

MID-SUMMER EDITION

1931

# RADIO IN DEX

The Magazine that Doubles the Pleasure of Radio



25<sup>c</sup>

Radio Theory in A-B-C  
Is Radio Commission Impotent?  
Has Ollie Ross 1309 Verifications?  
Cuban and Canadian Experimentals

No. 50

N. S. E.

# RADIO THEORY AND MODERN PRACTICE

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*A New Book in Simple Terms—Profusely Illustrated*

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Just off the press, here is a book that we believe every person interested at all in Radio, ought to have. While the veriest novice can easily understand its simple explanations, yet it is a book which an experienced radiotrician will find of the greatest value.

The chapter on *Radio Principles* explains the radio wave from its birth at the transmitter to its conversion into sound at the receiver. Numerous pictures and sketches enable the reader to grasp each stage. There is a list of the necessary technical words with their definitions in simple language and a list of the symbols used in radio diagrams with their meanings fully explained.

The chapter on *Vacuum Tubes* is, we think, the most simple and yet complete exposition of the principle and operation of radio tubes we have ever seen. The difference in tubes is fully explained and the reader learns not only the use and characteristics of each tube but the purpose served by each prong. Not only is the screen-grid tube covered but the new five-element as well.

In *Principles of Receiver Circuits* ten different systems are described and explained, from "Regenerative" to "Super-heterodyne with second harmonic oscillator."

A chapter on *Radio Circuit Diagrams* gives the schematic diagrams for many of the prominent sets including Super-Zenith, General Electric, Bosch, Super-Wasp, Silver Marshall, Grebe, Stewart-Warner, RCA, Atwater Kent, Majestic, Stromberg-Carlson and others, with explanations of each and where to look and what to do for trouble

The chapter on *Short Waves* is not only a complete treatise on short-wave theory and practice, but several well-known short wave sets are diagramed and explained. Other chapters which we can mention only as indicative are *Aerials, Loud Speakers, Radio Instruments, Broadcasting Transmitters, Radio Troubles, Television, etc.*

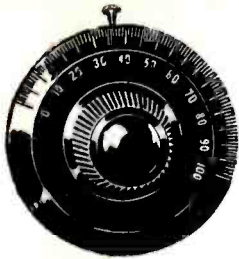
This book of 224 pages, printed in large type, bound in flexible cloth will be given to our readers

## FREE For Two Annual Subscriptions

We have secured a number of these books for those of our readers who will help us in this way to increase the field of RADEX. You can earn a copy in a few minutes by telling your friends about this magazine.

*We do not sell the book*

# MID-SUMMER EDITION

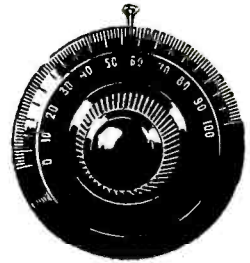


# RADIO INDEX

REG. U. S. PATENT OFFICE

FRED CLAYTON BUTLER

*Editor and Publisher*



SEVENTH YEAR

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# CONVERTING Vibrations Into SOUND

**A**S described in the last issue of **RADEX**, radio-frequency waves, which are picked up by the antenna of your receiver, and are amplified by means of vacuum tubes, cannot be converted directly into sound waves for the conveyance of speech and music, because their frequency, or rate of vibration per second, is too great; it must be converted into trains of lower-frequency waves before they can be transformed into mechanical impulses by the loudspeaker and this transformation takes place at the detector. Here the electrical impulses, although much stronger than the original r. f. impulses, are still too weak to be applied to a loudspeaker, but are able to actuate the mechanism of headphones. For loudspeaker operation, still more amplification is necessary, and this accounts for the audio-frequency stages in modern receivers, which strengthen the electrical impulses to such an extent that they can effectively operate a loudspeaker.

The conversion of electrical energy to sound is accomplished primarily by means of one or more electromagnets. An electromagnet is merely a coil of fine wire wound around a soft iron core, and electrical current passing through the coil magnetizes the core, the strength of the magnetism varying in unison with the strength of the electrical impulses passing through the coil. In the case of headphones an iron or steel diaphragm placed near the end of the core is pulled toward the latter when the electromagnet is energized, but returns to its normal position in the absence of the magnetic pull.

Now suppose that there are 256 separate electrical impulses per second traveling through the coil. The core is then magnetized 256 times per second and it attracts the diaphragm at the same rate.

A diaphragm moving forwards and backwards emits a distinct sound, which in this case happens to be the pitch of standard middle C on the piano. To understand that the diaphragm produces actual sound by such rapid move-

Fourth and Last  
Article in A-B-C

ment it is only necessary to reflect that it works in exactly the same manner as a drum, which, upon being hit with a drum stick, moves backward and forward, producing sound. The sound waves are somewhat of a mystery but really rather simple. The movement of the drum head of the diaphragm sets the air in contact with it in movement at a corresponding rate. Each particle of air transmits its movement to the next particle and in this way the vibrations are sent out in all directions. But these vibrations do not really become sound until after they strike our eardrums, to which delicate nerves are connected and here is a transformation, which no one has ever explained, namely, how the mechanical vibrations of the eardrum change into nervous vibrations, which are sent to our brains and there leave an impression, which we call sound. Nevertheless, this is exactly what happens.

## How Speaker Works

In getting back to loudspeakers, the basic principle on which the various types work is exactly the same, but the mechanical details of construction differ. A cone speaker is one that has its diaphragm connected to a large cone by means of a drive pin, so that the movement of the diaphragm is communicated directly to the cone, which being of much larger size than the diaphragm, sets a larger column of air in motion. As the cone type of speaker has replaced the horn type because of better tone quality, so the dynamic speaker has taken the place of the cone type. The reason is that the dynamic speaker gives better reproduction due to more equal amplification of low and high tones and less distortion than a cone speaker. Besides, a dynamic speaker is capable of delivering much more volume. It differs radically from the other types of speakers in that it has a small, light, movable coil attached to the apex of the cone directly

in front of the core on which an electromagnet is wound. So there is no mechanical connection such as a drive pin. The small coil, or voice coil, is attracted or repelled by the electromagnet on the core, depending on the amount of current flowing through the voice coil, this current being supplied by the receiver through a choke coil or output transformer. The cone of a dynamic speaker is mounted so that there is maximum space for its movement, without the use of any springs or pins to retard it, which helps to make possible the undistorted low tones.

### Purpose of Baffle

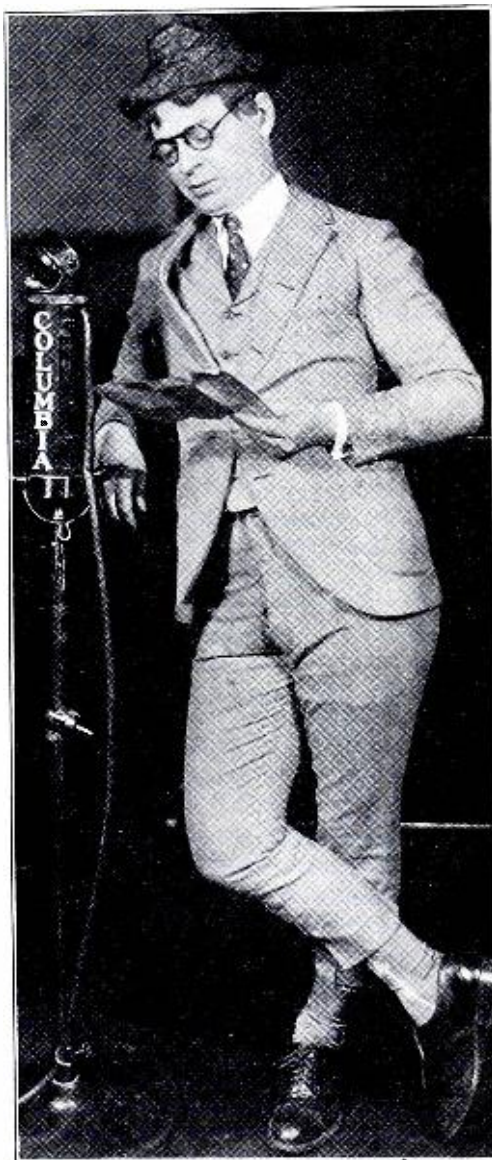
The front part of the speaker frame is fastened securely to a board which serves the purpose of a baffle, a circular hole being cut in the board to fit over the cone of the speaker. The reason for this is that rigidity is desired in order to prevent sound waves emitted from both sides of the cone from neutralizing each other and destroying the low frequencies. The baffle can be made of soft wood or soundproof insulating material to eliminate vibration as much as possible. Theoretically, a large baffle is better than a small one, although the latter should be solidly fastened to a frame or to the edge of a cabinet in which the speaker is housed.

Electrostatic speakers convert electricity directly into sound waves without the use of heavy electromagnets, movable drive pins and diaphragms. Essentially, such a speaker is nothing more than a condenser, two flat plates separated by a thin sheet of insulation. In the form in which it is being produced, it consists of an aluminum stamping with the edges turned back about three-quarter inch. The face of the plate is punched or perforated and over the face a sheet of insulation, only one five-hundredth of an inch in thickness, is placed. A thin metallic coating is sprayed over the surface, or a sheet of foil glued on it. A single plate can be used as a complete speaker or any number of plates may be bolted together through holes drilled in the flanges. In operation, one side of the radio-receiver output goes to the metallic plate and the other

to the metal or foil coating, which forms the diaphragm. In addition, a positive bias of 450 volts d. c. must be applied to the aluminum plate.

\* \* \*

Thus ends our story in a-b-c language of the theory of radio.



*The Town Clown*

*Dave Elman revives the character of "The Town Clown" on the programs heard every Wednesday over the CBS from 10:30 to 10:45 p.m. EDST. Elman, who is writing the script for this program, created a following several years ago in the same role.*

# GREAT RECORD Arouses SKEPTICS

But Ollie Ross  
Has Verifications

**R**ADEX has no desire to try to decide the world's championship in DXing nor even to pass upon the merits of those seemingly eligible to the title. If, however, anyone desires to enter the lists, he will have to bring in about every station in the world in order to challenge Ollie Ross, of Vallejo, California. For the grand total of the California expert now amounts to 1309 stations, all in the broadcast band. His verifications are so voluminous and convincing to those who have examined them that they do not hesitate to grant his claims to this astounding total.

Now and then there enters every art and sport some person who takes to it so naturally as to achieve unquestioned leadership. Lindbergh flies as naturally as other people walk. Golf to Bobby Jones is simply second nature. Johnny Weismuller literally swims like a fish. Here in Cleveland we have a young girl, Stella Walsh, who runs so easily and naturally that she is now the fastest girl in the world. But none of these champions rose to the heights without the most infinite preparation and painstaking practice. When Queen Victoria spoke to Paderewski of his genius, he is said to have replied, "Ah madame, it is but drudgery."

There is but little doubt that most of us could become great athletes but the desire to do so is not great enough to lead us to undertake the vigorous and consistent drudgery to that end. Only the one in a million has this desire in such proportions as to sacrifice all other interests to his ambition. And it is this one, naturally, who succeeds. So it is in DXing. The one who succeeds is not the one who works at it now and then. He works at it all the time. He takes pains with the most minute detail. He *knows* that every tube is right, that every joint is perfectly soldered. He tries every possible combination of ground and aerial. He is literally "toiling upward in the night."

From the *Los Angeles Examiner* we quote the following by Thomas Nunan, Radio Editor:

"Ollie Ross, of 337 Virginia Street, Vallejo, may be accepted as the DX champion of the world. Some months ago I told about his remarkable record, after examining his hundreds of verification reports.

"Last week Ross wrote a letter in answer to a question raised by one of the readers of this paper, and incidentally he mentioned that the number of stations tuned in by him had reached 1,309.

"That's coming rather close to the total number of stations in the world.

"The Vallejo champion, in the communication published Thursday morning, mentioned JOKK, a new Japanese station on 427 meters, as coming in well, and he suggested as a severe test that the fans try for ON4ED, Antwerp, Belgium. He said he was sure some of the local DXers could tune in on it. The station is on 206 meters and the announcer speaks English.

\* \* \*

"While writing the foregoing paragraphs, I received a letter from W. H. Daniels, Box 170, Chowchilla, California. Mr. Daniels is skeptical, and no one need wonder at that, about the accuracy of the Ross log. He writes:

*Our DX friend at Vallejo reports a log of 1,300 stations. I have just received an up-to-date, revised list of all the stations in the world and there are only 1,213 of them. Where did he get the other 87 stations*

*If he counted the short wave stations, then there are just about 1,300, so he has evidently had every station on this old world of ours. I would like to find out he gets a 5-watt station in Vermont.*

"The Ollie Ross record, Brother Daniels, is 1,309 stations, and Ross tells me that no short-wave broadcasters are included in his list. At first I, too, felt some skepticism about the Vallejo log, as I could not find enough stations to accord with it, but the great mass of verification reports convinced me. There seems to be a good many stations not



listed in the American log-books; but how the Vallejo DXer discovers them remains a mystery.

"Mr. Ross has just forwarded to me another large consignment of astonishing, even bewildering, verification reports. They are in all sorts of foreign languages, though most of the writers of them use some English. One communication is typed on a letter-sheet headed "Trondelag Krinkaster" with the date-line "Nidaros, 23 Oktober, 1930." And here's the main part of the letter:

*Ollie Ross, Mr. or Miss, I don't know:*

*I've got your letter and thank you very much. To get a message from far away in California to a relaystation in Norway is quite curious and I'm cautious to know the situation of your receiver when you heard us.*

*Any photo from our studio I gladly should have sent you if I had one, but no photo is by hand so you must take only this illustrasjon.*

"The 'illustrasjon' was a rather clever caricature of singer and pianist before the microphone, as sketched on the letter by the station program manager—or "programsekretær," to be exact.

"According to the letter, the station, with no call letters mentioned, broadcasts on 662 kilocycles, 453.1 meters, with power of 1350 watts."

RADEX is in receipt of an interesting letter from Mr. Ross from which we quote:

"Several months ago there appeared in RADEX an article concerning the number of stations that I had logged and also a short description of the ground I used. I have received hundreds of letters from readers of RADEX asking many questions about the ground and aerial. I have experimented with ground and aerials for four years, not only in California, but throughout thirty-six states of the Union.

"Now, after my four years of work with grounds and aerials, I find that regardless of what make set is used, in order to obtain the best possible results, it is absolutely necessary to have a good ground and aerial. I have used various aerial systems both in the air and in the earth but so far have received my best results with an overhead aerial for distance although for reception within a radius of 2000 miles, the underground aerial is excellent.

*(Continued on page 23)*

# RADIO IN PUZZLE FORM

WE received so many correct solutions for the April puzzles that we lost all count of them. And did our readers "rub it in?" "Duck soup," Joseph Stokes, 7318 Woodlawn Ave., Pittsburgh, Pa., calls them. "I solved them in about twenty minutes after a couple of preliminary glances," he says. And Marie Carson, 1622 Second St., Lewistown, Idaho, calls them "walk-aways" but concedes that "even so, they are enjoyable." "Why not take any puzzle that comes along?" asks M. R. Witinok, R. F. D. 4, Rockville, Conn. "The harder you strive to get a tougher puzzle, the easier it is to solve." And "please make them harder," appeals Greer McCrory, 606 S. 2nd St. W., Cedar Rapids, Iowa.

All right, all right, Miss Marie Carson and Messrs. Stokes, Witinok and McCrory. But where are your solutions for the May puzzles? At the time we are writing this, you are all among the missing. Is the shoe on the other foot?

So far we have received just enough correct solutions for the May problems to convince us they can be solved. But several hundred puzzlers must still be hunting for the correct answers. Well, here they are:

No. 1: W was K; T was F; F was I; Y was O; X was W; K was C; M was Y; B was M; O was B; C was X; I was E; E was T.

No. 2: The calls were CMKC-CKMC; WMC-CMW; KEX-XEK.

No. 3: The two sets of calls were KWKC-WSMK-KMOX and KWKC-WHOM-KOAC.

## Puzzle No. 1

Fill in the missing letters for the eight calls in such a way that the name of a state will be spelled vertically in one column and the name of its principal city in another.

<input type="checkbox"/>	<input type="checkbox"/>	A	<input type="checkbox"/>
W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A
<input type="checkbox"/>	T	<input type="checkbox"/>	<input type="checkbox"/>
W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	S	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	L
<input type="checkbox"/>	O	<input type="checkbox"/>	<input type="checkbox"/>

## These Should Hold You

Some readers tried to work JOAK in on us in No. 3. Only North American calls are used in any of our puzzles unless foreign calls are specifically called for. All calls will be found in the three indexes of the previous issue of RADEX.

Puzzlers will have until August 20th to submit solutions for the problems in this issue hence we will try to supply enough to last for three months.

WUYM	UBYBGHMB
CKQB	UHMVYBQJB
CQGB	UBZHVVYQM
CQBF	ZVHMZQM
CYUG	ZQJHGQ
KMVJ	JQMGQM
KMVF	ZQVQMZQ

Puzzle No. 2: This is another problem in code. Here are calls for seven stations together with the cities in which they are located. Every letter given stands for some other letter. What are the seven cities and the seven stations?

KWWG  
WG-----

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-----  
----- WX  
----- WXYZ

Puzzle No. 3: This was submitted by T. J. Johnson, 523 W. Russell Ave., Seminole, Okla. He calls it "A Trip By Air From Brownsville to Detroit." It is composed of thirteen four-letter calls. The last two letters of one call are the first two letters of the next. What are the thirteen calls?

Puzzle No. 4: This was produced by Viggo K. Jensen, Geneva Country Club, Geneva, N. Y. It is based on the knight's move in chess. For the uninitiated, the knight may move one square horizontally or vertically and one diagonally. The



Milton Watson and Helen Gilligan, who have appeared in many musical comedy hits have been teamed together to revive bits from musical comedy productions of yesteryear in the new "Star Reveries" which had its premiere over the CBS network, Sunday, May 3rd. It will appear each week at 10:45 p.m. Sundays, EDST.



W	C	W	C	W
W	K	J	K	C
W	K	K	B	K
W	L	K	N	W
W	W	K	C	W

problem is to so place your knight that in making his jumps he will spell out the call letters for seven stations which Mr. Jensen describes as follows:

1—Last two letters stand for city.

- 2—1000-watt CBS in the South.
- 3—5000-watt University.
- 4—Four stations in same city on this wave.
- 5—5000-watt CBS.
- 6—In Missouri.
- 7—On 1210 kcys.

In Mr. Jensen's solution the knight never rests on the same letter twice; that is any one letter may be used but once. He says, "This puzzle is easily solved if the system is discovered but I have used all the K's, W's and C's I possibly could so as to make it hard to find the starting point."

You will want one of the September issues of RADEX so get the answers to these four puzzles to us by August 20th sure.

# Monthly FORUM of RADEX Readers

**I**N the monthly interchange of information and opinion which takes place among our readers there is much of interest to us all. Many are the valuable hints on betterment of reception that are passed back and forth. Here is a little one to give quick access to the vital part of RADEX:

"In using RADEX I clip the upper right-hand corner off of cover and pages up to and including page 36 and by using my thumb, I open up on Index by Frequencies. I consider this an additional aid," advises Louis J. McVey, R. 10, Box 144B, Sparrows Point, Md.

And here is one on an aerial device:

"I have tuned in KFI, Los Angeles, Calif., 56 nights out of 74, only missing 18 nights and this station is 2000 miles away," says Herman Eichorn, 215 S. 4th, St., DeKalb, Ill., and adds, "I use a double coil induction aerial with about 300 feet of wire and use 14 separate grounds on which I have about 600 feet of wire. I can tune in stations all over the United States and Canada, except Pacific coast stations, and bring them in like the Chicago locals. I believe I have one of the finest aerial and ground systems. Most radio owners will not get results until they make a study of the aerial and ground system and this is more important than the radio."

## A Coincidence

"The following is a coincidence for which Mr. O. R. Queen, of Phoenix, Ariz., may thank RADEX," remarks M. R. Ayers, 460 E. 40th St., N., Portland, Ore. "When I wrote station JOCK in Japan for verification on March 7th, Mr. Queen also wrote same station. I received my verification one day and on the following received the same verification addressed to Mr. O. R. Queen, but to my address. I, of course, had no way to tell in what part of the U. S. Mr. Queen lived, but as I sat reading the April issue of RADEX, whose name should I run across but Mr. Queen's, giving his experiences with the Japanese stations. I immediately enclosed his verification in a properly addressed

## Helpful Hints and Caustic Criticism

envelope and sent it on to him. Some coincidence!"

"I wish to tell you," says Hodge Laughlin, 211 Walnut St., Barnesville, Ohio, "that on Saturday, April 4th, at 5:45 p.m. E.S.T., I received the unlicensed WGM in Jeannette, Pa., on 840 keys. The signals were very plain. I hope this information will help to solve the problem concerning WGM and WOOP."

And J. C. Garber, 812 Ross Ave., Wilkinsburg, Pa., reports that WGM, Jeannette, Pa., is broadcasting regular programs daily on 840 keys.

In this issue our readers will find an article on WGM and other unlicensed stations.

## Answers to Inquiries

"As a 'radio nut' of the old school (when one had to bribe a dealer in order to purchase a tube which had just come on the market) I would like to answer the SOS of Donald Sleeper, of Worcester, who asks in the April RADEX for information on the neutralizing of a Bremer-Tully Counterphase Six," advises Earl C. Hitchcock, Hotel Plaza, Glens Falls, N. Y. "This is the orthodox method and one which I have always found to work: Place a piece of paper under one of the filament prongs of the first r. f. tube so that it is in operating position but not lighted. If a strong station has been tuned in and the volume control well advanced signals will still be heard with the tube unlighted. Turn the screw on the top of the micro-mike condenser until this signal disappears. Repeat this operation with the second and third tube and the job is done. If the set is built on the conventional lines of the counterphase the micro-mike will be found directly in front of the tube to be neutralized. On the old type sixes this condenser is black and rectangular and the adjusting screw is in the center.

On the new type or 'power six' the condenser is a glass cylinder with a screw extending through the top and

which raises or lowers a brass cylinder inside the glass, varying the capacity. The so-called 'power six' has fixed resistance in the grid lead of each r. f. tube and with this set signals will be found remarkably constant over the entire broadcast band and if the three tubes have been neutralized as I have described, Mr. Sleeper should have no further trouble."

"I will inform Mr. Booneville," says Fred Rouse, 320 Delaware Ave., Albany, N. Y., "that I procured two Varituners, but cannot recommend them as they did not do what was advertised for them. But I have two friends who claim that they are great and would not be without them."

"I disagree with the person who stated that WJBT, Chicago, is on the air every day from 7 to 8 a.m.," comments Harry Durand, 216 No. Main St., Wheaton, Ill. "From what I have heard, WJBT has been completely deleted. It used to broadcast Evangelistic services conducted by Paul Rader, but due to lack of funds was discontinued."

"For the information of Mr. Harris Schiestel, station G5SW at Chelmsford, England, will verify reception upon receipt of correct log and one International reply coupon," writes James G. Miller, 313 Center Ave., Lake Bluff, Ill. "Letters requesting verification must be postmarked within 24 hours of reception of the program. Their address is British Broadcasting Corp., Savoy Hill, London, W. C. 2."

"In reply to question asked by one of your readers, Robert Buckley, of Kent, Ohio, I would like to say that the station is not CHIC, but CHRC, in Quebec City on 645 kcys. and using 100 watts power," advises R. E. Moran, 540 Parkdale Ave., Ottawa, Ont. "I have picked up a new station lately, VE9LP, using 1210 kcys. and situated at St. Huberts airport in Montreal. It is on the air most every afternoon and morning with reports on weather and visibility. I also heard a hockey game on Wednesday night."

"I notice in April RADEX that C. R. Simpson, Pomona, Calif., says he had received no verification from CJBC. As far as I know, he never will," remarks

G. A. Gamble, 186 Langley Ave., Toronto, Ont., "as I attend Jarvis Street Baptist Church and although we hold a 'phantom' license we have never used the call letters. We have always used CKGW."

"Please tell Mr. Orval Wyse, of Archbold, Ohio, that on January 22nd, my brother and I both heard what we identified as CMVO, Havana, on 1010 kcys.," reports Hodge Laughlin, 211 Walnut St., Barnesville, Ohio.

#### They Want to Know

"On March 31st at 5:05 a.m. E.S.T. I listened to a program on 760 kcys. The signals were very faint and while the announcements were in perfect English, it was plain that the announcer was a foreigner, because of a certain peculiar enunciation. A mixed chorus sang 'Onward, Christian Soldiers' and 'In the Cross of Christ I Glory.' Something was said about missionary work in the James or Jays Range. Can any reader identify?" asks Robert R. Rawstron, 15 Edgewood St., Claremont, N. H.

*(Continued on page 25)*



*Catherine Field, staff artist of the CBS, all dressed up for the role of "Gretel." Miss Field appears on programs frequently.*

# Is RADIO COMMISSION Impotent?

## Violators Defy Its Orders

**T**HERE are at the present time at least three stations regularly broadcasting in defiance of the authority of the Federal Radio Commission which seems to be powerless to enforce its own rules. Certainly with the broad powers granted to the Commission by the Radio Act, it ought to be possible for that body instantly to stop any station broadcasting without a license. But WGM, at Jeannette, Pa., has been on the air for years and has never had even a construction permit from the Commission.

In a recent issue of RADEX we gave notice of a station giving the call of KMRS or KMRF, at Gretna, Nebr., which was on the air regularly on 1490 kcs. They announced themselves openly as owned and operated by the Sun Theatre of Gretna. A letter from the Commission brought the information that they knew nothing of such a station but "would look into it." It seems strange that with all the radio inspectors the Commission has, any station could do regular broadcasting without being noticed.

Now comes a third station with not only regular program but with the effrontery to put on special DX programs for listeners all over the United States, all without even the knowledge, let alone the sanction of the Federal Commission.

"About three weeks ago," writes Paul L. King, of Madison, Wisc., "I wrote you asking for the frequency and power of a station calling itself KTST or KTFT and giving its location as Seymour, Texas. I had picked it up on about 1210 kcs, in the early morning hours when it was testing. You informed me that you knew of no new station in Texas and suggested that I had probably heard KTAT in Fort Worth.

"It happens that after I had picked it up for the first time, I told a friend in Brooklyn of my catch. He is a member of the Newark News Radio Club and so

he informed their program director. As a result, last Sunday a.m., I again picked up KTST (or KTFT) broadcasting a special DX program for the above club in which they stated again that they were a new station on the air and requested letters or telegrams."

Now comes a letter from the Radio Commission which says: "There is no station licensed to operate at Seymour, Texas, and this matter will be investigated." It would seem that someone is sound asleep or else that the Commission lacks either the authority or the backbone to proceed instantly and vigorously against outlaw stations. Surely it must realize that with every violation of its rules it is weakening its own power and standing.

RADEX wants to support the Commission in every possible way because it realizes that nothing could be more disastrous than a breaking down of the Commission's authority. For this reason we have removed from our index any station known to be operating without a license. But our readers are entitled to be able to identify stations they hear regularly and we will either have to include these stations again in our listings or publish an additional index solely for the use of outlaw stations.

No station can operate for even a single night without the knowledge of RADEX readers and within a few days RADEX knows of any new station appearing on the air. This information is available to the Commission and we and our readers will gladly cooperate in reporting these unlicensed stations. But if, as in the case of WGM, such stations are still operating one and two years after we report them, such cooperation is so futile as to be a waste of time.

There are other violators of Commission rules besides broadcasters. Some time ago we published a letter from W. W. Winthrop, Jackson, Mich., regarding a station that was blanketing his dials. Mr. Winthrop now writes us: "Since writing you about the mysterious station I heard, I have discovered what

it is. It is a testing transmitter used by a radio factory about six miles from me. Recently its power has been increased and, as I write, it is blanketing the entire section of my dial from WHAS to WJR and interfering with reception generally. I understand these people had trouble with the Radio Commission about two years ago, but apparently they are coming back now to their old tricks. Certainly they should be barred from the air with their repeating phonograph and their playing of one piece over and over all day long."

John L. Vincent, 948 Russell Street, Jackson, Mich., also writes: "I have listened to this station from 9 a.m. to 5 p.m. and then it just leaves the air without announcement. It comes on 800 keys, where WBAP and WFAA should come in. I get them every day for about a month but they never announce."

Aside from the Commission permitting such rank violation of its rules, it seems strange that a responsible radio manufacturer would clutter the air and destroy the pleasure of the potential users of his own sets. Certainly such action would not lead us to buy one of their receivers.



*The villainous "Yu 'an Hee See" of the Collier's Radio Hour broadcast each Sunday at 8:15 p.m. EDT. over NBC-WJZ chain.*

## Protests From Mexico

**R**ECENT articles in this magazine about the chaotic conditions in Mexico and Cuba have made some of our friends in those countries wrathful. While we think RADEX has been entirely fair in its criticisms even recommending an international agreement which would necessarily concede badly needed channels to the exclusive use of our southern neighbors, yet we feel that in fairness broadcasters in Mexico should be given the opportunity to present their side of the case.

From Difusora Portena, Radio Station XES, Tampico, Mexico, come the following letter:

"We have read with interest the article on P. 12 and 13 of the April number, with regard to the Mexican situation.

"We cannot be blamed for Americans in the U. S. who want to broadcast, coming down here and getting on the air, but we doubt that their efforts will meet with success, and sincerely believe that your readers needn't be worried.

"Tell the young fellow who wrote the third paragraph of the article to keep his pants on. He mentions interference by Mexican stations on the wave lengths being used by U. S. and Canadian stations. What does he say about the interference in the U. S. itself?

"I maintain that these stations in Mexico have just as much right to be on the air and to furnish programs that can be heard all over Mexico, as stations in the U. S. and Canada have to furnish music and entertainment to their peoples. Where do you people get that stuff of implying that God made the air only for the Americans and Canadians? You ought to get a baby rattle for the fellow who made that break.

"It seems that the cause for the interference lies in the fact that six or eight cleared channels were left for Canadian stations at the last Conference, and Mexico was not even asked to send a representative! Mexican stations cannot be blamed for the interference, surely.

"As to the wave lengths used by stations down here, the situation is improving constantly. Where we find

that a station is interfering with a U. S. station, a new frequency is sought immediately. This policy means many times quite large expenditures for the station owners, and to date only a few of our stations are commercially successful, so we see that in order to not interfere with the U. S. stations, it is just a matter of money out of pocket for the station owner. It seems that this attitude should be sincerely appreciated by U. S. station owners, and by listeners also. Instead of being criticized.

"With the further idea of improving the situation, the Mexican Government is doing its part. Stations are now required to go under crystal control. Several already have, and by fall every one will be on a standard, dependable frequency. This expense is also being borne by the station owners, and no help is asked from anybody.

"If you will publish this letter among your others that come from readers, perhaps it will help to explain the situation.

XES's time on the air is as follows:

Week days: 9:00-10:30 a.m. 12:30:1:30 p.m. 7-11 p.m.

Sundays: 12:00-2:00 p.m.

"Your publication is very helpful and interesting, and finds a large acceptance among radio fans in Mexico."

And from the Radio Engineering Laboratory of Fort Worth, Texas, who write that they constructed stations XES and XED as well as WBBM, WBAP, WREC and KFJZ, comes this letter:

"We have been buying your Radio Index regularly ever since you have been publishing it. We buy this book because it is accurate or as near as possible in its listing of stations, but in looking through the last issue we have taken an exception to one of your articles, and that is the one concerning the Mexican stations.

"Station XED, located at Reynosa, happens to be one of the stations that we have constructed. We are not amateurs in the game of radio, since we now have under construction our ninth complete transmitter. You have XED listed at 970 kilocycles, which is incorrect. This station is operating on 960 kilocycles and its variation is not more than 500 cycles, they are making preparations to

change their frequency from 960 to 965 kilocycles.

"Of all of the unfair things that have ever been forced on to neighbors, Mexico has been the goat. Mexico is just as close to the United States as Canada is, an imaginary line separates the two countries in both cases; there is not a single clear channel set aside for Mexico, not one. The United States, of which I am a citizen, has hogged the air and leaves only a very few for Canada, but no consideration has been given Mexico.

"We believe in being fair, and we are fair to all those we deal with. Mexico should be given a half dozen clear channels, at least, if it is allowed. Radio will be the means of preventing misunderstandings, and eventually wars, since if one listens nightly to one's neighbor's music, and listen to lectures in which they express their desire to be friendly to their Northern neighbors, it will be mighty hard to go and take your gun, and start shooting. They have no desire to create trouble, they are peace-loving people, they have had enough wars among themselves, and they are tired; their Government is now well established, they are buying our products, and they are offering nothing in competition to what we have that can hurt our business. Good, clean competition is the life of any business.

"Instead of writing a story in your Radio Index about the Mexican radio situation growing worse, and how their stations are all hay-wire, and that you find them on a different frequency every other night, why not investigate and find out what the real conditions are, and then "intelligently" write a story on the Mexican situation?

"P.S. It might be of interest to you to know that we have the contract for the construction of a 50,000-watt station for Dr. J. R. Brinkley, of Milford, Kans., which will be located immediately across the border, and will be operated in competition, in other words, in the same channel with a powerful American station."

It seems to us that this postscript destroys the whole argument of our correspondent. He seeks to prove in his

*(Continued on page 25)*

# HELPING Readers HELP Themselves

*I have a Sparton No. 931 and find the reception good with only a few exceptions. When W KRC, a local station is on the air, the other announcers "gargle," that is those below 600 kilocycles. After they sign off reproduction becomes clear. Reproduction is always good above 1,400 kilocycles. My antenna is approximately 35 feet long about 5 feet above a tin roof and the lead-in is about 25 feet long. What is your opinion of this arrangement I have logged about 225 stations this past winter. Am also having trouble with stations spreading over too much of the dial. I have paid well for service men to remedy this condition but so far to no effect. WLW, a local, spreads over about 70 kilocycles, and WENR, Chicago, over about 50. The community in which I live is residential. A street railway runs past about 500 feet; there are no high-tension power lines but only ordinary service lines in front of the house. The stations that I can log during the day are very few and the noise that accompanies reception is almost unbearable. At night, with all kinds of electrical appliances and signs in operation, the noise seems to abate. I cannot help but feel that the antenna is too short and the metal roof affects reception.*

For the results that you have been getting it seems that your antenna is sufficiently long. There is, however, a condenser action between the antenna and the metal roof which makes the antenna act as it would if erected only five feet above the ground, that is if the metal roof is grounded, which it undoubtedly is through the gutters and conductor pipe. It might be a good idea in your case to erect another aerial on the side of or behind the house, as high as possible from the ground. In our May, 1930, issue, No. 39, we published an article on Balancing Tuned Radio Frequency Receivers and in this article you will find complete instructions how to adjust the trimmer condensers, which may be necessary in your particular case. Another suggestion is to have an extra antenna about 10 or 15 feet long, which should help to sharpen the set on locals,

## Technical Editor Lends a Hand

and if this does not help a wave trap may be the remedy.

