralte
KGO KOA KPRC KSO KTBS KVOO
KWCR WBAL WBAP WCKY WENR
WGAR WJZ WOA1 WREN

C - Enoch Light, See Monday

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

E-7:00 p.m., C-8:00, M-5:00, P-4:00 C — Myrt and Marge, See Monday R — Molle Shew, 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 — John Herrick, 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 — Potash and Perimutter, See Mon.

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

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

- Jack Pearl M — Jack Pearl
CFCF CRCT KSD WBEN WCAE
WCKY WCSH WDAF WEAF WEEI
WFBR WGY WHO WJAR WLIT
WLS WOC WOW WRC WSAI WTAG
WTAM WTIC WWJ

B - Eno Crime. See Tuesday

13

Ŧ

E-8:15 p.m., C-7:15, M-6:16, P-5:16 C — Edwin C. Hill. See Monday

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

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

WREIN WSIAN

R — Wayne King and Orchestra

KSD WBEN WCAE WCSH WEAF

WFBR 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 — Ipana Troubadours
KDYL KFI KGO KGW KHQ KOA
KOMO KPRC KSD KSTP KTBS
KTHS KVOO WAPI WBAP WBEN
WCAE WCSH WDAF WBAP WBEN
WFBR WGY WHO WIOD WIS
WJAR WJAX WKY WLIT WMAQ
WMC WOAI WOC WOW WRC
WPDYA WSAI WSR WSM WSM WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ

WIAG WIAM WIMJ WWJ

B — Warden Lawes; Sing Sing Drama
KDKA, KOIL, KSO KWCR KWK
WBAL, WBZ WBZA WCKY WGAR
WHAM WJR WJZ WLS WMAL WHAM WJR 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 KF KFPY KFRC KGB KHJ KLRA KLZ KMJ KMOX KOIN KOL KRLD KSCJ KSL KTRH KMBC KOMA KRLD KSCJ KSL KTRH
KTSA KVI KWG WABC WADC
WBBM WBRC WBT WCAH
WCAU WCCO WDAE WDRC WDSU
WEAN WFBL WFBM WGST WHAS
WHEC WHK WIBW WICC WISN
WJAS WJSV WKBW WKRC WLAW
WMBD WMT WNAC WOKO WOWO
WQAM WREC WSPD WTAR WTOC KOMA

E-9:30 p.m., C-8:30, M-7:30, P-6:30 G — 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 WCAU WCAU WCCO
WDRC WEAN WFBL WFBM WGN
WHK WJAS WJSV WKBW WKRC
WNAC WOKO WORC WOWO WSPD
R — Fred Allen's Revue

KSD KSTP WBEN WCAE WCSH WDAF WEAF WFBR WGY WJAR WLIT WMAQ WOW WRC WSAI WTAG WTAM WTMJ WWJ

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

E-10:00 p.m., C-8:00, M-8:00, P-7:00
C — Old Gold—Ted Fiorito and Orch.
CKLW KDB KERN KFBK KFOR
KFPY KFRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOH KOIN
KOL KOMA KRLD KSCJ KSL
KTRH KTSA KVI KVOR KWG
WABC WACO WADC WBIG WBRC
WBT WCAH WCAO WCAU WCCO
WDAE WDBJ WDBO WDOD WDRC
WDSU WEAN WFBL WFBM WFEA
WGN WGST WHAS WHEC WHK
WHP WIBW WICC WISN WJAS
WISV WKBH WKBW WKRC WIAC WJSV WKBH WKBW WKRC WLAC WLBW WLBZ WMAS WMBD WMBG WMT WNAC WNAX WOKO WORC WOWO WPG WQAM WREC WSPD WTAR WTOC

WTAR WIGG

R—Corn Cob Pipe Club

KDYL KFI KFYR KGHL KGIR

KGO KGW KHQ KOA KOMO KSD

KSTP WBEN WCAE WCSH WDAF

WDAY WEAF WEBC WEEI WENR

WFBR WGY WHO WIBA WJAR

WLIT WLW WOC WOW WRC

WEVA WTAG WTAM WTIC WTMJ wwJ

WWJ
B — Benny Meroff Revue
KDKA KOIL KPRC KSO
KWCR KWK WAPI WAVE
WBZ WBZA WFAA WFLA
WHAM WIOD WIS WJAX
WJZ WKY WMAL WMC
WREN WSB WSM WSMB
WWNC KTHS WBAL WGAR WJDX WSOC

E-10:30 p.m., C-9:30, M-8:30, P-7:30
R — National Radio Forum
KFYR KPRC KSD KSTP KTHS
KYOO WBEN WCAE WCSH WDAY
WEAF WEEL WFAA WFBR WFLA
WGY WHO WIBA WIS WJAR WJAX
WJDX WKY WMAQ WOAL WOC
WOW WRC WRVA WSAI WSB WSM
WSMB WTAG WTAM WTIC WWJ
WWNC
C — News Service See Monday

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 — Andre Kostelantez

C—Andre Mostelanez

CKLW KFH KLRA KLZ KMBC

KSCJ KTRH KTSA WAAB WABC

WACO WADC WBRC WCAH WCAO

WDAE WDBJ WDBO WDOD WDRC

WDBU WAN WFBM WFEA WGLC

WGST WHAS WHEC WHK WHP WISH WHAS WHEC WHK WHP WIBW WICC WISN WJAS WKBW WLAC WLBW WLBZ WMAS WMBD WMBG WMT WNAX WODX WOKO WORC WPG WQAM WREC WSBT WSJS WSPD WTAR WTOC 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 WDBO
WDOD WDRC WDBU WEAN WFBL
WFBM WGLC WGST WHAS WHEC
WHP WIBW WIP WISN WJAS

WHEN WILC WGS! WHAS WHEE
WHP WIBW WIP WISN WIAS
WKEW WLAC WLBW WLBZ WMAS
WMBD WMBG WMT WNAX WODK
WORC WPG WQAM WREC
WSBT WSJS WSPD WTAR WTOC B — Warden Lawes; Sing Sing Drama KDYL KFI KGO KGW KHQ KOA KOMO KPRC KTBS KTHS KVOO WAPI WBAP WJDX WKY WMC

WOAI WSB WSM WSMB

B — Poet Prince, Songs KDYL KFI KFYR KGO KGW KHQ KOA KOIL KOMO KSO KSTP KTBS WIND A WILL WORK WAPI WBAL WCKY WDAY WEBC WFAA WIBA WJDX WJR WJZ WKY WMAL WMAQ WMC WREN WSB WSYR

E-11:30 p.m.. C-10:30, M-9:30, P-8:30 C — Edwin C. Hill KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMJ KOIN KOŁ 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 комо

#### THURSDAY

E — 8:00 p.m., C-5:00, M-4:00, P-3:08 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-6:15 p.m., C-5:15, M-4:15, P-3:16 C — Bobby Benson, See Monday

E-6:30 p.m., C-5:30, M-4:30, P-3:30
R — John B. Kennedy
KDYL EPYR KOA KPO KPRC KSD
KTBS KTHS KVOO WAPI WDAY
WEAF WFBR WFI WGY WHO WIBA
WIS WJAX WJDX WMAQ WMC
WOR WRC WSAI WSB WSMB WTAG WWJ WWNC

WAB WHICE

C = Edith Murray, Songs

WAAB WABC WBIG WBRC WBT

WCAO WDAE WDBJ WDSU WFEA

WGST WHEC WHP WJSV WKBN

WLBZ WMAS WMBG WORC WQAM WREC WSFA WSJS WTOC

E-6:45 p. m., C-5:45, M-4:45, P-3:45 B - Lowell Thomas, See Monday

C — Little Italy, See Tuesday

R — Southernaires; Negro Quartet
KDYL KOA KPO KSD WEAF WFBR
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 — A mos 'n' Andy, See Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:16 C — Just Plain Bill, See Monday R - Billy Bachelor, See Monday

THURSDAY—(Cont'd)

B - Robin Hood, Drama CRCT WBAL WBZ WBZA WHAM CRCT WBAL WBZ 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 - 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 CRCT KDYL KFI KFYR KGO
KGW KHQ KOA KOMO KPRC KSD
KSTP KTAR KTHS WAPI WBAP
WBEN WCAE WCSH WDAF WDAY
WBEAF WEBC WEEI WFBR WFI
WFILA WGY WHO WIOD WJAR
WJAX WJDX WKY WLW WMAQ
WMC WOAI WOC WOW WPTF WRC
WRVA WSB WSM WSMB WTAG
WTAM WTMJ WWJ WTAM WTMJ WWJ

- Morton Downey, Tenor KLW KFH KLRA KMBC KOMA CKLW KSCJ KSL KTRH KTSA WABC WACO WADC WBIG WBRC WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFBM WFEA WGLC WGST WHAS WHEC WHP WOST WHAS WHEC WHP WIBW WICC WISN WJAS WKEN WLAC WLBW WLBZ WMAS WMBG WAT WNAC WOKO WORC WQAM WREC WSJS WSPD WTAR WTOC WWYA

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

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

CKLW KMBC KMOX WABC WADC WBBM WCAO WCAU WDRC WEAN WFBL WGR WHAS WHK WJAS 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 KOA KOMO KPRC KSD KSIP KIAK KTBS WAPI WBAP WBEN WCAE WCKY WCSH WDAF WEAF WEEI WFBR WFI WFLA WGY WHO WIOD WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOC WOW WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ WWNC 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 C- Cantorna Melodies
CKLW KFH KLRA KLZ KMBC
KOMA KRLD KSCJ KTSA WABC
WACO WADC WBIG WBRC WCAO
WCCO WDAE WDBJ WDBO WDDO
WDRC WDSU WEAN WFBL WFEA
WGLC WGST WHEC WHK WHP WICC WIP WJAS WKBN WIBW

WKBW WLAC WLBW WLBZ WMAS WMBD WMBG WMT WNAC WNAX WODX WOKO WORC WQAM WREC WSBT WSJS WSPD WTAR WTOC 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 R — Paul Whiteman and Orchestra KDYL KFI KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTBS KTHS KVOO WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WOAI WOC WOW WRC WRYA WSB WSM WSMB WTAG WTAM WTMJ WWY WWNO WWJ WWNC

B - Hands Across the Border CFAC CFBO CFCF CFCH CFCN CFCO CFCY CFJC CFNB CFPL CFCO CFCY CFJC CFNB CFPL
CFQC CHAB CHGS CHNS CHRC
CHWC CHWK CJCA CJCB CJCJ
CJGX CJOC CJRM CJRW CKCH
CKCK CKNC CKOC CKOV CKPC
CKPR CKUA CKX CKY CRCO CRCS
CRCT CRCV 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 — Amos'n' Andy, See Monday R — Viola Philo, Soprana WCAE WCSH WEAF WFI WFLA WGY WIOD WIS WOW WRVA WTAM WWNC

CHAM WWIAM

CHAM WHO WARNOW

CKLW KFH KI.RA KI.Z KMBC

KSCJ KTSA WAAB WABC WACO

WADC WCAH WCAO WDAE WDBJ

WDBO WDOD WDRC WDBJ WFBA

WFEA WGLC WGST WHAS WHEC

WHK WHP WIBW WICC WISN

WHAS WGCN WGDW WICO WIDN

WHAS WGCN WGDW WICO WIDN WHA WHP WIBW WICC WISN
WJAS WKBN WKBW WLAC WLBW
WLBZ WMAS WMBD WMBG WMT
WNAX WODX WOKO WORC WQAM
WREC WSJS WSPD WTAR WTOC

E-11:15 p.m., C-10:15, M-9:15, P-8:15
C — Charles Carlile, Tenor
CFRB CKLW KFH KLRA KLZ
KMBC KSCJ KSL KTSA WAAB
WABC WACO WADE WDBJ WDBO
WDOD WDRC WDSU WEAN WFBL
WFBM WGLC WGST WHAS WHEC
WHP WIBW WISN WJAS WKBN
WKBW WLAC WLBW WLBZ WMAS
WMBD WMBG WMT WNAX WODX
WOKO WORC WPG WQAM WREC
WSIS WSPD WTAR WTOC
B — Poet Prince, See Wednesday

B - Poet Prince, See Wednesday

E-11:30 p. m., C-10:30 , M-9:30 , P:8-30 R — Enric Madriguera and Orohestra KSD WBEN WCAE WCSH WDAF WEAF WEEI WFBR WFI WGY WHO WJAR WOC WOW WSAI WTAG WTAM

C - Edwin C. Hill, See Wednesday C — LEWIN L. HIII, See Wednesday
C — Isham Jones and Orchestra
CKLW KLRA WABC WBRC WCAO
WDAE WDBJ WDBO WDOD WDRC
WDSU WEAN WGST WICC WIP
WLAC WLBZ WMAS WMBG WNAC
WORC WQAM WREC WSJS WSPD
WTAR WTOC

#### FRIDAY

E-8:00 p.m., C-5:00, M-4:00, P-3:00 C — H. V. Kaltenborn CFRB CKLW KLRA WAAB WABC WADC WBIG WBT WCAO WCAU WDAE WDBJ WDBO WDOD WDRC WFEA WGST WHEC WHK WICC WJSV WLAC WLBW WLBZ WMBG WOKO WORC WQAM WREC WSFA WSIS WSPD WTOC

R - Waldorf Astoria, See Monday

E-6:15 p.m., C-5:15, M-4:15, P-3:16 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—Tite Guizar, Tenor
CFRB CKLW WAAB WABC WBIG
WBRC WBT WCAO WDAE WDBJ
WDRC WDSU WFEA WGST WHEC
WKBN WKBW WLBZ WMAS WMBG
WOKO WORC WQAM WREC WSFA WSJS WTOC

E-6:45 p.m., C-5:45, M-4:45, P-3:45 C — Zoel Parenteau's Orchestra CKLW WAAB WABC WBT WCAU WDRC WEAN WFBL WFEA WHEC WJSV WKBW WLBZ WOKO B - Lowell Thomas, See Monday

- 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 — Amos'n' Andy, See Monday

E-7:15 p. m., C-6:15, M-5:15, P-4:16 C — Just Plain Bill, See Monday R - Billy Bachelor, See Monday B - Dramatic Sketch, See Thursday

E-7:30 p.m., C-8:30, M-5:30, P-4:30 R — Scott's Circus Day KSD WCSH WDAF WEAF WEEI WGY WJAR WKBF WLW WMAQ WOW WRC WTAG WTAM WTIC B — Potash and Perfmutter, 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 Bowe, Tenor
KDKA WBAL WBZ WBZA WCKY
WENR WJZ WMC WSB WSM WSMB

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

WSYR

R—CHIES SEVICE CONCERNO
CRCT KDYL KOA KPRC KSD KTBS
KTHS KYW WBEN WCAE WCSH
WDAF WEAP WEBC WEEL WFAA
WFBR WGY WHO WJAR WKY WLIT
WOAL WOC WOW WRC WRVA WSAI WTAG WTAM WTIC WTMJ WWJ

FRIDAY—(Continued)

- 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 - March of Time KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KSL KTRH KVI KWG 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

d:

E-9:00 p. m., C-8:00, M-7:00, P-6:00 B — Phil Harris and Orchestra B—Phil Harris and Urenestra CFCF KDKA KDYL, KFI KGHL KGIR KGO KGW KHQ KOA KOIL KOMO KSO KWCR KWK WAPI WBAL WBZ WBZA WCKY WFAA WGAR WJZ WKY WLS WMAL WOAL WREN WSB WSM WSMB WSYR

WSIL C — Philadelphia Symphony, See Mon. R — Frank Munn; Abe Lyman KSD WBEN WCSH WEAF WEEI WFBR WGY WJAR WLIT WMAQ WOW WRC WSAI WTAG WTAM

WW.J

E-9:15 p.m., C-8:15, M-7:15, P-6:15 C — Alexander Woollcott, See Tuesday

E-9:30 p.m., C-8:30, M-7:30, P-6:30 C-Melodic Strings CFRB CKLW KFH KLRA KLZ KMBC KOMA KRLD KSCJ KSL KTRH KTSA KVOR WABC WACO WADC WBIG WBRC WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFBM WFEA WGLC WGST WHAS WHEC WHP WIBW WICC WJAS WISV WKRW WIAZ WIRW WIRZ WHEC WHP WIBW WICC WJAS
WJSV WKBW WLAC WLBW WLBZ
WMAS WMBD WMBG WMT WNAZ
WNAX WODX WOKO WORC WQAM
WREC WSBT WSJS WSPD WTAR WTOC

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

WTAG WIAM WIIC WWJ

B — Armour Program; Phil Baker

KDKA KDYL KFI KGO KGW KHQ

KOA KOIL KOMO KPRC KSO KSTP KTAR KWK WAPI WBAL WBZ WBZA WEBC WENR WFAA WGAR WHAM WIOD WJAX WJR WJZ WKY WMC WOAI WREN WRVA WSB WSM WSMB WTMJ WWNC

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C - Swift Revue-Olsen and Johnson CKLW KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KSCJ KSL KTRH KVI KWG WABC WADC WBBM WBRC WBT WCAD WCAU WCCO WDRC WEAN WFBL WGST WHAS WHK WJAS WJSV WKBW WKRC WNAC WOKO WOWO WREC

R — First Nighter—Drama
CRCT KDYL KFI KGO KGW KHQ
KOA KOMO KPRC KSD KSTP
WAPI WBEN WCAE WCSH WDAF
WEAF WEBC WEEL WFBR WGY
WHO WJAR WKY WLIT WMAQ
WOAI WOC WOW WRC WSAI WSB

WSM WSMB WTAG WTAM WTIC WTMJ WWJ

B — Armco Ironmaster Program KDKA KOIL KSO KWCR WBAL WBZ WBZA WENR WGAR WHAM WJR WJZ WLW WMAL WREN

E-10:30 p.m., C-9:30, M-8:30, P-7:30 B — Mario Cozzi, Baritone KDKA KFYR KOIL KSO WAPI WBAL WBZ WBZA WCKY WDAY WEBC WFLA WHAM WIBA WICD WIS WJAX WJR WJZ WREN WSE WSM WSYR WWNC C. News Service See Monday

- 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

B — Amos 'A' Anoy, see Monday
C — Mary Eastman, Soprano
CKLW KFH KLZ KMBC KSCJ KTRH
KTSA KVOR WAAB WABC WADC
WBRC WBT WCAH WCAO WDAE
WDBJ WDRC WDSU WEAN WFEA
WGST WHAS WHEC WHK WHP
WIBW WICC WISN WJAS WJSV WIBW WICC WISN WIAS WISD WKBW WLBW WIBZ WMAS WMBD WMBG WMT WODX WOKO WORC WOWO WPG WQAM WREC WSJS WSPD WTOC

E-11:15 p.m., C-10:15, M-9:15, P-8:16 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 CFRB CKLW KFH KLRA KMBC

CFRB CRLW KFH LRA KMBC KOMA KSL KTRH KTSA KVOR WAAB WABC WACO WADC WBBM WBIG WBRC WCAO WCCO WDBJ WDSU WFBL WFEA WGR WGST WHAS WHEC WHK WHP WIBW WICC WIP WISN WJAS WJSV WLAC WLGC WIP WISN WJAS WJSV WLAC WLBW WLBZ WMBG WMT WOKO WQAM WREC WSBT WSFA WSJS WTAQ WTAR WTOC WWVA

R — Waldert Asteria, See Monday

- Trio Romantique WBZA WCKY WHAM WJR WJZ WMAL WREN WSYR

E-6:15 p.m., C-5:15, M-4:15, P-3:16 C — Mildred Bailey, Songs CKAC CKLW KFAB KFH KLRA KLZ KMBC KRLD KSL KTRH KTSA KLZ KMBC KRLD KSL KIRH KISA KVOR«WAAB WABC WACO WBIG WBT WCAH WCAO WCCO WDAE WDBJ WDBO WDOD WDRC WEAN WFEA WGR WGST WHEC WHK WHP WIBW WICC WIP WISN WJAS WJSV WLAC WLBW WLBZ WMBG WMT WOKO WORC WQAM WREC WSBT WSFA WSJS WSPD

WTAQ WTOC WWVA

B — O'Leary's Irish Minstrels

KOIL KSO KWCR KYW WBAL WBZ

WBZA WCKY WHAM WJR WJZ WMAL WREN WSYR

E-6:30 p.m., C-5:30, M-4:30, P-3:30 B — Mary Small, See Tuesday C — Frederic William Wile

C — Frederic William Wile
CKLW KLRA WAAB WABC WBIG
WBRC WCAO WCAU WDAE WDBJ
WDBO WDOD WDRC WDSU WFBL
WFEA WGLC WGST WHEC WHP
WJSV WKBW WLAC WLBW WLBZ
WMAS WMBG WOKO WORC WQAM
WREC WSJS WSPD WTAR WTOC

— Biorach Hirpher and Octable R — Richard Himber and Orchestra KDYL KFI KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTBS

KYOO WCAE WDAF WDAF WEBC WFLA WHO WIBA WIS WJAR WJAX WJDX WMAQ WMC WOAI WOC WSB WSM WTAG WTAM KTHS KVOO WCAE WDAF WEAF WEBC WFLA WHO WIOD WKY WRC WWJ WWNC

E-6:45 p.m., C-5:45, M-4:45, P-3:45 B — Flying with Capt. Al Williams WBAL WBZ WBZA WCKY WGAR WHAM WJR WJZ WSYR R — J. C. Nugent—Male Quartet WCSH WEAF WEEI WGY WJAR

E-7:00 p.m., C-6:00 M-5:00, P-4:00 B — John Herrick, Baritone KDKA KOIL KSO KWCR KWK WBAL WKCY WGAR WJZ WKBF WMAL WMAQ

WMAL WMAQ

C—Elder Michaux Congregation
CFRB CKLW KFH KLRA K4Z
KSCJ KSL KTRH KTSA KVOR
WABC WACO WADC WBIG WBRC
WCAO WCAU WDAE WDBJ WDBO
WDOD WDRC WDSU WFBL WFEA
WGLC WGR WGST WHEC WHP
WIBW WICC WJAS WJSV WLBW
WLBZ WMAS WMBG WMT WOKO
WORC WQAM WREC WSJS WSPD
WTAR WTOC WWVA

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 KFYR KGO KGW KHQ KOA
KOMO KSD KTBS WAPI WBEN
WCAE WDAF WEAF WEEI WFAA WFBR WFI WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WLW 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 E-7:35 B.M., C-5:35, M-5:35, P-3:35
C — Tite Guitar, Tenor
CKLW KFH KLRA KLZ KSCJ KSL
KTRH KTSA KVOR WABC WACO
WADC WBIG WBRC WCAH WCAO
WCAU WCCO WDAE WDBJ WDBO
WDODD WDRC WDBU WEAN WFBL WFBM WFEA WGLC WGR WGST WHAS WHEC WHK WHP WIBW WISN WJAS WJSV WLAC WICC WLBW WLBZ WMAS WMBG WMT WNAC WOKO WORC WQAM WREC WSBT WSJS WSPD WTAR WTOC WWVA

E-8:00 p.m., C-7:00, M-6:00, P-5:00 C-45 Minutes in Hollywood CKLW KLZ KMBC KMOX KSL KTAT KTRH KTSA WABC WACO WBBM WCAH WCAO WCAU WCCO

#### SATURDAY—(Cont'd)

WDRC WEAN WFBL WGR WHEC WHK WJAS WJSV WKRC WNAC WOKO WRR WSPD

WOKO WRR WSPD

R— George Olsen and Orchestra
KDYL KFI KFYR KGO KGW KHQ
KOA KOMO KPRC KSD KSTP KTBS
KVOO KYW WBEN WOSH WDAF
WEAF WEBC WEEL WFBR WFLA
WGY WIBA WIOD WIS WJAR WJAX
WJDX WOAI WOW WRC WSB WSM

WSMB WTAG WTAM WWJ WWNC

B — Economics in the New Deal

KOIL KSO KWCR WBAL WCKY
WENR WHAM WJR WJZ WMAL

WREN WSYR

E-8:30 p.m., C-7:30, M-6:30, P-5:30 B — Boston Symphony Orchestra CFCF CRCT KDYL KFI KFYR 

R — Sous Les Ponts de Paris KSD KYW WBEN WCSH WDAF WEAF WEEI WFBR WGY WJAR WOW WRC WTAG WTAM WWJ

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C — Trade and Mark KDB KERN KFBK KFPY CKLW KDB KERN KRPBK KFPL KFRC KGB KHJ KIZ KMBC KMJ KMOX KOIN KOL KSL KVI KWG WAAB WABC WADC WBBM WCAU WCAU WCCO WDRE WEAN WHAS WHK WJAS WJSV WKBW WKRC

C — Philadelphia Symphony, See Mon.

E-9:15 p.m., C-8:15, M-7:15, P-6:15 C — Stoopnagle-Budd, See Wednesday

E-9:30 p.m., C-8:30, M-7:30, P-6:80 - Carborundum Band

CKLW KMBC KMOX WAAB WABC WBBM WBT WCAO WCAU WCCO WHAS WHK WJAS WKBW WKRC

E-10:00 p.m., C-9:00, M-8:00, P-7:00 R — B. A. Rolfe and Orchestra R—B. A. Rolle and Orchestra
CRCT KDYL KFI KGO KGW KOA
KOMO KSD KSTP WBAP WBEN
WCAE WCSH WDAF WEAF WEEI
WFBR WFI WGY WHO WJAR WJAX
WLW WMAQ WOAI WOC WOW
WTAM WTMJ WWJ
C RVA WSB WSMB WTAG
WTAM WTMJ WWJ
C BVAF Typedille

C — Byrd Expedition

CKLW KDB KERN KFBK KFH
KFPY KFRC KGB KHJ KLRA
KMBC KMJ KMOX KOIN KOL
KOMA KRLD KTRH KTSA KVI KWG WAAB WABC WACO WADC
WBBM WBRC WBT WCAO WCAU
WCCO WDAE WEAN WGST WHAS
WHEC WHK WHP WIBW WJSV
WKBW WKRC WLAC WLAE WABG WMT WOKO WORC WQAM WREC

E-10:15 p.m., C-9:15, M-8:15, P-7:15 C — Choristers; 16 Male Volces
KDKA KOIL KWCR KWK KYW
WBAL WBZ WBZA WCKY WGAR
WHAM WJR WJZ WMAL WREN WSVR

E-10:30 p.m., C-9:30, M-8:30, P-7:30 B — F. O. B. Detroit KDKA KOIL KWCR KWK KYW WBAL WBZ WBZA WCKY WGAR WHAM WJAR WJR WJZ WMAL WREN WSYR

- News Service. See Monday

E-10:45 p.m., C-9:45, M-8:45, P-7:45
C—H. V. Kaltenbern
CFRB CKLW KLZ
KMBC KOMA
KRLD KSCJ KSL, KTRH KTSA
KVOR WAAB WABC WADC WBIG
WBRC WBT WCAH. WCAO WDBI
WDRC WDSU WEAN WFBM WFEA
WGST WHEC WHP WIBW WIP
WISN WIAS WISN WKBW WIRW WISN WJAS WJSV WKBW WLBW WLBZ WMAS WMBD WMBG WMT WODX WORC WPG WQAM WREC WSBT WSJS WSPD WTAQ WTOC WWVA

E-11:00 p.m.. C-10:00. M-9:00, P-8:00
C — Guy Lombardo and Orchestra
CFRB CKLW KLRA KLZ KMBC
KMOX KOMA KTRH KTSA KVOR
WAAB WABC WADC WBIG WBRC
WCAO WCAU WCCO WBIG WBRC
WEAN WFBL WFBM WGST WHAS
WHP WIBW WICC WISN WIAS WHP WIBW WICC WISN WJAS WJSV WKBW WLAC WLBW WLBZ WMBD WMBG WMT WOKO WPG WQAM WREC WSBT WSJS WTAR WTOC

WTOC

R — One Man's Family—Sketch
CFCF KDYL KFI KFYR KGO KGW
KHQ KOA KOMO KPO KPRC KSD
KSTP KTBS KTHS KVOO WBEN
WCAE WDAF WDAY WEAF WFBW
WFI WFLA WGY WHO WIBA WIOD
WIS WJAR WJAX WJDX WKY
WMAQ WMC WOAI WOC WOW
WRC WRVA WSAI WSB
WTAG WTAM WWJ WWNC

WILL STAN DAGS

WILL STAN DAGS

B - WLS Barn Dance KDKA KOIL KSO KWCR KWK WBZ WBZA WGAR WHAM WJR WJZ WLS WLW WMAL WREN WSYR

E-11:30 p.m., C-10:30, M-9:30, P-8:38
C — Ted Fiorito and Orchestra
CFRB CKLW KLRA KLZ KMBC
KOMA KSL KTRH KTSA KVOR
WABC WADC WBRC WCAO WDBJ
WDSU WEAN WFBL WFBM WGST
WHEC WHP WIBW WIP WISN
WISV WKRW WILG WIRW WIRZ WHEC WHP WIBW WIP WISN WJSV WKBW WLAC WLBW WLBZ WMBD WMBG WMT WNAC WOKO WPG WQAM WREC WSBT WSJS WPG WTOC

WIOU

R— Hollywood on the Air
CFCF KDYL KFYR KOA KPO KPRC
KSD KSTP KTBS KTHS KVOO
WBEN WCAE WDAF WDAY WEAF
WFBR WFI WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WJDX
WKY WMAQ WMC WOAI WOC
WOW WRC WRVA WSAI WSB
WSMB WTAG WTAM WWJ WWNC

E-12:00 p.m., C-11:00, M-10:00, P-9:00 CHING HIND WILL STAND WILL STAND WILL STAND WILL STAND WILL STAND WHILL STAND WHILL STAND WHILL STAND WHILL STAND WHILL STAND WILL STAND WILD WILL STAND WILD WILL STAND WILD WILL STAND WILD WILL STAND WILL STAND WILL STAND WILL STAND WILL STAND WILL STA

WMAS WKBW WLBW WMBD WNAC WOKO WSBT WSPD - Freddie Martin and Orchestra WBZ WBZA WCKY WGAR WHAM
WJZ WLW WMAL WREN WSYR

E-12:30 a.m., C-11:30, M-10:30, P-9:30 - William Scotti and Orchestra KDKA KOIL KSO KWCR KYW WBAL WBZ WBZA WGAR WJR WJZ WLW KWCR WCKY WMAL WREN WSYR

#### SUNDAY

E-11:15 a.m., C-10:15, M-9:15, P-8:15 E-11:15 a.m., C-10:15, M-9:15, P-8:16
R — Major Bowes' Capitol Family
KDYL KFYR KOA KPRC KSTP
KTBS KVOO WAPI WCAE WDAF
WDAY WEAF WEBC WFAA WFBR
WFLA WGY WHO WIOD WJAR
WJAX WKY WMAQ WMC WOAI
WOC WRC WRVA WSAI WSMB
WTAG WTAM WWNC

E-11:30 a. m., C-10:30, M-9:30, P-8:30
C — Salt Lake Tabernacle Choir
CKLW KLRA KLZ KMBC KOMA
KSL KTRH KTSA KVOR WABC
WACO WADC WBIG WBRC WCAO
WCCO WDBJ WDRC WDSU WEAN
WFBL WFEA WGN WGR WGST
WHAS WHEC WHP WIBW WICC
WISN WIAS WISY WIAC WIDW

WHAS WHEC WHP WIBW WICC WISN WJAS WJSV WLAC WLBW WMBD WMT WNAC WOKO WORC WPG WQAM WSBT WSFA WSJS WTAQ WTAR WWVA

E-12:15 p.m., C-11:15, M-10:15, P-9:15 R — Morning Home Circle WCSH WEAF WEEI WFBR WFI WJAR WRC WTAG

E-12:30 p. m., G-11:30, M-10:30, P-9:30 B — Radio City Concert CFCF CRCT KDKA KDYL KFI

CFCF CRCT RDRA RDYL RF1
KFYR KGO KGW KHQ KOA KOIL
KOMO KPRC KSO KVOO WAPI
WBAL WBZ WBZA WCKY WDAY
WEBC WGAR WHAM WIS WJDX
WJR WJZ WKY WMAL WOAI WREN
WSMD WSYD WWYN WSMB WSYR WWNC

WSMB WSIM W W W O

R — Chicago Round Table

WBEN WCSH WDAF WEAF WEEL

WFBR WFI WGY WHO WJAR

WOO WOW WRC WSAI WTAG

WTAM WWJ

C — Madison Ensemble C-Madison Ensemble
CFRB CKLW KLRA KLZ KMBC
KOMA KSL KTRH KVOR WACO
WADC WBIG WCAO WCAU WDBJ
WDRC WDSU WEAN WFBL WFEA
WGR WGST WHAS WHEC WIBW
WISN WJAS WJSV WLAC WJBW
WMBD WMT WNAC WOKO WPG
WCAM WREC WSBT WSJS WTAQ
WTAR WTOC WWVA

E-1:00 p. m., C-12:00, M-11:00, P-10:00
C—Church of the Air
CFRB CKLW KLRA KLZ KOMA
KTRH KTSA KVOR WAAB WABC
WACO WADC WCCO WDBJ WDRC
WOSU WFBL WGR WGST WHAS
WHEC WHP WIBW WJAS WJSV
WLAC WLRW WMW WOKO WPG WLAC WLBW WMT WOKO WPG WQAM WREC WSBT WSJS WTAQ WTAR WTOC WWVA

WHEN WCAE WDAF WEAF WEEL WFI WGY WHO WJAR WLW WMAQ WOC WRC WSAI WTAG WTAM ww.i

SUNDAY—(Continued)

E-1:30 p.m., C-12:30, M-11:30, P-10:30 R — Little Known Facts WBEN WCSH WEAF WEEI WFI WGY WJAR WTAG WTAM WWJ B — National Youth Conference

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

CLLW KMBC KMOX KRLD WABC
WBBM WCAH WCAO WCAU WCCO
WHAS WHK WJAS WJSV WKBW
WKRC WMBG

E-2:00 p.m., C-1:00, M-12:00, P-11:00 C — Broadway Melodies; Helen Mor-

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

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

WWNC

8 — Bar X Days and Nights

CFCF CRCT KDKA KOIL KSO

KWCR KWK KYW WBAL WBZ

WBZA WCKY WGAR WJR WJZ

WMAL WREN WSYR

E-2:30 p. m., C-1:30, M-12:30, P-11:30 C — Abe Ly man's Orchestra CFRB CKLW KMBC KMOX WABC WBBM WCAO WCAU WCCO WDRC WEAN WFBL WFBM WHEC WHK WJSV WKBW WKRC WNAC WOKO

WJSV WKBW WKRC WNAC WOKO
B—Grenadier Guards Band
CFCF CRCT KDKA KOIL KSO
KWCR KWK WAPI WBAL WBZ
WBZA WCKY WFLA WGAR WHAM
WIOD WIS WJAX WJDX WJR WJZ
WMAL WMC WR WSB WSM
WSMB WSYR WWNC
R—Elizabeth Lennox, Contralto
WBEN WDAF WEAF WEEI WFBR
WGY WJAR WOW WRC WSAI
WTAG WTAM WWJ

E-2:45 p. m., C-1:45, M-12:45, P-11:45 R — Gems of Melody; Muriet Wilson WBEN WCAE WCSH WDAF WEAF WEEI WFBR WGY WHO WJAR WMAQ WOC WOW WRC WSAI WTAG WTAM WWJ

E-3:00 p.m., C-4:00, M-1:00, P-12:00 C— New York Philharmonic Orch. CFAC CFBC CFCF CFCH CFCN CFCO CFCY CFJC CFNB CFPL CFQC CHAB CHGS CHNS CHCC CHWC CHWK CJCA CJCB CJCJ CHWC CHWK CJCA CJCB CJCJ CJGX CJOC CJRM CJRW CKCH CKCK CKNC CKOC CKOV CKPC CKPR CKUA CKX CKY CRCA CKPR CKUA CKX CKY CRCA
CRCO CRCS CRCT CRCV CFRB
CKLW KFH KLRA KLZ KMBC
KMOX KOMA KSL KTRH KTSA
KVOR WABC WADC WBIG WBRC
WCAO WCAU WCCO WDBJ WDRC WDSU WEAN WFBM WFEA WGN WGR WGST WHAS WHEC WHK WHP WIBW WICC WIP WISN WJAS WJSV WLAC WLBW WMBD WMBG WMT WNAC WOKO WORC WQAM WREC WSBT WSJS WTAQ WTAR WTOC WWVA

WYOU WWWA

R — Wayne King and Orchestra

KDYL KFI KGO KGW KHQ KOA

KOMO KPRC KSD KSTP KVOO

WBEN WCAE WCSH WDAF WEAF

WEEI WFAA WGY WHO WJAR

WKBF WKY WLIT WLS WLW

WOAI WOC WOW WRC WTAG

WTAM WTMJ WWJ

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

E-3:15 p.m., C-2:15, M-1:15, P-12:16 B — Irene Rich in Hollywood KDKA WBAL WBZ WBZA WCKY

KDKA WBAL WBZ WBZA WGAR WHAM WJR WJZ WMAQ WMC WSB WSM WMAI WSMB WSYR

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

R — Sparton Triolians
KSD KYW WBEN WCAE WCSH
WDAF WEAF WFBR WGY WJAR
WLIT WOW WRC WSAI WTAG WTAM WWJ

WTAM WWJ

B — Yeast Foamers; Jan Garber

KDKA KDYL KFI KFSD KFYR

KGHL KGIR KGO KGW KHQ KOA

KOIL KOMO KPRC KSO KTAR

KTBS KTHS KVOO KWCR KWK

KYW WAPI WBAL WBZ WBZA KYW WAPI WBAL WBZ WBZA WDAY WEBC WFAA WFLA WGAR WHAM WIBA WIOD WIS WJAX WHAM WIBA WIOD WIS WJA WJDX WJZ WKBF WKY WL WMAL WMC WPTF WREN WRV WSB WSM WSMB WSYR WTM WLW WWNC

E-4:00 p.m., C-3:00, M-2:00, P-1:00 R — Fiddlers Three CFCF CRCT KDYL KFI KFS

CFCF CRCT KDYL KFI KFSD
KFYR KGO KGW KHQ KOA KOMO
KSD KSTP KTAR KTBS KYW
WAPI WBEN WCAE WDAF WDAY
WEAF WEBC WEEL WFLA WGY
WHO WIBA WIOD WIS WJAR
WJDX WKY WLIT WOAL WOC WOW WRC WRVA WSAI WSB WSM WTAG WTAM WWJ WWNC

Rev. Charles E. Coughlin
KMOX KSTP KYW WCAO WCAU
WDRC WEAN WFBL WFEA WGAR
WGR WHB WHO WICC WJAS WJR
WLBZ WLW WMAS WNAC WOC
WOL WOR WORC WCKY WOKO

WOLL WORK WORK WORL WORLD

B — Dion Kennedy, Organist

KDKA KDYL KFI KFYR KGHL

KGIR KGO KGW KHQ KOA KOIL

KGIR KGO KGW KHQ KOA KOIL KOMO KPRC KSO KTBS KTHS KVOO KWCR KWK WAPI WBAL WBAP WBZ WBZA WDAY WEBC WBAP WBZ WBZA WDAY WEBC
WFLA WHAM WIBA WIOD WIS
WJAX WJDX WJZ WKBF WKY
WLS WMAL WMC WOAI WPTF
WREN WRVA WSB WSM WSMB
WSYR WWNC

E-4:15 p.m., C-3:15, M-2:15, P-1:15 R — Wildroot; Vee and Johnny KDYL KFI KFYR KGO KGW KHQ KOA KOMO KPRC KTBS KVOO WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR

WGY WIBA WJAR WKY WLI**T WL8** WOAI WOW WRC WSAI WTAG WTAM WTMJ WWJ

WTAM WIMJ WWJ

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

E-4:30 p. m., C-3:30, M-2:30, P-1:30 R — Hoover Sentinels R—Hoover Sentinels
CFCF CRCT KDYL KFI KGO KGW
KHQ KOA KOMO KPRC KVOO
WBAP WBEN WCAE WCSH WDAF
WEAF WEBC WEIL WFBR WFI
WGY WIBA WJAR WKY WMAQ
WOAI WOW WRC WTAG WTAM

