THE FEBRUARY 1931

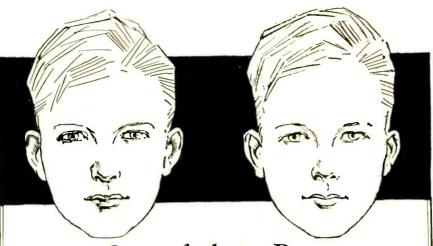
RADEX INDEX

The Magazine that Doubles the Pleasure of Radio



(25°)

Reducing the Effect of Static
Sick Sets and Their Symptoms
The Cuban-Mexican Situation



One of these Boys Will Fail-IF

DOTH possess equal health and intelligence, both have qualities that make for success, but only one will succeed, for the other one stammers—he will fail. He is dominated by fear. He will dread to meet people, for he will lack the self-confidence so necessary to succeed in all walks of life, but especially in business; and the humiliation of his disability will result in an impairment of his nervous system—a condition often the beginning of ill health.

All stammerers are fully aware of their handicap; they know how it feels to be regarded as "different" from other people—and often laughed at. They know that their affliction sets them apart from all others who are normal. They know that stammering is a handicap which prevents their greatest success in business or their participation in social affairs. But all stammerers do not know that their handicap can be removed.

From childhood Benjamin Bogue was afflicted with a chronic case of stammering. For nearly twenty years he endured the experience common to all stammerers. But after long years of tireless effort, after endless nights of study and days of research he developed the method by which he cured himself.

STAMMERING ITS CAUSE AND CURE

In the book offered below, Mr. Bogue relates the story of his own experiences, and describes how he restored himself to perfect speech. As stammering is due to a lack of co-ordination between the speech muscles and the brain, he quotes in the book the eminent authorities that for years recognized the well-known fact that stammering cannot be "outgrown,"

but instead becomes "ingrown," and that in order to restore perfect speech it is necessary to establish proper functioning of the speech musculature.

Beginning on page 72 will be found an explanation of the causes of stammering. The results of stammering are also fully described, giving the basis of the conviction held by leading speech authorities that stammering should be removed before it becomes deeply rooted in the muscular and nervous system. The text beginning on page 196 is devoted to a description of the Bogue Unit Method, which is based on the principle of coordination between the mind and the speech organs. It has restored perfect speech to stammerers everywhere. No drugs or medicine are used, and the method is highly endorsed by physicians.

In this book will be found the reason for the world-wide reputation of the Boxue Unit Method and its international recognition as the standard method for the cure of stammering and stuttering. Hundreds of helpful facts are embodied in this valuable book entitled "Stammering, Its Cause and Cure," a copy of which will be sent on receipt of ten cents mailed with the coupon.

Name

THE FEBRUARY 1931



RAD IO EX



FRED CLAYTON BUTLER

Editor and Publisher



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THE RADEX PRESS

1367 East 6th Street . . . Cleveland, Ohio

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REDUCING the Effect of STATIC

VERY owner of a radio receiver has undoubtedly have with frying and crashing noises, over which he has seemingly little or no control. He has noticed that such noises are very severe during rainy, cloudy weather, and especially during the warmer months of the year. Also, the trouble is worse in tropical or semitropical regions, but it is also present in parts farther north. These noises, which are caused by static, may have perplexed you. One radio owner, thinking that they were caused by his receiver operating poorly, purchased a new set of tubes, but the trouble still persisted, and then he resoldered all the connections, but to no avail. It is evident then that when you hear static noises, your set is not to blame, and therefore a lot of fruitless tinkering with the set can readily be avoided by knowing static noises when you hear them. Static is an electrical condition existing in the atmosphere and for this reason cannot be entirely eliminated, although something can be done to minimize its effects. Besides superimposing noises on the reception of a broadcast program, static sometimes has a blanketing effect on signals, and then it prevents them from even being heard. Such blanketing effect is entirely incurable by any method used at the receiving end. Sometimes static conditions exist over a small territory of only a few square miles, due to local storm conditions, each lightning discharge producing a loud crash or rumble in the loudspeaker, although such discharges may not be visible. On the other hand a territory of several thousand square miles may be affected by static conditions.

Long Aerial Magnifies

The more sensitive your receiver is, the more static you will pick up on occasions when the trouble prevails. The length of your aerial also has considerable influence. A long aerial will pick up more static than a short one, and an indoor aerial or loop will pick up the least. One method of reducing the

The Worst Enemy of Radio

effects of static is to shorten the aerial or use an inside aerial. Most modern receivers are sensitive enough to work satisfactorily on a short inside aerial. Many radio fans have two separate aerials, a long one and a short one, the former being used when the atmosphere is quite free from static disturbances, and the short one when the effects are noticeable. Another method of reducing trouble is to connect a small fixed condenser of about .00025-mfd. capacity in series with the aerial lead. This is done by connecting the aerial lead-in wire to one terminal of the condenser and then connecting the other terminal of the condenser to the aerial binding post of the set. This method has the same effect practically as shortening the length of the aerial. It causes the receiver to tune more sharply but it also decreases the receiving range. The latter effect is rather undesirable, but under the circumstances, it may be preferable to considerable static.

The most effective method of minimizing static noises in the receiver is to connect a small grid condenser and leak across the aerial and ground leads. This method has been used for a number of years in the U.S. navy. Several static discharges are by-passed by this arrangement and the condenser acts as a stabilizer. If, however, none of the methods already mentioned show any appreciable results, it may be necessary to install an underground antenna, one kind being known as a "Subantenna." This, it is claimed, eliminates considerable static and other atmospheric disturbances of an electrical nature by using the ground instead of the air waves. This kind of aerial consists of a shielded and sheathed wire insulated in a cable, and equipped with specially made pick-up coils at both ends and at the center. It can be procured in 75-foot or 100-foot lenghts. and the method of installing it is given in the directions which accompany it.

SEVEN PUZZLING PROBLEMS

To Test Your Knowledge of Radio

THERE were fifty-two correct solutions of the December puzzle, so that it is evident that our puzzlers found that form more difficult than the cross-call. As usual a number were received too late to be considered. We are now mailing RADEX to subscribers on the 20th of the preceding month. right hot off the press. Solutions must reach us, therefore, by the 20th of each month to receive consideration. The most common error in December was the call "850 miles south of Minneapolis on the new map." A large number used KTHS instead of KTBS. Any map should show that it is Shreveport and not Hot Springs which is 850 miles due south of "The Flour City."

In publishing the correct solution of the December puzzle last month, a typographical error was made for the call "First on the last." It should have been KDB instead of KDBG. A number want to know the meaning of this definition; translated, it means "The first station on the last frequency," KDB being the first listed on 1500 kcys.

The answers to the January stickers are pouring in and the premiums will be mailed to successful contestants on January 20th. The mistakes that are being made are nearly all due to failure in checking with the key descriptions. A number of different stations could be used for any one of the places but they would not fit the descriptions. Thus a number used WOKO instead of WOWO

but only the latter is a ten k.w. station On the other hand, solvers have found a number of stations which can be used which will not only fit the puzzle but will also meet the descriptions. We are counting these as correct.

Correct solutions of the January puzzle are as follows:

TUBE-WFBE-WLBW-GLOW.

PUSH-KUSD-KPSN -WISN -WILL PULL. In place of KUSD, WCSH
may be used and in place of KPSN,
any of the following with WCSH:
WCFL, WMSG, WGST, WBSO,
WCAC, WLSI or WPSC. WISJ
would answer in place of WISN.

RAID-WAIU-KFIU (or WIBU) KFRC (or WABC) WORC-WOMT-ROUT.

DIAL-WBAL-WBOW-WAAW-WACO-WOWO-KONO-SONG. In place of WBOW, any of the following may be used: WJAC, WMAL, WCAC, WBEN or WBBC. In place of WAAW: WICC-WBSO-WAAF.

For the February puzzle, we are going to try to suit everyone by putting in problems of each type. To conserve our supply of maps and RADEX, we are requiring a correct solution for each of the puzzles. Those sending correct answers to all may have their choice of either a new radio map or the March RADEX. If they request it, subscribers may have a number added to their subscription in place of the March issue.

Puzzle No. 1 is submitted by Victor J. Balt, 226 Sumner Ave., Aurora, Ills. A very similar one was submitted by Mort M. Schlosser, 109 South 10th St., Newark, N. J., so credit for this one goes to both. Fill in the blank spaces so that, from beginning to end, you will have the call letters for the following stations:

Key

Shares time with agricultural college. In a city named for a great horticulturist. Father Knickerbocker broadcasting.

	\Box T \Box H \Box E \Box \Box M \Box A \Box G \Box A \Box Z \Box I \Box N \Box E
	T H A T ODOUB L ESOT HE
	P L E A SU R E O O F O R A D I O
1	

One of five NBC stations on this wave. A hundred-watter in the far south The call is abbreviation of the state. Is this the Voice of Providence? (Reverse.) A church in Washington. A booking agency for the movies. Time only In Waterloo. (Reverse.) A Columbia voice in Florida. 20 k. w. agricultural. (Reverse.) On 1500. Shares wave with Zion. (Reverse.) In Massachusetts. Way down South in Dixie. (Reverse.) On the Rice Hotel. Western broadcasting company. NBC outlet in California. In Ogden. (Reverse.) A sister-station in California. In "The Sunshine City." In the middle of 1310. (Reverse.)
The banks of the Wabash far away. All hundred-watters on this wave but four. Has a night wave to itself. Last stop going east. Farthest south of the NBC. (Reverse.) In the middle of the dial.

In the next five puzzles we are to change one word into another by filling in station calls. For each of these calls we must bring down two letters from the one above, using two new letters. Thus to change SOLO into TRIO we change

SOLO

No. 2

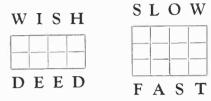
KCYS

TRIO

MTRS

S to W and L to K, bringing down the two O's, giving us WOKO. Now we bring down the W and the last O and change the first O to R and K to D, giving us WRDO. Changing W to T and D to I, gives us TRIO.

Puzzle No. 2. Change KCYS to MTRS with one station.



Puzzle No. 3: Change WISH to DEED with two calls as above.

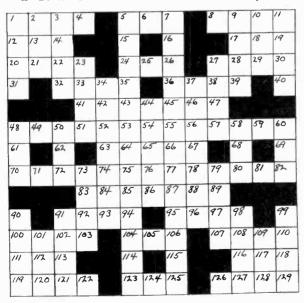
Puzzle No. 4: Change SLOW to FAST with three calls.

Puzzle No. 5: Change PATH to ROAD with three calls as shown.

Puzzle No. 6: Change LONG to HIGH with five calls.

No keys are given for the above as several different stations will fit each call

Puzzle No. 7: This is one of a number submitted by our readers in the January competition. Decision as to their relative





merits will be made later. This one is submitted by C. B. Huff, Martinsville, Ind.

Horizontal

1- 4 One of three stations on this wave 5- 7 On the center wave. 8-11 (Reverse) Associated Broadcasting Corp. 12-14 (Reverse) Moved from 980 in January. 15-16 Middle letters of Tennessee station. 17-19 Will this station be a goat? 20-23 On 1420. 24-26 Last three letters of Union Bank & Trust Co. 27-30 228.9 meters 31-40 Middle letters of College for Women. 32-35 Farthest south in U. S. A. 36-39 (Reverse) On fourth frequency from one end. 41-44 (Reverse) Church of the Nazarene. 44-47 On the Oklahoma-Kansas line. 48-51 (Reverse) Only 100-watt on its wave. 52-55 (Reverse) A sister-station. 55-56 22 stations begin with these letters. 57-60 A Columbia outlet. 61-62 Last two letters Pillar of Fire. 63-65 Last three letters of Brooklyn station. 65-67 (Reverse) An NBC outlet. 68-69 Last letters of two Boston stations. 70-73 "Down in Old Kentucky. 73-75 Two stations in the same city. 76-79 (Reverse) The other sister-station. 80-82 Owned by a secret society. 83-85 (Reverse) In a state capital. 86-89 On the Rio Grande. 90-99 First and last of two Boston stations. 91-94 A "Dn" station on a cleared wave. 95-98 Spells same either way. 100-103 (Reverse) In Greeley 104-106 Four countries on this wave. 107-109 Has permit to move to another city. 111-113 1000 watts daylight station. 114-115 First and last of three Canadian. 116-118 In the capital of another country. 119-122 (Reverse) On the Ohio.

126-129 (Reverse) 33 100-watters on this wave. Vertical

1- 31 Has permit to move to Albany.

5- 35 In Santa Ana. 6- 25 Last two letters of Utah station.

3- 32 (Reverse) Owned by a woman. 4-122 Last letters of two Georgia stations.

123-125 100 watts in California.

2- 21 G. Gutierrez, Jr.

7- 36 10 kilowatts.

8-126 Last two letters of station in C-3.
9-39 (Reverse) Another "Dn" station on clear wave.
10-29 Three stations in three countries on this wave.
11-40 In another state capital.
23-51 (Reverse) On the Mississippi.
27-57 A fitty-watter at the end of the dial.
34-52 Same as 74-76 horizontal.
37-56 Now owned by NBC.
42-74 (Reverse) Shares time with Yonkers.
43-53 Second and last letters of stations in Texas,
Kansas and Montana.
44-65 In Wenatchee.
45-55. Last two letters of Toronto station.

48- 70 (Reverse) Now synchronized with its sister-station.
49- 71 Two Denver stations end with these letters.
50- 72 Shares time with another NBC station in

50- 72 Shares time with another NBC station is same city.
53- 85 (Reverse) Owned by Mr. Jensen.
55- 87 Nothing over 100 watts on this wave.
59- 81 Middle letters of station on same wave.

60- 82 (Reverse) A State university. 67- 96 Lone Star Broadcast Co.

73-103 Ohio shares time with Pennsylvania.

74- 93 First three letters of a Tennessee station.
76- 86 Two Buffalo calls end with these letters.
79- 107 This is one of them.

90-119 A new call in January

91-121 Missouri shares with Illinois.

94-123 Low-powered Canadian. 95-125 100 watts in Illinois. 98-127 Knickerbocker Broadcasting.

98-127 Knickerbocker Broadcasting. 99-129 (Reverse) Only NBC station on its wave.

101-120 12500 watts. 105-124 Middle letters of Tupper Lake station.

109-128 Instituto Provincial.

All puzzles in this issue are made from calls as published in the January RADEX.

What Makes the Buzz?

Dirty commutators and sparking brushes on electric motors used on washing machines, vacuum cleaners, fans, oilburning furnaces, refrigerators, sewing machines, etc., are a frequent cause of crackling noises, if these devices are used while the radio set is in operation. In some cases where these motors cannot be turned off, as is the case with those used on oil-burning furnaces, the trouble can often be eliminated. Connect two 2-mfd, fixed condensers in series across the power line near the motor which is causing the trouble. A ground connection on a cold-water pipe is then made to a point between the two condensers. Fuses of 15-amp, capacity are also provided between the line and the condensers, to prevent short circuits in case the condensers break down. The operation of high-frequency devices, such as violet-ray and X-ray outfits, ozonators, induction coils, and the like, causes continuous crackling or buzzing sounds. Other sources of interference from powerline devices are: sign flashers, electricallyoperated switchboards used for railway signaling, elevator controllers, automatic cutouts and starting switches for machinery, stop lights on street corners, street arc lamps, motion-picture machine using arc lamps, electric-welding apparatus, smoke or dust precipitators, toy electric motors, toy electric trains, doorbells and buzzers.

SEE FREE RADIO MAP OFFER On Page 25

SICK SETS and their SYMPTOMS

My Radiola No. 16, a desk model, operating on direct current, works well but there is one fault. When I get my station, it suddenly fades away. The only way I can get it back again is to snap the switch back and forth. This happens once from every ten minutes to an hour. I went over the whole set and found no loose connections.

One would almost come to the conclusion that your switch is defective. This is probably the case if the tubes flicker or cease to light when the reception fades away. Of course, it may also be a ballast, loose connection between a tube and socket, or an internal defect in a tube that shows up after the tube has been heated for a short time. However, I would suspect the switch. To be on the safe side as far as the tubes are concerned, it would be a good idea to have them tested. Overloading a tube is another possibility that might be responsible for your trouble, which would necessitate turning the rheostat back. In this case it might be well to reduce the plate voltage on the tube that is overloading, probably the detector.

Station Blankets Dial

I have a Fada "10" seven-tube receiver on which reception is good but the separation of stations is poor. I live on the side of a mountain on which is located a 250watt station with an antenna almost parallel to mine. This station covers from 1200 to 1500 on my dial, or about 25 points. As you know the Fada "10" has a rejector. This controls another local station about one mile away but does not affect the closer station. As I cannot very well move my aerial I am wondering if a wave trap or some similar device would help. Would two or three hundred feet of aerial with a .00025-mfd, fixed condenser connected in series, help to make tuning sharper?

When in such close proximity to a broadcasting station as you are it becomes a very difficult matter to eliminate interference, especially with the aerials running parallel. Your suggestion of using a longer antenna with a fixed con-

More Remedies by the Radio Doctor

denser in series, would not make the matter better, but decidedly worse. A very short antenna, erected at right angles to the one of the broadcasting station, can be tried. The trimmers on your tuning condensers should also be properly adjusted, which has been fully covered in the No. 39 issue of RADEX. If the set does not tune the nearby station out, get a wavetrap.

Tube Shorted

I have a Sparton model No. 79A. The wire belt on the dial broke and I replaced it temporarily with a cord until I obtained another wire belt, which I then installed. Since this change was made reception stops a few minutes after the set has been turned on. I have had a radio-service man test all the parts including the tubes, and everything seems to be in good condition, but the set still stops playing. The service man cannot find the cause of this condition and says that the tubes have been choked. Can you make any suggestions?

Your trouble sounds like a temporary internal short-circuit of the r. f. tubes When not used for a short time these will perhaps test O. K., and will also function properly in the receiver for a few moments until they are heated up. The internal members then expand causing a short-circuit. By substituting good, new tubes, one at a time, you can find out just which one is defective. It is possible that when you installed the wire belt you accidentally touched certain parts and subjected the tubes to a high voltage not intended for them, which had a paralyzing effect. Tubes so injured are often referred to as "choked." The sudden stopping of reception may, however, also be due to a short-circuited or leaky by-pass condenser. If you desire a diagram of the wiring of this set write to the manufacturer, although wiring diagrams are usually distributed only to authorized dealers. The manufacturer of the Sparton receiver is the Sparks-Withington Co., of Jackson, Mich.

Changing to Short Waves

Can you furnish me with advice telling how to convert a Crosley No. 51 receiver into a short-wave set?

In the January issue of RADEX you will find an article covering the construction of a short-wave receiver. When an old receiver is to be re-wired for short-wave work the filament, plate and grid wiring can usually be left intact, but the coils and condensers must be changed, together with the leads connected to them. The audio end of your receiver will probably be suitable as is. Use the same kind of tubes as the set was origi-

Broad Tuning

My problem is a Silver-Marshall No. 30. This set, as you know, has an untuned stage which causes broad tuning. I have tried a simple tuned circuit ahead of the untuned tube. This increases the sensitivity of the set many times, especially on the higher frequencies, but adds nothing to the selectivity. Do you think that a band-selector tuner, to be tuned by an extra control, would help? A band selector cuts the signal strength but I believe that the added amplification gained by tuning the first stage would compensate for the loss in the tuner.



A Brand New 1931 Model

Arthur W. "Tiny" Stowe, announcer and maestro of late-night programs from KSTP, Velma Dean Stowe, the Southern Crooner of radio and little Velma Stowe, their four-months-old daughter

nally intended for, as it is equipped with resistors and rheostats passing just the right amount of current for these tubes.

Preliminary Squeal

I have a Brandes receiver model No. B-15, and it works satisfactorily except when I turn it on. While the tubes are warming up and just before reception comes in there is a terrible squeal. Could you tell me what could be done to eliminate this noise?

Many a. c. sets are apt to squeal when first turned on, especially if the volume control is advanced. Retard the volume control and then turn the set on, which usually eliminates the trouble. Proper adjustment of the plate voltages on the detector and r. f. stages may also be necessary.

Reducing the number of turns of the primary winding of the coil used in your additional tuned r. f. stage, and increasing the distance between this winding and the secondary winding, will help considerably to make your set more selective. A band-pass filter will also help to increase the selectivity but try the method just described first, and if the set is still too broad we will be glad to advise you again. Of course, you are aware of the broadness resulting from too long an aerial, and that by cutting a small fixed condenser in the lead-in, greater selectivity can be gained.

I have a "Larphonic" set made by the Larkin Co. It is an eight-tube set using five 227 tubes, two 245 tubes and one 280. (Continued on page 20)

MEXICO, CUBA and their Interference

Heterodynes in Spanish

THE frequencies of the broadcasting band have been allotted to American stations without the slightest consideration being given to stations in Mexico and Cuba. One would think that our authorities felt that stations in the latter two countries were in another planet or on the other side of this one. As a matter of fact, some of the Mexican stations are just across a river from the United States and, so far as interference is concerned, might as well be in the center of this country.

United States and Canadian authorities have gotten together and reached an agreement by which certain waves are set aside for exclusive Canadian use and a number of others designated to be used jointly. No such arrangement or treaty exists between the United States and Cuba or Mexico. When one considers that the result is almost to ruin radio reception in the southern part of the United States and even as far north as Canada, one cannot help but wonder why the officials charged with responsibility for radio in the United States do not take the necessary steps for an orderly arrangement of broadcast waves with our southern neighbors. True, any such arrangement would probably require certain channels to be set aside for the exclusive use of Mexican and Cuban stations, but illy as we can spare any channels in the broadcast band, it would be far better to spare a dozen of them, if need be, rather than have recept on ruined on nearly all of them.

"The Mexican stations," declares Mrs. L. R. Ledbetter, Vicksburg, Miss., "are making radio reception in this part of the country anything but a pleasure. We consider ourselves extremely fortunate to be able to tune in a 50 kilowatt station and leave the radio fifteen minutes without the program being drowned by a squealing and howling from 101-watters on the south (please tell me the reason for that extra one

watt). And why do the Mexican stations crowd Canadian waves? That is something the Canadian radio authorities should attempt to alter."

And Mrs. Roy Schank, Pox 1155, El Paso, Texas, writes that XEJ Juarez, Mexico, runs the gamut on her dial from 40 to 50, thus completely depriving her of a number of very desirable U. S. stations. "Although a radio enthusiast, I might as well junk my radio if the Radio Commission cannot bring about some improvement in the situation."

A New Station

We are in receipt of a telegram informing us that since December 16th XETF has been broadcasting on 680 kcys. as a trial for determining a wave for their 500-watt station. This station is owned by Manuel Angel Fernandez & Cia. Their address is Independencia 24, Veracruz, Mexico, and their slogan "The Voice of Veracruz."

"At 3 a.m. EST, December 23rd, I received a broadcast from a Mexican station coming in at 1160 keys. This broadcast continued until 4 a.m. when they signed off," writes James A. Burke, Box 5, Riverton, Conn. "Announcements were made after every number but they were all in Spanish and I could not understand them. I had the same station again December 25th, at 3 a.m. until 4:07 when they signed off. The letters were XEAAR with a pause between the two A's. The broadcast both times seemed to be from a cafe or dancehall as there was much laughter, talking and noise between each number. There were no announcements in English, and I am quite sure of the five letters unless AR is something in Spanish." We have no record of any Mexican station on or near this wave, but as the Mexican stations seem to be moving around the dial so frequently, it is next to impossible to keep an accurate check on them. We can only hazard the guess that this may have been XEA, Guadalajara, as it is possible that the name of this city in Spanish may sound similar to the letters AR in English. Our last record of XEA was 1200 keys.

A Lesson in Spanish

Charles Enrique Foster, 120 Hall Ave., Colvin Station, Syracuse, N. Y., comes to the assistance of our readers with a short lesson in Spanish.

Mr. Foster, who states that he is



Did You Hear It
The first-time-in-history broadcast from a submerged submarine. This program came from
forty fathoms below Atlantic waters.

partly of Spanish descent, offers to translate letters or postals in Spanish from Mexican or Cuban stations for our readers. We can only hope he will not be swamped. Here is the Spanish alphabet, as it is pronounced in English, according to Mr. Foster: A, be, ce, che, de, e, ef, ge, h, i, jota (the j being pronounced like the English h), ka, el, elle, em, ene (pronounced enye), o, pe, ku, ere, erre, ese, te, u, ve, x (pronounced ekis), i-griega, zetta. It will be noticed there are "ch," "ll" "enye," "rr," which do not appear in English. XEZ would sound like this, "Ekis, e, zetta."

"Early this morning, about 1:50 a.m., I picked up a new Mexican station between 1400 and 1410 kcys. This was not CMBY at Havana, Cuba, as I distinctly heard the announcer say Mexico two or three times during the program.

The location sounded like 'La Saltillo.' This report is from L. E. Wallace, 110 North Duval St., Tallahassee, Fla.

Joseph Stokes, 7318 Woodlawn Ave., Swissvale, Pa., heard a Mexican station with the call XAAR on 1140 kcys., and another on 690. (The latter may have been the new station XETF on 680.) Mr. Stokes has heard so many Spanish-speaking stations that he calls his set "Senorita."

J. H. Nickels, 1510 Gimber St., Indianapolis, Ind., is also seeking information regarding the Mexican station on 1160. He caught the call as XEKR. A number of other readers have written us about these same stations.

XED, Reynosa, Mexico, came on the air after our new map was completed, and a number of readers have called our attention to the fact that Reynosa is not shown. In order that they may mark their map with this important station they are advised that Peynosa is directly across the river from Hidalgo, Texas, on a straight line between Harlingen, Texas, and Monterrey, Mexico, thus coming in the square T-14.

The Cuban Situation

While our readers are endeavoring to identify Cuban stations they may be interested in the trials people there have in bringing in our locals. "We turn on the radio as soon as we awake in the morning," writes Mrs. A. C. Gray, Central Tanamo, Cayo Mambi, Oriente de Cuba. "That is between 5:30 and 5:45 a.m. EST. The most distant station we have been able to pick up is KEX, Portland, Ore. We get KFKB and WTAM nearly every morning, which remain clear and distinct with much volume until 7 a.m. We have WOAM and WIOD from the time they commence their broadcast until they sign off. Those two stations are like good friends to me as I am rather lonely here. I can get the news flashes and so many other things. I notice you omit from your list of Cuban stations CMKX, Holguin. We get it at 1240 kcys. It provokes us many times because it interferes with WIOD. We receive CMKC, Santiago, between 1040 and 1050 kcys., while you (Continued on page 22)

THINGS Our Readers Want to KNOW

About This

Victor J. Balt. 226 Sumner Ave., Aurora, Ill., wants information about KGR on 1500 keys. Roy Knapp, Akron, Ohio, gets KNX every night after KFKB signs off and thinks they surely must have increased their power. Frank Wheeler, 406 Eagle Point Blvd., Erie, Pa., gets KMJ louder than KFI, although the latter is presumed to have 5000 watts and the former but 100. Reg. Firth, 51 Roosevelt Road, Amsterdam, N. Y., wants information about KEEO which he picked up early in the morning of December 29th, hearing two or three orchestra numbers. The location was 1380 or 1390 keys.

J. Duval, 350 St. Joseph St., Quebec, Canada, heard a station whose call letters were clearly WTAT on 1010 kcys. He was sure this was not WPAP. Melvin DeJager, 106 Llewellyn Ave., Hawthorne, N. J., wants to identify a Spanish-speaking station on 1230 kcys. Frank H. Ludwig, Box 455, Barnsdall, Okla., heard a station giving the call letters KGBZ and calling themselves the Metropolitan Police Department of St. Louis. As this is the call of the station in York, Neb., Mr. Ludwig is puzzled.

In answer to O. C. Arnold who inquired as how best to receive New Hampshire and Vermont stations, John C. Berry, 49 Worcester St., Nashua, N. H., states that he lives about 60 miles from WKAV, the only New Hampshire station, and has never received them yet, although he has been trying for two or three years. C. A. Southworth, 2525 Scioto Trail, Portsmouth, Ohio, wants to know how far 2628 kilometers are. One meter is 39.37 inches and a kilometer is 1000 meters. In answer to Charles Foster of Syracuse concerning a German program heard on 1400 kcys., H. I. Humphrey, 22 Theron St., Johnson City, N. Y., thinks this was WBBC, Brooklyn, as that station broadcasts almost every night programs in either German or Yiddish.

Harmonics

Uriah Bronfenbrenner, Thiells, N. Y., wants to know what an harmonic is and what causes it, and Harold C. Rockey, 50 Trinity St., Stratford, Ont., asks why when tuned to about 1520 kcys., he gets WTAR of Norfolk, which is listed on 780 kcys. We can best explain an harmonic by stating that if one were to strike the lower C string on a piano all of the other C strings would vibrate. These are harmonics. In radio a station has a harmonic at twice its frequency. Thus a station on 500 kcys, would have a harmonic at 1000. WTAR's first harmonic would be 1560 kcys.

Frank Maida, R.F.D. No. 1, Long Branch, N. J., wants to know why the kilocycle readings on his Victor RE 45 are not accurate above 1000 kcys. It is probably not possible to mark dials in kilocycles and have them absolutely accurate, although some manufacturers are able to do this quite closely. To be perfectly accurate, each set should be calibrated by itself and this, of course, is not practical when manufacturing in large quantities.

Stations Testing

J. H. Nickels, Indianapolis, Ind., received a program over a powerful station on 1300 or 1310 keys. at 2:50 a.m. They never announced and signed off without giving their call. He heard a similar station on 820 kcys. after WHAS had signed off at 2 a.m. without announcement. R. R. Rawstron, 311/2 Sullivan St., Claremont, N. H., listened for an hour to a station in the early morning with not a single word being spoken. For half an hour they played the same selection over and over again. The secret is that after midnight when other stations on their wave have signed off, a station may do its testing. This is usually done with phonograph records and, as they are not regularly broadcasting, no announcements are necessary.

Herbert Woertz, 1927 No. Summit Ave., Pasadena, Calif., states that the log book which he received with his Majestic set shows the call letters of

Cuban stations beginning with figures instead of CM as in RADEX and wants to know why. Cuban stations changed from figures to calls beginning with CM nearly two years ago. This means that the Majestic log book is two years out of date. Why so progressive a manufacturer should furnish users of his set with such obsolete information we do not

Edward Hayworth, 55 No. 11th St.. San Jose, Calif., complains that we do not show KJBS as a limited time station with the "Dn" symbol. KJBS, he says, signs off at sundown, but returns to the air every night at midnight PST and remains on until sundown. KJBS is a daytime station only, but as stated above, stations may return to the air after midnight when those ordinarily having the channel have signed off.

answer to inquiries regarding WCLB, Karl Halpern, Brooklyn, N. Y., states that he went up to Long Beach to inquire about this station and found that they haven't been on the air since May, 1930, and may not be again until possibly next summer.

All Cleared Waves

A number of readers have written to us to complain of the chaotic conditions on many channels and to suggest that only one station at a time ought to be allowed to broadcast on any one channel. Such an arrangement would, of course, be ideal, but unfortunately is completely out of the question. We now have over 600 stations in this country and only about 90 American channels. It will be readily seen that if all were treated alike, each station would have one evening a week and no broadcasting company would maintain its expensive facilities under such an arrangement.

One of our readers tells us that his Radiola No. 60 was greatly improved by substituting a 245 tube for the 171 formerly used. At first, considerable trouble was encountered owing to hum but this was successfully eliminated. "To overcome the hum," he writes. "remove the lead from lug 8 and put it on lug 10, also remove lead from lug 9 and transfer it to lug 11. Lugs 8 and 9 are left open. Every socket was also carefully checked to see that there was

no more than 2.5 volts current on the filament." We have not tried this experiment and only present this as a remedy suggested by one reader.

We still receive a number of requests for information in regard to attaching headphones to a. c. sets. This was fully covered by an article in April RADEX No. 38.

Richard S. Tefft, 76 Salem St., Greenwich, N. Y., heard the announcer of



"Snoop and Peep" Master-mind "Deetecatives" of the NBC out-Sherlocking Holmes.

WBNX state that that call was being used in place of WKBQ. Karl Halpern, Brooklyn, reports that WSGH is changing to WFOX. C. Bach, 56 E. Compton Road, Mt. Healthy, Ohio, advises us that WFBE is increasing power from 100 to 250 watts. Several readers call our attention to the fact that while we changed KMIC to KMCS in January. that station is still using the call KMIC. Evidently this was an error and we are changing back to the old call. A reader sends a newspaper clipping announcing the first broadcast from Grove City's new station WHAJ, which is sponsored by the college. We are now carrying WSAJ at Grove City on 1310 which is

(Continued on page 22)

STALKING Elusive STATIONS

With the Midnight Dialers

E receive hundreds of letters from our DX friends and it is utterly impossible to quote all the interesting records and comments. Many which we planned to include this month will have to be carried over until March. We are particularly anxious to receive reports of reception of stations whose announcements do not agree with the call, frequency or location as published in RADEX. Many changes are made long before they are reported by the Radio Commission and it is only through the cooperation of our readers that we are enabled to keep this magazine not only up-to-date but actually in advance of official records.

In regard to WBBZ being heard from points other than Ponca City, Okla., an explanation is given by Thomas Henry Edmiston, 402 East Vilas, Guthrie, Okla. "This station has several studios in Arkansas that broadcast over it by remote control. The station has not moved."

John N. Dannert, 181 Alexander Ave., New York City, answers several inquiries as follows: To Charles Foster: WCGU at Coney Island broadcasts a Jewish program several times during the week. To Joseph Brocius: VAS may be heard at about 3:00 a.m. EST giving weather forecasts to Atlantic fishermen. To L. A. Deuchar: WHAP has taken over WOAX.

Eugene Martin, 5446 McCommas Lane, Dallas, Texas, sends us a letter which he received from a so-called DXer in Harrison, N. J., which asks Mr. Martin to furnish him with information that will enable the Harrison man to write to stations for verifications he has never heard and offers to perform a like service for Mr. Martin. Mr. Martin, however, is not that kind of a sport. We think we will have to arrange a black-list for fans of the Harrison type and hope readers who receive similar requests will forward them to us.

Foreign Reception

Many readers, like W. E. Cann, Hampton Beach, N. H., do not see how it is possible for other DXers to pull in foreign stations on the broadcast band. Let us say that out on the Pacific Coast it is no great feat to hear Japan, some DXers bringing in as many as six Japanese stations in one evening. If we grant that this is possible then we must assume that fans who have particularly sensitive sets farther inland, or particularly good locations or who are exceptionally skillful in tuning, may also bring in Japan. Thus we see, that these three factors being present, there is absolutely no reason why these Japanese stations may not be heard clear to the Atlantic seaboard. Let those who cannot understand how these foreign stations can be tuned in refer to our list of world stations and they will see that the vast majority of these are in the broadcast band. And remember this—the signals of stations in every country in the world are in the air in everyone's living-room; it is merely a case of whether our particular instruments are capable of converting them into audible waves.

B. L. Ahman, Jr., 412 Hillcrest Drive, Greensboro, N. C., noticed that when his city was under two feet of snow (a rare occurrence) he could get stations from Toronto, and other distant points even in mid-afternoon which he had never received before.

Aerial for Portables

"I travel eleven months of the year through 22 states," writes James Rohe, P. O. Box 215, St. Paul, Minn., "and I carry a radio with me (Table model Lincoln de luxe 31, eleven tube, a. c.). I have tried many aerials but the best is a 100-foot strand of copper wire cut into five lengths. Four of these are braided in pairs then the two pairs are braided together and the single wire is bound on the outside tightly the full length. This gives me 40% more volume."

JOGK, Kumamoto, Japan, advises R. B. Morell, 1654 Wagar Ave., Lake-



Bobby Tees At the Mike
Now the tred business man can take his golf
lesson direct from the world's greatest—The
Bobby Jones, Wednesdays at eight EST, NBC.

wood, Ohio, that he is the first Ohioan to report reception of that station.

Meyer Tuchinsky, 3436 Filbert St., Philadelphia, Pa., reports that KGMB, Honolulu, is on the air until 5:30 a.m. EST each Saturday night (or Sunday morning); that KGIR, Butte, Mont., has a Whoopee party each Saturday night from 2:00 to 5:00 a.m. Sunday morning; that KWWG, Brownsville, Texas, has its famous "Coat Hangers Club" on each Wednesday night from 1:00 a.m. on. EST. This gives all listeners a chance to get a genuine Mexican coat hanger.

Jack W. Duke, 110 N. 31st St., Billings, Mont., gets CMK every night except now and then when WSB breaks in. He also gets XED, XFX, XDN and XEW in Mexico.

Cadet J. W. Townsend, Hargrave Military Academy, Chatham, Va., finds that when he tunes WDBJ in in the day-time he can keep them right on into dark but if he turns his set off, they are gone or almost wiped out by heterodyne. Here's a mystery.

Mrs. Edwin T. Morris, 111 Rochelle Ave., Wissahickon, Philadelphia, logged KGU and held them for nearly half an hour. She received her verification from the Honolulu "Advertiser." She has brought in 99 stations under 100 watts.

KFYO, Abilene, Texas, advises Carroll C. Folts, 303 Central Ave., North

Baltimore, Ohio, that they will be on the air with a DX program every Sunday morning from 4 to 6 a.m. CST.

Alan Locklin, Syracuse, N. Y., has an 11-tube Zenith and has brought in KFI and KNX on loud speaker without an aerial of any kind. He has had KMIC at 7:30 a.m., KOB at 2:30 p.m., and gets KOA often at 8 p.m.

An Old-Timer

Michael Vitacco, 825 Cleveland Ave., Racine, Wis., says he has been DXing ever since KDKA was the only station in the list. With his Majestic Model 102 he has brought in 323 stations to date. The night he wrote he received 19 from the Pacific Coast.

L. G. Briscoe, 3743 Hutchson St., Montreal, Que., says CKPC will broadcast a DX program every Friday starting January 2nd at midnight with 100 watts power.

Margaret Lynn Hamilton, Coopersville, Mich., has received 201 stations on her Model 55 Atwater Kent with 25 feet

DX Listeners

Why have your verification questioned?

USE LOVE'S Standard Verification Cards

Designed by a DX fan with the one idea of making it easy to secure lots of iron-clad verifications. Love's Standard Verification Cards are easiest for the DX listener, because—He has only to fill in blank spaces on cards, sign, and mail to broadcast station. Easiest on Broadcaster, because—He has only to check DX report with his own records, sign on back of card, and return to sender. (This means prompt station response.) Completed verification contains, on one card, $3\frac{1}{2} \times 6\frac{3}{4}$ inches, full program log including exact time when heard and is OKed and signed on back by proper authority at broadcast station, making an ideal verification. Cards are arranged to be filled alphabetically by call letters.

Special Introductory Offer

Send one dollar, P. O. money order, check or currency, for 50 (double) cards, mailed postpaid anywhere in the U. S., Canada, or Mexico, or 100 (double) cards, \$2.00 postpaid; 300 (double) cards, \$5.00 postpaid. Special prices in quantities to DX clubs.

Address

PAUL LOVE

Mission Ranch Phoenix, Arizona

of wire in the room for an aerial and no ground. Among them was a fifty-watter from Arkansas. She finds it next to impossible to bring in Detroit in her own vicinity, but has no trouble getting a number of Mexican stations.

Harold C. Rockey 50 Trinity Street, Stratford, Ont., tells DXers to be on the lookout for 10AK of that city, a 10-watter on 1200 kcs. which is an amateur broadcasting station.

Some Targets

Richard S. Croker, Terminal Island, Calif., advises eastern DXers to listen for KFOX, Long Beach, Calif., which is on the air constantly except between 3 and 5 a.m., PST. He says KGFJ has not signed off for everal years except possibly when a tube burns out, and that KJBS is broadcasting daily from midnight to sunset. Mr. Croker has just received verification from 2BL, Sydney, and has them from 5CL, Adelaide, and 2YA, New Zealand.

"I operate an 8-tube Eveready Electric set," writes Herbert H. Seidler, 155 Hicks Street, Brooklyn, N. Y., "and since January 21, 1930, I have logged 168 stations. My furthest catch is KFI. I am near three subway systems and surrounded by large hotels with power plants and not far from the sending station of the Brooklyn navy vard. Such stations as WTAM, WHAS and KMOX, I get with only five feet of wire as antenna. I use no ground as I found it cut down my volume about fifty per cent." Warning: The instruction book that accompanies some sets says: "Never operate this receiver without connecting it to a water-pipe, radiator or other good ground."

Some DX Records

From Don R. Catlin, Locke, Calif.: "My best catch is KFIU, Juneau, Alaska, on ten watts. Am now awaiting verifications from JOIK, JOBK, JOAK, JOHK, JOCK and COMK, Mukden, China. Have verifications from seven Mexicans, thirty-two Canadians, one New Zealand, one South African and one English. Total log of 327 stations since September first. Am sixty airline miles east of KGO on 790 kcys, yet on 780 KTM comes in without a trace of distortion or interference and on 800

WFAA and WBAP roll in like locals."
Mr. Catlin uses a Maiestic.

Frank Maida, R. F. D. 1, Long Branch, N. J., states that with their Victor radio he has so far received 181 stations with only one on the Pacific coast. Frank is 14 years old and does his DX Friday and Saturday nights so it will not interfere with his school work. He wants to know what are the best nights to try for the Pacific coast and Mexico. We doubt if there are any "best nights" other than those on which reception is unusually good.

From Robt. W. Jameson, Rock House, Pulaski, Va. "I am another of those fellows that like to see how many stations they can log in one night and the farther away they are the better pleased I am. This isn't supposed to be a 'believe it or not' but twice last winter I logged station 2BD, Havana, with only five watts power and listened to it for quite a while, getting the call letters several times."

Kenneth J. Hartwick, 1138 Prospect Ave., S. W., Canton, Ohio, in one week and one day received 134 stations from 34 states, Canada, Cuba and Mexico, on his new midget Philco. He would like to receive letters from other DXers, particularly those who are receiving foreign stations.

"Although I am only 14 I am a real fan and an ardent DXer," writes Richard Douglas, 1130 Krug Park Place, St. Joseph, Mo. "We have a Victor electrola 10-tube set and it is really swell. I started DXing in June of this year and I have received 128 U. S. stations and four Mexican."

From Wm. D. Clark, Jr., 1119 Lake St., Evanston, Ill., 14 years old: "I have logged 138 stations since the reallocation two years ago. 38 of these were within 100-mile radius which I term locals, 95 were from other parts of the U. S. and five from Canada."

From Robt. Nicholas, 601 Eastman Row Ave., Kirkwood, Mo.: "I am 14 years of age and enjoy radio very much. We have a new General Motors set. During three summer months I logged 125 stations, I live about two miles from KWK and about five miles from KMOX,

(Continued on page 23)

EXPERIMENTS with Aerial and Ground

Many try the Grounded Aerial

HE story of Dr. Brokaw's experiments with a grounded aerial in the January issue stirs a number of readers to write us regarding their own experiments with aerial and ground.

