

N.S.E.

THE JANUARY 1937

25¢

# RADIO INDEX

The All-wave DX Log of the World



Mystery Contest

Television Developments

Prize Letters

No. 105

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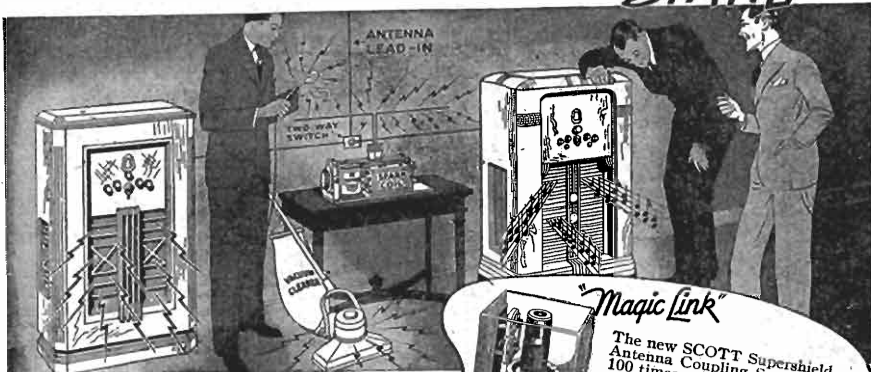
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# **The Radex Press, Conneaut, O.**

# SENSATIONAL *New* SCOTT "MAGIC LINK" CONQUERS "Man-Made" STATIC



**23 Tube High Fidelity SCOTT Equipped  
with "MAGIC LINK" IN AMAZING DEMONSTRATION  
PROVES QUIET FOREIGN RECEPTION**

**NOW POSSIBLE IN BAD RECEIVING LOCATIONS**

On Wednesday, October 7, 1936, at the SCOTT Radio Laboratories, a small group of radio engineers and short wave enthusiasts were shown, for the first time, the latest development of the SCOTT Research Laboratories. They intently watched two radio sets at one end of a room—both connected to the same lead-in with a two-way switch, and both tuned in to DJB, Germany, 15.20 megacycles.

### Germany Blotted Out

Suddenly, within three feet of these receivers, a terrific barrage of interference was turned on—from a violet ray machine, vacuum cleaner and automobile ignition coil, buzzing out streams of "man-made" static! What happened? From one receiver came a deafening roar such as you would hear in a boiler factory—and the program from Germany was completely blotted out!

### Clear with "Magic Link"

The two-way switch on the antenna was then thrown to the 23-tube SCOTT equipped with the sensational new "MAGIC LINK", the SCOTT Supershield Antenna Coupling System, and from Germany, over 4,000 miles away, the program came in as crystal clear, strong and enjoyable as a local station—all without the slightest trace of "man-made" static from the violet ray machine, vacuum cleaner and spark coil, each crashing and spluttering only three feet away from the antenna lead-in.

### E. H. SCOTT RADIO LABORATORIES, INC.

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630 Fifth Avenue,  
New York, N. Y.

115 N. Robertson Blvd.,  
Los Angeles, Cal.

Builders of the World's Finest Custom-Built Radios Since 1924

### Quiet Foreign Reception Now Possible for First Time in Many Locations

#### WHAT SCOTT SUPERSHIELD ANTENNA COUPLING SYSTEM ACCOMPLISHES

1. Doubles sensitivity or distance-getting ability of antenna and receiver combination, as compared with best results with any previous noise-reducing antenna with inefficient shielded coupler.
2. Improves antenna lead-in signal to noise ratio by 100 to 1 over best previous accomplishment of any antenna.
3. Eliminates shielded coupler switch. Switching from broadcast to short wave bands is automatic with SCOTT Supershield Antenna Coupling System.

The climax of 8 years of tireless research, this sensational new development means that "man-made" static caused by electrical appliances and picked up on the lead-in has, for the first time, been conquered without loss of signal strength! Up to

The new SCOTT Supershield Antenna Coupling System—any other "noise reducing" system in slashing away from the lead-in "man-made" static so disturbing to enjoyable, dependable foreign reception.

this time foreign reception from England, Germany, France, Italy and many other foreign stations has been spoiled for thousands of residents of apartment buildings, hotels and homes by the static from electrical appliances picked up on the antenna lead-in. Now these programs can be heard clearly, quietly, regularly—with the 23-tube SCOTT equipped with the new SCOTT Supershield Antenna Coupling System.

### COMPARE IN YOUR OWN HOME

We invite you to make a 30-day side-by-side comparison test of the SCOTT against any other receiver, regardless of price. If the SCOTT does not bring in foreign and domestic stations with more volume, greater clarity, and with finer and more natural tone, we will refund your payment price without question.

Send TODAY for complete proof—and full description of this remarkable new development that now makes possible in conjunction with the 23-tube FULL RANGE HIGH FIDELITY SCOTT Receiver, unparalleled tone, and distance performance in every continent of the globe. Discover this vast new world of radio entertainment you will never hear without a SCOTT. SEND COUPON NOW.



### FREE-SEND TODAY FOR DETAILS

E. H. Scott Radio Laboratories, Inc.  
4424 Ravenswood Ave., Dept. 15A7,  
Chicago, Ill.

Send details of unequalled D X Tone of 23 Tube SCOTT with new "Magic Link" Antenna Coupling System.

Name .....

Address .....

City.....State.....

**JANUARY 1, 1937**



# RADIO INDEX

Reg. U. S. Patent Office

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THIRTEENTH YEAR

NUMBER 105

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NBC—Blue on Sundays at 3:15 p. m.

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# Here and There in RADIO

## • • • TELEVISION IS HERE

**T**ELEVISION, like the will-o-wisp a year ago, is now a reality. It is still called "experimental," to be sure, but it has been taken out of the secret chambers of the laboratories and exhibited openly for the first time.

Four demonstrations were held in New York City during the celebration of the Tenth Anniversary of the inauguration of the National Broadcasting Company. Everyone who attended, broadcasting officials, visiting European radio men, newspaper men and others, was deeply impressed with the progress our engineers have made. Naturally, the RCA television is not yet at its highest perfection, but the pictures are large, fairly steady, clear and recognizable. Many kinks and "bugs" have to be ironed out, but television is ready for its greatest test, its reception by the American public.

It is planned by RCA and NBC to establish public "looking-in" stations in various large cities where the people as a whole may see and know what is in store for them. These posts will be established some time this year.

At the demonstrations two different kinds of televisors were used. In some of the models a kinescope tube with a diameter of nine inches was used, and in others a 12-inch tube was employed. The 9-inch tubes framed pictures 5½ by 7 inches in size, and the larger tubes painted pictures 7¼ by 10½ inches. The 9-inch kinescope showed the pictures in a bluish green hue while yellowish pictures were seen on the other. Engineers seem to be satisfied with both tubes, but those who witnessed the demonstrations did not agree which of the two colors was the most pleasing to watch.

Each receiver had 31 tubes in ad-

dition to the kinescope tube, and fourteen control knobs were required. The kinescope is something like an ordinary oscillograph tube, and on its round end the pictures are painted. In one of the experimental sets the image was viewed directly on the tube, and in the other model the picture was reflected onto a mirror.

Lenox R. Lohr, President of the NBC, pointed out that television receivers will not be ready for the public until the number of scanning lines and speed of transmission can



*A view of the NBC television studio where a program is being broadcast for sight and sound. Inside the two "iconoscope" cameras the image of Grace and Eddie Albert is changed from a visual thing to electrical impulses. This magic is accomplished, principally, by the iconoscope tube, which is to the iconoscope camera what film is to an ordinary camera. One of the cameras is mounted on a dolly so it can be moved around, focusing in many different ways on the subject without interrupting the transmission.*

be agreed upon. It is necessary that the transmitter and receiver be perfectly synchronized to receive pictures, and these standards wait to be officially established by the Communications Commission. Even when that time arrives, picture reception will be a city service until some method is learned whereby the ultra-high frequencies, necessary for pictures, can be transmitted over greater distances than at present.

It is with pleasure that RADEX presents, this month, the first television pictures released by the NBC. We are pleased to announce also that Mr. Dashiell, our Technical Editor, will prepare a series of articles explaining, in simple language, how pictures are transmitted and received. This series will commence in an early issue and readers desiring knowledge of this fascinating new art should not miss a single chapter.

#### **KDKA Aerial Destroyed**

Construction of the new vertical aerial for KDKA at Saxonburg, Pa., was temporarily suspended when the partly-completed radiator was blown down in a windstorm. The aerial, which was to have been a steel mast 710 feet high and only 5½ feet wide at its widest part, incorporated features hitherto unused in broadcasting. It was to provide sky wave suppression of high degree and greatly enlarge the non-fading listening service area.

The writer had the pleasure of visiting the KDKA transmitter site late last summer and was shown around the grounds by the operator on duty, Mr. W. Floyd Stuebgen, who supplied the information used here.

Saxonburg is a little village in Butler County, situated nine miles south of Butler and 28 miles north of Pittsburgh. The transmitter building is located on a hill a mile out of the town and commands an excellent view of the entire sur-



*W. Floyd Stuebgen*

rounding country. The aerials in use at that time were mounted on 90- to 100-foot poles, brought at great expense from the forests of Oregon where trees grow tall and straight as arrows. The broadcasting antenna was of the conventional horizontal type, while all the short-wave antennae were vertical except the 49-meter radiator. All the short-wave transmitters (except the ultra-shortwave) and the broadcast station are housed in the same building. The 400,000 watt station W8XAR, in use a few years ago, has been dismantled.

With the construction of the new radiator it was also planned to completely modernize the transmitter building and make room for a 500 kw station. Application has been made to the FCC for permission to use the high power but it is doubt-

ful now when permission will be granted since the Commission has decided to shelve all these applications.

The aerial which was destroyed was to have been held in position by two sets of guy wires, half of them being attached at 1/3 and the others at 2/3 of its height. The weight of the entire mast would have been supported by a porcelain insulator only 18 inches in diameter.

Engineers have announced that construction of a new aerial will proceed immediately.

### **KGKO Moves to Ft. Worth**

Station KGKO, Wichita Falls, Texas, was recently authorized by the FCC to move into Fort Worth, where it will become a NBC-Blue Network outlet. Coincident with this announcement comes news of a new company, the West Texas Broadcasting Co., which seeks permission to erect a new station in Wichita Falls to work on 1380 kcs. with 1000 watts, full time. Stockholders in the new company are also officers and directors of the Wichita Falls Times and Record-News. KGKO was sold to Mr. Amon Carter, publisher of the Fort Worth Star Telegram and owners of station WBAP at Fort Worth.

### **Australian and Asiatic News**

Mr. A. I. Breen of the New Zealand DX Radio Association sends a list of alterations of Australian stations. DXers should make these changes in the Foreign Broadcasting Station indices in the December, 1936 issue of RADEX.

2LM at Lismore came on the air on 900 kcs. instead of the 1340 kcs. channel.

3MA, Mildura, and 4WK, Warwick, have both moved to 1360 kcs.

2MO, as forecast, is now operating on 1370 kcs. This station is located at Gunnedah.

The Warrnambool station, 3YB, is

now on 1210 kcs.

4MK, Mackay, has been on 1080 kcs. for the past several weeks.

2DU, Dubbo, is now on 660 kcs. with 7BU and still does not verify reports. These two similar calls on the same frequency make logging difficult unless the location is distinctly heard.

3SH, Swan Hill, is now heard on 1130 kcs.

VUD, at New Delhi, India, is on 882 kcs. with an aerial power of 20 kw. Mr. C. W. Goyder, the Chief Engineer, states that reports will be verified for return postage, but we have yet to hear of anyone receiving a reply.

The Colombo, Ceylon, station VPB, uses the same call sign for the long and short wave transmitter, according to the Chief Telecommunication Engineer, Central Telegraph Office, Colombo. The broadcast transmitter is on 700 kcs. with 1000 watts, but this is to be increased to 5000 watts about next February.

VUM in Madras, India, is operated by the Corporation of Madras, Electrical Department, Ripon Buildings, Park Town P. O., Madras. Its frequency is 769.230 kcs. and the power, 100 watts. Mr. Breen says he believes the Indians must have a sense of humor. The letter from Madras is endorsed "all letters must be addressed to the Electrical Engineer by designation and not by name." The name of the Engineer is M. R. Ry. Rao Bahadur C. V. Krishnaswami Chetty Garu, M. B. E., B. A., B. Sc. (Tech.), AMIEE, M. I. E. (Ind.).

### **Quaker State Network Formed**

Mr. Donald Withycomb, general manager of WFIL, announced the formation of a regional chain of sixteen radio stations under the banner of the Quaker State Network, for the purpose of supplying commercial advertisers with concentrated coverage in the rural and urban markets of Pennsylvania. The net-

work consists of the following stations: WAZL, Hazleton; WBRE, Wilkes-Barre; WCBA, Allentown; WEST, Easton; WFBG, Altoona; WFIL, Philadelphia; WGAL, Lancaster; WGBI, Scranton; WJAC, Johnstown; WKBO, Harrisburg; WKOK, Sunbury; WLEU, Erie; WORK, York; WRAK, Williamsport; WRAW, Reading; WTBO, Cumberland, Md.; and WWSW, Pittsburgh. Negotiations are under way to add a New York outlet. Plans have also been completed to provide a number of stations with sustaining service, most of which will come from WFIL.

The NBC Blue Network continues to expand. The 500 watt KGBX at Springfield, Mo., was recently added to this system, as well as WEBR at Buffalo and WABY at Albany.



The RCA television receiver. This set employs 30 tubes and is controlled by 14 knobs. Only 70 of these experimental sets were built. When they are placed on the market the number of tubes and knobs will be greatly reduced. These receivers pick up the sound as well as the pictures.

## Guess Again, DX'ers!

(Compiled by Roy Covert)

1. The call letters KVCV stand for ....?
2. The Voice of Denver is ....?
3. What station has the permission of the government to boast, "We excel"?
4. What do the call letters KGGC signify?
5. What 100-watt station in the east has a "booster" of 50-watts synchronized with it on 1370 kcs.?
6. What might the letters KFRC mean?
7. What were the original call letters of KSFO; what did they mean; what does the present call stand for?
8. Why are 1200, 1210, 1370, 1420, and 1500 kcs. known as the "graveyard channels"?
9. What station's call letters are paradoxical?
10. What is the favorite sign-off signal of many stations?

(Answers on page 36)

## Mystery Contest

We are pleased to announce that the Grand Prize in the Second RADEX Mystery Contest will be the latest 23-tube Scott High-Fidelity Receiver. We consider that we are very fortunate to be able to offer this fine receiver, and we know that contestants will have an award well worth the winning.

The contest will take place on the mornings of Feb. 20, 21 and 22, and full details will be given in the February issue of RADEX. All entries must be submitted on the standard forms which will be forwarded upon receipt of the 25c entrance fee.

As an added feature of this year's contest, we will give place prizes to contestants who finish 50th, 100th, 150th, etc. in the final standing. Awards for these places have not been decided upon but some will be subscriptions to RADEX.



## BCB Prize Letter

*S. R. Lewis, 1733 Kensington Rd.,  
Toledo, Ohio*

The other morning while waiting for the frequency checks to begin, I was listening to W9XBY and came across a little program which did me more good than half-a-dozen European or Australian catches. There was nothing in the way of DX to the whole thing, but it was heard during a regular DX session and perhaps may be recorded in that classification.

The announcer was interviewing one of the students at the radio and television school which operates the station. Frank Collins was just one of scores of others striving to solve the mysteries of the medium which brings daily enjoyment to so many millions.

Unlike the others, Frank is blind. He cannot see the text in the books or the diagrams on the blackboards. He must feel his way among the condensers, resistors, coils and tubes of radio receivers. He must adjust dials and knobs by touch and hearing. Which sense he employs when soldering connections is a mystery to me, and heaven alone knows how he can read scales and meters.

But Frank is in radio to stay. He has serviced receivers for two years—and made a living at it. He isn't just sure what branch of the field he will choose when he completes his training, but he is determined to prepare himself for his life's work and nothing will stop him.

We unfortunates who have our sight and still think life is hard, should put on a blindfold some night and try to tune a radio. Then locate some trouble in the "in-nards" by touch and hearing alone. Trace a wiring diagram and see how easy it is to solder a couple of wires.

We all can learn something of the

## SW Prize Letter

*By Paul Dilg, Evanston, Ill.*

For a long time I have been curious to know how many air miles a week's tuning on shortwaves would cover. During my recent vacation period I could think of no better way to spend a week of the time than by turning the dials of my new 23-tube Scott and finding the answer to my question. The results I obtained during the week's tuning are, without question, quite startling.

I kept a record of every station heard broadcasting entertainment, excluding Canadians and Mexicans and at the end of each day computed the number of miles I had covered. Tuning was confined to regular hours, the earliest in the morning being at 5:50 am, and the latest I was at the dial was at 10:50 pm.

On Sunday I traveled the least, covering only 239,000 miles, while Friday's tuning took me the greatest distance, 336,000 miles. During the seven days I journeyed the astounding total of 2,039,800 miles, visiting 105 different stations in 37 countries on every continent.

---

very special brand of courage possessed by Frank Collins of Reubens, Idaho.

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On this page are reproduced two letters which the Editors have selected as being the best received in last month's mail. Readers are invited to write, telling us which they believe to be the most interesting, and a year's subscription to RADEX will be donated to the person who wrote the letter receiving the greater number of votes. Let us have your letters. You may win a subscription to your favorite magazine next month.

# A Christmas Gift that comes ten times a year

*Make up your gift list now.*

Give RADEX to your friends for a year around reminder of your affectionate thoughtfulness. Remember especially the shut-ins to whom radio is a chief joy.

An attractive Christmas Gift Card will be sent to announce on Christmas Day your name and gift. Or we will mail the cards direct to you to be forwarded with a message in your own writing, if you so request.

## *Special Christmas Rates*

*(Good only until Dec. 31, 1936)*

The subscription price of RADEX is \$1.75 per year. At this time only, we will accept subscriptions three for \$4.50, two for \$3.25, or one for \$1.75. Each year that you order counts as one subscription. Your own subscription (new or renewal) may be included at these rates.

## *Christmas Order Form*

The Radex Press, Conneaut, Ohio.

Please enter the following subscription to RADEX and send Gift Announcements for Christmas Day.

Name .....  
Please print  
Address ..... New   
Renewal   
City ..... State ..... 1 or 2  
Years? .....  
Send Gift Card to recipient  Send Gift Card to me

Name .....  
Please print  
Address ..... New   
Renewal   
City ..... State ..... 1 or 2  
Years? .....  
Send Gift Card to recipient  Send Gift Card to me

And enter my own subscription (new  or Renewal ) at the special Christmas rate for ..... year(s).

I enclose \$..... in payment.

Name of person sending order .....

Address .....

# The Monthly DX CLINIC

• • • By CARLETON LORD

**F**OR some time it has been apparent that something is wrong with DXing. The impression is one of those vague sensations which cannot be traced directly, yet is evident to all who stop to consider.

It may be that the art of fishing for distant stations no longer offers the same thrills of former years and that, as a consequence, the old-timers are losing interest. It is a matter of record that listeners who kept us busy with reports a few seasons ago, are seldom heard from today.

It is possible that the leadership which raised DXing to a high standard is lacking. A newer generation has come along and, finding that the hobby was ably handled by the veterans, contented themselves by becoming followers instead of potential directors.

The wolves that howl over outstanding reports of reception have undoubtedly caused the withdrawal of many listeners from active DXing. Even today, not a few prominent DXers refuse to submit reports for publication in even their own club bulletins, for fear of becoming targets for promiscuous pot shooting.

The increased tendency of many stations to broadcast all-night programs receives its share of blame.

But the real menace to DXing as we know it today is probably concealed in what has been considered the most important phase of the hobby—Courtesy Programs work. Here is the real obstacle to the continued prosperity of midnight marauding.

Time and again in the past we have warned against the dangers of over-activity in this field. We have contended that floods of special programs could only work to the detri-

ment of station and listener alike. Radio club officials have privately agreed with this point of view, but zealous CPCers continue to labor overtime lining up as many DX broadcasts as possible.

The larger clubs have condemned the smaller organizations for entering the already crowded field. The small clubs steadfastly maintain that the big organizations have more than their share as it is.

As a solution for the problem, we offer the suggestion of Arthur R. Willis, 103 Stanley St., St. Thomas, Ont., who writes:

"The Clearing House Plan worked out very well during the last DX



*Hildegard, lovely singer from Paris, London and Vienna, who was starred on the NBC press demonstration of RCA experimental television. She sang two numbers at the demonstration, playing her own piano accompaniment for one. She is a native of Wisconsin but won her greatest success at smart European cafes.*

season, but there still seems to be something wrong with the whole plan of arranging special programs. I should not criticize too harshly unless I was able to offer what I felt was a better plan.

"My idea is to contact the heads of the various DX clubs, with the idea of forming a Co-Operative Programs Scheme." Let this be a committee composed of CPC workers from all the clubs. Each committeeman would be assigned to specified frequencies and would be at liberty to get as many special programs as he deemed wise. All programs so arranged would be dedicated to all DXers in America, and each co-operating club would list the broadcasts in its bulletin.

"With only one CPCer working on a given frequency, clashes of programs would automatically be eliminated. By receiving requests from but one source, stations would be more willing to broadcast special programs. With members of all clubs listening to a certain broadcast, the station would undoubtedly receive a better response than at present.

"The co-operative scheme would apply only to the scheduling of programs. Beyond that, each club would be on its own as at present. It would continue to publish DX news, tips, discussions and other topics of interest, striving only to improve the quality of its publication and to render better service to its members."

We can anticipate some of the protests to this idea. The prestige of a club would suffer if it no longer received specific dedications. A club would lose its identity if its courtesy programs committee was abolished. And so on.

However, we are inclined to doubt the real importance of this point insofar as the fundamental purpose of the club is concerned. The members want special DX broadcasts and, if they can receive a needed station, it

really matters little whether the program is dedicated to the NNRC, CDXR or NRC. Although important, the DX calendar occupies but a very small portion of a club bulletin, and the scope of a club's activi-



*A famous radio lady. Emily Griswold of West Hartford, Conn., Operator of the Clearing House for DX Programs. It is her job to check all the special programs arranged by the various DX Clubs.*

ties is by no means limited to the publication of DX tips.

The suggestion is merely passed on the RADEXers for discussion and comment. We trust that it may receive some consideration when radio club officials make their plans for next season.

### Prize Letter

As announced in the December issue, we are going to award a year's subscription to RADEX each month

to the reader who sends in the most interesting letter. Two letters from the monthly mail will be selected for publication in their entirety, one covering the short waves and the other the broadcast band. Readers will then vote on which one they prefer.

While the December issue appeared too late for many readers to get letters mailed, we have selected a communication from S. R. Lewis, 1533 Kensington Rd., Toledo, Ohio, as being just about what we want for the broadcast band entry.

Incidentally, it was a story by Mr. Lewis in the May RADEX that started another discussion on what was possible in DXing. He claimed that, in June 1934, he had verified all but two of the active stations in the United States. In our October issue, Malcomb L. Gavin felt that this was not possible under our radio set-up. Another to take issue with the claim is William Buchanan, 189 Park St., Sydney, N. S.

"I don't see how a person can verify all but two stations," he writes, "as there are a lot of stations on the East and West Coasts which use 100 watts and less, and operate only during the daytime. I was telling a friend about this, and the only thing he could say about it was that Mr. Lewis must have moved around a lot."

We will not attempt to decide what percentage of stations may be heard, but we have a sneaking suspicion that several other listeners have come pretty close to having all active stations verified. Perhaps they will write in, telling us how close they came and how they did it.

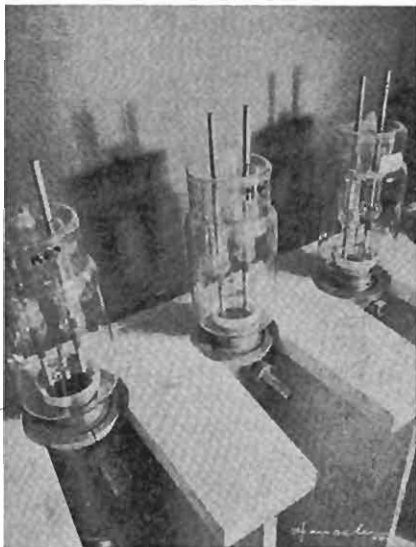
#### Verifying Non-Verifiers

"In the November issue of RADEX," reminds Alexander Maley, 738 Emerson Ave., Elizabeth, N. J., "you quoted a letter from WJRD which said they would not verify reports. At this time, I had a report out to them and was quite disappointed. However, I tried sending them a typewritten verification card

for them to sign and return. The card just came back and J. R. Doss who signed it, wrote: 'Thanks! Glad to hear from you any time.' "

"Good thing all stations aren't like KASA and WJRD," briefs R. E. Everly, Newton, Ill., "or DXing would be pretty thin soup. It must be terrible to be so self-centered in civic pride that you can't enjoy a good report from a DX fan. Thank Heaven we have stations like KBIX, KCMO and a few others who do appreciate a report and who aren't so rushed that they can't answer when postage is enclosed."

"Besides WJRD and KASA," points out Arthur H. Brackbill, Lancaster, Pa., "you should add WMFO, KGKY and WHJB to the list of non-verifiers. WHJB used to verify, but it is impossible to get any sort of an answer from them now. WMFO is owned by the same firm as WJRD, so it is obvious that they will not



The high-frequency tubes shown here are used in RCA's television transmitting station in the Empire State Building. In the tube room 220 tubes, worth more than \$25,000, are kept in reserve at all times. The tubes pictured amplify the picture signal.

verify and they announce that fact. KGKY has not been known to verify for more than five years, despite the fact that your magazine has always listed them as doing so."

According to back issues of R-DEX, KGKY verified reception during the 1931-32 season. For the next three years, they refused confirmations and were listed accordingly. In reply to our most recent questionnaire, which was postmarked at Scottsbluff on September 9, 1936, they are now verifying correct reports and are so listed. However, we do not have any reports for this season on whether or not they live up to that promise.

From Mr. Maley's letter, WJRD has verified at least one report on a prepared verification card. The writer has a similar card from WMFO, which covered reception of their September 12th frequency check and was signed by J. L. Doss. In fact, the card was postmarked in Decatur six days after the report had been mailed.

"We DXers are lucky and don't know it," observes Warren Winkley, Ahwahnee, Calif. "All we have to do is turn knobs and listen, while someone else does all the work. When a station wants to put on a special DX program, it must get permission from the F.C.C. to be on the air (if it's a daytime station), pay help for conducting the program, pay bill for running transmitter, and answer all requests for verification. All this to satisfy some listener in Siwash, Kenhio. And if the verie isn't received in a hurry, the station is blackballed. Such people are we!"

### Special Programs

"I am enclosing a list of special programs for the purpose of making frequency measurements," advises Everett L. Dillard of the Commercial Radio Equipment Co., Kansas City, Mo. "These broadcasts have been arranged so that we check the stations when their channels are known

to be reasonably free from interference. We are forwarding this information for the benefit of listeners who might not be able to hear these stations at other times."

The list of stations so kindly forwarded by Mr. Dillard includes KTSA, KWBG, WACO, KNOW, KASA, WJAG, KPOF, WRR, KIUL, KGFV, KADA, KBIX, WPAD and WSUI. The transmission from WSUI is scheduled for either the last Wednesday of the month or the first Wednesday of the next month from 0130 to 0200 EST. The other broadcasts are fixed and are so listed in the DX calendar.

"Station WCOP will broadcast a special DX tip program every Saturday morning from 0600 to 0700 EST," advises Chief Announcer Morton Blender of the station. "Joe Lippencott, an NNRC director, will preside at the microphone with DX tips and I will assist with recordings and general news of the wireless world. Reports will be verified and graded, and they should be sent to Mr. Lippencott at Box 2, Tufts College, Boston, Mass. Radio clubs desiring dedications will please form a line to the right. We'll take care of them all at any time."

"Some of your West Coast listeners may be interested in our schedule of wrestling broadcasts," submits Duke McLeod, Business Manager, Station CFCT, Victoria, B. C. "We have shows with nationally known wrestlers, and our broadcasts work in with similar accounts from Portland, Salt Lake City, Seattle and Vancouver to give the wrestling fan a complete week of entertainment. The broadcasts commence at 0015 EST every Saturday night. We also invite listeners to tune in our weekly DX program from 0300 to 0500 EST Sunday mornings."

### Concerning Aerials

"By staying up all night for three days," reports Jack Anderson, R.F.D. 2, Duncan, B. C., "I managed to log 51 new stations and bring my

log up to 401 stations. Included in the total are three stations in New Zealand, three in Australia, nine in Japan, and one in China. All of these were heard on a little 5-tube Victor of 1932 vintage.

"I think the secret of some of the better catches is my aerial. I have 100 feet of wire strung between two tall trees and passing over the top of my house. The lead-in has to be 90 feet long to reach the ground level."

"Four or five years ago, when I stated that an aerial was directional, you replied 'not so!'" reminds "Pretzelite," Allentown, Pa., and formerly of Reading. "Your October magazine agrees with my first statement. I am now using a bird-cage type of aerial, which is constructed in a zeppelin shape with six zinc plates. There are two disks 15 inches in diameter, two 10 inches, and two of 5 inches. A total of 100 feet of 14 gauge wire is used to make the cage, which is but 10 feet long. String it horizontally, it works well and good. Hanging it vertically, I seem to bring in more stations, but with less volume."

#### Becoming a DXer

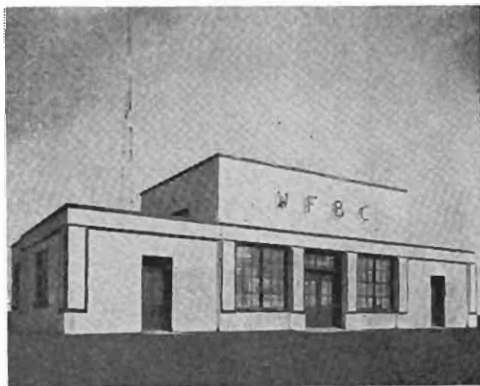
"I have had a radio in the house as far back as the good, old battery days of 1923," admits E. B. Hunter, 1062 Simmons Ave., Los Angeles, Calif., "but merely accepted it as a matter of course. Only once in a blue moon did I try to get reception outside of the immediate vicinity. Just last week I purchased a new Philco 116X and forthwith was smitten with what I am told is the DX bug. I bought a copy of RADEX and now my history is complete to the present. I would be very grateful if you would tell me the proper way to ask for verifications—that is, how to describe the way I received the signals."

Welcome to the Order of Midnight Marauders, Mr. Hunter! We are sure that you will enjoy DXing. The article, "Let's Verify," on page 16

of the November RADEX should answer your question about verifications. There are undoubtedly many DXers in and around Los Angeles who will be pleased to help you get off to a good start.

"Metal tubes really are a success," avers Raymond C. Corbett, 610 Twelfth St., Sacramento, Calif. "The other day I took all seven tubes from my set and had them tested. Every one was as good as the day they were purchased over a year ago. As they were used many hundreds of hours for DXing, it proves that the experimental stage is over."

The period during which a tube can perform at maximum efficiency is a very vital point for DXers. Metal tubes undoubtedly are coming into their own, but they will have to step some to surpass a record of service made by a set of glass tubes. When our new Scott was delivered on November 1st, the old Deluxe Model was retired to semi-active service. Checking the tubes, we found that nine of the original 12 tubes were still in perfect condition. That was after exactly three years of operation, dur-



*The new ultra-modern transmitter house of WFBC, Greenville, South Carolina. Also included in this house are living quarters for the engineer, a garage and workshop. It is located on the Atlanta Highway (U. S. No. 29) four miles out of Greenville.*

ing which time the set had been running on an average of eight hours daily.

### Contest News

"While I would favor a repetition of the Mystery DX Contest this year," supplies Carl E. Sylvester, Box 213, Yale, Mich., "I think that each contestant should be allowed to make his own report cards. You can specify the size of paper and the information required. This would permit entries from DXers who are not readers of RADEX, as the rules are generally mentioned on the broadcasts."

While we are not limiting entries in the contest to readers of RADEX, we do not see how it would be possible for listeners to receive all the necessary information unless they were able to read these columns regularly. After checking all of the contest stations last year, we know for a fact that only a very small percentage followed the rules in their entirety.

Furthermore, after seeing how many versions there could be of our specified standard report cards last year, we must insist that all report forms be uniform in every respect. After all, it is no small task to check several hundred entries and it is necessary to make the work of the judges as easy as possible.

"I am in favor of you folks printing the sheets for entering the contest," votes Walter J. Budd, St. Mihiel Dr., Burlington, N. J., one of last year's winners, "and making a charge for this service. It is a pretty tiresome job to write or type all of the cards for 30 or 40 different stations."

It has been decided, therefore, to print a pad of 100 report forms. We will also furnish a printed summary sheet and a page of the complete rules of the contest. This material will be sent to all listeners who intend to enter the contest. A charge of 25 cents will be made to cover

the costs of printing and distributing. All requests for this material, accompanied by the fee of 25 cents, should be received at our Conneaut office by February 1, 1937.

Complete details of the contest will be given in the February issue of RADEX. Readers should make a point of reserving a copy at their local newsstand, or better still, be sure of getting the news by taking out a year's subscription.

### IDXS Contest

Irwin E. Beitman, 249 Gates Ave., Elyria, Ohio, sends details of a contest being sponsored by the International DXers Society and open to listeners everywhere. A specified group of stations has been established for contestants to tune between September 1, 1936 and May 13, 1937. All stations heard must be verified and the final entries mailed no later than June 15, 1937.

In Group I, the stations are Kaunas, Lithuania (155 kcys); Brasov, Roumania; an unidentified station in Greenland; Istanbul, Turkey; Radio Luxembourg; Berlin No. 1, Germany 191 kcys; Leningrad and Moscow III (401 kcys), USSR. Group II: WCAD, WLW, WMPC, KDKA, KPCC, CJLS, CJCU, CFRB, CKFC, KOB, FQN, RDN, CMJO, XEPN, VFB, ZP1, YLZ, FJP, KFI, XHHX, RW31, RW9, RW84, LR5, KZRM, Tallinn, Jerusalem, Cairo, VK2CA, ZL1YA, 3YA, 1YX and VK3LO. Group III: TI4NRH, HJ1ABE, VQ7LO, RV15, ZBW, VE9CS, ZEC, W4XB, SPW, OER2,

### NOTES TO CONTESTANTS

All listeners who wish to enter the RADEX MYSTERY CONTEST are requested to send in their entries as early as possible, accompanied by the required entrance fee of 25c. The fee may be sent in unused United States postage stamps of any denomination, or in coin, carefully wrapped.



ZTJ, VPD, CJRO, HI2S, CQN, W3XL, VK6ME, FO8AA and PRA8.

In scoring, 4 points per mile will be awarded for stations heard from Group I, 3 points per mile for Group II, and 1 point per mile for Group III. Power points per mile (after the first 1000 miles) will be awarded as follows: 1 to 99 watts, 5 points; 100 to 249 watts, 3 points; 250 watts to 1 kilowatt, 2 points; and 1 to 10 KW, 1 point.

Additional 5 points will be awarded for singleton reception. In other words, when no other contestant has verified the same station.

The person holding the greatest number of points on this basis will receive the IDXS loving cup for 1936. No mention was made where entries should be sent, but further information may be received by writing direct to Mr. Beitman.

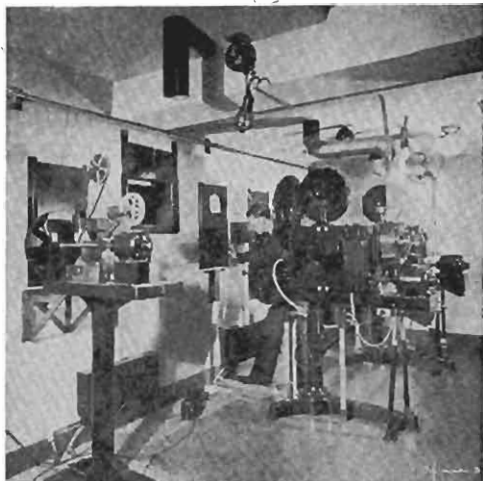
#### Foreign Reception

"The Australian and New Zealand stations are not as strong as they were last spring," observes Isaac T. Davis, Elkhart, Texas. "On three separate mornings last year, I heard about 60 Aussies and Zedders, but the best I have been able to do so far this year has been 20—heard on October 11. On the other hand, the Japs are even better than at any time last winter. The South Americans are below the par of last year.

"The two best Aussies are 2NR on 700 and 2CO on 670. In New Zealand, 1YA on 650 and 4YA on 790 stand out. JOHK on 770 and JOCK1 on 810 are the best of the Japs. LS2, Buenos Aires, has been heard through WOAI. The 250 watt KHBC at Hilo, Hawaii, is twice as strong as the higher powered KGU and KGMB."

"Will somebody tell me the address of Radio Normandie?" queries W. A. Kinsman, 76 Beech St., Halifax, N. S. "I have been hearing them frequently and would like the address for my records."

A report addressed to Radio Normandie, Fecamp, France, will be de-



*Experimental television programs of the NBC are of two types, studio pickups (with live talent) and from motion picture film. This picture shows the machine which converts movie film into television pictures. The film is placed in the projector and run off exactly as it might be in any motion picture theater, but, instead of showing an enlarged image on a screen, it is focussed on the Iconoscope camera, shown in another photograph.*

livered to the proper authorities.

"Last season I won the CDXR foreign BCB contest," informs John W. Ker, 4426 W. Eleventh Ave., Vancouver, B. C., "and received a very fine bronze plaque as first award. My DXing was done at home in Sardis, some 60 miles east of Vancouver. I was using a 1930 Model 50 Majestic super-het, attached to three inverted-L aerials pointing northeast, northwest and west and 125, 150 and 250 feet long respectively. The ground consisted of an auto radiator, filled with water and buried in the earth.

"The stations entered in the CDXR contest included 1YA, 2AY, 2BL, 2CO, 2FC, 2GB, 2GZ, 2HD, 2KO, 2NC, 2UE, 2UW, 2WL, 2YA, 3DB, 3GI, 3GL, 3HA, 3KZ, 3XY, 3YA, 4AK, 4BC, 4BH, 4GR, 4QG, 4TO, 4YA, 5CK, 7BU, 7NT, 7UV, 7ZL, CB138, JOAK1, JOCK2, JOHG, JOHK, JOIK, KGMB, KGU, LRI, LR4, LR5, LS2, Moravia-Ostrava and Radio Normandie. In addition,

I heard 3AR, XGOA, JOLK, 5CL, 3LO, 3UZ, 5DN, 2KY, KZRM, 2CH, 4BK and 3AW. All told, last winter I logged 110 different BDB stations outside of North America.

"This winter, however, it is a different story. I am attending Varsity at Vancouver, and we have no radio in our digs and no time to DX if we had one."

#### Station News

"Our local radio station WOCL has been sold to Col. H. C. Wilder," contributes Edward F. Shirley, 802 N. Main St., Jamestown, N. Y. "He also operates WSYR at Syracuse. The call letters of WOCL have been changed to WJTN, effective November 12th, and a new high fidelity Western Electric transmitter is being installed. They broadcast from 0900 to 2300 EST daily including Sundays."

"Valley City, N. D., now has their  
(Please turn to page 56)



*Charles C. Norton, President of the  
Universal Radio DX Club*



*The Lucky Strike Girl. While the  
Lucky Strike Sweepstakes features the  
songs which are the hits of the week,  
the Lucky Strike Girl previews costumes  
which prove to be the hits of the month.*

## Stop Press Flash!

Station PRF3, Rio de Janeiro, Brazil, is scheduled to broadcast between 1:30 and 3:30 am. on Jan. 4, dedicating an hour of the program to the National Radio Club. The Club suggests that DXers write XEAW and ask if the channel can be cleared for this broadcast. We add the suggestion that all requests simply be requests and not demands.

W. H. Applegate sends news of special programs to be broadcast for the Newark News Radio Club. XEFW, Tampico, 1310 kcs., will work on Dec. 27, Jan. 3 and Jan. 10 from 1 to 2 am, EST. A program from XEBK, Nuevo Laredo, will be on the air from 2 to 3 am, EST, Jan. 17. on 1000 kcs.

# The Universal Radio DX CLUB

••• By CHARLES C. NORTON, President

**T**HE Official Organ of the Universal Radio DX Club, the "Universalite," is issued weekly from the headquarters at 2018 Green St., San Francisco, Calif. Information for this bulletin is gathered from many sources, and its main features are the broadcast band tips from the bulletins of the Inter-Club Cooperation Plan; station changes from the FCC Bulletins; shortwave information edited by Robert A. Curtis, operator of amateur station N1EXZ; world-wide broadcast and shortwave information from our various representatives in all parts of the world; and a regular feature called "DXing in Japan," written by Shokichi Yoshimura, our Asiatic Representative.

We feel that DX schedules are not all that count, so we believe in knowing about the stations that are really being heard. This is accomplished by the Universal Letter Parade, a section of the bulletin dedicated to letters from our members from all parts of the world. In the Bulletin is also to be found a Singleton and Eliminator Contest for the amusement of members, and annual prizes are given.

Every DX Club has important problems which arise during every season. We have a board of directors elected by the members annually, and all important problems are voted on by these directors. The management of publicity is distributed to various districts.

The Club has two weekly DX tip programs. They come from KGGC in San Francisco, and WTAR in Norfolk. KGGC is on Sundays from 0045 to 0100, EST, and WTAR Wednesdays from 1030 to 1045 am, EST. In Luther Putman of KGGC and Lee Chadwick of WTAR, the pro-

grams have two fine announcers who do their best to make the programs ideal for DXers.

There are no qualifications for membership in the Club. We welcome the beginners as well as the old-time DXer, and believe the "Universalite" is truly universal in its appeal to all.

The picture of Count Alexis (Ollie) Ross shows the special tube he made for use in the Ethiopian war zone, and a portion of one of his famous radio receivers. Count Ross is the proud possessor of more than 1500 broadcast band verifications from every part of the world. Ollie Ross was created a nobleman by King Carol of Roumania for his splendid radio work and inventions.

## Tuning Trans-Pacifics

Warren E. Winkley, Director, CPC Chairman, **URDXC**. My luck in tuning the trans-Pacific stations has been quite good, as I have heard 92 of them on the broadcast band well enough to log.

The best of them are JOAK-1, JOCK-1, JOFK, JOHK, XGOA, 1YA, 2YA, 3YA, 2BL, 2CO and MTCY. The easiest way to identify the Japanese stations is by their peculiar music and language and the very fast fading. The Chinese and Manchukuoan stations are just about as easily identified. The Aussies and the Zedders have a deep slow fade and can be recognized by the accent of the speakers, whether men or women. It is not meant that positive identification of any station can be made by observing the manner in which it fades; when stations fading in the manner described are found they should be held until an announcement or some positive identification is given.

# FIRST AID For Sick Radios

• • • By the TECHNICAL EDITOR

**M**Y RADIO is a Sparton 8-tube all-wave model 580, and I am having considerable trouble keeping the dial calibrated. This difficulty appears on all the bands. When I move the needle to the extreme of the dial either way, the calibration is completely changed. I have had this trouble fixed once, but it seemed better for only a short while. Upon examining the set I find that there is some wax on the bottom of the chassis, which I presume is from overheating. Will you advise me what should be done to correct this?

Dial creeping is a matter that often has a very obscure cause. The dial seldom moves in itself, and if it does, after careful watching, the remedy is obvious, for the trouble will be found entirely in the mechanical drive and movements of the dial and tuning condensers.

The slipping of the stations over the dial is usually due to a change in the frequency generated in the mixing circuits of the set. This throws the whole responsibility upon the oscillator—either the tube or the coils and tuning units involved. Sometimes a new unit is advised, and again a careful drying and cleaning and adjusting of the tuning will be needed. You will find this thoroughly covered in an article on page 36 of the March, 1936, No. 97, issue of RADEX.

The melted wax drippings that you found under the chassis of the set may not indicate a failure of some part, but it does mean that some part is not mechanically perfect. Heat often softens and melts the wax in condensers and when too much is lost there is apt to be trouble. In any case, melted wax dripping from some small unit is

sufficient reason for removing and replacing the part in question. As we do not have any data concerning the part that has lost its wax impregnation, it is impossible for us to say whether it is causing a loss of permanent calibration, but if it happens to be in the oscillator and first-detector unit, it is likely to be at fault.

## More Dial Trouble

I have a Zenith model 808. The dial calibration is off at different points; for instance: Stations on 560 come in at 570, 650 on 660, and then all are perfect until 740 kcs., when the station reads 730. 1100 kcs., comes in on 1090, and 1130 on 1120. Then at 1400 it is off 10 to 20 kcs., up to 1500 kcs. On the 1500 reading I receive a station that is supposed to be on 1480 and I have to switch to the police band to get the 1500 station. And a station that is supposed to be 1200 comes in either 1190 or 1210. Would a different dial or a new dial with a new calibration help?

This set does not need a new dial as that would not solve the problem. Your trouble seems very much to be a permanent lack of proper adjustment, for, from your description, other than the 1200 kcs., station, the different stations all come in about 10 kilocycles off to one side of their rated positions. If the dial were troubled with creeping or frequency shifting, as answered in the foregoing item and more thoroughly in the March, 1936, issue of RADEX, it would move about from the regular readings to the slightly-off readings of about 10 kilocycles after the set is turned on.

We suggest that this set be taken to a good service man who, with his equipment of meters and analyzers,

will quickly be able to determine just what parts of the tuning circuits are out of alignment and adjustment. We believe that a simple readjustment of the tuning circuits will turn back all the stations to their proper dial assignments, and the set will tune nicely without further inconvenience. This type of work is strictly for a serviceman, and we strongly urge that such work on modern sets be performed in that way. The day of making simple home adjustments is fast disappearing, along with the older types of tuned-radio-frequency (neutrodyne) receivers, and simpler models of superheterodynes.

#### Antenna For Zenith

*Having just purchased a Zenith, model 6-S-152, but living in an apartment, I am unable to install an aerial on the roof or any lofty place. I studied all the antennas in the September RADEX, but do not believe I can use any of them. Can you suggest an aerial that would give me even fair results for short-wave reception? This set is built for a doublet leadin.*

The new set you have bought is a very good six-tube receiver, and is made to operate on either a single-wire antenna and leadin or a two-wire leadin from a doublet antenna. The three posts on the antenna and ground terminal strip are marked; "A," "Z" and "G." The "Z" and "G" terminals are connected together when a single-wire leadin and antenna is used. The connection is broken when a doublet antenna is used and the leadin wires are attached to "Z" and "A." Although it is not necessary to ground the receiver, there may be a few instances when a ground connection will remove noise and aid distant reception of signals. It can be tried and left connected if improvement is observed. If it does not help, or causes hum, try reversing the wall plug or leave the ground wire off entirely.

There are a number of good

doublet antennas, but, as in all cases similar to this one, we recommend strongly that the user erect the doublet antenna sold by the manufacturer of a set. We believe that these aerials have been designed under conditions best met by the characteristics of the set itself. The new Zenith doublet antenna is not an exception to our policy; it is a very efficient aerial.

The fact that you cannot erect an antenna provides a problem to overcome. We wonder why an aerial cannot be placed on your building. It could be arranged on the roof; be-



*Make-up, never a factor in sound broadcasting, is extremely important in television. This scene, backstage in the NBC studio, shows Grace Albert making up for the iconoscope camera. Complete facial make-up essentials, greasepaint, mascara, powder and lip rouge, are kept on hand. Luckily for television performers, the first basic make-up of chalk white face and black eyebrows and lips, has been discarded in favor of shades of pale orange, red and brown.*

tween two adjacent buildings; or along one side of the building. You need not worry about the lead-in wires, as these can run down close to the outside wall, in all directions, and be any length. If you cannot use a doublet, arrange a single wire in your apartment, or out of a window to some support, from 40 to 60 feet distant.



*Betty Goodwin has been chosen as the first announcer for the RCA television broadcasts. Her initial appearance at the press demonstration was highly praised.*

#### Has a Freed-Eisemann

*I have a Freed-Eisemann neodyne receiver which uses the 01A type of tubes. It is my wish to change these tubes over to type 30 so as to use 2 volts instead of 5 volts as at present. This will save me considerable in current consumption. What do you think about this, and will the type 30's neutralize as easily as the 01A's?*

You have failed to mention the model number of the receiver you contemplate rebuilding so as to use newer types of low-voltage tubes. Since there are at least 30 or more

models of early sets of this make you will understand that in this case our suggestions have to be very broad. *Once more the Technical Editor wishes to call attention to readers that if they will give all the data about their sets he can answer their problem in a more direct way.*

However, your set has two stages of a-f amplification. And with a detector and three stages of r-f amplification, this makes a six-tube receiver. We know that the two audio tubes can be replaced by a 30 and a 31, because the neutralizing question does not enter here. While there is a slight difference in the operating characteristics of the 01A and the 30 type tubes, we think that in this set they can be substituted for the former. It will require some readjustment, but the capacities of the neutralizing condensers should be sufficient to take up these different capacities.

When the 30 and 31 types are placed in an old set using the bayonet type of sockets, new sockets must be installed. As both type of sockets have four contacts and four terminals, the new types are merely substituted for the older, using the same connections. But the filament terminals of the six tubes are connected together without the use of any filament resistances or rheostats. A potential of two volts must be supplied to the filaments without change. Therefore, it may be necessary to make certain alterations in the filament circuits to the tubes. Volume control must be provided outside of the filament circuit.

It will not be necessary to replace the audio transformers in order to match them to the new tubes. Some change also must be made in the C bias voltage, as the grid of the last 31 tube needs 22½ volts, while the grid of the first a-f 30 tube requires 4½ volts. The grids of the r-f tubes may work best with about 1½ C volts instead of the —A now

provided for them. Sometimes the grid of the detector tube and its grid leak operate best when connected to the A plus terminal instead of the negative A.

And, of course, any change of this character calls for a complete neutralization job. We suggest, as the most satisfactory way, that you have this done by a competent service man, but it can be done by the experimenter if the instructions that have been given in these columns from time to time are carefully followed.

While it is possible to take the required list of parts and connect them together so that they will work, it becomes a different matter when distance reception and all-wave work is considered. Then, too, if we consider the cost of the parts we can often purchase a good factory-built set at perhaps even less cost, and it will be built to known specifications. Of course, we can sit down and plan a diagram; it's only a moment's work for in no case is a radio set a thing of mystery—there is only one principle for all radio receivers. But we dislike to encourage our readers to build a complicated superheterodyne using modern tubes and their bewildering characteristics, with the expectation of receiving signals having the perfection that is possible in commercial receivers.

We know of no particular circuit that is much better than some other as we do no experimenting of this sort, and if we published a diagram it would only be a reproduction of some other circuit that has been tried and proven. We suggest, however, that you study the Beginners' Story of Radio which shows several excellent circuits that can be adapted to your needs.

### **Boosting Radiola 60**

*As I have a Radiola, model 60, I would like, if possible, to use the signal booster described on page 39, of the April, 1934, copy of RADEX.*

*Will this harm the tone? In your diagram, I do not understand the aerial and ground connections. Also, can I use my Brandes headphones by plugging them in the place where the speaker is now connected?*

Any signal booster can be used with the Radiola 60, as the purpose of a booster is to provide an additional stage of radio-frequency amplification. Some call it a "pre-amplifier." In your set the antenna signal feeds directly into the control grid of a type 27 first radio-frequency or input amplifier. As a rule this set should need no booster as it already has two stages of radio-frequency amplification ahead of the first detector and oscillator. The usual number of r-f amplifiers in superheterodynes is but one. We are afraid that an additional stage of r-f will alter the tone somewhat by cutting off some of the audio band, as this set is, or should be, rather sharp in its tuning because of its two r-f stages. The booster coil is attached to the antenna and ground. The ground connection on your set remains as it is. The booster output, indicated by the arrow in the diagram, attaches to your set's aerial terminal.

You can attach a pair of headphones to this set very easily. The output to the speaker passes through a 5 mfd. condenser so as to remove the high potential direct current that would damage the windings of the speaker. However, as a further safeguard, we suggest that two 0.5 mfd. condensers be connected in series with the tips of the headphone cord.

### **More Power**

*My Lafayette 4-tube set, using one 6D6, one 6C6, one 25Z5 and one 43 pentode, does not give me as much power as I would like to have. Can I add another tube to this set to pep it up? Please tell me what tube is*  
*(Please turn to page 36)*

# The DX Calendar

Special programs arranged by the stations for the benefit of distant listeners. The regular monthly frequency checks were given in the October RADEX. All times are in Eastern Standard.