## Noisy Ground

*On my nine-tube superheterodyne, a Radiola No. 80, I am using a pipe driven into the earth about three feet as a ground. When I turn the set on there is a rumbling noise and by disconnecting the ground the noise disappears entirely. Could you tell me how I may eliminate this noise and what would you advise me as to the best type of ground that I could use?*

In your case the interference originates from an outside source, as it can be eliminated by disconnecting the ground. If the noise continues, its source would be in the set itself. It is, of course, possible that there is a loose connection in the aerial and ground system which accounts for this trouble, but most likely the cause lies in some electrically-operated device in the neighborhood, especially if the noise has a certain regularity. If you cannot determine just where the trouble arises after carefully checking over the condition of the aerial and ground, install an underground an-



*Here is the miniature railroad you hear on the "Empire Builders" program. Said to be the most costly piece of sound equipment used.*

tenna, which, according to claims made, will greatly reduce or entirely eliminate the interference. It seems that for the average condition of soil, your ground is as good as any. But in case the soil is exceptionally dry, bury a copper plate, to which the ground lead is soldered, in a hole about three feet deep, depositing a quantity of rock salt both below and above the plate. The salt attracts moisture and provides a moist ground, which enables you to get the best results in reception.

#### **Oscillator Broad**

*I have learned how to neutralize my set from your March issue, with good results. I made an oscillator but can hear the noise all over the dials. The coil is three inches in diameter and has 60 turns of No. 26 wire wound over it. The condenser has 12 plates and is marked 500 mmfd. Can you kindly tell me how to eliminate the oscillator from buzzing all over the dial My set is a Green Diamond.*

The reason you hear your buzzer all over the dial is because it is located too close to the receiver. The further it is placed away from the receiver, within reasonable limits, of course, the sharper the signals will be. This is just like a broadcasting station in the immediate vicinity, which spreads over the dial, but the same station located 50 or 100 miles away will not usually cause such trouble. The oscillator, which has very little power compared to that of a broadcasting station, would not have to be separated so far. If you can put this in your attic or even in the garage a hundred feet distant, better results will be obtained.

#### **This Set Howls**

*When we turn up the volume of our set it invariably starts to howl which becomes louder and louder and does not cease until the set is turned off and started over again with the volume control turned down. Will you kindly tell what the trouble is and how it can be remedied?*

You are undoubtedly annoyed by a microphonic tube, which can usually be traced to mechanical vibration transmitted to it, most likely the detector. There are several methods of eliminating such trouble. Sometimes an effective remedy is to set the entire radio set on

sponge-rubber feet. Changing the tubes for others of the same type until the defective one has been found has also been found helpful. Of course, it is best to cut off the source of trouble, but this cannot always be done. It has sometimes been found that a loudspeaker incorporated with the set will cause the vibration and in this case the remedy is to mount the speaker in a semi-rigid manner to absorb the vibration. This can be done by suspending it by means of rubber strips. If you are in doubt as to which tube in your set is microphonic, put the set in operation and grasp each tube firmly, holding it for just a moment; if the howl ceases while you are holding one of the tubes, the offending one has been located. Dry-cell operated receivers are especially apt to be microphonic.

#### **No Signal Strength**

*Our superheterodyne, which uses a loop, seems to have very little pick-up energy. The tubes all light up although they are about a year old. It is time to renew them and what other method can be employed to give the set more energy as we were not satisfied in this respect from the time we first got the set?*

The condition of the tubes in your receiver depends entirely on the length of time that they have been in actual operation, although it is also possible that one or more of them could have become defective before its rated length of service expired. Take the tubes to a radio shop and have them tested. A competent and reliable dealer will tell you how many should be renewed if any of them do not show a normal reading under test. Many users of loop-operated receivers take the aerial lead-in and wrap it around the loop a few times in the same direction that the loop wire is wound, and then connect the open end of the lead-in to the ground. In this way there is an energy transfer from the lead-in to the loop by means of induction which greatly increases the range of a receiver but sometimes spoils its selectivity.

#### **Speaker Rattles**

*I have an excellent cone speaker which has always given satisfactory results, but recently a serious rattle takes place during*



reception that is aggravated by turning up the volume control. Will you kindly inform me as to the cause and cure of this condition?

Cone speakers occasionally develop the trouble you are experiencing in yours. Usually the source of the trouble lies in changes in humidity, which cause the cone to contract or expand and thus produce a pull or a pressure on the drive pin. This condition can easily be remedied by merely loosening the setscrew that holds the apex of the cone on the drive pin and then tightening it again, which allows the cone to assume its normal position and relieves the drive pin from strain. Loose connections of the drive pin may also be responsible or foreign particles may have gotten between the cone and the frame to which it is attached.

#### Transformer Terminals

*After removing the audio-frequency transformers from my receiver in an effort to substitute others which I think are of better quality, I find that the new transformers are not marked. Knowing that a wrong hookup is apt to cause very poor reception, I am writing to find out by what means the right terminals can be located.*

Practically the only method of determining the correct ends of the transformers is to remove the shell and examine the winding. Of the four ends of the winding, the two that are the furthest away from the core belong to the secondary winding and the other two belong to the primary. The outermost tap should be connected to the grid of the tube following the transformer, while the second outside lead is connected to the biasing resistor, or in case your set is battery-operated, to the A-negative line. The closest tap to the core is connected to the B-positive line and the remaining one to the plate of the tube preceding the transformer. Mark the leads carefully, then replace the shell, marking the terminals to correspond with the leads attached to them, taking care not to ground any of them on the shell as this would make the transformer inoperative in most cases. The rest of the wiring is a simple matter and you should be sure to solder the leads well.

#### Noise From Wind

*During windy weather, even when there is no storm that might be the cause of static crashes, our receiver splutters quite frequently. Our set is an all-electric one and has given entire satisfaction this winter until the recent trouble commenced. We use an outside antenna and both antenna and ground connections are in good order. Can you indicate where the trouble lies*

The fact that the trouble only occurs during windy weather seems to show quite plainly that some grounded object



*Sherlock Holmes, himself, in the person of Richard Gordon. Every Monday at 10:00 p.m. over NBC-WEAF network.*

is coming in contact with the aerial at intermittent intervals. This is probably a tree branch which normally clears the aerial but brushes against it when moved by the wind. Another cause might be that the aerial or the lead-in wire sways against the edge of a building, while a third cause might be a loose connection between the lead-in and the aerial. Be sure that this made mechanically secure by soldering.

#### A. C. Sets on D. C.

*Recently we have moved to a small town where direct current is employed. Not*  
(Continued on page 24)

# Radio Frequencies OVER Ocean Waves

**M**ANY of us have a good time playing golf even if we do have a hard time breaking a hundred, but nevertheless we like to read about the matches between the fellows who go around in the seventies. So it is in radio. Only a few of us can brag about our foreign reception but just the same we like to read about the fellows who can.

"Have a heart and devote less space to trans-Pacific stations next month. To me it seems just like holding a piece of candy in front of a person having their hands tied. I wonder if anybody in this locality has ever heard Australia." Paul J. Keck, 1013 Maple St., Allentown, Pa., thus objects to so much and at the same time asks for more. So here we are off on another jaunt with our over-the-ocean flyers.

"I now have a model 93 Majestic a year old," says M. R. Ayers, 460 E. 40th St., N., Portland, Ore., "on which I have received 172 stations. These were all logged in the evening between the hours of 9 to 12 p.m. P.S.T., excepting for two mornings that I stayed up for the Japanese stations, of which I have verifications from six: JOAK, JOIK, JOCK, JOBK, JOFK and JOHK. Several of our readers have asked how to receive verifications from foreign stations where no English announcements are made. If you do not understand the language spoken, take the program down by sequence. For instance, on the Japanese stations the following is an example: '3:28 a.m., vocal selection, male voice; 3:34 a.m., announcement or speech; 3:45 a.m., instrumental selection, etc.' These stations keep a log and verification is made possible in this way. However, the Japanese and Mexican stations do announce occasionally in English."

"Anyone knows that the distance from the Pacific coast to Japan is a good 1000 miles farther than England is from the Atlantic coast, yet I never see any letters from one receiving at least one station in Europe, while on the Pacific coast they receive five or six in Asia. It looks to me as though the reception

## Tuning in the Trans-Pacific

on the west coast is much greater than on the Atlantic. Perhaps some one can enlighten me on this subject." Douglas Robinson, 63 Hollywood Ave., Albany, N. Y.

"By the way, Japs do *not* come from the west, nor does Europe come in from the east," advises Don R. Catlin, Woodbridge, Calif. "Radio waves travel the shortest distance, and from Woodbridge, at any rate (60 miles from San Francisco) Japs and Europe come over the North Pole. Paris is only 5,000 miles distant, airline, via North Pole and way stations."

"After my letter to you appeared in RADEX I have received numerous requests which boil down to this: 'If you don't speak foreign languages, how do you get verifications?' Here's a simple solution: Note your standard time to the second, if possible. Jot down everything you hear. For instance, '9:32½ P.S.T., woman's voice, singing, accompanied by piano, flute, stringed instrument, or what have you; 9:36, man, high (or low) pitched voice, song, with orchestra, etc.' The Jap stations particularly are extremely courteous," reports Don R. Catlin, Woodbridge, Calif.

"Regarding the Japs," says Charles Royal, R. 1, Box 438, Seattle, Wash., "they do broadcast their call letters in English. The best time to hear the call letters is at 1:00 a.m. P.S.T."

"Thought this information might be of use to RADEX readers," suggests Joe Stokes, 7318 Woodlawn Ave., Swissvale, Pa. "New Japs—JOKK, Okayama, 500 watts, 700 kcys.; JOLK, Fukuoha, 500 watts, 680 kcys.; JOPK, Shizuoka, 500 watts, 780 kcys.; JONK, Nagano, 500 watts, 635 kcys.; JOOK, Kioto, 300 watts, 625 kcys. JODK, Keijo (Seoul), is now on 690 kcys.; HIX, Santo Domingo, on 630 or 635 kcys.; TIC, San Jose, now on 882 kcys.; HJN, Bogota, S. A., now on 960 kcys.; 8RA, new

station in St. Johns, Newfoundland, on 550 kcys., 25 watts."

"In your March number I read about some of your readers asking about the Japanese stations and the time they are on the air," comments P. Hough, 3425 Manor Road, New Westminster, B. C. "I have received seven of the big stations in Japan and so far have four verifications, the other three have not come in yet. I have tuned them in dozens of times and they do broadcast a chain program at times. English speaking over Japanese stations is at 6:30 p.m. to 7:00 P.M. J.S.T., that is around 1:30 a.m. to 2:00 a.m. P.S.T."

### Gets the Announcements

"I have heard six of the big seven Japanese stations announce the call letters of their stations, all between 5:30 and 6:00 a.m. M.S.T. JOHK, JOFK, JOCK and JOBK announced at 5:50 a.m. JOIK and JOAK announced at 5:55 a.m. I have heard JOIK announce several times at exactly 5:55, so they must have a regular time to announce. They all evidently signed off at those times too as I could hear them no more. They announced the call letters only in English. I have heard 2YA, Wellington, New Zealand, sign off several times between 4:00 and 4:15 a.m. They always play 'God Save the King' just before leaving the air." O. R. Queen, 1534 W. Taylor St., Phoenix, Ariz.

"Have heard Japanese stations on 810, 830, 770, 850, 790 and 750 kcys. I have heard as high as five at the same time between 3 a.m. and 5 a.m. M.S.T., which sounded as if they were broadcasting a chain program. I have listened patiently to these stations for hours, without hearing one single word of English. The program consisted of long speeches and monotonous music and singing which sounded something like the Crow Indians giving a big pow-wow," complains Orin M. Stuart, Laurel, Mont.

"I have a verification from JOAK in front of me dated 'Tokyo, March 10, 1931,' and they are apparently broadcasting on 590 kcys., with 10 kilowatts power," advises Stanley Savage, Route 4, Spokane, Wash. "Besides the big 7 in

Japan I also have received an Oriental station on 710 kcys. I sure wish someone could tell who they are. Possibly COMK, Nukden, China? But has anyone ever received a verification from COMK, or has anyone ever heard an announcement they could understand?"

"Now some data on the Japanese stations," informs Leon V. Garland, Box 93, El Segundo, Calif. "The Japanese do announce in English, but not more than twice in a program. The programs are all in Japanese and usually are in this order—first a complete lineup of the program (there is no advertising), then news items, which are followed by a program for the children, then comes music and plays and talks, and last time signal and weather reports."

"On March 31st I tuned in JOIK, Japan," says Miss Marie Carson, 1622 2nd St., Lewiston, Idaho. They gave the call letters in English at 5 a.m. P.S.T. I live 400 miles from the Pacific Ocean. I have no special apparatus. The radio is a Temple non-screengrid Neutrodyne Plus (9 tubes). It may be others are making the same mistake I did, mistaking the Japanese station for a Mexican. The speech did sound a great deal like Spanish, but not quite so quickly spoken."

### High Power in Manila

"From a Japanese correspondent, I have learned that KZRM, Manila, P. I., is now on the air with 50,000 watts at 485 meters, and JOAK is now also broadcasting on 508 meters, with 10,000 watts," writes Raymond Corbett, 619 12th St., Sacramento, Calif., and asks, "Could you give me any information about an Oriental station broadcasting on 660 kcys.? I held them between 4 and 5 a.m. P.S.T."

"I picked up 2YA at 4:05 to 4:15 a.m. E.S.T., and at 4:32 I heard JOFK, Japan. It was stormy out, with torrents of rain, yet there was no static, which is very rare so late in the year," states Roy Cattle, R.F.D. No. 2, Paterson, N. J. "Has it been done so late in this part of the country before?"

"I notice that most of the distance reception is done on the Pacific Coast," comments Samuel F. Owens, 233 Rob-

*(Continued on page 19)*

# TUNING Time for DX PROGRAMS

## When Chances Are Best

**H**ELPFUL hints on the best time to tune for certain stations, continue to come from our readers. These are proving most popular and each month, a list of DX targets will be found in these columns.

"I am in receipt of a letter from 10AY, Kelowna, B. C., in which they request you to print their schedule, which at present is: Every Thursday at 8:30 p.m. and every other Sunday at 12:30 a.m. P.S.T.," writes Robert R. Rawstron, 15 Edgewood St., Claremont, N. H. "In verifying my report 10AY says that my report is the most remote one yet verified. They use 50 watts on 250 meters. CHGS, also wishes you to print that following the May 3rd and June 7th 1-2 a.m. E.S.T. DX tests, the DX programs will be discontinued till October 6th."

"For DXers I have a suggestion," advises Herbert C. Bent, 19 Westminster Apts., Halifax, N. S. "Station VCX at the Halifax Lightship, just off Halifax Harbor, broadcast daily on 690 keys. (or thereabouts) at 8 a.m. and 1:30 p.m. A.S.T. They only broadcast weather reports, aids to navigation, etc., for the benefit, largely, of fishermen. To those who hear the program, they will at least find something different in announcers and a new station."

"I have had many requests for schedule of WBIS," informs Robert R. Rawstron, 15 Edgewood St., Claremont, N. H. "I have answered all requests and I feel that many more will want the schedule. Here it is: WNAC, 6:30-7:45 a.m.; WBIS, 7:45-9:00 a.m.; WNAC, 9:00 a.m.-1:00 p.m.; WBIS, 1:00 p.m.-2:00 p.m.; WNAC, 2:00 p.m.-12 m."

"Tell your eastern readers," suggests Thomas C. Rogers, 2515 Jefferson St., Altoona, Pa. "to try for KHG on 590 keys., some Monday morning about 1:30 or 2. They sure come in strong with very little volume."

"A verification from HJN, Bogota,

Colombia, S. A., states them to be on the air every evening, except Sundays and holidays, from 8 to 11 p.m., local time," writes C. R. Caraven, 1840 Georgia St. E., Vancouver, B. C.

"I have just received a verification from station KFVD, Culver City, Calif., and on the card they say they are on the air daily from 6:00 a.m. to Sunset, and 10 p.m. to 1 a.m. P.S.T." advises Miss Laura Harris, 1301 Bloor St., W., Toronto, Ont., "It's a 250-watt station and they are on 1000 keys."

"I think that DX fans would be interested to know that regular programs are now broadcast from HJV, the Vatican station inaugurated about two months ago by Pope Pius in Italy," says Miss Laura Harris, 1301 Bloor St. W., Toronto, Ont. "Transmission is made daily, except Sundays and holidays. There are two periods a day, one in the morning, local time, and another in the afternoon. The following is the schedule in Eastern Standard Time: 5-5:30 a.m.; 2:30-3 p.m. The transmission at the earlier period will be on 19.84 meters and that during the later period on 50.26 meters."

"Just received a verification from KVOA, Tucson, Ariz., on 1260 keys. They broadcast a DX program every second Sunday from 1 to 3 E.S.T. They will be very glad to hear from DXers and give a nice verification," reports Francis M. Martin, 1101 Adrian Ave., Jackson, Mich.

"Has anyone logged station WIBG, Elkins Park, Pa.?" asks Chas. Fowlie, 101 17th St., West New York, N. J., and adds, "Station KFVS, Cape Girardeau, Mo., broadcasts a program every Saturday night until last Sunday morning. Station WAWZ, supposed to be located in New York City, has not been broadcasting since you allocated it at 1350 keys."

"KPSN, Pasadena, Calif., will not be on the air after Thursday, April 30th," reports Gilbert Van Vranken, Jr., 2230 N. El Molino St., Pasadena, Calif. "KGER, which has been sharing time

with KPSN, will be on the air full time after April 30th."

"I would be very thankful to you if you would care publishing in your well-known RADEX radio log that this station, CMBC, Cuba, which actually broadcasts with a frequency of 965 kcys., will broadcast every Sunday morning, beginning at 4 o'clock E.S.T., DX programs," writes D. Fernandez, Owner.

"Anybody trying to get NAL, such as M. Tuchinsky, tell them to try at 8:45 a.m. C.S.T., which is 20:45 G.C.T. (Greenwich Central Time)." Ivan D. Ide, Box 312, Genoa, Ill.

"CFCH, North Bay, is on the air every day from noon till 12 p.m. E.S.T. on 1200 kcys.," advises Lorne Chafsut, Kapuskasing, Ont.

**T**HE following information regarding time on the air has been secured from the stations concerned, from newspaper clippings, and from our readers. The times shown can be quickly converted into your own time by use of the following table:

Your Zone	EST	Whre Time is Given as CST	Given as MST	PST
EST		Add 1 hr.	Add 2 hrs.	Add 3 hrs.
CST	Subt. 1 hr.		Add 1 hr.	Add 2 hrs.
MST	Subt. 2 hrs.	Subt. 1 hr.		Add 1 hr.
PST	Subt. 3 hrs.	Subt. 2 hrs.	Subt. 1 hr.	.....

State	City	Call	Freq.	Watts
Arkansas	Fort Smith	KFPW	1340	50
	Sundays, 12 n.-7 p.m., CST.			
	Weekdays, 7 a.m.-7 p.m.			
	Little Rock	KGHI	1200	100
Colorado	Sunday, 11 a.m.-2 p.m.; 6:30 p.m.-9 p.m., CST.			
	Weekdays, 9:30 a.m.-11 a.m.; 12 n.-2 p.m.; 5:30-10 p.m.			
	Grand Junction	KFKJ	1310	100
	Sundays, 10-12 a.m., 7-9 p.m., MST.			
Iowa	Sundays, 8 a.m.-2 p.m., 5-10 p.m.			
	Weekdays, 8 a.m.-2 p.m., 5-7 p.m., 10 p.m.-1 a.m.			
	Saturdays, 8 a.m.-2 p.m., 5-7 p.m., 10 p.m.-1 a.m.			
	Trinidad	KGIW	1420	100
Georgia	Sundays, 10 a.m.-10:30 a.m., 3:30 p.m.-5 p.m., 7:30-8:30 p.m., MST.			
	Weekdays, 7 a.m.-3 p.m., 5:30 p.m.-9 p.m.			
	Rome	WFDW	1370	100
	Sundays, 9:45 a.m.-12 n., 6-10 p.m., CST.			
Louisiana	Weekdays, 9 a.m.-10:30 a.m., 11:45-1 p.m., 6-10 p.m.			
	Decorah	KGCA	1270	50
	Sundays, 10:45 a.m.-12:15 p.m., CST.			
	Weekdays, 9-9:45 a.m., 12:30-2 p.m.			
Mississippi	New Orleans	WJBW	1200	100
	Sundays, 8-10 a.m., 1-5 p.m., 9-12 p.m., CST.			
	Weekdays, 8-12 n., 4-8 p.m.			
	Jackson	WJDX	1270	1000
Alabama	Sundays, 12:15-10:15 p.m., CST.			
	Mon.-Tues., 7-15 a.m.-2:30 p.m., 5:30-10:15 p.m.			
	Wed.-Thu.-Fri., 7:15 a.m.-3:30 p.m., 5:45-10:15 p.m.			
	Saturdays, 7:15 a.m.-10:30 p.m.			
Missouri	Vicksburg	WQBC	1360	300
	Daily, 8 a.m.-6 p.m., CST.			
	Grant City	KGIZ	1500	100
	Daily, 6 a.m.-12 m., CST.			
Montana	Missoula	KGVO	1420	100
	Daily, 10 a.m.-6 p.m., MST.			

New York	New York	WCDA	1350	250
	Sat.-Sun., 9-12 a.m., 9-12 p.m., DST.			
	Monday, 3-6 p.m.			
	Tuesday, 6-9 p.m.			
	Wednesday, 9-4 p.m.			
North Dakota	Devils Lake	KDLR	1210	100
	Sundays, 11 a.m.-1 p.m., 3-8 p.m., CST.			
	Weekdays, 7 a.m.-2 p.m., 6-10 p.m.			
Oklahoma	Oklahoma City	KFXR	1310	100
	Daily, 7 a.m.-10 p.m., CST.			
Shawnee	Shawnee	KGFF	1420	100
	Sundays, 1-9:30 p.m., CST.			
Pennsylvania	Philadelphia	WELK	1370	100
	Daily, ex. Thu., 9:30 a.m.-10:30 p.m., DST.			
	Thursdays, 9:30 a.m.-12 m.			
Rhode Island	Newport	WMBA	1500	100
	Sundays, 1-7:30 p.m., DST.			
	Weekdays, 12-1 p.m., 4-5 p.m., 6-10 p.m.			
Tennessee	Bristol	WOPI	1500	100
	Daily, ex. Sat., 10:30 a.m.-2 p.m., 5-8:45 p.m., EST.			
Texas	Dallas	WRR	1280	500
	Sundays, 8 a.m.-11 p.m., CST.			
	Weekdays, 9:30 a.m.-1 p.m., 5-11 p.m.			
Memphis	Memphis	WHBQ	1370	100
	Sundays, 1:30-5 p.m., CST.			
Weekdays	9-11 a.m., 12-1 p.m., 4-5 p.m., 7-9:30 p.m.			

## Over Ocean Waves

(Continued from page 17)

erts Ave., Glenside, Pa. "How about giving some of the Easterners a break? I'm giving you what I believe to be an authentic report on when some of the more powerful European stations are on the air—not that I've had any of them, but here they are: LKO from 5:00 a.m. to 5:00 p.m.; ITO from 3:15 a.m. to 6:00 p.m.; IRO from 3:15 a.m. to 6:00 p.m.; IMI from 3:15 a.m. to 6:00 p.m.; PFBI from 2:00 a.m. to 6:00 p.m.; 5GB from 5:15 a.m. to 7:00 p.m.; 2LO from 7:00 a.m. to 7:00 p.m., all E.S.T. Remember, I'm not guaranteeing the authenticity of this report, but I believe it to be correct."

"Why not list a few of the high-powered Australian and Japanese stations in the regular Index by Frequencies of RADEX?" suggests George Lilley, 227 W. Bernard St., West Chester, Pa.

Sorry, but the Index by Frequencies contains too many stations now. We fear it would complicate things were we to attempt to list stations outside of North America therein. Perhaps some day when more of us can turn our dial to Tokyo, we will find it advisable to incorporate Japan and Australia, but not yet.

# LETTERS from Our MAIL BOX

WE are publishing below excerpts from letters from two radio stations to our DXers. From John M. Hilgers, President, WISJ DX Radio Club, Madison, Wis., comes the following with the statement that thirty verifications and 25 cents entitles anyone to membership in the club:

"Radio Station WISJ wishes to make a correction in the rating given it by figures in your Index By Frequencies and Dial Numbers columns. The figure, denoting "uninterested," is anything but expressive of the policies of the station management.

"It was not until January 1st that WISJ really systemized itself for its work. Since then the greatest attention has been given incoming DX mail. Now we have organized a DX club which, judging from the responses, will soon be among the greatest. We have been fairly swamped with mail, and for that reason our verifications are not mailed very promptly.

"I should appreciate it very much if you would certify us in said columns as 'DX enthusiasts' and as a regular station issuing stamps and verifications under the usual conditions. Also, would you publish this missive in your 'Letters From Readers' for we do come under that classification. There are many DXers who picked up the station last year who, I believe may not have received verifications. If published, this letter will assure them of our cooperation."

From Radio Station XES, the following change in policy:

"The expense attached to attending to listener-mail from the U. S. and Canada has for months been too much of an item, and we must place some sort of a restriction, in order to not be obliged to verify so many reports.

"We are only too glad to have reports from our listeners, and were it not for the expense, would like to answer each report personally. We acknowledge receipt of every report during the Victor Hour, Mondays, 10-11 C.S.T.

## From Stations and Fans

"However, we cannot handle so many verifications, for our folder costs us, with mailing expense, etc., about 15 cents. For the future we will *verify* all reports carrying 25 cents, and will send a printed reply card to all carrying 10 cents. We would appreciate it very much if you could find a place to publish the above."

"Do you know that KMA, Shenandoah, Iowa, which is listed in all the logs I have seen as being allocated to 930 kcys., is broadcasting on 710 kcys.?" asks G. J. Smith, 2120½ West Broadway, Enid, Okla. "I heard them there for the first time this morning and got all worked up thinking I had WOR, Newark, daytime reception, until I heard the station announcement."

Station KMA, Shenandoah, Iowa, advises as follows: "We have your letter relative to the correct listing of our station. We wish to advise you that for the past two or three weeks we have been operating on a frequency of 710 kcys. by authority of the Federal Radio Commission. However, due to the fact that the Commission gave us this wave without a hearing, and a protest was entered by WGN, Chicago, and due to that fact, we are going to Washington to have the hearing which will be held sometime about the middle of this month. Starting today, May 1st, we are on our old frequency of 930 kcys. and will remain on that frequency until after the hearing in Washington, which will determine just where we will be on the dial permanently. So for the present, at least, you may consider listing us as 930 kcys., as that is correct."

"I have just completed a most successful DX season and have a few real nice verifications, the best of which are from nine stations over 10,000 miles," writes Edmund Walbrecht, Box 124, Dover, N. J. "Verifications in this class are from 2BL, 2FC, 2GB, all of Sydney, Australia; 2YA, 1YA and 3YA, all of New

Zealand, and two of them being 500-watters; 3LO and 3AR, both of Melbourne, Australia, and 4QG, Brisbane. All of these are 100% specific and genuine and are open to any doubter's inspection. Most of these Aussies were received last October, which was by far the best month of the year for transpacific reception in this locality. But still I have no Europeans or Japs. I can't understand this, as Australia is a good deal farther away and the stations are lower-powered. Australian reception has been quite reliable this winter, and few weeks passed that I didn't at least hear 2BL. My total log is now 636, with about 300 verified. 69 of these verifications are from over 2000 miles, and include quite a few 50 and 100-watters on the Pacific Coast. I have every state in the Union and every province of Canada verified. Also have LR3 and LR4 of Argentina, but neither have verified yet, and KGMB, of Honolulu, who just sent me a very nice verification. Had him so loud on the morning of March 29th that he almost shook the windows. All of this has been done on a battery-operated Radiola No. 20, in one of the best locations existing for DX. I am situated on the top of Mine Hill, near Iron mines, and use a very long antenna, 325 feet, to be exact, and is 50 feet high on the average. I use a water pipe ground, which is best, in my opinion."

#### Heard First Broadcast

"My experience dates back to when Dr. Le DeForest was experimenting with the Radiophone from High Bridge, N. J., long before radio broadcasting was heard of, and I was listening on my wireless set one evening and heard 'The Star Spangled Banner' coming over the air. I called in my nearby neighbors, but as is often the case it was gone before they could hear it, and next day everyone I told about it said I was 'daffy,' but it was verified in the following day's *New York Times* and heard as far west as Chicago," writes I. H. Kattell, 79 Sherwood Ave., Binghamton, N. Y. "My best catch, in my estimation, was on February 18th this year, when at 4 a.m. I heard orchestra music coming through on 855 keys., but could not understand the announcement, except

that I thought I heard the word 'Sydney.' I waited for another announcement with the same result, then consulted my list of world stations in RADEX and found that 2BL, Sydney, was on this channel, shown as having 2500 watts power. I wrote them on February 19th, asking them if they were on the air at this time, which I figured would be about 7 p.m. the evening before, and if they played certain selections with orchestra, and April 21st I received verification card, dated 'Sydney, Australia, March 20th,' saying they were on with their National Broadcasting Orchestra and congratulated me on the reception and hoped to hear further from me."

#### Patient Tuning Rewarded

"I had a peculiar experience in DXing about a week ago," states Paul L. King, 1523 Madison St., Madison, Wis. "Up to that time I had never been able to pick up a transoceanic station, that is, farther away than Cuba or Porto Rico. On the morning of April 19th at 2:44, I caught 2YA, Wellington, N. Z., and heard their program quite clearly for 58 minutes, during which time I got plenty of material for verification. The very next morning I heard 2BL, Sydney Australia, for about 40 minutes, but due to heavy static and fading I failed to get enough material for verifying. After 2BL faded out, almost to the point of incredibility, I continued to fish and caught JOGK, Kumamoto, Japan. I heard an announcement and parts of two or three musical numbers by a Japanese orchestra. Due to the strangeness of the music and the fact that the announcement was in Japanese, I am unable to request a verification. Although I have heard neither JOGK nor 2BL since the 20th, yet I have heard 2YA every morning, but one, to date. Evidently the weather conditions must be ideal just now for long distance reception from the west. All of the west coast stations seem to be unusually loud the last three weeks or so."

"My biggest thrill came the other evening," states Charles Royal, R. 1, Box 438, Seattle, Wash., "when I heard an airplane talking to the ground station. I could even hear the motors. The

ground station is very clear, but they do not announce. I have heard him talking to someone on the Yukon River, but I could not hear them answer. The ground station said that he could hardly hear the answer himself. I have heard him talking to planes in California and one coming over the pass in the Cascades. The plane in the Cascades was giving the weather report up there and telling about his trip so far, which was very clear and cold. This was coming in on my set above 1500 kcys. about one-quarter inch. So far I have been unable to find out where this ground station is located. Have you any information on this?"

#### Cape Cod and Germany

"Here's my record, made 'way out on Cape Cod—far east for the United States," writes Theodore Vail Bullard, South Orleans, Mass. "312 stations, including Canada, Cuba and Mexico, with 14 on the west coast, one of only 250 watts—and one in Koenigsberg, Germany. The latter is worth writing about. I received the German signals at fair speaker volume on 1086 kcys. Held them for over an hour off and on, some fading. This was on an ordinary a. c. set (Amrad No. 81) with 125-foot conventional antenna, ground to a driven well 15 feet deep."

"I am writing you about three stations which I have failed to see where any of your readers or DXers mention in your magazine," remarks Wm. Bowers, 440 Vance St., Toledo, Ohio. "The first one is KPG, a 50-watt station in Wenatchee, Wash., on 1500 kcys. This station is seldom on with a DX program. The second one is a 100-watter in Seattle, Wash., KPCB. This one, however, is on the air every morning from 3 to 4 a.m. E.S.T., and comes in on 650 kcys. I noticed in your April issue there are several DXers who have ten or more stations on 1500 kcys., but KPG is not on their list. Here is the third and best one, I think, W9XV, on 1604 kcys., 2 watts power. This station is located at Cartersville, Mo., and owned and operated by Lannie W. Stewart. It is on the air every morning from 5 to 6 a.m. E.S.T. He sends a very nice verification and

also his picture and is very prompt in replying."

"I have logged over 400 stations, including 37 signals over 2000 miles away and I do not try to get verifications from stations east of Denver. My best pickup has been KGFJ, Los Angeles, operating on 100 watts, and it has not been unusual to play 15 to 20 west coast stations during a single evening from the east coast. My best record has been to play KNX, Hollywood, four consecutive evenings before 8 o'clock E.S.T., which programs have been verified, and the receiver I used gave ten kilocycles separation with Baltimore or Hartford on one side or Hot Springs or Collas on the other. On the BCL band I have played one Japanese station and one from New Zealand, but have been unable to get KGU, Honolulu, because WFIW, at Hopkinsville, never seems to sign off before I am ready to sign off." James E. Perry, Masonic Temple, Salisbury, Md.

"In the four weeks since I got my radio I have received 150 stations from all over North America. I have verifications from KFRC, San Francisco, CMK, Havana, XED and XEW, in Reynosa and Mexico City, but perhaps my best catch is CKWX in Vancouver, a 100-watter. All these I have received on a ground attached to a .00025 mfd. fixed condenser and then to the aerial post. This, I find, cuts down the volume on locals greatly, but brings in the distance. It also seems to eliminate fading." Francis G. H. Rice, Huntsville, Ont.

#### New Stations From Kitchen

"Last night I had the most excellent results in DXing without the use of aerial or ground," reports R. E. Moran, 540 Parkdale Ave., Ottawa, Ont. "The room being quite cool where I usually have the radio, I thought I would move it to a warmer room, this being the kitchen. I connected the radio, A Fada 25, 8-tube, to the incoming circuit at exactly 8:30 p.m. and the first station I hit was KOA, Denver, and before going to bed at 12:30 a.m., I pulled in numerous stations from coast to coast and at least one station in 27 different states. Some of these stations I have never got with an aerial attachment.



"I have logged about 265 stations in two years of DXing. I just started to collect verifications this year and have 161 stations verified to date. My best verified catches are CKWX, WRBL (using only 25 watts at the time), KGAR, XEV (south of Mexico City with 100 watts), and KGIQ. The set I use is a Kennedy Model XV, 5-tube battery set. I was the lucky Illinoisan to get a prize from Station KGGM for being the first person from this state to report reception of their station." Robert Thornton, 1450 W. 81st St., Chicago, Ill.

"The Mexican stations," comments A. H. B. Jordan, Everett Pulp and Paper Co., Everett, Wash., "have been acting like one of their jumping beans, and now the Canadian stations have started to do the same thing. CHWK is now on the same wave length as WEAJ and WTIC and recently CFCN is broadcasting on about 985 kcys., spoiling reception from WBZ and KDKA. Apparently the agreement between this country and Canada, allotting the latter certain wave lengths, is not being kept by Canada, and our reception from eastern stations is gradually being eliminated."

#### Mexicans Move at Midnight

"Have just received some interesting information on the Mexican situation," writes Karl Halpern, 1435 Coney Island Ave., Brooklyn, N. Y. "From 8 a.m. till midnight they have to stay on their regular channels; after that time they may move to any frequency they want. The log you have on the Mexicans is right, but at 2 a.m. it won't be worth anything at all."

"I have been much interested in your DX reports. I have been doing a little DXing myself and while I have not made any records I have had lots of fun. I have received 281 stations since last November 1st on my 8-tube Airline special. These include 38 states; 17 stations in 7 Canadian provinces; 16 Mexicans; 3 Cubans; TIC, San Jose, Costa Rica; KGMB, Honolulu; JOHK and JOCK, Japan; 2YA, Wellington, N. Z.; OAK, Lima, Peru; LS1, Buenos Aires, Argentina. I use a 6-foot 1½-inch galvanized pipe, which I keep filled with water, for a ground and three inter-

changeable aerials. I work until midnight and my radioing, except one day a week, is done after midnight." Arlo F. Kelley, 4234 W. 15th St., Amarillo, Texas.

