

THE JANUARY 1931

# RADIO IN INDEX

The Magazine that Doubles the Pleasure of Radio



25¢

How to Build a Short Wave Adapter

A Grounded Aerial Brings  
Surprising Results

No. 45

N. S. E.



## One of these Boys Will Fail-IF

**B**OTH 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 co-ordination 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 Bogue 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.

**BENJAMIN N. BOGUE,**  
14 52 Bogue Building,  
1147 N. Illinois St., Indianapolis, Ind.

Enclosed is 10 cents for which please send me the book "Stammering—Its Cause and Cure"—and full information regarding the Bogue Unit Method for the cure of stammering and stuttering.

Name .....

Address .....

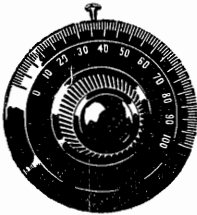
THE JANUARY 1931

# RAD IN DIO DEX

REG. U. S. PATENT OFFICE

FRED CLAYTON BUTLER

Editor and Publisher



SEVENTH YEAR

## Contents

NUMBER 45.

Frontispiece . . . Annette Hanshaw, Van Heusen Program Contralto She Had to Hire a Secretary for Her Fan Mail	
Building a Short Wave Adapter, by J. B. Smith . . . . .	2
Plans and Parts for the Experimenter	
Some Questions Asked and Some Answered . . . . .	4
The RADEX Family Swaps Information	
Whistles and Squeals or What Makes My Set Do That? . . . . .	6
The Technical Editor Takes Some Problems Apart	
“Let’s Call a Meetin’” says Andy . . . . .	8
Our Readers Hold a Forum	
Puzzles Are Getting Tougher . . . . .	10
So Are Our Puzzlers	
Dialing for DX Records . . . . .	13
Roamin’ in the Ether	
Why Can’t We All Get Japan? . . . . .	16
Skeptics Versus Records	
Key to Chain Stations . . . . .	27
Ready Reference Table for Dial Numbers	
What’s On the Air Tonight? . . . . .	28
Hour-by-Hour Index to Chain Programs	
A Complete Index by Frequencies . . . . .	36
Cross-Indexed by Dial Numbers and Wave Lengths	
A Complete Index by States and Cities . . . . .	50
With Key to Location of Station on Broadcast Map	
A Complete Index by Call Letters . . . . .	56
A Log for 750 Stations	
Principal Broadcasting Stations of the World . . . . .	61
Arranged by Countries and Cities	

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# BUILDING Short Wave ADAPTER

WITH the increased interest in short-wave reception many radio fans having sets designed for use on the regular broadcast waves, are wondering how they can build an adapter at a minimum cost, which will give them satisfactory short-wave reception. Having this general demand in view we are herewith presenting a two-tube, screen-grid adapter circuit which has been found to give entirely satisfactory reception on the lower waves when used in conjunction with a battery-operated receiver. The adapter described in this article should not be used on all-electric receivers owing to the introduction of hum and line noises. A. c. adapters have not yet proved to be generally satisfactory and if you have an a. c. set, it is advisable to build a separate audio amplifier for the adapter, both the adapter and the amplifier being built on a single baseboard, thus really making a complete short-wave set.

Good short-wave reception is possible only with the use of apparatus especially designed for the purpose. For this reason it is quite a compromise to use plug-in short-wave coils in the r. f. stages of a regular broadcast receiver as the .0005-mfd. variable condensers, with which most broadcast receivers are usually equipped, are too large in capacity for use with the coils designed for short-wave work. The adapter shown and described in this article is really a separate r. f. amplifier plus a detector, and it is plugged into the detector stage of the broadcast receiver, utilizing only the audio amplifier of the latter. In this way it is possible for you to tune in short-wave signals by building this simple adapter yourself, which will afford you interesting diversion besides effecting quite a saving.

## The Parts Necessary

All that is necessary are a set of three or four short-wave coils covering the 20, 40, 80 and 150-meter wavebands, a few fixed and variable condensers, two tubes and sockets and a few resistors, besides a panel, baseboard and a suitable

With Plans and Parts

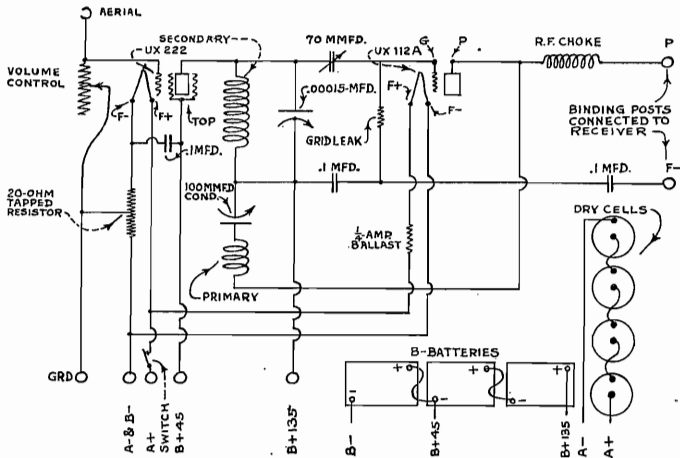
By J. B. Smith

cabinet, although the latter can be eliminated if desired. The cost of these parts is much less than that of a regular complete short-wave receiver, and to all practical purposes it is just as good for those who wish to listen in occasionally. The complete list of materials for the adapter are as follows:

- 1 Electrad Tonatrol, Type P Variable Resistor for use as a volume control.
- 1 20 ohm, center-tapped resistor of the fixed type.
- 1 two to four-megohm grid leak and mounting.
- 1 4-ohm  $\frac{1}{4}$  amp. ballast such as a No. 1A Amperite.
- 1 radio frequency choke coil such as the Hammarlund No. 250.
- 3 fixed condensers .1-mfd.
- 1 filament switch.
- 1 set of three or four plug-in short-wave coils with a condenser to match and a suitable mounting or socket which comes with the coils.
- 1 100-mmfd. variable condenser used for a sensitivity control.
- 1 70 mmfd. variable condenser.
- 1 UX-222 screen-grid tube and socket.
- 1 UX-112A tube and socket.
- 1 Hammarlund "Swap" adapter and cable which makes connection to the F and P terminals of the detector socket in the receiver.
- 8 binding posts.
- 1 bakelite panel about 7x14 inches.
- 1 suitable wood or bakelite subpanel or baseboard.
- 1 cabinet if desired.

Any type of short-wave coils made by a reputable manufacturer are satisfactory for the purpose, but care must be taken to get a variable condenser to match. Usually both the coils and the condenser come together in the form of a kit.

The storage battery which is used on the receiver can also be used for supplying the filament current to the adapter,



2-TUBE, SCREEN-GRID, SHORT-WAVE ADAPTER

although four dry cells, connected in series as shown in the diagram, can be substituted, while three 45-volt B-batteries supplying the receiver, also furnish plate current for the adapter.

### The Assembly

In assembling the parts, four controls are mounted on the panel, namely, the tuning knob, the filament switch, the volume control and the sensitivity control, which is the 100-mmfd, variable condenser. The other parts are laid out on the baseboard as neatly as possible and in such a way that the leads connecting them will be as short as possible, especially the grid and plate leads. Also be sure not to run the grid and plate leads parallel to each other. It is better to make these leads longer in order to run them at right angles to each other. Follow the wiring diagram, Fig. 1, carefully. Solder all connections, using flux that will not cause corrosion, which, of course, eliminates acid flux of all kinds. The coils, one of which is used at a time, are plugged into the coil mounting or socket. Each coil covers a definite waveband below the broadcast range. A screen-grid tube is used for the r. f. stage in the adapter as its amplification value is greater than that of a UX 201A tube, and as it serves to block feedback and thus prevent reradiation caused by too much regeneration. You will note

that the regeneration system employed in this case is not directly coupled to the antenna circuit. For a detector, a 112A tube has been found most satisfactory in short-wave work, although a 201A tube can be substituted if desired, especially when working on the lower wavelengths. It was found that a UX 200A tube was too noisy for use as a detector in this adapter although it was sufficiently sensitive. The binding posts should be mounted on small bakelite strips held up by suitable brass brackets. Two binding posts are used for the aerial and ground, four for the battery connections and the cord on the adapter plug is connected to the remaining two, which form the output, marked F and P. The plug is substituted for the detector tube of the receiver when the adapter is used.

### Connecting to Set

It is a comparatively simple matter to hook up the adapter, which is done in the following way: Disconnect the aerial from the receiver and connect it to the adapter binding post marked "aerial." Connect a ground lead to the "ground" binding post of the adapter. This may be a separate lead or it may be the regular ground lead of the receiver. Leads are then run from the terminals on the storage battery to the A-pos. and A-neg. binding posts of the adapter,

(Continued on page 18)

# Some QUESTIONS are ASKED

## And Some Are Answered

**I** FIND that a large number of DXers cannot get Maine, New Hampshire or Vermont," writes Bruce P. Lundy, Jr., R.F.D. 2, Jersey Shore, Pa. "Is this because the stations are not powerful enough, or is it because the New York, Hartford and Boston stations drown them out?" Mr. Lundy has installed the U.S. standard ground described in a recent number of RADEX and says, "I would by all means recommend this ground. It is an excellent ground because it gives a low resistance. I do not have a quarter the noise I used to have on my set."

"Here is a little information for those who have not tuned in New Hampshire and Vermont stations," writes Robert R. Rawstrong, 31½ Sullivan Street, Claremont, N. H., "WKAV Laconia, N. H., 1310 kcys., Saturday evenings 7:00 to 8:30, and third Sunday in each month from 3:00 a.m. to 5:00 a.m. WNBX Springfield, Vt., 1200 kcys., Fridays 1:00 to 2:00 p.m.

"What has become of 6BY?" asks Mr. Rawstrong. This is now station CMHA, last heard from on 1150 kcys.

"What station operates on 1440 kcys. from the Drake Hotel, Chicago," asks a reader from Pekin, Ill. We hazard the guess that this is a harmonic of WGN, 720. This reader says that KGGF now announces from Coffeyville, Okla., although other readers report this station from Coffeyville, Kansas.

"You have WBBZ at Ponca City, Okla.," states Victor J. Balt, 226 Sumner Avenue, Aurora, Ill., "but I heard from them November 9th and they gave their location as Arkansas City, Kansas." Commission still shows them at Ponca City. Have they moved? Mr. Balt sets up the target of KCRC Enid, Okla., which he states is on the air every Wednesday and Saturday night until 8:30 the next morning.

"Have noticed on Sundays that stations WOAX Trenton, N. J., and WHAP

New York, announce call letters together and wonder if they have combined. These two stations are on different frequencies," comments L. A. Deuchar, 119 N. 51st Street, Philadelphia, Pa.

### Station Queries

"WIAS Ottumwa, Iowa, has moved from 1420 kcys. to 1500, according to their own announcement," states Paul L. King, 1523 Madison Street, Madison, Wis. No notice to this effect from the Commission. How about it?

"Late Saturday afternoon, November 15th, while tuned in on 1100 kcys. I heard announced WALL, Wallingford, Conn.," writes Isaac O. Harper, 448 C Avenue, Coronado, Calif. "Can you throw any light on this station?" The Commission shows no such station, nor any station, in Wallingford. Perhaps some of our eastern readers can report.

From John W. Christie, 4136 Dorchester W., Westmount, Montreal, Que.: "November 22nd at 11 p.m., EST, while on WEA F I could hear women's voices singing right in back of WEA F's signal. They were rather faint and I was able to hear them only between numbers on WEA F. At 11:15 it was instrumental music, guitars or Hawaiian. It was not a part of WEA F's program and it was not anything spread from stations on either side as their programs were entirely different." Has any other reader had a similar experience on 660?

"Is station WEHS Evanston, Ill., still on the air?" asks Victor J. Balt, 226 Sumner Avenue, Aurora, Ill. "The last time I had them was two months ago and I wrote them but my letter came back marked 'no such address.'" The last list of the Commission still shows this station as "WEHS Inc., Evanston, Ill."

From Allen W. Mummey, R. 2, Walnutport, Pa.: "I wonder if a stage of screen-grid radio frequency (a screen-grid booster as made by the National) would help me to get a little more distance? I wish some of the users of such an accessory would let me know."

"Wednesday night, November 12th, at 9:45 p.m., EST., I heard a program

on 1400 kcys. announced in German and a song sung in the same language," says Charles Foster, 120 Hall Avenue, Colvin Station, Syracuse, N. Y. "Have you any idea what this station can be?" Can any of our readers enlighten Mr. Foster?

Joe Ribinski, 53 Kittell Avenue, Yonkers, N. Y., asks for information regarding a Pilot Wasp short wave set. He would like to hear from some reader who is getting good reception on such a

to know when NBA, TIX and VAS are on the air.

Robert N. Brengle, Paris, Ill., and others, want to know if KDKA has finished its tests in synchronization. Mr. Brengle adds, "Keep up the good work of publishing your admirable little magazine, the best of its kind, while we fans listen, hope and pray that in some far-distant day radio announcers decide to give their call letters at least every three hours instead of giving us lessons



*Lowell Thomas, writer and lecturer, whose adventures have carried him to the far corners of the earth, is the interpreter of the day's news on the Literary Digest Program. Every week-day at 6:45 E.S.T. over the National (WJZ) network.*

set, regarding the requirements such as tubes, batteries, aerial, ground, etc.

Paul Nessler, 266 Born Street, Secaucus, N. J., would also like to learn something of the results that have been secured with the Pilot Super-Wasp.

L. Y. Briscoe, 3743 Hutchison Street, Montreal, asks for information as to what station announces as "The Smallest Station in America." Can any reader answer?

John J. Barlow, Berkeley, Calif., wants to know if KNX has increased its power. He states that he received them very loud at 4 o'clock on a clear, warm day and thinks they must be using at least 50,000 watts.

Joseph Brocius, 1746 West Chestnut Street, Shamokin, Pa., who has made a wonderful record in DX work, wants

in the orthographical construction of Bulova which by this time we can spell perfectly anyway."

"WBBM and KFAB hetrodyne every day with WBBM getting in more words than KFAB," writes Gerald McGrath, 2211 South Clinton Street, Sioux City, Iowa. "I don't think KFAB should be the one to sign off as they have A-1 programs and WBBM broadcasts more hours per day. KMA Shenandoah, Iowa, is another that needs a little help. About 4:15 or 4:30 every afternoon, the interference starts on their station and entirely ruins their program. In the evening they absolutely cannot be heard."

The inquiry of O. W. Desmond is answered by Jack A. Bachman, 204 North 34th Street, Philadelphia. "Mr.

*(Continued on page 20)*

# WHISTLES and SQUEALS

## The Technical Editor Prescribes

### Volume Control Reduces Signal

*I have a Crosley eight-tube, screen-grid receiver and I cannot get volume on it as I should. When I turn up the volume control and it gets halfway, the signals get weaker instead of stronger. New tubes have not remedied the trouble. Can you kindly advise how to cure it*

Your trouble that reception is muffled or deadened when the volume control is turned up beyond a certain point, is generally caused by the "loading up" of a tube. Often the plate voltage of the detector tube as well as that of the screen-grid tubes is too much, and there is more amplification of the signal than the detector can pass. The remedy is reduction of voltage until the volume control acts correctly. In other cases wrong C-bias is the cause of overloading, owing to one or more defective resistors, or a resistor in the circuit may be open. Proper adjustment of commercial receivers should be made by the service men of the concern handling them.

### Logging Troubles in Super

*I have a Northern-Electric Superheterodyne receiver with six 199 tubes and a 201A tube for the power stage. I am using a thirty-foot aerial and intend to erect a longer one. The trouble I am having is that stations come in at several points on the dials and that the same stations never come in at the same dial readings, making it impossible to log them. I checked over the wiring very carefully with a dry cell and a pair of headphones but found all connections in good condition. I substituted new tubes but the trouble still persists. The set has eight variable controls on the panel. I live in Toronto, Canada, and have been getting San Francisco until lately and the set works fine in every other way except that mentioned. How should I go about curing the trouble?*

On the average superheterodyne there are two points at which the same station comes in. One of them is the fundamental

and the other is the harmonic. Sometimes superheterodyne receivers have several harmonics besides the fundamental. So really, this peculiarity is not abnormal with this type of receiver. In your case, however, there are more variable controls on the panel than usual and this accounts for the impossibility of getting stations repeatedly at the same points on the dial. It would be a good idea to experiment with the variable controls as follows: Set them for maximum volume, especially the coupling. Then without touching any controls except the two tuning dials and the volume control, tune in a number of stations. The same stations should always come in at the same points if the other dials are not moved. Another factor that often influences the tuning on a superheterodyne receiver is the oscillator tube. One tube is better suited for this purpose than another, and by changing them around you can readily determine which one is best. It should also be remembered that any change in the intermediate-frequency plate voltage will also cause a change in the dial readings.

### Station Blankets Dial

*Will you kindly explain the purpose and proper use of a shielded lead-in wire? I have recently put up a first-class aerial about sixty feet long, and am using between thirty and forty feet of shielded lead-in wire, with the shield grounded. I found that this reduced the volume considerably so that I was barely able to hear a signal. I then inserted a .00007-mfd. fixed condenser between the shield and ground, and this prevents the reduction in volume. Another thing I do not understand is this: I get very good reception on numerous stations in all sections of the country. I have a very good set, an R. C. A. No. 80, a fine location, and a good aerial and ground. Yet one of the local stations comes in so weak that I have to disconnect the ground lead from the set to increase the volume. Can you suggest any reason for this phenomenon? It is rather incon-*

*(Continued on page 20)*



# BROADCASTING RELAY STATIONS

## A List of the Short Wave Transmitters

<i>Location of Transmitter</i>	<i>Call Signal</i>	<i>Frequency in Kilocycles (Meters in Parenthesis)</i>	<i>Power (Watts in Antenna)</i>	<i>Licensee and Address</i>
California				
Sacramento -----	W6XAF	2,938 (112.1), 5,870 (51.11)	500	State Dept. of Agriculture (Calif.)
Westminster (Near) ---	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 -----	W9XAQ	6,040 (49.67)	1,000	Chicago Daily News
Chicago -----	W9XAA	6,080 (49.34), 11,840 (25.34), 17,780 (16.873)	500	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., Chicago, Ill.
Iowa				
Council Bluffs -----	W9XU	6,060 (49.5)	500	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 -----	W3XAL	6,100 (49.18)	20,000	Nat'l Broadcasting Co.
Coytesville -----	W2XAL	6,040 (49.67), 11,800 (25.42), 15,250 (19.672), 21,460 (13.979)	500	Aviation Radio Sta.
Kearny -----	W2XCX	6,080 (49.34)	500	L. Bamberger & Co.
New York				
Bellmore -----	W2XZ	610 (491.5)	50,000	Nat'l Broadcasting Co.
Cross Hassock Bay ---	W2XE	11,840 (25.34), 15,280 (19.634)	20,000	Atlantic Bdct. Corp.
New York (Portable) ---	W2XBR	6,020 (49.83)	1,000	Baruchrome Corp.
-----	W2XDA	1,544 (194.30)	50	Atlantic Bdct. Co.
South Schenectady ---	W2XAD	15,340 (19.557)	25,000	Gen. Electric Co.
South Schenectady ---	W2XAF	9,530 (31.48)	40,000	Gen. Electric Co.
South Schenectady ---	W2XAG	550 (545), 660 (455), 790 (380), 1,150 (260.9), 1,500 (200)	200,000	Gen. Electric Co.
Ohio				
Mason -----	W8XAL	6,060 (49.5)	250	Crosley Radio Corp., 1325 Arlington St., Cincinnati, Ohio
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	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.

## This Month's Changes

### Call Letters:

KMIC Inglewood, Cal., 1120 keys., now KMCS.  
 WRBU Gastonia, N. C., 1210 keys., now WSOC.  
 WFKD Philadelphia, Pa., 1310 keys., now WTFL.  
 WBNY New York, N. Y., 1350 keys., now WAWZ.  
 WBAM Greensboro, N. C., 1440 keys., now WBIG.  
 WORD Chicago, Ill., 1490 keys., now WCHI.

### Deleted:

XFA Mexico City, 540 keys.  
 KFHA Gunnison, Colo., 1200 keys.  
 WMAV St. Louis, Mo., 1200 keys.  
 WCSO Springfield, Ohio, 1450 keys.  
 WFJC Akron, Ohio, 1450 keys.

### Power:

KFYR Bismarck, N. Dak., 550 keys., 500 to 1000.  
 WIBW Topeka, Kans., 580 keys., 500 to 1000.  
 CKPC Preston, Ont., 1210 keys., 25 to 50.  
 KFKU Lawrence, Kans., 1220 keys., 1000 to 500.  
 WFBR Baltimore, Md., 1270 keys., 250 to 500.  
 WJDX Jackson, Miss., 1270 keys., 500 to 1000.  
 KID Idaho Falls, Ida., 1320 keys., 500 to 250.  
 WQDM St. Albans, Vt., 1370 keys., 5 to 100.

### Frequencies:

CNRE Edmonton, Alta., 930 to 580.  
 XFI Mexico City, 590 to 818.  
 XEZ Mexico City, 700 to 588.  
 XET Mexico City, 630 to 890.  
 XFC Jalapa, Mex., 630 to 805.  
 XFE Villahermosa, Mex., 920 to 632.  
 XEO Mexico City, 980 to 674.  
 XEM Tampico, Mex., 765 to 841.  
 CHNS Halifax, N. S., 930 to 910.  
 CNRH Halifax, N. S., 930 to 910.  
 XEX Mexico City, 920 to 1300.  
 XFF Chihuahua, Mex., 920 to 915.  
 XEH Monterrey, Mex., 960 to 1132.  
 XEB Mexico City, 670 to 1091.  
 XEC Toluca, Mex., 1330 to 1133.  
 WIBU Poynette, Wis., 1310 to 1210.

### New Stations:

XEQ Ciudad Juarez, Mex., 750 keys.  
 XEK Mexico City, 1000 keys.  
 XEG Mexico City, 970 keys.  
 XEV Puebla, Mex., 1035 keys.  
 XETA Mexico City, 1100 keys.  
 KGVO Missoula, Mont., 1420 keys.  
 WSYB Rutland, Vt., 1500 keys.

### Reinstated:

WBOQ New York City, 860 keys.  
 WRBI Tifton, Ga., 1310 keys.

# "LET'S CALL a MEETIN'"

## A Forum For Our Readers

Arnold Ridings, who signs himself "Just a Soldier," Fort McDowell, Calif., calls our attention to the fact that the new map shows Holy City near Los Angeles when it should be near San Francisco. We can't explain this unless there has been an earthquake that we haven't heard about. Mr. Ridings has had some cards printed to use in verifying reception, which he says have doubled his replies. One side of the card is self-addressed and the other contains a verification of reception so that the station merely has to fill in the date and sign it. Mr. Ridings closes his letter by saying, "Your magazine, RADEX, is absolutely, positively the greatest, finest, big-little radio informative in the world, and believe me I've tried scores of them."

Jerry S. Gascon, 537 W. 44th Street, New York City, has this to say about the new map: "Every radio listener should have one like it near his set, because it is so clear, so easy to find the city that you're hearing, and in a few seconds you can tell how far it is from your town."

Laurence Angel, Jr., sports editor of the Tarrytown Daily News, Tarrytown, N. Y., writes, "Incidentally I find the new RADEX map the best I have come across in eight years. Like RADEX it fills the bill. The distance hound must have it when he is roaming the ether for a new thrill." Mr. Angel says that he is not such an envious fan as to question the foreign reception of others, even if his present receiver, a 7-tube screen-grid model, has never yet taken him across the ocean, although KNX on some nights comes in very loud. He would like to find the secret of snaring signals from points well outside the boundaries of the U.S.A. We are sorry we have no inside information to offer Mr. Angel and other inquirers. Many of the authentic foreign records have been made on ordinary sets. Foreign reception seems to be the result of a combination of a

number of factors and there is no royal road to it.

A number of readers call our attention to numerous changes the Cuban stations are making. James L. Cavanagh, Jr., 101 North Spring Avenue, LaGrange, Ill., and several others, send us lists of the Cuban stations sent to them from Cuba, but even these lists are not at all accurate. Our readers will be glad to know that we have arranged with a correspondent in Havana to supply us each month with any changes in frequency, power, location, etc., of stations in that country. We hope to receive the first report in time to include it in this issue.

From Earl R. Roberts, 4310 East 30th Street, Indianapolis, Ind.: "Those Cuban stations must be jumping waves something awful. I have heard several I'd like to identify. One came in at about 585 keys. between WOW and WSAZ." (This was probably CMW on 588.) "I heard a Spanish-speaking station on the same wave as WABC, but according to my loop it came from the direction of



Miss Corinne Jordan, program director of KSTP, meets Mr. Televox, the automatic man who obeys "his master's voice"

Cuba rather than Mexico." Mr. Roberts has now heard a total of 465 stations.

Mrs. W. R. Horton, 512 Sixth Street, N., Great Falls, Mont., wants us to publish the Pacific coast networks, as there are many good programs there. We endeavored to do this at one time, but owing to the distance the programs reached us too late to be of any value and we have had to content ourselves with the Pacific coast stations on the regular NBC and Columbia networks. "Tonight the radio reception is very unusual," comments Mrs. Horton, "We have had WTAM as clearly as our own local station, WJZ came in clearly before 9 o'clock, and WTIC, WGP and WEAJ have come in as loud as our west coast stations do. Even WSB, WSM and WRVA have come in well and they gave me quite a thrill because I have never had them before."

Several readers answered the inquiry in the December issue regarding WRDS. Stanley H. Bond, Oakland, Md., reports that he has a verification from this station showing that it is owned by the Michigan State Police, is located at East Lansing, Mich., and broadcasts on 1603 kcys. They broadcast police information, but also use musical programs in testing. WRBE in the same inquiry is a ship station according to Ivan D. Ives, Box 312, Genoa, Ill., and the name is the "John Purroy Mitchell."

The inquiry by "Miss Anonymous," Helena, Mont., as to the foreign station received on 1110 kcys. is believed to be KTRH Houston, Texas, by H. J. Jandron, 77 Marion Road, Watertown, Mass. "They announce in both English and Spanish and fooled me the first time I got them. The reason she has to use so much power is that she is ten kcys. off the proper frequency. Ask her to try them on 1120 under the same conditions and see how she makes out."

Regarding WCLB Long Beach, N. Y., F. E. Wilkes, Ossining, N. Y., writes that this station has been inactive about a year although it is still licensed. Mr. Wilkes is worried about the ethics of counting as stations received those that have come in on harmonics of short waves, and would like to know what other DXers think about it.



Did you hear "Bill" Munday, he of the Georgia drawl, describe the "Knutre" Dame and Southern California football battle?

Raymond I. Keim, Box 107, Shamokin, Pa., thinks that the interference complained of with WMC may have been XEW Mexico City. He has been receiving this station nightly since November 24th but has interference with WBBM until the latter signs off at 1:00 a.m. and then XEW comes in strong.

"I received my copy of 'Radio Trouble Shooting' and say, *there is a book*. I've learned more about radio in the week I've had it than I've ever known in the four or five years I've been in radio. A great book!" is the comment of K. J. Loudon, P.O. Box 523, Orangeville, Ont. "I have added another 100 feet to my present aerial and now I have a 300-foot aerial in between two supports 30 feet apart. Sounds impossible, but it does the best job in town."

One reader asks how it was possible for Guy B. Welsh, 144 Brown Street, Reynoldsville, Pa., to receive both WBTM and WLVA during the same moment, as he stated in the December issue, in view of the fact that these two stations share time. Mr. Welsh explains that he happened to tune in this frequency at the moment they switched

*(Continued on page 24)*

# PUZZLES are GETTING TOUGHER

## So Are Our Puzzlers

**N**EARLY 150 copies of RADEX sent out as premiums for correct solutions of the November puzzle! Something surely will have to be done about this. Our puzzlers are getting altogether too good. No wonder they asked for something harder. Well, the December puzzle will probably hold them a while and now for January we are going to have something even harder. Remember, you asked for it.

Some of our readers want us to list the owners of stations alphabetically and others want us to print a list of slogans. If we were to make it any easier to solve these puzzles than they are now, we would have to print the month through just to supply copies for premiums. One or two complained that some of the keys referred to the new map of which they didn't have a copy. We did this to test the ingenuity of our readers. Here's the secret. The map wasn't necessary because the Index by States gives the new map key and "N-15 on the new map" can be very easily found in this index if one knows his geography.

Walter Kolojay, 5031 Northcote Ave., East Chicago, Ind., says he solved the November puzzle in twenty-one and one-half minutes and Billy McQuade, 6617 Leland Way, Hollywood, Calif., says it "took only two of his study periods in school!"

It's too early in the month as we write this for us to comment on the returns on the December puzzle. We thought it would be pretty hard but maybe not. Anyway, here is the correct solution:

wRvAsDvEwXew IaSxe TaHwEl  
kWpEnBaSbTkEgRmSk  
kUtNaAaBwRrIkDbGkExDq  
wOcFrcRlAwDcIpOw

The list of stations from left to right are: WRVA, VAS, WEVD, XEW, WIAS, XET, WHAT, WELK, WPEN, NBA, KTBS, KREG, KSMR, KUT,

NAA, WBAA, WRR, KDBG, KGB, KEX, WQDX, WOC, CFRC, WALR, WADC, WOPI.

We found that the call for "In a State Capital" KUT could also be answered by KFUP, Denver, and therefore counted as correct either of the two solutions. In spite of our very best endeavors to make no mistakes in compiling these puzzles, errors just will creep in. "One of the three 250-watters in its state" should have been "one of four," KGB. And one of the letters I in the puzzle was not used in any call.

S O L O



T R I O

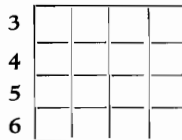
But if you think that was a hard one, just try this one. We want to change the first word in each of these puzzles, into the last word. We do this by changing *two* of the letters in each word to give us the call of a station as shown in the Index by Call Letters in the December RADEX. We must not change the order of the letters. Thus, in the first puzzle shown we want to change SOLO into TRIO. We keep the O-O and change S to W and L to K, giving us WOKO. Now we keep the W and the second O, changing the first O to R and the K to D, giving us WRDO. We now keep the R and O and change the W to T and the D to I thus solving the puzzle. Now you can proceed on your own and make TUBE GLOW.

T U B E



G L O W

P U S H



P U L L

# RAID

7				
8				
9				
10	W	T	I	M
11				

# ROUT

# DIAL

12	W	L	E	X
13				
14				
15	W	A	C	O
16				
17				

# SONG

Once more we will send to the successful contestants, their choice of the new map or the February RADEX. But get your solutions in before January 20th.

### Key

1. On 1200.
2. In Pennsylvania.
3. Last three letters stand for owner.
4. Last three letters stand for owner.
5. First three letters stand for state.
6. Last three letters stand for state.
7. Last three letters stand for owner.
8. On 1310.
9. A Columbia station.
10. First four letters of a city.
11. On 1210.
12. Last three letters are first three of city.
13. Last three letters are initials of owner.
14. 500 watts daytime.
15. Call spells city.
16. 10 k.w.
17. 100-watt Texan.

### Roll Your Own Puzzle

All right, if you think it is so easy to make up these cross-call puzzles, here is a chance to try your hand at it. Using this issue of RADEX, see if you can fit calls to the blanks in this square so they will be keyed both ways. When you have it completed, copy or cut out this square and fill it in. Send it to the Editor with the list of calls you have used for both horizontal and vertical and, for the best one submitted, we will send a year's subscription to RADEX. For the next best, a half-year's subscription; for the third, a map with leatherette cover. It will not be necessary to write descriptions for the calls.

1	2	3	4		5	6	7		8	9	10	11
12	13	14			15		16			17	18	19
20	21	22	23		24	25	26		27	28	29	30
31		32	33	34	35		36	37	38	39		40
			41	42	43	44	45	46	47			
48	49	50	51	52	53	54	55	56	57	58	59	60
61		62		63	64	65	66	67		68		69
70	71	72	73	74	75	76	77	78	79	80	81	82
			83	84	85	86	87	88	89			
90		91	92	93	94		95	96	97	98		99
100	101	102	103		104	105	106		107	108	109	110
111	112	113			114		115			116	117	118
119	120	121	122		123	124	125		126	127	128	129

# A Ground Phenomenon

I ACCIDENTLY discovered that my ground wire had become detached from its post on the set. When I made proper connection, the reception immediately became faint, but it became strong again as soon as I disconnected the ground," reports Norman E. Hills, 1501 20th Avenue, N., St. Petersburg, Fla.

"Thinking that I could get better reception on other stations without the ground wire connection, I tried it but found that the reception was better when the ground wire was properly connected except in the case of stations situated across water. Cuba, for example, where conditions in that respect resemble the Mexican stations, came in better without a ground."

Why stations whose signals must cross water come in better without a ground connection, is a question for the engineers to answer.

Both aeriels and grounds are so full of surprises that nothing will so repay the experimenter as trying the various methods his ingenuity will suggest. No law seems to govern them as what works for one fails for another.



VINCENT SOREY

That humble instrument, the mandolin, was responsible for Vincent Sorey's musical career. This young Italian musician who is heard directing the Columbia Salon Orchestra, the Columbia Review and the Columbia Melody Parade, was the son of a music-loving mother, who had for some reason or other specialized in the study of the mandolin.

So complete was her mastery of string and pick that she was known throughout many of the Italian provinces. She had

many pupils and frequently appeared with them in concerts.

As the public repertoire of mandolin music is very limited, she undertook to interpret the more difficult music of the violin and was able to accomplish surprising duplications of this instrument.

Almost as soon as little Vincent was able to walk, he was taught, inductively, facts about music, and as soon as he could hold a mandolin in his hands, he was learning to play it. Presently he studied theory and then became a student at the Italian Royal Conservatory at Turin.