## Sunday Mornings

### December 20

01:00-03:00	WHAZ	1300	Troy, N. Y.	
02:30-03:30	KMJ	580	Fresno, Calif.	UDXC
03:00-04:00	KXA	760	Seattle, Wash.	UDXC
03:30-04:00	CKWX	1010	Vancouver, B. C.	UDXC
03:30-04:30	CKMO	1410	Vancouver, B. C.	UDXC
04:00-05:00	KROW	990	Oakland, Calif.	UDXC
04:30-05:30	KMPC	710	Beverly Hills, Cal.	UDXC

### December 27

02:00-05:00	CFLC	930	Prescott, Ont.	NNRC
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### December 28, 27

00:00-05:00	TGW	1210	Guatemala City	
02:00-05:00	CMCU	1460	Havana, Cuba	
03:00-05:00	CFCT	1450	Victoria, B. C.	
03:00-05:00	XEP	1160	Juarez, Chih.	

### January 3

02:00-03:00	TI4NRH	980	Heredia, C. R.	NNRC
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### January 31

02:00-05:00	CFLC	930	Prescott, Ont.	NRC
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### January 3, 10, 17, 24, 31

00:00-05:00	TGW	1210	Guatemala City	
02:00-05:00	CMCU	1460	Havana, Cuba	
02:30-05:00	CKWX	1010	Vancouver, B. C.	
03:00-05:00	CFCT	1450	Victoria, B. C.	
03:00-05:00	XEP	1160	Juarez, Chih.	

## Monday Mornings

### January 4

01:00-01:15	KTSA	550	San Antonio, Texas	
05:30-06:00	WRAW	1310	Reading, Pa.	

### January 11

01:00-02:00	WHEF	1500	Kosciusko, Miss.	
02:00-06:00	FCC		Frequency Checks	

### January 25

02:45-03:15	KADA	1200	Ada, Okla.	
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## Tuesday Mornings

### December 22

01:00-02:30	CTIAA	620	Lisbon, Portugal	IDA
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### January 5

01:00-01:30	.....	660	Jerusalem, Palestine	IDA
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### January 12

02:00-06:00	FCC		Frequency Checks	
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### January 19

00:00-04:00	KGVO	1260	Missoula, Mont.	
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### January 26

05:30-06:00	KBIX	1500	Muskogee, Okla.	
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### January 5, 19

01:00-01:15	WRR	1280	Dallas, Texas	
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### January 5, 19, 26

03:00-03:30	KIUL	1210	Garden City, Kans.	
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### January 5, 12, 19, 26

05:30-05:45	WHEC	1430	Rochester, N. Y.	
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## Wednesday Mornings

### December 30

02:30-03:00	WHBQ	1370	Memphis, Tenn.	NNRC
03:00-04:00	KHBC	1400	Hilo, Hawaii	NNRC

### January 13

02:00-05:50	FCC		Frequency Checks	
03:00-06:00	CMOX	1320	Havana, Cuba	NNRC

### January 27

03:00-04:00	KHBC	1400	Hilo, Hawaii	NNRC
05:00-05:30	WPAD	1420	Paducah, Ky.	

### January 6, 20

06:30-07:00	KWBG	1420	Hutchinson, Kans.	
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### January 20, 27

02:30-03:00	WHBQ	1370	Memphis, Tenn.	
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### January 6, 13, 20, 27

06:00-06:30	WOOD	1270	Grand Rapids, Mich.	
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## Thursday Mornings

### January 7

05:00-05:30	WFLA	620	Clearwater, Fla.	
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### January 14

02:00-05:50	FCC		Frequency Checks	
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### January 21

02:00-05:00	CFLC	930	Prescott, Ont.	NNRC
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## Friday Mornings

### January 1

01:45-02:15	KNOW	1500	Austin, Texas	
01:45-02:15	WACO	1420	Waco, Texas	
03:00-06:00	KOOS	1390	Marshfield, Ore.	
04:00-05:00	KIUN	1420	Pecos, Texas	

### January 8

01:30-02:00	WJAG	1060	Norfolk, Neb.	
02:00-06:00	FCC		Frequency Checks	
02:15-02:45	KPOF	880	Denver, Colo.	

### January 15

01:00-01:30	.....	660	Jerusalem, Palestine	IDA
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### January 15, 29

06:00-06:30	KGFW	1310	Kearney, Neb.	
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## Saturday Mornings

### December 19

02:30-03:30	KGER	1360	Long Beach, Calif.	UDXC
03:00-04:00	KVI	570	Seattle, Wash.	UDXC
03:30-04:30	KVL	1370	Seattle, Wash.	UDXC
04:30-05:30	KRE	1370	Berkeley, Calif.	UDXC

### December 26

03:00-04:00	KFRO	1370	Longview, Texas	NNRC
06:00-07:00	WTRC	1310	Elkhart, Ind.	NRC

### January 2

02:00-02:30	WGL	1370	Fort Wayne, Ind.	NNRC
03:00-03:30	KFRO	1370	Longview, Texas	NNRC
03:30-03:50	KASA	1210	Elk City, Okla.	
03:30-04:00	WFOR	1370	Hattiesburg, Miss.	NNRC
04:00-04:30	KTEM	1370	Tempe, Texas	NNRC
04:30-05:00	KVL	1370	Seattle, Wash.	NNRC

### January 9

02:00-06:30	FCC		Frequency Checks	
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### January 16

02:30-03:00	WRJN	1370	Racine, Wis.	NNRC
03:00-04:00	KGKL	1370	San Angelo, Texas	NNRC
03:00-05:00	WHAZ	1300	Troy, N. Y.	
04:00-05:00	KFGQ	1370	Boone, Iowa	NNRC

### January 23

03:00-04:00	KFRO	1370	Longview, Texas	NNRC
03:30-04:00	WEXL	1310	Royal Oak, Mich.	NRC
06:00-07:00	WTRC	1310	Elkhart, Ind.	CDXR

### January 2, 9, 16, 23, 30

06:00-07:00	WCOP	1120	Boston, Mass.	
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The Chicago Federation of Labor shortwave station W9XAA, located in York Township, DuPage County, Ill., will be off the air while changes are made in the transmitter and the power is increased from 500 watts to 5000 watts, in conformity with the recent ruling of the FCC that s.w. stations must have high power. The frequencies used by this station are 6080, 11830 and 17780 kcs.

Stations WHK and WJAY of Cleveland have merged. Both stations are now operated under the same management and personnel, from the same studios. A new transmitter is under construction at Seven Hills Village, near Cleveland.



# Leaves From a DXer's Scrapbook

• • • By COUNT DE VERIES

**F**UNNY thing, this DX game. A person never can tell how and when the bug is going to bite. You may get a very severe case and never recover, or it may come in cycles like the sunspots.

Last spring, for example, this old night owl was very glad to lay aside the headphones and go into hibernation for a few months. Then, along about the middle of August, the old urge was felt and every few nights the dial was twirled to KFI to check on the static situation.

By the end of September, however, repeated doses of atmospheric fireworks had numbed the senses and the DX fever suffered a relapse. During October, a few half-hearted attempts were made, but a balky alarm clock failed to interrupt some concentrated shut-eye and the month was written off as a failure from a DX standpoint.

The arrival of a new Scott receiver for test early in November resulted in an about-face. The patient responded to this gentle stimulus and the 1936-37 DX season was officially opened with a 23-tube salute. The lights in the radio den once more burned bright and long.

Incidentally, this radio den has long been a secret pride and joy. It is a small room away on the second floor, where a loudspeaker may run all night without fear of disturbing anyone. It is purely a man's room, replete with comfortable chairs, occasional tables, a desk, typewriter stand, bookcases and smoking accessories.

The accompanying picture shows one corner where many a dial is turned. The tuner of the new Scott is handy on the table, while the speaker is mounted behind a baffle on the wall and the amplifier is on



a shelf below the table. Just below the speaker, on the window casement, is a panel with an assortment of aerial and ground connections, making it possible to plug in a number of different receivers at will. The older Scott Deluxe model, shown on the mantel, is available when a second receiver may be desired. A third receiver, not shown in the picture, is on a small table beside the desk.

The large chair makes for comfortable tuning, although it does make it easy to dose off. When some real DXing is in order, a smaller straight chair is substituted and the typewriter stand brought into position to pound out the reports as the stations are heard.

## Micrometer Dial

One of the neatest developments on the new Scott is the recently-introduced micrometer dial. This is pretty much the same as the previous dial, with one exception. Down below the ground glass screen is a tiny white cylinder graduated from 1 to 20. This revolves when the dial is turned and the graduations may be read through a small lens at the base of the dial escutcheon.

This is intended for accurate logging of stations. The cylinder re-

volves 25 times while the dial scale covers one wave band. On the crowded 31-meter band, for example, there is a complete revolution of the cylinder between 9.4 and 9.8 megacycles. By dividing each of the 20 divisions into quarters, it is possible to get 80 *accurate* readings over a sweep of 400 kilocycles. This means that a DXer may read this band to within 5 kilocycles of a given frequency — or twice as close as the average short wave log lists the stations.

On the broadcast band, there are two and a half revolutions, or 200 accurate readings, in the 100 kilocycles sweep between 900 and 1000 keys. Thus, it is possible to have a definite dial setting for every half kilocycle in this range.

### Reception Picking Up

Prognostications to the contrary, reception during November showed some very decent results. The frequency checks brought 22 new stations in five nights of listening and, with but one or two exceptions, all of the small stations throughout the country were logged with excellent volume and quality. The general noise level was much lower than last year, while signals seemed to carry better over distances.

Outstanding among the stations heard were KFBK and KHBC. The former, with but 5 KW of power, was pushing through a signal equal to that of the 50-KW KFI and KNX, and actually superior to KPO. KHBC showed twice the punch of the more powerful KGU and KGMB.

Incidentally, I wonder how many listeners noticed the tendency of stations to pass up selection announcements during the frequency checks. At least half of the new catches logged announced call and location regularly, but neglected to identify the numbers played. That made it most difficult to get a complete report on a station, and often

it was necessary to listen for the full 20 minutes before two or three selections could be recognized.

It is just possible that the stations hope to discourage requests for verifications by adopting this policy. It certainly happened too frequently to be just a coincidence.

### Thoughts While Tuning

**Forgotten Men of Radio:**—the lads who stick in the Spanish announcements for the Mexican border stations. By law, they must exist; but who listens to them?

**Grand and Glorious Feeling:**—the first time you hear an Aussie or Zedder carrier swish, and know you've struck a good night for reception.

**Shameful Confession:**—between DX catches, the hated all-night programs make pretty good listening. A variety of popular recordings and a pleasant-voiced announcer make a nice combination when there are no special programs to hear.

**Tip for Tuners:**—whenever an unknown station is tuned in, it is a good idea to take down on scratch paper every selection and announcement heard, even before the station is identified. When the call letters are given, you probably have the basis for a report. It may be an old station, but the time isn't wasted as you would have listened for the call anyhow. If it should be a needed station, you'd be glad for the material if the station immediately signed off.

**Timely Dedication:**—at 0457 EST on November 13th, Station WJAG dedicated "Easy Come, Easy Go" to the Atlantic Radio Club. Offhand, I'd say that it's been at least two years since the National Radio Club absorbed the ARC membership list.

**Things I Never Noodle Now:**—next time local interference is so loud that reception is impossible, try an inside aerial! At least, one prominent designer claims daily re-

*(Please turn to page 32)*

# NEW NAMES in Radio

• • • By B. FRANCIS DASHIELL

Two well-known names enter the 1937 radio field. Those who plan to purchase new receivers as the Christmas season arrives once more will do well to consider what is behind the names of Fairbanks-Morse and Arvin. The former, known to users of scales for more than a century, and for a lesser time engaged in the production of machinery, is offering a long line of excellent radios. And the latter, famous because of its pioneering in the field of automobile heating, also is offering its new radio sets.

When Fairbanks-Morse, or, more exactly, Fairbanks, made the first

improved weighing device back in 1830, he never realized that a century later his name would be associated with strange devices that picked sounds and music out of the air. So this old concern, with its wealth of experience in precision manufacturing and merchandising, comes to the modern radio field with a line of radios that have proved an instant triumph.

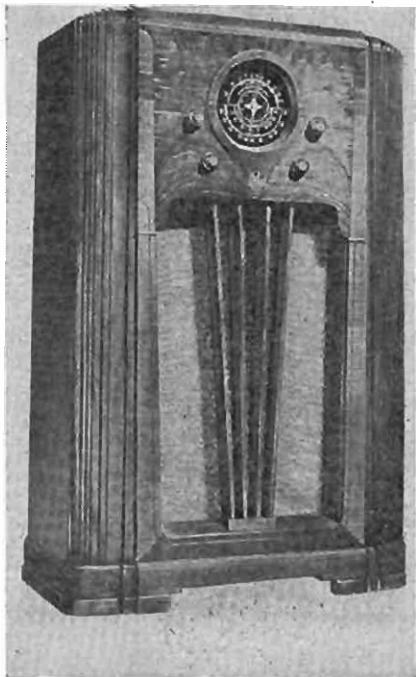
## Fairbanks-Morse Radios

The Fairbanks-Morse engineers, after three years of constant study, experimentation and rigid development, have successfully designed the new Fairbanks-Morse radio line of 1937. It is well understood that tuning the short waves demands patience and skill, when compared to broadcast reception. Fairbanks-Morse engineers have gone to extreme lengths in developing their new precision short-wave tuning controls. And they have even added the ultra-short-wave band up to 70,000 kilocycles, now utilized in television broadcasts.

The line includes six console cabinets and five table models. Also, there are three console battery or farm radios and three table models. The battery models are all operated from two or six-volt batteries. All these sets are "all-wave" models with the newest and exclusive Fairbanks-Morse features for 1937.

## Turret-Shielded Chassis

The chassis of the Fairbanks-Morse radio of 1937 operates *inside* an electrically shielded cage, approximating "screen-room" reception employed in the laboratory by every radio engineer. Noise and interference are literally screened out allowing broadcasts to be received with a hitherto unattained degree of selectivity and clear undistorted



*One of the oldest names in Industry, but a new name in Radio, is Fairbanks Morse. This is the turret-shielded super-heterodyne which covers all wave bands.*

tone. Tubes, condensers and other delicately balanced electrical elements can function at maximum efficiency. The whole thing is simple; it is a surprise to learn that no radio maker seemed to think it wise to do this long before.

This shielding, in addition to the individual shielding between high-frequency parts of the chassis, is a turret-shaped cage of strong, self-supporting copper mesh wire. In addition, the entire chassis base is metal enclosed, and floated on soft rubber. The turret cage may be instantly removed by turning a few thumb screws.

### The A. C. Models

The line of 1937 radios embraces one 12-tube console type; two 9-tube consoles and one table type; two 7-tube consoles and one table type, and one 5-tube console and three table models. The 12-tube model covers five wave bands, including the ultra short-wave band, and also a long-wave weather band. The 9-tube models cover four wave bands, but one includes the band below 10 meters in addition. The 7-tube types cover three wave bands, and the 5-tube models have three bands, while one covers only two bands.

All receivers use the new metal tubes, but the smaller sets have Octal-base tubes that are interchangeable with metal tubes. Other interesting features are: New tone projector; band identification; short-wave separator; visual volume indicator; visual tone indicator; voice control; electron beam output tube; tuning eye; variable selectivity; unit band window; and beautiful classic cabinets of Greek architecture.

### F-M Model 72-C-2

One of the most popular Fairbanks-Morse models of 1937, is the type 72-C-2. This is an attractive console cabinet containing the type 72 chassis with its seven Octal-base tubes. This is a turret-shielded su-

perheterodyne receiver that tunes to American and Foreign stations, police, aviation and amateur conversation. The tuning range of the three bands embraces: 540 to 1,750 kcs.; 2,300 to 7,700 kcs.; and 7,500 to 23,500kcs. The dial is an improved "Great Circle" type. The tuning eye contributes to perfect visual station finding. A triangular segment of light opens and closes when a station has been found. When the segment gets to its narrowest width the tuning is exact. The short-wave separator extends the usual limited movement of the tuning condensers over the equivalent of many times a 360 degree circle. It is thus possible to split degrees into very accurate fractions.

There is individual band illumination on the dial. The speaker is a large 12-inch unit with extra large baffle board. It projects and makes audible the musical overtones that often are lost; adds the bass notes and diffuses the treble notes. Some of the sets show visually, by a spot of light, in advance just how the program will come in—loud or soft, so adjustment may be made. Another spot of light indicates the tone quality. The model 72-C-2 console in its balanced perspective cabinet measures 40 inches high, 24½ inches wide and 12¾ inches deep.

### The New Arvin Line

Arvin has become a byword for automobile owners who enjoyed the warmth provided by this pioneer heater system. The Arvin manufacturers—The Noblitt-Sparks Industries, already had turned to motor radios with a well-deserved degree of success. It is only natural, then, with their experience and sales organization, that they should enter the home radio field. An excellent line of new 1937 radios is the result, and they are creating instant sales and highly favorable comment.



*One of the new Arvin models for 1937. This is the 927, known as the "Rhythm Queen." Combinations of walnut, mahogany and satin wood make it a pleasing piece of furniture.*

These Rhythm Radios, as they are designated by the makers, take in eight A. C. models, in console cabinets; and six in table styles. There are four battery sets; two in console and two in table types. And there are also two A.C.-D.C. table models. The battery or farm sets are the new 6-volt battery types without the use of "A" and "C" batteries. The Arvin line would not be complete without mention of the several powerful 6-tube superheterodynes tailored to fit any car with any combination of speaker arrangement and instrument panel to match the interior.

#### **Rhythm Queen—927**

Model 927 is instantly pleasing to the eye at first glance, and its ear-pleasing performance should satisfy the most exacting radio critic. The unusual cabinet is of walnut with combinations of striped mahogany

and satin wood, and its rich graining and many-toned shades makes it a pleasing piece of furniture. The console is 40 inches high, 25 1/4 inches wide and 13 inches deep.

This set uses 9 Octal-base tubes, either glass or metal. The radio amplifier is a type 6K7G. Then comes a type 6A8G detector-oscillator; 6K7G I. F. amplifier; 6R7G combination 2nd detector, automatic volume control and 1st audio amplifier; 6C5G 2nd audio amplifier; two 6N6G push-pull power output amplifiers; 5Y3 rectifier; and 6CG cathode-ray tuning indicator. The power output is full 8 watts, and current consumption is 120 watts. The chassis is clean, open and perfectly shielded against interactions and outside electrical interferences.

#### **All-Wave Performances**

The frequency range of this set includes: 535 to 1,750 kcs. (560 to 171 meters); 1,700 to 5,750 kcs. (176 to 52 meters); and 5,500 to 18,000 kcs. (54.5 to 16.5 meters). These embrace all broadcast services now practicable on the air. The huge, reverse-lighted dial eliminates glare, is easy to read, and makes station finding easy. There is a spotlight finder that travels behind the dial and in back of the indicator needle on whatever band is in use. A cathode-ray precision tuning indicator shows when the station is properly tuned in.

An automatic over-drive provides accurate station changing with speed. The speaker is 12 inches in diameter and has a wide tone range with true fidelity at all amplifications. An automatic built-in aerial tuning system operates at all wave bands. The radio-frequency unit is mounted separately on rubber, is heavily shielded and instantly removable for tests or repairs. The volume level is pre-set and remains so without change and also controls the top limits of the automatic volume control.

# Let's Listen To ASIA

## • • • SHORTWAVE NEWS

**T**HIS winter and spring should prove to be the best seasons ever enjoyed by shortwave DXers for reception of Asiatic stations. Japan, China, Hong Kong, India, the East Indies and Pacific Islands are the countries providing improved radio fare.

The new Japanese shortwave stations are on the air, according to a postal card received from George C. Sholin, 55 Lapidge St., San Francisco, Calif. "The following transmitters are now testing and will be used for all overseas broadcasts with 50 kilowatts power and beam antennae," Mr. Sholin writes. "JZH, 6095; JZI, 9535; JZJ, 11800; JZK, 15160; JZL, 17785, and JZM, 21520 kcs. Stations JZI and JZK have been heard from 1 to 2 p.m., PST., broadcasting to eastern North and South America. JZK also relays JOAK during the afternoons while JZI, with JVN on 10660 kcs. and sometimes JVT on 6750 kcs. carry the JOAK programs from 1 to 4:40 p.m. PST. All the new stations are located at Nazaki."

Mr. Sholin tells us that PMH, Bandoeng, Java, 6720 kcs., relays the native programs from 2:30 to 7:00 a.m. PST., and is heard with good volume. It is also stated that the Bandoeng stations will discontinue verifying reports after January 1, 1937.

### New Zealand Reports

From A. I. Breen of Dunedin, New Zealand, comes news of several other Asiatics. The Penang transmitter, ZHJ, is reported to be on the air daily from 1140 to 1340, GMT, which is 6:40 to 8:40 a.m. EST. With an aerial power of only 49 watts, this station will not prove to be an easy catch. Mr. Breen did not

give the frequency, but according to last reports it worked on 6080 kcs. The announcer says, "ZHJ, J for Jubilee, the broadcasting station of the Penang Wireless Society." Reports should be addressed to the Society at 40 Perak Road, Penang, Malaya.

In Colombo, Ceylon, station VPB works on 6160 kcs. with 300 watts in the aerial, according to information sent out by the station, but their actual frequency is 6070 kcs., says Mr. Breen.

VUB, Bombay, has 4500 watts in the aerial on 9565 kcs., and will acknowledge reports of reception. The schedule is stated to be irregular. The address is C. B. Sethna, Sprrott Road, Ballard Estate, Bombay.

The Hong Kong shortwaver ZBW is now on the 31 and 19 meter bands. A recent announcement heard was "ZBW, Hong Kong, transmitting simultaneously on 855, 8750 and 9526 kcs." Its signal on 19 meters was terrific in New Zealand. Incidentally, ZBW has been reported in the United States on 15.19 megacycles, with a good signal but much better on 9526 kcs.

Anthony Tarr, 909 West Lee St., Seattle, Wash., an old reliable RADEXer, sends lots of good information in a recent letter. "My log now totals 166 regular s.w. broadcasters," he reports. "The only stations I have any real difficulty in logging are the HI's in the Dominican Republic, who sign off long before it is dark here in many instances. Some new stations are ZBW, 9.530 megs., who present a very good program and are heard best here at 0700, PST, and YV1RH, heard on about 6390 kcs., at Maracaibo, Venezuela. (ZBW has moved

to the 15 meg. band, according to later reports. Ed.). I have heard OLR in Prague, Czechoslovakia, on two of its frequencies, 11760 and 15230 kcs. Neither was received very well, but as well as could be expected out here.



*Russell K. Heller, Vice-President of the URDXC.*

### **A Russian Stranger**

"I am hearing a stranger on a frequency of about 5680 kcs. It is almost without doubt a Russian. The program, which begins near 2230 PST, consists of semi-classical selections, and announcements by a lady who sounds like the RV15 announcer. At 0200, PST, after a long pause, they commence another program with an anthem by a band and an announcement by a man. At this time they are QSA5, R9, the loudest foreign signal ever heard here. It is even possible to hear someone walking across the floor

of the studio. I suspect this is RV15 on a new frequency."

### **His First Report**

"This is the first letter I ever wrote to any radio magazine," confesses Stephen G. Spicer, 2030 Lenox St., Harrisburg, Pa. "I have been DXing on the broadcast band since the latter part of 1932 in a big way, that is, staying up every night until 2 or 3 in the morning, and all night every Saturday. However, the s.w. bug hit me, and I had to write and tell you about my obsession. I had always felt that to be an s.w. DXer you first had to prove your ability to finish the job you started, and the job I started out to do was to try to hear VK3ME. The other morning I turned on the Zenith to try a little DXing, and the first thing heard was a selection from an opera. On its completion the announcer said, "This is VK3ME, Melbourne, calling." You can imagine how I felt; I walked on feathers all day long. After three years of wearing sets down to the binding posts, I finally accomplished the feat. (It was a feat for me, even though others have been hearing 3ME for years). Now that I have qualified as an s.w. DXer, I want to write to all the other shortwavers. I will answer every letter I receive, even if there are one, two, or three thousand!" DXers, welcome this man to your clan. He says he hopes you break the mail man's bag; show him you can.

"I have just completed a year of s.w. DXing, with very satisfactory results," contributes Robert Park, 5950 East Blvd., Vancouver, B. C. "I use a 1936 all-wave Westinghouse 5 tube set, with a noise-reducing antenna 40 feet high. This helps to eliminate noise from a nearby inter-urban line. I notice that during the last month or so some new s.w. stations have made their appearance and old ones have changed power and frequency.

"ZBW in Hong Kong, for instance, was received QSA5, R9 on roughly 9540 kcs for a week or so, but now this much sought-for station has moved to the 19-meter band where it is barely possible to hear it. ZBW can be heard there from 2 until 7 am, PST, and on Sundays on 9540 from 2 to 9 am, PST.

"There is now a large Java short-wave network. I can receive five Javan s.w. broadcasters, as follows: An unknown on 6.7 megs. from 0200 to 0600; YDB, 9.64 megs. from 0200 to 0800; PMN on 10.26 megs. from 0200 to 0730 or 0800; PLP on 11 megs. from 2 to 7 am on weekdays and until 8 or 9 am on Saturdays; and PLO, 11.49 megs. from 2 to 6 am, all times PST.

"The Prague station now works on 11.870 megs. instead of 11.760 and causes considerable interference with Radio Coloniale on 11.880. Our local, VE9CS, operates on 6.070 daily. France comes on the air daily on 11.88 megs. at 8:15 am with the Marseillaise, and remains until 3:00 pm. It then moves to 11.715 megs. DJB in Germany is heard signing off at 8 am; and then at 8:30 DJD and DJP come on broadcasting for Africa until 1:30 pm. At 2 o'clock DJD returns broadcasting for North and South America until 8 pm. After 9 o'clock DJN and DJA are heard. The Japanese station JVN is on practically all night and even at 2 in the morning there is no fading and the hum of the transmitter is plainly audible. Stations VPD2, VK3LR, and VK3ME are 31 meter early morning stand-bys."

Mr. Park, who is 17, concludes his report with some observations on receivers. "I am of the opinion that any up-to-date radio, equipped with a good aerial and ground, should bring in plenty of stations. The state of the atmosphere is the main factor in shortwave, as in long wave

reception, the difference being that on the medium waves the whole dial is good or bad, while on s.w. it depends on the station, frequency, time and chance."

### Rebuilding Daventry

Big changes are planned at the BBC Empire Broadcasting station at Daventry which should result in improved reception, of the BBC Empire programs in all parts of the world. This will ensure that the British shortwave service shall not be inferior to any other similar service in the world.

At the present time there are three shortwave transmitters at Daventry. These transmitters can all radiate on a number of different frequencies with an average power in the aerial of 10 kw. It has been decided to install three new transmitters which will work with a power of 50 kw. in the aerial. The three existing transmitters will probably be retained, and space has been allowed in the new building for the installation of a fourth high power sender at some later date.

At the time of writing there are seventeen different aerials at Daventry, supported by two masts 500 feet high and two steel towers each 350 feet high. Construction has already started on eight new masts, with an average height of 300 feet, which, together with the existing masts, will support a total of twenty-four beam aerial arrays of the latest design. To provide space for the aerial system, the BBC has purchased an additional 90 acres of land, making a total of approximately 150 acres at Borough Hill, Daventry.

For those interested in listening in on the "ham" bands, Wallace Howe, 3 Headley Terrace, Irvington, N. J., submits information which should be interesting. "The African stations are beginning to come in on 20 meter 'phone," he states.



"ZU6P, W. F. Meyer, 58 Sixth Ave., Bezuidenhout Valley, Johannesburg, South Africa, was heard two nights in succession near 11 pm, EST."

A number of favorable comments were received on Mr. Ahman's amateur column which appeared in the November RADEX and we have requested him to submit more information of a similar nature.

"I recently purchased a new Philco 620B," reports James Shock, Jr., 4045 Ashland St., Fkd., Philadelphia, Pa. "I am using two aerials, one running southeast by northwest, and the other running north and south. The first aerial is about 45 feet high and 115 feet long, including lead-in. The other aerial is 30 feet high and its length, 82 feet. The two aerials are connected to the all-wave terminals of the radio. Up to date my log consists of HAT4, HAS3, VK3ME, VPD2, VK3LR, PCJ, RAN, and many others. The lowest wave lengths I have tuned so far have been 31 meters and a little in the 20-meter amateur band. Although my amateur log is small, I have some good catches, including G6GO, G5ML and others in England; F3JD in France, ZU6P in South Africa and plenty from Canada and Cuba."

#### Prague Is Heard

"I have heard the Czechoslovakia s.w. station twice," reports Wells Gresham, 1449 Westover Ave., Norfolk, Va. "My receiver is not a very good one and I did not have enough volume to pull in the station like I wanted to. The second time they were heard better than the first, however, and as they were giving news reports in English the reception was more enjoyable. This reception was accomplished on about 11.8 megs., according to my dial, but my dial is not very accurate." (The exact frequency is 11.760 megs.)

From Drakeville, Iowa, comes another report on the new YV1RH at Maracaibo, Venezuela. Harold

Heckart writes: "A new station, YV1RH in Venezuela was heard on a frequency of 6350 kcs. It came in with an R8-9 wallop with good quality but considerable fading. I was tuning a Monroe 7-tube battery set, only about five months old, and the reception was obtained on the speaker. My antenna is about 180 feet long and 35 feet off the ground. Other shortwave stations logged are DJB Germany, DJL and the Davenport station GSF. On the police bands I was fortunate to receive the 10-watt station KNFU at Skykomish, Wash."

According to the "Union Telefonica", a radio-telephone service between the Argentine Republic and the Union of South Africa has been placed in service. It is reported that this new telephone connection is not expected to be a financial success, but that it represents a step in the company's plan of connecting Argentina with the entire outside world. In pursuing this policy, it has also been announced that a telephone service will be inaugurated between Argentina and San Salvador.

#### A Clean-up Worth While

"Some years ago I did a little DX-ing with a 5-tube Distantone set, but I threw away my old log of stations heard and am starting all over again," announces Sgt. A. W. Brummond, Box 84, Ft. Douglas, Utah. "I have the use of an 8-tube Crosley, four-band set of the 1935 vintage, and, having permission to clean it up, have done the following: I cleaned the condenser plates with pipe cleaners, drew all the dust from the chassis with the suction hose of a vacuum cleaner, and emery papered the tube prongs and connections. Formerly stations could be received only from 20 to 40 kcs. apart, so I moved the ground wire from the ground connection of the

*(Please turn to page 58)*

# Scrapbook

(Continued from page 24)

ception of VK3LR "using only 30 feet of wire inside his house — in a location so noisy that he can't even use an outside antenna, so much noise does it pick up from nearby street car lines, autos and local electrical equipment."

## The All-Night Problem

It's about time someone debunked the so-called menace of the all-night stations. To hear some of the night owls talk, a person would think that these stations meant the end of DXing.

It is admitted that these late programs block many of our best channels. We now find one or more broadcasters on each of the graveyard frequencies, while some of the more powerful stations in the United States and Mexico dominate other channels. It isn't an enviable situation, but not nearly as bad as some listeners paint the picture.

While condemning the Federal Communications Commission for allowing such a state of affairs, the average DXer seems to forget that the FCC offers six nights a month of virtually perfect listening conditions. I refer, of course, to the frequency check broadcasts which find nearly 300 stations transmitting on clear channels. Even the all-night stations stand by when they may interfere. The best Courtesy Programs Committee in the world couldn't do any better.

To these 300 stations, add on the number of broadcasters who may be heard at some time of the day during their regular schedules. Consider the additional stations which transmit occasional DX and test programs, and you realize that a very large percentage of the stations in this country may be logged during the course of a winter season.

Contrast this with conditions a few years ago when the all-nighters had not become a problem. A DXer might twirl a dial every night for a week without adding a new station, while it could easily take a couple of years to log the 300 broadcasters which may now be heard once a month.

It seems likely that the principal trouble today is that DXers are having things too easy for their own good. Many of those who have become interested during the past three years don't know what it is to fight for a station. They seem to want their quota of new verifications handed to them on a silver platter, and they feel abused when they have to work for a good catch.

Regardless of conditions, the most cherished of all possessions are those which were secured in spite of obstacles. In the old days, a station pulled out of a jumble on a crowded channel during the early-evening hours was a true prize, valued far more than even a more distant station heard on a clear frequency.

The current formula of *listening plus reporting equals verifications* makes the log grow, but it doesn't bring half the enjoyment that was possible when *perseverance* and *skill in tuning* went before the mere *listening* qualification.

So, the current challenge of the all-night stations should be an added incentive to better tuning. When domestic stations may not be heard, countless foreign catches await the skillful dialer. And when a DXer finds a night when he can't go overseas, it might be a good idea for him to lay off for a day or two. Repeated doses of fruitless tuning can quench the most ardent thirst for DX, while less frequent turns at the dials will whet the most jaded DX appetite.

# Where to Get the DAY'S NEWS

The time given in these news flash schedules is daily except Sunday unless otherwise noted.

## ATLANTIC TIME

- 1 Thursday only
- 2 Sunday only
- 3 Monday only
- 4 Except Monday
- 5 Except Saturday
- 6 Tuesday and Friday
- 7 Tues., Thurs. and Sat.
- 8 Mon., Wed., and Fri.
- 9 Saturday only
- a Including Sunday
- b Tuesday and Wednesday
- c Tues., Thurs. and Fri.
- d Thurs., Fri. and Sat.

7:15 a.m.	Noon	5:30 p.m.
WKAQ 1240	CJCB 1240	CKCW 1370
8:00 a.m.	12:30 p.m.	6:00 p.m.
CFNB 550	CHNC 1010	CJCB 1240
8:15 a.m.	12:45 p.m.	7:00 p.m.
CJCB 1240	CFNB 550	CFNB 550
CKCW 1370	CHNS 930	7:15 p.m.
8:30 a.m.	1:15 p.m.	CJCB 1240
CHNC 960	CKCW 1370	WKAQ 1240
10:30 a.m.	5:00 p.m.	7:30 p.m.
CHNS 930	CFNB 550	CHNS 930
11:00 a.m.	5:30 p.m.	10:00 p.m.
CJCB 1240	CHNC 1010	WKAQ 1240

## EASTERN STANDARD TIME

6:30 a.m.	WORC 1280	WGR 550 <sup>2</sup>	WALR 1210	WGBI 880 <sup>2</sup>	1:55 p.m.	5:00 p.m.	6:10 p.m.
WWJ 920	WORL 920	WHDD 830	WBAL 1060	WGH 1310	WRUF 830	CFCF 600	WSPD 1340a
7:00 a.m.	WPRO 630	WJAY 600	WBZ 990	WHKC 640	2:00 p.m.	WDEV 550	6:15 p.m.
WBZ 990	WSOC 1210	WPG 1100	WDBO 580	WJAS 1290	WDEV 550	WGR 550	CJCS 1210
WCOP 1120	WSPA 920a	WQAM 560	WDEV 550	WNBX 1260	WFDF 1310	WMAL 630	WBT 1080
WDEV 550	WSPD 1340	WSPR 1140	WELL 1420	WOR 710	WICC 600	WNBC 1380	WBCA 1440
SWJR 750	WTAG 580	9:55 a.m.	WESG 850	WORK 1320	WKBW 1480	WORL 920	WDEL 1120
WLS 870	WTIC 1040	WDEL 1120	WFDF 1310	WQAN 880	WORL 920	WOV 1130	WEAF 660
WORL 920	WTNJ 1280	10:00 a.m.	WFIL 560	WRVA 1110	2:30 p.m.	WQAM 560	WEBR 1310
7:15 a.m.	8:15 a.m.	WBAL 1060	WHDD 830a	WWJ 920	WORC1280 <sup>2</sup>	WSAZ 1190	WJAS 1290
WHDD 830	KDKA 980	WCOF 1120	WHIO 1260a	12:35 p.m.	WSPA 920	WSPR 1140a	WORK 1320
WNBX 1260	WCSC 1360	WDEV 550	WIP 610	CJKL 1310	2:45 p.m.	WGR 550 <sup>2</sup>	6:20 p.m.
WSAZ 1190	WDBJ 930	WFDF 1310	WIS 560	12:40 p.m.	WNBC 1380	WBAL 1060	WMCA 670
WSPR 1140	WDBO 580	WFIL 560	WKBW 1480	WLS 870	WRUF 1140	WGR 550 <sup>2</sup>	6:25 p.m.
7:25 a.m.	WEAF 660	WKBW 1480	WMMN 890	12:45 p.m.	2:55 p.m.	WMMF 1310	WRVA 1110
WBAL 1060	WIP 610	WMAZ1180 <sup>2</sup>	WOKO 1430	WMCA 570 <sup>2</sup>	WJAY 800	5:25 p.m.	6:30 p.m.
WGY 790	WIS 560	WMCA 570 <sup>2</sup>	WORC 1280	WNAC1230 <sup>2</sup>	3:00 p.m.	WJAY 610	CFRB 690
WKRC 550	WMMN 890	WNBH 1310	WORL 920	WSAR 1350	WBRE 1310	WNYC 810	CHML 1010
7:30 a.m.	WOKR 1320	WNYC 810	WQAM 560	WTIC 1040 <sup>2</sup>	WDEV 550	5:30 p.m.	CKSO 780
WCMI 1210	8:30 a.m.	WOR 710	WSOC 1210	12:55 p.m.	WDBR 1310	WNBH 1310	WDRCL330a
WHKC 640	WGH 1310	WORL 920	WSPA 920 <sup>2</sup>	WBRE 1310	WELL 1420	5:35 p.m.	WFDF 1310
WMBC 1420	WJR 750	WSOC 1210	WSPD 1340	1:00 p.m.	WGBI 880	WPTF 680	WFIL 560
7:35 a.m.	WLS 870	10:15 a.m.	WXYZ 1240	CKCV 1310	WGR 550	WKRC 550	WGH 1310
WICC 600	WMCA 570	WNBC1380 <sup>2</sup>	12:10 p.m.	CKPR 730	WHDD 830	5:40 p.m.	WIS 560
WXYZ 1240	WTFI 1450	WSAR 1350	WGY 790	CMHJ 1160	WHIO 1260a	5:45 p.m.	WLLH 1370
7:40 a.m.	8:45 a.m.	WSPD 1340	12:15 p.m.	WBT 1080	WKBW 1480	CMHJ 1160	WNAC1230 <sup>2</sup>
WPTF 680	WEAN 780 <sup>2</sup>	10:30 a.m.	WCAP 1280	WCOP 1120	WMMN 890	WBRE1310 <sup>8</sup>	WPRO 630
WWNC 570	WNAC1230 <sup>2</sup>	WOV 1130	WCLS 1310	WDEV 550	WORL 920	WDRCL330 <sup>8</sup>	WTAG 580
7:45 a.m.	WORC1280 <sup>2</sup>	WRUF 830 <sup>2</sup>	WCSC 1360	WEAF 660	WQAM 560	WICC 600	WTIC 1040
CFCF 600	WRUF 830	WSPA 920	WCSC 1360	WEAN 780	3:15 p.m.	WLCB 600	WTNJ 1280
WBEN 900	WSPR 1140 <sup>2</sup>	WSPR 1140 <sup>2</sup>	WDRCL 1330	WEEI 590	WPTF 680	WPG 1100	WWJ 920
WDRCL 1330	WTIC 1040 <sup>2</sup>	10:45 a.m.	WDRCL 1330	WGR 550	3:45 p.m.	WSAR 1350	WWNC 570
WEEI 590	8:55 a.m.	W2XR 1550	WEBR 1310	WJR 750	WBAL 1060	6:00 p.m.	WXYZ 1240
WJAY 610	WEAN 780	11:00 a.m.	WHAM 1150	WKRC 550	3:55 p.m.	CKCL 580	6:35 p.m.
WNBC 1380	WSPD 1340	WBAL 1060	WKBW 570	WLLH 1370	WRUF 830	CKCV 1310	WDBJ 930a
7:50 a.m.	9:00 a.m.	WDEV 550	WLBZ 620	WNAC 1230	4:00 p.m.	KDKA 980	WHAM 1150
WMAZ 1180	WABY 1370	WGBI 880	WMCA 570	WNBH 1310	WCOP 1120	WALR 1210	6:40 p.m.
WQAM 560	WAZL 1420	WGR 550	WNBC 1380	WORL 920	WDAE 1220	WBEN 900	WHK 1390
7:55 a.m.	WBEN 900	WLS 870	WSPR 1140	WPRO 630	WDEV 550	WBZ 990	6:45 p.m.
WFIL 560	WDEV 550	WMBCL 1420	WWNC 570	WTAG 580	WKBW 1480	WDAE 1220	WDBO 580
WJZ 760	WGR 550	WORL 920	12:20 p.m.	WTIC 1040	WOR 710	WEAN 780a	WEAN 780
WRVA 1110	WMAL 630	WPTF 680	12:25 p.m.	1:10 p.m.	WORL 920	WEEI 590	WGBI 880a
8:00 a.m.	WMMF 1310	WTFI 1450 <sup>2</sup>	11:30 a.m.	CFRB 690	WOV 1130	WGR 550	WLWL 1100
CFRB 690	WORL 920	11:30 a.m.	CKNX 1200	WCAD 1220	4:15 p.m.	WGY 790	WMAZ 1180
CJCS 1210	9:15 a.m.	CMJA 1010	WFBC 1300	1:15 p.m.	WRVA 1110	WHDD 830	WWR 1100
WBT 1080	WBRE 1310	WCOP 1120	WJZ 760	WDBJ 930	4:30 p.m.	WHKC 640	WXRA 1110
WDAE 1220	WNBC 1380	11:45 a.m.	12:30 p.m.	WFBC 1300 <sup>2</sup>	WCMI 1310	WJZ 760	W2XR 1550
WEAN 780	9:30 a.m.	WKAR 850	CJCS 1210	WNBC1380 <sup>2</sup>	WQAM 560	WLBZ 620	7:00 p.m.
WEBR 1310	WDRCL 1330	WMAZ 1180	CKCL 580	1:30 p.m.	WQAN 880	WMMN 890	CMJA 1010
WFDF 1310	WMCA 570	WQAM 560	CKSO 780	WEAN 780 <sup>2</sup>	4:45 p.m.	WNAC 1230	WAZL 1420
WGBI 880	9:35 a.m.	11:55 a.m.	WAZL 1420	WGR 550 <sup>2</sup>	WORC1280a	WORC1280a	WCLS 1440
WHIO 1260a	WMAZ 1180	WJAY 610	WBEN 900	WSPR 1140	WPTF 680	WPTF 680	WHAM1570a
WHK 1390a	9:40 a.m.	WRUF 830	WCAE 1220	WTFI 1450	WQAM 560	WQAM 560	WKBW 570a
WJAS 1290	WKRC 550	Noon	WDAE 1220	1:50 p.m.	WBOC 1210	WBOC 1210	WKBW 1480
WNAC 1230	9:45 a.m.	CHML 1010	WDEL 1120	4:50 p.m.	WSPA 920 <sup>2</sup>	WSPA 920 <sup>2</sup>	WLBZ 620 <sup>2</sup>
WOR 710	WCOP 1120 <sup>2</sup>	KDKA 980	WDRCL330 <sup>2</sup>	WMAZ 1180	WTCI 1040	WTCI 1040	WQAM 560 <sup>2</sup>

7:05 p.m. WCSC 1360a WMAZI 180 <sup>2</sup> 7:15 p.m. CKNX 1200 WBRE 1310 WTFI 1450 7:30 p.m. CRCM 910 WNBX 1260 7:45 p.m. WMCA 570 <sup>2</sup>	WTFI 1450 8:00 p.m. WELL 1420 WFDF 1310 WKBW 1480 8:15 p.m. WCAP 1280 9:00 p.m. CMCD 950 WAZL 1420 WFBC 1300 WGBI 880 <sup>2</sup>	WGH 1310 WGR 550 9:15 p.m. WMCA 570 9:30 p.m. CMJJK 780 9:45 p.m. WORK 1320 10:00 p.m. WBRE 1310 WDEL 1120 WFDF 1310	WGBI 880 WGR 550 WMAL 630 WNBH 1310 10:30 p.m. CKCK 1010 CMCD 950 WDBJ 930 WEBR 1610 WGR 550 <sup>2</sup> WMMN 890 WSPD 1340	10:45 p.m. CKCL 580 CRCM 910 WCBA 1440 WMCA 570 11:00 p.m. CFRB 690 KDKA 980 WBEN 900 WBT 1080 WEZ 990 WCAE 1220	WCSC 1360 WDAE 1220 WDBO 580 WDRB 1330 WEAF 660 WEAN 780a WEEI 590a WFIL 560 WGY 790 WHIO 1260a WIS 560 WJAS 1290	WJR 750 WKBW 1480 WKRC 550a WMCA 570 <sup>2</sup> WOR 710a WORC1230a WPG 1100a WPRO 630 WQAM 560a WRVA 1110 WSOC 1210	WTAG 580 WTIC 1040a WWNC 570 11:10 p.m. WOKO 1430 11:15 p.m. WHK 1390 WICC 600a 11:30 p.m. WJZ 760 11:45 p.m. WIP 610
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## CENTRAL STANDARD TIME

5:45 a.m. KFNF 890 6:00 a.m. KARK 890 WIBW 580 WMIN1370a 6:05 a.m. WAAW 660 6:15 a.m. WBAP 800 6:25 a.m. WJJD 1130 6:30 a.m. WOW 590 6:35 a.m. KMOX 1090 6:40 a.m. KGGF 1010 WDGY 1180 6:45 a.m. KFAB 770 KRLD 1040 KVOO 540 WNAX 570 6:55 a.m. WJJD 1130 7:00 a.m. KARK 890 KFRU 630 KFLPM 1240 KRGV1260a KRYT 1320 KSO 1430 KUSD 890 <sup>2</sup> WIBW 580 WMIN1370a WMT 600 7:15 a.m. KGGF 1010 KMBC 950 WGST 890 WHO 1000 7:25 a.m. WDAF 610 7:30 a.m. KFEQ 680 KUOA 1260 KWTO 560 WAAW 660 WDGY 1180 WDSU 1250 WIBW 580 WMC 780 WSFA 1410 WTMJ 620 7:45 a.m. KOMA 1480	KSOO 1110 KVOO 1140 WGST 890 <sup>2</sup> WNBR 1430 WOAI 1190 WOW 590 7:50 a.m. KFNF 890 7:55 a.m. WDAY 940 WJJD 1130 8:00 a.m. KADA 1200 KARK 890 KFDMD 560 KFLPM 1240 KMOX 1090 KRGV1260a WCOC 880 WFBM 1238 WKBH 1380 WMIN1370a WSMB 1320 XET 690 8:05 a.m. WILL 580 WSM 650 8:10 a.m. WGST 890 8:15 a.m. KFJM 1370 WDOD 1280 WJBY 1210 8:20 a.m. KGBX 1230 WDGY 1180 WDSU 1250 WHBF 1210 8:45 a.m. KFAB 770 WTAQ 1330 9:00 a.m. KARK 890 KFLPM 1240 KRGV 1260a WJDX 1270 WMIN1370a WMT 600 WNBW 1430 WROK 1410 WTMJ 620 9:15 a.m. WNAX 570 9:30 a.m. KOMA 1480 KRNT 1320 <sup>2</sup> KSO 1430 <sup>2</sup>	KWTO 560 WAAW 660 <sup>2</sup> WHBF 1210 WTRC 1310 9:45 a.m. WIDG 1180 WMFO 1370 10:00 a.m. KARK 890 KFRU 630 KFLPM 1240 KRGV 1260a KSOU 1110 WMIN1370a WSMB 1320 10:05 a.m. WDGY 1180 10:15 a.m. KGGF 1010 10:30 a.m. KTAT 1240 <sup>2</sup> KUOA 1260 WDSU 1250 WIBW 1430 10:50 a.m. KIH 1300 WAVE 940 11:00 a.m. KARK 890 KFN 890 KFLPM 1240 KRGV 1260a WISN 1120 WJDX 1270 WMIN1370a WTRC 1310 11:10 a.m. KGGF 1010 11:15 a.m. KVOO 1140 WBZZ 1290 WDGY 1180 WODD 1280 11:30 a.m. KFDMD 560 KFPW 1210 WAAW 660 WGST 890 WMT 600 11:50 a.m. WBAA 890 WDAF 610 WOAI 1190 Noon KARK 890	KFRU 630 KGNF 1430 KMBC 950 KRGV 1260a WIBW 580 WJJD 1130 WMIN1370a 12:15 p.m. KGGF 1010 KRLD 1040 KSO 1430 KYOL 1310 WJAG 1060 WKBH1380 <sup>2</sup> WNAX 570 WROK 1410 12:30 p.m. KFJM 1370 KUOA 1260 KWTO 560 KGBX 1230 WDSU 1250 WHBF 1210 WIBW 1280 WJBY 1210 WNBW 1430 WOW 590 WSFA 1410 WSM 650 WSMB 1320 9:25 p.m. KFEQ 680 KFLPM 1240 12:40 p.m. WJBY 1210 WNBW 1430 12:45 p.m. KSOU 1110a WCOC 880a WDAY 940 WHO 1000 WKBH 1380 WQBC 1360 12:50 p.m. WDGY 1180 1:00 p.m. KARK 890 KGKL 1370 KRGV 1260a WAAW 660 <sup>2</sup> WAVE 940 <sup>2</sup> WMIN1370a WTRC 1310 WTAQ 1330a 1:05 p.m. WTMJ 620 1:15 p.m. WAAW 660 <sup>2</sup> WJAG 1060	WAAW 660 WHO 1000 <sup>2</sup> 1:30 p.m. KFAB 770 WFBM 1230 1:50 p.m. WMFO 1370 1:55 p.m. WGST 890 2:00 p.m. KARK 890 KRGV 1260a WAYE 940 WMIN1370a 2:15 p.m. WDGY 1180 2:30 p.m. WDSU 1250 WNBW 1430 WSFA 1410 WTAQ 1330 2:45 p.m. WBAF 800 WIBW 580 2:55 p.m. KFN 890 3:00 p.m. KARK 890 KFRU 630 KGNF 1430 KRGV 1260a KSOO 1110 KWTO 560 WGST 890 WMIN1370a WNAX 570 XEB 1030a 3:30 p.m. WAVE 940 WDGY 1180 WGBF 630 WISN 1120 WJJD 1130 3:45 p.m. KVOO 1140 WOW 590 4:00 p.m. KARK 890 KMBC 950 KRGV 1260a KUSD 890 <sup>5</sup> WMIN1370a WTAQ 1330 4:15 p.m. WAAW 660 <sup>2</sup> WJAG 1060	4:30 p.m. WAAW 660 WDAF 610 WDGY 1180 WOI 640 4:45 p.m. WTMJ 620 4:50 p.m. WMFO 1370 5:00 p.m. KARK 890 KFAB 770 KFDMD 560 KOMA 1480 KRGV 1260a KSOO 1110a KUSD 890 <sup>5</sup> WDAF 610 <sup>9</sup> 5:15 p.m. WAAW 660 5:30 p.m. KFEQ 680 KUOA 1260 KVOO 1140 WBBZ 1200 WDGY 1180 WJDX 1270 5:45 p.m. KARK 890 KRGV 1260a KLPMD1240 <sup>2</sup> KWTO 560 WDSU 1250a WIBW 1280 <sup>2</sup> WSMB 1320 XET 690 5:50 p.m. WDGY1180 <sup>2</sup> WSUI 880 5:55 p.m. KFJM 1370 WJBY 1210 6:00 p.m. KARK 890 KFLPM 1240 KMOX 1090 KRGV 1260a KVOO 1140 WIBW 580a WMIN1370a WOAI 1190 WOW 590 WSFA 1410 <sup>2</sup>	6:05 p.m. WGST 890a 6:30 p.m. KSO 1430 WHO 1000 WIBZ 1280 WMT 600 WNAX 570 WNBW1430a WSFA 1410 WTAQ 1330a 6:35 p.m. XEB 1030 6:45 p.m. WFBM 1230 WKBH 1380 WSMB 1320 7:00 p.m. KARK 890 KFOU 630 KRGV 1260a KVOL 1310 WBBF 1210 7:15 p.m. WMIN1370a KFN 890 KRNT 1320a 7:45 p.m. KUSD 890 <sup>2</sup> 8:00 p.m. KARK 890 KRGV 1260a KGBX 1230 KWTO 560 WIBW 580 WJDX 1270 WNBW1430 <sup>2</sup> 8:45 p.m. KFN 890 KFLPM 1240 KFDMD 560 KGGK 1370 KRGV 1260a KUSD 890 <sup>5</sup> WBBF 1210 WMIN1370a WNBW1430 <sup>2</sup> 8:15 p.m. KFPW 1210 KATAT 1240 WGBF 630a WSFA 1410	9:45 p.m. KMBC 950 WODD 1280 WDSU 1250a WFBM1230 <sup>2</sup> WIBW 580a WROK 1410 10:00 p.m. KARK 890 KPRC 920 KRGV 1260a KRLD 1040 KUSD 890 <sup>5</sup> WDAY 940a WHBF 1210 WJDX 1270a WMIN1370a WMT 600 WNBW 1430 WOAI 1190 WTMJ 620a 10:05 p.m. WGST 890 10:15 p.m. KFLPM 1240 KRNT 1320a KSO 1430a WFBM 1230 WMC 780 WOAI 1190 WCOC 880a WTAQ 1330a 10:30 p.m. KMOX 1090 WOW 590 WSMB 1320 XEB 1030 10:45 p.m. KOMA 1480a 11:00 p.m. KARK 890 KPH 1300a WGST 890a WHBF 1210 WIBW 580 WMIN1370a 11:15 p.m. KMOX 1090 <sup>2</sup> WHO 1000a 11:30 p.m. WMC 780 11:45 p.m. WDSU 1250 Midnight KARK 890 KMBC 950 WHBF 1210
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## MOUNTAIN STANDARD TIME