Following the article in our last issue. a number of our readers have been experimenting with ground waves. Dr. W. F. Brokaw, 2301 Chatfield Drive, Cleveland, Ohio, has been carrying his experiments further. It will be recalled that Dr. Brokaw erected short 10-foot aerials in different directions, merely attaching with wire to low iron posts driven into the ground. There were no insulators between wire and posts. He now writes, "My easterly aerial has been extended to 110 feet, being attached directly to an iron pipe driven three feet into the ground and left just enough above the surface to attach the wire which trails along the ground to the house. The westerly lead has been extended to 60 feet in the same way-the southerly lead being left at ten feet. The terminal of the new easterly lead is about forty feet from the mast of the high aerial so there is little probability of any counterpoise effect. These extensions made a radical difference in signal strength and stations came in readily which I never heard before.

"With clear weather and high barometer, the reception during the daylight hours from my regular, high, 110-foot aerial is considerably stronger than from any of the grounded leads. Between 6 and 7:30 in the evening, this begins to change and thereafter the quality of reception from the grounded leads improves in strength and character and should please the most exacting. The quality of the signal on grounded leads is much more full and rounded out than on the high aerial.

"This is not an argument against aerials of the usual type but does show certain advantages in favor of a low, grounded antenna such as freedom from lightning hazard high-tension wires or unfavorable weather and ease and economy of construction. As I am writing this (11:30 p.m.) KFI is coming in with good volume."

"After reading Dr. Brokaw's article," writes Walter Baldwin, 98 Victoria Ave., North Hamilton, Ont., "I tried a little experiment myself. I took the aerial off altogether and put the ground wire on the aerial post and found I could get KFI, Los Angeles, better than I could with the outside aerial and ground. I have an Atwater Kent Model F."

Other readers have tried this same experiment with varying results. Mrs. N. N., 285 Creighton St., Ottawa, Ont., states that when she uses her ground on the ground post she gets scarcely any reception whatever, but when she moves the ground wire to the aerial post she gets excellent reception.

A. R. Wiggin, 1231 South St., Key West, Fla., has found that by connecting the ground wire to the short antenna post on his Majestic 71, his volume is greatly amplified and selectivity improved. A. L. Robb, Topeka, Kansas, tried Dr. Brokaw's arrangement. He did not have room to run a grounded aerial in different directions, and so substituted an outside ground in place of the regular



Gene and Glenn and Jake and Lena This famous quartette composed of—l. t. r.— Gene Carroll and Glenn Rowell, now graduate from the sticks of Cleveland to the "big time" of NBC.

antenna and used the water pipe for the ground. The volume was cut down on many stations but selectivity was increased. Some stations showed no change and on a few there was an increase in volume. WLW, which fades badly on the regular antenna and is often distorted, comes in loud, clear and steady on the grounded aerial and can be received at almost any time of day as well.

In one experiment, removing the ground and leaving the aerial in place brought the following surprising results. Stations above 1400 kcys. came in with greatly increased volume; stations in the center of the dial were not affected one way or the other, while stations below 1000 kcys, came in with reduced volume. In this case a switch was placed in the ground wire so that the ground can be cut out when it is desired to bring in stations on the higher frequencies.

An Aerial Fence

Theodore B. Hubbell, 330 Lafayette Ave., Lexington, Ky., relates the results of experiments he has been making for the past six or eight months with his eight-tube Model 40 Steinite. He writes: "I erected in my yard a 30-foot piece of ornamental wire fence, two feet high, running in a north-westerly direction. The bottom of the fence is imbedded in the ground for its entire length to a depth of two inches, being held upright by five pieces of half-inch iron pipe driven into the ground 18 inches. The lead-in wire is also underground for a distance of about nine feet thence through the cellar to the set. Connection is made to the short aerial binding post.

"The prime consideration in erecting this grounded aerial was to eliminate static in warm weather. It very effectually carries off much of the interference, permitting reception when my 75-foot high aerial made reception impossible. Recently when endeavoring to tune in CMCQ, Havana, the heterodyne being most annoying, I switched to the grounded aerial. Imagine my surprise when the station came in clearly and with plenty of volume. I then tuned in station CMX and it came in so clearly I could not believe my ears. I held the station until it had announced three

times. I then switched to the 75-foot aerial to compare reception. There was no comparison for I could not get the station at all. But on switching back to the grounded aerial reception was again perfect.

"A peculiarity I found in the use of the grounded aerial was that nearby stations like WHAS and WLW come in with lessened volume, but distant stations with increased volume. I have verifications from KFI, XEW and CMK, all received on the grounded aerial."

Salt Helps Reception

V. H., of Spokane, Wash., buried an old galvanized hot-water tank in a post hole which he dug to fit it. He dropped the tank in the hole with the concave end up, in which he put a six-inch nipple which came just level with the top of the ground. Into the tank he put four pounds of salt and filled it with water. This leaks out through the holes in the bottom of the tank. He used a good aerial and states that he now gets real DX.

Readers have mailed us two newspaper clippings of extraordinary reception records. Each of these emphasizes the necessity for a good ground. According to one clipping, Ollie Ross, Vallejo, Calif., has logged 1308 stations, including a 50-watt station in South America. He has heard clearly stations on all five continents and listened to programs from every state in the Union. He states that the most satisfactory ground he has found is copper tubing about an inch in diameter and 3 feet 10 inches long. The tubing is wrapped spirally with No. 20 copper wire from one end to the other end and back again, the laps being an eighth inch apart. The wire is soldered to the tubing at each end but is uninsulated, although the lead from the ground to the receiver is heavily insulated and as direct as possible. This tubing is buried in rock salt which draws dampness from the ground in dry season. Ross thinks that water pipes make poor grounds because they are used for grounding telephones and, aside from this, he says, have a tendency to collect rather than draw off disturbances.

The other clipping concerns Merle (Continued on page 24)

The "Unexpectuoso" of the Columbia



Virginia Arnold

F a speaker runs out of words, if an artist arrives in the studio a few minutes late, if a musical "station-break" is necessary, in fact, if anything causes a hiatus on the air, there is someone at WABC who can immediately step in and fill the breach with the necessary number of musical bars in the correct pitch. That person is young Virginia Arnold, pianist "unexpectuoso" of the Columbia Broadcasting System.

Here are presented some of the happenings in Virginia's life. She was born in Lawrence, Kans., on August 15, 1906. She started piano lessons at the age of five. She loved to learn, and most of all, when no one was looking, to sit at the piano and play simple pieces by ear.

After three months of instruction she gave her first public performance at a school function. She played the easy pieces she had been taught, but more difficult music she improvised from memory.

Later, at the University of Kansas, she continued her musical studies, toured with the university glee club and was piano soloist and accompanist for the college voice teachers. She played jazz without having seen the sheet music and many of the classics in the same manner.

At college Virginia started radio work.

She participated in a radio program presented by the university glee club in Lawrence. Later she was appointed program director of the station. In 1928 she came on to New York to further her radio work and joined the Columbia artist staff on August 1, 1929.

Her ability to ascertain perfect pitch made her broadcasting work a specialized job. There are few pianists in radio who can pick up the threads of a melody from an orchestra without making apparent a break of any kind, but this Virginia does continually—so perfectly, in fact, that once after an orchestral recital broadcast from the Biltmore Hotel, New York, the engineers in the studios thought that the switch-over had failed because they still heard the same melody in the same tone and tempo.

That is why Virginia Arnold is always quietly slipping in and out of studios, standing unostentatiously in a corner while a speaker, with one eye on the clock and the other on his manuscript, inwardly prays he will be able to fill his allotted time—a prayer which would be unnecessary, if he realized Miss Arnold is waiting like a good Samaritan to save him from eternal embarrassment by finishing his performance with a musical flourish.

Ground Sometimes Vital

Some manufacturers, the Philco for instance, state in the instruction book which accompanies their sets that the receiver must not be operated without a ground, Experimenters should keep this in mind. Most manufacturers take into consideration when designing their sets that the ground may be broken without the owner's knowledge and therefore wire the set so that no serious injury would result if it were used without a ground connection. But as stated above. there are some receivers in which the condensers in the power unit may be blown if operated more than a short time without a ground connection.

RADIO Comes in MANTEL SETS

New Models of 1931

THE Evolution of the Radio Set" might well be the title of this article. Do you remember the pre-historic sets of 1924? They came in square boxes without any attempt at beautification. The panel of plain bakelite was covered with dials and knobs and gadgets. Then some manufacturers gave us a box with a sloping front so we would not have to get down on our knees to read the dial numbers. Another added four legs to the box so we could use the dining-room table for other purposes.

Came then the Henry the 8th period with the sets becoming huge articles of furniture slightly smaller than a four-poster bedstead. After that began to appear sets which were really beautiful, but they still remained rather massive, especially for the small homes and apartments.

The first speakers had long, high horns, a throw-back to the early phonograph. Then the cones appeared and some manufacturers began to build their speakers into the sets. Followed the magnetic and then the dynamic speaker. Now, instead of building the speaker into the set they are putting the set in the speaker. Practically every manufacturer is now building at least one "midget" type of set which is but little larger than the speaker itself. The "inwards" of the set have been tucked away most ingeniously so that one may have a mantel-type set with the full quota of tubes and condensers and things.

In this and subsequent articles we are illustrating and describing some of the sets which will be found at the dealer's today. The claims made for the various sets are those of the manufacturers themselves as this magazine has had no opportunity of testing the sets described.

The "Little Symphony" made by The Sterling Manufacturing Co., 2831 Prospect Avenue, Cleveland, Ohio, is eighteen inches high and fourteen inches wide. It is a five-tube r.f. set employing three

screen-grid tubes with power detection. It is said to compare favorably with the best standard receivers in selectivity, sensitivity and volume. It uses the standard dynamic speaker and power supply is incorporated in the chassis. Cabinet is of walnut, the panel being a beautiful burl. The maker claims that



Sterling

bass notes are clear and distinct even at lowest volume and, when control is turned up, both high frequency and low frequency tones are amplified in perfect balance. The set lists at \$69.50 complete with tubes.

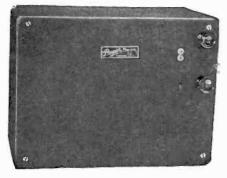
We are showing two sets manufactured by the Premier Electric Co., Grace and Ravenswood Avenues, Chicago, Ill., the "Home-Pal" Midget and the "Auto-Pal" receiver. The "Home-Pal" is of walnut, fifteen by eighteen inches, with a beautiful bronze tuning escutcheon. Tone quality, even at immense volume, is said to be an outstanding feature. Selectivity is remarkably sharp and even stations close together are claimed to be easily separated without over-lapping. "A minimum range of 1000 miles, under favorable weather conditions, is absolutely guaranteed." The set operates without antenna or ground on local



Home-Pal

stations. Two controls are used, one a quick-acting, fully illuminated, hairline tuner and the other a combination switch and volume control. There are six tubes, three of them screen-grid. The set lists at \$69.50 with tubes.

The "Auto-Pal" is designed for perfect automobile radio reception and is said to have been tested a full year in cities and on highways, before it was offered to the public. It fits under the dash and no cutting or disfiguring of the car is necessary. In size the set is only eight by ten inches, six inches deep. An illuminated dial and single-control switch make tuning easy. The drum has micrometer drive and positive lock and "stays put." There are four tubes, three of which are screen-grid. The set is claimed to have the



Auto-Pal

sensitivity and power of an ordinary five or six-tube set with only half the A and B battery consumption. This set lists at \$65.00 complete with aerial, tubes and batteries.

The Gloriton Radio, manufactured by the United States Radio & Television Corp., Marion, Ind., stresses its oval shape top, satin-gloss walnut finish, fully-shielded chassis, triple screen-grid and maximum fidelity of reproduction, great sensitivity and sharp tuning. It weighs 22 pounds and lists at \$49.95 complete with five tubes.



Gloritone

While most manufacturers of midget sets stress the small size of their instruments, the Mozart Radio Co., 109 W. Washington Blvd., Los Angeles, Calif., believes that this may well be carried to an extreme. The Mozart set is somewhat larger than other sets of this type although it still falls within the category of Midget receivers. Says this manufacturer: "American engineers are ingenious. But they are not magicians! They cannot seat a symphony orchestra on a card table-nor can they put all that a radio should have into a cigar box. The radios that are too small are small because they are not complete. They are a compromise. The Mozart is compact-and it is complete."

This set, a picture of which will be found on page 24, has four tuned circuits using seven tubes, four of which are screen grid, with screen grid power detection and push-pull audio amplifica(Continued on page 24)

Symptoms of Sick Sets

(Continued from page 7)

This set is very broad in tuning and I am using a 75-foot aerial, with a 25-foot lead-in. Do you think that greater selectivity can be obtained by using a wave trap?

By reducing the length of the aerial on your set to one-half of its present length you will be able to get greater selectivity. The lead-in is really part of the aerial and makes its effective length in your case 100 feet. The insertion of a small fixed condenser of about .00025-mfd. capacity, between the lead-in and the aerial binding post of your receiver will also sharpen the tuning. With these simple changes it may not even be necessary to use a wave trap.

Making a Milliammeter

I have a seven-volt d. c. voltmeter and I would like to change it to a 0 to 100-milliammeter, if this can be done. Please tell me the parts and what capacities to use to make such a change.

Without the use of a Wheatstone bridge for measuring internal resistance of meters, it is not advisable for the average radio fan to attempt changing a voltmeter to a milliammeter, and it is better and cheaper to buy another meter of the kind desired.

Oscillation Troubles

I have a five-tube Hammarlund-Roberts HQ receiver including three 201A's, one 200A and one 112A, which are all new. I am using a new Knight B-eliminator and an Abox A unit. The set frequently breaks into oscillation, which sometimes stops when I reduce or increase the detector plate voltage. I have adjusted the neutralizing condensers but this did not stop the trouble. All the transformers and condensers have been tested and I have cleaned most of the parts. Everything tests O. K. but the trouble still persists. Can you suggest what to do in this case?

Cut down the r. f. and detector plate voltages and see if the noise stops when the detector tube is grasped, which indicates a microphonic. If this is the case, place a "howl arrestor" on the detector. Also test the by-pass condensers for leaks as well as short circuits, which can be determined by their capacity to hold a charge after being

disconnected from the receiver circuit. Also be sure that the trimming and neutralizing condensers are properly adjusted, which has been covered completely in our No. 39 issue of RADEX under the heading "Balancing T. R. F. Receivers." An A-eliminator that does not produce enough current for the tubes is also apt to cause a set to break into oscillation. Substitute a fully-charged storage battery for the Abox A unit, and see whether the set still oscillates. If not, the trouble is due to the A-eliminator.

My set starts oscillating above 900 kc. It is a five-tube Pearson t. r. f. set and current is supplied by an A-eliminator and two 45-volt B-batteries. I am using a 200A tube for a detector, while the rest of the tubes are 201A's. When I turn the a. f. tubes up the others become dimmer and when I turn the r. f. tubes up the a. f. tubes act the same way. Is this supposed to do so?

Many t. r. f. receivers have a tendency to oscillate when the plate voltate on the detector and r. f. stages is excessive. Reduce this voltage and the oscillation will undoubtedly cease. Another cause of the same trouble might be traced to the A-eliminator, indicated by the fact that some of the tubes become dimmer when others are turned up and vice versa, although this symptom is not always an indication of a deficient Aeliminator. If more current is required than the eliminator will produce, without being overloaded, the voltage drops off, and then the plate and filament voltages are out of proportion in the same way that they are when the plate voltage is too high for a normal filament voltage. For best results no eliminator should be taxed to the limit. Your tubes require 1.5 amperes of current and the Aeliminator should be capable of supplying 2 amperes. Take it to a competent radio man and have the output current checked with an ammeter.

Using Aerial with Loop

I have a Radiola No. 28 in combination with a Victor Electrola, which was put on the market about six years ago. The phonograph uses the amplifying unit of the radio, which has two 281 tubes, replacing 216B tubes. The machine is completely self-

contained, there being only one outside connection, the wire for the current. I was wondering if the inside loop, containing approximately 50 feet of wire, could be replaced with a longer outside aerial, or some additional wire added to the loop, in order to get more distance and more volume.

A loop-operated receiver can be converted to one using an outside aerial. provided a r. f. coil covering the broadcast waveband, and a su table .0005 or .00035-mfd. variable condenser (one to match the coil), is substituted for the present loop. The aerial and ground leads are connected to the ends of the primary winding of the coil, while the ends of the secondary run to the grid terminal on the first tube and to the A-neg. line. The condenser is shunted across the secondary of the coil with the stator connection on the grid side. Of course, such a change requires some alteration in the wiring, which can be done best by a reliable radio service man. In "Radio Trouble Shooting," a book which we can furnish, you will find several pages devoted to the subject of loops and the changes necessary to make them operate on an outside aerial. One of the simplest methods of transfering the energy picked up by an outside aerial is to wind four or five turns of the lead-in around the loop and connect the end to the ground.

Magnetic or Dynamic Speaker

My set is located about two miles from high-power electric lines, about the same distance from the nearest radio set, and about 65 miles from the nearest broadcasting station. The set uses an R. C. A. type 100 magnetic speaker and I wonder if it could be replaced with a dynamic speaker. If so how should it be hooked up? I would like to get enough volume to enable the radio to be used in a small dance hall.

To increase the volume and to be able to use a dynamic speaker for dance-hall purposes, it is necessary to use a power amplifier and a separate power unit to furnish the amplifier and also the dynamic speaker with greater voltage than is now obtainable from your present power unit. Such a power amplifier is hooked up immediately after the detector

stage, and the present audio end of the set is disconnected entirely. In this case it might also be advisable to employ the services of a radio expert. Power amplifiers for the purpose can be obtained from the Samson Electric Co., 3201 South Michigan Avenue, Chicago, Ill.

A Second Speaker

I have a No. 39A Zenith and want to use another speaker in the rear of my house. The speaker that I have is a Western Electric No. 540 AW. Can I put this in series or in parallel with the speaker of receiver, which is a dynamic? Is it necessary to use an output transformer to protect the magnetic speaker? Also, can I use a 250-type tube instead of the present 210 in my set?

You can substitute a 250 tube for the 210 used at the present provided you supply the correct plate and grid voltages. By merely substituting the 250 for the present tube, you cannot expect better results unless the above voltages are also changed. To protect magnetic speakers when used on a set having a high voltage on the power tube, it is advisable to use an output transformer or choke. Speakers can be connected either in series or in parallel. The latter method is best in most cases as each speaker works independently of the other.

And here's one from still another corner of the globe:

"Enclosed please find money order value four shillings, two pence, for which please send me five copies of RADEX. I am a very keen short-wave fan and it gives me very great pleasure listening in to stations such as W2XAF, KDKA, W3XAL, etc.

"A friend of mine who lives at Detroit, Michigan, came over to my radio den to listen in to Schenectady and he was astounded to hear WGY so well. When he returned to the States he sent me a copy of RADEX and I can assure you that it is the real goods. I sincerely trust you will send same in good time as you know it takes about three weeks to get here. Thanking you in anticipation, Yours faithfully, Mike Kruger, Queenstown, Cape Province, South Africa."

Cuba and Mexico

(Continued from page 9)

have it listed at 1360. I can't help feeling that as we are so much nearer Santiago we are probably correct. CMKC is a good station. I have just heard of a new station in Santiago, CMKD on 1100 kcys., but I haven't been able to bring it in yet. I want you to know how much we like the radio map. It is a great idea."

P. J. Soper, 256 Burroughs Terrace, Union, N. J., sends us a letter from F. A. Lavin, owner of CMX, Havana, in which he states that they are switching from 900 to 910 kcys. to reduce interference.

"Shortly after 11 p.m. December 28th I heard a station announcing as CMCA, Havana, Cuba. It was just above WFBM on 1230," writes A. L. Robb, 1338 Mulvain St., Topeka, Kansas. This station will be found listed in this issue on 1225 kcys. Mr. Robb has also heard a Mexican station near 1150 kcys. whose call letters sounded like XEAR.

Our readers have so many complaints to make regarding broadcasting stations that they should be interested in the following criticisms of DXers by a broadcaster. Raoul Karman, of Casa Karman, owner of station CMCF, Havana, writes us as follows:

"We are always anxious to receive reports on reception, but I must say that American reports are very unreliable and not 20% will tell concisely the hour and even less the frequency of the station heard. Most of them give the impression of being merely a stamp collector."

Undoubtedly many DXers who complain that they do not hear from stations promptly are themselves to blame, in that they fail to give the complete data that will enable the station quickly and definitely to verify reception.

Our Readers Want to Know

(Continued from page 11)

owned by Grove City college. Will our readers advise us if WHAJ is a new station or merely a change in call?

The following stations failed to apply for renewal of license within the specified time and were technically disqualified on November 1st: WCOC, Meridian, Miss.; WMAF, So. Dartmouth, Mass., and KZM, Hayward, Calif. Are these stations actually off the air?

Wm. G. Benjamin, No. Muskegon, Mich., states that on January 2nd. between 1 and 2 a.m., he listened for about 20 minutes to a musical program on 1360 kcvs. No call letters were given. but each time the announcer said "the Rivoli Ball Poom in Balboa" or at least it was so understood by Mr. Fenjamin. One other reader reports his belief that he had heard NBA, Palboa. Now comes a letter from Geo. Lilley, 227 W. Pernard St., West Chester, Pa., enclosing a letter from the officer in charge of the United States Naval Communication Service, Balboa, Canal Zone, who states that there are no broadcasting stations in the Republic of Panama or the Canal Zone. Who can solve the mystery of NBA?

Police and Airports

We are in receipt of a considerable number of letters regarding both Police and Airport radio stations. Cnce more let us repeat that we do not include such stations in this magazine for the reason that they are neither in the broadcasting band nor are they broadcasting stations in the ordinary sense of that word. These stations all broadcast 1500 kcys, and neither of them desires an audience except the ones they serve. The police stations invariably broadcast information regarding criminals to policemen cruising the streets in automobiles equipped with short wave receivers. The Airport stations broadcast weather and ground conditions to pilots in the air. Both of these stations are on the air but a few moments at a time, periodically during day and night. The Government publishes no list, so far as we know, indexing them by call letters, frequency or location, and as they are entirely outside of its field, RADEX does not attempt to keep a record of them and we are not in position to furnish information regarding them.

Unintentional Synchronization

John R. Carter, Erie, Pa., asks for information regarding a station at Raleigh, No. Car. which he received on 570 kcys., the frequency assigned to

WWNC at Asheville, N. C. Mr. Carter states that he experienced an example of perfect synchronization on 600 kcys. when he heard the Parmount Publix program on the Columbia System from three stations on that frequency at one time, WMT, Waterloo, Iowa, WREC, Memphis, Tenn., and WCAO, Baltimore.

Read Barton, 1718 Ridge Ave., Coraopolis, Pa., asks at what time NAA, Arlington, broadcasts. NAA does no broadcasting, we believe, in the usual sense but sends out its time signals at noon, and again at 10 p.m. These are picked up and rebroadcast by various stations throughout the country.

In answer to Victor J. Balt's inquiry regarding WEHS, D. E. Cosgrove, Hotel Strand, Chicago, states that WEHS is on the air at 4 p.m. every day for one-half or one hour with a program of records, and Harold Yehling, 534 W. 60th Place, Chicago, advises us their studios are in the Soko-Slofsky Bldg., Cicero. Mr. Yehling asks why WJAZ comes in on his set very poorly, while WCKY, with the same power, comes in fine. The cause is probably purely one of location.

The same situation is found in almost every city. One location being shielded from a certain broadcasting station by steel buildings. Mr. Cosgrove and others ask where they can secure a copy of the RADEX map in their city. No arrangements have as yet been made to distribute these maps through newsdealers generally. In the meantine, they may be procured only by ordering direct from RADEX.

Stalking Stations

(Continued from page 14)

as the St. Louis stations have their transmitting towers in this vicinity."

From W. F. Byrne, 7316 Hurst St., New Orleans, La.: "I have an Echophone baby radio with three screen-grid tubes, one 245 and one 280. Have had it only about 40 days and have neglected to put up an aerial or ground. Operating on an indoor aerial of about 25 feet and no ground I have logged 92 stations."

From Clarence Fleagle, R. F. D. 1, Abilene, Kansas: "I have never had any extreme DX with my set, although I have heard WKAQ, Porto Rico, and AQM, San Salvador. On my short wave set I have had the Netherlands, England, Australia, Colombia, S. A., Honduras, and three stations in Canada.

"Using a Hammerlund-Roberts HIQ 30 with screen grid RF and detector, in a poor location, in the past five weeks we have landed 176 stations in 34 states, Mexico and Cuba, Quebec and Nova Scotia," writes George Shombert, Jr., 921 Lilac Street, Pittsburgh, Pa.

"I have succeeded in logging 145 stations in 13 days," writes Charles Fowlie, 101 17th Street, West New York, N. J. "Can you tell me what time of day KOB, New Mexico, changes time with KEX?"

From D. Gadoury, 2215 Hood Street, Montreal, Que.: "In a factory ward right in the heart of Montreal, I have heard 161 stations, four of them in California, two in Mexico and one in Cuba."

"Out of seven stations in Japan using 10,000 watts I have listened to five, all between 2 and 3 a.m., PST.," writes L. C. Cummins, 3463 8th Avenue, Vancouver, B. C. "My model 52 Majestic is proving even better than I expected."

From Marion L. Watson, R. F. D. 9, Wabash, Ind.: "With my Crosley screengrid 6-tube battery set I logged last night 67 stations on 58 wavelengths. I have now received stations on all frequencies except 910."

From Harry Durand, 216 No. Main



Julia Sanderson and Frank Crumit have added to their stage fame by their year in radio. With the CBS Blackstone program.

Street, Wheaton, Ill.: "Radio is my favorite pastime. In two nights this week I have received eight 100-watt, one 50-watt, one 30-watt, and one Mexican, all of them new to me. I am 16 years old and to date I have logged 253 stations."

From Jimmy Ninoda, 8622 Selkirk Street, Vancouver, B. C.: "I am an ardent radio fan, having received 129 stations, including six from Japan and two from Mexico, on a 9-tube Dictator set."

"I have an 8-tube all-electric Majestic radio. In nine months I have logged 334 stations, including 19 in Canada, 6 in Cuba and 2 in Mexico," says Floyd Moyer, 124 Brown Street, Reynoldsville, Pa.

"I think I have made a little record in low-power catches myself," states Dolphus Whitten, Jr., Gurdon, Ark. "My best are WEBR, Buffalo, and KGFJ, Los Angeles, both on crowded frequencies and using only 100 watts."

From Walter Wasana, 8256 Marion Street, Detroit, Mich.: "I am using a 3-tube receiver and in five days I have picked up 51 new stations, including KNX and CMC.

From Ralph Caldwell, R. F. D. 1, Clarksville, Pa.: "I have had a radio for almost four years and in that time I have received 447 stations from coast to coast."

T. J. Johnson, 523 West Russell Ave., Seminole, Okla., reports receiving WHC Emory, Va., and CKWX, Vancouver, B. C., hundred-watters.

"My young lad, a radio fan and quite a DXer, picked up 80 stations in five hours one evening," writes Frank E. Simpson, 77 Pleasant Ave., Montclair, N. J.

Aerial and Ground

(Continued from page 16)

Estes, Spokane, Wash., who tuned in six Japanese stations in one night. Mr. Estes is using an 85-foot aerial and the ground attached to a sheet of copper and a Ford radiator buried four feet deep. In summer he keeps the ground well watered. Here is a good use for old Fords.

The U.S. Standard Ground

We have had a number of requests to repeat the instructions for making what the United States Bureau of Standards calls a good ground. Here they are: Dig a hole in the ground one foot deep and one foot square away from all buried pipes; place in that hole five pounds of rock salt; turn a hose on it until it dissolves; drive an eight-foot rod or halfinch pipe through the center of the hole. In sections where there is little natural moisture in the earth use four of these grounds six feet apart and all connected together.

Radio in Mantel Sets

(Continued from page 19)

tion. The chassis is synchronized with the Magnavox Dynamic Speaker. A tone selector which enables the user to choose



The Mozart

the tone which pleases his ear, is said to reduce static to a minimum. Cabinet is walnut veneer in two tones. Drum tuning dial is illuminated. The set incorporates a phonograph pick-up jack, also a local-distance switch to eliminate "detuning" when using long aerial.

The Mozart lists at \$69.50 complete with tubes.

Neutralizing the Neutrodyne and Troubles in Aerial and Ground will appear in the March RADEX.

THIS MONTH'S CHANGES

Radio Map Free

For a limited time we will give with each year's subscription, one of those large, new Radio Maps of North America.

INSURE YOUR RADIO ENJOYMENT SEND THIS BLANK TODAY The Radex Press 1367 East Sixth Street. Cleveland, Ohio. Enclosed find \$_____ for which send me postpaid my choice of your offers as checked below: ☐ One Radio Map of North America. □ One copy of the next RADEX 25c ☐ Trial subscription, next five issues of RADEX.....\$1.00 ☐ One year's subscription to RADEX, 10 issues, and Radio Map free_____ 1.75 ☐ Two subscriptions to RADEX with one leatherette cover and Radio Map, both free___ 3.50 □ Leatherette Cover .50 □ One copy "Radio Trouble Shooting," by E. R. Haan 3.00 Write Name Plainly Street and Number 46

BROADCASTING RELAY STATIONS

A List of the Short Wave Transmitters

Location of Transmitter	Call Signal	Frequency in Kilocycles (Meters in Parenthesis)	Power (Watts in Antenna)	Licensee and Address
California	•			
Sacramento	W6XAF	2,938 (112.1), 5,870 (51.11)	500	State Dept. of Agri- culture (Calif.)
•	W6XAL	6,080 (49.34), 15,250 (19.672), 21,500 (13.953)	15,000	Pacific-Western Bdct. Federation
Colorado Denver	W9XA	830 (361)	12,500	General Electric Co.
Illinois Addison Chicago	W9XAQ W9XAA	6,040 (49.67) 6,080 (49.34), 11,840 (25.34), 17,780 (16.873)		Chicago Daily News Chicago Fed. of Labor
Downers Grove	W9XF	6,020 (49.83), 11,800 (25.42), 21,500 (13.953)	5,000	Gt. Lakes Radio Bdct. Co., 72 W.Adams St.,
Iowa Council Bluffs	W9XU	6,060 (49.5)	500	Chicago, Ill. Mona Motor Oil Co.
Massachusetts East Springfield	W1XAZ	9,570 (31.35), 2,398 (125.1)	10,000	West'g'e Elec& Mfg.Co.
New Jersey Bound Brook Coytesville	W3XAL W2XAL	6,100 (49.18) 6,040 (49.67), 11,800 (25.42), 15,250 (19.672), 21,460 (13.979)		Nat'l Broadcasting Co Aviation Radio Sta.
Kearny	W2XCX	6,080 (49.34)	500	L. Bamberger & Co.
New York (Portable)	W2XE W2XBR W2XDA W2XAD	11,840 (25.34), 15,280 (19.634) 6,020 (49.83) 1,544 (194.30)	20,000 1,000 50 25,000	Nat'l Broadcasting Co. Atlantic Bdct. Corp. Baruchrome Corp. Atlantic Bdct. Co. Gen. Electric Co. Gen. Electric Co.
South Schenectady South Schenectady	W2XAG	550 (545), 660 (455), 790 (380), 1,150 (260.9), 1,500 (200)		Gen. Electric Co.
Ohio Mason	W8XAL	6,060 (49.5)	250	Crosley Radio Corp., 1325 Arlington St.,
Pennsylvania East Pittsburgh	W8XK	6,140 (48.86), 9,570 (31.35), 11,880 (25.25), 15,210 (19.724), 17,780 (16.873), 21,540 (13.928)	40,000	Cincinnati, Ohio Westinghouse Elec. & Mfg. Co.
Philadelphia	W3XAU	6,060 (49.5), 9,590 (31.28)	500	Universal Brdc. Co., 1940 Market St.
Canada Middlechurch, Man	CJRX	11,720 (25.6)	2000	James Richardson & Sons, Ltd.

THE TELEVISION BAND

The Federal Radio Commission has instituted the new allocations of frequencies for television broadcasters, the outcome of the recommendation of a recent engineering conference called by the Commission. The new reallocations went into effect as follows:

2,000-2,100 kc.

W3XK	5.000 Wheaton, Md.
W2XCR	5,000Jersey City, N. J.
W2XAP	250Portable
W2XCD	5.000 Passiac, N. J.
W9XOA	500Chicago, Ill.
W2XBU	100Beacon, N. Y.
	2,100-2,200 kc.
W3XAK	5.000 Bound Brook, N. J.
W3XAD	500Camden, N. J.
W2XBS	5.000New York, N. Y.
W2XCW	20.000Schenectady, N. Y.
W8XAV	20,000East Pittsburgh, Pa.

W9XAP W2XR	1,900Chicago, III. 500Long Island City, N. Y.
W2XBO W9XAA W9XG	2,750—2,850 kc. 500 Long Island City, N. Y. 1,000 West Lafayette, Ind.
W1XAV W2XR W9XR	2,850-2,950 kc. 500 Boston, Mass. 500 Long Island City, N. Y. 5,000 Downers Grove, Ill.

Other proposals of the conference now being considered by the Engineering Division of the Federal Radio Commission, will probably be recommended for approval within a brief period.

This realignment of visual broadcasting stations is expected to aid experiments and to hasten the day when the art will be ready for public entertainment on a commercial scale.

CFRB 960 C	KPO 680 N	WBZ-A 990 N-	WFLA 620 N	WMAQ 670 C
CKAC 730 C	KPRC 920 N	WCA E 1220 N	WGAR 1450 N	WMC 780 N
CKGW 690 N	KRLD 1040 C	WCAH 1430 C	WGN 720 N	WMT 600 C
KDKA 980 N	KSCJ 1330 C	WCAO 600 C	WGR 550 C	WNAC 1230 C
KDYL 1290 C	KSD 550 N-	WCAU 1170 C	WGST 890 C WGY	WNAX 570 C
K ECA 1430 N	KSL 1130 N-	wcco	790 C	1190 N
KFAP 770 N	KSTP	810 C	1150 N	1000 N
KFH	1460 N	970 N	WHEC 1440 C	WOW 590 N
1300 C————— KF1	620 N	1490 N	1390 C————————————————————————————————————	WOWO 1160 C
640 N———— KFJF	1040 N	940 N	1000 N	1100 C
1480 C	1120 C	1220 C	1430 C——— WIBO 560 N———	680 N
1020 N———————————————————————————————————	1290 C	610 N-WDAY	WIBW 580 C	WRC 950 N
1340 CKFRC	760 C	940 C———— WDBJ	WIOD 1300 N	WREC 600 C
610 C————————————————————————————————————	1140 N	930 C	1120 C	1220 N
600 N	1350 N————————————————————————————————————	1120 C	890 N	1280 C
790 N————————————————————————————————————	10 20 N	1280 C	W JAX 900 N	WSAI 1330 N-
620 N	WABC 860 C	WDRC 1330 C	WJDX 1270 N WJJD	WSB 740 N
900 C	WACO 1240 C	WDSU 1250 C	1130 C	WSM 650 N————————————————————————————————————
KHQ 590 N	WADC 1320 C	WEAF 660 N	750 N	WSPD
1390 C	WAIU 640 C	WEAN 780 C	WKBN 570 C	1340 C
560 C	WAPI 1140 N	WEBC 1290 N	WKBW 1480 C	WTAG 580 N
KMBC 950 C	WBAL 1060 N	WEE1 590 N	WKRC 550 C	WTAM 1070 N
KMOX 1090 C	WBA P 800 N	WENR 870 N	900 N	1330 C
KOA 830 N	WBBM 770 C	WFAA 800 N	WLBW 1260 C	WTIC 1060 N———
KOIL 1260 C	WBCM 1410 C	WFAN 610 C	WLBZ 620 C	WTM J 620 N
KOIN 940 C	WBEN 900 N	WFBL 1360 C	WLIT 560 N	1260 C
KOL 1270 C	WBRC 930 C	WFBM 1230 C	870 N WLW 700 N	920 N
KOMO 920 N	WBT 1080 C	WF1 560 N	WM AL 630 C	WXYZ 1240 C

WHAT'S ON THE AIR TONIGHT?

A WEEKLY CALENDAR

Leading Features of the Network Program

Time is given by Eastern Standard: For Central Time, subtract one hour; For Mountain Time two hours; and for Pacific time, three hours.

Programs of the National Broadcasting Company begin with WEAF and WJZ; those of the Columbia Broadcasting System with WABC.

