

THE FEBRUARY 1930

# RADIO INDEX

The Radio Fan's Own Magazine



Beautiful Jeanette

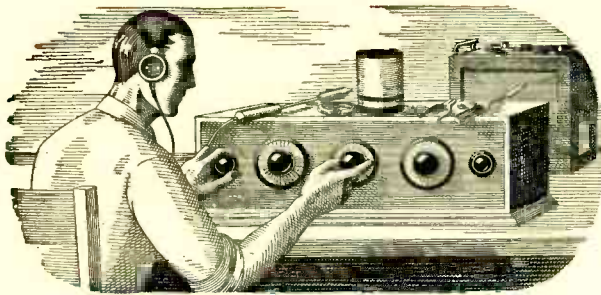
“I have logged 710 stations and most of the credit goes to RADEX —that wonderful little log-book”

[ See Story on Page 3 ]

No. 36

Curing Noises in Receivers

N. S. E.



*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 when an enormous, fast-growing industry Radio had come to be—employing thousands and thousands of trained men. I usually stayed home in the evenings after work, because I didn't make enough money to go out very much.

And as for the idea that a splendid Radio job might be mine, if I made a little effort to prepare for it—such an idea never entered my mind. When a friend suggested it to me one year ago I laughed at him.

"You're kidding me," I said.

"I'm not," he replied. "Take a look at this ad."

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

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

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

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

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

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

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

Take another tip—No matter what your plans are, no matter how much or how little you know about Radio—clip the coupon below and look their free book over. It is filled with interesting facts, figures, and photos, and the information it will give you is worth a few minutes of anybody's time. You will place yourself under no obligation—the book is free, and is gladly sent to anyone who wants to know about Radio. Just address J. E. Smith, President, National Radio Institute, Dept. OB52, Washington, D. C.

J. E. SMITH, President,  
National Radio Institute, Dept. OB52,  
Washington, D. C.

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

Name .....

Address .....

Town .....

State .....

Please mention RADEX

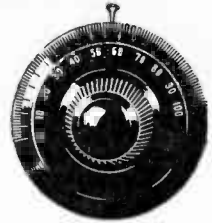
THE FEBRUARY 1930



# RADIO INDEX

REG. U. S. PATENT OFFICE

FRED CLAYTON BUTLER  
*Editor and Publisher*



SIXTH YEAR

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# Curing Noises in Radio Receivers

By J. B. SMITH

**R**ADIO noises are highly evasive especially to the average set owner who is not skilled in the function and operation of the various parts. However, there are a few specific symptoms of definite troubles, which are apparent to anyone, and it is the purpose of this article to direct the reader to the probable cause of these symptoms, making it possible for him to effect a cure without the need of calling a service man.

First of all, there are a number of sources of noise that originate entirely outside of the set. Some of these are incurable, but to others simple and effective remedies can be applied. Static belongs to the first kind. It is worse during summer than winter and its effect in the receiver can only be reduced to some extent by shortening the aerial or using a small fixed condenser or resistor across the aerial and ground binding posts. Sometimes broadcasting equipment is faulty, a condition that should be remedied at the station. Reradiation interference is not as prevalent today as it was a few years ago, as sets of the regenerative type are being supplanted by well-shielded receivers of the non-reradiating type. However, even now there are some of the "old-timers" in daily operation. They cause "mocking-bird" whistles in your reception and are caused by the operator of the offending set applying too much current to the set and then trying to tune in signals. Part of the energy, strengthened by the power of his set, is sent back into his aerial and off into the air. Your aerial picks up some of this energy and starts to whistle.

Telegraphic signals are easily distinguished by their dot and dash characteristics. All you can do about it is to report the case to the radio supervisor in your district. It is his duty to see that amateur wireless stations are operated on wave lengths below the broadcast wave lengths.

## *Some Common Faults*

Crackling noises in your receiver may be caused by a leakage of electricity over

wet insulators of power lines, defective transformer bushings and windings, loose lamps in your house-lighting circuit, loose connections in the aerial and ground system, grounded power and telephone lines, which includes tree branches touching the lines, or loose connections in the receiver, or cord connecting it to the loudspeaker. When this trouble is experienced, first check your aerial and ground system carefully. Then wiggle the tubes, one by one, while the set is in operation, and examine the wiring, including the loudspeaker cord. Very often the tube tips or socket prongs become corroded and need a cleaning, which can be done with fine emery cloth.

Interference from power-line devices usually have some degree of uniformity. Dirty commutators and sparking brushes on electric motors used on washing machines, vacuum cleaners, fans, oil-burning furnaces, refrigerators, sewing machines, etc., frequently cause crackling noises of a steady, buzzy kind. You can obtain interference eliminators to trap these disturbances before they enter your set, provided it is of the well-shielded type. A simple method of reducing the trouble and sometimes entirely eliminating it is to connect two 2-mfd. condensers in series with each other across the power line supplying the motor. A ground connection on a cold-water pipe is then made to the remaining open terminal of each condenser.

## *Disturbance by Electrical Devices*

Farm-lighting plants are equipped with a magneto which sets up a disturbance in radio reception. This can be remedied by shielding the high-tension lead from the magneto to the spark plug by slipping a length of flexible metal tubing over it. The ends of the tubing should not be allowed to touch the lugs on the wire and therefore it is a good idea to wrap tape about both the tubing and the leads. An insulated wire is then soldered to the tubing and is connected

*(Continued on page 18)*

# How I Brought in 710 Stations

By FRANK A. JOHNSON

I Have been listening-in now for six and a half years and in that length of time I have brought in 710 stations, each one verified. I caught my first station in 1924 and, incidentally, I secured my first RADEX the same year, perhaps the very first issue ever published. Nothing will ever equal the thrill of receiving new stations in those early days, although I still get the same pleasure and satisfaction from logging a new station that the stamp collector does in picking up a new "cover."

In 1925 I secured a six-tube battery-

For an aerial I use about 100 feet of Belden enameled No. 14 solid wire, although this can be procured in seven-strand. At each end of the aerial I use several large glass insulators, as I believe one should use every precaution to save the tiny aerial signals and get them to the set. My lead-in wire is also No. 14 insulated, as short as it was possible to make it, and leading as directly as possible to the set. The lead-in should be soldered to the nearest end of the aerial (which should also be the lowest) well-taped with both rubber and friction tape

*Pretty Anita Page is tuning up with the Biltmore Trio for their radio debut on the inaugural Purity Bakeries program which came from Hollywood over the Columbia System Monday evening, January 6th. This broadcast was the first of a weekly series presenting "Voices from Filmland," Earl Burnett's Orchestra, a large studio chorus and orchestra, the Fresh Bakery Harmony Boys and the Biltmore Trio pictured here.*



operated Zenith Model No. 7. In the fall of 1927 I exchanged this for an eight-tube Zenith No. 15, also battery operated. My very first receiver was a four-tube set which I put together myself. On this crude set I secured a good many stations, mostly close to home. At the present time I have a 1930 model Zenith Shielded Grid, using three No. 224, three No. 227, two No. 245 and one No. 280 tubes.

and well painted. Have aerial good and tight. (Editor's note: It would be still better to have the aerial wire form the lead-in and run directly to the set as even the best soldered joint is not as good as a continuous wire where so small a current as that in an aerial is being carried.)

I use a buried ground, that is a copper pipe four to six feet below the surface of the earth with about four inches above



ground, to which is securely attached a piece of No. 14 insulated wire, soldered to the pipe, taped and painted. I use RCA or Cunningham tubes.

There are certain periods of the year when distant reception is best. Here in Chicago, I have found October first to the middle of April best and from three o'clock in the morning to six o'clock the best hours for tuning in Australia, China and Japan.

Long distance tuning requires a good receiver, a set of sensitive headphones, plenty of patience, favorable atmospheric conditions and careful study and use of a good log. An accurate, reliable and up-to-date log-book is absolutely essential. In the past seven years I have always had the latest RADEX within my reach. In fact most of the credit for my record goes to this wonderful, little log-book. I have in my possession at all times from six to eight logs printed by different radio magazines, but I do not see where RADEX can be improved upon. The arrangement of stations in groups by their frequencies is an invaluable aid to DXers.

My dial readings are all entered in the Index by Frequencies. I tune in any station. By referring to my index I find that I am tuned to say 830 kcs. and that I am hearing KOA of Denver. By turning my dials slightly I tune my set for the next channel and find that I am hearing WHAS at Louisville on 820. Another slight turn of the dials and I am tuned to 800 kcs. at which point I bring in WPAP at Fort Worth. Coming back a point and WCCO at Minneapolis will be heard.

The foreign stations are not listed in this Index by Frequencies but knowing their wave length or frequency, it is a very simple matter to tune my set to the frequency of the station I want to hear and by very careful manipulation of the dials, I have been able to bring in many stations across the Pacific. Thus, knowing that KRC at Shanghai is on 345 meters, I merely turn to my index, ascertain the proper dial numbers for 870 kcs. and with lots of patience and careful tuning I am able to reach across the ocean and bring in this Shanghai station.

I am located on the South Side of Chicago, about seven miles from the downtown district. There is an elevated railroad half a block south and one block east, making it very bad at times. Early in the evening trains run every three minutes, but after midnight they are half an hour apart, thus giving me time between interference to do my DX work.

My log has entires from Alaska, Newfoundland, Haiti, Porto Rico, Uruguay, Bolivia, Chile, Peru, San Salvador, Argentine, Hawaii, Tasmania, New Zealand, and Bombay and Calcutta in India. In addition I have seventy stations in Canada, eleven in Mexico, seven in Cuba and eleven in Australia.

I was one of the founders and charter members of the Chicago Daily News Club. I belong to one DX club in Los Angeles, one in New York, one in St. Louis, and one in Chatham, Ontario. Through the members of these clubs I keep in touch with DX announcements, new stations in all parts of the world and receive information most vital to DX tuning.

## This Month's Changes

THE most important change made this month is in the Cuban stations where new calls have been adopted to consist of either three or four letters, the first two in each case being CM.

New stations this month include WFDW, Talladega, Ala., KGKX, Paragould, Ark., KGKY, at Scottsbluff, Nebr., WGTB, at Columbia, S. C. Stations reinstated are WFBE at Cincinnati and WMBJ at Pittsburgh.

Changes in call letters: WNAT becomes WHAT, and WJAD becomes WACO.

Changes in frequencies: KFXM from 1200 to 1210; WDAE from 1240 to 1220; WCFL from 1280 to 970; WJBO from 1370 to 1420; WRBJ from 1500 to 1370; WHB from 710 to 860; KGBX from 1370 to 1310; WJAY from 620 to 610; WSPD from 1340 to 1240; KFPY from 860 to 1340 and KIT from 1370 to 1310.

Changes in power affect the following: KGR, KECA, KGDM, KFEL, KFXF, KGKX, KFH, KGDE, WBNF, WFBL, WNRC, KXL and KFPY.

# All you need is a little TRAINING to make a SUCCESS in RADIO

"YOUNG MAN, study radio!" That's what every ambitious young man of today is told by J. H. Barron, Radio Inspector of the U. S. Department of Commerce. Radio is crying for trained men. Experienced radio operators and service men are in great demand. A very serious shortage exists. Practically all of the seven thousand licensed commercial operators are now employed and the need is constantly increasing. Radio needs thousands of trained men. Are you prepared to take advantage of this big opportunity? Ships at sea, planes in the air, broadcasting stations, manufacturing plants, as well as dealers, require thousands of experienced radio men.

*You Can Easily Learn Radio at Home Through This Course Sponsored by the Radio Corporation of America*

RCA sets the standards for the entire radio industry . . . And this RCA Institutes' Home Laboratory Training Course gives you the real inside secrets of Radio quickly and easily! In your spare time, you can obtain all the information you require to make a success in radio. You study at the very source of all the latest, up-to-the-minute de-

velopments. This is the only radio course sponsored by RCA, the world's largest radio organization. This is the real way to study radio. Learn radio under the direction of RCA . . . under the men who actually made radio what it is today!



*Radio Mechanic and Inspector \$1800 to \$4000 a Year.*



*Broadcast Operators \$1800 to \$4800 a Year.*



*Broadcast Station Mechanic \$1800 to \$3600 a Year.*

For the added convenience of students who prefer a Resident Study Course, RCA Institutes, Inc., has established Resident Schools in the following cities:

New York . . . . . 326 Broadway  
Boston, Mass. . . . . 899 Boylston St.  
Philadelphia, Pa. . . . . 1211 Chestnut St.  
Baltimore, Md. . . . . 1215 N. Charles St.  
Newark, N. J. . . . . 560 Broad St.

Home Study graduates may also attend any one of our resident schools for post-graduate instruction at no extra charge.

## *Graduates find it easy to secure Good-Pay Radio Jobs*

You actually train for success. Every graduate of RCA Institutes has the ability and the confidence to hold a well-paid radio job. You learn radio by actual experience with the remarkable outlay of apparatus given to every student. Every radio problem, such as repairing, installing and servicing fine sets is covered in this course. Students of RCA Institutes get first hand information and get it complete . . . That's why every graduate of RCA Institutes who desired a position has been able to get one. That's why they're always in big demand. No other radio school can make such a claim as this!

## *Step Out Towards Success in Radio Today!*

Get out of the low-pay class. Make your first move towards a pleasant and profitable career in radio today by sending for this free book . . . "Radio . . . the Field of Unlimited Opportunity." Read these forty fascinating pages, packed with pictures and descriptions of the brilliant opportunities in radio. Learn all about the oldest and largest commercial radio training organization in the world. See how you, too, can speed up your earning capacity in the fastest-growing industry of today. Others have done it and so can you.

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Please mention RADEX

# Radio's Magic Shatters Prison Gloom

By No. 52607 of Ohio State Penitentiary

**S**EATED in my drum-like cell, behind the frowning ramparts of the Ohio Penitentiary, I'm perspiring freely as I write on a battered typewriter which balances precariously on a wobbly three-legged stand—the same stand on which the brain-children of William Sidney Porter, better known to the world by his literary pseudonym, O. Henry, first saw the light of day.

When O. Henry occupied a six-by-eight cell in this grim, imposing tower of steel and stone, long sentences were the exception rather than the rule. Today the tendency is to imprison the culprit, throw away the key, and then conveniently forget him. He is engulfed within a world of long, gloomy passageways and narrow, cheerless cells where a life of deadly routine begins—a routine which daily undermines, saps and destroys those moral fibers which should be nurtured if he is to be the object of redemption. And to perform best this work of reformation, his interest in elevating outer-world influences should be kept alive. Yet, to a majority of men entering prison, all contact with the world of freedom ceases, unless . . . well, unless the unfortunate devil owns a radio set. This Godsend can do and has done much to regenerate society's outcasts—the herd of Crime's Zoo, an army of nameless living-dead, a sea of immobile faces, made pale, clayey by years of merciless expiation.

As I sit here, I cannot help but glance occasionally at the only adornment which hangs on the bars of my dank, prison cell, O. Henry's picture. Would that it were possible for him to return, even for a day, and should force of habit guide his footsteps along the tiers of the old G & H cell block, his former habitation, where he was better known by No. 30,666, he would be amazed to hear loud speakers emitting anything from the President's inaugural address to a minute description of a burglar, hijacker or bandit, wanted by the police for immediate questioning, imprisonment or hanging.

Furthermore, he might sit right down, and write, in his own inimitable way, a radio story interspersed with smiles and pathos; a story of a convict reformed by a powerful sermon coming over the ether. Too, he might write, in no uncertain terms, that criminals do not form a class as distinct from the rest of society as if they were savages, but have manners, ambitions and susceptibilities like other men more virtuous or more fortunate.

The first radio set permitted behind the walls of this institution was due directly to a lasting impression made on a venerable old gentleman by one of O. Henry's short stories.

Four years ago, he called on Warden Thomas: "O. Henry would have me do this," he said, placing a large five-tube set on his desk. "Take it," he pleaded, "and give it to one of the boys."

That started it. Today there are radios to the right of me, radios to the left of me, and all going full blast—seemingly each trying to make more noise than the other. Right now, a home-made "trydine" is leading the noisy pack, and the breezy gent manipulating it has a station featuring a "cigarette tenor" who is slaughtering "Where'll I Go?" to such an extent that I expect at any moment to hear some one suggest an appropriate place.

A sheik (oh, yes, we have sheiks in prison) on an upper tier just said, "Say, Rudolf, please leave that Chicago station; try St. Louis, their programs are so uplifting."

"Aw gowan," cracked a first-class, second-story man. "There ain't nothin' good in St. Louie, 'cept de cops, an' they don't mean us any good—so pipe down!"

The above is but a mite of the general conversation one hears. Radio is discussed in the cells, shops, yard and "idle house." It helps to keep one's mind busied with things other than those of a morbid nature. And, what is perhaps more important, to defeat the lagging years, the bleak

(Continued on page 21)



# Another Cross-Call Teaser

**S**EVENTY-FIVE readers sent correct solutions of the puzzle in the December edition of this magazine indicating that this feature is growing in popularity. "It's lots of fun to work out these puzzles while you are DXing in the middle of the night" writes one reader. "They are teaching me a lot about station calls and points of interest about them," comments another. A copy of RADEX has been sent to all who solved the December puzzle correctly. Those who sent in answers and did not receive a copy will find their reason if they will check their answer with the following correct solution:

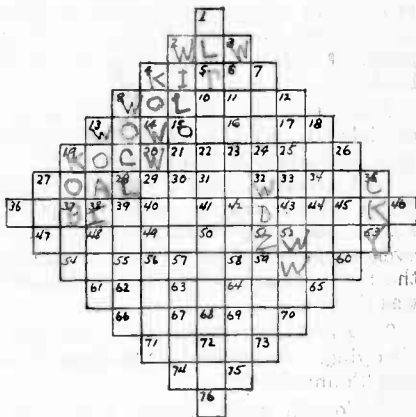
CKX . . . . WKY  
 WOW . . . WIL  
 KMED . KJBS  
 KEX . CKX  
 I . . . S  
 . . . .  
 K . . . W  
 WEW . WJW  
 WCLO . LABW  
 WLW . . . KOH  
 WLS . . . . WBZ

Friends still continue to send in puzzles of their own making and we now have on hand all we can use in the next several issues of this magazine, but there will always be room for good puzzles, symmetrical in shape and keyed both ways. Our readers have now graduated from the primary class and demand good hard nuts to crack. The one for this month was designed by R. A. Butts, of Ellensburg, Washington, and our puzzlers will find it will tax their patience to the utmost. Many of these calls are from the medieval times of 1925. So sharpen up your wits and pencils if you want an extra copy of the next RADEX to give to some good friend.

### Vertical

- 1- 5. Call letters are initials of its city's mayor.
- 2- 9. Shares time with a "Truth Center" and a Church.
- 3-11. An NBC station in the middle west.
- 3-16. Owned by Wilson Duncan.
- 4-14. Deleted from Denver.

- 4-20. Former Walla Walla station.
- 6-16. One-time Baltimore call.
- 7-24. On a Canadian wave.
- 8-28. On the "Finger Lakes."
- 10-22. Used to be in Portland.
- 13-38. Shares wave with Connecticut station.
- 18-34. Last three letters of baby-food station.
- 19-37. Apt call of deleted police station.
- 23-42. Call changed to XEY.
- 24-43. Deleted Seattle station.
- 27-47. Formerly in McKeesport.
- 29-49. On the anti-chain-store wave.
- 30-57. Naturally a Columbia station.
- 31-41. Last two letters of old Cuban station.
- 32-51. Once in Tuscola, Ill.
- 35-53. One of the oldest in Canada.
- 39-62. Moved from 550 to 1040 Nov. 11, 1928.
- 40-56. Owned by a radio manufacturer.
- 44-65. Long on 1120, now deleted.
- 50-68. In St. Paul long ago.
- 52-70. At the end of the list.
- 59-73. Last three letters are initials of owner.
- 64-75. Shares wave with Oklahoma and Washington.
- 72-76. Located at C-1.



### Horizontal

- 2- 3. One of Ohio's first.
- 4- 5. Moved from 1370 in this issue.
- 8- 9. On 1310.
- 11-12. Seeds.

- 13-15. First two letters same as last two.  
 16-17. Changed its call and moved from 750.  
 19-20. A college for women.  
 21-23. Old reliable from the Pacific.  
 25-26. An NBC outlet in the mountains.  
 27-28. Moved from 1070 in the big reallocation.  
 33-35. Changed from 1390 last month.  
 36-37. Owned by big department store.  
 40-41. Deleted St. Louis station.  
 45-46. On 1040 before Nov. 11, 1928.  
 47-48. Shares wave with two Florida stations.  
 50-51. A key station.  
 52-53. In the metropolis.  
 54-55. An old-time university station.  
 56-58. Defenders of Truth.  
 59-60. In the Hoosier state.  
 61-63. Daytime station on a cleared wave.  
 64-65. Once in Middletown, Ohio.  
 66-67. A municipal station.  
 69-70. Owned by Arthur C. Dailey.  
 71-72. A national station.  
 74-75. Another day 'station on a clear wave.

### Song Fans Spark of Life

**N**OW and again radio plays a part in a real drama of life. The invisible waves carry their winged message in scenarios of humor, pathos, tragedy and romance. Recently a bit of poignant drama was reported in Cleveland.

Fairy tale though it sounds to be, officials at WTAM vouch for radio's most unusual and half-tragic story.

Last Saturday night the sobbing voice of an Akron mother, Mrs. George W. Lason, 63 West Market Street, came over a long-distance telephone wire to the radio station, where Ed McConnell was singing.

"My little boy, Raymond," she said, "is dying. He wants Mr. McConnell to sing 'Sonny Boy'."

McConnell sang "Sonny Boy," but the voice that has brought him the name of "Smiling Ed" was changed and in it there was a tear that the radio audience had never heard before—and, perhaps, some of them wondered.

The mother called again after the lad had heard McConnell sing and told them the boy had gone to sleep—sleep that she believed was his last.

But a call by McConnell on Sunday revealed that his "Sonny Boy" had given the boy courage to fight on and doctors who were called to the home late Saturday night, after the child had gone to sleep, said that the song had pushed the lad over the crisis and that he will live.

### Milk From Contented Cows

**O**UT near Mount Clemens, Michigan, the Detroit Creamery Co. installed a Radiola receiving set to entertain the men who did the milking. It was found that men not only did this chore with less effort but much more quickly when they had a lively jazz tune for tempo. Much to the surprise of the company, however, the cows, too, responded to the dulcet strains and increased their flow of milk. They chewed their cuds contentedly while listening to "Singing in the Rain" and evidently as recompense for the program, released some additional gallons of lacteal fluid—a sort of quid pro quo, as it were. In any event, the 900 cows on this model farm now enjoy their radio programs.

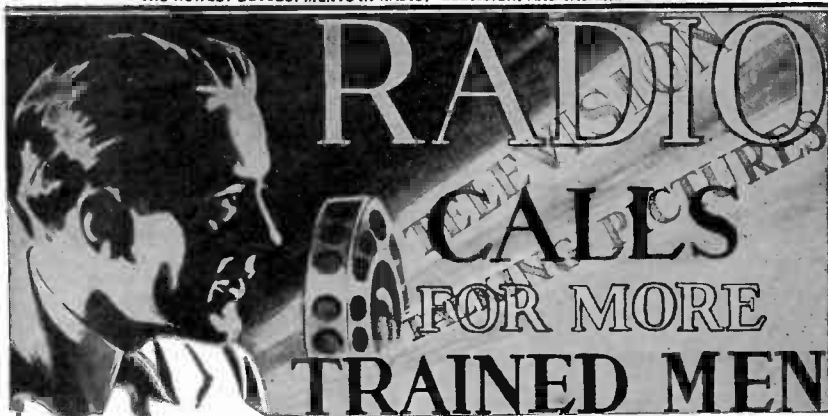
### A Fine Rugby Cowhide Football **FREE**

Official size, two-piece hand-made bladder with rawhide lace and needle complete. Any boy may secure this fine football by sending us two annual subscriptions to RADEX, or selling 14 single copies.

### THE RADEX PRESS

1367 East Sixth Street  
Cleveland, Ohio

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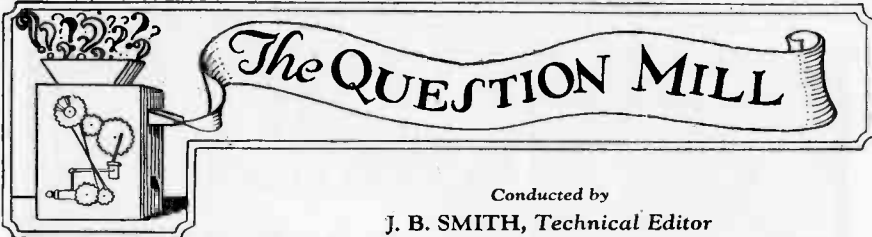
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# The QUESTION MILL

Conducted by

J. B. SMITH, Technical Editor

We are glad to publish replies in this column to questions asked by any reader. We cannot promise, however, to reply by mail to other than yearly subscribers. If you are not a subscriber and desire personal reply, please send your subscription with your question. You will find blank for this purpose on page 34

*I have a constant noise in my set. When I disconnect the lead-in wire from the aerial binding post on my receiver and rub it against the aerial post while the set is in operation, there is, of course, a terrible grating noise. This is exactly the sort of noise that is constant in my set with the ground wire and lead-in securely connected. After going over the aerial and ground system (which is attached to a cold-water pipe) I have as yet been unable to locate the trouble. Can you tell me where to look for it?*

It is almost certain that there is a broken connection in your set or in the aerial and ground system, and that the broken ends touch each other almost constantly. If, however, you cannot find such a break, I would suspect that the pipes of your plumbing system are not making good contact with each other and are periodically short-circuited directly to the ground at a point along the plumbing system, and that this point of contact is most likely the seat of your trouble. You can readily determine whether or not your ground is defective in this way by disconnecting the ground lead from the plumbing system entirely and running it to a stake driven into the ground.

*I have a Fada No. 31 receiver and I have picked up almost everything in the country and some foreign stations too. I would like to know if screen-grid tubes could be installed in my set. At present I am using five UY 227 tubes and a power tube. Also, the baffle board on my dynamic load speaker does not touch the sides of the cabinet very tightly. My set does*

*not register piano music very well. Is the above condition of the baffle board the cause?*

According to the tube data issued by the Radio Corporation of America, the new UY 224 all-electric, screen-grid tubes are to be used in circuits especially designed for their use. However, the installation of these tubes for experimental purposes is quite an easy task. No change in the wiring to the sockets is necessary. The top terminals of the screen-grid tubes, which will be the two in the radio-frequency stages, are connected to the B-positive, 45-volt line. It is possible that the new tubes will give excellent results in your set. They will not cause any greater current drain on A supply as they are rated at the same current consumption. Nevertheless, I cannot guarantee that the new hookup will work satisfactorily, for, as already stated, it is sometimes necessary to do considerable experimenting. Usually a baffle board is rigidly attached to the cabinet but this is not essential. The back of the cabinet should, however, be open, for the sound waves restricted in a cabinet will prevent the speaker from giving its best tone quality.

*My Magnavox receiver seems to need special tubes. These were not available in the vicinity so I purchased R. C. A. tubes and find that the set will not function at all. Can this be remedied or will it be necessary to discard the R. C. A. tubes and purchase those especially designed for the set?*

You will find a small coil of wire under the cardboard at the bottom of the set, near the panel. Connect a piece of wire



to both ends, in other words short-circuit it. Then bend the pin on the volume-control rheostat so that it can be adjusted to the extreme end of the "on" position. Your set will then operate with the R. C. A. tubes, which you have installed.

*I have a Steinite all-electric receiver on which the volume control burns out quite often. The service man says that this is due to faulty design. Is there any other control I could substitute for this one and get better results?*

Substitute a heavy-duty type of

and "bla-blaey" at times. The programs stay that way sometimes for a half minute or less and then become clear again. Are the tubes faulty, or maybe the set, or could the trouble be due to broadcasting station? About a month ago I had the tubes tested and they tested normal and still caused the trouble. Is there anything I can do to remedy this?

It seems as if your trouble is caused by poor electrical contact between the tube tips and the socket prongs. Clean them off carefully with fine emery cloth, using a narrow, flat stick to get at the socket



*Once they sang together as boys in the choir of the Moscow Church. Now they have gained prominence in radio broadcasting as the villagers' quartet and are heard with the "In a Russian Village" program every Tuesday night at 10:30 o'clock, over the Columbia chain. They first came to this country to sing at the Russian Cathedral in New York City and subsequently appeared in the stage production of "Redemption" starring John Barrymore.*

variable resistor such as a Clarostat for the present volume control, and you will no longer be troubled with it burning out. I do not suggest making any circuit changes in your receiver.

*I have a six-tube Crosley battery-operated radio that is now nearly two years old. Four of the tubes are the ones that came with the set. The detector and power tubes have been replaced by new ones. About a year ago it developed a certain peculiarity, that is, almost all the stations seem to fade away and then in a short time they come back again as strong as ever. Also many of the station programs become distorted*

prongs. Fluctuations in B-supply may also be the cause of your trouble. If you are using batteries replace them as soon as they have dropped 25 per cent below their original voltage. In case you have a B-eliminator, it is a good idea to have it tested. Perhaps a new rectifier tube is needed. Under average conditions tubes lose their efficiency at the end of a year's service and they should then be renewed to insure good reception. Keep the old ones, however, for emergencies.

*Our Majestic Model 70 receiver has developed a very annoying squeal and the music is entirely distorted. The local*



service man who handles Majestic receivers has taken the set to his shop for a complete test but the trouble has not been remedied. I thought that you could suggest something that will enable us to straighten out the difficulty. There is one peculiarity about the set at present. When the service man takes the plate-voltage readings he finds that the r. f. voltage is too high and the output voltage too low. Every part of the set has been carefully checked and found O. K.

A case very similar to yours has recently come to my attention. The fact that the output voltage is low and the r. f. voltage too high indicates that there is a drain or leakage of B-current at the output end of the receiver. Disconnect the speaker and then recheck the voltages. A short-circuited winding in the speaker may be found to be the sole cause of your trouble.

In your first 1929 issue you were answering a correspondent in regard to underground antenna. You did not seem to think much of the underground antenna which are being advertised today, but intimated that there were good ones. I would appreciate if you would tell me which one you think is the best underground antenna to use.

Recent press reports state that the U. S. Bureau of Standards, in reporting results of experiments with underground antenna, claim that they have an advantage over overhead aerials in that they pick up less static and give clearer, stronger reception. Also, an underground antenna eliminates lightning hazard and makes the use of a lightning arrester unnecessary. One of the oldest makes of underground antenna is called a "Subantenna," but I do not claim that this one is superior to others, as it is against the policy of this magazine to make a distinction between reputable manufacturers by claiming priority of one make over another. The above make comes in different models for use with certain specific receivers as for instance, the Atwater-Kent, Majestic, R. C. A., Zenith and Crosley receivers. Another type of Subantenna is of less exacting design and can be used on all types of radio and television receivers. Most mail order houses can supply them,

as well as many well-stocked radio dealers.

I have a Zenith model 11E and it is satisfactory except that after turning on the set and tuning in a station, the volume does not remain steady. Can you suggest where the trouble lies and how to cure it?

In Zenith models 11E, 14E and sometimes 16EP, trouble such as yours is frequently caused by the rotary plates of the gang condenser getting loose on the shaft. A good method of repair is as follows: Solder a length of hard-drawn brass wire about No. 22 gauge, across all the rotor plates. The wire should be grounded to the adjustment nut on the left end of the condenser shaft. It is a good idea to fasten the wire to the nut before soldering it to the rotor plates. It has been found that this will improve the operation of these sets considerably.

I have a five-tube Bremer-Tully battery set. I am using two UX 112A power tubes and three 201A tubes. It is a neutrodyne circuit. I am using 135 volts of B-battery, 3 volts of C-battery. I am located where there are no outside disturbances, so am using a 400-foot aerial. There are two jacks for plugging in the loudspeaker. One uses four and the other five tubes of the set. I recently purchased a new magnetic speaker and can use only four tubes with it. When I plug in all five tubes I either get nothing at all or a terrible howling, which I cannot stop. I used all five tubes on my old horn speaker but on the new magnetic I cannot do this. Kindly tell me where the trouble lies.

There is too much power for the operation of the speaker, if all five tubes of your Bremer-Tully set are used, as the new speaker is evidently much more sensitive than the old horn speaker. The trouble can readily be cured by using a volume control or modulator connected to the speaker cord. Another fault is that you have too long an aerial. A 100-foot length is all you need, and if you reduce your aerial to this length, the set will tune sharper than it does at present. Also it is a good idea to have your tubes tested before doing anything else.