At fifteen he won the Grand Prix, the youngest person ever to win that honor. He went to Paris and studied with Andolfi, a pupil of Sarsate, and made his debut at the Salle Gavo, playing Mozart's Fourth Concerto.

During the war he remained in Italy and played more than 250 concerts. He also played with the Philharmonic in Turin during President Wilson's visit there. Later he went to Buenos Aires.

Mr. Sorey's most recent work has to do with the collecting of Spanish and Mexican folk songs, many of which he presents on his program over WABC.

## HERE'S A LITTLE SLIP

that will bring pleasure to you or your radio friends  
Obey that impulse and sign it now

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- |  |        |
|--|--------|
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| <input type="checkbox"/> One copy of the next RADEX.....   | 25c    |
| <input type="checkbox"/> Trial subscription, next five issues of RADEX.....                                  | \$1.00 |
| <input type="checkbox"/> One year's subscription to RADEX, 10 issues, and Radio Map free.....                | 1.75   |
| <input type="checkbox"/> Two subscriptions to RADEX with one leatherette cover and Radio Map, both free..... | 3.50   |
| <input type="checkbox"/> Leatherette Cover.....  | .50    |
| <input type="checkbox"/> One copy "Radio Trouble Shooting," by E. R. Haan.....                               | 3.00   |

Write Name Plainly.....

Street and Number.....

City and State.....

# DIALING for DX RECORDS

One of our friends, who asks that we do not use his name, as its use always brings him more letters than he can answer, has the following to say in regard to his methods in DX work:

"Many persons have the mistaken idea that DX is possible only late at night. This is not by any means the case. While certain very distant stations, such as those on the Pacific Coast, cannot be heard well before midnight, and while nothing can be heard except our locals and the big New York and Chicago stations on their respective channels while they are operating, nevertheless it is quite possible to log a very respectable list during the early evening.

"This listener last night started right after Amos and Andy at 7:15. By 9:30 sixty-one different stations had been heard. At 11 o'clock the total was eighty-one.

Early evening DX, of course, entails the sacrifice of chain broadcasting and one's other favorite features. But it is extremely interesting, especially on the crowded channels. Stations will fade in and out, two or three being on the same channel at the same time. One of them usually gathers sufficient strength to hold the floor long enough for one to identify it. Furthermore no really long log can be made unless one starts early, because there are a number of stations that sign off before 8:30 p.m. One hour in the early evening will produce more stations than two hours after midnight.

"An interesting and helpful plan to follow is to take a piece of paper and write down all the broadcasting channels, running from 550 to 1500 k.c., making ninety-six in all. See how many of these channels you can cover and mark them off as they come in. This saves time that might otherwise be wasted waiting for an announcement, only to find that the station had already been heard."

"No listener should ask for verification of a chain program for it is too easy to cheat. While some stations will verify a chain broadcast, they do it only because

## Roaming the Ether is Radio's Thrill

they do not like to disappoint a listener. It is not clean DXing."

"Do you know of any DX clubs which I might join? How can I get in the Newark News DX Club?" asks F. B. Gilliland, 3621 Sutherland Road, Shaker Heights, Ohio. The principal DX clubs of which we have record are the Newark News, the Chicago Daily News, Buffalo News and the Toronto Evening Telegram. Letters addressed to the radio editors of any of these papers will undoubtedly bring full information.

The Portland (Maine) Press-Herald, Evening Express and Sunday Telegram, have established a Radio Club in charge of Dan Hagerty, reports William Armstrong, 424 West 26th Street, New York City.

## A Few Records

From Arborfield, Sask., John Forbes writes, "I am a DX tourist, but find it hard to pick up any great number of stations being so far north. The best I have had so far are KRGV, Harlingen, Texas, KGFL, Raton, New Mexico, and XEH, Monterrey, Mexico. I also heard CMK, Havana, lately. I got all these on a seven-tube DeForest Crosley and through the loud speaker. Can you tell me if KECA was operating in December, 1929?" We do not know when KECA, which is a sister station of KFI, first took the air. It appeared first in RADEX in January, 1930.

"I read RADEX from cover to cover and with its help I have received 260 stations since March, 1930," writes J. W. H. Johnston, 117 79th St., Niagara Falls, N. Y. "I have logged all 96 channels. Only since March have I been so enthused about verifications that I decided to join the Buffalo News DX club. Have logged and verified twenty west coast stations, one 100-watt at Reno, Nev., and one 100-watt at Wolf Point, Mont. Received verification from VAS just today. Can you give me any help on this one: A station on 1370 or 1380

keys, at 6:15 a.m. October 16th with an organ recital. After each selection the announcer would say, 'Heigh-ho, Everybody, Heigh-ho'."

"I have been at the DX game for six years," says Joaquin T. Russe, 21 Standish St., Provincetown, Mass. "Between October 1, 1930, and October 18th, I received over one hundred stations, including 22 on the Pacific coast, one of which was KFVD, 250-watts, Culver City, Calif."

"VAS does verify," says Rufus C. Myretetus, 515 Lincoln Ave., Collingswood, N. J. "In addition to the card received VAS wrote me a little note, in which they said that I was the first person from the United States ever to send them a Canadian stamp, that the rest all sent U. S. stamps which were useless there. I was in Canada last summer on a vacation," explains Mr. Myretetus, "and brought a few Canadian stamps home for use in requests from Canada. Perhaps this is the reason I received their verification."

#### Conditions in Texas

Reception in the Lone Star State is rapidly becoming worse, according to letters we receive. This is because of that state's proximity to Cuba and Mexico, and the lack of any understanding between this country and those two countries such as exists with Canada. "By actual count there are only 26 of the 96 channels which are usually free of interference at night," states Wm. E. Kessell, 411 No. 8th St., Temple, Texas. "And at the present rate it won't take the Latin Americans long to ruin those, as the Cuban and Mexican stations are rapidly taking over our cleared waves. At the present rate unless some treaty is arrived at between the U. S. and these countries, reception will soon be practically impossible in Texas. It is certainly a deplorable situation."

"I have stations on every channel except 540, 1030 and 1500," says Geo. A. McGrew, Avondale Ave., Warrensville, Ohio. "Have been getting KEX, Portland, every morning before six."

"I have logged ten coast stations and three hundred others so far," says LeRoy Cattle, RFD 2, Paterson, N. J.

110 stations in the first fifteen days of October with the Crosley Showbox is the record of Ralph Visser, Sheboygan Falls, Wis. Included are many west coast stations, CMC, Havana, the 100-watt station at Wolf Point, Mont., and the 100-watt station at Woodside, N. Y. Mr. Visser's total record now exceeds 200 stations.

"I have 445 stations on my list. I have a 1928 No. 72 Majestic. I have 31 Canadian, 14 Cuban, 17 Mexican, two from Alaska, two from Honolulu, one from Porto Rico, and one from Lima, Peru," says Chris Tom Banakas, 28 No. Claybrook St., Memphis, Tenn. "This winter I hope to add 250 more. My aerial is only 53 feet long. I've tried 28 aerials and this one has twice as much power, which is a mystery to me."

From Warren A. Huntsinger, 13850 Manning Ave., Detroit, Mich., "I have my first a. c. set, a Serenader, one of the cheaper ones, have had it only three months and so far have logged 115 stations, I get CMW and CMC, Havana, regularly."

## A Voice From New Zealand

IT is interesting to think that people on the other side of the globe whose feet are almost exactly opposite ours, are listening at the same moment to the same programs as we are here. We are sure our readers will find the following letter from a New Zealand reader of unusual interest:

"I received the September RADEX last week and, to say the least, I am sorry I did not know of its existence till then. I am indebted to Mr. C. Wells, of Concord, N. H., for introducing me to an excellent little magazine. I won't be able to send you my subscription for some weeks yet as I am working on a sheep-station (you'd call it a ranch) and see a post office only about every two months. I will send along my \$1.75 as soon as I get within range of a money order.

"I had an interesting night spent in solving the cross-call puzzle but I was working under a bit of a handicap in not being conversant with the terms 'Middle West,' 'East of the Smokies,' 'Where the World's Best Coffee Grows,'



etc. I am enclosing some New Zealand stamps to the equivalent of 26 cents in your coin so that I may make a claim for the Radio Map. Perhaps some philatelist over your way would be pleased to part with 25 cents for them.

"To say I am keen on DXing is putting it mild. My set is only a four-tube Browning-Drake which I constructed myself. The a.c. mains have not reached up here yet so I have to use dry batteries. I have 90 volts. I have heard almost ninety American stations, including XEN and a few Canadians. Some of the stations I have received verifications for are XEN, KGFG, KGIQ, WFIW, WJDX, KGNF, WAPI, KOIL, WIOD and KPRC. Just last week I had a letter from WHK (1000 watts, Cleveland) which said I did not give them quite enough information for positive verification, so I'll have to write again. I can get them nearly any night. I have about twenty verifications to come in yet, including WSFA, KFBB, KVL, KTBS, KTRH and WABC. This last station has been coming in well lately on organ numbers, closing down at 5:30 N. Z. time or 1:00 a.m. EST. KMOX is the best U. S. station here, coming in at full speaker strength while it is still daylight. WTAM is another good one. WTIC comes in well if it is on late. A letter from Mr. Randall, WTIC Plant Manager, asked me if I would be their long-distance receiving station, letting them know how WTIC comes in. The first time I heard WTIC they were testing all night as W1XG; the music could be heard a hundred yards from my speaker but the difference in time does not allow regular reception.

"A station which should be included in your list of world stations is 2YA Wellington, N. Z., a 5 k.w. transmitter on 720 kcys.

"If you put any of this in RADEX, please don't include my address. I might get more letters than I can buy stamps to answer. Radio takes the bigger half of my cheque, for batteries and tubes are expensive here.

"All success to RADEX. Yours sincerely, George Inglis, \_\_\_\_\_, New Zealand."

# In your Spare Time

## Build Radio Sets—Make Extra Money!

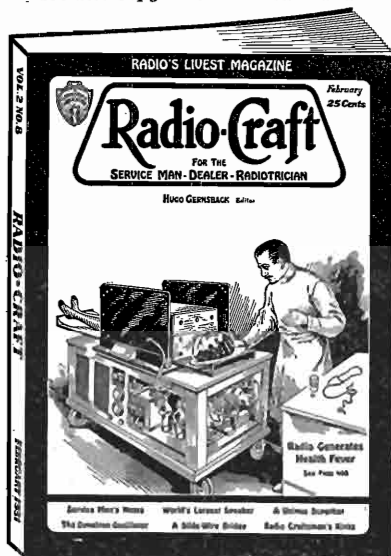
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# SKEPTICS VERSUS RECORDS

WE will now close the debate on the veracity of DX reception. Carroll C. Foltz, 303 Central Avenue, North Baltimore, Ohio, rather sums the situation up when he says:

"I would be willing to bet that 95 per cent of the DX receptions reported in your magazine are correct. The reason that some of your readers think they are lies, is because they do not understand how to tune for DX stations. DX stations are not brought in, by merely twirling the dials. When I tune for DX, I take about 30 seconds to cover each graduation on the dial. The signals from DX stations are naturally weak and if the dial is rotated too fast, you will have tuned the station in and out again before you are conscious of one being there."

Robert R. Rawstron, 31½ Sullivan Street, Claremont, N. H., adds to this, "Radios are like mules — sometimes they will and sometimes they won't. Here's an example of balkiness: WNBX with ten watts is about twenty miles from me. I tried for it one day with my eight-tube set and got blank. While I was trying, a friend nearby called me up and told me to listen to his radio over the phone. I did and heard the program clearly and when the announcement came, it was WNBX. And he has but five tubes. On the other hand, WTIC comes in like a house afire on my set while all he gets is a whisper."

"It is certainly strange," writes Mrs. L. R. Ledbetter, of Vicksburg, Miss., "that so many people are so skeptical concerning the DX records of others. I have had no astounding reception but I have received Montreal and Toronto before five o'clock p.m. I have been called not exactly truthful for saying I had received WLS at noon, but today, above the most awful interference, it was loud enough so that I had to turn the volume down. Surely everyone must realize how erratic radio is. Why, I get WREC Memphis almost as well as WJDX Jackson with the same power and the latter is only forty miles away. I have selected the coldest nights to DX

## Why Can't We All Get Japan?

only to be disappointed and then have brought in a long-coveted station on a supposedly bad night."

Many of us with good sets scarcely get out of the United States at all, but we know beyond dispute that others, perhaps with similar sets, are getting foreign stations. It's like a hole-in-one in golf, we read about others doing it but it never happens to us. If anyone thinks that he can tune in foreign stations in the same manner he dials for a local, he is very badly mistaken. Infinite patience and infinite care are necessary as well as infinite skill.

Let us take a concrete example: We have before us as we write, letters from foreign stations addressed to Frank A. Johnson, 317 West Englewood Avenue, Chicago. One of them is from Finland which states, "The items you mention are right." A second from 6LV London says, "This confirms your report of reception of our Liverpool station." Another from Budapest, Hungary, says, "You indeed heard our broadcasting station." JOBK, Japan, acknowledges the accuracy of the reception. One from Madrid, Spain, says, "Your data coincides exactly with our transmissions on the days you mention." Melbourne, Australia, 3DB writes: "On the day you mention a lady did sing 'Rose softly blooming,' and we consider it a very excellent performance for you to have picked us up at a distance of some 8,000 miles. The wavelength you heard us on is correct and the clipping you enclose is wrong."

Now if there is anything at all in verifying reception, surely these are authentic proof. And if Mr. Johnson can do this in the heart of Chicago, what right have we to question the reception of others?

We have a letter from a reader whom we will allow to go unnamed. In this letter the word "liar" appears five times so we will let the letter go unpublished.

But the writer adds a postscript as follows: "I picked up WXYO Rutland, Vermont, this morning on 1500 keys." Others who report unusual reception are "liars," but this person sees nothing humorous in himself making a most extraordinary claim. In the first place, there is no WXYO. The new Rutland station is WSYB. In the second place, to receive a hundred-watt station 200 miles distant in the morning is rather an achievement particularly when that station is on 1500 keys. and there are six other stations on the same frequency within the same radius and none of them sharing time!

So that's that. We will continue to publish letters of interesting reception without vouching for their accuracy and certainly we cannot undertake the monumental task of trying to verify such reception. As Richard Douglas, 1130 Krug Park Place, St. Joseph, Mo., says: "By all means print DX records; if the DXers aren't honest it isn't hurting anyone but themselves."



**SHERLOCK HIMSELF**

*Richard Gordon, who relives "The Adventures of Sherlock Holmes" each Monday night at 10:00 E.S.T. over the N.B.C. (WEAF) Network. The famous character of A. Conan Doyle's lends itself well to radio.*

## Grounding the Aerial!

THE antenna is such a vital and important part of radio reception that no line of experimenting is more interesting than trying new ideas in aerial construction. The history of radio is replete with instances where certain lines of procedure have been followed for years with the impression that they were the only ways to do a thing, only to have some ingenious experimenter discover much simpler and better ways of doing the same thing.

Dr. William F. Brokaw, 2301 Chatfield Avenue, Cleveland, Ohio, tried an entirely different aerial idea and the result, he says, was a most interesting experience with a revolutionary theory. This experiment he describes in the following article:

"My experience during the past year with an Atwater Kent a.c. 8-tube, screen-grid set, has negated to a marked degree the theory of careful aerial insulation. I have used for several years a well-insulated aerial 110 feet high and this has been quite satisfactory but, about a year ago, on a hunch I took a six-foot length of gas pipe and drove it into the ground about three feet at a distance of ten feet south of the house. To the top of this was clamped a piece of ordinary stranded aerial wire which was brought in through a hole bored in the window casing and twisted into a small bight on the inside. A piece of flexible cord about a foot long with a small Mueller clip on each end makes a convenient way to snap onto the lead at the wall and from that onto the antenna post of the set.

"The regular ground wire from the set extends about 25 feet into the basement and is soldered onto the cold water pipe near the meter.

"This combination immediately brought in Havana and other southern stations in full volume and much better than the long, high, insulated aerial! I then tried another similar line ten feet to the west and with it came KFI and the western stations. A third line to the East brought in the eastern stations.

"Under conditions at all favorable, any one of these short grounded leads

will bring in most anything from any direction and often the short eastward lead will have twice the signal strength of the 110 foot line.

"This experiment has afforded an opportunity to observe some of the vagaries of magnetic currents or carrying waves. The general impression is that these waves surge from South to North and back again often within a very few minutes or from East to West and back, or in a whirling motion, or up and down. The signal strength from the high aerial may be strong and then suddenly weaken and switching to the ground lead finds it strong there at the moment it is weak in the high aerial.

"An interesting instance of the surging wave current occurred early in October, at about 5 p.m., when without any aerial connection of any kind, KDKA came in with a volume almost equal to WTAM.

"With the ground leads, there is rarely fading of KDKA, something that has always been associated here with that station. The radio engineers probably have all this sort of thing cataloged and ready to spring on us at any time but you may let others have the benefit of my experience now."

(*Editor's Note*) What the doctor is using is really a large loop with the earth forming one side of it. His experience seems to upset the theory that the aerial must be perfectly insulated and also the idea that it must be high in the air. We hope some of our readers will try this arrangement and let us have their reports. It promises to be of great benefit, particularly to those who have scant space in which to erect a long, high antenna. It also provides a simple method of making some experiments in the directional qualities of aeriels.

## Short Wave Adaptor

(Continued from page 3)

and leads from the B-battery are run to the B-neg. and B 135-volt binding posts on the adapter. The detector tube is removed from the receiver and placed in the second socket of the adapter, while the plug to which the F and P leads from the adapter are connected, is inserted in the detector socket of the receiver, and the UX 222 screen-grid tube is inserted in the r. f. stage of the adapter. Plug in the particular coil covering the waveband in which you wish to work, and then everything is ready for operation. Turn on the switch and rotate the adapter dial slowly. The tuning dials of your receiver have no function whatever when the adapter is in use. It is advisable to use a set of headphones to get distant stations and after signals have been tuned in satisfactorily, the loudspeaker can be substituted for the phones.

### For All-Electric Sets

Fig. 2 shows an audio amplifier that can be used if your set is all electric. The parts required for this amplifier are two good audio-frequency transformers, two tube sockets for a standard UX 201A tube, two single contact jacks and two 1A Amperites passing one-quarter amp. each, or any other ballasts of the same rating. Follow the wiring as indicated. The only connection from the adapter to the amplifier is the one marked P, shown in both Figs. 1 and 2. This terminal is otherwise connected to the plug, which is not used when the adapter is wired to the amplifier. Connect the F-terminal to the A-neg. binding post of the adapter. The audio amplifier is connected to the batteries separately as indicated. Two jacks are used so that either headphones or loudspeaker can be attached, the first-stage jack being more satisfactory for headphone reception. Use a UX 201A tube for the first stage and a UX 112A for the second, although a 201A will also give good results in the last stage. With a 112A tube you need a C-bias of 9 volts, which is obtained from a C-battery. If a 201A tube is used in the last stage

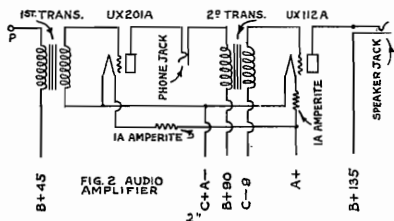


Figure 2

only 4.5 volts of C-bias are required. The filament current for both the adapter and amplifier should be taken from a storage battery instead of dry cells as the drain would be too great for the latter to operate economically.

#### Rolling Your Own Coils

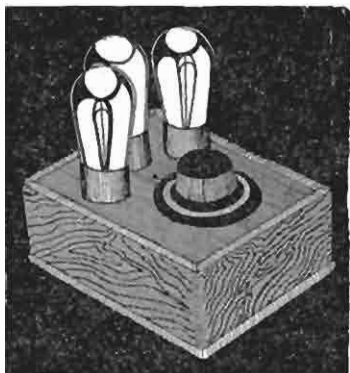
For those who would like to make their own plug-in coils, the easiest procedure is to get four discarded radio tubes of the UX 201A type, a mailing tube  $2\frac{1}{2}$  inches in diameter, and four strips of bakelite about one-half inch wide and 4,  $3\frac{1}{2}$ ,  $2\frac{1}{2}$  and 2 inches long respectively. Cut four lengths from the mailing tube the same length as the bakelite strips, Cut off the base of one of the old tubes and drill a hole through the center. With some No. 26 d. c. c. or enameled wire wrap two separate coils on each tube, taking care to wind them both in the same direction. Run the ends of the coils thus formed through small holes punched through the tube so that the ends will come inside of the tube. Wind one coil on one side and the other on the opposite side of the center of the tube, allowing about one-half inch of space between the two coils. Drill three holes through each bakelite strip and through the tube of corresponding length. One hole is drilled in the exact center of the strip and the other two at the ends. The strips are fastened to the tubes at the ends with small brass screws and nuts, after which four small holes are punched through each tube in the space between the coils to permit passing the ends of the wire out again for soldering to the tube-base prongs. Apply collodion to each soldered connection liberally, or better still, use short lengths of "spaghetti" tubing, these being slipped over the ends of the wire before soldering, and then pushed over the joint. This prevents short circuits. Attach the tube bases to the coils by passing a long brass machine screw through the hole in the base and then through the center hole of the bakelite strip and tube. When assembled in this way the bakelite strip protects the windings from injury and holds them in place.

#### Number of Turns

The following windings have been found suitable for short-wave work:

# Short Waves

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(R.X)

For the 150-200 meter range a primary of 20 turns and a secondary of 25 turns; for the 80-150 meter range a primary of 10 turns and a secondary of 15 turns; for the 40-80 meter band, a primary of 9 turns and a secondary of 7 turns, and for the 20-40 meter band, a primary of 6 turns and a secondary of 3 turns. The first or 150-200 meter coil is wound on the 4-inch tube, the 80-150 meter coil on the 3½-inch tube, etc., each coil being wound on a tube of corresponding size. When connecting the coil ends to the tube-base prongs, care must be taken to run the corresponding ends of the coils to the same prongs on the tube base so that the coils, when interchanged, will be connected in exactly the same way. Coils attached to tube bases as just described fit any standard socket. The socket terminals must also be hooked up correctly so that the coils will be properly placed in the circuit. It was found that a .00025-mfd. variable condenser worked best with the coils just described.

### Questions Are Asked

*(Continued from page 5)*

Desmond probably heard WCAU in Philadelphia. WCAU on 1170 and WPG on 1100 often couple up and broadcast programs from the Atlantic City Convention Hall, which is the largest in the East. It might interest your readers to know that football is played in this hall and a full-size dirt gridiron has been made, thirty carloads of dirt being hauled in from neighboring states. The games are played at night and broadcast over WCAU and WPG and possibly WFAN may be in the hookup."

The mystery of WCHI has at last been solved. Several readers report and this is now confirmed by the Commission that, after WCHI's license expired, their programs were broadcast over WORD, usually with an announcement giving both calls. WCHI has now taken over WORD's license and WORD is no more.

"The hetrodyne on WTAM very likely comes from one of the three 150-watt stations in Havana. One of my friends while listening recently on one of the new nine-tube superhets, heard a Spanish-

speaking station between WBAL, 1060, and WTAM, 1070. A number of the Cuban stations have recently been a little below their proper frequencies and, while my friend could not identify the station, it was apparently one of the Cuban stations. KMOX has a fine signal and, being twenty kcys. away from WTAM, should not cause any heterodyne." This report comes from C. M. Falconer.

### Whistles and Squeals

*(Continued from page 6)*

*venient to be hooking and unhooking the ground lead-in all the time.*

The advantage claimed for the shielded lead-in wire, namely the reduction of interference pickup, is greatly over-estimated, and practically just as good results can be obtained without it. The insertion of a small fixed condenser between your shield and the ground merely changes the capacity of the circuit and accounts for the difference in volume. Often broadcasting stations blanket radio receivers in the immediate vicinity. This is not only a peculiarity of your set but is quite common. Frequently a station can be tuned in louder at a distance of a hundred miles than is possible at a distance of two or three miles, owing to this effect. The only cure is to reduce the pickup of the signal by disconnecting the aerial or ground lead-in to the set. It might be advisable to install a switch outside of the set which is a much handier arrangement than opening the set to disconnect the lead.

### Microphonic in Majestic

*I have a Majestic radio receiver No. 72, which has been giving considerable trouble and service men have not improved it at all. There is a noise that develops at times that I can usually eliminate by snapping the power switch on and off or by momentarily disconnecting the aerial. At times this method will not help. I have checked the tubes over several times and service men have given the circuit a continuity test but have not located the trouble. I thought that perhaps you may have had cases of this kind before, and could suggest a remedy. The set is very sensitive to electrical interference, although the interference is not*

*bad in this locality, but on my set it seems to be picked up more than on most sets in town. I have thought of modernizing the set by putting in 245 power tubes and 224 screen-grid tubes. Would there be enough benefit from such a change to pay for the expense?*

Your trouble evidently is what is commonly called a "microphonic," and can usually be traced to the detector or first audio tube. Changing the detector with another of the same type, but one which is comparatively non-microphonic, may correct the trouble. The only method of finding a non-microphonic tube is by means of substitution. If this does not help, put a "howl arrester" on the detector tube. This is a heavy metal cap that is placed on the top of the tube, and it absorbs the small vibrations causing the trouble. In case the remedies just mentioned are ineffective, reduce the plate voltage on the detector and also the first audio tube. Do not attempt to remodel your set by using 224 screen-grid tubes and a 245 power tube, as this change will only be inviting complications and trouble. Moreover, the advantages obtained by such a change do not compensate for the cost and trouble of making it.

#### **Substituting 201A's for 199's**

*I have a No. 27 Zenith receiver which has five 199 tubes wired in series for the filament current, and one 171A at the audio end. The 189 tubes are wired for a C-bias differently than in most sets. Could I rewire the sockets for 201A tubes and use a different A-power supply, as the present one will not furnish enough current for 201A tubes in parallel? The 199 tubes usually last for about a week before they get noisy and then I have to turn up the two r. f. tubes very high in order to get anything at all. I do not get much volume except on powerful stations. If it is possible will you kindly tell me how to connect up the C-bias on 201A tubes connected in parallel in this set?*

It would be highly inadvisable to make circuit changes in your case, but the trouble you are having can be corrected in a very simple way. Open the cabinet in the rear and you will find a double-conductor cable running from

one side to the other, across the top. These lines carry 110 volts. Remove the outside covering and cut one of the conductors in two, this being done, of course, with the set entirely disconnected from the lighting circuit. Get a porcelain socket or cleat receptacle and screw it to the inside of the cabinet so that the two ends formed by cutting one conductor can be connected to the socket terminals. Insert a 40-watt lamp in the socket, which will cut down the power supplied, if this size of lamp is not effective in curing the trouble, substitute a 50 or 60-watt lamp until you find one of the right size. The reason why the exact size of lamp cannot be given is that line voltages vary considerably in different localities.

#### **Replacing 171A with 245**

*We have a customer who owns a nine-tube Case receiver of the neutrodyne type. This receiver employs push-pull with 171A tubes. Our customer desires 245 tubes substituted. Please inform us if this change is really practical and advantageous, and if so will appreciate detailed information covering the wiring changes?*

The object of developing the 245 tubes was not so much to obtain a better tone quality than that furnished by the 171A tubes, but merely to simplify receiver construction and wiring. The power packs usually furnished as integral parts of all-electric receivers are especially designed for use with a certain number of tubes of a certain kind in respect to voltage and current requirements. By substituting 245 tubes for 171A tubes previously used in a receiver, the five-volt taps on the A-supply are not used as the 245 tubes need only 2.5 volts filament voltage, and they would have to be connected to the 2.5-volt terminals of the power unit. As it is questionable whether this part of the power-unit winding was made to stand an overload, the change is not advisable. In fact, one of our readers recently made such a change, after which a decided hum was noticeable in reception. I advised him to change back to the original hookup using 171A tubes. An alternative method of using the present power unit with 245 tubes is to cut down the voltage to the

proper value by inserting a resistor. However, this also reduces the current and it is doubtful whether there would be enough current left to supply the tubes. With too little current they would, of course, not be operating efficiently. Still another method of providing filament current for 245 tubes is to use a separate transformer providing filament current at the proper voltage. Of all methods this one seems to be the most promising. The output terminals of the extra transformer are connected in parallel with the 2.5-volt output terminals of the power pack, and the input of the transformer is cut in the input lines to the power pack. The advantages obtained by making such a change would not be enough to compensate for the trouble and expense, and the difference in tone quality would not be appreciable.

#### Poor Amplification

*I have a five-tube battery-operated set with r. f. coils  $1\frac{1}{4}$  inches in diameter, wound with fine wire for .00035-mfd. variable condensers, and it is perfect up to 375 meters, and from there to 550 meters it falls off in amplification. What can I do to overcome this? I have two other sets of coils for .00035-mfd. condensers. One set is two inches and the other  $2\frac{3}{8}$  inches in diameter, and they are wound with coarse wire. Will these larger coils overcome the trouble?*

It is a peculiarity of all tuned radio-frequency receivers having coils wound for the broadcast waveband, that the stations on the lower end come in with plenty of volume, while those at the other end fall off in volume, exactly as in your case. Substituting coils with a few more turns on the secondary windings, and also using .0005-mfd. condensers, will reduce this trouble to some extent but will not eliminate it entirely. The trouble is more pronounced in one receiver than it is in another, owing to differences in the coils and condensers with which they are equipped. By using a long aerial instead of a short one, the signals from both low and high wavelength stations will be brought in louder. Those coming in too loud can then be toned down by means of the volume

control, and others previously too weak, will come in better than before.

#### Trouble With Two Sets

*I have a model 20 Atwater-Kent radio, battery-operated. It works perfectly with batteries. I thought that I would try an eliminator so I did and it worked well for a couple of days. Then suddenly it stopped. I have tried the eliminator with other battery sets and it functions all right and I have also used batteries on my set after the eliminator would not work, with good results. I would appreciate very much if you would give information concerning this trouble. Also I have a National S.W. 4 "Thrill Box" but can't get anything but code on it. I took it to the dealer from whom I purchased it but he could not find anything wrong with it. This set is a combination shortwave and broadcast receiver with interchangeable coils. On the broadcast coil I get reception barely audible with earphones. On the short-wave coils I get only code, which comes in quite loud. The set doesn't seem to have any push in it. Could you suggest anything on this set?*

Your Atwater-Kent No. 20 receiver is designed to use only 20 or 22.5 volts on the detector plate, if you are using the same kind of tube that was originally recommended for use with this set. The plate voltage for the audio tubes on this set should not exceed 90 volts. Undoubtedly the B-eliminator you have been using produces greater voltage, which chokes the tubes and makes them inoperative. Take the B-eliminator to a radio service shop and have the output voltage tested with a high-resistance voltmeter. An ordinary low-resistance voltmeter, which is ordinarily used for battery work, will not give accurate readings when used on an eliminator. If there are any variable controls on the eliminator, adjust them so that the detector plate supply will be about 20 volts, and the maximum output for the audio stages will be about 90 volts. I notice that the A-positive binding post of this receiver takes both the A-positive and the B-negative leads. Now, if this does not cure your trouble, have the tubes tested, which would be a good idea at any rate. Possibly a new detector such as a UX 200A, which takes from



20 to 50 volts on the plate, will give better results. Concerning the "Thrill Box" it seems evident that an additional stage of r. f. amplification with a short-wave coil and condenser to match, would greatly increase the range and volume. Code signals always come through much louder than broadcast signals, and on a weak receiver, only the former will come through. On the other hand you may not have been tuning in at the exact time that the broadcasts on short waves were made. No short-wave receiver will be efficient on the broadcast wave-lengths, even though coils for the latter are used, as the condensers are not designed for the broadcast wave-band, lower-capacity condensers being used for short-wave work. If you install an additional r. f. stage with a short-wave coil and condenser, the set will not pick up broadcast signals at all.

#### Voltage Causes Howl

*I have a model No. 55 Atwater-Kent radio set which has a tendency to break into oscillation every once in a while. Sometimes merely jarring the floor causes it to oscillate violently. The only remedy seems to be to take the detector tube out of its socket and then replace it. The trouble then stops for an indefinite period. Sometimes when the set does not oscillate, it will start doing so by placing the hand near the detector condenser. At other times the set will not cause any trouble at all. I am also extremely bothered by microphonic noises in spite of the fact that I have the detector capped. I have also bought new tubes, but that does not cure it. Can you give me any idea as to the cause and remedy of these conditions?*

It is absolutely necessary in the case of the Atwater-Kent No. 55 receiver to have a ground connection and a short aerial, the latter being separated as far as possible from pipes and other metal. The ground and aerial must not be interchanged as can be done with many receivers. The cause of your trouble is that the voltage constants are not correct, perhaps due to a faulty resistor. It seems quite certain that the plate voltage on the detector and first audio tubes is excessive. As this set has a complicated wiring system, including many

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resistors, of which you do not know the value, it is advisable, under the circumstances, to call in the help of the Atwater-Kent radio service man of your locality. He has all the necessary information at hand concerning the values of the resistors, which determine the voltage applied to the tubes.

#### Weak Tubes Reduce Efficiency.

*Up to a few months ago I received stations below 950 kilocycles, but I do not get them any more although others in the neighborhood do. I receive stations above this mark, which are less powerful and further away. Some evenings I receive stations loud and clear, then cannot get them at all a few hours afterwards. Will you suggest where the trouble lies?*

As you have received stations below 950 kilocycles up to a comparatively recent date, your trouble undoubtedly lies in the tubes, and if your set is battery-operated, also in the batteries. Have the tubes tested and replace those that do not show a normal reading. B-voltages must also be kept up to normal. It is a general fault or rather peculiarity of tuned radio-frequency sets to have greater volume on lower wave-length or high-frequency signals, than on higher wave-length or low-frequency stations, and as soon as the efficiency of the set is decreased, this peculiarity becomes pronounced, as it is in your case.