These programs are correct to date bu	t are subject to change daily thereafter
Daily (Except Saturday and Sunday)	2:30-3:00 American School of the Air
8:00-8:15 Gene and Glenn — Quaker Early Birds	WABC WFBL WKBW WEAN WNAC WCAU WJAS WLBW WMAL WCAO WTAR WDBJ
WEAF WJAR WEEL WTAG WCSH WFI	WADC WHK WKRC WWNC WGST WXYZ WSPD WDOD WREC WLAC WBRC WDSU
WRC WGY WCAE WTAM WWJ WSAI CKGW WRVA WPTF WJAX WIOD WFLA	WOWO WFBM WMAQ WCCO KMOX KMBC
WSUN	KOIL KFJF KRLD KTSA KLZ KDYL KVI KOL KFPY KOIN KHJ KFRC
8:15-8:30 Morning Devotions WEAF WRC WCAE WGY WHAS WOW	3:00-3:30 Columbia Salon Orchestra
WFI WCSH WJAR WWJ WPTF WIOD WAPI WFLA WSUN WTAG WGN WJAX	WABC WHEC WLBZ WEAN WNAC WORC WPG WHP WLBW WMAL WCAO WTAR
WJDX WRVA WBEN WSMB WFI	WDBJ WHK WKRC WAIU WWNC WXYZ
8:30-9:00 Cheerio WEAF WEEI WCKY WRC WCSH WWJ	WBCM WSPD WDOD WREC WLAC WBRC KSCJ WMT KMBC WDAY KOIL WIBW
WHO WOC WDAF WAPI KPRC WFI	KFJF KRLD KTRH KLZ CFRB
WSB WSM WJAX WPTF WTAG WOAI WBEN WRVA CKGW WIOD WHAS WFLA	5:00-5:30 The Lady Next Door WEAF WRC KSD WTAG WSM WHAS
WSUN WTAM WMC WJDX WJAR WGY	WKY KPRC WTAM
WOW WCAE WIBO	6:05-6:30 Black and Gold Room Orchestra WEAF WCAE WCSH WWJ WJAR WBEN
9:00-9:15 Something for Everyone WABC WHEC WPG WCAU WHP WJAS	6:45-7:00 Uncle Abe and David
WDBJ WWNC WXYZ WBCM WDOD WREC WLAC WBRC KSCJ WMT KMOX KMBC	WEAF WEEL WJAR WCSH WFI WRC WTMJ WSM WEBC WCAE WGY WTAG
KOIL KFH KFJF KTRH CFRB	WTAM WWJ WSAI KSD WOC WHO
9:02-9:45 Morning Melodies WEAF WRC WWJ WHAS WTAM WAPI	WOW WDAF WSB WAPI WSMB WJDX WENR WHAS
WSM WGN WRVA WBEN KSD WOC	6:45-7:00 Literary Digest Topics
WHO WOW WTMJ KSTP WEBC 9:45-10:00 A. & P. Program	WJZ WBZ WBZA WHAM WBAL KDKA WRVA WPTF WJAX WIOD WLW WFLA
WEAF WJAR WTAG WCSH WRC WGY	WSUN WITH WIAR WIOD WENT WIELD
WCAE WTAM WWJ WOC KSD WHO WDAF WTMJ WEBC WRVA WPTF WIOD	7:00-7:15 Amos 'n' Andy WJZ WHAM KDKA WBZ WBZA WRC
WFLA WSUN WHAS WSM WMC WSB	CKGW WRVA WPTF WJAX WIOD WCKY
WAPI WSMB WJDX KVOO WBAP KPRC WOAI WKY WBEN WOW WFI KSTP	WFLA WSUN WLW WJR WGAR 7:30-7:45 Phil Cook — Quaker Man
WIBO 11:15-11:30 Radio Household Institute	WJZ WBZ WBZA WHAM KDKA WREN
WEAF WJAR WTAG WCSH WLIT WRC	KWK WTMJ WEBC KOA KSL KGO KECA KGW WRC KOMO KHQ KFSD
WHAS WSM WSB WCAE WWJ WSAI KFKX WTAM KSD WTMJ KSTP WEBC	KTAR WGAR WSMB WSB WPTF WJAX
WAPI WSMB WOAI KTHS KVOO KPRC	WIOD WFLA WHAS WSM WMC WJDX KTHS KPRC WOAI
WKY WEEL WGY WMC WBEN 12:00-12:30 Paul Tremaine and His Orchestra	8:00-8:15 Literary Digest Topics
WABC WHEC WLBZ WORC WPG WCAU	WFBL WGR WJAS WADC WHK WGST WXYZ WSPD WREC WBRC WDSU WFBM
WDBJ WHK WKRC WAIU WWNC WDOD	WGL WMAQ WCCO WMOX KMBC KOIL
WREC WLAC WBRC KSCJ WMT KMBC WDAY KOIL WIBW KFJF KLZ	KFJF WRR KTSA 11:00-11:15 Amos 'n' Andy
12 · 30 1 · 00 Columbia Revue	WMAQ WREN KWK WDAF WTMJ WHAS
WABC WLBZ WORC WPG WCAU WHP WJAS WLBW WMAL WCAO WTAR WXYZ	WSM WSB WKY WENR KSTP WSMB WJDX KTHS KPRC WEBC WOAI WMC
WRCM WDOD WREC WLAC WBRC KSCJ	KOA KFAB WBAP
WMT KMBC WDAY WIBW KFJF KLZ 12:30-1:30 National Farm and Home Hour	11:30-11:45 Amos 'n' Andy KECA KSL KGO KOMO KHQ KGW
WJZ WHAM WJR KSTP WRVA WHAS	KFSD
WMC WSB WGAR KVOO WKY WOAI	Sunday
WRC WHO WDAF WJDX WBAL WSMB	1:30-2:00 Conclave of Nations
WELA WSUN WJAX KFAB KPRC KDKA	WABC WHEC WPG WHP WMAL WCAO WTAR WDBJ WAIU WWNC WXYZ WBCM
WLW KFKX WPTF WSM 1:30-2:00 Ambassador Hotel Orchestra	WDOD WREC WLAC WBRC WBBM WCCO
WABC WHEC WLBZ WEAN WPG WIAN	KSCJ WMT KMOX KMBC WDAY KOIL WIBW KFJF KTSA KLZ
WJAS WLBW WMAL WCAO WTAR WDBJ WKRC WAIU WWNC WXYZ WBCM WDOD	1:30-2:00 Neapolitan Days
WLAC WBRC	WEAF WWJ WDAF WTAM WIBO WCAE

KSD KGO	$_{\rm KFSD}^{\rm WOC}$	WHO WRC	WOW WEEI	WHAS WJAR	KSL WBEN	7:30-8:00 RO WEAF	CA Victor WJAR	Program WTAG	WCSH	WWJ	KPRC
WEBC	C	L C				WBEN KYW	WRU	WGY WIOD	WCAE WFLA	WTAM	WSAI
2:00-3:00 R WJZ	WBZ	WBZA	WBAL	KDKA	KYW	KSD	WRVA WDAF	WTMJ	WEBC	WSUN WMC	WHAS WSB
WFAA	WEBC	KFAB	CKGW	WHAS	KYW WPTF	WSMB	WJDX	KTHS	KVOO	WOAI	WKY
KSTP WSUN	$_{ m WSB}$	KWK WIOD	WRVA	WJAX WGAR	WFLA	KOA KGW	KSL KOMO	KGO KHO	KFI	KTAR	KFSD
KVOO	(WRC o	n 2:30)	(WREN	on 2:15)	** 1 1413	7:30-8:00 W					
2:00-2:30 C						WJZ	WBZ	WBZA	WHAM	KWK	WLW
WABC WPG	WHEC	WLBZ WHP	WEAN	WNAC WCAO	WORC WTAR	W REN 8:00-8:15 Er	KDKA	WGN	WJR		
WDBJ	WKRC		WXYZ	WBCM	WDOD	WJZ	WBZ	WBZA	WHAM	KWK	KYW
WREC	WLAC	WBRC	WFBM	WMAQ	WBBM	WKY	WJR	WREN	WFAA	KPRC	WOAI
KSCJ KFH	WMT KFJF	KMBC KRLD	WDAY KTRH	KOIL	WIBW KLZ	WHAS KOA	WSM WENR	WTMJ	KSTP KTHS	KDKA	WMC
CFRB				RIDA	KL	KFI	KGW	KSL	KHQ	WSMB WLW	KOMO WCKY
2:30-3:00 N	BC Artist	s Program	n		***	WSB	WPTF	WRVA	WFLA	WSUN	KFAB
WEAF WGY	M.OM.	WWJ	KSD	WDAF	KOA	KFSD 8:00-8:15 TH	KTAR	WJDX	KPO	KVOO	KHQ
3:00-4:00 N	ational Yo	outh Conf	erence			WABC	WLBZ	WEAN	WNAC	WORC	WCAU
WJZ	WBAL	KDKA	KWK	WREN		WHP	WJAS	WLBW	WNAC WMAL	WTAR	WDBJ
WRVA WFLA	WJAX	WIOD KGW	KVOO WPTF	WFAA KGO	WOAI KOA	WKRC WREC	WAIU	WMAQ	WXYZ	WBCM WMT	WDOD KMOX
KSTP	WSUN WEBC	WMC	WSMB	KPRC	WKY	KMBC	WIJAY	WNAX	KOIL	WIBW	KFJF
KPO	KOMO	KHQ	WSB	WAPI	WGAR	KRLD	KTRH	KLZ	KFRC		
WTMJ	KSL w York I	Ohilla	i. Ozak			8:00-8:30 M WEAF	WSMB	es ramii KSTP	WCSH	WDAF	WIOD
3:00-5:00 No WABC	WHEC	WLBZ	WEAN	WNAC	WORC	WSB	WMC	WJDX	WKY	WJAR	WCAE
WCAU	WHI	WJAS	WLBW	WMAL	WCAO	WRC WHAS	WGY WFLA	WWJ WSUN	WSAI	KSD	WFJC
WTAR WBCM	WDBJ WSPD	WKRC	WAIU WREC	WWNC WLAC	WXYZ WBRC	WOW	WHO	WTAM	WTAG	WLS	WEBC
WFBM	WMAQ	WCCO	KSCJ	WMT	KMOX	8:15-9:15 Co	lliers Rac	dio Hour			
KMBC	WDAY	KOIL	WIBW	KFH	KFJF	WJZ WLW	WBZ KYW	WBZA KWK	WHAM	KDKA	WJR KSL
KRLD 4:00-4:15 Fl	KTRH		KFRC			KHO	KOMO	KFI	KGW	K PO	KoL
W.IZ	WBZ	WBZA	WBAL	WHAM	KDKA	8:30-9:00 Ch WEAF	ase and S	Sanborn (Choral O	chestra	WON
WJR WGAR	WLW	KYW	KWK	WREN	KFAB	WCAE	WJAR WWJ	WSAI	WCSH KSD	WOW	WGY WIOD
4:00-5:00 D	S Park	os Cadmi	. n			WIBO	KSTP	WHO	WOC	WHAS	WLIT
WEAF	WEEL	WJAR	WCSH	WTAG		WEBC	WMC	WSB	WSMB WTAM	WKY	KTHS
WOW	WKY	WOAI	WSAI	WJAX	WHAS	WFLA	WOAI WSUN	WDAF	WINDLO	T. I.OO	WIOD
WJDX WFLA	KV00 WSUN	KPRC K H Q	WEBC WHO	WDAF WOC	WWJ KGO	9:00-9:15 "C WEAF	ur Gover	nment,"	David La	wrence	
KOMO	WCAE	WFJC	WRG	KGW	WPTF	KSD	WKY	WSAI	WEBC	WSB	WHAS WMC
WMC WSMB	WGY	WSM WBEN	KTHS	WBAP WIOD	WSB	WSM	WFAA	WOW WSUN	WOAI	WSMB	WJDX
5:00-5:30 Re				WIOD		WIOD W W J	WFLA KVOO	WSUN	WOC WBEN	WHO	WRC
WABC	WFBL	WGR WMAL	WEAN	WDRC	WNAC	9:00-9:30 Ar	ound the	Samovar		WJAR	
WCAU WSPD	WJAS WOWO	WMAL	WADC	WKRC KRLD	WXYZ WRR	WABC	WHEC	WEAN	WNAC	WORC WKBN	WPG
5:00-6:00 Da	vey Hour			KALD	with	WJAS 9:15-10:15 A	WCAO	WTAR	WADC	WKBN	
WEAF	WJAR WCAE	WTAG	WCSH	WFI	WRC	WEAF	WEEI	WRC	WFI	WGY	WCAE
WGY WOC	WHO	WOW	W DAF	WSAI CKGW	WENR WBEN	WTAM WFAA	WWJ KOA	WSAI	KSD	WOW	WSM
WEEI	WWJ		" DAI	ORGII	WDEN	KOMO	KPO	WOAI KHQ	WSMB KPRC	KFI WKY	KGW WHAS
5:00-6:00 Na	tional Ve	spers	TANKTA	TIT TO TO A T	n.onn	WGN	WSB	WOC	WHO	WMC	WDAF
WJZ KSTP	WEBC	WHAM WIOD	WMC	WREN KOMO	WCKY WJDX	KSL 9:30-10:00 G	CKGW	WAPI sige Hou	WBEN	KSTP	
WPTF	KVOO	KPRC	WFLA	WSUN	KOA	9:30-10:00 G WABC	WFBL	WKBW	WEAN	WDRC	WNAC
KTAR WSB	KGO WOAI	KGW WAPI	KHQ WSMB	WSM	WKY WBZA	WCAU WKRC	WJAS WBT	WMAL WGST		WADC	
	(KFAB	on 5:15)	(WIBO	on 5:30)	WDZA	WDAE	WXYZ	WSPD	WTOC	WQAM WDSU	MOMO
5:30-6:00 Th			WORG	WDO.	TT TO A N.	WBBM	wcco	KMOX	KMBC	KOIL	KFJF
WLBZ WHP	WEAN WJAS	WNAC WLBW	WORC WMAL	WCAO	WFAN WTAR	KRLD KFPY	KTRH KOIN	KTSA KHJ	KLZ KFRC	KDYL	KOL
WDBJ	WHK	WKRC	WAIU	WWNC	WTAR WXYZ	10:00-10:30 1	Royal's P	net of the	Organ		
WSPD WBBM	WDOD	WREC WMT	WLAC KMBC		WFBM KOIL	$egin{array}{c} WABC \ WJAS \end{array}$	WFBL	WKBW	WEAN	WNAC	WCAU
WIBW	KFJF		KLZ	KFRC	KOIL		WGST	WMAL WXYZ	WSPD	WADC	WHK WOWO
6:00-7:00 Ca	tholic Ho	ur			BYD.C	WBBM	KMOX KFPY	KMBC	KOIL	KLZ	KDYL
WEAF WGY		WJAR WEBC	WTAG WIOD	WKY	WRC WJDX	KOL 10:15-10:30 F	KFPY	KOIN	KHJ	KFRC	
KGO	KSTP	WSMB	KOMO	KSD	KGW	WJZ	WBZ	WBZA	KDKA	WJR	WLW
WCAE WDAF	KECA WJAX	KTAR	WEJC	WOC WHAS	WHO WMC	KWK	WREN	WRVA	WJAX	WIOD	WAPI
WSB			WOAI	WRVA	KOA	WSB WJDX	WMC WOAI	WHAS WKY	WFLA WHAM	WSUN	WSMB
KVOO	WSAI	WSM	WFI			10:15-10:45 S	tudebake	r Champ	ions		
7:00-7:30 lod WEAF	ent Big B WEEI	rother Cl WJAR	ub WTAG	WCSH	WRC	WEAF	WTIC WCAE	WTAG	WFI WWJ	WCSH WGN	WRC
WCAE	WWJ	WSAI	WLS	KSD	WOC	WTMJ	KOA	WEBC	KGO	KGW	WJAR WOW
WHO	WOW	WEBC	WTMJ	WBEN	WLIT		комо	KFI	WDAF	KHQ	WBEN

WJZ WBZ WBZA	er Music WHAM	KDKA	WJR	WSUN WTIC WKY WHAS KHQ WJAX 8:15-8:30 Barbasol Program WARC WFRL WKRW WEAN WDRC WNAC
WLW KWK WREN				8:15-8:30 Barbasol Program
10:30-11:00 The Gauchos WABC WHEC WLBZ WJAS WLBW WMAL	WNAC	WORC		WABC WFBL WKBW WEAN WDRC WNAC WCAU WJAS WMAL WCAO WADC WHK WKRC WXYZ WSPD WISN WFBM WCCO
WJAS WLBW WMAL	WCAO	WTAR	W DBJ	WKRC WXYZ WSPD WISN WFBM WCCO KMOX KMBC KOIL
10:45-11:15 Sunday at Seth Pa WEAF WEEI WCSH	wrker's WRC	WGY	WOW	KMOX KMBC KOIL 8:30-9:00 Ingram Shavers WJZ WBZ WBZA WJR WLW KYW
WDAF CKGW WTMI	KSTP	WCAE	WOW WTAM	WJZ WBZ WBZA WJR WLW KYW KWK KFAB WTMJ WEBC WRVA WJAX
WFJC WWJ KYW WJAX WIOD WHAS WKY KOA KGO	WOW WSM	WHO WJDX	WEBC KPRC KTAR	WIOD WSM WMC WSB WSMB KTHS
WKY KOA KGO KFSD WRVA WBEN	KGW	WSB	KTAR	KPRC WOAI WKY KOA CKGW WFLA WSUN WHAS KDKA WJDX KVOO WFAA
11:00-12:00 Back Home Hour				WGAR
WABC WHEC WLBZ WTAR WDBJ WXYZ WREC WLAC WFBM	WPG	WHP	WMAL	8:30-9:00 Arabesque WABC WLBZ WEAN WNAC WORC WJAS
WREC WLAC WFBM	WCCO	WMT	WDAY	
WNAX WIBW KFH KTSA	KFJF	KRLD	KTRH	WXYZ WBCM WDOD WREC WMAQ WMT KMOX WDAY WNAX KOIL KFJF KRLD
11:30-12:00 Russian Cathedral	Choir			KTRH KLZ CFRB 8:30-9:00 A. & P. Gypsies WEAF WEEI WTAG WJAR WTIC WCSH
WEAF WRC WFJC WOW WSB WGY	WWJ	WBAP	KOA	8:30-9:00 A. & P. Gypsies WEAF WEEL WTAG WJAR WTIC WCSH
WIOD WHAS WBEN	W. LAM	IXI-11	111100	WEIT WRO WGT WOAE WWJ WSAI
Man				WGN KSD WOC WDAF WTAM WOW WHO WBEN
Mone				9:00-9:30 Maytag Orchestra WJZ WBZ WBZA WHAM KDKA WJR
3:00-3:30 Phil Napoleon and H WJZ WBZ WBZA WREN WSB KWK	WBAL	WHAM	KDKA	KWK KYW KSTP WEBC KTHS WKY
WREN WSB KWK WSUN WRVA WSB	KDKA KOA			WOAI KOA KSL KGO KECA KGW KHQ KOMO KVOO WLW WFAA KPRC
3:30-4:00 Sixteen Singers	KOA			KHQ KOMO KVOO WLW WFAA KPRC
WEAF WRC WOC WTAM WGY WWJ	WHO	KSD	KSTP	WGAR 9:00-9:30 The Three Bakers WABC WFBL WHEC WKBW WLBZ WEAN WDRC WNAC WORC WPG WCAU WHP WJAS WLBW WMAL WCAO WTAR WDBJ WADC WHK WKRC WWNC WBT WGST WTOC WQAM WDBO WDAE WXYZ WBCM
4:00-4:30 Dance Orchestra				WDRC WNAC WORC WPG WCAU WHP
WJZ WBAL KSTP KWK KFSD WHAM	KTAR	KOA WSB	KGO WSMB	WJAS WLBW WMAL WCAO WTAR WDBJ WADC WHK WKRC WWNC WBT WGST WTOC WQAM WDBO WDAE WXYZ WBCM WSPD WDOD WREC WLAC WBRC WDSU
WMC WBZ WBZA	WGAR	KYW	WOMB	
4:15-4:30 U.S. Army Band	WNAC	WORC	WPC	WISN WOWD WIBM WMAQ WCCO KSCJ
WCAU WLBW WMAL	WCAO	WTAR	WDBJ	WMT KMOX KMBC KLRA WDAY WNAX KOIL WIBW KFH KFJF WRR KTRH
WAIU WWNC WXYZ	WCCO	WSPD	WDOD	KTSA KLZ KDYL KOL KFPY KOIN
WABC WLBZ WEAN WCAU WLBW WMAL WAIU WWNC WXYZ WREC WLAC WBBM KMOX KMBC WDAY KTRH KLZ KOL	KOIL	KFJF	KRLD	KHJ KFRC 9:30-10:00 Chesebrough Real Folks
				WMT KMOX KMBC KLRA WDAY WNAX KOIL WIBW KFH KFJF WRR KTRH KTSA KLZ KDYL KOL KFPY KOIN KHJ KFRC 9:30-10:00 Chesebrough Real Folks WJZ WBZ WBZA WHAM KDKA WLW KWK KYW CKGW WJR 9:30-10:00 General Motors Family Party WEAF WEEI WJAR WCSH WTAG WLIT
WABC WLBZ WEAN WFAN WHP WLBW WDBJ WKRC WAIU	WNAC	WORC	WPG	9:30-10:00 General Motors Family Party
WDBJ WKRC WAIU	WWNC	WXYZ	WBCM	WEAF WEEI WJAR WCSH WTAG WLIT WRC WGY WCAE WTAM WWJ WGN KSD WOC WOW WSAI WDAF KSTP
WSPD WDOD WRECKSCJ KMOX KMBC	WLAC	WBRC	WCCO	KSD WOC WOW WSAI WDAF KSTP
KFJF KRLD KTRH	KTSA	KLZ	KOL	WTMJ WHAS WSM WMC WSB KPRC WJAX WFAA WOAI WKY KOA KSL
KFRU UFRB	I: 0 .I			KGO KGW KFI KOMO KHO WTIC
WABC WPG WCAU WCAO WTAR WDBJ WSPD WDOD WREC WCCO KSCJ WMT	WHP	WLBW	WMAL	0.20 10:00 Pauriois
WCAO WTAR WDBJ WSPD WDOD WREC	WERC	WWNC	WBCM	9:30-10:00 Bourjois WABC WFBL WKBW WEAN WNAC WCAU WJAS WLBW WMAL WCAO WADC WHK
WCCO KSCJ WMT	WDAY	KFJF	KRLD	WABC WFBL WKBW WEAN WNAC WCAU WJAS WLBW WMAL WCAO WADC WHK WKRC WBT WXYZ WSPD WOWO WBBM KMOX KMBC KOIL
KTRH KTSA KLZ 6:15-6:45 Mormon Tabernacle	KOL	KFRC	CFRB	
WJZ WBAL WSM	KWK	KOA	KSL	NMOK MOLE NOTE 10:00-10:30 Robert Burns Panatela Program WABC WFBL WKBW WEAN WDRC WNAC WCAU WJAS WMAL WCAO WADC WHK WKRC WXYZ WSPD WOWO WFBM WMAQ WCCO KMOX KMBC KOIL KFJF KRLD KTRH KTSA KLZ KDYL KVI KOL
	KGW WAPI	KOA CKGW KFSD	WRC	WKRC WXYZ WSPD WOWO WFBM WMAQ
WSMB				WCCO KMOX KMBC KOIL KFJF KRLD
WDBJ WKRC WWNC WBRC KSCJ WMT WHEC WLBZ WORC WMAL WCAO WTAR KTRH KOL KFRC	WXYZ	WBCM	WDOD	KFPY KOIN KHJ KFRC
WBRC KSCJ WMT WHEC WLBZ WORC	WDAY	WJAS	WABC	10:00-10:30 Stromberg-Carlson Program WIZ WRZ WRZA WHAM KDKA KVW
WMAL WCAO WTAR	WIBW	KFH	KFJF	10:00-10:30 Stromberg-Carlson Program WJZ WBZ WBZA WHAM KDKA KYW KWK WREN WEBC WRVA WJAX WIOD WHAN WEBC WRYA WJAX WIOD
7:15-7:30 Tastyeast Jesters				WHAS WSM WMC WSB WSMB WOAI KOA KPRC KGO KFI WCKY KGW KHQ KOMO WJDX WFLA WSUN WJR KTAR KFSD WAPI WKY WGAR
7:15-7:30 Tastyeast Jesters WJZ WCKY WHAM KDKA WRC WGAR	WBZ	WBZA	WREN	KHQ KOMO WJDX WFLA WSUN WJR KTAR KFSD WAPI WKY WGAR
7:30-8:00 Colonial Beaconlight:	s			10:00-10:30 Advantures of Sharlack Halmas
WEAF WEEL WJAR WBEN	WTAG	WCSH	WGY	WEAF WJAR WCSH WWJ WTAG WEEI WLIT WTAM WSAI WRC WGN WOC WHO WBEN WCAE
7:45-8:30 Roxy's Gang Program WJZ WHAM KWK	m NYOD	WOL	IZDAD	WHO WBEN WCAE
CKGW WIBO WGAR			KFAB	WIZ WRZ WRZA WHAM KDKA WIR
8:15-8:30 Fifteen Minutes in N	Vation's C	apital KSD	WCAE	WLW KYW KWK WREN WTMJ WOAI
8:15-8:30 Fifteen Minutes in N WEAF WJAR WTAG KFSD KOMO WWJ WOW KYW WDAF	WSAI	WOC	WIIO	WLW KYW KWK WREN WTMJ WOAI KSTP WEBC KOA KSL KGO KECA KGW KOMO KHQ KTAR KFSD WKY WBAP KPRC WGAR
WOW KYW WDAF	WBEN	WJDX	WSMB	WBAP KPRC WGAR