#### Ollie Ross' Record

*(Continued from page 5)*

"My method for installing an underground aerial is as follows: Dig a ditch one foot deep and 100 feet long. Take a garden hose the same length and run a copper cable through it the entire length. Seal and tape the far end so that no water will get into the hose. The end of the hose next the set should stick out of the ground about one foot and an insulated wire should be securely soldered to the copper cable."

We are reprinting from the February, 1931, RADEX, the description of Mr. Ross's ground. "The most satisfactory ground I have found is copper tubing about an inch in diameter and three feet ten inches long. This tubing is wrapped spirally with No. 20 copper wire from one end to the other and back again, the laps being an eighth-inch apart. The wire is soldered to the tubing at each end but is uninsulated, although the lead from the ground to the receiver is heavily insulated and as direct as possible. This tubing is buried in rock salt which draws dampness from the ground in dry seasons."

"I would suggest that radio fans try the U. S. Standard Ground (see No. 46 RADEX, page 24)," goes on Mr. Ross in his letter. "Only if rods are used I find that a piece of seven-strand aerial wire soldered the entire length of the rod or pipe, will bring finer results. A well-insulated wire should be soldered to the seven-strand wire on the rod or pipe (or the same wire carried direct to ground post of the set).

"Tubes should be checked over at least twice a year for often efficiency is marred by a gasey or faulty tube and DX reception is very much hampered.

"To date," concludes the world-famous DXer, "I have tuned in and verified 1309 stations on every continent on earth and every country in the world having a broadcasting station. Very

interesting but very hard work. In three months I "played" a radio for a total of 1452 hours—sometimes as much as 22 hours a day.

"As a steady user and reader of RADEX, I think it is unquestionably the most complete and satisfactory method used in logging radio stations. DX and radio fans should indeed appreciate RADEX. In four years I have not found a better or more helpful radio magazine."

## Helping Our Readers

(Continued from page 15)

*knowing that this would affect the operation of our all-electric receiver which was made for use on alternating current, we plugged it into the line but got no results except a smell of tar which seemed to come from the radio itself. What is necessary to make the set operate*

Receivers designed to operate on alternating current will not operate on direct current as the principle employed is radically different. What you have undoubtedly done, if the set was connected very long, is to burn out the primary winding of the transformer, which damage can only be remedied by replacing this transformer. The best thing to do in your case is to check up whether or not the set has actually been damaged, which is an easy matter by plugging it in on an alternating-current line of the proper cycles for which the set was designed. Take the set to a radio dealer who is supplied with this kind of current. If the set does not work you need a new transformer, and then get a motor-generator that can be run on direct current and will deliver the correct alternating current for the operation of the set. Janette converters are made especially for this purpose.

### Control Grates

*The rheostat of our old Atwater-Kent battery-operated receiver causes a grating sound when it is turned. Is there any method of eliminating this unpleasant sound?*

After a rheostat has been in use for some time it oxidizes and the surface of the wire winding becomes coated with oxide which prevents good contact with the slider. The best method of eliminating this is to replace the rheostat with a

new one of the same value. However, in some cases it is possible to remove the coat of oxide by rubbing lightly with a piece of fine emery cloth or garnet paper, so that the slider will make contact with the cleaned surface.

### No Current Available

*We live on a farm where house-lighting current is not available, making it necessary to use a battery-operated set. Our set is a good one but we have more or less difficulty in charging the battery. This is usually done by putting it in the car and connecting it to the car battery, but we were wondering whether or not there is any easier method which does not necessitate such inconvenience. Can you suggest any?*

If you have an old auto generator of the 6-volt type, or can obtain one, it is a comparatively easy matter to mount this on the base of your portable gasoline engine, which you undoubtedly have, and then run the generator at its rated speed by belting it to the engine. Connect the output of the generator to the battery, positive to positive and negative to negative, which will charge the latter in a very short time. If desired, you can place the gasoline engine near the house and run heavy wires to the battery inside, making it unnecessary to take the battery out. However, the leads to the receiver should be disconnected during the charging process. By installing a switch on the line such disconnection is quickly accomplished.

### Set Goes Broad

*After sending our all-electric receiver out for test and repairs, it has become unaccountably broad in respect to tuning, although it was always quite sharp before. What would you say is the reason for this change?*

Most receivers nowadays have trimmer condensers attached to the tuning condensers, for the purpose of equalizing the capacity so that all the condensers will work in perfect unison. Proper adjustment of these trimmers is necessary for sharp tuning and mal-adjustment often accounts for broadness of tuning. The proper method of balancing tuned-radio frequency receivers by means of the trimmer condensers was completely described in the May, 1930, issue of RADEX, No. 39.

# Changes for June

## Frequencies

665	CJRM	Moose Jaw, Sask., from 600.
665	CJRW	Fleming, Sask., from 600.
780	CMGH	Matanzas, Cuba, from 1249.
840	CMC	Havana, Cuba, from 845
965	CMBC	Havana, Cuba, from 955.
865	CMBD	Havana, Cuba, from 955.
985	CFCN	Calgary, Alta., from 690.
1225	CMCD	Havana, Cuba, from 1345.
1300	XETY	Mexico City, Mexico, from 840.

## Power

588	CMW	Havana, Cuba, 700 to 1400.
660	CHWK	Chilliwack, B. C., 50 to 100.
730	CMK	Havana, Cuba, 3000 to 3150.
860	CMJE	Camaguey, Cuba, 5 to 20.
1210	CFNC	Fredericton, N. B., 100 to 400.
1210	CJOR	Sea Island, B. C., 50 to 500.
1225	CMCD	Havana, Cuba, 15 to 250.
1330	KGB	San Diego, Calif., 250 to 500.
1420	WHDL	Tupper Lake, N. Y., 10 to 100.
1500	CMBR	Havana, Cuba, 35 to 15.

## Owners

570	WKBN	Youngstown, Ohio, to WKBN Broadcasting Corp.
1070	CMCB	Havana, Cuba, to Antonio Capablanca LaPorte, Ind., to South Bend Tribune.
1200	WRAF	LaPorte, Ind., to South Bend Tribune.
1310	WDAH	El Paso, Texas, to Bledsoe & Blackwell.
1330	KGB	San Diego, Calif., to Don Lee, Inc.
1380	KQV	Pittsburgh, Pa., to KQV Brdstg. Co.
1420	WHFC	Cicero, Ill., to WHFC, Inc.
1420	WKBI	Chicago, Ill., to WKBI, Inc.
1500	KPJM	Prescott, Ariz., to A. P. Miller.

## Deletions

550	CMCJ	Havana, Cuba.
870	CMHH	Cifuentes, Cuba.
920	CMHD	Caibarien, Cuba.
1010	CMCX	Havana, Cuba.
1090	CMAA	Guanajay, Cuba.
1094	CMGI	Matanzas, Cuba.
1315	CMGC	Matanzas, Cuba.
1332	CMJA	Camaguey, Cuba.
1360	KPSN	Pasadena, Calif.
1429	CMHE	Santa Clara, Cuba.
1500	CMBP	Havana, Cuba.
1500	CMHB	Sagua la Grande, Cuba.

## Locations

1410	WAAB	From Squantum, Mass., to Boston, Mass.
1500	KGKB	From Brownwood, Tex., to Tyler, Texas.

## New

580	CHMA	Edmonton, Alta.
1375	CMAC	Pinar del Rio, Cuba.

## Calls

1050	KFBI	Milford, Kans., from KFKB.
1300	KFAC	Log Angeles, Cal., from KTBI
1370	WRAM	Wilmington, N. C., from WRBT

## Chains

560	WNOX	Knoxville, Tenn., new CBS.
1010	WIS	Columbia, C. C., new CBS.
1410	WAAB	Boston, Mass., new CBS.

## Protests From Mexico

(Continued from page 12)

letter that conditions in Mexico are fast becoming better and that we have nothing serious of which to complain and then, as an afterthought, he adds that his company is to build a 50,000-watt station to operate on the same channel with a powerful American station! There have been rumors that this is a "spite" station to get even with a big station here which opposed Dr. Brinkley's

operation of KFKB. Be that as it may, why should the Mexican authorities permit a station to be erected to use a frequency only for the purpose of destroying it? For no 50,000-watt station can occupy the same frequency as a "powerful American station" without completely destroying reception on that and perhaps adjacent channels.

## The Monthly Forum

(Continued from page 9)

"Yesterday morning at about 4:15 E.S.T. I picked up a station in Calgary, Alta. According to RADEX, there are five stations in Calgary, all on 690 kcys., which was the wavelength on which I heard them. This station use the slogan 'The Voice of the Prairie' several times, although I was unable to catch the call letters. If you should happen to know which of the five stations uses this slogan, I should certainly appreciate knowing it," requests Sturges D. Dorrance, Jr., 175 Riverside Drive, New York City.

This afternoon at about 3:30 o'clock I received a station on about 1050 or 1060 kcys.," says Edwin Erman, Fessenden, N. D. "They signed off at 4 o'clock C.S.T. Their call letters were WBIH or WCIIH, I couldn't quite get which. They said next Sunday they would be on the air for the last time until fall. I would like to receive some information on this."

"We are now going to ask you if you are able to give us some information relative to a station that we heard on Saturday, December 20th, at 1:45 a.m. E.S.T.," writes Hedley Simmonds, 23 Clyde St., Hamilton, Ont. "This station gave a call which sounded like WMBA or WNBA and gave their location as Silver Haven. They mentioned the fact that they operated on 1200 kcys. by authority of the Federal Radio Commission and then signed off."

"I would like to know if any of your readers have picked up foreign stations, such as Hawaii, Japan, Central or South America, on such a small set as I operate, two tubes," inquires Douglas J. Blackwell, 14 Walnut St., London, Ont.

"I would like to know when stations on 1030 kcys. are on the air," inquires

Lorne Chafsut, Kapuskasing, Ont. "I have not been able to bring them in and I have logged every channel excepting five, but 1030 seems to be the most elusive."

"Please tell me when CMK, Havana, on 730 kcys. broadcasts?" asks John Bullock, 260 Edgewood Ave., New Haven, Conn. "Also if it is possible for a person living in New Haven to get European and Asiatic stations, and when could I have the best chance to get them, and at what time."

"At 10:15, April 2nd, I tuned in a station broadcasting on a frequency of 920 kcys., but on account of interference I could not get any announcement except for the call letters which I am sure were KMJB. Does anyone know where this station is located?" asks Edwin H. Chandler, Ranfurly, Alta.

Here is another inquiry from Mr. Chandler: "This morning from 3 until 4 I heard a foreign station broadcasting on about 753 kcys. The program seemed to be a religious one, a man lectured for some time, and following that hymns were sung to an organ accompaniment. I could not get any announcement from this station. Did anyone else hear this? I also heard 2YA, 2BL and 3LO this morning."

Orin M. Stuart, Laurel, Mont., reports a station on 910 kcys. in Saskatoon, Sask., giving call letters CJHS being received since the first of the year. A list just received from the Dominion Government gives no data on this station. Can our readers advise us further regarding it?

### The Editor Answers

"Are there two WTIC, Hartford, Conn., stations?" asks Alvin D. Strong, Box 171, Bessmer, Ala. "May's RADEX lists one on 660 and one 1060 kcys.; also WEHC, Emory, Va., was moved to 1350 from 1200 kcys."

And "Could you tell me," inquires Howard Byrne, 907 Sixth St., Bismarck, N. D., "why I received WJZ's call letters in back of KOA? It was during a pause in the NBC for the station call letters."

The synchronizing of stations WTIC and WBAL with WEAJ and WJZ respectively was fully explained in the May issue, page 3. As for the change in WEHC, frequently corrections in data are received at the last minute before going to press and we make the change in the index but are not able to mention it in "This Month's Changes." In regard to WJZ on KOA's wave we can

*(Continued on page 62)*

## INSURE YOUR RADIO ENJOYMENT

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# KEY TO CHAIN STATIONS

CFCF 1030 N	KPRC 920 N	WCAU 1170 C	WHAS 820 N	WNAC 1230 C
CFRB 960 C	KRLD 1040 C	WCCO 810 C	WHEC 1440 C	WNAX 570 C
CKAC 730 C	KSCJ 1330 C	WCFL 970 N	WHK 1390 C	WNOX 560 C
CKGW 690 N	KSD 550 N	WCKY 1490 N	WHO 1000 N	WOAI 1190 N
KDKA 980 N	KSL 1130 N	WCSH 940 N	WHP 1430 C	WOC 1000 N
KDYL 1290 C	KSTP 1460 N	WDAE 1220 C	WIBO 560 N	WOKO 1440 C
KECA 1430 N	KTAR 620 N	WDAF 610 N	WIBW 580 C	WORC 1200 C
KFAB 770 N	KTHS 1040 N	WDAY 940 N	WIOD 1300 N	WOW 590 N
KFH 1300 C	KTRH 1120 C	WDBJ 930 C	WIP 610 C	WOWO 1160 C
KFI 640 N	KTSA 1290 C	WDBO 1120 C	WIS 1010 C	WPG 1100 C
KFJF 1480 C	KVI 760 C	WDOD 1280 C	WISN 1120 C	WPTF 680 N
KFKX 1020 N	KVOO 1140 N	WDRC 1330 C	WJAR 890 N	WQAM 560 C
KFPY 1340 C	KWK 1350 N	WDSU 1250 C	WJAS 1290 C	WRC 950 N
KFRC 610 C	KYW 1020 N	WEAF 660 N	WJAX 900 N	WREC 600 C
KFSD 600 N	WAAB 1410 C	WEAN 780 C	WJDX 1270 N	WREN 1220 N
KFYR 550 N	WABC 860 C	WEBC 1290 N	WJJD 1130 C	WRR 1280 C
KGO 790 N	WACO 1240 C	WEEI 590 N	WJR 750 N	WRVA 1110 N
KGW 620 N	WADC 1320 C	WENR 870 N	WJZ 760 N	WSAI 1330 N
KHJ 900 C	WAIU 640 C	WFAA 800 N	WKBN 570 C	WSB 740 N
KHQ 590 N	WAPI 1140 N	WFAN 610 C	WKBW 1480 C	WSM 650 N
KLRA 1390 C	WBAL 760 N	WFBL 1360 C	WKRC 550 C	WSMB 1320 N
KLZ 560 C	WBAP 800 N	WFBM 1230 C	WKY 900 N	WSPD 1340 C
KMBC 950 C	WBBM 770 C	WFI 560 N	WLAC 1470 C	WSUN 620 N
KMOX 1090 C	WBCM 1410 C	WFLA 620 N	WLAP 1200 C	WTAG 580 N
KOA 830 N	WBEN 900 N	WGAR 1450 N	WLBW 1260 C	WTAM 1070 N
KOH 1380 C	WBRC 930 C	WGL 1370 C	WLBZ 620 C	WTAQ 1330 C
KOIL 1260 C	WBT 1080 C	WGN 720 N	WLIT 560 N	WTAR 780 C
KOIN 940 C	WBZ-A 990 N	WGR 550 C	WLS 870 N	WTIC 660 N
KOL 1270 C	WCAE 1220 N	WGST 890 C	WLW 700 N	WTMJ 620 N
KOMO 920 N	WCAH 1430 C	WGY 790 N	WMAL 630 C	WTOC 1260 C
KPO 680 N	WCAO 600 C	WHAM 1150 N	WMAQ 670 C	WWJ 920 N
			WMC 780 N	WWNC 570 C
			WMT 600 C	WXYZ 1240 C

# WHAT'S ON THE AIR TONIGHT?

## A WEEKLY CALENDAR

### Leading Features of the Network Program

Time is given by Eastern Daylight Saving. For Eastern Standard time, subtract one hour; for Central Time, two hours for Mountain Time, three hours; and for Pacific Time, four 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 WEEI WFI WGY WCAE WRC  
WBEN CKGW

**8:00-8:15 Gene and Glenn — Quaker Early Birds**  
WEAF WJAR WEEI WTAG WCSH WFI  
WRC WGY WCAE WTAM WWJ WSAI  
CKGW WRVA WPTF WJAX WIOD WFLA  
WSUN

**8:15-8:30 Morning Devotions**  
WEAF WRC WCAE WGY WHAS WOW  
WFI WCSH WJAR WWJ WPTF WIOD  
WAPI WFLA WSUN WTAG WGN WJAX  
WJDX WRVA WBEN WSMB WFI

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

**9:00-9:30 Morning Moods**  
WABC WFBL WKBW WDRC WPG WIP  
WFAN WMAL WDBJ WAIU WBT WBCM  
WSPD WLAC WDSU WBBM WMT KMOX  
KMBC KOIL KFJF KFJF WACO CFRB  
WAAB

**9:15-9:45 Campbell's Orchestra**  
WEAF WJAR WLIT WTAG WCSH WRC  
WDAF WBEN WCAE WHO WTAM WSAI  
KSD WOW WOC WWJ CKGW (WLS on  
9:30)

**9:45 10:00 A. & P. Program**  
WEAF WJAR WTAG WCSH WRC WGY  
WCAE WTAM WWJ WOC KSD WHO  
WDAF WTMJ WEBC WRVA WPTF WIOD  
WFLA WSUN WHAS WSM WMC WSB  
WAPI WSMB WJDX KVOO WBAP KPRC  
WOAI WKY WBEN WOW WFI KSTP  
WIBO

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

**12:00-12:30 Paul Tremaine and His Orchestra**  
WABC WHEC WLBZ WORC WPG WCAU  
WHP WJAS WLBW WMAL WCAO WTAR  
WDBJ WHK WKRC WAIU WWNC WDOD  
WREC WLAC WBRC KSCJ WMT KMBC  
WDAY KOIL WIBW KFJF KLZ

**12:30-1:00 Columbia Revue**  
WABC WLBZ WORC WPG WCAU WHP  
WJAS WLBW WMAL WCAO WTAR WXYZ  
WBCM WDOD WREC WLAC WBRC KSCJ  
WMT KMBC WDAY WIBW KFJF KLZ

**1:30-2:30 National Farm and Home Hour**  
WJZ WHAM WJR KSTP WRVA WHAS  
WREN WFAA WEBC WIOD WAPI WHAS  
WMC WSB WGAR KVOO WKY WOAI  
WRC WHO WDAF WJDX WBAL WSMB  
KWK KOA WBZ WBZA WOC KTHS  
WFLA WSUN WJAX KFAB KPRC KDKA  
WLW KFJF WPTF WSM

**1:30-2:00 Hotel Orchestra**  
WABC WHEC WLBZ WEAN WPG WFAN  
WJAS WLBW WMAL WCAO WTAR WDBJ  
WKRC WAIU WWNC WXYZ WBCM WDOD  
WLAC WBRC

**2:45-3:00 Piano Moods**  
WJZ WBAL KDKA KWK CKGW WREN  
WJR WFLA WSUN WRVA WSB WMC  
WHAM WGAR WGN KFAB

**3:00-3:15 Columbia Salon Orchestra**  
WABC WHEC WLBZ WEAN WNAC WORC  
WPG WHP WLBW WMAL WCAO WTAR  
WDBJ WHK WKRC WAIU WWNC WXYZ  
WBCM WSPD WDOD WREC WLAC WBRC  
KSCJ WMT KMBC WDAY KOIL WIBW  
KFJF KRLL KTRH KLZ CFRB

**5:00-5:30 The Lady Next Door**  
WEAF WRC KSD WTAG WSM WHAS  
WKY KPRC WTAM

**5:30-5:45 Little Orphan Annie**  
WJZ WBZ WBZA WBAL KDKA WGAR

**6:05-6:30 Black and Gold Room Orchestra**  
WEAF WCAE WCSH WWJ WJAR WBEN

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

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

**7:30-7:45 Phil Cook — Quaker Man**  
WJZ WBZ WBZA WHAM KDKA WREN  
KWK WTMJ WEBC KOA KSL KGO  
KECA KGW WRC KOMO KHQ KFSD  
KTRAR WGAR WSMB WSB WPTF WJAX  
WIOD WFLA WHAS WSM WMC WJDX  
KTHS KPRC WOAI

**11:00-11:15 Amos 'n' Andy**  
WMAQ KWK WREN WDAF WTMJ KECA  
KSL WHAS WSM WSB WKY WENR  
KSTP WSMB WJDX KTHS KPRC WEBC  
KGO KHQ KOMO KGW KFSD WOAI  
WMC KOA KFAB WBAP

**11:15-11:30 Arthur Pryor's Cremona Military Band**  
WADC WKBW WKRC WHK WOWO KMBC  
WLBW KOIL WJAS KMOX WFBL WSPD  
WGST WBCM WBRC WDD WRR KLZ  
KAIN KOL KFPY WHP KTRH WFBM  
KLRA WCCO WISN WREC WCAH WLAC  
WDSU KFJF KSCJ K TSA KDYL WIBW  
WMT KFJF WKBN WNAX KOH WTAQ  
WLAP WOKO WACO

#### Sunday

**1:00-2:00 National Oratorio Society**  
WEAF WJAR WCSH WRC WGY WCAE  
WTAM WWJ KSD WOW WOC WHO  
WDAF CKGW WTMJ KSTP WEBC WHAS  
KPO KOA KGW KFSD KOMO KECA  
WBEN KGO CFCF

**1:30-2:00 Gypsy Trail**  
WABC WFBL WHEC WGR WDRC WPG  
WHP WJAS WMAL WTAR WDBJ WADC  
WAIU WBT WXYZ WBCM WSPD WISN  
WTAQ WCCO KSCJ WMT KMBC KOIL  
KFJF KLZ CFRB WAAB

**2:30-3:00 Yeast Foamers**  
WJZ WBZ WBZA WBAL WGAR WJR  
WLW KDKA KYW KWK WREN KFAB  
WTMJ KSTP WEBC WRVA WPTF WIOD  
WFLA WSUN WJAX WHAS WSM WMC  
WSB WAPI WJDX WSMB KTHS KVOO



KVOO KPRC WFAA WOAI WDAY KFYR  
 KWK WKY

**10:00-10:30 Royal's Poet of the Organ**  
 WABC WFBL WKBW WEAN WNAC WCAU  
 WJAS WLBW WMAL WCAO WADC WHK  
 WKRC WGST WXYZ WSPD WLAC WOWO  
 WBBM KMOX KMBC KOIL KLZ KDYL  
 KOL KFPY KOIN KHJ KFRC

**10:15-10:30 World Adventures with Floyd Gibbons**  
 WJZ WBZ WBZA WBAL KDKA WJR  
 WGAR WENR KWK WREN

**10:15-10:45 National Dairy Productions**  
 WEAJ WEEI WJAR WTIC WTAG WCSH  
 WFI WRC WGY WBEN WCAE WTAM  
 WWJ WSAI WOV WDAF WSB WAPI  
 WSMB WJDX WRVA WJAX WIOD WFLA  
 WSUN WHAS WSM WMC

**10:30-10:45 Fortune Builders**  
 WABC WFBL WKBW WEAN WDRS WNAC  
 WCAU WJAS WMAL WCAO WADC WHK  
 WKRC WGST WXYZ WSPD WDSU WOWO  
 WFBM WBBM WCCO KMOX KMBC KLRA  
 KRLD KLZ KDYL KOL KFPY KOIN  
 KHJ KFRC

**10:30-11:00 Kellogg Slumber Music**  
 WJZ WBZ WBZA WHAM KDKA WJR  
 KWK WENR WREN WBAL WLW

**10:45-11:00 Star Reveries**  
 WKBW WPG WJAS WLBW WCAO WTAR  
 WDBJ WADC WHK WKRC WCAH WKBN  
 WWNC WBT WGST WTOG WQAM WDDB  
 WDAE WXYZ WSPD WLAP WDOB WREC  
 WLAC WBRC WDSU WISN WTAQ WOWO  
 WFBM WBBM WCCO KSCJ WMT KMBC  
 KLRA WNAJ KOIL WIBW KFJF KRLD  
 KTRH KTSJ KLZ KDYL KOH KVI  
 KOL KFPY KOIN KHJ KFRC WSAZ  
 WNOX

**10:45-11:15 Sunday at Seth Parker's**  
 WEAJ WEEI WCSH WRC WGY WOW  
 WDAF CKGW WTMJ KSTP WCAE WTAM  
 WJFC WWJ KYW WOW WHO WNBC  
 WJAX WIOD WHAS WSM WJDX KPRC  
 WKY KOA KGO KGW WSB KTAR  
 KFSJ WRVA WBEN WLIT

**11:30-12:00 Russian Cathedral Choir**  
 WEAJ WRC WFJC WWJ WBAP KOA  
 WOW WSB WGY WTAM KSTP WNBC  
 WIOD WHAS WBEN

**11:30-12:00 Around the Samovar**  
 WABC WFBL WKBW WEAN WDRS WNAC  
 WCAU WMAL WCAO WTAR WDBJ WBT  
 WXYZ WSPD WBRC WDSU WTAQ WFBM  
 WBBM WCCO KSCJ WMT KMOX WNAJ  
 KFJF KFRC KLZ

## Monday

**3:00-4:00 Woman's Radio Review**  
 WEAJ WEEI WTIC WJAR WSAI KYW  
 KSD WOC WTAG WCSH WFI WRC  
 WGY WBEN WCAE WTAM WWJ WHO  
 WOW WDAF

**3:30-4:00 Chicago Serenade**  
 WJZ WHAM WJR WLW WLS KDKA  
 WFLA WSUN WMC WAPI WJAX WGAR

**4:00-4:30 Dance Orchestra**  
 WJZ WBAL KSTP KTAR KOA KGO  
 KWK KFSJ WHAM WSM WSB WSMB  
 WMC WBZ WBZA WGAR KYW

**4:00-4:30 U. S. Army Band**  
 WABC WLBZ WEAN WNAC WORC WPG  
 WCAU WLBW WMAL WCAO WTAR WDBJ  
 WAIU WWNC WXYZ WBCM WSPD WDOD  
 WREC WLAC WBBM WCCO KSCJ WMT  
 KMOX KMBC WDAY KOIL KFJF KRLD  
 KTRH KLZ KOL KFRC CFRB

**4:30-5:00 Wardman Park Hotel Orchestra**  
 WABC WLBZ WEAN WNAC WORC WPG  
 WFAN WHP WLBW WMAL WCAO WTAR  
 WDBJ WKRC WAIU WWNC WXYZ WBCM  
 WSPD WDOD WREC WLAC WBRC WCCO  
 KSCJ KMOX KMBC WDAY KOIL WIBM

KFJF KRLD KTRH KTSJ KLZ KOL  
 KPRC CFRB

**6:15-6:45 Mormon Tabernacle Choir**  
 WJZ WBAL WSM KWK KOA KSL  
 KGO KOMO KFAB KGW CKGW KSTP  
 KTAR KPO WHAS WAPI KFSJ WRC  
 WSMB

**7:00-7:15 Current Events—Kaltenborn**  
 WDBJ WKRC WWNC WXYZ WBCM WDOD  
 WBRC KSCJ WMT WDAY KOIL WABC  
 WHEC WLBZ WORC WHP WJAS WLBW  
 WMAL WCAO WTAR WIBW KFJF  
 KTRH KOL KFRC

**7:15-7:30 The World Today**  
 WEAJ WFI WSAI WOW KGO KECA  
 KGW KOMO KFSJ KTHS WENR WFAA  
 KSD KOA

**7:15-7:30 Tastyest Jesters**  
 WJZ WKY WHAM WBZ WBZA WREN  
 KDKA WRC WGAR

**8:00-8:15 "How's Business?"**  
 WEAJ WJAX WJAR WRC KSD WCAE  
 WWJ KOMO WSAI WDAF WJDX KGO  
 KVOO KECA KHQ WFLA WSUN WHAS  
 WBC WSM KGW KTAR KFSJ KSL  
 WMC

**8:15-8:30 Pennzoil Pete**  
 WEAJ WEEI WTIC WJAR WCSH WLIT  
 WRC WBEN WCAE WTAM WSAI KYW  
 KSD WOC WHO WHAS WSM WMC  
 WSB WDAF WBC WRVA WPTF WFLA  
 WSUN WIOD WSMB WJDX WKY KTHS  
 WFAA WOI CKGW WTMJ WWJ KSTP

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

**8:30-9:00 A. & P. Gypsies**  
 WEAJ WEEI WTAG WJAR WTIC WCSH  
 WLIT WRC WGY WCAE WWJ WSAI  
 WGN KSD WOC WDAF WTAM WOW  
 WHO WBEN

**8:30-9:00 Gold Medal Express**  
 WJZ WBZ WBZA KDKA WJAX WIOD  
 WFLA WSUN WGAR WJR WLW WOAI  
 WKY KYW KWK WREN KOA KSL  
 KFAB WRVA WPTF WBAL

**9:00-9:30 Maytag Orchestra**  
 WJZ WBZ WBZA WHAM KDKA WJR  
 KWK KYW KSTP WBC KTHS WKY  
 WOI KOA KSL KGO KECA KGW  
 KHQ KOMO KVOO WLW WFAA KPRC  
 WGAR

**9:00-9:30 The Three Bakers**  
 WABC WFBL WHEC WKBW WLBZ WEAN  
 WDRS WNAC WORC WPG WCAU WHP  
 WJAS WLBW WMAL WCAO WTAR WDBJ  
 WADC WHK WKRC WWNC WBT WGST  
 WTOG WQAM WDDB WDAE WXYZ WBCM  
 WSPD WDOD WREC WLAC WBRC WDSU  
 WISN WOWO WFBM WMAQ WCCO KSCJ  
 WMT KMOX KMBC KLRA WDAY WNAJ  
 KOIL WIBW KFH KFJF WRR KTRH  
 KTSJ KLZ KDYL KOL KFPY KOIN  
 KHJ KFRC

**9:30-10:00 Chesebrough Real Folks**  
 WJZ WBZ WBZA WHAM KDKA WLW  
 KWK KYW CKGW WJR WGAR

**9:30-10:00 General Motors Family Party**  
 WEAJ WEEI WJAR WCSH WTAG WLIT  
 WRC WGY WCAE WTAM WWJ WGN  
 KSD WOC WOW WSAI WDAF KSTP  
 WTMJ WHAS WSM WMC WSB KPRC  
 WJAX WFAA WOI WKY KOA KSL  
 KGO KGW KFI KOMO KHQ WTIC  
 WHO WBEN WCAE

**9:30-10:00 Bourgeois**  
 WABC WFBL WKBW WEAN WNAC WCAU  
 WJAS WLBW WMAL WCAO WADC WHK  
 WKRC WBT WXYZ WSPD WOWO WBBM  
 KMOX KMBC KOIL



**10:00-10:30 Robert Burns Panatela Program**  
 WABC WFBL WKBW WEAN WDRC WNAC  
 WCAU WJAS WMAL WCAO WADC WHK  
 WKRC WXYZ WSPD WOWO WFBM WMAQ  
 WCCO KMOX KMBC KOIL KFJF KRDL  
 KTRH KTSA KLZ KDYL KVI KOL  
 KFPY KOIN KHJ KFRC

**10:00-10:30 Stromberg-Carlson Program**  
 WJZ WBZ WBZA WHAM KDKA KYW  
 KWK WREN WEBC WRVA WJAX WIOD  
 WHAS WSM WMC WSB WSMB WOAI  
 KOA KPRC KGO KFI WKY KGW  
 KHQ KOMO WJDX WFLA WSUN WJR  
 KTAR KFSD WAPI WKY WGAR

**10:00-10:30 Adventures of Sherlock Holmes**  
 WEAJ WJAR WCSH WWJ WTAG WEEI  
 WLIT WTAM WSAI WRC WGN WOC  
 WHO WBEN WCAE

**10:30-11:00 Empire Builders**  
 WJZ WBZ WBZA WHAM KDKA WJR  
 WLW KYW KWK WREN WTMJ WOAI  
 KSTP WEBC KOA KSL KGO KECA  
 KGW KOMO KHQ KTAR KFSD WKY  
 WBAP KPRC WGAR

**10:30-11:00 Symphonic Rhythm Makers**  
 WEAJ WJAR WTAG WRC WCAE WTAM  
 WWJ WJDX WGY CFCF WEEI WENR

**10:30-11:00 Savino Tone Pictures**  
 WABC WFBL WEAN WDRC WNAC WORC  
 WJAS WLBW WMAL WCAO WTAR WDBJ  
 WADC WHK WNBC WBCM WDOD WREC  
 WBRC WISN WTAQ KSCJ WMT KMBC  
 KLRA WNAX KFJF KTSA KFPY CFRB  
 WOKO

**11:00-11:15 Paul Tremaine and His Orchestra**  
 WABC WFBL WKBW WDRC WORC WCAU  
 WLBW WMAL WCAO WTAR WDBJ WADC  
 WBT WBCM WSPD WLAC WBRC WDSU  
 WISN WTAQ WOWO WFBM WCCO KSCJ  
 WMT WNAX KOIL KFJF WACO KHZ  
 CFRB WAAB

**11:00-11:30 Florence Richardson and Orchestra**  
 WEAJ WCAE WOW (WSAI off 11:15) (WJDX  
 WMC WSB KSD WSM on 11:15) CFCF  
 WIOD

**11:30-12:00 Hal Kemp and His Orchestra**  
 WEAJ WEEI (WTAM on 11:35) KSD WOC  
 WHO WIOD (WOW WDAF WTMJ on 11:45)  
 WDAY WAPI WGY KOA KSTP WEBC

## Tuesday

**10:15-10:30 Through the Looking Glass**  
 WJZ WBZ WBZA WHAM WLW WREN  
 KFKX KDKA KWK CKGW KFAB WKY  
 KVOO WOAI WBAP WGAR

**4:00-4:30 Italian Idyll**  
 WABC WLBZ WEAN WNAC WORC WPG  
 WCAU WLBW WMAL WCAO WTAR WDBJ  
 WKRC WAIU WNBC WXYZ WSPD WDOD  
 WREC WLAC WBRC WBBM WCCO KSCJ  
 WMT KMOX KMBC WDAY KOIL KFJF  
 KTRH KTSA KLZ KFRC CFRB

**5:00-5:30 Pond's - Leo Reisman's Orchestra**  
 WEAJ WRC KSD WTAG WWJ WBEN  
 WCSH WEEI WAPI WTC WJAR WSAI  
 WOC WTAM KYW WHO WOW WDAF  
 CKGW WSB WCAE WSM WLIT

**6:30-6:45 'Who's Behind the Name?'**  
 WEAJ WFI WRC WCAE KOA KSD  
 KECA WIBO KGO KOMO WOC WHO  
 WSMB KGW KFSD WTAM WJDX KPRC

**7:00-7:15 Political Situation in Washington**  
 WABC WGR WNAC WCAU WJAS WLBW  
 WMAL WTAR WNBC WXYZ WSPD WDOD  
 WTAQ KFH KRDL WACO KOH KFRC

**7:00-7:30 Voter's Service**  
 WEAJ WJAR WCSH WFI WBEN WCAE  
 WWJ WOC WHO WOW WOAI KOMO  
 KGO WTAG KSTP WEBC KGW WSAI  
 KOA WTC

**7:30-7:45 Winegar's Barn Orchestra**  
 WDRC WORC WHP WJAS WLBW WDBJ  
 WAIU WKBN WNBC WXYZ WDOD WREC

WLAC WBRC WDSU WISN WTAQ WGL  
 KSCJ WMT KLRA KFH KDYL KFPY  
 KFRC CFRB

**7:30-8:00 Soconyland Sketches**  
 WEAJ WEEI WJAR WTAG WCSH WGY  
 WBEN

**7:45-8:00 Dr. Scholl's Ramblers**  
 WJZ WENR KFAB WCKY KWK WEBC  
 WRVA WREN WHAM KFSD WSMB WJDX  
 KTHS WBAP WOAI KOA KSL KGO  
 WPTF WJAX WFLA WSUN WSM WMC  
 WSB WDAY KFYP KFI KOMO KHQ  
 WHAS KVOO WKY KTAR