Why is shielding necessary? I have an old receiver of the three-dial type and it seems to work just as good as most metal-

enclosed sets of today. Do you think shielding will improve it?

Shielding is highly important in order to prevent intercoupling and feedback. Electric current flowing through a wire causes an electro-magnetic field around the wire. The current passing through r. f. coils produces such a field which is picked up by other wires in the set, causing interference and distortion. Shielding is often partly responsible for good tone quality, and the absence of extraneous noises which are caused by electrical disturbances and are picked up

instruments should be removed and the bottom of the shielding cans or boxes must first be attached to the subpanel. Each r. f. stage should be enclosed in a box. Knockdown boxes for the purpose can be purchased at radio supply houses.

On my radio set the B-negative is connected to the A-positive, a bridging wire being connected across the two binding posts to which the battery connections are made. I noticed in most diagrams of battery-operated receivers that the B-negative line is connected to the A-negative line. Would it be advisable to change the wiring

With "Yes, We Have No Bananas" for their theme song and "Fun for All and All for Fun" as their microphone cry, this irresponsible group of Nit Wits gather together every Saturday evening to broadcast their hilarious antics over the Columbia chain. During the half-hour they are allowed the freedom of the studios, everything sensible being thrown to the winds by the Chief Nit Wit and his cronies.



by the r. f. coils. Shielding around the coils absorbs and concentrates the electro-magnetic field so that the other parts of the receiver will not be influenced, and also prevents similar fields from inducing stray currents in the coils. To be effective, shielding must be thorough. Radio owners, who wish to shield old-type receivers will find it rather difficult to do, especially at the bottom, which is often omitted on account of the difficulties involved by the instruments mounted on the sub-panel. When the bottom is thus omitted the rest of the shielding becomes entirely ineffective. To do a good job, all the

of my set accordingly, and do you think that it would improve the reception?

It is better to connect the B-negative and A-negative lines together instead of the B-negative and A-positive, for the simple reason that in the case of an accidental short circuit, caused by letting a B-positive line get in contact with any one of the points where the instruments are grounded to the A-negative line, the B-voltage would not pass through the filaments of the tubes, which would burn them out most likely, or would paralyze them beyond all hope of reactivation. However, you will not obtain any better reception by making the change.

Is it possible to alter a battery-type receiver and add up-to-date instruments to it so that it will give as good reception as the latest model all-electric receivers? We live out in the country and have no electricity. Will you make suggestions what I can do to remodel my set?

Yes, it is possible for a battery-operated receiver to equal the latest models of all-electric sets in respect to tone quality in reception. The changes to be made, however, depend entirely on the type of battery set to be altered and its condition. In some cases it may be much better to correspond with large radio mail-order houses and find out what they have in the line of battery-operated sets of the latest type, which can often be had at ridiculously low prices, in fact, for much less than it would cost you to remodel yours. In general I might suggest the following improvements on old battery-operated sets to obtain better tone quality; Resistance-coupled audio amplification, or, preferably, the first stage transformer-coupled, and the last two stages resistance-coupled. Use a power tube such as a 112A or 171A in the last stage with the necessary C-biasing voltage. Better still, install push-pull audio amplification, using two 171A tubes. Then provide an output transformer and a dynamic loudspeaker to operate on a storage battery. It is not advisable to install a 250 power tube on a battery-operated set as it requires entirely too much B-voltage. Use a 200A tube for detector, two 240 tubes for the first and second audio stages. Many other refinements such as one-dial control and shielding are not entirely necessary, the former being hardly advisable.

I have a Remler superheterodyne and find that two teeth of the bakelite wheel on one variable condenser are broken out. The condenser is O. K. in every other respect. After removing the condenser and examining it carefully, I cannot find a method of removing the wheel. Is it necessary to purchase an entire new condenser?

The first Remler twin-rotor condensers frequently developed the trouble you have, due to the bakelite gear being strained by forcing the dial over too far

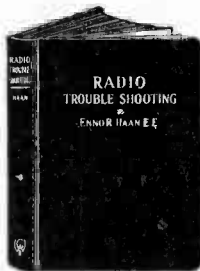
after the plates are all in mesh. I do not think that it would pay you to try to repair this yourself and it would be better to send it to the factory for repair. If they do not do this work, you will have to purchase a new condenser.

I have a Knight Eight battery set using six 201A and two 171A tubes. According to instruction, I should use 225 volts of B on this set. Is there any eliminator on the market with such a large output or would you advise the use of less B-voltage?

There are a number of power units on the market that will deliver all the voltage you need and it would be unwise to use less B-voltage than is recommended by the manufacturer in this case. If you have an eliminator which provides 180 volts, the cheapest method of getting 225 volts without purchasing any new equipment is to connect a 45-volt B-battery in series with the eliminator. To do this connect the 180-volt tap of the eliminator to the negative terminal of the B-battery. The positive terminal of the B-battery will then supply 225 volts when the eliminator is working.

## AT LAST—

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A complaint that seems to have a great deal of justification, comes to us from William E Kessell, of Temple, Texas. "The situation regarding Cuban and Mexican stations," he writes, "is getting acute. They are evidently raiding our cleared waves now. Last night I received a station on 810 kcs. from Vera Cruz, Mexico, whose call letters were XSC or XSE, which of course will eliminate WCCO. I also received a station on 870 which drowned out WLS and one on 1150 killed WHAM. Such is the situation in Mexico and Cuba with new stations seemingly coming in every week or so and picking their own waves. But you can hardly blame them for that, since we haven't left them any except already-crowded waves.

"Receiving conditions in this part of Texas are simply fierce. I can get stations on practically nothing but cleared waves and there is interference on most of these. From 1480 to 1240 I can usually receive nothing but a mass of heterodyning and interference. Again starting at 940 and continuing through 880, I can as a rule receive nothing. Finally starting at 630 and continuing through to 550, I can rarely get anything at all. So you see my radio entertainment is more or less limited."

The difficulty is that the United States has never negotiated any division of channels with either Mexico or Cuba as has been done with Canada. As a result the two former countries are at liberty to use any and all waves.

#### *The Cuban Situation*

Subscriber A. de Tcherniadiëff, of Havana, Cuba, writes: "They tell me that about a month ago, the Ministry of Communication has taken the broadcasting situation in hand and now assigns a certain wave to each station but

I cannot believe that they stick to it. Any real radio fan must deplore the number of Cuban stations because in general they are bad. Their broadcasts are simply pitiful; everybody who understands a little bit of music prefers records. Let me say that to enjoy radio without your RADEX seems to me impossible; it helps so much and I cannot conceive of a real radio fan not using it. If I can be of any use to you, do not hesitate to write; I'll be delighted to help you to show my gratitude."

In another letter Subscriber de Tcherniadiëff writes: "I am doing for my part all I can to collect enough signatures to back up a strong complaint, for they are crazy and ridiculous erecting new stations here every week. Just a few days ago they put on a new station at about the same wave as WEA F and, of course, this excellent station is now completely extinguished by a rotten one. Why can they not understand that they are killing radio expansion in this way? There is no use to buy a good set if one cannot receive the good concerts."

Three Cuban subscribers have kindly sent us new lists of the Cuban stations which show that the government has made a step toward uniformity by changing the calls of all stations to three and four letters, the first two of which are uniformly CM. These changes are being made in this issue. Perhaps this indicates that the island government is at last bringing the situation there under control.

#### *Polish Concerts*

The appeal published in the January issue brings us one reply from Arthur Byron Chase, of Buffalo, N. Y., who states that WKEN broadcasts a Polish program at 1 o'clock every Sunday and that WEBR lists such concerts week-day evenings. Do any of our other readers know of regular programs of Polish music?



"I have a new Fada screen-grid set and would like to know if it is possible to build an amplifier and build up the incoming signal before the radio stage." Thus writes George Griffin, of Peekskill, N. Y. We receive many inquiries from readers who are not satisfied with the volume of their sets asking for help in increasing it. As a rule we have to assume that if the set manufacturer felt that additional volume could be secured without overloading tubes or speaker, he would make the necessary changes in designing the set. The length and the height of the aerial and the efficiency of the ground, play very important parts in securing proper volume. So also does the location of the set. We believe it wiser to try to perfect these factors rather than to add to the set. Volume is a difficult thing to measure, for what is too much for one user may seem inadequate to another.

Daniel Holcomb, of Collingswood, N. J., states that he is greatly bothered by noises from trolley cars which pass the house, causing loud crashing noises. In this issue will be found an article on the elimination of noises by J. B. Smith. We hope this article will prove helpful but noises from street cars cannot very well be remedied except by the cooperation of the company. Such noises may be caused by either sparking commutators or leaky rails.

#### *Incorrect Dial Readings*

"I would like to know why it is that the stations that come in at the right places on the dials up to 850 kcs., fall behind after that." This inquiry comes from Jack Roberts, also of Collingswood. Many others write us regarding the same question. We have often pointed out that it is extremely difficult for the manufacturer of a set to mark his dials accurately in kilocycles. To be entirely accurate each set should be calibrated individually with its own aerial. This is, of course, out of the question. The manufacturer can merely do the best he can for average conditions. Where a dial is marked in kilocycles, the user should consider the numbers merely as dial markings and enter them in his RADEX as such, the same as described for ordinary dial numbers in the article on pages 32 and 33.

#### *"What's On the Air"*

M. R. Putnam, 1148 Michigan Ave., Columbus, Ohio, writes us a very caustic letter about the accuracy of the chain programs listed in RADEX. He gives us a long list of stations which should or should not have appeared on certain programs but the information sent us by the broadcasting stations does not bear out his criticisms. Readers should understand that these programs are subject to daily changes and even the morning newspaper does not always have the list exactly as it is given in the evening. What chance then has a monthly publication? The chain systems send us their lists only a week or ten days in advance and by the time you receive your RADEX, this period of time has expired. For this reason we pick from the voluminous programs only such features as have been appearing regularly for three weeks at certain hours. We give this information for what it is worth, knowing that at any moment a shift in programs may be made.

We have felt that this weekly calendar of chain programs was of real value to our readers, especially those who do not have access to daily newspapers. If Mr. Putnam represents any considerable number of our readers, we will be glad to discontinue "What's On the Air Tonight" in favor of some other feature of more interest.

#### *Heard This One?*

Alan Haws, of Homestead Park, Pa., reports a station which is not yet listed by the Radio Commission and regarding which we have no accurate data. "For the past six Sundays," he writes, "we have been receiving a station in Jeanette, Pa. They announced their call as WOOP and we received them at 860 kcs. Have any other readers heard this station and can they give us their owner and power? Art Latshaw, of Pittsburgh, reports hearing the same station but at 850 kcs.

We have received a number of compliments upon the appearance of the January issue and particularly of the helpfulness of the new symbol arrangement showing daytime, Sunday and part-time stations with their chain affiliations. We shall be glad to receive any criticisms of



this new arrangement with a view to making it still better. Our old friend, C. M. Falconer, of Baltimore, writes: "I want to tell you that the January RADEX is the finest thing you have gotten out so far. The references as to divided time, daylight, etc., are going to be a great help for the DXer. I have read the issue very carefully, being a printer myself, and have been unable to find any errors. Whoever read proof certainly deserves a prize."

Paul Benson, of Lewisburg, Pa., thinks "the January number is the very best radio magazine that has ever been printed." Mr. Benson reports CMX having changed from 610 kcs. to 922, but the new Cuban official list places them at 916. We are placing them in the 920 channel.

Someone wrote a letter to another radio magazine asking for information as to what foreign station was broadcasting on 410 meters. An old reader, W. M. Johnson, of Grayville, Ill., saw the letter and took the trouble to write the inquirer as follows: "CMK and XEN are both on this wave. Why don't you send 25c to The Radex Press, Cleveland, for a copy of RADEX? Man, it's made for DX. I couldn't radio without it. Do this." Just a case of "Ask the man who owns one."

#### *Some Reception Records*

"Please let all dial twisters know that I claim the world's record for reception, distance or otherwise," writes Leon V. Garland, El Segundo, Calif. The Editor doesn't want to become involved in settling a world's championship, but Mr. Garland certainly makes out a strong case by quoting calls made up from almost every letter of the alphabet and containing seven from Australia, four from New Zealand, five from China and eleven from Japan. Continental American stations come in too fast for Mr. Garland to tabulate them. His post-script reads: "RADEX is the best and only call book and if a radio fan does not use it he is not a real dial twister." Perhaps this helps to explain Mr. Garland's claim to the diamond belt.

Jack Roberts, of Collingswood, N. J., whom we have already quoted, writes:

"Another boy and I are having a race to see who can get the most stations. I have twice as many stations as he has now. We both have the same kind of radio but he doesn't use RADEX. I do. That explains it."

With a five-tube, home-built set that was given to him, M. B. Murphy, of Glenn Ranch, Calif., writes of some fine records in reception of distant and low-power stations. In less than two months he has logged stations in 31 states, in



*Joan Crawford, who, in private life is known as Mrs. Douglas Fairbanks, Jr., was heard with Friend Husband from Hollywood during the inaugural broadcast of "Voices from Filmland," Monday evening, January 6th, over a coast-to-coast network of the Columbia Broadcasting System.*

four Canadian provinces, Mexico, Japan, Australia, England, Czechoslovakia and Alaska. "Can bring in one Aussie and any of the five large Japanese stations any morning at this time of the year. CKIC, 50 watts, of Wolfville, Nova Scotia, is easily heard on some evenings and I have logged KFWI or KFWM, KGBZ and KMA on the same channel.

Have letters of confirmation from CKCD and CKMO (50 watts) and CKWK (100 watts) at Vancouver. Have no ear phones and every program has to be over the loud speaker."

William Wintle, of Jackman, Maine, recently won a five-pound box of chocolates from KGIQ of Twin Falls, Idaho, for receiving that 25-watter the greatest distance. "I receive KNX and KSL almost every night on the loud speaker," he adds.

From Elizabeth, N. J., Robert McGarvey, Jr. writes of the reception of 50-watt stations in Wisconsin, Ohio, Indiana and Michigan.

"My wife used to joke me about my collecting different radio logs but now she is always anxious to see the new issue of RADEX." Thus writes Frank Simons, of Dundalk, Maryland. "At 4:30 this morning I turned on the radio and tuned in KFEL. With the volume control only two-thirds on, they could be heard all over the house. On November 24th, I logged WQBT at Union City, Tenn. I also logged WMRJ with only 10 watts. By the way, I made the wave trap as described in the September RADEX and it is very good."

Other receptions of distant, low-watt stations are reported by F. A. Lester, of Mason, Mich., Charles Simpson, of Glencoe, Ill., Alonz N. Rose, Yonkers, N. Y. Mr. Rose reports 572 verified stations which have been checked by a certified accountant. He hopes to increase this total to 600 by the end of the year.

#### *More Calls Wanted*

"In view of the fact that advertising is the source of revenue for broadcasting, why can't the owners of broadcasting stations see the benefit of the publicity they can give their stations in taking every opportunity to inform their listeners what station they are receiving?" asks a modest friend who asks that we do not use his name. "No one listening to a program could object to hearing the station call every time there was a slight pause in the program." The same writer asks if it would not be possible to require all stations broadcasting the same program to use a single channel. The Radio

Commission has considered this, but it must be remembered that it is not easy for a station to change its frequency as this requires changes in equipment, crystal control and even in the antenna. Then, too, stations could not be synchronized exactly and the results would be a whistling chorus on every wave used by the chains.

We will have to carry over to next month several interesting letters for which we cannot find room in this issue. Until then, au revoir.

## **Curing Noises in Radio Receivers**

*(Continued from page 2)*

to a cold-water pipe or to a metal rod driven into the earth.

There are many other electrical devices causing interference. Automatic telephones produce a clicking sound in the receiver. Street cars, interurbans and elevated trains produce considerable sparking on the trolleys and rails, especially during wet weather or, when the tracks are covered with ice and this sets up interference waves which make radio reception almost impossible. Ignition systems of automobiles produce high-frequency currents, which also interfere with radio reception. Stop-and-go traffic lights are another cause of annoyance. An effective method of locating the source of electrical interference which disturbs radio reception is to get a portable receiver equipped with a loop. Start the set and tune in the interfering signal as loudly as possible. Very often it has a definite wave length and although it can be heard all over the dial, it will be loudest at one point. Now turn the loop around to a point where the disturbance comes in still louder and note precisely in which direction the loop points. Then take the receiver to a position a few blocks or possibly half a mile down the street and repeat the above procedure. Doing this at three points, or more if necessary, will usually give you an indication in which direction the interfering signal is coming from. After chasing it down as near to its source as possible by this method, try the ordinary hunting system for finding electrical devices such

as stop-and-go street signals, electric signs, power-line transformers and what-not.

### *Squealing*

Squeals are due to a variety of causes. Many tuned radio-frequency receivers of the older type often have a tendency to break into oscillation, which is evidenced by squealing and roaring noises, when the controls of the A and B-supply are turned up too high. In sets of this kind that have resistance-coupled audio stages, the trouble can often be remedied by substituting a good 1 to 2-ratio audio transformer for the resistance coupling of the first stage. Additional effect in eliminating the squeal from such sets is obtained by using a 1 or 2-megohm resistor in the plate line of the second audio tube instead of the smaller value resistor usually found here. Wires carrying plate voltage may cause the set to whistle constantly if they are run close to grid lines, especially the grid condenser of the detector tube. When cables are too long the radio owner often tucks the surplus cable inside of the cabinet behind the set and gets the B-supply lines in proximity to leads that will cause squealing. Also, when running loudspeaker cords, this trouble is frequently experienced. Receivers installed in consoles, which also accommodate the A and B-supply units, and possibly the loudspeaker, may have wires running in objectionable places. Too low a grid-leak value is often the cause of receiver breaking into oscillation. Too high a grid-leak value has just the opposite effect, namely, of reducing the signal strength. It has been found that poorly-designed audio transformers may cause a set to squeal. The fault may also be traced to a poor loudspeaker, especially those of the older type.

### *Microphonics*

Ringng noises, or those that somewhat resemble this description, and often increase in volume after the set is turned on, are usually "microphonics." Similar effects can often be produced when the receiver cabinet, panel or any of the tubes are tapped. Microphonics are often caused or aggravated by too much volume on the plate of the detector tube.

The detector plate voltage should always be kept as low as possible, consistent with good reproduction. Many old-type sets using a UX 201A tube for a detector, and not equipped with shock-absorbent sockets, have microphonic trouble. Change the tubes of your set around, trying all the UX 201A tubes in the detector socket, one by one, with the set in operation, until the least microphonic tube is found. Use of a UX 200A tube, which is especially designed for use as a detector, will often be found to be an effective cure. Then install a shock-absorbent socket. The reason for using shock-absorbent sockets is to prevent physical vibration, such as is occasioned by walking, to be absorbed by the tube itself, for vibration on a tube frequently causes it to be microphonic. Vibration is transmitted through the walls, floors, table, or stand on which the receiver is placed, or it may even be transmitted through the air. It is a good idea to arrest vibration before it enters the set. This can be done by setting the receiver on pieces of sponge rubber. Also provide a pad of sponge rubber under the loudspeaker, if this is set on the cabinet or on the same table. If rigidly connected inside, as is often the case in console models, try suspending the loudspeaker by means of heavy rubber strips cut from old inner tubes. Air vibrations caused by the loudspeaker often make the tubes of the receiver to vibrate enough to produce microphonic action. For this reason a speaker should, if possible, never be placed in a position facing the receiver.

### *Distortion*

Distorted reception is due to a variety of causes; the audio tubes may be overloaded, the transformers may be poorly designed or defective and in the case of resistance-coupled sets the resistors may be of incorrect values. Poor tubes, with too little emission, help to distort signals. Unshielded audio transformers, now practically obsolete, may cause inter-coupling of signals, resulting in distortion. The use of too high ratio audio transformers often causes constant distortion. The trouble sometimes occurs only when the r. f. and detector rheo-

stats are turned up too high. When two broadcasting stations are operating simultaneously and at wave lengths not far apart, the overlapping signals, even if they are not audible, may cause distortion. This is especially the case in broad-tuning sets, and can be partly remedied by reducing the length of the aerial, making the set tune more sharply. However, if the receiver tunes too sharp, it is impossible to get the benefit of the whole waveband and harsh-toned reception will result. Other sources of harsh-toned reception are: too high grid and plate voltages, detector filament rheostat turned up too high, incorrect resistors in resistance-coupled sets, too high a grid-leak value. Fuzzy reproduction may be due to a slowly-leaking condenser in the power supply, a poorly-adjusted eliminator, incorrect grid-leak value or too low a detector-plate voltage.

#### *Crackling*

Rasping, spluttering or crackling noises may be caused by condenser plates touching each other. Old B-batteries may occasion noise. Sporadic hissing and frying sounds are often due to internal short circuits in tubes. "Putt-putt" sounds or "motorboating" has been completely covered in a recent article in RADEX and therefore it is only necessary to mention some of the causes, which are as follows: Faulty resistors and leaky condensers in the power supply; fluctuations of voltage supplying the eliminator; excessive voltage on the r. f. and detector tubes; incorrect value of resistor in the detector-plate circuit of resistance-coupled receivers; incorrect grid bias; defective grid condenser; too high a grid-leak resistance; reversed winding of a. f. transformer; unmatched impedance between the power tube or putput device and the loudspeaker.

#### *A. C. Hum*

By far the greatest bugbear in radio reception today is a. c. hum. With the use of power devices operating directly from the house-lighting circuit, as a substitution for batteries, convenience is gained but often at the expense of tone quality. The greatest problem in the steps toward refinement of radio sets and the improvement of tone quality, is the

elimination of a. c. hum. Poor filtration in the power supply is often the cause. Hum frequently results from faulty adjustment of the variable controls on a power supply. Often the hum can be remedied by merely reversing the plug which connects to the light socket. Grounding the eliminator is also effective, and unless the receiver is especially designed to operate on an eliminator, it will usually be necessary to connect the B-negative terminal of the eliminator to the ground or A-negative terminal of the receiver, provided the A-negative and B-negative lines are connected together. If the A-positive and B-negative lines on the receiver are connected, the wiring should be changed so that the A-negative and B-negative will be connected. When this precaution is omitted, there is often a pronounced a. c. hum. The metal case in which almost every eliminator is enclosed, also serves as a shield, and this should be connected to the ground. But the B-negative terminal and the metal case of the eliminator can be grounded by the same wire.

#### *Shielding*

Proximity of the eliminator to the receiver is also a frequent cause of hum, owing to induction, and this is often the case with console installations, where the eliminator occupies the lower compartment directly under the receiver. Of course, the best method of preventing the hum is to install the eliminator away from the receiver, but this is often undesirable. Thus, in such cases, shielding the receiver must be resorted to. Sometimes a pronounced a. c. hum is caused by induction from the house-lighting circuit, which can also be reduced considerably by shielding the receiver, although the easiest remedy is to place the receiver in another location farther away from the offending house wires. Also be sure to remove from proximity to the receiver all portable lamps and other electrical appliances operating on the house-lighting circuit, for proximity of these devices may cause a hum. If a hum is caused by poor filtration in the eliminator and is carried to the receiver through the leads, it can sometimes be cured by shunting a number of by-pass



condensers around the output terminals of the eliminator. It may be necessary to experiment a little in order to get condensers whose capacities are most effective for reducing the hum. Condensers ranging from 1 to 4 mfd. in capacity can be used for this purpose, the smallest one being connected from the B-negative to the B-detector terminals, the second from the B-negative to the B intermediate terminals, and the third from the B-negative to the B-amplifier terminals. After the correct values have been found, the condensers should be permanently wired to these terminals. In most cases this method will be found quite effective. A hum, which becomes noticeable only after the eliminator has been in use for some time, and which did not exist at first, may be caused by a faulty buffer condenser. This trouble can be cured only by the replacement of the offending condenser. A defective rectifying device sometimes causes a hum and the device should then be replaced with a new one.

#### *Reducing the Hum*

In all-electric receivers using A. C. tubes it is often very easy to distinguish a hum, which is almost impossible to eliminate completely. One method of reducing the hum consists in connecting two 2-mfd. fixed condensers in series across the filament lines supplying the detector tube. Connect the remaining two terminals of the condensers to the ground line. Occasionally a hum in A. c. receivers using 2.5 volt tubes is caused by an inaccurately tapped 2.5-volt winding on the filament transformer. To remedy this condition get a 10 to 30-ohm potentiometer and connect the outside terminals of the potentiometer across the outside terminals of the 2.5-volt winding of the transformer. Then use the center tap of the potentiometer instead of the center tap on the transformer, the slider being adjusted so that the exact electrical center point between the 2.5-volt terminals is reached. A special device on the market called the "Hum-dinger" is practically the same thing as the potentiometer installation just described.

Many dynamic loudspeakers, espe-

cially the kinds using rectified A. C. current for their operation, produce a noticeable line hum. Connect a 4-mfd. condenser across the output terminals of the rectifier unit and ground the metal frame. It has also been found effective to connect a dry battery of slightly less voltage than that of the rectifier, to the output of the latter, instead of a condenser, as mentioned above. The positive terminal of the battery must be connected to the positive terminal of the rectifier, and the negative terminal of the battery to the negative terminal of the rectifier. Be sure, however, to disconnect the battery when not using the set.

### **Radio's Magic Shatters Prison Gloom**

*(Continued from page 6)*

remoteness and loneliness, the utter isolation of prison life.

Naturally, it is no mystery why there are more radio sets in use behind the walls of the Ohio penitentiary than within an equal area anywhere in the world. Just how many there are, no one knows. Between 1500 and 2000 sets would be a conservative estimate, and there are almost as many different makes.

Most of the sets are home-made. Prisoners read up on radio and have become experts in making good sets. In many cells there are two pair of head phones. In others, where there is but one pair, the prisoner will separate them and share the program with his cell-buddy. No loud speakers are permitted to run after the prison lights are extinguished, so all the prisoners desiring to radio late have to use phones.

Many of these sets are so small that they can be placed in a cigar box. Others are placed on an improvised shelf or on the floor; for be it known, the small "drums" which we affectionately call "home" are no wider than the average coal-chute.

If one were to walk through the narrow, sunless corridors of the cell blocks, the first thing to attract the eye would be hundreds of aerials stretched from the prisoners' cells to the wall of the hall some twenty-five or thirty feet away.



With short aeriels, eight or nine feet apart, it is to be expected that there is considerable interference, noise and disturbance. Yet, the men never complain. Patience is their forte. They do their best, and, under favorable atmospheric conditions, tune in their favorite stations with ease.

Less than an hour ago, I heard one prisoner say, "That little 'box' may make a world of racket; but it certainly helps me wile away the long hours, keeps my mind far removed from my confinement, my troubles, and above all, it connects me with something I'm interested in—the outer-world."

The speaker, a bank robber, doing so much time I hate to put it in print, is the proud possessor of a small one-tube set. What he said goes for practically every prisoner in this and every other prison in America.

New York, Cleveland, Chicago, Denver and Shreveport are the favorites, for they can be tuned in, on a good night, with little or no difficulty. With Columbia chain programs coming through WAIU, a local station, and the red and blue network of the National Broadcasting company coming through WTAM at Cleveland, and WJR at Detroit, it is possible most of the time to hear excellent programs. Some prisoners, more fortunate than the rest, own powerful eight and ten-tube sets, enabling them to get good programs from practically every station of importance in this country. And, what is more, they have fifteen or twenty inmates hooked up to their sets by means of a line which often circles a cell block 120 feet long.

Those whose knowledge of music has been confined to the church services and the annual minstrel shows, are now up in musical events, including classical, semi-classical, sacred and popular music. And there isn't a late tune that they cannot whistle or hum, thanks to the radio.

"People don't realize the hours of happiness it brings us," one prisoner explained. "And when we listen in on the radio we get to thinking different about a lot of things. People who talk over the radio, as a rule, have something important to say, and if you listen you

can't help but learn something. When I first came here, I dreaded the coming of night. It was from the prison workshop to supper, and then to my cell to be locked in for the night. Completely shut off from the world. Of course, I read, but orders are orders and the lights go out at 8:30. After that it was the solitude of my gloomy cell. Many nights I laid awake until the wee hours of the morning. Night was a horror then. Now, thank God, it is a pleasure."

During the past few months we have heard President Hoover, Dr. S. Parkes Cadman, pastor of the Central Congregational Church of Brooklyn, Babe Ruth, Al Smith, Al Jolson and other noted men. Still, in "this man's town," we have contributed our mite to radio. The Ohio penitentiary has furnished radio fans, throughout the middle west, with programs that compare favorably with those broadcast from expensive studios paying large sums for the privilege of featuring some celebrated orchestra, singer or comedian.

Ten months ago, station WAIU, Columbus, Ohio, had a microphone installed in the prison chapel. The object was to see how the public would respond to programs put on by prison talent. Putting it in the words of one prisoner, "It went over with a bang!" And each day since, during the noon hour, the prison orchestra sends its snappy jazz melodies floating over the air. In addition to the noon-day programs, a diversified program goes over the air every Monday evening from 7:30 to 8:30.

We have a "hooper" who can really sling "a mean pair of brogues," a tenor who can warble good enough to make feminine hearts to an occasional flip-flop, and a seventeen-year-old boy, "Specks" Russell, the youngest prisoner in this hoosegow, who plays a slide-trombone so well that the Warden is thinking of building a private post-office to handle his radio fan-mail.

We, too, have a prisoner whose broadcasting has attracted nation-wide attention. Before his sojourn behind the fortified walls of this castle, he was known as "the dancing redhead." That was when he was featured as a song and

dance specialist with various Keith circuit attractions. Several years ago he "stubbed his toe," and quietly dropped out of the theatrical limelight. Friends, acquaintances and admirers could find no trace of him. Finally, after several years of silence, Paul "Red" Philbin was induced to appear before the microphone, and how! Letters and telegrams poured in by the hundreds. Old friends recognized his voice, and a movement to obtain his release has been started by Fred Allen, nationally known comedian, now starring at the Music Box, New York City, and Henry Chesterfield, secretary of the National Vaudeville Association.

Radio is helping a lot of men in prison to find themselves. They are putting heart and soul in their work, and for every letter of appreciation received, they do that much better. They are making good. This is best evidenced by the fact, that after each program in which the prisoners appear before the microphone, hundreds of letters and gifts from every section of the country pour into the prison post-office.

In our search for entertainment we have many interesting experiences. It is not unusual for a prisoner to want to hear the broadcasting station from his home town, if one is there. This was the habit of a prisoner who formerly had Boston his home. In his younger days he was a member of a prominent Boston church; he sang in the choir and his sweetheart was a member of the same organization. Just about the time he was to be married something went wrong. He followed Horace Greely's advice and started west. He got as far as Ohio, and again something went wrong. He was arrested, and today he is serving a "flock" of years. When possible he always tuned in one of the Boston stations, in preference to all others. This was his habit until about a month ago, when the "something went wrong" again.

"It was Friday, and we were listening to an evening concert," his cell-buddy related. "The music was coming in better than usual and Dick (which is not his name, but will suffice in this case) seemed to get an unusual "kick" out of

each selection. He knew most of the songs and joined in singing with a voice often better than the voice of the singer at the other end. He certainly had a rich baritone that wasn't to be sneezed at.

"But all at once a woman began to sing 'Roses of Yesterday'. Dick grabbed my arm—his fingers bit into my flesh like a metal claw—what went wrong I didn't know, I just sat there staring at him. Finally, he relaxed his grip on my arm, lowered his head and cried like a child. Darned if it didn't kinda get me, too, though I didn't know what it was all about. He turned the set off and wouldn't answer any of my questions. I didn't know then what happened, but all night long Dick kept tossing and rolling in his bunk, and several times I heard him sob. The dame who warbled could warble some, too; don't you think that she couldn't! But, gee, we heard that same song fifty times, but it never hit Dick the way it did this time.

"Didn't know what the trouble was about until the next morning when I asked Dick what happened to him the night before. He finally told me that the girl who sang was an old sweetheart, and would have told me more, but tears again came to his eyes and I decided 'twas best to walk away.

"We have not mentioned the matter since, but it was over a week before he would again allow me to turn on the set. Dick is a funny guy that way. But he's gotten over it now, and we enjoy the 'box' as much as ever. But do you know he never tunes in Boston any more?"

Each day new sets are being added to those already owned in the Ohio penitentiary; and with each new set installed there is the making of a better prisoner, a future citizen who will be an asset to the state in lieu of a liability.