### "Let's Call a Meetin'"

*(Continued from page 9)*

and heard WBTM signing off and WLVA coming on.

From Meyer Tuchinsky, "You might be interested in the schedule of WRAX. This station broadcasts programs in foreign languages only and is rather interesting. Their schedule is as follows: 10 a.m. and 2 p.m., German hours; 11 a.m. and 3 p.m., Polish hours; 12 noon and 4 p.m., Jewish hours; 1 p.m. and 5 p.m., Italian hours; all E.S.T. The only English spoken is the call letters every fifteen minutes and announcements each hour."

Carroll C. Foltz who wrote the article on wave-traps in the December issue adds this note: "For those readers who have trouble with receiving stations on har-

monics, I recommend a wave-trap. In the daytime I receive a harmonic of WLW on 1400 which interferes with the reception of stations properly on that wave. I have found that if I set my wave-trap to absorb the wave of 700 keys. it also eliminates the harmonic on 1400 but does not affect the reception of stations on 1400. Setting the wave-trap to absorb the 1400 frequency in order to get rid of the harmonic will not help any, for it will then absorb everything on that wave."

Regarding that contemplated booklet of Hours on the Air, Mr. Foltz writes: "I would prefer to know what hours any particular station was on the air. However, in case you print such a list you will just cut yourself a big slice of trouble. Many stations that share time reverse the hours they are on the air at intervals. By the time you could gather the information for such an issue, half of it would be incorrect because of changes. You would have to take a lot of criticism from readers who do not realize that at least half of the stations are constantly changing the hours they are on the air."

Herbert H. Seidler, 155 Hicks Street, Brooklyn, N. Y., calls attention to the fact that any schedule of time on the air of the various stations, to be of the greatest value, would have to show the time according to the four or five standards. Otherwise anyone desiring to tune in a particular station would have to first ascertain what time zone the station was in and convert that into the time of his own zone and by that time, probably, the station would be off the air.

The manifest difficulties in the way of publishing a really worth-while and accurate index of time-on-the-air make it inadvisable for us to undertake it at this time. We shall talk this over with officials of the Radio Commission in the near future.

"The stations in Halifax, N. S., are on 910," writes C. M. Falconer. "I enclose program received from the Canadian National Railways and I also have a letter from CHNS dated September 12th in which they state that they are on 910. The change occurred, I think, about September first." The October

report of the Dominion Government bearing date of September 30th, still carries the Halifax stations on 930 as does also the list of our own Department of Commerce dated December 6th. A number of readers have reported reception on 910 and we are making the changes accordingly.

Radio Station KFYZ Bismarck, N. D., writes us that we were in error in reducing their power from 1000 watts to 500 as they have a license from the Radio Commission for 1000 watts at night and 2500 watts daytime. We are therefore again showing them with 1000 watts, although the Commission's list of December 6th still shows this station with 500 watts.

George S. Buckman, South Nyack, N. Y., sends us a letter from WGBS New York City in which they state that they no longer supply verifications of their programs. "Why is it," asks Mr. Buckman, "that the big 5000 watt stations on the Pacific Coast practically always send one of their 'Thank You' cards in answer to your very, very specific request for verification? These cards are no kind of a verification and another line like 'This verifies your reception of our station' would please their listeners."

When XED came on the air on November 8th with 10,000 watts, we naturally received many letters calling our attention to the fact that we had them listed on 770 instead of 960 kcys. As the November RADEX went to press on October 18th, there was no opportunity to make the change in the November issue but the new station with its proper rating, was correctly listed in December.

John Carter, 1119 West 9th Street, Erie, Pa., states that he has a card from CKAC Montreal, which gives their power as 20,000 watts and not 5000 as shown in RADEX. There are two ways of calculating power, one of them about four times the other.

J. R. Culver, 529 Concord Street, Boulder, Colo., and several others send us lists of stations which have verified for them although they have no marking in RADEX. As we have stated before, we cannot assign a symbol to these stations except upon their own written statement as we desire our rating to indicate what

the stations themselves promise, rather than the experience of our readers which is so often at variance. A large number of symbols are added in this issue as we have just sent another letter to stations not previously reporting.

"XED and CFRB interfere with each other so much I can get nothing but squealing, but as soon as the Toronto station signs off, XED comes in fine," comments Ralph Visser, Sheboygan Falls, Wis.

Ray E. Everly, 102 West Washington Street, Newton, Ill., thinks that temperature has more to do with reception than daylight. He finds that, in Illinois at least, there is less noise and better distance range between 40 and 60 degrees. He uses a 12-tube super and some of his daylight catches are the following: KNX at 6:45 p.m., E.S.T., WRUF at 12:38 p.m., CKAC at 10:15 a.m., WNAX at 6:50 a.m., KFJZ at 6:55 a.m., and WBBZ and WBIG at 7:00 a.m.

"Through WSSH Boston, I obtained the information that WMAF South Dartmouth, Mass., is no longer on the air," reports D. Ohlwiler, 19 Taft Street, Southbridge, Mass. The Commission still shows this station. Has anyone heard it recently?

WASH Grand Rapids is entitled to a big hand for announcing regularly, thinks Joseph Stokes, 7318 Woodlawn Avenue, Swissdale, Pa., who states that names of those writing in for verification are announced over the air by that station.

Robt. L. Stillson, Lonesome Lodge, Bradenton, Fla., thinks that the rule of the Federal Commission requiring the announcement of phonograph records is just an additional aggravation, for compared to the "raw advertising, poor jazz, and the great absence of common sense" the records average much higher than the rest.

Some western targets to shoot at are given us by R. G. Smith, 14916 Greenleaf Street, Van Nuys, Calif.: "CKWX has a special program for DX purposes Wednesday and Saturday nights from 11:30 P.S.T. to 1:00 a.m. KIDO Boise has an 'Idaho Spuds' Midnight Frolic Saturday nights and continues 'until the crowd goes home in the morning.' KOH is on the air every night at 6

o'clock P.S.T. KJR is on Saturday nights until 3 a.m. P.S.T. Here are some stations that are on the air after midnight P.S.T.: KFOX, KMTR, KTW, KOL, KXL, KWJJ, KGGG, KFYZ, KJBS, KFXF, KRE and KGRS."

Station 10 BP of Wingham, Ont., writes us as follows: "Owing to many requests from American DX fans and readers of RADEX for information regarding any special DX programs from 10 BP this winter, we are glad to comply and have decided on the following periods: The 10th and 25th of December, January and February, E.S.T. from 1:00 to 2:30 a.m. We will gladly verify on proof of reception." Many thanks to 10 BP for this opportunity to work this 25-watt station on 1200 kcys.

### Too Many Letters

**A**FTER you published my letter in the November issue, I received 203 letters from DXers asking me questions about my set. It is impossible for me to answer them all and I hope you can publish the following information, which answers their questions," writes Eugene Miller, 53 Hamilton Street, Harrison, N. J.

"I am using a Victor RE-45 a.c. set. It's a combination radio and phonograph. Antenna is about 100 feet long, in one piece, insulated wire. It is 75 to 80 feet high.

"I received 2BL Sydney, Australia, and JOAK Tokyo, when the local stations were off the air, in the morning between 4:30 and 6:00 o'clock.

"Every month, I remove the chassis of my set from the cabinet. I dust out the set carefully with a fine brush. (You'd be surprised at the amount of dust that gathers in a set.) I sandpaper the prongs of my tubes, my antenna lead-in and my ground. Every four months, I have my tubes tested. I have a set of headphones installed so I can DX without interfering with the family's sleep. I do not use a short-wave set of any kind. All my records were made in the broadcast band."

Mr. Miller sends us the original verifications from several stations. 2BL Syd-

ney, Australia, writes, "Congratulations on your reception of our station." 2FC, also of Sydney, writes similarly. CKMO, Vancouver: "You were listening to one of our special DX programs." The general manager of The Radio Broadcasting Company of New Zealand writes a personal letter saying, in part: "As the particulars given check with our station log for the occasion in question, we have pleasure in verifying your reception."

### The Long and Short of It

**O**NE of our readers who has a powerful screen-grid Philco was troubled with the local stations coming in with too great a volume. Even with the distance switch thrown to local it was necessary to turn the volume control down to the lowest possible point in order to prevent disagreeable volume. At this point reception was not satisfactory, as it was much like the wick of a lamp being turned so low that the light flickered.

To solve this difficulty, a short aerial was erected in the basement and this, as well as the long, outside aerial, was run to the set. An ordinary three-point electrical switch was secured and mounted underneath the set, out of sight. On a three-way switch there are four posts or screws but two of these are connected together, the other two being entirely separate. The aerial leads were attached to the separate posts while the common post had a lead to the antenna post of the set.

When local stations are desired, the switch is thrown to connect up the basement aerial. This cuts down the volume so that it is necessary to turn up the volume control to a point where the current is steady and does not fluctuate. When distant stations are desired, the outside aerial is brought into use.

The same result would be accomplished with an ordinary single-pole, double-throw knife-switch but the electrical device is better as it needs no insulated mounting and, reaching under the set, it is easily snapped from one setting to the other.

# KEY TO CHAIN STATIONS

CFRB 960 C	WOL 1270 C	WBEN 900 N	WFAA 800 N	WJAX 900 N	WOW 590 N
CKAC 730 C	KOMO 920 N	WBRC 930 C	WFAN 610 C	WJDX 1270 N	WOWO 1160 C
CKGW 690 N	KPO 680 N	WBT 1080 C	WFBL 1360 C	WJJD 1090 C	WPG 1100 C
KDKA 980 N	KPRC 920 N	WBZ 990 N	WFBM 1230 C	WJR 750 N	WPTF 680 N
KDYL 1290 C	KRLD 1040 C	WBZA 990 N	WFI 560 N	WJZ 760 N	WQAM 560 C
KECA 1430 N	KSCJ 1040 C	WCAE 1220 N	WFIW 940 C	WKBN 570 C	WRC 950 N
KFAB 770 N	KSD 550 N	WCAH 1430 C	WFJC 1450 N	WKBW 1480 C	WREC 600 C
KFH 1300 C	KSL 1130 N	WCAO 600 C	WGAR 1450 N	WKRC 550 C	WREN 1220 N
KFI 640 N	KSTP 1460 N	WCAU 1170 C	WFLA 620 N	WKY 900 N	WRR 1280 C
KFJF 1480 C	KTAR 620 N	WCCO 810 C	WGN 720 N	WLAC 1470 C	WRVA 1110 N
KFKX 1020 N	KTHS 1040 N	WCFL 970 N	WGR 550 C	WLBW 1260 C	WSAI 1330 N
KFPY 1340 C	KTRH 1120 C	WCKY 1490 N	WGST 890 C	WLBZ 620 C	WSB 740 N
KFRC 610 C	KTSA 1290 C	WCSH 940 N	WGY 790 N	WLIT 560 N	WSM 650 N
KFSD 600 N	KVI 760 C	WDAE 1220 C	WHAM 1150 N	WLS 870 N	WSMB 1320 N
KGO 790 N	KVOO 1140 N	WDAF 610 N	WHAS 820 N	WLW 700 N	WSPD 1340 C
KGW 620 N	KWK 1350 N	WDAY 940 C	WHEC 1440 C	WMAK 900 C	WSUN 620 N
KHJ 900 C	KYW 1020 N	WDBJ 930 C	WHK 1390 C	WMLA 630 C	WTAG 580 N
KHQC 590 N	WABC 860 C	WDBO 1120 C	WHO 1000 N	WMAQ 670 C	WTAM 1070 N
KLRA 1390 C	WADC 1320 C	WDOD 1280 C	WHP 1430 C	WMC 780 N	WTAR 780 C
KLZ 560 C	WAIU 640 C	WDSU 1250 C	WIBO 560 N	WMT 600 C	WTIC 1060 N
KMBC 950 C	WAPI 1140 N	WEAF 660 N	WIBW 580 C	WNAC 1230 C	WTMJ 620 N
KMOX 1090 C	WBAL 1060 N	WEAN 780 C	WIOD 1300 N	WNAX 570 C	WTOC 1260 C
KOA 830 N	WBAP 800 N	WEBC 1290 N	WISN 1120 C	WOAI 1190 N	WWJ 920 N
KOIL 1260 C	WBBM 770 C	WEEI 590 N	WJAR 890 N	WOC 1000 N	WWNC 570 C
KOIN 940 C	WBCM 1410 C	WENR 870 N	WJAS 1290 C	WORC 1200 C	WXYZ 1240 C

## ENTER YOUR DIAL NUMBERS IN THESE SPACES

510	610	710	810	910	1010	1110	1210	1310	1410
520	620	720	820	920	1020	1120	1220	1320	1420
530	630	730	830	930	1030	1130	1230	1330	1430
540	640	740	840	940	1040	1140	1240	1340	1440
550	650	750	850	950	1050	1150	1250	1350	1450
560	660	760	860	960	1060	1160	1260	1360	1460
570	670	770	870	970	1070	1170	1270	1370	1470
580	680	780	880	980	1080	1180	1280	1380	1480
590	690	790	890	990	1090	1190	1290	1390	1490
600	700	800	900	1000	1100	1200	1300	1400	1500

# WHAT'S ON THE AIR TONIGHT?

## A WEEKLY CALENDAR

### Leading Features of the Network Programs

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 but are subject to change daily thereafter*

#### Daily (Except Saturday and Sunday)

**6:45-8:00 Tower Health Exercises**  
WEAF CKGW WCAE WEEI WFI WBEN  
WGY WRC

**8:15-8:30 Morning Devotions**  
WEAF WAPI WCAE WCKY WCHS WFI  
WFLA WGEN WGY WHAS WIOD WJAR  
WJAX WJDX WLS WOW WPTF WRC  
WRVA WSUN WTAG WWJ

**8:30-9:00 Cheerio**  
WEAF CKGW KPRC KSTP WAPI WCAE  
WCKY WCHS WDAF WEEI WFI WFLA  
WBEN WGY WHAS WIBO WIOD WJAR  
WJAX WJDX WMC WOAI WOW WPTF  
WRC WRVA WSB WSM WSUN WTAG  
WTAM WWJ

**9:00-9:15 The Quaker Man**  
KPRC KSD KSTP KTHS KVOO WAPI  
WDAF WEBC WFAA WHAS WHO WJDX  
WKY WLS WMC WOAI WOC WOW  
WSB WSM WSB WTMJ

**9:00-9:30 Something For Everyone**  
WABC KDYL KFH KFJF KMBC KMOX  
KSCJ WADC WBCM WBRW WDBJ WDOD  
WHP WJAS WLAC WMAQ WMT WPG  
WREC WSPD WWNC WXYZ

**9:00-9:45 Morning Melodies**  
WEAF WAPI WGY WBEN WHAS WOW  
WRC WRVA WSM WTAM WWJ

**11:15-11:30 Radio Household Institute**  
WEAF KFKX KPRC KSD KSTP KTHS  
KVOO WAPI WCAE WCHS WEBC WEEI  
WBEN WGY WHAS WJAR WKY WLIT  
WMC WOAI WRC WSAI WSB WSM  
WSMB WTAG WTAM WTMJ WWJ

**12:00-12:30 Yoeng's Restaurant Orchestra**  
WABC WHEC WLBZ WPG WCAU WHP  
WJAS WLWB WMAL WCAO WTAR WDBJ  
WKBN WWNC WSPD WDOD WREC WISN  
WFBM KSCJ WMT KMBC KLRA KOIL  
WIBW KFJF KLZ KVI KOL KFPY  
KFRK CFRB WORC WGR

**12:30-1:00 Columbia Revue**  
WABC KFJF KFPY KFRK KMBC KOL  
KSCJ KVI WADC WBRW WCAO WCAU  
WDAY WDBJ WDOD WHEC WHP WIBW  
WISN WJAS WKBN WLWB WLBZ WMAL  
WMT WORC WOWO WPG WREC WSPD  
WTAR WWNC WXYZ WGR

**12:30-1:30 National Farm and Home Hour**  
WJZ KDKA KFAB KFKX KOA KPRC  
KSTP KTHS KVOO WAPI WBAL WBZ  
WBZA WDAF WEBC WFAA WFLA WHAM  
WHAS WHO WIOD WJAX WJDX WJR  
WKY WLW WMC WOAI WOC WOW  
WPTF WRC WREN WRVA WSB WSM  
WSMB WSUN

**1:30-2:00 Harold Stern and Ambassador Orchestra**  
WABC KFKJ KFPY WADC WAIU WBCM  
WBRW WCAO WDBJ WDOD WEAN WFAN  
WGR WHEC WJAS WKRC WLAC WLBZ  
WMAL WORC WOWO WSPD WTAR WWNC  
WXYZ

**2:30-3:00 American School of the Air**  
WABC WFBL WKBW WEAN WNAC WCAU  
WJAS WLWB WMAL WCAO WDBJ WADC  
WHK WKRC WWNC WGST WXYZ WSPD  
WDOD WREC WLAC WBRW WDSU WOWO  
WFBM WMAQ WCCO KMOX KMBC KOIL  
KFJF KRLD K TSA K LZ KDYL KVI  
KOL KFPY KOIN KHJ KFRK

**3:00-3:30 Columbia Salon Orchestra**  
WABC KFJF KFPY KLZ KMBC KOL  
KRLD KSCJ KVI WADC WAIU WBCM  
WBRW WCAO WCAU WDAY WDBJ WDOD  
WEAN WFBM WGR WHEC WHP WIBW  
WISN WKBN WKRC WLA WLBZ WMAL  
WTAR WWNC WXYZ

**5:00-5:30 The Lady Next Door**  
WEAF KSD WBEN WFAA WHAS WRC  
WSM WTAG

**6:05-6:45 Black and Gold Room Orchestra**  
WEAF WCAE WCHS WFAA WGY WHO  
WJAR WOC WRC WTAG WWJ

**6:45-7:00 Uncle Abe and David**  
WEAF KSD WAPI WCAE WCHS WDAF  
WEBC WEEI WENR WFI WFJC WGY  
WHAS WHO WJAR WJDX WMC WOC  
WOW WRC WSAI WSB WSM WSBM  
WTAG WTAM WTMJ WWJ

**6:45-7:00 Literary Digest Topics**  
WJZ KDKA WBAL WBZ WBZA WFLA  
WHAM WIOD WJAX WLW WPTF WRVA  
WSUN

**6:45-7:00 Tony's Scrap Book**  
WFBL WKBW WJAS WLWB WMAL WDBJ  
WAIU WKBN WWNC WXYZ WDOD WFBM  
WGL WBBM KSCJ WMT KLRA KFH  
KFJF KRLD KVI KOL KFPY KFRK  
CFRB

**7:00-7:15 Amos 'n' Andy**  
WJZ CKGW KDKA WBZ WBZA WCKY  
WFLA WHAM WIOD WJAX WJR WLW  
WPTF WRC WRVA WSUN

**7:30-7:45 Phil Cook, Quaker Man**  
WJZ KDKA KECA KFSD KGO KGW  
KHQ KOA KOMO KSL KTAR KWK  
WBZ WBZA WEBC WHAM WRC WREN  
WTMJ

**11:00-11:15 Amos 'n' Andy**  
KFAB KOA KPRC KSTP KTHS KWK  
WBAP WDAF WEBC WHAS WJDX WMAQ  
WMC WOAI WREN WSB WSM WSBM  
WTMJ

**11:30-11:45 Amos 'n' Andy**  
KECA KFSD KGO KGW KHQ KOMO  
KSL

#### Sunday

**1:30-1:45 Echoes of the Orient**  
WJZ CKGW KFAB WBAL WLW WRC  
WREN

**1:30-2:00 Neapolitan Days**  
WEAF KGO KSD KSL WCAE WDAF  
WHAS WHO WIBO WOC WOW WTAM  
WWJ

**1:30-2:00 Conclave of Nations**

WABC KFPY KLZ KMBC KMOX KSCJ  
 KVI WAIU WBGM WBRC WCAO WCAU  
 WDAY WDBJ WDOD WGR WHEC WHP  
 WBW WISN WKBN WLWB WMAL WMT  
 WORC WPG WREC WSPD WTAR WWNC  
 WXYZ

**2:00-3:00 Roxy Symphony Concert**

WJZ CKGW KDKA KFBK KSTP KWK  
 KYW WBAL WBZ WBZA WBEBC WFAA  
 WFLA WHAM WHAS WIOD WJAX  
 WPTF WRC WREN WRVA WSB WSUN

**2:00-3:00 Cathedral Hour**

WABC KDYL KFH KFPY KLZ KMBC  
 KMOX KRLD KSCJ KVI WADC WBGM  
 WBRC WCAO WCAU WCCO WDBJ WDOD  
 WEAN WFBM WHEC WHP WIBW WISN  
 WKBN WKRC WLAC WLWB WMT WNAC  
 WORC WPG WSPD WTAR WWNC WXYZ

**2:30-3:00 NBC Artists' Service Program**

WEAF KSD KSL WDAF WGY WLS  
 WOV WTAG WWJ

**3:00-4:00 National Youth Conference**

WJZ KDKA KFBK KFSD KGO KGW  
 KOA KSL KTHS KVOO KWK WBAL  
 WBZ WBZA WFAA WFLA WIOD WJAX  
 WJDX WJR WLS WLW WOAI WPTF  
 WREN WRVA WSB WSUN

**3:00-5:00 New York Philharmonic Orchestra**

WABC KDYL KFH KFJF KFPY KFRC  
 KEJ KLZ KMBC KMOX KRLD KSCJ  
 KVI WADC WAIU WBGM WBRC WCAO  
 WCAU WCCO WDAY WDBJ WDOD WEAN  
 WFBM WHEC WHP WIBW WISN WJAS  
 WKBN WKRC WLAC WLWB WLBZ WMAQ  
 WMT WNAC WORC WOW WREC WSPD  
 WTAR WWNC WXYZ WGR

**4:00-4:15 Florsheim's Sunday Feature**

WJZ KDKA KFBK KWK KYW WBAL  
 WBZ WBZA WHAM WJR WLW WREN

**4:00-5:00 Dr. S. Parkees Cadman**

WEAF KGO KGW KHQ KOA KOMO  
 KPO KPRC KVOO KWB WDAF WDAF  
 WEBC WEEI WFAA WFJC WFLA WBen  
 WHAS WHO WIBO WIOD WJAR WJAX  
 WJDX WKY WMC WOAI WOC WOW  
 WPTF WRC WRVA WSAI WSB WSUN  
 WTAG WWJ

**5:00-5:30 Rev. Donald Grey Barnhouse**

WABC KMOX KOIL KRLD WADC WCAU  
 WFBL WJAS WKBW WKRC WMAL WMAQ  
 WNAC WOWO WXYZ

**5:00-6:00 Davey Hour**

WEAF CKGW KSD WCHS WGY WHO  
 WJAR WOC WOW WRC WSAI WTAG

**5:00-6:00 National Vespers**

WJZ KFBK KGO KGW KHQ KOA  
 KOMO KPRC KSTP KTAR KVOO KWK  
 WEAL WBZ WBZA WBEBC WFLA WEAM  
 WIOD WJAX WJDX WLW WMC WOAI  
 WPTF WRC WREN WSB WSUN

**5:30-6:00 The French Trio**

KDYL KFJF KFPY KLZ KMBC KSCJ  
 KVI WADC WBRC WCCO WDAY WDBJ  
 WDOD WEAN WFBM WHP WIBW WJAS  
 WKBN WLWB WLWB WMAL WMT WNAC  
 WORC WOWO WPG WREC WSPD WTAR  
 WWNC WXYZ WGR

**6:00-7:00 Catholic Hour**

WEAF KECA KGO KGW KHQ KOA  
 KOMO KPO KPRC KSD KSTP KTAR  
 KVOO KYW WBAP WCAE WCHS WDAF  
 WEBC WEEI WFJC WFLA WGY WKY  
 WHAS WHO WIOD WJAR WJAX WJDX  
 WLIT WMC WOAI WRC WRC WRVA  
 WSAI WSB WSM WSMB WSUN WTAG  
 WTMJ WWJ

**7:00-7:35 Idont Big Brother Club**

WEAF KSD WCAE WCHS WEBC WEEI  
 WFJC WBN WHO WJAR WLIT WLS  
 WOC WOW WRC WSAI WTAG WTMJ  
 WWJ

**7:30-8:00 Williams Oilomatics**

WJZ KDKA KOA KSL KWK WBZ  
 WBZA WGN WHAM WJR WLW WREN

**7:35-8:30 Major Bowes' Family**

WEAF KSD KSTP WCAE WCHS WDAF  
 WFJC WFLA WGY WHAS WIOD WJAR  
 WJDX WKY WLS WMC WOAI WRC  
 WSAI WSB WSMB WSUN WTAG WWJ

**8:00-8:15 The World's Business**

WABC KDYL KFPY KFRC KHJ KLZ  
 KMBC KOL KRLD KSCJ WADC WAIU  
 WCAO WDAY WDBJ WDOD WEAN WFBM  
 WGR WHEC WHP WIBW WISN WJAS  
 WKBN WLAC WLWB WLWB WMAL WMT  
 WNAC WNAX WORC WREC WTAR WWNC  
 WXYZ

**8:00-8:15 Enna Jettick Melodies**

WJZ KDKA KFBK KFI KFSD KGW  
 KEJ KOA KOMO KPO KFRC KSL  
 KSTP KTAR KTHS KVOO KWK KYW  
 WAPI WBZ WBZA WCKY WBEBC WFAA  
 WFLA WHAM WHAS WIOD WJAX WJDX  
 WJR WKY WMC WOAI WPTF WREN  
 WRVA WSB WSM WSMB WSUN WTMJ  
 WTN

**8:15-9:15 Collier's Radio Hour**

WJZ KDKA KFI KGW KHQ KOA  
 KOMO KPO KSL KWK KYW WBZ  
 WBZA WHAM WJR WLW WREN

**8:30-9:00 Chase & Sanborn Choral Orchestra**

WEAF KPRC KSD KSTP KTHS KVOO  
 WCAE WCHS WDAF WBEBC WFJC WFLA  
 WGY WHAS WHO WIBO WIOD WJAR  
 WJDX WKY WLIT WMC WOAI WOC  
 WOV WRC WSAI WSB WSB WSMB  
 WSUN WTAG WTAM WTIC WTMJ WWJ

**9:00-9:15 Our Government, David Lawrence**

WEAF KSD WCAE WCHS WBEBC WEEI  
 WFAA WFJC WFLA WGY WHAS WHO  
 WIOD WJAR WJDX WKY WLIT WMC  
 WOAI WOC WOW WPTF WRC WSAI  
 WSB WSM WSMB WSUN WTAG WTIC  
 WWJ

**9:00-9:30 Majestic Curiosity Shop**

WABC CFRB CKAC KDYL KFH KFJF  
 KFPY KFRC KKH KLRA KLZ KMBC  
 KOIL KOIN KOL KRLD KTSA KVI  
 WADC WBBM WBRC WBT WCAO WCAU  
 WCCO WDBJ WDEL WDOD WDSU WEAN  
 WFBL WFBM WEK WFBM WISN WJAS  
 WKBW WKRC WLAC WLWB WLWB WMAL  
 WNAC WOWO WPG WREC WSAZ WSPD  
 WTAR WWNC WXYZ

**9:15-10:15 Atwater Kent Hour**

WEAF CKGW KFI KGW KHQ KOA  
 KOMO KPO KSD KSL KSTP WAPI  
 WCAE WDAF WEEI WFAA WFI WGN  
 WBen WGY WHAS WHO WKY WMC  
 WOAI WOC WOV WRC WSAI WSB  
 WSM WSMB WTAM WWJ

**9:30-10:00 Tone Pictures**

WABC KFJF KFPY KLRA KLZ KMBC  
 KMOX KOIL KOL KRLD KSCJ WADC  
 WBGM WBRC WCAO WCCO WDAY WDBJ  
 WDOD WEAN WFBL WHEC WIBW WISN  
 WJAS WKBW WKRC WLAC WLWB WMAL  
 WMT WNAC WNAX WORC WREC WSPD  
 WTAR WWNC WXYZ

**10:00-10:30 Jesse Crawford**

WABC WFBL WKBW WEAN WNAC WCAU  
 WLWB WMAL WCAO WADC WHK WKRC  
 WGST WXYZ WSPD WLC WOV WBBM  
 KMOX KMBC KOIL WRR KDYL KOL  
 KFPY KOIN KHJ KFRC WJAS

**10:15-10:45 Studebaker Champions**

WEAF KFI KGO KGW KHQ KOA  
 KOMO KSTP WCAE WCHS WDAF WEBC  
 WEEI WFI WGN WBen WGY WJAR  
 WOW WRC WTAG WTAM WTIC WTMJ  
 WWJ

**10:30-11:00 Around the Samovar**

WABC WADC WCAO WCAU WDBJ WEAN  
 WHEC WHK WJAS WKBN WLWB WLWB

WMAL WNAC WORC WPG WSPD WTAR  
 WXYZ  
 10:30-11:00 Lew White, Organist  
 WJZ CKGW KDKA KWK WBZ WBZA  
 WHAM WJAX WJDX WJR WREN WRVA  
 10:45-11:15 Sunday at Seth Parker's  
 WEAF CKGW KFSD KGO KGW KHQ  
 KOA KOMO KPRC KSTP KTRAR KYW  
 WCAE WCSH WDAF WEBC WEEI WFI  
 WFJC WBEN WGY WHAS WHO WIOD  
 WJAX WJDX WKY WMC WOC WOV  
 WRC WSB WSM WTAM WTMJ WWJ  
 11:00-11:30 Kaffee Hag Slumber Music  
 WJZ KDKA KWK WBZ WBZA WENR  
 WHAM WJR WLW WREN  
 11:00-12:00 Back Home Hour  
 WABC KFJF KFPY KHJ KMBC  
 KMOX KRLD WCCO WDAY WDBJ WDOD  
 WFBM WHEC WIBW WISN WKBN WKRC  
 WMAL WMT WNAX WPG WREC WTAR  
 WXYZ  
 11:30-12:00 Russian Cathedral Choir  
 WEAF CKGW KOA KSTP WBAP WEBC  
 WFJC WBEN WGY WHAS WIOD WOW  
 WRC WSB WTAM WWJ

**Monday**

3:00-3:30 Phil Napoleon and His Band  
 WJZ KDKA KPRC KWK WBAL WBZ  
 WBZA WHAM WREN WSB WSM  
 3:30-4:00 Sixteen Singers  
 WEAF CKGW KSD KSTP WBEN WFJC  
 WHO WOC WRC WTAM  
 4:00-4:30 Hotel Cosmopolitan Orchestra  
 WJZ CKGW KGO KOA KOMO KSTP  
 KYW WAPI WBAL WFAA WHAM WJAX  
 WJR WLW WREN WSB WSM WTMJ  
 4:00-4:30 Ballad Hour  
 WABC KDYL KFJF KFPY KFRC KHJ  
 KVI KMBC KMOX KOL KRLD KSCJ  
 KLZ WADC WAU WBGM WBRW WCAO  
 WCAU WCCO WDAY WDBJ WDOD WEAN  
 WGR WHEC WIBW WISN WKRC WLAC  
 WLBZ WMAL WMT WNAC WORC WPG  
 WREC WSPD WTAR WWNC WXYZ  
 4:30-5:00 Wardman Park Hotel Orchestra  
 WABC KDYL KFJF KFPY KFRC KLZ  
 KMBC KMOX KOL KRLD KSCJ KVI  
 WADC WAU WBGM WBRW WCAO WCCO  
 WDAY WDBJ WDOD WEAN WFAA WGR  
 WHP WBW WISN WLAC WLBZ WMAL  
 WMT WNAC WORC WPG WREC WSPD  
 WTAR WWNC WXYZ  
 6:00-6:30 WSPD Commodores  
 WABC KFJF KFPY KFRC KLRA KLZ  
 KOL KRLD WAU WBBM WBCM WBRW  
 WCCO WDAY WDBJ WDOD WFAA WFBL  
 WHP WKBW WLBW WMAL WMT WREC  
 WSPD WTAR WWNC  
 6:15-6:45 Mormon Tabernacle Choir  
 WJZ CKGW KDKA KFAB KFSD KGO  
 KGW KOA KOMO KPO KSL KSTP  
 KTRAR KWK WAPI WBAL WHAS WLW  
 WRC WSM  
 7:00-7:15 Current Events  
 WABC KFJF KFPY KFRC KLZ  
 KOL KSCJ KVI WBGM WCAU WDAY  
 WDBJ WDOD WFBM WHEC WHP WIBW  
 WISN WJAS WLBW WLBZ WMAL WMT  
 WORC WREC WSPD WTAR WWNC WXYZ  
 7:30-8:00 Colonial Beaconsights  
 WEAF WBEN WCSH WEEI WGY WJAR  
 WTAG  
 7:45-8:00 Anheuser-Busch Program  
 KFJF KLRA KMBC KMOX KOIL KRLD  
 KTRAR WAU WDOD WDSU WFBM WHK  
 WMAQ WMT WREC WSPD WXYZ  
 7:45-8:30 Roxy's Gang Program  
 WJZ CKGW KFAB KGO KGW KWK  
 WBZ WBZA WHAM WIBO WSB WSM  
 8:15-8:30 Fifteen Minutes in Nation's Capital  
 WEAF KECA KFSD KGO KGW KOA  
 KOMO KPRC KSD KVOO KYW WCAE  
 WDAF WFJC WFLA WHAS WHO WIOD