ŴŴĴ B — Princess Pat Pageant
KDKA KOIL KSO KWCR KWK
WBAL WBZ WBZA WENR WHAM
WJZ WMAL WREN WSYR

E-5:00 p.m., C-4:00, M-3:00, P-2:00 E-DIOU D. M., U-4:UU, M-3:UU, P-2:UU
C — Roses and Drums, Drama
CKLW KFAB KLRA KLZ KMBC
KMOX KOMA KRLD KTRH KTSA
WAAB WABC WADC WBBM WBRC
WCCO WDSU WGST WHAS WHK.
WJAS WJSV WKRC WREC

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

WWJ

B — National Vespers

KDYL KECA KFSD KFYR KGHL

KGIR KGO KGW KHQ KOA KOIL

KPRC KSO KSTP KTAR KTBS

KVOO KWCR KWK WAPI WBAL

WBZ WBZA WCFL WCKY WDAY

WEBC WFLA WGAR WHAM WIBA

WIOD WIS WJAX WJDX WJR WJZ

WKY WMAL WMC WOAL

WPTF

WREN WRVA WSB WSM WSMB WWNC

E-5:15 p.m., C-4:15, M-3:15, P-2:16 R — Achievements in Science, Drama CFCF CRCT WBEN WCAE WC8B WDAF WEAF WENR WFBR WGY WJAR WOW WRC WSAI WTAG WTAM WWJ

E-5:30 p.m., C-4:30, M-3:30, P-2:30
C — Frank Crumit; Julia Sanderson
CKLW KFAB KFH KMBC KMOX
KOMA WAAB WABC WADC WCAH
WCAO WCAU WDRC WDSU WEAN
WFBL WFBM WGR WHEC WHK
WICC WJSV WMAS WOKO WORC
WSPD WTAR WWVA

R - Talkie Picture Ti me-Sketch WCAE WCSH WDAF WEAF WEEI WFBR WFI WGY WJAR WMAQ WMC WOW WRC WSAI WSM WTAG

B — Grand Hotel—Drama KDKA KDYL KFI KGO KGW KHQ KOA KOIL KOMO KSO KSTP KWCR KWK WBAL WBZ WBZA WCKY WEBC WENR WGAR WHAM WJR WJZ WKBF WMAL WREN WSYR

E-8:00 p. m., C-5:00, M-4:00, P-3:00 C — Jacques Renard's Orchestra CKLW KMBC KMOX WABC WBBM WCAO WCAU WCCO WFBM WGR WHK WJAS WJSV WKRC

R — Catholic Hour KDYL KECA KFYR KGHL KGIR KGW KOA KOMO KPO KPRC KSTP KTAR KTBS KVOO WAPI KSTP KTBS WBAP WBEN WCAE WCSH WDAF

#### SUNDAY—(Continued)

WDAY WEAF WEBC WEEI WENR WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLIT WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WWJ WWNC

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

E-6:30 p.m., C-5:30, M-4:30, P-3:30
C — Smiling Ed McConnell
CKLW KDB KERN KFAB KFBK
KFH KFPY KFRC KGB KHJ KLZ
KMBC KMOX KOIN KOL KRLD
KSL KYI KWG WAAB WABC WBBM WBT WCAH WCAU WCCO WDSU WEAN WFBL WHAS WHEC WHP WJAS WJSV WKBW WKRC WLAC WMT WOKO WQAM WSPD WTAR WWVA

R — Our American Schools CFCF CRCT KDYL KECA KFSD KFYR KGW KOMO KPO KPRC KSD WBAP WEAF WEBC WEEL WFBR WDAY WEAF WEBC WEEL WFBK WFLA WGY WHO WIBA WIOD WJAR WJAX WJDX WKY WLIT WMAQ WMC WOOL WCV WRVA WSAI WSB WSM WSMB WTAG WTAM WWJ WWNC WSMB

E-6:45 p.m., C-5:45, M-4:45, P-3:45 C — Charles Carlile, Tenor CKLW KDB KERN KFBK KFPY

CKLW KDB KERN KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KSL KVI KWG WAAB WABC WADC WBBM WBIG WBRC WCAO WCAU WCCO WDAE WDBO WDRC WDSU WEAN WGST WHAS WHK WIP WJAS WJSV WKBH WKBW WKRC WPG WSJS WTAR WTOC

E-7:00 p.m., C-8:00, M-5:00, P-4:00 & True Story Court WBEN WCAE WCSH WEAF WFBR WGY WJAR WMAQ WOW WRC WSAI WTAG WTAM WWJ

WASA WIAM WIAM WWS
C - Ethel Waters; George Beatty
WABC WBT WCAO WCAU WDAE
WDBO WDRC WEAN WFEA WGST
WHK WJAS WJSV WKBN WLBZ
WNAC WPG WQAM WTAR WWVA

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

E-7:30 p.m., C-6:30, M-5:30. P-4:30 8 — Ozzie Nelson; Joe Penner KDKA KDYL KFI KFYR KGO KGW

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

L H W KALPAPPA

C — H. V. Kaltenborn

CKLW KFH KLRA KLZ KOMA KSCJ KTRH WABC WADC WBIG WBRC WCAH WCAO 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 WTOC WWVA

E-7:45 p.m., C-6:45, M-5:46, P-4:45 C — Rin Tin Tin Thriller CKLW KMOX WABC WCAU WFBL WFBM WGN WGR WHAS WHK WJAS WJSV WKRC WNAC

WJAS WJSV WKRC WNAC R— Fitch Program; Wendell Hall CFCF KSD WBEN WCAE WCSH 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

R — Chase and Sanborn Hour CFCF CRCT KDYL KFI KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTAR KTHS' KVOO WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFAA WFBR WFLA WGY WHO WIOD WIS WJAR WJAX WJDX WKY WLIT WLW WMAQ WMC WOAI WOC WOW WPTF WRG WRVA WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ WWNC C — Evening in Paris

WTAM WITG WITM WWJ WWNC
C— Evening in Paris
CKLW KLZ KMBC KMOX KOMA
KSL WABC WADC WBBM WCAO
WCAU WCCO WDSU WEAN WFBL
WFBM WGR WGST WHAS WHK
WJAS WJSV WKRC WOKO WSPD

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Ford; Fred Waring's Orchestra CFRB CKAC CKLW KFAB KFH

CFRB CKAC CKLW KFAB KFH
KLRA KLZ KMBC KMOX KOH
KOMA KRLD KSL KTRH KTSA
KVOR WAAB WABC WACO WADC
WBBM WBIG WBRC WBT WCAH
WCAO WCAU WCCO WDAE WDBJ
WDBO WDOD WDRC WDSU WEAD
WFBL WFBM WFEA WGST WHAS
WHEC WHK WHP WIBW WICC
WISN WJAS WJSV WKBN WKBW
WKRC WLAC WLBW WLBZ WMAS
WMBD WMBG WMT WOKO
WOWO WPG WQAM WREC WSFA
WSPD WTAQ WTAR WTOC WWVA KFAB

E-9:00 p.m., G-8:00, M-7:00, P-6:00 C — Erno Rapee; Nino Martini CKLW KDB KERN KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KFRC KGB KHJ KLRA KLZ KMBC
KMJ KMOX KOIN KOL KOMA
KRLD KSCJ KSL KTRH KVI KWG
WABC WADC WBBM WCAO WCAU
WCOO WDRC WDSU WEAN WFBL
WFBM WGR WGST WHAS WHK
WISN WJAS WJSV WKRC WMF
WNAC WNAX WOKO WORC WOWO
WREC WSPD WTAR

MENDALIAN MAGYY, CA. Bound

WREC WOFD WIAR

— Manhattan Merry-Go-Round
KDYL KFI KGO KGW KHQ KOA
KOMO KSD WDAF WEAF WFBR
WFI WGY WHO WJAR WMAQ WOC
WOW WRC WSAI WTAM WTIC

WWJ B — Gulf Headliners

KAKA KPRC KTBS WBAL WBZ WBZA WFAA WFLA WGAR WHAM WIDD WIS WJAX WJDX WJR WJZ WLW WMAL WMC WOAI WRVA WSB WSM WSMB WSYR WWNC

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

R — Album of Familiar Music
CFCF CRCT KDYL KFI KGO KGW
KHQ KOA KOMO KPRC KSD KSTP
WAPI WBEN WCAE WCKY WCSH
WDAF WEAF WEEL WFAA WFBR WEAT WEAT WEAT WHAT WHAT WHILE WHI WILL WGY WHO WIOD WJAX WJDX WKY WMAQ WMC WOAI WOC WOW WPTF WRC

WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ

WIAM WIMJ WWJ

B — Walter Winchell

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

WREN WSYR

E-9:45 p.m., C-8:45, M-7:45, P-6:45 B — Gould and Shefter Piano Duo KDKA KOIL KSO KWCR KWK KYW WBAL WBZ WBZA WGAR WHAM WJR WJZ WMAL WREN WSYR

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

R — Chevrolet; Jack Benny
KDYL KFI KFSD KFYR KGHL
KGIR KGO KGW KHQ KOA KOMO
KPRC KSTP KTAR KTBS WAPI
WBAP WBEN WCAE WCSH WDAF
WDAY WEAF WEBC WEEI WFBR
WFI WFLA WGY WIBA WIOD WIS
WJAR WJDX WKY WMAQ WMC
WOAI WOW WRC WRVA WSB WSM
WSMB WTAG WTAM WTIC WTMJ
WWI WWNC WWJ WWNC

C - Patri's Childhood Dramas C—Part's Cinindool Dramas CKLW KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KSL KYI KWG WAAB WABC WCAO WCAU WCCO WDRC WFBL 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 WBEN WCAE WCSH WDAF
WEAF WEEI WFRB WFI WGY
WJAR WJDX WKY WLW WMAQ
WMC WOAI WOW WRC WSM
WTAG WTAM WTIC WWJ

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 KTSA KVOR WABC
WACO WBIG WBRC WCAH WCAO
WDAE WDBJ WDBO WDOD WDRC
WDSU WEAN WGST WHAS WHEC
WHP WICC WIP WISN WJAS WJSV
WKBN WLAC WLBW WMAS WMBD
WNAC WODX WOKO WPG WQAM
WREC WSFA WSJS WSPD WTAR
WTOC

WTOC B — John Fogarty, Tenor KDKA KGHL KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WGAR WJR WJZ WLW WREN

B - Walter Winchell
KDYL KFI KFSD KGHL KGIK
KGO KGW KHQ KOA KOMO KPRC
KTAR 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

C-Leon Belasco and Urchestra
CFRB CKLW KFH KLZ KOMA
KSCJ KTRH KTSA KVOR WABC
WADC WBRC WBT WCAH WCAO
WCAU WDAE WDBJ WDRC WDSU
WEAN WFBL WFBM WGR WGST
WHEC WHK WHP WIBW WICK WHEC WHK WHP WIBW WICC WISN WJAS WJSV WKBN WLBZ WMAS WMBD WMT WNAC WOKO WQAM WREC WSBT WSJS WSPD WTOC

B — Paul Whiteman and Orchestra

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

#### CLASSIFIED INDEX TO CHAIN PROGRAMS

#### Time in Eastern Standard

CONCERTS

CONCERTS

Armeo 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.
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.
Roxy 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 Romantique, 6:00 p.m., Saturday, B.
Waldorf-Astoria 6:00 p.m., Cally, except Sunday, R.
DANCE RANDS

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, 3:30 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.

Lisham Jones, 9:30 p.m., Mon.; 11:15 p.m., Wed.; 11:30 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., 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., 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., Sunday, R.
Nat Shilkret, 8:45 p.m., Tuesday, R.
Raymond Paige, p.m., Tuesday, R.
Fred Warinet, 8:45 p.m., Tuesday, R.
Raymond Paige, p.m., Tuesday, R.
Raymond Paige, p.m., Tuesday, R.
Fred Warinet, 8:45 p.m., Tuesday, R.
Raymond Paige, B. D., Sunday, C.
Mark Warnow, 10:45 p.m., Thursday, C.
Ted Weems, 7:00 p.m., Sunday, C.
Paul Whiteman, 10:00 p.m., Thursday, R.

#### DIALOG

Fred Allen, 9:30 p.m. and 12:30 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 Perlmutter, 7:30 p.m., Mon., Wed., Fri., B.
Stoopnagle and Budd, 9:15 p.m., Wed. and Sat., C.
Ed Wynn, 9:30 p.m., Tuesday, R.

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., Tres, 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. E. Seite, 11:00 p.m., Saturday, R. One Man's Family, 11:00 p. m., Saturday, R. 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 Science, 5:15 p.m., Sunday, R. Roses and Drums, 5:00 p.m., Sunday, C. Scott's Gircus Days, 7:30 p.m., Fri. and Sat., R. Scoonyland 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 Shefter, 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

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. Buick Program, 9:15 p.m., Mon. and Thurs., C. Buick Program, 9:15 p.m., Mon. and Thurs., 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., Tues. and Thurs., C. Carborundum Band, 9:30 p.m., Saturday, C. Chase and Sanborn, 8:00 p.m., Sunday, R. Chevrolet Program, 10:00 p.m., Sunday, R. Chevrolet Program, 10:00 p.m., Sunday, R. Corn Cob Pipe Club, 10:00 p.m., Monday, R. Corn Cob Pipe Club, 10:00 p.m., Monday, 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. Fitch Program, 7:45 p.m., Sunday, R. Fieischmann Hour, 8:00 p.m., Thursday, R. Fieischmann Hour, 8:00 p.m., Sunday, R. Forty-Five Minutes in Hollywood, 8:00 p.m., Saturday, C. Jack Frost's Melody, 9:30 p.m., Sunday, B. Grenadier Guards, 2:30 p.m., Sunday, B. Grenadier Guards, 2:30 p.m., Sunday, B. Hall of Fame, 10:30 p.m., Sunday, B. Household Musical, 9:00 p.m., Sunday, B. Household Musical, 9:00 p.m., Finday, B. Maxwell House Showboat, 9:00 p.m., Sunday, R. Manhattan Merry-Go-Round, 9:00 p.m., Sunday, R. Manhattan Merry-Go-Round, 9:00 p.m., Sunday, R. Molle Show, 7:00 p.m., Mon., Wed. and Fri., C. Nestle's Chocolateers, 8:00 p.m., Friday, R. Pontice Program, 9:15 p.m., Wed. and Sat., C. Real Silk Show, 7:00 p.m., Sunday, B. Sparton Triolians, 3:30 p.m., Finday, R. Creace Fire Chief, 9:30 p.m., Tuesday, R. Swift Revue 10:00 p.m., Finday, R. Creace Fire 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

Catholie 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., Frene 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.
Cichard 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., Friday, R.
Morton Downey, 8:00 p.m., Thursday, 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.
Jane Froman, 9:00 p.m., Sunday, C.
Alex Gray, 8:30 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.

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, 3:30 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.

John McCormack, 9:30 p.m., Wednesday, B.
Helen Morgan, 2:00 p.m., Sunday, C.
Morin Sisters, 4:15 p.m., Sunday, 9:00 p.m., Friday, R.
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.
Virginia Rea, 9:30 p.m., Sunday, R.
Virginia Rea, 9:30 p.m., Sunday, R.
Silver Dust Sernaders, 7:30 p.m., Tues, Thurs., Sat., C.
Ethel Shutta, 8:00 p.m., Friday, B.
Silver Dust Sernaders, 7:30 p.m., Tues, Thurs., Sat., C.
Sixteen Male Voices, 10:15 p.m., Sat., B.
Mary Snall, 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 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, R.
Ethel Waters, 7:00 p.m., Sunday, R.

Ethel Waters, 7:00 p.m., Sunday, R.

TALKS

TALKS

Back of the News, 6:30 p.m., Wednesday, R.
Dale Carnegie, 1:30 p.m., Sunday, 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, C.
Flying Capt. Williams, 6:45 p.m., Saturday, B.
Flying Capt. Williams, 6:45 p.m., Saturday, B.
Flying Capt. Williams, 6:45 p.m., Saturday, B.
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, 8:30 and 11:45 p.m., Tuesday, C.
Frederic William Wile, 6:30 p.m., Saturday, C.
Walter Winchell, 9:30 and 11:16 p.m., Tuesday and Friday, C.

#### KEY TO SYMBOLS

As Shown in the Index by Frequencies and Dial Numbers

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

Verifies reception for return postage. Verifies only occasionally. Does not verify.
Verification 10c; letter 25c.
Sends Ekko stamp for 10c.
Sends Ekko stamp for 5c.

Sends Ekko stamp for postage Sends own station stamp for 10c. Sends own station stamp for 5c.

Sends own station stamp for postage. Has no stamps. No information available.

#### Fourth Column Symbols

National "Blue" network.. Columbia network.

D Daytime only.
Dn Daytime with occasional evening hours.
E Trans-Canada network.

Canadian Radio Brdcstg. Commission.

All Canadian networks.

Yankee network. Orange network. Orange network.
Michigan network.
Canadian Pacific Ry. network.
Central Canada network.
National "Red" and "Blue" networks. Has construction permit only. National "Red" network. Sunday only. Synchronized. Ŕ

Don Lee System. Ū V Dixie network.

Maritime Broadcasting network. All-Florida network... Curtis-Indiana network.

Has permit to increase power. Has permit to change location.

Has permit to change frequency.

a-b-c. Small letters show stations using same transmitter 1-2-3. Figures denote stations sharing time.

.... No information.

ş

DOTIED

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

550 kilocycles 545.1 meters

1 (1) 2 (1) 1N (2.5) 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 KFDY 500 яe KFUO KFYR KOAC 500 1000 яe яh ak 1000 ak 2R KSD 500

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—7:30-10:00 Cincinnati, Ohio. E—7:00-1:00 TISO ak 250 WDEV 500 Ď 86 1000 WGR 86 **WKRC** 1000 яk

560 kilocycles 535.4 meters

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—9:45; 11-1; 2-3; 4:30-6
Knoxville, Tenn. C
Miami, Fla. E—7:15-mid.
Mexicali, B. C. P—8:00-10:00 KFDM 500 ak KLZ KTAB ak 1000 Č ak 1000 ŘŤWO WFI 'n ak 500 500 IR (1) ae WĪÑD 1000 ak

WLIT 500 IR (1) ak WNOX 1000 C(2) ak WQAM XEAO 1000 ae 100 (.15)

570 kilocycles 526.0 meters 572

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 FON KGKO 250 250 ak (.5) KMTR KVI WKBN ak 500 500 ak iċ 500 ae WABN WMCA WNAX WOSU WSYR WWNC ak 500 C (2.5) 1 (1) B ak 1000 Columbus, Ohio. E—9-11; 1-3 Syracuse, N. Y. E—7:30-1. (WSYU) Asheville, N. C. E—8:00-1:00 750 250 ae ak

580 kilocycles 516.9 meters м

1000

ae

CKCL 100 aj ak CKUA CMDD 500 150 **588** HIX ak 1500

Toronto, Ont. B—o.u—Edmonton, Alta. M Havana, Cuba. E Santo Domingo, D. R. E—8:10-10:30 Peseno, Calif. P—7:00-mid. C—8:00-9:00; 10:1 ĊŤ KMJ KSAC ak 500 Manhattan, Kans. C-8:00-9:00; 10:00-10:30; 12:30-1:30; 4:30ak 500 2 (1) 5:30

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; 7:00-11:00 250 CW C2 **WDBO** ae 1000 WIBW ae WOBU ak 750 WTAG XEPN 750  $\mathbf{R}_{0}$ ae

ak 75000 585

590 kilocycles 508.2 meters

CMW 1400 595 Havana, Cuba. E-11:00-10:00 Tavana, Cuba. E—1:00-10:00 Spokane, Wash. P—7-mid. Boston, Mass. E—6:45-1. (WIXAL) Kalamazoo, Mich. E—7:00-7:00 Omaha, Neb. C—7:00-10:00; 10:45-3:15; 4:00-mid. KHQ ak 1000 N (2.5) WEEI ak 1000 R WKZO 1000 DK ae WOW 1000 R 90

600 kilocycles 499.7 meters

500 Montreal, Que. E—7:30-mid. Chatham, Ont. E—7:15-10 Vancouver, B. C. P—7:30-10:30 CFCF ae **CFCO** 50 ĒĽ яk CJOR KFOD KFSD 500 ak ....

Anchorage, Alaska. L—6:00-mid.

N San Diego, Calif. P—7:30-mid.

Storrs, Conn. E—12:30-1; 7-8

C Baltimore, Md. E—7:00-mid.

2 CH(.5) Bridgeport, Conn. E—7:45-1:00

Waterloo, Iowa. C—6:00-mid.

C (1) Memphis, Tenn. C—6:30-mid. 250 ck ah 1000 WCAC WCAO WICC 250 250 ae ae 250

ae af 500 WMT WREC ak 500

## 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 Čity, Mo. C—7:56:-12:30<br>WIP ae 500 C (1) Philadelphia, Pa. E—8:30-12:30<br>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) K. Petersburg, Fla. E—7:30-1:00 WTMJ ae 1000 N (2.5) Milwaukee. Wis. C—6:45-1:00  |
| 630 kilocycles 475.9 meters  |
| CFCY ae 500 FVE Charlottestown, P. E. I. A—12:00-1:30: 6:00-11:30 CJGX ck 500 F Yorkton, Sask. C—8:30-9:15; 10:30-11:45; 12:40-1:15; 7:30-9:00 CMQ z 500 2 Havana, Cuba. E Columbia, Mo. C—6-9; 4-sunset; 7-9 WGBF ae 500 I Evansville, Ind. C WMAL ak 250 B (.5) WOS ak 500 ID Jefferson City, Mo. C—9:00-4:00 XEX z 50   |
| 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 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<br>WSM aej 50000 N Nashville, Tenn. C—6:30-mid.   |
| 660 kilocycles 454.3 meters  |
| RUS z 500 664 San Salvador, E. S.<br>WAAW af 500 D Omaha, Neb. C—6:00-sunset<br>WEAF ak 50000 R New York, N. Y. E—8:00-1:00  |
| 670 kilocycles 447.5 meters  |
| WMAQ ck 5000 N Chicago, III. 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           KFEQ         ae         2500         D         St. Joseph, Mo.         C—9:30-4:50           KPO         ak         50000         N         San Francisco, Calif.         P—7:30-mid.           VAS         z         2:00         685         Glace Bay, N. S. A.—1:00-1:15; 1:00-1:15           WPTF         ae         10:0         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  |
| 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

| With Ideoday's Time on the Im  |                          |
|--|--------------------------|
| TIFB z 30 714 San Jose, C. R. C—6:00-10:00<br>WOR ak 5000 Newark, N. J. E—6:45-12:30<br>XEN ak 1000 711 Mexico City, D. F. C—9:00-noon; 1:00-4:00; 5:00-m  | aid.                     |
| 720 kilocycles 416.4 meters  |                          |
| WGN ck 50000 Chicago, III. C-7:00-1:30   |                          |
| 730 kilocycles 410.7 meters  |                          |
| CFPL z 100 F London, Ont. E<br>CJCA ah 1000 F Edmonton, Alta. M<br>CKAC ak 5000 C Montreal, Que. E—7:30-11.30<br>CMK ae 3150 Havana, Cuba. E—11:00-1:00; 7:00-mid.   | ксуs.<br>820             |
| XEF-<br>XER ak 150000 735 Villa Acuna, Coah. C-7:15-5:00   | DIAL                     |
| 740 kilocycles 405.2 meters  |                          |
| KMMJ ac 1000 D Clay Center, Neb. C—5:00-sunset<br>WHEB ak 250 D Portsmouth, N. H. E—8:30-1:30; 3:30-7:45<br>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<br>WJR ak 10000 B Detroit, Mich. E—7:00-1:00<br>XEOK ak 5000 757 Tijuana, B. C. P—7:00-mid.   |                          |
| 760 kilocycles 394.5 meters  |                          |
| CMBS         ak         200         765         Havana, Cuba.         E—10-noon; 3:30-6           KXA         ae         250         (.5)         Seattle, Wash.         P—5:30-mid.           WBAL         ae         1000         BSy         Baltimore, Md.         (See 1060 Kcys.)           WJZ         ck         50000         BSy         New York, N. Y.         E—8-sunset           WEYZ         z         10000          Mexico City, D. F.         C   |                          |
| 770 kilocycles 389.4 meters  |                          |
| CMCQ z 1000 775 Havana, Cuba. E<br>KFAB ae 5000 CSy Lincoln, Neb. C—5:00-6:45; 9:00-mid.<br>WBBM ae 25000 CSy Chicago, Ill. C  | CUT                      |
| 780 kilocycles 384.4 meters  | ¦8                       |
| CHWK ak 100 F Chilliwack, B. C. P—9:00-10:00; 12:00-1:00; 5:30-8: Sudbury, Ont. E—8:00-mid. Chilliwack, B. C. P—9:00-10:00; 12:00-1:00; 5:30-8: Chilliwack, Chilliwack | i₽                       |
| 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)   | Į.                       |
| 800 kilocycles 374.8 meters  | !                        |
| TIGP z 75 San Jose, C. R. VOAC z 40 St. John's, Newfoundland. L WBAP ak 50000 Na WFAA ak 50000 Na Dallas, Tex. C—7-8:30; 10:30-12:30; 3-5:30; 6:30-7; XFC z 350 805 Aguascalientes, Ags.   | 30-6:30; 7-10<br>10-mid. |
| 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<br>WHAS aj 50000 C Louisville, Ky. C—7:00-mid.   |                          |
|  |                          |