6:30 p.m. KOBH 1370 6:50 a.m.	KFKD 1200 7:00 a.m. KOA 830	7:15 a.m. KGVO 1260 KTFI 1240	KVOR 1270 7:30 a.m. KDYL 1290	7:45 a.m. KLZ 560 KOBH 1370	7:55 a.m. KSL 1130	8:00 a.m. CJRM 1200 CJCH CJCH 690	CJRM 540 CKCK 1010 KFEL 920
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8:15 a.m. KLO 1400	10:00 a.m. KDFN 1440 KOY 1390 KTAR 620	KGIR 1340 KIDO 1350 KTAR 620	KSL 1130 12:55 p.m. KDYL 1290 KTFI 1240	3:15 p.m. KGVO 1260 KSL 1130	5:45 p.m. KVOR 1270 5:55 p.m. KDYL 1290	KIDO 1350 7:30 p.m. KTFI 1240	10:00 p.m. CJRM 540 KFBB 1280 KLZ 560a KOBH 1370 KOY 1390 KVOD 920 <sup>2</sup>
8:30 a.m. KDFN 1440 KDYL 1290 KSEI 900	10:30 a.m. KDFN 1440 KIDO 1350 KOBH 1370	12:15 p.m. KDFN 1440 <sup>2</sup> KFBB 1280 KGVO 1260 KLZ 560	1:00 p.m. KVOD 920 1:30 p.m. KGHF 1320	4:00 p.m. KDFN 1440 KDYL 1290 <sup>2</sup> KOE 830	6:00 p.m. KGIR 1340 KLO 1400 KOY 1390	8:00 p.m. KSEI 900a KVOD 920a 8:15 p.m. KOB 1180	10:35 p.m. KSL 1130 10:45 p.m. KSL 1130a
8:45 a.m. KIUN 1420	11:00 a.m. KOBH 1370 KVOD 920	12:20 p.m. XBAF 990 KOY 1390a	1:50 p.m. KPKD 1200 KIDO 1350	4:45 p.m. KIBO 1350 <sup>2</sup> 5:00 p.m. CKCK 1010	6:15 p.m. CHAB 1200 KGVO 1260	8:30 p.m. CKCK 1010 KSL 1130 KXEA 990	11:00 p.m. KDYL 1290a KGIR 1340 KOA 830
9:00 a.m. KOBH 1370 KVOD 920	11:10 a.m. KDYL 1290	12:30 p.m. CHAB 1200 CKCK 1010	2:00 p.m. KVOD 920	5:30 p.m. KDFN 1440 KSEI 900 KTFI 1240	6:30 p.m. KOBH 1370 KSL 1130 KTFI 1240	8:45 p.m. KXEA 1010 9:00 p.m. KSEI 900	11:15 p.m. KTAR 620
9:30 a.m. KDYL 1290 KGHF 1320 KTFI 1240	11:15 a.m. KLZ 560 <sup>2</sup>	12:45 p.m. KDFN 1440 KPKA 880	2:30 p.m. KSL 1130 <sup>2</sup> KTFI 1240	3:00 p.m. KDYL 1290 KIDO 1350 KOY 1390	6:45 p.m. KIDF 1440 KIDN 1440 KIUN 1420	9:15 p.m. KIDF 1440 9:30 p.m. KJCY 690	
9:45 a.m. KFBB 1280	11:50 a.m. KLO 1400	Neon 12:45 p.m. CJRM 540					
9:50 a.m. KFXD 1200 KSEI 900	Neon KFEL 920a						

## PACIFIC STANDARD TIME

7:00 a.m. KGDH 1100 KHSL 950 KQW 1010	8:45 a.m. KFVD 1000 KWJJ 1040	10:30 a.m. KIRO 710	KMJ 580 KOL 1270 KOOS 1390a KVI 570	KPO 680 2:45 p.m. KYOS 1040	4:45 p.m. KFRC 610 KGDH 1100 KYOS 1040	7:00 p.m. KIT 1310 KLX 880	KOL 1270a KVI 570 KYA 1230
7:15 a.m. KFBB 1490 KMJ 580	9:00 a.m. KFI 640 KFPY 890	11:30 a.m. CJAT 910 KIRO 710	12:45 p.m. KVIN 940 KRNK 1500	3:00 p.m. KJBS 1070 KQW 1010	5:00 p.m. KFPY 890	7:45 p.m. KOAC 550 8:00 p.m. KGA 1470	10:00 p.m. KFI 640a KFRC 610a KFWB 950a KGA 1470 KGB 1330a KOMO 920 <sup>5</sup>
7:30 a.m. KFAC 1300 KIEM 1450 KIRO 710 KJR 970 KNX 1050 KRNK 1500 KWSC 1220	9:15 a.m. KGDH 1100 KJR 970 KOOS 1390	11:45 a.m. KHQ 590	1:00 p.m. KFRK 610 <sup>2</sup> KGA 1470	3:30 p.m. KIRO 710 KVIN 940	5:15 p.m. KOOS 1390	8:15 p.m. KGBU 900 9:00 p.m. KGFJ 1200 KIEM 1450 KJR 970a KNX 1050a KIN 940 <sup>2</sup> KQW 1010 KROW 930 KSF 560	11:00 p.m. KGER 1360a 10:30 p.m. KFVD 1000 10:45 p.m. KXA 750
7:45 p.m. KVI 570	9:30 a.m. KHSL 950 KIRO 710	Neon KFAC 1300 KIT 1310 KNX 1050 KOAC 550 KROW 930 KSF 560	1:15 p.m. KGER 1360	3:40 p.m. KFCF 1300	5:30 p.m. CJOW 630 KIRO 710	9:15 p.m. KQW 1010 KROW 930 KXEMO 860	11:15 p.m. KKEA 1430 KROW 930
8:00 p.m. KGA 1470 KHQ 590 KIT 1310 KOL 1270	9:45 a.m. KFWB 950 KNX 1050	12:15 p.m. CKOV 630 KFBB 1490 KHSL 950	1:30 p.m. KIRO 710	3:45 p.m. KGER 1360 KOL 1270 KYOS 1040	6:00 p.m. KECA 1430 KFAC 1300 KFWB 950a KQW 1010 KROW 930 XEMO 860	9:30 p.m. KFPY 890a KJR 970 KVI 570 <sup>2</sup>	11:45 p.m. KKEA 1430 KROW 930
8:30 a.m. CKOV 630 KFRC 610 KIRO 710 KVIN 940	10:00 a.m. KJBS 1070 KQW 1010	12:30 p.m. KFPY 890 KFRK 610 KFVD 1000 KGBU 900 KIEM 1450 KIRO 710 KJBS 1070	1:45 p.m. KHSL 950	4:00 p.m. KFVD 1000 KGA 1470 KLX 880 <sup>2</sup>	4:15 p.m. KHSL 950 KRNK 1500 KWJJ 1040	9:45 p.m. KIT 1310	11:00 p.m. KKEA 1430 KNX 1050 1:00 a.m. KGBU 900
8:30 a.m. CKOV 630 KFRC 610 KIRO 710 KVIN 940	10:15 a.m. KFVD 1000 KGBU 900 KIEM 1450 KIRO 710 KJBS 1070	12:45 p.m. KIDF 1440 KIDN 1440 KIUN 1420	2:00 p.m. KFVD 1000 KGDH 1100 <sup>2</sup> KLX 880	4:30 p.m. KIRO 710	6:15 p.m. KJR 970 KNX 1050	9:30 p.m. KFWB 950 KVI 570 <sup>2</sup>	11:45 p.m. KKEA 1430 KROW 930

## THE MONTH'S CHANGES IN STATION DATA

### NEW

790	KOAM	Pittsburgh, Kans.
1200	KELO	Sloux Falls, S. Dak.
	WBHP	Huntsville, Ala.
	WFTC	Kinston, N. C.
1250	WAIR	Winston-Salem, N. C.
1310	KRMC	Jamestown, N. Dak.
	KSUB	Cedar City, Utah
	KVOX	Moorhead, Minn.
	KWOS	Jefferson City, Mo.
1370	WSAU	Wausau, Wis.
1420	WNNY	Watertown, N. Y.
1480	WHIP	Hammond, Ind.
1500	KSJS	Salina, Kans.

### FREQUENCY

1450	KGCC	Wolf Point, Mont., from 1310
		<b>POWER</b>
1050	WEAU	Eau Claire, Wis., 1000 from 250
1200	KDNC	Lewistown, Mont., 100 from 250
		<b>CALL LETTERS</b>
		Portland, Me., from WSPG
		Jamestown, N. Y., from WOCL
		Santa Fe, N. Mex., from KIJJ
		Kansas City, Kans., from WLBF
		<b>LOCATION</b>
1080	WCBD	Chicago, Ill., from Waukegan
		<b>NETWORK</b>
		Denver, Colo., new NBC—Blue
		Hollywood, Calif., new CBS
		Richmond, Va., CBS from NBC
		San Antonio, Texas, CBS from NBC
		Stockton, Calif., NBC from CBS
		<b>DELETE</b>
1250	KXOK	St. Louis, Mo.

# First Aid

*(Continued from page 21)*

*best to add and how to do the job. What is the output of this set at present and what will it be when I add the extra tube?*

As this is only a four-tube set it does not seem reasonable that it should be expected to deliver great power. While the tubes are dual purpose in their action, except the 43 and the rectifier, the set still has definite limitations. And it is not good radio engineering to push the volume of any set beyond these limits. The type 43 pentode tube gives you about all the power that is practicable with the degree of previous amplification that is fed into the power tube. However, you might try connecting another 43 tube in parallel with the first 43 tube. In this manner you will connect another socket adjacent to the present socket and attach all similar leads or connections. Two 43 tubes thus work together handling just twice the amount of plate current that is possible with one 43 tube. Distortion is reduced and the tone is better at the greatest volume although intensity is not increased very much as there is no additional amplification provided for in this connection. It is likely that the rectifier and powerpack of this set will take care of an additional 43 tube, but if undue heating is observed you must pull the new 43 tube out of its socket and forget about it. The output of your set is approximately 1 watt of audio power while two 43's in push-pull should deliver nearly full two watts of power. The type 43, while taking 25 volts on its heater, uses a relative low plate voltage, making it ideal for a-c or d-c and universal sets. At 100 volts on the plate it still delivers a strong wattage for audio power.



*Frances Langford, singing star of Columbia's "Hollywood Hotel" programs, puts an original touch into her songs that has made her famous both as a radio and film star. She is heard on the CBS from 9 to 10 pm, EST on Fridays.*

## Answers

*(Questions on page 6)*

1. The Voice of the Central Valley.
2. KVOB.
3. WEXL, Royal Oak, Mich.
4. Golden Gate Broadcasting Company.
5. WLLH, Lowell, Mass.
6. Keep Furnishing Radio Cheer.
7. KTAB, Knowledge, Truth and Beauty; The Associated Broadcasters; Tenth Avenue Baptist Church; KSFO, San Francisco and Oakland.
8. So many stations are placed on these channels that many of them die from interference.
9. WEST, Easton, Pa.
10. Ted Lewis' recording of the "Goodnight Waltz."

# JACK BENNY, Funny Man

• • • By MARY LIVINGSTONE

**C**ONTRARY to what many people think, life with a comedian is not one long succession of wisecracks. "And thank goodness for it too," says Mary Livingstone, wife of radio's funny man Jack Benny. Mary had a lot on her mind and got relieved of most of it when she wrote the "piece" which follows.

Another bubble I'd like to bust is that the private existence of all people in the entertainment business is surrounded by what the Hollywood press agents call "glamour." It certainly isn't so with us and I'd like to see a publicity man who could build a glamorous story around a guy who has little interest in going to night clubs and receives friends at home wearing an old red bathrobe and even older bedroom slippers.

Jack and I are as congenial a couple as I know, but of course we have our arguments. All married couples do. But on looking back I find that I am invariably the one that starts them. In justice to myself, though, I do want you to know that Jack is very annoying at times. For instance, what can you do with a fellow who is cheerful bright and early in the morning, no matter what time he went to bed. Jack gets up long before breakfast every day. He bathes, shaves and gets fully dressed before we sit down to eat. The latter part of the week he works on the program and Sunday we have our reading rehearsal in the morning.

Sometimes he goes out to play golf. He's not very good, but he doesn't take it serious. If he comes home with a big grin I know he has broken 110.

In the evenings we usually go out with another couple, generally George Burns and Gracie Allen. Once in a while we go to the fights or to a new movie but nine times out of ten we just visit. Gracie and I talk about our babies, clothes or recipes, or if we stay home we play backgammon. But Jack and George just talk, mostly about their programs or horse races.

People still tell Jack he shouldn't try to do radio and pictures at the same time, but he thrives on hard work and lots of it. Fred Allen and Portland Hoffa told us one night they couldn't understand why Jack tried to do so many things at once, but we don't mind and we're having a lot of fun. We don't see how Fred Allen ever finds time to enjoy himself. I understand he writes seven days a week on his scripts. If I'm not mistaken there aren't many more left in the average week.

\* \* \*

**MORTIMER GOOCH:** Mortimer proved indisputably that he was not superstitious when he made his initial appearance on the air over the CBS Network on Friday the 13th, under the sponsorship of Wrigley's Chewing Gum. Mortimer is a salesman. And what a salesman! His aggressiveness frequently occasions difficulties for himself, his employers and the public in general, but troubles do not perturb his serene and effective salesmanship. He goes right on selling incredible quantities of the product manufactured by his company. This program is addressed to dealers only, but this will not be a small audience when it is remembered that 1,000,000 dealers handle Wrigley's.

**FOR RENT:** A couple of years ago Floyd Gibbons went to Florida for some sailfishing. While there, he bought a house. Since he purchased it, so much has been happening in his life, including the Ethiopian and Spanish conflicts and his CBS broadcasting commitments, that he has spent but a quarter of an hour in the new house.

\* \* \*

**TWIN STARS:** Helen Claire and Rosemarie Brancato wear twin gowns especially designed for their weekly broadcasts as the Twin Stars. The young artists, both golden blondes, both blue-eyed, carry their twinship further by wearing interchangeable evening ensembles of black and white lame, interwoven with gold.

\* \* \*

**CROSSED WIRES:** Visitors at NBC were interviewed by Ben Grauer in a special broadcast connected with the tenth anniversary of the Network. Queried by Mr. Grauer, one after the other named ANDRE KOSTELANETZ and GUY LOMBARDO as their favorite orchestra leaders, blithely ignoring the fact that both these leaders are heard regularly over the CBS instead of the NBC.

\* \* \*

**GREEK:** Parkyakarkus, Eddie Cantor's Greek dialog stogie, has probably the most difficult name in radio. He has received, among others, letters addressed as follows: Peppycarriage; Pepperpottus; Habeascorpus; Roastporkus, and Petintheparkis.

"Dot's okay, keed," says Parky (that's easier), "sometimes I got it trouble spelling him myself. But a Grik by any other nem would spell as sweet."

\* \* \*

**WE'RE PUNNY THAT WAY:** Walter O'Keefe has bought a ten room house which requires twenty tons of coal to heat for the winter

months. We understand that, as he peruses the coal bills, Walter hums, "O'Keefe the home fires burning."

\* \* \*

**SIDELIGHTS:** Radio's melting pot is the WE, THE PEOPLE program . . . average individuals representing every race and creed and economic stratum are brought together on equal terms . . . FRED ALLEN has only one brief period of relaxation during the week . . . it's the two hour period between his first Town Hall Tonight Show on Wednesdays and the repeat for the West coast . . . he regales anyone who stays around with hilarious stories of his vaudeville days and he never lacks for listeners . . . HAL KEMP and his band commute to New York from Philadelphia every Sunday for the Phil Baker programs: . . . ED WYNN'S new Saturday night broadcasts over NBC are being recorded and re-broadcast over sixteen stations in the south . . . sponsor was unable to clear time for those outlets on the network schedule . . . the JACK PEARL programs also are being recorded and rebroadcast over 18 stations in addition to the 43 on the NBC-Blue which carry the original broadcast . . . PHIL BAKER'S contract has been renewed for another 26 weeks . . . Rubinoff, Virginia Rea and Jan Peerce may be looking for a new spot on the completion of their present assignment . . . it will not be renewed . . . AMOS 'N' ANDY'S two-man radio act has expanded to a minstrel show . . . their Friday night programs include an orchestra, guest stars and announcer BILL HAY as interlocutor.

\* \* \*

Andre Kostelanetz steps up the smart Cuban rhythms his orchestra plays on his Columbia series, with "bangos," small Cuban drums heated to the proper pitch by an alcohol flame.



# WHAT'S ON THE AIR TONIGHT

Fill in calls and dial numbers for those stations through which you best receive the three chains. You can then turn quickly to the one that has the feature you want.

COLUMBIA.....(C)	
Call	Dial

NATIONAL, Red (R)	
Call	Dial

NATIONAL, Blue (B)	
Call	Dial

Time: E Eastern; C Central; M Mountain; P Pacific

RADEX is the only publication listing stations in alphabetical order for your convenience.

While these programs are correct at the time of going to press, changes are made from time to time.

## MONDAY

**E-6:15 p.m., C-5:15, M-4:15, P-3:15**  
**C — Bobby Benson — Sunny Jim**  
 WAAB WABC WCAU WDRB WEAN  
 WFBL WGR WHCC WOKO

**E-6:45 p.m., C-5:45, M-4:45, P-3:45**  
**C — Renfrew of the Mounted**  
 KFAB KFH KLRA KMBC KMOX  
 KOMA KRLD KRNT KSCJ KTUL  
 KWKH WABC WADC WBBM WBNS  
 WCCO WDRC WFBM WGR WHCC  
 WHK WIBX WICC WISN WJRW  
 WJSV WKBN WMAS WMBG WNAC  
 WNBH WOC WREC WSMK WSPD  
 WVVVA

**B — Lowell Thomas**  
 CRCT KDKA WBAL WBZ WBZA  
 WFLA WIOD WJAX WJZ WLW  
 WMAL WOOD WRVA WSYR WTAM  
 WXYZ

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**  
**C — Poetic Melodies; Jack Fulton**  
 WABC WADC WBT WCAO WCAU  
 WDRC WEAN WEEI WFBL WGR  
 WHCC WHK WJAS WJR WJSV  
 WKRC WOKO WSPD WTOC WVVVA  
**R — Amos 'n' Andy**  
 KYW WBN WCAE WCHS WCAF  
 WEEI WFBM WGY WJAR WLW  
 WRC WTAG WTIC

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**  
**C — Popeye the Sailor**  
 KFAB KLZ KMBC KMOX KRNT  
 KSL WABC WADC WBBM WBNS  
 WCAO WCAU WDRB WEAN WFBL  
 WFBM WGR WHAS WHCC WHK  
 WIBX WICC WJAS WJSV WKRC  
 WNAC WOC WOKO WORC WSMK  
**R — Uncle Ezra's Radio Station**  
 KPRC KTBS KTHS KVOO KYW  
 WBAF WBN WCAE WCKY WCHS  
 WDAF WFAF WEEI WFBM WGY  
 WHIO WIRE WJAR WKY WMAQ  
 WOI WOOD WOV WRC WTAG  
 WTAM WTIC

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**  
**C — Goose Creek Parson**  
 KFAB KMBC WABC WBBM WBNS  
 WBT WCAO WCAU WDAE WDBJ  
 WDBO WDRB WEAN WFBL WGR  
 WGST WHCC WHK WICC WJAS  
 WJR WJSV WKRC WLBZ WBMG

WMBR WNAC WOKO WORC WQAM  
 WTOC  
**B — Lum and Abner**  
 WBZ WBZA WENR WJZ WLW  
 WMC WSM WSYR

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**  
**C — Boake Carter**  
 KMBC KMOX KOMA KRLD WABC  
 WBBM WBT WCAO WCAU WCCO  
 WDRB WEAN WFBL WGR WHAS  
 WHK WJAS WJR WJSV WKRC  
 WNAC

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**  
**C — Horace Heidt and Orchestra**  
 KDB KERN KFAB KFBK KFH  
 KFPY KPRC KGB KHJ KLRA KLZ  
 KMBC KMJ KMOX KOIN KOL  
 KRLD KRNT KSL KTRH K TSA  
 KTUL KVI KWG WABC WBBM  
 WBRB WBT WCAO WCAU WCCO  
 WDRC WFBL WFBM WGR WGST  
 WHAS WHK WJAS WJR WJSV  
 WKRC WLAC WMBR WNAC WNAX  
 WOKO WREC WWL

**R — Fibber McGee and Molly**  
 KSD KYW WBN WCAE WCKY  
 WCHS WDAF WFAF WEEI WFBM  
 WGY WHO WIRE WJAR WMAQ  
 WOOD WOV WRC WTAG WTAM  
 WTIC WWJ

**B — Helen Hayes, Drama**  
 KDKA KOIL KSO KWK WABY  
 WBAL WBZ WBZA WEBR WFBM  
 WFIL WGAR WHAM WJZ WLS  
 WMAL WMT WREN WSAI WSYR  
 WXYZ

**E-8:30 p.m., C-7:30, M-6:30, P-5:30**  
**C — Pick and Pat**  
 KFAB KMBC WABC WADC WBBM  
 WBT WCAO WCAU WDRB WEAN  
 WFBL WGR WGST WHCC WHK  
 WHP WICC WJAS WJR WJSV  
 WKRC WLBZ WMAS WNAC WOKO  
 WORC WSPD

**R — Voice of Firestone**  
 CFCF CRCT KFYR KPRC KSD  
 KSTP KTBS KVOO KYW WAVE  
 WBN WCAE WCHS WCHS WDAF  
 WDAY WFAE WFCB WEEI WFAA  
 WFCB WFBM WFLA WGY WHO  
 WHIO WIBA WIOD WIRE WIS  
 WJAR WJAX WJDX WKY WMAQ  
 WMC WOI WOV WPTF WRC

WRVA WSB WSM WSMB WSOC  
 WTAG WTAM WTAR WTIC WTMJ  
 WWJ WWNC

**B — Melodiana; Abe Lyman**  
 KDKA KOIL KSO KWK WBAL WBZ  
 WJAZ WCKY WFIL WGAR WHAM  
 WJZ WLS WMAL WMT WREN  
 WSYR WXYZ

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**  
**C — Lux Radio Theatre**  
 CFRB CKAC KDB KERN KFAB  
 KFBK KFPY KPRC KGB KHJ  
 KLRA KLZ KMBC KMJ KMOX  
 KOIN KOL KOMA KRLD KRNT  
 KSL KTRH K TSA KTUL KVI KWG  
 WABC WADC WBBM WBNS WBRB  
 WBT WCAO WCAU WCCO WDAE  
 WDBJ WDRB WEAN WFBL WFBM  
 WGST WHAS WHCC WHK WICC  
 WISN WJAS WJR WJSV WKBW  
 WKRC WLAC WNAC WNAX WOKO  
 WORC WQAM WREC WWL

**R — Warden Lawes, Prison Drama**  
 KDYL KFI KGW KHQ KOA KOMO  
 KPO KPRC KSD KYW WBN  
 WCAE WCKY WCHS WDAF WFAF  
 WGY WHO WHIO WIRE WJAR  
 WMAQ WNC WOV WRC WTAM  
 WTIC WWJ

**B — Sinclair Greater Minstrels**  
 KDKA KDYL KFYR KOA KOIL  
 KPRC KSO KSTP KTBS KTHS  
 KVOO KWK WBAL WBZ WBZA  
 WDAY WECB WFAA WFLA WGAR  
 WHAM WIBA WIOD WIS WJAX  
 WJDX WJZ WKY WLS WLW WMAL  
 WMC WMT WOI WPTF WREN  
 WRVA WSB WSM WSMB WSOC  
 WSN WSYR WTAR WTMJ WWNC  
 WXYZ

**E-9:30 p.m., C-8:30, M-7:30, P-6:30**  
**R — Richard Himber and Orchestra**  
 KFYR KPRC KSD KSTP KTBS  
 KVOO KYW WBN WCAE WCHS  
 WDAF WDAY WFAE WFCB WFAA  
 WFBM WGY WHO WIBA WJAR  
 WKY WLW WMAQ WOI WOV  
 WRC WTAG WTAM WTIC WTMJ  
 WWJ

**B — Jack Pearl; Morton Bowe**  
 KDKA KECA KFSB KGA KGO  
 KJR KLO KOIL KSO KWK WABY  
 WAVE WBAL WBZ WBZA WCKY

## MONDAY (Continued)

WCOL WEBR WENR WFIL WFLL  
WGAR WHAM WIOD WIS WJAX  
WJDX WJZ WMAL WMC WMT  
WOOD WPTF WREN WRVA WSB  
WSM WSMB WSOC WSUN WSYR  
WTAR WUNC WXYZ

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

### R — Contended Program

CFBC CRCT KDYL KFI KGW  
KHQ KOA KOMO KPO KPRC KSD  
KYW WBEN WCAE WCSH WDAF  
WEAF WEEI WFBF WFLL WGY  
WHO WIOD WIS WJAR WJAX  
WKY WMAQ WMC WOAI WOV  
WPTF WRC WRVA WSB WSM  
WTAG WTAM WTAR WTIC WWJ  
WUNC

### B — Singin' Sam

KDKA KECA KFSD KGA KGO  
KJR KLO KOIL KSO KWK WBAL  
WBZ WBZA WENR WFIL WGAR  
WHAM WJZ WMAL WMT WREN  
WSYR WXYZ

### C — Wayne King and Orchestra

KDB KERN KFAB KFBK KFPY  
KFCR KGB KHJ KLZ KMBC  
KMJ KMOX KOIN KOL KRNT  
KSL KVI KWG WAAB WABC  
WADC WBBM WBNS WBT WCAO  
WCAU WCCO WDBC WEAN WFBL  
WFBM WHAS WHK WIBW WJAS  
WJR WJSV WKBW WKRC WOKO  
WSPD WLL

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**

### R — Krueger Musical Tost

WCSC WCSH WEAF WFBC WFLA  
WGY WIOD WIS WJAR WJAX  
WNAC WPTF WSB WSOC WSUN  
WTAG WTAR WTIC WUNC

**E-10:45 p.m., C-9:45, M-8:45, P-7:45**

### C — Goose Creek Parson

KDB KERN KFBK KFH KFPY  
KFCR KGB KHJ KLRA KLZ KMJ  
KOIN KOL KOMA KRLD KRNT  
KSL KTRH KTSa KTUL KVI KWG  
KWKH WACO WBCO WFBM WHAS  
WISN WLAC WREC WLL

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**

### C — Poetic Melodies; Jack Fulton

KERN KFAB KFBK KFPY KFCR  
KGB KHJ KLRA KLZ KMBC KMOX  
KOIN KOL KOMA KRLD KRNT  
KSL KTRH KTSa KVI WBBM  
WBRC WCCO WFBM WGST WLAC  
WREC WLL

### R — Amos 'n' Andy

KDYL KFI KGW KHQ KOA KOMO  
KPO KPRC KSD WBAF WDAF  
WHO WKY WLW WMC WOAI WOV  
WSB WSM WSMB WTAM WWJ

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**

### C — Renfrew of the Mounted

KDB KERN KFBK KFPY KFCR  
KGB KHJ KMJ KOIN KOL KSL  
KVI KWG

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**

### C — Dance Orchestra

CFRB CKAC KLRA WAAB WABC  
WADC WALA WBNS WBRC WBT  
WCAO WCAU WDAE WDBJ WDBO  
WDNC WDOD WDRG WEAN WFBL  
WFBM WFEA WGST WHAS WHEC  
WHK WIBX WICC WJAS WJR  
WJSV WKBW WKBW WKRC WLAC  
WLBZ WMAS WMBG WMBR WNOX  
WOKO WORC WQAM WREC WSBT  
WSJS WSMK WSPD WTOC

### C — Pick and Pat

KDB KERN KFBK KFPY KFCR  
KFB KGKO KHJ KLRA KLZ KMJ  
KMOX KOIN KOL KOMA KRLD  
KRNT KSCJ KSL KTUL KVI KWG  
KWKH WACO WBCO WFBM  
WHAS WLAC WREC

## TUESDAY

**E-6:15 p.m., C-5:15, M-4:15, P-3:15**

### C — News of Youth

WABC WADC WBNS WCAO WCAU  
WDRG WEAN WFBL WHK WIBX  
WICC WJR WKBW WLBZ WNAC  
WOKO WORC WWVA

**E-6:45 p.m., C-5:45, M-4:45, P-3:45**

### B — Lowell Thomas, See Monday C — Renfrew, See Monday

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**

### C — Poetic Melodies, See Monday

### R — Amos 'n' Andy, See Monday

### B — Easy Aces

KDKA KDYL KFI KGW KHQ KOA  
KOIL KOMO KPO KSO KWK WBAL  
WBZ WBZA WCKY WENR WFIL  
WGAR WHAM WHIO WIRE WJZ  
WMAL WMT WSYR WXYZ

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**

### R — Voice of Experience

KDYL KFI KFYR KGW KHQ KOA  
KOMO KPO KSD KSTP KYW WBEN  
WCAE WCSH WDAF WDAY WEAF  
WEBC WEEI WFBR WGY WHO  
WIBA WJAR WLW WMAQ WOV  
WRC WTAG WTAM WTIC

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**

### B — Lum and Abner, See Monday

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**

### C — Boake Carter, See Monday

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**

### C — Hammerstein Music Hall

KFAB KMOX KRNT WABC WADC  
WBBM WBNS WCAO WCAU WDRG  
WEAN WFBL WFBM WGR WHAS  
WHK WJAS WJR WJSV WKRC  
WMAS WNAS WOKO WSPD

### R — Leo Reisman and Orchestra

KFYR KPRC KSD KSTP KTBS  
KVoo KYW WBAF WBEN WCAE  
WCSH WDAF WDAY WEAF WEEI  
WFBF WFLL WGY WHO WIBA  
WIOD WIS WJAR WJAX WJDX  
WKY WLW WMAQ WOV WPTF  
WRC WRVA WSOC WTAG WTAM  
WTAR WTIC WTMJ WWJ WUNC

### B — Log Cabin Dude Ranch

KDKA KOIL KSO KWK WBAL  
WBZ WBZA WFIL WGAR WHAM  
WIRE WJZ WIS WMAL WMT  
WREN WSYR WXYZ

**E-8:30 p.m., C-7:30, M-6:30, P-5:30**

### C — Russ Morgan; Ken Murray

CFRB CROC KFAB KFH KLRA  
KMBC KMOX KOMA KRLD KRNT  
KSL KTRH KTSa KTUL WABC  
WADC WBBM WBNS WBRC WBT  
WCAO WCAU WCCO WDAE WDBJ  
WDRG WEAN WFBL WFBM WGR  
WGST WHAS WHEC WHK WICC  
WISN WJAS WJR WJSV WKRC  
WLAC WMAS WMBD WMBG  
WNAC WNLX WOKO WORC WQAM  
WREC WLL

### R — Wayne King and Orchestra

KFYR KPRC KSD KSTP KTBS  
KVoo KYW WAVE WBAF WBEN  
WCAE WCKY WCSH WDAF WDAY

WEAF WEBC WEEI WFBR WGY  
WHO WHIO WIBA WIRE WJAR  
WJDX WKY WMAQ WMC WOAI  
WOW WRC WSB WSM WSMB WTAG  
WTAM WTIC WTMJ WWJ

### B — Edgar Guest, Welcome Valley

KDKA KOIL KSO KWK WBAL WBZ  
WBZA WFIL WGAR WHAM WJZ  
WLS WLW WMAL WMT WREN  
WSYR WXYZ

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**

### C — Fred Waring and Orchestra

CFRB CKAC KFAB KFH KGKO  
KLRA KMBC KMOX KOMA KRLD  
KRNT KSCJ KTRH KTSa KTUL  
KWKH WABC WACO WADC WALA  
WBBM WBIG WBNS WBRC WBT  
WCAO WCAU WCCO WDAE WDBJ  
WDBO WDNC WDRG WEAN WFBL  
WFBM WFEA WGST WHAS WHEC  
WHK WHP WIBW WIBX WICC  
WISN WJAS WJR WJSV WKBW  
WKBW WKBW WKBW WKRC WLAC  
WLBZ WMAS WMBD WMBG WMBR  
WMBR WMMN WNAC WNAX WNBW  
WNOX WOC WOKO WORC WOV  
WPG WQAM WREC WSBT WSFA  
WSJS WSPD WTOC WLL

### R — Vox Pop; Sidewalk Interviews

KSD KYW WBEN WCAE WCKY  
WCSH WDAF WEAF WEEI WFBF  
WGY WHO WHIO WIRE WJAR  
WMAQ WOW WRC WTAG WTAM  
WTIC WWJ

### B — Ben Bernie and Orchestra

KDKA KDYL KFI KFSB KFYR  
KGW KHQ KOA KOIL KOMO KPO  
KPRC KSO KSTP KTAR KTBS  
KVoo KWK WAVE WBAL WBAF  
WBZ WBZA WDAY WEBC WFIL  
WFLA WGAR WHAM WIBA WIOD  
WIS WJAX WJDX WJZ WKY WLS  
WLW WMAL WMC WMT WOAI  
WPTF WREN WRVA WSB WSM  
WSMB WSOC WSYR WTAR WTMJ  
WUNC WXYZ

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

### C — Camel Caravan

KDB KERN KFAB KFBK KFH  
KFPY KFCR KGB KGKO KHJ  
KLRA KLZ KMBC KMJ KMOX  
KOH KOIN KOL KOMA KRLD  
KRNT KSCJ KSL KTRH KTSa  
KTUL KVI KVOR KWG KWKH  
WABC WACO WADC WALA WBBM  
WBIG WBNS WBRC WBT WCAO  
WCAU WCCO WDAE WDBJ WDBO  
WDNC WDOD WDRG WEAN WFBL  
WFBM WFEA WGST WHAS WHEC  
WHK WHP WIBW WIBX WICC  
WJAS WJR WJSV WKBW WKBW  
WKRC WLAC WLBZ WMAS WMBD  
WMBG WMBR WNAC WNAX WNOX  
WOKO WORC WOV WPG WQAM  
WREC WSBT WSFA WSJS WSPD  
WTOC WLL

### R — Fred Astaire; Johnny Green

CRCT KDYL KFI KFYR KGW  
KHQ KOA KOMO KPO KPRC KSD  
KSTP KTBS KTHS KVoo KYW  
WAVE WBAF WBEN WCAE WCKY  
WCSH WDAF WDAY WEAF WEBC  
WEEI WFBF WFLL WGY WHO  
WHIO WIBA WIOD WIRE WIS  
WJAR WJAX WJDX WKY WMAQ  
WMC WOAI WOW WPTF WRC  
WRVA WSM WSMB WSOC WTAG  
WTAM WTAR WTIC WTMJ WWJ  
WUNC

### B — Husbands and Wives

KECA KEX KFSD KGA KGO KJR

## TUESDAY (Continued)

KLO KOIL KSO KWK WBAL WBZ  
WBZA WEBR WENR WHAM WJZ  
WMAL WMT WREN WSAI WSYR  
WXYZ

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**  
**R—Jimmy Fiddler Hollywood Gossip**  
KDYL KFI KGW KHQ KOA KOMO  
KPO KSD KTAR KYW WBEN  
WCAE WCHS WDAF WFAE WFBP  
WGY WHO WJAR WLW WMAQ  
WNAC WOOD WOW WRC WTAG  
WTAM WTIC WWJ

### B—Portraits of Harmony

KDKA KECA KFSB KGA KGHL  
KGRG KGO KJR KLO KOIL KPRC  
KSO KTBS KTHS KWK WAPI WAVE  
WBAL WBAP WBLZ WBZA WKCY  
WENR WFIL WFLA WGAR WHAM  
WIOD WIRE WIS WJAX WJDX  
WJZ WKY WMAL WMC WMT WAO  
WPTF WREN WRVA WSB WSM  
WSMB WSOC WSUN WSYR WTAR  
WWNC WXYZ

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**  
**C—Poetic Melodies, See Monday**

**R—Amos 'n' Andy, See Monday**

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**  
**C—Renfrew of Mounted, See Monday**

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**  
**C—Dance Orchestra**

CFRB CKAK KLRA KSCJ WAAB  
WABC WADC WALA WBBM WBNS  
WBRC WBT WCAU WCCO WDAE  
WDBJ WDBO WDNC WDOE WDRC  
WEAN WFBL WFPM WFEA WGST  
WHAS WHEC WHK WIBX WICC  
WISN WJAS WJR WJSV WKBW  
WKRC WLAC WLBZ WMAS WMBD  
WMBG WMBR WNAX WNOX WOC  
WOKO WORC WQAM WREC WSPD  
WSJS WSMK WSPD WTOC

**R—Leo Reisman and Orchestra**  
KDYL KFI KFSB KGHL KGRG  
KGW KHQ KOA KOMO KPO KTAR

## WEDNESDAY

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

**E-6:45 p.m., C-5:45, M-4:45, P-3:45**  
**C—Renfrew of Mounted, See Mon.**  
**B—Lowell Thomas, See Monday**

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**  
**C—Poetic Melodies, See Monday**  
**R—Amos 'n' Andy, See Monday**  
**B—Easy Aces, See Tuesday**

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**  
**C—Popeye, See Monday**  
**R—Uncle Ezra, See Monday**

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**  
**C—Goose Creek Parson, See Mon.**  
**B—Lum and Abner, See Monday**

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**  
**C—Boake Carter, See Monday**

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**  
**C—Cavalcade of America**  
KDB KERN KFAB KFBK KFPY  
KFRG KGB KHJ KLZ KMBC KMJ  
KMOX KOIN KOL KRLD KRNT  
KSL KVI KWG WABC WBBM  
WBNS WCAO WCAU WCCO WDRC  
WEAN WFBL WFPM WGR WHAS  
WHEC WHK WJAS WJR WJSV  
WKRC WLAC WMBG WNAC WOKO  
WTOC WWL

**B—Follies de Patee**  
KDKA KOIL KSO KWK WBAL  
WBZ WBZA WKCY WFIL WGAR  
WHAM WHIO WIRE WJZ WLS  
WMAL WMT WREN WSYR WXYZ

### R—One Man's Family

KDYL KFI KFYR KGW KHQ KOA  
KOMO KPO KPRC KSD KSTP  
KTAR KTBS KTHS KVVO KYW  
WAPI WAVE WBAP WBAE WCAE  
WCHS WDAF WDAY WFAE WFCB  
WEEI WFAA WFBF WFLA WGY  
WHO WIBA WIOD WIS WJAR  
WJAX WJDX WKY WLW WMAQ  
WMC WOA1 WOW WPTF WRC  
WRVA WSB WSM WSMB WSOC  
WSUN WTAG WTAM WTAR WTIC  
WTMJ WWJ WWNC

**E-8:30 p.m., C-7:30, M-6:30, P-5:30**

### C—Burns and Allen

CKAK KFAB KFH KLRA KMBC  
KMOX KOMA KRLD KRNT KSCJ  
KTRH KTSa KTUL KWKH WABC  
WADC WBBM WBNS WBRC WBT  
WCAO WCAU WCCO WDAE WDBJ  
WDBO WDRC WEAN WFBL WFBM  
WFEA WGR WGST WHAS WHEC  
WHK WHP WIBW WIBX WICC  
WJAS WJR WJSV WKRC WLAC  
WLBZ WMAS WMBD WMBG  
WMBR WNAC WNAX WNOX WOKO  
WORC WPG WQAM WREC WSPD  
WWL

### R—Wayne King, See Tuesday

### B—Ethel Barrymore, Drama

KDKA KOIL KSO KWK WBAL WBZ  
WBZA WENR WFIL WGAR WHAM  
WJZ WMAL WMT WREN WSAI  
WSYR WXYZ

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**

### C—Chesterfield Program

KDB KERN KFAB KFBK KFH  
KFPY KFRG KGB KGKO KGMB  
KHJ KLRA KLZ KMBC KMJ  
KMOX KOH KOIN KOL KOMA  
KRLD KRNT KSCJ KSL KTRH  
KTSa KTUL KVI KVOR KWG  
KWKH WABC WACO WADC WALA  
WBBM WBIG WBNS WBOE WBT  
WCAO WCAU WCCO WCO WDAE  
WDBG WDBO WDNC WDOE WDRC  
WEAN WFBL WFPM WFEA WGST  
WHAS WHEC WHK WHP WIBW  
WIBX WICC WISN WJAS WJR  
WJSV WKBH WKBW WKRC WLAC  
WLBZ WMAS WMBD WMBG  
WMBR WNAC WNAX WNBFWNOX  
WOC WOKO WORC WOWO WPG  
WQAM WREC WSFA WSJS WSPD  
WTOC WWL

### R—Town Hall Tonight

KFYR KPRC KSD KSTP KTBS  
KTHS KVVO KYW WAVE WBEN  
WCAE WCHS WDAF WDAY WFAE  
WFCB WEEI WFAA WFBF WFLA  
WGY WHO WIBA WIOD WIS WJAR  
WJAX WJDX WKY WLW WMAQ  
WMC WOA1 WOW WPTF WRC WSB  
WSM WSMB WSOC WTAG WTAM  
WTAR WTIC WTMJ WWJ WWNC

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

### C—Come On, Let's Sing

KDB KERN KFAB KFBK KFH  
KFPY KFRG KGB KGMB KHJ  
KLRA KLZ KMBC KMJ KMOX  
KOIN KOL KOMA KRLD KRNT  
KSL KTRH KTSa KTUL KVI KWG  
KWKH WABC WBBM WBNS WBRC  
WBT WCAO WCAU WCCO WDAE  
WDBJ WDBO WDRC WEAN WFBL

WFBM WGST WHAS WHEC WHK  
WICC WISN WJAS WJR WJZA  
WKBW WKRC WLAC WLBZ WMBG  
WMBR WNAC WOKO WORC WOWO  
WQAM WREC WTOC WWL

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

### C—Crime Crusade; Phil Lord

KDB KERN KFAB KFBK KFH  
KFPY KFRG KGB KHJ KLRA KLZ  
KMBC KMJ KMOX KOIN KOL  
KOM A KRLD KRNT KSL KTRH  
KTSa KTUL KVI KWG KWKH  
WABC WACO WBBM WBNS WBRC  
WBT WCAO WCAU WCCO WDAE  
WDBJ WDBO WDRC WEAN WFBL  
WPBM WGST WHAS WHEC WHK  
WICC WISN WJAS WJR WJSV  
WKBW WKRC WLAC WLBZ WMBG  
WMBR WNAC WOKO WORC WOWO  
WQAM WREC WTOC WWL

### R—Your Hit Parade

KDYL KEX KFI KFYR KGHL  
KGRG KGU KGW KHQ KOA KOMO  
KPO KPRC KSD KSTP KTAR  
KTBS KTHS KVVO KYW WAVE  
WCAE WCHS WDAF WDAY  
WFAE WFCB WFAA WFBF WFLA  
WGY WHO WIBA WIOD WIS WJAR  
WJAX WJDX WKY WLW WMAQ  
WMC WNAC WOA1 WOW WPTF  
WRC WRVA WSB WSM WSMB  
WSOC WSUN WSYR WTAG WTAM  
WTAR WTIC WTMJ WWJ WWNC

**E-10:45 p.m., C-9:45, M-8:45, P-7:45**

### C—Goose Creek Parson, See Mon.

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**

### C—Poetic Melodies, See Monday

**R—Amos 'n' Andy, See Monday**

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**

### C—Renfrew of Mounted, See Monday

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**

### C—Dance Orchestra

CFRB CKAK KLRA WAAB WABC  
WADO WALA WBRC WBT WCAO WCAU  
WDAE WDBJ WDBO WDNC WDOI  
WDRC WEAN WFBL WFPM WFEA  
WGST WHAS WHEC WHK WICC  
WJAS WJR WJSV WKBW WKRC  
WLAC WLBZ WMBG WMBR WNOX  
WOKO WORC WQAM WREC WSPD  
WTOC

### C—Burns and Allen

KDB KERN KFBK KFPY KFRG  
KGB KHJ KLZ KMJ KOIN KOL  
KSL KVI KVOR KWG

## THURSDAY

**E-6:15 p.m., C-5:15, M-4:15, P-3:15**

### C—News of Youth, See Tuesday

**E-6:45 p.m., C-5:45, M-4:45, P-3:45**

### C—Renfrew of Mounted, See Mon.

**B—Lowell Thomas, See Monday**

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**

### C—Poetic Melodies, See Monday

**R—Amos 'n' Andy, See Monday**

**B—Easy Aces, See Tuesday**

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**

### R—Experience, See Tuesday

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**

### C—Judy Starr and Charioteers

KDB KERN KFAB KFBK KFPY  
KFRG KGB KHJ KLZ KMJ KMOX  
KOIN KOL KVI KWG WABC WBBM  
WCAO WCAU WCCO WEAN WEEI

## THURSDAY (Continued)

WFBL WFEM WGR WHBC WHK  
WJAS WJR WJSV WKRC

**B — Lum and Abner, See Monday**

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**  
**C — Boake Carter, See Monday**

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**

**C — Kate Smith; Babe Ruth**  
KFAB KMBC KMOX KRLD KRNT  
KTRH WABC WADC WBBM WBIG  
WBNS WABC WBT WCAO WCAU  
WCCO WDAE WDBJ WDRC WEAN  
WEEI WFBL WFBM WGR WGST  
WHAS WHK WHP WIBX WJAS  
WJR WJSV WKBN WKRC WLWB  
WMAS WMBG WMBR WOC WOKO  
WSPD WTOC WWL WVVV

**R — Rudy Vallee's Variety Hour**  
CFBC CRCT KDYL KFI KFYP  
KGW KHQ KOA KOMO KPO KSD  
KSTP KTAR KYW WBEW WCAE  
WCSE WDAF WDAY WEAF WEBC  
WEEI WFBR WGY WHO WJAR  
WJAS WMAQ WOW WRC WTAM  
WTIC WTMJ WWJ

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**

**C — Major Bowes' Amateurs**  
CFRB CKAK KDB KERN KFAB  
KFBB KFH KFY KFRC KGB  
KGKO KHLR KLZ KMBC WMJ  
KMOX KOIN KOL KOMA KRLD  
KRNT KSCJ KSL KTRH KTSK  
KTUL KVI KVOR KWG KWKH  
WABC WACO WADC WALA WBBM  
WBIG WBNS WBRC WBT WCAO  
WCAU WCCO WCOA WDAE WDBJ  
WDBO WDNC WDOE WDRC WEAN  
WFBL WFBM WFEA WGST WHAS  
WHBC WHK WHP WIBX WJAS  
WJIC WISN WJAS WJR WJSV  
WKBN WKWB WKRC WLAC WLWB  
WMAS WMBD WMBG WMBR  
WMNM WNAX WNOC WOC WOKO  
WORC WOWO WPG WQAM WREC  
WSFA WSJS WSPD WTOC WWL

**R — Maxwell House Show Boat**  
KDYL KFI KFSD KFYP KGLH  
KGR KFK KHQ KOA KOMO KPO  
KPRC KSD KSTP KTAR KTHS  
KYW WAPI WAVE WBAP WBEW  
WCAE WCSE WDAF WDAY WEAF  
WEBC WEEI WFBR WFLA WGY  
WHO WHIO WBA WIOD WIRE WIS  
WJAR WJAX WJDX WKY WMAQ  
WMC WOA1 WOW WPTF WRC  
WRVA WSAI WSB WSM WSMB  
WSOC WTAG WTAM WTAR WTIC  
WTMJ WWJ WWNC

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

**C — Sears—Then and Now**  
KDB KERN KFAB KFBB KFBB  
KFH KFY KFRC KGB KGKO  
KGMB KHJ KLRA KLZ KMBC  
KMJ KMOX KOH KOIN KOL KOMA  
KRLD KRNT KSCJ KSL KTRH  
KTSK KTUL KVI KVOR KWG  
KWKH WABC WACO WADC WALA  
WBBM WBIG WBNS WBRC WBT  
WCAO WCAU WCCO WCOA WDAE  
WDBJ WDBO WDNC WDOE WDRC  
WGR WEEI WFBL WFBM WFEA  
WGST WHAS WHBC WHK WHP  
WIBW WIBX WJIC WISN WJAS  
WJR WJSV WKBN WKWB WKRC  
WLAC WLWB WMAS WMBD WMBG  
WMBR WMNM WNAX WNOX WOC  
WOKO WORC WOWO WPG WQAM  
WREC WSBT WSFA WSJS WSMK  
WSPD WTOC WWL

**R — Bing Crosby; Bob Burns**  
CFBC CRCT KDYL KFI KFYP  
KGW KHQ KOA KOMO KPO KPRC  
KSD KSTP KTAR KTHS  
KTHS KVOO KYW WAVE WBAP WBEW  
WCAE WCBW WDAF WDAY WEAF  
WEBC WEEI WFBR WFLA WGY  
WHO WIBA WIOD WIS WJAR  
WJAX WJDX WKY WLW WMAQ  
WMC WOA1 WOW WPTF WRC  
WRVA WSB WSM WSMB WSOC  
WTAG WTAM WTAR WTIC WTMJ  
WWJ WWNC

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**

**C — March of Time**  
KDB KERN KFAB KFBB KFY  
KFRC KGB KHJ KLZ KMJ KMOX  
KOIN KOL KOMA KRNT KSL KVI  
KWG WABC WBBM WBNS WCAO  
WCAU WCCO WDRC WEAN WEEI  
WFBL WFBM WGST WHAS WEBC  
WHK WJAS WJR WJSV WKWB  
WKRC WOKO WWL

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**

**C — Poetic Melodies, See Monday**  
**R — Amos 'n' Andy, See Monday**

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**

**C — Renfrew of Mounted, See Monday**

## FRIDAY

**E-6:15 p.m., C-5:15, M-4:15, P-3:15**

**C — Bobby Benson, See Monday**

**E-6:45 p.m., C-5:45, M-4:45, P-3:45**

**C — Renfrew of Mounted, See Tues.**

**B — Lowell Thomas, See Monday**

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**

**C — Mortimer Gooch, Sketch**

WABC WADC WBT WCAO WCAU  
WDRS WEAN WEEI WFLR WGR  
WHBC WHK WJAS WJR WJSV  
WKRC WOKO WSPD WTOC WWVA

**R — Amos 'n' Andy, See Monday**

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**

**C — Popeye, See Monday**

**R — Uncle Ezra, See Monday**

**B — Stainless Show; Mario Cozzi**

KDKA KECA KEX KFSD KGA  
KGO KJR KLO KOIL KSO KVOD  
KWG WBAL WBT WBAZ WBBR  
WENR WFIL WGAR WHAM WJZ  
WMAL WMT WSAI WSYR WXYZ

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**

**C — Goose Creek Parson, See Mon.**

**B — Lum and Abner, See Monday**

**E-7:45 p.m., C-6:45, M-5:45, P-4:45**

**C — Boake Carter, See Monday**

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**

**C — Broadway Varieties**

KDB KERN KFAB KFBB KFY  
KFRC KGB KHJ KLZ KMBC KMJ  
KMOX KOIN KOL KOMA KRNT  
KSL KVI KWG WABC WBBM  
WBNS WBRC WBT WCAO WCAU  
WCCO WDRC WEAN WFBL WFBM  
WGR WGST WHAS WHK WJAS  
WJR WJSV WKRC WMAS WMBG  
WNAC WOKO WWL