KGO KVOO KPRC KOA KECA WFLA

10:30-11:00 Kaffee Hag Slumber Music

WEAF WGY WEAF WILD (KSD WTMJ WSM on 11:15) (KSD WTMJ WSM on 11:45) (KSD WTMJ WSM on 11:45) (WEAF WWJ WEAF WWJ WEAF WWJ WEAF WWJ WEAF WSJ WARN WEAF WSJ WEA	WEAF WEEL WJAR WRC WCAE WTAM WWJ WOW WDAF WMC WSB WJDX WBEN WOC WHO 10:30-11:00 Don Amaizo	WEAF WCAE WTAM WWJ WSAI WIBO
WAST	WEAF WEEL WJAR WRC WCAE WTAM WWJ WOW WDAF WMC WSB WJDX WBEN WOC WHO 10:30-11:00 Don Amaizo	WEAF WCAE WTAM WWJ WSAI WIBO
WHEN WOC WHO	WBEN WOC WHO 10:30-11:00 Den Amaizo	
10-30-11-00 Don Amaise WACO WAFF WASK WALD WAFF WASK WALD WAFF WASK W	10:30-11:00 Don Amaizo	
WKRC WCAL WKBN WSPD WISN WBBM WCCO KSCJ WTL KLZ KDYL KOL KPFY KOIN KHJ KLZ KDYL KOL KFFY KOIN KHJ KHJ KHZ KDYL KOL KFFY KOIN KHJ WAJR WSD WSD KJ WSD WSAIN WSAIN WSJ WAJR WJBO WJAR WDBJ WXCK WYZ WBCM WGAD WTAR WDBJ WWXC WYZ WBCM WSPD WDDD WREC WLAC WBIG WFBM WCC KSCJ WTN WAAX KOIL WIBW KFH KJF KTRH KJBO-1130 OFfence Reicht ardon and Orchestra WBAF WGY WCAE WOC WGAI Off 11:35) WGAI WJSD WMC WSB on 11:35) WGAI WGAI WJS WALA WAO WOOW (WSAI off 11:35) WGAI WJSD WHA WJSD WGA WJSD WGAI WJSD WALAW WAS WALAW WCC KJBO WTAIN WSB on 11:35) WGAI WGAI WJSD WHA WGA WGA WGA WGA WGA WGA WGA WGA WGA WG		WGY WBEN
WCCO KSCJ WMT WDAY WAAX KOIL	WKRC WCAH WKRN BISPD WISH WERM	8:30-9:00 Florsheim Frolic
RFPIC RNX NOD RFT ROTH RJJ 1:00-11:15 Musical Ariator Orchestra WABC WLAZ WORC WFO WABC WATAR WDBJ WWXC WXZ WECM WSFD WDDD WREC WLAC WBRG WFBM WCO KSCJ WTT KMOX KMB WDAY KLAX KOIL WIBW KFH KJJ KTRH 1:00-11:30 Flerence Richardon and Orchestra WBAF WGY WCAE WCC WHO WAS WALL WAS WALL WCAO WAD WHA WAS (WSAI off 11:15) WIDX WMC WSB on 11:15) (KSD) WTMJ WSM on 11:15) (MSD) WTMJ WSM WALL WCAO WJAF WDJB WHK WKEC WNC WYZZ WECM WDD WREC WALA WBRC WFBM WOCO KSCJ WMT KNBC WDAY WAAX WBAF WCO WHO WSM KYW (KSD on 12:30) (LSD) WHA WDD WREC WALA WBRC WFBM WOCO KSCJ WMT KNBC WDAY WAAX WBAF WRC WKY WSM KYW (KSD on 12:30) (KSTP WCO KJED WMAL WCAO WJAF WBLAY WBAF WGA WAS WAS WAS WAS WEAR WHEN WST WRO WOON WOON WBAF WRO WAS WAS WAS WAS WAS WAS WAS WAS WEAR WAS	WCCO KSCJ WMT WDAY WNAX KOIL	WWJ WSAI WGN KSD WDAF WERC
WABC WIER WARD WALD WIEW WAS WALD WERD WAS WERD WOOD WRECK WALO WHICH WAS WERD WOOD WRECK WAS WERD WOOD WRECK WAS WERD WOOD WRECK WAS WERD WOOD WREDK WAS WERD WAS WERD WOOD WREDK WAS WERD WAS WERD WAS WERDK WAS WARDK WAS WERDK WAS WARDK WAS WERDK WAS WARDK	KEE KUID KUL KITI KUIN KAJ	WRVA KVOO WIAY WIOD WEIN WELL
WSPD WALD WALD WALD WEDN WSPD	11:00-11:15 Musical Aviators Orchestra	WSM WMC WSB WSMB WJDX KPRC
WSPD WALD WALD WALD WEDN WSPD	WABC WLBZ WORC WPG WCAU WLBW	WHAS WCSH WBAP WBEN KSTP
WCCO KSCI WMT KMOX KMIG WDAY WAS	WCAO WIAR WDBJ WWNC WXIZ WBCM	8:45-9:00 Premier Salad Dressers
NELP WORD WORD WORD WORD WEEK WEEK WORD WORD WORD WEEK WEEK WORD WORD WORD WEEK WEEK WORD WILSO	WCCO KSCJ WMT KMOX KMBC WDAY	WABC WFBL WKBW WEAN WDRC WNAC
11-96-11-39 Florence Richardson and Orchestra WEAF WGY WCAE WOC WHO WGO	WNAX KOIL WIBW KFH KFJF KTRH	WGST WTOC WOAM WDBO WDAE WXYZ
W.E.A.F. W.C. W.F.D. W		WSPD WLAC WDSH WOWO WCCO KMOX
WEG WO WO WO KSD WGY W	WEAF WGY WCAE WOC WHO WOW	KMBC KOIL KTRH KLZ KDYL KVI
WEG WO WO WO KSD WGY W	(WSAI off 11:15) (WJDX WMC WSB on 11:15)	9:00-9:30 McKesson Musical Magazine
WEAF WIJ WOU WHO KSD WHO KSD WOW WHO KSD WHO WHO KSD WHA WEAR WARD WARD WARD WARD WARD WARD WARD WA	11:30-12:00 Horace Heidt and His Orchestra	WEAF WEEL WAAR WTAG WCSH WFI
## WARD Fletcher Henderson and His 90; WOW WARD Fletcher Henderson and His 90; WARD WARD WARD WARD WARD WARD WARD WARD	WEAF WWJ WOC WHO KSD WGY	WRC WBEN WTAM WSAI KSD WOW WTMI WERC WRVA WIOD WELA WSUN
11:30-12:00 Fletcher Henderson and His Orchestra	(WDAF KSTP WEBC KOA on 11:45) (WOW	WSM WMC WSB WSMB WJDX KPRC
WABC WARW WORD WERK WERK WWNC WYZZ WBCM WDOD WREC WLAC WBRC WFBM WCCO KSCJ WT KMBC WDAY WNAX KOIL WIBW KFH KFJF KTRF CRB 12:00-1:00 Phil Spitalny and His Orchestra WEAF WRC WKY WSM KYW (KSD on 12:30) (KSTP WGY off 12:30) (WDAF off 12:15 Tuesday 10:15-10:30 Through the Looking Glass WJZ WBZ WBZ, WHAM WLW KFK KDKA KW CKGW KFAB WKY WZ WBZ WBZ, WHAM WLW WREN KFKX KDKA KW CKGW KFAB WKY KYOO WOAI WBAP WGAR 3:30-4:00 Colden Gems WEAF WEEL WTLO KSD WFLA WSUN KSTP WOC WHO CKGW WABC WLAZ WBAW WAAC WORC WPG WABC WLAZ WBRW WAAC WORC WHO WRC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRW WAAZ WORL WKRC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRW WDAY KOIL KFJF KYSA KIZ KFRC CFRB WABC WHAW WRR WAR WLW WABC WHAW WRR WAR WLW WAS WHAW WRR WREN WRC WABC WHAW WAR WREN WRC WABC WHAW WRR WREN WRC WABC WHAW WAR WREN WRC WABC WHAW WWR WRR WRC WABC WHAW WAR WREN WRC WABC WHAW WAR WRC WABC WHAW WAR WRC WABC WHAW WRR WRC WABC WHAW WAR WRC WABC WHAW WRR WRC WAR WHAW WRR WRC WABC WHAW WRR WRC WAR WHAW WRR WRC WRC WAR WRD WRC WRC WHAW WRR WRC	11:30-12:00 Élatabar Handanan and His Ondanta	WKY KOA KSL KGO KECA KTAR
WEAF WRC WKY WSM KYW (KSD on 12:30) (KSTP WGY off 12:30) (WDAF off 12:15) Tuesday Tuesday 10:15-10:30 Through the Looking Glass WJZ WBZ WBZ WBZA WHAM WLW WREN KFKX KDKA KWK CKGW KFAB WKY KYOO WAI WBAP WGAR S:30-400 Golden Gems WEAF WEEI WTIC WTAG WFAC WANG WFBM WHOO WFBM WAQ WCOO WAT KMOC CKGW WABC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WBAW WHO WKRC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WBAW WWR WRAF WGAO WTAR WBBJ WKRC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WBAW WWR WRT KMOX KMBC WOOL KFJF KFKK KFAB WREN WGAO WTAR WBJK WRC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WBAW WGA WGAW WWW WWA WGAW WGAW WGAW WG	WABC WLBZ WORC WLBW WMAL WCAO	KYW
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WEAF WRC WKY WSM KYW (KSD on 12:30) (KSTP WGY off 12:30) (WDAF off 12:15) Tuesday Tuesday 10:15-10:30 Through the Looking Glass WJZ WBZ WBZ WBZA WHAM WLW WREN KFKX KDKA KWK CKGW KFAB WKY KYOO WAI WBAP WGAR S:30-400 Golden Gems WEAF WEEI WTIC WTAG WFAC WANG WFBM WHOO WFBM WAQ WCOO WAT KMOC CKGW WABC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WBAW WHO WKRC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WBAW WWR WRAF WGAO WTAR WBBJ WKRC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WBAW WWR WRT KMOX KMBC WOOL KFJF KFKK KFAB WREN WGAO WTAR WBJK WRC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WBAW WGA WGAW WWW WWA WGAW WGAW WGAW WG	WCCO KSCJ WMT KMBC WDAY WNAX	WJZ WBZ WBZA WBAL WREN KDKA
WEAF WRC WRY		WARC WERL WOR WEAR WIDDO WNAC
Tuesday Tuesday 10:15-10:30 Through the Looking Glass WJZ WBZ WBAM WLW WREN KFKX KDRA KWK CKGW KFAB WKY KVOO WOAI WBAP WGAR 3:30-4:00 Golden Gems WEAF WEEL WTIC WTAG WTAM WFJC KSD WFLA WSUN KSTP WOC WHO CKGW WAD WBAP WGAR WABC WLBZ WAAN WNAC WREC WALU WBWC WXYZ WSPD WREC WACU WLBW WMAL WCAO WTAR WDBJ WKRC WAIU WWNC WXYZ WSPD WDDD WREC WAC WBRC WBBM WCOO KSCJ WMT KMOX KMBC WDAY KOIL KTRH KTSA KLZ KFRC CFRB WJZ WHAM WJR WGAR WJAW WGAW WGC WJAX WSM WMC WAPI WFAA KSTP KOA KJSD Rhythm Kings WABC WHEC WFAN WHP WCAO WTAR WALU WWNC WXYZ WBCM WOOD WREC WLAC WBRC WBCW WAD WHO WOW WTMJ KSTP WGAF WABC WHEC WFAN WHP WCAO WTAR WALU WWNC WXYZ WBCM WOOD WREC WLAC WBRC WGCO KSCJ WMT KMBC WDAY KFJF KTSA KLZ KTSA KLZ KTRH WFSH WRC WADAY KOIL KTSH WABC WHEC WFAN WHP WCAO WTAR WALU WWNC WXYZ WBCM WOOD WREC WLAC WBRC WGCO WMT KMBC WDAY KFJF KTSA KLZ KTRH WFSH WLAC WBRC WGAO WTAR WALU WWNC WXYZ WBCM WOOD WREC WLAC WBRC WGAO WTAR WALU WWNC WXYZ WBCM WADAY KOIL KFJF KTSA KLZ KTRH WFSH WLAC WBCW WADAY KOIL KFJF KTRH KLZ KTRH KFSD WREAW WCAO WANA WHAW WCAY WADAY KOIL KFJF KTRH KLZ KTRH WFSH WLAC WBCW WADAY KOIL KFJF KTRH KLZ KTRH WFSH WLAC WBCW WADAY KOIL KFJF KTRH KLZ KTRH WFSH WLAC WBCW WADAY KOIL KFJF KTRH KLZ KTRH WFSH WLAC WBCW WADAY KOIL KFJF KTRH KLZ KTRH WFSH WLAC WBCW WADAY KOIL KFJF KTRH KLZ KTRH WFSH WLAC WBCW WADAY WALW WCAO WANA WALW WANA WHAL WCAO WANA WHAL WCAO WANA WHAL WCAO WANA WHAL WCAO WANA WHAL WWN WCAY WBE WBEA WABC WEBS WANA WNAC WCAO WTAR WALO WOOD WREC WLAC WOOD WREC WLAC WANA WHAN WCAO WAYA WBAD WAAR WHAN WCAO WANA WHAN WCA	WEAF WRC WKY WSM KVW (KSD on	WCAU WJAS WMAL WCAO WADC WHK
Tuesday 10:15-10:30 Through the Looking Glass WJZ WBZ WBZA WHAM WLW KFKX KDKA KWK CKGW KFAB WKY KVOO WOAI WBAP WGAR 3:30-4:00 Golden Gems WEAF WEEI WTIC WTAG WTAM WFJC KSD WFLA WSUN KSTP WOC WHO CKGW 4:00-4:30 Italian Idyll WABC WLBZ WEAN WNAC WORC WPG WCAU WHBW WMAL WCAO WTAR WDBJ WKRC WAIU WWN C WXYZ WSPD WDDD WREC WLAC WBRC WBBM WCOO KSCJ WMT KMOX KMBC WDDAY KOIL KFJF KTRH KTSA KLZ KFRC CFRB 4:00-5:00 Pacific Vagabonds WMC WAPI WFAA KSTP KOA KGO KKFSD KTAR S:00-5:30 Rhythm Kings WABC WHEC WLAC WBRC WCOO KSCJ WMT KMBC WDAY KFJF KELD KTSA KLZ T:30-8:00 Soconyland Sketches WEAF WEEI WAR WTAG WCAU WWN C WXYZ WDDD WREC WLAC WBTC WAND WREC WLAC WBRC WCOO WSCJ WMT KMBC WDAY KFJF KELD KTSA KLZ T:30-8:00 Soconyland Sketches WEAF WEEI WAR WTAG WCAU WNNC WXYZ WDDD WREC WLAC WRAC WLBW WMAL WCAO WTAR WDBJ WROC WAY KMBC WDAY KFJF KELD KTSA KLZ T:30-8:00 Soconyland Sketches WEAF WEEI WAR WTAG WCSH WBC WLBW WMAL WCAO WTAR WDBJ WRAC WLBW WMAL WCAO WTAR WDBJ WROC WAY KMBC WDAY KFJF KTRH KTSA KLZ T:30-8:00 Soconyland Sketches WEAF WEEI WAR WTAG WCSH WBC WLBW WMAL WCAO WTAR WDBJ WRAC WLBW WMAL WCAO WTAR WDBJ WROC WYNZ WDOD WREC WLAC WBC WAAW WCAY WSB KGW KWBW WBAN WAC WCAU WJAS WBAL WCAO WTAW WBC WARD WHAW WWN CWXYZ WBCM WMC WAPI WNN CWXYZ WBCM WNO WSWYZ WBCM WWN WNC WXYZ WDOD WREC WLAC WAND WWN WN CWXYZ WBCM WNO WSW WBR KWRC WJAS WABC WTAR WLAC WDBW KFJF WHEC WABC WTAR WLAC WDSU KFJF WHEC WABC WTAR WLAC WBSW WBN WAS WMC WWN WWN WWN WWN WN WN WN WN WN WN WN WN	12:30) (KSTP WGY off 12:30) (WDAF off 12:15	WRRM WCCO KMOY KMRC KOIL KEH
10:15-10:30 Through the Looking Glass WAZC WHZ WBZ W	Tr I	9:30-10:00 The Philco Symphony Concert
WADC WHK WKRC WXYZ WSPD WSAM WKRC W	- ,	WABC WEBL WHEC WKBW WEAN WDRC
N.	10:15-10:30 Through the Looking Glass	WADC WHK WKRC WGST WXYZ WSPD
NYOU WOAT WBAP WGAR WGAR WEAF WEEI WTIC WTAG WTAM WFJC KSD WFLA WSUN KSTP WOC WHO CKGW W-04-430 Italian Idyl WABC WLBZ WEAN WNAC WORC WCAU WLBW WMAL WCAO WTAR WDBJ WKRC WALO WWNC WXYZ WSPD WDOD WREC WLAC WBRM WCAO WTAR WDBJ WREC WLAC WBRM WCAO WTAR WDBJ WREC WLAC WBRM WCO KSCJ WMT KMOX KMBC WDAY KOIL KFJF KTRH KTSA KLZ KFRC CFRB WTAH WTAG WSM WWN WAPJ WFAA KSTP KOA KSD WHO WWW WWN WAPJ WFAA KSTP KOA KSD WHO WWW WAPJ WFAA KSTP WBEC WFAM WHO WFAA WTAG WSPD WMAL WWNC WSTY WBEN WFAA WWNC WXYZ WBOM WWNC WXYZ WBOM WWNC WXYZ WDOD WREC WLAC WAFF WEEI WAFF WFAA WHAM WKNC WSTY WFAA WHAM WWNC WXYZ WBOM WWNC WXYZ WBOM WWNC WXYZ WDOD WREC WLAC WAFF WEEI WAFF WFAA WHAM WKFOA WSTY WFAA WHAM WWNC WXYZ WDOD WREC WLAC WAFF WEEI WAFF WFAA WHAM WCAO WTAF WBEN WFAA WHAM WCAO WTAF WTAF WFAA WHAM WCAO WTAF WFAA WHAM WCAO WTAF WTAF WTAF WFAA WTAF	WJZ WBZ WBZA WHAM WLW WREN	WDOD WREC WLAC WBRC WDSU WISN
3.30-4.90 Golden Gems WEAF WEDI WTIC WTAG WTAM WFJC KSD WFLA WSUN KSTP WOC WHO CKGW 4.00-4.30 Italian Idyll WABC WLBZ WEAN WNAC WORC WCAU WLBW WMAL WCAO WTAR WDBJ WKRC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WBBM WCCO KSCJ WMT KMOX KMBC WDAY KOIL KTRH KTSA KLZ KFRC CFRB 4.00-5.00 Pacific Vagabonds WMZ WHAM WJR WGAR WLW WLS WMC WAPI WFAA KSTP KOA KGO KFSD KTAR 5.00-5.30 Rhythm Kings WABC WHEC WFAN WHP WCAO WTAR WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WCOO KSCJ WMT KMBC WDAY KFJF KELD KTRH WDOD WREC WLAC WBRC WCOO KSCJ WMT KMBC WDAY KFJF KELD KTRH WDOD WREC WLAC WBRC WCOO KSCJ WMT KMBC WDAY KFJF KELD KTRH WABC WHEC WLBZ WEAN WNAC WORC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDODD WREC WLAC WBTC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WYYZ WDODD WREC WLAC WBC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WYYZ WDODD WREC WLAC WBC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WYYZ WDODD WREC WLAC WBC WCAU WJAS WEBN WCAU WJAS WBEN WABC WLBZ WEAN WNAC WCSH WEAF WEEI WJAR WTAG WCSH WEAF WEEI WJAR WAAY WNAX WHAS WSMB WJDN WOAI WKY WAY WAAY WOO WATAR WBDJ WKRC WCA WJJ WSAJ KSD WOC WCA WJJ WSAJ KSD WOC WCA WJY WSAD WAAY WNAX WOIL WIS WBMB WJDN WOAI WKY WAN WAN WAIN WEEN WEAF WEEI WJAR WAAY WAAX WIL WRA WHAM WAPI WBEN WAR WHAM WCY WEAF WEEL WJAR WAPI WGAR WEAF WEEI WJAR WAR WOB WAR	KYOO WOAL WRAP WGAR	KMBC KOIL KFH KFJF KRLD KTRH
WHAM KDRA WENK WENK WENK WENK WENK WENK WENK WENK WENK	3:30-4:00 Golden Gems	KTSA CERR
WHAM KDRA WENK WENK WENK WENK WENK WENK WENK WENK WENK	KSD WELA WSUN KSTP WOC WHO	9:30-10:00 Death Valley Days W.J.Z. WRAL WCKY KWK WRZ WRZA
WABC WLBZ WEAN WNAC WORC WPG WCAU WLBW WMAL WCAO WTAR WDBJ WKRC WAIU WWNC WXYZ WSPD WDOD WREC WLAC WBRC WBBM WCCO KSCJ WMT KMOX KMBC WDAY KOIL KFJF KTRH KTSA KLZ KFRC CFRB 4:00-5:00 Pacific Vagabonds WZ WHAM WJR WGAR WLW WLS WMC WAPI WFAA KSTP KOA KGO KGO WRY WHAM WJR WGAA KSTP KOA KGO KFSD KTAR KFSD KTAR WAD WHAM WWNC WXYZ WBCM WMC WAPI WFAA KSTP KOA KGO WHAC WBBW WMAL WGAO WTAR WAIU WWNC WXYZ WBCM WACO WTAR WAIU WWNC WXYZ WBCM WDDJ WREC WLAC WBRC WCAO WTAR WAIU WWNC WXYZ WBCM WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDOD WREC WLAC WBC WCAO WTAR WAIU WWNC WXYZ WDOD WREC WLAC WDAY KOIL KFJF KTRH KLZ KFRC T:30-8:00 Soconyland Sketches WBEN WAC WSYZ WSPD WDOD WREC WLAC WBEN WARC WBEN WARC WBEN WWRC WXYZ WSPD WDOD WREC WLAC WBEN WARC WBEN WWRC WXYZ WSPD WDOD WREC WLAC WBEN WWRC WXYZ WSPD WDOD WREC WLAC WBEN WHAS WSM WWC WXYZ WSPD WDOD WREC WLAC WBEN WHAT WEAL WFRC WCAE WJJ WSAI KSD WOC WKY WFLA WSMB WJDX WOAI WKY WOA WSB WJDX WOAI WKY WOO WSB WJDX WAIU WBEN WAC WSB WJDX WAAI WKY WSEN WEEL WJR WRAA WAAI WAAI WSEN WJR WJR WBEN WJZ WBAA WAAI WHAM WJZ WBEN WJZ WBEN WJZ WBAA WAAI WHAM WJZ WBEN WJZ WBEN WJZ WBAA WAAI WHAM WJZ WBEN WJZ WBAA WAAI WHAM WJZ WBEN	CKGW	WHAM KIRA WENE
WREC WALC WBRG WCOC KSCJ WMT KMOX KMBC WDAY KOIL KFJF KFRG KAO WRY KOA KSL KGO KOMC WMT KMOX KMBC WDAY KOIL KFJF KFRG KAO WRY KOA KSL KGO KOMC WMT KMOX KMBC WDAY KOIL KFJF KFRG KAO WRY KOA KSL KGO KOMC WMT KMOX KMBC WDAY KOIL KFJF KFRG KAO WRY KOA KSL KGO KOMC WRY WAP WBR WRC WJAX WSM WMC WAPI WFAA KSTP KOA KGO WMAC WAPI WFAA KSTP KOA KGO WABC WHEC WFAN WHP WLBW WMAL WOOD WREC WLAC WBRC WCOC KSCJ WMT KMBC WDAY KFJF KELD KTSA KLZ 7:30-8:00 Musical Aviators Orchestra WABC WHEC WLBZ WEAN WNAC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDODD WREC WLAC WAT WDAY KOIL KFJF KTRH KLZ KFRC WABA WEAL WJAS WEAP WEEI WJAR WTAG WBEN WAC WSYZ WSPD WDOD WREC WLAC WBEN WAC WSYZ WSPD WDOD WREC WLAC WBEN WAC WSYZ WSPD WDOD WREC WLAC WBEN WAC WXYZ WSPD WDOD WREC WLAC WBEN WAC WXYZ WSPD WDOD WREC WLAC WBEN WAC WXYZ WSPD WDOD WREC WLAC WBEN WAC WSYZ WSPD WDOD WREC WLAC WBEN KFJF WHEC WAC WSEInghouse Pioneer's WEAF WEEI WJAR WTAG WCSH WEAF WEEI WJAR WAAY WNAX WHO WSMB WJDX WOAI WKY WAS WOO WCO WMT KMBC WDAY WNAX KOIL WBW WHA WSH WSEN WAC WEAF WEEI WJAR WTAG WCSH WEAF WEEI WJAR WAY WAX WHO WSM WSM WJX WAAI WKY WAS WOO WCO WMT KMBC WDAY WNAX KOIL WBW WHA WSH WSEN WRZ WBEN WWO WXYZ WSPD WDOD WREC WLAC WBM WJDX WAAI WKY WAS WSM WHO WSH WSEN WHO WTMJ WEBC WRA WHA WSEN WRZ WEAF WEEI WJAR WAY WAX WIG WAL WSH WSEN WRZ WEAF WEEI WJAR WAY WAX WHA WEBC WLAW WAY WAY WAY WEAF WEEI WJAR WAY	WARC WIRZ WEAN WNAC WORC WOC	9:30-10:00 Happy Wonder Bakers
WRCC WALC WBRG WCOC KSCJ WRO WWY KOA KSL KGO KOMO WMT KMOX KMBC WDAY KOIL KFJF KTRH KTSA KLZ KFRC CFRB WLO WLS WMT KMOX KMBC WDAY KOIL KFJF WFA KSCJ KFRC CFRB WFA KSCJ KFRC WFA WAR WAR WAR WAR WAR WAR WAR WAR WAR WA	WCAU WLBW WMAL WCAO WTAR WDBJ	WGY WCAE WTAM WWJ WSAI WIBO
WMT	WKRC WAIU WWNC WXYZ WSPD WDOD	KSD WHO WOW WTMJ KSTP WEBC
KTRH KTSA KLZ 4:00-5:00 Pacific Vagabonds WZ WHAM WJR WZ WS WZ WADO WZ WAO WANA WS WS WS WOO WG WG WAD WG WAD WG WAD WG WG WHE WG WAD WG WG WHE WG WAD WG WG WHE WG WG WG WG WHE WG	WMT KMOX KMBC WDAY KOIL KEIF	KECA KGW KHO WRAP WOC WRVA
WHEN WAYZ WOWO KMBC WABC WLBW WALL WSTD KGO KFSD KTAR S:00-5:30 Rhythm Kings WABC WHEC WFAN WHP WLBW WMAL WCO WSTS WDOD WREC WLAC WBRC WCO KSCJ KTSA KLZ 7:30-8:00 Musical Ariators Orchestra WABC WHEC WLBQ WEAN WNAC WORC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDOD WREC WLAC WBT WWNC WXYZ WDOD WREC WLAC WMT WWNC WXYZ WDOD WREC WLAC WMT WWNC WXYZ WDOD WREC WLAC WMT WBEN 8:00-8:30 Rhythm Choristers WABC WHEC WDG WCAU WJAS WABC WHEC WLBZ WGAN WORC WABC WHEC WLBZ WGAN WHAL WWNC WXYZ WDOD WREC WLAC WMT WBEN 8:00-8:30 Rhythm Choristers WABC WHEC WDG WCAU WJAS WWNC WXYZ WSPD WDOD WREC WLAC WABC WHEZ WJAR WTAG WCSH WWNC WXYZ WSPD WDOD WREC WLAC WABC WHEZ WJAR WTAG WCSH WWNC WXYZ WSPD WDOD WREC WLAC WABC WHEZ WJAR WTAG WCSH WWNC WXYZ WSPD WDOD WREC WLAC WWOCO WMT KMBC WDAY WNAX KOIL WIBW KFH KFFF KTRH KTSA KOL WIBW KFH WXYZ WBPD WDOD WREC WLAC WWNC WXYZ WSPD WDOD WREC WLAC WWOCO WMT KMBC WDAY WNAX KOIL WIBW KFH WXYZ WBPD WDOD WREC WLAC WGC WGAE WJJ WSAJI KSD WOC KECA KGW KHQ KOMO KTAR KFSD WJZ WBEN WMAL WKAY WNAX WOID WHE WRED WJAR WADI WKY WOA KGO KECA KGW KHQ KOMO KTAR KFSD WJZ WBEN WHAM WAPI WBEN WHK WXYZ WBPD WABC WLAC WSPB WALL WWNC WSR WARD WREC WLAC WDJ KTRH WFRM WRA WCO WISN WREC WTAR WLAC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WHAC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WALC WSN WARN WRE WTAR WALC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WALC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WALC WDSU KFJF WHEC WTAR WALC WDSU KFJF WHEC WTAR WALC WSN WARN WATH WWNC WYYZ WBDOD WREC WLAC WWD WTAR WRN WAYL WANN WATH WEST WTAR WLAC WDSU KFJF WHEC WTAR WALC WSN WARN WATH WOOD UNAC WTAR WALL WARN WATH WEST WTAR WALL WARN WCOO WASH WARL WARL WANN WACO WTAR WALL WWNC WST WARL WARL WALL WARN	KTPH KTSA KIZ KEDO CEDD	WEL WIME WREN KPRC
WHEN WAYZ WOWO KMBC WABC WLBW WALL WSTD KGO KFSD KTAR S:00-5:30 Rhythm Kings WABC WHEC WFAN WHP WLBW WMAL WCO WSTS WDOD WREC WLAC WBRC WCO KSCJ KTSA KLZ 7:30-8:00 Musical Ariators Orchestra WABC WHEC WLBQ WEAN WNAC WORC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDOD WREC WLAC WBT WWNC WXYZ WDOD WREC WLAC WMT WWNC WXYZ WDOD WREC WLAC WMT WWNC WXYZ WDOD WREC WLAC WMT WBEN 8:00-8:30 Rhythm Choristers WABC WHEC WDG WCAU WJAS WABC WHEC WLBZ WGAN WORC WABC WHEC WLBZ WGAN WHAL WWNC WXYZ WDOD WREC WLAC WMT WBEN 8:00-8:30 Rhythm Choristers WABC WHEC WDG WCAU WJAS WWNC WXYZ WSPD WDOD WREC WLAC WABC WHEZ WJAR WTAG WCSH WWNC WXYZ WSPD WDOD WREC WLAC WABC WHEZ WJAR WTAG WCSH WWNC WXYZ WSPD WDOD WREC WLAC WABC WHEZ WJAR WTAG WCSH WWNC WXYZ WSPD WDOD WREC WLAC WWOCO WMT KMBC WDAY WNAX KOIL WIBW KFH KFFF KTRH KTSA KOL WIBW KFH WXYZ WBPD WDOD WREC WLAC WWNC WXYZ WSPD WDOD WREC WLAC WWOCO WMT KMBC WDAY WNAX KOIL WIBW KFH WXYZ WBPD WDOD WREC WLAC WGC WGAE WJJ WSAJI KSD WOC KECA KGW KHQ KOMO KTAR KFSD WJZ WBEN WMAL WKAY WNAX WOID WHE WRED WJAR WADI WKY WOA KGO KECA KGW KHQ KOMO KTAR KFSD WJZ WBEN WHAM WAPI WBEN WHK WXYZ WBPD WABC WLAC WSPB WALL WWNC WSR WARD WREC WLAC WDJ KTRH WFRM WRA WCO WISN WREC WTAR WLAC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WHAC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WALC WSN WARN WRE WTAR WALC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WALC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WLAC WDSU KFJF WHEC WTAR WALC WDSU KFJF WHEC WTAR WALC WDSU KFJF WHEC WTAR WALC WSN WARN WATH WWNC WYYZ WBDOD WREC WLAC WWD WTAR WRN WAYL WANN WATH WEST WTAR WLAC WDSU KFJF WHEC WTAR WALC WSN WARN WATH WOOD UNAC WTAR WALL WARN WATH WEST WTAR WALL WARN WCOO WASH WARL WARL WANN WACO WTAR WALL WWNC WST WARL WARL WALL WARN	4:00-5:00 Pacific Vagabonds WIX WHAM WID WCAD WIW WIS	10:00-10:15 Graybar — Mr. and Mrs.
S:00-5:30 Rhythm Kings WABC WHEC WFAN WHP WLBW WMAL WCAO WTAR WAIU WWNC WYZ WBCM WDOD WREC WLAC WBRC WCOO KSCJ WMT KMBC WDAY KFJF KELD KTRH KTSA KLZ 7:30-8:00 Musical Aviators Orchestra WABC WHEC WLBZ WEAN WNAC WORC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDOD WREC WLAC WTC WDAY KOIL KFJF KTRH KLZ KFRC 7:30-8:00 Scoonyland Sketches WEAF WEEI WJAR WTAG WCSH WBEN 8:00-8:30 Rhythm Choristers WABC WLBZ WORC WPG WABC WLBZ WORC WPG WABC WLBZ WORC WFG WABC WLBZ WSPD WDOD WREC WLAC WHEN WWNC WXYZ WSPD WDOD WREC WLAC WCOO WMT KMBC WDAY WNAX KOIL WIBW KFH KFJF KTRH KTSA KOL WEG WCAE WJJ WSAJ KSD WCAE WJAS WHO WWC WXYZ WSPD WDOD WREC WLAC WBC WCAE WJJ WSAJ KSD WCAE WJAS WHO WKRD WARJ WRAZ WJAS WHO WTMJ WEBC WRYA WJAS WOD WKCAE WJJ WSAJ KSD WCAE WJJ WSAJ WJJ WJ WSAJ	KWK KFAB WREN WRC WJAX WSM	WHK WXYZ WOWO KMBC WABC WLBW
WABC WHEC WHAV WWNC WXYZ WBCM WOAO WTAR WAIU WWNC WXYZ WBCM WDOD WREC WLAC WBRC WCOO KSCJ WMT KMBC WDAY KFJF KELD KTRH KTSA KLZ 7:30-8:00 Missical Aviators Orchestra WABC WHEC WLBZ WEAN WNAC WORC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDOD WREC WLAC WMT WDAY KOIL KFJF KTRH KLZ KFRC 7:30-8:00 Soconyland Sketches WBEN WBEN WBEN WBEN WBEN WBEN WBEN WBEN		KOIL WCAU WJAS WEAN KMOX WFBL
WABC WHEC WARN WHY WND WXYZ WBCM WOOD WREC WLAC WBRC WCOO KSCJ WMT KMBC WDAY KFJF KELD KTRH KTSA KLZ 7:30-8:00 Musical Aviators Orchestra WABC WHEC WLBZ WEAN WNAC WORC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDOD WREC WLAC WMT WDAY KOIL KFJF KTRH KLZ KFRC 7:30-8:00 Soconyland Sketches WBEN WBEN WBEN WBEN WBEN WBEN WBC WBC WJAS WCSH WBEN WBEN WBC WBC WJAS WCSH WBEN WBC WGAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDOD WREC WLAC WMT WBEN WBEN WBC WLSZ WBZA WBAL KDKA KYW KPRC WBC WJAS WBAL KDKA KYW KRC WFRC WBC WJAS WHAS WSM KGC KHQ WTMJ KOMO WREN WRVA WOAN WSB WIOD WCKY WFLA WSUN KECA WFAA WHAM WCKY 10:00-11:00 Lecky Strike Dance Orchestra WEAF WEEI WJAR WTAG WCSH WEAF WEEI WJAR WTAG WCSH WHO WTMJ WEBC WRAW WJAS WHO WCAE WJA WJAS WOOD WRC WLBZ WORC WGA WJAS WHO WTMJ WEBC WRVA WJAS WOOD WRC WCAE WJJ WSAI KSD WOC WHO WTMJ WEBC WRVA WJAS WOOD WRC WCAE WJJ WSAI KSD WOC WHO WTMJ WEBC WRVA WJAS WOOD WRC WCAE WJJ WSAI KSD WOC WHO WTMJ WEBC WRVA WJAS WOOD WRC WCAE WJJ WSAI KSD WOC WHO WTMJ WEBC WRVA WJAS WOOD WRC WCAE WJJ WSAI KSD WOC WHO WTMJ WEBC WRVA WJAS WID WIJO WJAS WRW WWY WJAS WJOD WRC WCAE WJJ WSAI KSD WOC WRC WCAE WJJ WSAI KSD WOC WHO WTMJ WEBC WRVA WJAS WID WHO WTMJ WEBC WRVA WJAS WID WIJO WJAS WRW WWY WJAS WJOD WRC WCAE WJJ WSAI KSD WOC WRC WCAE WJJ WSAI KSD WOC WHO WTMJ WEBC WRVA WJAS WID WIJO WJAS WRW WWA WJAS WJOD WAR WEIL WJAR WTAG WCSH WIJO WJAS WRW WJAS WJOD WAR WEIL WJAR WTAG WCSH WIJO WJAS WJAS WJOD WRC WCAE WJJ WAIW WJAS WJOD WHO WTMJ WEBC WRVA WJAS WJOD WHO WTMJ WEBC WRVA WJAS WJOD WHO WTMJ WEBC WRVA WJAS WJOD WAR WEIL WJAR WTAG WCSH WIJO WJAS WJAS WJOD WAR WEIL WJAR WA WJA WJAS WJOD WAR WEIL WJAR WA WJAS WJOD WHO WJAS WRW WJAS WJOD WAR WEIL WJAR WA WJAS WJOD WAR WEIL WJAR WA WJAS WJOD WAR WEIL WJAR WA WJAS WJOD WJAS WJOD WA WJAS WJAS WJOD WAR WJO WA WJAS WJAS WJOD WAR WJAS WJAS WJOD WA WJAS WJAS WJOD WAR WJAS WJOD WA WJAS WJAS WJOD WAR WJAS WJAS WJOD WA WJAS WJAS WJOD WAR WJAS WJOD WA WJAS WJAS WJOD W	5:00-5:30 Rhythm Kings	KLZ KTRH WERM WLRA WCCO WISN
WDOD WREC WLAC WBRC WCO KSCJ WMT KMBC WLAC WBRC WCO KSCJ WMT KMBC WLAY KFJF KRLD KTRH KTSA KLZ 7:30-8:00 Musical Aviators Orchestra WABC WHEC WLBZ WEAN WNAC WORC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDODD WREC WLAC WMT WDAY KOIL KFJF KTRH KLZ KFRC 7:30-8:00 Soconyland Sketches WEET WEET WJAR WTAG WCSH WGY WBEN 8:00-8:30 Rhythm Choristers WABC WLBZ WORC WPG WCAU WJAS WHEW WMAL WCAO WTAR WDBJ WKRC WABC WLBZ WORC WPG WCAU WJAS WHOW WAS WIN WAY WOOD WREC WLAC WJAS WEET WEET WJAR WTAG WCSH WFI WHOW WHAL WCAO WTAR WDBJ WKRC WABC WLBZ WORC WPG WCAU WJAS WWOC WXYZ WSPD WDOD WREC WLAC WGC WAT KMBC WDAY WNAX KOIL WIBW KFH KFJF KTRH KTSA KOL WIBW KFH WEID WAR WAJ WKY WOOD WREC WCAE WJI WSAJ KSD WOC WFO WMT KMBC WDAY WNAX KOIL WIBW KFH KFJF KTRH KTSA KOL WIBO WDAF WTAM WAPI WBEN WZ WZ WBEN WAZ WBEN WAZ WBEN WWZ WBEN WJZ WBEN WAZ WBZA WHAM	WABC WHEC WFAN WHP WLBW WMAL	WREC WTAR WLAC WDSU KFJF WHEC
WIZ WBZ	WDOD WREC WLAC WRRC WCCO KSCI	WDBJ KTSA KDYL KFH WKBN KHJ
N. 18.1	WMT KMBC WDAY KFJF KELD KTRH	10:00-10:30 Westinghouse Pioneers
WABC WHEC WLBZ WEAN WNAC WORC WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDOD WREC WLAC WDAY KOIL KFJF KTRH KLZ KFRC 7:30-8:00 Soconyland Sketches WEAF WEEI WJAR WTAG WCSH WGY WEAF WEEI WJAR WTAG WCSH WGY WBEN 8:00-8:30 Rhythm Choristers WABC WLBZ WORC WPG WCAU WJAS WWNC WXYZ WSPD WDOD WREC WLAC WCCO WMT KMBC WDAY WNAX KOIL WIBW KFH KFJF KTRH KTSA KOL WIBW KFH KFJF KTRH KTSA KOL WIBW KFH KFJF KTRH KTSA KOL WIJ WIBW WAFI WRZ WBEN WRZ WBEN WIJ WRE WGW KOA KSL KGO KKTR WTMJ KOMO WREN WRA WSUN KECA KSTP KTAR KFSD WJR WAPI WGAR WFAA WHAM WCKY WEAF WEEI WJAR WTAG WCSH WFI WEAF WEIL WJAR WTAG WCSH WFI WEAF WHAM WCL WEAF WEIL WJAR WTAG WCH WEAF WEIL WJAR WTAG WCH WEAF WEIL WJAR WTAG WCH WEAF WEIL WJAR WTA WAPI WSA WHO WEAF WEAF WEIL WJAR WTA WAPI WSA WHO WHO WTAJ WEBC WJAR WTA WAN WAPI WSA WHO WHO WIJ WHAM WTO WSH WAS WITH WAN WAT WAN WAN WAN WAN WAN WAN W	7.30 8:00 Musical Ariotogo Orahastra	WJZ WBZ WBZA WBAL KDKA KYW
WCAU WJAS WLBW WCAO WDBJ WAIU WWNC WXYZ WDODD WREC WLAC WMT WDAY KOIL KFJF KTRH KLZ KFRC WBAF WEEL WJAR WTAG WCSH WGY WEAF WEEL WJAR WTAG WCSH WGY WBEN WBEN WFAA WHAM WCKY WEAF WEEL WJAR WTAG WCSH WFI WEAF WEEL WJAR WTAG WCSH WEIL WAR WTA WOON WEEL WITH WITH WITH WITH WITH WITH WITH WITH	WABC WHEC WLBZ WEAN WNAC WORC	WMC WSMB KGW KOA KSL KGO
WWAY KOIL KFJF KTRH KLZ KFRC 7:30-8:00 Soconyland Sketches WEAF WEEI WJAR WTAG WCSH WGY WBEN 8:00-8:30 Rhythm Choristers WABC WLBZ WORC WPG WCAU WJAS WWNC WXYZ WSPD WDOD WREC WLAC WCCQ WMT KMBC WDAY WNAX KOIL WIBW KFH KFJF KTRH KTSA KOL WIBW KFH KFJF KTRH KTSA KOL 8:00-8:30 Pure Oil Orchestra	WCAU WJAS WLBW WCAO WDBJ WAIU	KHQ WTMJ KOMO WREN WRVA WOAI
7:30-8:00 Soconyland Sketches WEAF WEEI WJAR WTAG WCSH WGY WBEN 8:00-8:30 Rhythm Choristers WABC WLBZ WORC WPG WCAU WJAS WWNC WXYZ WSPD WDOD WREC WLAC WIEW WHAL WCAO WTAR WDBJ WKRC WCCO WMT KMBC WDAY WNAX KOIL WIBW KFH KFJF KTRH KTSA KOL 8:00-8:30 Pure Oil Orchestra WFAA WHAM WCKY 10:00-11:00 Lucky Strike Dance Orchestra WEAF WEEI WJAR WTAG WCSH WFI WRC WCAE WWJ WSAI KSD WOC WHO WTMJ WEBC WRVA WJAX WIOD WFLA WSUN WHAS WSM WMC WSB WSMB WJDX WOAI WKY KOA KGO WISO Uckso WIZ WIR WRFN WRZ WBZA WHAM	WING WAYZ WOOD WREC WLAC WMT	WSB WIOD WCKY WFLA WSUN KECA
## WRC WASE WWJ WSAI KSD WOC WRC WLAC WWJ WSAI KSD WOC WASE WWJ WSAI KSD WOC WASE WWJ WSAI KSD WOC WRVAW WAS WIL WHO WTMJ WEBC WRVA WJAX WIOD WRC WLAC WSAY WSPD WDOD WREC WLAC WSMB WJDX WOAI WKY KOA KGO WTA KMBC WDAY WNAX KOIL WISW KFH KFJF KTRH KTSA KOL WISW WDAY WAS WSM WMC WSMB WJDX WOAI WKY KOA KGO WSMB WJDX WOAI WKY WAS WBO WJZ WJB WJZ WJR WBFN WBZ WBAA WHAM	7:30-8:00 Soconyland Sketches	WFAA WHAM WCKY
## WRC WASE WWJ WSAI KSD WOC WRC WLAC WWJ WSAI KSD WOC WASE WWJ WSAI KSD WOC WASE WWJ WSAI KSD WOC WRVAW WAS WIL WHO WTMJ WEBC WRVA WJAX WIOD WRC WLAC WSAY WSPD WDOD WREC WLAC WSMB WJDX WOAI WKY KOA KGO WTA KMBC WDAY WNAX KOIL WISW KFH KFJF KTRH KTSA KOL WISW WDAY WAS WSM WMC WSMB WJDX WOAI WKY KOA KGO WSMB WJDX WOAI WKY WAS WBO WJZ WJB WJZ WJR WBFN WBZ WBAA WHAM		10:00-11:00 Lucky Strike Dance Orchestra
WEBW WMAL WCAO WTAR WDBJ WKRC WWNC WXYZ WSPD WDOD WREC WLAC WCCO WMT KMBC WDAY WNAX KOIL WIBW KFH KFJF KTRH KTSA KOL WIBW KFH KFJF KTRH KTSA KOL WIBO WDAF WTAM WAPI WBEN 10:30-11:00 Cuckoo WIZ WIR WRFN WRZ WBZA WHAM	8:00-8:30 Rhythm Choristers	WRC WCAE WWJ WSAI KSD WOC
WWCC WAYZ WSPD WDODD WREC WLAC WCCO WMT KMBC WDAY WNAX KOIL WIBW KFH KFJF KTRH KTSA KOL WIBO WDAF WTAM WAPI WBEN KFRC KFRC 8:00-8:30 Pure Oil Orchestra WZ WIR WRFN WRZ WHAM	WABC WLBZ WORC WPG WCAU WJAS	WHO WTMJ WEBC WRVA WJAX WIOD
WIBW KFH KFJF KTRH KTSA KOL WIBO WDAF WTÂM WAPI WBEN 10:30-11:00 Cuckoo 8:00-8:30 Pure Oil Orchestra WIZ WIR WRFN WRZ WBZA WHAM	WWNC WXYZ WSPD WDOD WREC WLAC	WELA WELD WHAS WEN WING WEB
WIBW KFH KFJF KTRH KTSA KOL WIBO WDAF WTAM WAPI WBEN 10:30-11:00 Cuckoo 8:00-8:30 Pure Oil Orchestra WIZ WIR WRFN WRZ WBZA WHAM	WCCO WMT KMBC WDAY WNAX KOIL	KECA KGW KHO KOMO KTAR KFSD
8:00-8:30 Pure Oil Orchestra WJZ WJR WREN WBZ WBZA WHAM	WIBW KFH KFJF KTRH KTSA KOL	WIBO WDAF WTAM WAPI WBEN
	8:00-8:30 Pure Oil Orchestra	WJZ WJR WREN WBZ WBZA WHAM
WJZ WBAL WHAM KDKA WREN KWK KDKA WGAR	WJZ WBAL WHAM KDKA WREN KWK	KDKA WGAR
KYW KSTP WTMJ WEBC WHAS WMC WJAX WRVA WSM WSB KFAB WJDX WABC WFBL WHEC WKBW WLBZ WEAN	WJAX WRVA WSM WSB KFAB WJDX	WARC WERL WHEC WERW WERZ WEAN
WLW WDRC WNAC WPG WCAU WHP WJAS	WLW	WARC WFBL WHEC WKBW WLBZ WEAN WDRC WNAC WPG WCAU WHP WJAS

KRLD KTRH KTSA KFPY KOIN KHJ KFJF KLZ KFH KFJF KDYL KOL KNX CFRB KERC

11:00-11:30 Duke Ellington and His Orchestra
WEAF WFI WRC WFJC KSD WWJ
WSAI WOC WHO CKGW WEEI WBEN WWJ WDAF

11:00-11:30 Paul Tremaine and His Orchestra 10-11:30 Paul Tremaine and His Orchestra
WABC WHEC WLBZ WEAN WNAC WORC
WCAU WHP WLBW WCAO WTAR WDBJ
WWNC WXYZ WSPD WDOD WREC WLAC
WFBM WCCO WMT KMOX KMBC WDAY
WNAX KOIL WIBW KFH KFJF KTRH CFRB KOL

11:30-12:00 Vincent Lopez and His Orchestra
WEAF WFI KOA WRC KSTP WOC
WHO WOW WJDX KSD WTAM WDAF WBEN

Wednesday

11:45-12:00 The Recitalists WBAL KFAB WEBC WKY KOA

11:45-12:00 Sunny Side Up WEAF WEEI WJAR WTAG WCSH WLIT WRC WBEN WCAE WWJ WSAI WDAF WTAM KFKX

3:00-3:30 Matinee Gems WJZ WBAL KDKA WREN KWK WRVA WJAX WJDX WHAM CKGW

WJAX WJDX WHAM CAGN
3:30-3:45 Syncopated Silhouettes
WABC WHEC WLBZ WORC WPG
WHP WLBW WMAL WCAO WTAR WDBJ
WHK WKRC WAIU WWNC WXYZ WBCM
WSPD WDOD WREC WLAC WBRC WFBM
WBBM WCCO KSCJ WMT KMBC WDAY
WIBW KFJF KTRH KLZ CFRB

3:30-4:00 Evening Stars,
WEAF WEEI WJAX WIOD WHAS WSM
WRC KPRC KYW WMC WAPI WKY
WOAI WJDX WSB WSMB WFLA WSUN WTAG KOA KGO WCAE WSAI KSD KGO WFJC WFI WGY WEBC KSTP WRVA WCAE WSAI KSD WEBC
WTAM WPTF WWJ WOC
KPRC WBEN KSL CKGW
5:00-5:30 Asbury Park Casino Orchestra WOC WHO CKGW KTHS WBAP

WABC WHEC WFAN WHP WLBW WCAO WTAR WAIU WWNC WXYZ WBCM WDOD WREC WLAC WBRC WCO KSCJ WMT WDAY KFH KFJF KRLD KTRH KTSA KLZ

6:15-6:25 Smith Ballew and His Orchestra
WJZ KFAB WSM KOA KGO KTAR
KGW WBAL

7:00-7:30 Morton Downey — With Freddie Rich
WABC WHEC WLBZ WEAN WNAC WORC
WCAU WHP WJAS WLBW WMAL WCAO
WTAR WDBJ WKRC WAIU WWNC WXYZ
WBCM WDOD WLAC WBRC KSCJ WDAY
WIBW KFJF KTRH KOL KFRC

7.30-7.45 Evangeline Adams, Astrologer
WABC WFBL WHEC WGR WEAN WDRC
WABC WGRU WCAO WDBJ WTAR WADC
WHK WKRC WAIU WWNC WGST WXYZ
WSPD WDOD WREC WLAC WBRC WBSU
WISN WFBM WGL WCCO KMOX KMBC
KLRA KOIL KFJF WRR KTRH CFRB

KLRA KOIL KFJF WRR KTRH CFRB
7:45-8:00 "Back in the News in Washington"
WEAF WRC KOA KECA KGO WGY
WCAF WFJC WBEN WRVA WKY KOMO
KFSD WSAI WIBO KSD WOC WHO KOMO WDAF WAPI WOW

7:45-8:00 The Vagabonds -8:00 Ine vagabonds
WABC WHEC WLBZ WEAN WNAC WORC
WCAU WJAS WLBW WMAL WTAR WDBJ
WKRC WAIU WWNC WXYZ WBCM WDOD WREC WLAC WBRC WFBM WMAQ WCCO KSCJ KMOX KMBC WDAY KFJF KRLD KTRH KFRC

8:00-8:15 Listerine Program—Bobby Jones
WEAF WEEI WTIC WJAR WTAG WCSH
WLIT WRC WBEN WTAM WWJ WSAI
KSD WOC WHO WOW WPJF WIOD WEAR WEEL WITC WJAR WLIT WRC WBEN WTAN KSD WOC WHO WOW WFLA WSUN WHAS WSM WJDX WFAA WOAI KOA WSB

8:00-8:30 The Yeast Foamers
WJZ WBZ WBZA WHAM KDKA WREN
WJR WEBC KFAB KWK KSTP KYW WGAR

8:15-8:30 Radiotron Varieties
WEAF WTIC WJAR WTAG WRC
WTAM WSAI WIBO KSID WOW
WSM WSB WSMB WJDX WOA WIBO KSD WOW WIOI WSMB WJDX WOAI KOA WIOD KOMO KFSD KTAR KECA KHQ KGO KOA KVOO

RGO KOA KVOO
8:15-8:30 U.S. Marine Band
WABC WLBZ WEAN WNAC WORC WJAS
WLBW WMAL WTAR WDBJ WWNC WXYZ
WBCM WSPD WDOD WREC WLAC WBRC
WFBM KSCJ WMT KMOX KMBC WDAY WNAX KFJF KRLD KTSA KOL CFRB

CFRB
8:30-9:00 Mobiloil Concert

WEAF WEEI WJAR WTAG WCSH WLIT

WRC WSAI KSD WOW WTAM KOA

KYOO WFAA WOAI WKY

KSI. WGY WGN WEBC WDAF WCAE KVOO WFAA WOAI KSL WGY WGN WHO WOC WWJ WHO WBEN

8:30-9:00 Toscha Seidel and Concert Orchestra -9-90 Toscha Seidel and Concert Orchestra
WABC WBZ WNAC WORC WPG
WJAS WLBW WMAL WTAR WDBJ WWNC
WXYZ WBCM WSPD WDOD WREC WLAC
WMAQ KSCJ WMT KMOX KMBC WDAY
WNAX KOIL KFH KPJF KRLD KTRH
KTSA KLZ KFRC CFRB

8:30-9:00 Luden's Novelty Orchestra
WJZ WBZ WBZA WHAM KDKA KYW
KWK WREN CKGW KFAB WLW

KWK WREN CKGW KAR 9:00-9:30 Halsey, Stuart Program
WEAF WEEI WIAR WTAG WCSH WLIT
WRC WGY WCAE CKGW WRVA WJAX
WOAK KGO KGW KOMO KHQ
WHO WOW WWJ WSMB KVOO KPRC WOAL KSTP WTMJ WHAS WSM KYW WMC WSB WBEN WTAM

9:30-10:30 Palmolive Hour WEAF WEEI WTIC WITT WRC WGY WTIC WJAR WTAG WCSH WGY WCAE WSAI WGN WOW WSMB WTMJ KSTP WLIT WRC KSD WOC WHAS WSM WMC WDAF WHO
WJAX WOAI KOA KSL KGO
KOMO KHQ WFAA KPRC WWJ
KFI WBEN (KVOO of 10:00) WMC WDAF WHO WSB KGW WTAM

9:30-10:00 Camel Pleasure Hour WJZ WBZ WBZA WHAM KDKA WREN WLW KYW WSJS WRYA WJR KWK WIOD WJAX WFLA WSUN

WIOD WJAX WFLA WSUN

9:30-10:00 La Palina Smoke Dreams

WABC WFBL WKBW WEAN WNAC WCAU

WJAS WLBW WMAL WCAO WADC WHK

WKRC WXYZ WSPD WREC WISN

WBBM WCOO KMOX KMBC KOIL

10:00-10:30 Crescendo

WABC WHEC WLBZ WEAN WNAC WORC

WPG WCAU WJAS WLBW WMAL WTAR

WDBJ WKRC WWNC WXYZ WBCM WSPD

WDDD WLAC WBRC WFBM WMAQ KSCJ

WMT KMOX KMBC WDAY WNAX WIBW

KFJF KTRH KTSA KLZ KOL CFRB

10:30-11:00 Columbia Concerts Programs

KFJF KTRH K1SA KLL KOL CFRB

10:30-11:00 Columbia Concerts Programs

WABC WHEC WLBZ WEAN WNAC WORC

WFG WJAS WLBW WMAL WCAO WTAR

WDBJ WWNC WXYZ WBCM WSPD WDOD

WFBM WMAQ WCCO KSCJ WMT KMOX

KMBC WDAY WNAX WIBW KFJF KTRH

KTSA KLZ KOL CFRB

KTSA KLZ KOL CFRB

10:30-11:00 Coca Cola Program
WEAF WEEI WTIC WJAR WTAG WCSH

WLIT WRC WCAE WSAI WOC WEBC KSD WRVA KSTP WKY KYW WJAX WSM WSMB KTHS KPRC WIOD WOAI KOA KSL KGO KOMO WJDX WGY KECA KGW KHQ WDAF WHAS WTAM WHO WOW KFSD WMC WSB WWJ WBEN WAPI

11:00-11:30 Guy Lombardo and His Orchestra

WABC WHEC WLBZ WEAN WNAC WORC
WPG WCAU WLBW WCAO WTAR WDBJ
WHK WWNC WXYZ WBCM WSPD WDOD
WREC WFBM WCCO KSCJ WMT KMOX
KMBC WDAY WNAX KOIL WIBW KFH
KFJF KTRH KLZ KOL CFRB

11:00-11:30 Vincent Lopez and His Orchestra WEAF WFLA WSUN WRC WOW WJDX WGY WLIT WCAE KSD (WWJ WTAM (WSM WOC WHO WDAF off 11:15)

on 11-15

11:30-12:00 Musical Aviators' Orchestra
WABC WHEC WLBZ WEAN WNAC WORC
WCAU WLBW WCAO WATAR WDBJ WKRC
WWNC WXYZ WBCM WDOD WREC WBRC WFBM WCCO KSCJ WMT WNAX KOIL WIBW KFH WMT KMBC WDAY KEJF KTRH CFRR

Thursday

| 10:00-10:15 | Ceresota Program | WEAF | WJAR | WTAG | WCSH | WFI | WGY | WCAE | WWJ | WSAI | KYW | WFI | W WRC KSTP

WREN WLW WOAI WBZ WBZA

3:00-4:00 U.S. Navy Band WABC WHEC WLBZ WCAU WHP WLBW WLBZ WEAN WNAC WORC WLBW WMAL WCAO WTAR WKRC WAIU WWNC WXYZ WHK WDBJ WDBJ WHK WKRC WAID WWRC WAIL
WBCM WSPD WDOD WREC WBRC WFBM
WBBM WCCO KSCJ WMT KMOX KMBC WIBW KFJF WDAY KOIL KRLD KTRH CFRB KLZ

3:30-3:45 Chicago Serenade
WJZ KDKA WJR. WREN KFAB KOA
WLW WSM WMC WAPI WFLA WSUN CKGW

4:30-5:00 U. S. Army Band WJZ WLW KWK WSM KSTP WSM1 WREN KFAB WJAX WSMB

5:30-5:45 Rinso Talkie -3:49 KINSO IAIKIE
WEAF WEEL WTIC WTAG WJAR WLIT
WRC WGY WBEN WCAE WTAM WWJ
KSD WOC WHO WSAI KYW

7:00-7:30 Mid-Week Federation Hymn Sing WEAF WMC WIBO WWJ WHAS WOC WHO KOA WBEN

7:30-8:00 Voice of Columbia

WABC WDAY KFIF KTRH KFRC

7:45-8:00 Friendly Five Footnotes
WJZ WBZ WBZA WREN KWK KFAB WSMB WEAD WSM WMC WSB WAPI
WJDX WRVA WPTF WJAX WIOD
WSUN KGO KECA KOMO EHQ
KFSD WBAL KDKA WIBO KOA WFLA KTAR KSL

8:00-9:00 Fleischmann Hour — Rudy Vallee WEAF WEEI WTAG WJAX WIG WJAR WCSH WFI WRC WG WIOD WJDX WGY WCAE WDAF WWJ WHAS WOW KTAR WRVA WHO WSMB WEBC KOA WOC WSB WMC KSL KOMO WOAI WSM WAPI KSD CKGW WTAM KPRC WBEN (WTMJ KECA KSD KGO KHO KSTP WGN KGW KTHS WSAI WBAP WKY of 8:30)

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

8:30-8:45 Kaltenborn Edits the News WABC WFBL WGR WEAN WDRC WNAC WORC WCAU WJAS WMAL WCAO WADC WHK WKRC WXZZ WSPD WOWO WMAQ WCCO KMOX KMBC KOIL

8:45-9:00 The Hamilton Watchman
WABC WFBL WGR WEAN WNAC WCAU
WJAS WLBW WMAL WCAO WADC WHK
WKRC WXYZ WSPD WOWO WJJD KMOX
KMBC KOIL

9:00-9:30 Knox-Dunlap Orchestra
WJZ WBZ WBZA WBAL WHAM KDKA
WIBO KWK WREN WCKY

9:00-9:30 Savino Tone Pictures

WABC WHEC WLBZ WORC
WJAS WLBW WMAL WCAO WTAR WDBJ
WHK WKRC WWNC WXYZ WBCM WSPD
WDOD WLAC WBRC WFBM WCCO KSCJ
WMT WDAY WNAX KOLL KFH
KRLD KTSA KLZ KOL KFRC

9:00-9:30 Arco Birthday Party WEAF WEEI WJAR CKGW WRC WGY WTAG WCSH WFI WSM WSB WIOD WJAX WOAI KOA WRVA WSTP WWJ WKY WBAP KSL KSD WSAI WDAF KYW WCAE WEBC WOW WSMB WJDX WFJC WTMJ WMC WOC WHO KGO KECA KOMO KHQ KGW WAPI WTAM WBEN

9:30-10:00 Jack Frost's Melody Moments
WEAF WJAR WWJ WTAG WCSH WFI
WRC WCAE WSAI WTAM WIBO WGY

WBEN

9:30-10:00 Detective Story Magazine
WABC WFBL WKBW WEAN WDRC WNAC
WCAU WJAS WMAL WCAO WADC WHK
WKRC WXYZ WSPD WOWO WBBM KMOX
KMBC KOLL

WSM WJAZ WBAP KYW WJAX WSMB WOAI KECA KGW KOM WHAM KDKA KSL KOMO KHQ WAPI WMC

KFRC KHJ

10:00-11:00 Lucky Strike Dance Orchestra
WEAF WEEI WJAR WTAG WCSH WFI
WRC WGY WCAE WWJ WSAI WBE WBEN WKY WHAS WDAF WOW WOAI KSD KOA KSL. WTMJ WIOD KYW KVOO WRVA WFLA WSM WMC WSMB KPRC WJAX WEBC WSUN WFAA KFSD KOMO KHQ WSB KTAR (KGO KGW KFI off 10:30) (WOC WHO KTHS on 10:30)

10:30-11:00 Poet's Gold WABC WHEC WLBZ WEAN WNAC WORC WCAU WHP WJAS WLEW WMAL WCAO WTAR WDBJ WWNC WXYZ WBCM WSPD WDOD WLAC KSCJ WMT KMOX KMBC WDAY WNAX KOIL WIBW KFJF KRLD

KTRH KTSA KLZ

11:00-11:30 Florence Richardson's Orchestra WEAF WCAE WFI (WWJ WSAI of 11:15) (KSD WOW WSM WSMB on 11:15) (WOC WHO on 11:05-11:15)

WHO on 11:95-11:15)

11:00-11:30 Ben Bernie and His Orchestra
WABC WHEC WLBZ WEAN WNAC WORC
WCAU WHP WLBW WMAL WCAO WTAR
WDBJ WWNC WXYZ WBCM WSPD WDOD
WREC WLAC WBRC WFBM WCCO WMT
KMOX KMBC WDAY WNAX KOIL WIBW
KFH KFJF KTRH KTSA KLZ KOL
CFRB CFRB

11:30-12:00 Duke El	lington and	His Or	chestra	
WEAF WWJ off 11:50)	KSD (WJDX	WOW WDAF	WFI on 11:45	(KSTI

Friday

11:00-12:00 NBC Music Appreciation Hour							
WJZ	WEEI	WJAR	WTAG	WCSH			
WRC	WGY	WCAE	WTAM	WWJ			
	KYW	WENR	WIBO	KSD			
		WDAF	CKGW	WTMJ			
	WRVA	WPTF	WJAX	WIOD			
	WHAS	WSM	WMC	WSB			
WJDX	WSMB	KVOO	WFAA	KPRC			
WOAI	KOA	KSL	WBZ	WBZA			
WHAM	KDKA	WJR	WLW	KWK			
KFAB	WBEN	WBAP					
	WJZ WRC WGN WHO WEBC WSUN WJDX WOAI WHAM	WJZ WEEI WRC WGY WGN KYW WHO WOW WEBC WRVA WSUN WHAS WJDX WSMB WOAI KOA WHAM KDKA	WIZ WEEI WJAR WRC WGY WCAE WGN KYW WENR WHO WOW WDAF WEBC WRVA WPTF WSUN WHAS WSM WJDX WSMB KVOO WOAI KOA KSL WHAM KDKA WJR	WJZ WEEI WJAR WTAG WRC WGY WCAE WTAM WGN KYW WENR WIBO WHO WOW WDAF CKGW WEBC WRVA WPTF WJAX WSUN WHAS WSM WMC WJDX WSMB KVOO WFAA WOAI KOA KSL WHAM KDKA WJR WLW			

4:00-4:45 Dancing Melodies
WEAF WTAG WCAE WFJC WTAM WWJ
WOC WHO WOW WDAF WBEN

7:15-7:30 Howard Lanin's St. Moritz Orchestra
WABC WLBZ WEAN WNAC WORC
WHP WJAS WLBW WCAO WTAR
WWNC WXYZ WBCM WODD WLAC
WFBM KSCJ WMT KFJF WIBW WCAU WDBJ WBRC KTRH

7:45-8:00 Brownbilt Footlites WJZ WBZ WREN KWK WBZA KFAB WTMJ WEBC WRVA WPTF WJAX WIOD WSM WAPI WFLA WSUN WHAS WSMB WOAI WJDX WIBO KOA KSL KDKA WLW WSB KSTP WGAR

7:45-8:00 The Vagabonds WABC WLBZ WEAN WORC WCAU WJAS WLBW WTAR WDBJ WHK WHP WALU WWNC WXYZ WBCM WDOD WREC WLAC WBRC WFBM WMAQ WCCO KSCJ KFJF KRLD KTRH KFRO KMBC WDAY KEJE KFRC

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

8:00-9:00 Cities Service Concert Orchestra WEEL WTIC WEAF WLIT WRC WCAE KYW WOC WJAR WCSH WOW KSD WDAF WTMJ KSTF WKY KOA WEBC KOMO KGO WOAI KGW KHQ KSL WTAG CKGW KECA WHO WSAI WTAM WBEN WWJ (WFAA KPRC off 8:30)

8:15-8:30 Grand Opera Miniatures -0:30 Grand Opera Miniatures
WABC WLBZ WORC WPG WHP WJAS
WLBW WMAL WTAR WDBJ WWNC WBCM
WSPD WDOD WREC WLAC WBRC KSCJ WBRC KMOX KMBC WDAY WNAX KOIL WMT KEJE KTRH KTSA KOL

8:30-9:00 Weed Tire Chain Program
WABC WFBL WGR WEAN WDRC WNAC
WCAU WJAS WMAL WCAO WADC WKRC
WXYZ WSPD WOWO WMAQ WCCO KMOX

8:45-9:00 Natural Bridge Revue
WJZ WHAM KDKA KWK WREN
WIOD WIBO WBZ WBZA WFLA WREN WJAX WSUN WRVA WJR

9:00-9:30 Clicquot Club Eskimos WEAF WEEI WTIC WJAR WDC WOW WCAE WTAG WCSH WLIT WRC WOW WCAE WSAI WIBO WDAF WOC KSD WWJ WHO WBEN

9:00-9:30 Interwoven Pair WJZ WHAM WMC WREN KPRC KWK KDKA WJAX WKY WBZ WBZAKGW WSMB WIOD WFAA WJR WTMJ KSTP WHAS KYW WEBC WCKY WSM WRVA WSB WAPI WOAI KOA KSL KGO KGW KECA KOMO KHO KFSD KTAR WGAR WJR.