A moment ago a "trusty" interrupted me. Wanted to know if I would "chip-in" fifty cents toward the purchase of a one-tube set to be given to a prisoner who is in the tubercular ward . . . a former war buddy, gassed in France. He is but one of the many men in prison who returned from active service to find his position taken by another. He could

*(Continued on page 63)*

# WHAT'S ON THE AIR TONIGHT?

## A WEEKLY CALENDAR

### Leading Features of the Network Programs

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

Station lists beginning with WEAFF and WJZ are the National Broadcasting Co., while those beginning with WABC are the Columbia Broadcasting System.

*These programs are subject to change daily*

#### Daily (Except Saturday and Sunday)

6:45-8:00 Tower Health Exercises WEAF WEEI WCAE WFI WRC WGY WGR	8:00-8:15 The Aunt Jemima Man WJZ WBAL WHAM KDKA WJR WBZ WBZA WRC CKGW	8:00-8:15 Jolly Bill and Jane WEAF WEEI WGY WFI	8:00-8:30 Organ Reville WABC WEAN WCAU WHP WJAS WFBL WMAK WHK WGHP WKBN KOIL KMBC WIBW WBCM WSPD WMT WWNC WBRC WDOD WLAC KLRA	8:15-8:30 Morning Devotions WEAF WCAE WRC WGY WGR WFI WCSH WLS WJAR WWJ WOW WCKY WBT WJAX WHAS WPTF	8:30-8:45 Morning Devotions WABC WEAN WCAU WHP WFBL WMAK WGHP KOIL KMBC WBCM WSPD WWNC WBRC WDOD WREC WLAC KLRA	8:30-9:00 Cheerio WEAF WEEI WCKY WRC WGY WGR WBT WJAR WTAG WCSH WCAE WWJ WOW WDAF KSTP WPTF WAPI KPRC WFI WSB WJAX WTAM WRVA WHAS WCKY CKGW	8:45-9:30 Something for Everyone WABC WEAN WCAU WHP WJAS WFBL WMAK WHK WGHP WMAQC KOIL WBCM WSPD WMT WWNC WDBJ WBRC WDOD WREC WLAC KLRA	9:00-10:00 Morning Melodies WEAF WRC WWJ WOW WCKY WTAM WHAS	9:15-10:00 Parnassus String Trio WJZ KWK WBAL WHAM WREN	10:00-10:30 Ida Bailey Allen WABC WNAC WEAN WCAU WCAO WMAK WJAS WLWB WFBL WADC WHK WKRC WGHP WOWO WBBM KMOX KOIL KMBC WISN WCCO WSPD	10:00-10:45 Hits and Bits WEAF WWJ WRC WTAG WFI WTAM KFKX WAPI	10:00-11:00 The Manhatters WJZ WBAL KWK KFKX WAPI WBZ WBZA WJR WREN WRVA WCKY WCFL	11:00-11:30 Forecast School of Cookery WJZ WBZ WBZA WHAM KDKA WLW KWK WREN WJR WGN	11:15-11:30 Radio Household Institute WEAF WEEI WTAG WCSH WLIT WRC WGY WGR WCAE WWJ WSAI KSD WTMJ KSTP WJAR KYW WHO WDAF WBEBC KTHS WHAS WSM WMC WSB WAPI WSMB KPRC WOAI WKY	12:00-12:30 Columbia Revue WABC WEAN WFAN WFBL WMAK WHP WJAS WLWB WFBL WMAK WADC WGHP WKBN KOIL KMBC WCCO WBCM WMT WWNC WDOD WREC KLRA KLZ KFPY KVI	12:30-1:30 Yoeng's Restaurant Orchestra WABC WNAC WEAN WCAU WCAO WMAK WHP WJAS WLWB WFBL WMAK WADC WHK WKRC WGHP KOIL KMBC KFH WBCM WSPD WMT WWNC WDBJ WBRC WDOD WREC WLAC KLRA KLZ KVI KFPY	12:45-1:30 National Farm and Home Hour WJZ WBAL WJR KYW WMC WSMB WKY KTHS KPRC WRC	1:30-2:00 Harold Stern Orchestra WABC WEAN WFAN WCAO WMAK WHP WJAS WFBL WMAK WADC WKRC WGHP WBCM WSPD WWNC WDBJ WBRC WDOD WLAC KLRA KFPY	2:00-3:00 Pattern in Prints WABC WNAC WEAN WCAU WCAO WMAK WHP WJAS WFBL WKBW WADC WHK WKRC WGHP WKBN WFBM WBBM KOIL KMBC WISN WIBW KFH WBCM WSPD WMT WWNC WDBJ WBRC WDOD WREC WLAC KLRA KLZ KDYL KFPY	2:45-3:45 Band of a Thousand Melodies WJZ WBAL WJR KDKA KWK WAPI	3:00-3:30 Columbia Ensemble WCAO WMAL WHP WFBL WMAK WADC WGHP WKBN WFBM KOIL KMBC WIBW WBCM WSPD WMT WWNC WDBJ WBRC WDOD WREC WLAC KLRA KLZ KDYL KVI KFPY WISN	4:00-5:00 U. S. Band Concert WABC WNAC WEAN WCAU WCAO WMAL WHP WFBL WMAK WKRC WFBM WMAQ WBBM KOIL KMBC WISN WCCO WIBW WBCM WSPD WMT WWNC WDBJ WBRC WDOD WREC WLAC KLRA KLZ KDYL KVI KFPY WGHP WADC	5:00-5:30 Ambassador Tea Dance WABC WFAN WCAO WMAL WHP WFBL WMAK WKRC WKBM WMAQ KMBC WISN WBCM WSPD WMT WWNC WDBJ WDOD WREC KLRA KLZ KVI	5:30-6:00 The Lady Next Door WEAF WRC WOC KPRC WCSH KOA	6:00-7:00 Black and Gold Room Orchestra WEAF WCAE WWJ WTAG WJAR KSD	7:00-7:17 The Pepsody Program — Amos 'n' Andy WJZ WBZ WBZA WHAM KDKA WJR WRC CKGW WCKY	8:15-8:45 The Headliners WJZ WBAL KDKA WBZ WBZA WHAM
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11:30-11:45 The Pepsodent Program — Amos

n' Andy  
KYW KWK WREN WTMJ KSTP  
WEBC WKY WFAA KPRC WOAI  
KOA KSL WDAF WMAQ KECA  
KGO KOMO KGW KHO

Sunday

9:00-10:00 NBC Children's Hour  
WJZ WJR KWK WRC WBAL

9:00-10:00 Morning Musicals  
WABC WNAC WEAN WCAU WHP  
WFBL WFBM WIBW KFHF WBCM  
WSPD WMT WWNC WBRC WDOD  
WREC WLAC KLRA

10:00-10:50 Land o' Make Believe  
WABC WNAC WEAN WJAS KMBC  
WIBW WBCM WMT WWNC WBRC  
WDOD WREC WLAC KLRA

10:50-11:00 Columbia's Commentor  
WABC WNAC WEAN KMBC WIBW  
WBCM WWNC WBRC WDOD WLAC  
KLRA

1:00-2:00 National Light Opera  
WJZ WBAL WJR WLW WEBC  
KSL WRC CKGW KSTP KWK

1:30-1:45 Spanish Dreams  
WEAF WWJ KSD WOW WCAE

1:30-2:00 The Aztecs  
WCAU WCAO WHP WFBL WKBW  
WADC WKRC WGHP WKBN KMBC  
WCCO WIBW WBCM WSPD WMT  
WWNC WDBJ WBRC WDOD WLAC  
KLRA KVI KFPY

1:45-2:00 Godfrey Ludlow  
WEAF WWJ WCAE KSD WOW  
WHO

2:00-2:25 Troika Bells  
WEAF WWJ KSL KSD WLS  
WGR WJAX WHO

2:00-2:30 Ballad Hour  
WCAO WMAL WHP WJAS WFBL  
WKBW WKRC WGHP WKBN WFBM  
WMAQ KMBC WISN WCCO WIBW  
WBCM WSPD WMT WWNC WDBJ  
WBRC WDOD WLAC KLRA KLZ  
KDYL KVI KFPY

2:00-3:00 Roxy Symphony Concert  
WJZ WBZA WBZ WBAL KDKA  
WLW WTMJ KYW WRC WFAA  
WEBC KFAB WAPI CKGW WPTF

2:30-3:00 National Broadcasting Program  
WEAF WTAG WCSH WGY WWJ  
KSD WOC WHO WOW WJAX  
KSL WLS

3:00-4:00 National Youth Conference  
WJZ WBAL WRVA WPTF WJAX  
WMC WSB WOAI KFAB KDKA  
WLW KWK WREN WAPI KVOO  
KPRC KSL KGO KGW KOMO  
KHQ WBT WFAA

3:00-4:00 The Jewish Hour  
WEAF WJAR WCSH WRC WGR  
WCAE WWJ WSAI WCFL

3:00-4:00 Chicago Symphony  
KSD WOC WOW WDAF KSTP  
WTMJ WEBC WJR WGN

3:00-4:00 Symphonic Hour  
WABC WCAU WCAO WMAL WHP  
WJAS WFBL WKBW WADC WHK  
WKRC WGHP WKBN WFBM WMAQ  
KOIL KMBC WISN WCCO WIBW  
KFH WBCM WSPD WMT WWNC  
WDBJ WBRC WDOD WREC WLAC  
KLRA KLZ KDYL KVI KFPY

4:00-5:00 Cathedral Hour  
WABC WEAN WCAU WMAL WHP  
WJAS WLWB WFBL WKBW WADC  
WHK WKRC WGHP WKBN WFBM  
KOIL KMBC WISN WCCO WIBW  
KFH WBCM WSPD WMT WWNC  
WDBJ WBRC WDOD WREC WLAC  
KLRA KLZ KDYL KFRC KVI  
KFPY

4:00-5:00 Dr. S. Parkes Cadman  
WEAF WEEI WJAR WTAG WCSH  
WGY WGR WCAE WOW WRVA  
WPTF WJAX WBT WSM WMC  
WSB WKY WOAI KGO KOMO  
KHQ WSAI WDAF WHAS WAPI  
WVVO KPRC KOA WEBC KGW  
WHO WCFL WJDX WFJC WOC  
WFAA

5:00-5:30 McKesson News Reel  
WABC WNAC WEAN WCAU WMAL  
WJAS WLWB WFBL WHEC WKBW  
WADC WHK WKRC WGHP WOWO  
WMAQ KMOX KOIL KMBC WISN  
WCCO WIBW WSPD WWNC WTAR  
WDBJ WBRC WDOD WREC WLAC  
WDSU KRDL KLRA KFJF KTSA  
KLZ KDYL KHJ KFRC KOIN  
KVI KFPY

5:00-6:00 National Religious Service  
WJZ WBZ WBZA WBAL WHAM  
KFAB WLW WKB WREN WAPI  
WEBC WJAX WSMB KOA

5:00-6:00 Davey Hour  
WEAF WEEI WJAR WTAG WCSH  
WFI WRC WGY WGR WCAE  
WFJZ WSAI KSD WHO WOW  
WDAF WTAM WCFL CKGW

5:30-6:00 Rev. Donald Grey Barnhouse  
WABC WNAC WEAN WCAU WCAO  
WMAL WHP WJAS WLWB WFBL  
WKBW WADC WKRC WOWO WFBM  
WMAQ KOIL KMBC

6:00-6:15 Echoes of the Orient  
WEAF WRC WGY WCAE WOW  
KSD WOC WWJ WFI

6:00-6:30 Fox Fur Trappers  
WABC WNAC WCAU WHK

6:15-6:30 Countess Olga Medolago Albani  
WEAF WRC WGY WCAE WWJ  
KSD WOC WHO WOW WFI

6:30-7:00 Acousticon Program  
WABC WNAC WEAN WCAU WMAL  
WJAS WLWB WFBL WKBW WADC  
WHK WKRC WGHP WOWO WMAQ  
KMOX KOIL KMBC WSPD

6:30-7:00 Old Company's Songalogue  
WEAF WEEI WCSH WTAG WJAR  
WRC WGY WGR WLIT

7:00-7:30 Our Romantic Ancestors  
WCAO WMAL WHP WJAS WLWB  
WFBL WKRC WGHP WKBN WISN  
WIBW WBCM WMT WWNC WDBJ  
WDOD WREC KLRA KLZ KFRC  
KVI KFPY

7:00-7:30 Durant Heroes of the World  
WEAF WJAR WTAG WCSH WRC  
WGY WCAE WFJC WWJ WSAI  
WLS KSD KOA WDAF WTMJ  
WEBC WRVA WPTF WBT WJAX  
WIOD WHAS WSM WMC WSB  
WSMB WKY KPRC WOAI WOC  
WFAA CKGW WFI WGR

7:30-7:45 French Trio  
WABC WCAO WMAL WHP WJAS  
WLWB WFBL WGHP WKBN KOIL  
WISN WIBW WBCM WSPD WMT  
WWNC WDBJ WBRC WDOD WREC  
KLRA KLZ KDYL KVI KFPY

7:30-8:00 At the Baldwin  
WJZ WBZ WBZA WBAL WHAM  
WJR WLW WREN KYW KWK  
KTMJ WEBC KSTP WHAS WSB  
WSM KOA WMC KSL WSMB

7:30-8:30 Major Bowes' Family  
WEAF WJAR WRC WGY WCAE  
WWJ WSAI WJDX KSD WOW  
WFJZ WIOD WHAS WMC WSB  
WKY WTAM KTHS WOAI WHO

7:45-8:00 The World's Business  
WABC WNAC WEAN WMAL WHP  
WJAS WLWB WFBL WKRC WKBN  
WMAQ KMBC WISN WCCO WIBW  
WBCM WMT WWNC WDBJ WBRC







WMAQ KMOX KOIL KMBC WISN  
WCCO WGL KFH WSPD

8:30-9:00 Ceco Couriers  
WABC WNAC WEAN WCAU WCAO  
WMAL WJAS WLWB WFBL WMAK  
WADC WHK WKRC WGHP WFBM  
WMAQ KMOX KOIL KMBC WRHM  
WSPD

8:30-9:00 Ipana Troubadours  
WJZ WBZ WBZA WHAM KWK  
WHAS WJR WLW WREN KDKA  
KYW WIOD WRVA WJAX WMC  
WSB WBY KTHS KPRC KFAB  
WBT WSM. WSMB WOAI  
WTMJ

8:30-9:30 A. & P. Gypsies  
WEAF WEEI WTIC WJAR WTAG  
WCSH WLIT WRC WGY WGR  
WCAE WWJ WSAI WGN KSD  
WOC WDAF WTAM WOW

9:00-9:30 Edison Program  
WJZ WBZ WBZA KDKA WJR  
KYW WREN WBC KSL KGO  
KOMO KFI KGW KHQ KOA  
KWK WHAM KSTP WCKY

9:00-9:30 Physical Culture Magazine Hour  
WABC WNAC WEAN WCAU WCAO  
WMAL WJAS WLWB WFBL WMAK  
WADC WHK WKRC WGHP WMAQ  
KMOX KOIL KMBC WGL WSPD

9:30-10:00 Cheselbrough Real Folks  
WJZ WBZ WBZA WHAM KDKA  
KWK KYW WREN WLW WJR  
CKGW

9:30-10:00 An Evening in Paris  
WABC WNAC WEAN WCAU WMAL  
WJAS WLWB WFBL WMAK CFRB  
WADC WHK WKRC WGHP WOWO  
WMAQ KMOX KOIL KMBC WSPD  
WCAO

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

10:00-10:30 Whittall Anglo-Persians  
WEAF WEEI WTIC WJAR WTAG  
WCSH WLIT WGY WGR WCAE  
WFJC WWJ WSAI KSD WOC  
WOW WDAF WRC WIBO

10:00-10:30 Stromberg Carlson Program  
WJZ WBZ WBZA WHAM KDKA  
WJR KYW WKW WREN WTMJ  
KSTP WBC WRV WBT WJAX  
WIOD WHAS WSM WMC WSB  
WAPI WSMB WKY KTHS WBAP  
KPRC WOAI KOA KGO KFI  
KGW KHQ KOMO WJDX

10:00-10:30 Robert Burns Panatela  
WABC WNAC WEAN WCAU WCAO  
WMAL WJAS WLWB WFBL WMAK  
WADC WHK WKRC WGHP WOWO  
WFBM WMAQ KMOX KOIL KMBC  
WSPD

10:30-11:00 Strings and Bows  
WEAF WTAG WRC WGY WCAE  
WFJC WWJ WMC

10:30-11:00 Empire Builders  
WJZ WBZ WBZA WHAM KDKA  
WJR KYW WKW WREN WTMJ  
KSTP WLW WBC WKY WFAA  
KPRC WOAI KOA KSL KGO  
KFI KOMO KHQ KGW

10:30-11:30 Voice of Columbia  
WABC WNAC WEAN WCAO WMAL  
WJAS WLWB WFBL WMAK WADC  
WHK WKRC WGHP WKBN WFBM  
WMAQ KOIL KMBC WISN WCCO  
WIBW KFH WBC WSPD WMT  
WWNC WDBJ WBRC WDDO WREC

WLAC KLRA KLZ KDYL KFRC  
KVI KFPY

11:00-12:00 Hotel New Yorker Orchestra  
WEAF WGR WOW WWJ WLS

11:30-12:00 Hollywood Orchestra  
WABC WCAO WMAL WLWB WFBL  
WKBW WADC WGHP WKBN KOIL  
KMBC WISN WCCO WIBW KFH  
WBCM WSPD WMT WWNC WDBJ  
WBRC WDDO WREC KLRA KLZ  
KVI KFPY

## Tuesday

4:00-5:00 U. S. Navy Band  
WJZ WRC WAPI WHAM

4:30-5:00 Auction Bridge Game  
WEAF WEEI WTIC WJAR WTAG  
WCSH WLIT WRC WGY WGR  
WCAE WTAM WWJ WSAI WGN  
KSD WOC WOW WDAF WRVA  
WBT WJAX WHAS WSM WMC  
WSB WAPI KVOO WKY KTHS  
WFAA KPRC WOAI

6:00-6:30 This Week in History  
WABC WHP WLWB WFBL WADC  
WBBM KMBC KFH WBCM WWNC  
WBRC WDDO WREC KLRA KLZ  
KVI KFPY

6:30-7:00 Yoeng's Restaurant Orchestra  
WHP WJAS WLWB WFBL WKBW  
WKRC WKBN WFBM KMBC WISN  
KFH WBCM WMT WWNC WDBJ  
WBRC WDDO KLRA KLZ KVI  
KFPY

7:00-7:30 Voters' Service  
WEAF WJAR WTAG WCSH WGR  
WCAE WWJ WSAI WHO WOV  
WDAF WBC WPTF WBT WJAX  
WIOD WHAS WMC WSB WSMB  
WKY KTHS WFAA WOAI KGO  
KGW KOMO KHQ KOA

7:00-8:00 Carborundum Hour  
WABC WCAU WKBW WGHP WMAQ

7:30-8:00 Soconylnd Sketches  
WEAF WEEI WJAR WTAG WCSH  
WGY WRC

8:00-8:30 Pure Oil Band  
WJZ WBAL WHAM KDKA WJR  
KYW KWK WREN KSTP WTMJ  
WBC WHAS WMC WBT WJAX  
WRVA WSM WSB WCKY WIOD  
KFAB

8:00-8:30 Songs of the Season  
WEAF WTAG WFI WRC WGR  
WWJ WSAI KSD CKGW

8:00-8:30 Blackstone Program  
WABC WNAC WEAN WCAU WCAO  
WMAL WHP WJAS WLWB WFBL  
WHCC WKBW VGHP KOIL KMBC  
WRHM WMT

8:30-9:00 Around the World with Libby  
WJZ WBZ WBZA WBAL WHAM  
KDKA WJR WLW KWK KYW  
WREN WHAS WSM WMC WSB  
WSMB KOA KSL KGO KGW  
KOMO KHQ KECA

8:30-9:00 Frontier Days  
WEAF WGR KSD WEEI WJAR  
WTAG WFI WRC WGY WCAE  
WWJ WHO WOW WDAF

8:30-9:00 True Romances  
WABC WNAC WEAN WCAU WCAO  
WMAL WJAS WLWB WFBL WKBW  
WADC WHK WKRC WGHP WOWO  
KMOX KOIL KMBC WSPD

9:00-9:30 Eveready Hour  
WEAF WEEI WFI WRC WGY  
WGR WCAE WTAM WWJ WGN  
KSD WHO WDAF KSTP WBC  
WHAS WSM WMC WSB KVOO  
WOAI WJAR KOA KSL KGO  
KFI KGW KOMO KHQ WSMB  
WJDX

**9:00-10:00 Old Gold-Paul Whiteman**  
 WABC WNAC WCAU WCAO WMAL  
 WHP WFBL WHEC WKBW WADC  
 WHK WKRC WGHF WKBN WOWO  
 WFBM WBBM KOIL KSCJ WMBC  
 WISN WCCO WIBW WBCM WSPD  
 WWNC WTAR WDBJ WBRC WLAP  
 WDOD WREC WLAC WDSU KRLD  
 KFJF KLZ KDYL KHJ KFRC  
 KXA KOIN KFPY KLRA

**9:00-10:00 Johnson and Johnson**  
 WJZ WBZ WBZA WBAL WHAM  
 KDKA KYW KWK WLW WREN  
 CKGW

**10:00-10:30 Graybar's, Mr. and Mrs.**  
 WABC WNAC WEAN WCAU WCAO  
 WMAL WJAS WLWB WFBL WKBW  
 WADC WHK WKRC WGHF WOWO  
 WFEM WBBM KMOX KOIL KMBC  
 WISN WCCO WIBW WSPD WWNC  
 WTAR WDBJ WBRC WREC WLAC  
 WDSU KRLD KLRA KFJF KTSA  
 KLZ KDYL KHJ KFRC KOIN  
 KVI KFPY

**10:00-10:30 Williams' Oilomatics**  
 WJZ WBZ WBZA WHAM KDKA  
 KWK WREN WGN WJR

**10:00 10:30 Clickquot Club Eskimos**  
 WEFW WEEI WJAR WTAG WCSH  
 WFI WRC WGY WGR WCAE  
 WWJ WSAI KYW KSD WHO  
 WOW WDAF KSTP WTMJ WBCB  
 WJAX WHAS WSM WMC WSB  
 WBY WRVA WFAA KPRC WOAI  
 WKY KOA KSL KGO KFI  
 KGW KOMO KHQ

**10:30-11:00 In a Russian Village**  
 WABC WCAU WACO WMAL WHP  
 WJAS WLWB WFBL WKBW WADC  
 WHK WKRC WGHF WFEM KOIL  
 KMBC WISN WIBW WBCM WSPD  
 WMT WWNC WDBJ WBRC WDOD  
 WREC WLAC KLRA KLZ KDYL  
 KVI KFPY

**10:30-11:30 Radio-Keith-Orpheum Hour**  
 WEFW WEEI WJAR WTAG WCSH  
 WFI WRC WGY WGR WCAE  
 WFJC WWJ WSAI KSD WHO  
 WOW WAPI WSMB WFAA KPRC  
 WOAI WKY KTHS KOA KSL  
 KGO KGW KFI KOMO KHQ  
 WIBO WTAM WJDX

**11:00-11:30 Will Osborne's Orchestra**  
 WABC WCAO WMAL WHP WJAS  
 WLWB WFBL WKBW WADC WGHF  
 WFEM KOIL KMBC WISN WIBW  
 KFH WBCM WSPD WMT WWNC  
 WDBJ WBRC WDOD WREC WLAC  
 KLZ KDYL K I KFPY

**11:30-12:00 Phil Spital 's Music**  
 WEFW WFI WGR WFJC WWJ  
 WOW WRVA KSD WAPI

**Wednesday**

**2:30-3:00 Syncopated Silhouettes**  
 WABC WNAC WEAN WFAN WCAO  
 WMAL WHP WJAS WFBL WMAK  
 WADC WHK WKRC WGHF WKBN  
 WFCM WBBM KOIL KMBC WISN  
 WIBW WBCM WSPD WMT WWNC  
 WDBJ WBRC WDOD WREC WLAC  
 KLRA KLZ KDYL KFPY

**4:00-5:00 Radio Guild**  
 WJZ KWK WJAX KOA KGO  
 KOMO KYW

**5:00-5:15 National Woman's Party**  
 WJZ WBAL WHAM WLW KWK  
 KSTP WBCB WBT WJAX WHAS  
 WMC WSB KVOO WBPB KPRC  
 WOAI KOA KGO KGW KOMO  
 KHQ WRC

**6:30-7:00 Ben Pollack's Orchestra**  
 WABC WCAO WHP WJAS WLBW  
 WFBL WMAK WKRC WKBN WFBM  
 WBBM KMBC WISN KFH WBCM  
 WMT WWNC WDBJ WBRC WDOD  
 KLRA KLZ KVI KFPY

**7:00-7:30 Commodore Ensemble**  
 WHP WJAS WLWB WFBL WMAK  
 WKBW WFEM KOIL KMBC WISN  
 WCCO WIBW WBCM WMT WWNC  
 WDBJ WBRC WDOD WREC WLAC  
 KLRA KLZ KVI KFPY

**7:30-8:00 Westinghouse Salute**  
 WJZ WBZ WBZA WHAM KDKA  
 KYW WJR KWK WREN WBCB  
 WOAI KOA KFAB WCKY KSL  
 KGO KGW KOMO KFI KHQ  
 KPRC KSTP WFAA CKGW WRVA  
 WPTF WBT WJAX WIOD WHAS  
 WSM WMC WSB WSMB KVOO  
 WKY

**8:00-8:30 The Yeast Foamers**  
 WJZ WBZ WBZA WHAM KDKA  
 WJR KYW KWK WLW WREN  
 WTMJ KSTP WBCB KFAB

**8:00-8:30 Erno Rapee's Mobiloil Concert**  
 WEFW WEEI WTIC WJAR WTAG  
 WCSH WLIT WRC WGR WCAE  
 WWJ WSAI KSD WOC WOW  
 WDAF WFJC WTAM KOA KVOO  
 WFAA KPRC WOAI WKY WJBO  
 KSL

**8:00-8:30 General Mills Fast Freight**  
 WABC WNAC WEAN WCAU WCAO  
 WMAL WJAS WLWB WFBL WKBW  
 WADC WKRC WGHF WFEM WMAQ  
 KMOX KOIL KSCJ KMBC WCCO  
 WGL KFH WWNC WTAR WDBJ  
 WBRC WDOD WREC WLAC WDSU  
 WRR KFJF KLZ KDYE KHJ  
 KFRC KOIN KVI KFPY

**8:30-9:00 Happy Wonder Bakers**  
 WEFW WEEI WTIC WJAR WTAG  
 WCSH WLIT WRC WGY WGR  
 WWJ WSAI KSD WOC WOW  
 WFJC KSTP WTMJ WMC KVOO  
 WOAI KPRC WKY WFAA

**8:30-9:00 Sylvania Foresters**  
 WJZ WBZ WBZA WHAM KDKA  
 KWK WREN WLW KYW WJR  
 KFAB

**8:30-9:00 Forty Fathom Trawlers**  
 WABC WNAC WEAN WCAU WMAL  
 WHP WJAS WLWB WFBL WHEC  
 WKBW WADC WHK WKRC WGHF  
 WAU WFEM WMAQ KMOX WSPD  
 WCAO

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

**9:00-9:30 U. S. Army Band Concert**  
 WABC WNAC WEAN WCAO WMAL  
 WJAS WLWB WFBL WMAK WADC  
 WHK WKRC WGHF WFEM WMAQ  
 KOIL KMBC WISN WIBW KFH  
 WBCM WSPD WMT WWNC WDBJ  
 WBRC WDOD WLAC KLRA KLZ  
 KDYL KVI KFPY

**9:30-10:00 La Palina Smoker**  
 WABC WNAC WEAN WCAU WCAO  
 WMAL WJAS WLWB WFBL WMAK  
 WADC WHK WKRC WGHF WWOV  
 WMAQ KMOX KOIL KMBC WISN  
 WCCO WSPD

**9:30-10:30 Palmolive Hour**  
 WEFW WEEI WTIC WJAR WTAG  
 WCSH WLIT WRC WGY WGR  
 WCAE WTAM WWJ WSAI WGN

KSD WOC WOW WDAF WSMB  
 KSTP WTMJ WHAS WSM WMC  
 WSB WBT WJAX KVOO KPRC  
 WOAI KOA KSL KGO KFI  
 KGW KOMO KHQ WFAA

10:00-10:30 Kolster Radio Hour  
 WABC WNAC WEAN WCAU WCAO  
 WMAL WJAS WLBW WFBL WMAK  
 WADC WHK WKRC WGHF WOBW  
 WMAQ KMOX KOIL KMBC WCCO  
 WSPD

10:30-11:00 Grand Opera Concert  
 WABC WNAC WEAN WCAO WMAL  
 WJAS WLBW WFBL WMAK WADC  
 WHK WKRC WGHF WKBN WFBM  
 KOIL WISN WCCO WIBW WBCM  
 WSPD WMT WWNC WDBJ WDOD  
 WREC WLAC KLRA KLZ KDYL  
 KVI KFPY WBRC

10:30-11:00 Floyd Gibbons  
 WEAFF WTIC WJAR WRC WCAE  
 WWJ KSD WOC WOW WTAG

11:00-11:30 Lew White Frolickers  
 WEAFF WWJ KSD WEBC WDAF

11:00-12:00 Hank Simmons Show Boat  
 WABC WNAC WEAN WCAO WMAL  
 WJAS WLBW WFBL WMAK WADC  
 WHK WKRC WGHF WKDN KOIL  
 KMBC WISN WCCO WIBW KFH  
 WBCM WSPD WMT WWNC WDBJ  
 KBYC WDOD WREC KLRA KLZ  
 KDYL KFRAC KVI KFPY

11:00-12:00 Slumber Music  
 WJZ WREN KDKA WMA WIBO

11:30-12:00 Phil Spitalny's Music  
 WEAFF WWJ WOW KSD

## Thursday

2:00-2:30 Curtain Calls  
 WABC WNAC WEAN WFAN WCAO  
 WMAL WHP WFBL WKBW WHEC  
 WADC WHK WGHF WKBN WFBM  
 WBBM KOIL WISN WBCM WSPD  
 WMT WWNC WDBJ WBRC WDOD  
 WREC WLAC KLRA KLZ KDYL  
 KFPY

4:00-5:00 U. S. Army Band  
 WJZ WRC WLW KFAB KOA  
 WCFL KGO

4:30-5:00 Columbia Symphony Orchestra  
 WABC WNAC WEAN WCAU WCAO  
 WMAL WHP WFBL WKBW WADC  
 WKRC WGHF WFBM KOIL KMBC  
 WISN WCCO WIBW WBCM WSPD  
 WMT WWNC WDBJ WBRC WDOD  
 WREC WLAC KLRA KLZ KDYL  
 KFRAC KVI KFPY WHK

5:00-5:30 Radio-Keith-Orpheum Program  
 WEAFF WEEI WTIC WJAR WCSH  
 WLIT WRC WCAE WFJC WSAI  
 KSD WOC WOW KYW WTAG  
 WGY WWJ WDAF WGR WTAM

6:00-6:30 Hotel Shelton Orchestra  
 WABC WFAN WHP WLBW WFBL  
 WKBW WADC WHK WFBM WBBM  
 KMBC WCCO KFH WBCM WWNC  
 WERC WDOD WREC KLRA KLZ  
 KVI KFPY

6:30-7:00 Civic Repertory Theatre  
 WABC WCAU WHP WJAS WLBW  
 WFBL WKRC WKBN WFBM WMAQ  
 KOIL KMBC WISN KFH WBCM  
 WMT WDBJ WBRC WDOD KLRA  
 KLZ KFRAC KVI KFPY

7:00-7:30 Mid-Week Federation Hymn Sing  
 WEAFF WCSH WHAS KOA WMC  
 WJAR WIBO WJDX

7:30-8:00 Coward Comfort Music  
 WEAFF WJAR WTAG WCSH WEEI

8:00-8:30 Lehn and Fink Serenade  
 WJZ WBZ WBZA WBAL WHAM  
 KDKA KYW KWK WREN WBAP  
 KPRC WOAI WKY WLW

8:00-9:00 Fleischmann Hour  
 WEAFF WEEI WTAG WJAR WCSH  
 WFI WRC WGY WGR WCAE  
 WFJC WHO WOW WDAF WWJ  
 WTMJ WBT WJAX WIOD WJDX  
 WHAS WMC WSE WSMB WKY  
 WSAI KPRC KOA WEBC WRVA  
 KSL WOAI WSM KGO KGW  
 KOMO KHQ WBAP KTHS WAPI  
 KECA WIBO KSD CKGW WTAM