**R — Cities Service Concert**

CRCT KFYP KOA KPRC KSD  
KSTP KTHS KTHS KVOO KYW  
WBAP WBEW WCAE WCSE WDAF  
WDAY WEAF WEBC WEEI WFLA  
WFBR WGY WHO WHIO WIBA  
WIOD WJAR WKY WMAQ WOA1

WOW WRC WRVA WSAI WTAG  
WTAM WTIC WTMJ WWJ

**B — Irene Rich; Drama**

KDKA KDYL KFI KGW KHQ KOIL  
KOMO KPO KSO KTAR KWK WAVE  
WBAL WBZ WBAZ WCKY WFIL  
WGAR WHAM WIRE WJZ WLS  
WMAL WMC WMT WREN WSB  
WSM WSYR WXYZ

**E-8:15 p.m., C-7:15, M-6:15, P-5:15**

**B — Singin' Sam**

KDKA KOIL KSO KWK WBAL  
WBZ WBAZ WFLW WGAR WHAM  
WJZ WLS WMAL WMT WREN  
WSYR WXYZ

**E-8:30 p.m., C-7:30, M-6:30, P-5:30**

**C — Andre Kostelanetz**

KDB KERN KFAB KFBB KFH  
KFYP KFRC KGB KGKO KGMB  
KHJ KLRA KLZ KMBC KMJ KMOX  
KOH KOIN KOL KOMA KRLD  
KRNT KSCJ KSL KTRH KTSK  
KTUL KVI KVOR KWG KWKH  
WABC WACO WADC WALA WBBM  
WBIG WBNS WBRC WBT WCAO  
WCAU WCCO WCOA WDAE WDBJ  
WDBO WDNC WDOE WDRC WEAN  
WFBL WFBM WFEA WGST WHAS  
WHBC WHK WHP WIBX WJAS  
WJIC WISN WJAS WJR WJSV  
WKBN WKWB WKRC WLAC WLWB  
WMAS WMBD WMBG WMBR  
WNAC WNAX WNBW WNOX WOC WOKO  
WORC WOWO WPG WQAM WREC  
WSFA WSJS WSMK WSPD WTOC  
WWL

**B — Death Valley Days**

KDKA KDYL KFI KGW KHQ  
KOIL KOMO KPO KSO KWK WBAL  
WBZ WBAZ WFLW WGAR WHAM  
WJZ WLS WLW WMAL WMT  
WREN WSYR WXYZ

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**

**C — Hollywood Hotel**

CFRB CKAK KDB KERN KFAB  
KFBB KFH KFY KFRC KGB KHJ  
KLRA KLZ KMBC KMJ KMOX  
KOIN KOL KOMA KRLD KRNT  
KSCJ KSL KTRH KTSK KTUL KVI  
KVOR KWG KWKH WABC WADC  
WBBM WBNS WBRC WBT WCAO  
WCAU WCCO WDAE WDBJ WDBO  
WDRS WEAN WFBL WFBM WFEA  
WGST WHAS WHBC WHK WHP  
WIBW WIBX WJIC WJAS WJR  
WJSV WKWB WKRC WLAC WLWB  
WMAS WMBD WMBG WMBR  
WNAC WNAX WNOX WOKO WORC  
WPG WQAM WREC WSPD WWL

**R — Frank Munn; Bernice Claire**

KSD KYW WBEW WCAE WCSE  
WDAF WEAF WEEI WFBR WGY  
WJAR WLW WMAQ WOW WRC  
WTAG WTAM WWJ

**B — Fred Waring**

KDKA KDYL KFYP KOA KOIL  
KPRC KSO KSTP KTHS KWK  
WAPI WAVE WBAL WBZ WBAZ  
WDAY WEBC WFAA WFL WFLA  
WGAR WHAM WBA WIOD WIS  
WJAX WJDX WJZ WKY WLS WLW  
WMAL WMC WMT WOI WOOD  
WPTF WREN WRVA WSB WSM  
WSMB WSOC WSUN WSYR WTAR  
WTMJ WWNC WXYZ

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

**R — True Story Court**

KSD KYW WBEW WCAE WCSE  
WEAF WEEI WFBR WGY WHO

## FRIDAY (Continued)

WHIO WJAR WMAQ WOW WRC  
WTAG WTAM WTIC WWJ

**B—Rosemarie Brancato; Helen Claire**  
KDKA KEGA KFSD KFYP KGA  
KGHL KGIR KGO KJR KLO KOIL  
KPRC KSO KSTP KTAR KTBS  
KTHS KWK WABY WAPI WAVE  
WBAL WBZ WBZA WCKY WCSB  
WDAY WECB WBBR WENR WFAA  
WFBC WFIL WFLA WGAR WHEM  
WIBA WIOD WIRE WIS WJAX  
WJDX WJZ WKY WMAL WMC  
WMT WOAI WOOD WPTF WREN  
WRVA WSB WSM WSMB WSOC  
WSUN WSYR WTAR WTMJ WWNC  
WXYZ

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

**R—First Nighter; Drama**  
KDYL KFI KFYP KGW KHQ KOA  
KOMO KPO KPRC KSD KSTP  
KTBS KTHS KYW WAVE WBEN  
WCAE WCSH WDAF WDAY WEAF  
WECB WEEI WFAA WFBW WFLA  
WGY WHO WIBA WIOD WIS WJAR  
WJAX WJDX WKY WLW WMAQ  
WMC WPTF WRC WRVA WSB  
WSM WSMB WSOC WTAG WTAM  
WTAR WTIC WTMJ WWJ WWNC

**B—Your Radio Guide**

CRCT KDKA KOIL KSO KWK  
WBAL WBZ WBZA WENR WFIL  
WGAR WHAM WIRE WJZ WMAL  
WMT WREN WSYR WXYZ

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**

**C—Mortimer Gooch, Sketch**  
KERN KFAB KFBC KFYR KFRC  
KGB KHJ KLRA KLZ KMBC KMOX  
KOLN KOL KOMA KRLD KRNT  
KSL KTRH KTSB KVI WBBM  
WBRC WCOO WFBM WGST WLAC  
WREC WVV

**R—Amos 'n' Andy, See Monday**

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**

**C—Dance Orchestra**  
CFRB CKAC KLRA KSCJ WAAB  
WABC WADC WALA WBNS WBRC  
WBT WCAO WCAU WDAE WDBJ  
WDBO WDNC WDDO WDRC WFBL  
WFEA WGST WHEC WHK WIBX  
WISN WJAS WJR WKBW WLAC  
WLBZ WMAS WMBD WMBG  
WMBR WNAX WNOX WOC WOKO  
WORC WPG WQAM WRC WSBT  
WSJS WSMK WSPD WTOC

**C—Renfrew of Mounted, See Mon.**

## SATURDAY

**E-6:15 p.m., C-5:15, M-4:15, P-3:15**

**C—News of Youth, See Tuesday**

**E-6:45 p.m. C-5:45, M-4:45, P-3:45**

**C—Saturday Swing Club**  
CFRB CKAC KFBB KFH KGB KLZ  
KMBC KNOW KOH KRLD KSL  
KTRH KTSB KVOR KWKH WABO  
WACO WADC WALA WBNS WCAO  
WDAE WDBJ WDBO WDNC WDRC  
WEEI WFBL WFBM WFEA WHAS  
WHEC WHK WIBX WICC WJAS  
WLBZ WMBG WMBR WMMN WOC  
WOKO WORC WQAM WSBT WSJS  
WSPD

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**

**C—Carborundum Band**  
KFAB KMBC KNOX WABC WBBM  
WBT WCAU WCCO WEAN WEEI  
WFBL WGR WHAS WHK WJAS  
WJR WKRC

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**

**C—Columbia Workshop; Drama**  
CFRB CKAC KFAB KFH KFRC  
KLRA KMBC KMOX KOMA KRNT  
KTRH KTSB KTUL KWKH WABC  
WBBM WBNS WBRC WBT WCAO  
WCAU WCCO WDAE WDBJ WDBO  
WDRC WEAN WFBL WFBM WGR  
WGST WHAS WHEC WHK WHK  
WICC WISN WJAS WJR WJSV  
WKRC WLAC WLBZ WMBG WMBR  
WNAC WOKO WORC WQAM WREC  
WTOC WWL

**R—Saturday Night Party**

KSD KYW WAPI WAVE WBEN  
WCAE WCSB WCSH WDAF WEAF  
WFBW WFLA WGY WHO WIOD  
WIS WJAR WJAX WJDX WMAQ  
WMC WNAC WOW WPTF WRC  
WSB WSMB WSOC WSUN WTAG  
WTAM WTAR WTIC WWJ WWNC

**B—Ed Wynn; Don Voorhes**

KDKA KFYP KOIL KPRC KSO  
KSTP KTBS KWK WABY WBAL  
WBAP WBZ WBZA WCKY WDAY  
WECB WEEB WFIL WGAR WHEM  
WIBA WIRE WJZ WKY WLS WMAL  
WMT WOAI WREN WSYR WTMJ  
WXYZ

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**

**C—Floyd Gibbons; Vincent Lopez**  
KDB KERN KFAB KFBC KFYR  
KFRC KGB KHJ KLRA KLZ KMBC  
KMJ KMOX KOIN KOL KOMA  
KRLD KRNT KSL KTRH KTSB  
KVI KWG WABC WBBM WBNS  
WBT WCAO WCAU WCCO WDAE  
WDBO WDRC WEAN WFBL WFBM  
WGST WHAS WHK WISN WJAS  
WJR WJSV WKBW WKRC WMBR  
WOKO WQAM WREC WSPD WWL

**R—Snow Village Sketches**

KSD KYW WBEN WCAE WCSH  
WDAF WEAF WFBW WGY WJAR  
WMAQ WNAC WOW WRC WTAG  
WTAM WTIC WWJ

**B—National Barn Dance**

KDKA KOIL KPRC KSO KTBS  
KTHS KWK WABY WAPI WAVE  
WBAL WBAP WBZ WBZA WFIL  
WFLA WGAR WHEM WIOD WIRE  
WIS WJAX WJDX WJZ WKY WLS  
WMAL WMC WMT WOAI WOOD  
WPTF WREN WRVA WSB WSMB  
WSOC WSUN WSYR WTAR WWNC  
WXYZ

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

**C—Mary Eastman; Gus Haenschen**  
KDB KERN KFAB KFBC KFH  
KFYP KFRC KGB KGKO KHJ  
KLRA KLZ KMBC KMJ KMOX  
KOLN KOL KOMA KRLD KTRH  
KTSB KTUL KVI KWG KWKH  
WALA WBBM WBIG WBNS WBRC  
WBT WCAO WCOA WDAE WDBO  
WDDO WEAN WFBL WFBM WGST  
WHAS WHEC WHK WJAS WJR  
WJSV WKBW WLAC WMBD WMBR  
WNOX WOC WQAM WREC WFSB  
WSPD WTOC WWL WWVA

**R—Shell Chateau**

KDYL KFI KFSD KFYP KGHL  
KGIR KGW KHQ KOA KOMO KPO  
KSD KSTP KTAR KYW WBEN  
WCAE WCSH WDAF WDAY WEAF  
WECB WEEI WFBW WGY WIBA  
WJAR WLW WMAQ WOW WRC  
WTAG WTAM WTIC WTMJ WWJ

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

**C—Your Hit Parade**  
KERN KFAB KFBC KFH KFYR  
KFRC KGB KGKO KGMB KHJ  
KLRA KLZ KMBC KMJ KMOX  
KOH KOIN KOL KOMA KRLD  
KRNT KSCJ KSL KTRH KTSB  
KTUL KVI KVOR KWG KWKH  
WABC WACO WADC WALA WBBM  
WBAW WBNS WBRC WBT WCAO  
WCAU WCCO WCOA WDAE WDBJ  
WDBO WDNC WDDO WDRC WEAN  
WFBL WFBM WFEA WGST WHAS  
WHEC WHK WHF WIBW WIBX  
WICC WISN WJAS WJR WJSV  
WKBW WKRC WLAC WLBZ WMAS  
WMBD WMBG WMBR WNAC  
WNAX WNOX WOC WOKO WORC  
WPG WQAM WREC WSBT WSFA  
WSJS WSPD WTOC WWL WWVA

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**

**C—American Dances; Lud Gluskin**  
CFRB CKAC KERN KFBB KFBC  
KFH KFYR KGB KGVO KLZ KMBC  
KNOW KOH KOL KRLD KTRH  
KTSB KVI KVOR KWG KWKH  
WABC WACO WADC WALA WBNS  
WCAO WDAE WDBJ WDBO WDNC  
WDDO WDRC WEEI WFBL WFBM  
WFEA WGR WHAS WHEC WHK  
WIBX WJAS WJR WKRC WLBZ  
WMBD WMBG WMBR WMMN  
WOKO WORC WPG WQAM WSBT  
WSJS WSPD

**R—Ervin S. Cobb**

KDYL KFI KFYP KGHL KGIR  
KGW KHQ KOA KOMO KPO KPRC  
KSD KSTP KTAR KTBS KTHS  
KVOO KYW WAVE WBAP WBEN  
WCAE WCSH WDAF WDAY WEAF  
WECB WEEB WFLA WGY WIBA  
WIOD WIS WJAR WJAX WJDX  
WKY WMAQ WMC WNAC WOOD  
WOW WPTF WRC WRVA WSB  
WSMB WSOC WSUN WTAG WTAM  
WTAR WTIC WTMJ WWJ WWNC

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**

**C—Dance Orchestra**  
CFRB CKAC KFH KGKO KLRA  
KLZ KMBC KMOX KOMA KRLD  
KSCJ KSL KTRH KTSB KVOR  
KWKH WABC WACO WADC WALA  
WBBM WBNS WBRC WBT WCAO  
WCAU WCCO WDAE WDBJ WDBO  
WDNC WDDO WDRC WFBL WFBM  
WFEA WGST WHAS WHEC WHK  
WIBW WIBX WICC WISN WJAS  
WJR WJSV WKBW WKRC WLAC  
WLBZ WMAS WMBD WMBG  
WMBR WNAX WNOX WOC WOKO  
WORC WQAM WREC WSET WSJS  
WSMK WSPD WTOC

**B—National Barn Dance**

KDYL KFI KFSD KFYP KGHL  
KGIR KGU KGW KHQ KOA KOMO  
KPO KSTP KTAR WDAY WECB  
WIBA WLW WTMJ

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**

**C—Dance Orchestra**  
CFRB CKAC KFH KGKO KLRA  
KLZ KMBC KMOX KOMA KSL  
KTRH KTSB KVOR KWKH WABC  
WACO WADC WALA WBNS WBRC  
WBT WCAO WCAU WDAE WDBJ  
WDBO WDNC WDDO WDRC WEAN  
WFBL WFBM WFEA WGST WHAS  
WHEC WHK WIBW WIBX WICC  
WJAS WJR WKBW WKRC WLAC  
WLBZ WMAS WMBG WMBR WNOX  
WOKO WORC WQAM WREC WSBT  
WSJS WSMK WSPD WTOC

SUNDAY

**E-11:30 a.m., C-10:30, M-9:30, P-8:30**  
**C — Major Bowes' "Family"**  
 CFRB KERN KFAB KFBB KFBK  
 KFH KFPY KFRC KGB KGVO  
 KMBC KOH KOL KRLL KSL KTRH  
 KTSa KVI KVOR KWG KWKH  
 WABC WACO WADC WALA WBNS  
 WBRB WCAO WCCO WDAE WDBJ  
 WDBC WDNC WESG WFBL WFEA  
 WHAS WHK WIBX WJAS WJR  
 WKRC WLbZ WMBD WMBR  
 WMMN WOC WOKO WORC WPG  
 WQAM WSBT WSJS WSPD WTOC

**E-12:30 p.m., C-11:30 a.m., M-10:30, P-9:30**

**C — Salt Lake Tabernacle Choir**  
 CFRB KFAB KFBB KFBK KFH  
 KFPY KFRC KGB KLZ KOH KOL  
 KRLL -KSL KTRH KTSa KVI  
 KVOR KWG WABC WACO WADC  
 WALA WBIG WBNS WBRB WCAO  
 WCCO WDAE WDBJ WDBO WESG  
 WFBL WFEA WGR WHAS WICC  
 WJAS WJR WKRC WLbZ WMBR  
 WMMN WOC WOKO WORC WQAM  
 WSBT WSJS WSPD WTOC

**B — Radio City Music Hall**  
 CFCF CRCT KDKA KDYL KFI  
 KFYR KGO KGW KHQ KOIL KOMO  
 KPRC KSO KVOO WAPL WBAL  
 WBZ WBZA WCKY WDAY WEBC  
 WGAR WHAM WIS WJDX WJZ  
 WKY WMAL WQAI WREN WSMB  
 WSYR WWNC

**E-12:45 p.m., C-11:45 a.m., M-10:45, P-9:45**

**C — Trans-Atlantic Broadcast**  
 CFRB CKAC KFH KGKO KLRA  
 KLZ KMBC, KRLL KSCJ KTRH  
 KTSa KVOR WABC WACO WADC  
 WALA WBIG WBRB WCAO WCAU  
 WCCO WDAE WDBJ WDBO WDRB  
 WEAN WESG WFBL WFBM WFEA  
 WGR WHAS WIBX WJAS WJSV  
 WKBN WLAC WLbZ WMBD WMBR  
 WNAC WOC WOKO WORC WPG  
 WQAM WREC WSJS WSMK WSPD  
 WTOC WWL

**E-1:00 p.m., C-12:00, M-11:00, P-10:00**  
**C — Church of the Air**

KFBK KFH KFPY KFRC KGB  
 KHJ KMOX KOH KOL KOMA KRLL  
 KRNT KSCJ KSL KTRH KTSa  
 KVI KVOR KWG WABC WALA  
 WBNS WBT WCAO WCCO WDAE  
 WDBJ WDBO WDRB WESG WFBL  
 WFBM WGR WHAS WHP WIBX  
 WJAS WJSV WKBN WKRC WLAC  
 WLbZ WMBR WBNF WOC WOKO  
 WORC WPG WQAM WREC WSBT  
 WSJS WSPD WTOC WWVA

**E-1:30 p.m., C-12:30, M-11:30, P-10:30**  
**R — Muriel Dickson; Morton Bove**

KDYL KFI KFYR KGW KHQ KOA  
 KOMO KPO KSD KSTP KYW WBEN  
 WCAE WCKY WCSH WDAF WDAY  
 WFAF WEBC WFBR WGY WIBA  
 WIRE WJAR WMAQ WNAC WOW  
 WRC WTAG WTAM WTIC WTMJ  
 WWJ

**E-2:00 p.m., C-1:00, M-12:00, P-11:00**  
**C — Pittsburgh Symphony**

KFAB KLRA KLZ KMBC KMOX  
 KOMA KRLL KRNT KTRH KTSa  
 KTUL KWKH WABC WADC WBBM  
 WBNS WBRB WBT WCAO WCAU  
 WCCO WDAE WDBJ WDBO WDRB  
 WEAN WFBL WFBM WGST WHAS

WHBC WHK WIBX WISN WJAS  
 WJR WJSV WKBW WKRC WLAC  
 WMBG WMBR WMMN WNAC  
 WNOX WOC WOKO WQAM WREC  
 WTOC WWL

**B — Magic Key of RCA**  
 CFCF CRCT KDKA KDYL KFI  
 KFYR KGU KGW KHQ KOA KOIL  
 KOMO KPO KPRC KSO KSTP  
 KTSB KTHS KVOO KWK WAPI  
 WAVE WBAL WBZ WBAZ WCKY  
 WDAY WEBC WENR WFAA WFIL  
 WFLA WGAR WHAM WHIO WHIO  
 WIOD WIRE WIS WJAX WJDX  
 WJZ WKY WMAL WMC WMT  
 WQAI WPTF WREN WRVA WSB  
 WSM WSMB WSOC WSYR WTAR  
 WTMJ WWNC WXYZ

**E-3:00 p.m., C-2:00, M-1:00, P-12:00**  
**C — New York Philharmonic**

CFRB CKAC KERN KFAB KFBB  
 KFBK KFH KFPY KFRC KGB  
 KGVO KLRA KLZ KMBC KNOW  
 KOH KOL KRLL KSL KTRB KTSa  
 KVI KVOR KWKH WABC WACO  
 WADC WALA WBIG WBNS WBRB  
 WCAO WCCO WDAE WDBJ WDBO  
 WDNC WDOD WDRB WEAN WEEI  
 WESG WFBL WFBM WFEA WHAS  
 WHBC WHIO WHK WIBX WICC  
 WJAS WJR WKBW WKRC WLbZ  
 WMBD WMBG WMBR WMMN  
 WOC WOKO WORC WQAM WSBT  
 WSJS WSPD WTOC

**R — Metropolitan Auditions**  
 CFCF KDYL KFI KFYR KGW KHQ  
 KOA KOMO KPO KSD KSTP KTAR  
 KYW WAPI WAVE WVEN WCAE  
 WCKY WCSH WDAF WDAY WFAF  
 WEBC WFBR WGY WHO WIBA  
 WIRE WJAR WJDX WMAQ WMC  
 WNAC WOW WRC WSB WSM WSMB  
 WTAG WTAM WTIC WTMJ WWJ

**E-3:30 p.m., C-2:30, M-1:30, P-12:30**  
**R — Grand Hotel; Drama**

KDYL KFI KFYR KGW KHQ KOA  
 KOMO KPO KSD KSTP KYW  
 WBEN WCAE WCSH WDAF WDAY  
 WFAF WEBC WFBR WGY WHO  
 WIBA WJAR WMAQ WNAC WOW  
 WRC WSAI WTAG WTAM WTIC  
 WWJ

**E-3:30 p.m., C-3:30, M-2:30, P-1:30**  
**R — Musical Camera; Willie Morris**

KDYL KFI KGW KHQ KOA KOMO  
 KPO KYW WBEN WCAE WCSH  
 WFAF WGY WJAR WLW WMAQ  
 WOW WRC WSB WSMB WTAM  
 WTIC WWJ

**E-5:00 p.m., C-4:00, M-3:00, P-2:00**  
**C — Your Unseen Friend; Drama**

KFAB KLZ KMOX KSL KWKH  
 WABC WADC WBBM WBNS WCAO  
 WCAU WCOA WDAE WDBJ WDOD  
 WDRB WEAN WEEI WESG WFBL  
 WHAS WHBC WHK WHP WIBX  
 WJAS WJR WKBW WKRC WLAC  
 WLbZ WMA5 WMBG WMMN  
 WNOX WOKO WORC WOWO WQAM  
 WREC WSMK WSPD WWL WWVA

**R — Marion Talley, Soprano**  
 KDYL KFI KFYR KGW KHQ KOA  
 KOMO KPO KSTP KYW WBEN  
 WCAE WCKY WCSH WDAF WDAY  
 WFAF WEBC WFBR WGY WHIO  
 WIBA WIRE WJAR WMAQ WNAC  
 WOW WRC WTAG WTAM WTIC  
 WTMJ WWJ

**B — We, The People; Phil Lord**  
 KDKA KECA KEX KFSD KGA

KGHL KGIR KGO KJR KLO KOIL  
 KPRC KSO KTSB KTHS KVOO  
 KWK WABY WAPI WAVE WBAL  
 WBAP WBZ WBZA WEBR WENR  
 WFIL WFLA WGAR WHAM WIOD  
 WIS WJAX WJDX WJZ WKY WLW  
 WMAL WMC WMT WQAI WPTF  
 WREN WRVA WSB WSM WSMB  
 WSOC WSUN WSYR WTAR WWNC  
 WXYZ

**E-5:30 p.m., C-4:30, M-3:30, P-2:30**  
**C — Guy Lombardo and Orchestra**

KFH KMBC KMOX KOMA KTUL  
 WAAB WABC WBNS WCAO WCAU  
 WDRB WEAN WFBL WFBM WGR  
 WHAS WHBC WHK WIBX WICC  
 WJR WJSV WMA5 WOKO WORC  
 WSPD WWVA

**R — Smiling Ed McConnell**  
 KDYL KFI KFYR KGIR KGW KHQ  
 KOMO KPO KSTP KYW WBEN  
 WCAE WCSH WDAF WDAY WFAF  
 WFBM WFBR WGY WHO WIBA  
 WJAR WLW WMAQ WNAC WOW  
 WRC WTAG WTAM WTIC WTMJ  
 WWJ

**B — Stoopnagle and Budd**  
 KDKA KECA KEX KFSD KGA  
 KGO KJR KLO KOIL KSO KWK  
 WBAL WBZ WBZA WCKY WENR  
 WFIL WGAR WHAM WHIO WIRE  
 WJZ WMAL WMT WREN WSYR  
 WXYZ

**E-6:00 p.m., C-5:00, M-4:00, P-3:00**  
**C — Joe Penner; Jimmy Grier**

KDB KERN KFAB KFBK KFPY  
 KFRC KGB KHJ KLZ KMBC KMJ  
 KMOX KOIN KOL KOMA KRLL  
 KSL KTRB KTSa KVI KWG WABC  
 WBBM WBNS WBT WCAO WCAU  
 WCCO WDAE WDRB WEAN WFBL  
 WFBM WGST WHAS WHBC WHK  
 WJAS WJR WJSV WKBW WKRC  
 WMBG WMBR WOKO WQAM WWL

**E-6:30 p.m., C-5:30, M-4:30, P-3:30**  
**C — Rubinoff and His Violin**

KDB KERN KFAB KFBK KFBK  
 KFH KFPY KFRC KGB KGKO KHJ  
 KLRA KLZ KMJ KMOX KOH KOIN  
 KOL KOMA KRLL KRNT KSCJ  
 KSL KTRH KTSa KTUL KVI KVOR  
 KWG KWKH WABC WACO WADC  
 WALA WBBM WBIG WBNS WBRB  
 WBT WCAO WCAU WCCO WCOA  
 WDAE WDBJ WDBO WDNC WDOD  
 WDRB WEAI WFBL WFBM WFEA  
 WGST WHAS WHBC WHK WHP  
 WIBW WIBX WISN WJAS WJR  
 WJSV WKBW WKBW WKRC WLAC  
 WLbZ WMA5 WMBD WMBG  
 WMBR WNAX WNOX WOC WOKO  
 WORC WPG WQAM WREC WSBT  
 WSAF WSJS WSMK WSPD WTOC  
 WWL WWVA

**R — A Tale of Today**  
 WBEN WFAF WGY WJAR WMAQ  
 WOW WRC WTAM

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**  
**R — Jack Benny; Mary Livingstone**

KSD KYA KYW WBEN WCAE  
 WCSH WDAF WFAF WFBR WGY  
 WHO WJAR WLW WMAQ WNAC  
 WOW WRC WTAG WTAM WTIC  
 WWJ

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**  
**C — Phil Baker; Hal Kemp**

KLRA KLZ KRLL KTRH KTSa  
 KTUL KWKH WABC WACO WADC  
 WALA WBIG WBNS WBRB

## SUNDAY (Continued)

WCAO WCAU WCOA WDAE WDBJ  
WDBO WDNC WDDO WDRC WEAN  
WFBL WFBM WFEA WGR WGST  
WHAS WHEC WHK WHP WIBX  
WICC WJAS WJR WJSV WKBN  
WKRC WLAC WLWB WMAS WMBR  
WNAC WNOX WOKO WORC WQAM  
WREC WSBT WSFA WSJS WSMK  
WSPD WTOC WWL WVVVA

### R — Fireside Recitals

KSD KYW WBN WCAE WCSH  
WDAF WEAJ WFBM WGY WHIO  
WIRE WJAR WMAQ WOW WRC  
WSAI WTAG WTAM WTIC WWJ

### B — Ozzie Nelson; Bob Ripley

KDKA KOIL KPRC KSO KTBS  
KTHS KV00 KWK WAPI WAVE  
WBAL WBAP WBSZ WBZA WCKY  
WFIL WGAR WHAM WHIO WIRE  
WJDX WJZ WKY WLS WMAL WMC  
WMT WOAI WREN WSB WSM  
WSB WSJR WXYZ

### E-7:45 p.m., C-6:45, M-5:45, P-4:45

R — **Sunset Dreams; Morin Sisters**  
CFCE CRCT KSD KYW WBN  
WCAE WCSH WDAF WEAJ WFBM  
WGY WHIO WHIO WIRE WJAR  
WLW WMAQ WOAI WOOD WOW  
WRC WTAG WTAM WTIC WWJ

### E-8:00 p.m., C-7:00, M-6:00, P-5:00

R — **Nelson Eddy; Franca White**  
KDB KERN KFAB KFBC KFH  
KFPY KFRC KGB KHJ KLRA KLZ  
KMBC KMJ KMOX KOIN KOL  
KOMA KRLD KRNT KSCJ KSL  
KTRH K TSA KTUL KWKH WABC  
WADC WALA WBBM WBG WBNB  
WBRC WBT WCAO WCAU WCCO  
WDAE WDBJ WDBO WDDO WDRC  
WEAN WFBL WFBM WFEA WGR  
WGST WHAS WHEC WHK WHP  
WIBW WIBX WICC WISN WJAS  
WJR WJSV WKBN WKRC WLAC  
WLWB WMAS WMBD WMBR  
WNAX WNOX WOC WOKO WORC  
WQAM WREC WSBT WSFA WSMK  
WTOC WWL WVVVA

### R — Good Will Court

CFCE CRCT KDYL KFI KFJR  
KGW KHQ KOA KOMO KPO KPRC  
KSD KSTP KTAR KTBS KTHS  
KV00 KYW WAPI WAVE WBN  
WCAE WCSH WDAF WDAY WEAJ  
WFBM WFEA WFBM WFLA WGY  
WHIO WIBA WIOD WIS WJAR  
WJAX WJDX WKY WLW WMAQ  
WMC WNAC WOAI WOW WPTF  
WRC WRVA WSB WSM WSMB  
WSOC WSUN WTAG WTAM WTAR  
WTIC WTMJ WWJ WNNC

### B — Armo Band

KDKA KECA KFSD KGA KGO KJR  
KLO KOIL KSO KV00 KWK WBAL  
WBZ WBZA WENR WENR WFIL  
WGAR WHAM WIRE WJZ WMAL  
WMT WREN WSAI WSYR WXYZ

### E-8:30 p.m., C-7:30, M-6:30, P-5:30

C — **Eddie Cantor; Bobby Breen**  
CFAB KFH KGKO KLRA KMBC

KMOX KOMA KRLD KRNT KSCJ  
KTRH K TSA KTUL KWKH WABC  
WACO WADC WALA WBBM WBG  
WBNS WBRC WBT WCAO WCAU  
WCCO WCOA WDAE WDBJ WDBO  
WDNC WDDO WDRC WEAN  
WFBL WFBM WFEA WGR WGST  
WHAS WHEC WHK WHP WIBW  
WIBX WICC WISN WJAS WJR  
WJSV WKBN WKRC WLAC WLWB  
WMAS WMBD WMBR WMNM  
WNAX WNOX WOC WOKO WORC  
WQAM WREC WSBT WSFA WSJS  
WSMK WSPD WTOC WWL WVVVA

### E-9:00 p.m., C-8:00, M-7:00, P-6:00

R — **Manhattan Merry-Go-Round**  
CFCE KDYL KFI KFJR KGW  
KHQ KOA KOMO KPO KPRC KSD  
KSTP KTBS KTHS KYW WAVE  
WBN WCAE WCKY WCSH WDAF  
WDAY WEAJ WECB WEEI WFAA  
WFBM WFLA WGY WHO WHIO  
WIBA WIOD WIRE WIS WJAR  
WJAX WJDX WKY WMAQ WMC  
WOAI WOW WPTF WRC WRVA  
WSB WSM WSMB WSOC WTAG  
WTAM WTAR WTIC WTMJ WWJ  
WNNC

### C — Ford Sunday Evening Hour

CFRB CKAK KDB KERN KFAB  
KFBC KFH KFPY KFRC KGB  
KGKO KHJ KLRA KLZ KMBC  
KMJ KMOX KOH KOIN KOL KOMA  
KRLD KRNT KSCJ KSL KTRH  
K TSA KTUL KVI KVOR KGW  
KWKH WABC WACO WADC WALA  
WBBM WBG WBNS WBRC WBT  
WCAO WCAU WCCO WCOA WDAE  
WDBJ WDBO WDNC WDDO WDRC  
WEAN WFBL WFBM WFEA WGR  
WGST WHAS WHEC WHK WHP  
WIBW WIBX WICC WISN WJAS  
WJR WJSV WKBN WKRC WLAC  
WLWB WMAS WMBD WMBR WNAC  
WNAX WOC WOKO WORC WQAM  
WREC WSBT WSFA WSJS WSPD  
WTOC WWL WVVVA

### B — Walter Winchell

KDKA KECA KEX KFSD KGA  
KGHL KGIR KGO KJR KLO KOIL  
KSO KTAR KWK WBAL WBZ WBZA  
WENR WFIL WGAR WHAM WJZ  
WLW WMAL WMT WREN WSYR  
WXYZ

### E-9:15 p.m., C-8:15, M-7:15, P-6:15

B — **Paul Whiteman's Varieties**  
KDKA KECA KFSD KGA KGHL  
KGIR KGU KJR KLO KOIL KSO  
KTAR KWK WBAL WBZ WBZA  
WENR WFIL WGAR WHAM WJZ  
WLW WMAL WMT WREN WSYR  
WXYZ

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

R — **Album of Familiar Music**  
CFCE CRCT KDYL KFI KFJR  
KGW KHQ KOA KOMO KPO KPRC  
KSD KSTP KTBS KYW WAPI  
WAVE WBN WCAE WCSH WDAF  
WDAY WEAJ WECB WEEI WFAA  
WFBM WFLA WGY WHO WHIO

WIBA WIOD WIS WJAR WJAX  
WJDX WKY WMAQ WMC WOAI  
WOW WPTF WRC WRVA WSAI  
WSB WSM WSMB WSOC WTAG  
WTAM WTAR WTMJ WWJ WNNC

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

C — **Gillette Community Sing**  
CFRB CKAK KDB KERN KFAB  
KFBC KFBC KFH KFPY KFRC  
KGB KGKO KGBM KGVO KHJ  
KLRA KLZ KMBC KMJ KMOX  
KOH KOIN KOL KOMA KRLD  
KRNT KSCJ KSL KTRH K TSA  
KTUL KVI KVOR KGW KWKH  
WABC WACO WADC WALA WBBM  
WBG WBNB WBRW WBT WCAO  
WCAU WCCO WCOA WDAE WDBJ  
WDBO WDNC WDDO WDRC WEAN  
WFBL WFBM WFEA WGST WHAS  
WHEC WHK WHP WIBW WIBX  
WICC WISN WJAS WJR WJSV  
WKBN WKBW WKRC WLAC WLWB  
WMAS WMBD WMBG WMBR  
WMNM WNAC WNAX WNOX WOC  
WOKO WORC WOWO WPG WQAM  
WREC WSBT WSFA WSJS WSMK  
WSPD WTOC WWL

### R — General Motors Concert

CFCE CRCT KDYL KFI KFJR  
KGHL KGIR KGW KHQ KOA  
KOMO KPO KPRC KSTP KTAR  
KTBS KTHS KYW WAPI WAVE  
WBN WCAE WCKY WCSH WDAF  
WDAY WEAJ WECB WFAA WFBM  
WFLA WGY WHO WHIO WIBA  
WIOD WIRE WIS WJAR WJAX  
WJDX WKY WMAQ WMC WNNC  
WOAI WOOD WOW WPTF WRC  
WRVA WSB WSM WSMB WSOC  
WSUN WTAG WTAM WTAR WTIC  
WTMJ WWJ WNNC

### B — Edwin C. Hill

KDKA KECA KFSD KGA KGO  
KJR KLO KOIL KSO KWK WBAL  
WBZ WBZA WENR WFIL WGAR  
WHAM WJZ WLW WMAL WMT  
WREN WSYR WXYZ

### E-11:00 p.m., C-10:00, M-9:00, P-8:00

C — **Eddie Cantor; Bobby Breen**  
KERN KFBB KFBC KFPY KFRC  
KGB KGVO KHJ KLZ KMJ KOH  
KOIN KOL KSL KVI KVOR

### R — Sunset Dreams; Morin Sisters

KDYL KFI KFSD KGW KHQ KOA  
KOMO KPO KPRC KTAR KTBS  
KTHS WBAP WDAF WKY

### E-11:15 p.m., C-10:15, M-9:15, P-8:15

B — **Walter Winchell**  
KDYL KFI KFSD KGHL KGIR  
KGW KHQ KOA KOMO KPO KPRC  
KTAR KTBS KTHS WAPI WAVE  
WBAP WJDX WKY WMC WOAI  
WSB WSM WSMB

### E-11:30 p.m., C-10:30, M-9:30, P-8:30

B — **Paul Whiteman's Musical Varieties**  
KECA KEX KFSD KGA KGO KJR  
KPRC KTBS KTHS WAPI WAVE  
WBAP WJDX WKY WMC WOAI  
WSB WSM WSMB

"Time Marches On!" That staccato voice belongs to Cornelius Westbrook Van Voorhies, Jr., a young man who used to have \$150,000. While attend-

ing the U. S. Naval Academy he was bequeathed a legacy of that amount, after which Van really lived as a gentleman and the money didn't last long.

# CLASSIFIED INDEX TO CHAIN PROGRAMS

*Time in Eastern Standard*

C—Columbia; R—National (Red); B—National (Blue)

## CONCERTS

Frank Black, 2 p.m. Sun., B  
 Rosario Bourdon, 8 p.m. Fri., R  
 Ford Concert, 9 p.m. Sun., C  
 Metropolitan Auditions, 3 p.m. Sun., R  
 General Motors Concert, 10 p.m. Sun., R  
 New York Philharmonic, 3 p.m. Sun., C  
 Pittsburgh Symphony, 2 p.m. Sun., C  
 Radio City Music Hall, 12:30 p.m. Sun., B  
 Don Voorhees, 8 p.m. Wed., C

## DANCE BANDS

Victor Arden, 8 p.m. Wed., B; 8 p.m. Fri., C; 1:30 p.m. Sun., R  
 Ben Bernie, 9:00 p.m. Tues., B  
 Bunny Berigan, 6:45 p.m. Sat., C  
 Ray Block, 10:30 p.m. Mon., R  
 Jimmie Dorsey, 10 p.m. Thurs., R  
 Tommy Dorsey, 9:30 Mon., B  
 Lud Gluskin, 10:30 Sat., C  
 Al Goodman, 9 and 11:15 p.m. Thurs., R  
 Benny Goodman, 9:30 p.m. Tues., C  
 Johnny Green, 9:30 p.m. Tues., R  
 Jimmy Grier, 6 p.m. Sun., C  
 Gus Haenschen, 9:30 p.m. Sat., C  
 Horace Heldt, 8 p.m. Mon., C  
 Richard Himber, 9:30 p.m. Mon., R  
 Hal Kemp, 7:30 p.m. Sun., C  
 Henry King, 8:30 and 11:30 p.m. Wed., C  
 Wayne King, 8:30 p.m. Tues. and Wed., R. 10 p.m. Mon., C

Andre Kostelanetz, 9 p.m. Wed., C and 8:30 p.m. Fri., C  
 Benny Krueger, 8:30 and 11:30 p.m., Mon., C  
 Guy Lombardo, 5:30 Sun., C  
 Vincent Lopez, 9 p.m. Sat., C  
 Abe Lyman, 8:30 p.m. Mon., B. 9 p.m. Fri., R  
 Russ Morgan, 8:30 p.m. Tues., C  
 Ozzie Nelson, 7:30 Sun., B  
 Raymond Paige, 9 p.m. Fri., C  
 Portraits in Harmony, 10:30 Tues., B  
 Leo Reisman, 8 and 11:30 p.m. Tues., R  
 Jacques Renard, 8:30 and 11 p.m. Sun., C  
 Harry Salter, 10 p.m. Sat., C  
 Andy Sanella, 9 p.m. Sun., R  
 Nathaniel Shilkret, 9:30 p.m. Tues., C  
 Harry Sosnik, 10 p.m. Wed., R; 10 p.m. Sun., B  
 Rudy Valee, 8 p.m. Thurs., R  
 Peter Van Steeden, 9 p.m. Wed., R  
 Don Voorhees, 5:30 p.m. Sun., and 8 p.m. Sat., B  
 Fred Waring, 9:00 Tues., C; 9:00 Fri., B  
 Paul Whiteman, 9:15 and 11:30 p.m. Sun., B  
 Victor Young, 9:30 p.m. Sat., R

## DIALOG

Fred Allen, 9:00 Wed., R  
 Amos 'n' Andy, 7 and 11 p.m. daily except Sat. and Sun., R  
 Phil Baker, 7:30 p.m. Sun., C  
 Jack Benny, 7 and 11:30 p.m. Sun., R  
 Milton Berle, 10 p.m. Sun., C  
 Bob Burns, 10:00 Thurs., R  
 Burns and Allen, 8:30 and 11:30 p.m. Wed., C  
 Charles Butterworth, 9:30 Tues., R  
 Eddie Cantor, 8:30 and 11 p.m. Sun., C  
 Irvin S. Cobb, 10:30 p.m. Sat., R  
 Easy Aces, 7 p.m. Tues., Wed., Thurs., B  
 Ed. Everett Horton, 9:30 p.m. Sat., R  
 Fibber McGee and Molly, 8 p.m. Mon., R  
 Lum and Abner, 7:30 p.m. daily except Sat. and Sun., B  
 Ken Murray, 8:30 p.m. Tues., C  
 Jack Pearl, 9:30 p.m. Mon., B  
 Joe Penner, 6 p.m. Sun., C  
 Pick and Pat, 8:30 and 11:30 p.m. Mon., C  
 Popeye the Sailor, 7:15 Mon., Wed., Fri., C  
 Babe Ruth, 8 p.m. Thurs., C

Stoopnagle and Budd, 5:30 p.m. Sun., B  
 Uncle Ezra's Radio Station, 7:15 Mon., Wed., Fri., R  
 Ed Wynne, 8 p.m. Sat., B

## DRAMA

Ethel Barrymore, 8:30 p.m., Wed., B  
 Helen Claire, 9:30 p.m. Fri., B  
 Columbia Workshop, 8:00 p.m. Sat., C  
 Death Valley Days, 8:30 p.m. Fri., B  
 First Nighter, 10 p.m. Fri., R  
 Gang Busters, 10 p.m. Wed., C  
 Goose Creek Parson, 7:30 and 10:45 Mon., Wed., Fri., C  
 Grand Hotel, 3:30 p.m. Sun., R  
 Helen Hayes, 8:00 Mon., B  
 Hollywood Hotel, 9 p.m. Fri., C  
 Warden Lawes, 9 p.m. Mon., R  
 Log Cabin Ranch, 8 p.m. Tues., B  
 Phillips Lord, 10 p.m. Wed., C  
 Lux Radio Theater, 9 p.m. Mon., C  
 News of Yough, 6:15 p.m. Tues., Thurs., Sat., C  
 One Man's Family, 8 p.m. Wed., R  
 Renfrew of the Mounted, 6:45 and 11:15 p.m. Mon. thru Fri., C  
 Irene Rich, 8 p.m. Fri., B  
 Snow Village Sketches, 9 p.m. Sat., R  
 Tale of Today, 6:30 p.m., Sun., R  
 True Story Court, 9:30 p.m. Fri., R  
 Welcome Valley, 8:30 p.m. Tues., B  
 Your Unseen Friend, 5 p.m. Sun., C

## POPULAR PROGRAMS

Album of Familiar Music, 9:30 p.m. Sun., R  
 Arco Band, 8 p.m. Sun., B  
 Major Bowes, 11:30 a.m. Sun. and 9 p.m. Thurs., C  
 Broadway Varieties, 8:00 p.m. Fri., C  
 Camel Program, 9:30 p.m. Tues., C  
 Carborundum Band, 7:30 p.m. Sat., C  
 Cavalcade of America, 8 p.m. Wed., C  
 Chesterfield Program, 9 p.m. Wed., C  
 Cities Service Concert, 8 p.m. Fri., R  
 Contented Program, 10 p.m. Mon., R  
 Come On, Let's Sing, 9:30 p.m. Wed., C  
 Community Sing, 10 p.m. Sun., C  
 Fireside Recitals, 7:30 p.m. Sun., R  
 Fleischmann Variety Hour, 8 p.m. Thurs., R  
 Good Will Court, 8 p.m. Sun., R  
 Hammersten's Music Hall, 8 p.m. Tues., C  
 Hit Parade, 10 p.m. Red Wednesday; 10 p.m. Sat., C  
 Hollywood Hotel, 9 p.m. Fri., C  
 Husbands and Wives, 9:30 p.m. Tues., B  
 Krueger Musical Toast, 10:30 p.m. Mon., R  
 Magic Key of RCA, 2 p.m. Sun., B  
 Manhattan Merry-Go-Round, 9 p.m. Sun., R  
 March of Time, 10:30 p.m. Thurs., C  
 Maxwell House Show Boat, 9 p.m. Thurs., R  
 Melodiana, 8:30 p.m. Mon., B  
 Melody Matinee, 1:30 p.m. Sun., R  
 National Barn Dance, 9:00 and 11:30 p.m. Sat., B  
 Paekard Hour, 9:30 p.m. Tues., R  
 Sears, Then and Now, 10 p.m. Thurs., C  
 Sinclair Minstrels, 9 p.m. Mon., B  
 Variety Show, 8 p.m. Thurs., C  
 Voice of Firestone, 8:30 p.m. Mon., R  
 Vox Pop, 9 p.m. Tues., R  
 Waltz Time, 9 p.m. Fri., R

## SINGERS

Fred Astaire, 9:30 p.m. Tues., R  
 Kenny Baker, 7 and 11:30 p.m. Sun., R  
 Smith Ballew, 9:30 p.m. Sat., R  
 Morton Bowe, 1:30 p.m. Sun., R  
 Rosemarie Brancato, 9:30 p.m. Fri., B  
 Bobby Breen, 8:30 and 11 p.m. Sun., C  
 Rachel Carlay, 9 p.m. Sun., R  
 Charlottees, 7:30 p.m. Thurs., C  
 Bernice Claire, 9 p.m. Fri., R, and 8:30 Mon.; B



Jerry Cooper, 10:30 p.m. Mon., R  
 Mario Cozzi, 7:15 p.m. Fri., B  
 Bing Crosby, 10 p.m. Thurs., R  
 Muriel Dickson, 1:30 p.m. Sun., R  
 Bing Crosby, 10 p.m. Thurs., R  
 Flifi D'Orsay, 8 p.m. Wed., B  
 Jessica Dragonette, 8 p.m. Fri., R  
 Phil Ducey, 8 and 11:30 p.m. Tues., R  
 Nelson Eddy, 8 p.m. Sun., C  
 Jack Fulton, 7 and 11 p.m. Mon. through Thurs., C  
 Wendell Hall, 10 p.m. Sun., C  
 Helen Jepson, 9 and 11:15 p.m. Thurs., R  
 Vee Lawnhurst, 7:30 p.m. Thurs., C  
 Elizabeth Lennox, 8:00 p.m. Fri., C  
 Nino Martini, 9 p.m. Wed., C  
 Ed McConnell, 5:30 p.m. Sun., R  
 Lucy Monroe, 9:30 p.m. Sun., R  
 Morin Sisters, 7:45 and 11 p.m. Sun., R  
 Willie Morris, 4:30 p.m. Sun., R  
 Frank Munn, 9:30 p.m. Sun. and 9 p.m. Fri., R  
 Jan Pearce, 6:30 p.m. Sun., C  
 Carmella Ponselle, 8:00 p.m. Fri., C  
 Dick Powell, 9 p.m. Fri., C  
 Virginia Rea, 6:30 p.m. Sun., C

Homer Rodeheaver, 9:30 p.m. Wed., C  
 Lanny Ross, 9 p.m. Thurs., R  
 Singin' Sam, 8:15 Fri. and 10 p.m. Mon., B  
 Sally Singer, 10:30 p.m. Mon., R  
 Kate Smith, 8 p.m. Thurs., C  
 Oliver Smith, 5 p.m. Sun., C  
 Marlon Tahey, 10 p.m. Fri., R  
 Franca White, 8 p.m. Sun., C

#### TALKS

Boake Carter, 7:45 p.m. Mon. thru Fri., C  
 Jimmy Fidler, 10:30 p.m. Tues., R  
 Floyd Gibbons, 9 p.m. Sat., C  
 Eddie Guest, 8:30 p.m. Tues., B  
 Edwin C. Hill, 10 p.m. Sun., B  
 Bob Ripley, 7:30 Sun., B  
 Sidewalk Interviews, 9 p.m. Tues., R  
 Lowell Thomas, 6:45 p.m. Mon., thru Fri., B  
 Trans-Atlantic Broadcast, 12:45 p.m. Sun., C  
 Voice of Experience, Tues., Thurs., 7:15 R  
 Walter Winchell, 9 and 11:15 p.m. Sun., B

## CBS Stations

**R**ESPONDING to several requests, we present herewith a list of the stations of the Columbia Broadcasting System, arranged alphabetically by call letters.