WJAR WJAX WJDX WKY WOAI WOC  
 WOW WPTF WRC WSAI WSMB WSUN  
 WTAG WTIC WWJ  
 8:15-8:30 Voice of Columbia  
 WABC WFBL WKBW WLBZ WPG WJAS  
 WLBW WMAL WTAR WDBJ WADC WNBC  
 WBCM WDOD WREC WLAC WISN WGL  
 WCCO KSCJ WMT KLRA WNAX WIBW  
 KFH KFJF KRLD KFPY WORC  
 8:30-9:00 Ingram Shavers  
 WJZ CKGW KDKA KFAB KOA KPRC  
 KTHS KVOO KWK KYW WBZ WBZA  
 WEBC WFAA WFLA WHAS WIOD WJAX  
 WJR WKY WLW WMC WOAI WREN  
 WRVA WSB WSM WSMB WSUN WTMJ  
 8:30-9:00 Arabesque  
 WABC KFJF KFPY KLRA KMOX KOIL  
 KRLD WBCM WCCO WDAY WDBJ WDOD  
 WEAN WFBM WGR WJAS WKRC WLBW  
 WMAL WMAQ WMT WNAC WNAX WORC  
 WREC WWNC WXYZ  
 8:30-9:30 A & P Gypsies  
 WEAF KSD WCAE WCSH WDAF WEEI  
 WGN WBEN WGY WHO WJAR WLIT  
 WOC WOW WRC WSAI WTAG WTAM  
 WTIC WWJ  
 9:00-9:30 Maytag Orchestra  
 WJZ KDKA KECA KGO KGW KHQ  
 KOA KOMO KPRC KSL KSTP KTHS  
 KVOO KWK KYW WBZ WBZA WCKY  
 WEBC WHAM WJDX WJR WKY WMC  
 WOAI WREN WSB WSM WSMB  
 9:00-9:30 Mardi Gras  
 WABC KDYL KFPY KFRC KMBC KRLD  
 KSCJ WADC WBCM WCCO WDAY WDBJ  
 WDOD WEAN WGR WIBW WISN WJAS  
 WKRC WLAC WLBW WLBZ WMAL WMAQ  
 WNAC WNAX WORC WTAR WWNC WXYZ  
 9:30-10:00 Chesebrough Real Folks  
 WJZ CKGW KDKA KWK KYW WBZ  
 WBZA WHAM WJR WLW WREN  
 9:30-10:00 Bourjois—Evening in Paris  
 WABC KDYL KFJF KFPY KFRC KHJ  
 KLZ KMBC KMOX KOIL KOIN KOL  
 KRLD WADC WBBM WBT WCAO WCAU  
 WCCO WDSU WEAN WFBL WGST WHK  
 WJAS WKBW WKRC WLBW WMAL WNAC  
 WOWO WPG WSPD WXYZ  
 9:30-10:00 General Motors Family Party  
 WEAF KECA KFJF KGO KGW KHQ  
 KOA KOMO KPRC KSD KSL KSTP  
 WCAE WCSH WDAF WBEI WFAA WGN  
 WBEN WGY WHAS WHO WJAR WJAX  
 WKY WLIT WMC WOAI WOC WOX  
 WRC WSAI WSB WSM WTAG WTAM  
 WTIC WTMJ WWJ  
 10:00-10:30 Robert Burns Panatela Program  
 WABC KDYL KFJF KFPY KFRC KHJ  
 KLZ KMBC KMOX KOIL KOIN KOL  
 KRLD KTRH KTSA KVI WADC WBT  
 WCAO WCAU WCO WEAN WFBL WFBM  
 WHK WJAS WKBW WKRC WLBW WMAL  
 WMAQ WNAC WOWO WPG WSPD WXYZ  
 10:00-10:30 Stromberg-Carlson Program  
 WJZ KDKA KFJF KFSD KGO KGW  
 KHQ KOA KOMO KPRC KTRAR KWK  
 KYW WAPI WBZ WBZA WCKY WEBC  
 WFLA WHAM WHAS WIOD WJAX WJDX  
 WJR WKY WMC WOAI WREN WRVA  
 WSB WSM WSMB WSUN  
 10:00-10:30 Adventures of Sherlock Holmes  
 WEAF WCAE WCSH WEEI WGN WJAR  
 WLIT WRC WSAI WTAG WTAM WWJ  
 10:30-11:00 Empire Builders  
 WJZ KDKA KECA KFSD KGO KGW  
 KHQ KOA KOMO KPRC KSL KSTP  
 KTRAR KWK KYW WBAP WBZ WBZA  
 WEBC WHAM WJR WKY WLW WOAI  
 WREN WTMJ  
 10:30-11:00 American Maize Program  
 KDYL KFPY KFRC KHJ KLZ KNX  
 KOIL KOL KSCJ WADC WBBM WCAE  
 WCAU WDAY WHK WHP WISN WJAS  
 WKBN WKRC WLBW WMT WNAX WSPD



**10:30-11:00 Symphonic Rhythm Makers**  
 WEAF WCAE WCBH WDAF WEEI WJAR  
 WJDX WMC WOV WRC WSB WTAG  
 WTAM WWJ WBEN

**11:00-11:15 Musical Aviators Orchestra**  
 WABC WKBW WLBZ WPG WCAU WLBW  
 WCAO WTAR WDBJ WADC WKRC WKBN  
 WWNC WXYZ WBCM WDOD WREC WBRC  
 WISN WFBM WCCO WMT WMKC KMBC  
 KLRA WNAX KOIL WIBW KFJF KJFJ  
 KOL KFPY CFRB WORC

**11:00-11:30 Florence Richardson and Her Orchestra**  
 WEAF WGY WCAE WSAI KSD WTMJ  
 WSM WOC WHO WJDX WMC WSB  
 WOV

**11:30-12:00 Horace Heidt and His Orchestra**  
 WEAF WWJ WDAF KSTP WOV WOC  
 WHO WEBC KSD WGY

**11:30-12:00 Fletcher Henderson and His Orchestra**  
 WABC WKBW WLBZ WLBW WMAL WCAO  
 WTAR WDBJ WKRC WKBW WWNC WXYZ  
 WBCM WDOD WREC WBRC WISN WFBM  
 WCCO KSCJ WMT WMKC KMBC KLRA  
 WNAX KOIL WIBW KFJF KJFJ KLZ  
 KFPY CFRB WORC

**12:00-1:00 Phil Spitalny and His Orchestra**  
 WEAF KSD KSTP KYW WDAF WFJC  
 WHO WKY WOC WRC WSM WTAM  
 WWJ

**Tuesday**

**10:15-10:30 Through the Looking Glass**  
 WJZ CKGW KDKA KFAB KFJK KPRC  
 KVOO KWK WBZ WBZA WHAM WJR  
 WKY WLW WOI WREN

**3:30-4:00 Golden Gems**  
 WEAF KSD KSTP WEEI WFJC WFLA  
 WJAX WOV WSUN WTAG WTAM WTIC

**4:00-4:30 Italian Idyll**  
 WABC KDYL KFJF KFPY KFRC KLZ  
 KMBC KMOX KRLD KSCJ KVI WADC  
 WAU WBCM WBRC WCAO WCAU WCCO  
 WDBJ WDOD WEAN WHK WIBW WISN  
 WKRC WLAC WLBZ WMAL WMT WNAC  
 WORC WOV WPG WREC WTAR WWNC  
 WXYZ WGR

**4:00-5:00 Pacific Vagabonds**  
 WJZ KEAB KFSD KGO KOA KSTP  
 WAPI WHAM WJAX WJR WLW WSM

**5:00-5:15 Rhythm Kings**  
 WABC KDYL KFJF KFJF KLZ KMBC  
 KMOX KRLD KSCJ WAU WBCM WRC  
 WCAO WCCO WDOD WFBM WHP WISN  
 WKBN WLBZ WMAL WMT WREC WTAR  
 WWNC WXYZ WGR

**7:30-7:45 Musical Aviators Orchestra**  
 KFJF KFJF KFPY KFRC KLRA KLZ  
 KOIL KRLD KSCJ WAU WBRC WCCO  
 WDAY WDBJ WDOD WFLB WGR WHEC  
 WHP WIBW WISN WJAS WKRC WLAC  
 WLBW WMT WORC WREC WTAR WWNC  
 WXYZ

**7:30-8:00 Seconyland Sketches**  
 WEAF WBN WCBH WEEI WGY WJAR  
 WTAG

**8:00-8:15 Troika Bells**  
 WEAF WDAF WEEI WFI WRC WSAI  
 WWJ

**8:00-8:30 Pure Oil Orchestra**  
 WJZ KDKA KFAB KSTP KWK KYW  
 WBAL WEBC WHAM WHAS WJAX WJDX  
 WLW WMC WPTF WREN WRVA WSB  
 WSM WTMJ

**8:00-8:30 Blackstone Program**  
 WABC KMBC KMOX KOIL WADC WAU  
 WBT WCAH WCAO WCAU WCCO WEAN  
 WFLB WHEC WHK WHP WJAS WKBW  
 WLBW WLBZ WMAL WMAQ WMT WNAC  
 WORC WPG WSD WXYZ

**8:30-9:00 Florsheim Frolic**  
 WEAF KOA KPRC KSD KSL KSTP  
 KTHS KVOO WBAP WCAE WCBH WDAF  
 WEBC WFI WFLA WGN WBN WGY  
 WHAS WHO WIOD WJAR WJAX WJDX

WKY WMC WOI WOC WOV WRC  
 WRVA WSAI WSB WSM WSMB WSUN  
 WTAG WWJ

**8:45-9:00 Premier Salad Dressers**  
 WABC KDYL KFPY KFRC KHJ KLZ  
 KMBC KMOX KOIL KOIN KOL KTRH  
 KVI WADC WBT WCAO WCAU WCCO  
 WDAE WDBO WDSU WEAN WFLB WGST  
 WHK WJAS WKBW WKRC WLAC WLBW  
 WMAL WMAQ WNAC WOWO WPG WQAM  
 WSPD WTOC WXYZ

**9:00-9:30 Works of Great Composers**  
 WJZ WBZ WBZA WBAL WHAM KDKA  
 KYW KWK WREN WCKY CKGW

**9:00-9:30 Henry George**  
 WABC KFJF KMBC KMOX KOIL WADC  
 WBBM WCAO WCAU WCCO WEAN WFLB  
 WFBM WHK WHP WISN WJAS WKBW  
 WKRC WLBW WMAL WNAC WOV WSPD  
 WXYZ WBN

**9:00-9:30 Evedrey Program**  
 WEAF KGO KGW KHQ KOA KOMO  
 KSD KSL WCAE WCBH WEBC WEEI  
 WFI WFC WGN WGY WHAS WHO  
 WJAR WJDX WMC WOC WOV WRC  
 WSAI WSB WSM WSMB WTAM WWJ

**9:30-10:00 Happy Wonder Bakers**  
 WEAF KECA KGO KGW KHQ KOA  
 KOMO KPRC KSD KSL KSTP KVOO  
 WBAP WCAE WCBH WDAF WEBC WEEI  
 WFI WFC WBN WGY WHAS WHO  
 WIBO WJAR WJDX WKY WMC WOC  
 WOV WRC WRVA WSAI WSB WSMB  
 WTAG WTAM WTMJ WWJ

**9:30-10:00 Philco Symphony Concert**  
 WABC CFRB KFJF KFJF KMBC KMOX  
 KOIL KRLD KTRH KTSA WADC WBRC  
 WBT WCAO WCAU WCCO WDOD WDSU  
 WEAN WFLB WFBM WGST WHEC WHK  
 WISN WJAS WKBW WCRK WLAC WLBW  
 WMAL WMAQ WMT WNAC WOV WPG  
 WREC WSPD WTAR WXYZ

**10:00-10:15 Enna Jettick Songbird**  
 WEAF KSD WCAE WCBH WDAF WEEI  
 WFI WFC WBN WGY WHO WIBO  
 WJAR WOC WOV WRC WSAI WTAG  
 WTAM WWJ

**10:00-10:15 Graybar's, Mr. and Mrs.**  
 WABC KDYL KFJF KFPY KFRC  
 KHJ KLRA KLZ KMBC KMOX KOL  
 KOIN KOL KRLD KTRH KTSA KVI  
 WADC WAU WBBM WBRC WBT WCAO  
 WCAU WCCO WDBJ WDSU WEAN WFLB  
 WFBM WGST WHEC WHK WISN WJAS  
 WKBN WKBW WRC WLAC WLBW WMAL  
 WNAC WOV WPG WREC WSPD WTAR  
 WWNC WXYZ

**10:00-10:30 Westinghouse Salute**  
 WJZ KDKA KECA KFSD KGO KGW  
 KHQ KOMO KPRC KSL KSTP KTR  
 KWK KYW WAPI WBAL WBZ WBZA  
 WCKY WEBC WFLA WHAM WHAS WIOD  
 WJAX WJR WKY WMC WOI WREN  
 WRVA WSB WSM WSMB WSUN WTMJ

**10:15-11:00 Lucky Strike Orchestra**  
 WEAF KECA KFSD KGO KGW KHQ  
 KOA KOMO KSD KTR KTR WCAE WCBH  
 WDAF WEBC WEEI WFI WFC WFLA  
 WBN WHAS WHO WIBO WIOD WJAR  
 WJAX WJDX WKY WMC WOI WOC  
 WRC WRVA WSAI WSB WSM WSMB  
 WSUN WTAG WTMJ WWJ

**10:30-11:00 Paramount Publix Radio Playhouse**  
 WABC CFRB KDYL KFJF KFPY KPRC  
 KFRC KHJ KLRA KLZ KMX KMOX  
 KOIL KOIN KOL KSCJ KTRH KTSA  
 WADC WBBM WBCM WNRN WBT WCAO  
 WCAU WCCO WDAE WDAY WDBJ WDBO  
 WDOD WDSU WEAN WFLB WFBM WGST  
 WHEC WHK WHP WIBW WISN WJAS  
 WKBN WKBW WKRC WLAC WLBW WLBZ  
 WMAL WMT WNAC WNAX WOWO WPG  
 WQAM WREC WRR WSD WTAR WTCO  
 WWNC WXYZ

**10:30-11:00 Cuckoo**  
WJZ KDKA WBZ WBZA WCKY WJR  
WREN

**11:00-11:30 Yoeng's Restaurant Orchestra**  
WHEC WGR WLWB WEAN WNAC WORC  
WCAU WHP WLBW WCAO WTAR WDBJ  
WADC WWNC WXYZ WBCM WSPD WDOD  
WREC WBRC WISN WFBM WCCO KMOX  
KMBC KLRA WNAX KOIL WIBW KFH  
KFJF KOL KFPY KFRC CFRB

**11:00-11:30 Duke Ellington and His Orchestra**  
WEAF KOA KSD KSTP WCAE WDAF  
WFI WFJC WGY WHAS WJDX WMC  
WOW WSAI WSB WSM WTMJ WWJ

**11:30-12:00 Vincent Lopez and His Orchestra**  
WEAF CKGW KOA KSTP WFI WHO  
WJDX WOC WOW WRC

## Wednesday

**11:45-12:00 The Recitalists**  
WJZ KFAB KOA KWK WBAL WHAM  
WSM

**12:00-12:15 Elgin Program**  
WEAF CKGW KOA KSD KTHS KVOO  
KYW WAPI WCAE WCSH WDAF WECB  
WEEI WFJC WFLA WHAS WHO WIOD  
WJAR WJAX WJDX WKY WLW WMC  
WOAI WOC WPTF WRC WRVA WSAI  
WSB WSMB WSUN WTAG WWJ

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

**3:30-4:00 Synopsated Silhouettes**  
WABC KDYL KFJF KFPY KLZ KMBC  
KSCJ KVI WADC WAUI WBCM WBRC  
WCAO WCAU WCCO WDAY WDBJ WDOD  
WGR WHEC WHK WHP WIBW WISN  
WKBN WKRC WLAC WLWB WMAL WMT  
WORC WPG WREC WTAR WWNC WXYZ

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

**5:00-5:30 Asbury Park Casino Orchestra**  
WABC KFH KFJF KLRA KLZ KRLD  
KSCJ WAUI WBCM WBRC WCAO WCCO  
WDAY WDOD WFAN WFBL WGR WHP  
WISN WLWB WMAL WMT WREC WSPD  
WTAR WWNC WXYZ

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

**7:00-7:30 Musical Aviators Orchestra**  
WABC WHEC WLWB WORC WCAU WJAS  
WLWB WMAL WTAR WDBJ WAUI WWNC  
WXYZ WBCM WDOD WBRC WISN KSCJ  
KLRA KFJF KVI KOL KFPY KFRC

**7:30-7:45 Evangeline Adams, Astrologer**  
WABC CFRB KFJF KLRA KMBC KMOX  
KOIL KTRH WADC WAUI WBRC WBT  
WCAO WCAU WCCO WDBJ WDOD WDSU  
WEAN WFBL WFBM WGST WHEC WHK  
WISN WKBW WKRC WLAC WLWB WMAL  
WMAQ WNAC WREC WRR WSPD WTAR  
WWNC WXYZ

**7:45-8:00 Back of the News in Washington**  
WEAF KECA KFSD KGO KGW KOA  
KOMO KSD KSL WAPI WCAE WDAF  
WFJC WGY WHO WBI WKY WOC  
WOW WRC WRVA WSAI WSM WTAG

**7:45-8:00 Eskimo Pie Program**  
WABC CKAC KMOX KMOX KRLD WBRC  
WBT WCAO WCAU WCCO WGST WHEC  
WHK WJAS WKBW WKRC WLAP WMAL  
WMAQ WNAC

**7:45-8:00 Fifth Avenue Knights**  
WJZ KDKA KYW WBZ WBZA WHAM

**8:00-8:30 Yeast Foamers**  
WJZ KDKA KFAB KSTP KWK KYW  
WBZ WBZA WECB WHAM WJR WREN

**8:00-8:15 Rodeaver Sing**  
WEAF KGO KOA KJDX WOW KSD  
WWJ WTAM WIOD WEEI WJAR WTAG  
KFSD

**8:15-8:30 Radiotron Varieties**  
WEAF WTIC WJAR WTAG WRC WBEN  
WTAM WSAI WIBO KSD WOW WIOD  
WSM WSB WSMB WJDX WOI KOA  
KHQ KOMO KFSD KTAR KECA KSL  
KGO KOA

**8:15-8:30 U.S. Marine Band**  
WABC WGR WLWB WEAN WNAC WORC  
WJAS WLWB WMAL WTAR WDBJ WADC  
WWNC WXYZ WBCM WSPD WDOD WREC  
WLAC WBRC WCCO KSCJ WMT KMBC  
KLRA WNAX KFJF KFPY KFRC CFRB

**8:30-9:00 Toscha Seidel and Concert Orchestra**  
WABC WGR WLWB WEAN WNAC WORC  
WPG WJAS WLWB WMAL WTAR WDBJ  
WKRC WWNC WXYZ WBCM WSPD WDOD  
WBRC WOWO WMAQ WMT KSCJ KMOX  
KMBC KLRA WNAX WIBW KFH KFJF

**8:30-9:00 Luden Novelty Orchestra**  
WJZ CKGW KDKA KWK KYW WBZ  
WBZA WHAM WREN

**8:30-9:00 Mobiloil Concert**  
WEAF KOA KPRC KSD KSL KVOO  
WCAE WCSH WDAF WECB WEEI WFAA  
WFJC WGN WBEN WGY WHO WJAR  
WKY WLIT WOAI WOC WOW WRC  
WSAI WTAG WTAM WTIC WWJ

**9:00-9:30 Halsey, Stuart Program**  
WEAF CKGW KFI KGO KGW KHQ  
KOA KOMO KPRC KSD KSL KSTP  
KVOO KYW WCAE WCSH WEEI WLIT  
WGY WHAS WHO WJAR WJAX WRVA  
WMC WOAI WOC WOW WRC WTMJ  
WSAI WSB WSM WSMB WTAG

**9:30-10:00 Gold Medal Fast Freight**  
WABC KDYL KFBK KFH KFJF KFPY  
KFRC KHJ KLZ KMBC KMOX KOIL  
KOLN KOL KRLD KSCJ WADC WBBM  
WBT WCAO WCAU WCCO WDBJ WEAN  
WFBL WFBM WHK WISN WJAS WKBW  
WKRC WLAC WLAP WLWB WMAL WNAC  
WOWO WPG WREC WSPD WTAR WXYZ

**9:30-10:00 La Palina Smoker**  
WABC KMBC KMOX KOIL WADC WBBM  
WBT WCAO WCAU WCCO WEAN WFBL  
WHK WISN WJAS WKBW WKRC WLWB  
WMAL WNAC WOWO WPG WREC WSPD  
WXYZ

**9:30-10:30 Camel Pleasure Hour**  
WJZ KDKA KWK KYW WBZ WBZA  
WHAM WJR WLW WREN WRVA WSJS

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

**10:00-11:00 Detroit Symphony Orchestra**  
WABC KFH KFJF KFPY KLRA KMBC  
KOIL KSCJ WADC WBCM WBRC WCAO  
WCAU WCCO WDAY WDBJ WDOD WEAN  
WFBL WFBM WGR WHEC WIBW WISN  
WJAS WKBW WKRC WLAC WMAL WMAQ  
WMT WNAC WNAX WORC WPG WREC  
WSPD WTAR WWNC WXYZ

**10:30-11:00 Coca Cola Program**  
WEAF CKGW KECA KFSD KGO KGW  
KHQ KOA KOMO KVOO KYW WAPI WCAE  
KSTP KTHS WECB WEEI WBEN WGY  
WCSH WDAF WECB WEEI WBEN WGY  
WHAS WHO WIOD WJAR WJAX WJDX  
WKY WLIT WMC WOAI WOC WOW

WRC WRVA WSAI WSB WSMB WTAG

WTAM WTIC WWJ

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

WABC WHEC WGR WLBZ WEAN WNAC
WORC WPC WCAU WLBW WCAO WTAR
WDBJ WADC WKRC WWNC WXYZ WBCM
WSPD WODD WREC WBRG WISN WOWO
WFBM WCCO KSCJ WMT KMBC KLRA
WNAX KOIL WIBW KFH KFJF KFPY

11-00-11:30 Vincent Lopez and His Orchestra

WEAF KOA KSD KSTP WCAE WDAF
WJFC WFLA WGY WHAS WHO WIOD
WJDX WLIT WMC WOC WOW WRC
WSAI WSB WSM WSMB WSUN WTAM
WWJ

11:30-12:00 California Melodies

WABC KFH KFPY KHL KMBC KSCJ
WBCM WBRG WCAO WCCO WDBJ WDOD
WEAN WFBM WHEC WHK WIBW WISN
WKBN WKRC WLBW WMAL WMT WNAC
WNAX WORC WREC WTAR WWNC WXYZ

Thursday

9:45-10:00 A & P. Program

WEAF WJAR WTAG WCSH WRC WGY
WCAE WTAM WWJ WSAI KSD WOC
WHO WDAF WTMJ WEBC WRVA WPTF
WIOD WFLA WSUN WHAS WSM WMC
WSB WAPI WSMB WJDX KVOO WBAP
KPRC WOAI WKY WBEN WOW

10:00-10:15 Ceresota Program

WEAF KSTP KYW WBEN WCAE WCSH
WPI WGY WJAR WRC WRVA WSAI
WTAG WTAM WWJ

10:30-11:00 The Manhatters

WJZ KDKA KFAB KWK WHAM WIBO
WLW WREN WSMB

4:30-5:00 The Crockett Mountaineers

WABC WGR WLBZ WEAN WNAC WORC
WPG WFAN WHP WLBW WMAL WCAO
WTAR WDBJ WAIU WWNC WBCM WSPD
WDOD WREC WBRG WISN WGL WCCO
KSCJ WMT KMOX KMBC KLRA KOIL
WIBW KFJF KRLD KLZ KVI KOL
KFPY KFCR

5:00-5:30 In the Spotlight

WEAF KPSD KGO KOA KOMO KSD
KTAR WCAE WBEN WHAS WHO WJAR
WKY WOC WRC WSAI WSM WSMB
WTAG WTAM WTIC

5:30-5:45 The Toddy Party

WEAF CKGW KSD KYW WCAE WCSH
WEEI WFJC WBEN WGY WJAR WLIT
WRC WSAI WTAG WTIC WWJ

7:00-7:30 Mid-Week Federation Hymn Sing

WEAF KOA WHAS WHO WIBO WJAR
WMC WOC WWJ

7:30-8:00 Ward's Tip Top Club

WABC KMOX WCAO WCAU WEAN WFBL
WHK WJAS WKBN WNAC WXYZ

7:45-8:00 Friendly Five Footnotes

WJZ WBZ WBZA WREN KWK KFAB
WHAS WSM WMC WSB WAPI WSMB
WJDX WRVA WPTF WJAX WIOD WFLA
WSUN KGO KECA KOMO KHQ KTAR
KPSD WBAL KDKA WIBO KOA KSL

8:00-9:00 Fleischmann Hour-Rudy Vallee

WEAF CKGW KECA KGO KGW KHQ
KOA KOMO KPRC KSD KSL KSTP
KTAR KTHS WAPI WBAP WCAE WCSH
WDAF WEBC WEEI WPI WFJC WGN
WBEN WGY WHAS WHO WIOD WJAR
WJAX WJDX WKY WMC WOAI WOC
WOW WPTF WRC WRVA WSAI WSB
WSM WSMB WTAG WTAM WTMJ WWJ

8:15-8:30 Poets Guild

WABC WGR WLBZ WORC WPG WFAN
WJAS WLBW WMAL WTAR WDBJ WADC
WWNC WXYZ WBCM WSPD WDOD WREC
WLAC WBRG WISN KSCJ WMT KMBC
KLRA WNAX KFPY WIBW KFH KFJF
KRLD

8:30-8:45 Kaltenborn Edits the News

WABC KMBC KMOX KOIL WADC WBT
WCAO WCAU WCCO WEAN WFBL WJAS
WKBW WKRC WLBW WMAL WMAQ WNAC
WOWO WPG WSPD WXYZ

8:45-9:00 The Hamilton Watchman

WABC KMBC KMOX KOIL WADC WCAO
WCAU WEAN WFBL WHK WJAS WJJD
WKBW WKRC WLBW WMAL WNAC WOWO
WSPD WXYZ

9:00-9:30 Rhythm Choristers

WABC WHEC WKBW WLBZ WEAN WNAC
WORC WPG WHP WJAS WLBW WMAL
WTAR WDBJ WADC WWNC WXYZ WBCM
WSPD WISN KSCJ WMT KMBC KLRA
WNAX KOIL WIBW KFH KFJF KLYZ
KOL KFPY KPRC

9:00-9:30 Arco Birthday Party

WEAF CKGW KECA KGO KGW KHQ
KOA KOMO KSD KSL KSTP KYW
WAPI WBAP WCAE WCSH WDAF WECB
WEEI WPI WFJC WBEN WGY WHO
WIOD WJAR WJAX WJDX WKY WMC
WOAI WOC WOW WPTF WRC WRVA
WSAI WSB WSM WSMB WTAG WTMJ
WWJ

9:00-9:30 Knox-Dunlap Orchestra

WJZ KDKA KWK WBAL WBZ WBZA
WCKY WHAM WIBO WREN

9:30-10:00 Jack Frost's Melody Moments

WEAF WCAE WCSH WPI WBEN WGY
WBO WJAR WRC WSAI WTAG WTAM
WWJ

9:30-10:00 Maxwell House Ensemble

WJZ KDKA KECA KGO KGW KHQ
KOA KOMO KPRC KSL KSTP KWK
KYW WAPI WBAL WBAP WBT WBZA
WBCY WHAM WHAS WIOD WJAX WJR
WKBW WLBW WMC WOAI WPTF WREN
WRVA WSB WSM WSMB WTMJ

9:30-10:00 Detective Story Magazine

WABC KMBC KMOX KOIL WADC WBBM
WCAO WCAU WEAN WFBL WHK WJAS
WKBW WKRC WLBW WMAL WNAC WOWO
WSPD WXYZ

10:00-10:30 Lutheran Laymen League Program

WABC KDYL KFPY KPRC KHL KLZ
KMOX KOIL KOIN KOL KRLD WADC
WBBM WCAO WCAU WCCO WDSU WEAN
WFBL WHK WJAS WKBW WKRC WLBW
WMAL WMT WNAC WOWO WSPD WXYZ

10:00-11:00 Victor Herbert Opera Series

WJZ CKGW KDKA KWK WBAL WBZ
WBZA WHAM WREN

10:00-11:00 Lucky Strike Dance Orchestra

WEAF WEEI WJAR WTAG WCSH WFI
WRC WGY WGR WCAE WFJC WWJ
WSAI KSD WOV WKY WOAI KOA
KSL WTMJ WIOD WHAS WSM WMC
WMSB KYW WDAF WJAX KTHS WTAM
KSTP WJDX KPRC WEBC WRVA WFLA
WSUN WSB WFAA KPSD KTAR (KGO
KGW KPI KOMO KHQ off 10:30) (WOC
WHO KTHS on 10:30)

10:30-11:00 Melody Moments

WABC WFBL WHEC WGR WLBZ WEAN
WNAC WORC WFAN WHP WJAS WLBW
WMAL WCAO WTAR WDBJ WADC WKRC
WKBN WWNC WXYZ WBCM WSPD WDOD
WLAC WISN WCCO KSCJ WMT KMBC
KLRA WNAX KOIL WIBW KFPY KRLD
KLZ KFPY

11:00-11:30 Ben Bernie and His Orchestra

WABC WHEC WKBW WLBZ WEAN WNAC
WORC WPG WHP WLBW WMAL WCAO
WTAR WDBJ WADC WWNC WXYZ WBCM
WSPD WDOD WREC WBRG WISN WFBM
WMT KMOX KMBC KLRA WNAX KOIL
WIBW KFH KFJF KOL KFPY CFRB

11:00-11:30 Florence Richardson's Orchestra

WEAF WCAE WPI WRC WBEN WJDX
KSTP CKGW (WWJ WSAI off 11:15) (KSD
WOW WSM WSMB on 11:15)

11:30-11:45 Duke Ellington and His Orchestra  
WEAF CKGW KSD KSTP WDAF WFI  
WFJC WJDX WOW WRC WWJ

WCAU WEAN WFBL WHK WJAS WKBW  
WKRC WLBW WMAL WMAQ WNAC WOWO  
WSPD WXYZ

## Friday

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

9:30-10:00 Del Lampe's Eversharp Orchestra  
WEAF KSD WCAE WCSH WDAF WEEI  
WFJC WGN WBN WBY WGY WHO WJAR  
WLIT WOC WOW WRC WSAI WTAG  
WTIC WWJ

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

4:00-4:45 Dancing Melodies  
WEAF WEEI WTAG WCAE WFJC WTAM  
WWJ WOC WHO WGW WDAF WBN

10:00-10:30 Crime Prevention Program  
WEAF KSD WCAE WCSH WJAR WRC  
WTAG

10:00-10:30 Armstrong Quakers  
WJZ KDKA KFI KGO KGW KHQ  
KOA KOMO KPRC KSL KSTP KWK  
KYW WBAP WBZ WBZA WCKY WEBC  
WHAM WHAS WJR WKY WMC WOAI  
WREN WSB WSMB WTMJ

7:00-7:30 Howard Lanin's St. Moritz Orchestra  
WABC WFBL WGR WLBZ WEAN WORC  
WHP WJAS WLBW WMAL WTAR WDBJ  
WWNC WXYZ WBCM WDOD WBRC WISN  
WCCO KSCJ WMT KLRA WIBW KFJF  
KLZ KOL KFPY KFRC

10:00-10:30 Radio Follies, Guy Lombardo  
WABC KDYL KFJF KFPY KFRC KHJ  
KLZ KMBC KMOX KOIL KOIN KOL  
KVI WADC WBT WCAO WCAU WCCO  
WDSU WEAN WFBL WGST WEBC WFK  
WHP WJAS WKBW WKRC WMAL WMAQ  
WNAC WORC WOWO WPG WRR WSPD  
WTAR WXYZ

7:45-7:55 The Vagabonds  
WABC WHEC WLBZ WORC WHP WJAS  
WLBW WCAO WTAR WDBJ WHK WWNC  
WXYZ WBCM WDOD WBRC WISN WGL  
WMAQ WCCO KSCJ WMT KMBC KLRA  
KFJF KRLD KLZ KFPY KFRC CFRB

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

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

10:30-11:00 L'Orpheon de Montreal  
WABC WHEC WLBZ WEAN WNAC WORC  
WJAS WMAL WCAO WTAR WDBJ WADC  
WKRC WWNC WXYZ WBCM WSPD WDOD  
WLAC WBRC WISN WGL WCCO KSCJ  
WMT KMBC KLRA WNAX KOIL WIBW  
KFJF KLZ KOL KFPY

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

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

11:00-11:30 Musical Aviators Orchestra  
WHEC WKBW WLBZ WEAN WNAC WORC  
WLBW WCAO WTAR WDBJ WADC WNBC  
WXYZ WBCM WSPD WDOD WREC WBRC  
WISN WCCO WMT KMBC KLRA WNAX  
KOIL WIBW KFH KOL

8:15-8:30 Grand Opera Miniatures  
WABC KDYL KFH KFJF KFPY KFRC  
KHJ KLZ KMBC KRLD KSCJ KVI  
WADC WAIU WBCM WDAY WDBJ WDOD  
WHEC WHP WIBW WISN WJAS WKRC  
WLAC WLBW WLBZ WMAL WMAQ WMT  
WNAX WORC WREC WSPD WTAR WWNC  
WXYZ WGR

11:00-12:00 Vincent Lopez and His Orchestra  
WEAF CKGW KOA KSD KSTP WCAE  
WDAF WFJC WGY WHAS WHO WJDX  
WLIT WMC WOC WGW WRC WSB  
WSM WSMB WTIC WWJ

8:30-9:00 Weed Tire Chain Program  
WABC KFJF KMBC KMOX KOIL KRLD  
WADC WCAO WCAU WCCO WEAN WFBL  
WJAS WKBW WKRC WLBW WMAL WMAQ  
WNAC WOWO WSPD WXYZ