## INDEX BY FREQUENCIES AND DIAL NUMBERS . With Tuesday's Time on the Air

| 830 kilocycles   | 361.2 meters   | · · ·  |                        |
|--|--|--|------------------------|
| CMC ae 500 835<br>CMGA z 100 834<br>KOA ak 12500 N<br>LR5 z 20000<br>TIEA z 7.5 833  | Colon, Cuba. E Denver, Colo. M—;   | -10:30-11:30; <b>7:00-11:00</b><br>7:00 <b>-mid.</b>   |                        |
| WEEU ak 1000 D<br>WHDH ae 1000 Dn<br>WRUF ae 5000 Dn<br>XETW dk 500  | Boston, Mass. E—81<br>Gainesville, Fla. E-<br>Mexico City, D. F.   | 00-6:15<br>7:00-sunset in Denver<br>—8:00-7:00<br>C—Noon-11:00   |                        |
| 840 kilocycles   | 356.9 meters   |  |                        |
| CJOC ak 100 F<br>CKLW ac 5000 C<br>XFX ak 500  | Lethbridge, Alta. Mindsor, Ont. E—<br>Mexico City, D. F.   | M—7:30-8:00<br>-7:00-1:00<br>C—7-12:30; 6:30-10:00   |                        |
| 850 kilocycles   | 352.7 meters   |  |                        |
| KIEV ak 100 D<br>KWKH ac 10000 1<br>WWL ac 10000 1D  | Glendale, Calif. P-<br>Shreveport, La. C<br>n New Orleans, La. (   |  |                        |
| 860 kilocycles   | 348.6 meters   |  |                        |
| TIVL z 30 869<br>WABC ae 50000 C<br>WHB ae 500 D<br>XETH ak 100  | San Jose, C. R. C-<br>New York, N. Y. E<br>Kansas City, Mo. (<br>Puebla, Pue. C—8:   | -11:00-1:00; 7:00-10:00<br>37:30-2:00 (WBOQ) (W2XE)<br>C-6:00-6:00<br>30-11:00; 1:00-3:00; 6:30-11:00  |                        |
| 870 kilocycles   | 344.6 meters   |  |                        |
| CMCF ak 250 873<br>CMX ae 1000 875   | Havana, Cuba. E—<br>Havana, Cuba. E—   | -5:00-8:00; 9:00-11:00<br>-Noon-2:00; 8:00-9:00<br>V9XF)   |                        |
| WENR ak 50000 Na<br>WLS ae 50000 Na  | Chicago, III. C—(V<br>Chicago, III. C—5:   | V9XF)<br>30-9:15; 10:45-2:30; 6:00-7:30  |                        |
| 880 kilocycles   | 340.7 meters   |  |                        |
| CJCB ak 50 F CRCO ak 1000 F KFKA ak 500 2 ( KLX ae 1000 KPOF ac 500 2 ( WGOZ ac 500 (1) WGBI ac 250 1 WQAN ac 250 1 WSUI ac 500 YV2BC z 100 882  | Denver, Colo. M—   | (0:00-11:00; noon-2:00; 5:00-10:00<br>Noon-1:30; 5:30-11:30<br>-6:00-7:30; 9:00-2:30; 4:30-6; 8-mid.<br>-8:00-11:00<br>7:30-9:00; 2:30-4:00; 6:00-8:00<br>-7:30-2:00:5:00-10:30<br>9:30-12:30; 1:30-4:30; 5:30-8:00<br>9:00-9:30; 12:30-1:30; 4:30-5:30; 8-11:0<br>-9:00-10:00; 11:00-12:30; 2:00-4:00; 6:00 | 0<br>0 <b>0-</b> 10:00 |
|  |  |  |                        |
| 890 kilocycles   | 336.9 meters   |  |                        |
| 890 kilocycles  KARK ak 250  KFNF ak 500 2 ( KSEI ck 250 (.5  KUSD ae 500 2  WGST ach 250 C ( WILL ak 250 2 ( WJAR ae 500 R  WMMN ac 250 (.5  XETU z 100   | 336.9 meters  Little Rock, Ark. Shenandoah, Iowa. Pocatello, Idaho. Vermillion, S. D. Atlanta. Ga. C—7: Urbana, Ill. C—10 Providence, R. I.  | C—7:00-2:30; 4:30-9:00<br>C—5:00-10:00; 11:00-5:00; 6:00-10:00<br>M—7:30-11:00<br>C—Silent<br>00-mid.<br>00-12:15-5:00-6:00  |                        |
| KARK ak 250<br>KFNF ak 500 2 (KSEI ck 250 (.5 KUSD ae 500 2 WILL ak 250 C (WILL ak 250 R) WMMN ae 250 (.5 KIN AR)  | 336.9 meters  Little Rock, Ark. Shenandoah, Iowa. Pocatello, Idaho. Vermillion, S. D. Atlanta. Ga. C—7: Urbana, Ill. C—10 Providence, R. I. Fairmont, W. Va. Pachuca, Hdo.  333.1 meters   | C—7:00-2:30; 4:30-9:00<br>C—5:00-10:00; 11:00-5:00; 6:00-10:00<br>M—7:30-11:00<br>C—Silent<br>00-mid.<br>:00-12:15; 5:00-6:00<br>=—8:00-mid.<br>E—7:00-9:30  |                        |
| KARK ak 250 KFNF ak 500 2 ( KSEI ck 250 (.5) KUSD ae 500 2 WGST ach 250 C ( WILL ak 250 2 ( WJAR ac 500 R WMMN ac 250 (.5) XETU z 100  | 336.9 meters  Little Rock, Ark. Shenandoah, Iowa. Pocatello, Idaho. Vermillion, S. D. Collon, Iowa. Urbana, III. C—10 Providence, R. I. E Fairmont, W. Va. Pachuca, Hdo.  333.1 meters   | C—7:00-2:30; 4:30-9:00<br>C—5:00-10:00; 11:00-5:00; 6:00-10:00<br>M—7:30-11:00<br>C—Silent<br>00-mid.<br>:00-12:15; 5:00-6:00<br>=—8:00-mid.<br>E—7:00-9:30  |                        |
| KARK ak 250 KFNF ak 500 2 (KSEI ck 250 ( KUSD ac 500 2 WGST ach 250 C (WILL ak 250 C, WILL ak 250 C, WILL ak 250 C, WILL ak 250 C, WILL ac 250 (  900 kilocycles  KGBU ak 500 KHJ VOWR ak 500 S WBEN ac 1000 N WKY ak 1000 N | 336.9 meters  Little Rock, Ark. Shenandoah, Iowa. Pocatello, Idaho. Nermillion, S. D. Atlanta. Ga. C.—7; Urbana, Ill. C—10 Providence, R. I. Fairmont, W. Va. Pachuca, Hdo.  333.1 meters  Ketchikan, Alaska. Los Angeles, Calif. St. John's, Nfld. L Buffalo, N. Y. E— Jacksonville, Fla. I Oklahoma City, Ok Stevens Point, Wis. | C—7:00-2:30; 4:30-9:00<br>C—5:00-10:00; 11:00-5:00; 6:00-10:00<br>M—7:30-11:00<br>C—Silent<br>00-mid.<br>:00-12:15; 5:00-6:00<br>=—8:00-mid.<br>E—7:00-9:30  |                        |

```
Havana, Cuba. E-Noon-9:00
                          500
                                    915
CMCD
                яh
                                                   Camaguey, Cuba E
Montreal, Que. E
San Jose, C. R. C-
Mexico City, D. F.
                          200
CMJF
CRCM
                         5000
                ck
                                    911
                                                                                      -6:30-10:00
TICR
                            75
                         5000
XEW
                ak
920 kilocycles
                                            325.9 meters
                                                    Havana, Cuba. E

Port-au-Prince, Haiti. E—Silent
Denver, Colo. M—6:30-8:30; 10:00-12:30; 3:00-4:30; 6-7:30; 9-Mid.
Denver, Colo. M—8:30-10; 12:30-3; 4:30-6; 7:30-9:00; mid.-1:00
Seattle, Wash. P—6:55-mid.
Houston, Texas. C—6:30-mid.
Chicago, III. C—6:00-sunset
Babson Park, Mass. E—8:30-5:15
Detroit, Mich. E—7:30-mid.
                           150
                                     925
CMDE
                         1000
HHK
                ae
KFEL
                ak
                           500
KFXF
KOMO
                           500
                ak
                                    Ñ
N (2.5)
                         1000
                ak
                         1000
KPRC
                яe
                                    DDR
                          500
 WAAF
                ak
 WBSO
                          500
                яе
                         1000
930 kilocycles
                                            322.4 meters
                                                    Calgary, Alta. M
North Bay, Ont. E—Noon-1:30; 5:30-mid.
Prescott, Ont. E—8:00-10:00; noon-2:00; 5:00-10:00
Quebec, Que. E—9:00-12:30
Brantford, Ont. E—6:45-mid.
San Francisco, Calif. P—Silent till further notice
York, Neb. C—5-6; 7:30-9:30; 11-12:30; 2-3:30; 5-6:30; 8:30-mid.
Shenandoah, Iowa. C—6-7:30; 9:30-11; 12:30-2; 3:30-5; 6:30-8:30
Oakland, Calif. P—7:00-mid.
Birmingham, Ala. C—7:00-11:00
Roanoke, Va. E—8:00-mid.
                                    ;····
CFAC
                           100
                           100
 CFCH
                 ak
                                                                                                                                                                  KCYS.
 CFLC
                           100
                 ae.
                           100
                                                                                                                                                                  990
 CHRC
                 ak
                                     FG
                           100
 CKPC
                           500
                 яk
 KGBZ
KMA
                                     2 (1)
2 (1)
                                                                                                                                                                  DIAL
                 ak
                           500
                           500
                 ak
                                     Î (1)
C (1)
C (.5)
 KROW
                           500
                 ak
 WBRC
                           500
                 ak
                                                     Roanoke, Va. E-8:00-mid.
                           250
 WDBI
                 ae.
                                            319.0 meters
 940 kilocycles
                                                    Caibarien, Cuba. E—8:00-9:00
Portland, Ore. P—6:30-mid.
Jersey City. N. J. E—6:00-6:00
Louisville, Ky. C—Silent
Portland, Maine. E—8:00-mid.
Fargo, N. D. C—7:00-mid.
Madison, Wis. C—8:00-sunset
Mexico City, D. F. C—1:00-3:00; 6:25-mid. (XEO)
                           500
                                      945.5
 CMHD
 KOIN
WAAT
WAVE
WCSH
                                     CT
                 яk
                          1000
                           300
                 ae
                          1000
                 ak
                          1000
                                      R (2.5)
                 ae
                          1000
 WDAY
                 ae
                 ak
                          1000
  WHA
                          5000
 XEFO
                 ak
                                            315.6 meters
 950 kilocycles
                                     NJ (2.5)
C
                                                                                     P-7:30-12:30
 KFWB
                          1000
                                                     rionlywood, Calir. P—/:30-12:30
Billings, Mont. M—8:00-11:00
Kansas City, Mo. C—6:00-mid.
St. John's, Nfld. L—10:30-11:30; 1:00-2:00; 6:15-8:00
Washington, D. C. E—6:30-1:00
                                                      Hollywood, Calif.
                 ak
                          1000
 KGHL
                 ak
                          1000
 KMBC
                 ak
                                     .....
R
  VOGY
                 ak
 WRC
                            500
                  яe
                                                                                                                                                                    TOO
 960 kilocycles
                                             312.3 meters
                                                                                                                                                                    ç
                                                      Havana, Cuba. E-6:00-11:00
Havana, Cuba. E-1:00-3:00; noon-6:00
                            250
                                      965
  CMBD
 CMCW
CMJL
CRCT
XEAW
                            150
                                      965
                 ak
                                                     Camaguey, Cuba.
Toronto, Ont. E—6:45-mid. (VE9GW)
Reynosa, Tams. C—5:00-1:00
Caracas, Venz. L—11:00-1:30; 5:30-10:15
                                                                                                                                                                  DOTTED LINES
                              50
                 z
                                      ŇĖ
                          5000
                  ak
                        10000
                                      965
                  ak
  YVIBC
                          5000
                  яk
 970 kilocycles
                                             309.1 meters
                                                     Mantanzas, Cuba. E—3:00-5:00; 8:00-10:30
Seattle, Wash. P—7:30-mid.
Chicago, III. C—7:00-mid. (W9XAA)
Glenside, Pa. E—9:00-sunset
                            100
                                      971.5
N
  CMGF
 KJR
WCFL
                           5000
                  z
                                      BX
                           1500
                  ae
                            100
  WIBG
                  ae
 980 kilocycles
                                              303.9 meters
                                                      Pittsburgh, Pa. E—7:00-1:00. (W8XK)
Tijuana, B. C. P—9:00-mid.
Nuevo Laredo, Tams. C
                  ak 50000
  KDKA
                            800
  XEAE
                  ak
  XEFE
                             100
                                      985
  990 kilocycles
                                             302.8 meters
                             7.5
                                       999
                                                      San Jose, C. R. C-3:00-5:00; 7:00-11:00
Boston, Mass. E-7:00-1 00. (W1XAZ)
  TITV
  wŝz
                  ak
                        50000
                                       BSy
                                                      Springfield, Mass. E-7:00-1:00
  WBZA
                                       BSv
                           1000
                  ak
                                                      Tupelo, Miss.
  WJEM
                             500
                  z
```

```
XEAF
XEK
                             750
100
                                                          Nogales, Son.
                 z
ek
                                                          Mexico City, D. F. C-11:00-4:00; 6:00-2:00
1000 kilocycles
                                                    299.8 meters
                              150
                                         1005
                                                          Havana, Cuba. E-11-1; 4-6; 8:30-11
Los Angeles, Calif. P-6:30-sunset: 10:00-mid.
CMB7
                  яk
KFVD
                  яe
                              250
                                         Dn
WHO-
                                                          Des Moines, Iowa. C—7:00-mid.
York, Pa. E—8:00-6:45
Guadalajara, Jal. C—8:30-9:00; 6:00-11:00
Toluca, D. F. C
                  ak
                          50000
                                         R
WORK
                  ak
                            1000
                                         Ď
XEA
XEC
XEFJ
XEFS
                             250
                  ak
                                         . . . . .
                               50
                  z
                                         . . . . .
                                                          Monterrey, N. L. C—11:00-2:00; 7:00-10:00
Queretaro, Qro. C—8:00-10:00
Saltillo, Coah. C—10:30-1:00; 6:00-9:00
                  ak
                             100
                                         . . . . .
                               40
                  ak
                                         . . . . .
XEL.
                  ak
                               40
1010 kilocycles
                                                    296.9 meters
                                                         Hamilton, Ont. E—8:00-11:00
Regina, Sask. M—7-9: 10-11; noon-1; 3:30-6:30
Vancouver, B. C. P—7:30-11:30
Regina, Sask. M—9-10; 11-noon; 1-3:30; 5:30-11
Ottawa, Ont. E
Wolfville, N. S. A—Noon-1:00; 6:00-7:00
Vancouver, B. C. P—7-7:30
Ciego de Avila, Cuba. E—9:00-1:00; 6:00-10:00
Coffeyville, Kans. C—7:30-2; 3:45-7:15
San Jose, Calif. P—7:00-8:00; 9:00-3:00; 4:30-10:00
Cartago, C. R.
New York, N. Y. E—1:30-5:30
Columbia. S. C. E—8:00-mid.
Norman, Okla. C—7:15-9:15
New York, N. Y. E—1:1-1
New York, N. Y. E—1:1-1
New York, N. Y. E—9:30-1:30; 5:30-11
Juarez, Chih. C
Veracruz, Ver. C—7:00-9:00; 10:00-2:00; 5:00-11:00
CHML
CHWC
CKCD
CKCK
CKCO
CKIC
                               50
                  aei
                             500
                                         3F
                  яe
                              100
                  ak
                                         3F
                              500
                  яk
                              100
                                         . . . . .
                               50
                  ak
CKIC
CKWX
CMJO
KGGF
KOW
TIGA
WHN
                  aeh
                              100
                               50
                  яk
                              500
                                        2(1)
                  ak
                  ae
                              500
                               30
                                         1014
                  ae
                              250
                                         N (1)
 ŵΪŜ
                              500
                  ae
WNAD
WPAP
WQAO
WRNY
                              500
                  ae
                              250
                  ae.
                              250
                  ae
                              250
                  ae
                             500
                                         1015
XEJ
XEU
                  ak
                  ak
                              100
1020 kilocycles
                                                    293.9 meters
                                                          Chicago, III. C—8:00-1:00
Philadelphia, Pa. E—7:00-7:00
Tampico, Tams. E—10:00-2:30; 5:00-10:00
                  ae.
WRAX
XES
                             250
250
                                         DZ
                  ak
1030 kilocycles
                                                    291.1 meters
                                                          Calgary, Alta. M—7:30-1:30; 5:00-11:00
Fredericton, N. B. A—8:30-9:30; 12:30-2:00; 7:30-10:00
Toronto, Ont. E—8-11. (VE9CB)
Santa Clara, Cuba. E—11:00-noon; 8:00-9:00
Santiago, Cuba. E
Mexico City, D. F. C—9:30-10:00
                  ak 10000
CFCN
CFNB
CKNC
CMHI
                             500
                                         FΕ
                  ae
                  ak
                              100
                                         1037
                  ak
                              250
CMKC
                              150
                                         1034
                  ak 10000
XEB
1040 kilocycles
                                                    288.3 meters
                                                          Matanzas, Cuba. E—2:00-3:00; 5:00-6:00; 7:30-8:30 Dallas, Texas. C Hot Springs, Ark. C Elmira, N. Y. E—8:00-6:00 East Lansing, Mich. E
CMGH
                  яk
                               15
                                         įċ…
                          10000
KRLD
                  ae
                                         ĎŇ
KTHS
                          10000
                  ae
WESG
WKAR
                            1000
1000
                                          D
                  ak
                                         D
1050 kilocycles
                                                    285.5 meters
                                                          Halifax, N. S. A—8:00-1:30; 6:00-mid.
Havana, Cuba. E
Havana, Cuba. E
                              500
                  ae
CMBG
                              225
                                         1052a
CMCB
CMJG
KFBI
                  ak
                              150
                                         1052a
                                                          Camaguey, Cuba. E
Abilene, Kans. C—6:00-sunset
Hollywood, Calif. P—6:45-11:00
Merida, Yuc. C—7-10
                               50
                  z
                            5000
                  ak
                                         Dn
                          25000
                                         . . . . .
XEFC
                             100
1060 kilocycles
                                                    282.8 meters
                                                          Portland, Ore. P-6:00-8:00; 9:00-2:00
Baltimore, Md. E-3-mid.
Norfolk, Neb. C-6:45-sunset
Hartford, Conn. E-7:30-3
KWJJ
WBAL
                              500
                  ak
                                         iB
                  ae
                          10000
WJAG
WTIC
                  ak
                            1000
                          50000
                                         īR
```

```
1070 kilocycles
                                             280.2 meters
KJBS
WCAZ
WDZ
                                                  San Francisco, Calif. P—12:01-sunset
Carthage, Ill. C
Tuscola, Ill. C—8:00-4:00
                          100
                           50
                                    Ď
                ae
                         100
                                    กั
                ak
WTAM
                     50000
                                                   Cleveland, Ohio. E-6:30-1:00
                ck
1080 kilocycles
                                             277.6 meters
                                                  St. John's, Nfld. L—Noon-2:00
Charlotte, N. C. E—7:00-mid.
Zion, Ill. C—7:30-10:30; 1:30-sunset
Chicago, Ill. C—7:00-7:30; 10:30-1:30; 3:00-4:00
Mexico City, D. F. C—10:30-4:00; 7:00-mid.
                                   1085
CU
1Dn
                           30
 WBT
                      50000
                ae.
 ŴĈŔD
                        5000
               ае
 WMBI
                                    1Dn
                        5000
               ае
XEFG
                         500
                                    1085
1090 kilocycles
                                             275.1 meters
                                                  St. Louis, Mo. C—6:30-12:30
Mexico City, D. F. (All mail returned)
KMOX
XEAI
               ak 50000
                         100
1100 kilocycles
                                             272.6 meters
                                                  Havana, Cuba. E—Noon-6
Vancouver, B. C. P—Noon-1; 5:30-11
Stockton, Calif. P—6-sunset
San Jose, C. R. C—11:00-1:00:5:00-10:30
New York, N. Y. E—6:00-8:00
Atlantic City, N. J. E—9:00-6:00; 8:00-1:00
Veracruz, Ver. C
                         500
CMCU
                ak
                                   Ė.
CRCV
                        1000
               ak
KGDM
TIRCA
WLWL
WPG
                         250
               ak
                                   Đ
                         500
                ak
                        5000
                ae
                                    îс
                        5000
                яk
XEWW
                         250
1110 kilocycles
                                             270.1 meters
                                   Dn (2.5) Sioux Falls, S. D. C—6:00-6:30
N Richmond, Va. E—7:00-mid.
1115 Nuevo Laredo, Tams. C—6:00-8:00; 10:00-2:00; 5:00-10:00
                                                                                                                                                            KCYS.
KSOO
WRVA
                        1000
                        5000
                                                                                                                                                            1160
XENT
                ak 150000
1120 kilocycles
                                                                                                                                                            DIAL
                                             267.7 meters
                                                  Edmonton, Alta. M
Summerside, P. E. I. A—7:30
Montreal, Que. E—9:00-mid.
Hamilton, Ont. E—7:45-11:30
                         100
CHGS
               ae
                           50
                                                                                          -7:30-8:30; 10:30-2; 4:30-11
CHLP
                         100
                                   F (1)
CKOC
CMHJ
                                                  Hamilton, Ont. E—7:45-11:30
Cienfuegos, Cuba. E—11:00-2:00; 6:00-9:00
Spokane, Wash. P—7:00-sunset
Los Angeles, Calif. P—6:30-7:15; 7:30-mid.
Los Angeles, Calif. P—45-7:30
Seattle, Wash. P—6:45-6:30
Houston, Texas. C—6:30-11:30
Wilmington, Del. E—9:00-10:00
Milwaukee, Wis. C—9:30-10:15; 3:00-4:00; 8
Milwaukee, Wis. C
College Station, Tex. C—8-9
               ae
                         500
                                   1125
D
                           60
               яе
KFIO
KFSG
KRKD
KRSC
KTRH
                         100
               яе
                         500
               ag
                                   а
                         500
100
               яе
                                   ñ
               ak
                        1000
1000
250
250
250
                                   2C
               z
WDEI
               āk
                                   (.5)
1C
WHAD
               ak
                                                                                    -9:30-10:15; 3:00-4:00; 8:30-9:30
WISN
               яk
WTAW
                         500
               ae
                                                                                                                                                            logr
Gr
1130 kilocycles
                                             265.3 meters
                                                  Salt Lake City, Utah. M—6:45-mid.
Chicago, Ill. C—6:30-10:00
New York, N. Y. E—8:00-6:00
Monterrey, N. L. C—8:00-1:30; 5:00-10:00
KSL
                      50000
               ae
                                                                                                                                                            ģ
WJJD
WOV
                      20000
                                   Dn
               ae
                        1000
               ag
ak
                         250
                                   1132
                                                                                                                                                            DOTTED
1140 kilocycles
                                             263.0 meters
                                                  Havana, Cuba. E—8-11; 7-11
Havana, Cuba. E—6-11
Tulsa, Okla. C—6:30-9
Birmingham, Ala. C—6:00-sunset; 9:00-mid.
CMBJ
CMBW
                         500
                         600
               ak
                                  1N
1N
KVOO
WAPI
                      25000
                       5000
1150 kilocycles
                                             260.7 meters
                                                  Ciego de Avila, Cuba. E—8:00-8:30; 10:00-3:00; 5:30-10:30
Rochester, N. Y. E—8:00-mid.
Guadalajara, Jal. C—Noon-3:30; 7:00-mid.
CMJH
                           50
WHAM
                      50000
                                   1155
XED
                         300
1160 kilocycles
                                             258.5 meters
wowo
                      10000
                                                  Fort Wayne, Ind. C—8:30-5:15; 7:30-10
Wheeling, W. Va. E—6:30-8:30; 10-mid.
WWVA
               ae
                       5000
```

```
1170 kilocycles
                                                               256.3 meters
                                                                       Camaguey, Cuba. E
Philadelphia, Pa. E-8:00-1:00 (W3XAU)
                     z 50
ae 50000
                                                  ċ.
1180 kilocycles
                                                                254.1 meters
                                                                       Havana, Cuba. E
Havana, Cuba. E
Havana, Cuba. E
Portland, Ore. P
P-7-5:30; 8-mil:00; 5:00-9:00
Minneapolis, Minn
Minneapolis, Minn
Minneapolis, Minn
Minneapolis, Minn
Mery York, N. Y. E
-0:00-7:00
Macon, Ga. E
7:30-3:00; 5:00-8:15
CMBN
CMCJ
KEX
KOB
                                     150
                      ak
                                                   1185
                                     500
                       ak
                                                   żŃ
                      ak
                                  5000
                                10000
                      ae
 WDGY
WINS
                                  1000
                                                  Ďп
                      ak
                                    500
                      ae.
 WMAZ
                      ak
                                    500
1190 kilocycles
                                                                252.0 meters
HIJ
VE9EK
VONF
WOAI
                                       15
                                                  1195
                                                                        Santo Domingo, D. R.
                                                                                                                             E-12:30-2:30; 6:30-8:30
                      z
                      ak
                                                   1195
                                                                       Montmagny, Que. E
St. John's, Nfld. L—Noon-2:00; 6:00-9:00
                                       10
                      ak
                                     400
                                                   1195
                                50000
                                                                       San Antonio, Texas. C—6:30-11:30
Huntington, W. Va. E—8:00-8:00
                      ae
                                                  N
WSAZ
                                  1000
1200 kilocycles
                                                                249.9 meters
                                    100
                                                  F
                                                                       Moose Jaw, Sask. M-Trail, B. C. P-9:30-9
CJAT
CKTB
CMGB
                      ak
                                       50
                                                                     Trail, B. C. P—9:30-9
St. Catharines, Ont. B
Matanzas, Cuba. E
Cienfuegas, Cuba B
Jonesboro, Ark. C—7:30-1:30; 2:30-5:30
Bakersfield, Calif. P—7:00-mid.
Marshalltown, lowa. C—6:00-9:00; noon-3:00; 6:00-9:00
Nampa, Idaho. M—7:00-9:00
Grand Junction, Colo. M
Fergus Falls, Minn. C—7:00-9:00
Yuma, Colo. M—11:30-1:30; 7:15-8:45
Los Angeles, Calif. P—24 hours
Little Rock, Ark. C—7:00-1:00; 4:00-10:00
Missoula, Mont. M—8:00-8:30
Monroe, La. C
Lowell, Ariz. M—Sunrise-sunset
Bellingham, Wash. P—7:00-10:00
Stockton, Calif. P—7:00-mid.
Bangor, Maine. E—9:00-2:00; 6:00-10:00
New Orleans, La. C—Noon-5:00; 8:00-11:00
New Orleans, La. C—6:30-9
Huntsville, Ala. C
Rapid City, S. D. C—12:30-1:30
Burlington, Vt. E—Noon-1
Janesville, Wis. C—7:30-2:30; 5:30-10:30
Cincinnati, Ohio. E—7:00-9:00; noon-3:00; 6:00-9:00
Green Bay, Wis. C—7:30-9:45
Utica, N. Y. E—8:00-11:00
St. Louis, Mo. C—7:00-mid.
LaSalle, Ill. C—6:30-8; 9-10; 12:30-3; 6:30-10
New Orleans, La. C—8:00-noon; 5:00-8:00
Harrisburg, Pa. E—1:00-3:00; 6:00-9:00
Carton, Ohio. C—7:00-mid.
LaSalle, Ill. C—6:30-8; 9-10; 12:30-3; 6:30-10
New Orleans, La. C—8:00-noon; 5:00-8:00
Harrisburg, Pa. E—1:00-10:00; 2:00-5:00; 7:00-11:00
Louisville, Ky. C—7:30-11:30
Silverhaven, Pa. E—9:00-10:00; 2:00-5:00; 7:00-11:00
Louisville, Ky. C—7:30-11:30
Silverhaven, Pa. E—9:00-10:00; 5:00-6:00; 9:00-mid.
Carton, Ga. E—8:00-5:00; 6:00-9:00
Columbus, Ga. L—1:00-2:00; 5:00-10:30
Stratford, Ont. E—Noon-1
Brantford, Ont. E—Noon-1
                                                                       St. Catharines, Ont.
                                    100
                      ae
                                       30
                                                  1205
                                                                        Matanzas, Cuba. E
                      7.
CMHW
                                    100
                      7.
KBTM
KERN
KFJB
KFXD
KFXJ
KGDE
                                                  ĎΫ
                                    100
100
                      ak
                                                  CT
                      ak
                                                  (.25)
                      ak
                                     100
                                     100
                      ae
                      ak
                                     100
                                                  (.25)
                      ak
                                     100
KGEK
KGFJ
KGHI
KGVO
                      ak
                                     100
                                                   . . . . .
                                    100
                      ae
                                                  (.25)
                                    100
                      ak
                                     100
                      ak
                                                  . . . . .
                                                 .....
KMLB
KSUN
KVOS
                                    100
                      ak
                                     100
                      ae
                      ak
                                     100
                                                  ĊŤ
KWG
WABI
                                     100
                      ae
                                                 i ....
                      ak
                                    100
WBBX
                      ak
                                    100
WBBZ
                                    100
                      ak
WBHS
                                    100
WCAT
WCAX
WCLO
                                    100
100
                                                  Ď
                      ak
                      ak
                                                  . . . . .
                      ak
                                     100
                                                  8C ...
WFAM
                      ak
                                    100
                                                  4 (.25)
(.25)
2
WFBC
                                    100
                      ak
WFBE
                                    100
                      ak
WHBC
                      ak
                                    100
WHBY
                      ak
                                    100
WIBX
                                     100
                                                  (.3)
5 (.25)
                      ae
ak
WIL
                                    100
WJBC
WJBL
WJBW
                                     100
                                                   6
                      ae
                                    100
100
                      ae
                      ak
WKBO
                                    100
                      ak
WKJC
WLAP
                     ae
                                    100
                                                  (.25)
                                    100
                      ae
WNBO
WNBW
                                    100
                     ae
                     z
                                      10
                                                  (.1)
WPHR
                     ak
                                                  (.25)
                                    100
WRBL
                      z
                                    100
WWAE
                                    100
                     яe
YV3BC
                                  1000
                     ak
10-AK
                     ak
                                      15
                                                  . . . . .
                                                                       Wingham, Ont. E—Noon-1
Brantford, Ont. E—11-8
Canora, Sask. C
10-BP
                     ak
                                      15
                                                  . . . . .
10-BQ
10-BU
                                      15
                     ak
                                                  . . . . .
                                      15
                                                                       Canora, Sask.
1210 kilocycles
                                                               247.8 meters
CFBO
CHNC
                                    100
                                                 F
                                                                       St. John, N. B.
                                                                       New Carlisle, Que. A-
Prince Albert, Sask. N
                                                 PF
                                                                                                                            -1:00-mid.
                     ak
                                    100
CKBI
                                                                                                                       M
```

```
CKCH
CKMC
CKOV
KASA
KDLR
                                                                            Cobalt, Ont. E
Kelowna, B. C. P
Elk City, Okla. C—6:30-1:30; 5:00-7:00
Devils Lake, N. D. C—8:00-2:15; 6:00-8:00
Klamath Falls, Ore. P—8:30-9:00
Lincoln, Neb. C—7:00-10:00
Fort Smith, Ark. C—7:00-2:00; 5:00-10:00
Cape Girardeau, Mo. C—9-noon; 4-7:30; 9-mid.
San Bernardino, Calif. P—6-mid.
Watertown, S. D. C—7:00-3:00; 5:00-9:00
Olympia, Wash. P—7:45-sunset
Pasadena, Calif. P—Silent
Shreveport, La. C
Hilo, Hawaii. L
Zanesville, Ohio. E
                                                                               Hull, Que. E
                                                      ....
F
                        ak
                                          50
                        ak
                                           50
                        ak
                                        100
                                                       . . . . .
                                        100
                        ak
                                                       . . . . .
KFJI
KFOR
                                        100
                        ak
                                                       (.25)
                                        100
KFPW
KFVS
KFXM
KGCR
KGY
KIEM
KPPC
KWEA
KWFV
WALR
WBAX
WBBL
 KFPW
                        ak
                                        100
                                                        . . . . .
                                         100
                        ае
                                        100
                        ak
                                        100
                        ak
                                                       . . . . .
                        ak
                                        100
                                                       . . . . .
                                        100 .
                        ak
                                          50
                        ak
                                        100
                                                       . . . . .
                                        100
                                                       . . . . .
                                                       i....
                                                                               Zanesville, Ohio.
                        ae
                                        100
                                                                             Zanesville, Ohio. B

Wilkes Barre, Pa. E

Richmond Va. E—Silent

Springfield, III. C—11:15-3:00; 6:45-9:00

Chicago, III. C—11:00-2:00:5:00-7:00

Harrisburg, III. C—6-9; noon-4; 7:30-9

Chicago, III. C—6-3:0-10:00:00; 3:30-5:; 7:-8:; 10:-11:; mid.-2:00

White Plains, N. Y. E—9-11; 9-mid.

Freeport, N. Y. E—7-9

Mississippi City, Miss. C—9:00-1:00; 7:00-9:00

Chester, N. Y. E

Rock Island, III. C—7:30-10:00

Anderson, Ind. C—7-10
                                        100
                        ae.
                                                      7S
                        ak
                                        100
WCBS
WCRW
WEBQ
WEDC
                                        100
100
100
100
                        ak
                        ae
                         ae
                                         100
                        ae
 WFAS
                        ak
                                        100
                                                       3
WGBB
WGCM
WGNY
WHBF
                                        100
                        90
                                                       (.25)
                                        100
                        ae
                                                                            Rock Island, III. C—7:30-10:00
Anderson, Ind. C—7-10
Poynette, Wis. C
Red Bank, N. J. E—4-7
Gadsden, Ala. C—9:00-9:00
Hagerstown, Md. E—7:00-11:00; 4:00-7:45
Akron, Ohio. E—9:00-11:30
Greenville, Miss. C—7:00-7:00
Sunbury, Pa. E
Richmond, Va. E—7:00-mid.
Jamestown, N. Y. E—Noon-mid.
Manitowoc Wis. C
Providence, R. I. E—9:00-2:00; 4:00-11:15
Thomasville, Ga. E—8:00-9:00
Chicago, III. C—6:00-8:30; 10:00-11:00; 2:00-3:30; 8:00-10:00; 11:00-mid.
Columbus, Ohio. E—8:00-mid.
                                        100
                        ak
                                        100
                        ak
                                                       . . . . .
 WHBU
                        ah
                                        100
                                                       . . . . .
WHBU
WIBU
WJBY
WJEJ
WJW
WKFI
WKOK
                                        100
                                                       ġ.
                        ak
                                                      Ď....
                        ak
                                        100
                        ah
                                        100
                        ak
ak
ak
                                        100
                                        100
                                                       ĺΡ
                                        100
                                                       7Ĉ
 WMBG
                        ak
                                        100
WOCL
                                        50
100
                        ak
                                                       . . . . .
                        ae
                                                       . . . . .
WPRO
WQDX
WSBC
                        ak
                                        100
                                                       . . . . .
                                        100
                        96
                        ae
                                        100
                                                                                                                                                                                                                                                   KCYS.
WSEN
WSIX
WSOC
WTAX
                                                                              11:00-mid.
Columbus, Ohio. E—8:00-mid.
Springfield, Tenn. C—6:00-4:00; 6:00-9:00
Charlotte, N. C. E
Springfield, III. C
                                        100
                        ak
                                                       . . . . .
                        ak
                                        100
                                                                                                                                                                                                                                                   1240
                                         100
                        яe
                        ae
                                        100
                                                       2
                                                                               Mexico City, D. F.
                                                                                                                                                                                                                                                   DIAL
                                        500
XETZ
1220 kilocycles
                                                                      245.8 meters
                                                                             Cruces, Cuba. E—10:00-11:30
Lawrence, Kans. C—2:30-3:00; 6:00-6:15
Seattle, Wash. P—Silent
Pullman, Wash. P—6:45-8; 10:30-9:30
Canton, N. Y. E—12:30-1:30
Pittsburgh, Pa. E—6:45-1:00
Tampa, Fla. E—8:00-mid.
Lawrence, Kas. C—7:00-mid.
                                                       1225
CMHK
                        ak
KFKU
KTW
KWSC
WCAD
WCAE
                                        500
                        ae
                                     1000
                                                       Š2
                        ak
                                                      2 (2)
D
                                      1000
                        ae
                        ak
                                       500
                                     1000
                                                       R
                        ae
                                                       ĊW
 WDAE
                                     1000
                        ae
                                     1000
                                                       Ba
 WREN
                        ak
                                                                                                                                                                                                                                                   OUT
1230 kilocycles
                                                                      243.8 meters
                                                                             Saskatoon, Sask. C
Havana, Cuba. B
Havana, Cuba. B
Albuquerque, N. M. M—6:00-noon; 4:00-8:00
San Francisco, Calif. P—7:30-mid.
Indianapolis, Ind. C—7:30-10:15; noon-3:00; 5:30-11:30
Boston, Mass. E—6:30-1:00
South Bend, Ind. C—6:30-mid.
CFQC
CMBY
                                        500
                        z
                                                                                                                                                                                                                                                  Į
                                       250
150
                        z
                                                       2
 CMCA
                                                                                                                                                                                                                                                   DOTTED LINES
KGGM
KYA
WFBM
                        ak
                                        250
                                                      (.5)
N
                                     1000
                        ae
                                                       ic
                        ae
                                     1000
                                     1000
                                                      CH
                                        500
1240 kilocycles
                                                                      241.8 meters
CMAB
                        z
                                          20
                                                       1249
                                                                             Pinar del Rio, Cuba.
                                                                             Camaguey, Cuba. B
Mandan, N. D. M—Noon-5:00; 6:45-9:00
Minot, N. D. C—7:00-1:00:6:00-7:45
Fort Worth, Texas. C—7:00-mid.
                                          50
CMJN
KGCU
                        z
                                       250
                        ak
KLPM
                        ak
                                        250
                                                       1
C
KTAT
                        ak
                                     1000
```

```
Twin Falls, Idaho. M—6:00-mid.
San Juan, P. R. A—12:15-3:15; 6:30-10:00
Detroit, Mich. E—7:30-mid.
                               1000
 KTFI
                    ae
ak
                               1000
                               1000
1250 kilocycles 239.9 meters
                                                                Long Beach, Calif. P—6:00-mid.
Northfield, Minn. C—9:45-10:15; 8:00-10:00
New Orleans, La. C—7:00-11:45
Newark, N. J. E—2:00-5:00; 8:00-10:00
Minneapolis, Minn. C—8-9
Newark, N. J. E—7-2; 5-8; 10-mid.
Minneapolis, Minn. C—6:15-9:45; 10:35-8; 9-mid.
Mexico City, D. F. C
KFOX
                               1000
 WCAL
WDSU
                    ah
                               1000
                                              č
                               1000
                    ak
WGCP
WLB
WNEW
                               1000
                                              1 (2.5)
                    яk
                    ak
                               1000
                                              (2.5)
2
                    ae
                                1000
 WRHM
                               1000
                    ak
XEFA
                                 500
1260 kilocycles
                                                          238.0 meters
                                                                Council Bluffs, Iowa. C—6:00-1:00
Harlingen, Texas. C—7:00-9:30; 12:30-3:30; 6:30-9:30
Fayetteville, Ark. C—7:00-6:30
Tucson, Ariz. M—6:00-9:00; noon-3:00; 6:00-9:00
Brownsville, Tex. C—Silent till April 1st
Erie, Pa. B—8:00-1:00
KOIL
KRGV
KUOA
                               1000
                                              В
                     ak
                                 500
                     ae
                                              1
                               1000
                                              . . . . .
                                 500
KVOA
                    ak
KWWG
                                 500
                    z
WLBW
WNBX
WTOC
                                 500
250
                                             Ĉ(1)
                    90
                                                                Erie, Fa. E—0:00-1:00
Springfield, Vt. E—7:30-sunset
Savannah, Ga. E—7:00-1:00
                                             Ď
                    ak
                                 500
                                              č
                    ae
XEFI
                     ak
                                 250
                                                                 Chihuahua, Chih. C-1:00-3:00; 8:00-10:30
1270 kilocycles
                                                         236.1 meters
CMBC
CMCP
KGCA
KOL
                                 150
                                                                 Havana, Cuba.
                    ae
                                             Î
2D
CT
C
2D
                                 150
                                                                 Havana, Cuba. E
                                                                Havana, Cuba. B Decorah, Iowa. C—8:30-9:45; 10:45-11:30; 12:30-2:30 Seattle, Wash. P—6:45-mid. Colorado Springs, Colo. M—7:00-11:00 Decorah, Iowa. C—7:30-8:30; 9:45-10:45; 11:30-12:30; 2:30-3:30 Grand Rapids, Mich. E—7:00-mid. Baltimore, Md. E—7:10-1:00 Jackson, Miss. C—7:00-11:00 Grand Rapids, Mich. E—7:00-mid.
                                 100
                    ak
                               1000
                    ae
KVOR
KWLC
WASH
WFBR
                               1000
1000
500
                    ae
                    ak
                    ak
                                             Κa
                    ae
                                 500
WJDX
                               1000
                    ak
                                 500
1280 kilocycles
                                                          234.2 meters
                                                                Great Falls, Mont. M—8:00-3:00; 5:00-10:00
Camden, N. Y. E—2-5
Asbury Park, N. J. E—9-1; 8-mid.
Chattanooga, Tenn. C—7:00-11:00
Madison, Wis. C—7:30-mid.
Worcester, Mass. E—8:00-mid.
Dallas, Texas. C—7:00-11:00
Trenton, N. J. E—1:00-2:00; 5:00-8:00
Tampico, Tams. E—8:00-10:00; noon-2:00; 5:00-6:00; 7:00-10
KFBB
                               1000
                                              (2.5)
                    ae
WCAM
WCAP
WDOD
WIBA
WORC
WRR
                                 500
                    ae
                                 500
                    ae.
                                             C(2.5)
N (1)
CH
C
                               1000
                    ae
                                 500
                    ae
                                500
                    ak
                    ak
                                 500
 WTNJ
                    ak
                                 500
XEFW
                    ak
1290 kilocycles
                                                       232.4 meters
                                                                Cienfuegos, Cuba. E—10:00-noon; 6:00-9:00
Salt Lake City, Utah. M—6:30-1:00
Blytheville, Ark. C
CMHL
                                  20
                    ak
KDYL
KLCN
KTSA
                               1000
                    ae
                                             D
                                 100
                                                                San Antonio, Texas. C—7:00-mid.
Superior, Wis. C—7:00-mid.
Pittsburgh, Pa. E—7:30-12:30
Saranac Lake, N. Y. E.
San Luis Potosi, S. L. P.
Jalapa. Ver. C—8:00-9:00; 1:00-2:30; 8:00-11:30
                    ak
                               1000
                                             N (2.5)
C (2.5)
D
WEBC
                               1000
                    ae
WJAS
WNBZ
                               1000
                    ak
                                  50
                    z
XEAC
                                 100
                                             1295
                    z
                                            P •-
XFB
                    ak
                               1000
                                500
                                                                San Juan, P. R.
1300 kilocycles
                                                         230.6 meters
CMK J
                                  20
                                                                Guantanamo, Cuba. E
                    z
                                                               Guantanamo, Cuba. E
Santo Domingo, D. R. L
Portland, Ore. P—7:00-10:30; 2:30-5:00; 6:00-7:00
Los Angeles, Calif. P—7:00-mid.
Wichita, Kans. C—7-8:30; 9-11; 11:30-2; 3-11
Portland, Ore. P—10:30-2:30; 5-6; 7-11
Brooklyn, N. Y. B—6:00-7:00; 10:00-noon; 6:00-8:00
New York, N. Y. E—Silent
New York, N. Y. E—9:00-10:00; noon-3:00; 9:00-10:00
Troy, N. Y. E—Silent
Miami, Fla. E—7-15-mid. (W4XB)
Kansas City, Mo. C—6-7; 8:35-9:05; 11-11:30; 2-3; 11-mid.
                                              . . . . .
HIZ
KALE
KFAC
                                   10
                                             3ĊT
                    ak
                                500
                              1000
                   ae
                                             ....
KFH
                               1000
                    ak
KFIR
                                500
                                             3
                   ag
WBBR
                               1000
                   aej
WEVD
WFAB
WHAZ
WIOD
                                500
                    ak
                   ae
                               1000
                                500
                   ae
                                             Ñ
2
                               1000
                    ae
                              1000
WOQ
                   ae
```

With Tuesday's Time on the Air

```
1310 kilocycles
                                                                                                          228.9 meters
     CFJC
CHCK
                                       ak
                                                               100
                                                                                    FLE
                                                                                                                      Kamloops, B. C. P—7:30-10:30; noon-2:00; 6:00-7:30 Charlottetown, P. E. I. A—Noon-1:30 Kirkland Lake, Ont. E
                                                                  50
                                       ak
    CJKL
CJLS
CKCV
                                                                                                                      Kirkland Lake, Ont.
Yarmouth, N. S. A
                                                               100
                                                                                     . . . . .
                                                               100
                                                                                    . . . . .
                                                                                                                     Quebec, Que. E—Noon-2:00; 6:30-11:00
Jerome, Ariz. M—7:30-9:30; noon-1:00; 4:30-6:00
Sacramento, Calif. P—7:00-11:00
                                       ak
                                                                  50
                                                                                  .....
C
7
                                       ak
ak
ak
    KCRJ
KFBK
                                                              100
                                                                                                                    Sacramento, Calif. P—/:00-11:00
Boone, lowa. C
Boon
                                                               100
    KFGQ
KFPL
                                                              100
                                                              100
                                       ak
    KFPM
                                                                  15
                                       ae
                                                                                   (.25)
(.25)
    KFXR
KFYO
                                       ak
                                                              100
                                                                                                                  Okianoma City, Okia. C—7:00-2:00; 4:00-10:00
Springfield, Mo. C
Wolf Point, Mont. M—7:30-9:00; 11:30-3:00; 6:00-7:00
Kalispell, Mont. M—8:00-9:00
Kearney, Neb. C—7:00-9:00
Juneau, Alaska. L
Yakima, Wash. P—7:00-11:00
Medford, Ore. P—8:00-8:00
Shreveport, La. C—7:00-1:30; 3:00-10:00
Abreveport, La. C—7:00-1:30; 3:00-10:00
Aberdeen. Wash. P—7:30-10:00
Laurel, Miss. C—7:00-10:00; 11:00-2:00; 4:00-7:00
Marquette, Mich. C—9:30-1:15; 5:00-7:00
Terre Haute, Ind. C—7:00-11:30
Joliet, Ill. C—9:30-1:00; 5:00-8:00
El Paso, Texas. M—8ilent
Buffalo, N. Y. E—7:00-1:00
Royal Oak, Mich. E—7:30-5:00
Altoona, Pa. E—10:30-4:30; 7:00-10:00
                                       ak
                                                              100
   KGBX
KGCX
                                       ae
                                                              100
                                       ak
                                                              100
                                                                                   (.25)
    KGEZ
                                       aj
ak
                                                              100
    KĞFW
                                                              100
                                                                                    . . . . .
    KIFH
                                                              100
                                                                                   . . . . .
                                                              100
    KIT
                                       ak
                                                                                   . . . . .
    KMED
                                                              100
                                       ck
                                                                                   . . . . .
   KRMD
KTSM
KXRO
WAML
WBEO
WBOW
WBOW
                                       ak
                                                              100
                                                                                    . . . . .
                                       ak
                                                              100
                                                                                  8
                                       ak
                                                              100
                                                                                   . . . . .
                                      ak
                                                              100
                                                                                   . . . . .
                                                              100
                                       ae
                                                                                   . . . . .
                                                              100
                                       ak
                                                                                   . . . . .
                                       ak
                                                              100
                                                                                    . . . . .
   WCLS
WDAH
                                                              100
                                       ae
                                      ck
                                                              100
                                                                                  Sa
                                                                                  (.25)
    WEBR
                                                             100
                                      aej
                                                                                                               Buffalo, N. Y. E—7:00-1:00
Royal Oak, Mich. E—7:30-5:00
Altoona, Pa. E—10:30-4:30; 7:00-10:00
Flint, Mich B—7:00-mid
Lancaster, Pa. E—9:30-2-30; 4:30-6:00
Newport News, Va. E—7:00-1:00; 5:00-11:00
Philadelphia, Pa. E—9:00-11:00, 1:00-2:00; 8:30-mid.
Ottumwa. Iowa. C—7:00-11:00
Johnstown, Pa. E—9:00-10:00
Muncie, Ind. C—7:00-10:00
Muncie, Ind. C—7:00-10:00
Muncie, Ind. C—7:00-10:00
New Bedford, Mass. E—8:00-2:00; 4:00-10:00
Washington, D. C. E—7:00-mid.
Reading, Pa. E—7:00-9:30; 6:00-mid.
Knoxville, Tenn. C—7:00-1:00; 4:00-11:00
Grove City, Pa. E—7:15-8:15
Winston-Salem, N. C. E—7:45-mid.
Philadelphia, Pa. E—7:00-9:00; noon-1:00; 5:00-8:30
Jackson, Tenn. C—7:00-2:00; 4:00-11:00
Monterrey, N. L. C—11:00-2:00; 6:00-11:00
Morelia, Mich. C—2:00-3:30; 9:00-10:00
   WEXL
                                      ak
                                                                50
    WFBG
                                                             100
    WFDF
                                                                                  ĸ
                                       ak
                                                             100
   WGAL
WGH
                                                             100
                                                                                  5
                                      ae
                                      ae
                                                             100
   WHAT
WIAS
                                      ak
                                                             100
                                      ak
                                                            100
  WJAC
WKBC
                                                             100
                                                                                  3
                                      ae
                                                            100
                                                                                  (2.5)
                                      ak
   WLBC
                                      ak
                                                            100
   WMBO
                                     ak
                                                            10
   WNBH
WOL
                                                            100
                                                                                  (.25)
                                     ae
                                                             100
                                     ae
                                                                                 .····
   WRAW
                                     ak
                                                             100
 WRAW
WROL
WSAJ
WSJS
WTEL
WTJS
WTRC
                                     ak
                                                           100
                                                                                  . . . . .
                                                                               ċ....
                                                            100
                                     ae
                                    ak
                                                           100
                                                           100
                                     ah
                                                                                  (.25)
                                     ak
                                                           100
                                     ak
                                                               50
                                                                                  6 (.1)
   XEFB
                                      ak
                                                           100
                                                                                  1315
                                     ak
                                                           250
 1320 kilocycles
                                                                                                      227.1 meters
                                                                                                                                                                                                                                                                                                                                                                KCYS.
                                                                                                                 Havana, Cuba. E
Pueblo, Colo. M—6:30-9:30
Honolulu, T. H. L—6:00-11:00
Idaho Falls, Idaho. M—6:00-11:00
Akron, Ohio. E—8:00-mid.
New Orleans, La. C—7:00-mid.
 CMCY
                                                           500
                                                                                1325
                                   ak
KGHF
KGMB
KID
                                                           250
                                   ak
                                                                                (.5)
C
                                                                                                                                                                                                                                                                                                                                                                 1340
                                                           250
                                   ak
                                                                                (.5)
C
N
                                                           250
                                    ae
  WADC
                                                       1000
                                                                                                                                                                                                                                                                                                                                                               DIAL
                                   ae
 WSMB
                                                           500
 1330 kilocycles
                                                                                                      225.4 meters
                                                                                                                Ciego de Avila, Cuba. E
San Diego, Calif. P—7:00-1:00
Tacoma, Wash. P—6:45-11:00
Sioux City, Iowa. C—7:30-11:00
CMJ1
                                                              45
                                                                                1335
                                   ak
                                                      1000
KGB
KMO
                                   agj
ak
                                                                                CT
                                                          250
                                                                                                                                                                                                                                                                                                                                                               <u>2</u>
                                                                                iC(2.5)
                                                                                                                Sioux City, Iowa. C—7:30-11:CHartford, Conn. E—8:00-mid. Cincinnati Ohio. E—8:00-mid. C—7:00-8:00
                                                       1000
                                   aj
 WDRC
                                                       1000
                                                                                CH
                                   ae
                                                                                                                                                                                                                                                                                                                                                             CUT OUT
WSAI
                                                      0001
                                                                               R (2.5)
                                                                                                                                                                                     E-8:00-mid.
                                   ak
                                                      1000
 WTAQ
                                   ae
1340 kilocycles
                                                                                                     223.7 meters
                                                                                                                Spokane, Wash. P—6:45-mid.
Huron, S.D C
Dodge City, Kans. C—6:30-9:00
Pensacola, Fla. B—9:00-10:00
Portland, Maine. E—(Mail returned)
Toledo, Ohio. E—7:00-1:00
                                                     1000
KFPY
                                   ak
                                                                               С
KGDY
KGNO
WCOA
WLEC
                                                        250
250
500
                                   ak
                                                                               . . . . .
                                   ak
                                                                               . . . . .
                                   ae
                                                                               (.5)
                                                         250
                                   z
WSPD
                                                     1000
                                   80
```