**8:00-8:30 Paul Whiteman's Paint Men**  
 WJZ WBZ WBZA WHAM KDKA WTMJ  
 WJR WLW KYW KWK WREN WRVA  
 WJAX KGW KOMO KHQ KFSD KTAR  
 WGAR WGY KOA WIOD WHAS WSM  
 WMC WSB WJDX WSMB WOAI KFAB  
 KGO KECA WBAL WPTF

**8:00-8:30 Blackstone Plantation**  
 WEAJ WCAE WTAM WWJ WSAI WIBO  
 KSD WOC WHO WOW WDAF KOA  
 WEEI WJAR WTAG WCSH WFI WRC  
 WGY WBEN

**8:15-8:30 Old Gold Character Readings**  
 WABC WFBL WHEC WGR WLBZ WEAN  
 WDRC WNAC WORC WPG WCAU WHP  
 WJAS WLBW WCAO WTAR WDBJ WADC  
 WKRC WAIU WKBN WNBC WBT WGST  
 WTOC WQAM WDBO WDAE WXYZ WBCM  
 WSPD WDOD WREC WLAC WBRC WDSU  
 WISN WJDX WCCO KSCJ WMT KMOX  
 KMBC KLRA WDAY WNAX KOIL WIBW  
 KFH KFJF WRR KTRH KTSA KLZ  
 KDYL KVI KOL KFPY KOIN KHJ  
 KFRC

**8:30-9:00 Florshiem Frolic**  
 WEAJ WTAG WFI WRC WGY WCAE  
 WWJ WSAI WGN KSD WDAF WEBC  
 WRVA KVOO WJAX WIOD WSUN WFLA  
 WSM WMC WSB WSMB WJDX KPRC  
 WOAI WKY KOA KSL KTHS WJAR  
 WHAS WCSH WBAP WBEN KSTP

**8:45-9:00 Round Towners with Irene Beasley**  
 WABC WFBL WHEC WGR WDRC WORC  
 WHP WJAS WLBW WCAO WTAR WDBJ  
 WLAC WDSU WISN WTAQ WOWO KSCJ  
 KMOX KLZ CFRB

**9:00-9:30 Household Celebrities Program**  
 WJZ WBZ WBZA WBAL WHAM KDKA  
 WGN KWK WREN WJR

**9:00-9:30 McKesson Musical Magazine**  
 WEAJ WEEI WJAR WTAG WCSH WFI  
 WRC WBEN WTAM WSAI KSD WOW  
 WTMJ WEBC WRVA WIOD WFLA WSUN  
 WSM WMC WSB WSMB WJDX KPRC  
 WKY KOA KSL KGO KECA KTAR  
 KFSD KGW KOMO KHQ KVOO WOAI  
 KYW

**9:00-9:30 Henry-George**  
 WABC WFBL WGR WEAN WDRC WNAC  
 WCAU WJAS WMAL WCAO WADC WHK  
 WKRC WXYZ WSPD WISN WOWO WFBM  
 WBBM WCCO KMOX KMBC KOIL KFH

**9:30-10:00 The Philco Symphony Concert**  
 WABC WFBL WHEC WKBW WEAN WDRC  
 WNAC WCAU WJAS WMAL WCAO WTAR  
 WADC WHK WKRC WGST WXYZ WSPD  
 WDOD WREC WLAC WBRC WDSU WISN  
 WOWO WFBM WMAQ WCCO WMT KMOX  
 KMBC KOIL KFH KFJF KRDL KTRH  
 KTSA CFRB

**9:30-10:00 Death Valley Days**  
 WJZ WBAL WCKY KWK WBZ WBZA  
 WHAM KDKA WENR

**9:30-10:00 Happy Wonder Bakers**  
 WEAJ WJAR WEEI WTAG WCSH WRC  
 WGY WCAE WTAM WWJ WSAI WIBO  
 KSD WHO WOW WTMJ KSTP WEBC  
 KVOO WKY KOA KSL KGO KOMO  
 KECA KGW KHQ WBAP WOC WRVA  
 WFI WDAF WBEN KPRC

**10:00-10:15 Graybar — Mr. and Mrs.**  
 WADC WCAO WNAC WKBW WBBM WKRC  
 WHK WXYZ WOWO KMBC WABC WLBW  
 KOIL WCAU WJAS WEAN KMOX WFBL  
 WSPD WMAL WWNC WGST WBRK KRLD  
 KLZ KTRH WFBM WLRA WCCO WISN  
 WREC WTAR WLAC WDSU KFJF WHEC  
 WDBJ K TSA KDYL KFH WKBN KHJ  
 KOIN KFRC KOL KFPY

**10:00-11:00 Lucky Strike Dance Orchestra**  
 WEAFF WEEI WJAR WTAG WCSH WFI  
 WRC WCAE WWJ WSAI KSD WOC  
 WHO WTMJ WEBC WRVA WJAX WIOD  
 WFLA WSUN WHAS WSM WMC WSB  
 WSMB WJDX WOAI WKY KOA KGO  
 KECA KGW KHQ KOMO K TAR KFSD  
 WIBO WDAF WTAM WAPI WBEN

**10:15-10:30 Blue Ribbon Malt Jester**  
 WABC WFBL WGR WEAN WDRC WNAC  
 WCAU WJAS WMAL WCAO WADC WHK  
 WKRC WBT WXYZ WSPD WLAC WBRK  
 WDSU WOWO WMAQ WCCO KMBC KLRA  
 KOIL KFH KRLD K TSA KLZ

**10:30-10:45 Clara, Lu and Em**  
 WJZ WBAL WHAM KDKA WJR WLW  
 KWK WREN WGAR WBZ WBZA WGN

**10:30-11:00 Paramount Publix Playhouse**  
 WABC WFBL WHEC WKBW WLBZ WEAN  
 WDRC WNAC WPG WCAU WHP WJAS  
 WMAL WCAO WTAR WDBJ WADC WHK  
 WKRC WKBN WWNC WBT WGST WTOP  
 WQAM WDBO WDAE WXYZ WBCM WSPD  
 WDOD WREC WLAC WBRK WDSU WISN  
 WOWO WFBM WBBM WCCO KSCJ WMT  
 KMOX KLRA WDAY WNAX KOIL WIBW  
 KFH KFJF KRLD KTRH K TSA KLZ  
 KDYL KOL KFPY KOIN KHJ KFRC  
 KNX CFRB

**11:00-11:15 Fletcher Henderson and his Orchestra**  
 WABC WFBL WHEC WDRC WORC WCAU  
 WJAS WLBW WCAO WTAR WDBJ WADC  
 WKBN WWNC WXYZ WBCM WDOD WREC  
 WLAC WBRK WDSU WISN WTAQ KSCJ  
 WMT KMOX KLRA WNAX KFH KRLD  
 K TSA KDYL KFPY

**11:15-12:00 Cab Calloway and his Orchestra**  
 WEAFF WFI WOC WHO WOV KSD  
 WTIC WBEN WMC

## Wednesday

**7:00-7:15 Morton Downey**  
 WABC WHEC WLBZ WEAN WNAC WORC  
 WCAU WHP WJAS WLBW WMAL WCAO  
 WTAR WDBJ WKRC WAIU WWNC WXYZ  
 WBCM WDOD WLAC WBRK KSCJ WDAY  
 WIBW KFJF KTRH KOL KFRC

**7:05-7:15 Gene Austin, tenor**  
 WEAFF WBEN WCAE WOC KGO WWJ  
 WENR WEBC WSMB WHO WDAY

**7:15-7:30 Science Speaks**  
 WEAFF KFI KPO KGO WFI KOMO  
 KTAR KFSD WJAR WENR

**7:30-7:45 Evangeline Adams, Astrologer**  
 WABC WFBL WHEC WGR WEAN WDRC  
 WNAC WCAU WCAO WDBJ WTAR WADC  
 WHK WKRC WAIU WWNC WGST WXYZ  
 WSPD WDOD WREC WLAC WBRK WDSU  
 WISN WFBM WGL WCCO KMOX KMBC  
 KLRA KOIL KFJF WRR KTRH CFRB

**7:30-7:45 Boscul Moments with Mme. Alda**  
 WEAFF WLIT WBEN WCAE WSAI WRC  
 WTAM WWJ WGY

**7:45-8:00 "Back in the News in Washington"**  
 WEAFF WRC KOA KECA KGO WGY  
 WCAE WFJC WBEN WRVA WKY KOMO  
 KFSD WSAI WIBO KSD WOC WHO  
 WOW WDAF WAPI

**7:45-8:00 Daddy and Rollo**  
 WABC WFBL WKBW WEAN WNAC WCAU  
 WJAS WLBW WMAL WCAO WADC WKRC  
 WXYZ WSPD WREC WISN WFBM WGL  
 WMAQ WCCO KMOX KOIL WRHM

**8:00-8:15 Listerine Program—Bobby Jones**  
 WEAFF WEEI WTIC WJAR WTAG WCSH  
 WLIT WRC WBEN WTAM WWJ WSAI  
 KSD WOC WHO WOV WPTF WIOD  
 WFLA WSUN WHAS WSM WSB WSMB  
 WJDX WFAA WOAI KOA

**8:15-8:30 Radiotron Varieties**  
 WEAFF WTIC WJAR WTAG WRC WBEN  
 WTAM WSAI WIBO KSD WOV WIOD  
 WSM WSB WSMB WJDX WOAI KOA  
 KHQ KOMO KFSD K TAR KECA KSL  
 KGO KOA KVOO

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

**8:30-9:00 The Sunkist Musical Cocktail**  
 WABC WFBL WGR WEAN WDRC WNAC  
 WFAN WCAU WJAS WMAL WCAO WADC  
 WHK WKRC WXYZ WSPD WOV WJDX  
 KMOX KMBC KOIL KLZ KDYL KOL  
 KFPY KOIN KHJ KFRC

**8:30-9:00 Canadian Pacific Musical Crusaders**  
 WJZ WGAR WBZ WBZA WHAM KDKA  
 KYW KWK WCKY WREN KFAB CKGW

**9:00-9:30 The First Nighter**  
 WJZ KDKA WLS WHAM WGAR WREN  
 WBAL KDKA

**9:00-9:30 Gold Medal Fast Freight**  
 WABC WFBL WKBW WEAN WDRC WNAC  
 WCAU WJAS WMAL WCAO WTAR WDBJ  
 WADC WHK WKRC WCAH WXYZ WSPD  
 WLAP WREC WLAC WISN WOWO WFBM  
 WMAQ WCCO KSCJ KMOX KMBC KOIL  
 KFH KFJF KRLD KLZ KDYL KOL  
 KFPY KOIN KHJ KFRC K MJ

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

**9:30-10:00 Arabesque — Desert Play**  
 WABC WFBL WDRC WORC WPG WJAS  
 WLBW WMAL WDBJ WWNC WXYZ WBCM  
 WDOD WREC WDSU WISN WTAQ WFBM  
 WMT KMOX KLRA WNAX KFJF K TSA  
 KLZ KDYL KFPY CFRB

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

**10:00-10:15 Vitality Personalities**  
 WABC WADC WJAS WNAC WKBW WBBM  
 WKRC WBT WXYZ WOWO KMBC KOIL  
 WCAU WEAN KMOX WFBL WSPD WMAL  
 WDRC WGST WBRK WRR KTRH WFBM  
 KLRA WISN WCAH WLAC WDSU KFJF  
 K TSA KDYL KHJ KOIN KFRC KOL  
 KFPY

**10:15-10:30 Peter Pan Forecasts**  
 WABC WFBL WKBW WEAN WDRC WNAC  
 WCAU WJAS WMAL WCAO WADC WHK  
 WKRC WXYZ WSPD WOWO WBBM KMOX  
 KMBC KOIL KRLD CFRB

**10:30-10:45 McAleer Polishers**  
 WABC WFBL WKBW WLBZ WEAN WDRC  
 WNAC WORC WPG WCAU WJAS WMAL  
 WCAO WTAR WADC WHK WKRC WCAH  
 WBT WGST WXYZ WSPD WREC WLAC  
 WDSU WISN WOWO WFBM WMAQ WCCO  
 KSCJ WMT KMOX KMBC KLRA KOIL  
 KFJF WRR KTRH K TSA KLZ  
 KDYL CFRB CKAC WOKO

**10:30-11:00 Coca Cola Program**  
 WEAF WEEI WTIC WJAR WTAG WCSH  
 WLIT WRC WCAE WSAI WOC WECB  
 WKY KYW KSD WRVA KSTP WJAX  
 WIOD WSM WSMB KTHS KPRC WOAI  
 KOA KSL KGO KECA KGW KHQ  
 KOMO WJDX WGY WDAF WHAS WTAM  
 WHO WOV KFSD WMC WSB WWJ  
 WAPI WBEN

**10:45-11:15 Columbia Concerts Program**  
 WABC WFBL WEAN WDRC WORC WPG  
 WIP-WFAN WCAU WJAS WLBW WMAL  
 WCAO WTAR WDBJ WADC WHK WKBN  
 WWNC WXYZ WBCMN WDOD WREC WLAC  
 WBRC WDSU WISN WTAQ WOWO WFBM  
 KSCJ WMT KMOX KMBC KLRA WNAX  
 KFH KFJF KRDL K TSA KDYL KFPY  
 CFRB

**11:00-11:15 "The Voices of Radio Digest"**  
 WEAF WFLA WSUN KSD WTAM WOC  
 WHO WRC WEEI WJAR WCSH WGY  
 WIBO WJAX WIOD

**11:15-11:30 Vincent Lopez and His Orchestra**  
 WEAF WRC WCAE KSD WGY WLIT  
 WOC WHO (WJAX WFLA WSUN off 11:15)  
 (WAPI WDAF on 11:15)

**11:30-12:00 Will Osborne and His Orchestra**  
 WABC WFBL WKBW WDRC WORC WPG  
 WLBW WMAL WCAO WTAR WDBJ WADC  
 WBT WXYZ WBCMN WSPD WLAC WBRC  
 WDSU WISN WTAQ WFBM WCCO KSCJ  
 WMT KMBC WNAX KFJF KLZ CFRB  
 WAAB

**Thursday**

**10:00-10:15 Ceresota Program**  
 WEAF WJAR WTAG WCSH WFI WRC  
 WGY WCAE WWJ WSAI KYW KSTP  
 WRVA WTAM WBEN WOC WHO

**3:30-4:00 Chicago Serenade**  
 WJZ KDKA WJR WREN KFAB KOA  
 WLW WSM WMC WAPI WFLA WSUN  
 CKGW

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

**5:00-5:15 "Stories of the Old South"**  
 WJZ WHAM WLW WENR KWK WREN

**5:30-5:45 Rinse Talkie**  
 WEAF WEEI WTIC WTAG WJAR WLIT  
 WRC WGY WBEN WCAE WTAM WWJ  
 KSD WOC WHO WSAI KYW

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

**7:30-7:45 St. Moritz Orchestra**  
 WEAN WDRC WHP WJAS WLBW WMAL  
 WDBJ WKBW WBT WJAX WREC WBCMN  
 WLAC WBRC WISN WFBM WGL KSCJ  
 KMOX WDAY WNAX KOIL KFJF KTRH  
 KVI KFPY KFRC

**7:30-8:00 Niagara-Hudson Program**  
 WEAF WGY WSYR WBEN WTIC

**8:00-8:15 Dixie Spiritual Singers**  
 WJZ WBZ WBZA KFAB KWK WREN  
 WBAL KDKA WGAR WJR WCKY WLS

**8:00-9:00 Fleischmann Hour - Rudy Vallee**  
 WEAF WEEI WTAG WJAX WIOD WJDX  
 WJAR WCSH WFI WRC WGY WCAE  
 WHO WOV WDAF WWJ WHAS K TAR  
 WMC WSB WSMB WECB KOA WRVA  
 KBL KOMO WOAI WSM WOC WAPI  
 KGO KHQ KECA KSD CKGW WTAM  
 KGW KSTP WGN KPRC WBEN (WTMJ  
 KTHS WSAI WBAP WKY of 8:30)

**8:15-8:30 Rin-Tin-Tin Thriller**  
 WJZ WBZ WBZA WBAL KDKA WGAR  
 WJR KWK WREN WLW KYW KFAB

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

**8:30-9:00 Salada Salon Orchestra**  
 WJZ WBZ WBZA WBAL WHAM KDKA  
 WJR WIBO KWK WREN KFAB WGAR

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

**9:00-9:15 Premier Salad Dressers**  
 WABC WHEC WKBW WPG WJAS WLBW  
 WMAL WCAO WTAR WWNC WXYZ WSPD  
 WDOD WLAC WDSU WISN WTAQ KMBC  
 KFH KRDL WACO KLZ KOH

**9:00-9:30 Blackstone Plantation**  
 WJZ WBZ WBZA WBAL KDKA WCKY  
 WHAM

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

**9:15-9:30 Old Gold Character Readings**  
 WABC WFBL WHEC WGR WLBZ WEAN  
 WDRC WNAC WORC WPG WCAU WHP  
 WJAS WLBW WCAO WTAR WDBJ WADC  
 WHK WKRC WAIU WKBW WWNC WBT  
 WGST WTOC WQAM WDBO WDAE WXYZ  
 WBCMN WSPD WDOD WREC WLAC WBRC  
 WDSU WISN WOWO WFBM WBBM WCCO  
 KSCJ WMT KMOX KMBC KLRA WDAY  
 WNAX KOIL WIBW KFH KFJF KRDL  
 K TSA KLZ KDYL KVI KOL KFPY  
 KOIN KHJ KFRC

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

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

**9:30-10:00 Maxwell House Ensemble**  
 WJZ WBZ WBZA WBAL WLW KSTP  
 WKY WTMJ WECB WHAS WSM WJAX  
 KPRC KOA WRVA WSB WBAP KYW  
 KWK WREN WIOD WJR WSMB WOAI  
 KECA KGW KOMO KHQ WAPI WMC  
 WHAM KDKA KSL KGO

**10:00-10:30 The Lutheran Hour**  
 WABC WFBL WKBW WEAN WDRC WNAC  
 WCAU WJAS WMAL WCAO WADC WHK  
 WKRC WXYZ WSPD WDSU WOWO WBBM  
 WCCO WMT KMOX KMBC WNAX KOIL  
 KRDL KLZ KDYL KOL KFPY KOIN  
 KHJ KFRC

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

**11:30-12:00 Cab Calloway and His Orchestra**  
 WEAF WWJ WOW WFI KSTP WJDX  
 WDAF WTAM WOC WHO WIBO WGY  
 WCAE

**11:30-12:00 Radio Roundup**  
 WABC WKBW WEAN WNAC WPG WCAU  
 WLBW WMAL WCAO WTAR WADC WWNC  
 WXYZ WSPD WDOD WLAC WDSU WISN  
 WTAQ WCCO KMBC KFH WACO WCKY  
 CFRB

**12:00-12:30 Ozzie Nelson and His Orchestra**  
 WABC WFBL WKBW WNAC WPG WCAU  
 WCAO WDBJ WADC WBT WXYZ WBCMN  
 WSPD WLAC WBRC WISN WTAQ WFBM

WCCO KSCJ WMT KMOX KMBC WNAX  
KFH KFJF KLZ

**Friday**

**4:00-4:45 U. S. Marine Band Orchestra**  
WABC WFBL WGR WDRC WORC WPG  
WCAU WMAL WCAO WTAR WDBJ WHK  
WAIU WBT WXYZ WBCM WSPD WLAC  
WBRC WDSU WISN WTAQ WFBM KSCJ  
WMT KMBC KOIL KFJF WACO KLZ  
CFRB WAAB

**4:15-5:15 Radio Guild**  
WJZ WBAL WHAM WRC CKGW WPTF  
WJAX KGO KFI KOMO KFSD KTAR  
KFAB KSTP WEBC WSM WMC WREN  
KSL KOA KYW KWK WJR WGAR  
WLW WTMJ WSB WSBM KVOO WOAI  
WKY KPRC WRVA WJDX

**5:00-5:30 Light Opera Gems**  
WABC WKBW WGR WDRC WHP WJAS  
WLBW WCAO WTAR WAIU WKBN WBT  
WXYZ WBCM WSPD WREC WLAC WBRC  
WISN WGL WCCO KSCJ KMOX WDAY  
KOIL KFH KFJF KRLD KTRH K TSA  
KLZ CFRB

**5:30-5:45 Benjamin Moore Triangle**  
WEAF WTAG WJAR WCSH WLIT WRC  
WGY WBEN WCAE WTAM WWJ WSAI  
KSD WDAF KSTP WEBC WRVA WPTF  
KFYR WJAX WIOD WFLA WSUN KVOO  
KPRC WOAI WKY WEEI WTIC KYW  
WDAY

**6:00-6:30 Winegar's Barn Orchestra**  
WABC WGR WFAW WJAS WLBW WCAO  
WTAR WADC WNNC WDOD WLAC WDSU  
WISN WTAQ WBBM KFH KRLD KLZ  
KOH KFRC

**7:00-8:00 Major Bowes' Family**  
WEAF WJAR WCSH WLIT WBEN WCAE  
WWJ WENR WOC WHO KSTP WHAS  
WMC WSB WSBM KOA KGO KECA  
KGW KOMO KTAR

**7:30-7:45 Red Goose Adventures**  
WGR WCAU WJAS WLBW WCAO WTAR  
WDBJ WADC WKRC WAIU WKBN WNNC  
WBT WTOC WQAM WDBO WDAE WXYZ  
WBCM WDOD WREC WLAC WBRC WDSU  
WISN WTAQ WOWO WFBM WBBM WCCO  
KSCJ WMT KMOX KMBC KLRA WNAX  
KOIL WIBW KFH KFJF WRR KTRH  
KLZ KDYL KOH WNOX

**7:45-8:00 Kate Smith and Her Swanee Music**  
WABC WHEC WGR WORC WHP WJAS  
WLBW WTAR WDBJ WXYZ WBCM WLAC  
WBRC WDSU WISN WTAQ WFBM WCCO  
KSCJ KMBC KOIL KFJF CFRB WAAB

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

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

**8:30-9:00 The Dutch Masters**  
WABC WFBL WGR WEAN WDRC WNAC  
WCAU WJAS WMAL WCAO WADC WKRC  
WXYZ WSPD WBBM WCCO KMOX KMBC  
KOIL

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

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

**9:00-10:00 True Story Hour**

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

**9:30-9:45 American Pro-Art String Quartet**  
WEAF WJAR WTAG WCSH WRC WLIT  
WGY WBEN WCAE

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

**9:45-10:00 "Saki Get Rich"**  
WEAF WJAR WTAG WCSH WRC WLIT  
WGY WCAE KSD WBEN WENR

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

**10:00-10:30 Kodak Week-End Program**  
WEAF WJAR WCSH WCAE WWJ KSD  
WSAI WRC WBEN WLIT WTAG WGY  
WTAM WOW WENR KGO KGW KOMO  
KHQ KOA KSL KTAR KFSD KFI

**10:00-10:30 Van Heusen Program**  
WABC WFBL WKBW WEAN WDRC WNAC  
WCAU WJAS WMAL WCAO WADC WHK  
WKRC WGST WXYZ WSPD WDSU WMAQ  
WCCO KMOX KMBC KOIL

**10:30-11:00 The March of Time**  
WABC WFBL WKBW WEAN WDRC WNAC  
WCAU WJAS WMAL WCAO WADC WHK  
WKRC WXYZ WSPD WOWO WBBM KMOX  
KMBC KOIL

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

**10:45-11:00 The Ragamuffins**  
WJZ WHAM WGAR WREN KDKA WBAL  
WENR CFCF

**11:00-11:15 Fletcher Henderson and his Orchestra**  
WABC WHEC WDRC WORC WCAU WJAS  
WLBW WCAO WTAR WDBJ WKBN WNNC  
WXYZ WBCM WDOD WLAC WBRC WDSU  
WISN WTAQ KSCJ WMT KLRA WNAX  
KFH KFJF KRLD K TSA KLZ KDYL  
KFPY

**11:30-12:00 Vincent Lopez and His Orchestra**  
WEAF WGY CKGW WTIC WOC WHO  
(WRC WWJ off 11:15) (KOA KSTP WDAF  
on 11:45) (KSD on 11:30) (WCFL on 11:15-  
11:30) (WFJC WLIT off 11:30)

**11:30-12:00 Ben Bernie and his Orchestra**  
WABC WFBL WHEC WEAN WDRC WNAC  
WPG WIP-WFAN WLBW WMAL WCAO  
WTAR WDBJ WADC WKBN WNNC WXYZ  
WBCM WDOD WREC WLAC WBRC WDSU  
WISN WTAQ WMT KSCJ KMOX KMOX  
KLRA WNAX KFH K TSA KLZ KDYL

**12:00-1:00 Phil Spitalny and His Orchestra**  
WEAF WRC WGY KYW WMC KPRC

**Saturday**

**1:30-2:00 Savoy Plaza Orchestra**  
WABC WHEC WLBZ WEAN WCAU WHP  
WJAS WMAL WCAO WTAR WDBJ WKRC  
WAIU WNNC WXYZ WBCM WSPD WDOD  
WLAC WBRC WIBW CFRB

**4:30-5:00 Spanish Serenade**  
WABC WLBZ WEAN WNAC WORC WFAW  
WHP WMAL WCAO WTAR WDBJ WKRC  
WAIU WNNC WXYZ WBCM WSPD WDOD  
WREC WLAC WBRC WMAQ WBBM WCCO

**KSCJ WMT KMOX KMBC WDAY KOIL**  
**WIBW KFJF KRLD KTRH KTSA KLZ**  
**KOL KFRC**  
**5:00-5:30 Peter van Steeden and His Orchestra**  
**WJZ WHAM WLW WJDX WBZ WBZA**  
**WGAR**  
**6:00-6:30 Ted Husing's Sportslants**  
**WABC WFBL WFAN WHP WLBW WTAR**  
**WDBJ WADC WHK WAIU WBT WBCM**  
**WREC WLAC WBRW WISN WOWO WBBM**  
**WCCO KSCJ WDAY KOIL WIBW KFH**  
**KFJF KRLD KTRH KTSA KLZ KVI**  
**KOL KFJF KHJ KFRC CFRB**  
**6:00-6:15 Highroad of Adventure**  
**WEAF WTIC WRC WTAM WIBO KSD**  
**WJDX KOA KGO KGW KECA KOMO**  
**WGY KTRAR**  
**6:30-6:45 Smith Ballew and His Orchestra**  
**WJZ WBZ WBZA WRC KFAB KWK**  
**7:00-7:15 Gene Austin, songs**  
**WEAF WFI WCAE WWJ WSB KOA**  
**KGO WCSH WENR WDAY WTIC KFJR**  
**7:00-7:15 Morton Downey with Nat Brusiloff**  
**WABC WHEC WDRC WORC WHP WJAS**  
**WLBW WMAL WTAR WDBJ WADC WHK**  
**WAIU WKBN WWNC WBCM WSPD WDOD**  
**WDSU WTAQ WOWO WFBM KSCJ WMT**  
**KLRA KFH KFJF KRLD KFPY KFRC**  
**CFRB**  
**7:15-7:30 Laws That Safeguard Society**  
**WEAF WJAR WTAG WCSH WFI WGY**  
**WBEN WWJ WOC WHO WOW WEBC**  
**WOAI KOA KGO KECA KOMO KHQ**  
**KTRAR WJDX WEEI**  
**7:15-7:30 Armand Vecsey and his Orchestra**  
**WHEC WGR WEAN WNAC WJAS WLBW**  
**WMAL WCAO WTAR WADC WHK WWNC**  
**WSPD WDOD WDSU WTAQ KFH KRLD**  
**WACO KOH KFRC**  
**7:30-7:45 Rose of the Goldbergs**  
**WJZ WHAM KWK WREN WIBO WSB**  
**WJDX WSBM WAPI WGAR**  
**7:30-8:00 Club Valspar — Ted Lewis**  
**WEAF WTIC WJAR WTAG WCSH WGY**  
**WRC WBEN WCAE WSAI WENR WOC**  
**WHO WDAF CFCF CKGW WEBC WJAX**  
**WIOD WLIT WFLA WSUN WSM WMC**  
**WSB WAPI WJDX WSBM KTHS WOAI**  
**WKY WEEI WTAM WTMJ KSTP (WWJ**  
**on 7:30-7:45) (WHAS off 7:45) (WBAP on 7:45)**  
**8:15-8:30 Ben Alley, Tenor, with Ann Leaf**  
**WABC WKBW WGR WDRC WORC WPG**  
**WFAN WHP WJAS WLBW WMAL WCAO**  
**WDBJ WADC WKBN WBT WXYZ WBCM**  
**WSPD WREC WLAC WBRW WISN WOWO**  
**WFBM WMAQ KSCJ KMOX WDAY WNAX**  
**KOIL KFH KFJF KTRH KTSA KVI**  
**KFPY KHJ KFRC**  
**8:15-8:30 Radiotron Varieties**  
**WEAF WEEI WJAR WTAG WCSH WRC**  
**WGY WBEN WCAE WTAM WWJ WSAI**  
**WIBO KSD WOC WHO WOW WDAF**  
**WTMJ WRVA WJAX WIOD WFLA WSUN**  
**WSM WMC WSB WSMB WJDX KPRC**  
**WOAI WKY KOA KSL KGO KGW**  
**KOMO KHQ KTRAR KFSD**  
**8:30-9:00 The Silver Flute**  
**WEAF WEEI WTAG WCSH WRC WFI**  
**WGY WCAE WWJ WSAI KSD WDAF**  
**WIOD**  
**8:30-9:00 Fuller Man**  
**WJZ WBZ WBZA WBAL WHAM KDKA**  
**WJR KWK WREN KOA CKGW WHAS**  
**KPRC KGO KECA KGW KOMO KFAB**  
**KHQ WIBO WKY WTMJ WMC WEBC**  
**WSB WAPI WSBM WLW WJDX KSTP**  
**8:45-9:00 Mary Charles — Nat Brusiloff's Orchestra**  
**WABC WDRC WORC WCAU WHP WJAS**  
**WLBW WCAO WTAR WDBJ WADC WAIU**  
**WKBN WWNC WXYZ WBCM WSPD WDOD**  
**WREC WLAC WDSU WISN WTAQ WOWO**  
**WFBM KSCJ WMT KMOX KMBC KLRA**  
**WNAX KFH KRLD KLZ KFPY KFRC**  
**CFRB**

**9:00-9:30 Atlantic City Entertains**  
**WABC WKBW WDRC WORC WPG WJAS'**  
**WLBW WMAL WTAR WDBJ WAIU WBCM**  
**WLAC WBRW WDSU WISN WTAQ WGL**  
**KSCJ WMT KMBC KFH KFJF CFRB**  
**WHP**  
**9:00-10:00 General Electric Hour**  
**WEAF WEEI WJAR WTAG WCSH WFI**  
**WRC WGY WBEN WCAE WTAM WWJ**  
**WSAI WIBO KSD WOC WOW WDAF**  
**WTMJ WKY KSTP WEBC WRVA WJAX**  
**WHAS WMC WSB WAPI WSBM WBAP**  
**KPRC WOAI KOA KSL KGO KFI**  
**KGW KOMO KHQ KFSD KTRAR**  
**9:30-10:00 Columbia Educational Features**  
**WABC WLBZ WEAN WNAC WORC WPG**  
**WFAN WHP WJAS WLBW WMAL WTAR**  
**WDBJ WKRC WWNC WXYZ WBCM WSPD**  
**WDOD WREC WLAC WBRW WFBM WCCO**  
**KSCJ WMT KMBC WDAY WNAX KOIL**  
**WIBW KFH KFJF KTRH KTSA KLZ**  
**KOL KFRC**  
**10:00-10:30 Cuckoo**  
**WJZ WBZ WBZA WBAL KDKA WHAM**  
**WGAR WLW WIBO KWK WREN WJR**  
**CFCF CKGW**  
**10:00-11:00 Lucky Strike Dance Orchestra**  
**WEAF WEEI WJAR WTAG WCSH WFI**  
**WRC WGY WBEN WCAE WTAM WWJ**  
**WSAI WGN KSD WHO WOC WOW**  
**WDAF WTMJ KSTP WEBC WRVA WJAX**  
**WIOD WFLA WSUN WHAS WMC WSB**  
**WSMB WJDX KVOO WFAA KPRC WOAI**  
**WKY KOA KSL KGO KFI KGW**  
**KOMO KHQ KTRAR KFSD**  
**10:00-10:45 Hank Simmons' Show Boat**  
**WABC WHEC WLBZ WEAN WNAC WORC**  
**WPG WFAN WHP WJAS WLBW WMAL**  
**WCAO WTAR WDBJ WKRC WWNC WXYZ**  
**WBCM WSPD WDOD WLAC WBRW WFBM**  
**WMAQ WCCO KSCJ WMT KMOX KMBC**  
**WDAY WNAX KOIL WIBW KFH KFJF**  
**KRLD KTRH KTSA KLZ KOL KFRC**  
**CFRB**  
**10:30-10:45 Clara, Lu and Em**  
**WJZ WBZ WBZA WHAM KDKA WJR**  
**WLW WENR WGAR WBAL KWK WREN**  
**10:45-11:00 Anheuser Busch Program**  
**WABC WKBW WEAN WNAC WCAU WJAS**  
**WMAL WHK WCAH WXYZ WDOD WREC**  
**WDSU WFBM WBBM WMT KMOX KMBC**  
**KLRA KOIL KFJF KRLD KTRH KLZ**  
**KDYL KVI KOL KFJF KFPY KOIN KHJ**  
**KFRC**  
**11:00-11:15 Bert Lown and His Biltmore Orchestra**  
**WABC WFBL WHEC WKBW WDRC WORC**  
**WCAU WHP WLBW WMAL WTAR WDBJ**  
**WADC WHK WBT WXYZ WBCM WSPD**  
**WLAC WBRW WDSU WISN WTAQ WFBM**  
**WGL WCCO KSCJ WMT KMOX WNAX**  
**KOIL KFH KFJF WACO KLZ CFRB**  
**WAAB**  
**11:00-11:15 Troubadour of the Moon**  
**WEAF WFI WCAE WWJ WSAI WOC**  
**WHO WOW**  
**11:15-11:45 Hal Kemp and His Orchestra**  
**WEAF WTIC WFI WRC WWJ WGY**  
**KSD WOC WHO WEEI WCAE WDAY**  
**CFCF WTAM WOW WDAF**  
**11:30-12:00 Will Osborne and His Orchestra**  
**WABC WFBL WHEC WKBW WDRC WORC**  
**WPG WCAU WHP WLBW WMAL WCAO**  
**WTAR WDBJ WADC WHK WBT WXYZ**  
**WBCM WSPD WLAC WBRW EDSU WISN**  
**WTAQ WFBM WGL WCCO KSCJ WMT**  
**KMOX KMBC WNAX KFH KFJF KLZ**  
**CFRB**  
**11:45-12:00 Little Jack Little**  
**WEAF WFI WCAE WTAM KSD WOC**  
**WHO WDAF WFLA WSUN WSB KOA**  
**WGY WIBO WOW KPRC WIOD**  
**12:00-1:00 Jack Albin and His Orchestra**  
**WEAF WTIC WRC WBEN WTAM KSD**  
**WMC WSB KPRC KOA WGY WOW**

# 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; ‡ Sends stamp but does not verify otherwise; † Does not verify; § Did not reply. \$ Verification 25c, reply card 10c. 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. Dashes (--) have no meaning.