11:30-12:00 Romanelli and His Orchestra  
WABC KDYL KFH KFJF KFPY KLZ  
KMBC KMOX KOL WBCM WBRC WCAO  
WCCO WDAY WDBJ WDOD WEAN WHK  
WIBW WISN WKRC WLBW WLBZ WMAL  
WMT WNAC WNAX WORC WREC WSPD  
WTAR WWNC WXYZ

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

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

10:30-11:00 New World Salon Orchestra  
WABC KDYL KFJF KMBC KRLD KSCJ  
WADC WAIU WBCM WCAO WCAU WDAY  
WDBJ WDOD WEAN WFBL WEBC WHK  
WISN WJAS WKBN WLAC WLBZ WMAL  
WMT WNAC WREC WWNC WXYZ

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

1:30-2:00 Savoy Plaza Orchestra  
WABC KLRA WADC WBCM WGR WCAO  
WDBJ WDOD WEAN WFBL WBR WHP  
WJAS WKRC WLAC WMAL WSPD WTAR  
WWNC WXYZ

9:00-10:00 True Story Hour  
WABC KMBC KMOX KOIL WADC WCAO

## Saturday

**3:30-4:00 The Marionettes**  
WEAF KGO KOA KTAR WBEN WCAE  
WGY WRC

**4:30-5:00 Spanish Serenade**  
WABC WGR WLBZ WEAN WNAC WORC  
WPG WFAN WHP WMAL WCAO WTAR  
WDBJ WADC WAIU WUNC WXYZ WBCM  
WSPD WDOD WREC WLAC WISN WCOO  
KSCJ WMT KMOX KMBC KLRA KOIL  
WIBW KFJF KRLD KLZ KVI KOL  
KFPY KFRC

**5:30-6:00 Blue Aces**  
WJZ KWK WHAM WHAS WMC WSB  
WSMB

**6:00-6:15 The Jamases**  
WEAF CKGW KGO KGW KOA KSD  
KTAR WCAE WFI WGY WHAS WJAR  
WMC WOW WRC WWJ

**6:00-6:15 Tom, Dick and Harry**  
WABC KDYL KFH KFJF KFPY KLZ  
KMOX KRLD KSCJ WADC WAIU WBCM  
WBRC WCOO WDAY WDBJ WDOD WFAN  
WHEC WHK WHP WIBW WISN WKBN  
WLBW WMT WREC WTAR WUNC WGR

**6:15-6:40 Smith Ballew and His Orchestra**  
WJZ KFAB KWK WBZ WBZA

**7:00-7:15 Yoeng's Restaurant Orchestra**  
WABC WFBL WHEC WKBW WLBZ WORC  
WHP WJAS WLBW WMAL WTAR WDBJ  
WADC WKRC WAIU WISN WUNC WXYZ  
WBCM WDOD WBRC WBN WFBM KSCJ  
KLRA WIBW KFH KFJF KVI KOL  
KFPY KFRC CFRB

**7:00-7:30 Peter van Steeden and Orchestra**  
WEAF WJAR WFI WWJ WOC WHO  
WCSH WTAM WOW WSAI KSTP KOA  
KGO

**7:15-7:30 Tastyest Jesters**  
WJZ KDKA WBAL WBZ WBZA WCKY  
WHAM WREN

**7:30-8:00 Neco Surprise Party**  
WABC WEAN WFBL WHEC WKBW WLBZ  
WNAC WORC

**7:30-8:00 Silver Flute**  
WEAF CKGW KSD KSTP WCSH WDAF  
WBC WEEI WFI WBEN WHO WJAR  
WOC WOW WRC WSAI WTAG WWJ

**7:45-8:00 Pickard Family**  
WJZ CKGW KDKA KFAB KWK KYW  
WBZ WBZA WHAM WLW WREN

**8:00-8:15 Dixies Circus**  
WJZ KDKA KPRC KSTP KVOO KYW  
WBAL WBZ WBZA WHAM WKY WLW  
WOAI

**8:00-8:15 Rodeheaver Sing**  
WEAF KGO KGW KTAR KOA WJDX  
WSMB WFLA WSUN WOW KSD WWJ  
WTAM WGY WCSH

**8:15-8:30 Radiotron Varieties**  
WEAF WEEI WJAR WCSH WGY WBEN  
WCAE WTAM WWJ WSAI WIBO KSD  
WDAF WRVA WJAX WIOD WFLA WSUN  
WSM WMC WSB WSMB WJDX KPRC  
WOAI WKY KOA KSL KGO KGW  
KECA KOMO KHQ KTAR KFSD

**8:15-8:30 Dixie Echoes**  
WABC KDYL KFH KFJF KFPY KHJ  
KMBC KSCJ WADC WBCM WCAO WDAY  
WDBJ WDOD WFAN WHK WIBW WISN  
WJAS WKBN WKRC WLAC WLBW WLBZ  
WMAL WMT WNAX WORC WWO WREC  
WSPD WTAR WUNC WXYZ WGR

**8:30-9:00 Dancing Yesterdays**  
WABC KFH KFJF KFPY KFRC KLRA  
KMBC KOIL KSCJ WADC WBCM WCAO  
WCAU WDBJ WDOD WEAN WFBL WGR  
WIBW WISN WJAS WKRC WLAC WLBW  
WMAL WMT WNAC WNAX WORC WPG  
WSPD WTAR WUNC WXYZ

**8:30-9:00 Fuller Man**  
WJZ CKGW KDKA KECA KFAB KGO  
KGW KHQ KOA KOMO KPRC KWK  
WBAL WBZ WBZA WHAM WIBO WJR  
WKY WLW WREN

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

**9:00-10:00 General Electric Hour**  
WEAF KFI KFSD KGO KGW KHQ  
KOA KOMO KPRC KSD KSL KSTP  
KTAR WAPI WBAP WCAE WCSH WDAF  
WIBC WEEI WFI WBEN WHAS WHO  
WIBO WJAR WJAX WKY WMC WOAI  
WOC WOW WRC WRVA WSAI WSB  
WSMB WTAG WTAM WTMJ WWJ

**9:30-10:00 Dutch Masters Minstrels**  
WJZ KDKA KWK KYW WBAL WBZ  
WBZA WHAM WJR WLW WREN

**9:30-10:00 Columbia Educational Features**  
WABC KFH KFJF KFPY KHJ KLRA  
KLZ KMBC KOIL KOL KSCJ WADC  
WBCM WCAO WCAU WCOO WDBJ WDOD  
WEAN WFBL WFBM WHP WIBW WISN  
WJAS WKBW WKRC WLAC WLBW WMAL  
WMAQ WMT WNAC WNAX WORC WSPD  
WTAR WUNC WXYZ

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

**10:00-11:00 Hank Simmons' Show Boat**  
WABC KDYL KFH KFJF KFPY KFRC  
KHJ KLZ KMBC KMOX KOL KSCJ  
WADC WBCM WCAO WCAU WCOO WDAY  
WDBJ WDOD WEAN WHK WHP WIBW  
WISN WJAS WKBN WKRC WLAC WLBW  
WLBZ WMAL WMAQ WMT WNAC WNAX  
WORC WWO WPG WREC WSPD WTAR  
WUNC WXYZ

**10:00-11:00 Chicago Civic Opera**  
WJZ KDKA WBAL WBZ WBZA WHAM

**11:00-11:15 Troubadour of the Moon**  
WEAF KSTP WDAF WFI WHO WIOD  
WJDX WOC WOW WRC WSAI WTAM  
WJZ

**11:00-11:30 Jack Denny and His Orchestra**  
WABC KDYL KFJF KFPY KFRC KLZ  
KMBC KOL KRLD KSCJ WBCM WBR  
WCAO WDAY WDBJ WDOD WEAN WFAN  
WFBM WHEC WHK WHP WIBW WISN  
WLBW WLBZ WMAL WMT WNAC WNAX  
WORC WPG WREC WSPD WTAR WUNC  
WXYZ

**11:15-12:00 Horace Heidt and His Orchestra**  
WEAF WFI WTAM WOC WHO WOW  
KSTP KOA WCAE KSD WSMB WJDX  
WFJC WTMJ

**11:30-12:00 Guy Lombardo and His Orchestra**  
WABC KFJF KFPY KFRC KLZ KMBC  
KMOX KOL KRLD KSCJ WBCM WBR  
WCAO WCAU WCOO WDAY WDBJ WDOD  
WFBM WHEC WHK WHP WIBW WISN  
WKRC WLBW WLBZ WMAL WMT WNAC  
WNAX WORC WPG WREC WSPD WTAR  
WUNC WXYZ

**12:00-1:00 Rudy Vallee and his Orchestra**  
WEAF KOA KSD KSTP WDAF WFJC  
WJDX WRC WSB WWJ

## INDEX BY FREQUENCIES AND DIAL NUMBERS

### NOTICE OF COPYRIGHT

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### KEY

Frequency in kilocycles. Wave lengths in meters. Second column symbols: \* Verifies receptions 2c; sends station stamp 10c; † Verifies 2c; no stamp; ‡ Does not verify; § Did not reply. Third column shows night power in watts. Fourth column symbols: D, daytime only; S, Sunday only; Stations dividing time have same small figures; X means station has been granted permit to increase power; + means station has greater power during day; CP indicates station has construction permit only; Some Cuban and Mexican stations have odd frequencies; Correct kilocycles shown in small figures; N means NBC chain; C means Columbia chain; Z has been granted permit to change frequency; Y given permit to move to another city. Dn—This daylight station may use evening hours under certain conditions.

### 540 kilocycles 555.6 meters

CKX † 500 --- Brandon, Manitoba

Manitoba Telephone System		

### 550 kilocycles 545.1 meters

KFDY † 500 1+ Brookings, S. D.  
 KFUY \* 500 2+ St. Louis, Mo.  
 KFYZ † 1000 1+ Bismarck, N. D.  
 KOAC --- 1000 --- Corvallis, Ore.  
 KSD † 500 2N St. Louis, Mo.  
 WGR \* 1000 C Buffalo, N. Y.  
 WKRC † 1000 C Cincinnati, Ohio  
 XEY -- 105 547 Merida, Yucatan

	93 1/2	
S. D. State College Concordia Theological Seminary Meyer Broadcasting Co. State Agricultural College Pulitzer Publishing Co. Buffalo Broadcasting Co. WKRC Incorporated Partido Socialista del Sureste		

### 560 kilocycles 535.4 meters

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

	90 1/2	
Magnolia Petroleum Co. Reynolds Radio Co., Inc. Associated Broadcasters Strawbridge & Clothier Nelson Bros. Bond & Mortgage Co. Lit Brothers Sterchi Bros. North Shore Congregational Church Miami Broadcasting Co.		

### 570 kilocycles 526.0 meters

KGKO \* 250 + Wichita Falls, Texas  
 KMTR \* 500 --- Los Angeles, Cal.  
 KXA \* 500 --- Seattle, Wash.  
 WEO † 750 1 Columbus, Ohio  
 WKBN --- 500 1C Youngstown, Ohio  
 WMCA --- 250 2 Syracuse, N. Y.  
 WMCA \* 500 3 New York City  
 WNAZ \* 1000 C Yankton, S. D.  
 WNYC --- 500 3 New York City  
 WSYR --- 250 2 Syracuse, N. Y.  
 WWNC \* 1000 C Asheville, N. C.

	87 1/2	
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. Gurney Seed & Nursery Co. Dept. of Plants and Structures Clive B. Meredith Citizens Broadcasting Co., Inc.		

### 580 kilocycles 516.9 meters

CFCL --- 500 3S Toronto, Ont.  
 CHMA --- 250 4 Edmonton, Alta.  
 CKCL --- 500 3 Toronto, Ont.  
 CKNC \* 500 3 Toronto, Ont.  
 CKUA --- 500 4 Edmonton, Alta.  
 CNRE --- 500 4 Edmonton, Alta.  
 KGFY --- 200 D Pierre, S. D.  
 KSAC --- 500 2+ Manhattan, Kans.  
 WIBW \* 1000 2+C Topeka, Kansas  
 WOBW \* 250 1 Charleston, W. Va.  
 WSAZ \* 250 1 Huntington, W. Va.  
 WTAG \* 250 N Worcester, Mass.

	85	
Dominion Battery Co. Christian and Missionary Alliance The Dominion Battery Co. Canadian National Carbon Co., Ltd. University of Alberta Canadian National Railways Dana McNeil State Agricultural College Topeka Broadcasting Assn., Inc. WOBW, Inc. WSAZ, Inc. Telegram Publishing Co.		

INDEX BY FREQUENCIES AND DIAL NUMBERS

590 kilocycles 508.2 meters

CMW	--	1000	588	Havana, Cuba
KHQ	--	1000	+N	Spokane, Wash.
WCAJ	*	500	1	Lincoln, Neb.
- WEEI	†	1000	N	Boston, Mass.
- WKZO	*	1000	D	Berrien Springs, Mich.
- WOW	*	1000	1N	Omaha, Nebr.
- XEZ	--	500	588	Mexico City
-----	--	500	CP	Lynchburg, Va.

	22 1/2	
Columbus Commercial & Radio Co. Louis Wasmer, Inc. Nebraska Wesleyan University Edison Elec. Illuminating Co. WKZO, Inc. Woodmen of the World Joaquin Zamacona Abe Cohen		

KCY.S.  
**670**  
MTRS.  
**447.5**  
DIAL

600 kilocycles 499.7 meters

CFCH	--	250	3	Iroquois Falls, Ont.
CJRM	--	500	4	Moose Jaw, Sask.
CJRW	--	500	4	Fleming, Sask.
- CNRO	†	500	3	Ottawa, Ont.
- KFSD	*	500	+N	San Diego, Cal.
- WCAC	--	250	2+	Storrs, Conn.
- WCAO	*	250	C	Baltimore, Md.
WGBS	†	250	2+	New York City
WMT	*	500	C	Waterloo, Iowa
- WOAN	--	500	1	Lawrenceburg, Tenn.
- WREC	*	500	1+C	Memphis, Tenn.

	80	
Abitibi Power & Paper Co. Jas. Richardson & Sons, Ltd. Jas. Richardson & Sons, Ltd. Canadian National Railways Airfan Radio Corp. Conn. Agricultural College Monumental Radio, Inc. General Broadcasting System, Inc. Waterloo Broadcasting Co. WREC, Inc. WREC, Inc.		

610 kilocycles 491.5 meters

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

	77 1/2	77
Don Lee, Inc. Kansas City Star Co. Keystone Broadcasting Co., Inc. Gimbel Bros. Co. Cleveland Radio Broadcasting Corp.		

620 kilocycles 483.6 meters

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

	75 1/2	74 1/2
Oregonian Publishing Co. KTAR Broadcasting Co. Chamber of Commerce Maine Broadcasting Co., Inc. Chamber of Commerce Milwaukee Journal		

630 kilocycles 475.9 meters

CFCT	*	500	---	Victoria, B. C.
CJGX	--	500	---	Yorkton, Sask.
CNRA	--	500	---	Moncton, N. B.
- KFRR	*	500	1	Columbia, Mo.
- WGBF	†	500	1	Evansville, Ind.
- WMAL	*	250	+C	Washington, D. C.
- WOS	*	500	1	Jefferson City, Mo.
XFE	--	250	632	Villahermosa, Mex.

	73	
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		

640 kilocycles 468.5 meters

- KFI	--	5000	NX	Los Angeles, Cal.
- WAIU	*	500	C Dn	Columbus, Ohio
WOI	*	5000	D	Ames, Iowa
- XFG	--	2000	638	Mexico City
- CKCR		50	645	WATERLOO, ONT.

	71	70
Earle C. Anthony, Inc. American Insurance Union State College of Agriculture Secretaria de Guerra y Marina		

650 kilocycles 461.3 meters

- KPCB	--	100	Dn	Seattle, Wash.
- WSM	*	5000	N	Nashville, Tenn.

	69	
Wescoast Broadcasting Co. National Life & Accident Ins. Co.		

660 kilocycles 454.3 meters

- WAAW	*	500	D	Omaha, Neb.
- WEAF	†	5000	N	New York City

	67	66
Omaha Grain Exchange National Broadcasting Co., Inc.		

670 kilocycles 447.5 meters

- WMAQ	*	5000	C	Chicago, Ill.
XEO	--	101	674	Mexico City

	65 1/2	
WMAQ, Inc. F. Armida y Cia.		

INDEX BY FREQUENCIES AND DIAL NUMBERS

680 kilocycles 440.9 meters

-KFEQ	*	2500	D	St. Joseph, Mo.
-KPO	†	5000	N	San Francisco, Cal.
-WPTF	*	1000	N Dn	Raleigh, N. C.

	63 1/2	
--	--------	--

Scroggin & Co., Bank  
Hale Bros. & The Chronicle  
Durham Life Insurance Co.

690 kilocycles 434.5 meters

CFAC	--	500	1	Calgary, Alta.
CFCN	--	500	1	Calgary, Alta.
CHCA	--	500	1	Calgary, Alta.
CJ CJ	--	500	1	Calgary, Alta.
CJSC	--	5000	4	Toronto, Ont.
-CKGW	--	5000	2N	Toronto, Ont.
CNRC	--	500	1	Calgary, Alta.
-CPRY	--	5000	2N	Toronto, Ont.
-NAA	--	1000	---	Arlington, Va.
VAS	--	10000	685	Glace Bay, N. S.

	62 1/2	61-
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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

-WLW	*	5000	N	Cincinnati, Ohio
------	---	------	---	------------------

	60	59-
--	----	-----

Crosley Radio Corp.

710 kilocycles 422.3 meters

-KMPC	--	500	Dn	Los Angeles, Cal.
-WOR	--	5000	---	Newark, N. J.

	59	
--	----	--

R. S. MacMillan  
Bamberger Broadcasting Service, Inc.

720 kilocycles 416.4 meters

-WGN	--	25000	N	Chicago, Ill.
XEN	†	1000	---	Mexico City
8WMC	--	500	722	St. Johns, N. F.

	57 1/2	56
--	--------	----

Chicago Tribune  
Compania Civil de Inversiones Urbanas  
Wesley United Church

730 kilocycles 410.7 meters

CHLS	--	50	1	Vancouver, B. C.
CHYC	--	5000	2	Montreal, Que.
CKAC	--	5000	2C	Montreal, Que.
CKCD	--	50	1	Vancouver, B. C.
CKFC	--	50	1	Vancouver, B. C.
CKMO	--	50	1	Vancouver, B. C.
CKWX	†	100	1	Vancouver, B. C.
CMK	--	2000	---	Havana, Cuba
CNRM	*	5000	2	Montreal, Que.

	56	54 1/2
--	----	--------

W. G. Hassell  
Northern Electric Co., Ltd.  
La Presse Publishing Co., Ltd.  
Vancouver Daily Province  
United Church of Canada  
Spratt-Shaw Radio Co.  
A. Holstead & Wm. Hanlon  
Cuban Broadcasting Co., Hotel Plaza  
Canadian National Railways

740 kilocycles 405.2 meters

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

	54 1/2	
--	--------	--

The M. M. Johnson Co.  
Atlanta Journal Co.

750 kilocycles 399.8 meters

TIX	--	50	---	San Jose, Costa Rica
WJR	†	5000	N	Detroit, Mich.
XEQ	--	1000	---	Ciudad Juarez, Mex.

	53	52-
--	----	-----

WJR, The Goodwill Station, Inc.

760 kilocycles 394.5 meters

KVI	--	1000	C Dn	Tacoma, Wash.
WEW	--	1000	D	St. Louis, Mo.
-WJZ	†	30000	N	New York City

	52	50 1/2
--	----	--------

Puget Sound Broadcasting Co., Inc.  
St. Louis University  
National Broadcasting Co., Inc.

770 kilocycles 389.4 meters

CMJ	--	500	775	Havana, Cuba
-KFAB	*	5000	1N	Lincoln, Nebr.
-WBBM	*	25000	1C	Chicago, Ill.
WJBT	--	25000	1S	Chicago, Ill.

	50 1/2	
--	--------	--

Instituto Provincial  
KFAB Broadcasting Co.  
The Atlas Co., Inc.  
The Atlas Co., Inc.

780 kilocycles 384.4 meters

CKY	--	5000	3	Winnipeg, Manitoba
CNRW	--	5000	3	Winnipeg, Manitoba
KELW	--	500	2	Burbank, Cal.
-KTM	*	500	2+	Los Angeles, Cal.
-WEAN	*	250	+C	Providence, R. I.

	49 1/2	47 1/2
--	--------	--------

Manitoba Telephone System  
Canadian National Railways  
Union Bank & Trust Co.  
Pickwick Broadcasting Corp.  
Shepard Broadcasting Service, Inc.



# INDEX BY FREQUENCIES AND DIAL NUMBERS

WLS

- WISJ	--	250	+	Madison, Wis.
- WMC	--	500	+N	Memphis, Tenn.
- WFOR	--	500	I	Norfolk, Va.
- WTAR	*	500	1C	Norfolk, Va.
- XEW	--	5000	---	Mexico City

Wisconsin State Journal Bdcsg. Co.  
Memphis Commercial-Appeal  
WTAR Radio Corp.  
WTAR Radio Corp.  
Mexico Music Co.

## 790 kilocycles 379.5 meters

- CMHC	--	500	791	Tuinucu, Cuba
- KGO	+	7500	N	San Francisco, Cal.
- WGY	+	50000	N	Schenectady, N. Y.

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

## 800 kilocycles 374.8 meters

- WBAP	+	10000	1XN	Fort Worth, Texas
- WFAA	--	50000	IN	Dallas, Texas
- XEU	--	101	---	Veracruz, Mex.
- XFC	--	350	805	Jalapa, Mex.

Carter Publications, Inc.  
News & Journal  
Natalio Ulibarri  
Gobierno del Estado de Veracruz

KCYS.  
**880**  
MTRS.  
**340.7**  
DIAL

## 810 kilocycles 370.2 meters

- WCCO	--	7500	C	Minneapolis, Minn.
- WPCB	*	500	D	North West City

Northwestern Broadcasting, Inc.  
Eastern Broadcasters, Inc.

## 820 kilocycles 365.6 meters

- WHAS	+	10000	N	Louisville, Ky.
- XFI	--	1000	818	Mexico City

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

## 830 kilocycles 361.2 meters

- CMGA	--	300	834	Colon, Cuba
- KOA	+	12500	N	Denver, Colo.
- WHDH	--	1000	D	Boston, Mass.
- WRUF	*	5000	Dn	Gainesville, Fla.

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

## 840 kilocycles 356.9 meters

- CFCA	+	500	1	Toronto, Ont.
- CHCT	--	1000	---	Red Deer, Alta.
- CKLC	--	1000	2	Red Deer, Alta.
- CMC	--	500	---	Havana, Cuba
- CNRD	--	1000	2	Red Deer, Alta.
- CNRT	*	500	1	Toronto, Ont.
- XEM	--	500	841	Tampico, Mex.

Star Publishing & Prg. Co.  
C. F. Tull & Ardern, Ltd.  
Alberta Pacific Grain Co., Ltd.  
Cuban Telephone Co.  
Canadian National Railways  
Canadian National Railways  
Herbert A. Denny y Cia.

## 850 kilocycles 352.7 meters

- KWKH	*	10000	1	Shreveport, La.
- NBA	--	750	846	Balboa, Canal Zone
- WWL	*	5000	1	New Orleans, La.

Hello World Broadcasting Corp.  
United States Navy  
Loyola University

## 860 kilocycles 348.6 meters

- KMO	+	500	+ Dn	Tacoma, Wash.
- WABC	*	5000	XC	New York City
- WBOQ	--	5000	---	New York City
- WHB	*	500	D	Kansas City, Mo.
- XEJ	--	101	857	C. Juarez, Chih.
- XFX	--	500	---	Mexico City, Mex.

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

## 870 kilocycles 344.6 meters

- WENR	+	50000	1N	Chicago, Ill.
- WLS	+	5000	1XN	Chicago, Ill.

Great Lakes Broadcasting Co.  
Agricultural Broadcasting Co.

## 880 kilocycles 340.7 meters

- CHCS	--	10	4	Hamilton, Ont.
- CHML	--	50	4	Hamilton, Ont.
- CHRC	--	100	3	Quebec, Que.
- CJCB	--	50	---	Sydney, N. S.
- CKCI	+	22.5	3	Quebec, Que.
- CKCV	+	50	3	Quebec, Que.
- CKOC	+	50	4	Hamilton, Ont.
- CNRQ	+	50	3	Quebec, Que.
- KFKA	+	500	2+	Greeley, Colo.
- KLLX	+	500	---	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., Ltd  
Canadian National Railways  
Midwestern Radio Corp.  
Tribune Publishing Co.

## INDEX BY FREQUENCIES AND DIAL NUMBERS

KPOF	*	500	2	Denver, Colo.
WCOC	*	500	+	Meridian, Miss.
WGBI	*	250	1	Scranton, Pa.
WQAN	*	250	1	Scranton, Pa.
WSUI	*	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	+	100	---	Ottawa, Ont.
KFNJ	---	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.
WKAQ	---	500	---	San Juan, P. R.
WMAZ	+	250	1+	Macon, Ga.
WMMN	*	250	+	Fairmount, W. Va.
XES	+	500	---	Tampico, Mexico
XET	+	500	---	Monterrey, Mex.

	<b>38</b>	<b>37</b>
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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	1	Havana, Cuba
CMX	*	250	1	Havana, Cuba
KGBU	+	500	---	Ketchikan, Alaska
KFIJ	*	1000	C	Los Angeles, Cal.
KSEI	*	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.

	<b>37</b>	<b>36</b>
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Casa Karman  
Francisco Lavin  
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.
CNRH	---	500	3	Halifax, N. S.
CNRL	*	500	2	London, Ont.
CNRS	---	500	1	Saskatoon, Sask.

	<b>36 1/2</b>	
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The Electric Shop, Ltd.  
Halifax Herald, Ltd.  
Free Press Printing Co., Ltd.  
Canadian National Railways  
Canadian National Railways  
Canadian National Railways

### 920 kilocycles 325.9 meters

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

	<b>35 1/2</b>	<b>34 1/2</b>
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Manuel A. Alvarez  
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	---	50	3	Midland, Ont.
KFWI	---	500	1	San Francisco, Cal.
KGBZ	---	500	2+	York, Nebr.
KMA	*	500	2+	Shenandoah, Iowa
KROW	---	500	1+X	Oakland, Cal.
WBRC	---	500	+C	Birmingham, Ala.
WDBJ	*	250	+C	Roanoke, Va.
WIBG	*	50	D	Elkins Park, Pa.

	<b>35</b>	
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The Edmonton Journal, Ltd.  
Queen's University  
Acadia Academy  
Midland Broadcasting Corp.  
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

KGU	+	1000	---	Honolulu, Hawaii
KOIN	*	1000	C	Portland, Ore.
WAAT	---	300	D	Jersey City, N. J.
WGSB	---	1000	N	Portland, Maine
WDAY	*	1000	C	Fargo, N. D.
WFTW	*	1000	C	Hopkinsville, Ky.
WHA	---	750	D	Madison, Wis.

	<b>34</b>	
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Marion A. Mulrony  
KOIN, Inc.  
Bremer Broadcasting Corp.  
Congress Square Hotel Co.  
WDAY, Inc.  
WFTW, Inc.  
University of Wisconsin

INDEX BY FREQUENCIES AND DIAL NUMBERS

950 kilocycles 315.6 meters

CMCQ	--	1000	955	Havana Cuba
KFWB	--	1000	---	Hollywood, Cal.
KGHL	--	1000	---	Billings, Mont.
KMBC	--	1000	C	Kansas City, Mo.
WRC	†	500	N	Washington, D. C.

33
Andres Martinez Warner Bros. Broadcasting Corp. Northwestern Auto Supply Co., Inc. Midland Broadcasting Co., Inc. National Broadcasting Co., Inc.

960 kilocycles 312.3 meters

CFCY	*	250	1	Charlottetown, P. E. I.
CFRB	*	4000	2C	Toronto, Ont.
CHCK	--	30	1	Charlottetown, P. E. I.
CHWC	--	500	3	Pilot Butte, Sask.
CJBR	--	500	3	Regina, Sask.
CKCK	†	500	3	Regina, Sask.
CNRR	--	500	3	Regina, Sask.
CNRX	*	4000	2	Toronto, Ont.
XED	--	10000	961	Reynosa, Mexico

32 1/2	32-
The Island Radio Co. Rogers-Majestic Corp., Ltd. W. E. Burke R. H. Williams & Sons. Ltd. Cooperative Wheat Producers, Ltd. Leader Publishing Co., Ltd. Canadian National Railways Canadian National Railways International Broadcasting Co., Inc.	

970 kilocycles 309.1 meters

KJR	*	5000		Seattle, Wash.
WCFL	--	1500	N Dn	Chicago, Ill.
XEG	--	2000		Mexico City

32
Northwest Broadcasting System, Inc. Chicago Federation of Labor G. Gutierrez, Jr.

980 kilocycles 305.9 meters

KDKA	--	50000	N	Pittsburgh, Pa.
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31	30 1/2
Westinghouse Elec. & Mfg. Co.	

990 kilocycles 302.8 meters

WBZ	*	15000	1NY	Springfield, Mass.
WBZA	*	500	1NY	Boston, Mass.

30 1/2
Westinghouse Elec. & Mfg. Co. Westinghouse Elec. & Mfg. Co.

1000 kilocycles 299.8 meters

KFVD	--	250	Dn	Culver City, Cal.
WHO	--	5000	1N	Des Moines, Iowa
WOC	*	5000	1N	Davenport, Iowa
XEI	--	101	999	Morelia, Mexico
XEK	--	101	---	Mexico City

29 1/2
Los Angeles Broadcasting Co. Central Broadcasting Co. Central Broadcasting Co. Carlos Gutierrez M. Arturo Martinez

1010 kilocycles 296.8 meters

CFLC	*	50	3	Prescott, Ont.
CKCR	--	50	3	Waterloo, Ont.
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
WQAO	--	250	1	New York City
WRNY	--	250	1	New York City

29
Radio Association John Patterson Manuel y G. Salas Powell & Platz Pacific Agricultural Foundation, Ltd. Marcus Loew Booking Agency South Carolina Broadcasting Co., Inc. University of Oklahoma Calvary Baptist Church Calvary Baptist Church Aviation Radio Station, Inc.

1020 kilocycles 293.9 meters

KFKX	*	10000	1N	Chicago, Ill.
KYW	*	10000	1N	Chicago, Ill.
WRAX	†	250	D	Philadelphia, Pa.

28 1/2
Westinghouse Elec. & Mfg. Co. Westinghouse Elec. & Mfg. Co. WRAX Broadcasting Co.

1030 kilocycles 291.1 meters

CFCF	--	500	---	Montreal, Que.
CNRV	--	500	---	Vancouver, B. C.

28
Canadian Marconi Co. Canadian National Railways

1040 kilocycles 288.3 meters

KRLD	*	10000	1C	Dallas, Texas
KTHS	\$	10000	1N	Hot Springs, Ark.
WKAR	*	1000	D	East Lansing, Mich.
WMAK	*	1000	C Dn	Buffalo, N. Y.
XEV	--	101	1035	Puebla, Mex.

27 1/2	27
KRLD Radio Corp. Chamber of Commerce Michigan State College Buffalo Broadcasting Corp.	

KCYS.  
1040  
MTRS.  
288.3  
DIAL

INDEX BY FREQUENCIES AND DIAL NUMBERS

1050 kilocycles 285.5 meters

- KFKB \* 5000 Dn  
- KNX \* 5000 X

Milford, Kansas  
Hollywood, Cal.

27

KFKB Broadcasting Assn., Inc.  
Western Broadcast Co.

1060 kilocycles 282.8 meters

- KWJJ -- 500 Dn  
- WBAL \* 10000 1N  
- WJAG \* 1000 Dn  
- WTIC † 50000 1N

Portland, Ore.  
Baltimore, Md.  
Norfolk, Nebr.  
Hartford, Conn.

26 1/2

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

1070 kilocycles 280.2 meters

KJBS \* 100 D  
WCAZ -- 50 D  
WDZ † 100 D  
- WTAM \* 50000 N  
XER -- 101 1071

San Francisco, Cal.  
Carthage, Ill.  
Tuscola, Ill.  
Cleveland, Ohio  
Mexico City

26 25 1/2

Julius Brunton & Sons Co.  
Superior Broadcasting Service  
James L. Bush  
National Broadcasting Co., Inc.  
F. Armida y Cia

1080 kilocycles 277.6 meters

- WBT \* 5000 C  
WCBW \* 5000 1 Dn  
WMBI -- 5000 1 Dn

Charlotte, N. C.  
Zion, Ill.  
Chicago, Ill.

25 1/2

Station WBT, Inc.  
Wilbur Glenn Wilva  
Moody Bible Institute

1090 kilocycles 275.1 meters

- KMOX \* 50000 1CX  
XEB † 1000 1091  
XEL -- 10 ---

St. Louis, Mo.  
Mexico City  
Saltillo, Coah.

25

Voice of St. Louis, Inc.  
El Buen Tono, S. A.  
Antonio Garza Castro

1100 kilocycles 272.6 meters

- KGDM \* 250 DX  
- WLWL \* 5000 1  
- WPG -- 5000 1C  
XETA -- 500 ---

Stockton, Cal.  
New York City  
Atlantic City, N. J.  
Mexico City

24 1/2

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

1110 kilocycles 270.1 meters

- KSOO \* 2000 Dn  
- WRVA \* 5000 N

Sioux Falls, S. D.  
Richmond, Va.

24 23 1/2

Sioux Falls Broadcasting Assn., Inc.  
Larus & Bros. Co., Inc.