8:15-8:30 Frederick William Wile  
 WABC WNAC WEAN WCAO WMAL  
 WJAS WLBW WFBL WKBW WADC  
 WHK WKRC WKBN WFBM KOIL  
 KMBC WISN WCCO WIBW KFH  
 WBCM WMT WDBJ WBRC WDOD  
 WREC WLAC KLRA KLZ KFRAC  
 KVI KFPY

8:30-9:00 Champion Sparkers  
 WJZ WBZ WBZA WBAL WHAM  
 KDKA WLW WLS KWK WREN  
 WJR KFAB

8:30-9:00 Manhattan Moods  
 WABC WNAC WEAN WFAN WCAO  
 WMAL WJAS WLBW WFBL WKBW  
 WHK WKRC WGHF WKBN KOIL  
 KMBC WIBW KFH WBCM WSPD  
 WDBJ WDRC WDOD WREC WLAC  
 KLRA KVI KFPY

9:00-9:30 Sieberling Singers  
 WEAFF WEEI WJAR WTAG WCSH  
 WFI WRC WGY WGR WCAE  
 WTAM WWJ WSAI KYW KSD  
 WHO WOW WDAF KSTP WTMJ  
 WHAS WIOD WSM WMC WSB  
 WBT WJAX KOA KGO KFI  
 KGW KOMO KHQ WSMB WAPI  
 WOAI WBAP KPRC WKY

9:00-9:30 True Detective Mysteries  
 WABC WNAC WEAN WCAU WCAO  
 WMAL WJAS WLBW WFBL WHEC  
 WKBW WADC WHK WKRC WGHF  
 WOW WFBM WBBM KMBC WSPD  
 KMBC WISN WCCO WSPD

9:30-10:00 Maxwell House Melodies  
 WJZ WBZ WBZA WBAL WHAM  
 KDKA WJR WLW KSD WDAF  
 KSTP WTMJ WEBC WHAS WBAP  
 WSM WMC WBT KPRC KOA  
 WHO WOW WJAX WRVA WSB  
 KYW

9:30-10:00 Jack Frost's Melody Moments  
 WEAFF WJAR WTAG WCSH WFI  
 WRC WGY WGR WCAE WWJ  
 WSAI WLS

9:30-10:00 Dixie Echoes  
 WABC WNAC WEAN WJAS WCAU  
 WCAO WMAL WHP WHK WLBW  
 WFBL WKBW WADC KMBC WKRC  
 WGHF WKBN KOIL WBCM WISN  
 WCCO WIBW KFH WDOD WSPD  
 WMT WDBJ WBRC KVI WLAC  
 KLRA KLZ KDYL KFPY

10:00-10:30 Philco Hour  
 WABC WNAC WEAN WCAU WCAO  
 WMAL WJAS WLBW WFBL WHEC  
 WKBW CFRB WADC WHK WKRC  
 WGHF WKBN WWO WBM KMBC  
 KOIL WISN WCCO WJDX WJDX  
 WSPD WWNC WJAR WDBJ WBRC  
 WDOD WREC WLAC WDSU KLRA  
 WRR KFJF KTSF KLZ KDYL  
 KHJ KFRC KOIN KVI KFPY

10:00-11:00 Atwater Kent Mid-Week Program  
 WJA WBZ WBZA WBAL WHAM  
 KDKA WJR KWK WREN WGN  
 WCKY

10:30-11:00 National Radio Forum  
 WABC WNAC WEAN WFAN WCAO  
 WMAL WHP WJAS WLBW WFBL  
 WKBW WADC WHK WKRC WGHF  
 WBBM KOIL KMBC WISN WIBW  
 KFH WBCM WMT WDBJ WDOD  
 WREC WLAC KLRA KLZ KDYL  
 KFRAC KVI KFPY

<b>10:00-11:00 RCA Victor Hour</b>	WEAF WEEI WJAR WTAG WCSH WCAE WFI WRC WGY WGR WCAE WFJC WWJ WSAI KSD WOV WEBC WRVA WHO WBT WKY KPRC WOAI KOA KSL WTMJ WBAP WJAX WIOD WHAS WSM WMC WSB WSMB KYW WDAF KVOO KTHS WTAM KSTP KGO KGW KFI KOMO KHQ WJDX	WCAH WOWO WFBM KMOX KOIL KMBC WCCO WBW WJJD WMT WVNC WTAR WDBJ WFRB WODD WREC WLAC WDSU KRLD KLRA KFJF KLZ KDYL KHJ KFRC KQIN KFPY KXA KNX	<b>8:00-9:00 Cities Service Concert Orchestra</b> WEAF WEEI WTIC WLIT WRC WGR WCAE WTAM WJAR WCHS KYW KSD WOV WDAF KSTP WTMJ WKY WJF WOC KOA WFAA WSAI WEBC KOMO KGO KGW KHQ WOAI KPRC KSL WTAG CKGW KECA	<b>8:30-9:00 Eversharp Penmen</b> WABC WNAC WEAN WCAU WCAO WMAL WJAS WLWB WFBL WMAK WADC WHK WKRC WGHP WCAH WOWO WFBM KMOX KOIL KMBC WCCO WSPD WBBM	<b>9:00-9:30 Interwoven Pair</b> WJZ WBZ WBZA WHAM KDKA WMC KYW WREN KPRC WOAI KOA WHAS WSM WSB WBT WJAX KWK WRVA KSL KGO KOMO KHQ KGW KFI WKY WAPI WSMB WIOD WLW WFAA WEBC WJR CKGW	<b>9:00-9:30 Cliquot Club Eskimos</b> WEAF WEEI WTIC WJAR WTAG WCSH WLIT WRC WGY WGR WOW WCAE WSAI WIBO KSD	<b>9:00-10:00 True Story Hour</b> WABC WNAC WEAN WCAU WCAO WMAL WJAS WLWB WFBL WHEC WMAK WADC WHK WKRC WGHP WOWO WMAQ KMOX KOIL KMBC WCCO WIBW WSPD WVNC WTAR WDBJ WBRC WODD WREC WLAC WDSU KRLD KLRA KFJF KTSA KLZ KDYL KHJ KFRC KOIN KVI KFPY	<b>9:30-10:00 Armour Program</b> WJZ WBZ WBZA WJR KYW WREN KSTP WEBC WRVA WMC WSB WSMB WOAI KOA KSL WSM WKY WBT WHAS KGO KFI KGW KOMO KHQ WJAX WIOD KDKA WMTI WPTF	<b>10:00-10:30 Armstrong Quakers</b> WJZ WBZ WBZA KDKA KYW KWK WREN KPRC WHAM WJR KSTP WTMJ WEBC WHAS WSM WSB WBT KVOO WOAI KTHS WKY WSMB KOA KSL KGO KFI KGW KOMO KHQ WMC WBAP WLW WBAL	<b>10:00-10:30 Planters Pickers</b> WEAF WTIC WJAR WTAG WCSH WLIT WRC WGY WJR WCAE WFJC WWJ WSAI WLS WCAE WOW WOC CKGW WDAF KSD	<b>10:00-10:30 Brunswick Program</b> WABC WNAC WEAN WCAU WCAO WMAL WJAS WLWB WFBL WMAK WADC WHK WKRC WGHP WOV WMAQ KMOX KOIL KMBC WISN WCCO WSPD	<b>10:30-11:00 Mystery House</b> WEAF WTAG WRC WWJ WOC WGR WCAE WDAF WOV	<b>10:30-11:00 Curtis Institute of Music</b> WABC WNAC WEAN WCAU WCAO WMAL WLWB WFBL WMAK WADC WHK WKRC WGHP KOIL KMBC WISN WIBW WBCM WSPD WMT WVNC WDBJ WBRC WODD WREC WLAC KLRA KLZ KVI KFPY	<b>11:00-12:00 Hotel St. Regis Orchestra</b> WEAF WWJ WFJC WGY WOV WMC CKGW WLS	<b>11:30-12:00 Ben Pollack's Orchestra</b> WABC WEAN WCAU WCAO WMAL WLWB WFBL WKBW WADC WKRC
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## Friday

<b>11:00-12:00 NBC Music Appreciation Hour</b>	WEAF WJZ WEEI WJAR WTAG WCSH WLIT WRC WGY WGR WCAE WTAM WWJ WGN KSD WHO WOV WDAF KSTP WTMJ KOA WHAS WSM WMC WSB WBT KVOO WFAA KPRC WOAI WJAX WRVA WEBC WBZ WBZA WBAL WHAM KDKA WJR WLW KYW KWK WREN KFAB WFJC KSL WKY WIOD WSMB WAPI	<b>11:00-12:00 NBC Music Appreciation Hour</b> WJZ WEAF WBZ WBZA WBAL WHAM KDKA WJR WLW KYW KWK WREN KFAB WFJC KSL WKY WIOD WSMB WAPI WPTF KTHS WEEI WJAR WTAG WCSH WLIT WRC WGY WGR WCAE WTAM WWJ WGN KSD WHO WOW WDAF KSTP WTMJ KOA WHAS WSM WMC WSB WBT KVOO WFAA KPRC WOAI WJAX WRVA WEBC	<b>3:00-4:00 U.S. Marine Symphony Orchestra</b> WEAF WRC WTAM WWJ KSD WHO WOV	<b>3:15-4:15 Rochester Philharmonic Orchestra</b> WJZ WBZ WBZA WBAL WHAM KDKA WJR WRVA WPTF WJAX WSM WAPI WRC CKGW	<b>5:15-5:30 The March of Events</b> WEAF WEEI WJAR WCSH WRC WGR WTMJ KSD KSTP WEBC WBT WJAX WHAS WSB KPRC	<b>6:30-7:00 Yoeng's Restaurant Orchestra</b> WCAO WHP WLWB WFBL WMAK WHK WKRC WKBN WFBM WBBM KMBC WISN KFH WBCM WMT WVNC WDBJ WBRC WODD KLRA KLZ KVI KFPY	<b>7:00-7:30 Hotel Paramount Orchestra</b> WCAO WHP WLWB WFBL WMAK WKRC WGHP WFBM KOIL KMBC WISN WCCO WIBW WBCM WDBJ WBRC WODD KLRA KLZ KFRC KVI KFPY	<b>7:30-8:00 Raybestos Twins</b> WEAF WTIC WCSH WLIT KOA KSL WRC WCAE WWJ WSAI WIBO KSD WOV WDAF CKGW WGR WGY	<b>7:30-8:00 Dixie's Circus — Bob Sherwood</b> WJZ WBZ WBZA KDKA KYW WHAS WSM WSB WBT WMC WLW	<b>8:00-8:30 Brown-Bilt Footlights</b> WABC WNAC WEAN WCAU WCAO WMAL WJAS WLWB WFBL WHEC WMAK WADC WHK WKRC WGHP
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WGHP KOIL KMBC WISN WIBW  
KFH WBCM WSPD WMT WNW  
WDBJ WBRC WDOD WREC KLRA  
KLZ KDYL KFRC KVI KFPY

WDAF WTMJ KSTP WEBC WRVA  
WBT WJAX WIOD WHAS WSM  
WMC WSB WAPI WSMB WKY  
KTHS WBAP KFRC WQAI KOA  
KSL WBSB

Saturday

11:00-12:00 U.S. Army Band  
WABC WCAU WCAO WMAL WHP  
WJAS WLBW WFBL WKBW WKRC  
WGHP WFBM KMBC WIBW WBCM  
WSPD WMT WNNC WDBJ WDOD  
WREC KLRA KLZ KFRC KFPY

1:45-2:15 Keystone Chronicle  
WLW WLS KSD WOC WOW  
WDAF WTMJ KSTP WEBC WHAS  
WSM WMC WSMB KVOO WKY  
KTHS WBAP WFAA KPRC WOAI

2:00-2:30 Eddie Worth's Orchestra  
WABC WNAC WEAN WCAU WCAO  
WMAL WHP WJAS WFBL WKBW  
WADC WHK WGHF WKBN WBBM  
KOIL WCCO KFH WBCM WSPD  
WMT WNNC WDBJ WERC WDOD  
WREC WLAC KLRA KLZ KDYL  
KFPY

4:30-5:00 Whyte's Orchestra  
WEAF WRC WTAM WOC WDAF

6:00-6:30 Hotel Shelton Orchestra  
WABC WHP WLBW WFBL WKBW  
WADC WGHP WFBM WBBM KMBC  
WCCO WIBW KFH WBCM WMT  
WNNC WBRC WDOD WREC KLRA  
KLZ KFRC KVI KFPY

6:30-7:00 Yoeng's Orchestra  
WABC WHP WJAS WLBW WFBL  
WKBW WHK WKRC WGHF WFBM  
KMBC WCCO KFH WBCM WSPD  
WMT WNNC WDBJ WDRC WDOD  
KLRA KLZ KFRC KVI KFPY

7:00-7:30 The Family Goes Abroad  
WEAF WJAX WCSH WGY WGR  
WWJ WOC WRVA WPTF WSM  
WMC WKY

7:00-7:30 Commodore Concert Ensemble  
WABC WEAN WFAN WCAO WHP  
WJAS WLBW WFBL WKBW WKRC  
KMBC WISN WIBW KFH WBRC  
WBCM WMT WNNC WDBJ KLZ  
WDOD WREC WLAC KLRA KFPY  
KFRC KVI

7:30-8:00 Phil Spitalny's Music  
WEAF WJAR WCSH WRC WGY  
WWJ CKGW WPTF

8:00-8:15 Dr. Arthur Torraine  
WABC WNAC WEAN WCAU WCAO  
WMAL WJAS WLBW WFBL WKBW  
WADC WKRC WGHF WFBM KOIL  
KMBC WISN WCCO WIBW KFH  
WBCM WSPD WMT WNNC WDBJ  
WDOD WREC WLAC KLRA KFRC  
KVI KFPY

8:00-8:30 The New Business World  
WEAF WEEI WJAR WTAG WFI  
WCSH WRC WGY WGR WWJ  
WSAI WOW WDAF WRVA WPTF  
WBT WMC WSMB WKY KOA  
WCAE WOAI KTHS WFJC KSD  
WHO WJAX WAPI KFRC KGO  
KGW KHQ KOMO KECA

8:00-8:30 The Pickard Family  
WJZ WIBO KFAB KWK WRC

8:15-8:30 Babson Finance Period  
WABC WNAC WEAN WCAU WCAO  
WMAL WJAS WLBW WFBL WKBW  
WADC WHK WKRC WGHF WQOW  
WMAQ KMOX KOIL KMBC WCCO  
WSPD

8:30-9:00 Lauderdale Lyrics  
WEAF WEEI WJAR WTAG WCSH  
WRC WGY WGR WCAE WWJ  
WSAI WLS KSD WHO WOW

9:00-9:30 Nit Wit Hour  
WABC WNAC WEAN WCAU WCAO  
WMAL WHP WJAS WLBW WFBL  
WKBW WADC WHK WKRC WGHF  
WFBM KOIL KMBC WISN WCCO  
WIBW KFH WBCM WSPD WMT  
WNNC WDBJ WERC WDOD WREC  
WLAC KLRA KLZ KDYL KFRC  
KVI KFPY

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

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

9:30-10:00 Around the Samovar  
WABC WNAC WEAN WCAU WMAL  
WHP WJAS WLBW WFBL WKBW  
WADC WHK WKRC WGHF WFBM  
WMAQ KOIL KMBC WISN WCCO  
WIBW KFH WBCM WSPD WMT  
WNNC WDBJ WERC WDOD WLAC  
KLRA KLZ KDYL KVI KFPY

10:00-11:00 Lucky Strike Orchestra  
WEAF WEEI WJAR WTAG WCSH  
WFI WRC WGY WGR WCAE  
WWJ WGN KSD WHO WOW  
WDAF WIOD KSTP WTMJ WSMB  
WJAX WHAS WSM WBT WBT  
WBAP KPRC WOAI WKY WAPI  
WSAI WFJC KOA KSL KGO  
KFI KGW KOMO KHQ WEBC

10:00-11:00 Chicago Civic Opera  
WJZ WBZ WBZA WBAL WHAM  
KDKA WJR KWK WREN WCKY  
CKGW

10:00-11:00 Paramount-Publix Hour  
WABC WNAC WEAN WCAU WCAO  
WMAL WHP WJAS WLBW WFBL  
WHK WKRC WGHF WCAH WKBN  
WFBM WBBM KMOX KOIL KSCJ  
KMBC WISN WCCO WIBW WSPD  
WMT WNNC WTAR WDBJ WSDU  
WLAP WDOD WREC WLAC WBSU  
KRLD KLRA KFJF KTSA KLZ  
KDYL KHJ KFRC KXA KNX  
KOIN KFPY

11:00-11:15 Troubadour of the Moon  
WEAF WFI WCAE WFJC KSD  
WHO WOW WIOD

11:00-11:30 Guy Lombardo's Orchestra  
WABC WNAC WEAN WCAU WCAO  
WHP WJAS WLBW WFBL WKBW  
WADC WHK WKRC WGHF WMAQ  
KOIL KMBC WISN WIBW WBCM  
WSPD WMT WNNC WDBJ WERC  
WDOD WREC KLRA KLZ KDYL  
KVI KFPY

11:15-12:00 Club Richman Orchestra  
WEAF WFI WHO WOW WDAF  
WKY WFJC WWJ KSD WIOD  
WMC WJDX

11:30-12:00 Hotel Paramount Orchestra  
WABC WCAU WCAO WHP WLBW  
WFBL WKBW WADC WKRC WGHF  
KOIL KMBC WISN WIBW WBCM  
WSPD WMT WNNC WERC WDOD  
WREC KLRA KLZ KDYL KFPY

12:00-1:00 Rudy Vallee and His Orchestra  
WEAF WRC WTAM KSD WHO  
WOW KSTP WJAX WMC

**AIR-LINE DISTANCES**

Atlanta, Ga.	1273	1670	774	1967	830	1577	1126	1248	1417	332	833	1360	228	968	561	803	588	773	1252	1492	717	663	1174	938	1710	980	895	1	
Baltimore, Md.	--	575	1830	933	960	895	583	386	550	1208	738	595	1233	1112	750	688	901	498	947	286	675	1935	317	335	610	905	1790	2	
Boise, Idaho	--	2055	585	1255	273	603	423	305	1565	913	398	1750	1143	1239	1245	1154	964	808	682	962	2313	498	792	958	948	1947	3		
Boston, Mass.	--	2266	1610	1872	1453	1663	1754	637	1155	1671	967	975	1263	1538	934	1384	1367	2098	1158	667	1623	1506	2368	1140	252	1	1		
Brownsville, Tex.	-1681	398	849	737	500	1766	1159	613	2067	1304	1574	1598	1415	1302	922	1015	1250	2590	862	1823	1133	1268	1125	2124	4	1	1		
Buffalo, N. Y.	-1575	1234	1384	1402	1067	1102	1398	688	1445	471	287	1013	650	1543	1025	923	1370	1093	777	1100	1335	1706	1100	1335	1706	5	1	1	
Chicago, Ill.	--	454	92	175	1368	762	218	1690	923	1221	1289	1019	956	560	880	862	2195	803	802	1184	733	1740	410	1190	506	1348	6		
Cincinnati, Ohio	--	249	307	918	310	236	1249	571	820	954	566	585	367	851	643	1174	268	481	1190	506	1348	410	1190	506	1348	7	1	1	
Cleveland, Ohio	--	218	1090	509	234	1333	818	839	897	742	569	598	628	621	541	1842	92	410	957	603	1578	410	957	603	1578	8	1	1	
Denver, Colo.	-1223	617	94	1523	838	1046	1116	871	787	518	788	700	2044	309	627	1088	632	1640	1088	632	1640	1088	632	1640	9	1	1	1	
Des Moines, Iowa	--	607	1153	554	642	643	925	353	749	970	1468	555	288	1035	878	1732	699	670	1338	235	1074	1338	235	1074	10	1	1	1	
Detroit, Mich.	--	545	980	397	640	851	256	488	458	1024	108	1433	477	405	1338	235	1074	1338	235	1074	1338	235	1074	11	1	1	1	1	
El Paso, Tex.	--	1475	745	508	1111	800	761	427	832	643	1976	315	621	1156	542	1552	447	1662	1156	1115	1115	1115	1115	1115	12	1	1	1	1
Fargo, N. Dak.	-1161	973	1218	440	875	393	1400	548	1426	818	882	1721	219	819	13	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fort Worth, Tex.	--	283	544	273	1093	943	460	1212	751	448	1150	870	1312	447	1662	1156	1115	1115	1115	1115	1115	1115	1115	1115	14	1	1	1	1
Galveston, Tex.	--	808	375	1277	799	677	1423	807	492	941	1087	1595	621	923	605	1550	15	1	1	1	1	1	1	1	1	1	1	1	1
Hastings, Nebr.	--	513	666	1178	226	1177	693	591	1468	939	891	621	923	605	1550	16	1	1	1	1	1	1	1	1	1	1	1	1	1
Hot Springs, Ark.	--	901	728	328	1437	480	176	983	722	1385	17	923	605	1550	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Houghton, Mich.	-1216	633	1787	636	830	1545	872	1208	17	923	605	1550	18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Jacksonville, Fla.	--	952	2153	595	591	328	1192	2070	1247	413	1117	447	1662	1156	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	19	1	1	1
Kansas City, Mo.	--	1825	1602	2355	1522	910	11	923	605	1550	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Los Angeles, Calif.	--	878	700	1483	923	605	1550	21	923	605	1550	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Louisville, Ky.	--	1516	2359	1010	923	605	1550	23	923	605	1550	24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Memphis, Tenn.	--	1516	2359	1010	923	605	1550	25	923	605	1550	26	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Miami, Fla.	--	1516	2359	1010	923	605	1550	27	923	605	1550	28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Minneapolis, Minn.	--	1516	2359	1010	923	605	1550	29	923	605	1550	30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Missoula, Mont.	--	1516	2359	1010	923	605	1550	31	923	605	1550	32	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

**How To Use Your RADEX**

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 WEAF in New York.

First we must ascertain the frequency for this station. Look it up under WEAF in the Index by Call Letters or under New York in the Index by States and Cities. In either of these indexes we find that the frequency of WEAF is 660. Now we turn to 660 kilocycles in the Index by Frequencies and Dial Numbers. Here we find that WEAF is one of the two stations which have been assigned the 660 kcys. 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 kcys. 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 kcys. are 72-70 and the dial numbers for 660 kcys. are 69-67. If we now will set our dials for 70-68 it is obvious we will have our set tuned for 650 kcys. We listen carefully and if they are on the air and within range of our set we will tune in WSM of Nashville at this point. We then enter the dial readings for WSM opposite 650 kcys. Now it is clear that if we reset our dials at 71-69 our set will be tuned to 640 kcys. and at that point KFI of Los Angeles will be heard, always assuming of course that it is on the air and within range of our particular set.

Now we tune in some other station, proceeding

**INDEX BY FREQUENCIES AND DIAL NUMBERS**

590 kilocycles 508.2 meters	76 74
KFO 1800	Los Angeles, Wash.
KFSD 1800	Lafayette, Wis.
WEEF 1800	Boston, Mass.
WOW 1800	Omaha, Nebr.
WEMC 1600	Berrien Springs, Mich.
600 kilocycles 499.7 meters	75 73
CFCH 350	Troquois Falls, Ont.
KFBU 500	Lafayette, Wis.
KFSD 500	San Diego, Calif.
WCAO 500	Burlington, Mo.
WERN 740	Hot Springs, Ark.
WGAN 500	Lawrenceburg, Tenn.
WREB 500	Memphis, Tenn.
WTRC 500	Hartford, Conn.
610 kilocycles 491.5 meters	74 72
KFRC 1600	San Francisco, Calif.
WDFP 1000	Indianapolis, Ind.
WYAN 500	Philadelphia, Pa.
WFO 1000	Kansas City, Mo.
620 kilocycles 483.6 meters	73 71
KEAD 500	Phoenix, Ariz.
WJOP 1200	Portland, Ore.
WJAE 1000	Tampa, Fla.
WJRD 1000	Washington, D. C.
WJZZ 500	Denver, Colorado, Mo.
WJWA 1000	Minneapolis, Minn.
630 kilocycles 475.9 meters	72 70
CFCH 500	Troquois Falls, Ont.
KFBU 500	Lafayette, Wis.
KFSD 500	San Diego, Calif.
WCAO 500	Burlington, Mo.
WERN 740	Hot Springs, Ark.
WGAN 500	Lawrenceburg, Tenn.
WREB 500	Memphis, Tenn.
WTRC 500	Hartford, Conn.
640 kilocycles 468.5 meters	
KFI 5000	Los Angeles, Calif.
WAIU 5000	Columbus, Ohio
650 kilocycles 461.3 meters	70 68
WSM 5000	Nashville, Tenn.
660 kilocycles 454.3 meters	69 67
WAAW 500	Omaha, Nebr.
WEAF 5000	New York City
670 kilocycles 447.5 meters	68 66
WMAO 5000	Chicago, Ill.
680 kilocycles 440.9 meters	67 65
KFO 5000	San Francisco, Calif.
WTFP 6000	Raleigh, N. C.

Lois Warner, Inc.
Shelby-Walker University
Radio Elec. Filmmaking Co.
Woodmen of the World
Emmanuel Missionary College
Abilene Power & Paper Co.
Hubbap N. S. Thomas
Alford Radio Corp.
International Radio Co., Inc.
Radio Club
Victor School of Music
WKKC, Inc.
Travelers Insurance Co.
Dun Lee, Inc.
Essex City Star Co.
Raystone Broadcasting Co., Inc.
Citizens' B'n., Inc.
Unity School of Christianity
Electrical Equipment Co.
Georgetown Publishing Co.
Temple Publishing Co.
Burton College, Inc.
Thompson L. Guernsey
Miner's Journal
Virginia Broadcasting Ass'n.
Winning Grain Exchange
Canadian National Railways
Casco, Inc.
Permittee on the Air, Inc.
N. A. Loren Co.
State Marketing Bureau
Fairly C. Anthony, Inc.
American Insurance Union
National Life & Accident Ins. Co.
Omaha Grain Exchange
National Broadcasting Co., Inc.
Chicago Daily News, Inc.
Haggart & La Crenca
Durham Life Insurance Co.

# IN STATUTE MILES

117	1030	1801	1696	518	718	1748	303	1498	2015	1107	1628	938	483	893	1823	1178	764	1028	1889	742	1648	Albuquerque, N. Mex.	
118	427	747	507	753	815	643	1592	520	1022	2172	470	467	1560	2133	840	2190	567	1560	863	917	542	Atlanta, Ga.	
119	4001	170	167	1173	1026	90	2002	194	446	2367	128	731	1858	2451	278	2341	1044	2110	282	1083	33	Baltimore, Md.	
121	1359	2153	2137	1138	1044	2113	733	1863	2282	349	2060	1389	292	516	2120	405	1043	290	2196	973	2045	Boise, Idaho	
122	536	1695	1465	659	1061	1614	1023	1424	1961	1944	1428	975	1317	1675	1770	2015	510	1852	1805	1161	1493	Boston, Mass.	
126	1087	291	435	1217	883	278	1904	178	438	2167	375	662	1701	2298	249	2130	1080	1900	325	916	290	Brownsville, Tex.	
134	831	711	696	689	432	564	1451	411	892	1755	618	259	1260	1855	702	1743	725	1514	774	479	594	Buffalo, N. Y.	
139	608	568	474	755	620	501	1578	258	802	1907	399	308	1450	2037	605	1974	688	1746	659	694	403	Chicago, Ill.	
156	922	404	429	946	738	343	1245	115	603	2063	353	490	1567	2163	408	2035	904	1804	474	785	303	Cincinnati, Ohio.	
128	1079	1628	1562	503	485	1575	585	1320	1803	985	1488	793	372	946	1618	1020	799	827	1692	468	1490	Cleveland, Ohio.	
123	825	1023	983	469	122	972	1154	718	1197	1479	905	270	952	1547	1012	1074	624	1243	1085	187	695	Denver, Colo.	
168	938	483	522	905	666	444	1685	208	657	1975	445	452	1490	2087	467	1945	891	1715	540	705	397	Des Moines, Iowa	
169	986	1902	1755	578	875	1834	347	1592	2126	1286	1695	1033	689	993	1930	1373	752	1238	1890	920	1728	Detroit, Mich.	
100	1221	1213	1258	786	390	1184	1225	952	1313	1248	1180	658	865	1447	1157	1206	1002	976	1240	284	1141	El Paso, Tex.	
143	470	1398	1226	188	590	3326	1085	1097	1642	1612	1170	568	977	1454	1445	1658	269	1470	1495	689	1210	Fargo, N. Dak.	
166	288	1415	1195	456	828	1335	1065	1140	1678	1885	1154	697	1249	1693	1487	1938	233	1753	1584	938	1214	Fort Worth, Tex.	
197	870	1275	1216	357	135	1222	901	967	1454	1271	1142	655	708	1297	1267	1288	455	1061	1340	167	1139	Galveston, Tex.	
190	358	1125	955	260	490	1051	1094	825	1371	1733	897	325	1116	1648	1175	1598	142	1552	1234	605	936	Hastings, Neb.	
160	1187	849	946	926	547	827	1550	638	924	1638	870	591	1242	1833	776	1759	1043	1360	860	510	813	Houston, Mich.	
102	511	838	548	988	1098	758	1800	703	1113	2442	953	755	1840	2375	960	2450	733	2239	957	1203	647	Jacksonville, Fla.	
172	678	1097	1009	293	165	1037	1045	784	1300	1397	937	238	922	1500	1107	1500	326	1286	1173	280	943	Kansas City, Mo.	
177	1675	2446	2352	1182	1312	2388	357	2135	2631	825	2283	1585	577	345	2445	956	1420	939	2315	1291	2395	Los Angeles, Calif.	
153	623	505	528	675	579	580	1512	345	892	1953	457	242	1400	1983	695	1945	598	1720	745	663	473	Louisville, Ky.	
195	938	953	778	422	529	878	1264	680	1205	1852	722	242	1250	1800	1010	1847	279	1652	1055	642	763	Memphis, Tenn.	
121	681	1095	802	1233	1402	1023	1998	1014	1357	2716	831	1067	2098	2603	1229	2740	950	2528	1210	1510	927	Miami, Fla.	
195	1050	1019	1047	692	291	985	1279	745	1145	1425	968	464	988	1585	975	1403	859	1173	1056	238	936	Minneapolis, Minn.	
182	1733	2030	2045	1162	978	1997	932	1754	1133	430	1967	1331	435	762	1978	395	1457	170	2060	887	1940	Missoula, Mont.	
4	470	758	586	602	604	663	1445	472	1515	1970	526	253	1390	1958	820	1973	470	1752	663	704	567	Nashville, Tenn.	
		1173	932	575	845	1090	1318	923	1445	2063	899	599	1433	1923	1259	2908	280	1898	1287	960	968	New Orleans, La.	
		293	1324	1144	83	2142	613	233	277	2455	287	873	1972	2568	142	2419	1230	2190	120	1189	204	New York, N. Y.	
		1186	1095	220	2027	316	2027	316	565	2458	79	771	1925	2510	426	2440	1037	2211	411	1166	143	Norfolk, Va.	
		405	1856	843	1013	1550	1488	1122	1032	837	1318	1273	1020	352	833	1425	1354	1523	297	1374	1412	520	Oklahoma, Okla.
		1094	1032	693	1318	1273	1020	352	833	1425	1354	1523	297	1374	1412	520	1350	617	1149	1205	115	1012	Omaha, Neb.
		2079	254	260	2419	205	808	1923	2518	205	2388	1153	2129	201	1143	322	1153	2129	201	1143	322	Philadelphia, Pa.	
		1829	2345	1007	1960	160	1270	504	652	2152	1112	1067	1020	2220	1043	1980	1270	504	652	2152	1112	Phoenix, Ariz.	
		545	2174	242	561	1670	2264	350	2145	930	1918	400	891	188	188	188	930	1918	400	891	188	Pittsburgh, Pa.	
		2563	565	1094	2127	2725	197	2513	1084	2285	159	1345	480	1723	636	536	2405	143	1783	295	2488	1293	Portland, Me.
		699	1850	2436	406	2362	985	2133	407	1099	96	1783	295	2488	1293	2360	985	2133	407	1099	96	Portland, Ore.	
		1158	1738	898	1722	466	1500	958	450	710	710	466	1500	958	450	710	466	1500	958	450	710	Richmond, Va.	
		592	1950	697	1155	548	2027	785	1845	1558	2437	1155	548	2027	785	1845	1155	548	2027	785	1845	St. Louis, Mo.	
		2548	680	1655	730	2675	1383	2437	1655	730	2675	1383	2437	1655	730	2675	1383	2437	1655	730	2675	Salt Lake City, Utah	
		2363	1290	2139	86	1165	313	1165	313	1165	313	1165	313	1165	313	1165	313	1165	313	1165	313	1165	San Francisco, Calif.
		1820	229	2445	1282	2335	1282	2335	1282	2335	1282	2335	1282	2335	1282	2335	1282	2335	1282	2335	1282	2335	Schenectady, N. Y.
		1621	1333	728	1035	1035	1621	1333	728	1035	1035	1621	1333	728	1035	1035	1621	1333	728	1035	1035	Schenectady, N. Y.	
		2216	1055	2100	1242	313	2216	1055	2100	1242	313	2216	1055	2100	1242	313	2216	1055	2100	1242	313	313	Seattle, Wash.
		1242	313	728	1035	1035	1242	313	728	1035	1035	1242	313	728	1035	1035	1242	313	728	1035	1035	1035	Shreveport, La.
		1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	Spokane, Wash.
		1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	Springfield, Mass.
		1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	Vermillion, S. Dak.
		1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	1073	Washington, D.C.

before un-  
after an eve-  
or two, we have  
ks filled on every  
s. We are now able to  
our dials for any frequency  
desire and consequently any  
ion we may want whether we have  
received it before or not.