## 540 kilocycles 555.6 meters

CKX	†	500	---	Brandon, Manitoba
XEY	--	101	547	Merida, Mex.

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Manitoba Telephone System  
Partido Socialista Surt

## 550 kilocycles 545.1 meters

KFDY	†	500	1+	Brookings, S. D.
KFUO	*	500	2+	St. Louis, Mo.
KFYR	†	1000	1+N	Bismarck, N. D.
KOAC	†	1000	---	Corvallis, Ore.
KSD	†	500	2N	St. Louis, Mo.
WGR	*	1000	C	Buffalo, N. Y.
WKRC	†	1000	C	Cincinnati, Ohio

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S. D. State College  
Concordia Theological Seminary  
Meyer Broadcasting Co.  
State Agricultural College  
Pulitzer Publishing Co.  
Buffalo Broadcasting Co.  
WKRC Incorporated

## 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+C	Knoxville, Tenn.
WPCC	*	500	3S	Chicago, Ill.
WQAM	*	1000	C	Miami, Fla.

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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
WMAC	--	250	2	Syracuse, N. Y.
WMCA	*	500	3	New York City
WNAX	*	1000	C	Yankton, S. D.
WNYC	†	500	3	New York City
WSYR	--	250	2	Syracuse, N. Y.
WWNC	*	1000	C	Asheville, N. C.

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

## 580 kilocycles 516.9 meters

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

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

## INDEX BY FREQUENCIES AND DIAL NUMBERS

### 590 kilocycles 508.2 meters

CMW	--	1400	588	Havana, Cuba
- KHQ	--	1000	+N	Spokane, Wash.
- WCAJ	*	500	1	Lincoln, Nebr.
- WEEI	†	1000	N	Boston, Mass.
- WKZO	*	1000	DY	Berrien Springs, Mich.
- WOV	*	1000	1N	Omaha, Nebr.
- XEZ	*	500	588	Mexico City

Columbus Commercial & Radio Co. Louis Wasmer, Inc. Nebraska Wesleyan University Edison Elec. Illuminating Co. WKZO, Inc. Woodmen of the World Gonzales Zamacona y Cia.		

KCYS.  
**670**  
MTRS.  
**447.5**  
DIAL

### 600 kilocycles 499.7 meters

CNRO	†	500	3	Ottawa, Ont.
- KFSD	*	500	+N	San Diego, Cal.
- WCAC	†	250	2+	Storrs, Conn.
- WCAO	†	250	C	Baltimore, Md.
- WICC	*	250	2D	Bridgeport, Conn.
- WMT	*	500	C	Waterloo, Iowa
- WREC	*	500	+C	Memphis, Tenn.

Canadian National Railways Airfan Radio Corp. Conn. Agricultural College Monumental Radio, Inc. Bridgeport Broadcasting Station, Inc. Waterloo Broadcasting Co. WREC, Inc.		

### 610 kilocycles 491.5 meters

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

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.
- WLBY	*	500	C	Bangor, Maine
- WSUN	*	1000	1+N	St. Petersburg, Fla.
- WTMJ	*	1000	+N	Milwaukee, Wis.

Oregonian Publishing Co. KTAR Broadcasting Co. Chamber of Commerce Maine Broadcasting Co., Inc. Chamber of Commerce Milwaukee Journal		

### 630 kilocycles 475.9 meters

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

Victoria Broadcasting Association Winnipeg Grain Exchange Canadian National Railways Stephens College Evansville on the Air, Inc. M. A. Leese State Marketing Bureau Mexico Music Co., S. A.		

### 640 kilocycles 468.5 meters

CHRC	--	100	645	Quebec, Que.
CMHJ	--	40	645	Cienfuegos, Cuba
- KFI	*	5000	NX	Los Angeles, Cal.
- WAIU	*	500	C Dn	Columbus, Ohio
- WOI	*	5000	D	Ames, Iowa
- XFG	--	2000	638	Mexico City

E. Fontaine Arturo Hernandez 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.

Queen City Broadcasting Co. National Life & Accident Ins. Co.		

### 660 kilocycles 454.3 meters

CHWK	†	100	---	Chilliwack, B. C.
- CJRM	*	500	665	Moose Jaw, Sask.
- CJRW	--	500	665	Fleming, Sask.
CMCO	*	225	---	Havana, Cuba
WAAW	--	500	D	Omaha, Neb.
- WFAF	†	50000	N	New York City
- WTIC	*	5000	N	Hartford, Conn.

Chilliwack Brdcstg. Co., Ltd. Jas. Richardson & Sons, Ltd. Jas. Richardson & Sons, Ltd. J. L. Stowers Omaha Grain Exchange National Broadcasting Co., Inc. Travelers Broadcasting Service, Inc.		

### 670 kilocycles 447.5 meters

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

WMAQ, Inc Armida y Cia.		

CUT OUT ON DOTTED LINES

## 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.
XETF	--	500	--	Veracruz, Mex.
8WMC	--	500	682	St. Johns, N. F.

Scroggin & Co., Bank Hale Bros. & The Chronicle Durham Life Insurance Co. Manuel Angel Fernandez & Cia. Wesley United Church		

### 690 kilocycles 434.5 meters

- CFAC	--	500	1	Calgary, Alta.
CHCA	*	500	1	Calgary, Alta.
CJCJ	*	500	1	Calgary, Alta.
- CKGW	*	5000	2N	Toronto, Ont.
CNRC	--	500	1	Calgary, Alta.
- CPRY	--	5000	2	Toronto, Ont.
NAA	--	1000	--	Arlington, Va.
- VAS	†	10000	685	Glace Bay, N. S.

The Calgary Herald The Western Farmer Albertan Publishing Co., Ltd. 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
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Crosley Radio Corp.		

### 710 kilocycles 422.3 meters

- KMPC	*	500	Dn	Los Angeles, Cal.
- WOR	*	5000	--	Newark, N. J.
- XEN	†	1000	711	Mexico City

R. S. MacMillan Bamberger Broadcasting Service, Inc. Cia. Civil de Inversiones		

### 720 kilocycles 416.4 meters

- WGN	†	2500	N	Chicago, Ill.
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Chicago Tribune		

### 730 kilocycles 410.7 meters

CHLS	--	50	1	Vancouver, B. C.
- CHYC	*	5000	2S	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	--	3150	--	Havana, Cuba
- CNRM	*	5000	2	Montreal, Que.
- XEM	†	500	--	Tampico, Mex.

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

### 740 kilocycles 405.2 meters

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

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

### 750 kilocycles 399.8 meters

TIC	†	50	--	San Jose, Costa Rica
- WJR	†	5000	N	Detroit, Mich.

WJR, The Goodwill Station, Inc.		

### 760 kilocycles 394.5 meters

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

Puget Sound Broadcasting Co., Inc. Consolidated Gas, Elec. & Power Co. St. Louis University National Broadcasting Co., Inc.		

### 770 kilocycles 389.4 meters

- KFAB	*	5000	1N	Lincoln, Nebr.
- WBBM	*	25000	1C	Chicago, Ill.
5- WJBT	--	25000	1S	Chicago, Ill.

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

### 780 kilocycles 384.4 meters

- CKY	--	5000	3	Winnipeg, Manitoba
- CMGH	--	60	--	Matanzas, Cuba
- CNRW	--	5000	3	Winnipeg, Manitoba
- KELW	*	500	2	Burbank, Cal.
- KTM	*	500	2+	Los Angeles, Cal.
- WEAN	*	250	+C	Providence, R. I.

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



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- WISJ \* 250 + Madison, Wis.  
 S - WMC -- 500 +N Memphis, Tenn.  
 - WPOR -- 500 1 Norfolk, Va.  
 - WTAR \* 500 1C Norfolk, Va.  
 - XEW † 5000 --- Mexico City

Wisconsin State Journal Bdsng. Co.  
 Memphis Commercial-Appeal, Inc.  
 WTAR Radio Corp.  
 WTAR Radio Corp.  
 Mexico Music Co.

### 790 kilocycles 379.5 meters

CMBS -- 150 --- Havana, Cuba  
 CMHC -- 500 --- Tuinucu, Cuba  
 - KGO † 7500 N San Francisco, Cal.  
 - WGY † 50000 N Schenectady, N. Y.

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

### 800 kilocycles 374.8 meters

- WBAP † 10000 1XN Fort Worth, Texas  
 - WFAA † 50000 1N Dallas, Texas  
 XEU -- 101 --- Veracruz, Mex.  
 XFC -- 350 805 Aguascalientes, Mex.

Carter Publications, Inc.  
 News & Journal  
 Fernando Pazos  
 Gobierno del Estado de Aguascalientes

### 810 kilocycles 370.2 meters

- WCCO \* 7500 C Minneapolis, Minn.  
 - WPCH \* 500 D New York 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 -- 100 834 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.

Star Publishing & Ptg. Co.  
 G. F. Tull & Ardern, Ltd.  
 Alberta Pacific Grain Co., Ltd.  
 Cuban Telephone Co.  
 Canadian National Railways  
 Canadian National Railways

### 850 kilocycles 352.7 meters

S - KWKH \* 10000 1 Shreveport, La.  
 - WWL \* 5000 1 New Orleans, La.  
 XEJ \* 101 857 Juarez, Mex.

Hello World Broadcasting Corp.  
 Loyola University  
 Juan Buttner

### 860 kilocycles 348.6 meters

CMJE -- 20 856 Camaguey, Cuba  
 KMO † 500 + Dn Tacoma, Wash.  
 - WABC \* 5000 XC New York City  
 - WBOQ -- 5000 --- New York City  
 WHB \* 500 D Kansas City, Mo.  
 XFX -- 500 --- Mexico City, Mex.

Manuel Fernandez  
 KMO, Inc.  
 Atlantic Broadcasting Corp.  
 Atlantic Broadcasting Corp.  
 WHB Broadcasting Co.  
 Secretaria de Educacion Publica

### 870 kilocycles 344.6 meters

- WENR -- 50000 1N Chicago, Ill.  
 - WLS † 50000 1XN Chicago, Ill.

National Broadcasting Co., Inc.  
 Agricultural Broadcasting Co.

### 880 kilocycles 340.7 meters

- CHML \* 50 4 Hamilton, Ont.  
 - CJCB \* 50 --- Sydney, N. S.  
 CKCI † 22.5 3 Quebec, Que.  
 CKCV † 50 3 Quebec, Que.  
 CNRQ † 50 3 Quebec, Que.  
 - KFFA † 500 2+ Greeley, Colo.  
 KLX \* 500 --- Oakland, Cal.  
 - KPOF \* 500 2 Denver, Colo.  
 WCOG \* 500 + Meridian, Miss.  
 - WGBI \* 250 1 Scranton, Pa.  
 WOAN \* 250 1 Scranton, Pa.  
 - WSUI \* 500 --- Iowa City, Iowa

Maple Leaf Radio Co., Ltd.  
 N. Nathanson  
 Le "Soleil," Ltd.  
 G. A. Vandry  
 Canadian National Railways  
 Midwestern Radio Corp.  
 Tribune Publishing Co.  
 Pillar of Fire, Inc.  
 Mississippi Broadcasting Co., Inc.  
 Scranton Broadcasters, Inc.  
 Scranton Times  
 University of Iowa

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

CUT OUT ON DOTTED LINES

## INDEX BY FREQUENCIES AND DIAL NUMBERS

### 890 kilocycles 336.9 meters

-	CFBO	*	500	---	St. John, N. B.
-	CKCO	†	100	---	Ottawa, Ont.
-	CKPR	--	50	---	Port Arthur, Ont.
-	CMCF	†	250	---	Havana, Cuba
-	CMX	*	500	---	Havana, Cuba
-	KFNF	--	500	2+	Shenandoah, Iowa
-	KGJF	*	250	---	Little Rock, Ark.
-	KUSD	*	500	2+	Vermillion, S. D.
-	WGST	*	250	1+C	Atlanta, Ga.
-	WILL	*	250	2+	Urbana, Ill.
-	WJAR	*	250	+N	Providence, R. I.
-	WKAQ	*	500	---	San Juan, P. R.
-	WMAZ	†	250	1+	Macon, Ga.
-	WMMN	*	250	+	Fairmont, W. Va.
-	XES	\$	500	---	Tampico, Mexico

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C. A. Munro, Ltd.  
 Dr. G. M. Geldert  
 Dougall Motor Car Corp.  
 Raoul Karman  
 Francisco Lavin  
 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 Broadcasting Co.  
 Difusora Portena XES

### 900 kilocycles 333.1 meters

-	KGBU	†	500	---	Ketchikan, Alaska
-	KHJ	*	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.

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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	*	5000	2	London, Ont.
-	CNRH	--	500	3	Halifax, N. S.
-	CNRL	*	500	2	London, Ont.
-	CNRS	--	500	1	Saskatoon, Sask.

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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

-	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	Needham, Mass.
-	WWJ	†	1000	N	Detroit, Mich.
-	XFF	--	250	915	Chihuahua, Mex.

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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.
-	KFWI	†	500	1	San Francisco, Cal.
-	KGBZ	--	500	2+	York, Nebr.
S	KMA	*	500	2+	Shenandoah, Iowa
-	KROW	*	500	1+C	Oakland, Cal.
-	WBRC	*	500	+C	Birmingham, Ala.
-	WDBJ	*	250	+C	Roanoke, Va.
-	WIBG	*	50	S	Elkins Park, Pa.

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The Edmonton Journal, Ltd.  
 Queen's University  
 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.
-	WCSH	*	1000	N	Portland, Maine
-	WDAY	*	1000	N	Fargo, N. D.
S	WFIW	*	1000	---	Hopkinsville, Ky.
-	WHA	--	750	D+	Madison, Wis.
-	XEO	--	5000	---	Mexico City

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Marlon A. Mulrony  
 KOIN, Inc.  
 Bremer Broadcasting Corp.  
 Congress Square Hotel Co.  
 WDAY, Inc.  
 WFIW, Inc.  
 University of Wisconsin  
 National Revolucionario Party

### 950 kilocycles 315.6 meters

S	KFWB	*	1000	---	Hollywood, Cal.
-	KGHL	--	1000	---	Billings, Mont.
-	KMBC	*	1000	C	Kansas City, Mo.
-	WRC	†	500	N	Washington, D. C.

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

INDEX BY FREQUENCIES AND DIAL NUMBERS

960 kilocycles 312.3 meters

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-	CFCY	*	250	1	Charlottetown, P. E. I.
-	CFRB	*	5000	2C	Toronto, Ont.
-	CHCK	--	100	1	Charlottetown, P. E. I.
S	CHWC	*	500	3	Regina, Sask.
-	CJBR	--	500	3	Regina, Sask.
-	CKCK	†	500	3	Regina, Sask.
-	CMBC	--	150	965	Havana, Cuba
-	CMBD	--	150	965	Havana, Cuba
-	CNRR	--	500	3	Regina, Sask.
-	CNRX	*	5000	2	Toronto, Ont.
-	XED	*	10000	961	Reynosa, Mex

The Island Radio Co.  
 Rogers-Majestic Corp., Ltd.  
 W. E. Burke  
 R. H. Williams & Sons. Ltd.  
 Cooperative Wheat Producers, Ltd.  
 Leader Publishing Co., Ltd.  
 Domingo Fernandez  
 Luis Perez Garcia  
 Canadian National Railways  
 Canadian National Railways  
 International Broadcasting Co.

970 kilocycles 309.1 meters

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-	CMGF	--	50	977	Matanzas, Cuba
-	KJR	*	5000		Seattle, Wash.
-	WCFL	--	1500	N Dn	Chicago, Ill.

Bernabe R. de la Torre  
 Northwest Broadcasting System, Inc.  
 Chicago Federation of Labor

980 kilocycles 305.9 meters

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-	CFCN	--	500	985	Calgary, Alta.
-	KDKA	--	50000	N	Pittsburgh, Pa.
-	XEFE	--	101	---	Laredo, Mex.

Western Broadcasting Co.  
 Westinghouse Elec. & Mfg. Co.  
 Rafael T. Carranza

990 kilocycles 302.8 meters

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-	WBZ-A	†	15000	1N	Springfield-Boston
-	XEK	--	101	---	Mexico City

Westinghouse Elec. & Mfg. Co.  
 Arturo Martinez

1000 kilocycles 299.8 meters

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

Los Angeles Broadcasting Co.  
 Central Broadcasting Co.  
 Central Broadcasting Co.  
 Carlos Gutierrez M.

1010 kilocycles 296.8 meters

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-	CFLC	*	50	3	Prescott, Ont.
-	CKCR	--	50	3	Waterloo, Ont.
-	CKIC	--	50	---	Wolfville, N. S.
-	CMBW	--	150	---	Havana, Cuba
-	CMBZ	--	150	---	Havana, Cuba
-	KGGF	†	500	2	S. Coffeyville, Okla.
-	KQW	*	500	---	San Jose, Cal.
-	WHN	*	250	1	New York City
-	WIS	*	500	+ C	Columbia, S. C.
-	WNAD	*	500	2	Norman, Okla.
-	WPAP	*	250	1	New York City
-	WQAO	--	250	1	New York City
-	WRNY	--	250	1	New York City
-	XEQ	--	1000	1015	Juarez, Mex.

Radio Association  
 John Patterson  
 Acadia University  
 M. Alvarez  
 Manuel y G. Salas  
 Powell & Platz  
 Pacific Agricultural Foundation, Ltd.  
 Marcus Loew Booking Agency  
 South Carolina Broadcasting Co., Inc.  
 University of Oklahoma  
 Palisades Amusement Park  
 Calvary Baptist Church  
 Aviation Radio Station, Inc.  
 Feliciano Lopez Islas

1020 kilocycles 293.9 meters

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

Westinghouse Elec. & Mfg. Co.  
 Westinghouse Elec. & Mfg. Co.  
 WRAX Broadcasting Co.

1030 kilocycles 291.1 meters

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†	CFCF	--	1650	N	Montreal, Que.
†	CMKC	*	150	1034	Santiago de Cuba
†	CNRV	†	500	---	Vancouver, B. C.
-	XEB	†	1000	---	Mexico City, Mex.
-	XEV	--	101	1034	Puebla, Mex.

Canadian Marconi Co.  
 M. P. Martinez  
 Canadian National Railways  
 El Buen Tono, S. A.  
 Ciro Molina

1040 kilocycles 288.3 meters

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-	KRLD	*	10000	1C	Dallas, Texas
-	KTHS	†	10000	1N	Hot Springs, Ark.
-	WKAR	*	1000	D	East Lansing, Mich.
-	WMAK	*	1000	Dn	Buffalo, N. Y.

KRLD Radio Corp.  
 Chamber of Commerce  
 Michigan State College  
 Buffalo Broadcasting Corp.

1050 kilocycles 285.5 meters

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†	KFBI	*	5000	Dn	Milford, Kansas
†	KNX	*	5000	X	Hollywood, Cal.

Farmers & Bankers Life Insurance Co.  
 Western Broadcast Co.

KCYS.  
 1050  
 MTRS.  
 285.5  
 DIAL

CUT OUT ON DOTTED LINES

## INDEX BY FREQUENCIES AND DIAL NUMBERS

### 1060 kilocycles 282.8 meters

KWJJ	--	500	Dn	Portland, Ore.
WBAL	--	10000	1N	Baltimore, Md.
-WJAG	*	1000	Dn	Norfolk, Nebr.
WTIC	*	50000	1N	Hartford, Conn.

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

### 1070 kilocycles 280.2 meters

CMBG	--	150	---	Havana, Cuba
CMBT	--	150	---	Havana, Cuba
-CMCB	--	150	---	Havana, Cuba
KJBS	*	100	D	San Francisco, Cal.
-WCAZ	*	50	D	Carthage, Ill.
WDZ	†	100	D	Tuscola, Ill.
-WTAM	*	50000	N	Cleveland, Ohio

Francisco Garrigo E. Perera Antonio Capablanca Julius Brunton & Sons Co. Superior Broadcasting Service James L. Bush National Broadcasting Co., Inc.		

### 1080 kilocycles 277.6 meters

-WBT	*	5000	C	Charlotte, N. C.
-WCBF	*	5000	1 Dn	Zion, Ill.
-WMBI	*	5000	1 Dn	Chicago, Ill.
-XEH	--	5000	---	Monterrey, Mex.

Station WBT, Inc. Wilbur Glenn Voliva Moody Bible Institute Tarnava y Cia		

### 1090 kilocycles 275.1 meters

-KMOX	*	50000	C	St. Louis, Mo.
XEL	--	10	1091	Saltillo, Mex.

Voice of St. Louis, Inc. Antonio Garza Castro		

### 1100 kilocycles 272.6 meters

CMKD	--	20	---	Santiago, Cuba
KGDM	*	250	DX	Stockton, Cal.
-WLWL	*	5000	1	New York City
-WPG	*	5000	1C	Atlantic City, N. J.

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

### 1110 kilocycles 270.1 meters

CMHI	--	15	---	Santa Clara, Cuba
-KSOU	*	2000	Dn	Sioux Falls, S. D.
-WRVA	*	5000	N	Richmond, Va.

Laviz y Paz Sioux Falls Broadcasting Assn., Inc. Larus & Bros. Co., Inc.		

### 1120 kilocycles 267.7 meters

CFJC	--	100	---	Kamloops, B. C.
CHCS	--	10	4	Hamilton, Ont.
-CHGS	*	100	---	Summerside, P. E. I.
CJOC	†	50	---	Lethbridge, Alta.
-CKOC	*	50	4	Hamilton, Ont.
KFIO	†	100	D	Spokane, Wash.
-KFSG	*	500	3	Los Angeles, Cal.
KMCS	*	500	3Y	Inglewood, Cal.
KRSC	†	50	D	Seattle, Wash.
KTRH	*	500	2C	Houston, Texas
-WDBO	*	500	+C	Orlando, Fla.
-WDEL	†	250	+X	Wilmington, Del.
WHAD	*	250	1	Milwaukee, Wis.
WISN	†	250	1C	Milwaukee, Wis.
WTAW	*	500	2	College Station, Texas

N. S. Dalgleish & Sons The Hamilton Spectator R. T. Holman, Ltd. Harold R. Carson Wentworth Radio & Auto Sply. Co., Ltd 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		

### 1130 kilocycles 265.3 meters

-KSL	*	5000	N	Salt Lake City
-WJJD	*	20000	C Dn	Mooseheart, Ill.
-WVOV	--	1000	D	New York City
XEE	*	105	---	Oaxaca, Mex.

Radio Service Corp. of Utah Loyal Order of Moose International Broadcasting Corp. Alfonso Zorilla B.		

### 1140 kilocycles 263.0 meters

CMGD	--	5	---	Matanzas, Cuba
-KVOO	*	5000	1N	Tulsa, Okla.
-WAPI	*	5000	1N	Birmingham, Ala.
XETA	--	500	---	Mexico City

Rafael Rodriguez Southwestern Sales Corp. Alabama Polytechnic Institute Manuel Espinosa Tagle		

### 1150 kilocycles 260.7 meters

CMCQ	--	600	---	Havana, Cuba
CMHA	--	200	1154	Cienfuegos, Cuba
CMQ	†	250	---	Havana, Cuba
-WHAM	*	5000	N	Rochester, N. Y.

Andres Martinez Fox Bros Co. Jose Fernandez Stromberg-Carlson Tel. Mfg. Co.		

INDEX BY FREQUENCIES AND DIAL NUMBERS

1160 kilocycles 258.5 meters

WOWO \* 10000 1C  
 WWVA \* 5000 1

Ft. Wayne, Ind.  
 Wheeling W. Va.

--	--	--

Main Auto Supply Co.  
 West Virginia Broadcasting Corp.

1170 kilocycles 256.3 meters

CMKG -- 30 1176  
 KTNT \* 5000 Dn  
 WCAU \* 10000 C

Santiago de Cuba  
 Muscatine, Iowa  
 Philadelphia, Pa.

--	--	--

Ricardo Arnaldo  
 Norman Baker  
 Universal Broadcasting Co.

1180 kilocycles 254.1 meters

CMGB -- 7.5 1185  
 KEX \* 5000 2  
 KOB \* 20000 2  
 WDGY \* 1000 1 Dn  
 WGBS † 500  
 WHDI \* 500 1 Dn

Matanzas, Cuba  
 Portland, Ore.  
 State College, N. M.  
 Minneapolis, Minn.  
 New York City  
 Minneapolis, Minn.

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Jose Anorga  
 Western Broadcasting Co.  
 College of Agriculture & Mech. Arts  
 Dr. George W. Young  
 General Broadcasting System, Inc.  
 Wm. Hood Dunwoody Industrial Inst.

1190 kilocycles 252.0 meters

WOAI \* 50000 N

San Antonio, Texas

--	--	--

Southern Equipment Co.

1200 kilocycles 249.9 meters

CFCH -- 50 ---  
 CMKB -- 15 ---  
 KBTM -- 100 D  
 KFJB † 100 +  
 KFWF -- 100 5+  
 KGCU -- 100 ---  
 KGDE \* 100 +  
 KGDY -- 100 ---  
 KGEK † 50 9  
 KGEW † 100 9  
 KGFJ -- 100 ---  
 KGHI \* 100 ---  
 KGY † 10 +  
 KMLB -- 50 D  
 KSMR -- 100 ---  
 KVOS \* 100 ---  
 KWG \* 100 ---  
 WABI † 100 ---  
 WABZ \* 100 1  
 WBBZ \* 100 ---  
 WCAT † 100 ---  
 WCAX \* 100 2  
 WCLO † 100 ---  
 WCOD † 100 3  
 WEPS † 100 7  
 WFBC \* 50 ---  
 WFBE -- 100 +  
 WHBC † 10 4S  
 WHBY † 100 ---  
 WIBX \* 100 +  
 WIL \* 100 5+  
 WJBC \* 100 6  
 WJBL † 100 6  
 WJBW † 100 1  
 WKJC \* 100 3  
 WLAP † 100 +C  
 WLBG \* 100 +  
 WNBO \* 100 4  
 WNBW † 10 ---  
 WNBX † 10 2  
 WORC \* 100 7CX  
 WRAF \* 100 8Y  
 WRBL † 50 ---  
 WWAB \* 100 8  
 XEA -- 101 ---  
 10-BP -- 25 ---

North Bay, Ont.  
 Santiago de Cuba  
 Paragould, Ark.  
 Marshalltown, Iowa  
 St. Louis, Mo.  
 Mandan, N. D.  
 Fergus Falls, Minn.  
 Huron, S. D.  
 Yuma, Colo.  
 Fort Morgan, Colo.  
 Los Angeles, Cal.  
 Little Rock, Ark.  
 Lacey, Wash.  
 Monroe, La.  
 Santa Maria, Cal.  
 Bellingham, Wash.  
 Stockton, Cal.  
 Bangor, Maine  
 New Orleans, La.  
 Ponca City, Okla.  
 Rapid City, S. D.  
 Burlington, Vt.  
 Janesville, Wis.  
 Harrisburg, Pa.  
 Worcester, Mass.  
 Knoxville, Tenn.  
 Cincinnati, Ohio  
 Canton, Ohio  
 Green Bay, Wis.  
 Utica, N. Y.  
 St. Louis, Mo.  
 La Salle, Ill.  
 Decatur, Ill.  
 New Orleans, La.  
 Lancaster, Pa.  
 Louisville, Ky.  
 Petersburg, Va.  
 Washington, Pa.  
 Carbondale, Pa.  
 Springfield, Vt.  
 Worcester, Mass.  
 La Porte, Ind.  
 Columbus, Ga.  
 Hammond, Ind.  
 Guadalajara, Mex.  
 Wingham, Ont.

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Northern Supplies, Ltd.  
 Melchor Aguero  
 W. J. Beard's Temple of Music  
 Marshall Electric Co., Inc.  
 St. Louis Truth Center, Inc.  
 Mandan Radio Association  
 Jaren Drug Co.  
 Voice of South Dakota  
 Beehler Elec. Equipment Co.  
 City of Fort Morgan  
 Ben S. McGlashan  
 Berean Bible Class  
 St. Martin's College  
 G. C. Liner  
 Santa Maria Radio  
 KVOS, Inc.  
 Portable Wireless Tel. Co., Inc.  
 Pine Tree Broadcasting Corp.  
 Samuel D. Reeks  
 C. L. Carrell  
 State School of Mines  
 University of Vermont  
 WCLO Radio Corp.  
 Keystone Broadcasting Corp.  
 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  
 South Bend Tribune  
 David Parmer  
 Hammond-Calumet Broad. Corp.  
 Alberto Palos Souza  
 Radio & Electric Shop

KCYS.  
 1210  
 MTRS.  
 247.8  
 DIAL

CUT OUT ON DOTTED LINES

1210 kilocycles 247.8 meters

CFCO -- 100 ---  
 CFNB \* 500 ---  
 CJOR \* 500 ---  
 CKMC -- 15 ---

Chatham, Ont.  
 Fredericton, N. B.  
 Sea Island, B. C.  
 Cobalt, Ont.

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Western Ontario "Better Radio" Club  
 James S. Neill & Sons, Ltd.  
 G. C. Chandler  
 R. L. MacAdam

## INDEX BY FREQUENCIES AND DIAL NUMBERS

- CKPC	†	25	+	Preston, Ont.	Metal Shingle & Siding Co.
KDFN	†	100	---	Casper, Wyo.	Donald Lewis Hathaway
KDLR	†	100	---	Devils Lake, N. D.	KDLR, Inc.
- KFOR	*	100	+	Lincoln, Nebr.	Howard A. Shuman
- KFVS	*	100	6	Cape Girardeau, Mo.	Hirsch Battery & Radio Co.
KFXM	*	100	9	San Bernardino, Cal.	J. C. & E. W. Lee
- KGCR	†	100	---	Watertown, S. D.	Greater Kampecka Radio Corp.
KGMP	†	100	---	Elk City, Okla.	Bryant Radio & Electric Co.
- KGNO	*	100	---	Dodge City, Kans.	Dodge City Broadcasting Co.
KMJ	*	100	---	Fresno, Cal.	James McClatchy Co.
KPPC	§	50	9	Pasadena, Cal.	Pasadena Presbyterian Church
KWEA	*	100	---	Shreveport, La.	Hello World Broadcasting Corp.
- WALR	*	100	---	Zanesville, Ohio	Roy. W. Waller
WBAX	*	100	1	Wilkes-Barre, Pa.	John H. Stenger, Jr.
WBBL	†	100	7S	Richmond, Va.	Grace Covenant Pres. Church
- WCBS	*	100	2	Springfield, Ill.	H. L. Dewing & Chas. Messter
- WCOH	*	100	3	Yonkers, N. Y.	Westchester Broadcasting Corp.
- WCRW	*	100	4	Chicago, Ill.	Clinton R. White
WDWF	---	100	5	Providence, R. I.	Dutee W. Flint
S WEBQ	---	100	6	Harrisburg, Ill.	First Trust & Savings Bank
WEDC	---	100	4	Chicago, Ill.	Emil Denemark, Inc.
- WGBB	---	100	3	Freeport, N. Y.	Harry H. Carman
- WGCM	*	100	---	Gulfport, Miss.	Great Southern Land Co., Inc.
WHBF	*	100	---	Rock Island, Ill.	Beardsley Specialty Co.
WHBU	†	100	---	Anderson, Ind.	Citizens Bank
WIBU	*	100	---	Poynette, Wis.	Wm. C. Forrest
- WJBI	---	100	3	Red Bank, N. J.	Monmouth Broadcasting Co.
- WJBU	---	100	1	Lewisburg, Pa.	Bucknell University
- WJBY	*	50	---	Gadsden, Ala.	Gadsden Broadcasting Co., Inc.
- WJW	*	100	---	Mansfield, Ohio	Mansfield Broadcasting Assn.
- WLCI	*	50	---	Ithaca, N. Y.	Lutheran Assn. of Ithaca
WLSI	*	100	5	Providence, R. I.	The Lincoln Studios, Inc.
WMBG	*	100	7	Richmond, Va.	Havens & Martin, Inc.
- WMRJ	*	100	3	Jamaica, N. Y.	Peter J. Prinz
- WOCL	*	50	---	Jamestown, N. Y.	A. E. Newton
WOMT	*	100	---	Manitowoc, Wis.	Francis M. Kadow
- WPAW	*	100	5	Pawtucket, R. I.	Shartenburg & Robinson Co.
WQDX	*	100	---	Thomasville, Ga.	Stevens Luke
WRBQ	†	100	+	Greenville, Miss.	J. Pat. Scully
- WSBC	*	100	4	Chicago, Ill.	World Battery Co., Inc.
- WSEN	†	100	---	Columbus, Ohio	Columbus Broadcasting Co.
WSIX	*	100	---	Springfield, Tenn.	638 Tire & Vulcanizing Co.
WSOC	†	100	---	Gastonia, N. C.	WSOC, Inc.
- WTAX	†	100	2	Springfield, Ill.	WTAX, Inc.
XEX	---	500	---	Mexico City	Excelsior, Cia Editorial S. A.

### 1220 kilocycles 245.8 meters

CMCA	---	150	1225	Havana, Cuba
CMCD	---	250	1225	Havana, Cuba
CMCN	---	250	1225	Havana, Cuba
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	1N	Lawrence, Kans.

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

### 1230 kilocycles 243.8 meters

KFOD	---	100	---	Anchorage, Alaska
- KGGM	†	250	+	Albuquerque, N. Mex.
S 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.

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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

CMAB	---	20	1249	Pinar del Rio, Cuba
CMKE	---	250	1249	Santiago de Cuba
KTAT	†	1000	1	Ft. Worth, Texas
- WACO	†	1000	1C	Waco, Texas
- WXYZ	†	1000	C	Detroit, Mich.

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Francisco Martinez  
 Edmundo Recamier  
 S. A. T. Broadcast Co.  
 Central Texas Broadcasting Co., Inc.  
 Kunsky-Trendle Broadcasting Corp.