1120 kilocycles 267.7 meters

- CFJC -- 15 ---  
- CHGS \* 100 ---  
- CJOC -- 50 ---  
- KFIO † 100 D  
- KFSG \* 500 3  
- KMCS \* 500 3Y  
- KRSC † 50 D  
- KTRH \* 500 2C  
- WDBO \* 500 +C  
- WDEL † 250 +X  
- WHAD \* 250 1  
- WISN -- 250 1C  
- WTAW \* 500 2  
----- -- 150 CP  
----- -- 10 CPD

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.  
Milwaukee, Wis.  
College Station, Texas  
Rayne, La.  
Haynesville, La.

23 1/2

N. S. Dalgleish & Sons  
R. T. Holman, Ltd.  
Harold R. Carson  
Spokane Broadcasting Corp.  
Echo Park Evang. Assn.  
Dalton's, Inc.  
Radio Sales Corp.  
Rice Hotel  
Orlando Broadcasting Co., Inc.  
WDEL, Inc.  
Marquette University  
Evening Wisconsin Co.  
Agricultural & Mech. College  
Ber, Killmer & Bailey  
C. C. Crawford

1130 kilocycles 265.3 meters

CMBC -- 150 ---  
CMQ -- 150 ---  
- KSL \* 5000 N  
- WJJD \* 20000 C Dn  
- WOV -- 1000 D  
XEC -- 50 1133  
XEF -- 105 1131  
XEH -- 101 1132

Havana, Cuba  
Havana, Cuba  
Salt Lake City  
Mooseheart, Ill.  
New York City  
Toluca, Mex.  
Oaxaca. Oax.  
Monterrey, Mex.

23

Domingo Fernandez Cruz  
Jose Fernandez  
Radio Service Corp. of Utah  
Loyal Order of Moose  
International Broadcasting Corp.  
Jesus R. Benavides  
Frederico Zorrilla  
Ing. Constantino de Tarnava

1140 kilocycles 263.0 meters

- KVOO \* 5000 1N  
- WAPI -- 5000 1N

Tulsa, Okla.  
Birmingham, Ala.

22 2/3

Southwestern Sales Corp.  
Alabama Polytechnic Institute

WLAP

INDEX BY FREQUENCIES AND DIAL NUMBERS

1150 kilocycles 260.7 meters

- CMHA -- 200 1154 Cienfuegos, Cuba  
 - WHAM \* 5000 N Rochester, N. Y.

22+

Jose Ganduxe  
 Stromberg-Carlson Tel. Mfg. Co.

1160 kilocycles 258.5 meters

- WOWO \* 10000 1C Ft. Wayne, Ind.  
 - WWVA \* 5000 1Y Wheeling, W. Va.

22

Main Auto Supply Co.  
 West Virginia Broadcasting Corp.

1170 kilocycles 256.3 meters

- KTNT \* 5000 Dn Muscatine, Iowa  
 - WCAU \* 10000 C Philadelphia, Pa.

21 1/2 21

Norman Baker  
 Universal Broadcasting Co

1180 kilocycles 254.1 meters

- KEX -- 5000 2 Portland, Ore.  
 - KOB -- 20000 2 State College, N. M.  
 - WDGY \* 1000 1 Dn Minneapolis, Minn.  
 WHDI \* 500 1 Dn Minneapolis, Minn.

21 1/4

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

1190 kilocycles 252.0 meters

- WICC \* 500 D Bridgeport, Conn.  
 - WOAI \* 5000 N San Antonio, Texas

20 1/2

Bridgeport Broadcasting Station, Inc.  
 Southern Equipment Co.

1200 kilocycles 249.9 meters

KBTM -- 100 D Paragould, Ark.  
 KFJB -- 100 + Marshalltown, Iowa  
 KFWF -- 100 5 St. Louis, Mo.  
 KGCU -- 100 --- Mandan, N. D.  
 KGDE -- 100 + Fergus Falls, Minn.  
 KGDY -- 100 --- Huron, S. D.  
 KGEK + 50 9 Yuma, Colo.  
 KGEW + 100 9 Fort Morgan, Colo.  
 KGFJ -- 100 --- Los Angeles, Cal.  
 KGHJ -- 100 --- Little Rock, Ark.  
 KGY -- 10 + Lacey, Wash.  
 KMLB -- 50 D Monroe, La.  
 KSMR -- 100 --- Santa Maria, Cal.  
 KVOS -- 100 --- Bellingham, Wash.  
 KWG \* 100 --- Stockton, Cal.  
 WABI + 100 --- Bangor, Maine  
 WABZ -- 100 1 New Orleans, La.  
 WBBZ -- 100 --- Ponca City, Okla.  
 WCAT -- 100 --- Rapid City, S. D.  
 WCAX \* 100 2 Burlington, Vt.  
 WCOD + 100 3 Jamesville, Wis.  
 WEHC \* 100 + Harrisburg, Pa.  
 WEPS \* 100 --- Emory, Va.  
 WFBC \* 50 --- Worcester, Mass.  
 WFBE + 100 --- Knoxville, Tenn.  
 WHBC -- 10 4S Cincinnati, Ohio  
 WHBY + 100 --- Canton, Ohio  
 WIBX + 100 --- Green Bay, Wis.  
 WIL \* 100 5+ Utica, N. Y.  
 WJBC \* 100 6 St. Louis, Mo.  
 WJBL + 100 6 La Salle, Ill.  
 WJBW -- 100 1 Decatur, Ill.  
 WKJC \* 100 3 New Orleans, La.  
 WLAP + 100 + Lancaster, Pa.  
 WLBG \* 100 + Louisville, Ky.  
 WNBO \* 100 4 Petersburg, Va.  
 WNBW + 10 --- Washington, Pa.  
 WNBX + 10 --- Carbondale, Pa.  
 WORC \* 100 CX Springfield, Vt.  
 WRAF \* 100 8 Worcester, Mass.  
 WRBL + 50 --- La Porte, Ind.  
 WWAE -- 100 8 Columbus, Ga.  
 XEA -- 101 --- Hammond, Ind.  
 10-BP + 25 --- Guadalajara, Jal.  
 --- --- Wingham, Ont.

20 1/4

W. J. Beard's Temple of Music  
 Marshall Electric Co., Inc.  
 St. Louis Truth Center, Inc.  
 Mandan Radio Association  
 Jaren Drug Co.  
 J. Albert Loesch and George W. Wright  
 Beehler Elec. Equipment Co.  
 City of Fort Morgan  
 Ben S. McGlashan  
 Berean Bible Class  
 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 Farmer  
 Hammond-Calumet Broad. Corp.  
 Alberto Palos Sauza  
 Radio & Electric Shop

KCYS.  
**1200**  
 MTRS.  
**249.9**  
 DIAL

INDEX BY FREQUENCIES AND DIAL NUMBERS

1210 kilocycles 247.8 meters

	20-	12 1/2
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CFCO	*--	100	---	Chatham, Ont.
CFNB	*--	50	---	Fredericton, N. B.
CHWK	†	5	---	Chilliwick, B. C.
CJOR	*--	50	---	Sea Island, B. C.
CKMC	*--	15	---	Cobalt, Ont.
CKPC	†	50	+	Preston, Ont.
KDFN	†	100	---	Casper, Wyo.
KDLR	---	100	---	Devils Lake, N. D.
KFOR	---	100	+	Lincoln, Nebr.
KFVS	---	100	6	Cape Girardeau, Mo.
KFXM	---	100	9	San Bernardino, Cal.
KGCR	†	100	---	Watertown, S. D.
KGMP	---	100	---	Elk City, Okla.
KGNO	---	100	---	Dodge City, Kans.
KMJ	*--	100	---	Fresno, Cal.
KPPC	---	50	9	Pasadena, Cal.
KWEA	*--	100	---	Shreveport, La.
WALR	*--	100	---	Zanesville, Ohio
WBAX	*--	100	1	Wilkes-Barre, Pa.
WBBL	†	100	7S	Richmond, Va.
WCBS	*--	100	2	Springfield, Ill.
WCOH	*--	100	3	Yonkers, N. Y.
WCRW	*--	100	4	Chicago, Ill.
WDWF	---	100	5	Providence, R. I.
WEBQ	*--	100	6	Harrisburg, Ill.
WEDC	---	100	4	Chicago, Ill.
WGBB	*--	100	3	Freeport, N. Y.
WGCM	---	100	---	Gulfport, Miss
WHBF	*--	100	---	Rock Island, Ill.
WHBU	†	100	---	Anderson, Ind.
WIBU	---	100	---	Poynette, Wis.
WJBI	---	100	3	Red Bank, N. J.
WJBU	*--	100	1	Lewisburg, Pa.
WJBY	*--	50	---	Gadsden, Ala.
WJW	*--	100	---	Mansfield, Ohio
WLAI	*--	50	---	Ithaca, N. Y.
WLSI	*--	100	5	Providence, R. I.
WMBG	*--	100	7	Richmond, Va.
WMRJ	*--	100	3	Jamaica, N. Y.
WOCL	*--	25	---	Jamestown, N. Y.
WOMT	*--	100	---	Manitowoc, Wis.
WPAW	*--	100	5	Pawtucket, R. I.
WQDX	*--	50	---	Thomasville, Ga.
WRBQ	†	100	+	Greenville, Miss.
WSBC	*--	100	4	Chicago, Ill.
WSEN	†	100	---	Columbus, Ohio
WSIX	---	100	---	Springfield, Tenn.
WSOC	---	100	---	Gastonia, N. C.
WTAX	†	100	2	Springfield, Ill.
XETF	---	---	---	Veracruz, Mex.

Western Ontario "Better Radio" Clut  
 James S. Neill & Sons, Ltd.  
 Chilliwick Broadcasting Co., Ltd.  
 G. C. Chandler  
 R. L. MacAdam  
 Metal Shingle & Siding Co.  
 Donald Lewis Hathaway  
 KDLR, Inc.  
 Howard A. Shuman  
 Hirsch Battery & Radio Co.  
 J. C. & E. W. Lee  
 Cutler's Radio Brdcastg. Service, Inc.  
 Bryant Radio & Electric Co.  
 Dodge City Broadcasting Co.  
 James McClatchy Co.  
 Pasadena Presbyterian Church  
 Hello World Broadcasting Corp.  
 Roy. W. Waller  
 John H. Stenger, Jr.  
 Grace Covenant Presbyterian Church  
 H. L. Dewing & Chas. Messter  
 Westchester Broadcasting Corp.  
 Clinton R. White  
 Duttee W. Flint  
 First Trust & Savings Bank  
 Emil Denemark, Inc.  
 Harry H. Carman  
 Great Southern Land Co., Inc.  
 Beardsley Specialty Co.  
 Citizens Bank  
 Wm. C. Forrest  
 Monmouth Broadcasting Co.  
 Bucknell University  
 Gadsden Broadcasting Co., Inc.  
 Mansfield Broadcasting Assn.  
 Lutheran Assn. of Ithaca  
 The Lincoln Studios, Inc.  
 Havens & Martin, Inc.  
 Peter J. Prinza  
 A. E. Newton  
 Francis M. Kadow  
 Shartenburg & Robinson Co.  
 Stevens Luke  
 J. Pat. Scully  
 World Battery Co., Inc.  
 Columbus Broadcasting Co.  
 638 Tire & Vulcanizing Co.  
 A. J. Kirby Music Co.  
 WTAX, Inc.

1220 kilocycles 245.8 meters

	1942
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KFKU	--	500	1	Lawrence, Kans.
KWSC	*--	1000	+	Pullman, Wash.
WCAD	*--	500	D	Canton, N. Y.
WCAE	*--	1000	N	Pittsburgh, Pa.
WDAE	*--	1000	C	Tampa, Fla.
WREN	*--	1000	IN	Lawrence, Kans.

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

1230 kilocycles 243.8 meters

	19
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KFQD	--	100	---	Anchorage, Alaska
KGGM	--	250	+	Albuquerque, N. Mex.
KYA	*--	1000	---	San Francisco, Cal.
WBIS	*--	1000	2	Boston, Mass.
WFBM	*--	1000	1C	Indianapolis, Ind.
WNAC	*--	1000	2C	Boston, Mass.
WPSC	*--	500	D	State College, Pa.
WSBT	*--	500	1	South Bend, Ind.

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

1240 kilocycles 241.8 meters

	1833
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KTAT	†	1000	1	Ft. Worth, Texas
WACO	†	1000	1	Waco, Texas
WXYZ	†	1000	C	Detroit, Mich.

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

KFUM

INDEX BY FREQUENCIES AND DIAL NUMBERS

1250 kilocycles 239.9 meters

18 1/2 18 1/4

KFMX	**	1000	2
KFOK	**	1000	---
KIDO	**	1000	---
WAAM	**	1000	1+X
WCAL	**	1000	2
WDSU	**	1000	C
WGCP	--	250	1
WGMS	--	1000	2
WLB	†	1000	2
WODA	**	1000	1
WRHM	**	1000	2
----	--	500	CP

Northfield, Minn.  
Long Beach, Cal.  
Boise, Idaho  
Newark, N. J.  
Northfield, Minn.  
New Orleans, La.  
Newark, N. J.  
St. Paul, Minn.  
St. Paul, Minn.  
Paterson, N. J.  
Minneapolis, Minn.  
Little Rock, Ark.

Carleton College  
Nichols & Warinner, Inc.  
Boise Broadcasting Station  
WAAM, Inc.  
St. Olaf College  
Jos. H. Uhalt  
May Radio Broadcast Corp.  
Northwestern Broadcasting Inc.  
University of Minnesota  
Richard E. O'Dea  
Minnesota Broadcasting Corp.  
Joseph E. Phelps

1260 kilocycles 238.0 meters

18

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

Council Bluffs, Iowa  
Harlingen, Texas  
Tucson, Ariz.  
Brownsville, Texas  
Oil City, Pa.  
Savannah, Ga.

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

1270 kilocycles 236.1 meters

17 3/4

KFUM	*	1000	---
KGCA	--	50	2D
KOL	†	1000	3C
KTW	**	1000	3
KWLC	**	100	2D
WASH	**	500	1
WEAI	**	1000	D
WFBR	--	500	---
WJDX	--	1000	N-
WOOD	--	500	1

Colorado Springs, Colo.  
Decorah, Iowa  
Seattle, Wash.  
Seattle, Wash.  
Decorah, Iowa  
Grand Rapids, Mich.  
Ithaca, N. Y.  
Baltimore, Md.  
Jackson, Miss.  
Grand Rapids, Mich.

W. D. Corley  
Charles W. Greenley  
Seattle Broadcasting Co., Inc.  
First Presbyterian Church  
Luther College  
WASH Broadcasting Corp.  
Cornell University  
Baltimore Radio Show, Inc.  
Lamar Life Insurance Co.  
Walter B. Stiles, Inc.

1280 kilocycles 234.2 meters

17 1/2

CMCE	--	100	1285
KFBB	--	1000	+
WCAM	--	500	1
WCAP	**	500	1
WDOD	*	1000	+C
WIBA	--	500	---
WOAX	--	500	1
WRR	--	500	C

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

Julio E. Power  
Buttrety Broadcast, Inc.  
City of Camden  
Radio Industries Broadcast Co.  
WDOD Broadcasting Corp.  
Capital Times Co.  
WOAX, Inc.  
City of Dallas

1290 kilocycles 232.4 meters

17 1/4

KDYL	*	1000	C
KFUL	--	500	1
KLCN	**	50	D
KTSA	†	1000	1+C
WBCB	**	1000	+N
WJAS	**	1000	C+
WNBZ	--	50	D

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

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

1300 kilocycles 230.6 meters

17

KFH	*	1000	2C
KFJR	**	500	3
KGEF	**	1000	4
KTBI	**	1000	4
KTBR	**	500	3
WBBR	**	1000	1
WEVD	**	500	1
WHAP	**	1000	1
WHAZ	**	500	1
WIOD	*	1000	N
WOQ	**	1000	2
XEX	--	500	---

Wichita, Kansas  
Portland, Ore.  
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.  
Mexico City

Radio Station KFJH Co.  
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  
Excelsior Cia Editorial S. A.

1310 kilocycles 228.9 meters

16 1/2

KCRJ	†	100	---
KFBK	--	100	---
KFGQ	--	100	7
KFTU	--	10	---
KFJY	§	100	7

Jerome, Ariz.  
Sacramento, Cal.  
Boone, Iowa  
Juneau, Alaska  
Ft. Dodge, Iowa

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

KCY.S.  
1310  
MTR.S.  
228.9  
DIAL

## INDEX BY FREQUENCIES AND DIAL NUMBERS

KFPL	†	100	---	Dublin, Texas	C. C. Baxter
KFPM	*	15	---	Greenville, Texas	The New Furniture Co.
KFUP	†	100	8	Denver, Colo.	Fitzsimmons General Hospital
KFXJ	--	50	8X Y	Edgewater, Colo.	Western Slope Broadcasting Co.
KFXR	†	100	+	Oklahoma City	Exchange Ave. Baptist Church
KGBX	*	100	---	St. Joseph, Mo.	KGBX Inc.
KGCX	†	100	+	Wolf Point, Mont.	First State Bank of Vida
KGEZ	†	100	C	Kalispell, Mont.	Chamber of Commerce
KGFW	†	100	---	Ravenna, Neb.	O. F. Sothman and R. H. McConnell
KIT	--	50	---	Yakima, Wash.	Carl E. Haymond
KMED	--	50	---	Medford, Ore.	Mrs. W. J. Virgin
KRMD	--	50	9	Shreveport, La.	Robert M. Dean
KTLC	*	100	X	Houston, Tex.	Houston Broadcasting Co.
KTSL	†	100	9	Shreveport, La.	G. A. Houseman
KTSM	†	100	2	El Paso, Texas	W. S. Bledsoe & W. T. Blackwell
KWCR	†	100	7	Cedar Rapids, Iowa	Harry F. Paar
KXRO	†	75	---	Aberdeen, Wash.	KXRO, Inc.
WBOW	*	100	---	Terre Haute, Ind.	Banks of Wabash, Inc.
WBRE	†	100	---	Wilkes-Barre, Pa.	Louis G. Baltimore
WCLS	*	100	1	Joliet, Ill.	WCLS, Inc.
WDAH	†	100	2	El Paso, Texas	Eagle Broadcasting Co.
WEBR	*	100	+	Buffalo, N. Y.	Howell Broadcasting Co., Inc.
WEXL	†	50	---	Royal Oak, Mich.	Royal Oak Broadcasting Co.
WFBG	†	100	3	Altoona, Pa.	Wm. F. Gable Co.
WFDL	*	100	---	Flint, Mich.	Frank D. Fallain
WGAL	*	100	5	Lancaster, Pa.	WGAL, Inc.
WGH	*	100	C	Newport News, Va.	Hampton Roads Broadcasting Corp.
WHAT	†	100	4X	Philadelphia, Pa.	Independence Broadcasting Co.
WJAC	†	100	3	Johnstown, Pa.	Johnstown Automobile Co.
WJAK	*	50	6	Marion, Ind.	Marion Broadcasting Co.
WKAU	*	100	---	Laconia, N. H.	Laconia Radio Club
WKBB	*	100	1	Joliet, Ill.	Sanders Bros. Radio Station
WKBC	*	100	---	Birmingham, Ala.	R. B. Broyles Furniture Co.
WKBS	*	100	---	Galesburg, Ill.	Permil N. Nelson
WLBC	†	50	6	Muncie, Ind.	Donald A. Burton
WMBO	†	100	---	Auburn, N. Y.	Radio Service Laboratories
WNBH	*	100	---	New Bedford, Mass.	New Bedford Broadcasting Co.
WOBT	†	100	+	Union City, Tenn.	Tittsworth's Radio & Music Shop
WOL	*	100	---	Washington, D. C.	American Broadcasting Co.
WRAW	*	50	5X Z	Reading, Pa.	Reading Broadcasting Co.
WRBI	†	20	---	Tifton, Ga.	Kent's Furniture & Music Store
WROL	†	100	---	Knoxville, Tenn.	Stewart Broadcasting Co.
WSAJ	*	100	---	Grove City, Pa.	Grove City College
WSTS	--	100	---	Winston-Salem, N. C.	Winston-Salem Journal Co.
WTEL	*	50	4X	Philadelphia, Pa.	Foulkrod Radio Engineering Co.

### 1320 kilocycles 227.1 meters

KGHF	--	250	X+	Pueblo, Colo
KGIO	†	250	1+	Twin Falls, Idaho
KGMB	†	500	---	Honolulu, Hawaii
KID	†	250	1+	Idaho Falls, Idaho
WADC	†	1000	C	Akron, Ohio
WSMB	*	500	N	New Orleans, La.

	1674	75
--	------	----

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
WDRG	*	500	---	Hartford, Conn.
WSAI	*	500	N	Cincinnati, Ohio
WTAQ	*	1000	1	Eau Claire, Wis.

	16	1534
--	----	------

Pickwick Broadcasting Corp.  
Perkins Bros. Co.  
Doolittle Radio Corp.  
Crosley Radio Corp., Lessee  
Gillette Rubber Co.

### 1340 kilocycles 223.7 meters

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

	1534	1672
--	------	------

John Brown Schools  
Symons Broadcasting Co.  
City of Pensacola  
Toledo Broadcasting Co.

### 1350 kilocycles 222.1 meters

KWK	*	1000	N	St. Louis, Mo.
WAWZ	*	250	1	New York City
WCDA	--	250	1	New York City
WKBO	--	250	1	New York City
WMSG	--	250	1	New York City

	1512	1542
--	------	------

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



INDEX BY FREQUENCIES AND DIAL NUMBERS

1360 kilocycles 220.4 meters

15 1/4 15

CMKC	*	150	1364	Santiago de Cuba
KGCR	*	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.

M. P. Martinez
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

15 12 3/4

KCRC	+	100	2+	Enid, Okla.
KFBL	--	50	3	Everett, Wash.
KFJI	--	100	--	Astoria, Ore.
KFJM	+	100	--	Grand Forks, N. D.
KFJZ	--	100	X	Ft. Worth, Texas
KFLX	--	100	--	Galveston, Texas
KGAR	*	100	+	Tucson, Ariz.
KGDA	*	100	--	Mitchell, S. D.
KGFG	--	100	2	Oklahoma City
KGFL	+	50	--	Raton, N. M.
KGKL	+	100	--	San Angelo, Texas
KMAC	--	100	5	San Antonio, Tex.
KONO	+	100	5	San Antonio, Texas
KOOS	--	100	--	Marshfield, Ore.
KRE	--	100	6	Berkeley, Cal.
KVL	--	100	3	Seattle, Wash.
KWKC	--	100	--	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	--	100	+	Philadelphia, Pa.
WFDV	--	100	--	Rome, Ga.
WGL	*	100	C	Fort Wayne, Ind.
WHBD	*	100	--	Mount Orab, Ohio
WHBQ	--	100	--	Memphis, Tenn.
WHDF	+	100	+	Calumet, Mich.
WIBM	--	100	1	Jackson, Mich.
WJBK	--	50	1	Detroit, Mich.
WLEY	--	100	+	Lexington, Mass.
WLVA	+	100	7	Lynchburg, Va.
WMBR	+	100	--	Tampa, Fla.
WPOE	+	100	--	Patchogue, N. Y.
WQDM	*	100	D	St. Albans, Vt.
WRAK	+	50	--	Williamsport, Pa.
WREJ	+	10	--	Hattiesburg, Miss.
WRET	+	100	--	Wilmington, N. C.
WRIN	--	50	--	Racine, Wis.
WSVS	--	100	--	Buffalo, N. Y.
WRDO	§	100	CP	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

14 2/3 14 1/2

KOH	+	500	--	Reno, Nevada
KOV	+	500	2	Pittsburgh, Pa.
KSO	*	500	1	Clarinda, Iowa
WKBH	*	1000	1	Lg Crosse, Wis.
WSMK	--	200	2	Dayton, Ohio

Jay Peters
Doubleday-Hill Electric Co.
Berry Seed Co.
WKBH, Inc.
Stanley M. Krohn, Jr.

KCYS.  
1390  
MTRS.  
215.7  
DIAL

1390 kilocycles 215.7 meters

14 1/2 14 1/4

KLRA	*	1000	1C	Little Rock, Ark.
KOY	*	500	--	Phoenix, Ariz.
KUOA	--	1000	1	Fayetteville, Ark.
WHK	*	1000	C	Cleveland, Ohio

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

WJ GH  
WS DA  
WLE V

INDEX BY FREQUENCIES AND DIAL NUMBERS

1400 kilocycles 214.2 meters

147

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

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

1410 kilocycles 212.6 meters

14-

KFLV	†	500	4	Rockford, Ill.
KGRS	--	1000	1	Amarillo, Texas
WBCM	*	500	C	Bay City, Mich.
WDAG	--	250	1X	Amarillo, Texas
WHBL	*	500	4	Sheboygan, Wis.
WLEX	--	500	2	Lexington, Mass.
WMAF	--	500	2	S. Dartmouth, Mass.
WODX	*	500	3	Mobile, Ala.
WRBX	*	250	---	Roanoke, Va.
WSFA	†	500	3	Montgomery, Ala.
WSSH	†	500	2	Boston, Mass.

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

WJAP

1420 kilocycles 211.1 meters

13 2/3    13 1/2

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
KFXV	--	100	---	Flagstaff, Ariz.
KFYO	--	100	+	Abilene, Texas
KGFF	--	100	Y	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	†	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	X	Erie, Pa.
WEHS	--	100	2	Evanston, Ill.
WELL	--	50	X	Battle Creek, Mich.
WFDW	*	100	---	Talladega, Ala.
WHDL	*	10	DX	Tupper Lake, N. Y.
WHFC	--	100	2	Cicero, Ill.
WHIS	†	100	---	Bluefield, W. Va.
WIAS	†	100	---	Ottumwa, Iowa
WIBR	*	50	---	Steubenville, Ohio
WILM	*	100	---	Wilmington, Del.
WJBO	\$	100	---	New Orleans, La.
WKBI	*	100	2	Chicago, Ill.
WLBF	--	100	---	Kansas City, Kas.
WMBC	*	100	X+	Detroit, Mich.
WMBH	--	100	+	Joplin, Mo.
WPAD	†	100	---	Paducah, Ky.
WSPA	*	100	+	Spartanburg, S. C.
WTBO	*	100	---	Cumberland, Md.

Benson Polytechnic Institute  
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.  
Enquirer-News Co.  
Raymond G. Hammett  
Tupper Lake Broadcasting Co., Inc.  
Triangle Broadcasters  
Daily Telegraph  
Poling Electric 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

13 1/2

KECA	†	1000	N	Los Angeles, Cal.
KGNF	†	500	D	North Platte, Neb.
WBKA	†	500	1X+	Harrisburg, Pa.
WCAH	*	500	1C	Columbus, Ohio
WCBC	*	500	2	Memphis, Tenn.
WHP	*	500	1CX	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.

INDEX BY FREQUENCIES AND DIAL NUMBERS

1440 kilocycles 208.2 meters

	KLS	*	250	D
	WBIG	*	500	---
	WCEA	--	250	1
	WHCC	*	500	2C
	WMBD	*	500	3+
	WOKO	--	500	2Y
	WSAN	--	250	1
	WTAD	†	500	3

Oakland, Cal.  
Greensboro, N. C.  
Allentown, Pa.  
Rochester, N. Y.  
Peoria Heights, Ill.  
Poughkeepsie, N. Y.  
Allentown, Pa.  
Quincy, Ill.

		1374	
Warner Bros. North Carolina Broadcasting Co. B. B. Musselman Hickox Electric & Radio Corp. Peoria Heights Radio Laboratory Hudson Valley Broadcasting Co. Allentown Call Publishing Co., Inc. Ills. Stock Medicine Broadcasting Co.			

1450 kilocycles 206.8 meters

	KTBS	*	1000	---
	WBMS	*	250	1
	WGAR	†	500	N
	WHOM	*	250	1
	WKBO	*	250	1
	WNJ	*	250	1
	WSAR	*	250	---
	WTFI	--	500	---

Shreveport, La.  
Hackensack, N. J.  
Cleveland, Ohio  
Jersey City, N. J.  
Jersey City, N. J.  
Newark, N. J.  
Fall River, Mass.  
Toccoa, Ga.

		137	
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 kilocycles 205.4 meters

	KSTP	*	10000	NX
	WJSV	*	10000	---

St. Paul, Minn.  
Alexandria, Va.

		13	
National Battery Broadcasting Co. Independent Publishing Co.			

1470 kilocycles 204.0 meters

	KGA	†	5000	---
	WLAC	*	5000	1C
	WTNT	--	5000	1

Spokane, Wash.  
Nashville, Tenn.  
Nashville, Tenn.

		12 3/4	
Northwest Broadcasting System, Inc. Life & Casualty Insurance Co. Tennessee Publishing Co.			

1480 kilocycles 202.6 meters

	KFJF	*	5000	C
	WKBW	*	5000	C

Oklahoma City  
Buffalo, N. Y.

		12 1/2	12 1/4
National Radio Mfg. Co. Buffalo Broadcasting Co., Lessees			

1490 kilocycles 201.2 meters

	WCHI	--	5000	1
	WCKY	*	5000	1N
	WJAZ	--	5000	1

Chicago, Ill.  
Covington, Ky.  
Chicago, Ill.

		12 1/4	
People's Pulpit Association L. B. Wilson, Inc. Zenith Radio Corp.			

1500 kilocycles 199.9 meters

	KDB	*	100	---
	KGFI	--	100	+
	KGFK	†	50	---
	KGIZ	--	50	---
	KGKB	--	100	---
	KGKY	*	100	---
	KPJM	*	100	---
	KPO	†	50	---
	KREG	†	100	---
	KUJ	--	100	3Y
	KUT	--	100	---
	KXO	--	100	---
	WCLB	--	100	1
	WDLX	--	100	---
	WDX	--	100	---
	WBV	--	100	+
	WBZ	†	50	---
	WLB	*	100	1
	WLOE	*	100	2+
	WMBA	--	100	---
	WMBJ	†	100	---
	WMBQ	†	100	1
	WMPC	†	100	---
	WNB	†	100	---
	WOP	--	100	---
	WPEN	*	100	+
	WRDW	*	100	---
	WRRL	--	100	1
	WSYB	†	100	CP

Santa Barbara, Cal.  
Corpus Christi, Texas  
Moorhead, Minn.  
Grant City, Mo.  
Brownwood, Texas  
Scottsbluff, Nebr.  
Prescott, Ariz.  
Wenatchee, Wash.  
Santa Ana, Cal.  
Longview, Wash.  
Austin, Texas  
El Centro, Cal.  
Long Beach, N. Y.  
Tupelo, Miss.  
Connersville, Ind.  
Ludington, Mich.  
Long Island City, N. Y.  
Boston, Mass.  
Newport, R. I.  
Pittsburgh, Pa.  
Brooklyn, N. Y.  
Lapeer, Mich.  
Binghamton, N. Y.  
Bristol, Tenn.  
Philadelphia, Pa.  
Augusta, Ga.  
Woodside, N. Y.  
Rutland, Vt.

		12	
Dwight Faulding Eagle Broadcasting Co., Inc. Red River Broadcasting Co., Inc. Grant City Park Corp. Eagle Publishing Co. Hilliard Co., Inc. Miller & Klahn Wescoast Broadcasting Co. Pacific Western Broadcasting Columbia Broadcasting Co., Inc. Rice Hotel E. R. Irey and F. M. Bowles Arthur Fiske Blair & Anderson Knox Battery & Electric Co. K. L. Ashbacher John N. Brahy Boston Broadcasting Co. LeRoy Joseph Beebe Rev. J. W. Sproul Paul J. Gollhofer First M. P. Church Howitt-Wood Radio Co., Inc. Radiophone Brcdstg. Station, Inc. Wm. Penn Broadcasting Co. Warren C. Davenport's Musicove, Inc. Long Island Broadcasting Corp. Seward & Weiss Music Co.			