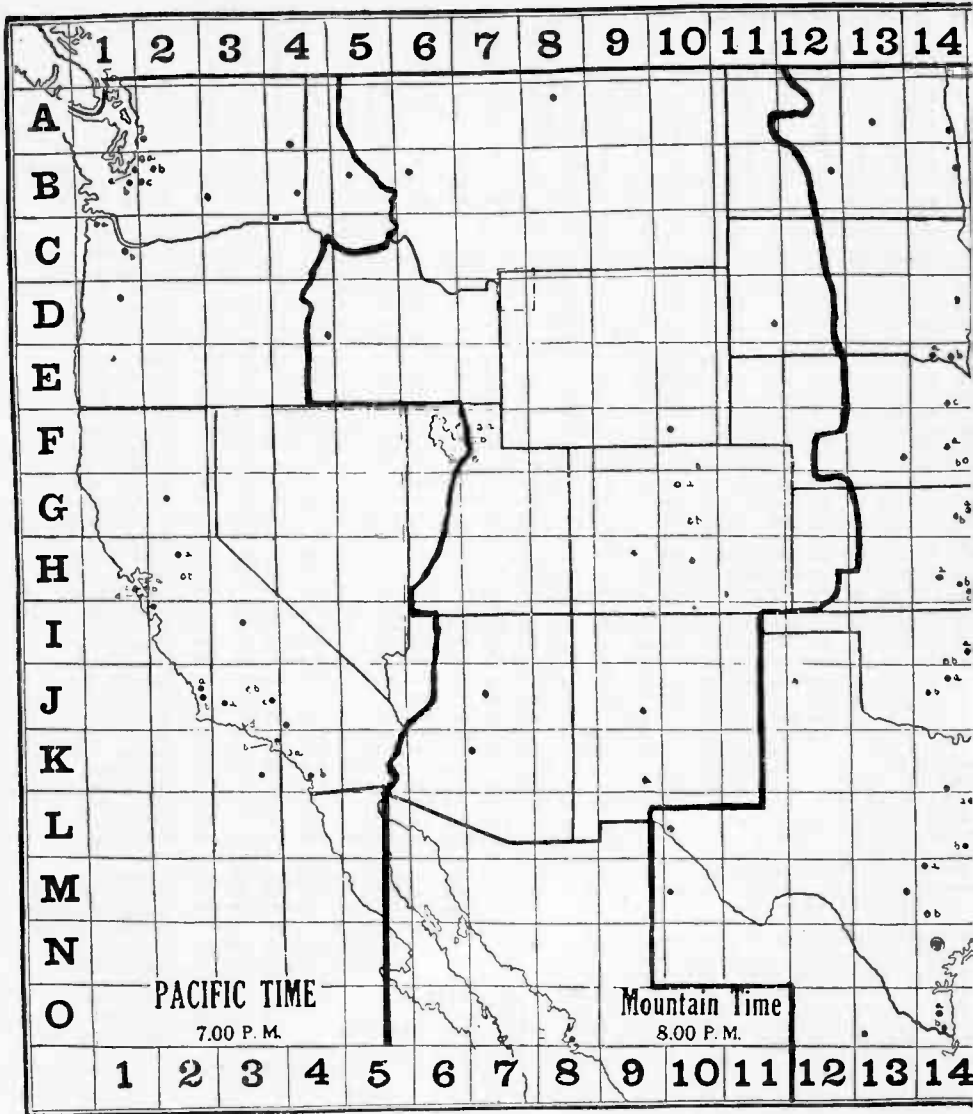
ur index now becomes of great value to us  
identifying programs. Let us say that we hear  
at 67-65 on our dials. We refer to our  
x by Frequencies and Dial Numbers and we  
that we are in tune to 680 kilocycles. On this  
e there are two stations: KFO at San Fran-  
and WPTF at Raleigh, N. C. Both of these  
ions have 5000 watts in power. But knowing  
h is the closer to our set, we can tell almost  
riably which station we are hearing. The  
io Commission has had to give the same fre-  
ncy in most cases to several stations but they  
e distributed them geographically so they  
ld not interfere. When two stations in the  
e locality have the same frequency, they are  
ired to divide time. In this case of course it  
ot possible to tell which one of the two sta-  
s is broadcasting at the particular moment  
ear it but we do know it is one or the other of  
a.

he second column in the index by Frequencies,  
e have seen, gives the power of the station as  
sured 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 pro-  
viding 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 Fre-  
quencies 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 de-  
sired. Take a pair of shears and cut along the  
dotted line, as shown.



The Radex Press,  
P.O. Box 143, Cleveland, Ohio

Begin With No 36      Renewal or  
37      New Subscription

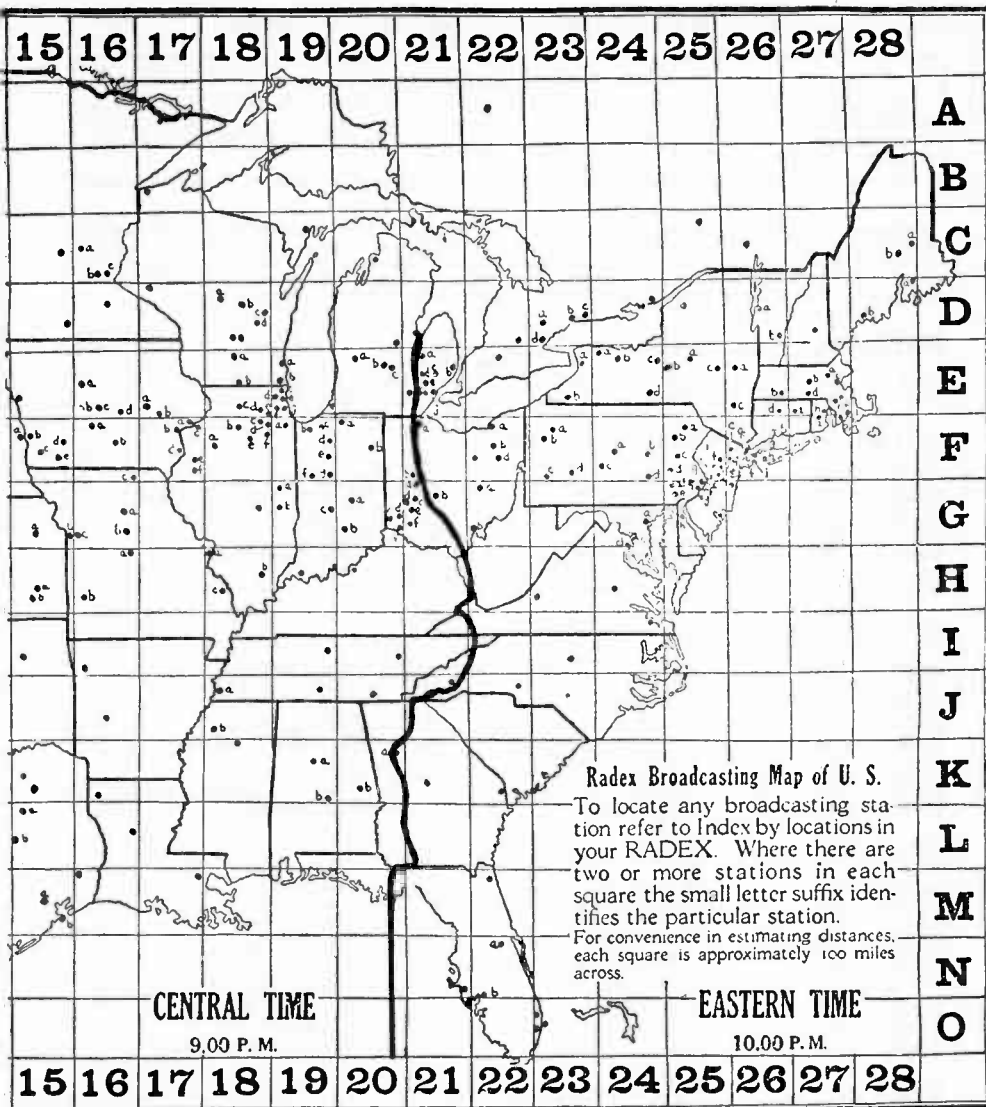
Please enter my subscription for one year (ten issues) for which I enclose \$1.75.  
Also send me leatherette cover for which I enclose 50c. (Cross out if not wanted.)

Write Name Plainly .....

Street and No. ....

City and State .....





RADEX is published monthly throughout the year with the exception of July and August. The price is 25c per copy or \$1.75 for the year of ten issues. If you desire to be up-to-date in radio and to be kept informed of the frequent changes in stations, please fill in the coupon on this page and mail it at once.

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# INDEX BY FREQUENCIES AND DIAL NUMBERS

## NOTICE OF COPYRIGHT

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### KEY

Frequency in kilocycles. Wave lengths in meters. Second column shows power in watts. Third 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.

## 540 kilocycles      555.6 meters

CKX	500	---	Brandon, Manitoba
XFA	50	---	Mexico City

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Manitoba Telephone System  
Sria. de Agricultura y Fomento

## 550 kilocycles      545.1 meters

KFDY	500	1+	Brookings, S. D.
KFUO	500	2+	St. Louis, Mo.
KFYR	500	1	Bismarck, N. D.
KOAC	1000	---	Corvallis, Ore.
KSD	500	2N	St. Louis, Mo.
WGR	1000	N	Buffalo, N. Y.
WKRC	500	&C	Cincinnati, Ohio
XEY	105	---	Merida, Yucatan

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S. D. State College  
Concordia Theological Seminary  
Hoskins-Meyer  
State Agricultural College  
Pulitzer Publishing Co.  
Radio Station WGR, Inc.  
WKRC Incorporated  
Partido Socialista del Sureste

## 560 kilocycles      535.4 meters

KFDM	500	X+	Beaumont, Texas
KLZ	1000	C	Denver, Colo.
KTAB	1000	---	Oakland, Cal.
WEBW	500	3D	Beloit, Wis.
WFI	500	1N	Philadelphia, Pa.
WIBO	1000	3+N	Chicago, Ill.
WLIT	500	1N	Philadelphia, Pa.
WNOX	1000	X+	Knoxville, Tenn.
WPCC	500	3S	Chicago, Ill.
WQAM	1000	---	Miami, Fla.

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Magnolia Petroleum Co.  
Reynolds Radio Co., Inc.  
Associated Broadcasters  
Beloit College  
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	---	Hollywood, Cal.
KXA	500	---	Seattle, Wash.
WEAO	750	1	Columbus, Ohio
WKBN	500	1C	Youngstown, Ohio
WMAC	250	2	Cazenovia, N. Y.
WMCA	500	3	New York City
WNAX	1000	---	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  
W. P. Williamson, Jr.  
Clive B. Meredith  
Knickerbocker Broadcasting Co., Inc.  
Gurney Seed & Nursery Co.  
Dept. of Plants and Structures  
Clive B. Meredith  
Citizens Broadcasting Co., Inc.

## 580 kilocycles      516.9 meters

CFCL	500	3S	Toronto, Ont.
CHMA	250	4	Edmonton, Alta.
CJBC	500	3S	Toronto, Ont.
CJCA	500	4	Edmonton, Alta.
CJSC	500	4	Toronto, Ont.
CKCL	500	3	Toronto, Ont.
CKNC	500	3	Toronto, Ont.
CKUA	500	4	Edmonton, Alta.
CNRE	500	4	Edmonton, Alta.
KGFX	200	D	Pierre, S. D.
KSAC	500	2+	Manhattan, Kans.
WIBW	500	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  
Jarvis Street Baptist Church  
The Edmonton Journal, Ltd.  
The Evening Telegram  
The Dominion Battery Co.  
Canadian National Carbon Co., Ltd.  
University of Alberta  
Canadian National Railways  
Dana McNeil  
State Agricultural College  
Topeka Broadcasting Assn., Inc.  
Charleston Radio Broadcasting Co.  
WSAZ, Inc.  
Telegram Publishing Co.

INDEX BY FREQUENCIES AND DIAL NUMBERS

**590 kilocycles 508.2 meters**

KHQ	1000	X+N
WCAJ	500	1
WEEL	1000	N
WEMC	1000	D
WOW	1000	1N
XFI	1000	---

Spokane, Wash.  
Lincoln, Nebr.  
Boston, Mass.  
Berrien Springs, Mich.  
Omaha, Nebr.  
Mexico City

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Louis Wasmer, Inc.  
Nebraska Wesleyan University  
Edison Elec. Illuminating Co.  
Emmanuel Missionary College  
Woodmen of the World  
Sria. de Industria, Comercio y Trabajo

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

**600 kilocycles 499.7 meters**

CFCH	250	3
CJRM	500	4
CJRW	500	4
CMW	1000	---
CNRO	500	3
KFSD	500	+
WCAC	250	2+
WCAO	250	C
WGBS	350	2+
WMT	500	X
WOAN	500	1
WREC	500	1+C

Iroquois Falls, Ont.  
Moose Jaw, Sask.  
Fleming, Sask.  
Havana, Cuba  
Ottawa, Ont.  
San Diego, Cal.  
Storrs, Conn.  
Baltimore, Md.  
New York City  
Waterloo, Iowa  
Lawrenceburg, Tenn.  
Memphis, Tenn.

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

**610 kilocycles 491.5 meters**

CMBY	200	612
KFRC	1000	C
WDAF	1000	N
WFAF	500	2C
WIP	500	2
WJAY	500	D

Havana, Cuba  
San Francisco, Cal.  
Kansas City, Mo.  
Philadelphia, Pa.  
Philadelphia, Pa.  
Cleveland, Ohio

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Lino E. Cosculluela  
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	X+N
KTAR	500	X+
WFLA	1000	1+
WLBZ	500	---
WSTW	1000	1+
WTMJ	1000	+N

Portland, Ore.  
Phoenix, Arizona  
Clearwater, Fla.  
Bangor, Maine  
St. Petersburg, Fla.  
Milwaukee, Wis.

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

**630 kilocycles 475.9 meters**

CFCT	500	---
CJGX	500	---
CNRA	500	---
KFRU	500	1
WGBF	500	1
WMAL	250	1+C
WOS	500	1+
XFC	350	---

Victoria, B. C.  
Yorkton, Sask.  
Moncton, N. B.  
Columbia, Mo.  
Evansville, Ind.  
Washington, D. C.  
Jefferson City, Mo.  
Jalapa, Ver.

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Victoria Broadcasting Association  
Winnipeg Grain Exchange  
Canadian National Railways  
Stephens College  
Evansville On the Air, Inc.  
M. A. Leese  
State Marketing Bureau  
Goberno Estado de Veracruz

**640 kilocycles 468.5 meters**

CMCF	250	643
KFI	5000	N
WAIU	500	C
WOI	5000	D
XFG	2000	---

Havana, Cuba  
Los Angeles, Cal.  
Columbus, Ohio  
Ames, Iowa  
Mexico City

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Raul Karmen  
Earle C. Anthony, Inc.  
American Insurance Union  
State College of Agriculture  
Sria, de Guerra y Marina

**650 kilocycles 461.3 meters**

WSM	5000	N
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Nashville, Tenn.

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National Life & Accident Ins. Co.

**660 kilocycles 454.3 meters**

WAAW	500	D
WEAF	50000	N

Omaha, Neb.  
New York City

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Omaha Grain Exchange  
National Broadcasting Co., Inc.

**670 kilocycles 447.5 meters**

WMAQ	5000	C
XEB	1000	---

Chicago, Ill.  
Mexico City

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Chicago Daily News, Inc.  
E. Buen Tono, S. A.

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	Raleigh, N. C.

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

### 690 kilocycles 434.5 meters

CFAC	500	1	Calgary, Alta.
CFCN	500	1	Calgary, Alta.
CHCA	500	1	Calgary, Alta.
CJBC	5000	2S	Toronto, Ont.
CJCJ	500	1	Calgary, Alta.
CKGW	5000	2N	Toronto, Ont.
CNRC	500	1	Calgary, Alta.
CNRX	5000	2	Toronto, Ont.
NAA	1000	---	Arlington, Va.
VAS	500	---	Louisburg, N. S.

The Calgary Herald Western Broadcasting Co. The Western Farmer Jarvis Street Baptist Church Albertan Publishing Co., Ltd. Gooderham & Worts, Ltd. Canadian National Railways Canadian National Railways U. S. Navy Department of Fisheries		

### 700 kilocycles 428.3 meters

WLW	5000	N	Cincinnati, Ohio
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Crosley Radio Corp.		

### 710 kilocycles 422.3 meters

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

R. S. MacMillan L. Bamberger & Co.		

### 720 kilocycles 416.4 meters

WGN	25000	N	Chicago, Ill.
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Chicago Tribune		

### 730 kilocycles 410.7 meters

CHLS	50	1	Vancouver, B. C.
CHYC	500	2	Montreal, Que.
CKAC	5000	2C	Montreal, Que.
CKCD	50	1	Vancouver, B. C.
CKFC	50	1	Vancouver, B. C.
CKMO	50	1	Vancouver, B. C.
CKWX	100	1	Vancouver, B. C.
CMK	2000	---	Havana, Cuba
CNRM	1650	2	Montreal, Que.
XEN	1000	---	Mexico City

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

### 740 kilocycles 405.2 meters

KMMJ	1000	---	Clay Center, Neb.
WSB	1000	XN	Atlanta, Ga.

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

### 750 kilocycles 399.8 meters

WJR	5000	N	Detroit, Mich.
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WJR, The Goodwill Station, Inc.		

### 760 kilocycles 394.5 meters

KJR	5000	D	Seattle, Wash.
WEW	1000	D	St. Louis, Mo.
WJZ	3000	N	New York City

Northwest Broadcasting System, Inc. St. Louis University Radio Corp. of America, Inc.		

### 770 kilocycles 389.4 meters

KFAB	5000	IN	Lincoln, Nebr.
WBBM	25000	1C	Chicago, Ill.
WJBT	25000	1S	Chicago, Ill.

Nebraska Buick Automobile Co. The Atlass Co., Inc. The Atlass Co., Inc.		

### 780 kilocycles 384.4 meters

CKY	5000	3	Winnipeg, Manitoba
CNRW	5000	3	Winnipeg, Manitoba
KELW	500	2	Burbank, Cal.
KTM	500	2+	Los Angeles, Cal.
WEAN	250	+C	Providence, R. I.
WMC	500	+N	Memphis, Tenn.
WPOR	500	1	Norfolk, Va.
WTAR	500	1C	Norfolk, Va.

Manitoba Telephone System Canadian National Railways Earl L. White Pickwick Broadcasting Corp. The Shepard Co. Memphis Commercial-Appeal WTAR Radio Corp. WTAR Radio Corp.		



INDEX BY FREQUENCIES AND DIAL NUMBERS

790 kilocycles 379.5 meters

CMHC	500	791	Tuinucu, Cuba
KGO	7500	N	Oakland, Cal.
WGY	50000	N	Schenectady, N. Y.

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Frank H. Jones  
General Electric Co.  
General Electric Co.

800 kilocycles 374.8 meters

WBAP	50000	1N	Fort Worth, Texas
WFAA	5000	1XN	Dallas, Texas

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Carter Publications, Inc.  
News & Journal

810 kilocycles 370.2 meters

WCCO	7500	C	Minneapolis, Minn.
WPCB	500	D	New York City

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Northwestern Broadcasting, Inc.  
Eastern Broadcasters, Inc.

820 kilocycles 365.6 meters

CMI	500	815	Havana, Cuba
WHAS	10000	N	Louisville, Ky.

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Instituto Provincial  
Courier-Journal & Times

830 kilocycles 361.2 meters

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

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Leopoldo V. Figueros  
General Electric Co.  
Matheson Radio Co., Inc.  
University of Florida

840 kilocycles 356.9 meters

CFCB	500	1	Toronto, Ont.
CHCT	1000	2	Red Deer, Alta.
CJCB	1000	1S	Toronto, Ont.
CKLC	1000	2	Red Deer, Alta.
CKOW	500	1	Toronto, Ont.
CMC	500	---	Havana, Cuba
CNRD	1000	2	Red Deer, Alta.
CNRT	500	1	Toronto, Ont.
XFX	500	---	Mexico City
WOOP	100	---	Jeannette, Pa.

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Star Publishing & Ptg. Co.  
G. F. Tull & Ardern, Ltd.  
Jarvis Street Baptist Church  
Alberta Pacific Grain Co., Ltd.  
Nestle's Food Co.  
Cuban Telephone Co.  
Canadian National Railways  
Canadian National Railways  
Sria. de Educacion Publica  
Oakford-Olympia Park Corp.

850 kilocycles 352.7 meters

KWKH	10000	1	Shreveport, La.
WWL	5000	1	New Orleans, La.

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W. K. Henderson  
Loyola University

860 kilocycles 348.6 meters

KFQZ	250	---	Los Angeles, Cal.
KMO	500	+	Tacoma, Wash.
WABC	5000	1XC	New York City
WBOQ	5000	1X	New York City
WHB	500	D	Kansas City, Mo.

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Taft Radio & Broadcasting Co., Inc.  
KMO, Inc.  
Atlantic Broadcasting Corp.  
Atlantic Broadcasting Corp.  
WHB Broadcasting Co.

870 kilocycles 344.6 meters

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

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Great Lakes Broadcasting Co.  
Agricultural Broadcasting Co.

880 kilocycles 340.7 meters

CHCS	10	4	Hamilton, Ont.
CHML	50	4	Hamilton, Ont.
CHRC	100	3	Quebec, Que.
CJCB	50	3	Sydney, N. S.
CKCI	22.5	---	Quebec, Que.
CKCV	50	3	Quebec, Que.
CKOC	50	4	Hamilton, Ont.
CNRQ	50	3	Quebec, Que.
KFKA	500	2+	Greeley, Colo.
KLX	500	---	Oakland, Cal.
KPOF	500	2--	Denver, Colo.
WCOC	500	+	Meridian, Miss.
WGBI	250	1	Scranton, Pa.
WOAN	250	1	Scranton, Pa.
WSUI	500	2	Iowa City, Iowa

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The Hamilton Spectator  
Maple Leaf Radio Co., Ltd.  
E. Fontaine  
N. Nathanson  
Le "Soleil," Ltd.  
G. A. Vandry  
Wentworth Radio & Auto Sply. Co., Ltd.  
Canadian National Railways  
State Teachers College  
Tribune Publishing Co.  
Millar of Fire, Inc.  
Mississippi Broadcasting Co.  
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	50	---	St. John, N. B.
CKCO	100	---	Ottawa, Ont.
CMBC	100	887	Havana, Cuba
KFNH	500	2+	Shenandoah, Iowa
KGJF	250	---	Little Rock, Ark.
KUSD	500	2+	Vermillion, S. D.
WGST	250	1	Atlanta, Ga.
WILL	250	2+	Urbana, Ill.
WJAR	250	+N	Providence, R. I.
WKAQ	500	---	San Juan, P. R.
WMAZ	250	1+	Macon, Ga.
WMMN	250	+	Fairmount, W. Va.

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

### 900 kilocycles 333.1 meters

KGBU	500	---	Ketchikan, Alaska
KHJ	1000	C	Los Angeles, Cal.
KSEI	250	---	Pocatello, Idaho
WJAX	1000	N	Jacksonville, Fla.
WKY	1000	N	Oklahoma City
WLBL	2000	D	Stevens Pt., Wis.
WMAK	750	C	Buffalo, N. Y.

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Alaska Radio & Service Co.  
 Don Lee, Inc.  
 KSEI Broadcasting Association, Inc.  
 City of Jacksonville  
 WKY Radiophone Co.  
 Wisconsin Dept. of Markets  
 WMAK Broadcasting System, Inc.

### 910 kilocycles 329.6 meters

CFQC	500	1	Saskatoon, Sask.
CJCC	500	2	London, Ont.
CJHS	250	1	Saskatoon, Sask.
CNRL	500	2	London, Ont.
CNRS	500	1	Saskatoon, Sask.

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The Electric Shop, Ltd.  
 Free Press Printing Co., Ltd.  
 Radio Service, Ltd.  
 Canadian National Railways  
 Canadian National Railways

### 920 kilocycles 325.9 meters

CMHD	250	---	Caibarien, Cuba
CMX	250	916	Havana, Cuba
HHK	1000	---	Port au Prince, Haiti
KVI	1000	C	Tacoma, Wash.
KFEL	500	1	Denver, Colo.
KFXF	500	1	Denver, Colo.
KPRC	1000	+N	Houston, Texas
WAAF	500	D	Chicago, Ill.
WBSO	250	DX	Wellesley Hills, Mass.
WWJ	1000	N	Detroit, Mich.
XEX	500	---	Mexico City
XFF	250	---	Chihuahua, Chih.

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Manuel A. Alvarez  
 Francisco Lavin  
 Republci of Haiti  
 Puget Sound Broadcasting Co., Inc.  
 Eugene P. O'Fallon, Inc.  
 Colorado Radio Corp.  
 Houston Printing Co.  
 Drivers Journal Publishing Co.  
 Babson Statistical Organization, Inc.  
 The Detroit News  
 Excelsior, Cia Editorial, S. A.  
 Gobierno Estado de Chihuahua

### 930 kilocycles 322.4 meters

CHNS	500	---	Halifax, N. S.
CKIC	50	---	Wolfville, N. S.
KFWI	500	1	San Francisco, Cal.
KFWM	500	1+	Richmond, Cal.
KGBZ	500	2+	York, Nebr.
KMA	500	2+	Shenandoah, Iowa
WBRC	500	+C	Birmingham, Ala.
WDBJ	250	+C	Roanoke, Va.
WIBG	50	D	Elkins Park, Pa.

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Halifax Herald, Ltd.  
 Acadia Academy  
 Radio Entertainments, Inc.  
 Oakland Educational Society  
 Dr. George R. Miller  
 May Seed & Nursery Co.  
 Birmingham Broadcasting Co., Inc.  
 Richardson-Wayland Elec. Corp.  
 St. Pauls P. E. Church

### 940 kilocycles 319.0 meters

KGU	500	X	Honolulu, Hawaii
KOIN	1000	C	Portland, Ore.
WCSH	1000	N	Portland, Maine
WDAY	1000	---	Fargo, N. D.
WFIW	1000	C	Hopkinsville, Ky.
WHA	750	D	Madison, Wis.

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Marion A. Mulrony  
 KOIN, Inc.  
 Congress Square Hotel Co.  
 WDAY, Inc.  
 The Acme Mills, Inc.  
 University of Wisconsin

### 950 kilocycles 315.6 meters

KMCB	150	952	Havana, Cuba
KFWB	1000	---	Hollywood, Cal.
KGHL	500	---	Billings, Mont.
KMBC	1000	C	Kansas City, Mo.
WRC	500	N	Washington, D. C.

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Jose Fernandez Suvlaur  
 Warner Bros. Broadcasting Corp.  
 Northwestern Auto Supply Co., Inc.  
 Midland Broadcasting Co., Inc.  
 Radio Corp. of America

INDEX BY FREQUENCIES AND DIAL NUMBERS

960 kilocycles

CFCR	500	3
CFCY	250	1
CFRB	4000	2C
CHCK	30	1
CHWC	500	3
CJBC	5000	2
CJBR	500	3
CKKC	500	3
CNRK	500	3
XEE	101	---

312.3 meters

Regina, Sask.
Charlottetown, P. E. I.
Toronto, Ont.
Charlottetown, P. E. I.
Pilot Butte, Sask.
Toronto, Ont.
Regina, Sask.
Regina, Sask.
Regina, Sask.
Pueblo, Pue.

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Sydney I. Robinson  
The Island Radio Co.  
Rogers-Majestic Corp., Ltd.  
W. E. Burke  
R. H. Williams & Sons, Ltd.  
Jarvis St. Baptist Church  
Cooperative Wheat Producers, Ltd.  
Leader Publishing Co., Ltd.  
Canadian National Railways  
Ramon Huerta G.

970 kilocycles

KOMO	15000	N
XEH	1000	---
WCFL	1500	N

309.1 meters

Seattle, Wash.
Monterey, N. L.
Chicago, Ill.

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Fisher's Blend Station, Inc.  
Ing. Constantino de Tarnava  
Chicago Federation of Labor

980 kilocycles

KDKA	50000	N
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305.9 meters

Pittsburgh, Pa.
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Westinghouse Elec. & Mfg. Co.

990 kilocycles

WBZ	15000	1N
WBA	500	1N

302.8 meters

Springfield, Mass.
Boston, Mass.

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Westinghouse Elec. & Mfg. Co.  
Westinghouse Elec. & Mfg. Co.

1000 kilocycles

KFVD	250	---
WHO	5000	1N
WOC	5000	1N
XEI	101	---

299.8 meters

Culver City, Cal.
Des Moines, Iowa
Davenport, Iowa
Morellia, Mexico

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Los Angeles Broadcasting Co.  
Bankers Life Co.  
Palmer School of Chiropractic  
Carlos Gutierrez M.

1010 kilocycles

CFLC	50	3
CKCR	50	3
CKSH	50	---
KGGF	500	2
KQW	500	---
WGTV	500	+
WHN	250	1
WNAD	500	2
WPAP	250	1
WQAO	250	1
WRYA	250	1

296.8 meters

Prescott, Ont.
Waterloo, Ont.
St. Hyacinthe, Que.
Picher, Okla.
San Jose, Cal.
Columbia, S. C.
New York City
Norman, Okla.
New York City
New York City
New York City

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Radio Association  
John Patterson  
City of St. Hyacinthe  
D. L. Connell, M. D.  
First Baptist Church  
George T. Barnes, Inc.  
Marcus Loew Booking Agency  
University of Oklahoma  
Calvary Baptist Church  
Calvary Baptist Church  
Aviation Radio Station, Inc.

1020 kilocycles

KFKX	5000	1XN
KYW	5000	1XN
WRAX	250	D

293.9 meters

Chicago, Ill.
Chicago, Ill.
Philadelphia, Pa.

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Westinghouse Elec. & Mfg. Co.  
Westinghouse Elec. & Mfg. Co.  
Berachah Church, Inc.

1030 kilocycles

CFCF	1650	---
CJOR	50	---
CMBW	50	1027
CMBZ	100	1027
CNRV	500	---

291.1 meters

Montreal, Que.
Sea Island, B. C.
Marianao, Cuba
Havana, Cuba
Vancouver, B. C.

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Canadian Marconi Co.  
G. C. Chandler  
Modesto Alvarez  
Manuel y G. Salas  
Canadian National Railways

1040 kilocycles

KRLD	10000	1C
KTHS	10000	1N
WKAR	1000	D
WKEN	1000	---

288.3 meters

Dallas, Texas
Hot Springs, Ark.
East Lansing, Mich.
Buffalo, N. Y.

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KRLD Radio Corp.  
Chamber of Commerce  
Michigan Agricultural College  
Radio Station WKEN, Inc.

1050 kilocycles

KFKB	5000	---
KNX	5000	X

285.5 meters

Milford, Kansas
Hollywood, Cal.

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KFKB Broadcasting Assn., Inc.  
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	---	Portland, Ore.
WBAL	10000	1N	Baltimore, Md.
WJAG	1000	---	Norfolk, Nebr.
WTIC	50000	1N	Hartford, Conn.