9:00-10:00 True Story Hour WABC WYZZ WSPD WOWO WMAQ KMOX

WGY

KMBC KOIL

9:30-10:00 Armour Program WJZ WBZ WBZA WJR KYW WREN WRVA KSTP WEBC WMC WSB WGAR WOAI KSL KGO KOA WKY WHAS KGW KOMO KDKA WJAX KHQ WJDX WIOD WTMJ WAPI WHAM KWK WLW WSMB KFI

10:00-10:30 Crime Prevention Program WEAF WJAR WCSH WCAE WSAI WDAF WRC WBEN WWJ KSD

10:00-10:30 Armstrong Quakers WIZ KDKA WBZ WJZ KDKA WBZ WHAM KPRC WJR WBZA KYW KWK WEBC WTMJ WHAS WSM WSB WOAL KOA WSMB KSL комо кно WMC KGW KFI WBAP WCKY KTHS KSTP KVOO WKY

10:00-10:30 Columbia Male Chorus WABC WHEC WEAN WDRC WPG WJAS WCAO WTAR WNAC WORC WPG WJAS WCAO WKRC WWNC WSPD WOWO WMAQ WCCO WDAY WNAX KOIL WADC WDOD WLAC WISN KSCJ KMOX KLRA KFJF KRLD KTSA

10:30-11:00 RKO Theatre of the Air WEEI WJAR WWJ WSAI WTAG WEAF WLIT WGY WCAE WWI WIBO KSD WDAF WRVA WJAX WIOD WMC WSB WSMB WOC WJDX KGO KTHS WOAI WKY WRC KOA KGW KFI KHO KOMO KTAR KFSD WCSH WTAM WFLA WSUN WHO WOW KSL WBEN

WHEC WLBZ WEAN WNAC WORC WCAU WJAS WLBW WMAL WCAO WDBJ WHK WWNC WXYZ WCOW WDOD WLAC WBRC KSCJ WCCO KMOX WDAY WNAX KOIL WIBW KTRH KTSA KLZ 10:30-11:00 Nit Wit Hour WABC WHEC WLBZ WPG WCAU WJAS WTAR WDBJ WHK WSPD WMT KEJF

11:00-11:30 California Melodies WABC WHEC WLBZ WEAN WNAC WORC WCAU WLBW WCAO WTAR WDBJ WWNC WXYZ WBCM WSPD WBRC WCCO WMT WBCM WSPD WDOD WREC WLAC KMOX KMBC WDAY WNAX KOIL WIBW KFH KFJF KTRH CERB KLZ

11:00-12:00 Vincent Lopez and His Orchestra No. 12:00 Vincent Lopez and His Orchestra
WEAF WGY CKGW WTIC WOC WHO
(WRC WWJoff 11:15) (KOA KSTP WDAF
on 11:45) (KSD on 11:30) (WCFL on 11:15
11:30) (WFIC WLIT off 11:30) (WCFL on 11:15-

11:30-12:00 Romanelli and His Orchestra
WABC WHEC WLBZ WORC WLBW WMAL
WCAO WTAR WDBJ WKRC WWNC WXYZ
WBCM WDOD WREC WLAC WBRC WCCO
WMT KMBC WDAY WNAX KOIL WIBW
KFH KFJF KTRH KLZ CFRB

Saturday

10:30-11:00 New World Salon Orchestra
WABC WHEC WLBZ WEAN WDRC WNAC
WORC WJAS WMAL WDBJ WAIU WWNC
WXYZ WDOD WBCM WREC WLAC
KSCJ WMT KMBC WDAY KOIL KFJF WWNC WFBM KRLD KTSA CFRB

1:30-2:00 Savoy Plaza Orchestra WABC WHEC WLBZ WEAN WCAU WHP WJAS WMAL WCAO WTAR WDBJ WKRC

WAIU WWNC WXYZ WBCM WSPD WDOD WLAC WBRC WIBW CFRB

4:30-5:90 Spanish Serenade
WABC WLBZ WEAN WNAC WORC WFAN
WHP WMAL WCAO WTAR WDBJ WKRC
WAIU WWNC WXYZ WBCM WSPD WDOD
WREC WLAC WBRC WMAQ WBBM WCOC
KSCJ WMT KMOX KMBC WDAY KOIL
WIBW KFJF KRLD KTRH KTSA KLZ

5:30-5:45 Tea Timers
WEAF WEEI WWJ WRC WBEN WOC
WHO WOW KOA KGO KGW KTAR

5:35-6:00 Blue Aces — Dance Band WJZ WHAM KWK WHAS WMC WSB WSMB

6:00-6:45 Ozzie Nelson's Orchestra
WABC WFAN WHP WJAS WLBW WTAR
WDBJ WKRC WAIU WWNC WXYZ WBCM
WDOD WREC WLAC WBRC WBBM KSCJ
WMT KMBC WDAY KOIL WIBW KFH
KFJF KRLD KTSA KLZ KOL KFRC

6:15-6:45 Smith Ballew and His Orchestra WJZ WBZ WBZA WRC KFAB KWK

7:00-7:15 Rodeheaver Sing WEAF WJAR WFI KSTP WOW KOA WTAM

7:00-7:15 Freddie Rich and His Orchestra
WABC WHEC WLBZ WORC WHP
WLBW WCAO WTAR WDBJ WHK WKRC
WWNC WXYZ WBCM WDOD WBRC WFBM
KSCJ WMT WDAY KOIL WIBW KFH
KFJF KOL KFRC CFRB

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

7:30-8:00 Necco Candy Party — Henry Burbig WABC WFBL WHEC WGR WLBZ WEAN WNAC WORC

7:45-8:00 "The Highroad of Adventure"
WEAF WTAG WBEN WCAE WTAM WWJ
WSAI WOC WHO KSTP WEBC KGO
KGW KFSD KTAR

7:45-8:00 Pickard Family WJZ WHAM KWK WREN WIBO WGAR

8:00-8:15 Dixies Circus WIZ WBAL KDKA KYW WHAM WBZ WBZA WOAI KSTP KPRC WKY CKGW WGAR

8:15-8:30 "Rin-Tin-Tin Thriller"
WJZ WHAM WBAL KDKA WREN KFAB
KWK WBZ WBZA KYW WGAR

8:15-8:30 Dixie Echoes
WABC WLBZ WORC WPG
WABC WLBZ WORC WPG
WEBW WMAL WCAO WTAR WDBJ WKRC
WWNC WXYZ WBCM WSPD WDDD WREC
WLAC WBRC WFBM WCCO KSCJ WMT
KMDK KMBC WDAY WNAX KOIL KFH
KFJF KTRH KTSA KOL KFRC CFRB

 8:15-8:30 Radiotron Varieties

 WEAF
 WEEI
 WJAR
 WTAG
 WCSH
 WRC

 WGY
 WBEN
 WCAE
 WTAM
 WWJ
 W8AI

 WIBO
 KSD
 WOC
 WHO
 WOM
 WDAF

 WTMJ
 WRVA
 WJAX
 WIOD
 WFLA
 WSU

 WSM
 WMC
 WSB
 WSMB
 WJDX
 KPRC

 WOAI
 WYY
 KOA
 KSL
 KGO
 KGW

 KOMO
 KHQ
 KTAR
 KFSD
 KGW
 KGW

8:30-9:00 The Silver Flute

WEAF WEEI WTAG WCSH WRC WFI

WGY WCAE WWJ WSAI KSD WDAF
WIOD

8:30-9:00 Fuller Man

WJZ WBZ WBZA WBZL WHAM KDKA

WJR KWK WREN KOA CKGW WHAS

KPRC KGO KECA KGW KOMO KFAB

KHQ WBO WKY WTMJ WMC WEBC

WSB WAPI WSMB WLW WJDX KSTP

8:30-9:00 Fletcher Henderson and His Orchestra
WABC WLBZ WEAN WNAC WORC
WCAU WJAS WLBW WMAL WCAO WTAR
WDBJ WKRC WWNC WXYZ WBCM WSPD
WDOD WREC WLAC WBRC KSCJ WMT
KMOX KMBC WDAY WNAX KOIL WIBW
KFH KFJF KRLD KTRH KTSA KLZ

9:00-9:30 Carborundum Hour WABC WKBW WNAC WCAU WHK WXYZ WMAQ KMOX

 9:00-10:00
 General Electric Hour

 WEAF
 WEBI
 WAR
 WTAG
 WCSH
 WFI

 WRAF
 WEBI
 WCAE
 WTAM
 WWJ

 WSAI
 WIBO
 KSD
 WCC
 WOW
 WDAF

 WTMJ
 WKY
 KSTP
 WEBC
 WYA
 WJAX

 WHAS
 WMC
 WSB
 WAPI
 WSMB
 WBAP

 KPRC
 WOAI
 KOA
 KSL
 KGO
 KFI

 KGW
 KOMO
 KHQ
 KPSD
 KTAR

9:30-10:90 Columbia Educational Features
WABC WLBZ WEAN WNAC WORC WPG
WFAN WHP
WDBJ WKRC WWNC WXYZ WBCM WSPD
WDOD WREC WLAC WBRC WFBM WCCO
KSCJ WMT KMBC WDAY WNAX KOIL
WIBW KFH KFJF KTRH KTSA KLZ

10:00-11:00 Lucky Strike Dance Orchestra WEAF WEEI WJAR WTAG WCSH WFI WRC WGY WBEN WCAE WTAM WWJ WGY WGN KSD WHO WSAI WOC WOW WDAF WTMJ KSTP WEBC WRVA WJAX WIOD WFLA WSUN WHAS WMC WSB WSMB WJDX KVOO WFAA KPRC WOAI WKY KOA KSL KGO KFI KGW KOMO KHQ KTAR KFSD

 $\begin{array}{cccc} 10:00\text{-}11:00 & \textbf{Chicago} & \textbf{Civic Opera} \\ & \textbf{WJZ} & \textbf{WBZ} & \textbf{WBZA} & \textbf{WBAL} \\ & \textbf{WIBO} & \textbf{KWK} & \textbf{WREN} & \textbf{WLW} & \textbf{WGAR} \end{array}$

11:00-11:30 Jack Denny and His Orchestra
WABC WHEC WLBZ WEAN WNAC WORC
WPG WCAU WHP WLBW WMAL WCAO
WTAR WDBJ WWNC WXYZ WBCM WSPD
WDOD WREC WLAC WBRC WFBM KSCJ
WMT KMBC WDAY WNAX KOIL WIBW
KFJF KRLD KTRH KLZ KOL CFRB

11:15-11:45 Horace Heidt and His Orchestra WEAF WFI KSD WOC WHO (WCAE WTMJ WSMB off 11:30) (WOW WJDX off 11:45) (KSTP KOA on 11:45)

11:30-12:00 Guy Lombardo and His Orchestra
WABC WHEC WLBZ WEAN WNAC WORC
WYG WFAN WHP WLBW WMAL WCAO
WTAR WDBJ WKRC WWNC WXYZ WBCM
WDOD WREC WLAC WBRC WFBM WCCO
KSCJ WMT KMBC WDAY WNAX KOIL
WIBW KFJF KRLD KTRH KLZ KOL

12:00-1:00 Rudy Vallee and His Orchestra
WEAF WRO WSB WJDX (WTAM KSD on 12:30) (WDAF KOA off 12:30)

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540 kilocycles 555.6 meters

CKX † 500 ... Brandon, Manitoba

Manitoba Telephone System

550 kilocycles 545.1 meters

KFDY	t	500	1+	Brookings, S. D.
KFUO	*	500	2 ÷	St. Louis, Mo.
KFYR	Ť	1000	1+	Bismarck, N. D.
KOAC		1000		Corvallis, Ore.
KSD	t	500	2N	St. Louis, Mo.
WGR	*	1000	С	Buffalo, N. Y.
WKRC	t	1000	С	Cincinnati, Ohio
XEY		105	547	Merida, Yucatan

560 kilocycles 535.4 meters

KFDM	*	500	X+	Beaumont, Texas
KLZ		1000	C	Denver, Colo.
KTAB	*	1000		San Francisco, Cal.
WFI	*	500	1N	Philadelphia, Pa.
WIBO		1000	3+N	Chicago, Ill.
WLIT	*	500	1N	Philadelphia, Pa.
WNOX		1000	\mathbf{x}_{+}	Knoxville, Tenn
WPCC	*	500	3S	Chicago, Ill.
WQAM		1000	С	Miami, Fla.

570 kilocycles 526.0 meters

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

580 kilocycles 516.9 meters

000 ,	CLIC	CJ CI	0	TO. 7 ILLCCCIS
CFCL		500	38	Toronto, Ont.
CHMA		250	4	Edmonton, Alta.
CKCL	*	500	3	Toronto, Ont.
CKNC	*	500	3	Toronto, Ont.
CKUA	†	500	4	Edmonton, Alta.
KGFX		200	D	Pierre, S. D.
KSAC		500	$^{2}+$	Manhattan, Kans.
WIBW	*	1000	2+C	Topeka, Kansas
WOBU	*	250	1	Charleston, W. Va.
WSAZ	*	250	ī	Huntington, W. Va.
WTAG	•	250	N	Worcester, Mass.

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

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

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

CLO

INDEX BY FREQUENCIES AN	ND DIAL NUMBERS	
590 kilocycles 508.2 meters CMW - 1000 588 Havana, Cuba KHQ - 1000 +N Spokane, Wash. WCAJ * 500 1 WEEI † 1000 N Boston, Nebr. WKZO * 1000 D Berrien Springs, Mich. WWW * 1000 1N Omaha, Nebr. XEZ * 500 588 Mexico City	Columbus Commercial & Radio Co. Louis Wasmer, Inc. Nebraska Wesleyan University Edison Elec, Illuminating Co. WKZO, Inc. Woodmen of the World Joaquin Zamacona	670 MTRS. 447.5 DIAL
600 kilocycles 499.7 meters CJRM † 500 4 Moose Jaw, Sask. CJRO † 500 3 Ottawa, Ont. KFSD * 500 +N San Diego, Cal. WCAC 250 2+ Storrs, Conn. WCAC * 250 C Baltimore, Md. WGBS † 250 2+ New York City WMT * 500 C Waterloo, lowa	Jas. Richardson & Sons, Ltd. Jas. Richardson & Sons, Ltd. Canadian National Railways Airfan Radio Corp. Conn. Agricultural College Monumental Radio, Inc. General Broadcasting System, Inc.	
WOAN wREC * 500 1 Lawrenceburg, Tenn. 610 kilocycles 491.5 meters	Waterloo Broadcasting Co. WREC, Inc. WREC, Inc.	
KFRC * 1000 C San Francisco, Cal. WDAF * 1000 N Kansas City, Mo. WFAN * 500 2C Philadelphia, Pa. WIP * 500 2 Philadelphia, Pa. WJAY † 500 D Cleveland, Ohio	Kansas City Star Co. Keystone Broadcasting Co., Inc. Gimbel Bros. Co. Cleveland Radio Broadcasting Corp.	
KGW * 1000 +N Portland, Ore. KTAR * 500 +N Phoenix, Arizona WFLA * 1000 1+N Clearwater, Fla. WLBZ * 500 C Bangor, Maine WSUN * 1000 1+N St. Petersburg, Fla. WTMJ * 1000 +N Milwaukee, Wis.	Oregonian Publishing Co. KTAR Broadcasting Co. Chamber of Commerce Maine Broadcasting Co., Inc. Chamber of Commerce Milwaukee Journal	CUT O
630 kilocycles 475.9 meters CFCT * 500 Victoria, B. C. CJGX - 500 Yorkton, Sask. CNRA * 500 Moncton, N. B. KFRU * 500 1 Columbia, Mo. WGBF † 500 1 Evansville, Ind. WMAL * 250 +C WOS * 500 1 Jefferson City, Mo. XFE - 350 632 Villahermosa, Mex.	Victoria Broadcasting Association Winnipeg Grain Exchange Canadian National Railways Stephens College Evansville on the Air, Inc. M. A. Leese State Marketing Bureau Gobierno del Estado de Tobasco	CUT OUT ON DOTTED LINES
640 kilocycles 468.5 meters KFI 5000 NX Los Angeles, Cal. Columbus, Ohio WOI * 5000 D Ames, Iowa XFG 2000 638 Mexico City	Earle C. Anthony, Inc. American Insurance Union State College of Agriculture Secretaria de Guerra y Marina	ŒS
650 kilocycles 461.3 meters KPCB - 100 Dn Seattle, Wash. WSM * 5000 N Nashville, Tenn.	Queen City Broadcasting Co. National Life & Accident Ins. Co.	
660 kilocycles 454.3 meters CMCO 50 D Buen Retiro, Cuba Omaha, Neb. WEAF † 50000 N New York City	J. L. Stowers Omaha Grain Exchange National Broadcasting Co., Inc.	
670 kilocycles 447.5 meters WMAQ * 5000 C Chicago, III. XEO 101 674 Mexico City	WMAQ, Inc. F. Armida y Cia.	

680 kilocycles	440 0 maters	
	St. Joseph, Mo.	Sanata & Ca Pa I
KFEQ * 2500 D KPO † 5000 N WPTF * 1000 N E XETF _ 500	San Francisco, Cal.	Scroggin & Co., Bank Hale Bros. & The Chronicle Durham Life Insurance Co. Manuel Angel Fernandez & Cia.
690 kilocycles	434.5 meters	2021
CFAC - 500 1 CFCN - 500 1 CHCA * 500 1 CJCJ * 500 1 CJSC - 5000 2N NRC - 500 2N NAA - 1000 685	Calgary, Alta. Calgary, Alta. Calgary, Alta. Calgary, Alta. Toronto, Ont. Toronto, Ont. Calgary, Alta. Toronto, Ont. Calgary, Alta. Toronto, Ont. Arlington, Va. Glace Bay, N. S.	The Calgary Herald Western Broadcasting Co. The Western Farmer Albertan Publishing Co., Ltd. The Evening Telegram Gooderham & Worts, Ltd. Canadian National Railways Canadian Pacific Railways U. S. Navy Canadian Marconi Co.
700 kilocycles	428.3 meters	711 2
WLW * 50000 N	Cincinnati, Ohio	Crosley Radio Corp.
710 kilocycles	422.3 meters	
WOR - 500 Dn	Los Angeles, Cal. Newark, N. J.	R. S. MacMillan Bamberger Broadcasting Service, Inc.
720 kilocycles	416.4 meters	W 74
WGN † 25000 N 8WMC - 500 722	Chicago, Ill. St. Johns, N. F.	Chicago Tribune Wesley United Church
730 kilocycles	410.7 meters	
CHLS - 50 1 CHYC * 5000 2 CKAC * 5000 2 CKCD - 50 1 CKFC + 50 1 CKMO - 50 1 CKWX † 100 1 CMK - 5000 CNRM * 5000 2 XEN † 1000 732	Vancouver, B. C. Montreal, Que. Montreal, Que. Vancouver, B. C. Vancouver, B. C. Vancouver, B. C. Vancouver, B. C. Havana, Cuba Montreal, Que. Mexico City	W. G. Hassell Northern Electric Co., Ltd. La Presse Publishing Co., Ltd. Vancouver Daily Province United Church of Canada Sprott-Shaw Radio Co. A. Holstead & Wm. Hanlon Cuban Broadcasting Co., Hotel Plaza Canadian National Railways Compania Civil de Inversiones Urbanas
740 kilocycles	405.2 meters	
KMMJ - 1000 Dn WSB - 5000 N	Clay Center, Neb. Atlanta, Ga.	The M. M. Johnson Co. Atlanta Journal Co.
750 kilocycles	399.8 meters	
TIC 50 WJR † 5000 N XEQ 1000	San Jose, Costa Rica Detroit, Mich. Ciudad Juarez, Mex.	WJR, The Goodwill Station, Inc.
760 kilocycles	394.5 meters	20 %
WEW * 1000 D WJZ † 30000 N	n Tacoma, Wash. St. Louis, Mo. New York City	Puget Sound Broadcasting Co., Inc. St. Louis University National Broadcasting Co., Inc.
770 kilocycles	389.4 meters	Cot
KFAB * 5000 1N WBBM * 25000 1C WJBT 25000 1S	Lincoln, Nebr. Chicago, Ill. Chicago, Ill.	KFAB Broadcasting Co. The Atlas Co., Inc. The Atlas Co., Inc.
780 kilocycles	384.4 meters	70 10
CKY - 5000 3 CNRW - 5000 3 KELW - 500 2 KTM • 500 2+ WEAN * 250 +C	Winnipeg, Manitoba Winnipeg, Manitoba Burbank, Cal. Los Angeles, Cal. Providence, R. I.	Manitoba Telephone System Canadian National Railways Union Bank & Trust Co. Pickwick Broadcasting Corp. Shepard Broadcasting Service, Inc.

			INI	EX	BY FREQUENCIES A	AND DIAL NUMBERS	
W	ISJ MC POR TAR EW	 * †	250 500 500 500 500	+ 1 1C	Madison, Wis. Memphis, Tenn. Norfolk, Va. Norfolk, Va. Mexico City	Wisconsin State Journal Bdcsg. Co. Memphis Commercial-Appeal WTAR Radio Corp. WTAR Radio Corp. Mexico Music Co.	
7	90 1	cilo	cycle	:S′	379.5 meters	Earle	
CN	MBS MHC GO GY	 -	150 500 7500 50000	791 N N	Havana, Cuba Tuinucu, Cuba San Francisco, Cal. Schenectady, N. Y.	E. Artalejo Frank H. Jones National Broadcasting Co., Inc. General Electric Co.	
		ilo	cycle	s	374.8 meters	2016	KCYS.
W	BAP FAA EU FC	† 	10000 50000 50 350	1XN 1N 805	Fort Worth, Texas Dallas, Texas Veracruz, Mex. Jalapa, Mex.	Carter Publications, Inc. News & Journal Natalio Ulibarri Gobierno del Estado de Veracruz	880 MTRS. 340.7
8	10 k	ilo	cycle	s	370.2 meters		DIAL
W	CCO PCH	*	7500 500	C D	Minneapolis, Minn. New York City	Northwestern Broadcasting, Inc. Eastern Broadcasters, Inc.	
8	20 l	ilo	cycle	es	365.6 meters		
	HAS	†	10000 1000	N 818	Louisville, Ky. Mexico City	Courier-Journal & Times Sria. de Ind., Commercio y Trabajo	
8	30 k	ilo	cycle	s	361.2 meters	20 74	}-
CI W W	MGA OA HDH RUF EG	Ť.	300 12500 1000 5000 2000	834 N D Dn 829	Colon, Cuba Denver, Colo. Boston, Mass. Gainesville, Fla. Mexico City, Mex.	Leopoldo V. Figueros National Broadcasting Co., Inc. Matheson Radio Co., Inc. University of Florida G. Gutierrez, Jr.	
8	40 1	cilo	cycle	es	356.9 meters	wh	
CICC	FCA HCT KLC MC MRD NRD NRT EM	† † † † *	500 1000 1000 500 1000 500 500	1 2 2 1 841	Toronto, Ont. Red Deer, Alta. Red Deer, Alta. Havana, Cuba Red Deer, Alta. Toronto, Ont. Tampico, Mex.	Star Publishing & Ptg. Co. G. F. Tull & Ardern, Ltd. Alberta Pacific Grain Co., Ltd. Cuban Telephone Co. Canadian National Railways Canadian National Railways Herbert A. Denny y Cia.	CUT
8	50 l	cilo	cycle	s	352.7 meters	CUH	0
⊮K' NI	WKH BA WL	*	10000 750 5000	1 846 1	Shreveport, La. Balboa, Canal Zone New Orleans, La.	Hello World Broadcasting Corp. United States Navy Loyola University	UT ON
8	60 1	cilo	cycle	es	348.6 meters	cust	Z
W W W XI	MO ABC BOQ HB EJ FX FZ	* * *	500 5000 5000 500 101 500 500	+ I XC D 857	On Tacoma, Wash. New York City New York City Kansas City, Mo. C. Juarez, Chih. Mexico City, Mex. Mexico City, Mex.	KMO, Inc. Atlantic Broadcasting Corp. Atlantic Broadcasting Corp. WHB Broadcasting Co. Juan G. Buttner Secretaria de Educacion Publica	CUT OUT ON DOTTED LINES
R	70 l	ei1c	cycle	25	344.6 meters	20 14 03	
100	ENR	Ť	50000 5000	1N 1X	Chicago, Ill.	Great Lakes Broadcasting Co. Agricultural Broadcasting Co.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
8	80 1	cilc	cycle	es	340.7 meters		
	HCS HML HRC JCB KCI KCV KOC NRQ FKA LX	******	10 50 100 50 22.5 50 50 50 500	4 4 3 3 4 3 2+	Hamilton, Ont. Hamilton, Ont. Quebec, Que. Sydney, N. S. Quebec, Que. Quebec, Que. Hamilton, Ont. Quebec, Que. Greeley, Colo. Oakland, Cal.	The Hamilton Spectator Maple Leaf Radio Co., Ltd. E. Fontaine N. Nathanson Le "Soleil," Ltd. G. A. Vandry Wentworth Radio & Auto Sply. Co., Canadian National Railways Midwestern Radio Corp. Tribune Publishing Co.	Ltd

KPOF	201	500	2	Denver, Colo.
WCOC		500	+	Meridian, Miss.
WGBI	*	250	1	Scranton, Pa.
WOAN	•	250	1	Scranton, Pa.
VWSUI	*	500		Iowa City, Iowa

Pillar of Fire, Inc. Mississippi Broadcasting Co., Inc. Scranton Broadcasters, Inc. Scranton Times University of Iowa

890 kilocycles 336.9 meters

CFBO	*	50		St. John, N. B.
CKCO	İ	100		Ottawa, Ont.
KFNF		500	2+	Shenandoah, Iowa
KGJF	*	250		Little Rock, Ark.
KUSD	*	500	2+	Vermillion, S. D.
WGST	*	250	1+C	Atlanta, Ga.
WILL	*	250	2 +	Urbana, Ill.
WJAR	*	250	+N	Providence, R. I.
WKAO	*	500		San Juan, P. R.
WMAZ	+	250	1+	Macon, Ga.
WMMN	*	250	+	Fairmount, W. Va.
XES	†	500		Tampico, Mexico
XET	Ť	1500		Monterrey, Mex.
				• • • • • • • • • • • • • • • • • • • •

C. A. Munro, Ltd. Dr. G. M. Geldert Henry Field Co. Church of the Nazarene University of South Dakota Georgia School of Technology University of Illinois The Outlet Co. Radio Corp. of Porto Rico Junior Chamber of Commerce Holt-Rowe Novelty Co. Difusora Portena XES Mexico Music Co.

900 kilocycles 333.1 meters

CMCF	+	250		Havana, Cuba
KGBU	Ť	500		Ketchikan, Alaska
KHJ	*	1000	C	Los Angeles, Cal.
KSE1	*	250		Pocatello, Idaho
WBEN	*	1000	N	Buffalo, N. Y.
WJAX	*	1000	N	Jacksonville, Fla
WKY	*	1000	N	Oklahoma City
WLBL	*	2000	D	Stevens Point, Wis.

Casa Karman Alaska Radio & Service Co. Don Lee, Inc. KSEI Broadcasting Association, Inc. Buffalo Evening News City of Jacksonville WKY Radiophone Co. Wisconsin Dept. of Markets

910 kilocycles 329.6 meters

CFQC		500	1	Saskatoon, Sask.
CHNS	*	500	3	Halifax, N. S.
CJGC	*	1000	2	London, Ont.
V CMX	*	1000		Havana, Cuba
CNRH		500	3	Halifax, N. S.
CNRL	*	500	2	London, Ont.
CNRS		500	1	Saskatoon, Sask.

The Electric Shop, Ltd. Halifax Herald, Ltd. Free Press Printing Co., Ltd. Francisco Lavin Canadian National Railways Canadian National Railways Canadian National Railways

TUT

920 kilocycles 325.9 meters

		- 5		
CMHD		250		Caibarien, Cuba
HHK	*	1000	54.	Port au Prince, Haiti
KFEL	†	500	1	Denver, Colo.
KFXF	*	500	1	Denver, Colo.
KOMO	t	1000	N	Seattle, Wash.
KPRC	*	1000	+N	Houston, Texas
WAAF		500	Ď	Chicago, Ill.
WBSO		500	D	Needham, Mass.
wwj	†	1000	N	Detroit, Mich.
XFF		250	915	Chihuahua, Mex.

Ev 11
Manuel A. Alverez
Republic of Haiti
Eugene P. O'Fallon, Inc.
Colorado Radio Corp.
Fisher's Blend Station, Inc.
Houston Printing Co.
Drovers Journal Publishing Co.
Babson Statistical Organization, Inc.
The Detroit, News
Gobierno del Estado de Chihuahua

930 kilocycles 322.4 meters

CJCA	*	500	4	Edmonton, Alta.
CFRC	-	500		Kingston, Ont.
CKIC		50		Wolfville, N. S.
CKPR		5 0	3	Midland, Ont.
CNRE		500	4	Edmonton, Alta.
KFWI	†	500	1	San Francisco, Cal.
KGBZ		500	2+	York, Nebr.
KMA	*	5 00	2+	Shenandoah, Iowa
KROW	*	500	1+X	Oakland, Cal.
WBRC	*	500	+C	Birmingham, Ala.
WDBJ	*	250	+C	Roanoke, Va.
WIBĞ	*	50	Ď	Elkins Park, Pa.
				•

The Edmonton Journal, Ltd.
Queen's University
Acadia Academy
Midland Broadcasting Corp.
Canadian National Railways
Radio Entertainments, Inc.
Dr. George R. Miller
May Seed & Nursery Co.
Educational Broadcasting Corp.
Birmingham Broadcasting Co., Inc.
Richardson-Wayland Elec. Corp.
St. Pauls P. E. Church

940 kilocycles 319.0 meters

		- 5		OZJIO IIICCOIC
KGU	†	1000		Honolulu, Hawaii
KOIN	*	1000	С	Portland, Ore.
WAAT		300	D	Jersey City, N. J.
WCSH	*	1000	N	Portland, Maine
WDAY	*	1000	С	Fargo, N. D.
VWFIW	*	1000		Hopkinsville, Ky.
WHA		<i>7</i> 50	D	Madison, Wis.

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

950 kilocycles 315.6 meters CMCQ 1000 955 Havana Cuba Hillywood Cat. Hillywood C	INDEX BY FREQUENCIES	S AND DIAL NUMBERS	
RCPH 1000	950 kilocycles 315.6 meters	w.H.	
CFCY	KFWB * 1000 Hollywood, Cal.	Warner Bros. Broadcasting Corp. Northwestern Auto Supply Co., Inc. Midland Broadcasting Co., Inc.	
CFCY	960 kilocycles 312,3 meters	204	
September Source	CFCY * 250 1 Charlottetown, P. I CFRB * 4000 2C Toronto, Ont. CHCK - 30 1 Charlottetown, P. I CHWC * 500 3 Regina, Sask. CJBR - 500 3 Regina, Sask. CKCK † 500 3 Regina, Sask. CNRR - 500 3 Regina, Sask. CNRX * 4000 2 Toronto, Ont.	Rogers-Majestic Corp., Ltd. E. I. W. E. Burke R. H. Williams & Sons. Ltd. Cooperative Wheat Producers, Ltd. Leader Publishing Co., Ltd. Canadian National Railways Canadian National Railways	
980 kilocycles 305.9 meters KCDKA 50000 N Pittsburgh, Pa. Mexico City, Mex. 990 kilocycles 302.8 meters CMBD 150 995 Havana, Cuba WCC * 5000 IN Py Springfield, Mass. 1000 kilocycles 299.8 meters KFVD * 250 Dn Culver City, Cal. WCC * 5000 IN Des Moines, Iowa Davenport, Iowa Mcico City WCC * 5000 IN Des Moines, Iowa Davenport, Iowa Mcico City WEXEK 101 September 150 Marianas, Cuba Mexico City 1010 kilocycles 296.8 meters CFLC * 50 3 Prescott, Ont. Charles In Iowana, Cuba San Jose, Cal. Miss * 5000 Charles In Iowana, Cuba San Jose, Cal. Miss * 5000 Charles In Iowana, Cuba San Jose, Cal. Why Nama, Charles In Iowana, Cuba San Jose, Cal. Why Nama, Charles In Iowana, Cuba San Jose, Cal. Why Nama, Charles In Iowana, Cuba San Jose, Cal. Why Nama, Charles In Iowana, Cuba San Jose, Cal. Why Nama, Charles In Iowana, Cuba San Jose, Cal. Why Nama, Charles In Iowana, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Why Nama, Charles In Iowa Marianas, Cuba San Jose, Cal. Westinghouse Elec. & Mfg. Co. WRAX Broadcasting Co. Canadian Marconi Co. C	970 kilocycles 309.1 meters	LU //	
980 kilocycles 305.9 meters KDKA 50000 N Mexico City, Mex. 990 kilocycles 302.8 meters CMBD 150 995 Havana, Cuba Springfield, Mass. 1000 kilocycles 299.8 meters KFVD * 250 Dn Culver City, Cal. WHO * 5000 1N Davenport, Iowa WCC * 5000 1N Davenport, Iowa WCE * 101	KIR * 5000 Seattle, Wash.	Chicago Federation of Labor KCYS	-
MENDEA 50000 N Mexico City, Mex. 990 kilocycles 302.8 meters CMBD 150 995 Havana, Cuba WBZ-A † 15000 1NY Springfield, Mass. 1000 kilocycles 299.8 meters KFVD * 250 D Mexico City WBX * 101 999 Mexico City WBX * 101 999 Mexico City WBX * 500 1N Des Moines, Iowa MBX 150 Havana, Cuba MBX 101 999 Morelia, Mexico MEX 101 999 Morelia, Mexico MEX 101 999 Mexico City Mexico City Mexico City Mexico City Mexico City Mex 1000 Karianas, Cuba Manuel y G. Salas Powell & Platz Pacific Agricultural Foundation, Ltd, Marcus Loew Booking Agency South Carolina Broadcasting Co. Central Broadcastin	980 kilocycles 305.9 meters	Va	-
Section Sect	VKDKA 50000 N Pittsburgh, Pa.	F. Armida v Cia.	
CMBD	990 kilocycles 302.8 meters		_
Calver City, Cal. Co. Calver City Cal. Calver City Cal. Calver City Cal. Calver City Cal. Calver City Ca		Luis Perez Garcia Westinghouse Elec. & Mfg. Co.	
Calver City, Cal. Co. Calver City Cal. Calver City Cal. Calver City Cal. Calver City Cal. Calver City Ca	1000 kilocycles 299.8 meters	telt	
CFLC * 50 3 Prescott, Ont. CKCR - 50 3 Waterloo, Ont. CMBW - 150 - Marianas, Cuba KGGF + 500 2 S. Coffeyville, Okla. KOW * 500 - San Jose, Cal. WHN * 250 1 New York City WIS * 500 C Columbia, S. C. WNAD * 500 2 Norman, Okla. WPAP * 250 1 New York City WQAO - 250 1 New York City WRNY - 250 1 New York City WRAX * 10000 1N Chicago, Ill. WRAX † 250 D Philadelphia, Pa. 1030 kilocycles 291.1 meters CFCF - 500 - Wancouver, B. C. XEB † 1000 - Wancouver, B. C. XEB † 1000 1C Dallas, Texas KRLD * 10000 1C Dallas, Texas KRLD * 10000 1N Hot Springs, Ark. WKAR * 10000 D Bast Lansing, Mich. WKAR * 10000 D Bast Lansing, Mich. WKAR * 10000 TO Chamber of Commerce Michigan State College	KFVD * 250 Dn Culver City, Cal. WHO * 5000 1N Des Moines, Iowa WOC * 5000 1N Davenport, Iowa XEI * 101 999 Morelia, Mexico	Central Broadcasting Co. Central Broadcasting Co. Carlos Gutierrez M.	
CFLC * 50 3 Prescott, Ont. CKCR - 50 3 Waterloo, Ont. CMBW - 150 - Marianas, Cuba KGGF + 500 2 S. Coffeyville, Okla. KOW * 500 - San Jose, Cal. WHN * 250 1 New York City WIS * 500 C Columbia, S. C. WNAD * 500 2 Norman, Okla. WPAP * 250 1 New York City WQAO - 250 1 New York City WRNY - 250 1 New York City WRAX * 10000 1N Chicago, Ill. WRAX † 250 D Philadelphia, Pa. 1030 kilocycles 291.1 meters CFCF - 500 - Wancouver, B. C. XEB † 1000 - Wancouver, B. C. XEB † 1000 1C Dallas, Texas KRLD * 10000 1C Dallas, Texas KRLD * 10000 1N Hot Springs, Ark. WKAR * 10000 D Bast Lansing, Mich. WKAR * 10000 D Bast Lansing, Mich. WKAR * 10000 TO Chamber of Commerce Michigan State College	1010 kilocycles 296.8 meters	e e e	
CFCF 500 Montreal, Que. CNRV + 500 Vancouver, B. C. XEB + 1000 Mexico City, Mex. 1040 kilocycles 288.3 meters VKRLD * 10000 1C Dallas, Texas KTHS \$ 10000 1N Hot Springs, Ark. WKAR * 1000 D East Lansing, Mich. WKAR * 1000 D Esst Lansing, Mich.	CFLC * 50 3 Prescott, Ont. CKCR - 50 3 Waterloo, Ont. CMBW - 150 - Marianas, Cuba CMBZ - 150 - Havana, Cuba KGGF † 500 2 S. Coffeyville, Okla. KQW * 500 - San Jose, Cal. WHN * 250 1 New York City WIS * 500 C + Columbia, S. C. WNAD * 500 2 Norman, Okla. WPAP * 250 1 New York City WOAO - 250 1 New York City	John Patterson	
CFCF 500 Montreal, Que. CNRV + 500 Vancouver, B. C. XEB + 1000 Mexico City, Mex. 1040 kilocycles 288.3 meters VKRLD * 10000 1C Dallas, Texas KTHS \$ 10000 1N Hot Springs, Ark. WKAR * 1000 D East Lansing, Mich. WKAR * 1000 D Esst Lansing, Mich.	1020 kilocycles 293.9 meters	s evt	
CFCF 500 Montreal, Que. CNRV + 500 Vancouver, B. C. XEB + 1000 Mexico City, Mex. 1040 kilocycles 288.3 meters VKRLD * 10000 1C Dallas, Texas KTHS \$ 10000 1N Hot Springs, Ark. WKAR * 1000 D East Lansing, Mich. WKAR * 1000 D Esst Lansing, Mich.	KFKX * 10000 1N Chicago, III.	Westinghouse Elec. & Mfg. Co. Westinghouse Elec. & Mfg. Co. WRAX Broadcasting Co.	
CFCF 500 Montreal, Que. Canadian Marconi Co. Canadian National Railways El Buen Tono, S. A. 1040 kilocycles 288.3 meters KRLD * 10000 IC Dallas, Texas KTHS \$ 10000 IN Hot Springs, Ark. WKAR * 1000 D East Lansing, Mich. WKAR * 1000 D Esst Lansing, Mich. WKAR * 1000 D Esst Lansing, Mich.	1030 kilocycles 291.1 meters	S ES	
VKRLD * 10000 1C Dallas, Texas KRLD Radio Corp. KTHS \$ 10000 1N Hot Springs, Ark. Chamber of Commerce WKAR * 1000 D East Lansing, Mich. Michigan State College	CFCF 500 Montreal, Que. CNRV † 500 Vancouver, B. C.	Canadian National Railways	
VKRLD * 10000 1C Dallas, Texas KRLD Radio Corp. KTHS \$ 10000 1N Hot Springs, Ark. Chamber of Commerce WKAR * 1000 D East Lansing, Mich. Michigan State College	1040 kilocycles 288.3 meters	EU #	
	KRLD * 10000 1C Dallas, Texas KTHS \$ 10000 1N Hot Springs, Ark. WKAR * 1000 D East Lansing, Mich	KRLD Radio Corp. Chamber of Commerce Michigan State College	

1050	. 1 . 1			205 5	2831	
	Kil	ocyc		285.5 meters	-CU-N	
CMKC KFKB KNX	*	150 5000 5000	1045 Dn X	Santiago de Cuba Milford, Kansas Hollywood, Cal.	M. P. Martinez KFKB Broadcasting Ass Western Broadcast Co.	n., Inc.
1060	kil	ocyc	les	282.8 meters		
KWJJ WBAL WJAG WTIC	* *	500 10000 1000 50000	Dn 1N Dn 1N	Portland, Ore. Baltimore, Md. Norfolk, Nebr. Hartford, Conn.	KWJJ Broadcast Co., In Consolidated Gas Elec. & Norfolk Daily News Travelers Broadcasting \$	k Pwr. Co.
1070	kil	ocycl	es	280.2 meters	CU #	
CMBT CMCB KJBS WCAZ WDZ WTAM	•	150 150 100 50 100 50000	D D D N	Havana, Cuba Havana, Cuba San Francisco, Cal. Carthage, III. Tuscola, III. Cleveland, Ohio	E. Perera M. D. Autran Julius Brunton & Sons (Superior Broadcasting S James L. Bush National Broadcasting Co	ervice
1080	kil	ocycl	es	277.6 meters	20-14-	
WBT WCBD WMBI	*	5000 5000 5000	C 1 Dn 1 Dn	Charlotte, N. C. Zion, III. Chicago, III.	Station WBT, Inc. Wilbur Glenn Voliva Moody Bible Institute	
1090	kil	ocycl	es	275.1 meters		
KMOX XEL		50000 10	1CX 1091	St. Louis, Mo. Saltillo, Coah.	Voice of St. Louis, Inc. Antonio Garza Castro	
1100	kil	ocycl	es	272.6 meters		
CMKD KGDM WLWL WPG XETA	* * *	250 5000 5000 1000	DX 1 1C	Santiago, Cuba Stockton, Cal. New York City Atlantic City, N. J. Mexico City	E. F. Peffer Missionary Society of St. WPG Broadcasting Corp	Paul
	kil	ocycl	es	270.1 meters	EU #	
KSOO WRVA	*	2000 5000	Dn N	Sioux Falls, S. D. Richmond, Va.	Sioux Falls Broadcasting Larus & Bros. Co., Inc.	Assn., Inc.
1120	kil	ocycl	es	267.7 meters	lett	
CFJC CHGC CJOC KFIO KFSG KMIC KRSC KTRH WDBO WDEL WHAD WISN WTAW	 † † * * † * * † * * * * * * * * * * * *	15 100 500 100 500 500 500 500 250 250 250 250	D 3 3 3 3 3 2 C +C +X 1 1 1 2	Kamloops, B. C. Summerside, P. E. I. Lethbridge, Alta. Spokane, Wash. Los Angeles, Cal. Inglewood, Cal. Seattle, Wash. Houston, Texas Orlando, Fla. Wilmington, Del. Milwaukee, Wis. College Station, Texas	N. S. Dalgleish & Sons R. T. Holman, Ltd. Harold R. Carson Spokane Broadcasting Control of the C	., Inc.
	kilo	ocycl	es	265.3 meters [
CMBC CMQ KSL WJJD WOV XEC XEF XEH	* * ;	150 150 5000 20000 1000 50 105 101	N C Dn D 1133 1131 1132	Havana, Cuba Havana, Cuba Salt Lake City Mooseheart, Ill. New York City Toluca, Mex. Oaxaca, Oax. Monterrey, Mex.	Domingo Fernandez Cru: Jose Fernandez Radio Service Corp. of Ut Loyal Order of Moose International Broadcasti Jesus R. Benavides Frederico Zorrila Ing. Constantino de Tarr	ah ng Corp.
1140	kilo	ocycl	es	263.0 meters [CO 14	
KVOO WAPI	*	5000 5000	1N 1N	Tulsa, Okla. Birmingham, Ala.	Southwestern Sales Corp Alabama Polytechnic Ins	titute

1160 kilocycles

258.5 meters

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

Main Auto Supply Co. West Virginia Broadcasting Corp.