KCYS.  
1500  
MTRS.  
199.9  
DIAL

**INDEX BY LOCATIONS WITH MAP KEY**

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

INDEX BY LOCATIONS WITH MAP KEY

ILLINOIS

	Watts	Keys.
Carthage J-18	50	WCAZ 1070
Chicago I-20	10000	KFKX 1020
	10000	KYW 1020
	500	WAAF 920
	25000	WBBM 770
	1500	WCFL 970
	5000	WCHI 1490
	100	WCRW 1210
	100	WEDC 1210
	50000	WENR 870
	500	WGES 1360
	25000	WGN 720
	1000	WIBO 560
	5000	WJAZ 1490
	25000	WJBT 770
	100	WKBI 1420
	5000	WLS 870
	5000	WMAQ 670
	5000	WMBI 1080
	500	WPCC 560
	100	WSBC 1210
Cicero I-20	100	WHFC 1420
Decatur K-19	100	WJBL 1200
Evanston I-20	100	WEHS 1420
Galesburg J-18	100	WKBS 1310
Harrisburg L-19	100	WEBQ 1210
Joliet I-19	100	WCLS 1310
	100	WKBB 1310
La Salle J-19	100	WJBC 1200
Mooseheart I-19	20000	WJJD 1130
Peoria Heights J-19	500	WMBD 1440
Quincy K-18	500	WTAD 1440
Rockford I-19	500	KFLV 1410
Rock Island I-18	100	WHBF 1210
Springfield K-19	100	WCBS 1210
	100	WTAX 1210
Tuscola K-20	100	WDZ 1070
Urbana J-20	250	WILL 890
Zion I-20	5000	WCBD 1080

INDIANA

Anderson J-21	100	WHBU 1210
Connersville K-21	100	WKBY 1500
Culver I-20	500	WCMA 1400
Evansville L-20	500	WGBF 630
Fort Wayne J-21	100	WGL 1370
	10000	WOWO 1160
Gary I-20	1000	WJKS 1360
Hammond I-20	100	WWAE 1200
Indianapolis J-21	1000	WFBB 1230
	500	WKBF 1400
Lafayette J-20	500	WBAA 1400
La Porte I-20	100	WRAF 1200
Marion J-21	50	WJAK 1310
Muncie J-21	50	WLBC 1310
South Bend I-20	500	WSBT 1230
Terre Haute K-20	100	WBOW 1310

IOWA

Ames I-17	5000	WOI 640
Boone I-17	100	KFGQ 1310
Cedar Rapids I-18	100	KWCR 1310
Clarinda J-16	500	KSO 1380
Council Bluffs J-16	1000	KOIL 1260
Davenport I-18	5000	WOC 1000
Decorah H-18	50	KGCA 1270
	100	KWLC 1270
Des Moines I-17	5000	WHO 1000
Fort Dodge I-16	100	KFYJ 1310
Iowa City I-18	500	WSUI 880
Marshalltown I-17	100	KFJB 1200
Muscatine J-18	5000	KTNT 1170

Ottumwa J-17	100	WIAS 1420
Red Oak J-16	100	KICK 1420
Shenandoah J-16	500	KFNF 890
	500	KMA 930
Sioux City I-15	1000	KSCJ 1330
Waterloo I-17	500	WMT 600

KANSAS

Dodge City L-13	100	KGNO 1210
Kansas City K-16	100	WLBK 1420
Lawrence K-16	500	KFKU 1220
	1000	WREN 1220
Manhattan K-15	500	KSAC 580
Milford K-14	5000	KFKB 1050
Topeka K-16	1000	WIBW 580
Wichita L-15	1000	KFH 1300

KENTUCKY

Covington K-22	5000	WCKY 1490
Hopkinsville M-20	1000	WFIW 940
Louisville L-21	10000	WHAS 820
	100	WLAP 1200
Paducah M-19	100	WPAD 1420

LOUISIANA

Haynesville P-17	10	1120
Monroe P-18	50	KMLB 1200
New Orleans R-19	100	WABZ 1200
	1000	WDSU 1250
	100	WBO 1420
	100	WJBW 1200
	500	WSMB 1320
	5000	WWL 850
Rayne Q-18	150	1120
Shreveport P-17	50	KRMD 1310
	1000	KTBS 1450
	100	KTSL 1310
	100	KWEA 1210
	10000	KWKH 850

MAINE

Augusta F-28	100	WRDO 1370
Bangor F-29	100	WABI 1200
	500	WLBZ 620
Portland F-28	1000	WCBSH 940

MARYLAND

Baltimore J-26	10000	WBAL 1060
	250	WCAO 600
	100	WCBM 1370
	500	WFBR 1270
Cumberland J-25	100	WTBO 1420

MASSACHUSETTS

Boston G-28	1000	WBIS 1230
	500	WBAZ 990
	1000	WEEI 590
	1000	WHDH 830
	100	WLOE 1500
	1000	WNAC 1230
	500	WSSH 1410
Fall River H-28	250	WSAR 1450
Lexington G-28	500	WLEX 1410
	100	WLEY 1370
New Bedford H-28	100	WNBH 1310
S. Dartmouth H-28	500	WMAF 1410
Springfield H-27	15000	WBZ 990
Wellesley Hills G-28	500	WBSO 920
Worcester G-28	100	WEPB 1200
	100	WORC 1200
	250	WTAG 580

**INDEX BY LOCATIONS WITH MAP KEY**

<b>MICHIGAN</b>			
	Watts		Kcys.
Battle Creek I-21	50	WELL	1420
Bay City H-22	500	WBCM	1410
Berrien Springs I-20	1000	WKZO	590
Calumet E-19	100	WHDF	1370
Detroit H-22	50	WJBK	1370
	5000	WJR	750
	100	WMBC	1420
	1000	WWJ	920
	1000	WXYZ	1240
East Lansing H-21	1000	WKAR	1040
Flint H-22	100	WFDF	1310
	100	WPDF	1200
Grand Rapids H-21	500	WASH	1270
	500	WOOD	1270
Jackson I-21	100	WIBM	1370
Lapeer H-22	100	WMPC	1500
Ludington H-20	50	WKBZ	1500
Royal Oak H-22	50	WEXL	1310

<b>MINNESOTA</b>			
	Watts		Kcys.
Fergus Falls F-15	100	KGDE	1200
Minneapolis G-17	7500	WCCO	810
	1000	WDGY	1180
	500	WHDI	1180
	1000	WRHM	1250
Moorhead F-15	50	KGFK	1500
Northfield G-17	1000	KFMX	1250
	1000	WCAL	1250
St. Paul G-17	1000	WGMS	1250
	1000	WLB	1250
	10000	KSTP	1460

<b>MISSISSIPPI</b>			
	Watts		Kcys.
Greenville O-19	100	WRBQ	1210
Gulfport Q-19	100	WGCM	1210
Hattiesburg Q-19	10	WRBJ	1370
Jackson P-19	1000	WJDX	1270
Meridian P-20	500	WCOC	880
Tupelo N-20	100	WDIX	1500
Vicksburg P-18	300	WQBC	1360

<b>MISSOURI</b>			
	Watts		Kcys.
Cp. Girardeau L-19	100	KFVS	1210
Columbia K-17	500	KFRU	630
Grant City J-16	50	KGIZ	1500
Jefferson City L-17	500	WOS	630
Joplin M-16	100	WMBH	1420
Kansas City K-16	1000	KMBC	950
	100	KWKX	1370
	1000	WDAF	610
	500	WHB	860
	1000	WOQ	1300
St. Joseph K-16	2500	KFEQ	680
	100	KGBX	1310
St. Louis L-18	500	KFUO	550
	100	KFWF	1200
	50000	KMOX	1090
	500	KSD	550
	1000	KWK	1350
	1000	WEW	760
	100	WIL	1200

<b>MONTANA</b>			
	Watts		Kcys.
Billings F-9	1000	KGHL	950
Butte F-7	500	KGR	1360
Great Falls E-8	1000	KFBB	1280
Kalispell D-7	100	KGZE	1310
Missoula E-7	100	KGVO	1420
Wolf Point E-11	100	KGCX	1310

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

<b>NEVADA</b>			
	Watts		Kcys.
Las Vegas L-5	100	KGIX	1420
Reno I-3	500	KOH	1380

<b>NEW HAMPSHIRE</b>			
	Watts		Kcys.
Laconia G-28	100	WKAV	1310

<b>NEW JERSEY</b>			
	Watts		Kcys.
Asbury Park I-27	500	WCAP	1280
Atlantic City J-27	5000	WPG	1100
Camden I-26	500	WCAM	1280
Hackensack I-27	250	WBMS	1450
Jersey City I-27	300	WAAT	940
	250	WHOM	1450
	250	WKBO	1450
Newark I-27	1000	WAAM	1250
	250	WGCP	1250
	250	WNJ	1450
	5000	WOR	710
Paterson I-27	1000	WODA	1250
Red Bank I-27	100	WBJ	1210
Trenton I-26	500	WOAX	1280

<b>NEW MEXICO</b>			
	Watts		Kcys.
Albuquerque N-7	250	KGGM	1230
Raton M-11	50	KGFL	1370
State College P-9	20000	KOB	1180

<b>NEW YORK</b>			
	Watts		Kcys.
Auburn H-25	100	WMBO	1310
Binghamton H-26	100	WBNF	1500
Brooklyn I-27	500	WBBC	1400
	1000	WBRR	1300
	500	WCGU	1400
	500	WLTH	1400
	100	WMBQ	1500
	500	WSDA	1400
	500	WSGH	1400
Buffalo H-24	1000	WBEN	900
	100	WBR	1310
	1000	WGR	550
	5000	WKBW	1480
	1000	WMAK	1040
	50	WSVS	1370
	500	WCAD	1220
	100	WGBB	1210
	50	WBGF	1370
	1000	WEAI	1270
	50	WLCI	1210
	100	WMRJ	1210
	25	WOCL	1210
Canton F-26	100	WLBX	1500
Freeport I-27	100	WCLB	1500
Glens Falls G-27	50	WBGF	1370
Ithaca H-25	1000	WEAI	1270
	50	WLCI	1210
Jamaica H-27	100	WMRJ	1210
Jamestown H-24	25	WOCL	1210
Long Island City I-27	100	WLBX	1500
Long Beach I-27	100	WCLB	1500

INDEX BY LOCATIONS WITH MAP KEY

New York City I-27	5000 → WABC	860
	250 WAWZ	1350
	5000 WBOQ	860
	250 WCDA	1350
50000 → WEFB		660
	500 → WEVD	1300
	250 WGBS	600
1000 → WHAP		1300
	250 WHN	1010
30000 → WJZ		760
	250 WKBQ	1350
	5000 → WLWL	1100
	500 → WMCA	570
	250 → WMSG	1350
	500 → WNYC	570
	1000 → WOV	1130
	250 WPAP	1010
	500 WPCB	810
	250 → WQAO	1010
	250 → WRNY	1010
Patchogue I-27	100 → WPOE	1370
Poughkeepsie H-27	500 WOKO	1440
Rochester G-25	5000 → WHAM	1150
	500 → WHEC	1440
	50 WNBZ	1290
Saranac Lake F-26	50000 → WGY	790
Schenectady G-27	1000 → WFBL	1360
Syracuse G-25	250 WMAC	570
	250 WSYR	570
	500 WHAZ	1300
Troy G-27	10 WHDL	1420
Tupper Lake F-26	100 WBX	1200
Utica G-26	100 → WRRL	1500
Woodside I-27	100 WCOH	1210
Yonkers I-27		

NORTH CAROLINA

Asheville M-23	1000 → WUNC	570
Charlotte M-24	5000 → WBT	1080
Gastonia M-24	100 → WSOC	1210
Greensboro M-24	500 → WBIG	1440
Raleigh M-25	1000 → WPFT	680
Wilmington N-26	100 WRBT	1370
Winston-Salem M-24	100 WSJS	1310

NORTH DAKOTA

Bismarck F-13	1000 KFYR	550
Devils Lake E-14	100 KDLR	1210
Fargo F-15	1000 → WDAY	940
Grand Forks E-15	100 KFJM	1370
Mandan F-13	100 KGCJ	1200
Minot E-13	100 KLPM	1420

OHIO

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

OKLAHOMA

	Watts	Kcys.
Alva M-14	100 KGFF	1420
Chickasha N-14	250 KOCW	1400
Elk City N-13	100 KGMF	1210
Enid M-15	100 KCRK	1370
Norman N-15	500 WNAD	1010
Oklahoma N-15	5000 → KFJF	1480
	100 KFXR	1310
	100 KGFV	1370
	1000 → WKY	900
Ponca City M-15	100 WBBZ	1200
S. Coffeyville M-16	500 KGGF	1010
Tulsa M-16	5000 → KVOO	1140

OREGON

Astoria D-2	100 KFJI	1370
Corvallis E-2	1000 KOAC	550
Eugene F-2	100 KOKE	1420
Marshfield F-1	100 KOOS	1370
Medford G-2	50 KMED	1310
Portland E-3	5000 → KEX	1180
	100 KBPS	1420
	500 KFJR	1300
	1000 KGW	620
	1000 KOIN	940
	500 KTRB	1300
	500 KWJJ	1060
	100 → KXL	1420

PENNSYLVANIA

Allentown I-26	250 → WCBA	1440
	250 WBSN	1440
Altoona I-25	100 WFBG	1310
Carbondale H-26	10 WNBW	1200
Elkins Park I-26	50 WIBG	930
Eric H-24	30 → WEDH	1420
Grove City I-26	100 WSAJ	1310
Harrisburg I-25	500 → WBAK	1430
	100 WCOD	1200
	500 → WHP	1430
Johnstown J-24	100 WIAC	1310
Lancaster I-25	100 WGAL	1310
	100 WKJC	1200
Lewisburg I-26	100 WJBU	1210
Oil City I-24	500 → WLBU	1260
Philadelphia I-26	10000 → WCAU	1170
	100 → WELK	1370
	500 WFAN	610
	500 WFI	560
	100 WHAT	1310
	500 WIP	610
	500 → WLIT	560
	100 → WPEN	1500
	250 → WRAX	1020
	50 WTEL	1310
Pittsburgh J-24	50000 → KDKA	980
	500 → KOV	1380
	1000 → WCAE	1220
	1000 → WJAS	1290
	100 WMBJ	1500
Reading I-26	50 WRAW	1310
Scranton H-26	250 → WGBI	880
	250 WQAN	880
State College I-25	500 WPSC	1230
Washington J-24	100 → WNBO	1200
Wilkes-Barre I-26	100 WBAX	1210
	100 WBRE	1310
Williamsport I-25	50 → WRAK	1370

PORTO RICO

San Juan W-34	500 WKAQ	890
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RHODE ISLAND

Newport H-28	100 WMBA	1500
Pawtucket H-28	100 WPAW	1210

INDEX BY LOCATIONS WITH MAP KEY

Providence H-28	100	WDWF	1210
	250	-WEAN	780
	250	WJAR	890
	100	WLSI	1210

**SOUTH CAROLINA**

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

**SOUTH DAKOTA**

Brookings H-15	500	KFDY	550
Huron H-14	100	KGDY	1200
Mitchell H-14	50	KGDA	1370
Pierre G-13	200	KGFX	580
Rapid City H-12	100	WCAT	1200
Sioux Falls I-15	2000	KSOO	1110
Vermillion I-15	500	KUSD	890
Watertown G-15	100	KGCR	1210
Yankton I-15	1000	WNAK	570

**TENNESSEE**

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

**TEXAS**

Abilene P-13	100	KFYO	1420
Amarillo N-12	1000	KGRS	1410
	250	WDAG	1410
	100	KUT	1500
Austin Q-14	500	KFDM	560
Beaumont R-17	500	KWWG	1260
Brownsville U-15	100	KGKB	1500
Brownwood P-14	500	WTAW	1120
College Sta. Q-15	100	KGFI	1500
Corpus Christi S-14	10000	-KRLD	1040
Dallas P-15	50000	-WFAA	800
	500	WRR	1280
Dublin P-14	100	KFPL	1310
El Paso P-9	100	KTSM	1310
	100	WDAH	1310
Fort Worth P-15	100	KFJZ	1370
	1000	-KTAT	1240
	10000	-WBAP	800
Galveston R-16	100	KFLX	1370
	500	KFUL	1290
	15	KFPM	1310
Greenville O-15	500	KRGV	1260
Harlingen T-14	1000	*KPRC	920
Houston R-16	100	KTLC	1310
	500	KTRH	1120
	100	KXYZ	1420
	100	KGKL	1370
San Angelo Q-13	100	KMAC	1370
San Antonio R-14	100	KONO	1370
	100	KTAP	1420
	1000	KTSA	1290
	50000	-WOAI	1190
Waco Q-15	1000	WACO	1240
Wichita Falls O-14	250	KGKO	570
<b>UTAH</b>			
Ogden I-7	500	KLO	1400
Salt Lake City I-7	1000	KDYL	1290
	5000	-KSL	1130

**VERMONT**

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

**VIRGINIA**

Alexandria J-26	10000	-WJSV	1460
Arlington J-25	1000	NAA	690
Danville L-25	100	WBTM	1370
Emory L-23	100	WEHC	1200
Lynchburg L-25	100	WLVA	1370
	500		590
Newport News L-26	100	WGH	1310
Norfolk L-26	500	WPOR	780
	500	-WTAR	780
Petersburg L-26	100	WLBG	1200
Richmond K-26	100	WBBL	1210
	100	WMBG	1210
	5000	*WRVA	1110
Roanoke L-24	250	-WDBJ	930
	250	WRBX	1410

**WASHINGTON**

Aberdeen D-2	75	KXRO	1310
Bellingham C-3	100	KVOS	1200
Everett C-3	50	KFBL	1370
Lacey D-3	10	KGY	1200
Longview D-3	100	KUJ	1500
Pullman E-5	1000	KWSC	1220
Seattle C-3	100	KFWQ	1420
	5000	*KJR	970
	1000	KOL	1270
	1000	KOMO	920
	100	KPCB	650
	50	KRSC	1120
	1000	KTW	1270
	100	KVL	1370
	500	KXA	570
Spokane D-5	100	KFIO	1120
	1000	-KFPY	1340
	5000	KGA	1470
	1000	KHQ	590
Tacoma D-3	500	KMO	860
	1000	KVI	760
Wenatchee D-4	50	KPQ	1500
Yakima D-4	50	KIT	1310

**WEST VIRGINIA**

Bluefield L-24	100	WHIS	1420
Charleston K-23	250	-WOBU	580
Fairmont J-24	250	-WMMN	890
Huntington K-23	250	-WSAZ	580
Wheeling J-24	5000	-WVVA	1160

**WISCONSIN**

Eau Claire G-18	1000	WTAQ	1330
Fond du Lac H-19	100	KFIZ	1420
Green Bay G-19	100	WHBY	1200
Janesville I-19	100	WCLO	1200
La Crosse H-18	1000	WKBH	1380
Madison H-19	750	WHA	940
	500	WIBA	1280
	250	-WISJ	780
Manitowoc H-20	100	WOMT	1210
Milwaukee H-20	250	-WHAD	1120
	250	-WISN	1120
	1000	-WTMJ	620
Poynette H-19	100	WIBU	1210
Racine I-20	100	*WRJN	1370
Sheboygan H-20	500	WHBL	1410
Stevens Pt. G-19	2000	WLBL	900
Superior F-17	1000	-WEBC	1290

**WYOMING**

Casper H-10	100	KDFN	1210
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INDEX BY LOCATIONS WITH MAP KEY

CANADA				QUEBEC		Watts	Keys
<b>ALBERTA</b>				Montreal E-26		500	CFCF 1030
Calgary B-7	500	CFAC	690		5000	CHYC	730
	500	CFCN	690		5000	CKAC	730
	500	CHCA	690		5000	CNRM	730
	500	CJCT	690	Quebec D-27	100	CHRC	880
	500	CNRC	690		22	CKCI	880
Edmonton A-8	250	CHMA	580		50	CKCV	880
	500	CJCA	930		50	CNRQ	880
	500	CKUA	580	<b>SASKATCHEWAN</b>			
	500	CNRE	580	Fleming C-13	500	CJRW	600
Lethbridge C-8	50	CJOC	1120	Moose Jaw C-11	500	CJRM	600
Red Deer A-8	1000	CHCT	840	Pilot Butte	500	CHWC	960
	1000	CKLC	840	Regina C-12	500	CJBR	960
	1000	CNRD	840		500	CKCK	960
<b>BRITISH COLUMBIA</b>				Saskatoon B-11	500	CNRR	960
Chilliwack B-3	5	CHWK	1210		500	CFQC	910
Kamloops B-5	15	CFJC	1120		500	CNRS	910
Sea Island	50	CJOR	1210	Yorkton C-13	500	CJGX	630
Vancouver B-3	50	CHKS	730	<b>HAITI</b>			
	50	CKCD	730	Port au Prince X-30	1000	HHK	920
	50	CKFC	730	<b>MEXICO</b>			
	50	CKMO	730	Chihuahua, Chih. R-9	250	XFF	915
	100	CKWX	730	Ciudad Juarez P-9	1000	XEQ	750
	500	CNRV	1030	Guadalajara, Jal. X-10	101	XEA	1200
Victoria C-3	500	CFCT	630	Jalapa, Ver. Y-14	350	XFC	805
<b>MANITOBA</b>				Juarez, Chih.	101	XEJ	857
Brandon D-14	500	CKX	540	Merida, Yuc. X-19	105	XEY	547
Winnipeg D-15	5000	CKY	780	Mexico City Y-13	1000	XEB	1091
	5000	CNRW	780		2000	XEG	970
<b>NEW BRUNSWICK</b>					101	XEK	1000
Fredericton D-29	50	CFNB	1210		1000	XEN	719
Moncton D-30	500	CNRA	630		101	XEO	674
St. John D-30	50	CFBO	890		101	XER	1071
<b>NEWFOUNDLAND</b>					500	XETA	1100
St. Johns A-35	500	8WMC	720		5000	XEW	780
<b>NOVA SCOTIA</b>					500	XEX	1300
Glace Bay C-32	10000	VAS	690		500	XEZ	588
Halifax E-31	500	CHNS	910		2000	XFG	638
	500	CNRH	910	Monterrey, N. L. U-13	1000	XFI	818
Sydney C-32	50	CJCB	880		500	XFX	860
Wolfville D-31	50	CKIC	930		101	XEH	1132
<b>ONTARIO</b>					500	XET	890
Chatham H-22	100	CFCO	1210	Morelia, Mich. Y-12	101	XEI	1000
Cobalt E-23	15	CKMC	1210	Oaxaca, Oax. AA-14	105	XEF	1132
Hamilton H-24	10	CHCS	880	Puebla Z-13	101	XEV	1035
	50	CHML	880	Reynosa, Tams. T-14	10000	XED	960
	50	CKOC	880	Saltillo, Coah. U-12	10	XEL	1091
Iroquois Falls F-26	250	CFCH	600	Tampico, Tams. W-14	501	XEM	841
Kingston G-25	500	CFRC	930		500	XES	890
London H-23	1000	CJCG	910	Toluco, Mex. Y-12	50	XEC	1133
	500	CNRL	910	Veracruz, Ver. Y-14	---	XETF	1210
	50	CKPR	930		101	XEU	800
Midland G-23	100	CKCO	890	Villahermosa, Tab.	250	XFE	632
Ottawa F-25	500	CNRO	600	<b>CUBA</b>			
	50	CFLC	1010	Caibarien W-25	250	CMHD	920
Prescott F-25	50	CKPC	1210	Cienfuegos W-25	200	CMHA	1150
Preston G-23	500	CFCA	840	Colon W-24	300	CMGA	830
Toronto G-24	500	CFCL	580	Havana W-23	150	CMBC	1130
	4000	CFRB	960		200	CMBY	1405
	5000	CJSC	690		150	CMBZ	1010
	500	CKCL	580		500	CMC	840
	5000	CKGW	690		100	CMCE	1280
	500	CKNC	580		250	CMCF	900
	500	CNRT	840		1000	CMCQ	950
	4000	CNRX	960		500	CMI	770
	5000	CPRY	690		2000	CMK	730
Waterloo G-23	50	CKCR	1010		150	CMQ	1130
Wingham G-23	25	10-BP	1200		1000	CMW	588
<b>PRINCE EDWARD ISLAND</b>					250	CMX	900
Charlottetown C-31	250	CFCY	960	Santiago X-28	150	CMKC	1360
	30	CHCK	960	Tuinucu	500	CMHC	790
Summerside C-31	100	CHGS	1120	<b>COSTA RICA</b>			
				San Jose FF-23	50	TIX	750

CFAC 690		CJRM 600		CMX 730	56	KFBL 1370	
Calgary, Alta.		Moose Jaw, Sask.		Havana, Cuba		Everett, Wash.	
CFBO 890		CJRW 600		CMKC 1360		KFDM 560	
St. John, N. B.		Fleming, Sask.		Santiago, Cuba		Beaumont, Tex.	
CFCA 840	43	CJSC 690		CMQ 1130		KFDY 550	
Toronto, Ont.	28	Toronto, Ont.	56	Havana, Cuba		Brookings, S.D.	
CFCF 1030		CKAC 730		CMW 590		KFEL 920	35 1/2
Montreal, Que.		CKCD 730		Havana, Cuba		Denver, Colo.	
CFCH 600		Vancouver, B.C.		CMX 900		KFEQ 680	63 1/2
Iroq's Falls, Ont.		CKCI 880		Havana, Cuba		St. Joseph, Mo.	
CFCL 580	85	Quebec, Que.		CNRA 630		Boone, Iowa	16 1/2
Toronto, Ont.		CKCK 960		Moncton, N.B.		CNRC 690	
CFCN 690		Regina, Sask.		Calgary, Alta.		CNRD 840	
Calgary, Alta.		CKCL 580	85	Red Deer, Alta.		CNRE 580	71
CFCO 1210		Toronto, Ont.	38	Edmonton, Alta.		CNRH 910	
Chatham, Ont.		CKCO 890	69 1/4	Halifax, N.S.		CNRL 910	
Victoria, B. C.		CKCR 1010		London, Ont.	36 1/2	CNRM 730	
CFCY 960		Waterloo, Ont.		Montreal, Que.		CNRO 600	
Ch'lottet'n, P.E.I.		CKCV 880		Ottawa, Ont.	80	Quebec, Que.	
CFJC 1120		Quebec, Que.		CNRR 960		Regina, Sask.	
Kamloops, B. C.		CKFC 730		CNRS 910		Saskatoon, Sask.	
CFLC 1010		Vancouver, B.C.	62 1/2	CNRT 840		Toronto, Ont.	
Prescott, Ont.		CKGW 690		Toronto, Ont.		CNRV 1030	
CFNB 1210		Toronto, Ont.		Vancouver, B.C.		CNRW 780	
Fredericton, N.B.		CKIC 930	85	Winnipeg, Man.	23 1/2	CNRY 960	
CFQC 910		Wolfville, N.S.		Toronto, Ont.		HHK 920	
Saskatoon, Sask.		CKLK 840		Port au Prince, H.		KBPS 1420	
CFRB 960	32 1/2	Red Deer, Alta.		Portland, Ore.		KBTM 1200	
Toronto, Ont.		CKMC 1210		Paragould, Ark.		KCRC 1370	
CFRC 930		Cobalt, Ont.		Enid, Okla.		KCRJ 1310	
Kingston, Ont.		CKMO 730		Jerome, Ariz.		KDB 1500	
CHCA 690		Vancouver, B.C.		S. Barbara, Cal.		KDFN 1210	
Calgary, Alta.		CKNC 580		Casper, Wyo.		KDKA 980	31
CHCK 960		Toronto, Ont.	85	Pittsburgh, Pa.		KDLR 1210	
Ch'lottet'n, P.E.I.		CKOC 880	23 1/2	Devils Lake, N.D.		KDYL 1290	
CHCS 880		Hamilton, Ont.		Salt Lake City		KECA 1430	
Hamilton, Ont.		CKPC 1210		Los Angeles, Cal.		KELW 780	
CHCT 840		Preston, Ont.		Burbank, Cal.		KEX 1180	21 1/2
Red Deer, Alta.		CKPR 930		Portland, Ore.		KFAB 770	50 1/2
CHGS 1120	23 1/2	Midland, Ont.		Lincoln, Nebr.		Great Fls., Mont.	
Sum'rside, P.E.I.		CKUA 580		KFBK 1310		Sacramento, Cal.	
CHLS 730		Edmonton, Alta.		W 3 2 P	5 1/4		
Vancouver, B.C.		CKWX 730		MIDDLE RIVER MO.			
CHMA 580		Vancouver, B.C.		W 3 2 P	6 3/4		
Edmonton, Alta.		CKX 540		W 3 2 P	5 1/4		
CHML 880	38 1/2	Brandon, Man.		W 3 2 P	5 1/4		
Hamilton, Ont.		CKY 780		W 3 2 P	5 1/4		
CHNS 910		Winnipeg, Man.		W 3 2 P	5 1/4		
Halifax, N.S.		CMBC 1130		W 3 2 P	5 1/4		
CHRC 880		Havana, Cuba		W 3 2 P	5 1/4		
Quebec, Que.		CMBY 1400		W 3 2 P	5 1/4		
CHWC 960		Havana, Cuba		W 3 2 P	5 1/4		
Pilot Butte, Sask.		CMCZ 1010		W 3 2 P	5 1/4		
CHWK 1210		Havana, Cuba	43	W 3 2 P	5 1/4		
Chilliwack, B.C.		CMC 840		W 3 2 P	5 1/4		
CHYC 730	56	Havana, Cuba		W 3 2 P	5 1/4		
Montreal, Que.		CMCE 1280		W 3 2 P	5 1/4		
CJBR 960		Havana, Cuba		W 3 2 P	5 1/4		
Regina, Sask.		CMCF 900		W 3 2 P	5 1/4		
CJCA 930		Havana, Cuba		W 3 2 P	5 1/4		
Edmonton, Alta.		CMCQ 950		W 3 2 P	5 1/4		
CJCB 880		Havana, Cuba		W 3 2 P	5 1/4		
Sydney, N.S.		CMGA 830		W 3 2 P	5 1/4		
CJCY 690		Colon, Cuba		W 3 2 P	5 1/4		
Calgary, Alta.		CMHA 1150		W 3 2 P	5 1/4		
CJGC 910		Cienfuegos, Cuba		W 3 2 P	5 1/4		
London, Ont.	36 1/2	CMHC 790		W 3 2 P	5 1/4		
CJGX 630		Tuinuco, Cuba		W 3 2 P	5 1/4		
Yorkton, Sask.		CMHD 920		W 3 2 P	5 1/4		
CJOC 1120		Caibarien, Cuba		W 3 2 P	5 1/4		
Lethbridge, Alta.		CMJ 770		W 3 2 P	5 1/4		
CJOR 1210		Havana, Cuba		W 3 2 P	5 1/4		
Sea Island, B.C.		W 9 2 A	6 3/4	W 9 2 B	7		
W 9 2 A	6 3/4	W 9 2 B	7	W 9 2 C	5		
PORTABLE		W 9 2 D	8	W 9 2 E	6 1/4		
BCLN	5 1/2	W 9 2 F		W 9 2 G			
PLAINVILLE, N.H.		CHICAGO	8	CHICAGO ILL.			

KFSD 600	KGFG 1370	KIDO 1250	KPJM 1500
San Diego, Cal.	Oklahoma City	Boise, Idaho	Prescott, Ariz.
KFSG 1120	KGFI 1500	KIT 1310	KPO 680
Los Angeles, Cal.	Corpus Ch'sti, Tex	Yakima, Wash.	San F'nisco, Cal.
KFUL 1290	KGfJ 1200	KJBS 1070	KPOF 880
Galveston, Tex.	Los Angeles, Cal.	San F'nisco, Cal.	Denver, Colo.
KFULM 1270	KGFK 1500	KJR 970	KPPC 1210
Col. Spgs., Colo.	Moorhead, Minn.	Seattle, Wash.	Pasadena, Cal.
KFUO 550	KGFL 1370	KLCN 1290	KPQ 1500
St. Louis, Mo.	Raton, N. M.	KLO 1400	Wanatchee, Wash
KFUP 1310	KGFW 1310	KLY 1290	KPRC 920
Denver, Colo.	KGFV 580	KMD 1420	Houston, Texas
KFV 1000	Pierre, S. D.	Minot, N. Dak.	KPSN 1360
Culver City, Cal.	KGCC 1420	KIRA 1390	Pasadena, Cal.
KFVS 1210	San F'nisco, Cal.	Little Rock, Ark.	KQV 1380
Cape Gir'rd'u, Mo	KGGF 1010	KLS 1440	Pittsburgh, Pa.
KFWB 950	Coffeyville, Kans.	KLK 880	San Jose, Cal.
Hollywood, Cal.	KGGM 1230	KLX 1370	Berkeley, Cal.
KFWF 1200	Alb'd'g'que, N.M.	KLZ 560	KREG 1500
St. Louis, Mo.	KGHP 320	Denver, Colo.	Santa Ana, Cal.
KFWI 930	Pueblo, Colo.	KMA 930	KRGV 1260
San F'nisco, Cal.	KGHI 1200	Shenandoah, Ia.	Harlingen, Texas
KFXD 1420	Little Rock, Ark.	KMAC 1370	KRLD 1040
Nampa, Idaho	KGHL 950	San Antonio, Tex.	Dallas, Texas
KFXF 920	Billings, Mont.	KMBC 950	KRMD 1310
Denver, Colo.	KGJQ 1320	Kan. City, Mo.	Shreveport, La.
KFXJ 1310	Twin Falls, Ida.	KMCS 1120	KROW 930
Edgewater, Colo.	KGJR 1360	Ingleswood, Cal.	Oakland, Cal.
KFXM 1210	Butte, Mont.	KMED 1310	KRSC 1120
San Ber'd'no, Cal.	KGJW 1420	Medford, Ore.	Seattle, Wash.
KFXR 1310	Trinidad, Colo.	KMJ 1210	KSAC 580
Oklahoma City	KGKX 1420	Fresno, Cal.	Manh't'n, Kans.
KFY 1420	Las Vegas, Nev.	KMLB 1200	KSCJ 1330
Flagstaff, Ariz.	KGIZ 1500	Monroe, La.	Sioux City, Ia.
KFYO 1420	Grant City, Mo.	KMMJ 740	KSD 550
Abilene, Texas	KGJF 890	Clay Ctr., Nebr.	KSEI 900
KFYR 550	Little Rock, Ark.	KMO 860	Pocatello, Idaho
Bismarck, N.D.	KGKB 1500	Tacoma, Wash.	KSL 1130
KGA 1470	Brownwood, Tex.	KMOX 1090	Salt Lake City
Spokane, Wash.	KGKL 1370	St. Louis, Mo.	KSMR 1200
KGAR 1370	San Angelo, Tex.	KMPC 710	Santa Maria, Cal.
Tucson, Ariz.	KGKO 1370	KMTR 570	KSO 1380
KGYO 1320	Wichita Fils., Tex	Los Angeles, Cal.	Clarinda, Iowa
San Diego, Cal.	KGKX 1420	Los Angeles, Cal.	KSOO 1110
KGBU 900	Sand Point, Ida.	Los Angeles, Cal.	Sioux Falls, S.D.
Ketohikan, Al'ka.	KGKY 1500	KOA 830	KSTP 1460
KGBX 1310	Scottsbluff, Nebr.	Denver, Colo.	St. Paul, Minn.
St. Joseph, Mo.	KGMB 1320	KOAC 550	KTAB 560
KGZ 930	Honolulu, T. H.	Corvallis, Ore.	San F'nisco, Cal.
York, Nebr.	KGMP 1210	KOB 1180	KTAP 1420
Decora, Iowa	Elk City, Okla.	State Coll., N.M.	San Antonio, Tex.
KGCR 1210	KGNF 1430	KOCW 1400	KTAR 620
Watertown, S.D.	No. Platte, Neb.	Chickasha, Okla.	Phoenix, Ariz.
KGCU 1200	Dodge City, Kans.	KOH 1380	KTAT 1240
Mandan, N.D.	KGK 790	Reno, Nevada	Ft. Worth, Tex.
KGCX 1310	San F'nisco, Cal.	KOIL 1260	KTBI 1300
Wolf P't, Mont.	KGRS 1410	Council Bluffs, Ia.	Los Angeles, Cal.
KGDA 1370	Amarillo, Texas	KOIN 940	KTBR 1300
Mitchell, S. D.	KGU 940	Portland, Ore.	Portland, Ore.
KGDE 1200	Honolulu, Hawaii	KOL 1270	KTBS 1450
Ferg's F'lls, Minn	KGVO 1420	Seattle, Wash.	Shreveport, La.
KGDM 1100	Missoula, Mont.	KOMO 920	KTHS 1040
Stockton, Cal.	KGW 620	Seattle, Wash.	Hot Spgs., Ark.
KGDY 1200	Portland, Ore.	KONO 1370	KTLC 1310
Huron, S. D.	KGY 1200	San Antonio, Tex	Houston, Texas
KGFE 1300	Lacey, Wash.	KOOS 1370	KTM 780
Los Angeles, Cal.	KHJ 900	Marshfield, Ore.	Los Angeles, Cal.
KGFK 1200	Los Angeles, Cal.	KORE 1420	KTNT 1170
Yuma, Colo.	KHK 590	Eugene, Ore.	Muscatine, Iowa
KGER 1360	Spokane, Wash.	KOY 1390	KTSA 1290
Long Beach, Cal.	KICK 1420	Phoenix, Ariz.	San Antonio, Tex.
KGEW 1200	Red Oak, Iowa.	KPCB 650	
Ft. Morgan, Colo.	KID 1320	Seattle, Wash.	
KGZ 1310	Idaho Falls, Ida.		
Kalispell, Mont.			
KGFF 1420			
Alya, Okla.			
W2 XCD	W9CMP	W7AWE	W9
JERCY CITY	KY	CURRIERVILLE	ANCONA
		Mo.	ILL.