Wilbur Jerman Consolidated Gas Elec. & Pwr. Co. Norfolk Daily News Travelers Broadcasting Service Corp.
------------------------------------------------------------------------------------------------------------------

1070 kilocycles 280.2 meters

KJBS	100	D	San Francisco, Cal.
WAAT	300	D	Jersey City, N. J.
WCAZ	50	D	Carthage, Ill.
WDZ	100	D	Tuscola, Ill.
WEAR	1000	IND	Cleveland, Ohio
WTAM	50000	1N	Cleveland, Ohio

Julius Brunton & Sons Co. Bremer Broadcasting Corp. Carthage College James L. Bush WTAM and WEAR, Inc. WTAM and WEAR, Inc.
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1080 kilocycles 277.6 meters

WBT	5000	N	Charlotte, N. C.
WCBD	5000	1	Zion, Ill.
WMBI	5000	1	Chicago, Ill.

Station WBT, Inc. Wilbur Glenn Voliva Moody Bible Institute
-------------------------------------------------------------------

1090 kilocycles 275.1 meters

KFQA	5000	1S	St. Louis, Mo.
KMOX	5000	1C	St. Louis, Mo.

Voice of St. Louis, Inc. Voice of St. Louis, Inc.
------------------------------------------------------

1100 kilocycles 272.6 meters

CMCE	100	1098	Havana, Cuba
KGDM	250	D	Stockton, Cal.
WLWL	5000	1	New York City
WPG	5000	1	Atlantic City, N. J.

Julio E. Power E. F. Peffer Missionary Society of St. Paul Municipality of Atlantic City
---------------------------------------------------------------------------------------------------

1110 kilocycles 270.1 meters

KSOO	2000	---	Sioux Falls, S. D.
WRVA	5000	N	Richmond, Va.

Sioux Falls Broacasting Assn., Inc. Larus & Bros, Co., Inc.
----------------------------------------------------------------

1120 kilocycles 267.7 meters

CFJC	15	---	Kamloops, B. C.
CFRC	500	---	Kingston, Ont.
CHGS	25	---	Summerside, P. E. I.
CJOC	50	---	Lethbridge, Alta.
CKPR	50	---	Midland, Ont.
KFSG	500	3	Los Angeles, Cal.
KMIC	500	3	Inglewood, Cal.
KRSC	50	D	Seattle, Wash.
KTRH	500	2	Austin, Texas
WDBO	500	+	Orlando, Fla.
WDEL	250	+	Wilmington, Del.
WHAD	250	1	Milwaukee, Wis.
WISN	250	1C	Milwaukee, Wis.
WTAW	500	2	College Station, Texas

N. S. Dalglish & Sons Queen's University R. T. Holman, Ltd. Harold R. Carson Midland Broadcasting Corp. Echo Park Evag. Assn. Dalton's, Inc. Radio Sales Corp. KUT Broadcasting Co. Orlando Broadcasting Co., Inc. WDEL, Inc. Marquette University Evering Wisconsin Co. Agricultural & Mech. College
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

1130 kilocycles 265.3 meters

KSL	5000	N	Salt Lake City
WJJD	20000	---	Mooseheart, Ill.
WOV	1000	D	New York City
XEF	105	---	Oaxaca, Oax.

Radio Service Corp. of Utah Loyal Order of Moose International Broadcasting Corp. Federico Zorrilla
--------------------------------------------------------------------------------------------------------------

1140 kilocycles 263.0 meters

KVOO	5000	1N	Tulsa, Okla.
WAPI	5000	1N	Birmingham, Ala.

Southwestern Sales Corp. Alabama Polytechnic Institute
-----------------------------------------------------------

1150 kilocycles 260.7 meters

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

Jose Ganduxe Stromberg-Carlson Tel. Mfg. Co.
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INDEX BY FREQUENCIES AND DIAL NUMBERS

1160 kilocycles 258.5 meters

WOWO 10000 1C  
 WWVA 5000 1

Ft. Wayne, Ind.  
 Wheeling, W. Va.

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Main Auto Supply Co.  
 West Virginia Broadcasting Corp.

1170 kilocycles 256.3 meters

KTNT 5000 ---  
 WCAU 10000 C

Muscatine, Iowa  
 Philadelphia, Pa.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Norman Baker  
 Universal Broadcasting Co.

1180 kilocycles 254.1 meters

KEX 5000 2  
 KOB 20000 2  
 WDGY 1000 1  
 WHDI 500 1

Portland, Ore.  
 State College, N. M.  
 Minneapolis, Minn.  
 Minneapolis, Minn.

\_\_\_\_\_  
 \_\_\_\_\_  
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Western Broadcasting Co.  
 College of Agriculture & Mech. Arts  
 Dr. George W. Young  
 Wm. Hood Dunwoody, Industry Inst.

1190 kilocycles 252.0 meters

WICC 500 D  
 WOAI 5000 XN

Bridgeport, Conn.  
 San Antonio, Texas

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 \_\_\_\_\_  
 \_\_\_\_\_

Bridgeport Broadcasting Station, Inc.  
 Southern Equipment Co.

1200 kilocycles 249.9 meters

KBTM 100 CPD  
 KFHA 50 ---  
 KFJB 100 ---  
 KFVF 100 5  
 KGDE 100 +  
 KGDY 15 ---  
 KGEK 50 9  
 KGEW 100 9  
 KGFJ 100 ---  
 KGFJ 100 ---  
 KGFJ 50 ---  
 KGHY 100 ---  
 KGY 10 ---  
 KSNR 100 ---  
 KVOS 100 ---  
 KWC 100 ---  
 KXO 100 ---  
 WABI 100 ---  
 WABZ 100 ---  
 WBBY 75 ---  
 WBBZ 100 ---  
 WCAT 100 ---  
 WCAX 100 2  
 WCLO 100 ---  
 WCOD 100 3  
 WFBC 50 ---  
 WFBE 100 ---  
 WHBC 10 4S  
 WHBY 100 ---  
 WIBX 100 +  
 WIL 100 5+  
 WJBC 100 6  
 WJBL 100 6  
 WJBW 30 1  
 WKJC 100 3  
 WLAP 30 ---  
 WLBG 100 D+  
 WMAV 100 5+  
 WNBO 100 4  
 WNBW 10 ---  
 WNBX 10 2  
 WORC 100 ---  
 WRAF 100 8  
 WRBL 50 ---  
 WWAE 100 8  
 XEA 101 ---  
 XES 250 ---

Paragould, Ark.  
 Gunnison, Colo.  
 Marshalltown, Iowa  
 St. Louis, Mo.  
 Fergus Falls, Minn.  
 Oldham, S. D.  
 Yuma, Colo.  
 Fort Morgan, Colo.  
 Los Angeles, Cal.  
 Hallock, Minn.  
 Little Rock, Ark.  
 Lacey, Wash.  
 Santa Maria, Cal.  
 Bellingham, Wash.  
 Stockton, Cal.  
 El Centro, Cal.  
 Bangor, Maine  
 New Orleans, La.  
 Charleston, S. C.  
 Ponca City, Okla.  
 Rapid City, S. D.  
 Burlington, Vt.  
 Kenosha, Wis.  
 Harrisburg, Pa.  
 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.  
 St. Louis, Mo.  
 Washington, Pa.  
 Carbondale, Pa.  
 Springfield, Vt.  
 Worcester, Mass.  
 La Porte, Ind.  
 Columbus, Ga.  
 Hammond, Ind.  
 Guadalupe, Jal.  
 C. Lerdo Dgo.

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W. J. Beard's Temple of Music  
 Western College of Colorado  
 Marshall Electric Co., Inc.  
 St. Louis Truth Center, Inc.  
 Jaren Drug Co.  
 J. Albert Loesch and George W. Wright  
 Beehler Elec. Equipment Co.  
 City of Fort Morgan  
 Ben S. McGlashan  
 Lautzenheiser & Mitchell  
 Berean Bible Class  
 St. Martin's College  
 Santa Maria Valley R. R. Co.  
 KVOS, Inc.  
 Portable Wireless Tel. Co., Inc.  
 E. R. Irey and F. M. Bowles  
 First Universalist Church  
 Coliseum Place Baptist Church  
 Washington Light Infantry  
 C. L. Carrell  
 State School of Mines  
 University of Vermont  
 C. E. Whitmore  
 Norman R. Hoffman  
 First Baptist Church  
 Park View Hotel  
 St. John's Catholic Church  
 St. Norbert's College  
 WIBX, Inc.  
 Missouri Broadcasting Corp.  
 Hummer Furniture Co.  
 Commodore Broadcasting, Inc.  
 Charles C. Carlson, Jr.  
 Kirk Johnson & Co.  
 American Broadcasting Corp. of Ky.  
 Robert Allen Gamble  
 Kingshighway Presbyterian Church.  
 John Brownlee Spriggs  
 Home Cut Glass & China Co.  
 First Congregational Church  
 Alfred Frank Kleindienst  
 The Radio Club, Inc.  
 David Parmer  
 Hammond-Calumet Broadcasting Corp.  
 Alberto Palos Sauza  
 Cerveceria de Durango, S. A.

KCYS.  
 1200  
 MTRS.  
 249.9  
 DIAL

CUT OUT ON DOTTED LINES

INDEX BY FREQUENCIES AND DIAL NUMBERS

1210 kilocycles 247.8 meters

CFCO	50	---	Chatham, Ont.
CFCN	50	---	Fredericton, N. B.
CHWK	5	---	Chilliwack, B. C.
CKMK	15	---	Cobalt, Ont.
CKPC	50	---	Preston, Ont.
KDFN	100	---	Casper, Wyo.
KDLR	100	8	Devils Lake, N. D.
KFOR	100	+	Lincoln, Nebr.
KFVS	100	6	Cape Girardeau, Mo.
KFXM	100	9	San Bernardino, Calif.
KGCR	100	---	Watertown, S. D.
KGCU	100	8	Mandan, N. D.
KMJ	100	---	Fresno, Cal.
KPCB	100	7	Seattle, Wash.
KPPC	50	9	Pasadena, Cal.
KPO	50	7	Seattle, Wash.
KWEA	100	---	Shreveport, La.
WBAX	100	1	Wilkes-Barre, Pa.
WCBS	100	2	Springfield, Ill.
WCOH	100	3	Yonkers, N. Y.
WCRW	100	4	Chicago, Ill.
WDWF	100	5	Providence, R. I.
WEBE	100	---	Cambridge, Ohio
WEBQ	100	6	Harrisburg, Ill.
WEDC	100	4	Chicago, Ill.
WGBB	100	3	Freeport, N. Y.
WGCM	100	---	Gulfport, Miss.
WHBF	100	---	Rock Island, Ill.
WHBU	100	---	Anderson, Ind.
WIBA	100	---	Madison, Wis.
WJBI	100	3	Red Bank, N. J.
WJBU	100	1	Lewisburg, Pa.
WJBY	50	---	Gadsden, Ala.
WJW	100	---	Mansfield, Ohio
WLCI	50	---	Ithaca, N. Y.
WLSI	100	5	Providence, R. I.
WMAN	50	---	Columbus, Ohio
WMBG	100	---	Richmond, Va.
WOCL	25	---	Jamestown, N. Y.
WOMT	100	---	Manitowoc, Wis.
WPAW	100	5	Pawtucket, R. I.
WRBQ	100	---	Greenville, Miss.
WRBU	100	---	Gastonia, N. C.
WSBC	100	4	Chicago, Ill.
WSIX	100	---	Springfield, Tenn.
WTAX	50	2	Streator, Ill.

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Western Ontario "Better Radio" Club  
 James S. Neill & Sons, Ltd.  
 Chilliwack Broadcasting Co., Ltd.  
 R. L. MacAdam  
 Wallace Russ  
 Donald Lewis Hathaway  
 Radio Electric Co.  
 Howard A. Shuman  
 Hirsch Battery & Radio Co.  
 J. C. & E. W. Lee  
 Cutler's Radio Brdcastg. Service, Inc.  
 Mandan Radio Association  
 James McClatchy Co.  
 Wescoast Broadcasting Co.  
 Pasadena Presbyterian Church  
 Wescoast Broadcasting Co.  
 William E. Antony  
 John H. Stenger, Jr.  
 H. L. Dewing & Chas. Messter  
 Westchester Broadcasting Corp.  
 Clinton R. White  
 Dutee W. Flint  
 Roy W. Waller  
 First Trust & Savings Bank  
 Emil Denmark, Inc.  
 Harry H. Carman  
 Great Southern Land Co., Inc.  
 Beardsley Specialty Co.  
 Citizens Bank  
 Capital Times  
 Robert S. Johnson  
 Bucknell University  
 Gadsden Broadcasting Co., Inc.  
 Mansfield Broadcasting Assn.  
 Lutheran Assn. of Ithaca  
 The Lincoln Studios, Inc.  
 W. E. Heskett  
 Havens & Martin, Inc.  
 A. E. Newton  
 Francis M. Kadow  
 Shartenburg & Robinson Co.  
 J. Pat Scully  
 A. J. Kirby Music Co.  
 World Battery Co., Inc.  
 638 Tire & Vulcanizing Co.  
 Williams Hardware Co.

1220 kilocycles 245.8 meters

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

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

1230 kilocycles 243.8 meters

KFIO	100	D	Spokane, Wash.
KFQD	100	---	Anchorage, Alaska
KCGM	250	+	Albuquerque, N. Mex.
KYA	1000	---	San Francisco, Calif.
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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Spokane Broadcasting Corp.  
 Anchorage Radio Club  
 New Mexico Broadcasting Co.  
 Pacific Broadcasting Corp.  
 Shepard-Norwell Co.  
 Indianapolis Power & Light Co.  
 Shepard-Norwell Co.  
 Pennsylvania State College  
 South Bend Tribune

1240 kilocycles 241.8 meters

KSAT	1000	1	Ft. Worth, Texas
WACO	1000	1	Waco, Texas
WSPD	500	C+	Toledo, Ohio

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S. A. T. Flying Service, Inc.  
 Frank P. Jackson  
 Toledo Broadcasting Co.



## INDEX BY FREQUENCIES AND DIAL NUMBERS

KFUP	100	8	Denver, Colo.	Fitzsimmons General Hospital
KFXJ	50	8	Edgewater, Colo.	R. G. Howell
KFXR	100	X+	Oklahoma City	Exchange Ave. Baptist Church
KGBX	100	---	St. Joseph, Mo.	Foster-Hall Tire Co.
KGCCX	100	+	Wolf Point, Mont.	First State Bank of Vida
KGEZ	100	---	Kalispell, Mont.	Chamber of Commerce
KGFW	50	X	Ravenna, Neb.	Otto F. Sothman and Roy H. McConnell
KIT	100	---	Yakima, Wash.	Carl E. Haymond
KMED	50	---	Medford, Ore.	Mrs. W. J. Virgin
KRMD	50	9	Shreveport, La.	Robert M. Dean
KTSL	100	9	Shreveport, La.	Houseman Sheet Metal Works, Inc.
KTSM	100	2	El Paso, Texas	W. S. Bledsoe & W. T. Blackwell
KWCR	100	7	Cedar Rapids, Iowa	Harry F. Paar
KXRO	75	---	Aberdeen, Wash.	KXRO, Inc.
WAGM	50	---	Royal Oak, Mich.	Robert L. Miller
WBOW	100	---	Terre Haute, Ind.	Banks of Wabash, Inc.
WBRE	100	---	Wilkes-Barre, Pa.	Louis G. Baltimore
WCLS	100	1	Joliet, Ill.	WCLS, Inc.
WDAH	100	2	El Paso, Texas	Trinity Methodist Church
WEBR	100	+	Buffalo, N. Y.	Howell Broadcasting Co., Inc.
WFBG	100	3	Altoona, Pa.	Wm. F. Gable Co.
WFDL	100	---	Flint, Mich.	Frank D. Fallain
WFKD	50	4	Philadelphia, Pa.	Foulkrod Radio Engineering Co.
WGAL	15	5	Lancaster, Pa.	Lancaster Electric Supply Co.
WGH	100	---	Newport News, Va.	Virginia Broadcasting Co., Inc.
WHAT	100	4X	Philadelphia, Pa.	Albert A. Walker
WIBU	100	---	Poynette, Wis.	William C. Forrest
WJAC	100	3	Johnstown, Pa.	Johnstown Automobile Co.
WJAK	50	6	Marion, Ind.	Marion Broadcasting Co.
WKAV	100	---	Laconia, N. H.	Laconia Radio Club
WKBB	100	1	Joliet, Ill.	Sanders Bros.
WKBC	100	---	Birmingham, Ala.	R. B. Broyles Furniture Co.
WKBS	100	---	Galesburg, Ill.	Permil N. Nelson
WLBC	50	6	Muncie, Ind.	Donald A. Burton
WNBH	100	---	New Bedford, Mass.	New Bedford Broadcasting Co.
WNBJ	50	---	Knoxville, Tenn.	Lonsdale Baptist Church
WOBT	100	+	Union City, Tenn.	Tittsworth's Radio & Music Shop
WOL	100	---	Washington, D. C.	American Broadcasting Co.
WRAW	100	5	Reading, Pa.	Avenue Radio & Electric Shop
WRBI	20	---	Tifton, Ga.	Kent's Furniture and Music Store
WRK	100	---	Hamilton, Ohio	Hamilton Radio Service
WSAJ	100	---	Grove City, Pa.	Grove City College
WSJS	100	CP	Winston-Salem, N. C.	Winston-Salem Journal Co.

### 1320 kilocycles 227.1 meters

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

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

### 1330 kilocycles 225.4 meters

KGB	250	---	San Diego, Cal.
KSCJ	1000	1C+X	Sioux City, Iowa
WDRG	500	---	New Haven, Conn.
WSAI	500	N	Cincinnati, Ohio
WTAQ	1000	1	Eau Claire, Wis.

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

### 1340 kilocycles 223.7 meters

KFPW	50	D	Cartersville, Mo.
KFPY	1000	CX	Spokane, Wash.
WCOA	500	---	Pensacola, Fla.
WGHP	750	C	Detroit, Mich.

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Rev. Lannie W. Stewart  
Symons Broadcasting Co.  
City of Pensacola  
American Broadcasting Corp.

### 1350 kilocycles 222.1 meters

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

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Greater St. Louis Broadcasting Corp.  
Baruchrome Corp.  
Italian Educ. Broadcasting Co., Inc.  
Standard Cahill Co., Inc.  
Madison Square Garden Brdctg. Corp.



INDEX BY FREQUENCIES AND DIAL NUMBERS

1360 kilocycles 220.4 meters

KFBB	500	3+	Great Falls, Mont.
KGER	1000	4	Long Beach, Cal.
KGIR	250	3X	Butte, Mont.
KPSN	1000	4	Pasadena, Cal.
WGES	500	1	Chicago, Ill.
WJKS	500	1+	Gary, Ind.
WLEX	500	2	Lexington, Mass.
WMAF	500	2	S. Dartmouth, Mass.
WQBC	300	---	Utica, Miss.
WSSH	500	2	Boston, Mass.

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Buttery Broadcast, Inc.  
C. Merwin Dobyns  
KGIR, Inc.  
Pasadena Star-News  
Oak Leaves Broadcasting Station, Inc.  
Johnson-Kennedy Radio Corp.  
Lexington Air Stations  
Round Hills Radio Corp.  
Delta Broadcasting Co.  
Tremont Temple Baptist Church

1370 kilocycles 218.7 meters

KCRC	100	2+	Enid, Okla.
KFBL	50	3	Everett, Wash.
KFJI	100	---	Astoria, Ore.
KFJM	100	---	Grand Forks, N. D.
KFJZ	100	---	Ft. Worth, Texas
KFLX	100	---	Galveston, Texas
KGAR	100	+	Tucson, Ariz.
KGCI	100	5	San Antonio, Texas
KGDA	50	---	Dell Rapids, S. D.
KGFG	100	2--	Oklahoma City
KGFL	50	---	Raton, N. M.
KGKL	100	---	San Angelo, Texas
KGRC	100	5	San Antonio, Texas
KLO	100	+	Ogden, Utah
KOH	100	---	Reno, Nevada
KOOS	100	---	Marshfield, Ore.
KRE	100	6	Berkeley, Cal.
KVL	100	3	Seattle, Wash.
KWKX	100	4	Kansas City, Mo.
KZM	100	6	Haywood, Cal.
WBBL	100	---	Richmond, Va.
WCBM	100	+	Baltimore, Md.
WEHC	100	---	Emory, Va.
WELK	100	---	Philadelphia, Pa.
WFBJ	100	---	Collegeville, Minn.
WGL	100	---	Fort Wayne, Ind.
WHBD	100	---	Mount Orab, Ohio
WHBQ	100	---	Memphis, Tenn.
WHDF	100	+X	Calumet, Mich.
WIBM	100	1	Jackson, Mich.
WJBK	50	1	Ypsilanti, Mich.
WMBQ	100	---	Auburn, N. Y.
WMBR	100	---	Tampa, Fla.
WPOE	100	---	Patchogue, N. Y.
WRAK	50	---	Erie, Pa.
WRBJ	10	---	Hattiesburg, Miss.
WRBT	100	---	Wilmington, N. C.
WRJN	100	---	Racine, Wis.
WSVS	50	---	Buffalo, N. Y.

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Champlin Refining Co.  
Leese Bros.  
KFJI Broadcasters, Inc.  
University of North Dakota  
H. C. Meacham  
George Roy Clough  
Tucson Motor Service Co.  
Liberto Radio Sales Co.  
Home Auto Co.  
Faith Tabernacle Assn.  
Hubbard & Murphy  
KGGK, Inc., Opr. by Ragsdale Auto  
Eugene J. Roth  
Peery Building Co.  
Jay Peters  
H. H. Hanseth  
First Congregational Church  
Arthur C. Dailey  
Wilson Duncan Broadcasting Co.  
Leon P. Tenney  
Grace Covenant Presbyterian Church  
Baltimore Broadcasting Corp.  
Emory & Henry College  
Howard R. Miller  
St. John's University  
Fred C. Ziegler  
F. P. Mier  
Broadcasting Station WHBQ, Inc.  
Upper Michigan Broadcasting Co.  
C. L. Carrell  
James F. Hopkins  
Radio Service Laboratories  
F. J. Reynolds  
Nassau Broadcasting Corp.  
C. R. Cummins  
Woodruff Furniture Co., Inc.  
Wilmington Radio Association  
Racine Broadcasting Corp.  
Seneca Vocational School

1380 kilocycles 217.3 meters

KQV	500	2	Pittsburgh, Pa.
KSO	500	1	Clarinda, Iowa
WKBH	1000	1	La Crosse, Wis.
WSMK	200	2	Dayton, Ohio

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Doubleday-Hill Electric Co.  
Berry Seed Co.  
Callaway Music Co.  
Stanley M. Krohn, Jr.

1390 kilocycles 215.7 meters

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

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

KCY5.  
1390  
MTRS.  
215.7  
DIAL

CUT OUT ON  
DOTTED LINES

## INDEX BY FREQUENCIES AND DIAL NUMBERS

### 1400 kilocycles 214.2 meters

KOCW	250	+
WBAA	500	1CP
WBBC	500	2
WCCU	500	2
WCMA	500	1
WKBF	500	1
WLTH	500	2
WSGH	500	2

Chickasha, Okla.  
Lafayette, Ind.  
Brooklyn, N. Y.  
Coney Island, N. Y.  
Culver, Ind.  
Indianapolis, Ind.  
Brooklyn, N. Y.  
Brooklyn, N. Y.

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College for Women  
Purdue University  
Brooklyn Broadcasting Corp.  
U. S. Broadcasting Corp.  
Culver Military Academy  
Indianapolis Broadcasting, Inc.  
The Voice of Brooklyn, Inc.  
Amateur Radio Specialty Co.

### 1410 kilocycles 212.6 meters

KFLV	500	2
KGRS	1000	1
WBCM	500	---
WDAG	250	1
WHBL	500	2
WODX	500	3CP
WSFA	500	3CP

Rockford, Ill.  
Amarillo, Texas  
Bay City, Mich.  
Amarillo, Texas  
Sheboygan, Wis.  
Mobile, Ala.  
Montgomery, Ala.

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Rockford Broadcasters, Inc.  
Gish Radio Service  
James E. Davidson  
National Radio & Broadcasting Corp.  
Press Pub. Co. & C. L. Carrell  
Mobile Broadcasting Corp.  
Montgomery Broadcasting Corp.

### 1420 kilocycles 211.1 meters

KFIF	100	4
KFIZ	100	---
KFOU	100	5
KFQW	100	---
KFXD	50	---
KFXV	100	---
KFYU	100	+
KGFF	100	---
KGGG	50	5
KGIW	100	---
KGIX	100	CP
KGKX	100	---
KICK	100	---
KLPM	100	---
KORE	100	---
KTAP	100	---
KTUE	100	X
KXL	100	4
WEDH	30	---
WEHS	100	2
WFDW	100	CP
WHDL	10	---
WHFC	100	2
WHIS	100	---
WIAS	100	---
WIBR	50	1
WILM	100	---
WJBO	100	---
WKBI	50	2
WKBP	50	---
WLBV	100	---
WLEY	100	+
WMBC	100	X+
WMBH	100	+
WMRJ	10	---
WQBZ	60	1
WTBO	50	---

Portland, Ore.  
Fond du Lac, Wis.  
Holy City, Cal.  
Seattle, Wash.  
Jerome, Idaho  
Flagstaff, Ariz.  
Abilene, Texas  
Alva, Okla.  
San Francisco, Cal.  
Trinidad, Colo.  
Las Vegas, Nevada  
Sand Point, Idaho  
Red Oak, Iowa  
Minot, North Dakota  
Eugene, Ore.  
San Antonio, Texas  
Houston, Texas  
Portland, Ore.  
Erie, Pa.  
Evanston, Ill.  
Talledega, Ala.  
Tupper Lake, N. Y.  
Cicero, Ill.  
Bluefield, W. Va.  
Ottumwa, Iowa  
Steubenville, Ohio  
Wilmington, Del.  
New Orleans, La.  
Chicago, Ill.  
Battle Creek, Mich.  
Kansas City, Kas.  
Lexington, Mass.  
Detroit, Mich.  
Joplin, Mo.  
Jamaica, N. Y.  
Weirton, W. Va.  
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.  
Leonard Gate Broadcasting Co.  
Goldard E. Wilson  
Las Vegas, Nevada, Radio Corp.  
C. E. Twiss and F. H. McCann  
Red Oak Radio Corp.  
E. C. Reineke  
Eugene Broadcasting Station  
Alamo Broadcasting Co.  
Uhalt Electric  
KXL Broadcasters, Inc.  
Erie Dispatch-Herald  
Victor C. Carlson  
Raymond G. Hammett  
George Franklin Bissell  
Triangle Broadcasters  
Daily Telegraph  
Poling Electric Co.  
George W. Robinson  
Delaware Broadcasting Co., Inc.  
Valdemar Jensen  
Fred L. Schoenwolf  
Enquirer-News Co.  
WLBV Broadcasting Co.  
Lexington Air Stations  
Michigan Broadcasting Co., Inc.  
Edwin Dudley Aber  
Peter J. Prinz  
J. H. Thomson  
Associated Broadcasting Corp.

### 1430 kilocycles 209.7 meters

KECA	1000	N
WBAK	500	1
WBRL	500	---
WCAH	500	1C
WGBC	500	2
WHP	500	1C
WNBR	500	2

Los Angeles, Calif.  
Harrisburg, Pa.  
Tilton, N. H.  
Columbus, Ohio  
Memphis, Tenn.  
Harrisburg, Pa.  
Memphis, Tenn.

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Earle C. Anthony, Inc.  
Penna. State Police  
Booth Radio Laboratories  
Commercial Radio Service Co.  
First Baptist Church  
Pennsylvania Broadcasting Co.  
John Ulrich

### 1440 kilocycles 208.2 meters

KLS	250	D
WCBA	250	1
WHCC	500	2C

Oakland, Cal.  
Allentown, Pa.  
Rochester, N. Y.

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Warner Bros.  
B. B. Musselman  
Hickson Electric Co.

## INDEX BY FREQUENCIES AND DIAL NUMBERS

WMBD	500	3+
WNRC	500	---
WOKO	500	2
WSAN	250	1
WTAD	500	3

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

Peoria Heights Radio Laboratory  
Wayne M. Nelson  
Hudson Valley Broadcasting Co.  
Allentown Call Publishing Co., Inc.  
Ills. Stock Medicine Broadcasting Co.

### 1450 kilocycles 206.8 meters

KTBS	1000	---
WBMS	250	1
WCSO	500	2
WFJC	500	2N
WIBS	250	1
WKBO	250	1
WNJ	250	1
WSAR	250	---
WTFI	250	---

Shreveport, La.  
Fort Lee, N. J.  
Springfield, Ohio  
Akron, Ohio  
Jersey City, N. J.  
Jersey City, N. J.  
Newark, N. J.  
Fall River, Mass.  
Toccoa, Ga.

Elliott & Steere  
WBMS Broadcasting Corp.  
Wittenberg, College  
W. F. Jones Broadcast, Inc.  
New Jersey Broadcasting Corp.  
Carnith Corp.  
Radio Investment Co.  
Doughty & Welch Electric Co., Inc.  
Toccoa Falls Institute

### 1460 kilocycles 205.4 meters

KSTP	10000	N
WJSV	10000	---

St. Paul, Minn.  
Mt. Vernon Hills, Va.

National Battery Broadcasting Co.  
Independent Publishing Co.

### 1470 kilocycles 204.0 meters

KFJF	5000	C
KGA	5000	---
WKBW	5000	C

Oklahoma City  
Spokane, Wash.  
Buffalo, N. Y.

National Radio Mfg. Co.  
Northwest Broadcasting System, Inc.  
Churchill Evangelistic Assn., Inc.

### 1480 kilocycles 202.6 meters

WCKY	5000	1N
WJAZ	5000	1
WORD	5000	1
WSOA	5000	1

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

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

### 1490 kilocycles 201.2 meters

KPWF	5000	CP
WFBL	1000	C
WLAC	5000	1C
WTNT	5000	1

Westminster, Cal.  
Syracuse, N. Y.  
Nashville, Tenn.  
Nashville, Tenn.

Pacific Western Broadcasting Fed.  
The Onondaga Co., Inc.  
Life & Casualty Insurance Co.  
Tennessee Publishing Co.

### 1500 kilocycles 199.9 meters

KDB	100	---
KGFI	100	---
KGKB	100	---
KGKY	100	CP
KPJM	100	---
KREG	100	---
KTLC	100	X
KUJ	10	3X
KVEP	15	3
WCLB	100	1
WKBV	100	+
WKBZ	50	---
WLBX	100	1
WLOE	100	2
WMB A	100	---
WMBJ	100	---
WMBQ	100	1
WMES	50	2
WMPC	100	---
WNBF	100	---
WOP1	100	---
WPEN	100	+
WWRL	100	1

Santa Barbara, Cal.  
Corpus Christi, Texas  
Brownwood, Texas  
Scottsbluff, Nebr.  
Prescott, Ariz.  
Pasadena, Calif.  
Houston, Texas  
Longview, Wash.  
Portland, Ore.  
Brooklyn, N. Y.  
Connersville, Ind.  
Ludington, Mich.  
Long Island City, N. Y.  
Boston, Mass.  
Newport, R. I.  
Pittsburgh, Pa.  
Brooklyn, N. Y.  
Boston, Mass.  
Lapeer, Mich.  
Binghamton, N. Y.  
Bristol, Tenn.  
Philadelphia, Pa.  
Woodside, N. Y.

Santa Barbara Broadcasting Co.  
Eagle Broadcasting Co., Inc.  
Eagle Publishing Co.  
Hilliard Co., Inc.  
Miller & Klahn  
Pacific Western Broadcasting  
Houston Broadcasting Co.  
Columbia Broadcasting Co., Inc.  
Schaeffer Radio Co.  
Arthur Faske  
Knox Battery & Electric Co.  
K. L. Ashbacher  
John N. Brahy  
Boston Broadcasting Co.  
LeRoy Joseph Beebe  
Rev. J. W. Sproul  
Paul J. Gollhofer  
Boston Broadcasting Co.  
First M. E. Church  
Hewitt-Wood Radio Co., Inc.  
Wm. Radiophone Service Co.  
Wm. Penn Broadcasting Co.  
Long Island Broadcasting Corp.