With Tuesday's Time on the Air

```
1350 kilocycles
                                                                                222.1 meters
                                                                                         Boise, Idaho. M—8:00-9:30
St. Louis, Mo. C—7:00-mid.
Guatemala City, Gua. L—Noon-1:00; 6:00-7:00; 9:00-11:00
Zarephath, N. J. E—7:45-8:45; 5:00-6:30
New York, N. Y. E—6:00-7:30; 9:00-1:00
Charlottesville, Va. E
KIDO
KWK
TGW
WAWZ
WBNX
                                                               <u>.</u>....
                            ak
                                           1000
                           ak
ak
                                           1000
                                              500
                                              250
                            ae
                            ae
                                              250
                                                               1
D
                                              500
 WEHC
1360 kilocycles
                                                                                220.4 meters
CMJP
KGER
KGIR
WCSC
WFBL
                            ak
                                                                                           Moron, Cuba.
                                                                                                                                      E-10:00-noon; 8:00-10:00
                                                                                         Moron, Cuba. E—10:00-noon; 8:00-10:00
Long Beach, Calif. P—6:00-mid.
Butte, Mont. M—7:00-mid.
Charleston, S. C. E—8:00-10:30; noon-2:00; 7:00-10:00
Syracuse, N. Y. E—8:00-1:00
Chicago, III. C—5:45-11:00; 5:00-8:00
Vicksburg, Miss. C
                            ak
                                           1000
                                                               N (1)
                                              500
                            ak
                                              500
                            ae
                                           1000
                                                               C (2.5)
                            ak
 WGES
                                              500
                             ae
                                                                . . . . .
 WOBC
                            ak
                                              500
1370 kilocycles
                                                                                218.8 meters
                                              100
CHPR
                                                                                          St. John, N. B.
                                                                                        St. John, N. D. A
Havana, Cuba. E
Havana, Cuba. E
Havana, Cuba. E
Havana, Cuba. E
Hoon-1:00; 4:00-6:00; 8:00-9:00
Cardenas, Cuba. E
Enid, Okla. C—6:00-9:00; 11:00-2:00; 5:00-7:45; 10:00-mid.
Everett, Wash. P—9:00-noon; 3:00-6:00; 9:00-mid.
Grand Forks, N. D. C—7:00-9:00
Fort Worth, Texas. C—7:00-11:00
Tucson, Ariz. M—7:00-9:00
Oklahoma City, Okla. C
Coswell, N. M. M—5:00-9:30; 2:00-7:30
San Angelo, Texas. C—8:00-4:30; 6:00-10:00
Clovis, N. M. M—9:30-2:00; 7:30-9:30
Galveston, Texas. C
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
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
Marshfield, Ore. P—7:00-9:00
Berkeley, Calif. P—6:30-9:30; noon-3:00; 6:00-9:00
Berkeley, Calif. P—6:30-9:00; noon-3:00; 6:00-9:00; mid.-1:30
Kansas City, Mo. C
Danville, Wash. P—6:00-9:00; noon-3:00; 6:00-9:00; mid.-1:30
Kansas City, Mo. C
Danville, Va. E—11:00-1:00; 6:30-10:00
Baltimore, Md. E—7:00-mid.
Hudson Falls, N. Y. E—7:30-mid.
Hudson Falls, N. E—7:00-9:00; 11:30-1:30; 5:30-8:30
Dothan, Ala. C—9:00-sunset
Jackson, Mich. E—7:00-9:00; 11:30-1:30; 5:30-8:30
Dothan, Ala. C—9:00-sunset
Jackson, Mich. E—7:00-9:00
Lexington, Mass. E—Noon-3:00; 6:00-9:00
Lynchburg, Va. E—7:00-11:00; 1:00-6:30
                                                                                          Havana, Cuba. E
Havana, Cuba. E
 CMCN
                                              250
                                                                1375
CMCR
CMGE
KCRC
KFBL
                                                                1375
1375
                                              150
30
                            ak
                                                                                                                                                   -Noon-1:00; 4:00-6:00; 8:00-9:00
                             ak
                                              100
                                                                2(.25)
                                                 50
                             яe
KFJM
KFJZ
KGAR
KGFG
KGFL
                             ak
                                               100
                                                               (.25)
2
                                               100
                             яe
                                               100
100
                             bk
                             ak
                                               100
                                                               <u>.</u>....
KGKL
KICA
KLUF
KMAC
                             ak
                                               100
                                              100
100
                             ak
                                                               <u>.</u>....
                             z
                                               100
                             ak
 KONO
                             ak
                                              100
                                                                5
KOOS
KRE
KSO
KUJ
                                               100
                             ae
                                                                 . . . . .
                             ak
                                               100
                                               100
                                                                B(.25)
                             ak
                                                               <u>.</u>...
                             ak
                                              100
KVL
KWKC
WBTM
                                               100
                             ak
                                                              ;····
                                               100
                                               100
100
100
                             ak
 WCBM
WDAS
WGL
WGLC
WHBD
                                                                (.25)
(.25)
C
C
                             ae
                             ae
                                               100
                             ae
                                               100
                             ak
                                               100
                             ak
 WHBQ
WHDF
                             ak
                                               100
                                                                 (.25)
                             ak
                                               100
 WHET
                                               100
                             ak
                                                                iĸ¨
                                               100
                             ae
 WJBK
WJTL
WLEY
                                                 50
                             ae
                                                                                         Detroit, Mich. E—7:00-sunset; 9:00-mid. Atlanta, Ga. E
Lexington, Mass. E—Noon-3:00; 6:00-9:00
Lynchburg, Va. E—7:00-11:00; 1:00-6:30
Tampa, Fla. E—7:00-9:30
Hattiesburg, Miss. C
St. Albans, Vt. E
Williamsport, Pa. E—8:30-3:00; 5:00-10:30
Wilmington, N. C. E—7:30-mid.
Augusta, Maine. E—9:00-1:00; 4:30-8:30
Racine, Wis. C—9:00-2:30; 4:00-10:30
Buffalo, N. Y. E—8:30-10:00; 2:00-3:00
Mexico City, D. F. C
                                               100
                             ak
                                               100
                                                                (.25)
 WLVA
WMBR
WPFB
                                               100
                             ck
                             ak
                                               100
                                                                 . . . . .
                                                               Ď....
                              ak
                                               100
 WQDM
WRAK
WRAM
WRDO
                                               100
                              ak
                                               100
                                                                 ....
                                               100
                             яe
                                                                  . . . . .
                                               100
                             яe
                                                                 . . . . .
 WRJN
WSVS
                                                                Ď....
                                               100
                              ae
                              ak
                                                  50
  XĔFZ
                                               100
                             ae
 1380 kilocycles
                                                                                  217.3 meters
 CMJC
                                               150
                                                                 1382
                                                                                            Camaguey, Cuba.
                                                                                          Camaguey, Cuba. B
Reno, Nev. P—8:00-10:00
Pittsburgh, Pa. E—7:00-10:00
Guatemala City, Guat.
LaCrosse, Wis. C—7:30-10:00
Dayton, Ohio. E—7:00-8:00; 10:00-mid.
 KOH
                             ak
                                               500
 KQV
TGX
                                                                 žC
                              ak
                                               500
                                                  75
                             z
                                                                .....
C
 WKBH
WSMK
                                             1000
                             ae
                             ak
                                               200
```

Torreon, Coah.

XETB

125

. . . . .

With Tuesday's Time on the Air

```
215.7 meters
1390 kilocycles
CJRC
HIH
KLRA
KOY
                                                                     Middlechurch, Man.
                                                                     San Pedro de Macoris, D. R. L
Little Rock, Ark. C—7:00-mid.
Phoenix, Ariz. M
Cleveland, Ohio. E—7:00-mid.
                     āk
                                 15
1000
                                                 1395
                     ae
                                   500
                                                 (1)
C(2.5)
                      ae
 WHK
                                 1000
                      90
1400 kilocycles
                                                              214.2 meters
                                                                     Ogden, Utah. M—8:30-10:30
Tulsa, Okla. C
Brooklyn, N. Y. E
                                   500
KLO
                                                (.5)
KTUL
WARD
                                   250
                     ak
                                   500
                                                                     Brooklyn, N. 1. E

Brooklyn, N. Y. E—7-11:30; 6-7:30

Indianapolis, Ind. C—6:00-mid.

Brooklyn, N. Y. E—11:30-1:30; 7:30-9

Brooklyn, N. Y. E

Jaurex, Chih. C—9:00-3:00; 5:00-11:00
WBAA
WBBC
                                   500
                                    500
                      ae
                                   500
                                                 ĩN
WKBF
WLTH
                     ak
                                    500
                      ak
                                                2
 WVFW
                      ak
                                   500
XEFV
                                   100
                     ae
1410 kilocycles
                                                              212.6 meters
                                                                     Vancouver, B. C.
Vancouver, B. C.
                                                                                                                    -3-4:30; 8:30-10:30
                      ak
CKMO
CMCH
CMCM
KFLV
                                                                                                               P-7:30-3; 4:30-11
                                    100
                                                 5
                                                                     Havana, Cuba.
Havana, Cuba.
                                      50
                     ak
                                      15
                                                                     Havana, Cuba. E
Rockford, Ill. C—9-12:30; 4-6; 8:30-mid.
Amarillo, Texas. C—6-8; 10-12:30; 3-4:30; 6-7; 9-10
Boston, Mass. B—8:30-mid.
Bay City, Mich. E—8:00-mid.
Amarillo, Texas. C—8-10; 12:30-3; 4:30-6; 7:30-9; 10-mid.
Sheboygan, Wis. C—7-10; 12:30-3; 6-8; 10-mid.
Bluefield, W. Va. B—7:00-9:00; noon-3:00; 6:00-8:00
                                    500
                      ak
KGRS
                                 1000
                                                 ĊН
 WAAB
                      ae
                                   500
 WBCM
                                    500
                      ae
 WDAG
                                 1000
                      ae
                                                                     Sheboygan, Wis.
Bluefield, W. Va.
Mobile, Ala. C
WHBL
WHIS
                                   500
                                    250
                      ak
                                                                                                            -7:00-6:15: 7:45-10:30
 WODX
WRBX
                                    500
                                                 3C
                      ae
                                                                                                       ĸ
                                                                      Roanoke, Va.
                                    250
                      ae
                                                 3C
                                                                      Montgomery, Ala.
                                                                                                                  C--6:00-7:45
                                    500
 WSFA
                      ck
 1420 kilocycles
                                                              211.1 meters
                                    100
                                                                      Timmons, Ont. E
CKGB
CKGB
KABC
KBPS
KCMC
KFIZ
KGFF
KGGC
KGIW
                                                                     San Antonio, Texas. C—6:00-mid.
Portland, Ore. P—11:00-12:30; 3:00-5:00
Texarkana, Ark. C—7:00-2:00; 4:00-9:00
Fond du Lac, Wis. C—10:00-1:00; 4:00-10:00
Shawnee, Okla. C—7:30-3:00; 5:00-9:00
San Francisco, Calif. P—9:00-1:00; 4:00-9:00
                                    100
                      ak
                                                 4....
                     aj
ak
                                    100
                                    100
                                                 . . . . .
                                    100
                      ak
                                                 . . . . .
                                    100
                                                 . . . . .
                                                                    San Francisco, Alamosa, Colo. M
Alamosa, Colo. M
Las Vegas, Nev. M
Carter Lake, Iowa. C—(Mail returned)
Lamar, Colo. M—8:00-10:00; 7:00-10:00
Eugene, Ore. P—7:45-9:00
Vima, Ariz. M-7:00-9:00; 11:00-2:00; 6:00-10:00
Iowa. C—7:00-Mid.
                                    100
                      ak
                                                 i ....
                                    100
                      ak
                      ak
                                    100
                                                 . . . . .
KICK
KIDW
                                    100
                                                i · · · ·
                                    100
                                                                    Lamar, Colo. M—8:00-10:00; 7:00-10:00
Eugene, Ore. P—7:45-9:00
Yuma, Ariz. M—7:00-9:00; 11:00-2:00; 6:00-10:00
Cedar Rapids, Iowa. C—7:00-Mid.
Portland, Ore. P—7:00-1:00
Waco, Texas. C—8:00-2:00; 5:00-10:30
Presque Isle, Maine. E—11:00-1:00; 4:00-7:00
Anniston, Ala. C—7:00-9:00
Hazelton, Pa. E—11:00-9:00
Greenville, N. C. E—9:00-6:00
Cicero, Ill. C—4:00-6:00
Battle Creek, Mich. E—9:00-9:30
Americus, Ga. C—7-6:15
Tupper Lake, N. Y. E
Cicero, Ill. C—7:00-1:30; 6:00-9:00; 11:00-1:00
Wilmington, Del. B—7:00-11:00; 2:00-5:00; 9:00-mid.
Baton Rouge, La. C
Ironwood, Mich. C—7:30-1:30; 4:30-7:00
Cicero, Ill. C—1:30-4:00
Kansas City, Kans. C—7:00-11:00
Springfield, Mass. B—8:00-mid.
Detroit, Mich. E—7:30-mid.
Joplin, Mo. C—7:30-2:00; 6:00-9:30
Muscle Shoals, Ala. C—7:00-10:00
Paducah, Ky. C
Spartanburg, S. C. E—7:30-2:00; 4:00-9:30
Cumberland, Md. E—9:00-7:00
KORE
                     ae
                                    100
KORE
KUMA
KWCR
KXL
WACO
WAGM
WAMC
WAZL
WEED
                                                 . . . . .
                     ak
                                    100
                                                 B(.25)
                     ak
                                    100
                                    100
                                                4
Č
                      ae
                                    100
                      яk
                                   100
100
                     ae
                      ae
                      ak
                                    100
                                    100
                                                 D
                      ak
                                   100
 WEHS
                     ak
                                                a
                                    50
100
WELL
WENC
                     ak
                                                 DY
                      ak
 WHDL
                                    100
                                                D
                      ae
 WHFC
WILM
                      ae
                                    100
                                    100
                      aj
WJBO
WJMS
WKBI
                                    100
                                                 D
                                   100
                     ak
                                                                                                                                                                                                                       KCYS.
                      ak
                                    100
 WLBF
                      ak
                                    100
                                                                                                                                                                                                                       1430
 WMAS
                                    100
                                                 CH(.25)
                     ak
 WMBC
                                    100
                     ag
ak
                                    100
 WMBH
                                                                                                                                                                                                                       DIAL
                                    100
 WNRA
                      ak
 WPAD
                      ak
                                    100
 WSPA
                                    100
                                                 (.25)(.25)
                      ae
 WTBO
                                    100
                      ae
1430 kilocycles
                                                              209.7 meters
                                 1000
KECA
                      ak
                                                                     Los Angeles, Calif. P-7:00-11:00
```