KTSL 1310		WABC 860		WCAH 1430		WDEL 1120	
Shreveport, La.		New York City	41	Columbus, Ohio	13 1/2	Wilmington, Del.	23 1/2
KTSM 1310		WABI 1200		WCAJ 590		WDGY 1180	21 1/4
El Paso, Texas		Bangor, Maine		WCAL 1250	18 1/2	Minneapolis, Minn.	
KTW 1270		WABZ 1200		Northfield, Minn.	17 1/2	WDIX 1500	
Seattle, Wash.		New Orleans, La.		WCAM 1280	80	Tupelo, Miss.	
KUJ 1500		WACO 1240		Camden, N. J.	17 1/2	WDOD 1280	17 1/2
Longview, Wash.		WADC 1320	16 1/4	WAO 600	17 1/2	Chattanooga, Tenn.	
KUOA 1390	14 1/2	Akron, Ohio	71	Baltimore, Md.	80	WDRG 1330	16
Fayetteville, Ark.		WAU 640		WCAP 1280	17 1/2	Hartford, Conn.	
KUSD 890		Columbus, Ohio		Asbury Pk., N. J.		WDSU 1250	18 1/2
Vermillion, S. D.		WALR 1210		WCAT 1200		New Orleans, La.	
KUT 1500		Zanesville, Ohio		Rapid City, S. D.		WDWF 1210	
Austin, Texas		WAPI 1140	22 2/3	WCAU 1170	21 1/2	Providence, R. I.	
KVI 760		Birmingham, Ala.		Philadelphia, Pa.		WDZ 1070	
Tacoma, Wash.		WASH 1270	17 3/4	WCAX 1200		Tuscola, Ill.	
KVL 1370		Gr. Rapids, Mich.		WCAZ 1070		WEAF 660	67 1/2
Seattle, Wash.		WAWZ 1350	15 1/2	Burlington, Vt.		New York City	
KVOA 1260		New York City	14 +	WCAZ 1070		WEAI 1270	17 3/4
Tucson, Arizona		WBAA 1400		Carthage, Ill.		Ithaca, N. Y.	
KVOO 1140	22 2/3	Lafayette, Ind.		WCBA 1440	13 1/4	WEAN 780	49 1/2
Tulsa, Okla.		WBAK 1430		Allentown, Pa.		Providence, R. I.	
KVOS 1200		Harrisburg, Pa.		WCBT 1080		WEAO 570	
Bellingham, Wash.		WBAL 1060	26 1/2	Zion, Ill.		Columbus, Ohio	
KWCR 1310		Baltimore, Md.		WCBM 1370		WBCB 1290	17 1/4
Cedar Rapids, Ia.		WBAP 800	47	Baltimore, Md.		Superior, Wis.	
KWEA 1210		Fort Worth, Tex.		WCSB 1210		WEBQ 1210	
Shreveport, La.		WBAX 1210		Springfield, Ill.		Harrisburg, Ill.	
KWG 1200		Wilkes-Barre, Pa.	14 +	WCO 810	46	WEBR 1310	16 1/2
Stockton, Cal.		WBBC 1400		Minneapolis, Minn.	15 1/2	Buffalo, N. Y.	
KWJJ 1060		Brooklyn, N. Y.		WCDA 1350		WDEC 1210	
Portland, Ore.		WBBL 1210	50 1/2	New York City	32	Chicago, Ill.	
KWK 1350	15 1/2	Richmond, Va.	17	WCFL 970	14 +	WEDH 1420	13 3/8
St. Louis, Mo.		WBBM 770		Chicago, Ill.	12 1/2	Erie, Pa.	82 1/2
KWKK 1370	42	Chicago, Ill.		WCGU 1400	12 1/4	WEEL 590	
Kansas City, Mo.		WBRR 1300	14	Brooklyn, N. Y.		Boston, Mass.	
Shreveport, La.		Brooklyn, N. Y.	37 1/2	WCH 1490		WEHC 1200	
KWLC 1270		WBWZ 1200	13 1/4	Chicago, Ill.	14 +	Emory, Va.	
Decorah, Iowa		Ponca City, Okla.	19	WCKY 1490	38	WEHS 1420	
KWSC 1220		WBCM 1410	41	Covington, Ky.		Evanston, Ill.	
Pullman, Wash.		WBEN 900	16 1/2	WCLB 1500		WELK 1370	15
KWWG 1260		Buffalo, N. Y.	35	Long Beach, N. Y.		Philadelphia, Pa.	
Brownsville, Tex.		WBGF 1370		WCO 1200		WELL 1420	
KXA 570		Glens Falls, N. Y.		Janesville, Wis.		Battle Creek, Mich.	
Seattle, Wash.		WBIG 1440	13 1/4	WCS 1310		WENR 870	40
KXL 1420	13 3/8	Greensboro, N. C.		Joliet, Ill.		Chicago, Ill.	
Portland, Ore.		WBIS 1230		WEMA 1400	14 +	WEPS 1200	
KXO 1500		Boston, Mass.	19	Culver, Ind.		Worcester, Mass.	
El Centro, Cal.		WBMS 1450		WCOA 1340		WEVD 1300	17
KXRO 1310		Hackensack, N. J.		Pensacola, Fla.		New York City	
Aberdeen, Wash.		WBOQ 860	41	WCOG 880	38	WEW 760	
KXYZ 1420		New York City	16 1/2	Meridian, Miss.		St. Louis, Mo.	
Houston, Texas		WBOW 1310		WCOB 1200		WEXL 1310	
KYA 1230		Terre Haute, Ind.	35	Harrisburg, Pa.		Royal Oak, Mich.	
San Francisco, Cal.		WBRC 930		WCOH 1210		WFAA 800	47
KYW 1020	28 1/2	Birmingham, Ala.		Yonkers, N. Y.		Dallas, Texas	77
Chicago, Ill.		WBRE 1310		WCRW 1210		WFAN 610	
KZM 1370		Wilkes-Barre, Pa.		Chicago, Ill.		Philadelphia, Pa.	
Hayward, Cal.		WBRO 920		WCSA 1360		WFCB 1200	
NAA 690	62 1/2	Well 'T'y'H's, Mass		Charleston, S. C.		WFBG 1200	
Arlington, Va.		WBT 1080	25 1/2	WCSH 940	34	Knoxville, Tenn.	
NBA 850		Charlotte, N. C.		Portland, Maine		WFBE 1200	
Balboa, C. Z.		WBTM 1370		WDAE 1220		Cincinnati, Ohio	
TIX 750		Danville, Va.		WDAF 610	77 1/2	WFBG 1310	
San Jose, C. R.		WBZ 990	30 1/2	Tampa, Fla.		Altoona, Pa.	
VAS 690		Springfield, Mass.	30 1/2	WDAF 610		WFLB 1360	15 1/4
Glance Bay, N. S.		WBSA 990	80	Kansas City, Mo.		Syracuse, N. Y.	
WAAF 920	35 1/2	Boston, Mass.		WDAF 610		WFBM 1230	19
Chicago, Ill.	18 1/2	WACAC 600		Ama-illo, Texas		Indianapolis, Ind.	
WAMM 1250	33 1/2	Storrs, Conn.		WDAH 1310		WFR 1270	17 3/4
Newark, N. J.	67 1/2	WCAD 1220		El Paso, Texas		Baltimore, Md.	
WAAT 940	5 1/2	Canton, N. Y.		WDAY 940	34	WDF 1310	
Jersey City, N. J.		WCAE 1220	19 1/2	Fargo, N. D.	34 1/2	Flint, Mich.	
WAAW 660		Pittsburgh, Pa.		WDBJ 930		WFDV 1370	
Omaha, Nebr.		W9BFT	7	Roanoke, Va.	23 1/2	Rome, Ga.	
W9BEO		KAN.		WDBO 1120	5 1/2	W400	5
CICE2014L				Orlando, Fla.		UNION CITY	
				W. J. B. X		WCDJ	8
				HARRISON			
				ORAD			

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WFDW 1420 Talladega, Ala.		WHDH 1180 Minneap., Minn.		WJBG 1370 Detroit, Mich.		WLBG 1200 Ettrick, Va.	28 1/3
WFI 560 Philadelphia, Pa.	90 1/2	WHDL 1420 TupperLake, N.Y.		WJBL 1200 Decatur, Ill.		WLBI 900 Stevens Pt., Wis.	
WFIW 940 Hopkinsville, Ky.	34	WHEC 1440 Rochester, N. Y.	13 1/4	WJBO 1420 New Orleans, La.		WLWB 1260 Oil City, Pa.	18
WFLA 620 Clearwater, Fla.	75 1/2	WHFC 1420 Cicero, Ill.		WJBT 770 Chicago, Ill.		WLWX 1500 L.L. City, N.Y.	12
WGAL 1310 Lancaster, Pa.		WHIS 1420 Bluefield, W. Va.		WJBU 1210 Lewisburg, Pa.		WLWZ 620 Bangor, Me.	75 1/2
WGAR 1450 Cleveland, Ohio	13+	WHK 1390 Cleveland, Ohio	14 1/2	WJBW 1200 New Orleans, La.		WLWI 1210 Ithaca, N. Y.	
WGBB 1210 Freeport, N. Y.	20	WHN 1010 New York City		WJBY 1210 Gadsden, Ala.		WLX 1410 Lexington, Mass.	15+
WGBC 1430 Memphis, Tenn.	13 1/2	WHO 1000 Des Moines, Ia.	29 1/2	WJDX 1270 Jackson, Miss.	17 3/4	WLEY 1370 Lexington, Mass.	
WGBF 630 Evansville, Ind.	74	WHOM 1450 Jersey City, N. J.		WJDD 1130 Mooseheart, Ill.	23	WLIT 560 Philadelphia, Pa.	90 1/2
WGBI 880 Scranton, Pa.	38	WHP 1450 Harrisburg, Pa.	13 1/2	WJKS 1360 Gary, Ind.	15 1/4	WLOE 1500 Boston, Mass.	12
WGBS 600 New York City		WIAS 1420 Ottumwa, Iowa		WJR 750 Detroit, Mich.	53	WLS 370 Chicago, Ill.	40
WGCM 1210 Gulfport, Miss.		WIBA 1280 Madison, Wis.	17 1/2	WJSV 1460 Alexandria, Va.	13	WLSE 1210 Providence, R. I.	
WGCP 1250 Newark, N. J.		WIBG 930 Elkins Park, Pa.		WJW 1210 Mansfield, Ohio		WLTH 1400 Brooklyn, N.Y.	14+
WGES 1360 Chicago, Ill.	15 1/2	WIBM 1370 Jackson, Mich.		WJZ 760 New York City	52	WLVA 1370 Lynchburg, Va.	
WGH 1310 Newp't News, Va.		WIBO 560 Chicago, Ill.	90 1/2	WKAQ 890 San Juan, P. R.		WLWY 700 Cincinnati, Ohio	60
WGL 1370 Ft. Wayne, Ind.	15	WIBR 1420 Steubenville, O.		WKAR 1040 E. Lansing, Mich.		WLWI 1100 New York City	24 1/2
WGMS 1250 St. Paul, Minn.		WIBU 1210 Poynette, Wis.		WKAV 1310 Laconia, N. H.		WLMAC 570 Syracuse, N. Y.	
WGN 720 Chicago, Ill.	57 1/2	WIBW 580 Topeka, Kansas	85	WKBK 1310 Joliet, Ill.	16 1/2	WMAF 1410 S. D'rtm'th, Mass.	
WGR 550 Buffalo, N. Y.	23 1/2	WIBX 1200 Utica, N. Y.		WKBC 1310 Birmingham, Ala.	14+	WMAK 1040 Buffalo, N. Y.	27 1/2
WGST 890 Atlanta, Ga.	38	WICC 1190 Bridgeport, Conn.	20 1/2	WKBF 1400 Indianapolis, Ind.		WMAL 630 Washington, D.C.	73
WGY 790 Schenec'd'y, N. Y.	48 1/2	WIL 1200 St. Louis, Mo.		WKBH 1380 La Crosse, Wis.		WMAQ 570 Chicago, Ill.	65 1/2
WHA 940 Madison, Wis.		WILM 1420 Wilmington, Del.	38	WKBI 1420 Chicago, Ill.	13 3/8	WMAZ 890 Macon, Ga.	
WHAD 1120 Milwaukee, Wis.	23 1/2	WIOD 1300 Miami, Fla.	17	WKBN 570 Youngstown, O.	87 1/2	WMB 1500 Newport, R. I.	
WHAM 1150 Rochester, N. Y.	22 1/3	WIP 610 Philadelphia, Pa.	77	WKBO 1450 Jersey City, N. J.		WMBB 1420 Detroit, Mich.	13 1/4
WHAP 1300 New York City	17	WIS 1010 Columbia, S. C.	29	WKBP 1350 New York City		WMBQ 1440 Peoria Hghts., Ill.	
WHAS 820 Louisville, Ky.	45	WISJ 780 Madison, Wis.	49 1/2	WKBS 1310 Galesburg, Ill.		WMBG 1210 Richmond, Va.	
WHAT 1310 Philadelphia, Pa.	16 1/2	WISN 1120 Milwaukee, Wis.	23 1/2	WKBY 1500 Connerville, Ind.	12 3/8	WMBH 1420 Joplin, Mo.	
WHB 860 Kansas City, Mo.	41	WJAC 1310 Johnstown, Pa.	16 1/2	WKBW 1480 Buffalo, N. Y.		WMBI 1080 Chicago, Ill.	
WHBC 1200 Canton, Ohio		WJAG 1060 Norfolk, Nebr.	26 1/2	WKBZ 1500 Ludington, Mich.		WMBJ 1500 Pittsburgh, Pa.	12
WHBD 1370 Mt. Orab, O.		WJAK 1310 Marion, Ind.	16 1/2	WKJC 1200 Lancaster, Pa.		WMBQ 1310 Auburn, N. Y.	
WHBF 1210 Rock Island, Ill.		WJAR 890 Providence, R. I.		WKRC 550 Cincinnati, O.	93 1/2	WMBR 1370 Brooklyn, N. Y.	
WHBL 1100 Sheboygan, Wis.		WJAS 1290 Pittsburgh, Pa.	17 1/3	WKY 900 Oklahoma City	37	WMBR 1370 Tampa, Fla.	
WHBU 1370 Memphis, Tenn.	15	WJAX 900 Jacksonville, Fla.	37	WKZO 590 Be'n Spgs., Mich.		WMC 780 Memphis, Tenn.	49 1/2
WHBY 1200 Green Bay, Wis.		WJAY 10 Cleveland, Ohio	77 1/2	WLAC 1470 Nashville, Tenn.	12 1/4	WMCB 570 New York City	87 1/2
WHDF 1370 Calumet, Mich.		WJAZ 1490 Chicago, Ill.		WLAF 1200 Louisville, Ky.	20 1/3	WMMN 890 Fairmont, W. Va.	38
WHDH 830 Boston, Mass.	43 1/2	WJBC 1200 La Salle, Ill.		WLB 1250 St. Paul, Minn.		WMPD 1500 Lapeer, Mich.	
W9 CHL	63 1/2	WJBI 1210 Red Bank, N. J.	53 1/4	WLBC 1310 Muncie, Ind.	13 3/8	WMRJ 1210 Jamaica, N. Y.	15 1/2
KY		W9 BIK		WLBK 1420 Kansas City, Mo.	6	WMSG 1350 New York City	6 1/4
		CLARIDON HILL		W5 B2C		WALC	
				OKLA.		O'BRIEN	
						167 MET	



# The World Stations by Countries

Country and City	Call	Keys.	Watts	Country and City	Call	Keys.	Watts
OCEANIA AND AFRICA				FRENCH INDO CHINA			
AUSTRALIA				Haiphong	-----	3446	2500
Adelaide	5CL	730	2500	HONG KONG			
	5DN	960	100	Victoria Peak	ZBW	857	1500
	5KA	1200	200	INDIA			
Bathurst	2MK	1155	50	Bombay	VUB	840	3000
Brisbane	4QG	760	2500	Calcutta	VUC	810	3000
Hobart	7ZL	580	600	JAPAN			
Melbourne	3AR	620	1000	Hirasio	JHBB	7995	-----
	3DB	1180	100	Hiroshima	JOFK	849	10000
	3LO	9369	1000	Kumamoto	JOJK	789	10000
		800		Nagoya	JOCK	810	10000
Newcastle	2NC	1245	2000	Osaka	JOBK	750	10000
Perth	6ML	1010	300	Sapporo	JOIK	831	10000
	6WF	690	1000	Sendai	JOHK	769	10000
Rockhampton	4RK	930	2000	Taihoku	JFAK	353	1000
Sydney	2BL	9225	1000	Taipeh	JFAB	7590	-----
		855		Tokyo	JOAK	869	10000
	2FC	10520	1000	KWANGTUNG			
		665		Dairen	JQAK	759	5000
	2GB	950	600	NETHERLAND EAST			
	2KY	1070	750	INDIES			
	2ME	10520	-----	Bandoeng	IBR	5170	1000
	2UE	1025	50	Batavia	PK1AA	3998	500
	2UW	1125	100	Djakakarta	PK2AF	5996	500
NEW ZEALAND				Makassar	PK6KZ	7313	500
Auckland	1YA	900	500	Malabar	PLF	17640	-----
	1ZQ	1188	-----	Palembang	PK4PA	59964	240
Christchurch	3YA	980	500	Semarang	PK2AG	-----	-----
	3ZC	5996	250	Surabaya	PH3CH	6662	250
		1199				2142	500
		648	500	SOUTHERN EUROPE			
		1147	160	ALBANIA			
		1049	150	Tirana	-----	-----	300
		718	5000	AUSTRIA			
ALGERIA				Graz	-----	851	7000
Algiers	8DB	825.3	100	Innsbruck	-----	1058	500
		824	2400	Klagenfurt	-----	662	500
CANARY ISLANDS				Linz	-----	1220	500
Las Palmas	EAR5	1071	500	Vienna	-----	581	15000
EGYPT				FRANCE			
Cairo	-----	869	-----	Agen	F2BD	963.1	480
		909	-----			9761	-----
KENYA				Angers	-----	1091	250
Nairobi	7LO	9640	1000	Beziers	-----	1364.3	1500
		750		Biarritz	-----	1313	250
MOROCCO				Bordeaux	-----	1260.4	5000
Casablanca	AIN	5879	-----			986	1500
Rabat	-----	6877	2500	Caen	-----	1080	200
		724		Grenoble	-----	914.1	1500
TUNISIA				Juan les Pins	-----	1219	250
Carthage	TNU	162	-----	Lille	-----	1130	500
Constantine	8KR	7005	-----	Limoges	-----	1022	500
Tunis	TUA	240	500	Lyon	YN	644	3000
UNION OF SOUTH AFRICA					YR	1029.9	500
Cape Town	ZTC	800	1000	Marsan	-----	7462.7	-----
Durban	ZTD	789	1000	Marseilles	-----	750	250
Johannesburg	ZTJ	9369	15000	Montpellier	-----	950	500
		666		Nancy	-----	1049	200
				Nice (see Juan les Pins)	-----	19355	-----
BRITISH MALAYA				Nimes	-----	1256	500
Singapore	VS1AB	7260	-----	Nogent-sur-Seine	F8AV	3750	-----
Johore	VS3AB	7055	-----	Paris	FL	9375	15000
CEYLON						207.5	-----
Colombo	-----	375	1750		FPTT	671	1000
CHINA					F8GC	825	1500
Canton	CAB	689	1000			4262.3	-----
Hangchow	XGY	895	250			905.2	500
Harbin	COHB	674	1000			174	13500
Mukden	COMK	714	2000			967.8	2000
Nanking	XGZ	606	500			7317.1	-----
Peking	COPK	937	1000	Rennes	-----	1103	1500
Shanghai	KRC	887	250	Rheims	-----	777.2	500
Tientsin	CRC	1071	500	St. Etienne	-----	1363.6	250
CHOSEN (KOREA)				Toulon	-----	1200	500
Heijo (Seoul)	JODK	714	1000	Toulouse	MRD	1175	1500
					-----	779	8000

Country and City	Call	Kcys.	Watts	Country and City	Call	Kcys.	Watts
<b>HUNGARY</b>				<b>Nauen</b>			
Budapest	-----	545	2000	AGC	17430	-----	-----
<b>ITALY</b>				Norddeich	-----	167	1000
Bolzano	IBZ	662	200	Nuremberg	-----	1254	1000
Genoa	IGE	788	1200	Schaerbeck	-----	1304	-----
Milan	IMI	599	7000	Stettin	-----	1059	750
Naples	INA	905.2	1500	Stuttgart	-----	833	4000
Rome	IRO	680	3000	<b>IRISH FREE STATE</b>			
Turin	IRAX	6666.7	-----	Cork	6CK	1337	1000
<b>PORTUGAL</b>				Dublin	2RN	940	1500
Lisbon	CT1AA	942	1000	<b>LUXEMBURG</b>			
<b>RUMANIA</b>				Luxemburg	LOAA	1344	10000
Bucharest	PIAA	983.6	500	<b>NETHERLANDS</b>			
<b>SPAIN</b>				Hilversum	PFBI	1004	7000
Almeria	EAJ18	1193	200	Huizen	PHI	17778	40000
Barcelona	EAJ1	860	7500	Scheveningen	PCF	160	1500
Madrid	EAJ13	1121	10000	<b>UNITED KINGDOM</b>			
	EAJ2	750	750	Aberdeen	2BD	995	1000
	EAJ7	707.6	1500	Belfast	2BE	1238	1000
	EAM	9772	-----	Bournemouth	6BM	1040	1000
Salamanca	EAJ22	662	-----	Cardiff	5WA	968	1000
San Sebastian	EAJ8	633	1000	Daventry	5XX	193	25000
Seville	-----	815	-----	Dundee	5GB	626	25000
<b>SWITZERLAND</b>				Edinburgh	2EH	1040	130
Basel	-----	941	250	Glasgow	5SC	752	1000
Berne	-----	743	1000	Hull	6KH	1040	130
Geneva	-----	9375	-----	Leeds & Bradford	2LS	1500	130
	-----	395	250	Liverpool	6LV	1040	130
	-----	442	600	London	2LO	842	30000
Lausanne	-----	3529.4	-----	Manchester	2ZY	1150	1000
Zurich	H9XD	9375	-----	Newcastle	5NO	1148	1000
<b>YUGOSLAVIA</b>				Plymouth	5PY	1040	130
Belgrade	-----	695	2500	Sheffield	6FL	1040	130
Ljubljana	-----	522	3000	Stoke on Trent	6ST	1040	130
Zagreb	-----	973	700	Swansea	5SX	1040	130
<b>WESTERN EUROPE</b>				<b>NORTHERN EUROPE</b>			
<b>BELGIUM</b>				<b>CZECHOSLOVAKIA</b>			
Brussels	ON4GT	887	100	Bratislava	OKR	1075	1250
Chatelineau	ON4RB	590	3600	Brunn	OKB	877	2500
	ON4CE	1388	200	Körsice	OKK	1023	2500
	ON4RG	1219	400	Prague	OKP	616	5000
Liege	ON4RW	1219	200	OKIMPI	5169	5000	5000
<b>DANZIG</b>				<b>DENMARK</b>			
Danzig	PTB	689	500	Copenhagen	-----	1067	1000
<b>GERMANY</b>				Kalundborg	-----	260	7500
Aix la Chapelle	-----	662	700	Lyngby	-----	15300	500
Augsburg	-----	535	700	Soro	-----	9488	6057
Berlin	AFT	717	4000	-----	3088	2000	-----
Bremen	-----	5552	10000	<b>ESTONIA</b>			
	-----	231	-----	Tallinn	-----	1013	10000
	-----	1635	-----	Tartu	-----	250	100
	-----	1059	2000	-----	735	2200	-----
	-----	119	-----	<b>FINLAND</b>			
	-----	950	700	Abo	-----	1219	-----
	-----	923	4000	Bjorenborg (Pori)	-----	1219	1500
	-----	1319	4000	Helsingfors	-----	1357	10000
	-----	4434	-----	Jakobstad	-----	1219	750
	-----	7963	-----	Jyvaskyla	-----	1009	200
Flensburg	-----	1373	1500	Lahti	-----	166	40000
Frankfort on Main	-----	769	1500	Tammerfors	-----	-----	700
Freiburg	-----	527	1500	Vipuri	-----	1030	750
Gleiwitz	-----	1157	3000	<b>ICELAND</b>			
Hamburg	-----	806	4000	Akureyri	G2SH	1560	-----
Hanover	-----	535	750	Reykjavik	-----	8995	500
Kaiserslautern	-----	1110	4000	<b>LATVIA</b>			
Kassel	-----	1219	750	Riga	YLZ	571	10000
Kiel	-----	1292	700	<b>LITHUANIA</b>			
Konigsberg	-----	1086	4000	Kovno	RYK	155	7000
Langenburg	-----	635	8000	<b>NORWAY</b>			
Leipzig	-----	1184	4000	Aalesund	LKA	671	350
Ludwigshaven	-----	1471	1500	Bergen	LKB	824	1000
Magdeburg	-----	1059	-----	LGN	9994	-----	-----
Muenster	-----	1319	1500	Fredrikstad	LKF	779	700
Munich	-----	563	4000	Hamar	LKH	526	700







# HOW TO TUNE A SET CORRECTLY

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

ALL stations in America are listed in RADEX in three tables:

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

The Index by Frequencies is the one to be used, the other two are merely supplementary.

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

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

Let us assume that the station we are hearing is WEF in New York. First we must ascertain the frequency for this station. Look it up under WEF 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 WEF is 660. Now we turn to 660 kilocycles in the Index by Frequencies and Dial Numbers. Here we find that WEF is one of the two stations which have been assigned the 660 keys. Frequency by the Federal Radio Commission. We also find that it has a power of 50,000 watts, that it is located in New York City and is owned by the National Broadcasting Co., Inc.

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

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

We now have found that the dial numbers for 630 keys, are 72-70 and the dial numbers for 660 keys, are 69-67. If we now will set our dials for 70-68 it is obvious we will have our set tuned for 650 keys. We listen carefully and if they are on the air and within range of our set we will tune in WSM of Nashville at this point. We then enter the dial readings for WSM opposite 650 keys. Now it is

clear that if we reset our dials at 71-69 our set will be tuned to 640 keys, and at that point KFI of Los Angeles will be heard, always assuming, of course, that it is on the air and within range of our particular set.

Now we tune in some other station, proceeding as before until after an evening or two, we have blanks filled on every page. We are now able to set our dials for any frequency we desire and consequently any station we may want whether we have ever received it before or not.

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

time. In this case, of course, it is not possible to tell which one of the two stations is broadcasting at the particular moment we hear it, but we do know it is one or the other of them.

The second column in the Index by Frequencies, as we have seen, gives the power of the station as measured in watts. This power also aids us in identifying stations as we will not ordinarily hear those stations with 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 dotted line, as shown.

### INDEX BY FREQUENCIES AND DIAL NUMBERS

#### 590 kilocycles 508.2 meters

KHO 1020 Spokane, Wash.  
WEL 500 Lincoln, Neb.  
WEEI 1000 Boston, Mass.  
WVW 1000 Omaha, Neb.  
WEMC 1000 Berry Springs, Mich.

#### 76 74

Louis Wagoner, Inc.  
Nebraska Wesleyan University  
Edison Elec. Illuminating Co.  
Woodmen of the World  
Methodist Missionary College

#### 600 kilocycles 499.7 meters

CCHC 1000 Fresno, Cal., Ont.  
EFBU 500 Laramie, Wyo.  
EFD 500 San Diego, Calif.  
WCAO 250 Baltimore, Md.  
WGV 500 Washington, D. C.  
WGAN 500 Lawrenceville, Tenn.  
WREZ 500 Houston, Texas  
WVIC 300 Hartford, Conn.

#### 75 73

Ashford Power & Paper Co.  
Richard B. Thomas  
Monumental Radio Co., Inc.  
Edwin C. Johnson  
Vaughan School of Music  
W.R.C. Inc.  
Travelers Insurance Co.

#### 610 kilocycles 491.5 meters

KPRC 1000 San Francisco, Calif.  
WDAF 1000 Kansas City, Mo.  
WFAW 1000 Philadelphia, Pa.  
WLF 500 Philadelphia, Pa.  
WQQ 1000 Kansas City, Mo.

#### 74 72

Dunham Inc.  
Kansas City Star Co.  
Excelsior Broadcasting Co., Inc.  
Cimbar Bros., Inc.  
Unity School of Christianity

#### 620 kilocycles 483.6 meters

EPAD 1000 Phoenix, Ariz.  
KCV 1000 Portland, Ore.  
WIA 1000 Philadelphia, Pa.  
WDBD 1000 Orlando, Fla.  
WLRZ 1000 Denver, Colo.  
WTMJ 1000 Milwaukee, Wis.

#### 73 71

Electrical Equipment Co.  
Oregonian Publishing Co.  
Tampa Publishing Co.  
Tulsa College, Inc.  
Thompson L. Greenway  
Milwaukee Journal

#### 630 kilocycles 475.9 meters

CFT 500 Victoria, B. C.  
CJCB 500 Yorkton, Sask.  
CJRA 500 Houston, Tex.  
CFR 500 Montreal, Que.  
EPR 500 Columbia, Mo.  
WCFB 500 Columbia, Mo.  
WVAL 350 Washington D. C.  
WOS 500 Jefferson City, Mo.

#### 72 70

Victoria Broadcasting Ass'n.  
Winnipeg Grain Exchange  
Canadian National Railways  
Carroll Liggins  
Stephens College  
Branville on the Air, Inc.  
St. A. Luce Co.  
State Marketing Bureau

#### 640 kilocycles 468.5 meters

KFI 5000 Los Angeles, Calif.  
WLIU 5000 Columbus, Ohio

#### 71 69

Earle C. Anthony, Inc.  
American Insurance Union

#### 650 kilocycles 461.3 meters

WSM 500 Nashville, Tenn.

#### 70 68

National Life & Accident Ins. Co.

#### 660 kilocycles 454.3 meters

WAAB 500 Omaha, Neb.  
WMAQ 5000 New York City

#### 69 67

Omaha Grain Exchange  
National Broadcasting Co., Inc.

#### 670 kilocycles 447.5 meters

WMAQ 3000 Chicago, Ill.

#### 68 66

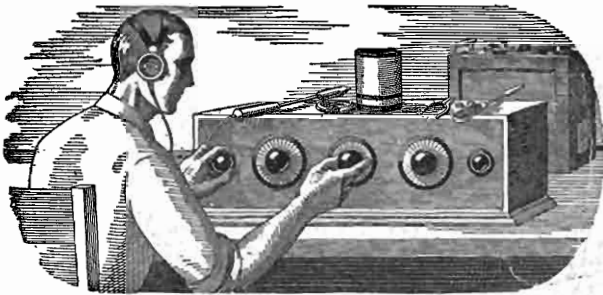
Chicago Daily News, Inc.

#### 680 kilocycles 440.9 meters

KFO 5000 San Francisco, Cal.  
WTFP 5000 Raleigh, N. C.

#### 67 65

Hale Bros & The Chronicle  
Burbanck Life Insurance Co.



*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 plaything — that was all I could see in it for me.*

# I Thought 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 that big would have been the height of my ambition.

Twelve months ago I was skimming 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 year ago because I was kidding myself, that's all — not 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, fast-growing 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 be mine, if I made a little effort to prepare for it — such an 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 over — 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 about 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. 1A0, Washington, D. C.

J. E. SMITH, President,  
National Radio Institute, Dept. 1A0,  
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 .....

Town .....

State .....