CFRB	690	Toronto
CKAC	730	Montreal
KFAB	770	Lincoln
KFBB	1280	Great Falls
KFBK	1490	Sacramento
KFHH	1300	Wichita
KFPY	890	Spokane
KFRC	610	San Francisco
KGB	1330	San Diego
KGKO	570	Wichita Falls
KGVO	1260	Missoula
KHJ	900	Los Angeles
KLRA	1390	Little Rock
KLZ	560	Denver
KMBC	950	Kansas City
KMOX	1090	St. Louis
KNOW	1500	Austin
KOH	1380	Rene
KOIN	940	Portland
KOL	1270	Seattle
KOMA	1480	Oklahoma City
KRLD	1040	Dallas
KRNT	1320	Des Moines
KSCJ	1330	Sioux City
KSL	1130	Salt Lake City
KTRH	1290	Houston
KTSA	550	San Antonio
KTUL	1400	Tulsa
KVI	570	Tacoma
KVOR	1270	Colorado Springs
KWKH	1100	Shreveport
WABC	860	New York
WACO	1420	Waco
WADC	1320	Akron
WALA	1380	Mobile
WBBM	770	Chicago
WBIG	1440	Greensboro
WBNS	1430	Columbus
WBRC	930	Birmingham
WBT	1080	Charlotte
WCAO	600	Baltimore
WCAU	1170	Philadelphia
WCCO	810	Minneapolis

WCOA	1340	Pensacola
WDAE	1220	Tampa
WDBJ	930	Roanoke
WDBO	580	Orlando
WDNC	1500	Durham
WDOD	1280	Chattanooga
WDRC	1330	Hartford
WEAN	780	Providence
WEHI	590	Boston
WESG	850	Elmira
WFBL	1360	Syracuse
WFBM	1230	Indianapolis
WFLA	1340	Manchester
WGL	1370	Fort Wayne
WGR	550	Buffalo
WGST	890	Atlanta
WHAS	820	Louisville
WHEC	1430	Rochester
WHIO	1260	Dayton
WHK	1390	Cleveland
WHP	1430	Harrisburg
WIBW	580	Topeka
WIBX	1200	Utica
WICC	600	Bridgeport
WISN	1120	Milwaukee
WJAS	1290	Pittsburgh
WJR	750	Detroit
WJSV	1460	Washington
WKBN	570	Youngstown
WKBW	1480	Buffalo
WKRC	550	Cincinnati
WLAC	1470	Nashville
WLBY	620	Bangor
WMAS	1420	Springfield
WMBD	1440	Peoria
WMBG	1210	Richmond
WMBR	1370	Jacksonville
WMMN	890	Fairmont
WNAX	570	Yankton
WNBZ	1500	Binghamton
WNOX	1010	Knoxville
WOC	1370	Davenport
WOKO	1430	Albany
WORC	1280	Worcester
WOWO	1160	Fort Wayne
WPG	1100	Atlantic City
WQAM	560	Miami
WREC	600	Memphis
WSBT	1360	South Bend
WSFA	1410	Montgomery
WSJS	1310	Winston-Salem
WSMK	1380	Dayton
WSPD	1340	Toledo
WTOC	1260	Savannah
WWL	850	New Orleans
WWVA	1160	Wheeling

# Short Wave Stations By Frequencies

*Police Broadcasters are shown in italics.*

Megs.	Meters			Megs.	Meters		
1.606	189.69	<i>KIKP</i>	<i>Ruby, Alaska.</i>			<i>WAKV</i>	<i>Fall River, Mass.</i>
						<i>-WPDB</i>	<i>Chicago, Ill.</i>
1.610	186.22	<i>WQPC</i>	<i>Chicago, Ill.</i>			<i>-WPDC</i>	<i>Chicago, Ill.</i>
		<i>-WQPD</i>	<i>DeQuoin, Ill.</i>			<i>-WPDD</i>	<i>Chicago, Ill.</i>
		<i>-WQPF</i>	<i>Efingham, Ill.</i>			<i>-WPDU</i>	<i>Pittsburgh, Pa.</i>
		<i>WQPG</i>	<i>Sterling, Ill.</i>			<i>WPED</i>	<i>Arlington, Mass.</i>
		<i>WQPM</i>	<i>Macomb, Ill.</i>			<i>WPEH</i>	<i>Somerville, Mass.</i>
		<i>-WQPP</i>	<i>Pontiac, Ill.</i>			<i>WPEI</i>	<i>E. Providence, R. I.</i>
		<i>-WQPS</i>	<i>Springfield, Ill.</i>			<i>WFFA</i>	<i>Newton, Mass.</i>
1.630		<i>WEY</i>	<i>Boston, Mass.</i>			<i>WPFN</i>	<i>Fairhaven, Mass.</i>
		<i>WKDT</i>	<i>Detroit, Mich.</i>			<i>WPGF</i>	<i>Providence, R. I.</i>
1.634	183.48	<i>-WPHE</i>	<i>Marion County, Ind.</i>			<i>WPGU</i>	<i>Cohasset, Mass.</i>
		<i>-WPHS</i>	<i>Culver, Ind.</i>			<i>WPGV</i>	<i>Boston, Mass.</i>
		<i>-WPHU</i>	<i>Jasper, Ind.</i>			<i>WPHG</i>	<i>Medford, Mass.</i>
		<i>-WQFE</i>	<i>Seymour, Ind.</i>	2.318	129.34	<i>-WQFL</i>	<i>Oak Park, Ill.</i>
		<i>-WQFW</i>	<i>Columbia City, Ind.</i>			<i>-WQFX</i>	<i>Waukegan, Ill.</i>
1.642	182.59	<i>-WRDP</i>	<i>Paw Paw, Mich.</i>	2.318	129.34	<i>CYQ</i>	<i>Toronto, Ont.</i>
		<i>-WRDS</i>	<i>E. Lansing, Mich.</i>	2.342	128.02	<i>CGZ</i>	<i>Vancouver, B. C.</i>
1.658	180.83	<i>-KNHD</i>	<i>Redwood Falls, Minn.</i>	2.366	126.72	<i>WAKC</i>	<i>Freehold, N. J.</i>
		<i>-KSW</i>	<i>Berkeley, Calif.</i>	2.382	125.87	<i>KGHT</i>	<i>Brownsville, Texas</i>
		<i>-WPGC</i>	<i>S. Schenectady, N. Y.</i>			<i>KGHV</i>	<i>Corpus Christi, Tex.</i>
1.666	179.96	<i>-WMP</i>	<i>Framingham, Mass.</i>			<i>KNFE</i>	<i>Duluth, Minn.</i>
		<i>WPEL</i>	<i>W. Bridgewater, Mass.</i>			<i>KNHB</i>	<i>Green Bay, Wisc.</i>
		<i>WPEV</i>	<i>Portable in Mass.</i>			<i>WAKE</i>	<i>Oshkosh, Wisc.</i>
		<i>-WPEW</i>	<i>Northampton, Mass.</i>	2.390	125.45	<i>WPDN</i>	<i>Auburn, N. Y.</i>
1.674	179.10	<i>KGHK</i>	<i>Palo Alto, Calif.</i>			<i>WPEA</i>	<i>Syracuse, N. Y.</i>
		<i>KGZT</i>	<i>Santa Cruz, Calif.</i>			<i>WPFM</i>	<i>Birmingham, Ala.</i>
		<i>-KIUK</i>	<i>Jefferson, Mo.</i>			<i>WPGW</i>	<i>Mobile, Ala.</i>
		<i>-WPSP</i>	<i>Harrisburg, Pa.</i>	2.390	125.45	<i>CJW</i>	<i>St. John, N. B.</i>
1.682	178.25	<i>-KACC</i>	<i>Fairfield, Iowa</i>			<i>CJZ</i>	<i>Verdun, P. Q.</i>
		<i>-KACD</i>	<i>Atlantic, Iowa</i>	2.396	125.14	<i>-YYW</i>	<i>Winnipeg, Man.</i>
		<i>-KGHO</i>	<i>Des Moines, Iowa</i>	2.406	124.61	<i>KGHZ</i>	<i>Little Rock, Ark.</i>
		<i>-KNFN</i>	<i>Waterloo, Iowa</i>			<i>KGPW</i>	<i>Salt Lake City, Utah</i>
		<i>-KNFO</i>	<i>Storm Lake, Iowa</i>			<i>KNHE</i>	<i>Fort Smith, Ark.</i>
1.692	177.19	<i>WQFT</i>	<i>Portable in Ohio</i>	2.414	124.30	<i>KACE</i>	<i>Olympia, Wash.</i>
1.698	176.57	<i>KNGG</i>	<i>Phoenix, Ariz.</i>			<i>KACJ</i>	<i>Wenatchee, Wash.</i>
		<i>WAKJ</i>	<i>Duval County, Fla.</i>			<i>KACK</i>	<i>Bellingham, Wash.</i>
1.706	175.74	<i>-KGPC</i>	<i>St. Louis, Mo.</i>			<i>KACN</i>	<i>San Buenaventura, C.</i>
		<i>-WKDU</i>	<i>Cincinnati, Ohio</i>			<i>KACO</i>	<i>Tracy, Calif.</i>
		<i>-WPET</i>	<i>Lexington, Ky.</i>			<i>KACS</i>	<i>Bakersfield, Calif.</i>
1.710	175.33	<i>CZ6F</i>	<i>Hamilton, Ont.</i>			<i>KACV</i>	<i>Walla Walla, Wash.</i>
1.712	175.13	<i>COL2</i>	<i>Havana, Cuba</i>			<i>KCHS</i>	<i>Spokane, Wash.</i>
		<i>-KACU</i>	<i>Gladewater, Texas</i>			<i>KCHW</i>	<i>Centratia, Wash.</i>
		<i>KGHY</i>	<i>Whittier, Calif.</i>			<i>KCPA</i>	<i>Seattle, Wash.</i>
		<i>-KGJX</i>	<i>Pasadena, Calif.</i>			<i>KGPF</i>	<i>Santa Fe, N. Mex.</i>
		<i>-KGPJ</i>	<i>Beaumont, Texas</i>			<i>KGPS</i>	<i>Bakersfield, Calif.</i>
		<i>-KGPL</i>	<i>Los Angeles, Calif.</i>			<i>KGZA</i>	<i>Fresno, Calif.</i>
		<i>KGPO</i>	<i>Honolulu, T. H.</i>			<i>KGZM</i>	<i>El Paso, Texas</i>
		<i>KGPR</i>	<i>Fort Worth, Texas</i>			<i>KGZN</i>	<i>Tacoma, Wash.</i>
		<i>KGZB</i>	<i>Houston, Texas</i>			<i>KGZO</i>	<i>Santa Barbara, Calif.</i>
		<i>KGZL</i>	<i>Shreveport, La.</i>			<i>KGZV</i>	<i>Aberdeen, Wash.</i>
		<i>KGZQ</i>	<i>Waco, Texas</i>			<i>KGZX</i>	<i>Albuquerque, N. M.</i>
		<i>KGZY</i>	<i>San Bernardino, Cal.</i>			<i>KNFA</i>	<i>Clovis, N. Mex.</i>
		<i>KNFJ</i>	<i>Pomona, Calif.</i>			<i>KNFI</i>	<i>Mt. Vernon, Wash.</i>
		<i>KNGE</i>	<i>Cleburne, Texas</i>			<i>KNFP</i>	<i>Everett, Wash.</i>
		<i>KNGL</i>	<i>Galveston, Texas</i>			<i>KNGU</i>	<i>Yakima, Wash.</i>
		<i>KNHF</i>	<i>Denton, Texas</i>			<i>KNGV</i>	<i>Lodi, Calif.</i>
		<i>-KVP</i>	<i>Dallas, Texas</i>			<i>WAKN</i>	<i>Herkimer, N. Y.</i>
		<i>YYR</i>	<i>Montreal, P. Q.</i>			<i>WCK</i>	<i>Detroit, Mich.</i>
		<i>WAKF</i>	<i>Everett, Mass.</i>			<i>WMO</i>	<i>Highland Park, Mich.</i>
						<i>WPDA</i>	<i>Tulare, Calif.</i>
						<i>WPDJ</i>	<i>Passaic, N. J.</i>
						<i>WPDY</i>	<i>Detroit, Mich.</i>
						<i>WPFH</i>	<i>Atlanta, Ga.</i>
						<i>WPFJ</i>	<i>Baltimore, Md.</i>
						<i>WPGH</i>	<i>Columbus, Ga.</i>
						<i>WPGJ</i>	<i>Albany, N. Y.</i>
						<i>WPGM</i>	<i>Utica, N. Y.</i>
						<i>WQFB</i>	<i>La Grange, Ga.</i>
						<i>WQFJ</i>	<i>Macon, Ga.</i>
						<i>WQFV</i>	<i>Oneonta, N. Y.</i>
						<i>WRDR</i>	<i>Augusta, Ga.</i>
							<i>Grosse Pointe, Mich.</i>
							<i>Stockton, Calif.</i>

## SHORT WAVE STATIONS BY FREQUENCIES

Megs.	Meters		Megs.	Meters		
2.422	123.79	KACA KACI KCPE KCPC KCZC KNGF KNGV WMJ WNFP WPDR WPDW WPFU WPHB			Atchison, Kans. Eureka, Calif. Kansas City, Mo. Vallejo, Calif. Topeka, Kans. Sacramento, Calif. Salina, Kans. Buffalo, N. Y. Niagara Falls, N. Y. Rochester, N. Y. Washington, D. C. Portland, Me. Nashua, N. H.	
2.430	123.38	KCPB KCZJ KNGP KNHG WAKH WAME WCPD WPDI WPPM WPPS WPEK WPFJ WPFK WPGI WPHO WQFO			Minneapolis, Minn. Phoenix, Ariz. Shreveport, La. Prescott, Ariz. Bloomfield, N. J. Baton Rouge, La. Charleston, S. C. Columbus, Ohio Dayton, Ohio St. Paul, Minn. New Orleans, La. Highland Park, Ill. Hackensack, N. J. Portsmouth, Ohio Zanesville, Ohio Lancaster, Ohio	
2.442	122.77	KGHU KCPP KGPX KCZK KGRZ KNHM WAKO WAMB WMDZ WPDE WPDF WPDH WPDJ WPEB WPEC WPEC WPEF WPEG WPEH WPEI WPEJ WPEK WPEL WPEM WPEO WPEP WPEQ WPER WPEU WPEV WPEW WPEX WPEY WPEZ WPCL WPCP WPHM WQFM WQFQ			Austin, Texas Portland, Ore. Denver, Colo. Klamath Falls, Ore. Salem, Ore. Fargo, N. Dak. Ft. Lauderdale, Fla. Connersville, Ind. Indianapolis, Ind. Louisville, Ky. Flint, Mich. Richmond, Ind. Lansing, Mich. Grand Rapids, Mich. Saginaw, Mich. Muskegon, Mich. Reading, Pa. Jacksonville, Fla. Lakeland, Fla. Palm Beach, Fla. Yonkers, N. Y. Miami, Fla. Binghamton, N. Y. Muncie, Ind. Orlando, Fla. Wilkes-Barre, Pa. Lafayette, Ind. Miami, Fla. York, Pa.	
2.450	122.38	KACF KACL KACP KACR KAPC KAPD KAPF KAPG KACH KCHN KCHP KCPH KCPO KCPZ KCZF KCZP KNGK KNGM KNGT KNHC KVPB			Chickasha, Okla. Altus, Okla. Ponca City, Okla. Seminole, Okla. Cushing, Okla. Drumright, Okla. El Dorado, Kans. Norman, Okla. Okmulgee, Okla. Hutchinson, Kans. Lawton, Okla. Oklahoma City, Ok. Tulsa, Okla. Wichita, Kans. Chanute, Kans. Coffeyville, Kans. Duncan, Okla. Rapid City, S. Dak. Muskogee, Okla. Ada, Okla. Huron, S. Dak.	
2.458	121.97				WPKD WPEE WPEF WPEG WPEP WPHF WQFH WQFI .....	Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y. New York, N. Y. Kenosha, Wisc. Richmond, Va. Roanoke, Va. Lynchburg, Va. Petersburg, Va. Iola, Kans.
2.466	121.58				KACM KCZI KGZW KNFB KNCW WPDC WPDO WPDF WPFJ WPGD WPHD WQFZ WRBH .....	Big Spring, Tex. Wichita Falls, Tex. Lubbock, Texas Idaho Falls, Idaho Brownwood, Texas Youngstown, Ohio Akron, Ohio Charlotte, N. C. Asheville, N. C. Rockford, Ill. Steubenville, Ohio Ottawa, Ill. Cleveland, Ohio Urbana, Ill.
2.474	121.19				KGOZ KCPD KCPI KCPK KCPM KCPN KCZC WAKB WAKG WPEC WPEM WPFV WPFW WPGA WPGB WPGK WPGX WPHA WPHN WPHP WQFA WQFC WQFK	Cedar Rapids, Iowa San Francisco, Calif. Omaha, Nebr. Sioux City, Iowa San Jose, Calif. Davenport, Iowa Des Moines, Iowa New London, Conn. Clearwater, Fla. Memphis, Tenn. Woonsocket, R. I. Pawtucket, R. I. Bridgeport, Conn. Bay City, Mich. Port Huron, Mich. Cranston, R. I. Worcester, Mass. Fitchburg, Mass. Tampa, Fla. Jackson, Mich. New Haven, Conn. Gainsville, Fla. Clearwater, Fla.
2.482	120.80				KGHC KGHM KNFH KNGH WAKI WPDJ WPFQ WPFJ WPFK WPGZ WPHY WQFY WRDQ	Las Vegas, Nev. Reno, Nev. Garden City, Kans. Dodge City, Kans. Sandusky, Ohio Philadelphia, Pa. Knoxville, Tenn. Swarthmore, Pa. Asheville, N. C. Johnson City, Tenn. Elizabethtown, Tenn. Mansfield, Ohio Toledo, Ohio
2.490	120.41				KGZE WPGT WPHZ WQFF WQFU	San Antonio, Texas New Castle, Pa. Oil City, Pa. Monessen, Pa. Sharon, Pa.
					KACQ KCHD KCHX KCZD KCZU KNFG KNFK KNFM KNFX KNGB KNGC KNGD	Kalaloch, Wash. Seattle, Wash. Santa Ana, Calif. San Diego, Calif. Lincoln, Nebr. Olympia, Wash. Bellingham, Wash. Compton, Calif. Ellensburg, Wash. Yakima, Wash. Vancouver, Wash. Walla Walla, Wash.

## SHORT WAVE STATIONS BY FREQUENCIES

Megs.	Meters			Megs.	Meters		
		<i>KNGJ</i>	<i>El Centro, Calif.</i>	4.865	61.63	<b>VDO</b>	Vancouver, B. C.
		<i>KNGN</i>	<i>Norfolk, Nebr.</i>				
		<i>KNGO</i>	<i>Wenatchee, Wash.</i>	5.000	59.96	<b>WWV</b>	Beltsville, Md.
		<i>KNGR</i>	<i>Spokane, Wash.</i>				
		<i>KNGZ</i>	<i>Ephrata, Wash.</i>	5.025	59.67	<b>ZFA</b>	Hamilton, Bermuda
		<i>WAKA</i>	<i>Huntington, Ind.</i>				
		<i>WAKK</i>	<i>Frankfort, Ind.</i>	5.520	54.32	<b>TI5HH</b>	San Ramon, Cos ta Rica
		<i>WPDZ</i>	<i>Kokomo, Ind.</i>				
		<i>WPDZ</i>	<i>Fort Wayne, Ind.</i>	5.710	52.51	<b>TGS</b>	Guatemala City, Guat.
		<i>WPPF</i>	<i>Clarksburg, W. Va.</i>				
		<i>WPGN</i>	<i>South Bend, Ind.</i>	5.720	52.42	<b>YV1ORSC</b>	San Cristobal, Venezuela
		<i>WPGO</i>	<i>Huntington, N. Y.</i>				
		<i>WPGS</i>	<i>Mineola, N. Y.</i>	5.730	52.32	<b>JVV</b>	Nazaki, Japan
		<i>WPHI</i>	<i>Charleston, W. Va.</i>				
		<i>WPHJ</i>	<i>Fairmont, W. Va.</i>	5.760	52.05	<b>HJ4ABD</b>	Medellin, Colombia
		<i>WPHQ</i>	<i>Parkersburg, W. Va</i>				
		.....	<i>Marion, Ind.</i>	5.780	51.87	<b>OAX4D</b>	Lima, Peru
2.506	119.64	<b>WOU</b>	Marshfield, Mass.	5.790	51.78	<b>JVU</b>	Nazaki, Japan
2.512	119.36	<b>KGM</b>	Ketchikan, Alaska	5.800	51.69	<b>YV2RC</b>	Caracas, Venezuela
		<b>KLE</b>	Rose Inlet, Alaska				
2.538	118.13	<b>KDK</b>	Wrangell, Alaska	5.810	51.60	<b>YV7RMO</b>	Maracaibe, Venez.
		<b>KILD</b>	Cordova (Eyak River)Aaa.				
2.566	116.84	<b>KFF</b>	Union Bay, Alaska	5.820	51.52	<b>CEC</b>	Santiago, Chile
		<b>KHV</b>	Nakeen, Alaska			<b>TIGPH</b>	San Jose, Costa Rica
		<b>KLA</b>	Waterfall, Alaska	5.830	51.43	<b>TDD</b>	Shinkio, Manchukuo
		<b>KLD</b>	Hidden Inlet, Aaa.	5.850	51.25	<b>YV5RMO</b>	Maracaibo, Venez.
2.604	115.14	<b>WVD</b>	Seattle, Wash.	5.865	51.12	<b>H11J</b>	San Ped. de Macoris, D. R.
		<b>WXH</b>	Ketchikan, Alaska			<b>HRN</b>	Tegucigalpa, Honduras
2.616	114.61	<b>KAEB</b>	Hydaburg, Alaska	5.875	51.03	<b>HCK</b>	Quito, Ecuador
		<b>KAED</b>	Angoon, Alaska	5.885	50.95	<b>YV8RB</b>	Raquisimeto, Venez.
		<b>KAEP</b>	Jack Wade, Alaska	5.895	50.86	<b>HH2S</b>	Port-au-Prince, Haiti
		<b>KAEP</b>	Tenakee, Alaska	5.915	50.69	<b>TG2X</b>	Guatemala City, Guat
2.632	113.91	<b>KIJW</b>	Shearwater Bay, Aaa.	5.940	50.47	<b>HJN</b>	Bogota, Colombia
		<b>KIJX</b>	Kadiak Island, Alaska			<b>HJ2ABD</b>	Bucaramanga, Colombia
		<b>KIMA</b>	Port Hobron, Alaska	5.950	50.39	<b>XEWI</b>	Mexico City, D. F.
		<b>KIOC</b>	Port Wakefield, Alaska	5.980	50.14	<b>TGWA</b>	Guatemala City, Guat.
		<b>KIOD</b>	Nellie Juan, Alaska	5.985	50.10	<b>XEBT</b>	Mexico City, D. F.
		<b>KIOH</b>	Iron Creek, Alaska	6.000	49.97	<b>CFCX</b>	Montreal, P. Q.
		<b>KIOI</b>	Akutan, Alaska			<b>HP5K</b>	Colon, Panama
2.726		<b>KIYY</b>	Los Angeles, Calif.	6.005	49.93	<b>CJCX</b>	Sydney, N. S.
		<b>WAJN</b>	Portable in Fla.			<b>COCO</b>	Havana, Cuba
		<b>WANB</b>	Dinsmore, Fla.	6.010	49.89	<b>HJ1ABC</b>	Quibdo, Colombia
2.912	102.96	<b>KHW</b>	Akutan, Alaska	6.012	49.87	<b>HJ3ABH</b>	Bogota, Colombia
		<b>KHZ</b>	Port Hobron, Alaska			<b>H13U</b>	Santiago, D. R.
2.986	100.41	<b>KGQ</b>	Todd, Alaska.	6.014	49.85	<b>ZHI</b>	Singapore, Straits Settl'ts
2.994	100.14	<b>KILY</b>	Excursion Inlet, Alaska	6.018	49.82	<b>DJC</b>	Zeesen, Germany
2.998	100.00	<b>WXE</b>	Anchorage, Alaska			<b>XEUW</b>	Veracruz, Ver.
3.040	98.63	<b>YDA</b>	Tandjong Priok, Java	6.025	49.76	<b>HJ1ABJ</b>	Santa Marta, Colombia
3.093	96.94	<b>KIAY</b>	Ketchikan, Alaska	6.030	49.72	<b>HP5B</b>	Panama City, Panama
4.098	73.16	<b>WND</b>	Hialeah, Fla.	6.040	49.64	<b>W1XAL</b>	Boston, Mass.
4.178	71.76	<b>WOO</b>	Ocean Gate, N. J.			<b>W4XB</b>	Miami, Fla.
4.253	70.50	<b>WKF</b>	Lawrencoville, N. J.			<b>YDA</b>	Tandjongpriok, N.E.I.
4.273	70.16	<b>RV15</b>	Khabarovsk, USSR.	6.042	49.62	<b>HJ1ABG</b>	Barranquilla, Colombia
4.512	66.44	<b>ZFS</b>	Nassau, Bahamas	6.045	49.60	<b>H19B</b>	Santiago, D. R.
4.600	65.18	<b>HC2ET</b>	Guayaquil, Ecuador	6.050	49.56	<b>GSA</b>	Daventry, Gt. Britain
4.753	63.08	<b>WOO</b>	Ocean Gate, N. J.	6.055	49.52	<b>HJ3ABD</b>	Bogota, Colombia
4.755	63.05	<b>CFU</b>	Rossland, B. C.	6.060	49.48	<b>W3XAU</b>	Philadelphia, Pa.
4.795	62.53	<b>VE9BK</b>	Vancouver, B. C.			<b>W8XAL</b>	Cincinnati, Ohio
4.820	62.20	<b>.GDW</b>	Rugby, England	6.070	49.39	<b>CFRX</b>	Toronto, Ont.
						<b>VE9CS</b>	Vancouver, B. C.
				6.080	49.31	<b>DJM</b>	Zeesen, Germany
						<b>HP5F</b>	Colon, Panama
						<b>W9XAA</b>	Chicago, Ill.

## SHORT WAVE STATIONS BY FREQUENCIES

Megs.	Meters	Call	Location	Megs.	Meters	Call	Location
6.085	49.27	HJ5ABD	Cali, Colombia	6.814	44.00	HJH	San Ped. de Macoris, D.R.
6.090	49.23	CRCX	Toronto, Ont.	6.860	43.71	KEL	Bolinas, Calif.
6.092	49.22	HJ4ABE	Medellin, Colombia	6.905	43.42	GDS	Rugby, Gt. Britain
6.100	49.15	W3XAL W9XF .....	Bound Brook, N. J. Chicago, Ill. Belgrade, Yugo Slavia	7.100	42.23	F08AA	Papeete, Tahiti
6.110	49.07	GSL	Daventry, Gt. Britain	7.220	41.53	VP3BG	Georgetown, Br. Guiana
6.115	49.03	.....	Prague, Czechoslovakia	7.280	41.18	HJ1ABD	Cartagena, Colombia
6.120	48.99	W2XE YDA5	New York, N. Y. Bandoeng, N.E.I.	7.380	40.63	XECR	Mexico City, D. F.
6.122	48.97	HJ3ABX	Bogota, Colombia	7.520	39.87	KKH	Kahuku, T. H.
6.130	48.91	C0CD VE9HX	Havana, Cuba Halifax, N. S.	7.797	38.47	HBP	Geneva, Switzerland
6.135	48.87	HJ4ABP	Medellin, Colombia	7.850	38.19	HC2JSB	Guayaquil, Ecuador
6.140	48.83	W8XK	Pittsburgh, Pa.	7.920	37.86	GDP	Rugby, Gt. Britain
6.150	48.75	CB615 CJRO HI5N	Santiago, Chile Winnipeg, Man. Santiago, D. R.	7.960	37.67	VLZ	Sydney, Australia
6.155	48.74	C0KG	Santiago, Cuba	8.050	37.24	WXA	Juneau, Alaska
6.165	48.63	YV3RC	Caracas, Venezuela	8.075	37.13	WEZ	Rocky Point, N. Y.
6.170	48.60	HJ2ABA HJ3ABF	Tunja, Colombia Bogota, Colombia	8.095	37.04	VLK	Sydney, Australia
6.182	48.50	XEXA	Mexico, D. F.	8.560	35.03	W00	Ocean Gate, N. J.
6.185	48.48	HI1A	Santiago, D. R.	8.565	35.00	HAT3	Budapest, Hungary
6.230	48.13	OAX4G	Lima, Peru	8.575	34.96	TYD2	Pontoise, France
6.235	48.09	HRD	La Ceiba, Honduras	8.590	34.90	YNVA	Balikpapan, N.E.I.
6.243	48.03	HIN	Trujillo, D. R.	8.620	34.78	VNVA	Managua, Nicaragua
6.280	47.74	C09WR HIG	Sancti-Spiritus, Cuba Trujillo, D. R.	8.620	34.78	VVD	Seattle, Wash.
6.300	47.59	YV12RM	Maracay, Venezuela	8.665	34.60	C09JQ	Camaguey, Cuba
6.315	47.48	HIZ	Trujillo, D. R.	8.680	34.54	GBC	Rugby, Gt. Britain
6.340		HIX	Trujillo, D. R.	8.690	34.50	VWZ	Kirkee, India
6.356	47.17	HRP1	San Pedro Sula, Hond.	8.750	34.26	ZBW	Hong Kong
6.375	47.03	YV4RC	Caracas, Venez.	8.900	36.50	HCJB	Quito, Ecuador
6.400	46.85	YV3RC	Caracas, Venez.	9.010	33.28	KEJ	Bolinas, Calif.
6.410	46.77	TIPG	San Jose, Costa Rica	9.020	33.24	GC5	Rugby, Gt. Britain
6.420	46.70	HI15	Puerto Plata, D. R.	9.045	33.15	VWY	Kirkee, India
6.425	46.66	W2XGB W3XL W9XF W9XBS	Hicksville, N. Y. Bound Brook, N. J. Chicago, Ill. Chicago, Ill.	9.125	32.86	HAT4	Budapest, Hungary
6.446	46.50	HJ1ABB	Barranquilla, Colombia	9.168	32.70	YVR	Maracay, Venezuela
6.450	46.48	HJ4ABC	Ibague, Colombia	9.280	32.31	GCB	Rugby, Gt. Britain
6.480	46.27	HI4V	Trujillo, D. R.	9.415	31.84	PLV	Bandoeng, N. E. I.
6.500	46.13	HIL HI4D	Trujillo, D. R. Trujillo, D. R.	9.428	31.80	COCH	Havana, Cuba
6.520	45.98	YV6RV	Valencia, Venezuela	9.448	31.74	WES	Rocky Point, N. Y.
6.545	45.81	YV11RB.	Bolivar, Venez.	9.450	31.73	TG1X	Guatemala City, Guat.
6.550	45.76	TIRC0	San Jose, Costa Rica	9.460	31.69	XG0X WKJ	Nanking, China New Brunswick, N. J.
6.620	45.29	PRADO	Rio Bamba, Ecuador	9.470	31.66	WET	Rocky Point, N. Y.
G.CC0	45.22	HIT	Trujillo, D. R.	9.480	31.63	KES	Bolinas, Calif.
6.650	45.09	HC2RL	Guayaquil, Ecuador	9.490	31.59	OXY VK3ME	Copenhagen, Denmark Melbourne, Australia
6.662	45.00	WXH	Ketchikan, Alaska	9.500	31.56	HJ1ABE	Cartagena, Colombia
6.672	44.94	YVQ	Maracay, Venezuela	9.505	31.54	XEFT PRF5	Veracruz, Ver. Rio de Janeiro, Brazil
6.700	44.75	TIEP	San Jose, Costa Rica	9.510	31.53	GSB HJU	Daventry, Gt. Britain Buenaventura, Colombia
6.750	44.42	HI3C JVT	La Romana, D. R. Nazaki, Japan	9.520	31.49	RAN XEDQ	Moscow, USSR. Guadalajara, Jal.
6.755	44.38	WOA	Lawrenceville, N. J.	9.530	31.46	W2XAF	Schenectady, N. Y.
6.800	44.09	HI7P	Trujillo, D. R.	9.540	31.43	DJN LKJ1 VPD2	Zeesen, Germany Jeloy, Norway Suva, Fiji
				9.560	31.56	DJA	Zeesen, Germany
				9.570	31.33	W1XK	Boston, Mass.
				9.575	31.31	HJ2ABC	Cucuta, Colombia
				9.580	31.30	GSC 3LR	Daventry, Gt. Britain Melbourne, Australia
				9.585	31.28	VK2ME	Sydney, Australia
				9.590	31.26	PCJ VK6ME W3XAU	Hilversum, Netherlands Perth, Australia Philadelphia, Pa.

## SHORT WAVE STATIONS BY FREQUENCIES

Megs.	Meters			Megs.	Meters		
9.595	31.25	HBL	Geneva, Switzerland	12.000	24.99	RNE	Moscow USSR.
9.600	31.23	CB960	Santiago, Chile	12.225	24.53	TFJ	Reykjavik, Iceland
9.605	31.21	HP5J	Panama City, Panama	12.290	24.49	GBU	Rugby, Gt. Britain
9.615	31.18	HJ1ABP	Cartagena, Colombia	12.830	23.36	CNR	Rabat, Morocco
9.617	31.18	HH3W	Port-au-Prince, Haiti	12.840	23.35	WOO	Ocean Gate, N. J.
9.635	31.12	I2RO	Rome, Italy	13.075	22.93	VPD	Suva, Fiji
9.640	31.10	YDB	Sourabaya, Java	13.380	22.41	IDU	Asmara, Eritrea
9.650	31.07	CT1AA	Lisbon, Portugal	13.410	22.36	WCT	San Juan, Puerto Rico
9.660	31.03	LRX	Buenos Aires, Argentina	13.585	22.05	GBB	Rugby, Gt. Britain
9.670	31.01	T14NRH	Heredia, Costa Rica	13.880	21.60	VJZ	Raboul, New Guinea
9.675	30.99	DZA	Zeesen, Germany	13.990	21.43	GBA2	Rugby, Gt. Britain
9.700	30.91	CQN	Macau	14.440	20.76	GBW	Rugby, Gt. Britain
9.755	30.74	COCQ	Havana, Cuba	14.590	20.55	WMN	Lawrenceville, N. J.
9.862	30.40	EAQ	Madrid, Spain	14.640	20.48	JVH	Nazaki, Japan
9.870	30.38	WON	Lawrenceville, N. J.	14.960	20.04	YSL	San Salvador, El Salv.
9.895	30.30	LSN	Buenos Aires, Argentina	14.970	20.03	LZA	Sofia, Bulgaria
9.950	30.13	GCU	Rugby, Gt. Britain	15.000	19.99	WWV	Beltsville, Md.
9.990	30.01	KAZ	Manila, P. I.	15.055	19.91	WNC	Hialeah, Fla.
10.000	29.98	WWV	Beltsville, Md.	15.090	19.87	RKI	Moscow, USSR.
10.042	29.85	DZB	Zeesen, Germany	15.120	19.83	HVJ	Vatican City
10.055	29.82	SUV	Cairo, Egypt	15.140	19.80	GSF	Daventry, Gt. Britain
		ZFB	Hamilton, Bermuda	15.175	19.76	RV96	Moscow, USSR.
10.135	29.58	OPM	Leopoldville, Bel. Congo	15.180	19.75	GSO	Daventry, Gt. Britain
10.160	29.51	RIO	Baku, USSR.	15.200	19.73	DJB	Zeesen, Germany
10.220	29.34	PSH	Rio de Janeiro, Brazil	15.210	19.71	W8XK	Pittsburgh, Pa.
10.250	29.25	LSL	Buenos Aires, Argentina	15.220	19.70	PCJ	Hilversum, Netherlands
10.260	29.22	PMN	Bandoeng, N. E. I.	15.230	19.69	.....	Prague, Czechoslovakia
10.285	29.15	DZC	Zeesen, Germany	15.245	19.67	TPA2	Pontoise, France
10.290	29.14	HPC	Panama City, Panama	15.260	19.65	GSI	Daventry, Gt. Britain
10.330	29.02	ORK	Brussels, Belgium	15.270	19.64	W2XE	New York N. Y.
10.335	29.01	ZFD	St. George, Bermuda	15.290	19.61	LRU	Buenos Aires, Argentina
10.610	28.25	WEA	Rocky Point, N. Y.	15.310	19.58	GSP	Daventry, Gt. Britain
10.660	28.13	JVN	Nazaki, Japan	15.330	19.56	W2XAD	Schenectady, N. Y.
10.670	28.10	CEC	Santiago, Chile	15.340	19.55	DJR	Berlin, Germany
10.740	27.92	JVM	Nazaki, Japan	15.355	19.52	KWU	Dixon, Calif.
10.770	27.84	GCP	Rugby, Gt. Britain	15.360	19.52	DZG	Zeesen, Germany
10.840	27.66	KWV	Dixon, Calif.	15.370	19.51	HAS3	Budapest, Hungary
10.955	27.37	H59PJ	Bangkok, Siam	15.415	19.45	KWO	Dixon, Calif.
11.000	27.26	PLP	Bandoeng, N. E. I.	16.140	18.58	GBX	Rugby, Gt. Britain
11.290	26.56	HIN	Trujillo, D. R.	17.080	17.55	GBC	Rugby, Gt. Britain
11.490	26.09	PLO	Bandoeng, N. E. I.	17.120	17.51	WOO	Ocean Gate, N. J.
11.595	25.86	VRR4	Stoney Hill, Jamaica	17.310	17.32	W3XL	Bound Brook, N. J.
11.650	25.73	COCX	Havana, Cuba	17.480	17.15	WVY2	Kirkoe, India
11.715	25.59	TPA4	Pontoise, France	17.760	16.88	W2XE	New York, N. Y.
11.720	25.58	CJRX	Winnipeg, Man.	17.775	16.87	PHI	Hilversum, Netherlands
11.750	25.52	GSD	Daventry, Gt. Britain	17.780	16.86	W3XAL	Bound Brook, N. J.
11.760	25.50	.....	Prague, Czechoslovakia	17.790	16.85	GSG	Daventry, Gt. Britain
11.770	25.47	DJD	Zeesen, Germany	18.310	16.40	GAS	Rugby, Gt. Britain
11.790	25.43	W1XAL	Boston, Mass.	18.350	16.34	WLA	Lawrenceville, N. J.
11.795	25.42	DJO	Zeesen, Germany	18.620	16.10	GAU	Rugby, Gt. Britain
11.810	25.39	I2RO	Rome, Italy	18.670	16.06	OCI	Lima, Peru
11.820	25.37	GSN	Daventry, Gt. Britain	18.830	15.92	PLE	Bandoeng, N. E. I.
11.830	25.34	W2XE	Wayne, N. J.	19.480	15.39	GAD	Rugby, Gt. Britain
		W9XAA	Chicago, Ill.	19.630	15.27	VQG	Nairobi, Kenya
11.855	25.29	DJP	Zeesen, Germany	19.650	15.26	LSN5	Buenos Aires, Argentina
11.860	25.28	GSE	Daventry, Gt. Britain	20.380	14.71	GAA	Rugby, Gt. Britain
11.870	25.25	W8XK	Pittsburgh, Pa.	21.470	13.96	GSH	Daventry, Gt. Britain
11.880	25.24	TPA3	Pontoise, France	21.520	13.93	W2XE	New York, N. Y.
				21.530	13.93	GSJ	Daventry, Gt. Britain
				21.540	13.92	W8XK	Pittsburgh, Pa.
				26.100	11.49	GSK	Daventry, Gt. Britain

## SHORT WAVE STATIONS BY LOCATIONS

<b>ARGENTINA (LOA-LVZ)</b>  Buenos Aires LRU 15.290 LRX 9.660 LSL 10.250 LSN 9.895 LSN 14.480 LSX 10.350	<b>BRITISH COLUMBIA</b>  Rossland CFU 4.755  Vancouver CGZ 2.342 VDO 4.865 VE9BK 4.795 VE9CS 8.070	<b>Bogota</b> HJN 5.950 HJ3ABD 6.055 HJ3ABF 6.170 HJ3ABH 6.012 HJ3ABX 8.122  Bucaramanga HJ2ABD 5.980  Buenaventura HJU 9.510  Cali HJ5ABD 8.085  Cartagena HJ1ABD 7.280 HJ1ABE 9.500 HJ1ABP 9.615  Cucuta HJ2ABC 9.575  Ibague HJ4ABC 6.450  Manizales HJ4ABL 6.100  Medellin HJ4ABD 5.760 HJ4ABE 6.092 HJ4ABP 6.135  Quibdo HJ1ABC 6.010  Santa Marta HJ1ABJ 6.025  Tunja HJ2ABA 6.170	<b>DOMINICAN REPUBLIC (HIA-HIZ)</b>  La Romana HI3C 6.750 Puerto Plata HI1S 6.420  San Pedro de Macoris HIH 6.814 HI1J 5.865  Santiago de Los Caballeros HI-1-A 6.185 HI3U 6.014 HI5N 6.150 HI9B 6.045  Trujillo HI9 6.280 HI1 6.500 HI9 6.243 HI9 11.290 HI1 6.630 HI9 6.340 HI2 6.315 HI4D 6.500 HI4V 6.480 HI7P 6.800	DJB 15.200 DJC 6.020 DJD 11.770 DJM 6.080 DJN 9.540 DJO 11.795 DJP 11.855 DJQ 15.280 DJR 15.340 DZA 9.675 DZB 10.042 DZC 10.285 DZG 15.360  <b>GREAT BRITAIN (G; M)</b>  Davenport GSA 6.050 GSB 9.510 GSC 9.580 GSD 11.750 GSE 11.860 GSF 15.140 GSG 17.790 GSH 21.470 GSI 15.260 GSJ 21.530 GSK 26.090 GSL 6.110 GSN 11.820 GSO 15.180 GSP 15.310  Rugby GAA 20.380 GAD 19.480 GAS 18.310 GAU 18.620 GBA2 13.290 GBB 13.585 GBC 16.080 GBC 8.650 GBU 12.290 GBW 14.440 GBX 16.140 GCB 9.280 GCP 10.770 GCS 9.020 GCU 9.950 GDP 7.920 GDS 6.905 GDW 4.820	<b>San Pedro Sula</b> HRP1 6.356  Tegucigalpa HRN 5.875  <b>HONGKONG (Z)</b>  Hongkong ZBW 8.750  <b>HUNGARY (HAA-HAZ)</b>  Budapest HAS3 15.370 HAT3 8.565 HAT4 9.125  <b>ICELAND (TFA-TFZ)</b>  Reykjavik TFJ 12.225  <b>INDIA (VTA-VWZ)</b>  VVY 9.045 VVY2 17.480 VWZ 8.690  <b>ITALY (I)</b>  I2RO 9.635 I2RO 11.810  <b>JAMAICA</b>  Stoney Hill VRR4 11.595  <b>JAPAN (J)</b>  Nazaki JVM 10.740 JVN 10.660 JVT 6.750 JVU 5.790 JVV 5.730  <b>KENYA (VQ7-)</b>  Nairobi VQG 19.630  <b>MACAU</b>  Macau CQN 9.700  <b>MANCHUKUO (J)</b>  Shinkio TDD 5.830
<b>AUSTRALIA (VUA-VMZ)</b>  Melbourne VK3LR 9.580 VK3ME 9.490  Perth VK6ME 9.590  Sydney VK2ME 9.585 VLK 8.095	<b>MANITOBA</b>  Winnipeg CJRO 6.150 CJRX 11.720 VYW 2.396  <b>NEW BRUNSWICK</b>  St. John CJW 2.390  <b>NOVA SCOTIA</b>  Halifax VE9HX 6.130  Sydney CJCX 6.010	<b>COSTA RICA (TIA-TIZ)</b>  Heredia TI4NRH 9.670  San Jose TI9P 6.700 TI9PH 5.820 TI9P 6.410 TI9CC 6.550  <b>CUBA (CLA-CMZ; COA-COZ)</b>  Camaguey CO9JQ 8.665  Havana COCD 6.130 COCH 9.428 COCO 6.010 COCQ 9.755 COCX 11.650 COL2 1.712  Sancti Spiritus COSWR 6.280  Santiago COKG 6.155  <b>CZECHO-SLOVAKIA</b>  Prague ..... 6.115 ..... 11.760 ..... 15.230  <b>DENMARK (OUA-OZZ)</b>  Copenhagen OXY 9.490	<b>ECUADOR (HCA-HCZ)</b>  Guayaquil HC2ET 4.600 HC2JSB 7.850 HC2RL 6.650  Quito HCJB 8.900 HCK 5.885  Riobamba PRADO 6.620  <b>EGYPT (STA-SUZ)</b>  Cairo SUV 10.055  <b>EL SALVADOR</b>  San Salvador YSL 14.960  Suva VPD 13.075 VPD2 9.540  <b>FRANCE (F; TYA-TZZ)</b>  Pontoise TPA2 15.245 TPA3 11.880 TPA4 11.715  <b>GERMANY (D)</b>  Zeesen DJA 9.560	<b>GUATEMALA (TGA-TGZ)</b>  Guatemala City TGS 5.710 TGWA 6.000 TG2X 5.940  <b>HAITI</b>  Port au Prince HH2S 5.915 HH3W 9.617  <b>HONDURAS (HRA-HRZ)</b>  La Ceiba HRD 6.235	
<b>BAHAMAS (ZF-)</b>  Nassau ZFS 4.512  <b>BELGIUM CONGO (OP-)</b>  Leopoldville OPM 10.135  <b>BELGIUM (ONA-OTZ)</b>  Brussels ORK 10.330  <b>BERMUDA (ZF-)</b>  Hamilton ZFA 5.025 ZFB 10.055  St. George ZFD 10.335  <b>BRAZIL (PPA-PYZ)</b>  Rio de Janeiro PRF5 9.500 PSH 10.220  <b>BRITISH GUIANA</b>  Georgetown VP3BG 7.220  <b>BULGARIA (LZA-LZZ)</b>  Sofia LZA 14.970  <b>CANADA (CFA-CKZ; CYA-CZZ; VAA-VGZ; VXA-VYZ)</b>	<b>ONTARIO</b>  Hamilton CZ6F 1.710  Toronto CFRX 6.070 CRCX 6.090 CYQ 2.318  <b>QUEBEC</b>  Montreal CFCX 6.005 VYR 1.712  Verdun CJZ 2.390  <b>CHILE (GAA-CEZ)</b>  Santiago CB615 6.150 CB960 9.600 CEC 5.820 CEC 10.670  <b>CHINA (XGA-XUZ)</b>  Nanking XGOX 9.460  <b>COLOMBIA (HJA-HKZ)</b>  Barranquilla HJ1ABB 6.447 HJ1ABG 6.042				

## SHORT WAVE STATIONS BY LOCATIONS

<b>MEXICO</b> (XAA-XFZ)	<b>PERU</b> (OAA-OCZ)	<b>Mobile</b> WPGW 2.382	<b>Bolinas</b> KEE 7.715 KEJ 9.010 KEL 6.860 KES 9.480	<b>FLORIDA</b>	<b>Oak Park</b>
Mexico City	Lima	<b>ALASKA</b>	<b>Compton</b> KNFM 2.490	<b>Clearwater</b> WAKG 2.466 WQFK 2.466	WQFL 1.712
XEBT 6.000 XECR 7.380 XEWI 5.985 XEXA 6.182	OAX4D 5.780 OAX4G 6.230	<b>Akutan</b> KHW 2.912 KIOI 2.632	<b>Dixon</b> KWO 15.415 KWU 15.355 KWV 10.840	<b>WANB</b> 2.726 <b>Duval County</b> WAKJ 1.698 Ft. Lauderdale WAKO 2.442	Ottawa WQFZ 2.458
Veracruz	<b>PHILIPPINE ISLANDS</b> (K)	<b>Anchorage</b> WXE 2.998 Angoon KAED 2.616 Cordova KILD 2.538 Excursion Inlet KILY 2.994	<b>El Centro</b> KNGJ 2.490	<b>Gainesville</b> WQFC 2.466 Hialeah WND 4.098 WNC 15.055	Pontiac WQPP 1.610
XEFT 9.505 XEUV 6.020	Manila KAZ 9.990	<b>Hydaburg</b> KAEB 2.616 Iron Creek KIOH 2.632 Jack Wade KAEF 2.616	<b>Eureka</b> KACI 2.422	<b>Jacksonville</b> WPFJ 2.442	Rockford WPGD 2.458
<b>MOROCCO</b>	<b>PORTUGAL</b> (CSA-CUZ)	<b>Lisbon</b> CSW 9.380 CTIAA 9.650	<b>Fresno</b> KGZA 2.414	<b>Lakeland</b> WPFZ 2.442 W4XB 6.040	Sterling WQPG 1.610
Rabat CNR 12.830	<b>SIAM</b> (HSA-HSZ)	<b>Juneau</b> WXA 8.050 Kadiak Island KIJY 2.632	<b>Lodi</b> KNGY 2.414	<b>Miami</b> WPFZ 2.442 W4XB 6.040	Springfield WQPS 1.610
<b>NETHERLANDS</b> (PAA-PIZ)	Bangkok HS8PJ 10.955	<b>Ketchikan</b> KGM 2.512 KIAY 3.093 WXH 2.604 WXH 6.662	<b>Los Angeles</b> KGPL 1.712	<b>Orlando</b> WPHM 2.442	Waukegan WQFX 1.712
Hilversum	<b>SPAIN</b> (EAA-EHZ)	<b>Nakeen</b> KHV 2.566 Nellie Juan KIOD 2.632	<b>Palo Alto</b> KGHK 1.674	<b>Palm Beach</b> WPFX 2.442	<b>INDIANA</b>
PCJ 9.590 PCJ 15.220 PHI 11.730 PHI 17.775	Madrid EAQ 9.862	<b>Port Hobron</b> KHZ 2.912 KIMA 2.632	<b>Pasadena</b> KGJX 1.712	<b>Tampa</b> WPHN 2.466	Columbia City WQFW 1.634
<b>NETHERLAND EAST INDIES</b> (PKA-POZ; YBA-YHZ)	<b>STRAITS SETTLEMENTS</b>	<b>P. Wakefield</b> KIOC 2.632 Rose Inlet KLE 2.512	<b>Pomona</b> KNFJ 1.712	<b>San Bernardino</b> KGZY 1.712	Connersville WAMB 2.442
Bandoeng	Singapore ZHI 6.018	<b>Shearwater Bay</b> KIJW 2.632	<b>Sacramento</b> KNGF 2.422	<b>San Jose</b> KJPM 2.466	Culver WPHS 1.634
PLE 18.830 PLP 11.000 PLV 9.415 PMN 10.260 YDA5 6.120	<b>SWITZERLAND</b> (HBA-HBZ)	<b>Tenakee</b> KAEP 2.616 Uganik KIJP 2.986	<b>San Francisco</b> KJPD 2.466	<b>San Diego</b> KJZD 2.490	Fort Wayne WPBZ 2.490
Sourabaya YDB 9.640	Geneva HBL 9.595 HBP 7.797	<b>Union Bay</b> KFF 2.566	<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Frankfort WAKK 2.490
Tandjongprik YDA 3.040 YDA 6.040	<b>TAHITI</b>	<b>Waterfall</b> KLA 2.566	<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Huntington WAKA 2.498
<b>NEW GUINEA</b>	Papeete F08AA 7.100	<b>Wrangell</b> KDK 2.538	<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Indianapolis WMDZ 2.442
Rabouli VJZ 13.880	<b>UNION OF SOCIALIST SOVIET REPUBLICS</b> (R; U)	<b>ARIZONA</b>	<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Jasper WPHU 1.634
<b>NICARAGUA</b> (YNA-YNZ)	Baku RIO 10.160 Khabarovsk RV15 4.273	<b>Phoenix</b> KNGG 1.698 KGJZ 2.430	<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Kokomo WPDT 2.490
Managua YNLF 9.650 YNVA 8.590	Moscow RAN 9.520 RKI 15.090 RNE 12.000 RV96 15.175	<b>Fort Smith</b> KNHE 2.406	<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Lafayette WQFQ 2.442
<b>NORWAY</b> (LAA-LNZ)	<b>UNITED STATES</b> (K; N; W)	<b>Little Rock</b> KGHZ 2.406	<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Marion County WPHE 1.634
Jeloy LKJ1 9.540	<b>ALABAMA</b>	<b>California</b>	<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Muncie WPGP 2.442
<b>PANAMA</b> (HPA-HPZ)	Birmingham WPFM 2.382	<b>Bakersfield</b> KACS 2.414 KGPS 2.414	<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Richmond WPDH 2.442
Colon		<b>Berkeley</b> KSW 1.658	<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Seymour WQFE 1.634
HP5F 6.080 HP5K 6.005			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	South Bend WPGN 2.490
Panama City			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	<b>IOWA</b>
HP5B 6.030 HP5J 9.605			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Atlantic KACD 1.682
			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Cedar Rapids KGOZ 2.466
			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Davenport KGPN 2.466
			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Des Moines KGHO 1.682
			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	KGZG 2.466
			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Fairfield KACC 1.682
			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Sioux City KGPK 2.466
			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Storm Lake KNFO 1.682
			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Waterloo KNFN 1.682
			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	<b>KANSAS</b>
			<b>San Bernardino</b> KJZD 2.466	<b>San Diego</b> KJZD 2.490	Atchison KACA 2.422



## SHORT WAVE STATIONS BY LOCATIONS

Chanute KGZF 2.450	Newton WPFA 1.712	<b>NEW HAMPSHIRE</b>	W2XE 11.830	Youngstown WPDG 2.458	<b>PUERTO RICO</b>
Coffeyville KGZP 2.450	Northampton WPEW 1.666	Nashua WPBH 2.422	W2XE 15.270	Zanesville WPHO 2.430	San Juan WCT 13.410
Dodge City KNGH 2.474	Somerville WPEH 1.712	<b>NEW JERSEY</b>	W2XE 21.520	<b>OKLAHOMA</b>	<b>RHODE ISLAND</b>
Eldorado KAPD 2.450	W. Bridgewater WPEL 1.666	Bloomfield WAKH 2.430	Niagara Falls WNFP 2.422	Ada KNHC 2.450	Cranston WPGK 2.466
Garden City KNFH 2.474	Worcester WPGX 2.466	Bound Brook W3XAL 6.100	Oneonta WQFJ 2.414	Altus KACL 2.450	E. Providence WPEI 1.712
Hutchinson KGHN 2.450	<b>MICHIGAN</b>	W3XAL 17.780	Rochester WPDR 2.422	Chickasha KACF 2.450	Pawtucket WPFV 2.466
Salina KNGV 2.422	Bay City WPGA 2.496	W3XL 6.425	Rocky Point WEA 10.610	Cushing KAPB 2.450	Providence WPGF 1.712
Topeka KGZC 2.422	Detroit WCK 2.414	W3XL 17.310	WEA 9.448	Drumright KAPC 2.450	Woonsocket WPEM 2.466
Wichita KGPZ 2.450	E. Lansing WRDS 1.642	Freehold WAKC 2.366	WES 9.470	Duncan KNKG 2.450	
<b>KENTUCKY</b>	Flint WPDF 2.442	Hackensack WPFK 2.430	WEZ 8.075	Lawton KGHP 2.450	
Lexington WPET 1.786	Grand Rapids WPEB 2.442	Lawrenceville WKF 4.253	Schenectady W2XAD 15.330	Muskogee KNGT 2.450	<b>SOUTH CAROLINA</b>
Louisville WPDE 2.442	Grosse Pointe WRDR 2.414	WKF 19.220	W2XAF 9.530	Norman KAPE 2.450	Charleston WCPD 2.430
<b>LOUISIANA</b>	Highland Park WMO 2.414	WLA 18.350	S. Schenectady WPGC 1.658	Oklahoma City KGPH 2.450	<b>SOUTH DAKOTA</b>
Baton Rouge WAME 2.430	WMO 2.414	WMN 14.590	Syracuse WPEA 2.382	Okmulgee KAPF 2.450	Huron KVPB 2.450
New Orleans WPEK 2.430	Jackson WPHP 2.466	WGA 6.755	Utica WPGJ 2.414	Ponca City KACP 2.450	Rapid City KNGM 2.450
Shreveport KGZL 1.712	Lansing WPDJ 2.414	WON 9.870	Yonkers WPFY 2.442	Seminole KACR 2.450	
KNGP 2.430	Muskegon WPFC 2.442	Non Brunswick WKJ 9.460	WPFY 2.442	Tulsa KGPO 2.450	<b>TENNESSEE</b>
<b>MAINE</b>	Paw Paw WRDP 1.642	Ocean Gate WOO 4.178	<b>NORTH CAROLINA</b>		Elizabethton WPHY 2.474
Portland WPFU 2.422	Port Huron WPGB 2.466	WOO 4.753	Asheville WPFS 2.458		Johnson City WPGZ 2.474
<b>MARYLAND</b>	Saginaw WPES 2.442	WOO 8.560	WPFS 2.474		Knoxville WPRO 2.474
Baltimore WPFH 2.414	<b>MINNESOTA</b>	WOO 12.840	Charlotte WPDV 2.458		Memphis WPEC 2.466
Beltsville WVW 5.000	Duluth KNFE 2.382	WOO 17.120	<b>NORTH DAKOTA</b>		Nashville ..... 1.666
WVW 10.000	Minneapolis KGPB 2.430	Passaic WPDJ 2.414	Fargo KNHM 2.442	<b>PENN-SYLVANIA</b>	<b>TEXAS</b>
WVW 15.000	Redwood Falls KNHD 1.658	<b>NEW MEXICO</b>		Harrisburg WPSF 1.674	Austin KGHU 2.442
<b>MASSACHUSETTS</b>	St. Paul WPSD 2.430	Albuquerque KGZX 2.414		Monesson WQFF 2.482	Beaumont KGPJ 1.712
Arlington WPED 1.712	<b>MISSOURI</b>	Clovis KNFA 2.414		New Castle WPGT 2.482	Big Spring KACM 2.458
Boston WPGV 1.712	Jefferson KIUK 1.674	Santa Fe KGPF 2.414		Oil City WPHZ 2.482	Brownsville Kght 2.382
WIXAL 6.040	Kansas City KGPE 2.422	<b>NEW YORK</b>		Philadelphia WPPD 2.474	Brownwood KNGW 2.458
WIXAL 11.790	St. Louis KGPC 1.706	Albany WPGH 2.414		W3XAU 0.060	Cleburne KNGE 1.712
Cohasset WPGU 1.712	<b>NEBRASKA</b>	Auburn WPDN 2.382		W3XAU 9.590	Corpus Christi KGVH 2.382
Everett WAKF 1.712	Lincoln KGZU 2.490	Binghamton WPLG 2.442		Pittsburgh WPDU 1.712	Dallas KVP 1.712
Fairhaven WPFN 1.712	Norfolk KNGN 2.490	Bronx WPEF 2.450		W8XK 6.140	Denton KNHF 1.712
Fall River WAKW 1.712	Omaha KGPI 2.466	Brooklyn WPEE 2.450		W8XK 11.870	
Fitchburg WPHA 2.466	<b>NEVADA</b>	Buffalo WMJ 2.422		W8XK 15.210	
Framingham WMP 1.666	Las Vegas KGVH 2.474	Herkimer ..... 2.414		W8XK 21.540	
Marshfield WOU 2.506	Reno KGHM 2.474	Hicksville W2XGB 6.425		Reading WPEF 2.442	
Medford WPHG 1.712		Huntington WPGO 2.490		Sharon WQFU 2.482	
		Mineola WPGS 2.490		Swarthmore WPFQ 2.474	
		New York WPEG 2.450		Wilkes-Barre WQFM 2.442	
		W2XE 6.120			

## SHORT WAVE STATIONS BY LOCATIONS

<b>El Paso</b> <b>KGZM</b> 2.414 <b>Fort Worth</b> <b>KGPR</b> 1.712 <b>Galveston</b> <b>KNGI</b> 1.712 <b>Gladewater</b> <b>KACU</b> 1.712 <b>Houston</b> <b>KGZB</b> 1.712 <b>Lubbock</b> <b>KGZW</b> 2.458 <b>San Antonio</b> <b>KGZE</b> 2.482 <b>Waco</b> <b>KGZQ</b> 1.712 <b>Wichita Falls</b> <b>KGZI</b> 2.458 <hr/> <b>UTAH</b> <b>Salt Lake City</b> <b>KGPW</b> 2.406	<b>VIRGINIA</b> <b>Lynchburg</b> <b>WQFH</b> 2.450 <b>Petersburg</b> <b>WQFI</b> 2.450 <b>Richmond</b> <b>WPHF</b> 2.450 <b>Roanoke</b> <b>WQFG</b> 2.450 <hr/> <b>WASHINGTON</b> <b>Aberdeen</b> <b>KGZV</b> 2.414 <b>Bellingham</b> <b>KACK</b> 2.414 <b>KNFK</b> 2.490 <b>Centralia</b> <b>KGHW</b> 2.414 <b>Ellensburg</b> <b>KNFX</b> 2.490	<b>Ephrata</b> <b>KNGZ</b> 2.490 <b>Everett</b> <b>KNFP</b> 2.414 <b>Kalaloch</b> <b>KACQ</b> 2.490 <b>Mt. Vernon</b> <b>KNFI</b> 2.414 <b>Olympia</b> <b>KACE</b> 2.414 <b>KNFG</b> 2.490 <b>Seattle</b> <b>KGPA</b> 2.414 <b>WVD</b> 2.604 <b>WVD</b> 8.620 <b>Spokane</b> <b>KGHS</b> 2.414 <b>KNGR</b> 2.490 <b>Tacoma</b> <b>KGZN</b> 2.414 <b>Vancouver</b> <b>KNGC</b> 2.490	<b>Walla Walla</b> <b>KACV</b> 2.414 <b>KNGD</b> 2.490 <b>Wenatchee</b> <b>KACJ</b> 2.414 <b>KNGQ</b> 2.490 <b>Yakima</b> <b>KNGB</b> 2.490 <b>KNGU</b> 2.414 <hr/> <b>WEST VIRGINIA</b> <b>Charleston</b> <b>WPHI</b> 2.490 <b>Clarksburg</b> <b>WFPF</b> 2.490 <b>Fairmont</b> <b>WPHJ</b> 2.490 <b>Parkersburg</b> <b>WPHQ</b> 2.490	<b>WISCONSIN</b> <b>Green Bay</b> <b>KNHB</b> 2.382 <b>Kenosha</b> <b>WPEP</b> 2.450 <b>Milwaukee</b> <b>WPDK</b> 2.450 <b>Oshkosh</b> <b>WAKE</b> 2.382 <hr/> <b>VATICAN STATE (HVA-HVZ)</b> <b>Vatican City</b> <b>HVJ</b> 15.120 <hr/> <b>VENEZUELA (YVA-YWZ)</b> <b>Barquisimeto</b> <b>YV8RB</b> 5.895	<b>Bolivar</b> <b>YV11RB</b> 6.545 <b>Caracas</b> <b>YV2RC</b> 5.800 <b>YV3RC</b> 6.165 <b>YV4RC</b> 6.375 <b>YV9RC</b> 6.400 <b>Maracaibo</b> <b>YV5RMO</b> 5.850 <b>YV7RMO</b> 5.810 <b>Maracay</b> <b>YVQ</b> 6.672 <b>YVR</b> 9.158 <b>YV12RM</b> 6.300 <b>San Cristobal</b> <b>YV10RSC</b> 5.720 <b>Valencia</b> <b>YV6RV</b> 6.520 <hr/> <b>YUGO SLAVIA</b> <b>Belgrade</b> <b>.....</b> 6.100
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## DX Clinic

*(Continued from page 16)*

new station KOVC on 1500 kcys," postcards O. Ingmar Oleson, Ambrose, N. D. "Best time for DXers to get them is early in the morning. KFJM is now on 1410 kcys with 1000 watts. They are using a vertical antenna 165 feet high, and their signal is about 20 times as strong as when they had 100 watts."