### 1250 kilocycles 239.9 meters

- KFMX	†	1000	2	Northfield, Minn.
- KFOX	*	1000	---	Long Beach, Cal.
- KIDO	†	1000	---	Boise, Idaho

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Carleton College  
 Nichols & Warinner, Inc.  
 Boise Broadcasting Station

## INDEX BY FREQUENCIES AND DIAL NUMBERS

-	WAAM	*	1000	1+X
-	WCAL	*	1000	2
S	WDSU	†	1000	C
-	WGCP	--	250	1
-	WLB	†	1000	2
-	WODA	†	1000	1
-	WRHM	*	1000	2
-	XEFA	--	250	---

### 1260 kilocycles 238.0 meters

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

### 1270 kilocycles 236.1 meters

-	CMJB	--	20	1276
-	KFUM	*	1000	---
-	KGCA	†	50	2D
S	KOL	†	1000	3C
-	KTW	--	1000	3
-	KWLC	*	100	2D
-	WASH	*	500	1
S	WEAI	*	1000	D
S	WFBR	--	500	---
-	WJDX	*	1000	N
-	WOOD	†	500	1

### 1280 kilocycles 234.2 meters

-	CMBJ	--	15	1285
-	CMBM	--	15	1285
-	CMCG	--	30	1285
-	CMCH	--	15	1285
-	CMCR	--	20	1285
-	KFBB	*	1000	+
-	WCAM	*	500	1
-	WCAP	*	500	1
S	WDOD	*	1000	+C
S	WIBA	*	500	---
S	WOAX	--	500	1
-	WRR	†	500	C

### 1290 kilocycles 232.4 meters

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

### 1300 kilocycles 230.6 meters

-	KFAC	*	1000	4
-	KFH	*	1000	2C
-	KFJR	*	500	3
-	KGEF	*	1000	4
-	KTBR	--	500	3
-	WBBR	*	1000	1
-	WEVD	*	500	1
-	WHAP	*	1000	1
-	WHAZ	*	500	1
-	WIOD	*	1000	N
-	WOO	*	1000	2
-	XETY	--	2000	---

### 1310 kilocycles 228.9 meters

-	KCRJ	†	100	---
-	KFBK	†	100	---
-	KFGQ	†	100	7
-	KFIU	*	10	---
-	KFJY	*	100	7
-	KFPL	†	100	---
-	KFPM	*	15	---
-	KFUP	--	100	8
-	KFXJ	†	100	8

Newark, N. J.
Northfield, Minn.
New Orleans, La.
Newark, N. J.
St. Paul, Minn.
Paterson, N. J.
Minneapolis, Minn.
Mexico City

WAAM, Inc.
St. Olaf College
Jos. H. Uhalt
May Radio Broadcast Corp.
University of Minnesota
Richard E. O'Dea
Minnesota Broadcasting Corp.
Luis F. Murguia

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

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Eduardo V. Figueroa
Reynolds Radio Co., Inc.
Charles W. Greenley
Seattle Rroadcasting Co., Inc.
First Presbyterian Church
Luther College
WASH Broadcasting Corp.
Cornell University
Baltimore Radio Show, Inc.
Lamar Life Insurance Co.
Kunsky-Trendle Broadcasting Corp.

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Jesus Lopez
Jose Leiro
Jose Justo Moran
Hernani Torralbas
Aurelio Hernandez
Buttrety Broadcast, Inc.
City of Camden
Radio Industries Broadcast Co.
WDOD Broadcasting Corp.
Capital Times Co.
WOAX, Inc.
City of Dallas

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

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Los Angeles Broadcasting Co.
Radio Station KFH Co.
Ashley C. Dixon & Son
Trinity Methodist Church
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 Church of Christianity
Juan Gutierrez, Jr.

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Chas. C. Robinson
Jas. McClatchy Co.
Boone Biblical College
Alaska Electric Light & Power Co.
C. S. Tunwall
C. C. Baxter
The New Furniture Co.
Fitzsimmons General Hospital
Western Slope Broadcasting Co.

KCYS.  
 1310  
 MTRS.  
 228.9  
 DIAL

CUT OUT ON DOTTED LINES

## INDEX BY FREQUENCIES AND DIAL NUMBERS

<ul style="list-style-type: none"> <li>- KFXR † 100 +</li> <li>- KGBX * 100 ---</li> <li>- KGCCX † 100 +</li> <li>KGEZ † 100 ---</li> <li>KGFW † 100 ---</li> <li>KIT † 50 ---</li> <li>KMED † 100 ---</li> <li>KRMD † 50 9</li> <li>S KTLC † 100 ---</li> <li>- KTSL † 100 9</li> <li>- KTSM * 100 2</li> <li>- KWCR † 100 7</li> <li>- KXRO † 75 X</li> <li>WBEO † 100 CP</li> <li>- WBOW * 100 ---</li> <li>- WBRE † 100 ---</li> <li>WCLS * 100 1</li> <li>WDAH † 100 2</li> <li>- WEBR * 100 +</li> <li>- WEXL † 50 ---</li> <li>- WFBG * 100 3X</li> <li>WDFD * 100 ---</li> <li>- WGAL * 100 5</li> <li>- WGH * 100 ---</li> <li>- WHAT † 100 4</li> <li>- WJAC * 100 3</li> <li>- WJAK * 50 6</li> <li>- WKAV * 100 ---</li> <li>S - WKBB * 100 1</li> <li>- WKBC * 100 ---</li> <li>- WLBC † 50 6</li> <li>- WMBO † 100 ---</li> <li>WNBH * 100 ---</li> <li>WOBT † 100 +Y</li> <li>- WOL * 100 ---</li> <li>- WRAW * 100 5X</li> <li>WRBI † 100 ---</li> <li>- WROL † 100 ---</li> <li>WSAJ * 100 ---</li> <li>- WSJS * 100 ---</li> <li>- WTEL * 100 4</li> </ul>	<ul style="list-style-type: none"> <li>Oklahoma City</li> <li>St. Joseph, Mo.</li> <li>Wolf Point, Mont.</li> <li>Kalispell, Mont.</li> <li>Ravenna, Neb.</li> <li>Yakima, Wash.</li> <li>Medford, Ore.</li> <li>Shreveport, La.</li> <li>Houston, Tex.</li> <li>Shreveport, La.</li> <li>El Paso, Texas</li> <li>Cedar Rapids, Iowa</li> <li>Aberdeen, Wash.</li> <li>Marquette, Mich.</li> <li>Terre Haute, Ind.</li> <li>Wilkes-Barre, Pa.</li> <li>Joliet, Ill.</li> <li>El Paso, Texas</li> <li>Buffalo, N. Y.</li> <li>Royal Oak, Mich.</li> <li>Altoona, Pa.</li> <li>Flint, Mich.</li> <li>Lancaster, Pa.</li> <li>Newport News, Va.</li> <li>Philadelphia, Pa.</li> <li>Johnstown, Pa.</li> <li>Marion, Ind.</li> <li>Laconia, N. H.</li> <li>Joliet, Ill.</li> <li>Birmingham, Ala.</li> <li>Galesburg, Ill.</li> <li>Muncie, Ind.</li> <li>Auburn, N. Y.</li> <li>New Bedford, Mass.</li> <li>Union City, Tenn.</li> <li>Washington, D. C.</li> <li>Reading, Pa.</li> <li>Tifton, Ga.</li> <li>Knoxville, Tenn.</li> <li>Grove City, Pa.</li> <li>Winston-Salem, N. C.</li> <li>Philadelphia, Pa.</li> </ul>	<ul style="list-style-type: none"> <li>Exchange Ave. Baptist Church</li> <li>KGBX Inc.</li> <li>First State Bank of Vida</li> <li>Treloar-Church Brdcastg. Co.</li> <li>Central Nebraska Broadcasting Corp.</li> <li>Carl E. Haymond</li> <li>Mrs. W. J. Virgin</li> <li>Robert M. Dean</li> <li>Houston Broadcasting Co.</li> <li>G. A. Houseman</li> <li>W. S. Bledsoe &amp; W. T. Blackwell</li> <li>Harry F. Paar</li> <li>KXRO, Inc.</li> <li>Charles B. McCleod</li> <li>Banks of Wabash, Inc.</li> <li>Louis G. Baltimore</li> <li>WCLS, Inc.</li> <li>Bledsoe &amp; Blackwell</li> <li>Howell Broadcasting Co., Inc.</li> <li>Royal Oak Broadcasting Co.</li> <li>Wm. F. Gable Co.</li> <li>Frank D. Fallain</li> <li>WGAL, Inc.</li> <li>Hampton Roads Broadcasting Corp.</li> <li>Independence Broadcasting Co.</li> <li>Johnstown Automobile Co.</li> <li>Marion Broadcasting Co.</li> <li>Laconia Radio Club</li> <li>Sanders Bros. Radio Station</li> <li>R. B. Broyles Furniture Co.</li> <li>Perml N. Nelson</li> <li>Donald A. Burton</li> <li>Radio Service Laboratories</li> <li>New Bedford Broadcasting Co.</li> <li>Tittsworth's Radio &amp; Music Shop</li> <li>American Broadcasting Co.</li> <li>Reading Broadcasting Co.</li> <li>Oglethorpe University</li> <li>Stewart Broadcasting Co.</li> <li>Grove City College</li> <li>Winston-Salem Journal Co.</li> <li>Foulkrod Radio Engineering Co.</li> </ul>
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### 1320 kilocycles 227.1 meters

<ul style="list-style-type: none"> <li>CMJC -- 15 1321</li> <li>CMKH -- 250 1327</li> <li>- KGHF † 250 +</li> <li>- KGMB † 500 ---</li> <li>- KID † 250 1+</li> <li>- KTFI -- 250 1X</li> <li>- WADC † 1000 C</li> <li>- WSMB * 500 N</li> </ul>	<ul style="list-style-type: none"> <li>Camaguey, Cuba</li> <li>Santiago de Cuba</li> <li>Pueblo, Colo</li> <li>Honolulu, Hawaii</li> <li>Idaho Falls, Idaho</li> <li>Twin Falls, Idaho</li> <li>Akron, Ohio</li> <li>New Orleans, La.</li> </ul>	<div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 5px;"></div> <ul style="list-style-type: none"> <li>Feliciano Isaac</li> <li>Alberto Ravelo</li> <li>C. P. Ritchie &amp; J. E. Finch</li> <li>Honolulu Broadcasting Co., Ltd.</li> <li>KID Broadcasting Co.</li> <li>Radio Broadcasting Corp.</li> <li>Allen T. Simmons</li> <li>Saenger Theatre &amp; Maison Blanche Co.</li> </ul>
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### 1330 kilocycles 225.4 meters

<ul style="list-style-type: none"> <li>- KGB * 500</li> <li>- KSCJ * 1000 1+C</li> <li>- WDRC * 500 C</li> <li>- WSAI * 500 N</li> <li>WTAQ * 1000 1C</li> <li>XEC -- 50 1333</li> </ul>	<ul style="list-style-type: none"> <li>San Diego, Cal.</li> <li>Sioux City, Iowa</li> <li>Hartford, Conn.</li> <li>Cincinnati, Ohio</li> <li>Eau Claire, Wis.</li> <li>Toluca, Mex.</li> </ul>	<div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 5px;"></div> <ul style="list-style-type: none"> <li>Don Lee, Inc.</li> <li>Perkins Bros. Co.</li> <li>WDRC, Inc.</li> <li>Crosley Radio Corp., Lessee</li> <li>Gillette Rubber Co.</li> <li>Jesus R. Benavides</li> </ul>
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### 1340 kilocycles 223.7 meters

<ul style="list-style-type: none"> <li>CMBA -- 50 1345</li> <li>CMBF -- 7.5 1345</li> <li>CMCU -- 50 1345</li> <li>CMCY -- 15 1345</li> <li>KFPW † 50 D</li> <li>- KFPY * 1000 C</li> <li>- WCOA * 500 ---</li> <li>- WSPD * 500 C+</li> </ul>	<ul style="list-style-type: none"> <li>Havana, Cuba</li> <li>Havana, Cuba</li> <li>Havana, Cuba</li> <li>Havana, Cuba</li> <li>Fort Smith, Ark.</li> <li>Spokane, Wash.</li> <li>Pensacola, Fla.</li> <li>Toledo, Ohio</li> </ul>	<div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 5px;"></div> <ul style="list-style-type: none"> <li>Oscar Montenegro</li> <li>Jose G. Reigada</li> <li>Jorge Garcia Serra</li> <li>M. D. Autran</li> <li>Southwestern Hotels Co.</li> <li>Symons Broadcasting Co.</li> <li>City of Pensacola</li> <li>Toledo Broadcasting Co.</li> </ul>
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### 1350 kilocycles 222.1 meters

<ul style="list-style-type: none"> <li>- KWK * 1000 N</li> <li>- WAWZ * 250 1</li> <li>- WBNX * 250 1</li> <li>S - WCDA * 250 1</li> <li>S - WEHC * 100 +D</li> <li>- WMSG -- 250 1</li> </ul>	<ul style="list-style-type: none"> <li>St. Louis, Mo.</li> <li>Zarephath, N. J.</li> <li>New York City</li> <li>New York City</li> <li>Emory, Va.</li> <li>New York City</li> </ul>	<div style="border: 1px solid black; height: 20px; width: 100%; margin-bottom: 5px;"></div> <ul style="list-style-type: none"> <li>Greater St. Louis Broadcasting Corp.</li> <li>Pillar of Fire</li> <li>Standard Cahill Co., Inc.</li> <li>Italian Educ. Broadcasting Co., Inc.</li> <li>Emory &amp; Henry College</li> <li>Madison Sq. Garden Brdcastg. Corp.</li> </ul>
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INDEX BY FREQUENCIES AND DIAL NUMBERS

1360 kilocycles 220.4 meters

CMKF	--	30	1363
KGER	--	1000	
KGIR	+	500	---
WCSC	+	500	---
WFBL	*	1000	CX
WGES	*	500	1+
WJKS	*	1000	1+
WQBC	+	300	CP D

Holguin, Cuba  
Long Beach, Cal.  
Butte, Mont.  
Charleston, S. C.  
Syracuse, N. Y.  
Chicago, Ill.  
Gary, Ind.  
Vicksburg, Miss.

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Manuel J. de Gongora  
C. Merwin Dobyns  
KGIR, Inc.  
Jordan & Burk  
Onondaga Radio Broadcasting Corp.  
Oak Leaves Broadcasting Station, Inc.  
Johnson-Kennedy Radio Corp.  
Delta Broadcasting Co., Inc.

1370 kilocycles 218.7 meters

CMAC	--	30	1375
CMGE	--	30	1375
KCRC	+	100	2+
KFBL	+	50	3
KFJI	+	100	---
KFJM	+	100	---
KFJZ	+	100	---
KFLX	--	100	---
KGAR	+	100	+
KGDA	+	100	---
KGFG	+	100	2
KGFL	+	50	---
KGKL	+	100	---
KMAC	+	100	5
KONO	+	100	5
KOOS	*	100	---
KRE	+	100	6
KUJ	+	100	---
KVL	--	100	3
KWKC	+	100	---
KZM	+	100	6
WBGF	+	50	---
WBTM	+	100	7
WCBM	*	100	+Z
WELK	+	100	+
WFDV	+	100	---
WGL	+	100	C
WHBD	+	100	---
WHBQ	+	100	---
WHDF	+	100	+
WIBM	+	100	1
WJBK	*	50	1
WLEY	--	100	+
WLVA	+	100	7
WMBR	+	100	---
WPOE	+	100	---
WQDM	+	100	D
WRAK	+	100	---
WRAM	+	100	---
WRBJ	+	10	---
WRDO	+	100	CP
WRJN	+	100	---
WSVS	+	50	---

Pinar del Rio, Cuba  
Cardenas, Cuba  
Enid, Okla.  
Everett, Wash.  
Astoria, Ore.  
Grand Forks, N. D.  
Ft. Worth, Texas  
Galveston, Texas  
Tucson, Ariz.  
Mitchell, S. D.  
Oklahoma City  
Raton, N. M.  
San Angelo, Texas  
San Antonio, Tex.  
San Antonio, Texas  
Marshfield, Ore.  
Berkeley, Cal.  
Walla Walla, Wash.  
Seattle, Wash.  
Kansas City, Mo.  
Hayward, Cal.  
Glens Falls, N. Y.  
Danville, Va.  
Baltimore, Md.  
Philadelphia, Pa.  
Rome, Ga.  
Fort Wayne, Ind.  
Mount Orab, Ohio  
Memphis, Tenn.  
Calumet, Mich.  
Jackson, Mich.  
Detroit, Mich.  
Lexington, Mass.  
Lynchburg, Va.  
Tampa, Fla.  
Patchogue, N. Y.  
St. Albans, Vt.  
Williamsport, Pa.  
Wilmington, N. C.  
Hattiesburg, Miss.  
Augusta, Me.  
Racine, Wis.  
Buffalo, N. Y.

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Oscar S. Mechoso  
Genaro Sebater  
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  
Paul R. Heitmeyer  
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.  
Dolles 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  
Wilmington Radio Association  
Woodruff Furniture Co., Inc.  
Albert S. Woodson  
Racine Broadcasting Corp.  
Seneca Vocational School

1380 kilocycles 217.3 meters

KOH	+	500	C
KQV	+	500	2
KSO	*	500	1
WKBH	*	1000	1
WSMK	*	200	2

Reno, Nevada  
Pittsburgh, Pa.  
Clarinda, Iowa  
La Crosse, Wis.  
Dayton, Ohio

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Jay Peters  
KQV Broadcasting Co.  
Berry Seed Co.  
WKBH, Inc.  
Stanley M. Krohn, Jr.

1390 kilocycles 215.7 meters

KLRA	*	1000	1C
KOY	*	500	---
KUOA	+	1000	1
WHK	+	1000	C

Little Rock, Ark.  
Phoenix, Ariz.  
Fayetteville, Ark.  
Cleveland, Ohio

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

1400 kilocycles 214.2 meters

CMBI	--	30	1405
CMBK	--	15	1405
CMBN	--	30	1405
CMBQ	--	50	1405
CMBX	--	30	1405
CMBY	--	100	1405
KLO	*	500	---
KOCW	*	250	+
WBAA	+	500	1+

Havana, Cuba  
Havana, Cuba  
Havana, Cuba  
Havana, Cuba  
Havana, Cuba  
Havana, Cuba  
Ogden, Utah  
Chickasha, Okla.  
Lafayette, Ind.

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Heriberto Meireles  
Jose L. Ferriol  
Armado Romeu  
Emilio Salas  
Bertin Fernandez  
Lino E. Cosculluela  
Peery Building Co.  
College for Women  
Purdue University

KCYS.  
1400  
MTRS.  
214.2  
DIAL

CUT OUT ON  
DOTTED LINES

## INDEX BY FREQUENCIES AND DIAL NUMBERS

WBBC	*	500	2
WCGU	*	500	2
WCMA	†	500	1
WFOX	--	500	2
WKBF	†	500	1
WLTH	*	500	2
XEP	--	2500	---

Brooklyn, N. Y.  
Brooklyn, N. Y.  
Culver, Ind.  
Brooklyn, N. Y.  
Indianapolis, Ind.  
Brooklyn, N. Y.  
Laredo, Mex.

Brooklyn Broadcasting Corp.  
U. S. Broadcasting Corp.  
General Broadcasting Corp.  
Paramount Broadcasting Co.  
Indianapolis Broadcasting, Inc.  
The Voice of Brooklyn, Inc.  
La Voz Latino

### 1410 kilocycles 212.6 meters

KFLV	†	500	4
KGRS	*	1000	1
WAAB	*	500	2C
WBCM	*	500	C
WDAG	*	1000	1
WHBL	*	500	4
WHIS	†	250	---
WODX	*	500	3
WRBX	*	250	---
WSFA	†	500	3
WSSH	†	500	2

Rockford, Ill.  
Amarillo, Texas  
Boston, Mass.  
Bay City, Mich.  
Amarillo, Texas  
Sheboygan, Wis.  
Bluefield, W. Va.  
Mobile, Ala.  
Roanoke, Va.  
Montgomery, Ala.  
Boston, Mass.

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

### 1420 kilocycles 211.1 meters

KBPS	--	100	4
KFIZ	--	100	---
KFOU	*	100	5
KFQW	*	100	---
KFXD	*	100	---
KFX Y	*	100	---
KFY O	†	100	+
KGFF	†	100	---
KGGC	†	100	5
KGIW	†	100	---
KGIX	†	100	---
KGKX	†	100	---
KGVO	†	100	D
KICK	†	100	---
KLPM	†	100	---
KORE	†	100	---
KTAP	†	100	---
KXL	†	100	4
KXYZ	--	100	---
WEDH	--	100	---
WEHS	--	100	2
WELL	†	50	X
WFDW	*	100	---
WHDL	*	100	D
WHFC	--	100	2
WIAS	†	100	---
WIBR	*	50	---
WILM	*	100	---
WJBO	*	100	---
WKBI	*	100	2
WLBF	†	100	---
WMBC	†	100	+
WMBH	--	100	+
WPAD	†	100	---
WSPA	†	100	+
WTBO	*	100	+

Portland, Ore.  
Fond du Lac, Wis.  
Holy City, Cal.  
Seattle, Wash.  
Nampa, Idaho  
Flagstaff, Ariz.  
Abilene, Texas  
Shawnee, Okla.  
San Francisco, Cal.  
Trinidad, Colo.  
Las Vegas, Nevada  
Sand Point, Idaho  
Missoula, Mont.  
Red Oak, Iowa  
Minot, North Dakota  
Eugene, Ore.  
San Antonio, Texas  
Portland, Ore.  
Houston, Texas  
Erie, Pa.  
Cicero, Ill.  
Battle Creek, Mich.  
Talladega, Ala.  
Tupper Lake, N. Y.  
Cicero, Ill.  
Ottumwa, Iowa  
Steubenville, Ohio  
Wilmington, Del.  
New Orleans, La.  
Chicago, Ill.  
Kansas City, Kas.  
Detroit, Mich.  
Joplin, Mo.  
Paducah, Ky.  
Spartanburg, S. C.  
Cumberland, Md.

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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.  
WHFC, Inc.  
Iowa Broadcasting Co.  
George W. Robinson  
Delaware Broadcasting Co., Inc.  
Valdemar Jensen  
WKBI, Inc.  
WLBF Broadcasting Co.  
Michigan Broadcasting Co., Inc.  
Edwin Dudley Aber  
Paducah Broadcasting Co.  
Voice of South Carolina  
Associated Broadcasting Corp.

### 1430 kilocycles 209.7 meters

KECA	†	1000	N
KGNF	†	500	D
WBAK	†	500	1+
WCAH	*	500	C
WGBC	*	500	2S
WHP	*	500	1C+
WNBR	*	500	2

Los Angeles, Cal.  
North Platte, Neb.  
Harrisburg, Pa.  
Columbus, Ohio  
Memphis, Tenn.  
Harrisburg, Pa.  
Memphis, Tenn.

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Earle C. Anthony, Inc.  
Great Plains Broadcasting Co.  
Penna. State Police  
Commercial Radio Service Co.  
Memphis Broadcasting Co.  
WHP, Inc.  
Memphis Broadcasting Co.

### 1440 kilocycles 208.2 meters

KLS	*	250	D
WBIG	*	500	---
WCBA	*	250	1
WHEC	*	500	2C
WMBD	*	500	3+
WOKO	†	500	2C
WSAN	†	250	1
WTAD	†	500	3

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

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

## INDEX BY FREQUENCIES AND DIAL NUMBERS

### 1450 kilocycles 206.8 meters

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CMKA	--	20	---
KTBS	*	1000	---
-WBMS	*	250	1
-WGAR	†	500	N
-WHOM	*	500	1
-WKBO	*	250	1
-WNJ	*	250	1
-WSAR	*	250	---
-WTFI	--	500	Y

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

Arturio C. de Ribas  
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 Broadcasting Co.

### 1460 kilocycles 205.4 meters

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-KSTP	*	10000	N
-WJSV	*	10000	---

St. Paul, Minn.  
Alexandria, Va.

National Battery Broadcasting Co.  
Independent Publishing Co.

### 1470 kilocycles 204.0 meters

--	--	--

-KGA	†	5000	---
-WLAC	*	5000	C

Spokane, Wash.  
Nashville, Tenn.

Northwest Broadcasting System, Inc.  
Life & Casualty Insurance Co.

### 1480 kilocycles 202.6 meters

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-KFJF	*	5000	C
-WKBW	*	5000	C
XETO	---	101	1485

Oklahoma City  
Buffalo, N. Y.  
Mexico City

National Radio Mfg. Co.  
Buffalo Broadcasting Co., Lessees  
Ricardo Gonzalez Montero

### 1490 kilocycles 201.2 meters

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

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

People's Pulpit Association  
L. B. Wilson, Inc.  
Zenith Radio Corp.

### 1500 kilocycles 199.9 meters

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CMBL	--	15	---
CMBR	--	15	---
CMCM	--	15	---
CMCT	--	5	---
KDB	*	100	---
KGFI	*	100	+
KGFK	†	50	---
KGIZ	†	50	X
KGKB	--	100	---
-KGKY	*	100	---
KPJM	*	100	---
-KPQ	†	50	---
KREG	†	100	---
KUT	†	100	---
KXO	*	100	---
-WDIX	--	100	---
-WKBV	*	100	+
WKBZ	†	50	---
-WLBX	*	100	1
WLOE	*	100	+
-WMBA	†	100	---
-WMBQ	*	100	1
-WMIL	--	100	1
WMPC	†	100	---
-WNBK	*	100	---
-WOPH	*	100	---
-WPEN	*	100	+
WRDW	*	100	---
WSYB	†	100	---
-WWRL	*	100	1
WWSW	--	100	CP

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

Julio C. Hidalgo  
Tomas Basail  
Martinez y Madico  
Alberto Fernandez  
Dwight Faulding  
Eagle Broadcasting Co., Inc.  
Red River Broadcasting Co., Inc.  
Grant City Park Corp.  
Eagle Publishing Co.  
Hilliard Co., Inc.  
A. P. Miller  
Wescoast Broadcasting Co.  
Pacific Western Broadcasting  
Driskill Hotel  
E. R. Ireby and F. M. Bowles  
North Mississippi Broadcasting Corp.  
Knox Battery & Electric Co.  
K. L. Ashbacher  
John N. Brahy  
Boston Broadcasting Co.  
LeRoy Joseph Beebe  
Paul J. Gollhofer  
Arthur Faske  
First M. P. Church  
Howitt-Wood Radio Co., Inc.  
Radiophone Brdcstg. Station, Inc.  
Wm. Penn Broadcasting Co.  
Musicove, Inc.  
Seward & Weiss Music Co.  
Long Island Broadcasting Corp.  
William S. Walker

KCYS.  
**1500**  
MTRS.  
**199.9**  
DIAL

## INDEX BY LOCATIONS WITH MAP KEY

### ALABAMA

	Watts		Kcys.
Birmingham O-21	5000	WAPI	1140
	500	WBRC	930
	100	WKBC	1310
Gadsden O-21	50	WBY	1210
Mobile Q-20	500	WODX	1410
Montgomery P-21	500	WSFA	1410
Talladega O-21	100	WFDW	1420

### ALASKA

Anchorage	100	KFQD	1230
Juneau	10	KFIU	1310
Ketchikan	500	KGBU	900

### ARIZONA

Flagstaff M-7	100	KFX	1420
Jerome M-6	100	KCRJ	1310
Phoenix N-6	500	KOY	1390
	500	KTAR	620
Prescott M-6	100	KPJM	1500
Tucson O-7	100	KGAR	1370
	500	KVOA	1260

### ARKANSAS

Blytheville M-19	50	KLCN	1290
Fayetteville M-16	1000	KUOA	1390
Fort Smith N-16	50	KFPW	1340
Hot Springs N-17	10000	KTHS	1040
Little Rock N-17	100	KGHI	1200
	250	KGJF	890
	1000	KLRA	1390
Paragould M-18	100	KBTM	1200

### CALIFORNIA

Berkeley J-2	100	KRE	1370
Burbank M-3	500	KELW	780
Culver City M-3	250	KFVD	1000
El Centro N-4	100	KXO	1500
Fresno K-2	100	KMJ	1210
Hayward J-1	100	KZM	1370
Hollywood M-3	1000	KFWB	950
	5000	KNX	1050
Holy City K-1	100	KFQU	1420
Inglewood M-3	500	KMCS	1120
Long Beach M-3	1000	KFOX	1250
	1000	KGER	1360
Los Angeles M-3	1000	KECA	1430
	1000	KFAC	1300
	5000	KFI	640
	500	KFSG	1120
	1000	KGEF	1300
	100	KGFJ	1200
	1000	KHJ	900
	500	KMPC	710
	500	KMTR	570
	500	KTM	780
Oakland J-1	250	KLS	1440
	500	KLX	880
	500	KROW	930
	50	KPPC	1210
Pasadena M-3	100	KFBK	1310
Sacramento J-2	100	KFXM	1210
San Bernardino M-3	500	KFSD	600
San Diego N-3	500	KGB	1330
San Francisco J-1	1000	KFRC	610
	500	KFWI	930
	100	KGGC	1420
	7500	KGO	790
	100	KJBS	1070
	5000	KPO	680
	1000	KTAB	560
	1000	KYA	1230

San Jose J-1	500	KQW	1010
Santa Ana M-3	100	KREG	1500
Santa Barbara M-2	100	KDB	1500
Santa Maria L-2	100	KSMR	1200
Stockton J-2	250	KGDM	1100
	100	KWG	1200

### COLORADO

Colorado Springs K-11	1000	KFUM	1270
Denver K-11	500	KFEL	920
	100	KFUP	1310
	500	KFXF	920
	1000	KLZ	560
	12500	KOA	830
	500	KPOF	880
Fort Morgan J-11	100	KGEW	1200
Grand Junction K-9	100	KFXJ	1310
Greeley J-11	500	KFKA	880
Pueblo L-11	250	KGHF	1320
Trinidad L-11	100	KGIW	1420
Yuma J-12	50	KGEK	1200

### CONNECTICUT

Bridgeport H-27	250	WICC	600
Hartford H-27	500	WDRG	1330
	50000	WTIC	660-1060
Storrs H-28	250	WCAC	600

### DELAWARE

Wilmington J-26	250	WDEL	1120
	100	WILM	1420

### DISTRICT OF COLUMBIA

Washington J-26	250	WMAL	630
	500	WRC	950
	100	WOL	1310

### FLORIDA

Clearwater R-24	1000	WFLA	620
Gainesville Q-24	5000	WRUF	830
Jacksonville Q-24	1000	WJAX	900
Miami T-25	1000	WIOD	1300
	1000	WQAM	560
Orlando R-24	500	WDBO	1120
Pensacola Q-21	500	WCOA	1340
St. Petersburg S-24	1000	WSUN	620
Tampa R-24	1000	WDAE	1220
	100	WMBR	1370

### GEORGIA

Atlanta O-22	250	WGST	890
	5000	WSB	740
Augusta O-23	100	WRDW	1500
Columbus O-22	50	WRBL	1200
Macon O-23	250	WMAZ	890
Rome N-22	100	WFDV	1370
Savannah O-24	500	WTOG	1260
Thomasville Q-22	100	WQDX	1210
Tifton P-23	100	WRBI	1310
Toccoa N-23	500	WTFI	1450

### HAWAII

Honolulu	500	KGMB	1320
	1000	KGU	940

### IDAHO

Boise G-5	1000	KIDO	1250
Idaho Falls G-7	250	KID	1320
Nampa G-5	50	KFXD	1420
Pocatello H-7	250	KSEI	900
Sand Point D-6	100	KGKX	1420
Twin Falls H-6	250	KTFI	1320

## INDEX BY LOCATIONS WITH MAP KEY

### ILLINOIS

	Watts		Kcys.
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	WBBO	560
	5000	WJAZ	1490
	25000	WJBT	770
	100	WKBI	1420
	50000	WLS	870
	5000	WMAQ	670
	5000	WMBI	1080
	500	WPCC	560
	100	WSBC	1210
Cicero I-20	100	WEHS	1420
	100	WHFC	1420
	100	WJBL	1200
Decatur K-19	100	WKBS	1310
Galesburg J-18	100	WEBQ	1210
Harrisburg L-19	100	WCLS	1310
Joliet I-19	100	WKBB	1310
	100	WJBC	1200
La Salle J-19	20000	WJJD	1130
Mooseheart I-19	500	WMBD	1440
Peoria Heights J-19	500	WTAD	1440
Quincy K-18	500	KFLV	1410
Rockford I-19	100	WHBF	1210
Rock Island I-18	100	WCBS	1210
Springfield K-19	100	WTAX	1210
	100	WDZ	1070
Tuscola K-20	250	WILL	890
Urbana J-20	5000	WCBD	1080
Zion I-20			

### INDIANA

Anderson J-21	100	WHBU	1210
Connersville K-21	100	WKBV	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	WFBM	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	KFJY	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	WLBF	1420
Lawrence K-16	500	KFKU	1220
	1000	WREN	1220
Manhattan K-15	500	KSAC	580
Milford K-14	5000	KFBI	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	WLPAD	1200
Paducah M-19	100	WPAD	1420

### LOUISIANA

Monroe P-18	50	KMLB	1200
New Orleans R-19	100	WABZ	1200
	1000	WDSU	1250
	100	WJBO	1420
	100	WJBW	1200
	500	WSMB	1320
	5000	WWL	850
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	WCSH	940

### MARYLAND

Baltimore J-26	10000	WBAL	760-1060
	250	WCAO	600
	100	WCBM	1370
	500	WFBR	1270
Cumberland J-25	100	WTBO	1420

### MASSACHUSETTS

Boston G-28	500	WAAB	1410
	1000	WBIS	1230
	1000	WEEI	590
	1000	WHDH	830
	100	WLOE	1500
	1000	WNAO	1230
	500	WSSH	1410
Fall River H-28	250	WSAR	1450
	100	WLEY	1370
	500	WBOS	920
Needham G-28	100	WNBH	1310
New Bedford H-28	15000	WBZ-A	990
Springfield H-27	100	WEPS	1200
Worcester G-28	100	WORC	1200
	250	WTAG	580

### MICHIGAN

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

# INDEX BY LOCATIONS WITH MAP KEY

Detroit H-22	50	WJBK	1370
	5000	WJR	750
	100	WMBQ	1420
	1000	WWJ	920
	1000	WXYZ	1240
East Lansing H-21	1000	WKAR	1040
Flint H-22	100	WDFD	1310
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	WKBY	1500
Marquette F-19	100	WBEO	1310
Royal Oak H-22	50	WEXL	1310

## MINNESOTA

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	WLB	1250
	10000	KSTP	1460

## MISSISSIPPI

Greenville O-18	100	WRBQ	1210
Gulfport Q-19	100	WGCM	1210
Hattiesburg Q-19	10	WRBQ	1370
Jackson P-19	1000	WJDJ	1270
Meridian P-20	500	WCOC	880
Tupelo N-20	100	WDIX	1500
Vicksburg P-18	300	WQBC	1360

## MISSOURI

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	KWKC	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

## MONTANA

Billings F-9	1000	KGHL	950
Butte F-7	500	KGIR	1360
Great Falls E-8	1000	KFBB	1280
Kalispell D-7	100	KGEZ	1310
Missoula E-7	100	KGVO	1420
Wolf Point E-11	100	KGCX	1310

## NEBRASKA

Clay Center J-14	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	KGFV	1310
Scottsbluff I-11	100	KGKY	1500
York J-15	500	KGBZ	930

## NEVADA

Las Vegas L-5	100	KGIX	1420
Reno I-3	500	KOH	1380

## NEW HAMPSHIRE

Laconia G-28	100	WKAU	1310
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## NEW JERSEY

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
	500	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	WJBI	1210
Trenton I-26	500	WOAX	1280
Zarephath I-27	250	WAWZ	1350

## NEW MEXICO

Albuquerque N-7	250	KGGM	1230
Raton M-11	50	KGFL	1370
State College P-9	20000	KOB	1180

## NEW YORK

Albany H-27	500	WOKO	1440
Auburn H-25	100	WMBO	1310
Binghamton H-26	100	WNBF	1500
Brooklyn I-27	500	WBBC	1400
	1000	WBRR	1300
	500	WCGU	1400
	500	WFOJ	1400
	500	WLTH	1400
	100	WMBQ	1500
	100	WMIL	1500
Buffalo H-24	1000	WBEN	900
	100	WEBR	1310
	1000	WGR	550
	5000	WKBW	1480
	1000	WMAK	1040
	50	WSVS	1370
Canton F-26	500	WCAD	1220
Freeport I-27	100	WGBB	1210
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	50	WOCL	1210
Long Island City I-27	100	WLBX	1500
New York City I-27	5000	WABC	860
	250	WBXN	1350
	5000	WBOQ	860
	250	WCDA	1350
	50000	WEAF	660
	500	WEVD	1300
	500	WGBS	1180
	1000	WHAP	1300
	250	WHN	1010
	30000	WJZ	760
	5000	WLWL	1100
	500	WMCA	570
	250	WMSG	1350
	500	WNYC	570
	1000	WOV	1130
	250	WPAP	1010
	500	WPCH	810
	250	WQAO	1010
	250	WRNY	1010