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





## INDEX BY LOCATIONS WITH MAP KEY

### ILLINOIS

Carthage F-17-e	50	WCAZ	1070
Chicago E-19-g	5000	KFKX	1020
	5000	KYW	1020
	500	WAAF	920
	25000	WBBM	770
	1000	WCFL	970
	100	WCRW	1210
	100	WEDC	1210
	50000	WENR	870
	500	WGES	1360
	25000	WGN	720
	1000	WIBO	560
	5000	WJAZ	1480
	25000	WJBT	770
	50	WKBI	1420
	5000	WLS	870
	5000	WMAQ	670
	5000	WMBI	1080
	5000	WORD	1480
	500	WPCC	560
	100	WSBC	1210
	5000	WSOA	1480
Cicero E-19	100	WHFC	1420
Decatur G-18	100	WJBL	1200
Evanston E-19	100	WEHS	1420
Galesburg F-18-a	100	WKBS	1310
Harrisburg H-18-b	100	WEBQ	1210
Joliet E-19-f	100	WCLS	1310
	100	WKBB	1310
La Salle F-18-d	100	WJBC	1200
Mooseheart E-18-e	20000	WJJD	1130
Peoria Heights G-18	500	WMBD	1440
Quincy G-17	500	WTAD	1440
Rockford E-18-c	500	KFLV	1410
Rock Island F-17-c	100	WHBF	1210
Springfield G-18	100	WCBS	1210
Streator F-18-c	50	WTAX	1210
Tuscola G-19-b	100	WDZ	1070
Urbana G-19-a	250	WILL	890
Zion E-19-c	5000	WCBD	1080

### INDIANA

Anderson G-20-a	100	WHBU	1210
Connersville G-20	100	WKBV	1500
Culver F-19-d	500	WCMA	1400
Evansville H-19	500	WGBF	630
Fort Wayne F-20-b	100	WGL	1370
	10000	WOWO	1160
Gary F-19	500	WJCS	1360
Hammond F-19	100	WVAE	1200
Indianapolis G-19-c	1000	WFEM	1230
	500	WKBK	1400
Lafayette G-19	500	WBAA	1400
La Porte F-19-c	100	WRAF	1200
Marion F-20	50	WJAK	1310
Muncie G-20	50	WLBC	1310
South Bend F-20-a	500	WSBT	1230
Terre Haute G-19	100	WBOW	1310
Valparaiso F-19-b	500	WRBC	1240

### IOWA

Ames E-16-c	5000	WOI	640
Boone E-16	100	KFGQ	1310
Cedar Rapids E-17-a	100	KWCR	1310
Clarinda E-15-c	500	KSO	1380
Council Bluffs F-15-b	1000	KOIL	1260
Davenport F-17-a	5000	WOC	1000
Decorah D-17	50	KGCA	1270
	100	KWLC	1270
Des Moines F-16-a	5000	WHO	1000
Fort Dodge E-16-a	100	KFJY	1310
Iowa City E-17-b	500	WSUI	880
Marshalltown E-16-d	100	KFJB	1200
Muscatine F-17-b	5000	KTNT	1170

Ottumwa F-17	100	WIAS	1420
Red Oak F-15	100	KICK	1420
Shenandoah F-15-c	500	KKNF	890
	500	KMA	930
Sioux City E-15	1000	KSCJ	1330
Waterloo F-17	500	WMT	600

### KANSAS

Kansas City G-15	100	WLBF	1420
Lawrence G-15-a	1000	KFKU	1220
	1000	WREN	1220
Manhattan G-14-a	500	KSAC	580
Milford G-14	5000	KFKB	1050
Topeka G-14	500	WBW	580
Wichita H-14-a	1000	KFH	1300

### KENTUCKY

Covington G-20	5000	WCKY	1480
Hopkinsville I-19	1000	WFIW	940
Louisville H-20	10000	WHAS	820
	30	WLAP	1200

### LOUISIANA

New Orleans M-17	100	WABZ	1200
	1000	WDSU	1250
	100	WJBO	1420
	30	WJBW	1200
	500	WSMB	1320
	5000	WWL	850
Shreveport K-16	50	KRMD	1310
	1000	KTBS	1450
	100	KTSL	1310
	100	KWEA	1210
	10000	KWKH	850

### MAINE

Bangor C-28-b	100	WABI	1200
	500	WLBZ	620
Portland D-28-b	1000	WCSH	940

### MARYLAND

Baltimore G-24-a	10000	WBAL	1060
	250	WCAO	600
	100	WCBM	1370
	250	WFBR	1270
Cumberland G-23	50	WTBO	1420

### MASSACHUSETTS

Boston E-27-c	1000	WBIS	1230
	500	WBZA	990
	1000	WEEI	590
	100	WLOE	1500
	50	WMES	1500
	1000	WNAC	1230
	500	WSSH	1360
Fall River E-27	250	WSAR	1450
Gloucester E-27	1000	WHDH	830
Lexington E-27	500	WLEX	1360
	100	WLEY	1420
New Bedford E-27	100	WNBH	1310
S. Dartmouth E-27	500	WMAF	1360
Springfield E-26-b	15000	WBZ	990
Wellesley Hills E-27	250	WBOS	920
Worcester E-27-b	100	WORC	1200
	250	WTAG	580

### MICHIGAN

Battle Creek E-20	50	WKBP	1420
Bay City D-21	500	WBCM	1410
Berrien Spgs. E-19	1000	WEMC	590
Calumet B-18	100	WHDF	1370

## INDEX BY LOCATIONS WITH MAP KEY

Detroit E-21-g	750	WGHP	340
	5000	WJR	750
	100	WMBC	1420
	1000	WWJ	920
East Lansing E-20-b	1000	WKAR	1040
Flint E-21-a	100	WFDF	1310
Grand Rapids E-20-a	500	WASH	1270
	500	WOOD	1270
Jackson E-20	100	WIBM	1370
Lapeer E-21	100	WMPC	1500
Ludington D-19	50	WKBC	1500
Royal Oak E-21-e	50	WAGM	1310
Ypsilanti E-21-f	50	WJBK	1370

### MINNESOTA

Collegeville C-15	100	WFBJ	1370
Fergus Falls B-15	100	KGDE	1200
Hallock A-14	50	KGFK	1200
Minneapolis C-16-b	7500	WCCO	810
	1000	WDGY	1180
	500	WGMS	1250
	500	WHDI	1180
	500	WLB	1250
	1000	WRHM	1250
Northfield D-16	1000	KFMX	1250
	1000	WCAL	1250
St. Paul C-16-c	10000	KSTP	1460

### MISSISSIPPI

Greenville K-17	100	WRBQ	1210
Gulfport M-18	100	WGCM	1210
Hattiesburg L-18	10	WRBJ	1370
Jackson L-18	500	WJDX	1270
Meridian L-18	500	WCOG	880
Utica L-17	300	WQBC	1360

### MISSOURI

Cartersville H-16	50	KFPW	1340
Cp. Girardeau H-18-c	100	KFVS	1210
Columbia G-16-b	500	KFRU	630
Jefferson City H-16-a	500	WOS	630
Joplin H-16	100	WMBH	1420
Kansas City G-15-b	1000	KMBC	950
	100	KWKC	1370
	1000	WDAF	610
	500	WHB	860
	1000	WOQ	1300
St. Joseph G-15	2500	KFEQ	680
	100	KGBX	1310
St. Louis H-18-a	5000	KFQA	1090
	500	KFUO	550
	100	KFWF	1200
	5000	KMOX	1090
	500	KSD	550
	1000	KWK	1350
	1000	WEW	760
	100	WIL	1200
	100	WMA Y	1200

### MONTANA

Billings C-8	500	KGHL	950
Butte C-7	250	KGIR	1360
Great Falls A-8	500	KFBB	1360
Kalispell A-5	100	KGEZ	1310
Wolf Point A-10	100	KGCX	1310

### NEBRASKA

Clay Center G-14	1000	KMMJ	740
Lincoln F-14-b	5000	KFAB	770
	100	KFOR	1210
	500	WCAJ	590
Norfolk E-14-c	1000	WJAG	1060
Omaha F-15-a	500	WAAW	660
	1000	WOW	590
Ravenna F-13	50	KGFV	1310
Scottsbluff F-11	100	KGKY	1500
York F-13	500	KGBZ	930

### NEVADA

Las Vegas I-5	100	KGIX	1420
Reno G-3	100	KOH	1370

### NEW HAMPSHIRE

Laconia D-27	100	WKAV	1310
Tilton D-27	500	WBRL	1430

### NEW JERSEY

Asbury Park G-26	500	WCAP	1280
Atlantic City G-25	5000	WPG	1100
Camden F-25-f	500	WCAM	1280
Fort Lee F-26	250	WBMS	1450
Jersey City F-26-d	300	WAAT	1070
	250	WIBS	1450
	250	WKBO	1450
Newark F-25-h	1000	WAAM	1250
	250	WGCP	1250
	250	WNJ	1450
	5000	WOR	710
Paterson F-26-c	1000	WODA	1250
Red Bank G-26	100	WJBI	1210
Trenton F-25	500	WOAX	1280

### NEW MEXICO

Albuquerque J-9	250	KGGM	1230
Raton I-11	50	KGFL	1370
State College K-9	20000	KOB	1180

### NEW YORK

Auburn E-24	100	WMBO	1370
Binghamton E-25	100	WNBF	1500
Brooklyn F-26-f	500	WBBC	1400
	100	WCLB	1500
	500	WLTH	1400
	100	WMBQ	1500
	500	WSGH	1400
Buffalo E-23-a	100	WEBR	1310
	1000	WGR	550
	5000	WKBW	1470
	1000	WKEN	1040
	750	WMAK	900
	50	WSVS	1370
Canton D-25	500	WCAD	1220
Cazenovia E-25-b	250	WMAC	570
Coney Island F-26	500	WCGU	1400
Freeport F-26-l	100	WGBB	1210
Ithaca E-24-d	500	WEAI	1270
	50	WLCI	1210
	10	WMRJ	1420
Jamaica F-26-f	25	WOCL	1210
Jamestown E-23-b	100	WLBX	1500
Long Island City F-26	100		

# INDEX BY LOCATIONS WITH MAP KEY

New York City F-26	5000	WABC	860	Steubenville F-22	50	WIBR	1420
	250	WBNY	1350	Toledo F-21-a	500	WSPD	1240
	5000	WBOQ	860	Youngstown F-22	500	WKBN	570
	250	WCDA	1350	<b>OKLAHOMA</b>			
	5000	WEAF	660	Alva I-13	100	KGFF	1420
	500	WEVD	1300	Chickasha J-14-b	250	KOCW	1400
	250	WGBS	600	Enid I-14	100	KCRC	1370
	1000	WHAP	1300	Norman J-14-a	500	WNAD	1010
	250	WHN	1010	Oklahoma I-14-b	5000	KEJF	1470
	30000	WJZ	760		100	KFXR	1310
	250	WKBQ	1350		100	KGFG	1370
	5000	WLWL	1100		1000	WKY	900
	500	WMCA	570	Picher I-15	500	KGGF	1010
	250	WMSG	1350	Ponca City I-14	100	WBBZ	1200
	500	WNYC	570	Tulsa I-15	5000	KVOO	1140
	1000	WOV	1130	<b>OREGON</b>			
	250	WPAP	1010	Astoria C-1-a	100	KFJI	1370
	500	WPCB	810	Corvallis D-1	1000	KOAC	550
	250	WQAO	1010	Eugene D-1	100	KORE	1420
	250	WRNY	1010	Marshfield E-1	100	KOOS	1370
	100	WPOE	1370	Medford E-1	50	KMED	1310
Patchogue F-26	5000	WHAM	1150	Portland C-1-b	5000	KEX	1180
Poughkeepsie F-26-a	500	WHEC	1440		100	KFIF	1420
Rochester E-24-b	5000	WHAM	1150		500	KFJR	1300
	500	WHEC	1440		1000	KGW	620
Rossville F-26	1000	WBBR	1300		1000	KOIN	940
Saranac Lake D-26	50	WNBZ	1290		500	KTBR	1300
Schenectady E-25-c	5000	WGY	790		15	KVEP	1500
Syracuse E-24-c	1000	WFBL	1490		500	KWJJ	1060
	250	WSYR	570		100	KXL	1420
Troy E-21-a	500	WHAZ	1300	<b>PENNSYLVANIA</b>			
Tupper Lake D-25	10	WHDL	1420	Allentown F-25-c	250	WCBA	1440
Utica E-25-a	100	WIBX	1200		250	WSAN	1440
Woodside F-26	100	WWRL	1500	Altoona F-24-c	100	WFBG	1310
Yonkers E-26	100	WCOH	1210	Carbondale F-25	10	WNBW	1200
				Elkins Park G-25-c	50	WIBG	930
<b>NORTH CAROLINA</b>				Erie E-23	30	WEDH	1420
Asheville J-21	1000	WWNC	570		50	WRAK	1370
Charlotte J-22	5000	WBT	1080	Grove City F-23-b	100	WSAJ	1310
Gastonia J-22	100	WRBU	1210	Harrisburg F-24-d	500	WBAK	1430
Greensboro I-22	500	WNRC	1440		100	WCOD	1200
Raleigh I-23	1000	WPTF	680		500	WHP	1430
Wilmington J-24	100	WRBT	1370	Jeannette G-23	100	WOOP	840
Winston-Salem I-22	100	WSJS	1310	Johnstown F-23-d	100	WJAC	1310
<b>NORTH DAKOTA</b>				Lancaster G-24-a	15	WGAL	1310
Bismarck B-12	500	KFYR	550		100	WKJC	1200
Devils Lake A-13	100	KDLR	1210	Lewisburg F-24-b	100	WJBU	1210
Fargo B-14	1000	WDAY	940	Oil City F-23-a	500	WLBW	1260
Grand Forks A-14	100	KFJM	1370	Philadelphia G-25-d	1000	WCAU	1170
Mandan B-12	100	KGGU	1210		100	WELK	1370
Minot A-12	100	KLPM	1420		500	WFAN	610
					500	WEI	560
<b>OHIO</b>					50	WFKD	1310
Akron F-22-b	1000	WADC	1320		100	WHAT	1310
	500	WFJC	1450		500	WIP	610
Cambridge F-22	100	WEBE	1210		500	WLIT	560
Canton F-22-d	10	WHBC	1200		100	WPEN	1500
Cincinnati G-20-e	100	WFBE	1200		250	WRAX	1020
	500	WKRC	550	Pittsburgh F-23-c	5000	KDKA	980
	5000	WLW	700		500	KQV	1380
	500	WSAI	1330		500	WCAE	1220
Cleveland F-22-a	1000	WEAR	1070		1000	WJAS	1290
	1000	WHK	1390		100	WMBJ	1500
	500	WJAY	610		100	WRAW	1310
	50000	WTAM	1070		250	WGBI	880
Columbus G-21-b	500	WAIU	640		250	WQAN	880
	500	WCAH	1430		500	WPSC	1230
	750	WEAO	570		100	WNBO	1200
	50	WMAN	1210		100	WBAX	1210
Dayton G-21-e	200	WSMK	1380		100	WBRE	1310
Hamilton G-20-d	100	WRK	1310				
Mansfield F-21	100	WJW	1210				
Mount Orab	100	WHBD	1370				
Springfield G-21-c	500	WCSO	1450				

# INDEX BY LOCATIONS WITH MAP KEY

<b>PORTO RICO</b>				<b>San Antonio M-14-a</b>				100	KGCI	1370
San Juan	500	WKAQ	890				100	KGRC	1370	
<b>RHODE ISLAND</b>							100	KTAP	1420	
Newport F-27	100	WMBA	1500	Waco L-15-b			1000	KTSA	1290	
Pawtucket E-27	100	WPAW	1210	Wichita Falls K-14			5000	WQAI	1190	
Providence E-27-h	100	WDWF	1210				1000	WACO	1240	
	250	WEAN	780	<b>UTAH</b>						
	250	WJAR	890	Ogden F-7-b			100	KLO	1370	
	100	WLSI	1210	Salt Lake City F-7-c			1000	KDYL	1290	
							5000	KSL	1130	
<b>SOUTH CAROLINA</b>				<b>VERMONT</b>						
Charleston K-23	75	WBBY	1200	Burlington D-26-a			100	WCAX	1200	
Columbia K-22	500	WGTV	1010	Springfield D-26-b			10	WNBX	1200	
<b>SOUTH DAKOTA</b>				<b>VIRGINIA</b>						
Brookings D-14	500	KFDY	550	Arlington G-24-d			1000	NAA	690	
Dell Rapids D-14	50	KGDA	1370	Emory			100	WEHC	1370	
Oldham D-14	15	KGDY	1200	Mt. Vernon Hills			10000	WJSV	1460	
Pierre D-12	200	KGFX	580	Newport News I-24			100	WGH	1310	
Rapid City D-11	100	WCAT	1200	Norfolk I-24			500	WPOR	780	
Sioux Falls D-14	2000	KSOU	1110				500	WTAR	780	
Vermillion E-14-b	500	KUSD	890	Petersburg H-24			100	WLBG	1200	
Watertown	100	KGCR	1210	Richmond H-24			100	WBBL	1370	
Yankton E-14-a	1000	WNAX	570				100	WMBG	1210	
							5000	WRVA	1110	
<b>TENNESSEE</b>							250	WDBJ	930	
Bristol I-22	100	WOPI	1500	<b>WASHINGTON</b>						
Chattanooga J-20	1000	WDOD	1280	Aberdeen B-1			75	KXRO	1310	
Knoxville I-20	50	WFDX	1200	Bellingham A-1			100	KVOS	1200	
	50	WNBX	1310	Everett A-2			50	KFBL	1370	
	1000	WNOX	560	Lacey B-2-b			10	KGY	1200	
Lawrenceburg J-19	500	WOAN	600	Longview B-1			10	KUJ	1500	
Memphis J-18-a	500	WGBC	1430	Pullman B-4			500	KWSC	1220	
	100	WHBQ	1370	Seattle B-2-a			100	KFWW	760	
	500	WMC	780				5000	KJR	1420	
	500	WNBR	1430				1000	KOL	1270	
	500	WREC	600				15000	KOMO	970	
Nashville I-19	5000	WLAC	1490				100	KPCB	1210	
	5000	WSM	650				50	KPQ	1210	
	5000	WTNT	1490				50	KRSC	1120	
Springfield I-19	100	WSIX	1210				1000	KTW	1270	
Union City I-18	100	WOBT	1310				100	KVL	1370	
							500	KXA	570	
<b>TEXAS</b>							100	KFIO	1230	
Abilene K-13	100	KFYO	1420	Spokane A-4			1000	KFPY	1340	
Amarillo J-12	1000	KGRS	1410				5000	KGA	1470	
	250	WDAG	1410	Tacoma B-1-a			1000	KHQ	590	
Austin L-14-b	500	KTRH	1120				500	KMO	860	
Beaumont M-16	500	KFDM	560	Yakima B-3			100	KVI	920	
Brownsville O-14-b	500	KKWG	1260					KIT	1310	
Brownwood L-13	1000	KGKB	1500	<b>WEST VIRGINIA</b>						
College Sta. M-13	500	WTAW	1120	Bluefield H-22			100	WHIS	1420	
Corpus Christi N-14	100	KGFI	1500	Charleston H-22			250	WOBV	580	
Dallas L-15-a	10000	KRLD	1040	Fairmont G-23			250	WMMN	890	
	5000	WFAA	800	Huntington G-22			250	WSAZ	580	
	500	WRR	1280	Weirton G-22			60	WQBZ	1420	
Dublin K-14	15	KFPL	1310	Wheeling G-22			5000	WVVA	1160	
El Paso L-10	100	KTSM	1310	<b>WISCONSIN</b>						
	100	WDAH	1310	Beloit E-18-b			500	WEBW	560	
Fort Worth L-14-a	100	KFJZ	1370	Eau Claire D-17			1000	WTAQ	1330	
	1000	KSAT	1240	Fond du Lac D-18-d			100	KFIZ	1420	
	50000	WBAP	800	Green Bay D-19			100	WHBY	1200	
Galveston M-15-b	100	KFLX	1370	Kenosha E-19			100	WCLO	1200	
	500	KFUL	1290	La Crosse E-17			1000	WKBH	1380	
Greenville K-15	15	KFPM	1310	Madison E-18-2			750	WHA	940	
Harlingen O-14	500	KRGV	1260				100	WIBA	1210	
Houston M-15-a	1000	KPRC	920	Manitowoc D-19			100	WOMT	1210	
	100	KTUE	1420	Milwaukee E-19-a			250	WHAD	1120	
	100	KTLC	1500				250	WISN	1120	
San Angelo M-12	100	KGKL	1370				1000	WTMJ	620	



INDEX BY LOCATIONS WITH MAP KEY

Poynette D-18-e	100	WIBU	1310
Racine E-19	100	WRJN	1370
Sheboygan C-18	500	WHBL	1410
Stevens Pt. D-18-b	2000	WLBL	900
Superior B-17	1000	WBCB	1290

WYOMING

Casper	100	KDFN	1210
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CANADA

ALBERTA

Calgary	500	CFAC	690
	500	CFCN	690
	500	CHCA	690
	500	CJ CJ	690
	500	CNRC	690
Edmonton	250	CHMA	580
	500	CJCA	580
	500	CKUA	580
	500	CNRE	580
Lethbridge	50	CJOC	1120
Red Deer	1000	CHCT	840
	1000	CKLC	840
	1000	CNRD	840

BRITISH COLUMBIA

Chilliwack	5	CHWK	1210
Kamloops	15	CFJC	1120
Sea Island	50	CJOR	1030
Vancouver	50	CHLS	730
	50	CKGD	730
	50	CKFC	730
	50	CKMO	730
	100	CKWX	730
	500	CNRV	1030
Victoria	500	CFCT	630

MANITOBA

Brandon	500	CKX	540
Winnipeg	5000	CKY	780
	5000	CNRW	780

NEW BRUNSWICK

Fredericton	50	CFNB	1210
Moncton	500	CNRA	630
St. John	50	CFBO	890

NOVA SCOTIA

Halifax	500	CHNS	930
Louisburg	500	VAS	690
Sydney	50	CJCB	880
Wolfville	50	CKIC	930

ONTARIO

Chatham	50	CFCO	1210
Cobalt	15	CKMC	1210
Hamilton	10	CHCS	880
	50	CHML	880
	50	CKOC	880
	250	CFCH	600
Iroquois Falls	500	CFRC	1120
Kingston	500	CJGC	910
London	500	CNRL	910
	50	CKPR	1120
Midland	100	CKCO	890
Ottawa	500	CNRO	600
	50	CFLC	1010
Prescott	50	CKPC	1210
Preston	500	CFCA	840
Toronto	500	CFCL	580
	4000	CFRB	960
	500	CJBC	580
	5000	CJBC	690
	1000	CJBC	840
	5000	CJBC	960
	500	CJSC	580

Toronto	500	CKCL	580
	5000	CKGW	690
	500	CKNC	580
	500	CKOW	840
	500	CNRT	840
	5000	CNRX	690
Waterloo	50	CKCR	1010

PRINCE EDWARD ISLAND

Charlottetown	250	CFCY	960
	30	CHCK	960
Summerside	25	CHGS	1120

QUEBEC

Montreal	1650	CFCF	1030
	500	CHYC	730
	5000	CKAC	730
	1650	CNRM	730
Quebec	100	CHRC	880
	22	CKCI	880
	50	CKCV	880
	50	CNRQ	880
St. Hyacinthe	50	CKSH	1010

SASKATCHEWAN

Fleming	500	CJRW	600
Moose Jaw	500	CJRM	600
Pilot Butte	500	CHWC	960
Regina	500	CFGR	960
	500	CJBR	960
	500	CKCK	960
	500	CNRR	960
Saskatoon	500	CFQC	910
	250	CJHS	910
	500	CNRS	910
Yorkton	500	CJGX	630

HAITI

Port au Prince	1000	HHK	920
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MEXICO

Chihuahua	250	XFF	920
C. Lerdo, Dgo.	250	XES	1200
Guadalajara, Jal.	101	XEA	1200
Jalapa, Ver.	350	XFC	630
Merida, Yucatan	105	XEY	550
Mexico City	1000	XEB	670
	1000	XEN	730
	50	XEX	920
	500	XFA	540
	2000	XFG	640
	1000	XFI	590
	500	XFX	840
	1000	XEH	970
Monterrey, N. L	101	XEI	1000
Morelia, Mich.	105	XEF	1130
Oaxaca, Oax.	101	XEE	960
Puebla, Pue.			

CUBA

Caibarien	250	CMHD	920
Cienfuegos	200	CMHA	1150
Colon	300	CMGA	830
Havana	100	CMBC	890
	200	CMBY	610
	100	CMBZ	1030
	500	CMC	840
	150	CMCB	950
	100	CMCE	1100
	250	CMCF	640
	500	CMI	820
	2000	CMK	730
	1000	CMW	600
	500	CMX	920
Marianao	50	CMBW	1030
Tuinucu	500	CMHC	790

CFAC 690		CJOC 1120		CMHA 1150	
Calgary, Alta.		Lethbridge, Alta.		Cienfuegos, Cuba	
CFBO 890		CJOR 1030		CMHC 790	
St. John, N. B.		Sea Island, B. C.		Tuinucu, Cuba	
CFCA 840		CJRM 800		CMHD 920	
Toronto, Ont.		Moose Jaw, Sask.		Caibarien, Cuba	
CFCF 1030		CJRW 600		CMI 820	
Montreal, Que.		Fleming, Sask.		Havana, Cuba	
CFCH 600		CJSC 580		CMK 730	
Iroq's Falls, Ont.		Toronto, Ont.		Havana, Cuba	
CFCL 580		CKAC 730		CMW 600	
Toronto, Ont.		Montreal, Que.		Havana, Cuba	
CFCN 690		CKCD 730		CMX 920	
Calgary, Alta.		Vancouver, B. C.		Havana, Cuba	
CFCO 1210		CKCI 880		CNRA 630	
Chatham, Ont.		Quebec, Que.		Moncton, N.B.	
CFCR 960		CKCK 960		CNRC 690	
Regina, Sask.		Regina, Sask.		Calgary, Alta.	
CFCT 630		CKCL 580		CNRD 840	
Victoria, B. C.		Toronto, Ont.		Red Deer, Alta.	
CFCY 960		CKCO 890		CNRE 580	
Ch'tottet'n, P.E.I.		Ottawa, Ont.		Edmonton, Alta.	
CFJC 1120		CKCR 1010		CNRL 910	
Kamloops, B. C.		Waterloo, Ont.		London, Ont.	
CFLC 1010		CKCV 880		CNRM 730	
Prescott, Ont.		Quebec, Que.		Montreal, Que.	
CFNB 1210		CKFC 730		CNRO 600	
Fredericton, N.B.		Vancouver, B. C.		Ottawa, Ont.	
CFQC 910		CKGW 690		CNRQ 880	
Saskatoon, Sask.		Toronto, Ont.		Quebec, Que.	
CFRB 960		CKIC 930		CNRR 960	
Toronto, Ont.		Wolfville, N.S.		Regina, Sask.	
CFRC 1120		CKLC 840		CNRS 910	
Kingston, Ont.		Red Deer, Alta.		Saskatoon, Sask.	
CHCA 690		CKMC 1210		CNRT 840	
Calgary, Alta.		Cobalt, Ont.		Toronto, Ont.	
CHCK 960		CKMO 730		CNRV 1030	
Ch'tottet'n, P.E.I.		Vancouver, B. C.		Vancouver, B. C.	
CHCS 880		CKNC 580		CNRW 780	
Hamilton, Ont.		Toronto, Ont.		Winnipeg, Man.	
CHCT 840		CKOC 880		CNRX 690	
Red Deer, Alta.		Hamilton, Ont.		Toronto, Ont.	
CHGS 1120		CKOW 840		HHK 920	
Sum'side, P.E.I.		Toronto, Ont.		Port au Prince, H.	
CHLS 730		CKPC 1210		KBTM 1200	
Vancouver, B. C.		Preston, Ont.		Paragould, Ark.	
CHMA 580		CKPR 1120		KCRC 1370	
Edmonton, Alta.		Midland, Ont.		Oklahoma City	
CHML 880		CKSH 1010		KDB 1500	
Hamilton, Ont.		St. H'cinthe, Que.		S. Barbara, Cal.	
CHNS 930		CKUA 580		KDFN 1210	
Halifax, N.S.		Edmonton, Alta.		Casper, Wyo.	
CHRC 880		CKWX 730		KDKA 980	
Quebec, Que.		Vancouver, B. C.		Pittsburgh, Pa.	
CHWC 960		CKX 540		KDLR 1210	
Pilot Butte, Sask.		Brandon, Man.		Devils Lake, N. D.	
CHWK 1210		CKY 780		KDYL 1290	
Chilliwack, B. C.		Winnipeg, Man.		Salt Lake City	
CHYC 730		CMBE 890		KECA 1430	
Montreal, Que.		Havana, Cuba		Los Angeles, Cal.	
CJBC580-840-960		CMBW 1030		KEJK 710	
Toronto, Ont.		Marianao, Cuba		Los Angeles, Cal.	
CJBR 960		CMBY 610		KELW 780	
Regina, Sask.		Havana, Cuba		Burbank, Cal.	
CJCA 580		CMBZ 1030		KEX 1180	
Edmonton, Alta.		Havana, Cuba		Portland, Ore.	
CJCB 880		CMC 840		KFAB 770	
Sydney, N.S.		Havana, Cuba		Lincoln, Neb.	
CJ CJ 690		CMCB 950		KFBB 1360	
Calgary, Alta.		Havana, Cuba		Great Fls., Mont.	
CJGC 910		CMCE 1100		KFBK 1310	
London, Ont.		Havana, Cuba		Sacramento, Cal.	
CJGX 630		CMCF 640		KFBL 1370	
Yorkton, Sask.		Havana, Cuba		Everett, Wash.	
CJHS 910		CMGA 830		KFDM 560	
Saskatoon, Sask.		Colon, Cuba		Beaumont, Tex.	

KFDY 550	KFSD 600	KGER 1360
Brookings, S.D.	San Diego, Cal.	Long Beach, Cal.
KFEL 920	KFSG 1120	KGEW 1200
Denver, Colo.	Los Angeles, Cal.	Ft. Morgan, Colo.
KFEQ 680	KFUI 1310	KGEZ 1310
St. Joseph, Mo.	Juneau, Alaska	Kalispell, Mont.
KFGQ 1310	KFUL 1290	KGFF 1420
Boone, Iowa	Galveston, Tex.	Alva, Okla.
KFH 1300	KFUM 1270	KGFG 1370
Wichita, Kansas	Col. Spgs., Colo.	Oklahoma City
KFHA 1200	KFUO 550	KGFI 1500
Gunnison, Colo.	St. Louis, Mo.	C'pus Ch'sti, Tex.
KFI 640	KFUP 1310	KGFJ 1200
Los Angeles, Cal.	Denver, Colo.	Los Angeles, Cal.
KFIF 1420	KFVD 1000	KGFK 1200
Portland, Ore.	Culver City, Cal.	Hallock, Minn.
KFIO 1230	KFVS 1210	KGFL 1370
Spokane, Wash.	Cape Gir'rd'u, Mo	Raton, N.M.
KFIZ 1420	KFWB 950	KGFW 1310
Fond du Lac, Wis.	Hollywood, Cal.	Ravenna, Nebr.
KFJB 1200	KFWF 1200	KGFX 580
Marshalltown, Ia.	St. Louis, Mo.	Pierre, S.D.
KFJF 1470	KFWI 930	KGGC 1420
Oklahoma City	San F'nisco, Cal.	San F'nisco, Cal.
KFJI 1370	KPWM 930	KGGF 1010
Astoria, Ore.	Richmond, Cal.	Picher, Okla.
KFJM 1370	KFXD 1420	KGGM 1230
Grd. Forks, N.D.	Jerome, Idaho	Alb'g'que, N.M.
KFJR 1300	KFXF 920	KGHB 1320
Portland, Ore.	Denver, Colo.	Honolulu, T.H.
KFJY 1310	KFXJ 1310	KCHF 1320
Fort Dodge, Ia.	Edgewater, Colo.	Pueblo, Colo.
KFJZ 1370	KFXM 1210	KGHI 1200
Ft. Worth, Tex.	San Ber'd'no, Cal.	Little Rock, Ark.
KFKA 880	KFXR 1310	KGHL 950
Greeley, Colo.	Oklahoma City	Billings, Mont.
KFKB 1050	KFX Y 1420	KGIQ 1320
Milford, Kansas	Flagstaff, Ariz.	Twin Falls, Ida.
KFKU 1220	KPYO 1420	KGIR 1360
Lawrence, Kans.	Abilene, Texas	Butte, Mont.
KFKX 1020	KPYR 550	KGIW 1420
Chicago, Ill.	Bismarck, N.D.	Trinidad, Colo.
KFLY 1410	KGA 1470	KGIX 1420
Rockford, Ill.	Spokane, Wash.	Las Vegas, Nev.
KFLX 1370	KGAR 1370	KGJF 890
Galveston, Tex.	Tucson, Ariz.	Little Rock, Ark.
KFMX 1250	KGB 1330	KGKB 1500
N'thfield, Minn.	San Diego, Cal.	Brownwood, Tex.
KFNF 890	KGBU 900	KGKL 1370
Shenandoah, Ia.	Ketchikan, Al'ka.	San Angelo, Tex.
KFOR 1210	KGBX 1310	KGKO 570
Lincoln, Nebr.	St. Joseph, Mo.	Wichita Fils., Tex
KFOX 1250	KGBZ 930	KGKX 1420
Long Beach, Cal.	York, Nebr.	Sand Point, Ida.
KFPL 1310	KGCA 1270	KGKY 1500
Dublin, Texas	Decorah, Iowa	Scottsbluff, Nebr.
KFPM 1310	KGCI 1370	KGO 796
Greenville, Tex.	San Ant'nio, Tex.	Oakland, Cal.
KFPW 1340	KGCR 1210	KGRC 1370
Cartersville, Mo.	Watertown, S.D.	San Antonio, Tex.
KFPY 1340	KGCU 1210	KGRS 1410
Spokane, Wash.	Mandan, N.D.	Amarillo, Texas
KFQA 1090	KGCV 1310	KGU 940
St. Louis, Mo.	Wolf P't, Mont.	Honolulu, Hawaii
KFQD 1230	KGDA 1370	KGW 620
Anchorage, Alas.	Dell Rapids, S.D.	Portland, Ore.
KFQU 1420	KGDE 1200	KGY 1200
Holy City, Cal.	Ferg's F'ls, Minn	Lacey, Wash.
KFQW 1420	KGDM 1100	KHJ 900
Seattle, Wash.	Stockton, Cal.	Los Angeles, Cal.
KFQZ 860	KGDY 1200	KHQ 590
Los Angeles, Cal.	Oldham, S.D.	Spokane, Wash.
KFRC 610	KGEF 1300	KICK 1420
San F'nisco, Cal.	Los Angeles, Cal.	Red Oak, Iowa
KFRU 630	KGEK 1200	KID 1320
Columbia, Mo.	Yuma, Colo.	Idaho Falls, Ida.