1170 kilocycles

5000

10000

KTNT WCAU

WOAL

XEX

256.3 meters Muscatine, Iowa Philadelphia, Pa.

252.0 meters

Norman Baker

Universal Broadcasting Co

1180 kilocycles

254.1 meters KEX Portland, Ore. State College, N. M. Minneapolis, Minn. Minneapolis, Minn. 5000 KOB WDGY 20000 1000 Dn WHDI 500 î Dn

Western Broadcasting Co. College of Agriculture & Mech. Arts Dr. George W. Young Wm. Hood Dunwoody Industrial Inst.

1190 kilocycles

500 DN Bridgeport, Conn. 50000 San Antonio. Texas Mexico City, Mex. 500

Bridgeport Broadcasting Station, Inc. Southern Equipment Co. **Excelsior Cia Editorial**

1200 kilocycles

249.9 meters North Bay, Ont. **CFCH** 50 100 KBTM KFJB KFWF D Paragould, Ark. Marshalltown, Iowa 5 100 St. Louis, Mo. Mandan, N. D. Fergus Falls, Minn. 100 KGCU KGDE 100 + 182 100 rergus rails, Minn. Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Lacey, Wash. KGDY KGEK 100 9 50 KGEW KGFJ KGHI ŧ 100 ģ. 100 100 KGY KMLB 10 † 50 100 *----100

Lacey, Wash.
Monroe, La.
Santa Maria, Cal.
Bellingham, Wash.
Stockton, Cal.
Bangor, Maine
New Orleans, La.
Ponca City, Okla
Rapid City, S. D.
Burlington, Vt.
Wie, KSMR KVOS KWG WABI WABZ 100 100 † 1 100 WBBZ 100 - - -WCAT WCAX WCLO 100 2 Burlington, Vt. Janesville, Wis. 100 100 Harrisburg, Pa. Emory, Va. Worcester, Mass. Knoxville, Tenn. Cincinnati, Ohio WCOD WEHC 3 100 100 + WEPS 100 50 WFBC WFBE WHBC 100 + 4S 10

Canton, Ohio Green Bay, Wis. Utica, N. Y. WHBY 100 + 5+ 6 WIBX 100 * St. Louis, Mo. La Salle, Ill. Decatur, Ill. 100 WIL WJBC WJBL WJBW WKJC WLAP WLBG 100 100 6 † 100 New Orleans, La. 1 3 Lancaster, Pa. 100 ++4 Louisville, Ky. Petersburg, Va 100 100 WNBO WNBW WNBX 100 10 †

Washington, Pa. Carbondale, Pa. Springfield, Vt. Worcester, Mass. La Porte, Ind. 10 ĆΧ WORC 100 WRAF 100 8 WRBL t 50 Columbus, Ga. Hammond, Ind. 8 WWAE 100 XEA 10-BP 101 Guadalajara, Jal. Wingham, Ont.

CUA

Northern Supplies, Ltd. W. J. Beard's Temple of Music Marshall Electric Co., Inc. St. Louis Truth Center, Inc. Mandan Radio Association KCYS. 1200 MTRS. Jaren Drug Co. Voice of South Dakota Beehler Elec. Equipment Co. City of Fort Morgan 249.9 DIAL Ben S. McGlashan Berean Bible Class St. Martin's College

G. C. Liner Santa Maria Radio KVOS, Inc Portable Wireless Tel. Co., Inc. Pine Tree Broadcasting Corp. Coliseum Place Baptist Church C. L. Carrell

State School of Mines University of Vermont WCLO Radio Corp. Keystone Broadcasting Corp. Emory & Henry College Alfred Frank Kleindienst First Baptist Church WFBE, Inc.

St. John's Catholic Church St. Norbert's College WIBX, Inc. Missouri Broadcasting Corp. Kaskaskia Broadcasting Co. Commodore Broadcasting, Inc.

Charles C. Carlson, Jr. Kirk, Johnson & Co. American Broadcasting Corp. of Ky. Robert Allen Gamble John Brownlee Spriggs Home Cut Glass & China Co.

First Congregational Church Alfred Frank Kleindienst Chas. Middleton David Parmer Hammond-Calumet Broad. Corp.

Alberto Palos Sauza Radio & Electric Shop 9 DOTTED LINES

INDEX BY FREQUENCIES AND DIAL NUMBERS 1210 kilocycles 247.8 meters CFCO CFNB 100 Chatham, Ont Western Ontario "Better Radio" Club James S. Neill & Sons, Ltd. Fredericton, N. B. Chilliwack, B. C. Sea Island, B. C. 50 5 CHWK Chilliwack Broadcasting Co., Ltd. ---CJOR CKMC 50 G. C. Chandler R. L. MacAdam 15 Cobalt, Ont. Preston, Ont. Casper, Wyo. Devils Lake, N. D. CKPC 50 + Metal Shingle & Siding Co. KDFN t 100 Donald Lewis Hathaway ---100 KDLR, Inc. Howard A. Shuman + KFOR 100 Lincoln, Nebr. KFOR KFVS KFXM KGCR KGMP KGNO Hirsch Battery & Radio Co. J. C. & E. W. Lee Cutler's Radio Brdcstg. Service, Inc. Bryant Radio & Electric Co. 100 Cape Girardeau, Mo. 100 9 San Bernardino, Cal. Watertown, S. D. ++** 100 ---Elk City, Okla. Dodge City, Kans. Fresno, Cal. 100 100 Dodge City Broadcasting Co. James McClatchy Co. ---KMJ KPPC 100 9 James McClatchy Co. Pasadena Presbyterian Church Hello World Broadcasting Corp. Roy, W. Waller John H. Stenger, Jr. H. L. Dewing & Chas. Messter Westchester Broadcasting Corp. Clinton R. White Dutee W. Flint First Trust & Savings Bank 50 Pasadena, Cal. KWEA WALR Shreveport, La. Zanesville, Ohio Wilkes-Barre, Pa. 100 ---٠ 100 WBAX 100 1 2 3 Springfield, Ill. Yonkers, N. Y. Chicago, Ill. Providence, R. I. WCBS 100 WCOH 100 WCRW 4 5 100 100 WEBQ 100 6 Harrisburg, Ill. Chicago, Ill. First Trust & Savings Bank WEDO 100 4 3 Emil Denemark, Inc. Freeport, N. Y. Gulfport, Miss Rock Island, Ill. WGBB 100 Harry H. Carman WGCM 100 Great Southern Land Co., Inc. WHBF 100 Beardsley Specialty Co. Citizens Bank Wm. C. Forrest Monmouth Broadcasting Co. Anderson, Ind. Poynette, Wis. Red Bank, N. J. WHBU 100 ---WIBU WIBU WJBI WJBY WJW WLCI WLSI WMBG WMBG 100 <u>-</u>--100 Red Bank, N. J. Lewisburg, Pa. Gadsden, Ala. Mansfield, Ohio Ithaca, N. Y. Providence, R. I. Richmond, Va. Jamaica, N. Y. Bucknell University Gadsden Broadcasting Co., Inc. 100 1 50 100 Mansfield Broadcasting Assn. Lutheran Assn. of Ithaca * 50 5 100 The Lincoln Studios, Inc. Havens & Martin, Inc. Peter J. Prinz A. E. Newton 100 3 100 Jamaica, N. Y. Jamestown, N. Y. Manitowoc, Wis. Pawtucket, R. I. Thomasville, Ga. Greenville, Miss. WOCL WOMT 25 5 100 Francis M. Kadow WPAW WQDX WRBQ 100 Shartenburg & Robinson Co. 50 Stevens Luke J. Pat. Scully World Battery Co., Inc. 1 100 WSBC 100 Chicago, Ill. Columbus, Ohio Springfield, Tenn. Gastonia, N. C. WSEN WSIX † 100 Columbus Broadcasting Co. 638 Tire & Vulcanizing Co. A. J. Kirby Music Co. WTAX, Inc. 100 ---WSOC 100 WTAX 2 100 Springfield, Ill. 1220 kilocycles 245.8 meters J. L. M. Cruz

CMCA KFKU	 *	100 500	1225	Havana, Cuba Lawrence, Kans.
KWSC	*	1000	-+-	Pullman, Wash.
WCAD	*	500	Ď	Canton, N. Y.
WCAE	*	1000	N	Pittsburgh, Pa.
WDAE	*	1000	С	Tampa, Fla.
WREN	*	1000	1N	Lawrence, Kans.

1230 kilocycles 243.8 meters

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

1240 kilocycles 241.8 meters

CMKX KTAT † 1000 WACO † 1000 WXYZ † 1000	1 Ft. V	uin, Cuba Vorth, Texas o, Texas oit, Mich.
---	---------	---

M. Cruz
University of Kansas
State College of Washington
St. Lawrence University
Gimbel Bros.
Tampa Publishing Co.
Jenny Wren Co.

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

S. A. T. Broadcast Co. Central Texas Broadcasting Co., Inc. Kunsky-Trendle Broadcasting Corp.

WOO

KFH 1000 KF JR KGEF 500 1000 KTBI 1000 KTBR 500 3 WBBR 1000 1 WEVD 500 1 WHAP 1000 WHAZ WIOD 500

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

1310 kilocycles

1000

1000

228.9 meters Jerome, Ariz. Sacramento, Cal. KCR. 100 KFBK 100 7--KFGQ ŧ 100 Boone, Iowa Juneau, Alaska 10 ---KFJY 100 Ft. Dodge, Iowa

N

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

Radio Station KFH Co.

Chas. C. Robinson Jas. McClatchy Co. Boone Biblical College Alaska Electric Light & Power Co. C. S. Tunwall

TOOT 9 DOTTED

WTEL * 50 4X Philadelphia, Pa. 100 CP Marquette, Mich.	KFPL KFPM KFPM KFPM KFSM KGCX KGCX KGGEV KITSL KTSL KTSL KTSL KTSL KTSL KTSL KTSL K	†* * - † + + + + + + + + + + + + + + + + + + +	100 15 100 100 100 100 100 100 50 50 50 100 10	88XY + + + C 9X 9 2 7 1 2 + + 3 5 C 4X 3 6 1 1 5 XZ	Dublin, Texas Greenville, Texas Greenville, Texas Denver, Colo. Edgewater, Colo. Oklahoma City St. Joseph, Mo. Wolf Point, Mont. Kalispell, Mont. Ravenna, Neb. Yakima, Wash. Medford, Ore. Shreveport, La. Houston, Tex. Shreveport, La. El Paso, Texas Cedar Rapids, Iowa Aberdeen, Wash. Terre Haute, Ind. Wilkes-Barre, Pa. Joliet, Ill. El Paso, Texas Buffalo, N. Y. Royal Oak, Mich. Altoona, Pa. Flint, Mich. Lancaster, Pa. Newport News, Va. Philadelphia, Pa. Johnstown, Pa. Marion, Ind. Laconia, N. H. Joliet, Ill. Birmingham, Ala. Galesburg, Ill. Muncie, Ind. Auburn, N. Y. New Bedford, Mass. Union City, Tenn. Washington, D. C. Reading, Pa. Tifton, Ga. Knoxville, Tenn. Grove City, Pa. Winston-Salem, N. C.
	WEIS	*	100 50	4X CP	Winston-Salem, N. C. Philadelphia, Pa.
			* 00	Cr	marquette, mien.

The New Pullinture Co.
Fitzsimmons General Hospital
Western Slope Broadcasting Co.
Exchange Ave. Baptist Church
KGBX Inc.
First State Bank of Vida
Chamber of Commerce
Central Nebraska Broadcasting Corp.
Carl E. Haymond
Mrs. W. J. Virgin
Robert M. Dean
Houston Broadcasting Co.
G. A. Houseman
W. S. Bledsoe & W. T. Blackwell
Harry F. Paar
KXRO, Inc.
Banks of Wabash, Inc.
Louis G. Baltimore
WCLS, Inc.
Eagle Broadcasting Co.
Howell Broadcasting Co., Inc.
Royal Oak Broadcasting Co.
Wm. F. Gable Co.
Frank D. Fallain
WGAL, Inc.
Hampton Roads Broadcasting Corp.
Independence Broadcasting Co.
Johnstown Automobile Co.
Marion Broadcasting Co.
Laconia Radio Club
Sanders Bros. Radio Station
R. B. Broyles Furniture Co.
Permil N. Nelson
Donald A. Burton
Radio Service Laboratories
New Bedford Broadcasting Co.
Tittsworth's Radio & Music Shop
American Broadcasting Co.
Reading Broadcasting Co.
Kent's Furniture & Music Store
Stewart Broadcasting Co.
Grove City College
Winston-Salem Journal Co.
Foulkrod Radio Engineering Co.
C. C. McLeod

C. C. Baxter
The New Furniture Co.

1320 kilocycles 227.1 meters

KGHF	t	250	\mathbf{x} +	Pueblo, Colo
KGIQ		250	1+	Twin Falls, Idaho
KGMB	+	5 00		Honolulu, Hawaii
KID	†	250	1+	Idaho Falls, Idaho
WADC	†	1000	C.	Akron, Ohio
WSMB	*	500	N	New Orleans, La.

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

1330 kilocycles 225.4 meters

KGB	*	250	X	San Diego, Cal.
KSCJ	*	1000	1+C	Sioux City, Iowa
WDŘC	*	500	C _	Hartford, Conn.
WSAI	*	500	7	Cincinnati, Ohio
WTAQ	*	1000	1 C	Eau Claire, Wis.

1.1	
Pickwick B Perkins Br	Broadcasting Corp.
Doolittle R	ladio Corp.
Crosley Ra	dio Corp., Lessee
Gillette Ru	abber Co.

1340 kilocycles 223.7 meters

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

Southwestern Hotels Co. Symons Broadcasting Co. City of Pensacola Toledo Broadcasting Co.

201

1350 kilocycles 222.1 meters

CMJC	÷-0			Camaguey, Cuba
KWK	*	1000	N	St. Louis, Mo.
WAWZ	*	250	1	New York City
WCDA		250	1	New York City
WKBO	-	250	ī	New York City
WMSĞ		250	ī	New York City

Greater St. Louis Broadcasting Corp. Pillar of Fire Italian Educ. Broadcasting Co., Inc. Standard Cahill Co., Inc. Madison Sq. Garden Brdestg. Corp.

1360 kilocycles 220.4 meters

KGER	*	1000	4	Long Beach, Cal.
KGIR	†	500		Butte, Mont.
KPSN	*	1000	4	Pasadena, Cal.
wcsc	*	500		Charleston, S. C.
WFBL	*	1000	C+X	Syracuse, N. Y.
WGES	*	500	1+	Chicago, Ill.
WJKS	*	1000	1+	Gary, Ind.
WQBC		300	CP D	Vicksburg, Miss.

C. Merwin Dobyns
KGIR, Inc.
Pasadena Star-News
Jordan & Burk
Onondaga Radio Broadcasting Corp.
Oak Leaves Broadcasting Station, Inc.
Johnson-Kennedy Radio Corp.
Delta Broadcasting Co., Inc.

1370 kilocycles 218.7 meters

KCRC	t	100	2.4	Enid, Okla.
KFBL	*	50	2+ 3	Everett, Wash.
KFII		100		Astoria, Ore.
KFJI KFJM KFJZ	Ť	100		
KEIZ	*	100	$\ddot{\mathbf{x}}$	Grand Forks, N. D.
KFLX		100	Λ	Ft. Worth, Texas Galveston, Texas
KGAR	*	100		Gaiveston, Texas
KGDA	ŧ	100	+	Tucson, Ariz.
KGFG				Mitchell, S. D.
KGFL	†	100	Z	Oklahoma City
	İ	50		Raton, N. M.
KGKL	†	100	2-1	San Angelo, Texas
KMAC		100	5	San Antonio, Tex. San Antonio, Texas
KONO	+	100	5	San Antonio, Texas
Koos	*	100	6	Marshfield, Ore.
KRE		100	6	Berkeley, Cal.
KVL		100	3	Berkeley, Cal. Seattle, Wash.
KWKC		100	2	Kansas City, Mo.
KZM_	*	100	6	Hayward, Cal.
WBGF	†	50		Glens Falls, N. Y.
WBTM	†	100	7	Danville, Va.
WCBM		100	+z	Baltimore, Md.
WELK	11.	100	+	Philadelphia, Pa.
WFDV		100		Rome, Ga.
WGL	*	100	C	Fort Wayne, Ind.
WHBD	*	100		Mount Orab, Ohio
WHBO		100		Memphis, Tenn.
WHDF	†	100	+	Memphis, Tenn. Calumet, Mich. Jackson, Mich.
WIBM		100	1	Jackson, Mich.
WJBK	*	50	Ī	Detroit, Mich.
WLEY		100	+	Lexington, Mass.
WLVA	†	100	7	Lynchburg, Va.
WMBR	ŧ	100		Tampa, Fla.
WPOE	ŧ	100		Patchogue, N. Y.
WQDM	*	100	D	St. Albans, Vt.
WRAK	*	50	_	Williamsport, Pa.
WRBJ	+	10		Hattiesburg, Miss.
WRBT	† *	100		Wilmington, N. C.
WRJN		100		Racine, Wis.
wsvs	*	50		Buffalo, N. Y.
WRDO	5	100	CP	
WINDO	8	100	CF	Augusta, Me.

Champlin Refining Co. Leese Bros. KFJI Broadcasters, Inc. University of North Dakota Estate of H. C. Meachem George Roy Clough Tucson Motor Service Co. Mitchell Broadcasting Corp. Oklahoma Broadcasting Co., Inc. W. E. Whitmore KGKL, Inc., Opr. by Ragsdale Auto W. W. McAllister Mission Broadcasting Co. H. H. Hanseth, Inc. First Congregational Church KVL, Inc. Wilson Duncan Broadcasting Co. Leon P. Tenney W. N. Parker and H. H. Metcalfe Clarke Electric Co. Baltimore Broadcasting Corp. WELK Broadcasting Station, Inc. Dolies Goings Fred C. Zieg F. P. Moler Broadcasting Station WHBQ, Inc. Upper Michigan Broadcasting Co. WIBM, Inc. James F. Hopkins, Inc. Lexington Air Stations
Lynchburg Broadcasting Corp. F. J. Reynolds Nassau Broadcasting Corp. A. J. St. Antoine C. R. Cummins Woodruff Furniture Co., Inc. Wilmington Radio Association Racine Broadcasting Corp. Seneca Vocational School Albert S. Woodson

1380 kilocycles 217.3 meters

KOH KQV KSO WKBH WSMK	† † * *	500 500 500 1000 200	2 1 1 2	Reno, Nevada Pittsburgh, Pa. Clarinda, Iowa La Crosse, Wis. Dayton, Ohio
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Jay Peters
Doubleday-Hill Electric Co.
Berry Seed Co.
WKBH, Inc.
Stanley M. Krohn, Jr.

COK

1390 kilocycles 215.7 meters

KLRA KOY KUOA WHK	* †	1000 500 1000 1000	IC I C	Little Rock, Ark. Phoenix, Ariz. Fayetteville, Ark. Cleveland, Ohio
WHK	•	1000	C	Cleveland, Onio

Arkansas Broadcasting Co. Nielson Radio & Sporting Goods Co. University of Arkansas Radio Air Service Corp. ксүз. 1390

215.7

DIAL

1400 kilocycles 214.2 meters

	CMBY		200	1405	Havana, Cuba
L	KLO	*	500	X	Ogden, Utah
	KOCW	*	250	+	Chickasha, Okla.
	WBAA	t	500	1+	Lafayette, Ind.
	WBBC	*	500	2	Brooklyn, N. Y.
	WCGU	*	500	2	Brooklyn, N. Y.
	WCMA	†	500	1	Culver, Ind.
	WFOX		500	2	Brooklyn, N. Y.
L	WKBF	*	500	1	Indianapolis, Ind.
	WLTH	*	500	2	Brooklyn, N. Y.
	WSDA		500	2	Brooklyn, N. Y.

Lino E. Cosculluala
Peery Building Co.
College for Women
Purdue University
Brooklyn Broadcasting Corp.
U. S. Broadcasting Corp.
General Broadcasting Corp.
Paramount Broadcasting Co.
Indianapolis Broadcasting, Inc.
The Voice of Brooklyn, Inc.
Paramount Broadcasting Co.

TU-4

1410 kilocycles 212.6 meters

		5		
KFLV	†	500	4	Rockford, Ill.
KGRS	*	1000	1	Amarillo, Texas
WBCM	*	500	С	Bay City, Mich.
WDAG	*	250	1X	Amarillo, Texas
WHBL	*	500	4	Sheboygan, Wis.
WHIS	t	250		Bluefield, W. Va.
WLEX		500	2	Lexington, Mass.
WODX	*	500	3	Mobile, Ala.
WRBX	*	250		Roanoke, Va.
WSFA	t	500	3	Montgomery, Ala.
WSSH	Ť	500	2	Boston, Mass.

Rockford Broadcasters, Inc.
Gish Radio Service
James E. Davidson
National Radio & Broadcasting Corp.
Press Pub. Co.
Daily Telegraph
Lexington Air Stations
Mobile Broadcasting Corp.
Richmond Development Corp.
Montgomery Broadcasting Co., Inc.
Tremont Temple Baptist Church

1420 kilocycles 211.1 meters

	1420	KIR	ocyci	es	Z11.1 meters
	KBPS		100	4	Portland, Ore.
	KFIZ	*	100		Fond du Lac, Wis.
	KFQU	*	100	5X.	Holy City, Cal.
	KFQW		100		Seattle, Wash.
	KFXD	*	100	XY	Nampa, Idaho
	KFXY		100		Flagstaff, Ariz.
	KFYO	†	100 -	+	Abilene, Texas
	KGFF		100	Ý 5	Alva, Okla.
	KGGC	†	100	5	San Francisco, Cal.
	KGIW		100		Trinidad, Colo.
	KGIX	†	100		Las Vegas, Nevada
	KGKX		100		Sand Point, Idaho
	KGVO		100	CPD	Missoula, Mont.
	KICK	*	100		Red Oak, Iowa
	KLPM	t	100		Minot, North Dakota
	KORE		100		Eugene, Ore.
	KTAP	†	100		San Antonio, Texas
	KXL		100	4	Portland, Ore.
	KXYZ		100	X	Houston, Texas
	WEDH	*	100	=	Erie, Pa.
	WEHS		100	2	Cicero, Ill.
	WELL	ţ	50	X	Battle Creek, Mich.
	WFDW	*	100	$\overline{\mathbf{D}}\mathbf{X}$	Talladega, Ala.
L	WHDL	*	10		Tupper Lake, N. Y.
	WHFC		100	2	Cicero, Ill.
	WIAS	† *	100		Ottumwa, Iowa
	WIBR WILM	*	50	227	Steubenville, Ohio
	WJBO	*	100		Wilmington, Del.
	WKBI	*	100 100	2	New Orleans, La.
	WLBF		100	2	Chicago, Ill.
	WMBC	*	100	$\bar{\mathbf{x}}$ +	Kansas City, Kas.
4	WMBH		100		Detroit, Mich.
	WPAD	Ť	100	+	Joplin, Mo.
	WSPA	*	100	+	Paducah, Ky.
	WTBO	*	100		Spartanburg, S. C.
	" I DO		100		Cumberland, Md.

Benson Polytechnic Institute Benson Polytechnic In Reporter Printing Co. W. E. Riker KFQW, Inc. Service Radio Co. Mary M. Costigan T. E. Kirksey KGFF Broadcasting Co. Golden Gate Broadcasting Co. Leonard E. Wilson Las Vegas, Nevada, Radio Corp. C. E. Twiss and F. H. McCann Mosby's Incorporate Red Oak Radio Corp. John B. Cooley
Eugene Broadcasting Station
Alamo Broadcasting Co.
KXL Broadcasters, Inc. Harris County Broadcast Co. Erie Dispatch-Herald WEHS, Inc. Raymond G. Hammett Tupper Lake Broadcasting Co., Inc. Triangle Broadcasters Iowa Broadcasting Co. George W. Robinson Delaware Broadcasting Co., Inc. Valdemar Jensen Fred L. Schoenwolf WLBF Broadcasting Co. Michigan Broadcasting Co., Inc. Edwin Dudley Aber Paducah Broadcasting Co. Voice of South Carolina Associated Broadcasting Corp.

1430 kilocycles 209.7 meters

KECA	‡	1000	N	Los Angeles, Cal.
KGNF	Ť	500	D	North Platte, Neb
WBAK	Ť	500	1X +	Harrisburg, Pa.
WCAH	*	500	1C	Columbus, Ohio
WGBC	*	500	2S	Memphis, Tenn.
WHP	*	500	1C+	Harrisburg, Pa.
WNBR	•	500	2	Memphis, Tenn.

Pacific Development Radio Co. Great Plains Broadcasting Co. Penna. State Police Commercial Radio Service Co. Memphis Broadcasting Co. Pennsylvania Broadcasting Co. Memphis Broadcasting Co.

KLS WBIG WCBA	*	ocycl	D ī	208.2 meters Oakland, Cal. Greensboro, N. C. Allentown, Pa.	Warner Bros. North Carolina Broadcasting Co. B. B. Musselman]
WHEC WMBD WOKO WSAN WTAD	* * - †	500 500 500 250 500	2C 3+ 2Y 1 3	Rochester, N. Y. Peoria Heights, III. Poughkeepsie, N. Y. Allentown, Pa. Quincy, III.	Hickson Electric & Radio Corp. Peoria Heights Radio Laboratory WOKO, Inc. Allentown Call Publishing Co., Inc. Ills. Stock Medicine Broadcasting Co.	
1450	kilo	ocycl	es	206.8 meters [
KTBS WBMS WGAR WHOM WKBO WNJ WSAR WTFI	* * * * * * * * * * * * * * * * * * * *	1000 250 500 250 250 250 250 250 500	1 N 1 1 1 D	Shreveport, La. Hackensack, N. J. Cleveland, Ohio Jersey City, N. J. Jersey City, N. J. Newark, N. J. Fall River, Mass. Toccoa, Ga.	Tri-State Broadcasting System, Inc. WBMS Broadcasting Corp. WGAR Broadcasting Co. New Jersey Broadcasting Corp. Camith Corp. Radio Investment Co. Doughty & Welch Electric Co., Inc. Toccoa Falls Institute	
1460	kilo	ocycl	es	205.4 meters		
KSTP WJSV		10000 10000	NX 	St. Paul, Minn. Alexandria, Va.	National Battery Broadcasting Co. Independent Publishing Co.	
1470	kilo	ocycl	es	204.0 meters [late .]
WLAC WTNT	† * 	5000 5000 5000	1Ĉ 1	Spokane, Wash. Nashville, Tenn. Nashville, Tenn.	Northwest Broadcasting System, Inc. Life & Casualty Insurance Co. Life & Casualty Insurance Co.	
1480	kilo	ocycl	es	202.6 meters [
KFJF WKBW	*	5000 5000	C	Oklahoma City Buffalo, N. Y.	National Radio Mfg. Co. Buffalo Broadcasting Co., Lessees	
1490	kilo	ocycl	es	201.2 meters [
WCHI WCKY WJAZ	*	5000 5000 5000	1 1N 1	Chicago, Ill. Covington, Ky. Chicago, Ill.	People's Pulpit Association L. B. Wilson, Inc. Zenith Radio Corp.	
1500	kilo	ocycl	es	199.9 meters		
KDB KGFI	*	100 100	+	Santa Barbara, Cal. Corpus Christi, Texas	Dwight Faulding Eagle Broadcasting Co., Inc.	
KGFK KGIZ	† 	50 50		Moorhead, Minn. Grant City, Mo.	Red River Broadcasting Co., Inc. Grant City Park Corp.	
KGKB KGKY	*	100 100		Grant City, Mo. Brownwood, Texas Scottsbluff, Nebr.	Eagle Publishing Co. Hilliard Co., Inc.	
KPJM KPQ	* † †	100 50		Prescott, Ariz. Wenatchee, Wash. Santa Ana, Cal. Longview, Wash.	Miller & Klahn Wescoast Broadcasting Co. Pacific Western Broadcasting	
KRĒG KUJ KUT	Ť	100 100	Y	Longview, Wash. Austin, Texas	Columbia Broadcasting Co., Inc. Driskill Hotel	
KXO WCLB		100 100 100	î	El Centro, Cal. Long Beach, N. Y.	E. R. Irey and F. M. Bowles Arthur Faske	
WDIX WKBV	*	100 100	+	Tupelo, Miss. Connersville, Ind.	North Mississippi Broadcasting Corp. Knox Battery & Electric Co.	
WKBZ WLBX	† *	50 100	1	Ludington, Mich. Long Island City, N. Y.	K. L. Ashbacker John N. Brahy	
WLOE WMBA	*	100 100	+	Boston, Mass. Newport, R. I.	Boston Broadcasting Co. LeRoy Joseph Beebe	
WMBJ WMBQ	*	100 100	1	Pittsburgh, Pa. Brooklyn, N. Y.	LeRoy Joseph Beebe Rev. J. W. Sproul Paul J. Gollhofer	
WMPC WNBF	† *	100 100		Lapeer, Mich. Binghamton, N. Y.	First M. P. Church Howitt-Wood Radio Co., Inc.	
WOPI WPEN	*	100 100	¥-	Bristol, Tenn. Phildelphia, Pa.	Radiophone Brdcstg. Station, Inc. Wm. Penn Broadcasting Co.	
WRDW WWRL WSYB	* †	100 100 100	î CP	Augusta, Ga. Woodside, N. Y. Rutland, Vt.	Warren C. Davenport's Musicove, Inc. Long Island Broadcasting Corp. Seward & Weiss Music Co.	

1500 MTRS. 199.9 DIAL

ALABAMA			17	San Jose J-1	500	KOW	1010
	Watts	SSI A DE	Kcys.	Santa Ana M-3	100	KQW KREG	1500
Birmingham O-21	5000 500	WAPI WBRC	1140 930	Santa Barbara M-2	100	KDB	1500
	100	WKBC	1310	Santa Maria L-2 Stockton J-2	100 250	KSMR KGDM	1200
Gadsden O-21	50	WIBY	1210	Stockton J-2	100	KWG	1100 1200
Mobile O-20	500	WODX WSFA	1410	CANAL ZONE	100	10.00	1200
Montgomery P-21 Talladega O-21	500 100	WFDW	1410 1420	Balboa FF-26	750	NIDA	950
				l .	<i>7</i> 50	NBA	850
ALASKA				COLORADO			
Anchorage	100	KFOD KFIU	1230	Colorado Springs K-1	1 1000	KFUM	1270
Juneau Ketchikan	10 500	KGBU	1310 900	Denver K-11	500 100	KFEL KFUP	920 1310
	000	ROBO	,,,,		500	KFXF	920
ARIZONA					1000	KLZ	560
Flagstaff M-7	100	KFXY	1420		12500 500	KOA KPOF	830 880
Jerome M-6	100	KFXY KCRJ	1310	Edgewater K-10	50	KFXJ	1310
Phoenix N-6	500	KOY	1390	Fort Morgan J-11	100	KGEW	1200
Prescott M-6	500 100	KTAR KPJM	620 1500	Greeley J-11 Pueblo L-11	500 250	KFKA KGHF	880 1320
	100	KGAR	1370	Trinidad L-11	100	KĞİW	1420
Tucson O-7	500	KVOA	1260	Yuma J-12	50	KGEK	1200
ARKANSAS				CONNECTICUT			
Blytheville M-19	50	KLCN	1290	Bridgeport H-27	500	WICC	1190
Fayetteville M-16 Fort Smith N-16	1000	KUOA	1390	Hartford H-27	500	WDRC	1330
Fort Smith N-16	10000	KFPW	1340	Storrs H-28	50000 250	WTIC WCAC	1060 600
Hot Springs N-17 Little Rock N-17	10000	KTHS KGHI	1040 1200	30013 11-28	230	WCAC	000
Dietic Rock 14-17	250	KGJF	890	DELAWARE			
D	1000	KLŘA	1390	Wilmington J-26	250	WDEL	1120
Paragould M-18	100	KBTM	1200		100	WILM	1420
CALIFORNIA				DISTRICT OF	COLU	MBIA	
Berkeley J-2	100	KRE	1370	Washington J-26	250	WMAL	630
Burbank M-3	500	KELW	780		500	WRC	950
Culver City M-3 El Centro N-4	250 100	KFVD KXO	1000 1500	FLORIDA	100	WOL	1310
Fresno K-2	100	KMI	1210		1000	SUEL A	(20
Hayward J-1	100	KZM	1370	Clearwater R-24 Gainesville Q-24	1000 5000	WFLA WRUF	620 830
Hollywood M-3	1000 5000	KFWB KNX	950 1050	Jacksonville Q-24	1000	WIAX	900
Holy City K-1	100	KFQU	1420	Miami T-25 Miami T-25	1000 1000	WQAM WIOD	560
Inglewood M-3	500	KMĪC	1120	Orlando R-24	500	WDBO	1300 1120
Long Beach M-3	1000 1000	KFOX KGER	1250 1360	Pensacola Q-21	500	WCOA WSUN	1340
Los Angeles M-3	1000	KECA	1430	St. Petersburg S-24	1000	WSUN	620
	5000	KFI	640	Tampa R-24	1000 100	WDAE WMBR	1220 1370
	500 1000	KFSG KGEF	1120 1300	GEORGIA	100		10,0
	100	KGFJ	1200	Atlanta O-22	250	WGST	890
	1000	KHJ	900	Atlanta 0-22	5000	WSB	740
	500 500	KMPC KMTR	710 570	Augusta O-23	100	WRDW	1500
	500	KTM	780	Columbus O-22 Macon O-23	50 250	WRBL WMAZ	1200 890
O-1:1 1 1 1	1000	KTBI	1300	Rome N-22	100	WFDV	1370
Oakland J-1	250 500	KLS KLX	1440 880	Savannah O-24	500	WTOC	1260
	500	KROW	930	Thomasville Q-22	50	WQDX WRBI	1210
Pasadena M-3	50	KPPC	1210	Tifton P-23 Toccoa N-23	20 500	WTFI	1310 1450
Sacramento J-2	1000 100	KPSN KFBK	1360 1310	M			
San Bernardino M-3		KFXM	1210	HAWAII			
	100	KI-VIAI		I II a constante	F00	IZCN (D	1320
San Diego N-3	100 500	KFSD	1330	Honolulu	500	KGMB	
San Francisco J-1	100 500 250 1000	KFSD KGB KFRC	1330 610		1000	KGMB	940
	100 500 250 1000 500	KFSD KGB KFRC KFWI	1330 610 930	IDAHO	1000	KGU	940
	100 500 250 1000 500 100	KFSD KGB KFRC KFWI KGGC	1330 610 930 1420	IDAHO Boise G-5	1000	KGU KIDO	940 1250
	100 500 250 1000 500 100 7500 100	KFSD KGB KFRC KFWI KGGC KGO KJBS	1330 610 930 1420 790 1070	IDAHO Boise G-5 Idaho Falls G-7 Nampa G-5	1000 1000 250 50	KGU KIDO KID KFXD	940
	100 500 250 1000 500 100 7500 100 5000	KFSD KGB KFRC KFWI KGGC KGO KJBS KPO	1330 610 930 1420 790 1070 680	IDAHO Boise G-5 Idaho Falls G-7 Nampa G-5 Pocatello H-7	1000 1000 250 50 250	KGU KIDO KID KFXD KSEI	940 1250 1320 1420 900
	100 500 250 1000 500 100 7500 100	KFSD KGB KFRC KFWI KGGC KGO KJBS	1330 610 930 1420 790 1070	IDAHO Boise G-5 Idaho Falls G-7 Nampa G-5	1000 1000 250 50	KGU KIDO KID KFXD	940 1250 1320 1420

Carthage J-18								
Carthage J-18	ILLINOIS	Watta		Vana	Ottumwa I-17	100	WIAS	1420
Chicago I-20			WCAZ		Red Oak J-16	100	KICK	1420
Section WAF 920 25000 WBBM 770 1500 WCFL 1490 1400 WCFL 1490 WCFL	Chicago I-20	10000	KFKX	1020	Shenandoah J-16			890 930
25000 WCFL 970 WCFL 9					Sioux City I-15	1000	KSCJ	1330
South Series 1-20 South Series 1-20		25000	WBBM	<i>77</i> 0	waterioo 1-17	500	WMI	600
100 WEBC 1210 50000 WERN 870 5000 WERN 5000 WERN 5000 WERN 5000 WIA 5000 WI					KANSAS			
South Sout		100	WCRW	1210	11	100	KGNO	1210
Solid Wilso Solid Solid Wilso Solid Soli				1210 870	Kansas City K-16		WLBF	1420
Marhattan K-15 Solo KSAC Solo WIBD Solo WIBD Solo WIBD Solo WIBT Topeka K-16 1000 WIBW Solo WIBD Solo WIBT Topeka K-16 1000 WIBW Solo WIBD Solo WI		500	WGES	1360	Lawrence K-10		WREN	1220 1220
Sound Wight 1420 1000 Wight 1420							KSAC	580
100		5000	WJAZ	1490			WIBW	1050 580
Soon WLS S70 Soon WAGQ Soon Soon Soon Soon WAGQ Soon Soon WAGQ Soon Soon WAGG So								1300
Cicero I-20		5000	WLS	870	IZENITY IOIZ SZ			
Cicero I-20						=	****	
Decatur K-19		500	WPCC	560	Covington K-22 Honkinsville M-20			1490 940
Decature K-19	Cicero I-20			1210	Louisville L-21	10000	WHAS	820
Galesburg J-18 100 W/BE 1310 13	Decatur K-19				Paducah M-19			1200 1420
Harrisburg L-19		100	WIBL	1200	l addition in a	100	WIAD	1420
La Salle J-19			WEBO	1210	LOUISIANA			
La Salle J-19	Joliet I-19	100		1310	Monroe P-18	50	KMLB	1200
Quincy K-18 Rockford I-19 S00 WTAD 1440 Rock Island I-18 100 WHBF 1210 Springfield K-19 100 WCBS 1210 100 WTAX 1210 100 WTBX 130 1000 WWEMA 1200 1000 WGBM 130 1000 WCSH 9 1000 WCSH 9 1000 WCSH 1000 WCSSH 1000 WCSS	La Salle I-19	100	WKBB		New Orleans R-19	100	WABZ	1200 1250
Quincy K-18 Rockford I-19 S00 WTAD 1440 Rock Island I-18 100 WHBF 1210 Springfield K-19 100 WCBS 1210 100 WTAX 1210 100 WTBX 130 1000 WWEMA 1200 1000 WGBM 130 1000 WCSH 9 1000 WCSH 9 1000 WCSH 1000 WCSSH 1000 WCSS	Mooseheart I-19	20000	WJJD	1130		100	W IBO	1420
Rock Island I-18	Ouincy K-18	500 500	WMBD		j .	100	WJBW	1200
Springfield K-19	Rockford I-19	500	KFLV	1410			WWL	850
Tuscola K-20	Rock Island I-18 Springfield K-19	100	WHBF		Shreveport P-17	50	KRMD	1310
Tuscola K-20		100	WTAX	1210				1450 1310
INDIANA	Tuscola K-20		WDZ	1070		100	KWEA	1210
INDIANA	Zion I-20				MAINE	10000	KWKH	850
INDIANA						100	WRDO	1370
Anderson J-21	1517514514					100	WABI	1200
Connersville K-21		-1			Portland F-28		WLBZ	620 940
Culver I-20	Anderson J-21 Connersville K-21		WHBU WKBV		1 010.00.00	1000	W COII	740
Total Columb	Culver I-20	500	WCMA	1400	MARYLAND			
Cary I - 20	Evansville L-20	100	WGBF	1370	Baltimore J-26	10000	WBAL	1060
Cumberland J-25 100 WFBR 120		10000	wowo	1160		250	WCAO	600 1370
Indianapolis J-21	Gary I-20		WJKS				WFBR	1270
Massachusetts		1000	WFBM	1230	Cumberland J-25	100	WTBO	1420
La Porte I-20			WKBF		MASSACHUSET	TS		
Marrion J-21	La Porte I-20	100	WRAF	1200			WBIS	1230
South Bend I-20	Marion J-21	50	WIAK		7		WEEI	590
Terre Haute K-20	South Bend I-20	500	WSBT	1230				830 1500
TOWA	Terre Haute K-20	100	WBOW	1310		1000	WNAC	1230
IOWA					Fall River H-28	500 250	WSSH	1410 1450
Ames I-17 5000 WOI 640 New Bedford H-28 100 WLEY 137 Boone I-17 100 KFGQ 1310 Springfield H-27 15000 WBH 1310 Cedar Rapids I-18 100 KWCR 1310 Springfield H-27 15000 WBZ-A 99 Council Bluffs J-16 1000 KOIL 1260 Worcester G-28 100 WEPS 120 Davenport I-18 500 WWC 1000 WCC 100 WORC 120 Des Moines I-17 5000 WHO 1000 KFJY 1310 MICHIGAN MICHIGAN Des Moines I-16 100 KFJY 1310 Battle Creek I-21 50 WELL 142 Iowa City I-18 500 WSUI 880 Bay City H-22 500 WBCM 144 Marshalltown I-17 100 KFJB 1200 Berrien Springs I-20 1000 WKZO 55	IOWA					500	WLEX	1410
Boone I-17		5000	WOI	640	New Bedford H-28			1370 1310
Needham G-28 S00 WBSO S00 W	Boone I-17	100	KFGO	1310	Springfield H-27	15000	WBZ-A	990
Council Bluffs J-16 1000 KOIL 1260 1			KSO	1310	Needham G-28			920
Decorah H-18	Council Bluffs J-16	1000	KOIL	1260	HOICESTEL G-20	100	WORC	1200
100 KWLC 1270 MICHIGAN	Davenport 1-18 Decorah H-18		KGCA			250	WTAG	5 80
Fort Dodge I-16		100	KWLC	1270	MICHIGAN'			
Iowa City I-18 500 WSUI 880 Bay City H-22 500 WBCM 141 Marshalltown I-17 100 KFJB 1200 Berrien Springs I-20 1000 WKZO 55			KFIY		Battle Creek I-21		WELL	1420
Marshalltown I-17 100 KFJB 1200 Berrien Springs 1-20 1000 WK2O 55	Iowa City I-18	5 00	WSUI	880	Bay City H-22		WBCM	1410
	Marshalltown I-17 Muscatine I-18				Berrien Springs 1-20		WHDF	590 1370
				/				