## INDEX BY LOCATIONS WITH MAP KEY

Patchogue I-27	100	WPOE	1370
Rochester G-25	5000	WHAM	1150
	500	WHEC	1440
Saranac Lake F-26	50	WNBZ	1290
Schenectady G-27	50000	WGY	790
Syracuse G-25	1000	WFBL	1360
	250	WMAC	570
	250	WSYR	570
Troy G-27	500	WHAZ	1300
Tupper Lake F-26	100	WHDL	1420
Utica G-26	100	WBX	1200
Woodside I-27	100	WWRL	1500
Yonkers I-27	100	WCOH	1210

### NORTH CAROLINA

Asheville M-23	1000	WWNC	570
Charlotte M-24	5000	WBT	1080
Gastonia M-24	100	WSOC	1210
Greensboro M-24	500	WBIG	1440
Raleigh M-25	1000	WPTF	680
Wilmington N-26	100	WRAM	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	KGCU	1200
Minot E-13	100	KLPM	1420

### OHIO

Akron I-23	1000	WADC	1320
Canton I-23	10	WHBC	1200
Cincinnati K-22	100	WBFE	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	WAIU	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

Chickasha N-14	250	KOCW	1400
Elk City N-13	100	KGMP	1210
Enid M-14	100	KCRC	1370
Norman N-15	500	WNAD	1010
Oklahoma N-15	5000	KFJF	1480
	100	KFXR	1310
	100	KGFG	1370
	1000	WKY	900
Ponca City M-15	100	WBZZ	1200
S. Coffeyville M-15	500	KGGF	1010
Shawnee N-15	100	KGFF	1420
Tulsa M-15	5000	KVOO	1140

### OREGON

Astoria D-2	100	KFJI	1370
Corvallis E-2	1000	KOAC	550
Eugene F-2	100	KORE	1420

Marshfield F-1	100	KOOS	1370
Medford G-2	100	KMED	1310
Portland E-3	5000	KEX	1180
	100	KBPS	1420
	500	KFJR	1300
	1000	KGW	620
	1000	KOIN	940
	500	KTBR	1300
	500	KWJJ	1060
	100	KXL	1420

### PENNSYLVANIA

Allentown I-26	250	WCBA	1440
	250	WSAN	1440
Altoona I-25	100	WFBG	1310
Carbondale H-26	10	WNBW	1200
Elkins Park I-26	50	WIBG	930
Erie H-24	100	WEDH	1420
Grove City I-24	100	WSAJ	1310
Harrisburg I-25	500	WBAK	1430
	100	WCOD	1200
	500	WHP	1430
Johnstown J-24	100	WJAC	1310
Lancaster I-26	100	WGAL	1310
	100	WKJC	1200
	100	WJBU	1210
Lewisburg I-26	100	WLBW	1260
Oil City I-24	500	WCAU	1170
Philadelphia I-26	10000	WELK	1370
	100	WFAN	610
	500	WFI	560
	100	WHAT	1310
	500	WIP	610
	500	WLIT	560
	100	WPEN	1500
	250	WRAX	1020
	100	WTEL	1310
Pittsburgh J-24	50000	KDKA	980
	500	KQV	1380
	1000	WCAE	1220
	1000	WJAS	1290
	100	WWSW	1500
Reading I-26	100	WRAB	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	100	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
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	100	KGDA	1370
Pierre G-13	200	KGFX	580
Rapid City H-12	100	WCAT	1200
Sioux Falls H-15	2000	KSOO	1110

## INDEX BY LOCATIONS WITH MAP KEY

Vermillion I-15	500	KUSD	890
Watertown G-15	100	KGCR	1210
Yankton I-15	1000	WNAX	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
Memphis N-19	500	WGBC	1430
	100	WHBQ	1370
	500	WMC	780
	500	WNBR	1430
	500	WREC	600
Nashville M-21	5000	WLAC	1470
	5000	WSM	650
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
	1000	WDAG	1410
Austin Q-14	100	KUT	1500
Beaumont R-17	500	KFDM	560
Brownsville U-15	500	KWWG	1260
College Sta. Q-15	500	WTAW	1120
Corpus Christi S-14	100	KGFI	1500
Dallas P-15	10000	KRDL	1040
	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
Greenville O-15	15	KFPM	1310
Harlingen T-14	500	KRGV	1260
Houston R-16	1000	KPRC	920
	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
Tyler P-16	100	KGKB	1500
Waco Q-15	1000	WACO	1240
Wichita Falls O-14	250	KGKO	570

### UTAH

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 K-26	10000	WJSV	1460
Arlington J-25	1000	NAA	690
Danville L-25	100	WBTM	1370
Emory L-23	500	WEHC	1350
Lynchburg L-25	100	WLVA	1370
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
Pullman E-5	1000	KWSC	1220
Seattle C-3	100	KFQW	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
Walla Walla E-5	100	KUJ	1370
Wenatchee D-4	50	KPQ	1500
Yakima D-4	50	KIT	1310

### WEST VIRGINIA

Bluefield L-24	250	WHIS	1410
Charleston K-23	250	WOBU	580
Fairmont J-24	250	WMMN	890
Huntington K-23	250	WSAZ	580
Wheeling J-24	5000	WWVA	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-19	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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### CANADA

#### ALBERTA

Calgary B-7	500	CFAC	690
	500	CFCN	985
	500	CHCA	690
	500	CJCJ	690
	500	CNRC	690
Edmonton A-8	250	CHMA	580
	500	CJCA	930
	500	CKUA	580
Lethbridge C-8	50	CJOC	1120
Red Deer A-8	1000	CHCT	840
	1000	CKLC	840
	1000	CNRD	840



## INDEX BY LOCATIONS WITH MAP KEY

BRITISH COLUMBIA		Watts	Kcys.	SASKATCHEWAN			
Chilliwack B-3	100	CHWK	665	Fleming C-13	500	CJRW	665
Kamloops B-5	100	CFJC	1120	Moose Jaw C-11	500	CJRM	665
Sea Island	500	CJOR	1210	Regina C-12	500	CHWC	960
Vancouver B-3	50	CHLS	730		500	CJBR	960
	50	CKCD	730		500	CKCK	960
	50	CKFC	730	Saskatoon B-11	500	CNRR	960
	50	CKMO	730		500	CFQC	910
	100	CKWX	730	Yorkton B-13	500	CNRS	910
	500	CNRV	1030			CJGX	630
Victoria C-3	500	CFCT	630				
<b>MANITOBA</b>				<b>HAITI</b>			
Brandon D-14	500	CKX	540	Port au Prince X-30	1000	HHK	920
Winnipeg D-15	5000	CKY	780				
	5000	CNRW	780	<b>MEXICO</b>			
<b>NEW BRUNSWICK</b>				Aguascalientes W-10	350	XFC	805
Fredericton D-29	500	CFNB	1210	Chihuahua, Chih. R-9	250	XFF	915
Moncton D-30	500	CNRA	630	Guadalajara, Jal. X-10	101	XEA	1200
St. John D-30	500	CFBO	890	Juarez P-9	101	XEJ	857
<b>NEWFOUNDLAND</b>				Laredo, N. L. S-13	1000	XEQ	1015
St. Johns A-35	500	8WMC	682		101	XEFE	980
<b>NOVA SCOTIA</b>				Merida, Yuc. X-19	2500	XEP	1400
Glace Bay C-32	10000	VAS	685	Mexico City Y-13	105	XEY	547
Halifax E-31	500	CHNS	910		1000	XEB	1030
	500	CNRH	910		250	XEFA	1250
Sydney C-32	50	CJCB	880		101	XEK	990
Wolfville D-31	50	CKIC	1010		1000	XEN	711
<b>ONTARIO</b>					5000	XEO	940
Chatham H-22	100	CFCO	1210		101	XER	674
Cobalt E-23	15	CKMC	1210		500	XETA	1140
Hamilton H-24	10	CHCS	1120		100	XETO	1485
	50	CHML	880		2000	XETY	1300
	50	CKOC	1120		500	XEX	1210
Kingston G-25	500	CFRC	930		5000	XEW	780
London H-23	5000	CJGC	910	Monterrey, N. L. U-13	5000	XEZ	588
	500	CNRL	910		2000	XFG	638
North Bay	50	CFCH	1200		1000	XFI	818
Ottawa F-25	100	CKCO	890		500	AFX	860
	500	CNRO	600	Morelia, Mich. Y-12	5000	XEH	1080
Port Arthur E-19	50	CKPR	890		500	XET	630
Prescott F-25	50	CFLC	1010	Oaxaca, Oak. AA-14	101	XEI	1000
Preston H-23	25	CKPC	1210	Puebla Z-13	105	XEE	1132
Toronto G-24	500	CFCA	840	Reynosa, Tams. T-14	101	XEV	1034
	500	CFCL	580	Salttillo, Coah. U-12	10000	XED	961
	5000	CFRB	960	Tampico, Tams. W-14	10	XEL	1091
	500	CKCL	580		500	XEM	730
	5000	CKGW	690	Toluca, Y-12	500	XES	890
	500	CKNC	580	Veracruz, Ver. Z-14	50	XEC	1333
	500	CNRT	840		500	XETF	680
	5000	CNRX	960		101	XEU	800
	5000	CPRY	690	<b>CUBA</b>			
Waterloo G-23	50	CKCR	1010	Cardenas W-24	30	CMGE	1375
Wingham G-23	25	10-BP	1200	Camaguey W-26	15	CMJC	1321
<b>PRINCE EDWARD ISLAND</b>				Ciego de Avila W-26	20	CMJE	856
Charlottetown C-31	250	CFCY	960	Cienfuegos W-25	20	CMJB	1276
	100	CHCK	960		200	CMHA	1154
Summerside C-31	100	CHGS	1120		40	CMHJ	645
<b>QUBBEC</b>				Colon W-24	100	CMGA	834
Montreal E-26	1650	CFCF	1030	Havana W-23	50	CMBA	1345
	5000	CHYC	730		150	CMBC	965
	5000	CKAC	730		150	CMBD	965
	5000	CNRM	730		7.5	CMBF	1345
Quebec D-27	100	CHRC	645		150	CMBG	1070
	22	CKCI	880		30	CMBI	1405
	50	CKCV	880		15	CMBJ	1285
	50	CNRQ	880		15	CMBK	1405
	50				15	CMBL	1500
	50				15	CBM	1285
	50				30	CMBN	1405

CFAC 690	✓	CJRM 665	✓	CMBQ 1405		CMKA 1450	
Calgary, Alta.		Moose Jaw, Sask.		Havana, Cuba		Santiago, Cuba	
CFBO 890	✓	CJRW 665		CMBR 1500		CMKB 1200	
St. John, N. B.		Fleming, Sask.		Havana, Cuba		Santiago, Cuba	
CFCA 840	✓	CKAC 730	✓	CMBS 790	✓	CMKC 1034	
Toronto, Ont.		Montreal, Que.		Havana, Cuba		Santiago, Cuba	
CFCF 1030	✓	CKCD 730		CMBT 1070		CMKD 1100	
Montreal, Que.		Vancouver, B.C.		Havana, Cuba		Santiago, Cuba	
CFCH 1200	✓	CKCI 880		CMBW 1010		CMKE 1249	
North Bay, Ont.		Quebec, Que.		Havana, Cuba		Santiago, Cuba	
CFCL 580	✓	CKCK 960	✓	CMBX 1405		CMKF 1363	
Toronto, Ont.		Regina, Sask.		Havana, Cuba		Holguin, Cuba	
CFCN 985	✓	CKCL 580	✓	CMBY 1405		CMKG 1176	
Calgary, Alta.		Toronto, Ont.		Havana, Cuba		Santiago, Cuba	
CFCO 1210		CKCO 890		CMBZ 1010		CMKH 1327	
Chatham, Ont.		Ottawa, Ont.		Havana, Cuba		Santiago, Cuba	
CFCT 630	✓	CKCR 1010		CMC 840	✓	CMQ 1150	✓
Victoria, B. C.		Waterloo, Ont.		Havana, Cuba		Havana, Cuba	
CFCY 960	✓	CKCV 880		CMCA 1225		CMW 588	
Ch'lotet'n, P.E.I.		Quebec, Que.		Havana, Cuba		Havana, Cuba	
CFJC 1120	✓	CKFC 730		CMCB 1070	✓	CMX 890	✓
Kamloops, B. C.		Vancouver, B.C.		Havana, Cuba		Havana, Cuba	
CFLC 1010	✓	CKGW 690	✓	CMCD 1225		CNBA 630	✓
Prescott, Ont.		Toronto, Ont.		Havana, Cuba		Moncton, N.B.	✓
CFNB 1210		CKIC 1010	✓	CMCF 890		CNCR 690	
Fredericton, N.B.		Wolfville, N.S.		Havana, Cuba		Calgary, Alta.	
CFQC 910	✓	CKLC 840	✓	CMCG 1285		CNRD 840	
Saskatoon, Sask.		Red Deer, Alta.		Havana, Cuba		Red Deer, Alta.	
CFRB 960	✓	CKMC 1210	✓	CMCH 1285		CNRH 910	✓
Toronto, Ont.		Cobalt, Ont.		Havana, Cuba		Halifax, N. S.	✓
CFRC 930	✓	CKMO 730	✓	CMCM 1500		CNRL 910	✓
Kingston, Ont.		Vancouver, B.C.		Havana, Cuba		London, Ont.	✓
CHCA 690	✓	CKNC 580	✓	CMCN 1225		CNRM 730	✓
Calgary, Alta.		Toronto, Ont.		Havana, Cuba		Montreal, Que.	✓
CHCK 960		CKOC 1120	✓	CMCO 660		CNRO 600	✓
Ch'lotet'n, P.E.I.		Hamilton, Ont.		Havana, Cuba		Ottawa, Ont.	✓
CHCS 1120	✓	CKPC 1210	✓	CMCQ 1150		Quebec, Que.	
Hamilton, Ont.		Preston, Ont.		Havana, Cuba		CNRR 960	✓
CHCT 840		CKPR 890	✓	CMCR 1285		Regina, Sask.	✓
Red Deer, Alta.		Port Arthur, Ont.		Havana, Cuba		CNRS 910	
CHGS 1120	✓	CKUA 580	✓	CMCT 1500		Saskatoon, Sask.	
Sum'rside, P.E.I.		Edmonton, Alta.		Havana, Cuba		CNRT 840	✓
CHLS 730	✓	CKWX 730	✓	CMCU 1345		Toronto, Ont.	✓
Vancouver, B.C.		Vancouver, B.C.		Havana, Cuba		CNRV 1030	✓
CHMA 580		CKX 540	✓	CMCY 1345		Vancouver, B.C.	✓
Edmonton, Alta.		Brandon, Man.		Havana, Cuba		CNRW 780	✓
CHML 880	✓	CKY 780	✓	CMGA 834		Winnipeg, Man.	✓
Hamilton, Ont.		Winnipeg, Man.		Colon, Cuba		CNRX 960	✓
CHNS 910	✓	CMAB 1249		CMGB 1185		Toronto, Ont.	✓
Halifax, N.S.		Pinar del Rio, Cu.		Matanzas, Cuba		CNRY 690	✓
CHRC 645		CMAC 1375		CMGD 1140		Toronto, Ont.	✓
Quebec, Que.		Pinar del Rio, Cu.		Matanzas, Cuba		CMGE 1375	
CHWC 960	✓	CMBA 1345		Cardenas, Cuba		CMGF 977	
Regina, Sask.		Havana, Cuba		Matanzas, Cuba		CMGH 780	
CHWK 665		CMBC 965		Matanzas, Cuba		Matanzas, Cuba	
Chilliwack, B.C.		Havana, Cuba		CMHA 1154		Matanzas, Cuba	
CHYC 730	✓	CMBD 965		Cienfuegos, Cuba		Matanzas, Cuba	
Montreal, Que.		Havana, Cuba		CMHC 790		Matanzas, Cuba	
CJBR 960	✓	CMBF 1345		Tuinucu, Cuba		Matanzas, Cuba	
Regina, Sask.		Havana, Cuba		CMHI 1110		Santa Clara, Cu.	
CJCA 930	✓	CMBG 1070		Santa Clara, Cu.		CMHJ 645	
Edmonton, Alta.		Havana, Cuba		Cienfuegos, Cuba		CMJB 1276	
CJCB 880	✓	CMBI 1405		Ciego de Avila		Camaguey, Cuba	
Sydney, N.S.		Havana, Cuba		Camaguey, Cuba		Camaguey, Cuba	
CJCJ 690	✓	CMBJ 1285		Camaguey, Cuba		Camaguey, Cuba	
Calgary, Alta.		Havana, Cuba		Camaguey, Cuba		Camaguey, Cuba	
CJGC 910	✓	CMBK 1405		Camaguey, Cuba		Camaguey, Cuba	
London, Ont.		Havana, Cuba		Camaguey, Cuba		Camaguey, Cuba	
CJGX 630	✓	CMBL 1500		Camaguey, Cuba		Camaguey, Cuba	
Yorkton, Sask.		Havana, Cuba		Camaguey, Cuba		Camaguey, Cuba	
CJOC 1120	✓	CMBM 1285		Camaguey, Cuba		Camaguey, Cuba	
Lethbridge, Alta.		Havana, Cuba		Camaguey, Cuba		Camaguey, Cuba	
CJOR 1210		CMBN 1405		Camaguey, Cuba		Camaguey, Cuba	
Sea Island, B.C.		Havana, Cuba		Camaguey, Cuba		Camaguey, Cuba	
	19		14		3		17

**KELW** 780  
 Burbank, Cal. ✓  
**KEX** 1180  
 Portland, Ore. ✓  
**KFAB** 770  
 Lincoln, Nebr. ✓  
**KFAC** 1300  
 Los Angeles, Cal. ✓  
**KFBB** 1280  
 Great Fls., Mont. ✓  
**KFBI** 1050  
 Milford, Kans. ✓  
**KFBK** 1310  
 Sacramento, Cal. ✓  
**KFBL** 1370  
 Everett, Wash. ✓  
**KFDM** 560  
 Beaumont, Tex. ✓  
**KFDY** 550  
 Brookings, S.D. ✓  
**KFEL** 920  
 Denver, Colo. ✓  
**KFEQ** 680  
 St. Joseph, Mo. ✓  
**KFGQ** 1310  
 Boone, Iowa ✓  
**KFH** 1300  
 Wichita, Kansas ✓  
**KFI** 640  
 Los Angeles, Cal. ✓  
**KFIO** 1120  
 Spokane, Wash. ✓  
**KFIU** 1310  
 Juneau, Alaska ✓  
**KFIZ** 1420  
 Fond du Lac, Wis ✓  
**KFJB** 1200  
 Marshalltown, Ia. ✓  
**KFJF** 1480  
 Oklahoma City ✓  
**KFJI** 1370  
 Astoria, Ore. ✓  
**KFJM** 1370  
 Grd. Forks, N.D. ✓  
**KFJR** 1300  
 Portland, Ore. ✓  
**KFJY** 1310  
 Fort Dodge, Ia. ✓  
**KFJZ** 1370  
 Ft. Worth, Tex. ✓  
**KFKA** 880  
 Greeley, Colo. ✓  
**KFKU** 1220  
 Lawrence, Kans. ✓  
**KFKX** 1020  
 Chicago, Ill. ✓  
**KFLV** 1410  
 Rockford, Ill. ✓  
**KFLX** 1370  
 Galveston, Tex. ✓  
**KFMX** 1250  
 N'thfield, Minn. ✓  
**KFNF** 890  
 Shenandoah, Ia. ✓  
**KFOR** 1210  
 Lincoln, Nebr. ✓  
**KFOX** 1250  
 Long Beach, Cal. ✓  
**KFPL** 1310  
 Dublin, Texas ✓  
**KFPM** 1310  
 Greenville, Tex. ✓  
**KFPW** 1340  
 Ft. Smith, Ark. ✓  
**KFPY** 1340  
 Spokane, Wash. ✓

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**KFQD** 1230  
 Anchorage, Alas. ✓  
**KFQU** 1420  
 Holy City, Cal. ✓  
**KFQW** 1420  
 Seattle, Wash. ✓  
**KFRC** 610  
 San F'ncisco, Cal. ✓  
**KFRU** 630  
 Columbia, Mo. ✓  
**KFSD** 600  
 San Diego, Cal. ✓  
**KFSG** 1120  
 Los Angeles, Cal. ✓  
**KFUL** 1290  
 Galveston, Tex. ✓  
**KFUM** 1270  
 Col. Spgs., Colo. ✓  
**KFUO** 550  
 St. Louis, Mo. ✓  
**KFUP** 1310  
 Denver, Colo. ✓  
**KFVD** 1000  
 Culver City, Cal. ✓  
**KFVS** 1210  
 Cape Gir'rd'u, Mo. ✓  
**KFWB** 950  
 Hollywood, Cal. ✓  
**KFWF** 1200  
 St. Louis, Mo. ✓  
**KFWI** 930  
 San F'ncisco, Cal. ✓  
**KFXD** 1420  
 Nampa, Idaho ✓  
**KFXF** 920  
 Denver, Colo. ✓  
**KFXJ** 1310  
 GrandJunc., Colo. ✓  
**KFXM** 1210  
 San Ber'd'no, Cal. ✓  
**KFXR** 1310  
 Oklahoma City ✓  
**KFYU** 1420  
 Flagstaff, Ariz. ✓  
**KFYO** 1420  
 Abilene, Texas ✓  
**KFYR** 550  
 Bismarck, N.D. ✓  
**KGA** 1470  
 Spokane, Wash. ✓  
**KGAR** 1370  
 Tucson, Ariz. ✓  
**KGB** 1330  
 San Diego, Cal. ✓  
**KGBU** 900  
 Ketchikan, Al'ka. ✓  
**KGBX** 1310  
 St. Joseph, Mo. ✓  
**KGBZ** 930  
 York, Nebr. ✓  
**KGCA** 1270  
 Decorah, Iowa ✓  
**KGCR** 1210  
 Watertown, S.D. ✓  
**KGCU** 1200  
 Mandan, N.D. ✓  
**KGCX** 1310  
 Wolf P't, Mont. ✓  
**KGDA** 1370  
 Mitchell, S. D. ✓  
**KGDE** 1200  
 Ferg's F'lls, Minn ✓  
**KGDM** 1100  
 Stockton, Cal. ✓  
**KGDY** 1200  
 Huron, S. D. ✓

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**KGEF** 1300  
 Los Angeles, Cal. ✓  
**KGEK** 1200  
 Yuma, Colo. ✓  
**KGER** 1360  
 Long Beach, Cal. ✓  
**KGEW** 1200  
 Ft. Morgan, Colo. ✓  
**KGEZ** 1310  
 Kalispell, Mont. ✓  
**KGFF** 1420  
 Shawnee, Okla. ✓  
**KGFG** 1370  
 Oklahoma City ✓  
**KGFI** 1500  
 Corpus Ch'sti, Tex ✓  
**KGfJ** 1200  
 Los Angeles, Cal. ✓  
**KGfK** 1500  
 Moorhead, Minn. ✓  
**KGfL** 1370  
 Raton, N. M. ✓  
**KGfW** 1310  
 Ravenna, Nebr. ✓  
**KGfX** 580  
 Pierre, S. D. ✓  
**KGfC** 1420  
 San F'ncisco, Cal. ✓  
**KGfF** 1010  
 Coffeyville, Okla. ✓  
**KGGM** 1230  
 Alb'q'rque, N.M. ✓  
**KGfH** 1320  
 Pueblo, Colo. ✓  
**KGfI** 1200  
 Little Rock, Ark. ✓  
**KGfL** 950  
 Billings, Mont. ✓  
**KGfR** 1360  
 Butte, Mont. ✓  
**KGfW** 1420  
 Trinidad, Colo. ✓  
**KGfX** 1420  
 Las Vegas, Nev. ✓  
**KGfZ** 1500  
 Grant City, Mo. ✓  
**KGfJF** 890  
 Little Rock, Ark. ✓  
**KGfKB** 1500  
 Tyler, Texas ✓  
**KGfKL** 1370  
 San Angelo, Tex. ✓  
**KGfKO** 570  
 Wichita Flls., Tex ✓  
**KGfKX** 1420  
 Sand Point, Ida. ✓  
**KGfKY** 1500  
 Scottsbluff, Nebr. ✓  
**KGfMB** 1320  
 Honolulu, T. H. ✓  
**KGfMP** 1210  
 Elk City, Okla. ✓  
**KGfNF** 1430  
 No. Platte, Neb. ✓  
**KGfNO** 1210  
 Dodge City, Kans. ✓  
**KGfO** 790  
 San F'ncisco, Cal. ✓  
**KGfRS** 1410  
 Amarillo, Texas ✓  
**KGfU** 940  
 Honolulu, Hawaii ✓  
**KGfVO** 1420  
 Missoula, Mont. ✓  
**KGfW** 620  
 Portland, Ore. ✓

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**KGY** 1200  
 Lacey, Wash. ✓  
**KHJ** 900  
 Los Angeles, Cal. ✓  
**KHQ** 590  
 Spokane, Wash. ✓  
**KICK** 1420  
 Red Oak, Iowa. ✓  
**KID** 1320  
 Idaho Falls, Ida. ✓  
**KIDO** 1250  
 Boise, Idaho ✓  
**KIT** 1310  
 Yakima, Wash. ✓  
**KJBS** 1070  
 San F'ncisco, Cal. ✓  
**KJR** 970  
 Seattle, Wash. ✓  
**KLCN** 1290  
 Blytheville, Ark. ✓  
**KLO** 1400  
 Ogden, Utah ✓  
**KLPM** 1420  
 Minot, N. Dak. ✓  
**KLRA** 1390  
 Little Rock, Ark. ✓  
**KLS** 1440  
 Oakland, Cal. ✓  
**KLX** 880  
 Oakland, Cal. ✓  
**KLZ** 560  
 Denver, Colo. ✓  
**KMA** 930  
 Shenandoah, Ia. ✓  
**KMAC** 1370  
 San Antonio, Tex. ✓  
**KMBC** 950  
 Kan. City, Mo. ✓  
**KMCS** 1120  
 Inglewood, Cal. ✓  
**KMED** 1310  
 Medford, Ore. ✓  
**KMJ** 1210  
 Fresno, Cal. ✓  
**KMLB** 1200  
 Monroe, La. ✓  
**KMMJ** 740  
 Clay Ctr., Nebr. ✓  
**KMO** 860  
 Tacoma, Wash. ✓  
**KMOX** 1090  
 St. Louis, Mo. ✓  
**KMPC** 710  
 Los Angeles, Cal. ✓  
**KMTR** 570  
 Los Angeles, Cal. ✓  
**KNX** 1050  
 Los Angeles, Cal. ✓  
**KOA** 830  
 Denver, Colo. ✓  
**KOAC** 550  
 Corvallis, Ore. ✓  
**KOB** 1180  
 State Coll., N.M. ✓  
**KOCW** 1400  
 Chickasha, Okla. ✓  
**KOH** 1380  
 Reno, Nevada ✓  
**KOIL** 1260  
 Council Bluffs, Ia. ✓  
**KOIN** 940  
 Portland, Ore. ✓  
**KOL** 1270  
 Seattle, Wash. ✓  
**KOMO** 920  
 Seattle, Wash. ✓

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KONO 1370	✓	KTM 780	✓	WAAF 920	✓	WBZ-A 990	✓
San Antonio, Tex.		Los Angeles, Cal.		Chicago, Ill.		Springfield, Mass.	
KOOS 1370	✓	KTNT 1170	✓	WAAM 1250	✓	WCAC 600	✓
Marshfield, Ore.		Muscataine, Iowa		Newark, N. J.		Storrs, Conn.	
KORE 1420		KTRH 1120		WAAT 940	✓	WCAD 1220	✓
Eugene, Ore.		Houston, Texas		Jersey City, N. J.	✓	Canton, N. Y.	
KOY 1390	✓	KTSA 1290	✓	WAAW 660		WCAE 1220	✓
Phoenix, Ariz.		San Antonio, Tex.		Omaha, Nebr.		Pittsburgh, Pa.	✓
KPCB 650		KTSL 1310		WABC 860	✓	WCAH 1430	✓
Seattle, Wash.		Shreveport, La.		New York City		Columbus, Ohio	✓
KPJM 1500		KTSM 1310	✓	WABI 1200		WCAJ 590	✓
Prescott, Ariz.		El Paso, Texas	✓	Bangor, Maine		Lincoln, Nebr.	✓
KPO 680	✓	KTW 1270	✓	WABZ 1200	✓	WCAL 1250	✓
San F'n'cisco, Cal.		Seattle, Wash.		New Orleans, La.		Northfield, Minn.	
KPOF 880	✓	KUJ 1370		WACO 1240	✓	WCAM 1280	✓
Denver, Colo.		Walla Wall, Wash.		Waco, Texas	✓	Camden, N. J.	✓
KPPC 1210	✓	KUOA 1390		WADC 1320	✓	WCAO 600	✓
Pasadena, Cal.		Fayetteville, Ark.		Akron, Ohio	✓	Baltimore, Md.	✓
KPQ 1500	✓	KUSD 890	✓	WAIU 640	✓	WCAP 1280	✓
Wenatchee, Wash		Vermillion, S. D.		Columbus, Ohio	✓	Asbury Pk., N. J.	✓
KPRC 920	✓	KUT 1500		WALR 1210	✓	WCAT 1200	✓
Houston, Texas		Austin, Texas		Zanesville, Ohio	✓	Rapid City, S. D.	
KQV 1380	✓	KVI 760	✓	WAPI 1140	✓	WCAU 1170	✓
Pittsburgh, Pa.		Tacoma, Wash.		Birmingham, Ala.	✓	Philadelphia, Pa.	✓
KQW 1010		KVL 1370		WASH 1270	✓	WCAX 1200	✓
San Jose, Cal.		Seattle, Wash.		Gr. Rapids, Mich.	✓	Burlington, Vt.	✓
KRE 1370		KVOA 1260	✓	WAWZ 1350	✓	WCAZ 1070	✓
Berkeley, Cal.		Tucson, Arizona	✓	Zarephath, N. J.	✓	Carthage, Ill.	✓
KREG 1500		KVOO 1140	✓	WBAA 1400	✓	WCBA 1440	✓
Santa Ana, Cal.		Tulsa, Okla		Lafayette, Ind.	✓	Allentown, Pa.	✓
KRGV 1260	✓	KVOS 1200		WBAK 1430	✓	WCBD 1080	✓
Harlingen, Texas		Bellingh'm, Wash.		Harrisburg, Pa.	✓	Zion, Ill.	✓
KRLD 1040	✓	KWCR 1310	✓	WBAL 760-1060	✓	WCBM 1370	✓
Dallas, Texas		Cedar Rapids, Ia.		Baltimore, Md.	✓	Baltimore, Md.	✓
KRMD 1310		KWEA 1210	✓	WBAP 800	✓	WCBS 1210	✓
Shreveport, La.		Shreveport, La.		Fort Worth, Tex.	✓	Springfield, Ill.	✓
KROW 930		KWG 1200		WBAX 1210	✓	WCCO 810	✓
Oakland, Cal.		Stockton, Cal.		Wilkes-Barre, Pa.	✓	Minneap., Minn.	✓
KRSC 1120		KWJJ 1060		WBBC 1400	✓	WCDA 1350	✓
Seattle, Wash.		Portland, Ore.		Brooklyn, N. Y.	✓	New York City	✓
KSAC 580	✓	KWK 1350	✓	WBBL 1210	✓	WCFL 970	✓
Manh'tt'n, Kans.		St. Louis, Mo.		Richmond, Va.	✓	Chicago, Ill.	✓
KSCJ 1330	✓	KWKC 1370	✓	WBBM 770	✓	WCGU 1400	✓
Sioux City, Ia.		Kansas City, Mo.		Chicago, Ill.	✓	Brooklyn, N. Y.	✓
KSD 550	✓	KWKH 850	✓	WBBR 1300	✓	WCHI 1490	✓
St. Louis, Mo.		Shreveport, La.		Brooklyn, N. Y.	✓	Chicago, Ill.	✓
KSEI 900		KWLC 1270		WBBZ 1200	✓	WCKY 1490	✓
Pocatello, Idaho		Decorah, Iowa		Ponca City, Okla.	✓	Covington, Ky.	✓
KSL 1130	✓	KWSC 1220	✓	WBCM 1410	✓	WCLO 1200	✓
Salt Lake City		Pullman, Wash.		Bay City, Mich.	✓	Janesville, Wis.	✓
KSMR 1200		KWWG 1260	✓	WBEN 900	✓	WCLS 1310	✓
Santa Maria, Cal.		Brownsville, Tex.		Buffalo, N. Y.	✓	Jollet, Ill.	✓
KSO 1380	✓	KXA 570		WBEO 1310	✓	WCMA 1400	✓
Clarinda, Iowa		Seattle, Wash.		Marquette, Mich.	✓	Culver, Ind.	✓
KSOO 1110	✓	KXL 1420	✓	WBGF 1370		WCOA 1340	✓
Sioux Falls, S.D.		Portland, Ore.		Glens Falls, N. Y.		Pensacola, Fla.	✓
KSTP 1460	✓	KXO 1500		WBIG 1440	✓	WCOC 880	✓
St. Paul, Minn.		El Centro, Cal.		Greensboro, N.C.	✓	Meridian, Miss.	✓
KTAB 560	✓	KXRO 1310		WBIS 1230	✓	WCOD 1200	✓
San F'n'cisco, Cal.		Aberdeen, Wash		Boston, Mass.	✓	Harrisburg, Pa.	✓
KTAP 1420		KXYZ 1420		WBMS 1450	✓	WCOH 1210	✓
San Antonio, Tex.		Houston, Texas		Hackensack, N.J.	✓	Yonkers, N. Y.	✓
KTAR 620	✓	KYA 1230	✓	WBNX 1350	✓	WCRW 1210	✓
Phoenix, Ariz.		San F'n'cisco, Cal.		New York City	✓	Chicago, Ill.	✓
KTAT 1240	✓	KYW 1020	✓	WBOQ 860	✓	WCSC 1360	✓
Ft. Worth, Tex.		Chicago, Ill.		New York City	✓	Charleston, S. C.	✓
KTBR 1300		KZM 1370		WBOW 1310	✓	WCSH 940	✓
Portland, Ore.		Hayward, Cal.		Terre Haute, Ind.	✓	Portland, Maine	✓
KTBS 1450	✓	NAA 690		WBRC 930	✓	WDAE 1220	✓
Shreveport, La.		Arlington, Va.		Birmingham, Ala.	✓	Tampa, Fla.	✓
KTFI 1320	✓	TIC 750		WBRE 1310	✓	WDAF 610	✓
Twin Falls, Ida.		San Jose, C. R.		Wilkes-Barre, Pa.	✓	Kansas City, Mo.	✓
KTHS 1040	✓	VAS 685	✓	WBSO 920	✓	WDAG 1410	✓
Hot Spgs., Ark.		Glace Bay, N. S.		Needham, Mass.	✓	Amarillo, Texas	✓
KTLC 1310	✓	WAAB 1410		WBT 1080	✓	WDAH 1310	✓
Houston, Texas		Boston, Mass.		Charlotte, N. C.	✓	El Paso, Texas	✓
	22		16	WBTM 1370		WDAY 940	✓
				Danville, Va.		Fargo, N. D.	✓
					31		31