With Tuesday's Time on the Air

```
North Platte, Neb. C—7:00-sunset
Harrisburg, Pa. B
Columbus, Ohio. E—8:00-mid.
Manchester, N. H. E—7:30-11:00
Rochester, N. Y. E
Harrisburg, Pa. B—8:30-10:30; 11:30-1:30; 2:30-4:00; 4:30-1:00
Memphis, Tenn. C—8:00-1:00; 3:00-10:00
Albany, N. Y. E—7:30-1:00
KGNF
                                500
                   ak
WBAK
WCAH
WFEA
WHEC
WHP
WNBR
                             ✓ 500
500
500
                                            1 (1)
1C
                   ak
                    ae
                                            ĈH
                    96
                                500
                    ae.
                                            IC(1)
                                500
                   ak
                                           c ....
                  ae
                                500
 WOKO
                                500
                   ae
 1440 kilocycles
                                                        208.2 meters
                                                              Havana, Cuba. E—Mail returned
Casper, Wyo. M—7:30-2:00; 3:30-9:00
Oakland, Calif. P—8:00-sunset
Houston, Texas. C—6:30-1:00; 2:30-11
Cartago, C. R. L
Greensboro, N. C. E—8:00-11:00
Allentown, Pa. E—7:30-mid.
Peoria, Ill. C—6:00-11:00; 8:00-mid.
Allentown, Pa. E—7:30-mid.
Quincy, Ill. C—11:00-8:00
                                200
CMBI
                                            1445
 KDFN
                    ak
                                500
                                           Ď.
KLS
KXYZ
                                250
                   ae
                    ak
                                250
                                                                                                 C-6:30-1:00; 2:30-11:00
 TIFS
                                    7.5 1441
                    7.
 WBIG
WCBA
                                500
                                            C(1)
                    96
                                250
                    aj
                                            3C(1)
 WMBD
                                500
                    ae
 WSAN
                                250
 WTAD
                                500
                                            \bar{3}
 1450 kilocycles
                                                        206.8 meters
                                  50
 CFCT
                                                               Victoria, B. C. P-8:00-12:30; 6-8; mid.-2:00
                    яe
                                                              Brandon, Man. C—7:00-10:30
Shreveport, La. C—7:00-mid.
CKX
KTBS
TIEP
                   ak
                                500
                   ck
                                           Ñ
                                                              Shreveport, La. C
San Jose, C. R. L
                              1000
                                   7.5
                   z
                                                             San Jose, C. R. L
Cleveland, Ohio. E—6:30-1:00
Jersey City, N. J. E—8:00-mid.
Fall River, Mass. E—8:00-3:30; 5:00-10:00
Athens, Ga. E—8:00-9:00
Neuvo Laredo, Tams. C—10:00-3:00; 4:00-7:00
WGAR
WHOM
                                500
                                           B (1)
                    ak
                                250
250
                    aе
 WSAR
                                            . . . . .
 WTFI
                   ak
                                500
XEAB
                    ak
1460 kilocycles
                                                        205.4 meters
                          10000
10000
                                                              St. Paul, Minn. C-6:45-12:30
Washington, D. C. E-6:30-mid.
                                           N (25)
1470 kilocycles
                                                        204.0 meters
KGA
WLAC
                   ak
                              5000
                                                              Spokane, Wash. P-6:00-mid.
Nashville, Tenn. C-7:00-mid.
                              5000
                    ae
1480 kilocycles
                                                        202.6 meters
CMBK
KOMA
                                  15
                                            1485
                                                              Havana, Cuba. E
                                                              Oklahoma City, Okla. C-6:30-mid.
Buffalo, N. Y. E-10:00-1:00
                             5000
                   ak
 WKBW
                              5000
                   ae
1490 kilocycles
                                                        201.2 meters
WCKY
                             5000
                                           RY
                                                              Covington, Ky. E-7:00-mid.
                   ae
1500 kilocycles
                                                        199.9 meters
                                                             Chicoutimi, Que. E—6:30-11:30
Santa Barbara, Calif. P—7:30-mid.
Corpus Christi, Tex. C—7:30-mid.
Corpus Christi, Tex. C—7:00-3:00; 6:00-10:00
Moorhead, Minn. C—8:00-9:00
Tyler, Texas. C—8:00-10:00; noon-2:00; 5:00-6:00; 7:30-9:00
Scottsbluff, Neb. M—9:00-1:30; 5:30-9:00
Austin, Texas. C—7:30-2:00; 4:00-10:00
Prescott, Ariz. M—7:00-8:00
Wenatchee, Wash. P—7:00-10:00
Santa Ana, Calif. P—9:00-11:00
El Centro, Calif. P—9:00-11:00
Brooklyn, N. Y. E—2:00-6:00
Rome, Ga. C—7:00-10:00; noon-3:00; 6:00-9:00
Kosciusko, Miss. C
                                100
CRCS
                                           ĊТ
KDB
                   ak
                                100
KGFI
KGFK
                   ak
                                100
                                           (.25)
                   ak
                                100
                                           . . . . .
KGKB
KGKY
KNOW
                   ak
                                100
                                           . . . . .
                                100
                   ck
                                           . . . . .
                   ak
                                100
                                           . . . . .
KPJM
KPQ
KREG
KXO
WCNW
                   ak
                                100
                                           . . . . .
                                100
                   aj
ak
                                            . . . . .
                                100
                                            . . . . .
                                100
                   al
                                           i ....
                   ak
                                100
                                                              Rome, Ga. C-Kosciusko, Miss.
WFDV
                   ak
                                100
                                           P (.25)
                                                            Kosciusko, Miss. C
East Dubuque, III. C—7:00-[0-15; 11:45-1:30; 5:30-Richmond, Ind. C
Ludington, Mich. E—9:00-9:00
LaGrange, Ga. C—[0:00-ncon; 3:00-6:00
Brooklyn, N. Y. E—9:00-11:00; 8:00-mid.
Lapeer, Mich. E—10:00-2:00; 3:30-6:00; 7:00-10:30
Binghamton, N. Y. E—7:30-10:00
Bristol, Tenn. E—7:00-2:00; 3:00-8:00
Philadelphia, Pa. E—7:30-10:00
Augusta, Ga. E
Rutland, Vt. E—10:00-1:00; 5:00-9:00
Woodside, N. Y. E—8-9; 11-2; 6-8
(Continued on base 91)
WHEF
                                100
                   Z
WKBB
                                                                                                      C-7:00-10-15; 11:45-1:30; 5:30-9:00
                                100
                   ae
                                            . . . . .
WKBV
WKBZ
                                100
                                           . . . . .
                                100
                                           . . . . .
WKEU
                   ak
                               100
                                            . . . . .
WMBQ
                                100
                                           i
                   ae
WMPC
WNBF
WOPI
                               100
                   ak
                               100
                   ae
                                           . . . . .
                               100
                   ае
                                           (.25)AZ
WPEN
                   ck
                               100
WRDW
                               100
                   ae
WSYB
                               100
                   ae
WWRL
                               100
                   ak
                                                                          (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, R National Red, B National Blue, N National Bed and Blue. F Canadian.

| Ent Ditte. 1 Cumum                   | 1                                 | 1                                   |                                    |
|--------------------------------------|-----------------------------------|-------------------------------------|------------------------------------|
| ALABAMA                              | Fresno                            | CONNECTICUT                         | Twin Falls                         |
| Anniston                             | KMJ 580 500 C                     | Bridgeport                          | →KTFI 1240 1000                    |
| WAMC 1420 100<br>Birmingham          | Glendale<br>KIEV 850 100          | WICC 600 250 C<br>Hartford          | ILLINOIS<br>Carthage               |
| ≪WAPI 1140 5000 N                    |                                   | WDRC 1330 1000 C                    | -WCAZ 1070 50                      |
| WBRC 930 500 C                       | Hollywood                         | -WTIC 1060 50000 R                  | Chicago                            |
| -WKBC 1310 100                       | KFWB 950 1000<br>KMTR 570 500     | Storrs 250                          | -KYW 1020 10000 N<br>-WAAF 920 500 |
| <b>Dothan</b><br>₩HET 1370 100       | WKNX 1050 25000                   | WCAC 600 250<br>DELAWARE            | -WAAF 920 500<br>-WBBM 770 25000 C |
| Gadsden                              | Long Beach                        | Wilmington                          | -WCFL 970 1500 B                   |
| WJBY 1210 100                        | KFOX 1250 1000                    | WDEL 1120 250                       | -WCRW 1210 100                     |
| <b>Huntsville</b> WBHS 1200 100      | KGER 1360 1000<br>Los Angeles     | WILM 1420 100<br>DISTRICT OF        | WEDC 1210 100<br>WENR 870 50000 N  |
| Mobile                               | KECA 1430 1000 N                  | COLUMBIA                            | WGES 1360 500                      |
| ***WODX 1410 500 C                   | KFAC 1300 1000                    | Washington                          | -WGN 720 50000                     |
| <b>Montgomery</b><br>WSFA 1410 500 C | KFI 640 50000 N                   | WJSV 1460 10000 C<br>WMAL 630 250 B | ₩JJD 1130 20000<br>₩LS 870 50000 N |
| WSFA 1410 500 C<br>Muscle Shoals     | KFSG 1120 500<br>KFVD 1000 250    | WOL 1310 100                        | -WMAQ 670 5000 N                   |
| -WNRA 1420 100                       | ™KGFJ 1200 100                    | WRC 950 500 R                       | ₩MBI 1080 5000                     |
| ALASKA                               | ⊷KHJ 900 1000 C                   | FLORIDA                             | -WSBC 1210 100<br>Cicero           |
| Anchorage                            | KRKD 1120 500<br>KTM 780 500      | Clearwater<br>WFLA 620 1000 N       | -WEHS 1420 100                     |
| KFQD 600 250                         | Oakland                           | Galnesville                         | -WHFC 1420 100                     |
| Juneau<br>KIFH 1310 100              | KLS 1440 250                      | WRUF 830 5000                       | WKBI 1420 100                      |
| Ketchikan                            | KLX 880 1000                      | Jacksonville<br>WJAX 900 1000 N     | Decatur<br>WJBL 1200 100           |
| KGBU 900 500                         | KROW 930 500                      | Miami                               | East Dubuque                       |
| ARIZONA                              | KPPC 1210 50                      | WIOD 1300 1000 N                    | -WKBB 1500 100                     |
| Jerome                               | Sacramento                        | WQAM 560 1000 C                     | Harrisburg<br>-WEBO 1210 100       |
| KCRJ 1310 100<br>Lowell              | KFBK 1310 100 C<br>San Bernardino | WDBO 580 250 C                      | -WEBQ 1210 100<br>Joliet           |
| KSUN 1200 100                        | KFXM 1210 100                     | Pensacola                           | -WCLS 1310 100                     |
| Phoenix                              | San Diego                         | -WCOA 1340 500                      | LaSalle                            |
| KOY 1390 500<br>KTAR 620 500 N       | KFSD 600 1000 N                   | St. Petersburg<br>WSUN 620 1000 N   | WJBC 1200 100<br><b>Peorla</b>     |
| KTAR 620 500 N<br>Prescott           | KGB 1330 1000 C<br>San Francisco  | Tampa                               | -WMBD 1440 500 C                   |
| KPJM 1500 100                        | KFRC 610 1000 C                   | WDAE 1220 1000 C                    | Quincy                             |
| Tucson<br>KGAR 1370 100              | KFWI 930 500                      | WMBR 1370 100                       | WTAD 1440 500<br>Rockford          |
| KGAR 1370 100<br>KVOA 1260 500       | KGGC 1420 100<br>KGO 790 7500 N   | GEORGIA<br>Americus                 | KFLV 1410 500                      |
| Yuma                                 | ≠KJBS 1070 100                    | WENC 1420 100                       | Rock Island                        |
| KUMA 1420 100                        | ⊯KPO 680 50000 N                  | Athens                              | WHBF 1210 100<br>Springfield       |
| ARKANSAS                             | KTAB 560 1000<br>KYA 1230 1000 N  | WTFI 1450 500<br>Atlanta            | WCBS 1210 100                      |
| Blytheville<br>KLCN 1290 100         | San Jose                          | WGST 890 250 C                      | WTAX 1210 100                      |
| KLCN 1290 100 Fayetteville           | KQW 1010 500                      | WJTL 1370 100                       | Tuscola<br>WDZ 1070 100            |
| KUOA 1260 1000                       | Santa Ana<br>KREG 1500 100        | ₩SB 740 50000 N                     | WDZ 1070 100<br>Urbana             |
| Fort SmithKFPW 1210 100              | Santa Barbara                     | Augusta<br>-WRDW 1500 100           |                                    |
| -KFPW 1210 100<br>Hot Springs        | KDB 1500 100 C                    | Columbus                            | <b>Zion</b><br>WCBD 1080 5000      |
| -KTHS 1040 10000 N                   | <b>Stockton</b><br>■KGDM 1100 250 | -WRBL 1200 100                      |                                    |
| 1500 100                             | -KWG 1200 100 C                   | LaGrange<br>≠WKEU 1500 100          | INDIAÑA<br>Anderson                |
| Jonesboro                            | COLORADO                          | Macon                               | -WHBU 1210 100                     |
| -KBTM 1200 100                       | Alamosa                           | WMAZ 1180 500                       | Elkhart                            |
| Little Rock<br>KARK 890 250          | KGIW 1420 100                     | Rome<br>  WFDV 1500 100             | ∞WTRC 1310 50                      |
| <b>⊬KGHI</b> 1200 100                | Colorado Springs                  | Savannah                            | Evansville                         |
| →KLRA 1390 1000 C                    | →KVOR 1270 1000 C                 | ₩TOC 1260 500 C                     | WGBF 630 500                       |
| Texarkana                            | Denver<br>KFEL 920 500            | WQDX 1210 100                       | Fort Wayn -WGL 1370 100 C          |
| -KCMC 1420 100                       | ⊯KFEL 920 500<br>⊯KFXF 920 500    | HAWAII                              | ₩OWO 1160 10000 C                  |
| CALIFORNIA                           | ∞KLZ 560 1000 C                   | HIIo                                | Gary                               |
| Bakersfield                          | ₩KOA 830 12500 N                  | KWFV 1210 100<br>Honolulu           | -WIND 560 1000 C                   |
| →KERN 1200 100 C                     | KPOF 880 500                      | KGMB 1320 250 C                     | Hammond                            |
| Berkeley<br>KRE 1370 100             | Grand Junction<br>KFXJ 1200 100   | KGU 750 2500 N                      | WWAE 1200 100                      |
| Beverly Hills                        | Greeley                           | IDAHO                               | WFBM 1230 1000 C                   |
| →KMPC 710 500                        | KFKA 880 500                      | Bolse<br>  KIDO 1350 1000           | WKBF 1400 500 N                    |
| Burbank                              | Lamar                             | Idaho Falls                         | Muncle                             |
| KELW 780 500                         | KIDW 1420 100                     | KID 1320 250                        | WLBC 1310 100                      |
| <b>El C</b> entro<br>→KXO 1500 100   | Pueblo<br>≪KGHF 1320 250          | Nampa<br>KFXD 1200 100              | Richmond<br>WKBV 1500 100          |
| Eureka                               | Yuma                              | Pocatello .                         | South Bend                         |
| -KIEM 1210 100                       | ∞KGEK 1200 100                    | KSEI 890 250                        | -WFAM 1200 100 C                   |
|                                      |                                   |                                     | <u> </u>                           |

|                                      |                                     | <del>DOCATTIONS</del>                |                                  |
|--------------------------------------|-------------------------------------|--------------------------------------|----------------------------------|
| WSBT 1230 500 C                      | KWEA 1210 100                       | MINNESOTA                            | KFOR 1210 100                    |
| Terre Haute                          | KWKH 850 10000                      | Fergus Falls                         | KFOR 1210 100                    |
| 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<br>™WDGY 1180 1000 | KGNF 1430 500<br>Omaha           |
| IOWA<br>Ames                         | Bangor<br>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                            | Moorhead                             | Scottsbluff                      |
| -KFGQ 1310 100                       | -WCSH 940 1000 R                    | MGFK 1500 100 Northfield             | KGKY 1500 100                    |
| Carter Lake<br>KICK 1420 100         | WLEC 1340 250 Presque Isle          | -WCAL 1250 1000                      | York<br>KGBZ 930 500             |
| Cedar Rapids                         | WAGM 1420 100                       | St. Paul                             |                                  |
| -KWCR 1420 100 B                     | MARYLAND                            | ™KSTP 1460 10000 N                   | NEVADA                           |
| Council Bluffs                       | Baltimore                           | MISSISSIPPI                          | Las Vegas<br>KGIX 1420 100       |
| -KOIL 1260 1000 B                    | WBAL 1060 10000 B<br>WCAO 600 250 C | Greenville<br>WKFI 1210 100          | Reno                             |
| Decorah<br>∽KGCA 1270 100            | WCBM 1370 100                       | Hattlesburg                          | -KOH 1380 500 C                  |
| -KWLC 1270 100                       | ₩FBR 1270 500 R                     | WPFB 1370 100                        | NEW HAMPSHIRE                    |
| Des Moines                           | Cumberland                          | Jackson                              | Manchester<br>WFEA 1430 500 C    |
| KSO 1370 100 B                       | WTBO 1420 100                       | WJDX 1270 1000 N<br>Kosciusko        | Portsmouth                       |
| •₩OC- 1000 50000 R<br>•₩HO           | Hagerstown<br>WIEI 1210 100         | WHEF 1500 100                        | WHEB 740 250                     |
| Iowa City                            | MASSACHUSETTS                       | Laurel                               | NEW JERSEY                       |
| ∽WSUI 880 500                        | Babson Park                         | -WAML 1310 100                       | Asbury Park                      |
| Marshalltown  KFIB 1200 100          | WBSO 920 500                        | Meridian<br>™WCOC 880 500            | WCAP 1280 500 A                  |
| ∞KFJB 1200 100<br>Ottumwa            | Boston<br>WAAB 1410 500 C           | Mississippi City                     | Atlantic City WPG 1100 5000 C    |
| -WIAS 1310 100                       | WBZ 990 50000 B                     | WGCM 1210 100                        | Camden                           |
| Shenandoah                           | WEEI 590 1000 R                     | Tupelo                               | WCAM 1280 500                    |
| ⊷KFNF 890 500<br>⊷KMA 930 500        | WHDH 830 1000                       | WJEM 990 500<br>Vicksburg            | Jersey City                      |
| KMA 930 500<br>Sioux City            | WNAC 1230 1000 C<br>Chelsea         | -WQBC 1360 500                       | WAAT 940 300<br>WHOM 1450 250    |
| KSCJ 1330 1000 C                     | 1500 100                            | MISSOURI                             | Newark                           |
| Waterloo                             | Fall River                          | Cape Girardeau                       | WGCP 1250 1000                   |
| ∞WMT 600 500 C                       | WSAR 1450 250                       | ⊷KFVS 1210 100<br>Columbia           | WNEW 1250 1000                   |
| KANSAS                               | Lexington<br>WLEY 1370 100          | *KFRU 630 500                        | ™WOR 710 5000<br>Red Bank        |
| Abilene                              | New Bedford                         | Jefferson City                       | WJBI 1210 100                    |
| FREN 1050 5000                       | WNBH 1310 100                       | ∞WOS 630 500                         | Trenton                          |
| Coffeyville                          | Springfield<br>WBZA 990 1000 B      | <b>Joplin</b><br>∞WMBH 1420 100      | WTNJ 1280 500                    |
| Dodge City                           | WMAS 1420 100 C                     | l Kansas Citv                        | Zarephath<br>WAWZ 1350 250       |
| ∞KGNO 1340 250                       | Worcester                           | *KMBC 950 1000 C                     | NEW MEXICO                       |
| Kansas City<br>∞WLBF 1420 100        | WORC 1280 500 C                     | *KWKC 1370 100<br>*WDAF 610 1000 R   | Albuquerque                      |
| Lawrence                             | WTAG 580 · 750R<br>MICHIGAN         | WDAF 610 1000 R                      | ⇔KGGM 1230 250                   |
| ∞KFKU 1220 500                       | Battle Creek                        | WOQ 1300 1000                        | -KOB 1180 10000                  |
| WREN 1220 1000 B                     | WELL 1420 50                        | l St. Joseph                         | <b>Clovis</b><br>-KICA 1370 100  |
| Manhattan<br>◆KSAC 580 500           | Bay City<br>™WBCM 1410 500          | *KFEQ 680 2500<br>St. Louis          | Roswell                          |
| Topeka                               | ™BCM 1410 500<br>Calumet            | KFUO 550 500                         | ►KGFL 1370 100                   |
| -WIBW 580 1000 C                     | **WHDF 1370 100                     | **KMOX 1090 50000 C                  | NEW YORK                         |
| Wichita                              | Detroit                             | KSD 550 500 R                        | WOKO 1430 500 C                  |
| *KFH 1300 1000 C                     | WJBK 1370 50                        | KWK 1350 1000 B                      | Auburn                           |
| KENTUCKY                             | ₩JR 750 10000 B<br>WMBC 1420 100    | ₩IL 1200 100                         | WMBO 1310 100                    |
| Covington<br>∞WCKY 1490 5000B        | ₩WJ 920 1000 R                      | Springfield                          | Binghamton                       |
| ⊷WCKY 1490 5000B<br>Louisville       | WXYZ 1240 1000                      | **KGBX 1310 100                      | WNBF 1500 100                    |
| *WAVE 940 1000                       | East Lansing<br>WKAR 1040 1000      | KTWO 560 500<br>MONTANA              | Brooklyn                         |
| -WHAS 820 50000 C                    | WKAR 1040 1000<br>Filnt             | Billings                             | WARD 1400 500                    |
| WLAP 1200 100                        | WFDF 1310 100                       | FRGHL 950 1000 N                     | WBBC 1400 500<br>WBBR 1300 1000  |
| Paducah                              | Grand Rapids                        | Butte                                | WCNW 1500 100                    |
| ₩PAD 1420 100                        | WASH 1270 500<br>WOOD 1270 500      | KGIR 1360 500 N<br>Great Falls       | WLTH 1400 500                    |
| LOUISIANA                            | WOOD 1270 500                       | -KFBB 1280 1000                      | WMBQ 1500 100                    |
| <b>Baton Rouge</b><br>W.IBO 1420 100 | -WJMS 1420 100                      | Kalispell                            | WVFW 1400 500<br>Buffalo         |
|                                      | Jackson                             | ►KGEZ 1310 100                       | WBEN 900 1000 R                  |
| Monroe<br><b>™KMLB</b> 1200 100      | WIBM 1370 100                       | Missoula<br>≈KGVO 1200 100           | WEBR 1310 100                    |
| New Orleans                          | <b>Kalamazoo</b><br>WKZO 590 1000   | Wolf Point                           | WGR 550 1000 C                   |
| ₩BBX 1200 100                        | Lapeer                              | KGCX 1310 100                        | WKBW 1480 5000 C<br>WSVS 1370 50 |
| ∽WDSU 1250 1000 C                    | -WMPC 1500 100                      | NEBRASKA                             | Canton                           |
| ₩JBW 1200 100<br>₩SMB 1320 500 N     | Ludington<br>WKBZ 1500 100          | Clay Center<br>™KMMJ 740 1000        | -WCAD 1220 500                   |
| ₩SMB 1320 500 N<br>₩WL 850 10000     | WKBZ 1500 100  Marquette            | Kearney                              | Chester                          |
| Shreveport                           | ₩BEO 1310 100                       | KGFW 1310 100                        | WGNY 1210 100                    |
| <b>-KRMD 1310 100</b>                | Royal Oak                           | Lincoln                              | Elmira                           |
|                                      | WEXL 1310 50                        | ∞KFAB 770 5000 C                     | -WESG 1040 1000                  |

| Freeport<br>WGBB 1210 100              | Canton<br>WHBC 1200 100              | Grove City<br>-WSAJ 1310 100        | Sloux Falls<br>KSOO 1110 1000          |
|--|--------------------------------------|-------------------------------------|--|
| <b>Hudson Falls</b><br>WGLC 1370 100 C | WFBE 1200 100                        | WBAK 1430 1000                      | Vermillion<br>KUSD 890 500             |
| Jamestown                              | WKRC 550 1000 C                      | WHP 1430 500 C<br>WKBQ 1200 100     | Watertown<br>-KGCR 1210 100            |
| ₩OCL 1210 50<br>New York               | -WSAI 1330 1000 R                    | Hazelton                            | Yankton                                |
| →WABC 860 50000 C                      | Cleveland<br>→WGAR 1450 500 B        | WAZL 1420 100<br>Johnstown          | WNAX 570 1000 C                        |
| WBNX 1350 250<br>WBOO 860 50000        | ₩HK 1390 1000 C                      | WJAC 1310 100<br>Lancaster          | Bristol                                |
| -WEAF 660 50000 R<br>WEVD 1300 500     | -WTAM 1070 50000 R                   | WGAL 1310 100                       | WOPI 1500 100<br>Chattanooga           |
| WFAB 1300 1000                         | Columbus<br>WAIU 640 500             | WKJC 1200 100 Philadelphia          | -WDOD 1280 1000 C                      |
| WHN 1010 250<br>WINS 1180 500          | -WCAH 1430 500 C                     | WCAU 1170 50000 C<br>WDAS 1370 100  | Jackson<br>WTJS 1310 100               |
| -₩JZ 760 50000 B<br>-₩LWL 1100 5000    | WSEN 1210 100                        | WFI 560 500 R                       | WNOX 560 1000 C                        |
| WMCA 570 500                           | Dayton<br>→WSMK 1380 200             | WHAT 1310 100<br>WIP 610 500 C      | ₩ROL 1310 100                          |
| WNYC 810 500<br>-WOV 1130 1000         | Mount Orab                           | WLIT 560 500 R                      | Memphis<br>-WHBQ 1370 100              |
| WPAP 1010 250                          | WHBD 1370 100                        | WPEN 1500 100<br>WRAX 1020 250      | WMC 780 500 N<br>WNBR 1430 500         |
| WRNY 1010 250                          | →WSPD 1340 1000 C<br>Youngstown      | =WTEL 1310 100                      | WREC 600 500 C                         |
| RochesterWHAM 1150 50000 B             | ₩KBN 570 500 C                       | Pittsburgh wKDKA 980 50000 B        | Nashville<br>WLAC 1470 5000 C          |
| ∞WHEC 1430 500 C                       | <b>Zanesville</b><br>WALR 1210 100   | KQV 1380 500 C<br>■WCAE 1220 1000 R | ■WSM 650 50000 N                       |
| Saranac Lake<br>WNBZ 1290 50           | OKLAHOMA                             | WJAS 1290 1000 C<br>WWSW 1500 100   | Springfield<br>≠WSIX 1210 100          |
| Schenectady<br>WGY 790 50000 R         | Elk City                             | Reading                             | TEXAS                                  |
| Syracuse                               | KASA 1210 100<br>Enid                | WEEU 830 1000<br>WRAW 1310 100      | Amarillo<br>KGRS 1410 1000             |
| WSYR 570 250 B                         | KCRC 1370 100<br>Norman              | Scranton<br>WGB1 880 250            | WDAG 1410 1000<br>Austin               |
| Troy<br>WHAZ 1300 500                  | ₩NAD 1010 500                        | WQAN 880 250                        | KNOW 1500 100                          |
| Tupper Lake                            | Oklahoma City<br>KFXR 1310 100       | Silverhaven<br>WNBO 1200 100        | Beaumont<br>KFDM 560 500               |
| WHDL 1420 100<br>Utica                 | ⇒KGFG 1370 100<br>⇒KOMA 1480 5000 C  | Sunbury                             | Brownsville<br>KWWG 1260 500           |
| WIBX 1200 100 White Plains             | ₩KY 900 1000 N                       | WKOK 1210 100<br>Wilkes-Barre       | College Station                        |
| WFAS 1210 100                          | Ponca City WBBZ 1200 100             | WBAX 1210 100<br>WBRE 1310 100      | WTAW 1120 500<br>Corpus Christi        |
| <b>₩oodside</b><br>WWRL 1500 100       | Shawnee<br>KGFF 1420 100             | Williamsport<br>WRAK 1370 100       | ⊯KGFI 1500 100<br>Dallas               |
| NORTH CAROLINA                         | Tulsa                                | York                                | KRLD 1040 10000 C                      |
| Asheville<br>WWNC 570 1000 N           | -KTUL 1400 250<br>-KVOO 1140 25000 N | WORK 1000 1000                      | ₩RR 1280 500 C                         |
| Charlotte WBT 1080 50000 C             | OREGON                               | PHILIPPINES<br>Manila               | Dublin                                 |
| -WSOC 1210 100 N                       | Corvallis<br>KOAC 550 1000           | KZEG 618.5 1000<br>KZRM 618.5 50000 | El Paso<br>*KTSM 1310 100              |
| Greensboro WBJG 1440 500 C             | Eugene<br>KORE 1420 100              | PORTO RICO                          | ∞WDAH 1310 100                         |
| Greenville<br>WEED 1420 100            | Klamath Falls                        | San Juan                            | Fort Worth —KFJZ 1370 100              |
| Raleigh                                | KFJI 1210 100<br>Marshfield          | -WKAQ 1240 1000<br>1290 500         | ─KTAT 1240 1000 C<br>─WBAP 800 50000 N |
| WPTF 680 5000 N                        | KOOS 1370 100<br><b>Medford</b>      | RHODE ISLAND                        | Galveston                              |
| ₩iimington<br>•WRAM 1370 100           | KMED 1310 100                        | Providence<br>WEAN 780 500 C        | -KLUF 1370 100<br>Greenville           |
| Winston-Salem -WSJS 1310 100 C         | Portland<br>KALE 1300 500 C          | WJAR 890 500 R                      | -KFPM 1310 15<br>Hariingen             |
| NORTH DAKOTA                           | KBPS 1420 100<br>KEX 1180 5000 N     | WPRO 1210 100                       | -KRGV 1260 500                         |
| Bismarck                               | KFJR 1300 500                        | SOUTH CAROLINA<br>Charleston        | Houston<br>KPRC 920 1000 N             |
| -KFYR 550 1000 N  Devils Lake          | -KGW 620 1000 N<br>-KOIN 940 1000 C  | ₩CSC 1360 500<br>Columbia           | -KTRH 1120 1000 C                      |
| KDLR 1210 100                          | KWJJ 1060 500                        | WIS 1010 500 N                      | Lubbock                                |
| Fargo<br>WDAY 940 1000 N               | -KXL 1420 100<br>PENNSYLVANIA        | Greenville<br>WFBC 1200 100         | KFYO 1310 100<br>San Angelo            |
| Grand Forks                            | Allentown                            | Spartanburg                         | →KGKL 1370 100                         |
| ─KFJM 1370 100<br>Mandan               | WCBA 1440 250<br>WSAN 1440 250       | SOUTH DAKOTA                        | San Antonio<br>KABC 1420 100           |
| -KGCU 1240 250                         | Altoona                              | Brookings                           | KMAC 1370 100<br>KONO 1370 100         |
| Minot<br>KLPM 1240 250                 | WFBG 1310 100<br>Carbondale          | KFDY 550 500<br>Huron               | ∞KTSA 1290 1000 C                      |
| OHIO                                   | WNBW 1200 10<br>Erie                 | KGDY 1340 250<br>Pierre             | WOAJ 1190 50000 N                      |
| Akron                                  | WLBW 1260 500 C                      | KGFX 630 200                        | -KGKB 1500 100                         |
| WADC 1320 1000 C<br>-WJW 1210 100      | Glenside<br>WIBG 970 100             | Rapid City WCAT 1200 100            | Waco<br>WACO 1420 100 C                |

| Wichita Falls                             | WEST VIRGINIA                     | Middlechurch                     | Montmagny                          |
|---|-----------------------------------|----------------------------------|------------------------------------|
| -KGKO 570 250                             | Bluefleld                         | CJRC 1390 100                    | VE9EK 1195 10                      |
| UTAH                                      | -WHIS 1410 250                    | Winnipeg                         | Montreal                           |
|   | Charleston<br>WORU 580 750        | CKY 910 5000 F                   | CFCF 600 500 N                     |
| Ogden .<br>KLO 1400 500 (                 | WOBU 580 750                      | NEW BRUNSWICK                    | CHLP 1120 100<br>CKAC 730 5000 C   |
| Salt Lake City                            | ₩MMN 890 250                      | Fredericton<br>CFNB 1030 500 F   | CKAC 730 5000 C<br>CRCM 910 5000 F |
| -KDYL 1290 1000 N                         | Huntington                        | CFNB 1030 500 F<br>St. John      | New Carlisle                       |
| KSL 1130 50000 C                          | WSAZ 1190 1000                    | CFBO 1210 100 F                  | CHNC   1210 100 F                  |
| VERMONT                                   | Wheeling                          | CHPR 1370 100                    | Quebec                             |
| Burlington                                | ⇒WWVA 1160 5000 C                 | NOVA SCOTIA                      | CHRC 930 100 F                     |
| WCAX 1200 100                             | WISCONSIN<br>Eau Claire           | Glace Bay                        | CKCV 1310 50                       |
| <b>Rutiand</b><br>WSYB 1500 100           | -WTAQ 1330 1000 C                 | VAS 685 2000<br>Halifax          | SASKATCHEWAN<br>Canora             |
| St. Albans                                | Fond du Lac                       | CHNS 1050 500 F                  | 10-BU 1200 15                      |
| WQDM 1370 100                             | KFIZ 1420 100                     | Sydney                           | Fleming                            |
| Springfield                               | Green Bay<br>WHBY 1200 100        | CJCB 880 50 F                    | CJRW 540 500 F                     |
| WNBX 1260 250<br>Waterbury                | Janesville                        | Wolfville CKIC 1010 50           | Moose Jaw                          |
| WDEV 550 500                              | ■WCLO 1200 100                    | Yarmouth                         | ←CHAB 1200 100<br>←CJRM 540 1000 F |
| VIRGINIA                                  | LaCrosse                          | CJLS 1310 100                    | Prince Albert                      |
| Arlington                                 | WKBH 1380 1000 C                  | ONTARIO                          | CKBI 1210 100                      |
| NAA 690 1000                              | Madison<br>™WHA 940 1000          | Brantford                        | Regina                             |
| Charlottesville                           | ™WIBA 1280 500 N                  | -CKPC 930 100 F                  | CHWC 1010 500 F                    |
| ∞WEHC 1350 500                            | Manitowoc                         | 10-BQ 1200 15<br>Chatham         | CKCK 1010 500 F                    |
| Danville<br>WBTM 1370 100                 | WOMT 1210 100                     | CFCO 600 50 F                    | Saskatoon                          |
| WBTM 1370 100                             | Milwaukee<br>WHAD 1120 250 C      | Cobalt                           | -CFQC 1230 500 F<br>Yorkton        |
| Lynchburg<br>WLVA 1370 100                | WISN 1120 250 C                   | CKMC 1210 50                     | CJGX 630 500 F                     |
| Newport News                              | ■WTMJ 620 1000 N                  | Fort William<br>CKPR 780 50 F    | NEWFOUNDLAND                       |
| ∞WGH 1310 100                             | Poynette                          | Hamilton                         | St. John's                         |
| <b>Norfolk</b><br>WTAR 780 500 C          | -WIBU 1210 100                    | CHML 1010 50                     | VOAC 800 40                        |
| Petersburg                                | Racine<br>WR IN 1370 100          | CKOC 1120 500 F                  | VOAS 810 100                       |
| ∞WPHR 1200 100                            | Sheboygan                         | Kingston<br>CFRC 1510 100        | VOGY 950 75<br>VOKW 1085 30        |
| Richmond<br>≪WBBL 1210 100                | -WHBL 1410 500                    | Kirkland Lake                    | VONF 1195 400                      |
| WMBG 1210 100 C                           | Stevens Point<br>WLBL 900 2500    | CJKL 1310 100                    | VOWR 900 500                       |
| ∞WRVA 1110 5000 N                         | Superior                          | Kitchener                        | MIQUELON                           |
| Roanoke<br>WDB I 930 250 C                | ■WEBC 1290 1000 N                 | CKCR 1510 100                    | St. Pierre                         |
| WDBJ 930 250 C<br>WRBX 1410 250           | WYOMING                           | CFPL 730 100 F                   | FQN 572 250                        |