"I'm back in Rochester, N. Y., after seven months in Laredo, Texas," greets Samuel A. Meyer, Jr., 83 Canterbury Rd., that city, "and have a little Mexican dope that may interest you. XEFO, which has been using 5 KW for many years, has changed managers and will increase power to 50 KW very soon. There are two stations in Mexico City which you do not list, XEMC and XEJP, but I don't know the frequency or power of either. XEWZ has changed its call to XEEO. When I tuned a radio in Mexico City at about 1900 in the evening, the whole dial seemed to be covered with local stations. Twelve-watters like XEMX

came in with nearly the strength of XEW or XEFO.

"In your broadcast band lists, you show only three stations in Trujillo, D.R. HIT, HIG, H18Q, and H19B and at least five other short wave stations are relaying BCB transmitters of the same call. Two Colombians not listed in RADEX are HJ1ABR, 1400 kcys, Cartagena, and HJ4ABQ, 1320 kcys, Medellin. I am afraid that most of the short wave stations down there have BCB equivalents."

### Reports and Such

"I joined with the GRDA-IDA about six months ago," says F. H. Hagedorn, Ambrose N. E. Line, Queensland, Australia, "and find DXing a most fascinating hobby indeed. I am using a four-valve Victor receiver and, being in a farming district, it is battery-operated. It costs a little more to operate than an A.C. set in the city, but this is more than compensated by the fact that we have no electricity to cause interference. Except during a thunderstorm, we get practically undistorted reception at all times.



SHORT WAVE STATIONS BY CALLS

WPHS 1.634	WQFO 2.430	WRDP 1.642	W2XAD 15.330	W8XK 6.140	XGOX 9.460	YV5RMO 5.850
WPHU 1.634	WQFQ 2.442	WRDQ 2.474	W2XAF 9.530	W8XK 11.870	YDA 3.040	YV6RV 5.820
WPHY 2.474	WQFT 1.596	WRDR 2.414	W2XE 6.120	W8XK 15.210	YDA 6.040	YV7RMO 5.810
WPHZ 2.482	WQFU 2.482	WRDS 1.642	W2XE 11.830	W8XK 21.540	YDA5 6.120	YV8RE 5.895
WPSF 1.674	WQFV 2.414	WVD 2.604	W2XE 15.270	W9XAA 6.080	YDB 9.640	YV9RC 6.400
WQFA 2.466	WQFW 1.634	WVD 8.620	W2XE 17.760	W9XAA 11.830	YNA 14.480	YV10RS 5.720
WQFB 2.414	WQFY 1.712	WVV 5.000	W2XE 21.520	W9XBS 6.425	YNLF 9.650	YV11RB 6.545
WQFC 2.466	WQFX 2.474	WVV 10.000	W2XGB 6.425	W9XF 6.100	YNVA 8.590	YV12RM 6.300
WQFE 1.634	WQZ 2.458	WVV 15.000	W3XAL 6.100	W9XF 6.425	YSL 14.960	ZBW 8.750
WQFF 2.482	WQPC 1.610	WX 8.050	W3XAL 17.780	XEBT 6.000	YVQ 6.672	ZFA 5.025
WQFG 2.450	WQPD 1.610	WXE 2.998	W3XAU 6.060	XECR 7.380	YVQ 13.337	ZFB 10.055
WQFH 2.450	WQPF 1.610	WXH 2.604	W3XAU 9.590	XEFT 9.505	YVR 9.168	ZFD 10.335
WQFI 2.450	WQPG 1.610	WXH 6.662	W3XL 6.425	XEUW 6.020	YV2RC 5.800	ZFS 4.512
WQFJ 2.414	WQPM 1.610	WXH 8.050	W3XL 17.310	XEWI 5.985	YV3RC 6.165	ZHI 6.018
WQFK 2.466	WQPP 1.610	W1XAL 6.040	W4XB 6.040	XEXA 6.182	YV4RC 6.375	ZLT4 11.000
WQFL 1.712	WQPS 1.610	W1XAL 11.790	W8XAL 6.060			
WQFM 2.442	WRBH 2.458	W1XK 9.570				

## Let's Listen

(Continued from page 31)

set to the second antenna connection. I put up an aerial only 50 feet in over-all length. I am using No. 28 double rubber covered electric power wire for the antenna and ground, and can now separate the stations from hair line to 10 kcs. apart.

"The other evening I tried out this set with the result that on the short-wave bands, these stations were received: XEBT, 6000 kcs., Mexico City, 2029 pm, MST, very strong; GSB, Daventry, England, 2135 pm, audible to strong; DJP in Zeesen, Germany; HJ2ABD, Bucaramanga, Colombia; XEWI, Mexico City, just audible; COCO, 6020 kcs., Havana, Cuba; COCH in Havana and HJ2ABC in Cucuta, Colombia."

So many new readers join our ranks each month that we deem it advisable, once or twice a year at least, to devote an entire article to a discussion of terms and expressions used in radio. "We want to know *how* to find stations," one reader writes, and another says, "I would like to see an article dedicated to greenhorns." An article for "greenhorns" is now in preparation. It will tell what can be heard on short-waves and how to tune for overseas stations. The QSA and R signals will be explained, as well as "fre-

This month our Frequency list shows the "extra" time that stations may be heard. We have shown, as much as we were able with the information on hand, the hours that the stations transmit outside of their regular broadcasting periods. The time is given in Eastern Standard.

quencies," "megacycles," "meters," "Greenwich Mean Time" and other words perplexing to a beginner. Watch for this feature in an early issue of RADEX.

Carl and Anne Eder, Pouch A, Willmar, Minn., have asked us to send a general call to all s.w. tuners that they wish to exchange QSL cards.

"Station W3XEY, on a frequency of 31.6 megas. and located here in Baltimore, relays the Red Network programs between 1800 and 0000 EST," writes Paul Wirtz, 633 St. John's Road, Baltimore, Md. "Reports to this station should be addressed in care of station WFBR, 7 St. Paul St., and they will be verified for return postage." Paul is only 15 years old and claims that he has just started in radio, although he has already built three sets, one of them a one-tube regenerative rig on which he logged 25 foreign stations in about a month and a half. Among the better catches were PCJ, HAT4, 2RO, GSC and EAQ.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

540 kcys. (555.2)

CJRM ak 1000 F Moose Jaw, Sask.

550 kcys. (545.1)

CFNB mk 500 F (1) Fredericton, N. B.  
 KFUP ae 500 2 (1) St. Louis, Mo.  
 KFVR ae 1000 N (5) Bismarck, N. D.  
 KOAC ak 1000 . . . Corvallis, Ore.  
 KSD ak 1000 2R (5) St. Louis, Mo.  
 KTSA ak 1000 C (5) San Antonio, Tex. —Jan. 4, 0100-0115  
 WDEV ae 500 D Waterbury, Vt. —2nd Mon., 0420-0440  
 WGR ae 1000 C Buffalo, N. Y.  
 WKRC ak 1000 CX Cincinnati, Ohio —2nd Tues., 0320-0340  
 WSWA ak 500 D Harrisonburg, Va.  
 XEFC ak 250 . . . Merida, Yuc.

560 kcys. (535.4)

KFDM ak 500 (1) Beaumont, Tex. —2nd Mon., 0400-0420  
 KLZ ae 1000 C (5) Denver, Colo.  
 KSFO ak 1000 . . . San Francisco, Calif.  
 KWTO ak 5000 D Springfield, Mo.  
 WFIL ak 1000 B Philadelphia, Pa.  
 WIND ak 1000 (5) Gary, Ind.  
 WIS ae 1000 N (5) Columbia, S. C.  
 WOAM ak 1000 C Miami, Fla. —2nd Sat., 0300-0320  
 XEAO ak 250 . . . Mexicali, L. C.

570 kcys. (526.0)

KGKO ak 250 C(1)Y Wichita Falls, Tex. —2nd Thurs., 0300-0320  
 KMTR ak 1000 . . . Hollywood, Calif.  
 KVI ak 1000 C(5) Tacoma, Wash.  
 WKBN ae 500 1C Youngstown, Ohio —2nd Wed., 0320-0340  
 WMCA ak 500 X New York, N. Y.  
 WNAX ak 1000 C (5) Yankton, S. D.  
 WOSU ak 750 1 (1) Columbus, Ohio —2nd Wed., 0350-0410  
 WSVR ak 1000 B Syracuse, N. Y. —2nd Tues., 0420-0440  
 WWNC ak 1000 N Asheville, N. C.

580 kcys. (516.9)

CFPR ak 50 . . . Prince Rupert, B.C.  
 CHRC ak 100 F Quebec, Que.  
 CKCL ag 100 F Toronto, Ont.  
 CKUA ak 500 . . . Edmonton, Alta.  
 KMJ ak 500 C (1) Fresno, Calif.  
 KSAC ak 500 2 (1) Manhattan, Kans.  
 WCHS ak 500 (1) Charleston, W. Va.  
 WDBO ak 1000 C Orlando, Fla. —2nd Mon., 0330-0350  
 WBBW ak 1000 C2 (5) Topeka, Kans.  
 WILL ak 1000 D Urbana, Ill.  
 WTAG ae 500 RX Worcester, Mass.

590 kcys. (508.2)

KHO ak 1000 R (2.5) Spokane, Wash.  
 WEBI ak 1000 CX Boston, Mass.  
 WKZO ak 1000 D Kalamazoo, Mich.  
 WOW ae 5000 R Omaha, Nebr.

600 kcys. (499.7)

CFCF ae 400 FN Montreal, Que.  
 CJOR ak 500 . . . Vancouver, B. C.  
 CMW ak 1400 . . . Havana, Cuba  
 CRCW ak 500 F (1) Windsor, Ont.  
 FQN z 250 609 St. Pierre, Miq.

**NORTH AMERICAN B. C. STATIONS BY FREQUENCIES**

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KFSD	ae	1000	B	San Diego, Calif.
WCAO	ae	500	C (1)	Baltimore, Md.
WICC	ae	500	C (1)	Bridgeport, Conn.
WMT	ak	1000	B (5)	Cedar Rapids, Ia.
WREC	c	1000	C (5)	Memphis, Tenn.

**610 kcys. (491.5)**

KFRC	ck	1000	C (5)	San Francisco, Cal.
WDAF	ak	1000	R (5)	Kansas City, Mo.
WIP	ak	1000	....	Philadelphia, Pa.
WJAY	ae	500	D	Cleveland, Ohio
XEXM	z	....	....	Mexico City, D. F.
XFX	ak	1000	....	Mexico City, D. F.

-2nd Tues., 0430-0450

**620 kcys. (483.6)**

KGW	ak	1000	R (5)	Portland, Ore.
KTAR	ae	1000	N	Phoenix, Ariz.
WFLA	ae	1000	Na (5)	Clearwater, Fla.
WHJB	ak	250	D C	Greensburg, Pa.
WLBZ	ak	500	C (1)	Bangor, Maine
WSUN	ae	1000	Na (5)	St. Petersburg, Fla.
WTMJ	ak	1000	N (5)	Milwaukee, Wis.

-Jan. 7, 0500-0530

**630 kcys. (475.9)**

CFCO	ak	100	F	Chatham, Ont.
CFCY	ae	1000	F	Charlottetown, P.E.I.
CJRC	ak	1000	F	Winnipeg, Man.
CKOV	ak	100	F	Kelowna, B. C.
KFRU	ak	500	I (1)	Columbia, Mo.
KGFX	ak	200	D	Pierre, S. D.
WGBF	ak	500	I	Evansville, Ind.
WMAL	ak	250	B (.5)	Washington, D. C.
WOS	ak	500	ID	Jefferson City, Mo.
WPRO	ak	500	(1)	Providence, R. I.
XEZ	z	500	....	Merida, Yuc.
WGAN	ck	500	P	Portland, Me.

-2nd Sat., 0350-0410

**640 kcys. (468.5)**

CMBC	dj	150	....	Havana, Cuba
KFI	ak	50000	R	Los Angeles, Calif.
WHKC	ak	500	....	Columbus, Ohio
WOI	ae	5000	D	Ames, Iowa
XEOX	ak	500	....	Saltillo, Coah.

**650 kcys. (461.3)**

TIGPH	ak	1000	....	San Jose, C. R.
WSM	ae	50000	N	Nashville, Tenn.

**660 kcys. (454.3)**

WAAW	ae	500	D	Omaha, Neb.
WEAF	ak	50000	R	New York, N. Y.

**670 kcys. (447.5)**

WMAQ	ak	50000	N	Chicago, Ill.
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**680 kcys. (440.9)**

CMCG	ak	1000	....	Havana, Cuba
KFEQ	ak	2500	D	St. Joseph, Mo.
KPO	ak	50000	R	San Francisco, Cal.
RDN	z	500	....	San Salvador, E. S.
VAS	akn	2000	685	Glace Bay, N. S.
VOWR	ck	500	681	St. John's, Nfld.
WPFT	ak	1000	N (5)	Raleigh, N. C.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

690 keys. (434.5)

CFRB	ae	10000	C	Toronto, Ont.
CJ CJ	ak	100	F	Calgary, Alta.
NAA	akn	1000	....	Arlington, Va.
XET	ak	500	....	Monterrey, N. L.

700 keys. (428.3)

WLW	ak	500000	N	Cincinnati, Ohio
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710 keys. (422.3)

KIRO	ak	1000	....	Seattle, Wash.
KMPC	ak	500	....	Beverly Hills, Cal.
WOR	ak	50000	....	Newark, N. J.
XEN	ak	1000	....	Mexico City, D. F.

720 keys. (416.4)

WGN	ak	50000	....	Chicago, Ill.
XEH	ak	250	....	Monterrey, N. L.

730 keys. (410.7)

CFPL	ak	100	F	London, Ont.
CJCA	ak	1000	F	Edmonton, Alta.
CKAC	ak	5000	CF	Montreal, Que.
CKPR	ak	100	F	Fort William, Ont.
CMK	ae	3000	....	Havana, Cuba
XEBC	z	5000	....	Agua Caliente, L.C.
XEPN	ak	100000	....	Piedras Negras, Ch.

740 keys. (405.2)

KMMJ	ae	1000	D	Clay Center, Neb.	-2nd Thurs., 0510-0530
KTRB	ak	250	D	Modesto, Calif.	
WHEB	ak	250	D	Portsmouth, N. H.	
WSB	ae	50000	N	Atlanta, Ga.	

750 keys. (399.8)

CMCW	dk	150	....	Havana, Cuba	-2nd Thurs., 0420-0440
KGU	aj	2500	N	Honolulu, T. H.	
WJR	ak	50000	C	Detroit, Mich.	
XEAM	z	7.5	....	Matamoros, Tams.	

760 keys. (394.5)

CMHX	ak	200	....	Cienfuegos, Cuba	-2nd Fri., 0320-0340
KXA	ae	250	(.5)	Seattle, Wash.	
WBAL	ae	2500	BSy	Baltimore, Md.	
WEW	ae	1000	D	St. Louis, Mo.	
WJZ	ak	50000	BSy	New York, N. Y.	
XEOK	ak	250	....	Tijuana, L. C.	

770 keys. (389.4)

CMBS	ak	150	....	Havana, Cuba
KFAB	ak	10000	CSy	Lincoln, Neb.
WBBM	ae	50000	CSy	Chicago, Ill.

780 keys. (384.4)

CHWK	dk	100	F	Chilliwack, B. C.	-2nd Sat., 0400-0420
CKSO	ak	1000	F	Sudbury, Ont.	
CMJK	ak	250	....	Camaguey, Cuba	
KEHE	ak	500	(1) X	Los Angeles, Calif.	
KFDY	ae	1000	D	Brookings, S. D.	
KFOD	ck	250	....	Anchorage, Alaska	
KGHL	ak	1000	N(5)	Billings, Mont.	
WEAN	ae	500	CX	Providence, R. I.	

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

MWC ak 1000 N (5.) Memphis, Tenn.  
 WTAR ae 500 NX (1) Norfolk, Va.  
 XEYZ z 10000 .... Mexico City, D. F.

790 kcys. (379.5)

CMGH z 250 .... Matanzas, Cuba  
 KGO ak 7500 B San Francisco, Cal.  
 KOAM z 1000 DP Pittsburg, Kans.  
 WGY ak 50000 R Schenectady, N. Y.

800 kcys. (374.8)

HIX ak 700 .... Trujillo, D. R.  
 TIX ak. .... San Jose, C. R.  
 WBAP ak 50000 Na Fort Worth, Tex.  
 WFAA ak 50000 Na Dallas, Tex.  
 WTBO ak 250 D Cumberland, Md.

810 kcys. (370.2)

CMCF ak 600 .... Havana, Cuba  
 WCCO ae 50000 C Minneapolis, Minn.  
 WNYC ak 1000 D New York, N. Y.  
 XFC z 350 .... Aguascalientes, Ags.

820 kcys. (365.6)

CMHW ak 100 .... Cienfuegos, Cuba  
 WHAS aj 50000 C Louisville, Ky.  
 XEBZ ae 100 .... Mexico City, D. F.  
 XEMZ z .... Coronado Isle, L. C.

830 kcys. (361.2)

CMJX ae 500 .... Camaguey, Cuba  
 KOA ak 50000 N Denver, Colo.  
 WEEU ak 1000 D Reading, Pa.  
 WHDH ae 1000 Dn Boston, Mass.  
 WRUF ae 5000 Dn Gainesville, Fla.

840 kcys. (356.9)

CFOC ak 1000 F Saskatoon, Sask.  
 CRCT ak 5000 FN Toronto, Ont.  
 VOGY ak 400 .... St. John's, Nfld.  
 XERA ck 350000 .... Villa Acuna, Coah.

850 kcys. (352.7)

CMBN z 150 .... Havana, Cuba  
 KIEV ak 250 D Glendale, Calif.  
 TIEP z 500 .... San Jose, C. R.  
 WESG ak 1000 C Elmira, N. Y.  
 WKAR ae 1000 D East Lansing, Mich.  
 WWL ae 10000 C New Orleans, La.

860 kcys. (348.6)

WABC ae 50000 C New York, N. Y.  
 WHB ak 1000 D Kansas City, Mo.  
 XEMO ak 5000 .... Tijuana, L. C.

870 kcys. (344.6)

WENR ak 50000 Na Chicago, Ill.  
 WLS ae 50000 Na Chicago, Ill.

880 kcys. (340.7)

CFJC ak 100 F Kamloops, B. C.  
 CMQ ak 500 .... Havana, Cuba  
 CRCO ak 1000 F Ottawa, Ont.



NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KFKA	ak	500	2 (1)	Greeley, Colo.	
KLX	ae	1000	...	Oakland, Calif.	
KPOF	ae	500	2	Denver, Colo.	—Jan. 8, 0215-0245
WCOC	ae	500	(1)	Meridian, Miss.	—2nd Wed., 0410-0430
WGBI	ae	500	1	Scranton, Pa.	
WPHR	ak	500	D	Petersburg, Va.	
WOAN	ae	250	1	Scranton, Pa.	—2nd Thurs., 0300-0320
WSUI	ae	500	(1)	Iowa City, Iowa	

890 kcys. (336.9)

KARK	ak	250	(.5)X	Little Rock, Ark.	—2nd Wed., 0350-0410.
KFNF	ak	500	2 (1)	Shenandoah, Iowa	
KFPY	ak	1000	C (5)	Spokane, Wash.	
KUSD	ae	500	2	Vermillion, S. D.	
WBAA	ak	500	(1)	W. Lafayette, Ind.	
WGST	ak	1000	C	Atlanta, Ga.	
WJAR	ae	1000	R	Providence, R. I.	
WMMN	ak	500	C (1)	Fairmont, W. Va.	
XEW	ak	50000	....	Mexico City, D. F.	

900 kcys. (333.1)

KGBU	ak	500	X	Ketchikan, Alaska	—2nd Tues., 0440-0500
KHJ	ae	1000	C (5)	Los Angeles, Calif.	
KSEI	ae	250	(.5)	Pocatello, Idaho	
WBEN	ak	1000	R (5)	Buffalo, N. Y.	
WBLI	ak	500	D	New Haven, Conn.	
WFMD	ak	500	D	Frederick, Md.	
WJAX	ak	1000	N (5)	Jacksonville, Fla.	
WKY	ae	1000	N (5)	Oklahoma City, Okla.	
WLBL	ak	2500	DX	Stevens Point, Wis.	
WTAD	ak	500	DX	Quincy, Ill.	—2nd Tues., 0340-0400

910 kcys. (329.6)

CJAT	ak	1000	F	Trail, B. C.	
CKY	ak	15000	F	Winnipeg, Man.	
CRCM	ak	5000	F	Montreal, Que.	
XENT	ak	150000	...	Nuevo Laredo, Tams.	

920 kcys. (325.9)

CMX	ae	1000	....	Havana, Cuba	
HHK	ae	1000	...	Port-au-Prince, Haiti	
KFEL	ak	500	a	Denver, Colo.	
KOMO	ak	1000	R (5)	Seattle, Wash.	
KPRC	ak	1000	N (5)	Houston, Texas	
KVOD	ak	500	aB	Denver, Colo.	
WAAF	ak	1000	D	Chicago, Ill.	
WORL	ae	500	D	Boston, Mass.	
WPEN	ak	250	(.5)1	Philadelphia, Pa.	
WRAX	ak	250	1 (.5)	Philadelphia, Pa.	
WSPA	ae	1000	D	Spartanburg, S. G.	
WWJ	ak	1000	R (5)	Detroit, Mich.	
XEAA	ak	200	....	Mexicali, L. C.	

930 kcys. (322.4)

CFAC	ak	100	F	Calgary, Alta.	
CFCH	ak	100	F	North Bay, Ont.	
CFCL	ae	100	....	Prescott, Ont.	
CHNS	ae	1000	F	Halifax, N. S.	—Jan. 21 and 31, 0200-0500
CKPC	ae	100	F	Brantford, Ont.	
KMA	ak	1000	(5)	Shenandoah, Iowa	
KROW	ak	1000	....	Oakland, Calif.	
TIRH	z	50	....	San Jose, C. R.	
WBRC	ak	1000	C	Birmingham, Ala.	
WDBJ	ae	1000	C (5)	Roanoke, Va.	
XEBH	ak	500	....	Hermosillo, Sonora	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

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940 kcys. (319.0)

KOIN	ak	1000	C (5)	Portland, Ore.	
VOAS	ak	100	....	St. John's, Nfld.	
WAAT	ak	500	D	Jersey City, N. J.	
WAVE	ak	1000	N	Louisville, Ky.	-2nd Tues., 0510-0530
WCSE	ak	1000	R (2.5)	Portland, Maine	
WDAY	ae	1000	N (5)	Fargo, N. D.	
WHA	ak	5000	D	Madison, Wis.	
XEFO	ak	5000	(XFO)	Mexico City, D. F.	

950 kcys. (315.6)

CJOC	ak	100	F	Lethbridge, Alta.	
CMCD	ak	250	....	Havana, Cuba	
CRCS	ak	100	F	Chicoutimi, Que.	
KFWB	ak	1000	(5)	Hollywood, Calif.	-2nd Thurs., 0440-0500
KHSL	ak	250	D	Chico, Calif.	
KMBC	ae	1000	C (5)	Kansas City, Mo.	
WRC	ak	500	R (1)	Washington, D. C.	
YNVA	z	30	....	Managua, Nic.	

960 kcys. (312.3)

CFRN	ak	100	F	Edmonton, Alta.	
CHNC	ak	1000	F	New Carlisle, Que.	
XEAW	ck	50000	....	Reynosa, Tams.	

970 kcys. (309.1)

CMBY	z	150	....	Havana, Cuba	
KJR	ak	5000	B	Seattle, Wash.	
WCFL	ae	5000	B	Chicago, Ill.	
WIBG	ak	100	D	Glenside, Pa.	

980 kcys. (306.0)

KDKA	c	50000	B	Pittsburgh, Pa.	
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990 kcys. (302.8)

WBZ	c	50000	BSy	Boston, Mass.	
WBZA	c	1000	BSy	Springfield, Mass.	
XEAF	ak	500	....	Nogales, Sonora	
XEK	ak	100	....	Mexico City, D. F.	
XES	dk	250	....	Tampico, Tams.	

1000 kcys. (299.8)

CMBZ	ak	500	(1)	Havana, Cuba	
KFVD	ae	250	DnX	Los Angeles, Calif.	
TIGH	z	500	....	San Jose, C. R.	
WHO	ak	50000	R	Des Moines, Iowa	
XEBK	ak	100	....	Nuevo Laredo, Tams.	
XEY	z	10	....	Merida, Yuc.	

1010 kcys. (296.9)

CHML	ak	100	F	Hamilton, Ont.	
CKCD	ak	100	1	Vancouver, B. C.	
CKCD	ak	100	....	Vancouver, B. C.	
CKCK	ak	500	F	Regina, Sask.	
CKCO	ak	100	F	Ottawa, Ont.	
CKIC	ak	50	....	Wolfville, N. S.	
CKWX	ak	100	F 1	Vancouver, B. C.	-Every Sun., 0230-0500
CMJA	ak	300	....	Camaguey, Cuba	
KGGF	ak	1000	2	Coffeyville, Kans.	
KQW	ae	1000	....	San Jose, Calif.	
TIGA	z	30	1014	Cartago, C. R.	
WHN	ae	1000	(5)	New York, N. Y.	
WNAD	ae	1000	2	Norman, Okla.	-2nd Tues., 0330-0350
WNOX	ak	1000	C (2)	Knoxville, Tenn.	
XEU	ak	250	....	Veracruz, Ver.	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1020 kcys. (293.9)

KYW	ak	1000	R	Philadelphia, Pa.	
WDZ	ak	250	D	Tuscola, Ill.	—2nd Wed., 0510-0530
XEJ	ak	1000	....	Juarez, Chih.	

1030 kcys. (291.1)

CFCN	ak	10000	....	Calgary, Alta.
CKLW	ae	5000	....	Windsor, Ont.
CMCY	ak	5000	....	Havana, Cuba
XEB	ak	10000	....	Mexico City, D. F.

1040 kcys. (288.3)

KRLD	ak	10000	C	Dallas, Texas
KWJJ	ak	500	....	Portland, Ore.
KYOS	z	250	D	Merced, Calif.
WTIC	ah	50000	R	Hartford, Conn.

1050 kcys. (285.5)

CMKD	ak	250	....	Santiago, Cuba
CRCK	ak	1000	F	Quebec, Que.
KFBI	ak	5000	Dn	Ablene, Kans.
KNX	ak	50000	C	Hollywood, Calif.
TIFA	z	75	....	San Jose, C. R.
WEAU	z	1000	DP	Eau Claire, Wis.

1060 kcys. (282.8)

KTHS	ak	10000	N	Hot Springs, Ark.	
VOAC	z	40	1065	St. John's, Nfld.	—Jan. 8, 0130-0200
WBAL	ak	10000	B (25)	Baltimore, Md.	
WJAG	ak	1000	D	Norfolk, Neb.	
XEA	ak	500	....	Guadalajara, Jal.	

1070 kcys. (280.2)

CMBX	ak	500	....	Havana, Cuba	
CMHA	z	50	....	Sagua la Grande, C.	—2nd Thurs., 0410-0430 —2nd Fri., 0410-0430
KJBS	ak	500	Dn	San Francisco, Cal.	
WCAZ	ak	100	DX	Carthage, Ill.	
WTAM	ak	50000	R	Cleveland, Ohio	

1080 kcys. (277.6)

WBT	ak	50000	C	Charlotte, N. C.
WCBD	ak	5000	1Dn	Chicago, Ill.
WMBI	ak	5000	1Dn	Chicago, Ill.

1090 kcys. (275.1)

KMOX	ak	50000	C	St. Louis, Mo.
XEAQ	ak	1000	....	Rosarito, L. C.

1100 kcys. (272.6)

CRCV	ak	1000	FX	Vancouver, B. C.	
KGDM	ak	1000	D	Stockton, Calif.	—2nd Mon., 0420-0440
KWKH	ae	10000	C	Shreveport, La.	
WLWL	ae	5000	1	New York, N. Y.	
WPG	ak	5000	1C	Atlantic City, N. J.	
XEL	z	250	....	Mexico City, D. F.	

1110 kcys. (270.1)

CMCJ	ak	500	....	Havana, Cuba
KSOO	ak	2500	Dn	Sioux Falls, S. D.
WRVA	ak	5000	C	Richmond, Va.
XELO	z	10000	....	Piedras Negras, Co.

**NORTH AMERICAN B. C. STATIONS BY FREQUENCIES**

**1120 kcys. (267.7)**

CHLP	ak	100	F	Montreal, Que.	
CHSJ	ak	500	F (1)	St. John, N. B.	
CKOC	ae	500	F (1)	Hamilton, Ont.	
CKX	ak	100	F	Brandon, Man.	
CMGF	dk	150	....	Matanzas, Cuba	
CMKM	ak	200	....	Manzanillo, Cuba	
KFIO	ae	100	D	Spokane, Wash.	—2nd Tues., 0420-0440
KFSG	ag	500	a (2.5)	Los Angeles, Calif.	
KRKD	ak	500	a (2.5)	Los Angeles, Calif.	
KRSC	ak	100	DX	Seattle, Wash.	
WCOP	ak	500	D	Boston, Mass.	
WDEL	ak	250	(.5)	Wilmington, Del.	
WISN	ak	250	(1) C	Milwaukee, Wis.	—2nd Tues., 0350-0410
WTAW	ae	500	....	College Station, Tex.	

**1130 kcys. (265.3)**

CMJI	ak	150	....	Ciego de Avila, Cuba	
KSL	ak	50000	C	Salt Lake City, Utah	
WJJD	ak	20000	Dn	Chicago, Ill.	
WOV	ag	1000	D	New York, N. Y.	

**1140 kcys. (263.0)**

CMBG	z	200	....	Havana, Cuba	
KVOO	ak	25000	1N	Tulsa, Okla.	
WAPI	ak	5000	1N	Birmingham, Ala.	
WSPR	ak	500	D	Springfield, Mass.	

**1150 kcys. (260.7)**

CMJF	z	200	....	Camaguey, Cuba	
WHAM	ae	50000	B	Rochester, N. Y.	
XEFL	ak	250	....	Tijuana, L. C.	
XEWZ	ak	100	....	Mexico City, D. F.	

**1160 kcys. (258.5)**

CMHJ	ak	175	....	Cienfuegos, Cuba	
WOWO	c	10000	1C	Fort Wayne, Ind.	
WWVA	ak	5000	1C	Wheeling, W. Va.	
XEAS	z	100	....	Saltillo, Coah.	
XEC	z	30	....	Tijuana, L. C.	
XED	ak	2500	....	Guadalajara, Jal.	
XEP	ak	500	....	Juarez, Chih.	—Every Sunday, 0300-0500

**1170 kcys. (256.3)**

CMBD	ae	500	....	Havana, Cuba	
WCAU	ak	50000	C	Philadelphia, Pa.	

**1180 kcys. (254.1)**

CMJO	ak	50	....	Ciego de Avila, Cuba	
KEX	ak	5000	2B	Portland, Ore.	
KOB	ak	10000	2	Albuquerque, N.M.	
VE9EK	ak	10	1185	Montmagny, Que.	
WDGY	ak	1000	Dn (5)	Minneapolis, Minn	
WINS	ak	1000	....	New York, N. Y.	
WMAZ	ak	1000	....	Macon, Ga.	
XEFA	z	500	....	Mexico City, D. F.	

**1190 kcys. (252.0)**

HLJ	z	15	1195	Trujillo, D. R.	
VONF	ak	500	1195	St. John's, Nfld.	
WATR	ak	100	DXZ	Waterbury, Conn.	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WOAI ak 5000 C San Antonio, Tex.  
WSAZ ak 1000 .... Huntington, W. Va.

1200 kcys. (249.9)

CHAB	ak	100	F	Moose Jaw, Sask.	
CKNX	ak	50	....	Wingham, Ont.	
CKTB	ag	100	F	St. Catharines, Ont.	
CMCO	ad	250	....	Havana, Cuba	
KADA	ak	100	D	Ada, Okla.	-2nd Mon., 0350-0410; 25th of month 0245-0315
KBTM	ak	100	D	Jonesboro, Ark.	-2nd Sat., 0510-0530
KDNC	z	100	P(.25)	Lewistown, Mont.	
KELO	z	100	P	Sioux Falls, S. Dak.	
KFJB	ak	100	(.25)	Marshalltown, Iowa	-2nd Wed., 0500-0520
KFXD	ae	100	(.25)	Nampa, Idaho	-2nd Sat., 0530-0550
KFXJ	ak	100	(.25)	Grand Junc., Colo.	-2nd Wed., 0340-0400
KGDE	ak	100	(.25)	Fergus Falls, Minn.	-2nd Fri., 0450-0510
KG EK	ak	100	....	Sterling, Colo.	-2nd Fri., 0510-0530
KG FJ	ae	100	....	Los Angeles, Calif.	
KG HI	ak	100	(.25)	Little Rock, Ark.	-2nd Thurs., 0400-0420
KMLB	ak	100	....	Monroe, La.	-2nd Mon., 0410-0430
KOOS	ae	250	D	Marshfield, Ore.	
KSUN	c	100	(.25)	Lowell, Ariz.	-2nd Thurs., 0430-0450
KVCV	z	100	P	Redding, Calif.	
KVEC	z	250	DP	San Luis Obispo, Cal.	
KVOS	dk	100	....	Bellingham, Wash.	-2nd Sat., 0410-0430
KWG	ak	100	N	Stockton, Calif.	
WABI	ak	100	....	Bangor, Maine	
WAIM	ak	100	XZ	Anderson, S. C.	-2nd Wed., 0210-0230
WAYX	ak	100	....	Waycross, Ga.	
WBBZ	ak	100	....	Ponca City, Okla.	
WBHP	z	100	P	Huntsville, Ala.	
WBNO	ak	100	1	New Orleans, La.	-2nd Mon., 0440-0500
WCAT	ak	100	D	Rapid City, S. D.	-2nd Tues., 0540-0600
WCAX	ak	100	....	Burlington, Vt.	-2nd Mon., 0250-0310
WCLO	ak	100	(.25)	Janesville, Wis.	-2nd Tues., 0420-0440
WCPO	ak	100	(.25)	Cincinnati, Ohio	-2nd Thurs., 0300-0320
WEST	ae	100	3 (.25)	Easton, Pa.	
WFAM	ak	100	8	South Bend, Ind.	-2nd Wed., 0300-0320
WFTC	z	100	(.25)P	Kinston, N. C.	
WHBC	ak	100	(.25)	Canton, Ohio	-2nd Tues., 0440-0500
WHBY	ak	100	(.25)	Green Bay, Wis.	-2nd Sat., 0320-0340
WIBX	ak	100	(.3)C	Utica, N. Y.	-2nd Fri., 0320-0340
WIL	ak	100	(.25)	St. Louis, Mo.	-2nd Fri., 0530-0550
WJBC	ak	100	6(.25)	Bloomington, Ill.	-2nd Thurs., 0340-0400
WJBL	ak	100	6	Decatur, Ill.	-2nd Sat., 0340-0400
WJBW	ak	100	1	New Orleans, La.	-2nd Mon., 0230-0250
WJNO	ak	100	....	W. Palm Beach, Fla.	-2nd Wed., 0400-0420
WJRD	c	100	D	Tuscaloosa, Ala.	
WKBO	ak	100	3 (.25)	Harrisburg, Pa.	-2nd Tues., 0300-0320
WLVA	ak	100	(.25)	Lynchburg, Va.	-2nd Sat., 0200-0220
WMFR	ae	100	D	High Point, N. C.	-2nd Wed., 0420-0440
WMPC	ak	100	(.25)	Lapeer, Mich.	-2nd Fri., 0240-0300
WNRI	ak	100	(.25)	Newport, R. I.	
WRBL	ak	100	....	Columbus, Ga.	
WTHT	ak	100	D	Hartford, Conn.	
WWAE	ae	100	8	Hammond, Ind.	-2nd Thurs., 0510-0530

1210 kcys. (247.8)

CJCS	ak	50	....	Stratford, Ont.	
CJCU	z	50	....	Aklavik, N. W. T.	
CKBI	ak	100	F	Prince Albert, Sask.	
CKCH	ak	100	F	Hull, Que.	
CKMC	ak	50	....	Cobalt, Ont.	
CMHI	ak	150	....	Santa Clara, Cuba	
KANS	ak	100	....	Wichita, Kans.	
KASA	ck	100	....	Elk City, Okla.	-Jan. 2, 0330-0350
KDLR	ak	100	....	Devils Lake, N. D.	-2nd Wed., 0530-0550
KDON	z	100	....	Del Monte, Calif.	-2nd Mon., 0510-0530
KFJI	ak	100	....	Klamath Falls, Ore.	-2nd Tues., 0520-0540
KFOR	ae	100	(.25)	C Lincoln, Neb.	
KFPW	ak	100	....	Fort Smith, Ark.	-2nd Mon., 0330-0350
KFVS	ak	100	6(.25)	Cape Girardeau, Mo.	-2nd Tues., 0340-0400
KFXM	ak	100	9	San Bernardino, Calif.	
KGLO	z	100	P	Mason City, Iowa	
KGY	ak	100	....	Olympia, Wash.	-2nd Sat., 0550-0610
KIUL	ak	100	....	Garden City, Kans.	-2nd Fri., 0400-0420

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KLAH	z	100	P	Carlsbad, N. Mex.	
KOCA	z	100	P	Kilgore, Texas	
KPPC	ak	100	9	Pasadena, Calif.	
KVSO	ak	100	.....	Ardmore, Okla.	-2nd Sat., 0400-0420
KWTN	ak	100	.....	Watertown, S. D.	-2nd Sat., 0450-0510
TGW	ak	10000	.....	Guatemala City	-Every Sun., 0000-0500
WALR	ak	100	.....	Zanesville, Ohio	-2nd Thurs., 0530-0550
WBAX	ae	100	.....	Wilkes Barre, Pa.	-2nd Tues., 0200-0220
WBBL	ak	100	S	Richmond, Va.	-2nd Tues., 0220-0240
WBLY	z	100	DP	Lima, Ohio	
WBRB	ak	100	3	Red Bank, N. J.	-2nd Mon., 0210-0230
WCOL	ak	100	N	Columbus, Ohio	-2nd Tues., 0400-0420
WCRW	ae	100	4	Chicago, Ill.	
WEBQ	ae	100	6(.25)	Harrisburg, Ill.	-2nd Fri., 0300-0320
WEDC	ae	100	4	Chicago, Ill.	
WFAS	ak	100	3	White Plains, N. Y.	-2nd Mon., 0350-0410
WFOY	z	100	P	St. Augustine, Fla.	
WGBB	ae	100	3	Freeport, N. Y.	-2nd Fri., 0220-0240
WGCM	ae	100	(.25)	Gulfport, Miss.	-2nd Mon., 0500-0520
WGNV	ak	100	3	Newburgh, N. Y.	-2nd Fri., 0200-0220
WHBF	ak	100	(.25)	Rock Island, Ill.	-2nd Thurs., 0450-0510
WHBU	ak	100	(.25)	Anderson, Ind.	-2nd Wed., 0400-0420
WIBU	ak	100	(.25)	Poynette, Wis.	-2nd Thurs., 0320-0340
WJBY	ak	100	D	Gadsden, Ala.	
WJEJ	ae	100	D	Hagerstown, Md.	
WJIM	z	100	(.25)	Lansing, Mich.	-2nd Thurs., 0410-0430
WJTN	z	ak	50	Jamestown, N. Y.	-2nd Thurs., 0230-0250
WJW	ae	100	(.25)	Akron, Ohio	-2nd Fri., 0340-0400
WKOK	ak	100	.....	Sunbury, Pa.	-2nd Thurs., 0210-0230
WLMU	z	100	P	Middlesboro, Ky.	
WMBG	ak	100	C(.25)	Richmond, Va.	-2nd Tues., 0240-0300
WMFG	ak	100	X	Hibbing, Minn.	-2nd Fri., 0420-0440
WMFN	ak	100	Y	Clarksdale, Miss.	-2nd Mon., 0310-0330
WOMT	ak	100	D	Manitowoc, Wis.	-2nd Tues., 0310-0330
WPAX	ak	100	D	Thomasville, Ga.	-2nd Wed., 0310-0330
WSAY	z	100	D	Rochester, N. Y.	-2nd Tues., 0500-0520
WSBG	ae	100	4	Chicago, Ill.	
WSIX	ak	100	Y	Springfield, Tenn.	-2nd Sat., 0240-0300
WSOC	ak	100	N(.25)	Charlotte, N. C.	-2nd Sat., 0220-0240
WTAX	ak	100	(.25)	Springfield, Ill.	-2nd Wed., 0450-0510
XEAT	ak	300	(.25)	Hidalgo, Chih.	
XEE	z	50	.....	Durango, Dgo.	
XEFV	ak	100	.....	Juarez, Chih.	
XETH	ak	100	.....	Puebla, Pue.	

### 1220 kcys. (245.8)

CMJE	z	50	.....	Camaguey, Cuba	
KFKU	ak	1000	a(5)	Lawrence, Kans.	
KTW	ak	1000	S2	Seattle, Wash.	
KWSC	ae	1000	2(5)	Pullman, Wash.	
TIVCA	ak	.....	1225	San Jose, C. R.	
WCAE	ak	500	D	Canton, N. Y.	-2nd Mon., 0310-0330
WCAE	ak	1000	R(5)	Pittsburgh, Pa.	
WDAE	ae	1000	C(5)	Tampa, Fla.	
WREN	ak	1000	Ba(5)	Lawrence, Kas.	
XETF	ak	30	.....	Veracruz, Ver.	

### 1230 kcys. (243.8)

CMCB	ak	150	.....	Havana, Cuba	
KGBX	ak	500	.....	Springfield, Mo.	-2nd Wed., 0330-0350
KGGM	ak	250	(.5)X	Albuquerque, N. M.	-2nd Thurs., 0340-0400
KYA	ak	1000	N	San Francisco, Calif.	
WFBM	ae	1000	C(5)	Indianapolis, Ind.	
WNAC	ak	1000	R(5)	Boston, Mass.	
XEFJ	ak	100	.....	Monterrey, N. L.	
YNOP	z	100	.....	Managua, Nic.	

### 1240 kcys. (241.8)

CJCB	ak	1000	F	Sydney, N. S.	
CMHB	z	50	.....	Sancti Spiritus, Cuba	
KGCU	ak	250	1	Mandan, N. D.	-2nd Sat., 0320-0340

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KLPM	ak	250	1	Minot, N. D.	—2nd Tues., 0410-0430
KTAT	ak	1000	.....	Fort Worth, Texas	
KTFI	ak	1000	.....	Twin Falls, Idaho	
WKAQ	ae	1000	.....	San Juan, P. R.	—2nd Wed., 0240-0300
WXYZ	ak	1000	B	Detroit, Mich.	—2nd Tues., 0520-0540
XEAC	z	250	.....	Tijuana, L. C.	
XEAI	z	100	.....	Mexico City, D. F.	
XEKL	z	500	.....	Leon, Guan.	
XELA	z	50	.....	Saltillo, Coah.	
XEME	z	15	.....	Merida, Yuc.	

### 1250 kcys. (239.9)

CMKC	ak	150	.....	Santiago, Cuba	
KFOX	ae	1000	.....	Long Beach, Calif.	
WAIR	z	250	DP	Winston-Salem	
WCAL	ah	1000	2(2.5)	Northfield, Minn.	
WDSU	ak	1000	.....	New Orleans, La.	
WHBI	ak	1000	1(2.5)	Newark, N. J.	
WLB	ak	1000	2	Minneapolis, Minn.	—2nd Wed., 0410-0430
WNEW	ae	1000	1(2.5)	Newark, N. J.	
WTCN	ak	1000	2(5)	Minneapolis, Minn.	

### 1260 kcys. (238.0)

KGVO	ak	1000	C	Missoula, Mont.	—2nd Tues., 0450-0510
KOIL	ak	1000	B(2.5)	Omaha, Nebr.	
KPAC	ak	500	D	Port Arthur, Texas	—2nd Tues., 0310-0330
KRGV	ae	500	X	Weslaco, Texas	—2nd Sat., 0340-0400
KUOA	ak	1000	DX	Siloam Spgs., Ark.	—2nd Fri., 0330-0350
KVOA	ak	500	X	Tucson, Ariz.	
WHIO	ak	1000	C(5)	Dayton, Ohio	
WNBX	ak	1000	.....	Springfield, Vt.	
WTOC	ae	1000	C	Savannah, Ga.	