WDBJ 930  
Roanoke, Va. ✓  
WDBO 1120  
Orlando, Fla. ✓  
WDEL 1120  
Wilmington, Del. ✓  
WDGY 1180  
Minneap., Minn. ✓  
WDIX 1500  
Tupelo, Miss. ✓  
WDOD 1280  
Chattan'ga, Tenn ✓  
WDRG 1330  
Hartford, Conn. ✓  
WDSU 1250  
New Orleans, La. ✓  
WDWF 1210  
Providence, R. I. ✓  
WDZ 1070  
Tuscola, Ill. ✓  
WEAF 660  
New York City ✓  
WEAI 1270  
Ithaca, N. Y. ✓  
WEAN 780  
Providence, R. I. ✓  
WEAO 570  
Columbus, Ohio ✓  
WEBC 1290  
Superior, Wis. ✓  
WEBQ 1210  
Harrisburg, Ill. ✓  
WEBR 1310  
Buffalo, N. Y. ✓  
WEDC 1210  
Chicago, Ill. ✓  
WEDH 1420  
Erie, Pa. ✓  
WEET 590  
Boston, Mass. ✓  
WEHC 1350  
Emory, Va. ✓  
WEHS 1420  
Cicero, Ill. ✓  
WELK 1370  
Philadelphia, Pa. ✓  
WELL 1420  
BattleCreek, Mich ✓  
WENR 870  
Chicago, Ill. ✓  
WEPS 1200  
Worcester, Mass. ✓  
WEVD 1300  
New York City ✓  
WEW 760  
St. Louis, Mo. ✓  
WEXL 1310  
Royal Oak, Mich. ✓  
WFAA 800  
Dallas, Texas ✓  
WFAN 610  
Philadelphia, Pa. ✓  
WFBC 1200  
Knoxville, Tenn. ✓  
WFBE 1200  
Cincinnati, Ohio ✓  
WFBG 1310  
Altoona, Pa. ✓  
WFBL 1360  
Syracuse, N. Y. ✓  
WFBM 1230  
Indianapolis, Ind. ✓  
WFBR 1270  
Baltimore, Md. ✓  
WFDF 1310  
Flint, Mich. ✓  
WFDV 1370  
Rome, Ga. ✓

WFDW 1420  
Talladega, Ala. ✓  
WFI 560  
Philadelphia, Pa. ✓  
WFIW 940  
Hopkinsville, Ky. ✓  
WFLA 620  
Clearwater, Fla. ✓  
WFOX 1400  
Brooklyn, N. Y. ✓  
WGAL 1310  
Lancaster, Pa. ✓  
WGAR 1450  
Cleveland, Ohio ✓  
WGBB 1210  
Freeport, N. Y. ✓  
WGBC 1430  
Memphis, Tenn. ✓  
WGBF 630  
Evansville, Ind. ✓  
WGBI 880  
Scranton, Pa. ✓  
WGBS 1180  
New York City ✓  
WGCM 1210  
Gulfport, Miss. ✓  
WGCP 1250  
Newark, N. J. ✓  
WGES 1360  
Chicago, Ill. ✓  
WGH 1310  
Newp't News, Va. ✓  
WGL 1370  
Ft. Wayne, Ind. ✓  
WGN 720  
Chicago, Ill. ✓  
WGR 550  
Buffalo, N. Y. ✓  
WGST 890  
Atlanta, Ga. ✓  
WGY 790  
Schenec'd'y, N.Y. ✓  
WHA 940  
Madison, Wis. ✓  
WHAD 1120  
Milwaukee, Wis. ✓  
WHAM 1150  
Rochester, N.Y. ✓  
WHAP 1300  
New York City ✓  
WHAS 820  
Louisville, Ky. ✓  
WHAT 1310  
Philadelphia, Pa. ✓  
WHAZ 1300  
Troy, N. Y. ✓  
WHB 860  
Kansas City, Mo. ✓  
WHBC 1200  
Canton, Ohio ✓  
WHBD 1370  
Mt. Orab, O. ✓  
WHBF 1210  
Rock Island, Ill. ✓  
WHBL 1410  
Sheboygan, Wis. ✓  
WHBG 1370  
Memphis, Tenn. ✓  
WHBU 1210  
Anderson, Ind. ✓  
WHBY 1200  
Green Bay, Wis. ✓  
WHDF 1370  
Calumet, Mich. ✓  
WHDH 830  
Boston, Mass. ✓  
WHDI 1180  
Minneap., Minn. ✓

WHDL 1420  
TupperLake, N.Y. ✓  
WHEC 1440  
Rochester, N. Y. ✓  
WHFC 1420  
Cicero, Ill. ✓  
WHIS 1410  
Bluefield, W. Va. ✓  
WHK 1390  
Cleveland, Ohio ✓  
WHN 1010  
New York City ✓  
WHO 1000  
Des Moines, Ia. ✓  
WHOM 1450  
Jersey City, N. J. ✓  
WHP 1430  
Harrisburg, Pa. ✓  
WIAS 1420  
Ottumwa, Iowa ✓  
WIBA 1280  
Madison, Wis. ✓  
WIBG 930  
Elkins Park, Pa. ✓  
WIBM 1370  
Jackson, Mich. ✓  
WIBO 560  
Chicago, Ill. ✓  
WIBR 1420  
Steubenville, O. ✓  
WIBU 1210  
Poynette, Wis. ✓  
WIBW 580  
Topeka, Kansas ✓  
WIBX 1200  
Utica, N. Y. ✓  
WICC 600  
Bridgeport, Conn. ✓  
WIL 1200  
St. Louis, Mo. ✓  
WILL 890  
Urbana, Ill. ✓  
WILM 1420  
Wilmington, Del. ✓  
WIOD 1300  
Miami, Fla. ✓  
WIP 610  
Philadelphia, Pa. ✓  
WIS 1010  
Columbia, S. C. ✓  
WISJ 780  
Madison, Wis. ✓  
WISN 1120  
Milwaukee, Wis. ✓  
WJAC 1310  
Johnstown, Pa. ✓  
WJAG 1060  
Norfolk, Nebr. ✓  
WJAK 1310  
Marion, Ind. ✓  
WJAR 890  
Providence, R. I. ✓  
WJAS 1290  
Pittsburgh, Pa. ✓  
WJAX 900  
Jacksonville, Fla. ✓  
WJAY 610  
Cleveland, Ohio ✓  
WJAZ 1490  
Chicago, Ill. ✓  
WJBC 1200  
La Salle, Ill. ✓  
WJBI 1210  
Red Bank, N. J. ✓  
WJBK 1370  
Detroit, Mich. ✓  
WJBL 1200  
Decatur, Ill. ✓

WJBO 1420  
New Orleans, La. ✓  
WJBT 770  
Chicago, Ill. ✓  
WJBU 1210  
Lewisburg, Pa. ✓  
WJBW 1200  
New Orleans, La. ✓  
WJBY 1210  
Gadsden, Ala. ✓  
WJDX 1270  
Jackson, Miss. ✓  
WJJD 1130  
Mooseheart, Ill. ✓  
WJKS 1360  
Gary, Ind. ✓  
WJR 750  
Detroit, Mich. ✓  
WJSV 1460  
Alexandria, Va. ✓  
WJW 1210  
Mansfield, Ohio ✓  
WJZ 760  
New York City ✓  
WKAQ 890  
San Juan, P. R. ✓  
WKEAR 1040  
E. Lansing, Mich. ✓  
WKAU 1310  
Laconia, N. H. ✓  
WKBH 1310  
Joliet, Ill. ✓  
WKBG 1310  
Birmingham, Ala. ✓  
WKBK 1400  
Indianapolis, Ind. ✓  
WKBH 1380  
La Crosse, Wis. ✓  
WKBW 1420  
Chicago, Ill. ✓  
WKBX 570  
Youngstown, O. ✓  
WKBO 1450  
Jersey City, N. J. ✓  
WKBS 1310  
Galesburg, Ill. ✓  
WKBV 1500  
Connersville, Ind. ✓  
WKBW 1480  
Buffalo, N. Y. ✓  
WKBZ 1500  
Ludington, Mich. ✓  
WKJC 1200  
Lancaster, Pa. ✓  
WKRC 550  
Cincinnati, O. ✓  
WKY 900  
Oklahoma City ✓  
WKZO 590  
Be'n Spgs., Mich. ✓  
WLAC 1470  
Nashville, Tenn. ✓  
WLAP 1200  
Louisville, Ky. ✓  
WLB 1250  
St. Paul, Minn. ✓  
WLCB 1310  
Muncie, Ind. ✓  
WLBK 1420  
Kansas City, Mo. ✓  
WLBG 1200  
Ettrick, Va. ✓  
WLBL 900  
Stevens Pt., Wis. ✓  
WLBW 1260  
Oil City, Pa. ✓  
WLBX 1500  
L.I. City, N.Y. ✓

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WLBZ 620	✓	WNBO 1200	✓	WPTF 680	✓	WSIX 1210	
Bangor, Me.		Washington, Pa.		Raleigh, N. C.		Springfield, Tenn.	
WLCI 1210	✓	WNBR 1430		WQAM 560	✓	WSJS 1310	✓
Ithaca, N. Y.		Memphis, Tenn.		Miami, Fla.		Winst.-Sal., N. C.	
WLEY 1370	✓	WNBW 1200		WQAN 880		WSM 650	✓
Lexington, Mass.		Carbondale, Pa.		Scranton, Pa.		Nashville, Tenn.	✓
WLIT 560	✓	WNBX 1200		WQAO 1010	✓	WSMB 1320	✓
Philadelphia, Pa.		Springfield, Vt.		New York City		New Orleans, La.	✓
WLOE 1500		WNBZ 1290		WQBC 1360		WSMK 1380	✓
Boston, Mass.		Saranac Lake, N. Y.		Vicksburg, Miss.		Dayton, Ohio	✓
WLS 870	✓	WNJ 1450	✓	WQDM 1370	✓	WSOC 1210	✓
Chicago, Ill.		Newark, N. J.		St. Albans, Vt.		Gastonia, N. C.	✓
WLSI 1210	✓	WNOX 560	✓	WQDX 1210		WSPA 1420	✓
Providence, R. I.		Knoxville, Tenn.		Thomasville, Ga.		Spartanburg, S. C.	✓
WLTH 1400	✓	WNYC 570	✓	WRAF 1200	✓	WSPD 1340	✓
Brooklyn, N. Y.		New York City		La Porte, Ind.		Toledo, Ohio	✓
WLVA 1370	✓	WOAI 1190	✓	WRAC 1370		WSSH 1410	✓
Lynchburg, Va.		San Antonio, Tex.		Williamsport, Pa.		Boston, Mass.	✓
WLW 700	✓	WOAX 1280	✓	WRAM 1370		WSUI 880	✓
Cincinnati, Ohio		Trenton, N. J.		Wilmington, N. C.		Iowa City, Ia.	✓
WLWL 1100	✓	WOBT 1310	✓	WRW 1310	✓	WSUN 620	✓
New York City		Union City, Tenn.		Reading, Pa.		St. Petersburg, Fla.	✓
WMAC 570	✓	WOBU 580	✓	WRAX 1020	✓	WSVS 1370	✓
Syracuse, N. Y.		Charleston, W. Va.		Philadelphia, Pa.		Buffalo, N. Y.	✓
WMAK 1040	✓	WOC 1000	✓	WRBI 1310		WSYB 1500	✓
Buffalo, N. Y.		Davenport, Iowa		Tifton, Ga.		Rutland, Vt.	✓
WMAI 630	✓	WOCL 1210	✓	WRBJ 1370		WSYR 570	✓
Washington, D. C.		Jamestown, N. Y.		Hattiesburg, Miss.		Syracuse, N. Y.	✓
WMAQ 670	✓	WODA 1250	✓	WRBL 1200	✓	WTAD 1440	✓
Chicago, Ill.		Paterson, N. J.		Columbus, Ga.		Quincy, Ill.	
WMAZ 890	✓	WODX 1410	✓	WRBQ 1210	✓	WTAG 580	✓
Macon, Ga.		Mobile, Ala.		Greenville, Miss.		Worcester, Mass.	✓
WMBA 1500	✓	WOI 640	✓	WRBX 1410	✓	WTAM 1070	✓
Newport, R. I.		Ames, Iowa		Roanoke, Va.		Cleveland, Ohio	✓
WMBC 1420	✓	WOKO 1440	✓	WRC 950	✓	WTAQ 1330	✓
Detroit, Mich.		Albany, N. Y.		Washington, D. C.		Eau Claire, Wis.	✓
WMBD 1440	✓	WOL 1310	✓	WRDO 1370	✓	WTAR 780	✓
Peoria Hghts., Ill.		Washington, D. C.		Augusta, Me.		Norfolk Va.	✓
WMBG 1210	✓	WOMT 1210	✓	WRDW 1500	✓	WTAW 1120	✓
Richmond, Va.		Manitowoc, Wis.		Augusta, Ga.		College Sta., Tex.	✓
WMBH 1420	✓	WOOD 1270	✓	WREC 600	✓	WTAX 1210	✓
Joplin, Mo.		Gr. Rapids, Mich.		Memphis, Tenn.		Springfield, Ill.	✓
WMBI 1080	✓	WOPI 1500	✓	WREN 1220	✓	WTBO 1420	✓
Chicago, Ill.		Bristol, Tenn.		Lawrence, Kans.		Cumberland, Md.	✓
WMBO 1310	✓	WOQ 1300	✓	WRHM 1250	✓	WTEL 1310	✓
Auburn, N. Y.		Kansas City, Mo.		Minneap., Minn.		Philadelphia, Pa.	✓
WMBQ 1500	✓	WOR 710	✓	WRJN 1370	✓	WTFI 1450	✓
Brooklyn, N. Y.		Newark, N. J.		Racine, Wis.		Toccoa, Ga.	✓
WMBR 1370	✓	WORC 1200	✓	WRNY 1010	✓	WTIC 660-1060	✓
Tampa, Fla.		Worcester, Mass.		New York City		Hartford, Conn.	✓
WMC 780	✓	WOS 630	✓	WROL 1310	✓	WTMJ 620	✓
Memphis, Tenn.		Jeff's'n City, Mo.		Knoxville, Tenn.		Milwaukee, Wis.	✓
WMCA 570	✓	WOV 1130	✓	WRR 1280	✓	WTOC 1260	✓
New York City		New York City		Dallas, Texas		Savannah, Ga.	✓
WMIL 1500	✓	WOW 590	✓	WRUF 830	✓	WWAE 1200	✓
Brooklyn, N. Y.		Omaha, Nebr.		Gainesville, Fla.		Hammond, Ind.	✓
WMMN 890	✓	WOWO 1160	✓	WRVA 1110	✓	WWJ 920	✓
Fairmont, W. Va.		Ft. Wayne, Ind.		Richmond, Va.		Detroit, Mich.	✓
WMPC 1500	✓	WPAD 1420	✓	WSAI 1330	✓	WWL 850	✓
Lapeer, Mich.		Paducah, Ky.		Cincinnati, Ohio		New Orleans, La.	✓
WMRJ 1210	✓	WPAP 1010	✓	WSAJ 1310	✓	WWNC 570	✓
Jamaica, N. Y.		New York City		Grove City, Pa.		Asheville, N. C.	✓
WMSG 1350	✓	WPAW 1210	✓	WSAN 1440	✓	WVRL 1500	✓
New York City		Pawtucket, R. I.		Allentown, Pa.		Woodside, N. Y.	✓
WMT 600	✓	WPCC 560	✓	WSAR 1450	✓	WWSW 1500	✓
Waterloo, Iowa		Chicago, Ill.		Fall River, Mass.		Pittsburgh, Pa.	✓
WNAC 1230	✓	WPCH 810	✓	WSAZ 580	✓	WWVA 1160	✓
Boston, Mass.		New York City		Hunt'gton, W. Va.		Wheeling, W. Va.	✓
WNAD 1010	✓	WPEN 1500	✓	WSB 740	✓	WXYZ 1240	✓
Norman, Okla.		Philadelphia, Pa.		Atlanta, Ga.		Detroit, Mich.	✓
WNAX 570	✓	WPG 1100	✓	WSBC 1210	✓	XEA 1200	✓
Yankton, S. D.		Atl'ntic City, N. J.		Chicago, Ill.		Guad'l'jara, Mex.	✓
WNBF 1500	✓	WPOE 1370	✓	WSBT 1230	✓	XEB 1030	✓
Bingh'mt'n, N. Y.		Patchogue, N. Y.		South Bend, Ind.		Mexico City	✓
WNBH 1310	✓	WPOR 780	✓	WSEN 1210	✓	XEC 1333	✓
New B'd'd, Mass.		Norfolk, Va.		Columbus, Ohio		Toluca, Mex.	✓
		WPSC 1230	✓	WSFA 1410	✓	XED 961	✓
		State College, Pa.		Montgomery, Ala.	✓	Reynosa, Mex.	✓
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XEE 1132 Oaxaco, Mex.	XEM 730 Tampico, Mex.	✓	XETA 1140 Mexico City		XEZ 588 Mexico City	
XEFA 1250 Mexico City	XEN 711 Mexico City	✓	XETF 680 Veracruz, Mex.		XFC 805 Aguascal'tntes, M.	
XEFE 980 Laredo, Mex.	XEO 940 Mexico City		XETO 1485 Mexico City		XFF 915 Chihuahua, Mex.	
XEH 1080 Monterrey, Mex.	XEP 1400 Laredo, Mex.	✓	XETY 1300 Mexico City	✓	XFG 638 Mexico City	
XEI 1000 Morelia, Mex.	XEQ 1015 Juarez, Mex.	✓	XEU 800 Veracruz, Mex.		XFI 818 Mexico City	
XEJ 857 Juarez, Mex.	XER 674 Mexico City		XEV 1034 Puebla, Mex.		XFX 860 Mexico City	
XEK 990 Mexico City	XES 890 Tampico, Mex.	✓	XEW 780 Mexico City	✓	8WMC 682 St. Johns, N.F.	
XEL 1091 Saltillo, Mex.	XET 630 Monterrey, Mex.	✓	XEX 1210 Mexico City		10BP 1200 Wingham, Ont.	✓
			XEY 547 Merida, Mex.	✓		

INDEX BY LOCATIONS WITH MAP KEY

(Continued from page 55)

Havana W-23	50 CMBQ 1405			250 CMQ 1150
	15 CMBR 1500			1400 CMW 588
	150 CMBS 790			500 CMX 890
	150 CMBT 1070		Holguin W-27	30 CMKF 1363
	150 CMBW 1010		Matanzas W-24	7.5 CMGB 1185
	30 CMBX 1405			5 CMGD 1140
	100 CMBY 1405			50 CMGF 977
	150 CMBZ 1010			60 CMGH 780
	500 CMC 840		Pinar del Rio W-22	20 CMAB 1249
	150 CMCA 1225			30 CMAC 1375
	150 CMCB 1070		Santa Clara W-25	15 CMHI 1110
	250 CMCD 1225		Santiago X-28	20 CMKA 1450
	250 CMCF 890			15 CMKB 1200
	30 CMCG 1285			150 CMKC 1034
	15 CMCH 1285			20 CMKD 1100
	15 CMCM 1500			250 CMKE 1249
	250 CMCN 1225			30 CMKG 1176
	225 CMCO 660			250 CMKH 1327
	600 CMCQ 1150		Tuinucu	500 CMHC 790
	20 CMCR 1285			
	5 CMCT 1500		<b>COSTA RICA</b>	
	50 CMCU 1345		San Jose FF-23	50 TIC 750
	15 CMCY 1345			
	3150 CMK 730			

AMATEUR BROADCAST STATIONS IN CANADA

Call	Owner of Station	Location of Station	Kcys.	Meters	Watts
10AK	Classic Radio Club	151 Ontario St., Stratford, Ont.	1200	250	10
10BU	Canora Radio Association	Railway Ave., East Canora, Saskatchewan	1200	250	15
10BP	Wingham Radio Club	Brunswick Hotel Bldg., Wingham, Ont.	1200	250	15
10AE	Bowmanville Radio Club	Sougog St., West, Bowmanville, Ont.	1200	250	10
10BI	Prince Albert Radio Club	331 20th St. West, Prince Albert, Sask.	1200	250	25
10AY	Kelowna Radio Association	Pendozi St., Kelowna, B. C.	1200	250	25
10AB	Moose Jaw Radio Association	338 Main St. North Moose Jaw, Sask.	1200	250	25
10BQ	Telephone City Radio Asso.	12 Terrace Hill, Brantford, Ont.	1200	250	5

CANADIAN STATIONS TELEVISION

Call	Owner	Location	Kycl.	Meters
VE9AU	Crawford Hopkins	London, Ontario	2004-2100	149.7-142.9
VE9RM	Rogers Majestic Corp., Limited	Toronto, Ontario	2004-2100	149.7-142.9
VE9BZ	Radio Service Engineers	Vancouver, B. C.	2750-2850	109.1-105.3
VE9AR	A. R. MacKenzie	Saskatoon, Sask.	2850-2950	105.3-101.7

CANADIAN HIGH FREQUENCY BROADCASTING

Call	Owner	Location	Kycl.	Meters
VE9CI	Crawford Hopkins	London, Ont.	2758	108.8
VE9AK	Alberta Pacific Grain Company	Red Deer, Alta.	2830	105.9
VE9CU	Calgary Albertan	Calgary, Alta.	6005	49.96
VE9CF	Borrett for CHNS	Hallifax, N. S.	6050	49.59
VE9CS	United Church of Canada	Vancouver, B. C.	6070	49.42
VE9GW	Gooderham & Worts, Limited	Bowmanville, Ontario	6095	49.22
VE9CG	Calgary Herald, Limited	Calgary, Alta.	6110	49.10
VE9DR	Canadian Marconi Co.	Drummondville, Quebec	11780	25.47
VE9CA	Western Broadcasting Co., Ltd.	Calgary, Alta.	11860	25.3
VE9CA	Western Broadcasting Co., Ltd.	Calgary, Alta.	6030	49.75
VE9CL	James Richardson & Sons	Middlechurch, Manitoba	6150	48.8

# THE CUBAN EXPERIMENTALS

Call	Owner	Address	Location	Kcys.	Meters	Watts
CLR	Enrique Lasanta	Rayo numero 2	Habana	1000	30	150
CM-1BY	Antonio Sarasola	Marti numero 3	Gunajay	7150	41.9	30
CM-1CX	Gerardo R. Suarez	Luz Caballero numero 25	Gunajay	7300	41	15
CM-1FM	Julian Machado	Marti numero 49	Guanajay	14122	21.5	100
CM-1OE	Oswaldo Esecobar	Capitan Reyes s-n	San Cristobal	7150	41.9	7.5
CM-2AP	Pedro C. Andux	Neptuno numero 176	Habana	7310	41.5	10
CM-2AR	Alfredo Rosell	Xifres numero 18	Habana	143.50	20.9	7.5
CM-2AY	Cesar Fernandez	Real 101	Marianao	7310	41.5	7.5
CM-2CF	Victor Coullard	Camp. Columbia 30-B	Marianao	7257	41.2	7.5
CM-2FC	Fernando Capestany	Godinez "E" Buena Vista	Marianao	7150	41.9	7.5
CM-2GZ	Jorge L. Gonzalez	Monte numero 49	Habana	7300	41	7.5
CM-2IQ	Jose Fernandez	Rcal 89	Marianao	7257	41.2	7.5
CM-2JM	Justo Mahia	Sitios numero 65	Habana	7150	41.9	5
CM-2JT	Jose A. Terry	Avenida de la Playa numero 5	Marianao	14280	21	7.5
CM-2KW	Carlos Alburquerque	Goicuria numero 24	Habana	7310	41.5	5
CM-2MD	Marino Diaz Quinones	Padre Varela numero 120	Habana	7300	41	20
CM-2MK	R. V. Watters	Avenida de Italia 29	Habana	7170	41.8	100
CM-2OC	Lorenzo Capó	Neptuno numero 176, altos	Habana	7300	41	7.5
CM-2PC	Marino Diaz Quinones	Yatch Mariana	Habana	7190	41.7	10
CM-2QY	Alberto Giro	21 entre C y D, Vedado	Habana	7310	41.5	15
CM-2RA	Rigoberto Alvarez	San Jose numero 216	Habana	7152	41.9	7.5
CM-2RC	Radio Club de Cuba	Genios numero 23	Habana	7310	41.5	7.5
CM-2RO	Pablo A Rosado	Santa Rosa y Gral. Nunez	Marianao	7300	41	7.5
CM-2RZ	Nestor Rodriguez	Cardenas numero 55	Habana	7152	41.9	7.5
CM-2SC	Jose del Salto	General Suarez numero 126	Habana	14015	21.4	250
CM-2SF	Eusebio Solis	Juana Alonso num. 9, Luyano	Habana	7207	41.6	7.5
CM-2SH	Silvio Hernandez	H numero 184, Vedado	Habana	7170	41.8	7.5
CM-2WA	Ezequiel Santos	Cristina numero 12	Habana	7170	41.8	7.5
CM-2WD	Pedro Madiedo	Santa Rosa A	Marianao	7135	42	10
CM-2WW	Amadeo Saenz d'Calahorra	Marina numero 2	Habana	7120	42.1	50
CM-2XA	Alfredo Rosell	Xifres numero 18	Habana	7202	41.1	7.5
CM-2XC	Alexander Strang	M. P. de Castro s-n	Habana	7310	41.5	5
CM-2XD	Juan F. de Castro	3a. Avenida esquina a 4	Marianao	14015	21.4	250
CM-2XK	Raul Karman	Rayo 67	Habana	7150	41.9	7.5
CM-2YB	Francisco Vives	Paseo de Marti numero 105	Habana	7310	41.5	5
CM-4AA	Morris Katzen	Yatch Kallisto	Habana	7150	41.9	7.5
CM-5AZ	Ernesto V. Figueroa	Independencia 130	Matanzas	7257	41.2	7.5
CM-5BY	Leon Gonzalez Velez	San Isidro 5	Matanzas	7257	41.2	7.5
CM-5CX	Jose Alfonso	Diago 73	Colon	7257	41.2	50
CM-5EN	Escuela Normal	Tello Lamar 41	Matanzas	7257	41.2	7.5
CM-5FC	Felix U. Casas	E. Blanchet 19	Matanzas	7211	41.6	7.5
CM-5FL	Francisco Diaz	Santa Catalina 16	P. Betancourt	7170	41.8	7.5
CM-5IM	Felix U. Casas	Tello Lamar 60	Matanzas	7257	41.2	7.5
CM-5NI	Julio C. Oyarzabal	Marti numero 24	Jovellanos	7300	41	7.5
CM-5RV	Jose R. Ponte	San Vicente numero 28	Matanzas	7150	41.9	7.5
CM-5RY	Bernabe R. de la Torre	General Betancourt numero 105	Matanzas	14280	21	7.5
CM-6DW	Eduardo Terry	San Carlos 197	Cienfuegos	7300	41	10
CM-6GT	Juan Pablo Ros	Independencia 150	Cienfuegos	1579	41.2	5
CM-6SG	Reinberto Sanchez	Candelaria numero 16	Santa Clara	7310	41.5	7.5
CM-6SZ	Homero Sanchez	Independencia numero 9	Santo Domingo	7300	41	15
CM-7CX	Leonard B. Fox	Central Florida	Florida	7310	41.5	15
CM-7DW	M. L. de Quintana	Central Tacajo	Tacajo	7211	41.6	10
CM-7JQ	Leonard B. Fox	Central Florida	Florida	14280	21	7.5
CM-7OL	Arsenio Valdes	Ave. General Machado	Ciego de Avila	7130	42.8	20
CM-7SH	Domingo Caymares	Augusto Arango 31	Nuevitas	7257	41.2	15
CM-8BY	Alberto Ravelo	Ave. entre 1 y 3 V. A.	Santiago de Cuba	7300	41	30
CM-8CW	Edmundo Recamier	Reloj Alta numero 2	Santiago de Cuba	7300	41	20
CM-8CX	Arturo C. de Ribas	1 esquina a 8 V. A.	Santiago de Cuba	7300	41	20
CM-8HS	Guillermo Polanco	M. Corona Baja 16	Santiago de Cuba	7130	42.8	100
CM-8MN	Melchor Aguero	Estrada Palma, Alta 1	Santiago de Cuba	7140	42.8	50
CM-8OL	Luis C. Greco	San Bartolome 32	Santiago de Cuba	7300	41	50
CM-8UF	Earle D. Byer	Estacion Naval	Guantanamo	7300	41	50
CM-8YB	B. V. Greer	Estacion Naval	Guantanamo	7300	41	100

## The Monthly Forum

(Continued from page 26)

only surmise that the Denver station was broadcasting a program which originated in the studio of WJZ and the announcer of the latter inadvertently spoke before cutting off the chain.

"Will you please explain to me why

it is that Station KQV, Pittsburgh, Pa., only has 500 watts instead of 5000," inquires John W. Delach, Oakmont, Pa. "It's the second oldest radio in Pittsburgh."

Unfortunately, or perhaps fortunately, power is not assigned by seniority. There are many old stations still on low power.

Not even merit seems to be recognized



in making power assignments. For instance, WHK, one of the pioneer stations, has been trying for years to get more power than the 1000 watts allotted it, but has been unable to get by the powers that be.

"Why is WWAE listed as Hammond, Ind.?" asks Wm. Lesser, 180 Harman St., Brooklyn, N. Y. "I receive this station nightly and they announce it as Chicago, Ill. I wouldn't believe this only I have had a verification from this station and the Post Office stamp was also Chicago."

Hammond is a suburb of Chicago. More and more stations are moving their transmitters to the suburbs of the cities in which they are located. RADEX always gives as location the studio rather than the antenna towers. In the case of WWAE, however, the reports of the Commission show both transmitter and studio locations as Hammond. We are unable to account for their announcing as from Chicago.

"I would like to know," inquires Chas. H. Kramer, 1906 Hanover Ave., Allentown, Pa., "if there is a 10,000-watt California station on or near 1490 kcys."

The Commission reports for years carried KPWF at Westminster, Calif., as having a construction permit for 10,000 watts. Information came to us that no such station was on the air or even in course of construction and letters addressed to it were returned. We therefore deleted it.

"How about a complete airline distance chart?" suggests W. Dyson, 72 Cambridge Ave., Hamilton, Ont.

Any table of distances must necessarily show only a very limited number of cities, the number that can be given at either the top or the side of a sheet. We formerly published such a list but received many complaints because so few cities were shown. A very much better method of measuring distances is with the RADEX Radio Map, for then the distance can be quickly ascertained between any two given points in North America.

"Puzzle No. 3 in March *cannot be solved*," insists James Pinkerton, 47 Jasper St., Paterson, N. J. "I worked hours on it and could not get it. All calls

were supposed to be in North America and CBMT is in Cuba, not North America. I could have easily solved it had I know Cuba could have been used."

Has anyone ever seen a map of North America that did not show Cuba or seen Cuba on any other map but that of North America?

We receive many complaints regarding the character of programs. We ourselves frequently chafe during long harangues regarding the merits of some tooth-paste or washing-machine, but usually we can spin the dial and get something more to our taste.

H. W. Martin, Secretary of the Fort William Radio Club, 330 Dease St., Fort William, Ont., writes in part as follows: "We feel that the broadcasting of programs has taken on an aspect of cheapness during the last year or so. Out of scores of programs each week it is safe to say that not over eight or nine percent belong to the better class, and the trash that is flooding the air now is increasing so rapidly that quite a few people cannot see investment in a radio."

Advertisers are more and more coming to sense the fact that all over the continent people are springing to their feet when advertising begins and tuning out their programs. For instance, Cremo cigars have gone from the extreme of most obnoxious newspaper and billboard advertising to the limiting of advertising talk on their radio programs to twenty-five words.

It is no easy matter to provide all 100% features, but there is really no excuse for some of the patter and chatter put out on some programs. The dialog between some of the comedians (!) of the air is so asinine and puerile it would not be permitted on the stage of even the cheapest burlesque house. And our own pet peeve is the "laughter" interjected in a program by hired laughers. The Blackstone program with Frank Crummit and Julia Sanderson is one of the greatest offenders in this respect.

However, our only comfort is that we don't have to pay money for this sort of thing and by using the dial patiently, sooner or later we can tune in something really enjoyable.

# FAVORITE PROGRAMS

Time	Station	Dials	Feature	Time	Station	Dials	Feature
<b>DAILY</b>				<b>WEDNESDAY</b>			
<b>SUNDAY</b>				<b>THURSDAY</b>			
<b>MONDAY</b>				<b>FRIDAY</b>			
5.30	W 5	4	ea times				
<b>TUESDAY</b>				<b>SATURDAY</b>			

# 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 WEAJ in New York. First we must ascertain the frequency for this station. Look it up under WEAJ 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 WEAJ is 660. Now we turn to 660 kilocycles in the Index by Frequencies and Dial Numbers. Here we find that WEAJ 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

Frequency (kilocycles)	Wave Length (meters)	Station	Power (watts)	Location	Dial Numbers
590	508.2	KHJ	1000	Spokane, Wash.	76 74
590	508.2	WEAF	500	Lincoln, Neb.	
590	508.2	WEFI	500	Boston, Mass.	
590	508.2	WOW	1000	Omaha, Neb.	
590	508.2	WEMC	1000	Berrien Springs, Mich.	
600	499.7	CFCH	350	Ironquels Falls, Ont.	75 73
600	499.7	KLVN	800	Laramie, Wyo.	
600	499.7	KFSD	500	San Diego, Calif.	
600	499.7	WEAD	350	Baltimore, Md.	
600	499.7	WEIW	250	Butte, Wis.	
600	499.7	WGAN	500	Lawrenceburg, Tenn.	
600	499.7	WISC	500	Memphis, Tenn.	
600	499.7	WTIC	350	Hartford, Conn.	
610	491.5	KPRC	1000	San Francisco, Calif.	74 72
610	491.5	WLPZ	1000	Kansas City, Mo.	
610	491.5	WEAN	500	Philadelphia, Pa.	
610	491.5	WISN	500	Madison, Wis.	
610	491.5	WQQ	1000	Kansas City, Mo.	
620	483.6	KPAD	500	Phoenix, Ariz.	73 71
620	483.6	KCJW	1000	Portland, Ore.	
620	483.6	WJAB	500	Tampa, Fla.	
620	483.6	WHDH	1000	Ocala, Fla.	
620	483.6	WJLS	500	Dover, Pa.	
620	483.6	WTMJ	1000	Milwaukee, Wis.	
630	475.9	CFCT	350	Victoria, B. C.	72 70
630	475.9	CJCK	800	Yorkton, Sask.	
630	475.9	CJNA	350	Moncton, N. B.	
630	475.9	CYR	250	Manitowish, Wis.	
630	475.9	KPRC	500	Columbia, Mo.	
630	475.9	WCHY	500	Nashville, Ind.	
630	475.9	WVAL	350	Washington, D. C.	
630	475.9	WOS	500	Jefferson City, Mo.	
640	468.5	KFI	500	Los Angeles, Calif.	
640	468.5	WAIU	500	Columbus, Ohio	
650	461.3	WSM	500	Nashville, Tenn.	70 68
660	454.3	WAAY	500	Omaha, Neb.	69 67
660	454.3	WEAF	50000	New York City	
670	447.5	WMAO	500	Chicago, Ill.	68 66
680	440.9	EPO	500	San Francisco, Cal.	67 65
680	440.9	WPTF	5000	Raleigh, N. C.	



*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 be 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. 1FO, Washington, D. C.

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

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