|   | Casper                            | North Bay                        | CENTRAL                            |
| WASHINGTON                                | ™KDFN 1440 500                    | CFCH 930 100 F<br>Ottawa         | AMERICA                            |
| Aberdeen<br>KXRO 1310 100                 | CANADA'                           | CKCO 1010 100                    | COSTA RICA                         |
| Bellingham                                | ALRERTA                           | CRCO 880 1000 F                  | Cartago                            |
| KVOS 1200 100                             | Calgary                           | Prescott                         | TIFS 1441 7.5                      |
| Everett                                   | CFAC 930 100                      | CFLC 930 100 St. Catharines      | TIGA 1014 30 San Jose              |
| KFBL 1370 50                              | CFCN 1030 10000 F<br>CJCJ 690 100 | CKTB 1200 100                    | TICR 912 75                        |
| <b>Olympia</b><br>KGY 1210 100            | Edmonton                          | Stratford                        | TIEA 833 7.5                       |
|   | CFTP 1120 100                     | 10-AK 1200 15                    | TIEP 1450 7.5                      |
| <b>Pullman</b><br><b>→</b> KWSC 1220 1000 | CJCA 730 1000 F                   | Sudbury<br>CJCS 780 500          | TIFB 714 30                        |
| Seattle                                   | CKUA 580 500<br>Lethridge         | CJCS 780 500<br>Timmins          | TIGP 800 75<br>TIRCA 1100 500      |
| KJR 970 5000 N                            | CJOC 840 100 F                    | CKGB 1420 100                    | TISO 550 250                       |
| KOL 1270 1000 C                           | BRT. COLUMBIA                     | Toronto                          | TITV 999 7.5                       |
| KOMO 920 1000 N<br>KPCB 650 100           | Chilliwack                        | CFRB 690 10000 C<br>CKCL 580 100 | TIVL 869 30                        |
| KRSC 1120 100                             | CHWK 780 100 F                    | CRCT 960 5000 N                  | TIXA 614 7.5 GUATEMALA             |
| KTW 1220 1000                             | Kamloops<br>□CFJC 1310 100 F      | CKNC 1030 100 F                  | Guatemala City                     |
| -KVL 1370 100                             | CFJC 1310 100 F<br>Kelowna        | Windsor                          | TGW 1350 500                       |
| -KXA 760 250                              | CKOV 1210 50 F                    | CKLW 840 5000 C                  | TGX 1380 75                        |
| <b>Spokane</b><br>KFIO 1120 100           | Trail                             | Wingham<br>10-BP 1200 15         | EL SALVADOR                        |
| ₩FPY 1340 1000 C                          | CJAT 1200 50                      | PRINCE EDWARD                    | San Salvador                       |
| KGA 1470 5000 N                           | Vancouver<br>CJOR 600 500         | ISLAND                           | RUS 664 500                        |
| KHQ 590 1000 N                            | CKCD 1010 100                     | Charlottetown                    | MEXICO                             |
| Tacoma 250                                | -CKFC 1410 50                     | CFCY 630 500 F                   | AGUASCALIENTES                     |
| KMO 1330 250<br>KVI 570 500 C             | CKMO 1410 100                     | CHCK 1310 50<br>Summerside       | Aguascalientes                     |
| Walla Walla                               | CKWX 1010 100<br>CRCV 1100 1000 F | CHGS 1120 50 F                   | XFC 805 350                        |
| KUJ 1370 100                              | Victoria                          | QUEBEC                           | BAJA CALIFORNIA                    |
| Wenatchee                                 | -CFCT 1450 50                     | Chicoutimi                       | Mexicali<br>XEAO 560 100           |
| KPQ 1500 100                              | MANITOBA                          | CRCS 1500 100 F                  | Tijuana                            |
| Yakima 100                                | Brandon                           | Hull                             | XEAE 980 800                       |
| KIT 1310 100                              | -CKX 1450 500 F                   | CKCH 1210 100 F                  | XEOK 757 5000                      |
|   |                                   |                                  |                                    |

| CHIHUAHUA           | NUEVO LEON       | CMJG 1050 50               | CMCW 965 150    |
|---------------------|------------------|----------------------------|-----------------|
| Chihuahua           | Monterrey        | CMJK 790 500               | CMCY 1320 500   |
| XEFI 1260 250       | XEFB 1315 100    | CMJL 960 50                | CMDD 588 150    |
| Juarez 250          | XEFJ 1000 100    | CMJN 1240 50               | CMDE 925 150    |
| =XEFV 1400 100      | XEH 1132 250     |                            | CMK 730 5000    |
| XEJ 1015 500        | XET 690 500      | Cardenas                   | CMO 630 500     |
|                     | XEX 630 50       | CMGE 1375 30               | CMW 595 1400    |
| COAHUILA            | PUEBLA           | Ciego de Avila             | CMX 875 1000    |
| Piedras Negras      | Puebla           | CMJH 1150 50               | Matanzas        |
| EPN 585 75000       | XETH 860 100     | CMJ1 1335 45               | CMGB 1205 30    |
| Saltillo            |                  | CMJO 1010 50               | CMGC 820 30     |
| XEL 1000 40         | QUERETARO        | Cienfuegos                 | CMGF 971.5 100  |
| Torreon             | Queretaro        | CMHJ 1125 60               | CMGH 1040 15    |
| XETB 1380 125       | XEFS 1000 40     | CMHL 1290 20               | Moron           |
| Villa Acuna         | SAN LUIS POTOSI  | CMHW 1200 100              | CM IP 1360 75   |
| ₩XER- 735 150000    | San Luis Potosi  |                            | Pinar del Rio   |
| XEF                 | ■XEAC 1295 100   | Colon<br>CMGA 834 100      | CMAB 1249 20    |
| D. F.               | SONORA           |                            | Santa Clara     |
| Mexico City         | Nogales          | Cruces                     | CMHI 1037 250   |
| XEAI 1090 100       | XEAF 990 750     | CMHK 1225 50               | Santlago        |
| XEB 1030 10000      | TAMAULIPAS       |                            | CMKC 1034 150   |
| XEFA 1250 500       | Nuevo Laredo     | Guantanamo<br>CMKJ 1300 20 |                 |
| XEFG 1085 500       | XEAB 1450 7.5    | CMKJ 1300 20               | DOMINICAN       |
| XEFZ 1370 100       | XEFE 985 100     | Havana                     | REPUBLIC        |
| XEK 990 100         | XENT 1115 150000 | CMAF 680 1000              | San Pedro de    |
| XEN 711 1000        | Reynosa          | CMBC 1270 150              | Marcoris        |
| XEO 940 5000        | XEAW 965 10000   | CMBD 965 250               | HIH 1395 15     |
| XEP 780 500         | Tampico          | CMBG 1052 225              | Santo Domingo   |
| XETW 830 500        | XEFW 1280 70     | CMBJ 1140 500              | HIJ 1195 15     |
| XETZ 1210 50        | -XES 1020 250    | CMBK 1485 15               | HIX 580 1500    |
| XEWW 1100 250       | VERACRUZ         | CMBL 1445 200              | HIZ 1300 10     |
| XEW 010 5000        | Jalapa           | CMBN 1185 150              | HAITE           |
| XEYZ 760 10000      | XFB 1290 1000    | CMBS 765 200               | Port-au-Prince  |
| XFG 638 2000        | Veracruz         | CMBW 1140 600              | HHK 920 1000    |
| XFO 940 5000        | XEU 1010 100     | CMBY 1230 250              |                 |
| XFX 840 500         |                  | CMBZ 1005 150              | l SOUTH         |
| Toluca              | YUCATAN          | CMC 835 500                | AMERICA         |
| XEC 1000 50         | Merida           | CMCA 1230 150              |                 |
| HIDALGO             | XEFC 1050 100    | CMCB 1052 150              | ARGENTINE       |
| Pachuca             | XEY 546.8 10     | CMCD 915 500               | Buenos Aires    |
| XETU 890 100        | XEZ 630 500      | CMCF 873 250               | ⇒LR5 830 20000  |
|                     | WEST INDIES      | CMCH 1410 50               | COLOMBIA        |
| JALISCO             | CUBA             | CMCI 1180 500              | Bogota          |
| Guadalajara         |                  | CMCM 1410 15               | HIN 681 500     |
| XEA 1000 250        | Calbarien        | CMCN 1375 250              | VENEZUELA       |
| XED 1155 500        | CMHD 945.5 500   |                            | VENEZUELA       |
| MICHOACAN           | Camaguey         |                            | Caracas         |
|                     | CMJC 1382 150    | CMCQ 775 1000              | YV1BC 960 5000  |
| Morella             | CMJE 1170 50     | CMCR 1375 150              | YV2BC 882 100   |
| <b>XEI</b> 1310 250 | CMJF 910 200     | CMCU 1100 500              | YV3BC 1200 1000 |
|                     |                  |                            |                 |

The harmonious Morin Sisters, left to right, Marge, Pauline and Evelyn, heard on the Seeled Power Sideshow over an NBC (Blue) network on Mondays at 8:00 p.m. EST. These sisters had 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.



| OF40 800 100 October 180  | CJOR 600 500 Vancouver R C   |
|---|--|
| CFAC 930 100 Calgary, Alta. Calgary Herald.                                 | G. C. Chandler.  |
| GFBO 1210 100 St. John, N. B.<br>C. A. Munro, Ltd.                          | CJRC 1390 100 Middlechurch, Man.<br>James Richardson & Sons.           |
| CFCF 600 500 Montreal, Que.   | CJRM 540 1000 Moose Jaw Seek   |
| Canadian Marconi Co.  | James Richardson & Sons, Ltd.  |
| Northern Broadcasting Co., Ltd.   | CJRW 540 500 Fieming, Sask.<br>James Richardson & Sons, Ltd.           |
| CFCN 1030 10000 Calgary, Alta.  | CKAC 730 5000 Montreal Out   |
| Voice of the Prairies, Ltd. CFCO 600 50 Chatham, Ont.                       | La Presse Publishing Co., Ltd.  CKBI 1210 100 Prince Albert, Sask.     |
| John Beardall. CFGT 1450 50 Victoria, B. C.                                 | Frince Albert Radio Club.  |
| Victoria Broadcasting Assn.   | Vancouver Daily Province.  |
| CFCY 630 500 Charlottetown, P. E. I.<br>Island Radio Broadcasting Co., Ltd. | CKCH 1210 180 Hull, Que.<br>Dr. J. L. Chabot.                          |
| CFJC 1810 100 Kamloops, B. C.   | CKCK 1010 500 Boolea Coak  |
| Review Publishing Co., Ltd.    CFLC 930 100 Prescott, Ont.                  | Leader-Post, Ltd.  |
| Radio Assn. of Prescott.  | Dominion Battery Co., Ltd.   |
| CFNB 1030 500 Fredericton, N. B.<br>James S. Neill & Sons, Ltd.             | CKCO 1010 100 Ottawa, Ont.<br>Dr. G. M. Geldert.                       |
| CFPL 780 100 London, Ont.   | CKCR 1510 100 Kitchener Ont  |
| Free Press & Printing Co., Ltd. CFQC 1230 500 Saskatoon, Sask.              | William C. Mitchell and G. Liddle.  CKCV 1310 50 Quebec, Que.          |
| Electric Shop, Ltd.   | Vandry, Inc.   |
| CFRB 690 10000 Toronto, Ont.<br>Canadian Radio Corp., Ltd.                  | CKFC 1410 50 Vancouver, B. C.<br>Radio Service Engineers, Ltd.         |
| CFRC 1510 100 Kingston, Ont.<br>Queens University.                          | CKGB 1420 100 Timmins, Ont.<br>R. H. Thompson                          |
| CFTP 1120 100 Edmonton, Alta.   | CKIC 1010 50 Walfvilla M &   |
| Taylor & Pearson, Ltd. CHAB 1200 100 Moose Jaw, Sask.                       | Acadia University.   |
| Moose Jaw Radio Assn.   | CKLW 840 5000 Windsor, Ont.<br>Western Ontario Broadcasting Co., Ltd.  |
| CHCK 1310 50 Charlottetown, P. E. I. J. A. Gesner.                          | CKMC 1210 50 Cobalt, Ont.<br>R. L. MacAdam.                            |
| CHGS 1120 50 Summerside, P. E. I.   | CKMO 1410 100 Vancouver, B. C  |
| R. T. Holman, Ltd. CHLP 1120 100 Montreal, Que,                             | Sprott-Shaw Radio Co.  CKNC 1030 100 Toronto, Ont.                     |
| La Patrie Publishing Co., Ltd.  | Canadian National Carbon Co., Ltd.                                     |
| CHML 1010 50 Hamilton, Ont.<br>Maple Leaf Radio Co., Ltd.                   | CKOC 1120 500 Hamilton, Ont.<br>Wentworth Radio Broadcasting Co., Ltd. |
| CHNC 1210 100 New Carlisle, Que. Dr. Charles Houde.                         | CKOV 1210 50 Kellowna, B. C.   |
| CHNS 1050 500 Halifax, N. S.  | Okanagan Broadcasters, Ltd., Box 243.  CKPC 930 100 Brantford, Ont.    |
| Maritime Broadcasting Co., Ltd.   | Cyrus Dolph.   |
| CHPR 1370 100 St. John, N. B.<br>H. P. Robinson.                            | CKPR 780 50 Fort William, Ont.<br>Dougall Motor Co., Ltd.              |
| CHRC 930 100 Quebec, Que.<br>CHRC, Ltd.                                     | CKTB 1200 100 St. Catharines Ont                                       |
| CHWC 1010 500 Regina, Sask,   | E. T. Sandell.  CKUA 580 500 Edmonton, Alta.                           |
| R. H. Williams & Sons, Ltd.  CHWK 780 100 Chilliwack, B. C.                 | University of Alberta.   |
| Chilliwack Broadcasting Co., Ltd.   | CKWX 1010 100 Vancouver, B. C.<br>Western Broadcasting Co., Ltd.       |
| CJAT 1200 50 Trail, B. C.<br>Trail Amateur Radio Assn.                      | CKY 1450 500 Brandon Mon   |
| CJCA 730 1000 Edmonton, Alta.   | Manitoba Telephone System CKY 910 5000 Winnipeg, Man.                  |
| Edmonton Journal, Ltd. CJCB 880 50 Sydney, N. S.                            | Manitoba Telephone System.   |
| Nathanson's Radio Headquarters.   | CMAB 1249 20 Pinar del Río, Cuba. Jose Silvera, Marti No. 101.         |
| CJCJ 690 100 Calgary, Alta.   | CMAF 680 1000 Havana, Cuba.  |
| Albertan Publishing Co., Ltd. CJCS 780 500 Sudbury, Ont.                    | International Broadcasting Co., Miramar. CMBC 1270 150 Havana, Cuba.   |
| George McLeod Cootes  | Domingo Fernandez, Maximo Gomez No. 189.  CMBD 965 250 Havana, Cuba.   |
| Winnipeg Grain Exchange.  | Luis Perez Garcia, Enamorados y Flores.                                |
| CJKL 1310 100 Kirkland Lake, Ont.<br>O. J. Thorpe & Branchaud.              | CMBQ 1052 225 Havana, Cuba.<br>John L. Stowers, Hospital No. 100       |
| CJLS 1310 100 Yarmouth, N. S.   | CMBJ 1140 500 Havana, Cuba.  |
| Laurie L. Smith.  GJOC 840 100 Lethbridge, Alta.                            | Emilio Perera, Consulado y Virtudes.  CMBK 1485 15 Havana, Guba.       |
| H. R. Carson, Ltd.  | Alberto Alverez, Paula y Oficios.                                      |
|   |  |

|          | CMBL 1445 200 Havana, Cuba.<br>Julio C. Hidalgo, Vedado.                 |   | CMJE 1170 50 Camaguey, Cuba.   |
|----------|--|---|--|
|          | CMBN 1185 150 Havana, Cuba.  |   | Manuel Fernandez, Plaza de Maceo.  CMJF 910 200 Camaguey, Cuba.                                  |
|          | G. de Sequeira, Agrimonte No. 32 CMBS 765 200 Havana, Cuba.              |   | John L. Stowers, Hotel Plaza.  |
| 1        | Enrique Artalejo, Calzada y H. St.                                       |   | CMJG 1050 50 Camaguey, Cuba.<br>Jose Antonio Lefran, Martires 133.                               |
|          | CMBW 1140 600 Havana, Cuba.<br>Alvarez, Moris y Cia, Obrapia No. 13.     |   | CMJH 1150 50 Ciego de Avila, Cuba.   |
|          | CMBY 1230 250 Havana, Cuba.  |   | Luis Marauri Mendosa.<br>CMJI 1335 45 Ciego de Avila, Cuba.                                      |
|          | Callejas-Estefani, Principe No. 33.                                      |   | Gilberto Gessa Lopez, Independencia 95.  |
|          | CMBZ 1005 150 Havana, Cuba.<br>Manuel y G. Salas, San Rafael No. 14.     |   | CMJK 790 500 Camaguey, Cuba.<br>Compania Cubana Nacional de Radio S. A.                          |
|          | CMC 835 500 Havana, Cuba.  |   | CMJL 960 50 Camaguey, Cuba.  |
| -        | Radio Corp. of Cuba.  CMCA 1230 150 Havana, Cuba.                        |   | Enrique Artime, Cuba No. 27.  CMJN 1240 50 Camaguey, Cuba.                                       |
|          | Manuel Cruz, Ave. de Italia No. 102.                                     |   | Ernesto de Ugarriza, Martires 11.  |
|          | CMCB 1052 150 Havana, Cuba.<br>Metropolitan-Radio de Cuba.               |   | CMJO 1010 50 Ciego de Avila, Cuba.<br>Jose M. Rey, C. Central & Maceo.                           |
|          | CMCD 915 500 Havana, Cuba.   |   | CMJP 1860 75 Moron, Cuba.  |
|          | Angel Bertematy.  CMCF 878 250 Havana, Cuba.                             | - | Cesar Canall, Callejas No. 28.  CMK 730 5000 Havana, Cuba.                                       |
|          | Raoul Karman.  |   | National Broadcasting Co. of Cuba.   |
|          | CMCH 1410 50 Havana, Cuba.<br>Wifredo y Humberto Fontanals Sanchez.      |   | CMKC 1034 150 Santiago, Cuba.<br>Pinol Batlle y Co.  |
|          | CMCJ 1180 500 Havana, Cuba.  |   | CMKJ 1300 20 Quantaname, Cube.   |
|          | Rafael Rodriquez, Estevez No. 4.  CMCM 1410 15 Havana, Cuba.             |   | Luis Morlote, East Giro 11. CMQ 630 500 Havana, Cuba.  |
|          | Aurello Balino, Belas Coain No. 639.                                     |   | Jose Fernandez, 25 Numero 445.   |
|          | CMCN 1375 250 Havana, Cuba.<br>Antonio Ginard, Reina y Ave. Buen Retiroe |   | CMW 595 1400 Havana, Cuba.<br>Troncoso y Gil, Paseo de Marti 103.                                |
|          | CMCP 1270 150 Havana, Cub2.  |   | CMX 875 1000 Havana, Cuba  |
|          | Jose A. Yanis  |   | Casa "Lavin," Ave. de la Republica 99A.<br>CRCM 910 5000 Montreal, Que.                          |
|          | CMCQ 775 1000 Havana, Cuba.<br>Andres Martinez, Vista Alegre No. 80.     |   | Canadian Radio Broadcasting Commission   |
|          | CMCR 1375 150 Havana, Cuba.<br>Aurelio Hernandez.                        |   | CRCO 880 1000 Ottawa, Ont.<br>Canadian Radio Broadcasting Commission.                            |
|          | CMCU 1100 500 Havana, Cuba.  |   | CRCS 1500 100 Chicoutimi Que.  |
|          | Jorge Garcia Serra.  |   | Canadian Marconi Co., Ltd.  CRCT 969 5000 Toronto, Ont.  Canadian Radio Broadcasting Commission. |
|          | CMCW 965 150 Havana, Cuba.<br>Vilarino y Cervantes.                      |   | Canadian Radio Broadcasting Commission.  |
|          | CMCY 1325 500 Havana, Cuba.<br>Manuel D. Autran, Ave. deLa Pdt s.215.    |   | CRCV 1100 1000 Vancouver, B. C.<br>Canadian Radio Broadcasting Commission.                       |
|          | CMDD 588 150 Havana, Cuba.   |   | FQN 572 250 St. Pierre, Mig.   |
| -        | G. de Sequira<br>CMDE 925 150 Havana, Cuba,                              |   | HHK 920 1000 Port-au-Prince, Halft.  |
|          | Radio Aerial Ad.   |   | Haitlan Government.  |
|          | CMGA 834 100 Colon, Cuba.<br>L. Valdes Figueroa, Marti No. 19.           |   | HIH 1395 16 San Pedro de M., D. B.   |
|          | CMGB 1205 30 Matanzas, Cuba.   |   | HIJ 1195 15 Santo Domingo, D. M.   |
|          | Jose Anorga, Magdelena No. 1. CMGC 820 30 Matanzas, Cuba.                |   | Tuto Baez, Hostos 34 HIX 580 1600 Santo Domingo, D. R.   |
|          | Oscar S. Mechoso, Independa No. 56.                                      |   | J. R. Saladin, Director General  |
|          | CMGE 1375 30 Cardenas, Cuba.<br>Genaro Sebater, Cespedes No. 180.        |   | HIZ 1300 10 Santo Domingo, D. R.<br>Abbes and Garda  |
|          | CMQF 971.5 100 Matanzas, Cuba.   |   | HJN 681 500 Bogota, Colombia   |
| <u> </u> | Bernabe R. de la Torre.  CMGH 1040 15 Matanzas, Cuba,                    | _ | Government of Colombia, National Library.  KABC 1420 100 San Antonio, Texas.                     |
|          | Octavio y Julio Alvarez.   |   | Alamo Broadcasting Co., Inc.   |
|          | CMHD 945.5 500 Caibarien, Cuba.<br>Manuel Alvarez, M. Escobar 17.        |   | KALE 1300 500 Portland, Ore.<br>Kale, Inc., New Heathman Hotel                                   |
|          | CMHI 1037 259 Santa Clara, Cuba.   |   | KARK 899 250 Little Rock, Ark.   |
|          | Lavis y Paz. CMHJ 1125 60 Cienfuegos, Cuba.                              |   | Arkansas Radio & Equipment Co.  KASA 1210 100 Eik City, Okia.                                    |
|          | Victorino Lopez Hontanon.  |   | E. M. Woody, Casa Grande Hotel.  |
|          | CMHK 1225 50 Cruces, Cuba.<br>Virgilio Villaneuva Fernandez.             |   | KBPS 1420 100 Portland, Ors. Benson Polytechnic School   |
|          | CMHL 1290 20 Cientuegos, Cuba.   |   | KBTM 1200 100 Jonesboro, Ark.  |
| 1        | Oscar Zayas, San Carlos 143.<br>CMHW 1200 100 Cienfuegos, Cuba.          | - | Jay P. Beard.<br>KCMC 1420 100 Texarkana, Ark.   |
|          | San Carlos No. 106   |   | M. P. Mims, Box 865.   |
|          | CMJC 1382 150 Camaguey, Cuba.<br>Feliciano Isaac, Cisneros y G. Gomes.   |   | KCRC 1370 100 Enid, Okia.<br>Enid Radiophone Co.   |
|          | ] гоными ками, Опистов у С. Соппел.                                      |   | 1  |

|          |  | VEDI 1010 100 P. III   |
|----------|--|--|
|          | KCRJ 1310 100 Jerome, Ariz.<br>Chas. C. Robinson, Drawer D.              | KFPL 1310 100 Dublin, Texas.<br>C. C. Baxter, Box 176                  |
|          | KDB 1500 100 Santa Barbara, Calii  | KFPM 1310 15 Greenville, Texas. New Furniture Co.                      |
|          | Santa Barbara Broadcasters, Ltd.   | KFPW 1210 100 Fort Smith, Ark.   |
|          | KDFN 1440 500 Casper, Wyo. Donald Lewis Hathaway.                        | Southwestern Hotel Co.   |
|          | KDKA 980 50000 Pittsburgh, Pa.   | KFPY 1340 1000 Spokane, Wash.<br>Symons Broadcasting Co.               |
|          | Westinghouse Electric & Mfg. Co. KDLR 1210 100 Devils Lake, N. D.        | KFQD 600 250 Anchorage, Alaska   |
|          | KDLR, Inc., 1025 3rd Street.   | Anchorage Radio Club, Inc.  KFRC 610 1000 San Francisco, Calif.        |
|          | KDYL 1290 1000 Salt Lake City, Utab.<br>Intermountain Broadcasting Corp. | Don Lee, Inc.  |
|          | KECA 1430 1000 Los Angeles, Calif.                                       | KFRU 630 500 Columbia, Mo.<br>KFRU, Inc., 9th and Elm Sts.             |
|          | Earle C. Anthony, Inc. KELW 780 500 Burbank, Calif.                      | KFSD 600 1000 San Diego Calif.   |
|          | Magnolia Park, Ltd., 3702 Magnolia<br>KERN 1200 100 Bakersfield, Calif.  | Airfan Radio Corp., Ltd.  KFSQ 1120 500 Los Angeles, Calif.            |
|          | Bee Bakersfield Broadcasting Co.   | Echo Park Evangelistic Assn.   |
|          | KEX 1180 5000 Portland, Ore.<br>National Broadcasting Co.                | KFUO 550 500 St. Louis, Mo. Evangelical Lutheran Church.               |
|          | KFAB 770 5000 Lincoln, Neb.  | KFVD 1000 250 Los Angeles, Calif.                                      |
|          | KFAB Broadcasting Co.  | E. L. Cord, 645 S. Mariposa.   |
|          | KFAC 1300 1000 Los Angeles, Calif.<br>E. L. Cord, 645 So. Mariposa.      | KFVS 1210 100 Cape Girardeau, Me.<br>Oscar C. Hirsch, Box 275.         |
|          | KFBB 1280 1000 Great Falls, Mont.  | KFWB 950 1000 Hollywood, Calif.  |
|          | Buttrey Broadcast, Inc.<br>KFBI 1050 5000 Abilene, Kans.                 | Warner Bros. Motion Pictures, Inc.  KFWI 930 500 San Francisco, Calif. |
| <u> </u> | Farmers & Bankers Life Ins. Co.  | Radio Entertainments, Ltd.   |
|          | KFBK 1310 100 Sacramento, Galif. James McClatchy Publishing Co.          | KFXD 1200 100 Nampa, Idaho.<br>Frank E. Hurt, 1024 12th Ave., S.       |
|          | KFBL 1370 50 Everett, Wash.<br>Leese Bros., 2814 Rucker Ave.             | KFXF 920 500 Denver, Colo.   |
|          | KFDM . 560 500 Beaumont, Texas.  | Colorado Radio Corp.  KFXJ 1200 100 Grand Jet., Cole.                  |
|          | Sabine Broadcasting Co.  KFDY 550 500 Brookings, S. D.                   | Western Slope Broadcasting Co.   |
|          | South Dakota State College.  | KFXM 1210 100 San Bernardino, Call<br>Lee Bros. Broadcasting Co.       |
|          | KFEL 920 500 Denver, Colo.<br>Eugene P. O'Fallon, Inc.                   | KFXR 1810 100 Oklahoma City, Okla                                      |
|          | KFEQ 880 2500 St. Joseph, Mo.  | Exchange Avenue Baptist Church.  KFYO 1310 100 Lubbock, Texas.         |
|          | Scroggin & Co. Bank<br>KFGQ 1310 100 Boone, lowa.                        | Kirksey Bros., Hotel Lubbock.  |
|          | Boone Biblical College.  | Mayer Broadcasting Co.   |
|          | KFH 1300 1000 Wichita, Kans.<br>Radio Station KFH Co.                    | KGA 1470 5000 Spokane, Wash.<br>Northwest Broadcasting Co., Inc.       |
|          | KFI 640 50000 Los Angeles, Calif.  | KGAR 1370 100 Tucson, Ariz,  |
| •        | Earle C. Anthony, Inc. KFIO 1120 100 Spokane, Wash,                      | Tucson Motor Service Co.  KGB 1330 1000 San Diego, Calif.              |
|          | Spokane Broadcasting Corp.   | KGB 1330 1000 San Diego, Calit. Don Lee Broadcasting System            |
|          | KFIZ 1420 100 Fond du Lac, Wis.<br>Reporter Printing Co.                 | KGBU 900 500 Ketchikan, Alaska.<br>Alaska Radio & Service Co., Inc.    |
|          | KFJB 1200 100 Marshalltown, lowa.  | KGBX 1810 100 Springfield, Me.   |
|          | Marshall Electric Co. KFJI 1210 100 Klamath Falls, Ore.                  | KGBX, Inc.   |
|          | KFJI Broadcasters, Inc., Willard Hotel.                                  | KGBZ 930 500 York, Neb.<br>KGBZ Broadcasting Co., 715 Grant Ave.       |
|          | KFJM 1370 100 Grand Forks, N. D.<br>University of North Dakota.          | KGCA 1270 100 Decorah, lowa<br>Charles W. Greenley                     |
|          | KFJR 1300 500 Portland, Ore.   | KQCR 1210 100 Watertown, S. D.   |
|          | Ashley C. Dixon-KFJR, Inc. KFJZ 1370 100 Fort Worth, Texas.              | Greater Kampeska Radio Corp.   |
|          | Fort Worth Broadcasters, Inc.  | KGCU 1240 250 Mandan, N. D.<br>Mandan Radio Assn.                      |
|          | KFKA 880 500 Greeley, Colo.<br>Mid-Western Radio Corp.                   | KGCX 1310 100 Wolf Point, Mont.  |
|          | KFKU 1220_ 500 Lawrence, Kans.   | E. E. Krebsbach.  KGDE 1200 100 Fergus Falls, Minn.                    |
| L        | University of Kansas.  | C. L. Jaren.   |
|          | KFLV 1410 500 Rockford, III.<br>Rockford Broadcasters, Inc.              | KGDM 1100 250 Stockton, Calif.<br>E. F. Peffer, 42 S. Calif. St.       |
|          | KFNF 890 500 Shenandoah, Iowa.   | KGDY 1840 250 Huron, S. D.   |
|          | Henry Field Co.  KFOR 1210 100 Lincoln, Neb.                             | Voice of S. D., Inc., 347 Dakota Ave.  KGEK 1200 100 Yuma, Cole.       |
|          | Howard Shuman  | Elmer G. Beehler, 109 W. 2nd St.                                       |
|          | KFOX 1250 1000 Long Beach, Calif.<br>Nicholas & Warinner, Inc.           | KGER 1360 1000 Long Beach, Call.<br>Consolidated Broadcasting Co.      |
| لينسسسا  |  | Componence Producesting Co.  |

|          | KGEZ 1810 100 Kalispell, Mont.   |          | KIDO 1850 1000 Boise, Idaho.  |
|----------|--|----------|---|
| <b>—</b> | Donald C. Treloar, Box 1.  KGFF 1420 100 Shawnee, Okla.                  | <u> </u> | C. G. Phillips & Frank L. Hill.<br>KIDW 1420 100 Lamar, Colo.         |
|          | KGFF 1420 100 Shawnee, Okla.<br>KGFF Broadcasting Co., Inc.              |          | Lamar Broadcasting Co., Box 688                                       |
| $\Box$   | KGFG 1370 100 Oklahoma City, Okla.                                       |          | KIEM 1210 100 Eureka, Calif.  |
|          | Oklahoma Broadcasting Co., 1113 N. Broadway                              |          | Harold H. Hanseth, Vance Hotel.                                       |
|          | KGFI 1500 100 Corpus Christi, Texas.                                     |          | KIEV 850 100 Glendale, Calif.   |
|          | Eagle Broadcasting Co., Inc. KGFJ 1200 100 Los Angeles, Calif.           |          | Cannon System, Ltd., Glendale Hotel.                                  |
|          | KGFJ 1200 100 Los Angeles, Calif.<br>Ben S. McGlashan, 1417 S. Figueroa. |          | KIFH 1310 100 Juneau, Alaska<br>Juneau Broadcasting Co.               |
|          | KGFK 1500 100 Moorhead, Minn.  |          | KIT 1810 100 Yakima, Wash.  |
|          | Red River Broadcasting Co., Inc.   |          | Valley Broadcasters, Inc.   |
|          | KGFL 1370 100 Roswell, N. M.   |          | KJBS 1070 100 San Francisco, Calif.                                   |
|          | KGFL, Inc., 507 N. Main St.<br>KGFW 1310 100 Kearney, Neb.               | <u> </u> | Julius Brunton & Sons Co.  KJR 970 5000 Seattle, Wash.                |
|          | Central Nebraska Broadcasting Corp.                                      |          | Fishers Blend Station, Inc.   |
|          | KGFX 630 200 Pierre, S. D.   |          | KLCN 1290 100 Blytheville, Ark.                                       |
|          | Dana McNeil, 510 Summit Ave.   | <u> </u> | C. L. Lintzenich, Main and Division St.                               |
|          | KGGC 1420 100 San Francisco, Callf.                                      |          | KLO 1400 500 Ogden, Utah.<br>Interstate Broadcasting Co.              |
|          | Golden Gate Broadcasting Co. KGGF 1010 500 Coffeyville, Kans.            |          | KLPM 1240 250 Minot, N. D.  |
|          | Hugh J. Powell and Stanley Platz.  |          | John B. Cooley.   |
|          | KGGM 1230 250 Albuquerque, N. M.   |          | KLRA 1390 1000 Little Rock, Ark.                                      |
|          | New Mexico Broadcasting Co.  |          | Arkansas Broadcasting Co.   |
|          | KGHF 1320 250 Pueblo, Colo.  |          | KLS 1440 250 Oakland, Calif.  |
|          | C. P. Ritchie & Geo. J. Ikelman<br>KGHI 1200 100 Little Rock, Ark.       |          | Warner Bros., 2201 Telegraph Ave.  KLUF 1370 100 Galveston, Texas.    |
|          | KQHI 1200 100 Little Rock, Ark.<br>Lloyd Judd Co., Marion Hotel.         |          | Geo. R. Clough, 3327 Ave. P.  |
|          | KGHL 950 1000 Billings, Mont.  |          | KLX 880 1000 Oakland, Calif.  |
|          | Northwestern Auto Supply Co.   |          | Tribune Building Co.  |
|          | KGIR 1360 500 Butte, Mont.   |          | KLZ 569 1000 Denver, Colo.  |
|          | KGIR, Inc., 121 W. Broadway.<br>KGIW 1420 100 Alamosa, Colo.             |          | Reynolds Radio Co., Inc. KMA 930 500 Shenandoah, Iowa                 |
| 1 1      | Leonard E. Wilson, 326 N. Commercial                                     |          | Earl E. May Seed & Nursery Co.  |
|          | KGIX 1420 100 Las Vegas, Nev.  |          | KMAC 1870 100 San Antonio, Texas.                                     |
|          | J. M. Heaton. Box 656.   |          | W. W. McAllister, Blue Bonnet Hotel.                                  |
|          | KGKB 1500 100 Tyler, Texas.  |          | KMBC 950 1000 Kansas City, Me.<br>Midland Broadcasting Co.            |
|          | East Texas Broadcasting Co. KGKL 1370 100 San Angelo, Texas.             |          | KMED 1210 100 Medford, Ore.   |
|          | KGKL, Inc., St. Angelus Hotel.   |          | Mrs. W. J. Virgin, Sparta Bldg.                                       |
|          | KGKO 570 250 Wichita Falls, Texas.                                       |          | KMJ 580 500 Fresno, Calif.  |
|          | Wichita Falls Broadcasting Co.   |          | James McCiatchy Co.<br>KMLB 1200 100 Monree, La.                      |
| 1 1      | KGKY 1500 100 Scottsbluff, Neb.<br>Hilliard Co., Inc., 1517½ Broadway.   | ]        | KMLB 1200 100 Monree, La.<br>Liners Broadcasting Station, Inc.        |
|          | KGMB 1320 250 Honolulu, T. H.  |          | KMMJ 740 1900 Clay Center, Nab.                                       |
|          | Honolulu Broadcasting Co., 119 Merchant St.                              |          | The M. M. Johnson Co.   |
|          | KGNF 1480 500 North Platte, Neb.   |          | KMO 1330 250 Tacoma, Wash.  |
|          | Great Plains Broadcasting Co. KGNO 1340 250 Dodge City, Kans.            |          | KMO, Inc., Hotel Winthrop.  KMOX 1090 50000 St. Louis, Mo.            |
|          | KGNO Broadcasting Station  |          | The Voice of St. Louis, Inc.  |
|          | KGO 790 7500 San Francisco, Calif.                                       |          | KMPC 710 580 Beverly Hitts, Calls,                                    |
|          | National Broadcasting Co., Inc.  |          | Beverly Hills Broadcasting Corp.                                      |
|          | KGRS 1410 1000 Amarillo, Texas.<br>E. B. Gish, Bellaire Park.            |          | KMTR 570 500 Hollywood, Calif.  |
| $\vdash$ | KOU 750 9500 Honolulu T H  |          | KMTR Radio Corp., 915 N. Formosa Ave.<br>KNOW 1500 100 Austin. Texas. |
|          | Advertiser Publishing Co., Ltd.  |          | Southwest Broadcasting Co.  |
|          | KGVO 1200 100 Missoula, Mont.  |          | KNX 1050 25000 Hollywood, Calif.                                      |
|          | Mosbys, Inc., 240 N. Higgins.  |          | Western Broadcast Co., Inc.   |
|          | KGW 620 1000 Portland, Ore.  |          | KO'A 830 12,500 Denver, Colo.   |
|          | Oregonian Publishing Co. KGY 1219 100 Olympia, Wash.                     |          | General Electric Co., 1370 Krameria St.                               |
|          | KGY, Inc., 11th and Capitol Way.   |          | KOAC 550 1808 Corvallis, Ore.<br>Oregon State Agricultural College.   |
|          | KHJ 900 1000 Los Angeles, Calif.   |          | KOB 1180 10000 Albuquerque, N. M.                                     |
|          | Don Lee Broadcasting System.   |          | Albuquerque Journal, Box 667.   |
|          | KHQ 590 1900 Spokane, Wash.  |          | KOH 1380 500 Reno, Nev.   |
|          | Louis Wasmer, Inc.<br>KICA 1370 100 Clovis, N. M.                        |          | The Bee, Inc.   |
|          | Southwest Broadcasting Co.   |          | KOIL 1260 1000 Council Bluffs, Iewe. Mona Motor Oil Co.               |
|          | KICK 1420 100 Carter Lake, lowa.   |          | KOIN 940 1900 Portland, Ore,  |
|          | Red Oak Radio Corp.  |          | KOIN, Inc., New Heathman Hotel.                                       |
|          | KID 1320 250 Idaho Falls, Idaho.   |          | KOL 1270 1000 Seattle, Wash.  |
| Li       | KID Broadcasting Co., Inc.   |          | Seattle Broadcasting Co.  |

| 1           | KOMA 1480 5000 Oklahoma City, Okla.<br>National Radio Manufacturing Co.        | KTFI 1240 1000 Twin Falls, Idahe.                                       |
|-------------|--|---|
|             | KOMO 920 1060 Seattle, Wash.<br>Fishers Blend Station, Inc.                    | Radio Broadcasting Corp.  KTHS 1040 10000 Hot Springs, Ark.             |
|             | Fishers Blend Station, Inc.  | Chamber of Commerce.  |
|             | KONO 1370 100 San Antonio, Texas. Mission Broadcasting Co., St. Anthony Hotel. | KTM 780 500 Los Angeles , Calif.  |
|             | KOOS 1870 100 Marshfield, Ore.   | Pickwick Broadcasting Corp., Ltd.                                       |
| 1           | H. H. Hanseth, Hall Bldg.  | KTRH 1120 1000 Houston, Texas.<br>KTRH Broadcasting Co., Rice Hotel.    |
|             | KORE 1420 100 Eugene, Ore.<br>Frank L. Hill and Curtis G. Phillipps.           | KTSA 1280 1000 San Antonio, Texas.                                      |
|             | KOY 1390 500 Phoenix. Ariz.  | Southwest Broadcasting Co.  |
| 1           | KOY 1390 500 Phoenix, Ariz.<br>Nielsen Radio & Sporting Goods Co.              | KTSM 1810 100 El Paso, Texas.   |
|             | KPCB 650 100 Seattle, Wash,  | Tri-State Broadcasting Co., Inc.  KTUL 1400 250 Tulsa, Okla,            |
|             | Queen City Broadcasting Co.  | J. T. Griffin   |
| 1           | KPJM 1500 100 Prescott, Ariz.<br>Frank Mauthe, Box 852                         | KTW 1220 1000 Seattle, Wath.  |
| <del></del> | KPO 680 50000 San Francisco, Calif.  | First Presbyterian Church.  KUJ 1870 100 Walla Walla, Wash,             |
| 1           | National Broadcasting Co., Inc.  | KUJ, Inc., Marcus Whitman Hotel.  |
|             | KPOF 880 500 Denver, Colo.   | KUMA 1420 100 Yuma, Ariz,   |
| -           | Pillar Of Fire, 1845 Champa St.  KPPC 1210 50 Pasadena, Calif.                 | Dr. A. H. Schermann, Box 267.   |
| 1           | Pasadena Presbyterian Church.  | KUOA 1280 1000 Fayetteville, Ark.<br>KUOA, Inc., Washington Hotel.      |
|             | KPQ 1500 100 Wenatchee, Wash.  | KUSD 890 500 Vermillion, S. D.  |
| <u> </u>    | Wescoast Broadcasting Co.  KPRC 920 1000 Houston, Texas.                       | University of South Dakota.   |
| 1           | Houston Printing Co.   | KVI 570 500 Tacoma, Wash.<br>Puget Sound Broadcasting Co., Tacoma Hotel |
|             | KQV 1380 500 Pittsburgh, Pa.   | KVL 1870 100 Seattle, Wash.   |
| <u></u>     | KQV Broadcasting Co., Investment Bldg.   | KVL, Inc., 5th and Virginia St.   |
|             | KQW 1010 500 San Jose, Calif. Pacific Agricultural Foundation, Ltd.            | KVOA 1260 500 Tucson, Ariz.   |
| -           | KRE 1870 100 Berkeley, Calif.  | Arizona Broadcasting Co., Inc.  |
| <u>L</u>    | First Congregational Church.   | KVOO 1140 25000 Tulsa, Okla.<br>Southwestern Sales Corp.                |
|             | KREG 1500 100 Santa Ana, Calif. The Voice of the Orange Empire, Inc.           | KVOR 1270 1000 Colorado Springs, Cela                                   |
|             | KRGV 1260 500 Harlingen, Texas.  | S. H. Patterson   |
| 1           | KRGV, Inc.   | KVOS, Inc., Bellingham Hotel.   |
|             | KRKD 1120 500 Los Angeles, Calif   | KWCR 1420 100 Cedar Rapids, lowe.                                       |
| Ĺ           | Fireside Broadcasting Corp.  KRLD 1040 10000 Dallas, Texas.                    | Cedar Rapids Broadcast Co.  |
| 1           | KRLD Radio Corp., Adolphus Hotel.  | KWEA 1210 100 Shreveport, La. International Broadcasting Corp.          |
|             | KRMD 1310 100 Shreveport, La.  | KWFV 1210 100 Hilo, Hawali  |
| <u> </u>    | Radio Station KRMD, Inc.  KROW 930 500 Oakland, Calif.                         | Hilo Broadcasting Co., Ltd.   |
| 1           | KROW 930 500 Oakland, Calif. Educational Broadcasting Corp.                    | KWG 1200 100 Stockton, Calif.<br>McClatchy Newspapers, Inc.             |
|             | KRSC 1120 100 Seattle, Wash.   | KWJJ 1060 500 Portland, Ore.  |
|             | Radio Sales Corp., Washington Athletic Club.                                   | KWJJ Broadcast Co., Inc., 328 Salmon St.                                |
| 1           | KSAC 580 500 Manhattan, Kans.<br>State College of Agriculture.                 | KWK 1850 1000 St. Louis, Mo.  |
|             | KSCJ 1330 1000 Sioux City, Iowa.   | Thomas Patrick, Inc., Hotel Chase.  KWKC 1370 100 Kansas City, Me.      |
|             | Perkins Bros. Co., 415 Douglas St.   | Wilson Duncan Broadcasting Co.  |
|             | KSD 550 500 St. Louis, Mo.<br>Pulitzer Publishing Co.                          | KWKH 850 10000 Shreveport, La.  |
| -           | KSEI 890 250 Pocatello, Idaho.   | International Broadcasting Corp.  |
|             | Radio Service Corp., 141 S. 6th Ave.   | KWLC 1270 100 Decorah, Iowa.<br>Luther College.                         |
|             | KSL 1130 50000 Salt Lake City, Utah.   | KWSC 1220 1000 Pullman, Wash.   |
| <u> </u>    | Radio Service Corp. of Utah.  KSO 1370 100 Des Moines, Iowa.                   | State College of Washington.  |
|             | Des Moines Register & Tribune.   | KWTO 560 500 Springfield, Mo.<br>KGBX Inc.                              |
|             | KSOO 1110 1000 Sioux Falls, S. D.  | KWWG 1280 500 Brownsville, Texes.                                       |
|             | Jos. Henkin, 1613 S. Duluth Ave.   | Frank P. Jackson.   |
|             | KSTP 1460 10000 St. Paul, Minn.<br>National Battery Broadcasting Co.           | KXA 760 250 Seattle, Wash.  |
| <del></del> | KSUN 1200 100 Lowell, Ariz.  | American Radio Tel. Co., 218 Bigelow Bldg.  KXL 1420 100 Portland, Ore. |
|             | Copper Electrical Co.  | KXL Broadcasters, 269 Pine St.  |
|             | KTAB 580 1000 San Francisco, Calif.  | KXO 1500 100 El Centro, Calif.  |
| ├           | Associated Broadcasters, Inc.  KTAR 620 500 Phoenix, Ariz.                     | E. R. Irey and F. M. Bowles.  |
|             | KTAR Broadcasting Co.  | KXRO 1310 100 Aberdeen, Wash.<br>KXRO, Inc., Hotel Morck.               |
|             | KTAT 1240 1000 Fort Worth, Texas.  | KXYZ 1440 250 Houston, Texas.   |
|             | Southwest Broadcasting Co.   | Harris County Broadcast Co.   |
|             | KTBS 1450 1000 Shreveport, La. Tri-State Broadcasting System.                  | KYA 1230 1000 San Francisce, Celli. Pacific Broadcasting Corp.          |
|             | 1 11-0000 Prostosseme System.  | racine broadcasting Corp.   |

|   | WACO 1420 100 Waco, Texas.<br>Southwest Broadcasting Co.                   | WBTM 1370 100 Danville, Va. Piedmont Broadcasting Corp.                  |
|---|--|--|