Detroit H-22	1420 1380 1310 1280 1100
East Lansing H-21 1000 WKYZ 1240 NEW HAMPSHIRE Laconia G-28 100 WKAV 1270 WKAV 1270 WKAV 1270 WKAV 1270 WODD 1270 WODD 1270 WODD 1270 WODD 1270 WODD 1270 WODD 1270 WODD 1270 WIBM 1370 WEW JERSEY 100 WKAV 1270 WWBM 1370 WKAV 1270 1380 1310 1280	
East Lansing H-21 1000 WXYZ 1240 Flint H-22 1000 WKAR 1040 Flint H-22 1000 WFDF 1200 Grand Rapids H-21 500 WASH 1270 Jackson I-21 100 WIBM 1370 NEW JERSEY	1310 1280
East Lansing H-21 1000 WKAR 1040 NEW HAMPSHIRE Flint H-22 1000 WFDF 1200 WPDF 1200 Grand Rapids H-21 500 WASH 1270 500 WOOD 1270 Iackson I-21 100 WIBM 1370 NEW JERSEY	1280
Flint H-22 100 WFDF 1310 WPDF 1200 Grand Rapids H-21 500 WASH 1270 WOOD 1270 WEST 1270 WOOD 1270 WIBM 1370 Active Pools 1 27 500 WCAP	1280
Grand Rapids H-21 500 WASH 1270 NEW JERSEY Jackson I-21 100 WIBM 1370 NEW JERSEY	1280
Jackson I-21 100 WIBM 1370 Anton Dark I 37 500 WCAP	1280
	1100
Lapeer H-22 100 WMPC 1500 Atlantic City L-27 5000 WPG	1100
Marguette F-19 100 Camden I-26 500 WCAM	1280 1450
Royal Oak H-22 50 WEXL 1310 Jersey City I-27 300 WAAT	940
MINNESOTA 250 WHOM 250 WKBO	1450 1450
Ferrus Falls F-15 100 KGDE 1200 Newark I-27 1000 WAAM	1250 1250
Minneapolis G-17 7500 WCCO 810 250 WGCP 1000 WDGY 1180 250 WNJ 5000 WHDI 1180 5000 WOR	1450
	710 1250
Moorhood F-15 50 KCFK 1500 Red Bank I-27 100 WJBI	1210
Northfield G-17 1000 KFMX 1250 Trenton I-26 500 WOAX	1280
1000 WCAL 1250 St. Paul G-17 1000 WLB 1250 NEW MEXICO	
MISSISSIDDI 10000 KSIP 1400 Albuquerque N-7 250 KGGM	1230
MIODIODIFFI II D. A. M. CEI	1370 1180
Gulfport O-19 100 WGCM 1210 State College F-9 20000 ROB	1100
Jackson P-19 1000 WJDX 1270 NEW YORK	
Meridian P-20 500 WCOC 880 Tupelo N-20 100 WDIX 1500 Auburn H-25 100 WMBO	1310
Vicksburg P-18 300 WOBC 1360 Binghamton H-26 100 WNBF	1500 1400
MISSOURI 1000 WBBR	1300
500 WCGU	1400 1400
Columbia K-17 500 KFRU 530 II 500 WI TH	1400
lefferson City L-17 500 WOS 630	1500 1400
Joplin M-16 100 WMBH 1420 Buffalo H-24 1000 WBEN 100 WFRR	900 1310
100 KWKC 1370 1000 WGR	550
1000 WDAF 610 5000 WKBW 500 WHB 860 1000 WMAK	1480 1040
50 WSVS	1370
100 KGBX 1310 Canton F-26 300 WCAB	1220 1210
100 KEWE 1200 Glens Falls G-27 50 WBGF	1370
50000 KMOX 1090 Ithaca H-25 1000 WEAT	1270 1210
1000 KMZ 1350 Jamajca H-27 100 WMRJ	1210
1000 WEW 760 Jamestown H-24 23 WOCE Long Island City I-27 100 WLBX	1210 1500
MONTANA 100 WIL 1200 Long Beach 1-27 100 WCLB New York City 1-27 5000 WABC	1500 860
Billings F-9 1000 KGHL 950 250 WAW2	1350
Butte F-7 500 KGIR 1360 5000 WBOQ	860 1350
Kalispell D-7 100 KGEZ 1310 50000 WEAF	660
Missoula E-7 100 KGVO 1420 500 WEVD Wolf Point F-11 100 KGCX 1310 250 WGBS	1300 600
NEBRASKA 1000 WHAP 250 WHN	1300 1010
Clay Center 1000 KMMI 740 30000 WJZ	760
Lincoln J-15 5000 KFAB 770 250 WKBQ 100 KFOR 1210 5000 WLWL	1350 1100
500 WCAJ 590 500 WMCA	570
Norfolk I-15 1000 WJAG 1060 250 WMSG North Platte J-13 500 KGNF 1430 500 WNYC	1350 570
Omaha J-15 500 WAAW 660 1000 WOV	1130 1010
1000 WOW 590 250 WPAP Ravenna J-14 100 KGFW 1310 500 WPCH	810
Scottsbluff I-11 100 KGKY 1500 250 WQAO	1010 1010
York J-15 500 KGBZ 930 250 WKN1	1010

		WDOD	1270	16 11 5 1	100	Koos	1370
Patchogue I-27	100 500	WPOE WOKO	1370 1440	Marshfield F-1 Medford G-2	50	KMED	1310
Poughkeepsie H-27 Rochester G-25	5000	WHAM	1150	Portland E-3	5000	KEX	1180
Rochester G-25	500	WHEC	1440	l orthand 2 o	100	KBPS	1420
Saranac Lake F-26	50	WNBZ	1290 790		500	KFJR KGW	1300
Schenectady G-27	50000	WGY	790		1000	KGW	620
Syracuse G-25	1000	WFBL	1360	l	1000	KOIN	940
	250	WMAC	570		500	KTBR	1300 1060
T 0.35	250	WSYR	570		500 100	KWJJ KXL	1420
Troy G-27	500 10	WHAZ WHDL	1300 1420		100	KAL	1420
Tupper Lake F-26 Utica G-26	100	WIBX	1200	PENNSYLVANI	A		
Woodside I-27	100	WWRL	1500	Allentown I-26	250	WCBA	1440
Yonkers I-27	100	WCOH	1210	Allentown 1-20	250	WSAN	1440
10				Altoona I-25	100	WFBG	1310
	7274			Carbondale H-26	10	WNBW	1200
NORTH CAROL	JINA			Elkins Park I-26	50	WIBG	930
Asheville M-23	1000	WWNC	570	Elkins Park I-26 Erie H-24	30	WEDH	1420
Charlotte M-24	5000	WBT	1080	Grove City 1-26	100	WSAJ	1310
Gastonia M-24	100	WSOC	1210	Harrisburg I-25	500	WBAK	1430 1200
Greensboro M-24	500	WBIG	1440	1	100 500	WCOD WHP	1430
Raleigh M-25	1000	WPTF WRBT	680 1370	Johnstown J-24	100	WIAC	1310
Wilmington N-26 Winston-Salem M-24	100 100	WSJS	1310	Lancaster I-25	100	W JAC WGAL	1310
winston-Salem M-24	100	waja	1310	Lancascer 1-25	100	WKJC	1200
NODMII DAILO				Lewisburg I-26	100	WIĐU	1210
NORTH DAKO	IΑ			Oil City I-24	500	WLBW	1260
Bismarck F-13	1000	KFYR	550	Philadelphia I-26	10000	WCAU	1170
Devils Lake E-14	100	KDLR	1210		100	WELK	1370
Fargo F-15	1000	WDAY	940	l .	500 500	WFAN WFI	610 560
Grand Forks E-15	100	KFJM KGCU	1370 1200	l	100	WHAT	1310
Mandan F-13 Minot E-13	100 100	KLPM	1420	1	500	WIP	610
Minot E-13	100	KLPIVI	1420	l	500	WLIT	560
01110				l	100	WPEN	1500
OHIO					250	WRAX	1020
Akron I-23	1000	WADC	1320	1	50	WTEL	1310
Canton I-23	10	WHBC	1200	Pittsburgh J-24	50000	KDKA	980
Cincinnati K-22	100	WFBE	1200		500 1000	KQV WCAE	1380
	1000 50000	WKRC WLW	550 700		1000	WLAE	1220 1290
	500	WSAI	1330		100	WJAS WMBJ	1500
Cleveland I-23	500	WGAR	1450	Reading I-26	50	WRAW	1310
Cleveland 1-25	1000	WHK	1390	Scranton H-26	250	WGBI	880
	500	WJAY WTAM	610		250	WQAN WPSC	880
	50000	WTAM	1070	State College I-25 Washington J-24 Wilkes-Barre I-26	500	WPSC	1230
Columbus J-22	500	WAIU	640	Washington J-24	100	WNBO	1200
	500	WCAH	1430	Wilkes-Barre 1-26	100 100	WBAX WBRE	1210 1310
	750 100	WEAO WSEN	570 1210	Williamsport I-25	50	WRAK	1370
Dayton J-22	200	WSMK	1380	Williamspore 1-20	00	********	20,0
Mansfield J-22	100	WIW	1210	DODTO DICO			
Mount Orab K-22	100	WJW WHBD	1370	PORTO RICO			
Steubenville J-23	50	WIBR	1420	San Juan W-34	500	WKAQ	890
Toledo I-22	500	WSPD	1340	l			
Youngstown I-23	500	WKBN	570	RHODE ISLAN	D		
Zanesville J-23	100	WALR	1210			11/1 4TD 4	1500
				Newport H-28	100	WMBA WPAW	1500 1210
OKLAHOMA				Pawtucket H-28	100 100	WDWF	1210
Alva M-14	100	KGFF	1420	Providence H-28	250	WEAN	780
Chickasha N-14	250	KOCW	1400	I .	250	WJAR	890
Elk City N-13	100	KGMP	1210	Į	100	WLSI	1210
Enid M-15	100	KCRC	1370	i			
Norman N-15	500	WNAD	1010	SOUTH CAROL	INA		
Oklahoma N-15	5000	KFJF KFXR	1480		500	wcsc	1360
	100	KEXR	1310 1370	Charleston O-25 Columbia N-24	500	WIS	1010
	100 1000	KGFG WKY	900	Spartanburg N-23	100	WSPA	1420
Ponca City M-15	1000	WBBZ	1200	Spartanioni g			0
S. Coffeyville M-16	500	KGGF	1010	SOUTH DAKO	ГΑ		
Tulsa M-16	5000	KVOO	1140	4	500	KFDY	550
				Brookings H-15 Huron H-14	100	KGDY	1200
OREGON				Mitchell H-14	100	KGDA	1370
Astoria D-2	100	KFJI	1370	Pierre G-13	200	KGFX	580
Corvallis E-2	1000	KOAC	550	Rapid City H-12	100	WCAT	1200
Eugene F-2	100	KORE	1420	Sioux Falls 1-15	2000	KSOO	1110

Vermillion I-15	500	KUSD	890	Petersburg L-26	100	WLBG	1200
Watertown G-15 Yankton I-15	100 1000	KGCR WNAX	1210 570	Richmond K-26	100	WMBG	1210
	1000	WINAA	3/0	Roanoke L-24	5000 250	WRVA WDBJ	1110 930
TENNESSEE Bristol L-23	100	WOPI	1500	WACHINGTON	250	WRBX	1410
Chattanooga N-21	1000	WDOD	1280	WASHINGTON		Wwn o	
Knoxville M-22	50 1000	WFBC WNOX	1200 560	Aberdeen D-2 Bellingham C-3	75 100	KXRO KVOS	1310 1200
	100	WROL	1310	Everett C-3	50	KFBI.	1370
Lawrenceburg N-20 Memphis M-19	500 500	WOAN WGBC	600 1430	Lacey D-3 Longview D-3	10 100	KGY KUJ	1200 1500
wieniphis wi-19	100	WHBQ	1370	Longview D-3 Pullman E-5	1000	KWSC	1220
	500 500	WMC WNBR	780 1430	Seattle C-3	100 5000	KFQW KJR	1420 970
	500	WREC	600		1000	KOL	1270
Nashville M-20	5000	WLAC	1470		1000 100	KOMO KPCB	920 650
	5000 5000	WSM WTNT	650 1470		50	KRSC	1120
Springfield M-20	100	WSIX	1210		1000 100	KTW KVL	1270 1370
Union City M-19	100	WOBT	1310		500	KXA	570
TEXAS				Spokane D-5	100	KFIO	1120
Abilene P-13 Amarillo N-12	100 1000	KFYO KGRS	1420 1410		1000 5000	KFPY KGA	1340 1470
	250	WDAG	1410	T	1000	KHQ	590
Austin Q-14 Beaumont R-17		KUT KFDM	1500 560	Tacoma D-3	500 1000	KMO KVI	860 760
Brownsville U-15	500	KWWG	1260	Wenatchee D-4	50	KPQ	1500
Brownwood P-14 College Sta. Q-15	100 500	KGKB WTAW	1500 1120	Yakima D-4	50	KIT	1310
Corpus Christi S-14	100	KGFI	1500	WEST VIRGIN	IA		
Dallas P-15		KRLD WFAA	1040 800	Bluefield L-24	100	WHIS	1420
		WRR	1280	Charleston K-23	250	WOBU	580
Dublin P-14	100	KFPL	1310	Fairmont J-24 Huntington K-23	250 250	WMMN WSAZ	890 580
El Paso P-9	100 100	KTSM Wdah	1310 1310	Wheeling J-24	5000	WWVA	1160
Fort Worth P-15	100	KFJZ KTAT	1370	WISCONSIN			
	1000 10000	WBAP	1240 800	Eau Claire G-18	1000	WTAQ	1330
Galveston R-16	100	KFLX	1370	Fond du Lac H-19	100	KFIZ	1420
Greenville O-15	500 15	KFUL KFPM	1290 1310	Green Bay G-19 Janesville I-19	100 100	WHBY	1200
Greenville O-15 Harlingen T-14	500	KRGV	1260	La Crosse H-18 Madison H-19	1000	WCLO WKBH	1200 1380
Houston R-16	1000	KPRC KTLC	920 1310	Madison H-19	750 500	WHA	940
	500	KTRH	1120		250	WÎBA WISJ	1280 780
San Angelo Q-13	100 100	KXYZ KGKL	1420	Manitowoc H-20	100	WOMT	1210
San Antonio R-14	100	KMAC	1370 1370	Milwaukee H-20	250 250	WHAD WISN	1120 1120
	100	KONO KTAP	1370	D 17.10	1000	WTMI	620
		KTSA	1420 1290	Poynette H-19 Racine I-20	100 100	WIBU WRJN	1210 1370
Waco Q-15	50000	WOAI	1190	Sheboygan H-20	500	WHBL	1410
Wichita Falls O-14	1000 250	WACO KGKO	1240 570	Stevens Pt. G-19 Superior F-17	2000 1000	WLBL WEBC	900 1290
UTAH					2000	DDC	12,0
Ogden I-7	500	KLO	1400	WYOMING	• • • •	****	
Salt Lake City I-7	1000	KDYL	1290	Casper H-10	100	KDFN	1210
VERMONT	5000	KSL	1130	CAN	ADA		
Burlington F-27	100	WCAX	1200	ALBERTA			
Rutland G-27	100	WSYB	1500		500	CEAC	690
St. Albans F-27 Springfield G-27	100	WQDM WNBX	1370 1200	Calgary B-7	500	CFAC CFCN	690
	10	WINDA	1200		500	CHCA	690
VIRGINIA					500 500	CJCJ CNRC	690 690
Alexandria J-26 Arlington J-25		WJSV	1460	Edmonton A-8	250	CHMA	580
Danville L-25		NĀA WBTM	690 1370		500 500	CJCA CKUA	93 0 580
Emory L-23	100	WEHC	1200		500	CNRE	930
Lynchburg L-25 Newport News L-26	100 '	WLVA WGH	1370	Lethbridge C-8 Red Deer A-8	50 1000	CJOC	1120 840
Norfolk L-26	500	WPOR	1310 780	1.00 0001 11-0	1000	CKLC	840
	500	WTAR	780		1000	CNRD	840

BRITISH	***			Regina C-12	500	CHWC	960
	Watts		Kcys.	Negma C-12	500	CIBR	960
COLUMBIA				l .	500	CJBR CKCK	960
Chilliwack B-3	.5	CHWK	1210	Section B 11	500	CNRR	960
Kamloops B-5 Sea Island	15 50	CFJC CJOR	1120 1210	Saskatoon B-11	500 500	CFQC CNRS	910 910
Vancouver B-3	50	CHLS	730	Yorkton C-13	500	CJGX	630
	50	CKCD	730	l l		•	
	50 50	CKFC	730 730	HAITI			
	100	CKMO	730	Port au Prince X-30	1000	HHK	920
	500	CKWX CNRV	1030	VENTOO			
Victoria C-3	500	CFCT	630	MEXICO	350	WEE	015
MANITOBA				Chihuahua, Chih. R-9 Ciudad Juarez P-9	250 1000	XFF	915 750
Brandon D-14	500	CKX	540	-	101	XEQ XEJ XEA	857
Winnipeg D-15	5000 5000	CKY CNRW	780 780	Guadalajara, Jal. X-10	101	XEA	1200
	5000	CINKW	780	Jalapa, Ver. Y-14	350 105	XFC XEY	805 547
NEW BRUNSW				Guadalajara, Jal. X±10 Jalapa, Ver. Y-14 Merida, Yuc. X-19 Mexico City Y-13	1000	XEB	1030
Fredericton D-29	_50	CFNB	1210	Mexico City 1-10	2000	XEG	829
Moncton D-30	500 50	CNRA CFBO	630 890		101	XEK	1000
St. John D-30	50	CFBU	090	1	1000 101	XEN	732 674
NEWFOUNDLA				Į.	101	XEO XER	984
St. Johns A-35	500	8WMC	720		1000	XETA	1100
NOVA SCOTIA			125		5000	XEW	780
Glace Bay C-32	10000	VAS	685	1	500 500	XEX XEZ	1190 588
Glace Bay C-32 Halifax E-31	500	ĆHNS	910		2000	XFG	638
	500	CNRH	910		1000	XFI	818
Sydney C-32 Wolfville D-31	50 50	CJCB CKIC	880 930		500	XFX	860
	00	Citie	,,,,	Monterrey, N. L. U-13	500 101	XFZ XEH	859 1132
ONTARIO Chatham H-22	100	CFCO	1210		1500	XET	890
Cobalt E-23	15	CKMC	1210	Morelia, Mich. Y-12	101	XEI	1000
Hamilton H-24	10	CHCS	880	Oaxaca, Oax. AA-14 Puebla Z-13	105 101	XEF XEV	1132 1035
	50	CHML	880	Revnosa Tams T-14	10000	XED	960
Kingston G-25	50 500	CKOC CFRC	880 930	Reynosa, Tams. T-14 Saltillo, Coah. U-12	10	XEL	1091
London H-23	1000	CJGC CNRL	910	Tampico, Tams. W-14	501	XEM	841
	500	CNRL	910	Toluco, Mex. Y-12	500 50	XES XEC	890 1133
Midland G-23	50 50	CKPR CFCH	930 600	Veracruz, Ver. Y-14	500	XETF	680
North Bay Ottawa F-25	100	CKCO	890		50	XETF XEU	800
	500	CNRO	600	Villahermosa, Tab.	350	XFE	632
Prescott F-25	50	CFLC	1010	CIDA			
Preston G-23 Toronto G-24	50 500	CKPC CFCA	1210 840	CUBA Buen Retiro	50	CMCO	660
10101110 3-24	500	CFCL	580	Caibarien W-25	250	CMCO CMHD	920
	4000	CFRB	960	Camaguev	50	CMJC	135
	5000 500	CJSC CKCL	690 580	Cienfuegos W-25	200	CMHJ	115
	5000	CKGW	690	Colon W-24 Havana W-23	300 150	CMGA CMBC	83 o 1130
	500	CKNC	580	navana W-23	150	CMBD	995
	500	CNRT	840		150	CMBS CMBT CMBY	790
	4000 5000	CNRX CPRY	960 690	1	150	CMBT	1070
Waterloo G-23	50	CKCR	1010		200 150	CMBZ	1405 1010
Wingham G-23	25	10-BP	1200		500	CMC	840
PRINCE EDWA	RD IS	LAND			100	CMCA	1225
Charlottetown C-31	250	CFCY	960	l	150 250	CMCB CMCF CMCH	1070 900
	30	CHCK	960		15	CMCH	1285
Summerside C-31	100	CHGS	1120		1000	CMCQ	955
QUEBEC					5000	CMK	730
Montreal E-26	500	CFCF	1030	l .	150 1000	CMQ CMW	1130 588
	5000 5000	CHYC CKAC	730 730		1000	CMX	910
	5000	CNRM CHRC	730	Holguin		CMKX	1240
Quebec D-27	100	CHRC	880	Marianao V 29	150	CMBW	1010
	22 50	CKCI	880 880	Santiago X-28	150	CMKC CMKD	1045 1100
	50 50	CNRQ	880	Tuinucu	500	CMHC	790
SASKATCHEW							
Fleming C-13	500	CJRW	600	COSTA RICA	F.0	mr.c	===
Moose Jaw C-11	500	CJRM	600	San Jose FF-23	50	TIC	750
	= 11						

CFAC 690	[CJSC 690		CMHD 920	- 11	KFAB 770	1
Calgary, Alta. CFBO 890	Toronto, Ont.		Caibarien, Cuba		Lincoln, Nebr.	-
St. John, N. B.	Montreal, Que.		Cienfuegos, Cuba	- 11	KFBB 1280 Great Fls., Mont.	
CFCA 840	CKCD 730		CMJC 1350		KFBK 1310	
Toronto, Ont.	Vancouver, B.C.		Camaguey, Cuba		Sacramento, Cal.	
CFCF 1030 Montreal, Que.	CKCI 880 Quebec, Que.		CMK 730 Havana, Cuba	- 1	KFBL 1370 Everett, Wash.	
CFCH 1200	II CKCK 960		CMKC 1045		KFDM 560	
North Bay, Ont.	Regina, Sask.		Santiago, Cuba		Beaumont, Tex.	
CFCL 580 Toronto, Ont.	CKCL 580 Toronto, Ont.		CMKD 1100		RFDY 550	1
CFCN 690	CKCO 890		Santiago, Cuba CMKX 1240		Brookings, S.D. KFEL 920	
Calgary, Alta.	Ottawa, Ont.		Holguin, Cuba		Denver, Colo.	
CFCO 1210 Chatham, Ont.	CKCR 1010 Waterloo, Ont.		CMQ 1130		KFEQ 680	
CFCT 630	CKCV 880		Havana, Cuba CMW 590	[St. Joseph, Mo. KFGQ 1310	
Victoria, B. C.	II Quebec, Que.		Havana, Cuba		Boone, Iowa	
CFCY 960 Ch'lottet'n, P.E.I.	CKFC 730		CMX 910	- 1	KFH 1300	
CFJC 1120	Vancouver, B.C. CKGW 690		Havana, Cuba CNRA 630		Wichita, Kansas KFI 640	
Kamloops, B. C.	Toronto, Ont.		Moneton, N.B.		Los Angeles, Cal.	
CFLC 1010	CKIC 930		CNRC 690		KFIO 1120	
Prescott, Ont. CFNB 1210	Wolfville, N.S. CKLC 840		Calgary, Alta.		Spokane, Wash. KFIU 1310	
Fredericton, N.B.	Red Deer, Alta.		Red Deer, Alta.		Juneau, Alaska	
CFQC 910	CKMC 1210		CNRE 930		KFIZ 1420	
Saskatoon, Sask. CFRB 960	Cobalt, Ont.		Edmonton, Alta.		Fond du Lac, Wis KFJB 1200	
Toronto, Ont.	Vancouver, B.C.		Halifax, N. S.		Marshalltown, Ia.	ŀ
CFRC 930	CKNC 580		CNRL 910		KFJF 1480	
Kingston, Ont. CHCA 690	Toronto, Ont.		London, Ont. CNRM 730	!!	Oklahoma City KFJI 1370	
Calgary, Alta.	Hamilton, Ont.		Montreal, Que.	11	KFJI 1370 Astoria, Ore.	
CHCK 960	CKPC 1210		CNRO 600		KFJM 1370	
Ch'lottet'n, P.E.I.	Preston, Ont. CKPR 930		Ottawa, Ont. CNRQ 880		Grd. Forks, N.D. KFJR 1300	
Hamilton, Ont.	Midland, Ont.		Quebec, Que.		Portland, Ore.	
CHCT 840	CKUA 580	-	CNRR 960		KFJY 1310	
Red Deer, Alta. CHGS 1120	Edmonton, Alta.		Regina, Sask. CNRS 910	1	Fort Dodge, Ia.	
Sum'rside, P.E.I.	Vancouver, B.C.		Saskatoon, Sask.	- 11	KFJZ 1370 Ft. Worth, Tex.	
CHLS 730	CKX 540		CNRT 840		KFKA 880	
Vancouver, B.C.	Brandon, Man. CKY 780		Toronto, Ont.		Greeley, Colo.	
CHMA 580 Edmonton, Alta.	CKY 780 Winnipeg, Man.		Vancouver, B.C.	- 11	KFKB 1050 Milford, Kansas	
CHML 880	CMBC 1130		CNRW 780		KFKU 1220	
Hamilton, Ont. CHNS 910	Havana, Cuba CMBD 995		Winnipeg, Man. CNRX 960		Lawrence, Kans.	
Halifax, N.S.	Havana, Cuba		Toronto, Ont.	- 1	KFKX 1020 Chicago, Ill.	
CHRC 880	CMBS 790		CPRY 690		KFLV 1410	
Quebec, Que. CHWC 960	Havana, Cuba CMBT 1070		Toronto, Ont.		Rockford, Ill. KFLX 1370	
Regina, Sask.	Havana, Cuba		Port au Prince, H.	1	KFLX 1370 Galveston, Tex.	
CHWK 1210	CMBW 1010		KBPS 1420		KFM X 1250	
Chilliwack, B.C. CHYC 730	Marianao, Cuba CMBY 1405		Portland, Ore. KBTM 1200		N'thfield, Minn.	
Montreal, Que.	Havana, Cuba		KBTM 1200 Paragould, Ark.		KFNF 890 Shenandoah, Ia.	
CJBR 960	CMBZ 1010		KCRC 1370		KFOR 1210	
Regina, Sask. CJCA 930	Havana, Cuba CMC 840		Enid, Okla		Lincoln, Nebr.	
Edmonton, Alta.	Havana, Cuba	1	Jerome, Ariz.		KFOX 1250 Long Beach, Cal.	
CJCB 880	CMCA 1225		KDB 1500		KFPL 1310	
Syndey, N.S.	Havana, Cuba	I	S. Barbara, Cal.		Dublin, Texas	
CJCJ 690 Calgary, Alta.	CMCB 1070 Havana, Cuba		KDFN 1210 Casper, Wyo.	- 1	KFPM 1310 Greenville, Tex.	
CJGC 910	CMCF 900		KDKA 980		KFPW 1340	
London, Ont.	Havana, Cuba		Pittsburgh, Pa.		Ft. Smith, Ark.	
CJGX 630 Yorkton, Sask.	CMCH 1285 Havana, Cuba		KDLR 1210 Devils Lake, N.D.	ll l	KFPY 1340 Spokane, Wash.	
CJOC 1120	CMCO 660		KDYL 1290		KFQD 1230	
Lethbridge, Alta.	BuenRetiro, Cuba		Salt Lake City		Anchorage, Alas.	
CJOR 1210 Sea Island, B.C.	CMCQ 955 Havana, Cuba		KECA 1430 Los Angeles, Cal.	·	KFQU 1420 Holy City, Cal.	
CJRM 600	CMGA 830		KELW 780		KFQW 1420	
Moose Jaw, Sask.	Colon, Cuba		Burbank, Cal.		Seattle, Wash.	
CJRW 600 Fleming, Sask	CMHC 790 Tuinucu, Cuba		KEX 1180 Portland, Ore.	H	KFRC 610 San F'ncisco, Cal.	
			2 5. 514114, 016.		Dan F Heises, Car.	
				II		

KFRU 630	KGFF 1420	l li	KIDO 1250	11	KPJM 1500	
Columbia, Mo.	Alva, Okla.		Boise, Idaho		Prescott, Ariz.	
KFSD 600	KGFG 1370 Oklahoma City		KIT 1310 Yakima, Wash.		KPO 680 San F'neisco, Cal.	
San Diego, Cal. KFSG 1120	KGFI 1500		KJBS 1070		KPOF 880	
Los Angeles, Cal.	Corpus Ch'sti, Tex		San F'ncisco, Cal.		Denver, Colo.	
KFUL 1290	KGFJ 1200		KJR 970		KPPC 1210	
Galveston, Tex. KFUM 1270	Los Angeles, Cal. KGFK 1500		Seattle, Wash. KLCN 1290		Pasadena, Cal. KPQ 1500	
Col Sper Cole	Moorhead, Minn.		Blytheville, Ark.	- 1	Wenatchee, Wash	
Col. Spgs., Colo. KFUO 550	KGFL 1370		KLO 1400		KPRC 920	
St. Louis, Mo.	Raton, N. M. KGFW 1310		Ogden, Utah		Houston, Texas	
KFUP 1310	KGFW 1310		KLPM 1420		KPSN 1360	
Denver, Colo.	Ravenna, Nebr.		Minot, N. Dak. KLRA 1390		Pasadena, Cal. KQV 1380	
KFVD 1000 Culver City, Cal.	KGFX 580 Pierre, S. D. KGGC 1420	11	KLRA 1390 Little Rock, Ark.		Pittsburgh, Pa.	
KFVS 1210	KGGC 1420		KLS 1440		KQW 1010	
Cape Gir'rd'u, Mo	San F'ncisco, Cal. KGGF 1010		Oakland, Cal.		San Jose, Cal.	
KFWB 950	KGGF 1010		KLX 880		KRE 1370	
Hollywood, Cal.	Coffeyville, Kans. KGGM 1230		Oakland, Cal. KLZ 560		Berkeley, Cal. KREG 1500	
KFWF 1200 St. Louis, Mo.	Alb'a'raya N M		Denver, Colo.	- 11	Santa Ana Cal	
KFWI 930	Alb'q'rque, N.M. KGHF 1320		KMA 930		KRG V 1260	
San F'ncisco, Cal.	Pueblo, Colo.		Shenandoah, Ia.		KRGV 1260 Harlingen, Texas KRLD 1040	
KFXD 1420	KGHI 1200		KMAC 1370		KRLD 1040	
Nampa, Idaho	Little Rock, Ark. KGHL 950		San Antonio, Tex. KMBC 950		Dallas, Texas KRMD 1310	
Denver, Colo.	Billings, Mont.		Kan. City. Mo.		Shreveport, La.	
KFXJ 1310	H KC1G 1320		KMED 1310		KROW 930	
Edgewater, Colo.	Twin Falls, Ida.		Medford, Ore.		Oakland, Cal.	
KFXM 1210	H KCIR 1360		KM1C 1120		KRSC 1120	
San Ber'd'no,Cal KFXR 1310	Butte, Mont. KGIW 1420		Inglewood, Cal. KMJ 1210		Seattle, Wash. KSAC 580	
Oklahoma City	KGIW 1420 Trinidad, Colo.		Fresno, Cal.		KSAC 580 Manh'tt'n, Kans. KSCJ 1330	
KFXY 1420 Flagstaff, Ariz. KFYO 1420	KGIX 1420		KMLB 1200		KSCJ 1330	
Flagstaff, Ariz	Las Vegas, Nev. KGIZ 1500		Monroe, La.		Sioux City, Ia.	
KFYO 1420	KGIZ 1500	l li	KMMJ 740 Clay Ctr., Nebr.		KSD 550 St. Louis, Mo.	
Abilene, Texas KFYR 550	Grant City, Mo.		KMO 860		KSEI 900	
Bismarck, N.D.	Little Rock, Ark.		Tacoma, Wash.		Pocatello, Idaho	
KGA 1470	KGKB 1500		KMOX 1090		KSL 1130	
Spokane, Wash.	Brownwood, Tex. KGKL 1370		St. Louis, Mo. KMPC 710		Salt Lake City KSMR 1200	
KGAR 1370 Tucson, Ariz.	KGKL 1370		Los Angeles, Cal.		Santa Maria, Cal.	
KGB 1330	San Angelo, Tex. KGKO 570		KMTR 570		KSO 1380	
San Diego, Cal.	Wichita Fils., Tex		Los Angeles, Cal.		Clarinda, Iowa	
KGBU 900	KGKX 1420		KNX 1050	- 1	KSOO 1110	
Ketchikan, Al'ka. KGBX 1310	Sand Point, Ida. KGKY 1500		Los Angeles, Cal. KOA 830		Sioux Falls, S.D. KSTP 1460	
C+ Incomb Ma	Scottsbluff, Nebr.		Denver, Colo.		St. Paul, Minn.	
KGBZ 930 York, Nebr. KGCA 1270	Scottsbluff, Nebr. KGMB 1320		KOAC 550		KTAB 560	
York, Nebr.	Honolulu, T. H.		Corvallis, Ore.		San F'ncisco, Cal.	
KGCA 1270	KGMP 1210		KOB 1180 State Coll., N.M.		KTAP 1420 San Antonio, Tex.	
Decorah, Iowa KGCR 1210	Elk City, Okla. KGNF 1430		KOCW 1400		KTAR 620	
Watertown, S.D.	No. Platte, Neb.		Chickasha, Okla.		Phoenix, Ariz.	
KGCU 1200	II KCNO 1910		KOH 1380		KTAT 1240	
Mandan, N.D.	Dodge City, Kans. KGO 790 San F'ncisco, Cal. KGRS 1410		Reno, Nevada		Ft. Worth, Tex. KTBI 1300	
KGCX 1310 Wolf P't, Mont. KGDA 1370	San E'neisco Cal		KOIL 1260 Council Bluffs, Ia.		Los Angeles, Cal.	
KGDA 1370	KGRS 1410		KOIN 940		KTBR 1300	
Mitchell, S. D.	Amarillo, Texas		Portland, Ore.		Portland, Ore.	
	NGU 940		KOL 1270		KTBS 1450	
Ferg's F'lls, Minn _	Honolulu, Hawaii KGVO 1420		Seattle, Wash. KOMO 920		Shreveport, La. KTHS 1040	
KGDM 1100 Stockton, Cal.	Missoula, Mont.		Seattle, Wash.		Hot Spgs., Ark.	
KGDY 1200 1	KGW 620		KONO 1370			
Huron, S. D.	Portland, Ore.		San Antonio, Tex		Houston, Texas	
KGEF 1300	KGY 1200		KOOS 1370 Marshfield, Ore.		KTM 780 Los Angeles, Cal.	
Los Angeles, Cal. KGEK 1200	Lacey, Wash. KHJ 900		KORE 1420		KTNT 1170	
Yuma, Colo.	Los Angeles, Cal.		Eugene, Ore.		Muscatine, Iowa	
KGER 1360	II KHO 590		KOY 1390		KTRH 1120	
Long Beach, Cal. KGEW 1200	Spokane, Wash.		Phoenix, Ariz.		Houston, Texas	
KGEW 1200	KICK 1420	l l	KPCB 650 Seattle, Wash.		KTSA 1290 San Antonio, Tex.	
Ft. Morgan, Colo. KGEZ 1310	Red Oak, Iowa.		Seattle, Wash.		Dan minomio, rex.	
KGEZ 1310 Kalispell, Mont.	Idaho Falis, Ida.					
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	The second secon	- 1				