**KIDO** 1250  
 Boise, Idaho  
**KIT** 1310  
 Yakima, Wash.  
**KJBS** 1070  
 San F'nscisco, Cal.  
**KJR** 760  
 Seattle, Wash.  
**KLCN** 1290  
 Blytheville, Ark.  
**KLO** 1370  
 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.  
**KMBC** 950  
 Kan. City, Mo.  
**KMED** 1310  
 Medford, Ore.  
**KMIC** 1120  
 Inglewood, Cal.  
**KMJ** 1210  
 Fresno, Cal.  
**KMMJ** 740  
 Clay Ctr., Nebr.  
**KMO** 860  
 Tacoma, Wash.  
**KMOX** 1090  
 St. Louis, Mo.  
**KMTR** 570  
 Hollywood, 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** 1370  
 Reno, Nevada  
**KOIL** 1260  
 Council Bluffs, Ia.  
**KOIN** 940  
 Portland, Ore.  
**KOL** 1270  
 Seattle, Wash.  
**KOMO** 970  
 Seattle, Wash.  
**KOOS** 1370  
 Marshfield, Ore.  
**KORE** 1420  
 Eugene, Ore.  
**KOY** 1390  
 Phoenix, Ariz.  
**KPCB** 1210  
 Seattle, Wash.  
**KPJM** 1500  
 Prescott, Ariz.  
**KPO** 680  
 San F'nscisco, Cal.  
**KPOF** 880  
 Denver, Colo.  
**KPPC** 1210  
 Pasadena, Cal.

**KPQ** 1210  
 Seattle, Wash.  
**KPRC** 920  
 Houston, Texas  
**KPSN** 1360  
 Pasadena, Cal.  
**KQV** 1380  
 Pittsburg, Pa.  
**KQW** 1010  
 San Jose, Cal.  
**KPWF** 1490  
 Westminster, Cal.  
**KRE** 1370  
 Berkeley, Cal.  
**KREG** 1500  
 Santa Ana, Cal.  
**KRGV** 1260  
 Harlingen, Texas  
**KRLD** 1040  
 Dallas, Texas  
**KRMD** 1310  
 Shreveport, La.  
**KRSC** 1120  
 Seattle, Wash.  
**KSAC** 580  
 Manh'tt'n, Kans.  
**KSAT** 1240  
 Ft. Worth, Tex.  
**KSCJ** 1330  
 Sioux City, Ia.  
**KSD** 550  
 St. Louis, Mo.  
**KSEI** 900  
 Pocatello, Idaho  
**KSL** 1130  
 Salt Lake City  
**KSMR** 1200  
 Santa Maria, Cal.  
**KSO** 1380  
 Clarinda, Iowa  
**KSOO** 1110  
 Sioux Falls, S.D.  
**KSTP** 1460  
 St. Paul, Minn.  
**KTAB** 560  
 Oakland, Cal.  
**KTAP** 1420  
 San Antonio, Tex.  
**KTAR** 620  
 Phoenix, Ariz.  
**KTBI** 1300  
 Los Angeles, Cal.  
**KTBR** 1300  
 Portland, Ore.  
**KTBS** 1450  
 Shreveport, La.  
**KTHS** 1040  
 Hot Spgs., Ark.  
**KTLC** 1500  
 Houston, Texas  
**KTM** 780  
 Los Angeles, Cal.  
**KTNT** 1170  
 Muscatine, Iowa  
**KTRH** 1120  
 Austin, Texas  
**KTSA** 1290  
 San Antonio, Tex.  
**KTSL** 1310  
 Shreveport, La.  
**KTSM** 1310  
 El Paso, Texas  
**KTUE** 1420  
 Houston, Texas  
**KTW** 1270  
 Seattle, Wash.

**KUJ** 1500  
 Longview, Wash.  
**KUOA** 1390  
 Fayetteville, Ark.  
**KUSD** 890  
 Vermillion, S.D.  
**KVEP** 1500  
 Portland, Ore.  
**KVI** 920  
 Tacoma, Wash.  
**KVL** 1370  
 Seattle, Wash.  
**KVOA** 1260  
 Tucson, Arizona  
**KVOO** 1140  
 Tulsa, Okla.  
**KVOS** 1200  
 Bellingh'm, Wash.  
**KWCR** 1310  
 Cedar Rapids, Ia.  
**KWEA** 1210  
 Shreveport, La.  
**KWG** 1200  
 Stockton, Cal.  
**KWJJ** 1060  
 Portland, Ore.  
**KWK** 1350  
 St. Louis, Mo.  
**KWKC** 1370  
 Kansas City, Mo.  
**KWKH** 850  
 Shreveport, La.  
**KWLK** 1270  
 Decorah, Iowa  
**KWSC** 1220  
 Pullman, Wash.  
**KWWG** 1260  
 Brownsville, Tex.  
**KXA** 570  
 Seattle, Wash.  
**KXL** 1420  
 Portland, Ore.  
**KXO** 1200  
 El Centro, Cal.  
**KXRO** 1310  
 Aberdeen, Wash.  
**KYA** 1230  
 San F'nscisco, Cal.  
**KYW** 1020  
 Chicago, Ill.  
**KZM** 1370  
 Hayward, Cal.  
**NAA** 690  
 Arlington, Va.  
**VAS** 690  
 Louisburg, N. S.  
**WAF** 920  
 Chicago, Ill.  
**WAAM** 1250  
 Newark, N. J.  
**WAAT** 1070  
 Jersey City, N.J.  
**WAAW** 660  
 Omaha, Nebr.  
**WABC** 860  
 New York City  
**WABI** 1200  
 Bangor, Maine  
**WABZ** 1200  
 New Orleans, La.  
**WACO** 1240  
 Waco, Texas  
**WADC** 1320  
 Akron, Ohio  
**WAGM** 1310  
 Royal Oak, Mich.



WAIU 640 Columbus, Ohio	WAPI 1140 Birmingham, Ala.	WASH 1270 Gr. Rapids, Mich.	WBAA 1400 Lafayette, Ind.	WBAK 1430 Harrisburg, Pa.	WBAL 1060 Baltimore, Md.	WBAP 800 Fort Worth, Tex.	WBAX 1210 Wilkes-Barre, Pa.	WBBC 1400 Brooklyn, N.Y.	WBBL 1370 Richmond, Va.	WBBM 770 Chicago, Ill.	WBBR 1300 Rossville, N.Y.	WBBY 1200 Charleston, S.C.	WBBZ 1200 Ponca City, Okla.	WBCM 1410 Bay City, Mich.	WBIS 1230 Boston, Mass.	WBMS 1450 Fort Lee, N.J.	WBNY 1350 New York City	WBOQ 860 New York City	WBOW 1310 Terre Haute, Ind.	WBRC 930 Birmingham, Ala.	WBRE 1310 Wilkes-Barre, Pa.	WBRL 1430 Tilton, N.H.	WBSO 920 Well't'yH'ls, Mass	WBT 1080 Charlotte, N.C.	WBZ 990 Springfield, Mass.	WBZA 990 Boston, Mass.	WCAC 600 Storrs, Conn.	WCAD 1220 Canton, N.Y.	WCAE 1220 Pittsburgh, Pa.	WCAH 1430 Columbus, Ohio	WCAJ 590 Lincoln, Nebr.	WCAL 1250 Northfield, Minn.	WCAM 1280 Camden, N.J.	WCAO 600 Baltimore, Md.	WCAP 1280 Asbury Pk., N.J.	WCAT 1200 Rapid City, S.D.	WCAU 1170 Philadelphia, Pa.	WCAZ 1070 Carthage, Ill.	WCBA 1440 Allentown, Pa.	WCBD 1080 Zion, Ill.	WCBM 1370 Baltimore, Md.	WCBS 1210 Springfield, Ill.	WCDO 810 Minneap., Minn.	WCDA 1350 New York City	WCFL 970 Chicago, Ill.	WCGU 1400 Coney Is., N.Y.	WCKY 1480 Covington, Ky.	WCLB 1500 Brooklyn, N.Y.	WCLO 1200 Kenosha, Wis.	WCLS 1310 Joliet, Ill.	WCMA 1400 Culver, Ind.	WCOA 1340 Pensacola, Fla.	WCOC 880 Meridian, Miss.	WCOD 1200 Harrisburg, Pa.	WCOH 1210 Yonkers, N.Y.	WCRW 1210 Chicago, Ill.	WCSE 940 Portland, Maine	WCSE 1450 Springfield, Ohio	WDAE 1220 Tampa, Fla.	WDAF 610 Kansas City, Mo.	WDAG 1410 Amarillo, Texas	WDAH 1310 El Paso, Texas	WDAY 940 Fargo, N.D.	WDBJ 930 Roanoke, Va.	WDBO 1120 Orlando, Fla.	WDEL 1120 Wilmington, Del.	WDGY 1180 Minneap., Minn.	WDOD 1280 Chatt'an'ga, Tenn	WDRC 1330 N. Haven, 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	WEAR 1070 Cleveland, Ohio	WEBC 1290 Superior, Wis.	WEBE 1210 Cambridge, Ohio	WEBQ 1210 Harrisburg, Ill.	WEBR 1310 Buffalo, N.Y.	WEBW 560 Beloit, Wis.	WEDC 1210 Chicago, Ill.	WEDH 1420 Erie, Pa.	WEEL 590 Boston, Mass.	WEHC 1370 Emory, Va.	WEHS 1420 Evanston, Ill.	WELK 1370 Philadelphia, Pa.	WEMC 590 Ber'n Spgs., Mich	WENR 870 Chicago, Ill.	WEVD 1300 New York City	WEW 760 St. Louis, Mo.	WFAA 800 Dallas, Texas	WFAN 610 Philadelphia, Pa.	WFBC 1200 Knoxville, Tenn.	WFBE 1200 Cincinnati, Ohio	WFBG 1310 Altoona, Pa.	WFBJ 1370 Coll'geville, Minn.	WFBL 1490 Syracuse, N.Y.	WFBM 1230 Indianapolis, Ind.	WFR 1270 Baltimore, Md.	WFD 1310 Flint, Mich.	WFDW 1420 Talladega, Ala.	WFI 560 Philadelphia, Pa.	WFIW 940 Hopkinsville, Ky.	WFJC 1450 Akron, Ohio	WFKD 1310 Philadelphia, Pa.	WFLA 620 Clearwater, Fla.	WGAL 1310 Lancaster, Pa.	WGBB 1210 Freeport, N.Y.	WGBC 1430 Memphis, Tenn.	WGBF 630 Evansville, Ind.	WGBI 880 Scranton, Pa.
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WGBS 600				WHP 1430				WJR 750				
New York City				Harrisburg, Pa.				Detroit, Mich.				
WGCM 1210				WIAS 1420				WJSV 1460				
Gulfport, Miss.				Ottumwa, Iowa				Mt. Vern. H'ls, Va.				
WGCP 1250				WIBA 1210				WJW 1210				
Newark, N.J.				Madison, Wis.				Mansfield, Ohio				
WGES 1360				WIBG 930				WJZ 760				
Chicago, Ill.				Elkins Park, Pa.				New York City				
WGH 1310				WIBM 1370				WKAQ 890				
Newsp't News, Va.				Jackson, Mich.				San Juan, P.R.				
WGHP 1340				WIBO 560				WKAR 1040				
Detroit, Mich.				Chicago, Ill.				E. Lansing, Mich.				
WGL 1370				WIBR 1420				WKAV 1310				
Ft. Wayne, Ind.				Steubenville, O.				Laconia, N.H.				
WGMS 1250				WIBS 1450				WKBB 1310				
Minneapolis, Minn.				Jersey City, N.J.				Joliet, Ill.				
WGN 720				WIBU 1310				WKBC 1310				
Chicago, Ill.				Poynette, Wis.				Birmingham, Ala.				
WGR 550				WIBW 580				WKBF 1400				
Buffalo, N.Y.				Topeka, Kansas				Indianapolis, Ind.				
WGST 890				WIBX 1200				WKBH 1380				
Atlanta, Ga.				Utica, N.Y.				La Crosse, Wis.				
WGTB 1010				WICC 1190				WKBI 1420				
Columbia, S. C.				Bridgeport, Conn.				Chicago, Ill.				
WGY 790				WIL 1200				WKBN 570				
Schnee'd'y, N.Y.				St. Louis, Mo.				Youngstown, O.				
WHA 940				WILL 890				WKBO 1450				
Madison, Wis.				Urbana, Ill.				Jersey City, N.J.				
WHAD 1120				WILM 1420				WKBP 1420				
Milwaukee, Wis.				Wilmington, Del.				Battle Crk., Mich				
WHAM 1150				WIOD 1300				WKBQ 1350				
Rochester, N.Y.				Miami Bch., Fla.				New York City				
WHAP 1300				WIP 610				WKBS 1310				
New York City				Philadelphia, Pa.				Galesburg, Ill.				
WHAS 820				WISN 1120				WKBV 1500				
Louisville, Ky.				Milwaukee, Wis.				Connersville, Ind.				
WHAT 1310				WJAC 1310				WKBW 1470				
Philadelphia, Pa.				Johnstown, Pa.				Buffalo, N.Y.				
WHAZ 1300				WJAG 1060				WKBZ 1500				
Troy, N.Y.				Norfolk, Nebr.				Ludington, Mich.				
WHB 860				WJAK 1310				WKEN 1040				
Kansas City, Mo.				Marion, Ind.				Buffalo, N.Y.				
WHBC 1200				WJAR 890				WKJC 1200				
Canton, Ohio				Providence, R.I.				Lancaster, Pa.				
WHBD 1370				WJAS 1290				WKRC 550				
Mt. Orab, O.				Pittsburgh, Pa.				Cincinnati, O.				
WHBF 1210				WJAX 900				WKY 900				
Rock Island, Ill.				Jacksonville, Fla.				Oklahoma City				
WHBL 1410				WJAY 610				WLAC 1490				
Sheboygan, Wis.				Cleveland, Ohio				Nashville, Tenn.				
WHBQ 1370				WJAZ 1480				WLAP 1200				
Memphis, Tenn.				Chicago, Ill.				Louisville, Ky.				
WHBU 1210				WJBC 1200				WLB 1250				
Anderson, Ind.				La Salle, Ill.				Minneapolis, Minn.				
WHBY 1200				WJBI 1210				WLCB 1310				
Green Bay, Wis.				Red Bank, N. J.				Muncie, Ind.				
WHDF 1370				WJBK 1370				WLB 1420				
Calumet, Mich.				Ypsilanti, Mich.				Kansas City, Ka.				
WHDH 830				WJBL 1200				WLBG 1200				
Gloucester, Mass.				Decatur, Ill.				Etrick, Va.				
WHDI 1180				WJBO 1420				WLBL 900				
Minneapolis, Minn.				New Orleans, La.				Stevens Pt., Wis.				
WHDL 1420				WJBT 770				WLBW 1260				
Tupper Lake, N.Y.				Chicago, Ill.				Oil City, Pa.				
WHEC 1440				WJBX 1210				WLBX 1500				
Rochester, N.Y.				Lewisburg, Pa.				L.I. City, N.Y.				
WHFC 1420				WJBW 1200				WLBZ 620				
Cicero, Ill.				New Orleans, La.				Bangor, Me.				
WHIS 1420				WJBY 1210				WLCI 1210				
Bluefield, W. Va.				Gadsden, Ala.				Ithaca, N.Y.				
WHK 1390				WJDX 1270				WLEX 1360				
Cleveland, Ohio				Jackson, Miss.				Lexington, Mass.				
WHN 1010				WJJD 1130				WLEY 1420				
New York City				Mooseheart, Ill.				Lexington, Mass.				
WHO 1000				WKS 1360				WLIT 560				
Des Moines, Ia.				Gary, Ind.				Philadelphia, Pa.				

WLOE 1500		WNBO 1200		WPG 1100	
Boston, Mass.		Washington, Pa.		Atl'ntic City, N.J.	
WLS 870		WNBE 1430		WPOE 1370	
Chicago, Ill.		Memphis, Tenn.		Patchogue, N.Y.	
WLSY 1210		WNBW 1200		WPOP 780	
Providence, R.I.		Carbondale, Pa.		Norfolk, Va.	
WLTH 1400		WNBX 1200		WPSC 1230	
Brooklyn, N.Y.		Springfield, Vt.		State College, Pa.	
WLW 700		WNBZ 1290		WPTF 680	
Cincinnati, Ohio		SaranacL'ke, N.Y.		Raleigh, N.C.	
WLWL 1100		WNJ 1450		WQAM 560	
New York City		Newark, N.J.		Miami, Fla.	
WMAC 570		WNOX 560		WQAN 880	
Cazenovia, N.Y.		Knoxville, Tenn.		Scranton, Pa.	
WMAF 1360		WNRC 1440		WQAO 1010	
S.D'rtm'th, Mass.		Greensboro, N.C.		New York City	
WMAK 900		WNYC 570		WQBC 1360	
Buffalo, N.Y.		New York City		Utica, Miss.	
WMAL 630		WOAI 1190		WQEZ 1420	
Washington, D.C.		San Antonio, Tex.		Weirton, W.Va.	
WMAN 1210		WOAN 600		WRAF 1200	
Columbus, Ohio		Law'nceb'g, Tenn		La Porte, Ind.	
WMAQ 670		WOAX 1280		WRAK 1370	
Chicago, Ill.		Trenton, N.J.		Erie, Pa.	
WMAY 1200		WOBT 1310		WRAW 1310	
St. Louis, Mo.		Union City, Tenn		Reading, Pa.	
WMAZ 890		WOBU 580		WRAX 1010	
Macon, Ga.		Charlest'n, W.Va.		Philadelphia, Pa.	
WMBA 1500		WOC 1000		WRBI 1310	
New ort, R.I.		Davenport, Iowa		Tifton, Ga.	
WMBC 1420		WOCL 1210		WRBJ 1370	
Detroit, Mich.		Jamestown, N.Y.		Hattiesburg, Miss.	
WMBD 1440		WODA 1250		WRBL 1200	
Peoria Hghts., Ill.		Paterson, N.J.		Columbus, Ga.	
WMBG 1210		WODX 1410		WRBQ 1210	
Richmond, Va.		Mobile, Ala.		Greenville, Miss.	
WMBH 1420		WOI 640		WRBT 1370	
Joplin, Mo.		Ames, Iowa		Wilmington, N.C.	
WMBI 1080		WOKO 1440		WRBU 1210	
Chicago, Ill.		P'ghkeepsie, N.Y.		Gastonia, N.C.	
WMBJ 1500		WOL 1310		WRC 950	
Pittsburgh, Pa.		Washington, D.C.		Washington, D.C.	
WMBO 1370		WOMT 1210		WREC 600	
Auburn, N.Y.		Manitowoc, Wis.		Memphis, Tenn.	
WMBQ 1500		WOOD 1270		WREN 1220	
Brooklyn, N.Y.		Gr. Rapids, Mich.		Lawrence, Kans.	
WMBR 1370		WOOP 840		WRHM 1250	
Tampa, Fla.		Jeannette, Pa.		Minneap., Minn.	
WMC 780		WOPI 1500		WRJN 1370	
Memphis, Tenn.		Bristol, Tenn.		Racine, Wis.	
WMCA 570		WOQ 1300		WRK 1310	
New York City		Kansas City, Mo.		Hamilton, Ohio	
WMES 1500		WOR 710		WRNY 1010	
Boston, Mass.		Newark, N.J.		New York City	
WMMN 890		WORC 1200		WRR 1280	
Fairmont, W.Va.		Worcester, Mass.		Dallas, Texas	
WMPC 1500		WORD 1480		WRUF 830	
Lapeer, Mich		Chicago, Ill.		Gainesville, Fla.	
WMRJ 1420		WOS 630		WRAVA 1110	
Jamaica, N.Y.		Jeff's'n City, Mo.		Richmond, Va.	
WMSG 1350		WOV 1130		WSAI 1330	
New York City		New York City		Cincinnati, Ohio	
WMT 600		WOW 590		WSAJ 1310	
Waterloo, Iowa		Omaha, Nebr.		Grove City, Pa.	
WNAC 1230		WOWO 1160		WSAN 1440	
Boston, Mass.		Ft. Wayne, Ind.		Allentown, Pa.	
WNAD 1010		WPAP 1010		WSAR 1450	
Norman, Okla		New York City		Fall River, Mass.	
WNAX 570		WPAW 1210		WSAZ 580	
Yankton, S.D.		Pawtucket, R.I.		Hunt'gton, W.Va.	
WNBZ 1500		WPCC 560		WSB 740	
Bingh'mt'n, N.Y.		Chicago, Ill.		Atlanta, Ga.	
WNBH 1310		WPCH 810		WSBC 1210	
New B'd'f'd, Mass.		New York City		Chicago, Ill.	
WNBJ 1310		WPEN 1500		WSBT 1230	
Knoxville, Tenn.		Philadelphia, Pa.		South Bend, Ind.	

WSFA 1410	WTAQ 1330	XEB 670
Montgomery, Ala.	Eau Claire, Wis.	Mexico City
WSGH 1400	WTAR 780	XEE 960
Brooklyn, N. Y.	Norfolk, Va.	Pueblo, Pue.
WSIX 1210	WTAW 1120	XEF 1130
Springfield, Tenn.	College Sta., Tex.	Oaxaca, Oax.
WSJS 1310	WTAX 1210	XEH 970
Winst.-Sal., N. C.	Streator, Ill.	Monterey, N.L.
WSM 650	WTBO 1420	XEI 1000
Nashville, Tenn.	Cumberland, Md.	Morelia, Mich.
WSMB 1320	WTFI 1450	XEN 730
New Orleans, La.	Toccoa, Ga.	Mexico City
WSMK 1380	WTIC 1060	XES 1200
Dayton, Ohio	Hartford, Conn.	C. Lerdo, Dgo.
WSOA 1480	WTMJ 620	XEX 920
Chicago, Ill.	Milwaukee, Wis.	Mexico City
WSPD 1240	WTNT 1490	XEY 550
Toledo, Ohio	Nashville, Tenn.	Merida, Yucatan
WSSH 1360	WTOC 1260	XFA 540
Boston, Mass.	Savannah, Ga.	Mexico City
WSUI 880	WWAE 1200	XFC 630
Iowa City, Ia.	Hammond, Ind.	Jalapa, Ver.
WSUN 620	WWJ 920	XFF 920
St. Petersb'g, Fla.	Detroit, Mich.	XFG 640
WSVS 1370	WWL 850	Mexico City
Buffalo, N. Y.	New Orleans, La.	XFI 590
WSYR 570	WWNC 570	Mexico City
Syracuse, N. Y.	Asheville, N.C.	XFX 840
WTAD 1440	WWRL 1500	Mexico City
Quincy, Ill.	Woodside, N.Y.	
WTAG 580	WWVA 1160	
Worcester, Mass.	Wheeling, W. Va.	
WTAM 1070	XEA 1200	
Cleveland, Ohio	Guadalajara, Jal.	

## The Short Wave Stations

Call	Station	Owner	City and State	Meters	Watts
W1XAA	WRAH	Stanley N. Read	Providence, R. I.		75
W1XAB	WCSH	Congress Square Hotel Co.	Portland, Maine	63.79	250
W1XAE	WBZ	Westinghouse Elec. & Mfg. Co.	Springfield, Mass.	70.0	
W1XAF	WEEL	Edison Elec. Illuminating Co.	Boston, Mass.		
W1XAG		Edison Elec. Illuminating Co.	Boston, Mass.		
W1XY	WBRL	Booth Radio Laboratories	Tilton, N. H.	105-109	250
W2XA	WRMU	Yacht, "MU-1" Grebe Co.	New York		
W2XAC	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAD	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAE	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAF	WGY	General Electric Co.	Schenectady, N. Y.	32.7	
W2XAG	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAH	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAK	WGY	General Electric Co.	Schenectady, N. Y.		
W2XAL	WRNY	Aviation Radio Station, Inc.	New York	30.91	500
W2XAO		Atlantic Broadcasting Co.	New York	105.9	100
W2XAQ	WOR	L. Bamberger Co.	Newark, N. J.	65.4	50
W2XAW	WGY	General Electric Co.	Schenectady, N. Y.		
W2XBA	WAAM	WAAM, Inc.	Newark, N. J.	65.18	50
W2XBH	WCGU	Chas. G. Ungar	Coney Island, N. Y.	54.02	150
W2XE	WABC	Atlantic Broadcasting Co.	Richmond Hill, N. Y.	21.1	50
W2XZ		National Broadcasting Co.	Bellmore, L. I.	49.15	50000
W3XX		C. Francis Jenkins Labs.	Washington, D. C.		
W3XL	WJZ	Radio Corp. of America	Bound Brook, N. J.	59.96	30000
W3XN		Bell Telephone Laboratory	Whippany, N. J.		
W4XD	WSM	Nat'l Life & Accident Ins. Co.	Memphis, Tenn.	31.43	
W4XE		William Justice Lee	Winter Park, Fla.	200.	250
W6XA	KNX	Los Angeles Express	Los Angeles, Cal.	107.1	100
W6XAD	KFWO	Lawrence Mott	Avalon, Cal.	53.07	100
W6XAF	KNRC	Clarence B. Juneau	Santa Monica, Cal.	108.2	100
W6XAI	KGGM	Los Angeles Radio Club	Los Angeles, Cal.	66.04	50
W6XAK	KFWH	F. W. Morse	Chico, Cal.	108.2	50
W6XAL	KFQZ	L. E. Taft	Hollywood, Cal.	66.04	50
W6XAN	KRLO	Freeman Lang	Los Angeles, Cal.	105.9	250
W6XAR	KJBS	J. Brinton & Sons	San Francisco, Cal.	32.	50
W6XAU	KHJ	Times-Mirror Co.	Los Angeles, Cal.	104.1	50
W6XAX	KGO	General Electric Co.	Oakland, Cal.	10-40	10000
W6XAZ		Nelson Radio Co.	San Diego, Cal.	106.	50
W6XBA	KFSG	Air-Fan Radio Corp.	Los Angeles, Cal.	108.2	250
W6XBE	KFBC	W. K. Azbill	San Diego, Cal.		
W6XBH	KFQU	W. B. Riker	Holy City, Cal.	31-106	50

W6XBR	KFWB	Warner Bros. Picture Studio	Los Angeles, Cal.	40-105	50
W6XBV	KGER	C. Merwin Dobyns	Long Beach, Cal.	48.86	
W6XBX	KFVD	McWhinnie Electric Co.	Venice, Cal.	105.	50
W6XN	KGO	General Electric Co.	Oakland, Cal.	10-40	10000
W7XAB	KFPY	Symons Investment Co.	Spokane, Wash.	105.9	
W7XAO	KWJJ	Wilbur Jerman, Inc.	Portland, Ore.	53-54	100
W7XC	KJR	Northwest Radio Service	Seattle, Wash.	105.2	
W7XO	KJR	Northwest Radio Service	Seattle, Wash.		
W8XAC	WHAM	Stromberg-Carlson Tel. Mfg. Co.	Rochester, N. Y.		
W8XAL	WLW	Crosley Radio Corp.	Cincinnati, Ohio	52.05	500
W8XOA	WJR	WJR, Inc.	Detroit, Mich.	32.	75
W8XF	WHK	Radio Air Service Corp.	Cleveland, Ohio	66.04	500
W8XJ	WEAO	Ohio State University	Columbus, Ohio	54.02	250
W8XK	KDKA	Westinghouse Elec. & Mfg. Co.	Pittsburgh, Pa.	62.5	40000
W8XP	KDKA	Westinghouse Elec. & Mfg. Co.	Pittsburgh, Pa.	10-150	500
W9XAB	WNAL	R. J. Rockwell	Omaha, Nebr.	105.	50
W9XU	KOIL	Mona Motor Oil Co.	Council Bluffs, Iowa	61.06	500

## Radio's Magic Shatters Prison Gloom

(Continued from page 23)

find nothing to do, his experiences in the war had somewhat overturned his scale of social values, and he descended to "hi-jacking" for a livelihood. Capture and a long prison sentence quickly followed. . . . Once a hero, today, frail and broken, shunted and forgotten. But, thanks to radio, he will find some surcease from his troubles and cares. Tomorrow, instead of a one-tube set, a five-tube set will be transferred to the tubercular ward for his use.

Today we have the radio and long for liberty, just as much as ever, but we realize that liberty can only be gained by good behavior. We learn that opportunities exist on the outside for those of us who would live the right kind of life; and when I say that radio is making better men of us all and creating a desire within us to live a better life, I'm expressing the thought of every man in here.

Radio, the best panacea for inescapable loneliness, has softened adamant hearts, raised criminals out of themselves, torn down the limits of steel and stone, and led the nameless, disgraced, forgotten, into the brightness, happiness, freedom and fellowship of the outside world. It has done more to enlighten, instruct, and create a desire, in the prisoner, to return to respectability than all the legislation our assemblies can enact with the view of diminishing crime in this country.

Ollie Meloay, No. 52607,  
Ohio State Penitentiary,  
Columbus, Ohio

## The Radex Library

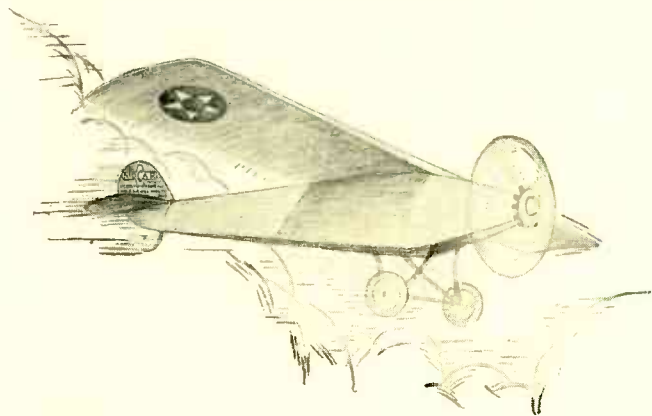
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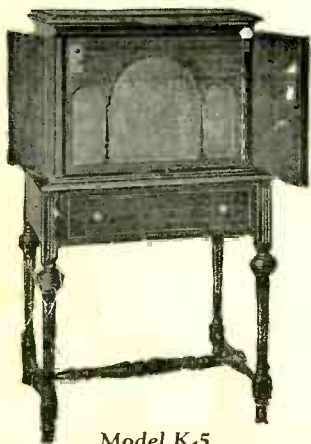
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Combined with 210 Power Amplifier and "B" Supply Unit



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