|   | WABI 1200 100 Bangor, Maine.<br>First Universalist Society.                | Station WBT, Inc., Wilder Bldg.  |
|   | Atlantic Broadcasting Corp.  | Broadcasting Service Organization, Inc.                                  |
|   | Omaha Grain Exchange.<br>WABC 880 50000 New York, N. Y.                    | Louis G. Baltimore, 16 N. Main.<br>WBSO 920 500 Babson Park, Mass.       |
|   | Bremer Broadcasting Corp., 50 Journal Sq                                   | WBRE 1310 100 Wilkes-Barre, Pa.  |
|   | WAAT 940 800 Jersey City, N. J.  | WBRC 930 500 Birmingham, Ala.<br>Frank M. King, Receiver.                |
|   | WAAF 920 500 Chicago, III.<br>Chicago Daily Drovers Journal.               | WBOW 1310 100 Terre Haute, Ind.<br>Banks of Wabash, Inc., 24½ S. 6th.    |
|   | WAAB 1410 500 Boston, Mass.<br>Bay State Broadcasting Corp., 1 Winter Pl.  | Atlantic Broadcasting Corp.  |
|   | Wesley United Church, Box 157.   | Standard Cahill Co., Inc. WBOQ 860 50000 New York, N. Y.                 |
|   | Dominion Broadcasting Co., Ltd., Box 1355.  VOWR 900 500 St. John's, N. F. | North Carolina Broadcasting Co., Inc. WBNX 1350 250 New York, N. Y.      |
|   | Cyril L. Parkins. VONF 1195 400 St. John's, N. F.                          | WBIG 1440 500 Greensboro, N. C.  |
|   | VOKW 1085 80 St. John's, N. F.   | WBHS 1200 100 Huntsville, Ala.<br>Radio Station WBHS, Inc.               |
|   | VOQY 950 75 St. John's, N. F.<br>Newfoundland Broadcasting Co.             | WBEO 1310 100 Marquette, Mich.<br>Lake Superior Broadcasting Co., Inc.   |
|   | VOAS 810 100 St. John's, N. F.<br>Ayre & Sons, Ltd.                        | WBEN 800 1000 Buffalo, N. Y.<br>WBEN, Inc. (Buffalo Evening News.)       |
|   | VOAC 800 40 St. John's, Nfld.  | James E. Davidson, Hotel Wenonah.  |
|   | J. A. Marquis, P. O. Box 57  | C. L. Carrell. WBCM 1410 500 Bay City, Mich.                             |
|   | Canadian Marconi Co., Ltd.   | Samuel D. Reeks, Marberc Hotel.  WBBZ 1200 100 Ponca City, Okla.         |
|   | VAS 685 2000 Glace Bay, N. S.  | Peoples Pulpit Assn.  WBBX 1200 160 New Orleans, La.                     |
|   | TIXA 614 7.5 San Jose, C. R.   | WBBR 1300 1000 Brooklyn, N. Y.   |
|   | TIVL 869 80 San Jose, C. R.  | WBBM 770 25000 Chicage, Ill. WBBM Broadcasting Corp., Wrlgley Bldg.      |
|   | TITV 999 7.5 San Jose, C. R.   | Grace Covenant Presbyterian Church.                                      |
|   | TISO 550 250 San Jose, C. R.<br>P. F. Saborio, Apt. 1354                   | Brooklyn Broadcasting Corp.  |
|   | Perry Girton, Apt. 225.  | John H. Stenger, Jr., 70 S. Main St.  WBBC 1400 500 Brooklyn, N. Y.      |
|   | Gonzalo Pinto H. Apt. 225.<br>TIRCA 1100 500 San Jose, C. R.               | Carter Publications, Inc. WBAX 1210 100 Wilkes-Barre, Pa.                |
|   | TIQP 800 75 San Jose, C. R.  | WBAP 800 50000 Fort Worth, Texas.  |
|   | TIGA 1014 30 Cartago, C. R.  | WBAL 1080 10000 Baltimere, Md. Consolidated Gas, Elec. Light & Power Co. |
|   | TIFS 1441 7.5 Cartago, C. R.   | WBAK 1430 1000 Harrisburg, Pa.<br>Commonwealth of Pennsylvania.          |
|   | TIFB 714 30 San Jose, C. R.  | WBAA 1400 500 West Lafayette, Ind.<br>Purdue University.                 |
|   | TIEP 1450 7.5 San Jose, C. R.  | WAZL 1420 100 Hazleton, Pa.<br>Hazleton Broadcasting Service, Inc.       |
|   | TIEA 838 7.5 San Jose, C. R.   | Pillar of Fire.  |
|   | Government of Costa Rica.  | WFIW, Inc.   |
|   | TICR 912 75 San Jose, C. R.  | Kunsky-Trendle Broadcasting Corp.  WAVE 940 1000 Louisville, Kv.         |
|   | Gobierno de Guatemala. TGX 1380 75 Guatemala City                          | WASH 1270 500 Grand Rapids, Mich.  |
| - | TQW 1350 500 Quatemala, Qua.   | WARD 1400 500 Brooklyn, N. Y.<br>United States Broadcasting Corp.        |
|   | RUS 664 500 San Salvador, E. S.<br>Republic of El Salvador.                | WAPI 1140 5000 Birmingham, Ala.<br>WAPI Broadcasting Corp.               |
|   | NAA 690 1000 Arlington, Va.<br>United States Navy.                         | WAML 1310 100 Laurel, Miss.<br>Southland Radio Corp.                     |
| 1 | LR5 830 20000 Buenos Aires, Arg.   | R. C. Hammett, 1200 Noble St.  |
|   | KZRM 618.5 60008 Manila, P. I.<br>Erlanger and Galinger, Inc. (KZEG)       | WALR 1210 100 Zanesvilla, Ohie.<br>WALR Broadcasting Corp.               |
|   | Westinghouse Elec. & Mfg. Co.  | Associated Radiocasting Corp.  |
|   | KYW 1020 10000 Chicago, III.   | WAIU 640 500 Columbus, Ohie.   |

| WCAC 600 250 Storrs, Conn.  | WDEV 550 500 Waterbury, Vt.   |
|---|---|
| Connecticut Agricultural College.  WCAD 1220 500 Canton, N. Y.            | Harry C. Whitehill, Stowe St.  WDGY 1180 1000 Minneapolis, Minn.            |
| St. Lawrence University.  | Dr. Geo. W. Young, 909 W. Broadway.   |
| WCAE, Inc., Sun-Telegraph.  | WDOD 1280 1000 Chattanooga, Tenn.<br>WDOD Broadcasting Corp., Hotel Patten. |
| WCAH 1430 500 Columbus, Ohie.   | WDRC 1330 1000 Hartford, Conn.<br>WDRC, Inc., Corning Bldg., 11 Asylum St.  |
| International Bible Students Assn.  WCAL 1250 1000 Northfield, Minn.      | WDSU 1250 1000 New Orleans, La.   |
| St. Olaf College.   | Jos. H. Uhalt, On Hotel DeSoto.   |
| WCAM 1280 500 Camden, N. J.<br>City of Camden, City Hall.                 | WDZ 1070 100 Tuscola, III.<br>James L. Bush.                                |
| WCAO 600 250 Baltimore, Md.   | WEAF 660 50000 New York, N. Y.  |
| Monumental Radio Co. WGAP 1280 500 Asbury Park, N. J.                     | National Broadcasting Co., Inc. WEAN 780 500 Providence, R. I.              |
| Radio Industries Broadcast Co.  | Shepard Broadcasting Service, Inc.  |
| WCAT 1200 100 Rapid City S. D.<br>South Dakota State School of Mines.     | WEBC 1290 1000 Superior, Wis.<br>Head of the Lakes Broadcasting Co.         |
| WCAU 1170 50000 Philadelphia, Pa.   | WEBQ 1210 100 Harrisburg, III.  |
| WCAU Broadcasting Co., 1622 Chestnut. WGAX 1200 100 Burlington, Vt.       | Harrisburg Broadcasting Co.  WEBR 1310 100 Buffalo, N. Y.                   |
| Burlington Dally News, Inc.   | Howell Broadcasting Co., Inc., 735 Main.                                    |
| WCAZ 1070 50 Carthage, IH.<br>Superior Broadcasting Service, Inc.         | WEDC 1210 100 Chicago, III.<br>Emil Denemark, 3860 Ogden Ave.               |
| WCBA 1440 250 Allentown, Pa.  | WEED 1420 100 Greenville, N.O.  |
| B. Bryan Musselman, 39-41 10th St.  WGBD 1080 5000 Zion, III.             | Wm. Avera Wynne. WEEI 590 1000 Boston, Mass.                                |
| Wilbur Glenn Voliva.  | 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, III.   | WEHC 1350 500 Charlottesville, Ve.  |
| WCBS, Inc., 208½ S. 5th.  WCCO 810 50000 Minneapolis, Minn.               | Community Brdestg. Corp. WEHS 1420 100 Cicero, III.                         |
| Northwestern Broadcasting, Inc.   | WEHS, Inc., 6138 W. 22nd St.  |
| WCFL 970 1500 Chicago, III.<br>Chicago Federation of Labor.               | WELL 1420 50 Battle Creek, Mick.<br>Enquirer News Co., 7 N. McCamly St.     |
| WCKY 1490 5000 Covington, Ky.<br>L. B. Wilson, Inc.                       | WENC 1420 100 Americus, Ga.<br>Americus Broadcast Corp.                     |
| WCLO 1200 100 Janesville, Wis.  | WENR 870 50000 Chicago, III.  |
| WCLO Radio Corp.  | Great Lakes Broadcasting Co. WESQ 1040 1000 Elmira, N. Y.                   |
| WCLS, Inc., 301 E. Jefferson St   | Elmira Star Gazette, Inc.   |
| WCNW 1500 100 Brooklyn, N. Y.<br>Arthur Faske, 1525 Pitkin Ave.           | WEVD 1300 500 New York, N. Y.<br>Jewish Daily Forward, Hotel Claridge.      |
| WCOA 1840 500 Pensacola, Fla.   | WEW 760 1000 St. Louis, Me.   |
| Pensacola Broadcasting Co. WCOC 880 500 Meridian, Miss.                   | St. Louis University, 221 N. Grand Blvd.<br>WEXL 1310 50 Royal Oak, Mich.   |
| Mississippi Broadcasting Co., Inc.  | Royal Oak Broadcasting Co.  |
| WCRW 1210 100 Chicago, III.<br>Clinton R. White, 2756 Pine Grove Ave.     | WFAA 800 50000 Dallas, Texas. Morning News and Journal                      |
| WCSC 1360 500 Charleston, S. C.   | WFAB 1300 1000 New York, N. Y.  |
| South Carolina Broadcasting Co., Inc.  WCSH 940 1000 Portland, Me.        | Fifth Avenue Broadcasting Corp.  WFAM 1200 100 South Bend, Ind.             |
| 1   Congress Square Hotel Co. 157 High                                    | South Bend Tribune, 200 W. Colfax.  |
| WDAE 1220 1000 Tampa, Fla. Tampa Publishing Co., Tampa Terrace.           | WFAS 1210 100 White Plains, N. Y. Westchester Broadcasting Corp.            |
| WDAF 610 1000 Kansas City, Me.  | WFBC 1200 100 Greenville, S. C.   |
| Kansas City Star Co. WDAG 1410 1000 Amerillo, Texas.                      | Greenville News-Piedmont Co.  WFBE 1200 100 Cincinnati, Ohie.               |
| National Radio & Broadcasting Corp.                                       | WFBE, Inc., Hotel Sinton.   |
| WDAH 1310 100 El Paso, Texas. Fri-State Broadcasting Co., Inc.            | WFBQ 1310 100 Altoona, Pa. Gable Broadcasting Co. 12th Av. & 13th St.       |
| WDAS 1370 100 Philadeiphia, Pa.   | WFBL 1360 1000 Syracuse, N. Y.  |
| WDAS Broadestg. Co., Inc., Broadwood Hotel.<br>WDAY 940 1000 Fargo, N. D. | Onondaga Radio Broadcasting Corp.  WFBM 1230 1000 Indianapolis, Ind.        |
| WDAY, Inc., Black Bldg., 118 Broadway.                                    | Indianapolis Power & Light Co.  |
| WDBJ 930 250 Roanoke, Va.<br>Fimes World Corp., 122 W. Church Ave.        | WFBR 1270 500 Baltimore, Md.<br>Baltimore Radio Show, Inc.                  |
| WDBO 580 250 Orlando, Fla.  | WFDF 1810 100 Flint, Mich.  |
| Orlando Broadcasting Co., Inc. WDEL 1120 250 Wilmington, Del.             | Flint Broadcasting Co. WFDV 1500 100 Rome, Ga.                              |
| WDEL, Inc., 10th and King Sts.  | Rome Broadcasting Corp., 10 3rd Ave.  |

|          | WFEA 1480 500 Manchester, N. H.                                      |          | WHEB 740 250 Portsmouth, N. H. Granite State Broadcasting Corp.       |
|----------|--|----------|---|
|          | New Hampshire Broadcasting Co. WF1 560 500 Philadelphia. Pa.         |          | WHEC 1430 500 Rochester, N. Y.  |
| 1        | WFI Broadcasting Co., 801 Market.                                    |          | WHEC, Inc., 40 Franklin St.   |
|          | WFLA 620 1000 Clearwater, Fla.                                       |          | WHEF 1500 100 Kosciusko, Miss.  |
|          | Florida West Coast Broadcasting Co., Inc.                            |          | Attala Milling & Produce Co. WHET 1870 100 Dothan, Ala.               |
|          | WGAL 1310 100 Lancaster, Pa.<br>WGAL, Inc., 8 W. King St.            |          | Troy Broadcasting Co.   |
|          | WGAR 1450 600 Cleveland, Ohio.                                       |          | WHFC 1420 100 Cicero, III.  |
|          | WGAR Broadcasting Co., Hotel Statler.                                |          | WHFC, Inc., 6138 W. 22nd St.  |
|          | WGBB 1210 100 Freeport, N. Y.  |          | WHIS 1410 250 Bluefield, W. Va. Daily Telegraph Printing Co., Inc.    |
|          | H. H. Carman, 64 S. Grove St.<br>WGBF 630 500 Evansville, Ind.       |          | WHK 1390 1000 Cleveland, Ohie.  |
|          | Evansville*On the Air, Inc.  |          | Radio Air Service Corp.   |
|          | WGBI 880 250 Scranton, Pa.   |          | WHN 1010 250 New York, N. Y.<br>Marcus Loew Booking Agency.           |
|          | Scranton Broadcasters, Inc.  WGCM 1210 100 Mississippi City, Miss.   |          | WHOM 1450 250 Jersey City, N. J.                                      |
|          | Great Southern Land Co., Guifport, Miss.                             |          | New Jersey Broadcasting Corp.   |
|          | WGCP 1250 1000 Newark, N. J.   |          | WHP 1480 500 Harrisburg, Pa.  |
| <u> </u> | May Radio Broadcasting Co.   |          | WHP, Inc., Harrisburg Telegraph.                                      |
| ŀ        | WGES 1380 500 Chicago, III.<br>Oak Leaves Broadcasting Station, Inc. |          | WIAS 1810 100 Ottumwa, Iowa.<br>Iowa Broadcasting Co., Hotel Ottumwa. |
|          | WGH 1310 100 Newport News, Va.                                       |          | WIBA 1280 500 Madison, Wis.   |
|          | Hampton Roads Broadcasting Corp.                                     |          | Badger Broadcasting Co., Inc.   |
|          | WGL 1370 100 Fort Wayne, Ind.<br>F. C. Zieg, 213 W. Main St.         |          | WIBG 970 100 Glenside, Pa.<br>WIBG, Inc., Keswick Bldg.               |
|          | WGLC 1870 100 Hudson Falls, N. Y.                                    |          | WIBM 1370 100 Jackson, Mich,<br>WIBM, Inc., Otsego Hotel.             |
|          | O. T. Griffin & G. F. Bissell.                                       |          | WIBM, Inc., Otsego Hotel.   |
|          | WGN 720 50000 Chicago, III.  |          | WIBU 1210 100 Poynette, Wie.<br>Wm. C. Forrest, R. F. D. No. 3.       |
|          | WGN, Inc., Tribune Tower.  WGNY 1210 100 Chester, N. Y.              |          | WIBW 580 1000 Topeka, Kans.   |
|          | Peter Goelet (Orange County).  |          | Topeka Broadcasting Assn. Inc.  |
|          | WGR 550 1000 Buffalo, N. Y.  |          | WIBX 1200 100 Utica, N. Y.  |
|          | Buffalo Broadcasting Corp.   | <u> </u> | WIBX, Inc., 1st Natl. Bank Bldg.                                      |
|          | WGST 890 250 Atlanta, Ga.<br>Georgia School of Technology.           | 1        | Shepard Broadcasting Service, Inc.                                    |
|          | WGY 790 50000 Schenectady, N. Y.                                     |          | WIL 1200 100 St. Louis, Me. Missouri Broadcasting Corp.               |
|          | National Broadcasting Co., Inc.                                      |          | WILL 890 250 Urbana, III.   |
|          | WHA 940 1000 Madison, Wis.<br>University of Wisconsin.               |          | University of Illinois.   |
|          | WHAD 1120 250 Milwaukee, Wis.  |          | WILM 1420 100 Wilmington, Del.<br>Delaware Broadcasting Co., Inc.     |
|          | Marquette University.  |          | WIND 580 1000 Gary, Ind.  |
|          | WHAM 1150 50000 Rochester, N. Y.<br>Stromberg-Carlson Tel. Mfg. Co.  | 1        | Johnson-Kennedy Broadcasting Corp.                                    |
|          | WHAS 820 50000 Louisville, Ky.                                       |          | WINS 1180 500 New York, N. Y.   |
|          | Courier Journal & Louisville Times.                                  |          | American Radio News Corp.  WIOD 1800 1000 Miami, Fig.                 |
|          | WHAT 1310 100 Philadelphia, Pa.<br>Curtis-Martin Newspapers, Inc.    |          | Isle of Dreams Broadcasting Corp.                                     |
|          | WHAZ 1800 500 Troy, N. Y.  |          | WIP 610 500 Philadelphia, Pa.   |
|          | Rensselaer Polytechnic Institute.                                    |          | Pennsylvania Broadcasting Co. WIS 1010 590 Columbia, S. O.            |
|          | WHB 860 500 Kansas City, Me. WHB Broadcasting Co., Scarritt Bldg.    |          | Station WIS, Inc., 1811 Main St.                                      |
|          | WHBC 1200 100 Canton, Ohio.  |          | WISN 1120 250 Milwaukes, Wis.   |
|          | Edw. P. Graham, 319 Tusc. St., W.                                    |          | American Radio News Corp.   |
|          | WHBD 1870 100 Mount Orab, Ohle.                                      | 1        | WJAC 1310 180 Johnstown, Pa.<br>WJAC, Inc., Tribune Bldg. Annex.      |
|          | F. P. Moler.<br>WHBF 1210 100 Rock Island, III.                      |          | WJAG 1080 1000 Norfolk, Neb.  |
|          | Rock Island Broadcasting Co.   |          | Norfolk Daily News.   |
|          | WHBL 1410 500 Sheboygan, Wis.  |          | WJAR 890 500 Providence, R. I.<br>Outlet Co., Weybossett St.          |
|          | Press Publishing Co. WHBQ 1370 100 Memphia, Tenn.                    |          | WJAS 1290 1000 Pittsburgh, Pa.  |
|          | Broadcasting Sta. WNBQ, Inc., Hotel Claridge.                        |          | Pittsburgh Radio Supply House.  |
|          | WHBU 1210 100 Anderson, Ind.   |          | WJAX 900 1000 Jacksonville, Fiz.                                      |
|          | Anderson Broadcasting Corp.  |          | City of Jacksonville.  WJAY 610 500 Cleveland, Ohie.                  |
|          | WHBY 1200 100 Green Bay, Wis.<br>WHBY, Inc., Bellin Bidg.            |          | Cleveland Radio Broadcasting Corp.                                    |
|          | WHDF 1370 100 Calumet, Mich.   |          | WJBC 1200 100 LaSalle, III.   |
|          | Upper Michigan Broadcasting Co.                                      |          | Kaskaskia Broadcasting Co.<br>WJBI 1210 100 Red Bank, N. J.           |
|          | WHDH 839 1000 Boston, Mass.<br>Matheson Radio Co., 62 Boylston.      |          | Monmouth Broadcasting Co., Inc.                                       |
|          | WHDL 1420 100 Tupper Lake, N. Y.                                     |          | WJBK 1370 60 Detroit, Mich.   |
|          | Tupper Lake Broadcasting Co.   |          | James F. Hopkins, Inc., Curtiss Bldg.                                 |
|          |  |          |   |

| WJBL 1200 100 Decatur, III.   | WLBC 1810 100 Muncle, Ind.   |
|---|--|
| Commodore Broadcasting, Inc.  WJBO 1420 100 Baton Rouge, Le.            | D. A. Burton, Anthony Bldg.  WLBF 1420 100 Kansas City, Kans.                    |
| Baton Rouge Broadcasting Co., Inc.                                      | WLBF Broadcasting Co., Huron Bldg.   |
| WJBW 1200 100 New Griegns, La.<br>C. C. Carlson, 2743 Dumaine St.       | WLBL 900 2500 Stevens Point, Wis. Wisconsin Dept. of Agriculture and Markets.    |
| WJBY 1210 100 Gadsden, Ala.<br>Gadsden Broadcasting Co., 112 N. 8th St. | WLBW 1260 500 Erie, Pa. Broadcasters of Pennsylvania, Inc.                       |
| WJDX 1270 1000 Jackson, Miss.   | WLBZ 620 500 Bangor, Me.   |
| Lamar Life Insurance Co.  WJEJ 1210 100 Hagerstown, Md.                 | Maine Broadcasting Co., Inc., 100 Main. WLEC 1340 250 Portland, Me.              |
| Hagerstown Broadcasting Co., Inc.                                       | Casco Bay Broadcasting Co.   |
| WJEM 990 500 Tupelo, Miss. Britt A. Rogers, Jr.                         | WLEY 1370 100 Lexington, Mass. Albert S. Moffat                                  |
| WJJD 1130 20000 Chicago, III.<br>WJJD, Inc., 201 N. Wells St.           | WLIT 560 500 Philadelphia, Pa.<br>Lit Bros. Broadcasting System, Inc.            |
| WJMS 1420 100 Ironwood, Mich.   | WLS 870 50000 Chicago, III.  |
| WJMS, Inc., St. James Hotel. WJR 750 10000 Detroit, Mich.               | Agricultural Broadcasting Co. WLTH 1400 500 Brocklyn, N. Y.                      |
| WJR, Inc., Fisher Bldg.   | Voice of Brooklyn, Inc.  |
| WJSV 1460 10000 Washington, D. C.<br>Old Dominion Broadcasting Co.      | WLVA 1370 100 Lynchburg, Va. Lynchburg Broadcasting Corp.                        |
| WJTL 1370 100 Atlanta, Ga.<br>Oglethorpe University.                    | WLW 700 50000 Cincinnati, Ohle.  |
| WJW 1210 100 Akron, Ohlo,   | Crosley Radio Corp. WLWL 1100 5000 New York, N. Y.                               |
| WJW, Inc., 41 S. High St. WJZ 780 50000 New York, N. Y.                 | Missionary Society of St. Paul.  WMAL 630 250 Washington, D. C.                  |
| National Broadcasting Co., Inc.   | National Broadcasting Co., Inc.  |
| WKAQ 1240 1000 San Juan, P. R.<br>Radio Corp. of Porto Rico.            | WMAQ 670 5000 Chicago, III.<br>National Broadcasting Co., Inc.                   |
| WKAR 1040 1000 East Lansing, Mich.<br>Michigan State College.           | WMAS 1420 100 Springfield, Mass.<br>WMAS, Inc., Hotel Stonehaven.                |
| WKBB 1500 100 East Dubane III   | WMAZ 1180 500 Macon, Ga.   |
| Richard W. Hoffman WKBC 1310 100 Birmingham, Ala.                       | Southeastern Broadcasting Co.  WMBC 1420 100 Detroit, Mich.                      |
| R. B. Broyles, Tutwiler Hotel.  | Michigan Broadcasting Co.  |
| WKBF 1400 500 Indianapolis, Ind. Indianapolis Broadcasting, Inc.        | WMBD 1440 500 Peoria, III.<br>Peoria Broadcasting Co.                            |
| WKBH 1380 1000 LaGrosse, Wis. WKBH, Inc., 409 Main St.                  | WMBQ 1210 199 Richmond, Vs.<br>Havens and Martin, Inc.                           |
| WKBI 1420 100 Gicero, III.<br>WKBI, Inc., 6138 W. 22nd St.              | WMBH 1420 100 Joplin, Mc.  |
| WKBN 570 500 Youngstown, Ohlo.  | W. M. Robertson. WMBI 1080 5000 Chicago, III.                                    |
| WKBN Broadcasting Corp. WKBO 1200 100 Harrisburg, Pa.                   | Moody Bible Institute.  WMBO 1310 100 Auburn, N. Y.                              |
| Keystone Broadcasting Corp.   | WMBO, Inc., Metcalf Bldg.  |
| WKBV 1500 100 Richmond, Ind.<br>Wm. O. Knox, Box 286                    | WMBQ 1500 100 Brooklyn, N. Y.<br>Paul J. Gollhofer, 95 Leonard St.               |
| WKBW 1489 5000 Buffalo, N. Y.   | WMBR 1370 100 Tampa, Fla.  |
| Buffalo Broadcasting Corp.  WKBZ 1500 100 Ludington, Mich.              | F. J. Reynolds, 907 Florida Ave. WMC 780 500 Memphis, Tenn.                      |
| Karl L. Ashbacker & Sons.  WKEU 1500 100 LaGrange, Ga.                  | WMC, Inc., Hotel Gayoso.   |
| Radio Station WKEU, 906 Hill St.  | WMCA 570 500 New York, N. Y.<br>Knickerbocker Broadcasting Co.                   |
| WKFI 1210 100 Greenville, Miss.<br>J. Pat Scully, Box 302.              | WMMN 890 250 Fairmont, W. Va.<br>A. M. Rowe, Inc., 325 Main St.                  |
| WKJC 1200 100 Lancaster, Pa.  | WMPC 1500 100 Lapeer, Mich.  |
| Lancaster Broadcasting Service, Inc. WKOK 1210 100 Sunbury, Pa.         | First Methodist Protestant Church.   |
| Sunbury Broadcasting Co.  | Waterloo Broadcasting Co.  |
| WKRC, Inc., Hotel Alms.   | WNAC 1230 1000 Boston, Mass.<br>Shepard Broadcasting Service, Inc.               |
| WKY 900 1000 Öklahoma City, Okla. Oklahoma Publishing Co.               | WNAD 1010 500 Norman, Okla.<br>University of Oklahoma.                           |
| WKZO 590 1000 Kalamazoo, Mich.  | WNAX 570 1000 Yankton, S. D.   |
| John E. Fetzer, Burdick Hotel. WLAC 1470 5000 Nashville, Tenn.          | The House of Gurney, Inc., 2nd and Capital St<br>WNBF 1500 100 Binghamton, N. Y. |
| Life & Casualty Insurance Co.   | Howitt-Wood Radio Co., Inc.  |
| WLAP 1200 100 Louisville, Ky.<br>American Broadcasting Corp. of Ky.     | WNBH 1310 100 New Bedford, Mass.<br>New Bedford Broadcasting Co.                 |
| WLB 1250 1000 Minneapolis, Minn.  | WNBO 1200 100 Silver Haven, Pa.  |
| University of Minnesota.  | John Brownlee Spriggs. (Washington, Pa.)   |

|          | WNBR 1480 500 Memphis, Tenn.  |          | WQAM 560 1000 Miami, Fla.   |
|----------|---|----------|---|
|          | Memphis Broadcasting Co., Hotel DeVoy. WNBW 1200 10 Carbondale, Pa.             |          | Miami Broadcasting Co., Inc., 327 N. E. 1st Ave.                              |
|          | WNBW 1200 10 Carbondale, Pa.<br>WNBW, Inc., 50 Main St., N.                     | į.       | WQAN 680 250 Scranton, Pa. Scranton Times, 149 Penn Ave.                      |
| -        | WNBX 1260 250 Springfield, Vt.  |          | WQAO 1010 250 New York, N. Y.   |
|          | WNBX Broadcasting Corp., 39 Main St.  |          | Marcus Loew Booking Agency.   |
|          | WNBZ 1290 60 Saranac Lake, N. Y   |          | WQBC 1360 500 Vicksburg, Miss. Delta Broadcasting Co., Hotel Vicksburg.       |
|          | Smith & Mace, 70 Broadway.  |          | Delta Broadcasting Co., Hotel Vicksburg.                                      |
|          | WNEW 1250 1000 Newark, N. J.<br>Wodaam Corp., 1060 Broad                        | 1        | WQDM 1370 100 St. Albans, Vt.<br>A. J. St. Antoine and E. J. Regan.           |
|          | WNOX 560 1000 Knoxville, Tenn.  |          | WQDX 1210 100 Thomasville, Ga.  |
|          | WNOX, Inc.  |          | Stevens Luke, 135 E. Jackson St.  |
|          | WNRA 1420 100 Muscle Shoals, Ala.   |          | WRAK 1970 100 Williamsport Do   |
|          | Kathryn Jones   |          | WRAK, Inc., 244 W. 4th St.  |
|          | WNYC 810 500 New York, N. Y. Dept. of Plant and Structures.                     |          | WRAM 1870 100 Wilmington, N. C.   |
|          | WOAI 1190 50000 San Antonio, Texas.   | _        | Wilmington Radio Assn., Princess St.<br>WRAW 1310 100 Reading, Pa.            |
|          | Southern Industries, Inc., 1038 Navarro.  |          | Reading Broadcasting Co., 533 Penn St.  |
|          | WOBU 580 750 Charleston, W. Va.   |          | WRAX 1020 250 Philadelphia. Pa.   |
|          | WOBU, Inc., Ruffner Hotel.  |          | WRAX 1020 250 Philadelphia, Pa.<br>WRAX Broadcasting Co., 217 S. Broad St.    |
|          | WOC- 1090 50000 Des Moines, Iowa.<br>WHO Central Broadestg. Co., 914 Walnut St. |          | WRBL 1200 100 Columbus, Ga.   |
|          | WOCL 1210 50 Jamestown, N. Y.   | <b>-</b> | WRBL Radio Station, Inc. WRBX 1410 250 Roanoke, Va.                           |
|          | A. E. Newton, 840 N. Main St.   |          | WRBX 1410 250 Roanoke, Va. Richmond Development Corp.                         |
|          | WODX 1410 500 Mobile, Ala.  |          | WRC 950 500 Washington, D. C.   |
|          | Mobile Broadcasting Corp., Battle House.  |          | National Broadcasting Co., Inc.   |
|          | WOI 640 5000 Ames, lowa.  |          | WRDO 1870 100 Augusta, Me.  |
| <u></u>  | Iowa State College.   |          | WRDO, Inc., Augusta House.  |
|          | WOKO 1430 500 Albany, N. Y.<br>WOKO, Inc., Hotel Ten Eyck.                      |          | WRDW 1500 100 Augusta, Ga.<br>Virgil V. Evans Co., 309 8th St.                |
|          | WOL 1810 100 Washington, D. C.  |          | WREC 600 500 Memphis, Tenn.   |
|          | American Broadcasting Co., Annapolis Hotel.                                     |          | WREC, Inc., Hotel Peabody.  |
|          | WOMT 1210 100 Manitowoc, Wis.   |          | WREN 1220 1000 Lawrence, Kans.  |
|          | Francis M. Kadow, Box 326.  |          | Jenny Wren Co., 8th and Vermont St.   |
|          | WOOD 1270 500 Grand Rapids, Mich.<br>Kunsky-Trendle Broadcasting Corp.          |          | WRHM 1250 1000 Minneapolis, Minn.   |
|          | WOPI 1500 100 Bristol, Tenn.  |          | Minnesota Broadcasting Corp., 115 E. Grant. WRJN 1370 100 Racine, Wis.        |
|          | Radiophone Broadcasting Station WOPI, Inc.                                      |          | Racine Broadcasting Corp., Hotel Racine.                                      |
|          | WOQ 1300 1000 Kansas City, Mo.  |          | WRNY 1010 250 New York, N. Y.   |
|          | Unity School of Christianity.   |          | Marcus Loew Booking Agency.   |
|          | WOR 710 5000 Newark, N. J.<br>Bamberger Broadcasting Service, Inc.              |          | WROL 1310 100 Knoxville, Tenn.<br>Stuart Broadcasting Corp., 524 S. Gay.      |
|          | WORC 1280 500 Worcester, Mass.  | ļ        | WRR 1280 500 Dallas, Texas.   |
|          | Alfred F. Kleindienst, 60 Franklin St.  |          | City of Dallas, Hilton Hotel.   |
| ·····    | WORK 1000 1000 York, Pa.  |          | WRUF 830 5000 Gainesville, Fla.   |
|          | York Broadcasting Co., 15 S. Beaver St.   |          | State University.   |
|          | WOS 630 500 Jefferson City, Mo.<br>State Highway Control, Capitol Bldg.         | ĺ        | WRVA 1110 5000 Richmond, Va.<br>Larus & Bro. Co., Inc., 22nd and Gary St.     |
| <u> </u> | WOSU 570 750 Columbus, Ohio.  |          | WSAI 1380 1000 Cincinnati, Ohlo,  |
|          | Ohio State University.  | 1        | Crosley Radio Corp., 1329 Arlington.  |
|          | WOV 1180 1000 New York, N. Y.   |          | WSAJ 1310 108 Grove City, Pa.   |
|          | International Broadcasting Corp.  |          | Grove City College  |
|          | WOW 590 1000 Omaha, Neb.<br>Woodmen of the World, 4th and Farnam.               | 1        | WSAN 1440 250 Allentown, Pa.<br>WSAN, Inc., 39 10th St.                       |
|          | WOWO 1180 10000 Fort Wayne, Ind.  |          | WSAR 1450 250 Fall River, Mass.   |
| 1        | Main Auto Supply Co., 213 W. Main.  | 1        | Doughty & Welch Electric Co., Inc.  |
| <b></b>  | WPAD 1420 100 Paducah, Ky.  |          | WSAZ 1190 1000 Huntington, W. Va.   |
|          | Paducah Broadcasting Co., Inc.  |          | WSAZ, Inc., 929½ 4th Ave.   |
|          | WPAP 1010 250 New York, N. Y.   |          | WSB 740 50000 Atlanta, Ga.  |
|          | Marcus Loew Booking Agency.   |          | Atlanta Journal, 7 N. Forsyth St.   |
| 1        | WPEN 1500 100 Philadelphia, Pa.   |          | WSBC 1210 100 Chicago, III.<br>  Gene T. Dyer, 1258 S. Michigan Ave.          |
| -        | William Penn Broadcasting Co. WPFB 1370 100 Hattiesburg, Miss.                  |          | WSBT 1230 500 South Bend, Ind.  |
|          | Otis P. Eure, Box 530.  |          | South Bend Tribune.   |
|          | WPG 1100 5000 Atlantic City, N. J.  |          | WSEN 1210 100 Columbus, Ohlo.   |
|          | Columbia Broadcasting System.   |          | Columbus Broadcasting Corp., 144 S. High.                                     |
|          | WPHR 1200 100 Petersburg, Va.   |          | WSFA 1410 500 Montgomery, Ala.<br>Montgomery Brdg. Co., Inc., Jeff. Dav. H'l. |
| <u> </u> | WLBG, Inc., Medical Arts Bldg.  |          | WSIX 1210 100 Springfield, Tenn.  |
|          | WPRO 1210 100 Providence, R. I.<br>Cherry & Webb Broadcasting Co., 15 Chestnut. |          | 638 Tire & Vulcanizing Co.  |
|          | WPTF 680 5000 Raleigh, N. C.  |          | WSJS 1310 100 Winston-Salem, N. C.  |
|          | Durham Life Insurance Co.   |          | Winston-Salem Journal Co., 416 N. Marshall.                                   |
|          |   | -        |   |

|  | •  |
|--|--|
| WSM 650 50000 Nashville, Tenn.                                       | XEA 1000 250 Guadalajara, Jal.   |
| National Life & Accident Insurance Co.                               | Alberto Palos Souza. Juan Manuel 383   |
| WSMB 1320 500 New Orleans, La.                                       | XEAB 1450 7.5 Nuevo Laredo, Tams.  |
| WSMB, Inc., Malson Blanche Bldg.                                     | Homberto Garcia.  XEAC 1295 100 San Luis Potosi. S.L.P.                      |
| WSMK 1380 200 Dayton, Ohlo-  | XEAC 1295 100 San Luis Potosi, S.L.P.<br>Francisco de P. Cabrera.            |
| S. M. Krohn, Jr., 4th and Main St. WSOC 1210 100 Charlotte, N. C.    | VEAF DOD OND Tillians D.O.   |
| WSOC 1210 100 Charlette, N. C. WSOC, Inc., Box 730.                  | XEAE 980 800 Tijuana, B. C.  |
| WSPA 1420 100 Spartanburg, S. C.                                     | Adolfo Labastida, Jr., Ave. D 542.  XEAF 990 750 Nogales, Son.               |
| Virgil V. Evans, Ravenel and Avant St.                               | Manuel Mascarenas M., Hotel Central.   |
| WSPD 1349 1000 Toledo, Ohio.   | XEAI 1090 100 Mexico City, D. F.   |
| Toledo Broadcasting Co., 505 Jefferson                               | Carlos Gonzales Caballero, Insurgentes 366.                                  |
| WSUI 880 500 Iowa City, Iowa.  | XEAO 560 100 Mexicali, B. C.   |
| State University of Iowa.  | Luis L. Castro, C. Altamirano 156.   |
| WSUN 620 1000 St. Petersburg, Fla.                                   | XEAW 965 10000 Reynosa, Tams.  |
| Florida Westcoast Broadcasting Co., Inc.                             | Internacional Broadcasting Co., S. A.  |
| WSVS 1370 50 Buffalo, N. Y.  | XEB 1030 10000 Mexico City, D. F.  |
| Seneca Vocational High School. WSYB 1500 100 Rutland, Vt.            | El Buen Tono, S. A., Buen Tono No. 6.<br>XEC 1000 50 Toluca, D. F.           |
| Philip Weiss Music Co., 80 West St.                                  | Jesus R. Benavides, Independencia 76.  |
| WSYR 570 250 Syracuse, N. Y.   | XED 1155 500 Quadalajara, Jal.   |
| Central New York Broadcasting Corp.                                  | Radiofonografica de Guadalajara, S. A.                                       |
| WTAD 1440 500 Quincy, III.   | XEF 785 150000 Villa Acuna, Coah.  |
| Illinois Broadcasting Corp., State and 6th.                          | Compania Radiodifusora de Acuna, S. A.                                       |
| WTAG 580 750 Worcester, Mass.  | XEFA 1250 500 Mexico City, D. F.   |
| Worcester Telegram Publishing Co.                                    | Eduardo Limon Segui, Meditarraneo 236  |
| WTAM 1070 50000 Cleveland, Ohio. National Broadcasting Co., Inc.     | XEFB 1315 100 Monterrey, N. L.   |
| WTAQ 1330 1000 Eau Claire, Wis.                                      | Jesus Quintanilla, 5 de Mayo Oriente 112.                                    |
| Gillette Rubber Co., Hotel Eau Claire.                               | J. Molina Font, Calle 59, 517.   |
| WTAR 780 500 Norfolk, Va.  | XEFE 985 100 Laredo, Tams.   |
| WTAR Radio Corp., Wainwrlght Bldg.                                   | Rafael T. Carranza.  |
| WTAW 1120 500 College Station, Texas.                                | XEFG 1085 500 Mexico City, D. F.   |
| Agricultural and Mechanical College.                                 | Ricardo Gonzales Montero, Tepic 48   |
| WTAX 1210 100 Springfield, III.<br>WTAX, Inc., 416 E. Capitol Ave.   | XEFI 1260 250 Chihuahua, Chih.<br>Feliciano Lopez Isles, Ap. 157.            |
| WTBO 1420 100 Cumberland, Md.  | XEFJ 1000 100 Monterrey, N. L.   |
| Associated Broadcasting Corp., Box 794.                              | R. Junco de la Vega, C. Morelos Oriente 759.                                 |
| WTEL 1310 100 Philadelphia, Pa.                                      | XEFO 940 5000 Mexico City, D. F.   |
| Foulkrod Radio Engineering Co., Inc.                                 | Partido Nacional Revolucionario.   |
| WTFI 1450 500 Athens, Ga.  | XEFS 1000 40 Queretaro, Qro.   |
| Liberty Breadcasting Co., Costa Bldg.                                | Salvador Sanches, Calle Montes 23.  XEFV 1400 100 Jaurez, Chih.              |
| WTIC 1060 50000 Hartford, Conn. Travelers Broadcasting Service Corp. | J. Onofre Meza, Ave. Lerdo Norte 521.  |
| WTJS 1810 100 Jackson, Tenn.   | XEFW 1280 70 Tampico, Tams.  |
| Sun Publishing Co., Sun Bldg.  | J. Expedito Martinez, C. Madero Poniente 19.                                 |
| WTMJ 620 1000 Milwaukes, Wis.  | XEFZ 1870 100 Mexico City, D. F.   |
| The Journal Co., 333 W. State St.                                    | Manuel Zetina  |
| WTNJ 1280 500 Trenton, N. J.   | XEH 1182 250 Monterrey, N. L.  |
| Trenton Broadcasting Co., Stacy Trent Hote                           | Tarnava y Cla, P. Mler 215.  |
| WTOC 1260 500 Savannah, Qa.  | XEI 1310 250 Morelia, Mich.<br>Carlos Gutierrez M., F. I. Madero 545         |
| Savannah Broadcasting Co., Inc., DeSoto Hotel                        | XEJ 1015 500 Juarez, Chih.   |
| WTRC 1310 50 Elkhart, Ind.   | Juan G. Buttner, Ave. Lerdo 309.   |
| Truth Radio Corp., Hotel Elkhart.  WVFW 1400 500 Brooklyn, N. Y.     | XEK 990 100 Mexico City, D. F.   |
| Paramount Brdcstg. Co., 1 Nevins St.                                 | Arturo Martinez. Jalapa No. 51   |
| WWAE 1200 100 Hammond, Ind.  | XEL 1000 40 Saltillo, Coah.  |
| Hammond Calumet Broadcasting Corp.                                   | Antonio Garza Castro, Aldama 59  |
| WWJ 920 1000 Detroit, Mich.  | XEN 711 1000 Mexico City, D. F.  |
| Evening News Assn., 616 Lafayette Blvd.                              | Cerveceria Modelo S. A., Motolinia 22.  XENT 1115 150000 Nuevo Laredo, Tame. |
| WWL 850 10000 New Orleans, La.                                       | Cia Industrial Universal S. A., Apt. 47.                                     |
| Loyola University, Roosevelt Hotel.  WWNC 570 1000 Asheville, N. C.  | XEO 940 5000 Mexico City, D. F.  |
| Citizen Broadcasting Co., Inc., Flatiron Bldg.                       | Partido Nacional Revolucionario.   |
| WWRL 1500 100 Woodside, N. Y.  | XEOK 760 2500 Tijuana, B. C.   |
| Long Island Broadcasting Corp.                                       | Carlos de la Sierra, (Box 1441, San Diego).                                  |
| WWSW 1500 100 Pittsburgh, Pa.  | XEP 780 500 Mexico City, D. F.   |
| Walker & Downing Radio Corp.   | Cia Difusora de Mexico S. A., Durango 74.                                    |
| WWVA 1160 5000 Wheeling, W. Va.                                      | XEPN 585 75000 Pledras Negras, Coak  |
| West Virginia Broadcasting Corp.                                     | Piedras Negras Broadcasting Co. XER 735 150000 Villa Acuna, Coah.            |
| WXYX 1240 1000 Detroit, Mich.  | Compania Radiodifusora de Acuna, S. A.                                       |
| Kunsky-Trendle Broadcasting Corp.                                    |  |

| XES 1020 250 Tampico, Tams.                                     | XEZ 630 500 Merida, Yuc.  |
|---|---|
| Fernando Sada, Hotel Inglaterra.                                | Bartolome Garcia Correa, Calle 58 No. 497.                              |
| XET 690 500 Monterrey, N. L.                                    | XFB 1290 1000 Jalapa, Ver.  |
| Cadena Radiodifusora Mexicana, S. A.                            | Gobierno del Estado de Veracruz.  |
| Jose A. Berumen, R. Corona 317.                                 | XFC 805 350 Aguascalientes, Ags. Goblerno del Estado de Aguascalientes. |
| XETH 860 100 Puebla, Pue.                                       | XFG 638.3 2000 Mexico City, D. F.                                       |
| Ramon Huerta G., Calle 17, Oriente 6.                           | Secretaria de Guerra y Marina.  |
| XETU 890 100 Pachuca, Hdge.                                     | XFO 940 5000 Mexico City, D. F.   |
| Benito Castillo   | National Revolucionario Party.  |
| XETW 880 500 Mexico City, D. F.                                 | XFX 840 500 Mexico City, D. F.  |
| Rafael M. Pena, Gante 4, 3er piso                               | Secretaria de Educacion Publica.  |
| XETZ 1210 500 Mexico City, D. F.                                | YV1BC 960 6000 Caracas, Venz.   |
| Jose Alvarez del Villar, 92 Londres 190.                        | Cla Ama Alamacen Americana.   |
| XEU 1010 100 Veracruz, Ver.<br>Fernando Pazos Sosa, Vicario 12. | YV2BC 882 100 Caracas, Vens.  |
| XEW 910 5000 Mexico City, D. F.                                 | YV3BC 1200 1000 Caracas, Venz.  |
| Cadena Radiodifusora Mexicana S. A.                             | Degwitz & Siblesz.  |
| XEWW 1100 250 Veracruz, Ver.                                    | 10-AK 1200 15 Stratford, Ont.   |
| Horacio Remes, Calle Canal 42.                                  | M. I. Higgins, 151 Ontarlo St.  |
| XEX 630 50 Monterrey, N. L.                                     | 10-BP 1200 15 Wingham, Ont.   |
| Luis F. Petit Jean, Aldama 932 Sur.                             | W. T. Crulcksbank.  |
| XEY 546.8 10 Merida, Yuc.                                       | 10-BQ 1200 15 Brantford, Ont.   |
| Partido Socialista del Surest.                                  | Tom and Harold Brown.   |
| XEYZ 760 10000 Mexico City, D. F.                               | 10-BU 1200 16 Canora, Sask.   |
| Angel M. Diez, Ave. Juarez 48.                                  | Canora 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.)

Wald, Wayne, N. J. (New York, N. I.)
 15.258 19.65 11 a.m. to 1 p.m.
 11.823 25.36 3 p.m. to 5 p.m.
 6.114 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-WEEl 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
11.340 25.35 lrregular
11.340 40 34 34 34 6 p. m.

6.076 49.34 3 to 6 p. m.

### NATIONAL "BLUE" NETWORK

₩1XAZ-WBZ-WBZA, Millis, Mass. (Boston and Springfield, Mass.)

9.560 31.36 6 a.m. to midnight

W3XAL-WJZ Boundbrook, N. J. (New York, N. Y.) W3XAI-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 W3XI-WJZ, Boundbrook, N. J. (New York, N. Y.) 6.425 46.66 Fri., 5 p.m. to 1 a.m. W8XK-KDKA, Saxonburg, Pa. (Pittsburgh, Pa.) 21.451 13.93 7 a.m. to 2 p.m. 15.204 19.72 10 a.m. to 4:15 p.m. 11.870 25.25 4:30 to 10 p.m. 4:30 to 10 p.m. 4:30 p.m. to 12:30 a.m. 48.83

### 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.; Frl. and Sat.,
3 to 11 p.m.; Sun., 11 a.m. to 8 p.m.
W4XB-WIOD, Miaml Beach, Fla. (Miaml Beach, Fla.)
6.036 40 67 Urregular

2 a.m.

WAXB-W1OD, Miami Beacn, Fis., (Miami Deacn, Fis.)
6.036 49.67 Irregular
WSXAL-WLW, Mason, Ohio (Cincinnati, Ohio)
6.060 49.48 Irregular
W9XF-WENR, Downer's Grove, Ill. (Chicago, Ill.)
6.100 49.15 Sat., silent; Sun., 1 to 2:30 p.m., 4:30
to 7 p.m., 9 p.m. to 2 a.m.; other
days, 4:30 to 8 p.m., 9:30 p.m to
2 a.m.

# Index by Frequencies and Dial Numbers

|              |          |            |         | (Continued from page 74)                            |   |
|--------------|----------|------------|---------|---|---|
| wwsw         | ae       | 100        | (.25)   | Pittsburgh, Pa. E-8:00-11:45                        |   |
|              | z        | 100        | P (.25) |   |   |
|              | Z        | 100        | DP      | Hot Springs, Ark. C                                 |   |
| 1510         | kilo     | cyc]       | les     | 198.6 meters  | 7 |
| CFRC<br>CKCR | ak<br>ak | 100<br>100 |         | Kingston, Ont. E<br>Kitchener, Ont. E-10-1:30: 4-11 | _ |

# AROUND the CLOCK on the SHORT WAVES

# MIDNIGHT TO NOON (EST)

| GMT | 5:00                  | 6:00  | 7:00                | 8:00                        | 9:00                   | 10:00        | 11:00 | 12:00   | 13:00   | 14:00  | 15:00  | 16:00  |