KTSL 1310	WABC 860	WCAJ 590	WDEL 1120
Shreveport, La.	New York City	Lincoln, Nebr.	Wilmington, Del.
KTSM 1310 El Paso, Texas	WABI 1200 Bangor, Maine	WCAL 1250 Northfield, Minn.	WDGY 1180
KTW 1270	WABZ 1200	WCAM 1280	Minneap., Minn. WDIX 1500
Seattle, Wash.	New Orleans, La.	Camden, N. J.	Tupelo, Miss.
KUJ 1500	WACO 1240	WCAO 600	WDOD 1280
Longview, Wash. KUOA 1390	Waco, Texas WADC 1320	Baltimore, Md. WCAP 1280	Chattan'ga, Tenn WDRC 1330
Fayetteville, Ark.	Akron, Ohio	II Asbury Pk., N. J.	Hartford, Conn.
KUSD 890	WAIU 640	R WCAI 1200	WDSU 1250
Vermillion, S. D KUT 1500	Columbus, Ohio WALR 1210	Rapid City, S. D. WCAU 1170	New Orleans, La. WDWF 1210
Austin, Texas	Zanesville, Ohio	Philadelphia, Pa.	Providence, R. I.
KVI 760	II WAPI 1140	WCAX 1200	WDZ 1070
Tacoma, Wash. KVL 1370	Birmingham, Ala. WASH 1270	Burlington, Vt. WCAZ 1070	Tuscola, Ill. WEAF 660
Seattle, Wash.	Gr. Rapids, Mich.	Carthage, Ill.	New York City
KVOA 1260	WAWZ 1350	WCBA 1440	WEAI 1270
Tucson, Arizona KVOO 1140	New York City WBAA 1400	Allentown, Pa.	Ithaca, N. Y.
KVOO 1140 Tulsa Okla	WBAA 1400 Lafayette, Ind.	WCBD 1080 Zion, Ill.	WEAN 780 Providence, R. I.
Tulsa, Okla KVOS 1200	WBAK 1430	WCBM 1370	WEAO 570
Bellingh'm, Wash.	Harrisburg, Pa.	Baltimore, Md.	Columbus, Ohio
KWCR 1310 Cedar Rapids, Ia.	Baltimore, Md.	WCBS 1210 Springfield, Ill.	WEBC 1290
KWEA 1210	WBAP 800	WCCO 810	Superior, Wis. WEBQ 1210
Shreveport, La.	Fort Worth, Tex.	Minneap., Minn.	Harrisburg, Ill.
KWG 1200 Stockton, Cal.	WBAX 1210 Wilkes-Barre, Pa.	WCDA 1350 New York City	WEBR 1310
KWJJ 1060	WBBC 1400	WCFL 970	Buffalo, N. Y. WEDC 1210
Portland, Ore.	Brooklyn, N. Y. WBBM 770	Chicago, Ill.	Chicago, Ill.
KWK 1350 St. Louis, Mo.	Chicago, Ill.	WCGU 1400	WEDH 1420
KWKC 1370	WBBR 1300	Brooklyn, N. Y. WCH1 1490	Erie, Pa. WEEI 590
Kansas City, Mo.	Brooklyn, N. Y.	Chicago, Ill.	Boston, Mass.
KWKH 850 Shreveport, La.	WBBZ 1200 Ponca City, Okla.	WCKY 1490	WEHC 1200
KWLC 1270	WBCM 1410	Covington, Ky. WCLB 1500	Emory, Va. WEHS 1420
Decorah, Iowa	Bay City, Mich.	Long Beach, N.Y.	Cicero, Ill.
KWSC 1220 Pullman, Wash.	WBEN 900 Buffalo, N. Y.	WCLO 1200 Janesville, Wis.	WELK 1370
KWWG 1260	WBGF 1370	H WCLS 1310 1	Philadelphia, Pa. WELL 1420
Brownsville, Tex.	Glens Falls, N. Y.	Joliet, Ill.	BattleCreek, Mich
KXA 570 Seattle, Wash.	WBIG 1440 Greensboro, N.C.	WCMA 1400 Culver, Ind.	WENR 870
KXL 1420	WBIS 1230	WCOA 1340	Chicago, Ill. WEPS 1200
Portland Oro	Boston, Mass.	Pensacola, Fla.	Worcester, Mass.
KXO 1500 El Centro, Cal. KXRO 1310	WBMS 1450 Hackensack, N.J.	WCOC 880 Meridian, Miss.	WEVD 1300
KXRO 1310	WBOQ 860	WCOD 1200	New York City WEW 760
Aberdeen, Wash	New York City	Harrisburg, Pa.	St. Louis, Mo.
KXYZ 1420 Houston, Texas	WBOW 1310 Terre Haute, Ind.	WCOH 1210 Yonkers, N. Y.	WEXL 1310
KYA 1230	WBRC 930	WCRW 1210	Royal Oak, Mich. WFAA 800
San F'ncisco, Cal.	Birmingham, Ala.	Chicago, Ill.	Dallas, Texas
KYW 1020 Chicago, Ill.	WBRE 1310 Wilkes-Barre, Pa.	WCSC 1360 Charleston, S. C.	WFAN 610 Philadelphia, Pa.
KZM 1370	WBSO 920	WCSH 940	WFBC 1200
Hayward, Cal.	Needham, Mass.	Portland, Maine	WFBC 1200 Knoxville, Tenn.
NAA 690 Arlington, Va.	WBT 1080 Charlotte, N. C.	WDAE 1220 Tampa, Fla.	WFBE 1200 Cincinnati, Ohio
NBA 850	WBTM 1370	I WDAF 610 I	WFBG 1310
Balboa, C. Z.	Danville, Va.	Kansas City, Mo.	Altoona, Pa.
TIC 750 San Jose, C. R.	WBZ-A 990 Springfield, Mass.	WDAG 1410 Amarillo, Texas	WFBL 1360
VAS 685	11 WCAC 600	II W D A H 1310 I	Syracuse, N. Y. WFBM 1230
Glace Bay, N. S.	Storrs, Conn.	El Paso, Texas	Indianapolis, Ind.
WAAF 920 Chicago, Ill.	WCAD 1220 Canton, N. Y.	WDAY 940 Fargo, N. D. WDBJ 930	WFBR 1270
WAAM 1250	WCAE 1220	WDBJ 930	Baltimore, Md. WFDF 1310
Newark, N. J.	Pittsburgh, Pa.	Roanoke, Va.	Flint, Mich.
WAAT 940 Jersey City, N. J.	WCAH 1430 Columbus, Ohio	WDBO 1120 Orlando, Fla.	WFDV 1370
WAAW 660	Joint July 1	Onando, Fia.	Rome, Ga.
Omaha, Nebr.			
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WFDW 1420	WHDI 1180	WJBK 1370	WLBG 1200
Talladega, Ala. WFI 560	Minneap., Minn. WHDL 1420	Detroit, Mich	Ettrick, Va.
Philadelphia, Pa.	TupperLake, N.Y.	Decatur, Ill.	WLBL 900 Stevens Pt., Wis.
WFIW 940	WHEC 1440	WJBO 1420	WLBW 1260
Hopkinsville, Ky.	Rochester, N. Y.	New Orleans, La.	Oil City, Pa.
WFLA 620 Clearwater, Fla. WFOX 1400	WHFC 1420	WJBT 770	WLBX 1500
WFOX 1400	Cicero, Ill. WHIS 1410	Chicago, Ill. WJBU 1210	L.I.City, N.Y. WLBZ 620
Brooklyn, N. Y.	Bluefield, W. Va.	Lewisburg, Pa.	WLBZ 620 Bangor, Me.
WGAL 1310	WHK 1390	WJBW 1200	WLCI 1210
Lancaster, Pa.	Cleveland, Ohio	New Orleans, La.	Ithaca, N. Y.
WGAR 1450 Cleveland, Ohio	WHN 1010 New York City	WJBY 1210	WLEX 1410
WGBB 1210	WHO 1000	Gadsden, Ala. WJDX 1270	Lexington, Mass. WLEY 1370
Freeport, N. Y.	Des Moines, Ia.	Jackson, Miss.	Lexington, Mass.
WGBC 1430	II WHOM 1450	WJJD 1130	WLIT 560
Memphis, Tenn. WGBF 630	Jersey City, N. J. WHP 1430	Mooseheart, Ill. WJKS 1360	Philadelphia, Pa.
Evansville, Ind.	Harrisburg, Pa.	WJKS 1360 Gary, Ind.	WLOE 1500 Boston, Mass.
WGBI 880	WIAS 1420	WJR 750	WLS 870
Scranton, Pa.	Ottumwa, Iowa	Detroit, Mich.	Chicago, Ill.
WGBS 600	WIBA 1280	WJSV 1460	WLSI 1210
New York City WGCM 1210	Madison, Wis. WIBG 930	Alexandria, Va. WJW 1210	Providence, R. I
Gulfport, Miss.	Elkins Park, Pa.	Mansfield, Ohio	WLTH 1400 Brooklyn, N. Y.
WGCP 1250	WIBM 1370	WJZ 760	WLVA 1370
Newark, N. J.	Jackson, Mich.	New York City	Lynchburg, Va. WLW 700
WGES 1360 Chicago, Ill.	WIBO 560 Chicago, Ill.	WKAQ 890 San Juan, P. R.	
WGH 1310	WIBR 1420	WKAR 1040	Cincinnati, Ohio WLWL 1100
Newp't News, Va.	Steubenville, O.	E. Lansing, Mich.	New York City WMAC 570
WGL 1370	W1BU 1210	WKAV 1310	WMAC 570
Ft. Wayne, Ind. WGN 720	Poynette, Wis. WIBW 580	Laconia, N. H. WKBB 1310	Syracuse, N. Y. WMAK 1040
Chicago, Ill.	Topeka, Kansas	Joliet, Ill.	Buffalo, N. Y.
WGR 550	WIRY (200	WKBC 1310	WMAL 630
Buffalo, N. Y. WGST 890	Utica, N. Y. WICC 1190	Birmingham, Ala.	Washington, D.C.
Atlanta, Ga.	WICC 1190 Bridgeport, Conn.	WKBF 1400 Indianapolis, Ind.	WMAQ 670 Chicago, Ill.
WGY 790	WIL 1200	WKBH 1380	WMAZ 890
Schenec'd'y, N.Y.	St. Louis, Mo.	La Crosse, Wis.	Macon, Ga.
WHA 940 Madison, Wis.	WILL 890 Urbana, Ill.	WKBI 1420	WMBA 1500
WHAD 1120	WILM 1420	Chicago, Ill. WKBN 570	Newport, R. I. WMBC 1420
Milwaukee, Wis WHAM 1150	Wilmington, Del.	Youngstown, O.	Detroit, Mich.
	WIOD 1300	WKBO 1450	WMBD 1440
Rochester, N.Y. WHAP 1300	Miami, Fla. WIP 610	Jersey City, N. J. WKBQ 1350	Peoria Hghts.,Ill. WMBG 1210
New York City	Philadelphia, Pa.	New York City	Richmond, Va.
WHAS 820	WIS 1010	WKBS 1310	WMBH 1420
Louisville, Ky. WHAT 1310	Columbia, S. C. WISJ 780	Galesburg, Ill. WKBV 1500	Joplin, Mo. WMBI 1080
Philadelphia, Pa.	Madison, Wis.	WKBV 1500 Connersville, Ind.	WMBI 1080 Chicago, Ill.
WILLAY 1200	WISN 120	WKBW 1480	WMBJ 1500
Troy, N. Y. WHB 860	Milwaukee, Wis. WJAC 1310	Buffalo, N. Y.	Pittsburgh, Pa.
WHB 860	Johnstown, Pa.	WKBZ 1500	WMBO 1310
Kansas City, Mo. WHBC 1200	WJAG 1060	Ludington, Mich. WKJC 1200	Auburn, N. Y. WMBQ 1500
Canton, Ohio	Norfolk, Nebr.	Lancaster, Pa.	Brooklyn, N. Y.
WHBD 1370	WJAK 1310	WKRC 550	WMBR 1370
Mt. Orab, O. WHBF 1210	Marion, Ind. WJAR 890	Cincinnati, O. WKY 900	Tampa, Fla. WMC 780
Rock Island, Ill.	Providence, R. I.	Oklahoma City	Memphis, Tenn.
WHBL 1410	WJAS 1290	WKZO 590	WMCA 570
Sheboygan, Wis. WHBQ 1370	Pittsburgh, Pa.	Be'n Spgs., Mich.	New York City
Memphis, Tenn.	WJAX 900 Jackson ville, Fla.	WLAC 1470 Nashville, Tenn.	WMMN 890 Fairmont, W.Va.
WHBU 1210	WJAY 610	WLAP 1200	WMPC 1500
Anderson, Ind.	Cleveland, Ohio	Louisville, Ky.	Lapeer, Mich.
WHBY 1200 Green Ray Win	WJAZ 1490	WLB 1250	WMRJ 1210
Green Bay, Wis. WHDF 1370	Chicago, Ill. WJBC 1200	St. Paul, Minn. WLBC 1310	Jamaica, N. Y. WMSG 1350
Calumet, Mich.	La Salle, Ill.	Muncie, Ind.	New York City
WHDH 830	WJBI 1210	WLBF 1420	
Boston, Mass.	Red Bank, N. J.	Kansas City, Ks.	-
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WMT 600	WPCC 560	WSAR 1450	WWNC 570
Waterloo, Iowa WNAC 1230	Chicago, Ill. WPCH 810	Fall River, Mass. WSAZ 580	Asheville, N. C. WWRL 1500
Boston, Mass.	New York City	Hunt'gton, W.Va.	Woodside, N. Y.
WNAD 1010	WPEN 1500	WSB 740	WWVA 1160
Norman, Okla.	Philadelphia, Pa. WPG 1100	Atlanta, Ga. WSBC 1210	Wheeling, W. Va. WXYZ 1240
WNAX 570 Yankton, S. D.	Atl'ntic City, N.J.	Chicago, Ill.	Detroit, Mich.
WNBF 1500 Bingh'mt'n, N.Y.	II WPOE 1370	WSBT 1230	XEA 1200
Bingh'mt'n, N.Y.	Patchogue, N. Y.	South Bend, Ind.	Guadalajara, Jal XEB 1030
WNBH 1310 New B'df'd, Mass.	WPOR 780 Norfolk, Va.	WSDA 1400 Brooklyn, N. Y.	Mexico City
WNBO 1200	WPSC 1230 State College, Pa.	WSEN 1210	XEC 1133
Washington, Pa.	State College, Pa.	Columbus, Ohio	Toluca, Mex.
WNBR 1430 Memphis, Tenn.	WPTF 680 Raleigh, N. C.	WSFA 1410 Montgomery, Ala.	XED 961 Reynosa, Tams.
WNBW 1200	II WOAM 560	WSIX 1210	XEF 1132
Carbondale, Pa. 📗	Miami, Fla.	Springfield, Tenn.	Oaxaca, Oax.
WNBX 1200	WQAN 880 Scranton, Pa.	WSJS 1310 WinstSal., N. C.	XEG 829 Mexico City
Springfield, Vt. WNBZ 1290	WQAO 1010	WSM 650	XEH 1132
SaranacL'ke, N.Y.	New York City	Nashville, Tenn.	Monterrey, N. L.
WNJ 1450	WQBC 1360	WSMB 1320 New Orleans, La.	XEI 1000
Newark, N. J. WNOX 560	Vicksburg, Miss. WQDM 1370	WSMK 1380	Morelia, Mich. XEJ 857
Knoxville, Tenn.	St. Albans, Vt.	Dayton, Ohio	Juarez, Chih.
WNYC 570	WQDX 1210	WSOC 1210	XEK 1000
New York City WOAI 1190	Thomasville, Ga. WRAF 1200	Gastonia, N. C. WSPA 1420	Mexico City XEL 1091
San Antonio, Tex.	La Porte, Ind.	Spartanburg, S.C.	Saltillo, Coah.
WOAN 600	WRAK 1370	WSPD 1340	XEM 841
Law'nceb'g,Tenn. WOAX 1280	Williamsport, Pa. WRAW 1310	Toledo, Ohio WSSH 1410	Tampico, Tams
WOAX 1280 Trenton, N. J.	Reading, Pa.	Boston, Mass.	Mexico City
WOBT 1310	WRAX 1020	WOIT OOD	
Union City, Tenn.	Philadelphia, Pa.	Iowa City, Ia. WSUN 620	Mexico City XEQ 750
WOBU 580 Charlest'n, W.Va.	WRBI 1310 Tifton, Ga.	I St Petersh'o Fla	Ciudad Juarez
WOC 1000	WRBJ 1370	II WSVS 1370	XER 984
Davenport, Iowa	Hattlesburg, Miss	Buffalo, N. Y.	Mexico City XES 890
WOCL 1210 Jamestown, N. Y.	WRBL 1200 Columbus, Ga.	WSYB 1500 Rutland, Vt.	XES 890 Tampico, Tamp.
WODA 1250	WRBQ 1210	WSYR 570	XET 890
Paterson, N. J.	II Greenville, Miss. I	Syracuse, N. Y.	Monterrey, N. L.
WODX 1410	WRBT 1370 Wilmington, N.C.	WTAD 1440 Quincy, Ill.	XETA 1100 Mexico City
Mobile, Ala. WOI 640	WRBX 1410	WTAG 580	XETF 680
Ames, Iowa	Roanoke, Va.	Worcester, Mass.	Veracruz
WOKO 1440	WRC 950 Washington, D.C.	WTAM 1070 Cleveland, Ohio	XEU 800 Veracruz, Ver.
P'ghkeepsie, N.Y. WOL 1310	WRDO 1370	WTAO 1330	XEV 1035
Washington D.C.	Augusta, Me.	Eau Claire, Wis. WTAR 780	Puebla
WOMT 1210	WRDW 1500	WTAR 780 Norfolk Va.	XEW 780
Manitowoc, Wis. WOOD 1270	Augusta, Ga. WREC 600	WTAW 1120	Mexico City XEX 1190
Gr. Rapids, Mich.	Memphis, Tenn.	College Sta., Tex.	Mexico City
WOPI 1500	WREN 1220	WTAX 1210	XEY 547
Bristol, Tenn. WOQ 1300	Lawrence, Kans.	Springfield, Ill. WTBO 1420	Merida, Yuc. XEZ 588
Kansas City, Mo.	WRHM 1250 Minneap., Minn	Cumberland, Md.	Mexico City
WOR 710	II WRIN 1370	WTEL 1310	XFC 805
Newark, N. J. WORC 1200	Racine, Wis. WRNY 1010	Philadelphia, Pa. WTFI 1450	Jalapa, Ver. XFE 632
Worcester, Mass.	New York City	Toccoa, Ga.	Villahermosa, Tab
	WROL 1310	WTIC 1060	XFF 915
leff's'n City, Mo	Knoxville, Tenn. WRR 1280	Hartford, Conn. WTMJ 620	Chihuahua, Chih.
WOV 1130 New York City	WRR 1280	WTMJ 620 Milwaukee, Wis.	XFG 638 Mexico City
WOW 590	Dallas, Texas WRUF 830	WTNT 1470	XFI 818
Omaha, Nebr. WOWO 1160	Gainesville, Fla.	Nashville, Tenn.	Mexico City
WOWO 1160 Ft. Wayne, Ind.	WRVA 1110 Richmond, Va.	WTOC 1260 Savannah, Ga.	XFX 860 Mexico City
WPAD 1420	WSAI 1330	WWAE 1200	XFZ 859
Paducah, Ky.	Cincinnati, Ohio	Hammond, Ind.	Mexico, City
WPAP 1010 New York City	WSAJ 1310 Grove City, Pa.	WWJ 920	8WMC 720
WPAW 1210	WSAN 1440	Detroit, Mich.	St. Johns, N. F. 10BP 1200
Pawtucket, R. I.	Allentown, Pa.	New Orleans, La.	Wingham, Ont.
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Principal Broadcasting Stations of the World

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

Keye	Call	Watts	City	Country	Ксия.	Call	Watts	City	Country
119	Cutt		Berlin	Germany		0		550	
55	RYK	7000	Kovno	Lithuania					
60	PH9	6200	Huizen	Netherlands					
62	TNU		Carthage	Tunisia					
66		40000	Lahti	Finland	553	SBD	600	Sundsvall	Sweden
67		1000	Norddeisch	Germany	563		4000	Munich	Germany
74		13500	Paris	France	571	RA30	1000	Dneipropetrovsk	
76	RA43	4000	Kharkov	Russia	571	YLZ	10000	Riga	Latvia
87		5000	Angora	Turkey	580	RA38	1000	Krasnodar	Russia
93	5 X X	25000	Daventry	Un. Kingdom	580	7ZL	600	Hobart	Australia
02.5		12000	Warsaw	Poland	581		15000	Vienna	Austria
207	RA1	40000	Moscow	Russia	590	ON4RB	3600	Brussels	Belgium
07.5	FL	15000	Paris	France	599	IMI	7000	Milan	Italy
22	SBG	30000	Motala	Sweden					
31	AFT	10000	Berlin	Germany				600	
40	TUA	500	Tunis	Tunisia					
50		100	Tallinn	Estonia					1
:50		6000	Osmanie	Turkey					**
50	SBE	600	Boden	Sweden	600	cwow		Montevideo	Uruguay
60		7500	Kalundborg	Denmark	606	XGZ	500	Nanking	China
69	RA33	4000	Novorossisk	Russia	608	LKO	60000	Oslo	Norway
72	RA57	500	Irkutsk	Russia	616	OKP	5000	Prague	Czecho- slovakia
78	RA67	1200	Malchik	Russia	c20	2 4 12	1000	M - II	Slovakia Australia
79	PCF	1500	Scheveningen	Netherlands	620	3AR	1000 500	Melbourne Tientsin	China
280	PFBI	7000	Hilversum	Netherlands	625	COTN CMAB	1000	Santiago	Chile
.85	RA15	500	Sverdlovak	Russia	625	RA17	1500	Vladivostok	Russia
85	RA49	1200	Erivan	Russia	625	5GB	25000	Daventry	Un, Kingdo
00	R A 42	10000	Leningrad	Russia	626		4000	Kharkov	Russia
107	RA40	1200	Odessa	Russia	631 633	RA43 EAJ8	1000	San Sebastian	Spain
16	RA12	1200	Voronezh	Russia	635	EAJO	8000	Langenburg	Germany
325	RA39	1200	Gomel	Russia	644	YN	3000	Lyon	France
333	RA22	1200	Samara	Russia	648	4YA	500	Dunedin	New Zealan
343	RA41	1200	Vologda	Russia	653	41A	630	Zurich	Switzerland
345	RA11	4000	Tiffis	Russia	662	1BZ	200	Bolzano	Italy
349	RA18	1200	Minsk	Russia	662	102	500	Klagenfurt	Austria
357	RA13	1800	Nizhni-Novgorod		662	SCT	150	Uppsala	Sweden
66	RA14	4000	Rostov-on-Don	Russia	662	LKP	700	Porsbrund	Norway
375	RA7	180	Ivanovo Vos-	Russia	662	LKI	700	Aix la Chapelle	Germany
	D 10	250	nesensk	Russia	662	EAJ22	100	Salamanca	Spain
375	RA9	1750	Sevastopol Colombo	Cevlon	664	RUS	500	Salvador	Salvador
375 380	RA56	1200	Artemovsk	Russia	665	2FC	2500	Sydney	Australia
389	SBF	600	Ostersund	Sweden	666	ZTJ	15000	Johannesburg	South Africa
93 393	RA46	2000	Petrozovodsk	Russia	667	RA4	300	Moscow	Russia
95 395	K A 40	250	Geneva	Switzerland	667	RA2	500	Moscow	Russia
93 97	RA5	1200	Kiev	Russia	671	FPTT	1000	Paris	France
100	RAS	700	Bogorodsk	Russia	671	LKR		Rjukan	Norway
100	RA45	4000	Baku	Russia	671	LKA	350	Aalesund	Norway
111	RA77	1200	Stalino	Russia	674	COHB	1000	Harbin	China
117	RA47	200	Armavir	Russia	680	IRO	3000	Rome	Italy
20	RA27	2000	Tashkent	Russia	685	LT2	1000	LaPlata	Argentina
129	RA26	1000	Astrakhan	Russia	688	SBA	1000	Stockholm	Sweden
135	RA44	1200	Tver	Russia	689	PTB	500	Danzig	Danzig
142		600	Lausanne	Switzerland	689	CAB	1000	Canton	China
162	RA16	1200	Vel Ustjuk	Russia	689	SCN	250	Malmberget	Sweden
169	RA25	1000	Orenburg	Russia	690	6WF	1000	Perth	Australia
103	KALJ	1000	Oremoung		695		2500	Belgrade	Yugoslavia
					698	JODK	1000	Keijo	Japan
			500					700	
								700	
					700	CWOA	1000	Montevideo	Uruguay
	D 4 2 4	1000	Kausak	Russia	706	LS1	5000	Buenos Aires	Argentina
21	RA34	1000	Kourak			LOI	2000	Sorocaba	Brazil
522		3000	Lljubljana	Yugos!avia	706	HJN	550	Bogota	Colombia
526	LKH	700	Hamar	Norway	706 707 6	EAJ7	1500	Madrid	Spain
27		1500	Freiburg	Germany		JOJK	3000	Kanazawa	Japan
35		700	Augsburg	Germany	708		200	Kanazawa Saratov	Russia
35	47722	750	Hanover	Germany	714	RA32	2000	Saratov Mukden	China
545	RA20	1200	Stavropol	Russia	714	COMK			Chosen
545		20000	Budapest	Hungary	714	JODK	1000	Heijo (Seoul)	(Korea)
545		12000	Bucharest	Rumania					(Poica)

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	s. Call	Watts		Country		. Call	Watts	City	Country
717	14.00	4000	Berlin	Germany	923		4000	Breslau	Germany
718	2 Y A	5000	Wellington	New Zealand	930	4RK	2000	Rockhampton	Australia
724		2500	Rabat	Morocco	931	SBB	10000	Goteborg	Sweden
725	1111	750	Dresden	Germany	937	PRAB	500	Rio de Janerio	Brazil
730	5CL	2500	Adelaide	Australia	937	COPK	1000	Peking	China
734		10000	Katowice	Poland	940	2RN	1500	Dublin	Irish Free St.
735	******	2200	Tartu	Estonia	941	000	250	Basle	Switzerland
743	r D.7	1000	Berne	Switzerland	942	CTIAA	1000	Lisbon	Portugal
750	LR7	1250	Buenos Aires	Argentina	949	LR3	1000	Buenos Aires	Argentina
750 750	PRAA	1000 250	Rio de Janerio Marsan	Brazil France	950 950	2GB	600 500	Sydney Marseilles	Australia France
750	7LO	2000	Nairobi	Kenya	950		700	Bremen	Germany
750	JOBK	10000	Osaka	Japan	956	K4	250	Tucuman	Argentina
750	EAJ2	750	Madrid	Spain	959	K 1	1500	Krakow	Argentina Poland
752	5SC	1000	Glasgow	Un. Kingdom	960	5DN	100	Adelaide	Australia
759	JQAK	5000	Dairen	Kwangtung	963.1	F2BD	480	Agen	France
760	LT4	500	Mendoza	Argentina	967.8		2000	Paris	France
760	4QG	2500	Brisbane	Australia	967	PRAP	300	Pernambuco	Brazil
769	JOHK	10000	Sendai	Japan	968	5WA	1000	Cardiff	Un. Kingdom
769		1500	Franfort on Main		973		700	Zagreb	Yugoslavia
777.2		500	Rheims	France	980	3YA	500	Christchurch	New Zealand
779		500	Wilna	Poland	983.6	PIAA	500	Lisbon	Portugal
779 770	LKF	700	Fredrikstad	Norway	986	1.04	1500	Bordeaux	France
779	1CF	8000	Toulouse	France	990	LR4	2000	Buenos Aires	Argentina
788 789	IGE ZTD	1200 1000	Genoa Durban	Italy South Africa	995	2BD	1000	Aberdeen	Un. Kingdom
789 789	JOGK	10000	Durban Kumamoto	Japan			1	1000	
789	LRI	500	Buenos Aires	Argentina					
789	PRAJ	200	Juiz de Fora	Brazil					
789	OAX	1500	Lima	Peru	1000	D 4 2 2	150	T	Datasia
789	cwos	500	Montevideo	Uruguay		RA21	1000	Tomsk	Russia
797	2ZY	1000	Manchester	Un. Kingdom	1000 1004	OPX PFBI	7000	LaPaz Hilversum	Bolivia Netherlands
				_	1004	SCC	500	Falun	Sweden
			800		1009	SCC	200	Jyvaskyla	Finland
-		-			1010	6ML	300	Perth	Australia
					1013	UNIL	10000	Tallinn	Estonia
800	ZTC	1000	Cape Town	South Africa	1016	CMAO	250	Santiago	Chile
800	3LO	2500	Melbourne	Australia	1022		500	Limoges	France
804	CMAC	1000	Santiago	Chile	1023	OKK	2500	Kosice	Czecho-
806		4000	Hamburg	Germany					slovakia
810	JOCK	10000	Nagoya	Japan	1025	2UE	50	Sydney	Australia
810	VUC	3000	Calcutta	India	1029.9	YR	500	Lyon	France
815			Seville	Spain	1030	221111	750	Vipuri	Finland
824	1125	2400	Algiers	Algeria	1030	LR9	2000	Buenos Aires	Argentina
824	LKB	1000	Bergen	Norway	1031	ITO	7000	Turin	Italy
825 825.3	F8GC 8DB	1500 100	Paris	France	1034	CMAJ	100	Valparaiso	Chile
828	LR5	2000	Algiers Buenos Aires	Algeria Argentina	1040 1040	6BM 6LV	1000 130	Bournemouth Liverpool	Un. Kingdom Un. Kingdom
831	JOIK	10000	Sapporo	Japan	1040	2DE	130	Dundee	Un. Kingdom
833	TOTAL	4000	Stuttgart	Germany	1040	2EH	350	Edinburgh	Un. Kingdom
833	PRAE	1000	Stuttgart Sao Paulo	Brazil	1040	6KH	130	Hull	Un. Kingdom
840	G5	250	Venado Tuerto	Argentina	1040	5PY	130	Plymouth	Un. Kingdom
840	VUB	3000	Bombay	India	1040	2LS	130	Leeds & Bradford	Un. Kingdom
842	2LO	30000	London	Un. Kingdom	1040	6FL	130	Sheffield	Un. Kingdom
849	JOFK	10000	Hiroshima	Japan	1040	6ST 5SX	130	Stoke on Trent	Un. Kingdom
851	120000	7000	Graz	Austria	1040		130	Swansea	Un. Kingdom
855	2BL	2500	Sydney	Australia	1049	2ZF	150	Palmerston	New Zealand
857	ZBW	1500	Victoria Peak	Hong Kong	1049	42000	200	Montpellier	France
857	PRAD	500	Rio de Janerio	Brazil	1050	D5		Bahia Blanca	Argentina
85 7 860	CWOR EAJ1	500 7500	Montevideo	Uruguay Sasia	1058	*****	500	Innsbruck	Austria
869	EAJI	1300	Barcelona Cairo	Spain Egypt	1059 1059	******	2000	Berlin	Germany
869	JOAK	10000	Tokyo	Japan	1059		750	Magdeburg Stettin	Germany Germany
870	LR2	3000	Buenos Aires	Argentina	1059	SCU	300	Varberg	Sweden
877	OKB	2500	Brunn	Czecho-	1067	500	1000	Copenhagen	Denmark
				slovakia	1070	EAR5	500	Las Palmas	Canary Isl'ds
882	E4	350	Azul	Argentina	1071	PRAR	500	Sao Paulo	Brazil
887	KRC	250		China	1071	CRC	500	Tientsin	China
887	ON4GT	100	Brussels	Belgium	1075	OKR	12500	Bratislava	Czecho-
895	XGY	250	Hangchow	China				_	slovakia
896		1500	Poznan	Poland	1076	LS5	1000	Buenos Aires	Argentina
			900		1080		200	Caen	France
			J J J		1086	I To	4000	Konigsberg	Germany
					1090	LT3	1500	Rosario	Argentina
0.00					1091	Pr. 68	250	Angers	France
900	1YA	500		New Zealand			1	100	
900 905.2	JFAK	1000	Taihoku	Japan					
905.2		1500		ltaly -					
005 2	IIIA	500							
905.2		500		France	1102		1500	D	Г
905.2 909	LR6	500 1000	Buenos Aires	Argentina	1103		1500	Rennes	France
905.2			Buenos Aires Cairo		1103 1110 1110	SCF	1500 4000 150	Rennes Kaiserslautern Hudiksvall	France Germany Sweden

Kcys. Call	Watts	- 6	Country	Kcys	Call	Watts	City	Country
1110 SCO 1112 LS4	250 1000		Sweden				1400	
1121 EAJ13	10000		Argentina Spain					
1125 2UW	100	Sydney	Australia	1410	D4	100	Mar del Plata	Argentina
1129 SCQ 1130	250 500	Trollhattan Lille	Sweden France	1428	LS6	1000	Buenos Aires	Argentina
1147 2ZM	160	Gisborne	New Zealand	1470	SCD	200	Gavle	Sweden
1148 5NO	1000	Newcastle	Un. Kingdom	1471 1481	SCM	1500 250	Ludwigshaven	Germany
1149 LR8 1150 2LO	1500	Buenos Aires	Argentina	1484	SCH	250	Kristinehamn Jonkoping	Sweden Sweden
1150 2LO 1153 PRAC	30000 500	London Rio de Janerio	Un. Kingdom Brazil					
1155 2MK	50	Bathurst	Australia				1500	
1157	3000	Gleiwitz	Germany	į				
1167 SBH 1169 CWON	10000 200	Horby Montevideo	Sweden	1500	2LS	130	Leeds & Bradford	IIIn Kingdom
1175 MRD	1500	Toulouse	Urugu ay France	1530	SCJ	250	Karlskrona	Sweden
1180 3DB	100	Melbourne	Australia	1560	G2SH	10000	Akureyri	Iceland
1184	4000	Leipzig	Germany	1635 2000	AFT RA51	10000 350	Berlin Leningrad	Germany Russia
1188 1ZQ 1190 LS2	1000	Auckland Buenos Aires	New Zealand Argentina	2000	RA72	800	Smolensk	Russia
1193 EAJ18	200	Almeria	Spain	2142		500	Surabaya	Netherland
1199 3ZC	250	Christchurch	New Zealand	2000		1500		East Indies
1199.5	5000	Bordeaux	France	2998 3088	********	1500 2000	Manaos Soro	Brazil Denmark
1199 PRAG	500	Porto Alegre	Brazil	3446		2500	Haiphong	French Indo
		4000						China
		1200			4 H9 X D F8 A V		Zurich Nogent-sur-Seine	Switzerland
					PK1AA	500	Nogent-sur-Seine Batabia	Prance Netherland
								East Indies
1200	500	Toulon	France	4262.: 4434	3 F8GC	1500	Paris	France
1200 5KA	200	Adelaide	Australia	516 9	OKIMPI	5000	Doberitz Prague	Germany Czecho-
1211 SCl	200	Kalmas	Sweden	0100	ORI	3000	1 tague	slovakia
1219 1219 ON4RW	250 200	Juan les Pins Liege	France Belgium	5170	IBR	1000	Bandoeng	Netherland
1219 ON4RG	400	Ghent	Belgium	5290	AGJ		Nauen	East Indies
1219	750	Kassel	Germany	5552	AFT	10000	Berlin	Germany Germany
1219 1219	1500	Abo Biographese (Ban	Finland	5879	AIN		Casablanca	Morocco
1219	750	Bjørenborg (Por Jakobstad	Finland	599 6	PK2AF	500	Djokjakarta	Netherland
1219 SCL	200	Kiruna	Sweden	5996	3ZC	250	Christchurch	East Indies New Zealand
1220 SCB	200	Eskilstuna	Sweden	6005	HRB	2300	Tegucigalpa	Honduras
1220 SCP 1220	400 500	Saffle Linz	Sweden Austria	6057		500	Lyngby	Denmark
1224 CMAQ	100	Santiago	Chile	6662	РНЗСН	250	Surabaya	Netherland East Indies
1229	1000	Trondhjem	Norway	6666.7	71RAX		Rome	Italy
1238 2BE 1245 2NC	1000 2000	Belfast Newcastle	Un. Kingdom Australia	6877	1	2500	Rabat	Morocco
1254	1000	Nuremburg	Germany	7005 7055	8KR VS3AB		Constantine Johore	Tunisia
1256	500	Nimes	France	7260	VSIAB		Singapore	Brit. Malaya Brit. Malaya
1260.4	5000	Bordeaux	France	7313	PK6KZ	500	Makassar	Netherland
1265 SCV 1270 LS3	200 1000	Orebro Buenos Aires	Sweden Argentina	7217		2000	D:-	East Indies
1287 G4	560	Rafaela	Argentina	7317.1 7462.7		2000 500	Paris Lyon	France France
1292	700	Kiel	Germany	7590	JFAB	300	Taipeh	Japan
				7963			Doberitz	Germany
	1	1300		7995 8818	JHBB	14.11	Hirasio Para	Japan Brazil
				8995		500	Reykjavik	Iceland
				9225	2BL	1000	Sydney	Australia
1301 SCB	600	Malma	Sundan	9369	ZTJ	15000	Johannesburg	South Africa
1301 SCG	200	Malmo Helsingborg	Sweden Sweden	9369 9375	3LO	1000 1000	Melbourne Berne	Australia Switzerland
1301 SCS	200	Umea	Sweden	9375	H9XD	1000	Zurich	Switzerland
1304		Schaerbeck	Germany	9375	FL	15000	Paris	France
1309 SCA 1313	150	Boras	Sweden	9488	71.0	500	Lyngby	Denmark
1319	250 1500	Biarritz Muenster	France Germany	9640 9761	7LO F2BD	1000 480	Nairobi Agen	Kenya France
1319	4000	Cologne	Germany	9772	EAM		Madrid	Spain
1330 PRAO	1000	Sao Paulo	Brazil	9994	LGN		Bergen	Norway
1330 J2	400	Concordia Cork	Argentina	10520			Sydney	Australia
1337 6CK 1344 LOAA	1000 10000	Cork Luxemburg	Irish Free St. Luxemburg	10520 11760	SAS		Sydney Karlsborg	Australia Sweden
1351 LS7	1000	Buenos Aires	Argentina		SQBE		Bahia	Brazil
1357	10000	Helsingfors	Finland	15300		500	Lyngby	Denmark
1363.6	250 1500	St. Etienne Beziers	France France	17430 17640			Nauen Malabar	Germany Netherland
1373 SCW	200	Ormskoeldsvik	Sweden	11040			,,,a,a,va,	East Indies
1373	1500	Flensburg	Germany	17778	PHI	40000	Huizen	Netherlands
1375 SCK 1388 ON4CE	250 200	Karlstad Chatalineau	Sweden Relaium	19355	PK4PA	240	Nancy Palembang	France Netherland
1388 ON4CE 1390 SCE	200	Chatelineau Halmstad	Belgium Sweden	33304	L KALA	240	ratempang	East Indies

FAVORITE PROGRAMS

ne Station	Dials Feature	Time Station Dials WEDNESDA	Feature
	DAILY	WEDNESDA	Y .
	SUNDAY	THURSDAY	<u> </u>
_			
_			
	MONDAY	FRIDAY	
	(DI IEOD A W	CATYEDDAY	,
	TUESDAY	SATURDAY	L
	- Land		

HOW TO TUNE A SET CORRECTLY

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

INDEX BY FREQUENCIES AND DIAL NUMBERS

590 kilocycles 508.2 meters

600 kilocycles 499.7 meters

610 kilocycles 491.5 meters

620 kilocycles 483.6 meters

630 kilocycles 475.9 meters

640 kilocycles 468.5 meters

650 kilocycles 461.3 meters

660 kilocyeles 454.3 meters

670 kilocycles 447.5 meters 5000 Chicago, Ill.

680 kilocycles 440.9 meters

RPO 5000 San Francisco, Cat.

WAAW 500 Omehs, Nebr.

5000 Lee Angries, Calif.

Nashville, Tenn.

troquele Falls, Out, Lecemte, Wyu, San Diego, Calif. Balrimore, Md, Beloit, Wis Lawrenceburg, Tenn. Memphis, Tenn. Hartford, Conn.

A LL stations in America are listed in RADEX in three tables:

1st by Frequencies. 2nd by Call Letters. 3rd by States and Cities

The Index by Frequencies is the one to be used,

the other two are merely supplementary.

Let us assume you have just bought your first RADEX. Proceed as follows:

Tune in some stationany station that comes in. Tune it sharply, turning down your rheostats (Volume control) until we find the marks on your dials at which it comes in most clearly and with greatest volume.

Let us assume that the

station we are hearing is WEAF in New York. First we must ascertain the frequency for this station. Look it up under WEAF in the Index by Call Letters or under New York in the Index by States and Cities. In either of these indexes we find that the frequency of WEAF is 660. Now we turn to 660 kilocycles in the Index by Frequencies and Dial Numbers. Here we find that WEAF is one of the two stations which have been assigned the 660 keys, frequency

by the Federal Radio Commission. We also

find that it has a power

of 50,000 watts, that it is

and is owned by the National Broadcasting Co., Inc. In the blanks for dial numbers opposite 660 kilocycles (which is the wave length of 454.3 meters) enter the dial readings of your set. It is immaterial whether your set has one, two or three dials. Use as many of three spaces provided as you need. The set used in the illustration had two dials. In this case we entered the dial readings for 660 kilocycles as 69-67.

Let us now tune in some other station. We repeat the same procedure in tuning and find that we are hearing, let us say, WOS at Jefferson City. Proceed as before in ascertaining the frequency of WOS. This we find to be 680 keys. We turn to 630 in the Inex by Frequencies and enter our dial readings for this band which on the set we are using was 72-70.

We now have found that the dial numbers for 630 kcys, are 72-70 and the dial numbers for 660 kcys, are 69-67. If we now will set our dials for 70-68 it is obvious we will have our set tuned for 650 kcys. We listen carefully and if they are on the air and within range of our set we will tune in WSM of Nashville at this point. We then enter the dial readings for WSM opposite 650 kcys. Now it is clear that if we reset our dials at 71-69 our set will be tuned to 640 kcys, and at that point KFI of Los Angeles will be heard, always assuming, of course, that it is on the air and within range of our particular set.

Now we tune in some other station, proceeding as before until after an

ole Wasmer, Inc. brasha Wesleyan Unfeerelry tron Elec. Illuminating Ga. codmen of the World inmanuel Missionary College Abilibi Fower & Paper Co.
Bishop N. S. Thomas
Airfan Rudlo Corp.
Monumerral Rudlu Co. Jac.
Beloit College
Vaughan S. hool of Music
WRKL, Inc.
Travviers Josurance Co. 74 172 lee, Inc.
as Ciry Star Co.
tone Broadcasetag Co., Inc.
hel Bros. Inc.
v School of Christiantry 73 | 7/ 72 170 replient College renville on the Mr. Inc. f. A. Lerre Co. inte Marketing Buresu Earle C. Anthony, Inc. American Insurance Union 70 168 1 lonal Life & Accident Ine.

69 | 67 |

68 | 66 Chicago Dally News, Inc.

67 65

Omeha Crain Erchange National Broadcassing Co., Inc.

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

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

Burkering A The Chronicia same frequency, they are required to divide the time. In this case, of course, it is not possible to tell which one of the two stations is broadcasting at the particular moment we hear it, but we do know it is one or the other of them.

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

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

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



If all the Radio sets I've "fooled" with in my time were piled on top of each other, they'd reach about half way to Mars. The trouble with me was that I thought I knew so much about Radio that I really didn't know the first thing. I thought Radio was a plauthing - that was all I could see in it

IThought Radio Was a Plaything

But Now My Eyes are Opened, and I'm Making Over \$100 a Week!

\$50 a week! Man alive, just one year ago a salary

Twelve months ago I was skimping along on starvation wages, just barely making both ends meet. It was the same old story — a little job, a salary just as small as the job.

If you'd told me a year ago that in twelve months' time I would be making \$100 and more every week in the Radio business — whew! I know I'd have thought you were crazy. But that's the sort of money I'm pulling down right now — and in the future I expect even more. why, only today -

But I am getting ahead of my story. I was hard up a

because I had to be.

When broadcasting first became the rage, I first began dabbling with Radio. There's a fascination — something that grabs hold of a fellow — about twirling a little knob and suddenly listening to a voice speaking a thousand miles away!

Up to a year ago, I was just a dabbler — I thought Radio was a plaything. I never realized what an enormous, fastgrowing industry Radio had come to be — employing thousands and thousands of trained men. I usually stayed home in the evenings after work, because I didn't

make enough money to go out very much.

And as for the idea that a splendid Radio job might And as for the idea that a spiendid Radio job might be mine, if I made a little effort to prepare for it — such a idea never entered my mind. When a friend suggested it to me one year ago I laughed at him.
"You're kidding me," I said.
"I'm not," he replied. "Take a look at this ad."

He pointed to a page ad in a magazine I'd seen many times but just passed up. This time I read the ad carefully. It told of many big opportunities for trained men to succeed in the great new Radio field. With the advertisement was a coupon. I sent the coupon in, and in a few days received a handsome 64-page book, telling about the opportunities in the Radio field and how a man can prepare quickly and easily at home to take advantage of these opportunities. Well, it was a revelation to me. I read the book carefully, and when I finished it I made my decision.

What's happened in the twelve months since that day, seems almost like a dream to me now. For ten of those twelve months, I've had a Radio business of my own. At first, of course, I started it as a little proposition on the side, under the guidance of the National Radio Institute. It wasn't long before I was getting so much to do that I quit my measly little clerical job, and devoted my full time to my Radio business.

Since that time I've gone right on up. They would have given me just as much help, too, if I had wanted to follow some other line of Radio besides building my

own retail business - such as broadcasting, manufacturing, experimenting, sea operating, or any one of the score of lines they prepare for you. And to think that until that day I sent for their eye-opening book I'd been wailing
"I never had a chance."

Now I'm making, as I told you before, over \$100 a week. And I know the future holds even more, for Radio is one of the most progressive, fastest-growing businesses in the world today. And it's work that I like - work a man can get interested in.

You may not be as bad off as I was. But think it ever—
are you satisfied? Are you making enough money, at
work that you like? Would you sign a contract to stay where you are now for the next ten years — making the same money? If not, you'd better be doing something

anout It.

This new Radio game is a live-wire field of golden rewards. The work is fascinating, absorbing, well paid. The National Radio Institute—oldest and largest Radio home-study school in the world—will train you inexpensively in your own home to know Radio from A to Z.

Take another tip - No matter what your plans are, no matter how much or how little you know about Radio clip the coupon below and look their free book over. It is filled with interesting facts, figures, and photos, and the information it will give you is worth a few minutes of anybody's time. You will place yourself under no obligation—the book is free, and is gladly sent to anyone who wants to know about Radio, Just address J. E. Smith, President, National Radio Institute, Dept. 1AO, Washington, D. C.

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

Dear Mr. Smith: - Please send me your 64-page free book, giving all information about the opportunities in Radio and how I can learn quickly and easily at home to take advantage of them. I understand this request places me under no obligation, and that no salesman will call on me.

Name	 					•								•				*		•
Address	 				٠	•					,									
Town	 	 					 												,	
State																				