|-----|-----------------------|-------|---------------------|-----------------------------|------------------------|--------------|-------|---|---|--|--|--|
| AST | 1:00                  | 2:00  | 3:00                | 4:00                        | 5:00                   | 6:00         | 7:00  | 8:00  | 9:00  | 10:00  | 11:00  | 12:00  |
| est | 12:00                 | 1:00  | 2:00                | 3:00                        | 4:00                   | 5:00         | 6:00  | 7:00  | 8:00  | 9:00   | 10:00  | 11:00  |
| CST | 11:00                 | 12:00 | 1:00                | 2:00                        | 3:00                   | 4:00         | 5:00  | 6:00  | 7:00  | 8:00   | 9:00   | 10:00  |
| MST | 10:00                 | 11:00 | 12:00               | 1:00                        | 2:00                   | 3:00         | 4:00  | 5:00  | 6:00  | 7:00   | 8:00   | 9:00   |
| PST | 9:00                  | 10:00 | 11:00               | 12:00                       | 1:00                   | 2:00         | 3:00  | 4:00  | 5:00  | 6:00   | 7:00   | 8:00   |
|     | W3XAU<br>W8XK<br>W9XF |       | GSD<br>GSF<br>VK2ME | GSD<br>GSF<br>RV15<br>VQ7LO | PK1WK<br>RV15<br>VQ7LO | J1AA<br>RV15 | VK3ME | EAR58<br>GSE<br>GSG<br>PHI<br>Rabat<br>RV15<br>VE9GW<br>VK2ME<br>W1XAZ<br>W8XK<br>ZGE | DJB<br>EAR58<br>GSE<br>GSG<br>PHI<br>Pont.<br>Rabat<br>VE9DR<br>VE9GW<br>VK2ME<br>W1XAZ<br>W8XK<br>YV2AM<br>ZGE | DJB<br>GSB<br>GSF<br>PHI<br>Pont.<br>VE9DR<br>VE9JR<br>VK2ME<br>W1XAZ<br>W8XK<br>YV2AM | CT3AQ<br>DJB<br>DJD<br>GSB<br>GSF<br>Pont.<br>VE9DR<br>VE9GW<br>W1XAL<br>W1XAZ<br>W8XK | CT3AQ<br>DJB<br>DJD<br>GSA<br>12RO<br>Pont.<br>VE9DR<br>VE9JR<br>W1XAZ<br>W1XAL<br>W1XAZ<br>W2XE<br>W8XK |

# NOON TO MIDNIGHT (EST)

| _   |  |       |  |  |                                 |       |   |  |   |   |  |  |
|-----|--|-------|--|--|---------------------------------|-------|---|--|---|---|--|--|
| GMT | 17:00  | 18:00 | 19:00  | 20:00  | 21:00                           | 22:00 | 23:00   | 24:00  | 1:00  | 2:00  | 3:00   | 4:00   |
| AST | 1:00   | 2:00  | 3:00   | 4:00   | 5:00                            | 6:00  | 7:00  | 8:00   | 9:00  | 10:00   | 11:00  | 12:00  |
| est | 12:00  | 1:00  | 2:00   | 3:00   | 4:00                            | 5:00  | 6:00  | 7:00   | 8:00  | 9:00  | 10:00  | 11:00  |
| CST | 11:00  | 12:90 | 1:00   | 2:00   | 3:00                            | 4:00  | 5:00  | 6:00   | 7:00  | 8:00  | 9:00   | 10:00  |
| MST | 10:00  | 11:00 | 12:00  | 1:00   | 2:00                            | 3:00  | 4:00  | 5:00   | 6:00  | 7:00  | 8:00   | 9:00   |
| PST | 9:00   | 10:00 | 11:00  | 12:00  | 1:00                            | 2:00  | 3:00  | 4:00   | 5:00  | 6:00  | 7:00   | 8:00   |
|     | DJB<br>DJD<br>GSA<br>GSB<br>I12RO<br>Pont<br>VE9GW<br>VE9GW<br>VE9JDR<br>W1XAZ<br>W1XAZ<br>W2XE<br>W3XAL<br>W3XAL<br>W3XAL | W3XAL | I2RO<br>OXY<br>Rabat<br>VE9DR<br>VE9GW<br>VE9JR<br>W1XAZ | DJB<br>DJD<br>GSC<br>GSD<br>HAT<br>I2RO<br>OXY<br>Pont.<br>Rabat<br>VE9DR<br>VE9BW<br>VE9JR<br>W1XAZ<br>W3XAL<br>W3XAL<br>W3XAL<br>W3XAL | VE9GW<br>W1XAZ<br>W2XAD<br>W2XE | RV59  | DJA<br>EAQ<br>GSA<br>GSC<br>HBL<br>HBP<br>HC2RL | HJ4ABE<br>Pont.<br>VE9DR<br>VE9GW<br>VE9HX<br>VE9JR<br>W1XAL | HJ1ABB<br>2ABA<br>4ABB<br>4ABE<br>Pont.<br>VE9DR<br>VE9GW<br>VE9HX<br>VE9JR<br>W1XAL<br>W2XAF | CP5 DJC G6RX HCJB HC2RL HIX BHJ2ABA HJ3ABA HJ3ABA HKN PRADO VE9DR VE9JR WIXAL W3XAL W3XAL W3XAL W3XAU W8XK XETE YV1BC YV3BC | CP5<br>DJC<br>HC2RL<br>HJ<br>3ABD<br>Pont.<br>VE9BR<br>VE9BX<br>VE9HX<br>VE9HX<br>VE9HX<br>WESAL<br>WIXAZ<br>WEXAF<br>WEXAF<br>WEXAF<br>WEXAF<br>WEXE<br>WEXAF<br>WEXE<br>WEXE | CP5<br>HJ<br>4ABB<br>Pont.<br>VE9DR<br>W1XAZ<br>W3XAU<br>W3XAU<br>W8XK<br>XETE |

# One Hundred Best S. W. Stations by Calls

Stations marked with an asterisk (\*) will not verify. Frequencies are given in megacycles. Times are given in Eastern Standard.

eveles. \*British Ships, 13.220, 8.831, 4.174 \*British Ships, 13.220, 8.831, 4.174
\*CEC, Chile, 19.678, 15.855
CGA, Canada, 13.296, 9.340
CNR, Morocco, 12.820
CP5, Bolivia, 6.081. 6:30 to 7:30 or 8 p.m., daily, exc.
Sun.; 9-11.30 p.m. daily
CT1AA, Portugal, 9.592. Tues. and Frl., 4:30-7 p.m.
CT3AQ, Madeira, Tues., Thurs., 5-6:30 p.m.; Sun. 10:30 CT3AQ, Madeira, Tues., Thurs., 5-6:30 p.m. a.m.-noon.

DAF, Germany, 12.394
DFB, Germany, 17.512
DIQ, Germany, 17.512
DJG, Germany, 9.552. 5 to 9:15 p.m.
DJB, Germany, 15.190. 8 a.m. to 4:30 p.m.
DJC, Germany, 6107. 8 to 10:15 p.m.
DJD, Germany, 11.753. 10 a.m. to 6 p.m.
DJL, Germany, 11.753. 10 a.m. to 6 p.m.
DJL, Germany, 15.110
EAQ, Spain, 9.862. 5:30-8 p.m.
EAR58, Canaries, 7.207. 5 to 6:30 p.m.
EHY, Spain, 10.164
FTK, France, 15.863
FTM, France, 19.822
FZS, Indo-China, 11.983
\*German Ships, 13.135, 10.163, 8.328, 4.174
GAS, England, 18.304 "German Snips, 13.135, 10.163, 8.328, 4.174 GAS, England, 13.304 GBB, England, 13.500 GBS, England, 12.148 GBW, England, 14.450 GSA, England, 6.050. 6-8 p.m.; 11 a.m.-1 p.m.; 4-5:45 p.m. GSB, Excluded, 0.510. 0 p.m.; 11 a.m.-1 p.m.; 4-5:45 p.m. GSB, England, 9.510. 9 a.m.-1 p.m., 6 to 8 p.m. GSC, England, 9.585. 1:15 to 5:45 p.m.; 6 to 8 p.m. GSD, England, 11.750. 2 to 4 a.m.; 1:15 to 5:45 p.m. 7-8:45 a.m. 2-4 a.m.; 9-11 a.m. GSE, England, 11.865. GSF, England, 15.140. GSG, England 17.770. G6RX, England, 4.972. 7 to 8:45 a.m. Testing nights 4.302. 8-10 p.m. Tests Sunday, 4 p.m. HAT, Hungary, 7,220. Tests Sunday, 4 p.m.
HBL, Switzerland, 9,580. Sat., 5:30 to 6:15 p.m.
HBP, Switzerland, 7,872. Sat., 5:30 to 6:15 p.m.
HC2JSB, Ecuador, 4,283. 9 to 11 p.m.
HC2RL, Ecuador, 6.659. Tues., 9:14 to 11:14 p.m.; Sun., 5:45 to 7:45 p.m.
HCJB, Ecuador, 3,998. 8:14 to 10:14 dally, exc. Mon.
HCK, Ecuador, 5,694. 8 to 11 p.m.
HIX, Santo Domingo, 5,948. Tues. and Frl., 8 to 10 p.m.; Sun. 7:40 a.m. Sun., 7:40 a.m. HIZ, Santo Domingo, 6.379. 5-6 p.m. HI-1-A, Santo Domingo, 6.272. 8-8:30 a.m.; 12:30-1:30 HILD, SSRIGO DORNINGO, 0.519. 5-0 p.m.
HI-1-A, Santo Dorningo, 6.272. 8-8:30 a.m.; 12:30-1:30 p.m.; 8-9 p.m.
HJB. Colombia, 14.930
\*HJY, Colombia, 18.444
HJ1ABB, Colombia, 5.879. 7:30 to 10 p.m.
HJ2ABA, Colombia, 5.879. 7:30 to 10 p.m.
HJ3ABD, Colombia, 7.402. 9-11:15 p.m., dally
HJ4ABB, Colombia, 7.139. Sat., 11 p.m. to Mid.; Sun. 3-5 p.m.; Wed., 3-10 p.m.
HJ4ABB, Colombia, 5.900. 7-11 p.m.
HJ5ABB, Colombia, 8.271
HKN, Colombia, 7.138. 8-10 p.m., dally
\*HPF, Panama, 14.545.
HSP, Slam. 17.719
HVJ, Vatican City, 15.120. 5 to 5:15 a.m.
IAC, Italy, 12.785
LZRO, Italy, 11.800. 11:30 a.m. to 12:30 p.m.; 1:15 to 6 p.m.
JAA, Japan, 9.862. 5 to 8 a.m. J1AA Japan, 9.862. 5 to 8 s.m. KAY, Philippines, 14.980 KAZ, Philippines, 9.990 \*KKP, Hawaii, 16.024 LSN, Argentina, 9.895 LSX, Argentina, 10.345
LSY, Argentina, 18.116
\*OCI, Peru, 18.670
OXY, Denmark, 9.520. 2 to 6:30 p.m.
PHI, Holland, 11.725. 7:30 to 10 a.m., except Tues. and PK1WK, Java, 6.116. 4:15-6 a.m.

PLE, Java, 18.820 PLE, Java, 10.020 PLV, Java, 9.410 Pontolse, France, 15.454 Pontolse, France, 15.234. 8-11 a.m. 11.898. 11:15 a.m. to 2:15 p.m.; 8 to 6 p.m. 3 to 9 p.m.; 10 p.m. to mid. 11.711. \*PPU, Brazil, 19.270 PRADO, Ecuador, 6.618. Thursday, 9-11 p.m. \*PSF, Brazil, 14.682 Rabat, Morocco, 12.820. Sun, 7:30 to 9 a.m. 8.218. Sun, 2:30 to 5 p.m. 8.218. Sun, 2:30 to 5 p.m.

Radio-Tananarive, Madagascar, 6.000. 2:30-4 a.m., Sun.
3-3:45 a.m., daily exc. Sun. and Mon.

RNE, USSR., 11,923. Testing irregularly
RV15, Siberia, 4.273. 3-9 a.m., daily
RV59. USSR, 5.996. 3-6 p.m., daily
SRI, Poland, 9.488. 1-3 p.m., Tues.; 8-9 a.m., Wed.
TGA, Guatemala, 14.545
TIN-TIU, Costa Rica, 14.545
TIANRH, Costa Rica, 9.670.
UOR2, Austria, 6.072. 8:30-9 a.m.; 10 a.m.-1 p.m. and
2-4 p.m. on Tuesdays.
UOR3. Austria, 11.800
VE9AO, Toronto, Canada. UURA: Austria, 11.800 VE9AO, Toronto, Canada. VE9BJ, Canada, 6.090. Irreg. VE9CA, Canada, 6.030. VE9CS, Canada, 6.074. 8-10 p.m. VE9DR, Canada, 6.005. 7:30 a.m. to Midnight; Sun., noos to 11:15 p. m. VE9GW, Canada, 6.092. 3 p.m.-mldnight VE9HX, Canada, 6.110. 5-11 p.m., daily VE9JR, Canada, 11.720. Irreg., approx. 9:30 a.m.-10-30 p.m. VK2ME, Australia, 10.520. VK2ME, Australia, 10.520. 9.585. Sun., 1 to 3 a.m.; 5 to 11 a.m. VK3ME, Australia, 9.503. Wed., 5-6:30 a.m.; Sat., 5-7 a.m. VWZ, India, 17.533 \*WNC, U. S. A., 15.055 W1XAL, U. S. A., 15.242. Sunday, 10 a.m.-1 p.m. 11.780. Sat., 5:30-11 p.m.; Sun., 6:30-11.780. Sat., 5:30-11 p.m.; Sun., 6:39-8:30 p.m.

W2XAD, USA, 15.320. Sun., Mon., Wed., Frl., 4-5 p.m.

W2XAF, USA, 9.530. 7:45 to 11 p.m.

11.823. 3 to 5 p.m.

6.116. 6 to 11 p.m., except Sat.

6.096 3 p.m. to midnight, Saturday

W3XAU, USA, 9.585. Noon to 6 p.m.

6.057. 8 p.m. to 1 a.m.

W3XL, U. S. A., 17.722. 9 a.m. 3 p.m., except Sat.

6.096 3 p.m. to midnight, Saturday

W3XAU, USA, 9.585. Noon to 6 p.m.

6.057. 8 p.m. to 1 a.m.

W3XL, U. S. A., 6.421. Irregular

W8XK, U. S. A., 21.451. 7 a.m. to 2 p.m.

15.204. 10 a.m. to 4:15 p.m.

11.870. 4:30-10 p.m.

6.140. 4:30 p.m. to 12:30 a.m. W9XAA, U. S. A., 6.076. 3 to 6 p.m. W9XF, U. S. A., 6.425 W9XF, U. S. A., 6.425 7 p.m.; 9 p.m. to 2 a.m.; other days, 4:30-8 p.m.; 9:33 p.m. to 2 a.m. XAM, Mexico, 11.187 XDS, Mexico, 11.760 XETE, Mexico, 9.600 XDS, Mexico, 11.760
XETE, Mexico, 9.600 2:30-5 p.m.; 6:30 p.m. to midnight
\*YNA, Nicaragua, 14.480. Phones Hialeah.
\*YVQ, Venezuela, 13.337. Phones Hialeah
\*YVR, Venezuela, 18.296 and 9.168
YVIBC, Venezuela, 6.112. 5:15 to 10 p.m.
YV2AM, Venezuela, 7.138. Sun., 8-10 a.m.
YV3BC, Venezuela, 9.510. 9:30 to 10 p.m. 10:30 a.m. to 1 p.m. and 6:38-9:30 p.m.; Sun., 8:30 a.m. to noon and 3-6:30 p.m. 6.150. \*ZFA, Bermuda, 5.045 \*ZFB, Bermuda, 10.060 ZFS, Bahamas, 4.513. ZGE, Malaya, 5.996. Tues., Fri., 6:30-8:30 a.m. and Sun., 7-9 a.m.

| Th               | oSh.                  | ortWaveStations   | 6.670              | 44.95                 | KFY, Forward Base, Little America<br>KFZ, Main Base, Little America  |
|------------------|-----------------------|---|--------------------|-----------------------|--|
| 1 1)(            |                       | of two ave Stations   | 6.718              | 44.62                 | WDB. Rocky Point, N. Y., Exp.  |
|                  | 10-                   |   | 6.725              | 44.57                 | WDB, Rocky Point, N. Y., Exp. WQO, Rocky Point, N. Y., Exp.  |
|                  | (000                  | ntinued from page 37)   | 6.733              | 44.53                 | KEQ, Kahuku, Hawaii, phone   |
|                  |                       | KCPN Devenment Lower  | $6.740 \\ 6.755$   | 44.48                 | WEJ, Rocky Point, N. Y., Exp.  |
|                  |                       | KGPN, Davenport, Iowa<br>KGPW, Salt Lake City, Utah   | 6.755              | 44.38                 | WOA, Lawrenceville, N. J., phone   |
|                  |                       | KGZG, Des Moines, Iowa KGZT, Santa Cruz, Calif. KGZU, Lincoln, Nebr. WPDP, Philadelphia, Pa. WPDT, Kokomo, Ind.   | $6.860 \\ 6.928$   | $\frac{43.71}{43.27}$ | WQO, Rocky Point, N. Y., Exp. KEQ, Kahuku, Hawaii, phone WEJ, Rocky Point, N. Y., Exp. WOA, Lawreneeville, N. J., phone KEL, Bolinas, Calif., Exp. WEZ, Rocky Point, N. Y., Exp. WEB, Rocky Point, N. Y., Exp. WKP, Rocky Point, N. Y., Exp. KEB, Bolinas, Calif., Exp. WJN, Rocky Point, N. Y., Exp. WWM, Rocky Point, N. Y., Exp. WWM, Rocky Point, N. Y., Exp. WEM, Rocky Point, N. Y., Exp. WEM, Rocky Point, N. Y., Exp.  |
|                  |                       | KGZT, Santa Cruz, Calif.  | 6.935              | 43.23                 | WEB. Rocky Point, N. Y., Exp.  |
|                  |                       | KGZU, Lincoln, Nebr.  | 6.950              | 43.13                 | WKP, Rocky Point, N. Y., Exp.  |
|                  |                       | WPDT Kolomo Ind   | 6.958              | 43.09                 | WEO, Rocky Point, N. Y., Exp.  |
|                  |                       | WPDZ, Fort Wayne, Ind.  | 7.370              | 40.67                 | KEB, Bolinas, Calif., Exp.   |
|                  |                       | WPDZ. Fort Wayne, Ind.<br>WPEC, Memphis, Tenn.<br>WPEM, Woonsocket, R. I.   | 7 400              | 10 51                 | WJN, ROCKY POINT, N. 1., EXP.  |
|                  |                       | WPEM, Woonsocket, R. I.   | $7.400 \\ 7.415$   | $\frac{40.51}{40.43}$ | WEM, Rocky Point, N. Y., Exp.<br>WEG, Rocky Point, N. Y., Exp.   |
|                  |                       | WPFO, Knoxville, Tenn.  | 7.520              | 39.87                 | KIJK-KKH Kahijikii Hawaii nhone  |
|                  |                       | WPFP Johnson City Tonn  |                    | 39.40                 | KWX, Dixon, Calif., phone  |
|                  |                       | WPFV Pawtucket, R. I.   | 7,610<br>7.715     | 38.86<br>34.74        | KWX, Dixon, Calif., phone<br>KEE, Bolinas, Calif., Exp.<br>WOO, Ocean Gate, N. J., Ship phone  |
|                  |                       | WRDQ, Toledo, Ohio  | 8.630              | 34.74                 | WOO, Ocean Gate, N. J., Ship phone   |
|                  |                       | WPFO, Knoxville, Tenn. WPFR, Johnson City, Tenn. WPFR, Johnson City, Tenn. WPFV, Pawtucket, R. I. WRDQ, Toledo, Ohio Cranston, R. I. Las Vegas, Nev. Palo Alto, Calif. South Bend, Ind.                       | 8.820              | 33.99                 | KFY, Forward Base, Little America<br>KFZ, Main Base, Little America  |
|                  |                       | Las Vegas, Nev.   | 8.840              | 33.92                 | KEV Forward Rese Little America  |
|                  |                       | Palo Alto, Calif.   | 0.010              | 00.82                 | KFY, Forward Base, Little America<br>KFZ, Main Base, Little America  |
| 0 506            | 110.64                | KGZE, San Antonio, Tex., State police   | 8.930              | 33.57                 | WAD-WEC Rocky Point, N. Y., Exp.   |
| 2.506            | 119.64                | Portable in Wash.   | 8.940              | 33.54                 | KZGG, Cebu, P. I., Inter-island phone  |
|                  |                       | Seattle, Wash State police  |                    |                       | WAD-WEC, Rocky Point, N. Y., Exp.<br>KZGG, Cebu, P. I., Inter-island phone<br>WKL, Rocky Point, N. Y., Exp.  |
|                  |                       | Seattle, Wash . State police Snoqualmie Pass, Wash., police   | 8.950              | 33.50                 | WEL, Rocky Point, N. Y., Exp.  |
| 2.530            | 118.51                | KOW, Seattle, Wash., Harbor phone<br>WOX, St. George, N. Y., Harbor phone   | 9.010              | 33.28                 | K.F.I. Bolinas, Calif., Exp.   |
|                  |                       | WOX, St. George, N. Y., Harbor phone  | 9.170              | 32.70                 | KZGF, Manila, P. I., Inter-island phone  |
| 2.542            | 117.94                | KLH, San Francisco, Calif., Harbor phone  | 0.440              | 21 74                 | WNA, Lawrenceville, N. J., phone   |
| 2.590            | 115.76                | KOU, Wilmington, Calif., Ship phone<br>WOU, Green Harbor, Mass., Ship phone   | 9.448              | 31.74<br>31.79        | WKI New Brunewick N. I., Exp.  |
|                  |                       | WOU, Green Harbor, Mass., Ship phone  | $9.460 \\ 9.470$   | 31.66                 | WET. Rocky Point, N. Y., Exp.  |
| 3.387            | 88.50                 | KGYA-KGYB, Longmire, Wash., Fores-  | 9.480              | 31.62                 | WDA, Rocky Point, N. Y., Exp.  |
|                  |                       | try station<br>KGYC, Paradise, Wash., Forestry station  | 9.490              | 31.59                 | WES, Rocky Point, N. Y., Exp. WKJ, New Brunswick, N. J., phone WET, Rocky Point, N. Y., Exp. WDA, Rocky Point, N. Y., Exp. KZGH, Iloilo, P. I., Inter-island phone WEF, Rocky Point, N. Y., Exp.   |
| 3.410            | 87.92                 | WRI Poe Reef Lighthouse Mich.   |                    |                       | WEF, Rocky Point, N. Y., Exp.  |
| 0.110            | 01.02                 | WRJ, Poe Reef Lighthouse, Mich.<br>WST, Dry Tortugas Lighthouse, Fla.<br>WWAJ, Manitou Isl. Lighthouse, Mich.   | 9.530              | 31.46                 |  |
|                  |                       | WWAJ, Manitou Isl. Lighthouse, Mich.  | $9.585 \\ 9.750$   | 31.28<br>30.75        | WOF Lawrenceville N. I. phone  |
|                  |                       | WWAL, Passage Isl. Lighthouse, Mich.  | 9.870              | 30.38                 | WON, Lawrenceville, N. J., phone   |
|                  |                       | WWAL, Passage Isl. Lighthouse, Mich.<br>WWAM, Rock of Ages Lighthouse, Mich.<br>WWAO, Huron Isl. Lighthouse, Mich.  | 9.990              | 30.01                 | KAZ, Manila, P. I., phone  |
|                  |                       | WWE Fourteen Foot Shoals, Mich.   | 10.317             | 28.09                 | W3XAU, Philadelphia, Pa. (Byberry) WOF, Lawrenceville, N. J., phone WON, Lawrenceville, N. J., phone KAZ, Mamia, P. I., phone WCG, Rocky Point, N. Y., Exp. KEZ, Bolinas, Calif., Exp. KEZ, Bolinas, Calif., Exp. WOK, Lawrenceville, N. J., phone WCA, Rocky Point, N. Y., Exp. WED, Rocky Point, N. Y., Exp. WED, Rocky Point, N. Y., Exp. KWV, Dixon, Calif., phone KIO, Kahuku, Hawaii, Exp. WIXAL, Boston, Mass. W2XE, New York, N. Y. (Wayne, N. J. W8XK, Pittsburg, Pa. (Saxonburg) KKQ, Bolinas, Calif., Exp.  |
|                  |                       | WWE, Fourteen Foot Shoals, Mich.<br>WWG, Cheboygan Range, Mich.<br>WWH, Stannard Rock Lighthouse, Mich.   | 10.370             | 28.91                 | WCG, Rocky Point, N. Y., Exp.  |
|                  |                       | WWH, Stannard Rock Lighthouse, Mich.  | 10.400 $10.410$    | $28.83 \\ 28.80$      | KES Bolings Calif Exp.   |
|                  |                       | wwm, Marquette Lighthouse, Mich.  | 10.550             | 28.42                 | WOK, Lawrenceville, N. J., phone   |
|                  |                       | WWN. Detroit River Lighthouse, Mich.  | 10.610             | 28.25<br>28.20        | WEA, Rocky Point, N. Y., Exp.  |
|                  |                       | WWR, Detroit, Mich., Lighthouse<br>WWZ, Key West, Fla., Lighthouse  | 10.630             | 28.20                 | WED, Rocky Point, N. Y., Exp.  |
| 3.423            | 87.59                 | WOZ, New York, N. Y.<br>WKF, Lawrenceville, N. J., phone<br>WOG, Ocean Gate, N. J., Ship phone  | 10.830             | 27.68                 | KWV, Dixon, Calli., phone  |
| 4.253            | 70.50                 | WKF, Lawrenceville, N. J., phone  | $11.680 \\ 11.780$ | $25.67 \\ 25.45$      | W1XAL Boston Mass.   |
|                  |                       | WOG, Ocean Gate, N. J., Ship phone  | 11.823             | 25.36                 | W2XE, New York, N. Y. (Wayne, N. J.  |
| 4.273            | 70.17                 | WOO, Ocean Gate, N. J., Ship phone  | 11.870             | 25.25                 | W8XK, Pittsburg, Pa. (Saxonburg)   |
| 4.276            | 70.11                 | WIR, Rocky Point, N. Y., Exp.   | 11.950             | 25.08                 | KKQ, Bolinas, Calif., Exp.   |
| 4.307            | 69.60                 | WOO, Ocean Gate, N. J., Ship phone<br>WIR, Rocky Point, N. Y., Exp.<br>WTDV, St. Thomas, Virgin Islands<br>WTDW, St. Croix, Virgin Islands  | 12.840             | 23.35                 | WAXA, Intesting, ta. Castoning/<br>KKQ, Bolinas, Calif., Exp.<br>WOO, Ocean Gate, N. J., Ship phone<br>WAW, Hialeah, Fla., phone<br>KFY, Forward Base, Little America<br>KFZ, Main Base, Little America  |
| 5.263            | 56.96                 | WON Pooks Point N V Exp   | 12.930<br>13.185   | $23.18 \\ 22.74$      | WAW, Hisiesh, Fis., phone<br>KEV Forward Rose Little America   |
| 5.505            | 54.46                 | WQN, Rocky Point, N. Y., Exp. WQN, Rocky Point, N. Y., Exp. KZGF, Manila, P. I., Inter-island phone KZGG, Cebu, P. I., Inter-island phone KZGG, Cebu, P. I., Inter-island phone WQN, Rocky Point, N. Y., Exp. | 10.100             | 22.14                 | KFZ. Main Base. Little America   |
| 5.765            | 52.01                 | KZGF, Manila, P. I., Inter-island phone   | 13.200             | 22.71                 | KFY, Forward Base, Little America  |
| 5.795            | 51.74                 | KZGH, Iloilo, P. I., Inter-island phone   | 20,200             |                       | KFZ, Main Base, Little America   |
| 5.825            | 51.47                 | KZGG, Cebu, P. I., Inter-island phone   | 13.245             | 22.64                 | KFY, Forward Base, Little America  |
|                  | ** **                 | WQN, Rocky Point, N. Y., Exp.   |                    |                       | KFZ, Main Base, Little America   |
| 5.845            | 51.30                 | KRO, Kahuku, Hawaii, phone<br>WOB, Lawrenceville, N. J., phone  | 13.260             | 22.61                 | KFY, Forward Base, Little America  |
| 5.850<br>6.057   | $51.25 \\ 49.50$      | W3XAU, Philadelphia, Pa. (Byberry)  |                    |                       | KFZ, Main Base, Little America   |
| 6.060            | 49.48                 | W8XAL Cincinnati Ohio (Mason)   | 13.390             | 22.39                 | WMA, Lawrenceville, N. J., phone   |
| 6.096            | 49.17                 | W3XAL, New York, N. Y. (Boundbrook,   | 13.420             | $\frac{22.34}{22.31}$ | WHR, Rocky Point, N. Y., Exp.  |
|                  |                       | W8XAL, Cincinnati, Ohio (Mason) W3XAL, New York, N. Y. (Boundbrook, N. J.)  | $13.435 \\ 13.450$ | $\frac{22.31}{22.28}$ | WEY Rocky Point N V Evr  |
| 6.100            | 49.15                 | W9XF-W9XQ, Chicago III. (Downers  | 13.465             | 22.26                 | WKC. Rocky Point, N. Y., Exp.  |
|                  |                       | Grove)  | 13.480             | 22.24                 | WAJ, Rocky Point, N. Y., Exp.  |
| 6.116            | 49.02                 | W2XE, New York, N. Y. (Wayne, N. J.)  | 13.690             | 21.90                 | KKZ, Bolinas, Calif., Exp.   |
| 6.140            | 48.83                 | W8XK, Pittsburg, Pa. (Saxonburg)  | 13.780             | 21.75                 | KFZ, Main Base, Little America WMA, Lawrenceville, N. J., phone WHR, Rocky Point, N. Y., Exp. WKD, Rocky Point, N. Y., Exp. WKC, Rocky Point, N. Y., Exp. WKC, Rocky Point, N. Y., Exp. WKZ, Rolinas, Calif., Exp. KKZ, Bolinas, Calif., Exp. KKW, Bolinas, Calif., Exp. WPE, Rocky Point, N. Y., Exp. WQU, Rocky Point, N. Y., Exp. WQU, Rocky Point, N. Y., Exp. WQV, Rocky Point, N. Y., Exp. WQP, Rocky Point, N. Y., Exp. WQP, Rocky Point, N. Y., Exp. WQP, Rocky Point, N. Y., Exp. WMF, Lawrenceville, N. J., phone WMN, Lawrenceville, N. J., phone |
| $6.425 \\ 6.425$ | 46.66<br>46.66        | WOXE Downers Grove III Evo  | 13.840             | 21.66                 | WOU Pooky Point, N. Y., Exp.   |
| 6.610            | 46.66<br>45.36        | WMEP, Akron, Ohio, Airway Exp.  | $13.855 \\ 13.870$ | 21.63<br>21.61        | WIY Rocky Point N V Exp.   |
| 6.618            | $\frac{45.36}{45.30}$ | WSAL, Fitsburg, Fs. (Saxonourg) WSAL, Boundbrook, N. J., Exp. WSAF, Downers Grove, III., Exp. WMEP, Akron, Ohio, Airway Exp. WVD, Seattle, Wash., phone KFY, Forward Base, Little America                     | 13.900             | 21.57                 | WOP. Rocky Point, N. Y., Exp.  |
| 6.650            | 45.09                 | KFY, Forward Base, Little America   | 13.915             | 21.54                 | WQS, Rocky Point, N. Y., Exp.  |
|                  |                       | Krz. Wain base, Little America  | 14.470             | 20.72                 | WMF, Lawrenceville, N. J., phone   |
| 6.660            | 45.02                 | KFY, Forward Base, Little America<br>KFZ, Main Base, Little America   | 14.590             | 20.55                 | WMN, Lawrenceville, N. J., phone<br>WQV, Rocky Point, N. Y., Exp.<br>WQL, Rocky Point, N. Y., Exp.   |
| 0 000            | 45.00                 | KFZ, Main Base, Little America  | 14.800             | 20.26                 | WOL Poolsy Point, N. Y., Exp.  |
| 6.662            | 45.00                 | WXH, Ketchikan, Alaska, phone   | 14.815             | 20.23                 | m was, mocky follo, N. I., Exp.  |

| 14.980<br>15.040<br>15.055<br>15.2042<br>15.252<br>15.320<br>15.415<br>15.970<br>16.015<br>16.030<br>17.120<br>17.120<br>17.600<br>17.620<br>17.772<br>17.880<br>17.900<br>17.920<br>17.920<br>17.920<br>18.350<br>18.350<br>18.350<br>18.350 | 20.21<br>19.93<br>19.91<br>19.65<br>19.65<br>19.65<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67<br>19.67 | WKU, Rocky Point, N. Y., Exp. KAY, Manila, P. I., phone WQG, Rocky Point, N. Y., Exp. WNC, Hialeah, Fla., phone WXK, Pittsburg, Pa. (Saxonburg) W1XAL, Boston, Mass. W2XE, New York, N. Y. (Wayne, N. J. W2XAD, Schenectady, N. Y. KWO, Dixon, Calif., phone WKW, Rocky Point, N. Y., Exp. WKO, Rocky Point, N. Y., Exp. WKO, Rocky Point, N. Y., Exp. WKP, Kahuku, Hawaii, phone WLK, Lawrenceville, N. J., phone WOO, Ocean Gate, N. J., Ship phone KFY, Forward Base, Little America KFY, Main Base, Little America KFY, Main Base, Little America KFY, Main Base, Little America W3XAL, New Yotk, N. Y. (Boundbrook N. J.) WQC, Rocky Point, N. Y., Exp. WQL, Rocky Point, N. Y., Exp. WQL, Rocky Point, N. Y., Exp. WQL, Rocky Point, N. Y., Exp. WQB, Rocky Point, N. Y., Exp. WTT, Rocky Point, N. Y., Exp. | W<br>K<br>K<br>L<br>Megs. | 5.55<br>Ianawah<br>lupalaku<br>Zaikii, Is<br>aunakal<br>alepa, Is | WBU, Rocky Point, N. Y., Exp. WQW, Rocky Point, N. Y., Exp. WKK, Lawrenceville, N. J., phone WSKK, Pittsburg, Pa. (Saxonburg) KFY, Forward Base, Little America KFY, Main Base, Little America KFY, Forward Base, Little America KFY, Forward Base, Little America KFY, Forward Base, Little America KFY, Main Base, Little America KFY, Forward Base, Little America KFY, Main Base, Little America KFY, Forward Base, Little America KFY, Howard Base, Little America KIY, Lisland of Oahu, KGXH-L-M  Li, Island of Maui, KGXH-L-M  Li, Island of Molokai, KGXN  Jand of Hawaii, KGXK-L-M  Li, Island of Molokai, KGXN  Jand of Hawaii, KGXM  Jand of Maui, KGXH-L-M  Li, Island of Molokai, KGXN  Jand of Hawaii, KGXM  Jand of Hawaii  Jand of Hawaii, KGXM  Jand of Hawaii  Jan |
|---|---|--|---------------------------|---|--|
| 18.900  | 15.86<br>15.84  | WDS, Rocky Point, N. Y., Exp.<br>WQE, Rocky Point, N. Y., Exp.   |                           |   | UZI, Nelson, B. C.<br>UZM, Prince George, B. C.  |
|   | 15.83   |  |                           |   |  |
| 18.940<br>18.960<br>18.980  | 15.83<br>15.81<br>15.79   | WQD, Rocky Point, N. Y., Exp.<br>WFX, Rocky Point, N. Y., Exp.   | 2.414                     | 124.17  | CFN, Grande Prairie, Alta., Police<br>CFO, Lethbridge, Alta.   |
| 18.940<br>18.960<br>18.980<br>19.220<br>19.816  | 15.81<br>15.79<br>15.60<br>15.14  | WQD, Rocky Point, N. Y., Exp.<br>WFX, Rocky Point, N. Y., Exp.<br>WKF, Lawrenceville, N. J., phone<br>WKN, Lawrenceville, N. J., phone   | 2.414                     | 124.17  | CFN, Grande Prairie, Alta., Police<br>CFO, Lethbridge, Alta.<br>CFU, Peace River, Alta.<br>CGJ, Edmonton, Alta.  |
| 18.940<br>18.960<br>18.980<br>19.220<br>19.816<br>19.980  | 15.81<br>15.79<br>15.60<br>15.14<br>15.01   | WQD, Rocky Point, N. Y., Exp.<br>WFX, Rocky Point, N. Y., Exp.<br>WKF, Lawrenceville, N. J., phone<br>WKN, Lawrenceville, N. J., phone<br>KAX, Manila, P. I., phone  | 2.414                     | 124.17  | CFN, Grande Prairie, Alta., Police<br>CFO, Lethbridge, Alta.<br>CFU, Peace River, Alta.<br>CGJ, Edmonton, Alta.  |
| 18.940<br>18.960<br>18.980<br>19.220<br>19.816<br>19.980<br>20.100<br>20.180  | 15.81<br>15.79<br>15.60<br>15.14  | WQD, Rocky Point, N. Y., Exp. WFX, Rocky Point, N. Y., Exp. WKF, Lawrenceville, N. J., phone WKN, Lawrenceville, N. J., phone KAX, Manila, P. I., phone WQY, Rocky Point, N. Y., Exp. WQX, Rocky Point, N. Y., Exp.  | 2.414                     | 124.17  | CFN, Grande Prairie, Alta., Police<br>CFO, Lethbridge, Alta.<br>CFU, Peace River, Alta.<br>CGJ, Edmonton, Alta.<br>CGS, Calgary, Alta.<br>CJW, St. John, N. B.<br>CKT, Penticton, B. C.  |
| 18.940<br>18.960<br>18.980<br>19.220<br>19.816<br>19.980<br>20.100<br>20.180<br>20.260  | 15.81<br>15.79<br>15.60<br>15.14<br>15.01<br>14.91<br>14.85<br>14.79  | WQD. Rocky Point, N. Y., Exp. WFX. Rocky Point, N. Y., Exp. WEF, Lawrenceville, N. J., phone WKN, Lawrenceville, N. J., phone KAX, Manila, P. I., phone WQY. Rocky Point, N. Y., Exp. WQX, Rocky Point, N. Y., Exp. WQQ, Rocky Point, N. Y., Exp.  | 2.414                     | 124.17  | CFN. Grande Prairie, Alta., Police CFO, Lethbridge, Alta. CFU, Peace River, Alta. CGJ, Edmonton, Alta. CGS, Calgary, Alta. CJW, St. John, N. B. CKT, Penticton, B. C. UYW, Winnipeg, Man.  |
| 18.940<br>18.960<br>18.980<br>19.220<br>19.816<br>19.980<br>20.100<br>20.180<br>20.260<br>21.054  | 15.81<br>15.79<br>15.60<br>15.14<br>15.01<br>14.91<br>14.85<br>14.79<br>14.24   | WQD, Rocky Point, N. Y., Exp. WFX, Rocky Point, N. Y., Exp. WKF, Lawrenceville, N. J., phone WKN, Lawrenceville, N. J., phone KAX, Manila, P. I., phone WQY, Rocky Point, N. Y., Exp. WQX, Rocky Point, N. Y., Exp. WQQ, Rocky Point, N. Y., Exp. WKA, Lawrenceville, N. J., phone   | 2.414                     | 124.17  | CFN, Grande Prairie, Alta., Police CFO, Lethbridge, Alta. CFU, Peace River, Alta. CGJ, Edmonton, Alta. CGS, Calgary, Alta. CJW, St. John, N. B. CKT, Penticton, B. C. UYW, Winnipeg, Man. UZE, Victoria, B. C.   |
| 18.940<br>18.960<br>18.980<br>19.220<br>19.816<br>19.980<br>20.100<br>20.180<br>20.260  | 15.81<br>15.79<br>15.60<br>15.14<br>15.01<br>14.91<br>14.85<br>14.79  | WQD. Rocky Point, N. Y., Exp. WFX. Rocky Point, N. Y., Exp. WEF, Lawrenceville, N. J., phone WKN, Lawrenceville, N. J., phone KAX, Manila, P. I., phone WQY. Rocky Point, N. Y., Exp. WQX, Rocky Point, N. Y., Exp. WQQ, Rocky Point, N. Y., Exp.  | 2.414                     | 124.17  | CFN. Grande Prairie, Alta., Police CFO, Lethbridge, Alta. CFU, Peace River, Alta. CGJ, Edmonton, Alta. CGS, Calgary, Alta. CJW, St. John, N. B. CKT, Penticton, B. C. UYW, Winnipeg, Man.  |

# 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 RA-DEX in any respect. The information conradio magazine should give to its readers."
S. H. Crowe, 157 Catharine St., N., Hamil-

ton, 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, Fayette-

ville, 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., Chorl-ton-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, Chicouti mi, 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                                     |
|-----------------------|-------------------|--|--------------------|-----------------------|---|
|                       |                   | UZM, Prince George, B. C.  | 6.005              | 49.93                 | VE9DR, Montreal, P. Q.  |
| 2.481                 | 120.80            | UZN, Cranbrook, B. C.<br>CGK, Ft. Chipweyan, Alta., Airway         | $6.015 \\ 6.030$   | $\frac{49.85}{49.72}$ | VE9CX, Wolfville, N. S.<br>VE9CA, Calgary, Alta.                          |
| 2.101                 | 120.00            | 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.  |
| 0.795                 | 100.69            | UYO, Echo Bay, N. W. T., Airway                                    | 6.092              | 49.22                 | VE9GW, Toronto, Ont. (Bowmanville)  |
| $\frac{2.735}{3.068}$ | $109.62 \\ 97.70$ | VE9CI, London, Ont., Broadcast<br>CJU, Winnipeg, Man., Airway      | $6.110 \\ 6.150$   | 49.07<br>48.75        | VE9HX, Halifax, N. S.<br>VE9CL, Winnipeg, Man.                            |
| 3.331                 |                   | VE9AA, Montreal, P. Q., Exp.                                       | 6.335              | 47.35                 | VE9AP, Drummondville, P. Q., Exp.   |
| 3.450                 | 86.90             | CGK, Ft. Chipweyan, 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<br>UYN, Ft. McMurray, Alta., Airway |                    |                       | CFU, Peace River, Alta.<br>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.<br>UZF, Vancouver, B. C.                             |
|                       |                   | CFU, Peace River, Alta.<br>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.   |                    |                       | UZM, Prince George, B. C.   |
|                       |                   | UZF, Vancouver, B. C.<br>UZG, Prince Rupert, B. C.                 | 6.840              | 43.82                 | UZN, Cranbrook, B. C.<br>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.  |
|                       |                   | UZM, Prince George, B. C.  |                    |                       | UZF, Vancouver, B. C.   |
| 4.751                 | 63 10             | UZN, Cranbrook, B. C.<br>CGK, Ft. Chipweyan Alta., Airway          |                    |                       | UZG, Prince Rupert, B. C.<br>UZH, Kamloops, B. C.                         |
| 2.701                 | 00.10             | UYM, Ft. Rae, N. W. T., Airway                                     |                    |                       | UZI, Nelson, B. C.  |
|                       |                   | UYN, Ft. McMurray, Alta., Airway                                   |                    |                       | UZM, Prince George, B. C.   |
| 4.772                 | 60.00             | UYO, Echo Bay, N. W. T., Airway                                    | 0.050              | 95 00                 | UZN, Cranbrook, B. C.   |
| 4.772                 | 62.82             | CFN, Grande Prairie, Alta., Police<br>CFO, Lethbridge, Alta.       | 8.353              | <b>35.8</b> 9         | CGK, Ft. Chipweyan, Alta., Airway<br>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.<br>UZE, Victoria, B. C.                      | $11.720 \\ 12.951$ | $25.58 \\ 23.15$      | VE9JR, Winnipeg, Man. (Middlechurch)<br>CGK, Ft. Chipweyan, Alta., Airway |
|                       |                   | UZF, Vancouver, B. C.  | 12.001             | 20.10                 | UYM, Ft. Rae, N. W. T., Airway  |
|                       |                   | UZF, Vancouver, B. C.<br>UZG, Prince Rupert, B. C.                 |                    |                       | UYN, Ft. McMurray, Alta., Airway  |
|                       |                   | UZH, Kamloops, B. C.<br>UZI, Nelson, B. C.                         | 13.296             | 22.55                 | UYO, Echo Bay, N. W. T., Airway<br>CGA, Drummondville, P. Q., phone       |
|                       |                   | UZM, Prince George, B. C.  | 13.740             | $\frac{22.33}{21.82}$ | 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 \$  | ☐ 4 for 25c<br>———————————————————————————————————— |
| Write Name plainly  |   |
| 76 City and State   |   |

# $February\ DX\ Calendar \qquad {}^{\text{Feb.\ 3-17}}_{2:00\text{-}3:00-XES,\ Tampico,\ 1020\ (.5)}$

(Continued from second cover) FRIDAY MORNINGS

# Feb. 2

2:30-4:00-CHWK, Chilliwack, 780 (.1)

4:00-5:00-KPOF, Denver, 880 (.5)

# Feb. 2-9-16-23

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—WGNY, Chester, 1210 (.1)

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. 10-17-24

1:00-3:00—CMCW, Havana, 965 (.15) 2:00-3:00—WGLC, Hudson Falls, 1370 (.1)

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)

1:00-2:00—CMHJ, Cienfuegos, 1125 (.06) 4:00-5:00—CFQC, Saskatoon, 1250 (.5)

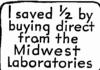
Feb. 3-10-17-24

1:00-2:00—WGNY Chester, 1210 (.1) 2:00-3:00—CMBS, Havana, 765 (.2) 4:00-5:00—XEAO, Mexicali, 560 (.1)

# THE MONTH'S CHANGES

| 595<br>600<br>765<br>775<br>800<br>835<br>873<br>875                       | CMW<br>CJOR<br>CMBS<br>CMCQ<br>TIGP<br>CMC<br>CMCF                           | FREQUENCIES  Havana, Cuba, from 590 Vancouver, B. C., from 1210 Havana, Cuba, from 780 Havana, Cuba, from 780 San Jose, C. R., from 666 Havana, Cuba, from 840 Havana, Cuba, from 890 Havana, Cuba, from 890  | 1100<br>1120<br>1120<br>1200<br>1200<br>1210<br>1210<br>1210 | CRCV<br>CHGS<br>CKOC<br>CJAT<br>10-BQ<br>CKBI<br>CKMC<br>CKOV<br>CHCK | Vancouver, B. C., 500 to 1000<br>Summerside, P. E. 1., 100 to 50<br>Hamilton, Ont., 1000 to 500<br>Trail, B. C., 25 to 50<br>Brantford, Ont., 5 to 15<br>Prince Albert, Sask., 25 to 100<br>Cobalt, Ont., 100 to 50<br>Kelowna, B. C., 100 to 50<br>Charlottetown, P. E. 1., 100 to 59 |
|--|--|---|--|---|--|
| 910<br>915<br>945.5<br>950<br>971.5<br>985<br>1005<br>1052<br>1052<br>1120 | CMJF<br>CMCD<br>CMHD<br>VOGY<br>CMGF<br>XEFE<br>CMBZ<br>CMBG<br>CMCB<br>CFTP | Camaguey, Cuba, from 930 Havana, Cuba, from 925 Caibarien, Cuba, from 950 St. John's, Nfld., from 1400 Matanzas, Cuba, from 977 Nuevo Laredo, Tams., from 1000 Havana, Cuba, from 1010 Havana, Cuba, from 1070 Havana, Cuba, from 1070 Edwarder, Alta, From 500 | 1290<br>1310<br>1310<br>1370<br>1390<br>1420<br>1500         | CJKL<br>CJLS<br>CHPR<br>CJRC<br>CKGB                                  | NEW San Juan, P. R. Kirkland Lake, Ont. Yarmouth, N. S. St. John, N. B. Middlechurch, Man. Timmins, Ont. Chelsea, Mass. Hot Springs, Ark.  |
| 1120<br>1170<br>1180<br>1200<br>1210<br>1370<br>1450<br>1500               | CMJE<br>CMCJ<br>CJAT<br>CKBI<br>WHET<br>CFCT<br>WKBB<br>CFRC                 | Edmonton. Alta, from 580 Camaguey, Cuba, from 1175 Havana, Cuba, from 1185 Trail, B. C., from 1155 Prince Albert, Sask., from 1200 Dothan, Ala., from 1210 Victoria, B. C., from 1430 E. Dubuque, Ill., from 1310 Kingston, Ont., from 915                      | 560<br>580<br>1200<br>1210<br>1250                           | KTWO<br>CFTP<br>CJAT<br>CKBI<br>WNEW                                  | CALLS Springfield, Mo., formerly KGIZ Ed monton, Alta, formerly CHMA Trail, B. C., formerly 10-AT Prince Albert, Sask., formerly 10-Bl Newark, N. J., formerly WAAM-WODA LOCATION  |
| 1510   | CKCR   | POWER   | 930<br>1200<br>1370  | CKPC<br>KBTM<br>WHET  | Brantford, Ont., from Preston, Ont.<br>Jonesboro, Ark., from Paragould, Ark.<br>Dothan, Ala., from Troy, Ala.  |
| 540<br>580<br>580<br>600   | CJRM<br>WOBU<br>WTAG<br>CFCO   | Moose Jaw, Sask., 500 to 1000<br>Charleston, W. Va., 500 to 750<br>Worcester, Mass., 500 to 750<br>Chatham, Ont., 100 to 50   | 1370<br>1420   | PERM<br>WMBR<br>WENC  | IT TO CHANGE LOCATION Tampa, Fla., to Jacksonville. Fla. Americus, Ga., to Albany, Ga.   |
| 690<br>730<br>780<br>930   | CJCJ<br>CJCA<br>CKPR<br>CFAC   | Calgary, Alta., 500 to 100<br>Edmonton, Alta., 500 to 1000<br>Fort William, Ont., 100 to 50<br>Calgary, Alta., 500 to 100   | 630<br>1200  | XEZ<br>CHAB   | REINSTATED<br>Merida, Yuc.<br>Moose Jaw, Sask.   |

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.



Yes, and it gives you WORLD-WIDE Reception!

mazing M SUPER Deluxe

# ALL-WAVE Radio

TO 2,000 METERS



WRITE FOR NEW LOG

BEFORE you buy any radio write for this big new FREE in four colors. It has helped thousands of satisfied customers save from ½ to ½ on their radios. by buying direct from the Midwest Laboratories. You, too, can make a positive saving of 30% to 50% by buying a Midwest 16-tube de luxe ALL-WAVE radio at sensationally low direct-from-laboratory prices. You'll be amazed and delighted with tits super performance! Broadcast from stations 10,000 miles and more away are brought in . . . "(cear as locals." You get complete wave

length coverage of 9 to
2,000 meters (33 megocycles 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: ultrashort, short, medium, broadcast
and long . . putting the whole
world of radio at your finger tips
Wowlisten in on all U. S. programs . . Canadian, police, amateur, commercial, alrelane and ship teur, 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 Superheterodyne Circuits, Super-Power Class "A" Amplifier, 29 Tuned Circuits, No-Image Heterodynes, Variable Tone Blender, Centralized Tuning, 7 KC Selectivity, New Thermionic Rectifier, Automatic Tone Compensation, Auditorium Type Speaker, etc., found only in sets selling from \$100 to \$150.

# WORLD'S GREATEST RADIO VALUE with Deluxe Auditorium Type SPEAKER

TERMS NEW STYLE CONSOLES

AS LOWAS

Write quickly for your FREE copy of the new Midwest catalog. It pletures a complete line of beautiful. artistic de lure consoles and cate consoles and cate of the c



AMAZING FOREIGN RECEPTION

RECEPTION
AKNON, ORIO-My
Midwest-16 is a sea go-getter for
203 escellus on regular vavo
and . . . including U. S.
Canadian, Mexican, Cuban,
Hawalian and South American
land. France, Germany ..
Madrid. Rome, on 15-30
meterband. L. H. Mozeller
73 N. South St.

Increasing costs are sure to result in higher radio prices soon. Buy in higher radio prices soon. NOW, while you can take advantage of Midwest's amazingly low prices. You save from 30% to 50% when you buy direct from Midwest Laborator-

ies . . . you get 30 days FREE trial you get 30 days FREE trial SAVE UP as little as \$5.00 down puts a Midwest radio in your

MAIL COUPON TODAY/ GOL AMAZING BODDAY BREETRIA 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 com-plete details of your liberal 30-day FREE trial offer. This is NOT an order.

AGENTS! Make Easy Extra Money Check Here for Details

| lame | <br> |  |
|------|------|--|

| Address |  |
|---------|--|
|---------|--|

City.

MIDWEST CORP

DEPT. TEE - CINCINNATI, OHIO, U. S. A.