### 1270 kcys. (236.1)

CMHD	dk	250	.....	Caibarien, Cuba	
KGCA	ak	100	2D	Decorah, Iowa	—2nd Tues., 0430-0450
KOL	ae	1000	C(5)	Seattle, Wash.	
KVOR	ae	1000	C	Colorado Sp'gs, Colo.	
KWLC	ak	100	2D	Decorah, Iowa	—2nd Mon., 0320-0340
WASH	ak	500	aN	Grand Rapids, Mich.	—Every other Wed. from 0600-0615
WFBR	ae	500	R(1)	Baltimore, Md.	
WJDX	ae	1000	N(2.5)	Jackson, Miss.	
WOOD	ak	500	aN	Grand Rapids, Mich.	—Same as WASH
XEG	z	200	.....	Ensenada, L. C.	
XFB	ak	250	.....	Jalapa, Ver.	
YNLF	z	20	1275	Managua, Nic.	

### 1280 kcys. (234.2)

CMCU	aed	500	.....	Havana, Cuba	
KFBF	ae	1000	C(2.5)	Great Falls, Mont.	—Every Sunday, 0200-0500
WCAM	ae	500	1	Camden, N. J.	
WCAP	ae	500	1	Asbury Park, N. J.	—2nd Mon., 0400-0420
WDDO	ak	1000	C(5)	Chattanooga, Tenn.	
WIBA	ae	1000	N(5)	Madison, Wis.	
WORC	ak	500	C	Worcester, Mass.	
WRR	ak	500	.....	Dallas, Texas	—Jan. 5 and 19, 0100-0115
WTNJ	ak	500	1	Trenton, N. J.	
XEMX	z	12	.....	Mexico City, D. F.	

### 1290 kcys. (232.4)

KDYL	ak	1000	RX	Salt Lake City, Utah	
KLGN	ak	100	D	Blytheville, Ark.	—2nd Wed., 0310-0330
KTRH	ak	1000	C(5)	Houston, Texas	—2nd Mon., 0300-0320
WEBC	ak	1000	N(5)	Duluth, Minn.	
WJAS	ak	1000	C(5)	Pittsburgh, Pa.	
WNBZ	ak	100	D	Saranac Lake, N. Y.	—2nd Fri., 0340-0400
WNEL	ak	1000	(2.5)	San Juan, P. R.	—2nd Sat., 0320-0340

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1300 kcys. (230.6)

KALE	ak	500	3C	Portland, Ore.	
KFAC	ak	1000	....	Los Angeles, Calif.	
KFHH	ak	1000	C	Wichita, Kans.	
KFJR	ag	500	3	Portland, Ore.	
WBBR	ak	1000	1	Brooklyn, N. Y.	
WEVD	ak	1000	1	New York, N. Y.	
WFAB	ae	1000	1	New York, N. Y.	
WFBC	ak	1000	(5)N	Greenville, S. C.	
WHAZ	ae	500	1	Troy, N. Y.	—Jan. 16, 0300-0500
WHBL	ae	250	....	Sheboygan, Wis.	
WIOD	ak	1000	N	Miami, Fla.	—2nd Mon., 0220-0240

1310 kcys. (228.9)

CHCK	ak	50	...	Charlottetown, P.E.I.	
CJKL	ak	100	F	Kirkland Lake, Ont.	
CJLS	ak	100	....	Yarmouth, N. S.	
CKGV	ak	100	F	Quebec, Que.	
KCRJ	ak	100	D	Jerome, Ariz.	—2nd Mon., 0410-0430
KFPL	dk	100	(25)	Dublin, Texas	—2nd Wed., 0320-0340
KFXX	ak	150	(2)	Oklahoma City, Okla.	—2nd Wed., 0450-0510
KFYO	ak	100	(25)	Lubbock, Texas	—2nd Thurs., 0310-0330
KGEZ	ae	100	....	Kalispell, Mont.	—2nd Sat., 0520-0540
KGFW	ak	100	....	Kearney, Neb.	
KHUB	z	250	DP	Watsonville, Calif.	
KINY	ak	100	....	Juneau, Alaska	—2nd Sat., 0600-0620
KIT	ak	100	(25)	Yakima, Wash.	—2nd Sat., 0500-0520
KMED	ck	100	(25)	Medford, Ore.	—2nd Sat., 0610-0630
KPDN	z	100	D	Pampa, Texas	—3rd and 17th of month, 0300-0400
KRMC	z	100	DP	Jamestown, N. D.	
KRMD	ak	100	....	Shreveport, La.	—2nd Tues., 0420-0440
KROC	ak	100	....	Rochester, Minn.	—2nd Mon., 0430-0450
KROY	z	100	DP	Sacramento, Calif.	
KROA	ak	100	....	Santa Fe, N. Mex.	—2nd Fri., 0340-0400
KRRV	z	100	D	Sherman, Texas	
KSUB	z	100	P	Cedar City, Utah	
KTSM	ak	100	....	El Paso, Texas	—2nd Sat., 0420-0440
KVOL	ak	100	....	Lafayette, La.	—2nd Wed., 0220-0240
KVOX	z	100	DP	Moorhead, Minn.	
KWOS	z	100	DP	Jefferson City, Mo.	
KXRO	ak	100	....	Aberdeen, Wash.	—2nd Sat., 0540-0600
WAML	ak	100	....	Laurel, Miss.	—2nd Sat., 0330-0350
WBEO	ae	100	....	Marquette, Mich.	—2nd Wed., 0410-0430
WBOW	ak	100	(25)	Terre Haute, Ind.	—2nd Thurs., 0420-0440
WBRE	ak	100	....	Wilkes Barre, Pa.	—2nd Tues., 0400-0420
WGLS	ak	100	....	Joliet, Ill.	—2nd Sat., 0310-0330
WCGM	ak	100	(25)	Ashland, Ky.	—2nd Fri., 0400-0420
WDAH	ak	100	S	El Paso, Texas	—2nd Thurs., 0440-0500
WEBR	ak	100	B(25)	Buffalo, N. Y.	—2nd Tues., 0250-0310
WEMP	ak	100	D	Milwaukee, Wis.	—2nd Fri., 0440-0500
WEXL	ak	50	....	Royal Oak, Mich.	—2nd Wed., 0430-0450
WFBG	ae	100	3	Altoona, Pa.	—2nd Tues., 0230-0250
WDFD	ak	100	....	Flint, Mich.	—2nd Sat., 0400-0420
WGH	ak	100	(25)	Newport News, Va.	—2nd Tues., 0440-0500
WHAT	ak	100	4	Philadelphia, Pa.	
WJAC	ae	100	3	Johnstown, Pa.	—2nd Tues., 0340-0400
WLAJ	z	100	....	Lakeland, Fla.	—2nd Mon., 0450-0510
WLBC	ak	100	6(25)	Muncie, Ind.	—2nd Fri., 0310-0330
WLNH	ak	100	....	Laconia, N. H.	—2nd Mon., 0200-0220
WMBO	ak	100	....	Auburn, N. Y.	—2nd Mon., 0300-0320
WMFF	ak	250	D	Plattsburg, N. Y.	—2nd Mon., 0330-0350
WNBH	ak	100	(25)	New Bedford, Mass.	
WOL	ae	100	XZ	Washington, D. C.	
WRAW	ak	100	....	Reading, Pa.	—2nd Thurs., 0220-0240
WROL	ak	100	(25)	Knoxville, Tenn.	—2nd Sat., 0250-0310
WSAJ	ae	100	....	Grove City, Pa.	—2nd Thurs., 0330-0350
WSGN	ak	100	(25)	Birmingham, Ala.	
WSJS	ak	100	C	Winston-Salem, N.C.	—2nd Wed., 0250-0310
WTAL	ak	100	....	Tallahassee, Fla.	—2nd Mon., 0510-0530
WTFL	ce	100	4	Philadelphia, Pa.	—2nd Thurs., 0240-0300
WTJS	ak	100	(25)	Jackson, Tenn.	—2nd Sat., 0230-0250
WTRC	ak	100	6(25)	Elkhart, Ind.	—2nd Thurs., 0500-0520
XEAG	z	10	....	Cordoba, Ver.	
XECW	z	10	....	Mexico City, D. F.	
XEFW	ak	250	....	Tampico, Tams.	
XETB	ak	125	....	Torreón, Coah.	



**NORTH AMERICAN B. C. STATIONS BY FREQUENCIES**

XEX ak 125 .... Monterrey, N. L.  
 XFA z 5 .... Aguascalientes, Ags.  
 ..... z 100 DP Corsicana, Texas

**1320 kcys. (227.1)**

CMOX	ak	200	....	Havana, Cuba	—Jan. 13, 0300-0600
KGHF	am	500	....	Pueblo, Colo.	—2nd Thurs., 0350-0410
KGMB	ak	1000	C	Honolulu, T. H.	—2nd Mon., 0540-0600
KID	ae	500	(1)	Idaho Falls, Idaho	
KRNT	ak	500	C(1)	Des Moines, Iowa	
WADC	ae	1000	C(5)	Akron, Ohio	—2nd Wed., 0340-0400
WORK	ak	1000	....	York, Pa.	
WSMB	ak	1000	N	New Orleans, La.	—2nd Mon., 0340-0400

**1330 kcys. (225.4)**

CMHK	z	250	....	Cruces, Cuba	
CMKW	z	....	....	Santiago, Cuba	
KGB	ag	1000	C(2.5)	San Diego, Calif.	
KMO	ak	250	....	Tacoma, Wash.	
KSCJ	ak	1000	C(2.5)	Sioux City, Iowa	
WDRC	ae	1000	C(5)	Hartford, Conn.	
WSAI	ak	1000	N(2.5)	Cincinnati, Ohio	
WTAQ	ae	1000	....	Green Bay, Wis.	—2nd Fri., 0420-0440

**1340 kcys. (223.7)**

CMAB	z	....	....	Pinar del Rio, Cuba	
CMJL	z	75	....	Camaguey, Cuba	
HRN	z	50	....	Tegucigalpa, Hond.	
KGDY	ak	250	D	Huron, S. D.	
KGIR	ak	1000	N(2.5)	Butte, Mont.	
KGNO	ak	250	....	Dodge City, Kans.	
WCOA	ak	500	C	Pensacola, Fla.	
WFEA	ae	500	C(1)	Manchester, N. H.	
WSPD	ae	1000	C(5)	Toledo, Ohio	—2nd Tues., 0500-0520
XEFE	z	250	....	Nuevo Laredo, Tams.	
XFD	z	350	....	Jalapa, Ver.	

**1350 kcys. (222.1)**

CMCA	z	250	....	Havana, Cuba	
KIDO	ak	1000	(.25)	Boise, Idaho	
KWK	ak	1000	B(5)	St. Louis, Mo.	
WAWZ	ae	500	1(1)	Zarephath, N. J.	
WBNX	ae	1000	1	New York, N. Y.	

**1360 kcys. (220.4)**

CMJH	dk	50	....	Ciego de Avila, Cuba	
KCRC	ak	250	....	Enid, Okla.	
KGER	ak	1000	....	Long Beach, Calif.	
WCSC	ak	500	(1)N	Charleston, S. C.	
WFBL	ak	1000	C(5)	Syracuse, N. Y.	
WGES	ae	500	1	Chicago, Ill.	
WQBC	ak	1000	D	Vicksburg, Miss.	—2nd Wed., 0330-0350
WSBT	ak	500	1	South Bend, Ind.	

**1370 kcys. (218.8)**

GKCW	ak	100	F	Moncton, N. B.	
CMGE	ak	150	....	Cardenas, Cuba	
HIZ	z	10	....	Trujillo, D. R.	
KAST	ak	100	D	Astoria, Ore.	—2nd Tues., 0510-0530
KCMO	ak	100	....	Kansas City, Mo.	—2nd Tues., 0520-0540
KELD	z	100	....	El Dorado, Ark.	—2nd Wed., 0520-0540
KERN	ak	100	....	Bakersfield, Calif.	—2nd Thurs., 0450-0510
KFGQ	ak	100	....	Boone, Iowa	
KFJM	ak	100	(.25)XZ	Grand Forks, N. D.	—2nd Tues., 0440-0500
KFJZ	ae	100	(.25)	Fort Worth, Texas	—2nd Wed., 0400-0420
KFRO	ak	100	D	Longview, Texas	—2nd Sat., 0520-0540
KGAR	ae	100	(.25)	Tucson, Ariz.	—2nd Mon., 0430-0450

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KGFG	bk	100	....	Oklahoma City, Okla	-2nd Fri., 0540-0600
KGFL	ak	100	4	Roswell, N. M.	-2nd Thurs., 0330-0350
KGKL	ak	100	(.25)	San Angelo, Texas	-2nd Thurs., 0430-0450
KICA	ak	100	4	Clovis, N. M.	-2nd Fri., 0300-0320
KIUP	ak	100	....	Durango, Colo.	-2nd Fri., 0430-0450
KLUF	ak	100	(.25)	Galveston, Texas	-2nd Mon., 0420-0440
KMAC	ak	100	5	San Antonio, Tex.	-2nd Fri., 0520-0540
KOBH	ak	100	P	Rapid City, S. Dak.	
KONO	ak	100	5	San Antonio, Tex.	-2nd Sat., 0410-0430
KRE	ak	100	(.25)	Berkeley, Calif.	-2nd Mon., 0450-0510
KRKO	ak	50	1	Everett, Wash.	-2nd Sat., 0510-0530
KSLM	ak	100	....	Salem, Ore.	
KTEM	z	100	DP	Temple, Texas	-Jan. 2, 0400-0430
KUJ	z	100	....	Walla Walla, Wash.	-2nd Sat., 0430-0450
KVJ	ak	100	1	Seattle, Wash.	-2nd Sat., 0450-0510
KWYO	ak	100	(.25)	Sheridan, Wyo.	-2nd Sat., 0310-0330
WABY	ak	100	B	Albany, N. Y.	-2nd Fri., 0230-0250
WAGF	ak	250	D	Dothan, Ala.	-2nd Mon., 0400-0420
WATI	z	100	....	Atlanta, Ga.	
WBLK	z	100	DP	Clarksburg, W. Va.	
WBNY	ak	100	2(.25)	Buffalo, N. Y.	-2nd Tues., 0350-0410
WBTM	ak	100	(.25)	Danville, Va.	-2nd Tues., 0310-0330
WCBM	ae	100	(.25)	Baltimore, Md.	
WDAS	ag	100	(.25)	Philadelphia, Pa.	-2nd Tues., 0210-0230
WDWS	ak	100	DP	Champaign, Ill.	
WEOA	z	100	....	Evansville, Ind.	-2nd Wed., 0500-0520
WFOR	ak	100	....	Hattiesburg, Miss.	
WGL	ae	100	C	Fort Wayne, Ind.	-2nd Thurs., 0310-0330
WGRC	ak	250	D	New Albany, Ind.	
WHBO	ak	100	....	Memphis, Tenn.	-2nd Wed., 0230-0250
WHDF	ak	100	(.25)	Calumet, Mich.	-2nd Fri., 0330-0350
WHLB	ak	100	....	Virginia, Minn.	-2nd Wed., 0430-0450
WBMB	ak	100	(.25)	Jackson, Mich.	-2nd Thurs., 0520-0540
WLLH	ak	100	(.25)	Lowell, Mass.	
WMBR	ak	100	C(.25)	Jacksonville, Fla.	-2nd Mon., 0240-0300
WMFD	ak	100	D	Wilmington, N. C.	-2nd Wed., 0300-0320
WMFO	ak	100	D	Decatur, Ala.	-2nd Sat., 0210-0230
WMIN	ak	100	(.25)	St. Paul, Minn.	
WOC	ak	100	C(.25)	Davenport, Iowa	-2nd Mon., 0310-0330
WPAV	ak	100	....	Portsmouth, Ohio	-2nd Tues., 0410-0430
WPRO	z	100	(.25)P	Mayaguez, P. R.	
WODM	ae	100	DXZ	St. Albans, Vt.	-2nd Sat., 0340-0400
WRAK	ak	100	(.25)	Williamsport, Pa.	-2nd Mon., 0340-0400
WRDO	ak	100	....	Augusta, Maine	-2nd Tues., 0330-0350
WRJN	ak	100	(.25)	Racine, Wis.	-2nd Fri., 0350-0410
WSAU	z	100	DP	Wausau, Wis.	
WSVS	ak	50	D2	Buffalo, N. Y.	-2nd Thurs., 0200-0220
XEFZ	ak	100	....	Mexico City, D. F.	
XEI	ak	125	....	Morelia, Mich.	
XEZZ	z	100	....	San Luis Potosi, SLP.	

### 1380 kcys. (217.3)

CMCR	z	150	....	Havana, Cuba	
KOH	ak	500	C	Reno, Nev.	
KQV	ae	500	1C	Pittsburgh, Pa.	-2nd Tues., 0540-0600
WALA	af	500	C(1)	Mobile, Ala.	
WKBH	ae	1000	D	LaCrosse, Wis.	
WNBC	ak	250	D	New Britain, Conn.	
WSMK	ak	200	1C	Dayton, Ohio	-2nd Thurs., 0400-0420

### 1390 kcys. (215.7)

CJGX	ak	100	....	Yorkton, Sask.	
CMJC	z	150	....	Camaguey, Cuba	
HIH	ak	15	....	1395 San Ped. de Macoris	
KLRA	ae	1000	C(2.5)	Little Rock, Ark.	
KOY	ae	500	(1)	Phoenix, Ariz.	
WHK	ae	1000	C(2.5)	Cleveland, Ohio	-2nd Tues., 0400-0420

### 1400 kcys. (214.2)

CMGC	ad	150	....	Matanzas, Cuba	
CMKR	z	100	....	Santiago, Cuba	
KHBC	z	250	....	Hilo, T. H.	-2nd Thurs., 0500-0520
KLO	ak	500	B	Ogden, Utah	
KTUL	ak	500	C(1)	Tulsa, Okla.	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

TGX	ak	250	...	Guatemala City, Gt.
WARD	ak	500	2	Brooklyn, N. Y.
WBBC	ae	500	2(1)	Brooklyn, N. Y.
WEGL	z	500	P	Brooklyn, N. Y.
WIRE	ak	500	R(1)	Indianapolis, Ind.
WLTH	ak	500	2	Brooklyn, N. Y.
WVFW	ak	500	2	Brooklyn, N. Y.

1410 kcys. (212.6)

CKFC	ak	50	5	Vancouver, B. C.
CKMO	ag	100	5F	Vancouver, B. C.
CMCQ	ak	250	...	Havana, Cuba
KGNC	ae	1000	(2.5)	Amarillo, Texas
WAAB	ak	500	...	Boston, Mass.
WBCM	ak	500	...	Bay City, Mich.
WHIS	ak	500	(1)	Bluefield, W. Va.
WROK	ak	500	...	Rockford, Ill.
WSFA	ak	500	C(1)	Montgomery, Ala.

-2nd Thurs., 0330-0350  
-2nd Thurs., 0250-0310

1420 kcys. (211.1)

GKGB	ak	100	F	Timmins, Ont.
KABC	ak	100	(.25)	San Antonio, Texas
KABR	ak	100	...	Aberdeen, S. Dak.
KALB	z	100	D	Alexandria, La.
KBPS	ak	100	4	Portland, Ore.
KCKN	ak	100	...	Kansas City, Kans.
KCMC	ak	100	...	Texarkana, Ark.
KEUB	z	100	P	Price, Utah
KFIZ	ak	100	...	Fond du Lac, Wis.
KGFF	ak	100	(.25)	Shawnee, Okla.
KGCC	ak	100	...	San Francisco, Cal.
KGIW	ak	100	1	Alamosa, Colo.
KIDW	ak	100	1	Lamar, Colo.
KIUN	ak	100	...	Pecos, Texas
KNET	z	100	D	Palestine, Texas
KORE	ae	100	..	Eugene, Ore.
KRBC	ak	100	...	Abilene, Tex.
KRLC	ak	100	XZ	Lewiston, Idaho
KRLH	z	100	D	Midland, Tex.
KUMA	ak	100	...	Yuma, Ariz.
KWBG	ak	100	...	Hutchinson, Kans.
KXL	ak	100	4(.25)	Portland, Ore.
WACO	ak	100	C	Waco, Texas
WAGM	ae	100	...	Presque Isle, Maine
WAPQ	ak	100	DP	Chattanooga, Tenn.
WAZL	ak	100	2	Hazleton, Pa.
WCBS	ak	100	...	Springfield, Ill.
WCHV	ak	100	3(.25)	Charlottesville, Va.
WEED	ak	100	3(.25)	Rocky Mt., N. C.
WEHS	ak	100	a	Cicero, Ill.
WELL	ak	100	...	Battle Creek, Mich.
WGPC	ak	100	...	Albany, Ga.
WHDL	ak	100	DXZ	Olean, N. Y.
WHFC	ae	100	a	Cicero, Ill.
WILM	aj	100	2	Wilmington, Del.
WJBO	ak	100	...	Baton Rouge, La.
WJBR	z	100	P	Gastonia, N. C.
WJMS	ak	100	...	Ironwood, Mich.
WKBI	ak	100	a	Cicero, Ill.
WLAP	ak	100	(.25)	Lexington, Ky.
WLWU	ak	100	(.25)	Erie, Pa.
WMAS	ak	100	C(.25)	Springfield, Mass.
WMBC	ae	100	(.25)	Detroit, Mich.
WMBH	ak	100	(.25)	Joplin, Mo.
WMFJ	ak	100	...	Daytona Beach, Fla.
WMSD	ak	100	...	Sheffield, Ala.
WNNY	z	100	(.25)P	Watertown, N. Y.
WPAD	ak	100	(.25)	Paducah, Ky.
WPAP	ak	100	...	Parkersburg, W. Va.
WPRP	z	100	P(.25)	Ponce, P. R.
XEAZ	z	7	...	Guanajuato, Gto.
XEFB	ak	100	...	Monterrey, N. L.

-2nd Mon., 0340-0400  
-2nd Wed., 0300-0320  
-2nd Mon., 0430-0450  
-2nd Fri., 0410-0430  
-2nd Sat., 0440-0500  
-2nd Tues., 0300-0320  
-2nd Tues., 0450-0520  
-2nd Tues., 0510-0530  
-2nd Tues., 0430-0450  
-2nd Sat., 0420-0440  
-2nd Tues., 0450-0510  
-2nd Mon., 0520-0540  
-Jan. 6 and 20, 0630-0700  
-2nd Fri., 0310-0330  
-2nd Fri., 0330-0350  
-2nd Thurs., 0430-0450  
-2nd Sat., 0350-0410  
-2nd Wed., 0330-0350  
-2nd Mon., 0410-0430  
-2nd Mon., 0200-0220  
-2nd Wed., 0440-0500  
-2nd Thurs., 0350-0410  
-2nd Thurs., 0310-0330  
-2nd Mon., 0220-0240  
-2nd Tues., 0330-0350  
-2nd Fri., 0350-0410  
-2nd Wed., 0200-0220  
-2nd Fri., 0430-0450  
-2nd Tues., 0410-0430  
-2nd Sat., 0310-0330

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1430 kcys. (209.7)

CMJP	ak	75	....	Camaguey, Cuba	
KECA	ak	1000	(5) B	Los Angeles, Calif.	
KGNF	ak	1000	D	North Platte, Neb.	
KSO	ak	500	B (1)	Des Moines, Iowa	-2nd Wed., 0420-0440
WBNS	ak	500	C (1)	Columbus, Ohio	-2nd Tues., 0350-0410
WHEC	ak	500	C (1)	Rochester, N. Y.	-2nd Tues., 0320-0340
WHP	ak	500	C (1)	Harrisburg, Pa.	
WNBR	ae	500	(1)	Memphis, Tenn.	-2nd Mon., 0320-0340
WOKO	ae	500	C (1)	Albany, N. Y.	-2nd Mon., 0240-0300

1440 kcys. (208.2)

CMOA	z	150	....	Havana, Cuba	
HP50	z	25	....	Colon, Panama	
KDFN	ak	500	....	Casper, Wyo.	
KLS	ae	250	D	Oakland, Calif.	-2nd Mon., 0400-0420
KXYZ	ak	1000	....	Houston, Texas	-2nd Sat., 0330-0350
TIFS	z	7.5	(1441)	Cartago, C. R.	
WBIG	ae	500	C (1)	Greensboro, N. C.	
WCBA	aj	500	a	Allentown, Pa.	
WMBD	ak	500	C (1)	Peoria, Ill.	
WSAN	aj	500	a	Allentown, Pa.	
XEFI	ae	250	....	Chihuahua, Chih.	

1450 kcys. (206.8)

CFCT	ae	75	(.05)	Victoria, B. C.	-Every Sunday, 0300-0500
CHGS	ae	50	F	Summerside, P.E.I.	
KGCCX	ak	1000	...	Wolf Point, Mont.	-2nd Tues., 0530-0550
KIEM	ak	500	N	Eureka, Calif.	-2nd Mon., 0500-0520
KTBS	ak	1000	N	Shreveport, La.	
WGAR	ak	500	B (1)	Cleveland, Ohio	-2nd Tues., 0530-0550
WHOM	ae	250	....	Jersey City, N. J.	
WSAR	ae	1000	Y	Fall River, Mass.	
WTFI	ak	500	Y	Athens, Ga.	
XEF	ak	100	....	Juarez, Chih.	

1460 kcys. (205.4)

CMKF	z	50	....	Holguin, Cuba	
KSTP	ak	1000	N (25)	St. Paul, Minn.	
WJSV	ak	1000	C	Washington, D. C.	

1470 kcys. (204.0)

CMOK	z	150	....	Havana, Cuba	
KGA	ak	5000	B	Spokane, Wash.	
WLAC	ak	5000	C	Nashville, Tenn.	

1480 kcys. (202.6)

KOMA	ak	5000	C	Oklahoma City, Okla.	
WHIP	z	5000	P	Hammond, Ind.	
WKBW	ae	5000	C	Buffalo, N. Y.	

1490 kcys. (201.2)

KFBK	ak	5000	C	Sacramento, Calif.	
WCKY	ae	5000	N	Covington, Ky.	

1500 kcys. (199.9)

CJIC	ak	100	...	Sault Ste. Marie, Ont.	
CMCX	z	150	....	Havana, Cuba	
KBIX	z	100	....	Muskogee, Okla.	-2nd Tues., 0320-0340
KBST	z	100	P	Big Spring, Tex.	
KDB	ak	100	C	Santa Barbara, Cal.	
KGFI	ak	100	(.25)	Corpus Christi, Tex.	-2nd Thurs., 0320-0340
KGFK	ak	100	Y	Moorhead, Minn.	-2nd Tues., 0300-0320
KGKB	ak	100	....	Tyler, Texas	-2nd Thurs., 0420-0440
KGKY	ak	100	(.25)	Scottsbluff, Neb.	

## NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KNEL	ak	100	D	Brady, Texas	—2nd Sat., 0350-0410
KNOW	ak	100	C	Austin, Texas	—2nd Fri., 0440-0500
KOTN	ak	100	D	Pine Bluff, Ark.	—2nd Sat., 0300-0320
KOVC	ak	100	....	Valley City, N. Dak.	
KPLC	ak	100	....	Lake Charles, La.	—2nd Wed., 0340-0400
KPLT	z	100	DP	Paris, Texas	
KPO	ak	100	(.25)	Wenatchee, Wash.	—2nd Tues., 0410-0430
KRNR	ak	100	D	Roseburg, Ore.	—2nd Sat., 0440-0500
KSJS	z	100	P	Salina, Kans.	
KTEP	z	100	P	El Paso, Texas	
KUTA	z	100	P	Salt Lake City, Utah	
KVOE	ak	100	....	Santa Ana, Calif.	
KXO	ak	100	....	El Centro, Calif.	—2nd Thurs., 0400-0420
WCNW	ak	100	1 (.25)	Brooklyn, N. Y.	—2nd Fri., 0210-0230
WDNC	ae	100	C	Durham, N. C.	—2nd Mon., 0420-0440
WGAL	ae	100	(.25)	Lancaster, Pa.	
WHBB	ak	100	D	Selma, Ala.	—2nd Mon., 0210-0230
WHEF	ak	100	(.25)	Kosciusko, Miss.	—2nd Mon., 0350-0410
WJBK	ae	100	(.25)	Detroit, Mich.	—2nd Fri., 0350-0410
WKBB	ak	100	(.25)	E. Dubuque, Ill.	—2nd Fri., 0320-0340
WKBV	ak	100	(.25)	Richmond, Ind.	—2nd Sat., 0330-0350
WKBZ	ak	100	(.25)	Muskegon, Mich.	—2nd Sat., 0410-0430
WKEU	ak	100	D	Griffin, Ga.	
WMBQ	ae	100	1	Brooklyn, N. Y.	—2nd Mon., 0320-0340
WMEX	ak	100	(.25)	Boston, Mass.	
WNBF	ae	100	C	Binghamton, N. Y.	—2nd Tues., 0430-0450
WNLC	ak	100	D	New London, Conn.	
WOFI	ae	100	....	Bristol, Tenn.	—2nd Mon., 0250-0310
WRDW	ak	100	....	Augusta, Ga.	—2nd Wed., 0320-0340
WRGA	ak	100	(.25)	Rome, Ga.	
WSYB	ak	100	....	Rutland, Vt.	—2nd Fri., 0250-0310
WTMV	ak	100	....	East St. Louis, Ill.	—2nd Thurs., 0440-0500
WWRL	ak	100	1 (.25)	Woodside, N. Y.	—2nd Mon., 0230-0250
WWSW	ae	100	(.25)	Pittsburgh, Pa.	—2nd Tues., 0450-0510

### 1510 keys. (198.6)

CFRC	ak	100	F	Kingston, Ont.
CKCR	ak	100	....	Waterloo, Ont.

### 1530 keys. (196.0)

W1XBS	ak	1000	....	Waterbury, Conn.
W9XBY	ak	1000	....	Kansas City, Mo.

### 1550 keys. (193.4)

W2XR	ak	1000	....	Long Isl. City, N. Y.
W6XAI	ak	1000	....	Bakersfield, Calif.

## KEY TO SYMBOLS

As shown in the Index by  
Frequencies and Dial Numbers

Frequency is given in kilocycles; wave lengths in meters. Night power is shown in watts in third column. Daytime power is shown in parenthesis in fourth column in kilowatts, thus (.25) indicating 250 watts. Some stations outside the United States use a "split frequency." Their exact frequency is shown in fourth column.

<b>Second Column Symbols</b>	
a	Verifies reception for return postage.
b	Verifies only occasionally.
c	Does not verify.
d	Verification 10c; letter 25c.
e	Sends Ekko stamp for 10c.
f	Sends Ekko stamp for 5c.
g	Sends Ekko stamp for postage.
h	Sends own station stamp for 10c.
i	Sends own station stamp for 5c.
j	Sends own station stamp for postage.

k	Has no stamps.
m	Verifies for 5c.
n	Weather or time only.
z	No information available.
<b>Fourth Column Symbols</b>	
B	National "Blue" network.
C	Columbia network.
D	Day time only.
Dn	Day time with occasional evening hours.
F	Canadian Radio Brdstg. Commission.
N	National "Red" and "Blue"

networks.	
P	Has construction permit only.
R	National "Red" network.
S	Sunday only.
Sy	Synchronized.
X	Has permit to increase power.
Y	Has permit to change location.
Z	Has permit to change frequency.
a-b-c.	Small letters show stations using same transmitter.
1-2-3.	Figures denote stations sharing time.
....	No information.

### Time on the Air

All times are shown in Eastern Standard. The hours are given according to the International or 24-hour clock. To convert to ordinary time, subtract 12 where the time shown is greater than that figure. Thus, 1700 is 5:00 p.m.; 1200 is noon; midnight is either 0000 or 2400.

## NORTH AMERICAN B. C. STATIONS BY LOCATIONS

*Frequency in kilocycles in second column. Night power in watts in third column. Net work affiliations in fourth column: C Columbia, R National Red, B National Blue, N National Red and Blue, F Canadian.*

ALABAMA	CALIFORNIA	Stockton	Gainesville
Birmingham	Bakersfield	KGDM 1100 1000	WRUF 830 5000
WAPI 1140 5000 N	KERN 1370 100 C	KWG 1200 100 N	Jacksonville
WBRC 930 1000 C	W6XAI 1550 1000	Watsonville	WJAX 900 1000 N
WSGN 1310 100	Berkeley	KHUB 1310 250	WMBR 1370 100 C
Decatur	KRE 1370 100	<b>COLORADO</b>	Lakeland
WMFO 1370 100	Beverly Hills	Alamosa	WLAK 1310 100
Dothan	KMPF 710 500	KGIW 1420 100	Miami
WAGF 1370 250	Chico	KVOR 1270 1000 C	WIOD 1300 1000 N
Gadsden	KHSL 950 250	Colorado Springs	WQAM 560 1000 C
WJBY 1210 100	Del Monte	Denver	WDBO 580 1000 C
Huntsville	KDON 1210 100	KFEL 920 500	Pensacola
WBHP 1200 100	El Centro	KLZ 560 1000 C	WCOA 1340 500 C
Mobile	KXO 1500 100	KOA 830 50000 N	St. Augustine
WALA 1380 500 C	Eureka	KPOF 880 500	WFOY 1210 100
Montgomery	KIEM 1450 500	KVOD 920 500 B	St. Petersburg
WSFA 1410 500 C	Fresno	Durango	WSUN 620 1000 N
Selma	KMJ 580 500 C	KIUP 1370 100	Tallahassee
WHBB 1500 100	Glendale	Grand Junction	WTAL 1310 100
Sheffield	KIEV 850 250	KFXJ 1200 100	Tampa
WMSD 1420 100	Hollywood	Greeley	WDAE 1220 1000 C
Tuscaloosa	KFWB 950 1000	KKFA 880 500	West Palm Beach
WJRD 1200 100	KMTR 570 1000	Lamar	WJNO 1200 100
<b>ALASKA</b>	KNX 1050 50000 C	KIDW 1420 100	<b>GEORGIA</b>
Anchorage	Long Beach	Pueblo	Albany
KFQD 780 250	KFOX 1250 1000	KGHF 1320 500	WGBC 1420 100
Juneau	KGER 1360 1000	Sterling	Athens
KINY 1310 100	Los Angeles	KGKE 1200 100	WTFI 1450 500
Ketchikan	KECA 1430 1000 B	<b>CONNECTICUT</b>	Atlanta
KGBU 900 500	KEHE 780 500	Bridgeport	WATL 1370 100
<b>ARIZONA</b>	KFAC 1300 1000	WICC 600 500 C	WGST 890 1000 C
Jerome	KFI 640 50000 R	Hartford	WSB 740 50000 N
KCRJ 1310 100	KFSG 1120 500	WDRG 1330 1000 C	Augusta
Lowell	KFVD 1000 250	WTIC 1040 50000 R	WRDW 1500 100
KSUN 1200 100	KGFJ 1200 100	WTHT 1200 100	Columbus
Phoenix	KIHJ 900 1000 C	New Britain	WRBL 1200 100
KOY 1390 500	KRKD 1120 500	WNBC 1380 250	Griffin
KSTAR 620 1000 N	Merced	New Haven	WKEU 1500 100
Tucson	KYOS 1040 250	WELI 900 500	Macon
KGAR 1370 100	Modesto	New London	WMAZ 1180 1000
KVOA 1260 500	KTRB 740 250	WNLC 1500 100	Rome
Yuma	Oakland	Waterbury	WRGA 1500 100
KUMA 1420 100	KLS 1440 250	WATR 1190 100	Savannah
<b>ARKANSAS</b>	KLX 880 1000	WIXBS 1530 1000	WTOC 1260 1000 C
Blytheville	KROW 930 1000	<b>DELAWARE</b>	Thomasville
KLCN 1290 100	Pasadena	Wilmington	WPAX 1210 100
El Dorado	KPPC 1210 100	WDEL 1120 250	Waycross
KELD 1370 100	Redding	WILM 1420 100	WAYX 1200 100
Fort Smith	KVCV 1200 100	<b>DISTRICT OF COLUMBIA</b>	<b>HAWAII</b>
KFPW 1210 100	Sacramento	Washington	Hilo
Hot Springs	KFBK 1490 5000 C	WJSV 1460 10000 C	KHBC 1400 250
KTHS 1060 10000 N	KROY 1310 100	WMAL 630 250 B	Honolulu
Jonesboro	San Bernardino	WOL 1310 100	KGMB 1320 1000 C
KBTM 1200 100	KFXM 1210 1000	WRC 950 500 R	KGU 750 2500 N
Little Rock	San Diego	<b>FLORIDA</b>	<b>IDAHO</b>
KARK 890 250	KFSJ 600 1000 B	Clearwater	Boise
KGHI 1200 100	KGB 1330 1000 C	WFLA 620 1000 N	KIDO 1350 1000
KLRA 1390 1000 C	San Francisco	Daytona Beach	Idaho Falls
Pine Bluff	KFRG 610 1000 C	WMFJ 1420 100	KID 1320 500
KOTN 1500 100	KGCC 1420 100	<b>DISTRICT OF COLUMBIA</b>	Lowiston
Siloam Springs	KGO 790 7500 B	Washington	KRLC 1420 100
KUOA 1260 1000	KJBS 1070 500	WJWS 1460 10000 C	Nampa
Texarkana	KPO 680 50000 R	WMAL 630 250 B	KFXD 1200 100
KCMC 1420 100	KSFO 560 1000	WOL 1310 100	Pocatello
	KYA 1230 1000 N	WRC 950 500 R	KSEI 900 250
	San Jose	<b>DISTRICT OF COLUMBIA</b>	Twain Falls
	KOW 1010 1000	Washington	KTFI 1240 1000
	San Luis Obispo	WJWS 1460 10000 C	
	KVEC 1200 250	WMAL 630 250 B	
	Santa Ana	WOL 1310 100	
	KVOE 1500 100	WRC 950 500 R	
	Santa Barbara	<b>DISTRICT OF COLUMBIA</b>	
	KDB 1500 100 C	Washington	

## NORTH AMERICAN B. C. STATIONS BY LOCATIONS

ILLINOIS	Muncie	Covington	Fall River
Bloomington WJBC 1200 100	WLBC 1310 100 New Albany WGRG 1370 250	WCKY 1490 5000 N Lexington WLAP 1420 100	WSAR 1450 1000 Lowell WLLH 1370 100
Carthage WCAZ 1070 100	Richmond WKBV 1500 100	Louisville WAVE 940 1000 N WHAS 820 5000 C	New Bedford WNBH 1310 100
Champaign WDWS 1370 100	South Bend WFAM 1200 100 WSBT 1360 500 C	Middlesboro WLMU 1210 100	Springfield WBZA 990 1000 B WMAS 1420 100 C WSPR 1140 500
Chicago	Terre Haute WBOW 1310 100 West Lafayette WBAA 890 500	Paducah WPAD 1420 100	Worcester WORC 1280 500 C WTAG 580 500 R
WAFF 920 1000 WBBM 770 50000 C WGBD 1080 5000 WCFL 970 5000 B WCRW 1210 100 WEDC 1210 100 WENR 870 50000 N WGES 1360 500 WGN 720 50000 WJJD 1130 20000 WLS 870 50000 N WMAO 670 50000 N WMBI 1080 5000 WSBC 1210 100			
Cicero WEHS 1420 100 WHFC 1420 100 WKBI 1420 100	<b>IOWA</b>	<b>LOUISIANA</b>	<b>MICHIGAN</b>
Decatur WJBL 1200 100	Ames WOI 640 5000	Alexandria KALB 1420 100	Battle Creek WELL 1420 100
East Dubuque WKBB 1500 100	Boone KFGQ 1370 100	Baton Rouge WJBO 1420 100	Bay City WBCM 1410 500
East St. Louis WTMW 1500 100	Cedar Rapids WMT 600 1000 B	Lafayette KVOL 1310 100	Calumet WHDF 1370 100
Harrisburg WEBQ 1210 100	Davenport WOC 1370 100 C	Lake Charles KPLC 1500 100	Detroit WJBK 1500 100 WJR 750 50000 C WMBG 1420 100 WWJ 920 1000 R WXYZ 1240 1000 B
Joliet WCLS 1310 100	Decorah KGCA 1270 100 KWLC 1270 100	Monroe KMLB 1200 100	East Lansing WKAR 850 1000
Peoria WMBD 1440 500 C	Des Moines KRNT 1320 500 C KSO 1430 500 B WHO 1000 50000 R	New Orleans WBNO 1200 100 WDSU 1250 1000 WJBW 1200 100 WSMB 1320 1000 N WWL 850 1000 C	Flint WFDF 1310 100
Quincy WTAD 900 500	Iowa City WSUI 880 500	Shreveport KRMD 1310 100 KTBS 1450 1000 N KWKH 1100 1000 C	Grand Rapids WASH 1270 500 N WOOD 1270 500 N
Rockford WROK 1410 500	Marshalltown KFJB 1200 100		Ironwood WJMS 1420 100
Rock Island WHBF 1210 100	Mason City KGLO 1210 100	<b>MAINE</b>	Jackson WIBM 1370 100
Springfield WCBS 1420 100 WTAX 1210 100	Shenandoah KFNF 890 500 KMA 930 1000	Augusta WRDO 1370 100	Kalamazoo WKZO 590 1000 B
Tuscola WDZ 1020 250	Sioux City KSCJ 1330 1000 C	Bangor WABI 1200 100 WLBZ 620 500 C	Lansing WJIM 1210 100
Urbana WILL 580 250		Portland WCSH 940 1000 R WGAN 640 500	Lapeer WMPC 1200 100
<b>INDIANA</b>	<b>KANSAS</b>	Presque Isle WAGM 1420 100	Marquette WBEO 1310 100
Anderson WHBU 1210 100	Ablene KFBI 1050 5000		Muskegon WKBZ 1500 100
Elkhart WTRC 1310 100	Coffeyville KGGF 1010 1000	<b>MARYLAND</b>	Royal Oak WEXL 1310 50
Evansville WEOA 1370 100 WGBF 630 500	Dodge City KGNO 1340 250	Baltimore WBAL 760 2500 B WBAL 1060 10000 B WCAO 600 500 C WCBM 1370 100 WFRB 1270 500 R	<b>MINNESOTA</b>
Fort Wayne WGL 1370 100 C WOWO 1160 10000 C	Garden City KIUL 1210 100	Cumberland WTBO 800 250	Duluth KDAL 1200 1000 N
Gary WIND 560 1000	Hutchinson KWBG 1420 100	Frederick WFMD 900 500	Fergus Falls KGDE 1200 100
Hammond WWAE 1200 100 WHIP 1480 5000	Kansas City KCKN 1420 100	Hagerstown WJBJ 1210 100	Hibbing WMFG 1210 100
Indianapolis WFBM 1230 1000 C WIRE 1400 500 R	Lawrence KFKU 1220 1000 WREN 1220 1000 B		Minneapolis WCCO 810 50000 C WDGY 1180 1000 WLB 1250 1000 WTCN 1250 1000
	Manhattan KSAC 580 500	<b>MASSACHUSETTS</b>	Moorhead KGFK 1500 100 KVOX 1310 100
	Pittsburg KOAM 790 1000	Boston WAAB 1410 500 WBZ 990 50000 C WCOP 1120 500 WEEI 590 1000 C WHDH 830 1000 WMEX 1500 100 WNAC 1230 1000 R WORL 920 500	Northfield WCAL 1250 1000
	Salina KSJS 1500 100		Rochester KROC 1310 100
	Topeka WIBW 580 1000 C		St. Paul KSTP 1460 10000 N WMIN 1370 100
	Wichita KANS 1210 100 KFH 1300 1000 C		Virginia WHLB 1370 100
	<b>KENTUCKY</b>		
	Ashland WCMI 1310 100		

**NORTH AMERICAN B. C. STATIONS BY LOCATIONS**

<b>MISSISSIPPI</b>	Norfolk WJAG 1060 1000 North Platte KGNF 1430 1000 Omaha KOIL 1260 1000 WAAW 660 500 WOW 590 5000 R Scottsbluff KGKY 1500 100	WLTH 1400 500 WMBQ 1500 100 WVWF 1400 500 Buffalo WBEN 900 1000 R WBNY 1370 100 WEBR 1310 100 B WGR 550 1000 C WKBW 1480 5000 C WSVS 1370 50 Canton WCAD 1220 500 Elmira WESG 850 1000 C Freeport WGBB 1210 100 Jamestown WJTN 1210 50 Long Island City W2XR 1550 1000 Newburgh WGNV 1210 100 New York WABC 860 50000 C WBNX 1350 10000 WBOQ 860 50000 WEAF 660 50000 R WEVD 1300 1000 WFAB 1300 1000 WHN 1010 1000 WINS 1180 1000 WJZ 760 50000 B WLWL 1100 5000 WMCA 570 500 WNYC 810 1000 WOV 1130 1000 Olean WHDL 1420 100 Plattsburg WMFF 1310 250 Rochester WHAM 1150 50000 B WHEG 1430 500 C WSAY 1210 100 Saranac Lake WNBZ 1290 100 Schenectady WGY 790 50000 R Syracuse WFBL 1360 1000 C WSYR 570 1000 B Troy WHAZ 1300 500 Utica WIBX 1200 100 C Watertown WNNY 1420 100 White Plains WFAS 1210 100 Woodside WWRL 1500 100	High Point WMFR 1200 100 Kinston WFTC 1200 100 Raleigh WPTF 680 1000 N Rocky Mount WEED 1420 100 Wilmington WMFD 1370 100 Winston-Salem WAIR 1250 250 WSJS 1310 100 C
	<b>NEVADA</b>		<b>NORTH DAKOTA</b>
	Reno KOH 1380 500 C		Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Forks KFJM 1370 100 Jamestown KRMK 1310 100 Mandan KGCU 1240 250 Minot KLPM 1240 250 Valley City KOVV 1500 100
	<b>NEW HAMPSHIRE</b>		
	Laconia WLNH 1310 100 Manchester WFEA 1340 500 C Portsmouth WHEB 740 250		
	<b>NEW JERSEY</b>		<b>OHIO</b>
	Asbury Park WCAP 1280 500 Atlantic City WPG 1100 5000 C Camden WCAM 1280 500 Jersey City WAAT 940 500 WHOM 1450 250 Newark WHBI 1250 1000 WNEW 1250 1000 WOR 710 50000 Red Bank WBRB 1210 100 Trenton WTNJ 1280 500 Zarephath WAWZ 1350 500		Akron WADC 1320 1000 C WJW 1210 100 Canton WHBC 1200 100 Cincinnati WGPO 1200 100 WKRC 550 1000 C WLW 700 50000 N WSAI 1330 1000 N Cleveland WGAR 1450 500 B WHK 1390 1000 C WJAY 610 500 WTAM 1070 50000 R Columbus WBNS 1430 500 C WGOL 1210 100 N WHKC 640 500 WOSU 570 750 Dayton WHIO 1260 1000 C WSMK 1380 200 C Lima WBLY 1210 100 Portsmouth WPAY 1370 100 Toledo WSPD 1340 1000 C Youngstown WKBN 570 500 C Zanesville WALR 1210 100
	<b>NEW MEXICO</b>		
	Albuquerque KGGM 1230 250 KOB 1180 10000 Carlsbad KLAH 1210 100 Clovis KICA 1370 100 Roswell KGFJ 1370 100 Santa Fe KRQA 1310 100		
	<b>NEW YORK</b>		<b>NORTH CAROLINA</b>
	Albany WABY 1370 100 B WOKO 1430 500 C Auburn WMBO 1310 100 Binghamton WNBZ 1500 100 C Brooklyn WARD 1400 500 WBBC 1400 500 WBBR 1300 1000 WCNW 1500 100 WEGL 1400 500		Asheville WWNC 570 1000 N Charlotte WBT 1080 50000 C WSOC 1210 100 N Durham WDNC 1500 100 C Gastonia WJBR 1420 100 Greensboro WBIG 1440 500 C
	<b>NEBRASKA</b>		<b>OKLAHOMA</b>
	Clay Center KMMJ 740 1000 Kearney KGFV 1310 100 Lincoln KFAB 770 10000 C KFOR 1210 100 C		Ada KADA 1200 100 Ardmore KVSQ 1200 100 Elk City KASA 1210 100



## NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<p><b>Enid</b> KCRC 1360 250</p> <p><b>Muskogee</b> KBIX 1500 100</p> <p><b>Norman</b> WNAD 1010 1000</p> <p><b>Oklahoma</b> KFXR 1310 150 KGFQ 1370 100 KOMA 1480 5000 C WKY 900 1000 N</p> <p><b>Ponca City</b> WBBZ 1200 100</p> <p><b>Shawnee</b> KGFF 1420 100</p> <p><b>Tulsa</b> KTUL 1400 500 C KVOO 1140 25000 N</p> <hr/> <p style="text-align: center;"><b>OREGON</b></p> <hr/> <p><b>Astoria</b> KAST 1370 100</p> <p><b>Corvallis</b> KOAC 550 1000</p> <p><b>Eugene</b> KORE 1420 100</p> <p><b>Klamath Falls</b> KFJI 1210 100</p> <p><b>Marshfield</b> KOOS 1200 250</p> <p><b>Medford</b> KMED 1310 100</p> <p><b>Portland</b> KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 KGW 620 1000 R KOIN 940 1000 C KWJJ 1040 500 KXL 1420 100</p> <p><b>Roseburg</b> KRNK 1500 100</p> <p><b>Salem</b> KSLM 1370 100</p> <hr/> <p style="text-align: center;"><b>PENNSYLVANIA</b></p> <hr/> <p><b>Allentown</b> WCBA 1440 500 WSAN 1440 500</p> <p><b>Altoona</b> WFBG 1310 100</p> <p><b>Easton</b> WEST 1200 100</p> <p><b>Erie</b> WLEU 1420 100</p> <p><b>Glenside</b> WIBG 970 100</p> <p><b>Greensburg</b> WHJB 620 250 C</p> <p><b>Grove City</b> WSAJ 1310 100</p> <p><b>Harrisburg</b> WHP 1430 500 C WKBO 1200 100</p> <p><b>Hazleton</b> WAZL 1420 100</p> <p><b>Johnstown</b> WJAC 1310 100</p> <p><b>Lancaster</b> WGAL 1500 100</p>	<p><b>Philadelphia</b> KYYW 1020 10000 R WCAU 1170 50000 C WDAS 1370 100 WFIL 560 1000 B WHAT 1310 100 WIP 610 1000 WPEW 920 250 WRAX 920 250 WTEL 1310 100</p> <p><b>Pittsburgh</b> KDKA 980 50000 B KQV 1380 500 C WGAE 1220 1000 R WJAS 1290 1000 C WWSW 1500 100</p> <p><b>Reading</b> WEBU 830 1000 WRAW 1310 100</p> <p><b>Scranton</b> WGBI 880 500 WQAN 880 250</p> <p><b>Sunbury</b> WKOK 1210 100</p> <p><b>Wilkes-Barre</b> WBAX 1210 100 WBRE 1310 100</p> <p><b>Williamsport</b> WRAC 1370 100</p> <p><b>York</b> WORK 1320 1000</p> <hr/> <p style="text-align: center;"><b>PUERTO RICO</b></p> <hr/> <p><b>Mayaguez</b> WPRA 1370 100</p> <p><b>Ponce</b> WPRP 1420 100</p> <p><b>San Juan</b> WKAQ 1240 1000 WNEL 1290 1000</p> <hr/> <p style="text-align: center;"><b>RHODE ISLAND</b></p> <hr/> <p><b>Newport</b> WNRI 1200 100</p> <p><b>Providence</b> WEAN 780 500 C WJAR 890 1000 R WPRO 630 500</p> <hr/> <p style="text-align: center;"><b>SOUTH CAROLINA</b></p> <hr/> <p><b>Anderson</b> WAIM 1200 100</p> <p><b>Charleston</b> WCSC 1360 500 N</p> <p><b>Columbia</b> WIS 560 1000 N</p> <p><b>Greenville</b> WFBC 1300 1000 N</p> <p><b>Spartanburg</b> WSPA 920 1000</p> <hr/> <p style="text-align: center;"><b>SOUTH DAKOTA</b></p> <hr/> <p><b>Aberdeen</b> KABR 1420 100</p> <p><b>Brookings</b> KFDY 780 1000</p>	<p><b>Huron</b> KGDY 1340 250 Pierre KGFY 630 200</p> <p><b>Rapid City</b> KOBH 1370 100 WCAT 1200 100</p> <p><b>Sioux Falls</b> KELO 1200 100 KSOO 1110 2500</p> <p><b>Vermillion</b> KUSD 890 500</p> <p><b>Watertown</b> KWTN 1210 100</p> <p><b>Yankton</b> WNAX 570 1000 C</p> <hr/> <p style="text-align: center;"><b>TENNESSEE</b></p> <hr/> <p><b>Bristol</b> WOPI 1500 100</p> <p><b>Chattanooga</b> WAPO 1420 100 WDD 1280 1000 C</p> <p><b>Jackson</b> WJTS 1310 100</p> <p><b>Knoxville</b> WNOX 1010 1000 C WROL 1310 100</p> <p><b>Memphis</b> WHBQ 1370 100 WMC 780 1000 N WNBZ 1430 500 WREC 600 1000 C</p> <p><b>Nashville</b> WLAC 1470 5000 C WSM 650 50000 N</p> <p><b>Springfield</b> WSIX 1210 100</p> <hr/> <p style="text-align: center;"><b>TEXAS</b></p> <hr/> <p><b>Ablene</b> KRBC 1420 100</p> <p><b>Amarillo</b> KGNC 1410 1000</p> <p><b>Austin</b> KNOW 1500 100 C</p> <p><b>Beaumont</b> KFDM 560 500</p> <p><b>Big Spring</b> KBST 1500 100</p> <p><b>Brady</b> KNEL 1500 100</p> <p><b>College Station</b> WTAU 1120 500</p> <p><b>Corpus Christi</b> KCFI 1500 100</p> <p><b>Corsicana</b> ..... 1310 100</p> <p><b>Dallas</b> KRLD 1040 10000 C WFAA 800 50000 N WRR 1280 500</p> <p><b>Dublin</b> KFPL 1310 100</p> <p><b>El Paso</b> KTEP 1500 100 KTSM 1310 100 WDAH 1310 100</p> <p><b>Fort Worth</b> KFJZ 1370 100 KTAT 1240 1000 WBAP 800 50000 N</p> <p><b>Galveston</b> KLUF 1370 100</p>	<p><b>Houston</b> KPRC 920 1000 N KTRH 1290 1000 C KXYZ 1440 1000</p> <p><b>Kilgore</b> KOCA 1210 100</p> <p><b>Longview</b> KFRO 1370 100</p> <p><b>Lubbock</b> KFYO 1310 100</p> <p><b>Midland</b> KRLH 1420 100</p> <p><b>Palestine</b> KNET 1420 100</p> <p><b>Pampa</b> KPDN 1310 100</p> <p><b>Paris</b> KPLT 1500 100</p> <p><b>Pecos</b> KIUN 1420 100</p> <p><b>Port Arthur</b> KPAC 1260 500</p> <p><b>San Angelo</b> KSKL 1370 100</p> <p><b>San Antonio</b> KABC 1420 100 KMAC 1370 100 KONO 1370 100 KTTA 550 1000 C WQAI 1190 50000 C</p> <p><b>Sherman</b> KRRV 1310 100</p> <p><b>Temple</b> KTEM 1370 100</p> <p><b>Tyler</b> KGGK 1500 100</p> <p><b>Waco</b> WACO 1420 100 C</p> <p><b>Weslaco</b> KRGV 1260 500</p> <p><b>Wichita Falls</b> KGKO 570 250 C</p> <hr/> <p style="text-align: center;"><b>UTAH</b></p> <hr/> <p><b>Cedar City</b> KSUB 1310 100</p> <p><b>Ogden</b> KLO 1400 500 B</p> <p><b>Price</b> KEUB 1420 100</p> <p><b>Salt Lake City</b> KDYL 1290 1000 R KSL 1130 50000 C KUTA 1500 100</p> <hr/> <p style="text-align: center;"><b>VERMONT</b></p> <hr/> <p><b>Burlington</b> WCAX 1200 100</p> <p><b>Rutland</b> WSYB 1500 100</p> <p><b>St. Albans</b> WQDM 1370 100</p> <p><b>Springfield</b> WNBX 1260 1000</p> <p><b>Waterbury</b> WDEV 550 500</p> <hr/> <p style="text-align: center;"><b>VIRGINIA</b></p> <hr/> <p><b>Arlington</b> NAA 690 1000</p> <p><b>Charlottesville</b> WCHV 1420 100</p>
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## NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<p><b>Danville</b> WBTM 1370 100</p> <p><b>Harrisonburg</b> WSVA 550 500</p> <p><b>Lynchburg</b> WLVA 1200 100</p> <p><b>Newport News</b> WGH 1310 100</p> <p><b>Norfolk</b> WTAR 780 500 N</p> <p><b>Petersburg</b> WPHR 880 500</p> <p><b>Richmond</b> WBBL 1210 100 WMBG 1210 100 C WRVA 1110 5000 C</p> <p><b>Roanoke</b> WDBJ 930 1000 C</p> <hr/> <p style="text-align: center;"><b>WASHINGTON</b></p> <hr/> <p><b>Aberdeen</b> KXRO 1310 100</p> <p><b>Bellingham</b> KVOS 1200 100</p> <p><b>Everett</b> KRKO 1370 50</p> <p><b>Olympia</b> KGY 1210 100</p> <p><b>Pullman</b> KWSC 1220 1000</p> <p><b>Seattle</b> KIRO 710 1000 KJR 970 5000 B KOL 1270 1000 C KOMO 920 1000 R KRSC 1120 100 KTW 1220 1000 KVL 1370 100 KXA 760 250</p> <p><b>Spokane</b> KFIO 1120 100 KFPY 890 1000 C KGA 1470 5000 B KHQ 590 1000 R</p> <p><b>Tacoma</b> KMO 1330 250 KVI 570 1000 C</p> <p><b>Walla Walla</b> KUJ 1370 100</p> <p><b>Wenatchee</b> KPQ 1500 100</p> <p><b>Yakima</b> KIT 1310 100</p> <hr/> <p style="text-align: center;"><b>WEST VIRGINIA</b></p> <hr/> <p><b>Bluefield</b> WHIS 1410 500</p> <p><b>Charleston</b> WCHS 580 500</p> <p><b>Clarksburg</b> WBLK 1370 100</p> <p><b>Fairmont</b> WMMN 890 500 C</p> <p><b>Huntington</b> WSAZ 1190 1000</p> <p><b>Parkersburg</b> WPAR 1420 100</p> <p><b>Wheeling</b> WVVA 1160 5000 C</p>	<p style="text-align: center;"><b>WISCONSIN</b></p> <hr/> <p><b>Eau Claire</b> WEAU 1050 1000</p> <p><b>Fond du Lac</b> KFIZ 1420 100</p> <p><b>Green Bay</b> WBTV 1200 100</p> <p><b>WTAQ</b> 1330 1000</p> <p><b>Janesville</b> WCLO 1200 100</p> <p><b>LaCrosse</b> WKBH 1380 1000</p> <p><b>Madison</b> WHA 940 5000 WIBA 1280 1000 N</p> <p><b>Manitowoc</b> WOMT 1210 100</p> <p><b>Milwaukee</b> WEMP 1310 100 WISN 1120 250 C WTMJ 620 1000 N</p> <p><b>Peynette</b> WIBU 1210 100</p> <p><b>Racine</b> WRJN 1370 100</p> <p><b>Sheboygan</b> WHBL 1300 250</p> <p><b>Stevens Point</b> WLBL 900 2500</p> <p><b>Wausau</b> WSAU 1370 100</p> <hr/> <p style="text-align: center;"><b>WYOMING</b></p> <hr/> <p><b>Casper</b> KDPN 1440 500</p> <p><b>Sheridan</b> KWYO 1370 100</p> <hr/> <p style="text-align: center;"><b>CANADA</b></p> <hr/> <p style="text-align: center;"><b>ALBERTA</b></p> <hr/> <p><b>Calgary</b> CFAC 930 100 F CFCN 1030 10000 CJ CJ 690 100 F</p> <p><b>Edmonton</b> CFRN 960 100 F CJCA 730 1000 F CKUA 580 500</p> <p><b>Lethridge</b> CJOC 950 100 F</p> <hr/> <p style="text-align: center;"><b>BRITISH COLUMBIA</b></p> <hr/> <p><b>Chilliwack</b> CHWK 780 100 F</p> <p><b>Kamloops</b> CFJC 880 100 F</p> <p><b>Kelowna</b> CKOV 630 100 F</p> <p><b>Prince Rupert</b> CFPR 580 50</p> <p><b>Trail</b> CJAT 910 1000 F</p> <p><b>Vancouver</b> CJOR 600 500 CKGD 1010 100 CKFC 1410 50 CKMO 1410 100 F CKWX 1010 100 F CRCV 1100 1000 F</p> <p><b>Victoria</b> CFCT 1450 75</p>	<p style="text-align: center;"><b>MANITOBA</b></p> <hr/> <p><b>Brandon</b> CKX 1120 100 F</p> <p><b>Winnipeg</b> CJRC 630 1000 F CKY 910 1500 F</p> <hr/> <p style="text-align: center;"><b>NEW BRUNSWICK</b></p> <hr/> <p><b>Fredericton</b> CFNB 550 500 F</p> <p><b>Moncton</b> CKCW 1370 100 F</p> <p><b>St. John</b> CHSJ 1120 500 F</p> <hr/> <p style="text-align: center;"><b>N. W. TERRITORY</b></p> <hr/> <p><b>Aklavik</b> CJCU 1210 50</p> <hr/> <p style="text-align: center;"><b>NOVA SCOTIA</b></p> <hr/> <p><b>Glace Bay</b> VAS 685 2000</p> <p><b>Halifax</b> CHNS 930 1000 F</p> <p><b>Sydney</b> CJCB 1240 1000 F</p> <p><b>Wolfville</b> CKIC 1010 50</p> <p><b>Yarmouth</b> CJLS 1310 100</p> <hr/> <p style="text-align: center;"><b>ONTARIO</b></p> <hr/> <p><b>Brantford</b> CKPC 930 100 F</p> <p><b>Chatham</b> CFCO 630 100 F</p> <p><b>Cobalt</b> CKMC 1210 50</p> <p><b>Fort William</b> CKPR 730 100 F</p> <p><b>Hamilton</b> CHML 1010 100 F CKOC 1120 500 F</p> <p><b>Kingston</b> CFRC 1510 100 F</p> <p><b>Kirkland Lake</b> CJKL 1310 100 F</p> <p><b>London</b> GFPL 730 100 F</p> <p><b>North Bay</b> CFCH 930 100 F</p> <p><b>Ottawa</b> CKGO 1010 100 F CRCO 880 1000 F</p> <p><b>Prescott</b> CFLC 930 100</p> <p><b>St. Catharines</b> CKTB 1200 100 F</p> <p><b>Sault Ste. Marie</b> CJIC 1500 100</p> <p><b>Stratford</b> CJCS 1210 50</p> <p><b>Sudbury</b> CKSO 780 1000 F</p> <p><b>Timmins</b> CKGB 1420 100 F</p>	<p><b>Toronto</b> CFRB 690 10000 C CKGL 580 100 F CRCT 840 5000 N</p> <p><b>Waterloo</b> CKCR 1510 100</p> <p><b>Windsor</b> CKLW 1030 5000 CRCW 600 500 F</p> <p><b>Wingham</b> CKNX 1200 50</p> <hr/> <p style="text-align: center;"><b>PRINCE EDWARD ISLAND</b></p> <hr/> <p><b>Charlottetown</b> CFCY 630 1000 F CHCK 1310 50</p> <p><b>Summerside</b> CHGS 1450 50 F</p> <hr/> <p style="text-align: center;"><b>QUEBEC</b></p> <hr/> <p><b>Chicoutimi</b> CRCS 950 100 F</p> <p><b>Hull</b> CKCH 1210 100 F</p> <p><b>Montmagny</b> VE9EK 1185 10</p> <p><b>Montreal</b> CFCF 600 400 N CHLP 1120 100 F CKAC 730 5000 C CRCM 910 5000 F</p> <p><b>New Carlisle</b> CHNC 960 1000 F</p> <p><b>Quebec</b> CHRC 580 100 CKCV 1310 100 F CRCK 1050 1000 F</p> <hr/> <p style="text-align: center;"><b>SASKATCHEWAN</b></p> <hr/> <p><b>Moose Jaw</b> CHAB 1200 100 F CJRM 540 1000 F</p> <p><b>Prince Albert</b> CKBI 1210 100 F</p> <p><b>Regina</b> CKCK 1010 500 F</p> <p><b>Saskatoon</b> CFQC 840 1000 F</p> <p><b>Yorkton</b> CJGX 1390 100</p> <hr/> <p style="text-align: center;"><b>NEWFOUNDLAND</b></p> <hr/> <p><b>St. John's</b> VOAC 1065 40 VOAS 940 100 VOGY 840 400 VONF 1195 500 VOWR 681 500</p> <hr/> <p style="text-align: center;"><b>MIQUELON</b></p> <hr/> <p><b>St. Pierre</b> FQN 609 250</p>
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NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<b>CENTRAL AMERICA</b>		<b>Saltillo</b>		<b>NUEVO LEON</b>		<b>Cardenas</b>	
		XEAS 1160 100		<b>Monterrey</b>		CMGE 1370 150	
		XELA 1240 50		XEFB 1420 100		<b>Ciego de Avila</b>	
		XEOX 640 500		XEFJ 1230 100		CMJH 1360 100	
<b>COSTA RICA</b>		<b>Torreon</b>		XEH 1150 250		CMJI 1130 150	
		XETB 1310 125		XET 690 500		CMJO 1180 50	
<b>Cartago</b>		<b>Villa Acuna</b>		XEX 1310 125		<b>Cienfuegos</b>	
TIFS 1441 7.5		XERA 840 350000		<b>PUEBLA</b>		CMHJ 1160 175	
TIGA 1014 30		<b>D. F.</b>		<b>Puebla</b>		CMHW 820 100	
<b>San Jose</b>				XETH 1210 100		CMHX 760 200	
TIEP 850 500		<b>Mexico City</b>		<b>SAN LUIS POTOSI</b>		<b>Cruces</b>	
TIFA 1050 75		XEAI 1240 100		<b>San Luis Potosi</b>		CMHK 1330 250	
TIGH 1000 500		XEB 1030 10000		XEZZ 1370 100		<b>Havana</b>	
TIGPH 650 1000		XEBZ 820 100		<b>SONORA</b>		CMBC 640 150	
TIRH 930 50		XECW 1310 10		<b>Hermosillo</b>		CMBD 1170 500	
TIVCA 1225 .....		XEFA 1180 500		XEBH 930 500		CMBG 1140 200	
TIX 800 .....		XEFO 940 5000		<b>Nogales</b>		CMBN 850 150	
<b>GUATEMALA</b>		XEFZ 1370 100		XEAF 990 500		CMBS 770 150	
<b>Guatemala City</b>		XEK 990 100		<b>TAMAULIPAS</b>		CMBX 1070 500	
YGW 1210 10000		XEL 1100 250		<b>Matamoros</b>		CMCY 970 150	
TGX 1400 250		XEMX 1280 12		XEAM 750 7.5		CMCZ 1000 500	
<b>HONDURAS</b>		XEN 710 1000		<b>Nuevo Laredo</b>		CMCA 1350 250	
<b>Tegucigalpa</b>		XEW 890 50000		XEBK 1000 100		CMCB 1230 150	
HRN 1340 100		XEWZ 1150 100		XEFE 1340 250		CMCC 950 250	
<b>NICARAGUA</b>		XEXM 610 .....		XENT 910 150000		CMCF 810 600	
<b>Managua</b>		XEYZ 780 10000		<b>Reynosa</b>		CMCG 680 1000	
YNLF 1275 20		XFX 610 1000		XEAW 960 50000		CMCJ 1110 500	
YNOP 1230 100		<b>DURANGO</b>		<b>Tampico</b>		CMCO 1200 250	
YNVA 950 30		<b>Durango</b>		XEFW 1310 250		CMCQ 1410 250	
<b>PANAMA</b>		XEE 1210 50		XES 990 250		CMCR 1380 150	
<b>Colon</b>		<b>GUANAJUATO</b>		<b>VERACRUZ</b>		CMCU 1280 500	
HP50 1440 25		<b>Guanajuato</b>		<b>Cordoba</b>		CMCW 750 150	
<b>EL SALVADOR</b>		XEAZ 1420 7		XEAG 1310 10		CMCX 1500 150	
<b>San Salvador</b>		<b>Leon</b>		XFB 1270 250		CMCY 1030 5000	
RDN 680 500		XEKL 1240 500		XFD 1340 350		CMK 730 3000	
<b>MEXICO</b>		<b>JALISCO</b>		<b>Veracruz</b>		CMOA 1440 150	
<b>AGUASCALIENTES</b>		<b>Guadalajara</b>		XETF 1220 30		CMOK 1470 150	
<b>Aguascalientes</b>		XEA 1060 500		XEU 1010 250		CMOX 1320 200	
XFA 1310 5		XED 1160 2500		<b>YUCATAN</b>		CMQ 880 500	
XFC 810 350		<b>LOWER CALIFORNIA</b>		<b>Merida</b>		CMW 600 1400	
<b>CHIHUAHUA</b>		<b>Agua Caliente</b>		XEF 550 250		CMX 920 1000	
<b>Chihuahua</b>		XEBC 730 5000		XEME 1240 15		<b>Holguin</b>	
XEFI 1440 250		<b>Coronado Island</b>		XEY 1000 10		CMKF 1460 250	
<b>Hidalgo</b>		XEMZ 820 .....		XEZ 630 500		<b>Manzanillo</b>	
XEAT 1210 300		<b>Ensenada</b>		<b>WEST INDIES</b>		CMKM 1120 200	
<b>Juarez</b>		XEG 1270 200		<b>CUBA</b>		<b>Matanzas</b>	
XEFV 1210 100		<b>Mexicali</b>		<b>Calbarien</b>		CMCG 1400 150	
XEF 1450 100		XEAA 920 200		CMHD 1270 250		CMGF 1120 150	
XEP 1020 1000		XEAO 560 250		<b>Camaguey</b>		CMGH 790 250	
XEP 1160 500		<b>Rosarito</b>		CMJA 1010 300		<b>Pinar del Rio</b>	
<b>COAHUILA</b>		XEAQ 1090 1000		CMJC 1390 150		CMAB 1340 .....	
<b>Piedras Negras</b>		<b>Tijuana</b>		CMJE 1220 50		<b>Sagua la Grande</b>	
XELO 1110 10000		XEAC 1240 250		CMJF 1150 200		CMHA 1070 50	
XEPN 730 100000		XEC 1160 30		CMJG 780 250		<b>Sancti Spiritus</b>	
<b>MICHOACAN</b>		XEFL 1150 250		CMJH 1150 200		CMHB 1240 50	
<b>Morelia</b>		XEMO 860 5000		CMJI 1340 100		<b>Santa Clara</b>	
XEI 1370 125		XEOK 760 250		CMJJ 1430 75		CMHI 1210 150	
				CMJK 830 500		<b>Santiago</b>	
						CMKC 1250 150	
						CMKD 1050 250	
						CMKR 1400 100	
						CMKW 1330 .....	
						<b>DOMINICAN REPUBLIC</b>	
						<b>San Pedro de Macoris</b>	
						HHH 1395 15	
						<b>Trujillo</b>	
						HIJ 1195 15	
						HIX 800 700	
						HIZ 1370 10	
						<b>HAITI</b>	
						<b>Port-au-Prince</b>	
						HHK 920 1000	

**NORTH AMERICAN B. C. STATIONS BY CALLS**

CFAC	930	100	CJIC	1500	100	CMAB	1340	....
Calgary, Alta.			S. Ste. Marie, Ont.			Pinar del Rio, Cuba		
CFCF	600	400	CJKL	1310	100	CMBC	640	150
Montreal, Que.			Kirkland Lake, Ont.			Havana, Cuba		
CFCH	930	100	CJLS	1310	100	CMBD	1170	500
North Bay, Ont.			Yarmouth, N. S.			Havana, Cuba		
CFCN	1030	10000	CJOC	950	100	CMBG	1140	200
Calgary, Alta.			Lethbridge, Alta.			Havana, Cuba		
CFCO	630	100	CJOR	600	500	CMEN	850	150
Chatham, Ont.			Vancouver, B. C.			Havana, Cuba		
CFCT	1450	75	CJRC	630	1000	CMBS	770	150
Victoria, B. C.			Winnipeg, Man.			Havana, Cuba		
CFCY	630	1000	CJRM	540	1000	CMBX	1070	500
Charlottetown, P.E.I.			Moose Jaw, Sask.			Havana, Cuba		
CFJC	880	100	CKAC	730	5000	CMBY	970	150
Kamloops, B. C.			Montreal, Que.			Havana, Cuba		
CFLC	930	100	CKBI	1210	100	CMBZ	1000	500
Prescott, Ont.			Prince Albert, Sask.			Havana, Cuba		
CFNB	550	500	CKCD	1010	100	CMCA	1350	250
Fredericton, N. B.			Vancouver, B. C.			Havana, Cuba		
CFPL	730	100	CKCH	1210	100	CMCB	1230	150
London, Ont.			Hull, Que.			Havana, Cuba		
CFPR	580	50	CKCK	1010	500	CMCD	950	250
Prince Rupert, B. C.			Regina, Sask.			Havana, Cuba		
CFQC	840	1000	CKCL	580	100	CMCF	810	600
Saskatoon, Sask.			Toronto, Ont.			Havana, Cuba		
CFRB	690	10000	CKCO	1010	100	CMCG	680	1000
Toronto, Ont.			Ottawa, Ont.			Havana, Cuba		
CFRC	1510	100	CKCR	1510	100	CMCJ	1110	500
Kingston, Ont.			Waterloo, Ont.			Havana, Cuba		
CFRN	960	100	CKCV	1310	100	CMCO	1200	250
Edmonton, Alta.			Quebec, Que.			Havana, Cuba		
CHAB	1200	100	CKCW	1370	100	CMCQ	1410	250
Moose Jaw, Sask.			Moncton, N. B.			Havana, Cuba		
CHCK	1310	50	CKFC	1410	50	CMCR	1380	150
Charlottetown, P. E. I.			Vancouver, B. C.			Havana, Cuba		
CHGS	1450	50	CKGB	1420	100	CMCU	1280	500
Summerside, P. E. I.			Timmins, Ont.			Havana, Cuba		
CHLP	1120	100	CKIC	1010	50	CMCW	750	150
Montreal, Que.			Wolfville, N. S.			Havana, Cuba		
CHML	1010	100	CKLW	1030	5000	CMCX	1500	150
Hamilton, Ont.			Windsor, Ont.			Havana, Cuba		
CHNC	960	1000	CKMC	1210	50	CMCY	1030	5000
New Carlisle, Que.			Cobalt, Ont.			Havana, Cuba		
CHNS	930	1000	CKMO	1410	100	CMGC	1400	150
Halifax, N. S.			Vancouver, B. C.			Matanzas, Cuba		
CHRC	580	100	CKNX	1200	50	CMGE	1370	150
Quebec, Que.			Wingham, Ont.			Cardenas, Cuba		
CHSJ	1120	500	CKOC	1120	500	CMGF	1120	150
St. John, N. B.			Hamilton, Ont.			Matanzas, Cuba		
CHWK	780	100	CKOV	630	100	CMGH	790	250
Chilliwack, B. C.			Kelowna, B. C.			Matanzas, Cuba		
CJAT	910	1000	CKPC	930	100	CMHA	1070	50
Trall, B. C.			Brantford, Ont.			Sagua la Grande, Cu.		
CJCA	730	1000	CKPR	730	100	CMHB	1240	50
Edmonton, Alta.			Fort William, Ont.			Sancti Spiritus, Cuba		
CJCB	1240	1000	CKSO	780	1000	CMHD	1270	250
Sydney, N. S.			Sudbury, Ont.			Caibarien, Cuba		
CJCJ	690	100	CKTB	1200	100	CMHI	1210	150
Calgary, Alta.			St. Catharines, Ont.			Santa Clara, Cuba		
CJCS	1210	50	CKUA	580	500	CMHJ	1160	175
Stratford, Ont.			Edmonton, Alta.			Cienfuegos, Cuba		
CJCU	1210	50	CKWX	1010	100	CMHK	1330	250
Aklavik, N. W. T.			Vancouver, B. C.			Cruces, Cuba		
CJGX	1390	100	CKX	1120	100	CMHW	820	100
Yorkton, Sask.			Brandon, Man.			Cienfuegos, Cuba		
			CKY	910	15000	CMHX	760	200
			Winnipeg, Man.			Cienfuegos, Cuba		

## NORTH AMERICAN B. C. STATIONS BY CALLS

	<b>CMJA</b> 1010	300		<b>HIH</b> 1395	15		<b>KEUB</b> 1420	100
	Camaguey, Cuba			San Pedro de M., D. R.			Price, Utah	
	<b>CMJC</b> 1390	150		<b>HIJ</b> 1195	15		<b>KEX</b> 1180	5000
	Camaguey, Cuba			Trujillo, D. R.			Portland, Ore.	
	<b>CMJE</b> 1220	50		<b>HIX</b> 800	700		<b>KFAB</b> 770	10000
	Camaguey, Cuba			Trujillo, D. R.			Lincoln, Neb.	
	<b>CMJF</b> 1150	200		<b>HIZ</b> 1370	10		<b>KFCAC</b> 1300	1000
	Camaguey, Cuba			Trujillo, D. R.			Los Angeles, Calif.	
	<b>CMJH</b> 1360	100		<b>HP50</b> 1440	25		<b>KFBB</b> 1280	1000
	Ciego de Avila, Cuba			Colon, Panama			Great Falls, Mont.	
	<b>CMJI</b> 1130	150		<b>HRN</b> 1340	100		<b>KFBI</b> 1050	5000
	Ciego de Avila, Cuba			Tegucigalpa, Hond.			Ablene, Kans.	
	<b>CMJK</b> 780	250		<b>KABC</b> 1420	100		<b>KFKB</b> 1490	5000
	Camaguey, Cuba			San Antonio, Texas			Sacramento, Calif.	
	<b>CMJL</b> 1340	100		<b>KABR</b> 1420	100		<b>KFDM</b> 560	500
	Camaguey, Cuba			Aberdeen, S. Dak.			Beaumont, Texas	
	<b>CMJO</b> 1180	50		<b>KADA</b> 1200	100		<b>KFDY</b> 780	1000
	Ciego de Avila, Cuba			Ada, Okla.			Brookings, S. D.	
	<b>CMJP</b> 1430	75		<b>KALB</b> 1420	100		<b>KFEL</b> 920	500
	Camaguey, Cuba			Alexandria, La.			Denver, Colo.	
	<b>CMJX</b> 830	500		<b>KALE</b> 1300	500		<b>KFEQ</b> 680	2500
	Camaguey, Cuba			Portland, Ore.			St. Joseph, Mo.	
	<b>CMK</b> 730	3000		<b>KANS</b> 1210	100		<b>KFGQ</b> 1370	100
	Havana, Cuba			Wichita, Kans.			Boone, Iowa	
	<b>CMKC</b> 1250	150		<b>KARK</b> 890	250		<b>KFH</b> 1300	1000
	Santiago, Cuba			Little Rock, Ark.			Wichita, Kans.	
	<b>CMKD</b> 1050	250		<b>KASA</b> 1210	100		<b>KFI</b> 640	50000
	Santiago, Cuba			Elk City, Okla.			Los Angeles, Calif.	
	<b>CMKF</b> 1460	250		<b>KAST</b> 1370	100		<b>KFIO</b> 1120	100
	Holguin, Cuba			Astoria, Ore.			Spokane, Wash.	
	<b>CMKM</b> 1120	200		<b>KBIX</b> 1500	100		<b>KFIZ</b> 1420	100
	Manzanillo, Cuba			Muskogee, Okla.			Fond du Lac, Wis.	
	<b>CMKR</b> 1400	100		<b>KBPS</b> 1420	100		<b>KFJB</b> 1200	100
	Santiago, Cuba			Portland, Ore.			Marshalltown, Iowa	
	<b>CMKW</b> 1330	....		<b>KBST</b> 1500	100		<b>KFJI</b> 1210	100
	Santiago, Cuba			Big Spring, Texas			Klamath Falls, Ore.	
	<b>CMOA</b> 1440	150		<b>KBTM</b> 1200	100		<b>KFJM</b> 1370	100
	Havana, Cuba			Jonesboro, Ark.			Grand Forks, N. D.	
	<b>CMOK</b> 1470	150		<b>KCKN</b> 1420	100		<b>KFJR</b> 1300	500
	Havana, Cuba			Kansas City, Kans.			Portland, Ore.	
	<b>CMOX</b> 1320	200		<b>KCMC</b> 1420	100		<b>KFJZ</b> 1370	100
	Havana, Cuba			Texarkana, Ark.			Fort Worth, Texas	
	<b>CMQ</b> 880	500		<b>KCMO</b> 1370	100		<b>KFKA</b> 880	500
	Havana, Cuba			Kansas City, Mo.			Greeley, Colo.	
	<b>CMW</b> 600	1400		<b>KCRC</b> 1360	250		<b>KFKU</b> 1220	1000
	Havana, Cuba			Enid, Okla.			Lawrence, Kans.	
	<b>CMX</b> 920	1000		<b>KCRJ</b> 1310	100		<b>KFNH</b> 890	500
	Havana, Cuba			Jerome, Ariz.			Shenandoah, Iowa	
	<b>CRCK</b> 1050	1000		<b>KDB</b> 1500	100		<b>KFOR</b> 1210	100
	Quebec, Que.			Santa Barbara, Calif.			Lincoln, Neb.	
	<b>CRCM</b> 910	5000		<b>KDFN</b> 1440	500		<b>KFOX</b> 1250	1000
	Montreal, Que.			Casper, Wyo.			Long Beach, Calif.	
	<b>CRCO</b> 880	1000		<b>KDKA</b> 980	50000		<b>KFPL</b> 1310	100
	Ottawa, Ont.			Pittsburgh, Pa.			Dublin, Texas	
	<b>CRCS</b> 950	100		<b>KDLR</b> 1210	100		<b>KFPW</b> 1210	100
	Chicoutimi, Que.			Devils Lake, N. D.			Fort Smith, Ark.	
	<b>CRCT</b> 840	5000		<b>KDNC</b> 1200	250		<b>KFPY</b> 890	1000
	Toronto, Ont.			Lewistown, Mont.			Spokane, Wash.	
	<b>CRCV</b> 1100	1000		<b>KDON</b> 1210	100		<b>KFQD</b> 780	250
	Vancouver, B. C.			Del Monte, Calif.			Anchorage, Alaska	
	<b>CRCW</b> 600	500		<b>KDYL</b> 1290	1000		<b>KFRC</b> 610	1000
	Windsor, Ont.			Salt Lake City, Utah			San Francisco, Calif.	
	<b>FQN</b> 609	250		<b>KECA</b> 1430	1000		<b>KFRO</b> 1370	100
	St. Pierre, Miq.			Los Angeles, Calif.			Longview, Texas	
	<b>HHK</b> 920	1000		<b>KEHE</b> 780	500		<b>KFRU</b> 630	500
	Port-au-Prince, Haiti			Los Angeles, Calif.			Columbia, Mo.	
				<b>KELD</b> 1370	100		<b>KFSD</b> 600	1000
				El Dorado, Ark.			San Diego, Calif.	
				<b>KELO</b> 1200	100		<b>NDAL</b> 1500	100
				Sioux Falls, S. Dak.			AVONDA, MINN.	
				<b>KERN</b> 1370	100			
				Bakersfield, Calif.				

## NORTH AMERICAN B. C. STATIONS BY CALLS

	<b>KFSG</b> 1120	500		<b>KGGF</b> 1010	1000		<b>KIUL</b> 1210	100
	Los Angeles, Calif.			Coffeyville, Kans.			Garden City, Kans.	
	<b>KFUO</b> 550	500		<b>KGGM</b> 1230	250		<b>KIUN</b> 1420	100
	St. Louis, Mo.			Albuquerque, N. M.			Peecos, Texas	
	<b>KFVD</b> 1000	250		<b>KGHF</b> 1320	500		<b>KIUP</b> 1370	100
	Los Angeles, Calif.			Pueblo, Colo.			Durango, Colo.	
	<b>KFVS</b> 1210	100		<b>KGHI</b> 1200	100		<b>KJBS</b> 1070	500
	Cape Girardeau, Mo.			Little Rock, Ark.			San Francisco, Calif.	
	<b>KFWB</b> 950	1000		<b>KGHL</b> 780	1000		<b>KJR</b> 970	5000
	Hollywood, Calif.			Billings, Mont.			Seattle, Wash.	
	<b>KFXD</b> 1200	100		<b>KGIR</b> 1340	1000		<b>KLAH</b> 1210	100
	Nampa, Idaho			Butte, Mont.			Carlsbad, N. Mex.	
	<b>KFXJ</b> 1200	100		<b>KGIW</b> 1420	100		<b>KLCN</b> 1290	100
	Grand Junction, Colo.			Alamosa, Colo.			Blytheville, Ark.	
	<b>KFXM</b> 1210	100		<b>KGKB</b> 1500	100		<b>KLO</b> 1400	500
	San Bernardino, Calif.			Tyler, Texas			Ogden, Utah	
	<b>KFXR</b> 1310	100		<b>KGKL</b> 1370	100		<b>KLPM</b> 1240	250
	Oklahoma City, Okla.			San Angelo, Texas			Minot, N. D.	
	<b>KFYO</b> 1310	100		<b>KGKO</b> 570	250		<b>KLRA</b> 1390	1000
	Lubbock, Texas			Wichita Falls, Texas			Little Rock, Ark.	
	<b>KFYR</b> 550	1000		<b>KGKY</b> 1500	100		<b>KLS</b> 1440	250
	Bismarck, N. D.			Scottsbluff, Neb.			Oakland, Calif.	
	<b>KGA</b> 1470	5000		<b>KGLO</b> 1210	100		<b>KLUF</b> 1370	100
	Spokane, Wash.			Mason City, Iowa			Galveston, Texas	
	<b>KGAR</b> 1370	100		<b>KGMB</b> 1320	1000		<b>KLX</b> 880	1000
	Tucson, Ariz.			Honolulu, T. H.			Oakland, Calif.	
	<b>KGB</b> 1330	1000		<b>KGNC</b> 1410	1000		<b>KLZ</b> 560	1000
	San Diego, Calif.			Amarillo, Texas			Denver, Colo.	
	<b>KGBU</b> 900	500		<b>KGNF</b> 1430	1000		<b>KMA</b> 930	1000
	Ketchikan, Alaska			North Platte, Neb.			Shenandoah, Iowa	
	<b>KGBX</b> 1230	500		<b>KGNO</b> 1340	250		<b>KMAC</b> 1370	100
	Springfield, Mo.			Dodge City, Kans.			San Antonio, Texas	
	<b>KGCA</b> 1270	100		<b>KGO</b> 790	7500		<b>KMBC</b> 950	1000
	Decorah, Iowa			San Francisco, Calif.			Kansas City, Mo.	
	<b>KGCU</b> 1240	250		<b>KGU</b> 750	2500		<b>KMED</b> 1310	100
	Mandan, N. D.			Honolulu, T. H.			Medford, Ore.	
	<b>KGCX</b> 1450	1000		<b>KGVO</b> 1260	1000		<b>KMJ</b> 580	500
	Wolf Point, Mont.			Missoula, Mont.			Fresno, Calif.	
	<b>KGDE</b> 1200	100		<b>KGW</b> 620	1000		<b>KMLB</b> 1200	100
	Fergus Falls, Minn.			Portland, Ore.			Monroe, La.	
	<b>KGDM</b> 1100	1000		<b>KGY</b> 1210	100		<b>KMMJ</b> 740	1000
	Stockton, Calif.			Olympia, Wash.			Clay Center, Neb.	
	<b>KGDY</b> 1340	250		<b>KHBC</b> 1400	250		<b>KMO</b> 1330	250
	Huron, S. D.			Hilo, T. H.			Tacoma, Wash.	
	<b>KGEK</b> 1200	100		<b>KHJ</b> 900	1000		<b>KMOX</b> 1090	50000
	Sterling, Colo.			Los Angeles, Calif.			St. Louis, Mo.	
	<b>KGER</b> 1360	1000		<b>KHQ</b> 590	1000		<b>KMPC</b> 710	500
	Long Beach, Calif.			Spokane, Wash.			Beverly Hills, Calif.	
	<b>KGEZ</b> 1310	100		<b>KHSL</b> 950	250		<b>KMTR</b> 570	1000
	Kalispell, Mont.			Chico, Calif.			Hollywood, Calif.	
	<b>KGFF</b> 1420	100		<b>KHUB</b> 1310	250		<b>KNEL</b> 1500	100
	Shawnee, Okla.			Watsonville, Calif.			Brady, Texas	
	<b>KGFG</b> 1370	100		<b>KICA</b> 1370	100		<b>KNET</b> 1420	100
	Oklahoma City, Okla.			Clovis, N. M.			Palestine, Texas	
	<b>KGFI</b> 1500	100		<b>KID</b> 1320	500		<b>KNOW</b> 1500	100
	Corpus Christi, Texas			Idaho Falls, Idaho			Austin, Texas	
	<b>KGfJ</b> 1200	100		<b>KIDO</b> 1350	1000		<b>KNX</b> 1050	50000
	Los Angeles, Calif.			Boise, Idaho			Hollywood, Calif.	
	<b>KGfK</b> 1500	100		<b>KIDW</b> 1420	100		<b>KOA</b> 830	50000
	Moorhead, Minn.			Lamar, Colo.			Denver, Colo.	
	<b>KGfL</b> 1370	100		<b>KIEM</b> 1450	500		<b>KOAC</b> 550	1000
	Roswell, N. M.			Eureka, Calif.			Corvallis, Ore.	
	<b>KGfW</b> 1310	100		<b>KIEV</b> 850	250		<b>KOAM</b> 790	1000
	Kearney, Neb.			Glendale, Calif.			Pittsburg, Kans.	
	<b>KGfX</b> 630	200		<b>KINY</b> 1310	100		<b>KOB</b> 1180	10000
	Pierre, S. D.			Juneau, Alaska			Albuquerque, N. M.	
	<b>KGfC</b> 1420	100		<b>KIRO</b> 710	1000		<b>KOBH</b> 1370	100
	San Francisco, Calif.			Seattle, Wash.			Rapid City, S. Dak.	
				<b>KIT</b> 1310	100		<b>KOCA</b> 1210	100
				Yakima, Wash.			Kilgore, Texas	
							<b>KOH</b> 1380	500
							Reno, Nev.	

## NORTH AMERICAN B. C. STATIONS BY CALLS

X	<b>KOIL</b> 1260	1000		<b>KROY</b> 1310	100		<b>KVEC</b> 1200	250
	Omaha, Nebr.			Sacramento, Calif.			San Luis Obispo, Calif.	
X	<b>KOIN</b> 940	1000		<b>KRQA</b> 1310	100		<b>KVI</b> 570	4000
	Portland, Ore.			Santa Fe, N. Mex.			Tacoma, Wash.	
X	<b>KOL</b> 1270	1000		<b>KRRV</b> 1310	100		<b>KVL</b> 1370	100
	Seattle, Wash.			Sherman, Texas			Seattle, Wash.	
X	<b>KOMA</b> 1480	5000		<b>KRSC</b> 1120	100		<b>KVOA</b> 1260	500
	Oklahoma City, Okla.			Seattle, Wash.			Tucson, Ariz.	
X	<b>KOMO</b> 920	1000	X	<b>KSAC</b> 580	500	X	<b>KVOD</b> 920	500
	Seattle, Wash.			Manhattan, Kans.			Denver, Colo.	
	<b>KONO</b> 1370	100		<b>KSCJ</b> 1330	1000		<b>KVOE</b> 1500	100
	San Antonio, Texas			Sioux City, Iowa			Santa Ana, Calif.	
	<b>KOOS</b> 1200	250		<b>KSD</b> 550	1000		<b>KVOL</b> 1310	100
	Marshfield, Ore.			St. Louis, Mo.			Lafayette, La.	
	<b>KORE</b> 1420	100		<b>KSEI</b> 900	250		<b>KVOO</b> 1140	25000
	Eugene, Ore.			Pocatello, Idaho			Tulsa, Okla.	
	<b>KOTN</b> 1500	100		<b>KSFO</b> 560	1000		<b>KVOR</b> 1270	1000
	Pine Bluffs, Ark.			San Francisco, Calif.			Colorado Spgs., Colo.	
X	<b>KOVC</b> 1500	100		<b>KSJS</b> 1500	100		<b>KVOS</b> 1200	100
	Valley City, N. Dak.			Salina, Kans.			Bellingham, Wash.	
	<b>KOY</b> 1390	500	X	<b>KSL</b> 1130	50000		<b>KVOX</b> 1310	100
	Phoenix, Ariz.			Salt Lake City, Utah			Moorhead, Minn.	
	<b>KPAC</b> 1260	500		<b>KSLM</b> 1370	100		<b>KVSO</b> 1210	100
	Port Arthur, Texas			Salem, Ore.			Ardmore, Okla.	
	<b>KPDN</b> 1310	100		<b>KSO</b> 1430	500	X	<b>KWBG</b> 1420	100
	Pampa, Texas			Des Moines, Iowa			Hutchinson, Kans.	
	<b>KPLC</b> 1500	100		<b>KSOO</b> 1110	2500		<b>KWG</b> 1200	100
	Lake Charles, La.			Sioux Falls, S. D.			Stockton, Calif.	
	<b>KPLT</b> 1500	100		<b>KSTP</b> 1460	25000		<b>KWJJ</b> 1040	500
	Paris, Texas			St. Paul, Minn.			Portland, Ore.	
X	<b>KPO</b> 680	50000		<b>KSUB</b> 1310	100		<b>KWK</b> 1350	1000
	San Francisco, Calif.			Cedar City, Utah			St. Louis, Mo.	
X	<b>KPOF</b> 880	500		<b>KSUN</b> 1200	100		<b>KWKH</b> 1100	10000
	Denver, Colo.			Lowell, Ariz.			Shreveport, La.	
	<b>KPPC</b> 1210	100		<b>KTAR</b> 620	1000		<b>KWLC</b> 1270	100
	Pasadena, Calif.			Phoenix, Ariz.			Decorah, Iowa	
	<b>KPQ</b> 1500	100		<b>KTAT</b> 1240	1000		<b>KWOS</b> 1310	100
	Wenatchee, Wash.			Fort Worth, Texas			Jefferson City, Mo.	
X	<b>KPRC</b> 920	1000		<b>KTBS</b> 1450	1000		<b>KWSC</b> 1220	1000
	Houston, Texas			Shreveport, La.			Pullman, Wash.	
	<b>KQV</b> 1380	500		<b>KTEM</b> 1370	100		<b>KWTN</b> 1210	100
	Pittsburgh, Pa.			Temple, Texas			Watertown, S. D.	
	<b>KQW</b> 1010	1000		<b>KTEP</b> 1500	100		<b>KWTO</b> 560	5000
	San Jose, Calif.			El Paso, Texas			Springfield, Mo.	
	<b>KRBC</b> 1420	100		<b>KTFI</b> 1240	1000		<b>KWYO</b> 1370	100
	Ablene, Texas			Twin Falls, Idaho			Sheridan, Wyo.	
	<b>KRE</b> 1370	100	X	<b>KTHS</b> 1060	10000		<b>KXA</b> 760	250
	Berkeley, Calif.			Hot Springs, Ark.			Seattle, Wash.	
	<b>KRGV</b> 1260	500		<b>KTRB</b> 740	250		<b>KXL</b> 1420	100
	Weslaco, Texas			Modesto, Calif.			Portland, Ore.	
	<b>KRKD</b> 1120	500	X	<b>KTRH</b> 1290	1000		<b>KXO</b> 1500	100
	Los Angeles, Calif.			Houston, Texas			El Centro, Calif.	
	<b>KRKO</b> 1370	50		<b>KTSA</b> 550	1000		<b>KXRO</b> 1310	100
	Everett, Wash.			San Antonio, Texas			Aberdeen, Wash.	
	<b>KRLC</b> 1420	100		<b>KTSM</b> 1310	100		<b>KXYZ</b> 1440	1000
	Lewiston, Idaho			El Paso, Texas			Houston, Texas	
X	<b>KRLD</b> 1040	10000		<b>KTUL</b> 1400	500	X	<b>KYA</b> 1230	1000
	Dallas, Texas			Tulsa, Okla.			San Francisco, Calif.	
	<b>KRLH</b> 1420	100		<b>KTW</b> 1220	1000		<b>KYOS</b> 1040	250
	Midland, Texas			Seattle, Wash.			Merced, Calif.	
	<b>KRMC</b> 1310	100		<b>KUJ</b> 1370	100		<b>KYW</b> 1020	10000
	Jamestown, N. Dak.			Walla Walla, Wash.			Philadelphia, Pa.	
	<b>KRMD</b> 1310	100		<b>KUMA</b> 1420	100		<b>NAA</b> 690	1000
	Shreveport, La.			Yuma, Ariz.			Arlington, Va.	
	<b>KRNR</b> 1500	100		<b>KUOA</b> 1260	1000		<b>RDN</b> 680	500
	Roseburg, Ore.			Siloam Springs, Ark.			San Salvador, E. S.	
X	<b>KRNT</b> 1320	500	X	<b>KUSD</b> 890	500		<b>TGW</b> 1210	10000
	Des Moines, Iowa			Vermillion, S. D.			Guatemala, Gua.	
X	<b>KROC</b> 1310	100		<b>KUTA</b> 1500	100		<b>TGX</b> 1400	250
	Rochester, Minn.			Salt Lake City, Utah			Guatemala City	
	<b>KROW</b> 930	1000		<b>KVCV</b> 1200	100		<b>TIEP</b> 850	500
	Oakland, Calif.			Redding, Calif.			San Jose, C. R.	

NORTH AMERICAN B. C. STATIONS BY CALLS

	<b>TIFA</b> 1050	75		<b>WATL</b> 1370	100		<b>WCAD</b> 1220	500
	San Jose, C. R.			Atlanta, Ga.			Canton, N. Y.	
	<b>TIFS</b> 1441	7.5		<b>WATR</b> 1190	100		<b>WCAE</b> 1220	1000
	Cartago, C. R.			Waterbury, Conn.			Pittsburgh, Pa.	
	<b>TIGA</b> 1014	30	X	<b>WAVE</b> 940	1000	X	<b>WCAL</b> 1250	100
	Cartago, C. R.			Louisville, Ky.			Northfield, Minn.	
	<b>TIGH</b> 1000	500		<b>WAWZ</b> 1350	500		<b>WCAM</b> 1280	500
	San Jose, C. R.			Zarephath, N. J.			Camden, N. J.	
	<b>TIGPH</b> 650	1000		<b>WAYX</b> 1200	100		<b>WCAO</b> 600	500
	San Jose, C. R.			Waycross, Ga.			Baltimore, Md.	
	<b>TIRH</b> 930	50		<b>WAZL</b> 1420	100		<b>WCAP</b> 1280	500
	San Jose, C. R.			Hazleton, Pa.			Asbury Park, N. J.	
	<b>TIVCA</b> 1225	....		<b>WBBA</b> 890	500		<b>WCAT</b> 1200	100
	San Jose, C. R.			West Lafayette, Ind.			Rapid City, S. D.	
	<b>TIX</b> 800	....		<b>WBAL</b> 760	2500	X	<b>WCAU</b> 1170	50000
	San Jose, C. R.			Baltimore, Md.			Philadelphia, Pa.	
	<b>VAS</b> 685	2000		<b>WBAL</b> 1060	10000		<b>WCAX</b> 1200	100
	Glace Bay, N. S.			Baltimore, Md.			Burlington, Vt.	
	<b>VESEK</b> 1185	10	X	<b>WBAP</b> 800	50000		<b>WCAZ</b> 1070	100
	Montmagny, Que.			Fort Worth, Texas			Carthage, Ill.	
	<b>VOAC</b> 1065	40		<b>WBAX</b> 1210	100		<b>WCBA</b> 1440	500
	St. John's, Nfld.			Wilkes-Barre, Pa.			Allentown, Pa.	
	<b>VOAS</b> 940	100		<b>WBBC</b> 1400	500		<b>WCBD</b> 1080	5000
	St. John's, Nfld.			Brooklyn, N. Y.			Chicago, Ill.	
	<b>VOGY</b> 840	400		<b>WBBL</b> 1210	100		<b>WCBM</b> 1370	100
	St. John's, Nfld.			Richmond, Va.			Baltimore, Md.	
	<b>VONF</b> 1195	500	X	<b>WBBM</b> 770	50000	X	<b>WCBS</b> 1420	100
	St. John's, Nfld.			Chicago, Ill.			Springfield, Ill.	
	<b>VOVR</b> 681	500		<b>WBBR</b> 1300	1000	X	<b>WCCO</b> 810	50000
	St. John's, Nfld.			Brooklyn, N. Y.			Minneapolis, Minn.	
	<b>WAAB</b> 1410	500		<b>WBBZ</b> 1200	100	X	<b>WCFL</b> 970	5000
	Boston, Mass.			Ponca City, Okla.			Chicago, Ill.	
	<b>WAAF</b> 920	1000	X	<b>WBCM</b> 1410	500	X	<b>WCBS</b> 580	500
	Chicago, Ill.			Bay City, Mich.			Charleston, W. Va.	
	<b>WAAT</b> 940	500	X	<b>WBEN</b> 900	1000	X	<b>WCHV</b> 1420	100
	Jersey City, N. J.			Buffalo, N. Y.			Charlottesville, Va.	
X	<b>WAAW</b> 660	500	X	<b>WBEO</b> 1310	100	X	<b>WCKY</b> 1490	5000
	Omaha, Neb.			Marquette, Mich.			Covington, Ky.	
X	<b>WABC</b> 860	50000		<b>WBHP</b> 1200	100	X	<b>WCLO</b> 1200	100
	New York, N. Y.			Huntsville, Ala.			Janesville, Wis.	
	<b>WABI</b> 1200	100		<b>WBIG</b> 1440	500		<b>WCLS</b> 1310	100
	Bangor, Maine			Greensboro, N. C.			Joliet, Ill.	
	<b>WABY</b> 1370	100		<b>WBLK</b> 1370	100		<b>WCMI</b> 1310	100
	Albany, N. Y.			Clarksburg, W. Va.			Ashland, Ky.	
	<b>WACO</b> 1420	100		<b>WBLY</b> 1210	100		<b>WCNW</b> 1500	100
	Waco, Texas			Lima, Ohio			Brooklyn, N. Y.	
X	<b>WADC</b> 1320	1000		<b>WBNO</b> 1200	100		<b>WCOA</b> 1340	500
	Akron, Ohio			New Orleans, La.			Pensacola, Fla.	
	<b>WAGF</b> 1370	250		<b>WBNS</b> 1430	500		<b>WCOC</b> 880	500
	Dothan, Ala.			Columbus, Ohio			Meridian, Miss.	
	<b>WAGM</b> 1420	100		<b>WBNX</b> 1350	1000		<b>WCOL</b> 1210	100
	Presque Isle, Me.			New York, N. Y.			Columbus, Ohio	
	<b>WAIM</b> 1200	100		<b>WBNY</b> 1370	100		<b>WCOP</b> 1120	500
	Anderson, S. C.			Buffalo, N. Y.			Boston, Mass.	
	<b>WAIR</b> 1250	250		<b>WBOQ</b> 860	50000		<b>WCPO</b> 1200	100
	Winston-Salem, N. C.			New York, N. Y.			Cincinnati, Ohio	
	<b>WALA</b> 1380	500	X	<b>WBOW</b> 1310	100		<b>WCNR</b> 1210	100
	Mobile, Ala.			Terre Haute, Ind.			Chicago, Ill.	
	<b>WALR</b> 1210	100		<b>WBRB</b> 1210	100		<b>WCSC</b> 1360	500
	Zanesville, Ohio			Red Bank, N. J.			Charleston, S. C.	
	<b>WAML</b> 1310	100	X	<b>WBRC</b> 930	1000		<b>WCSS</b> 940	1000
	Laurel, Miss.			Birmingham, Ala.			Portland, Me.	
X	<b>WAPI</b> 1140	5000	X	<b>WBRE</b> 1310	100		<b>WDAE</b> 1220	1000
	Birmingham, Ala.			Wilkes-Barre, Pa.			Tampa, Fla.	
	<b>WAPO</b> 1420	100	X	<b>WBT</b> 1080	50000		<b>WDAF</b> 610	1000
	Chattanooga, Tenn.			Charlotte, N. C.			Kansas City, Mo.	
	<b>WARD</b> 1400	500		<b>WBTM</b> 1370	100		<b>WDAH</b> 1310	100
	Brooklyn, N. Y.			Danville, Va.			El Paso, Texas	
	<b>WASH</b> 1270	500	X	<b>WBZ</b> 990	50000			
	Grand Rapids, Mich.			Boston, Mass.				
			X	<b>WBZA</b> 990	1000			
				Springfield, Mass.				



NORTH AMERICAN B. C. STATIONS BY CALLS

	<b>WDAS</b> 1370 Philadelphia, Pa.	100		<b>WFAA</b> 800 Dallas, Texas	50000		<b>WHAS</b> 820 Louisville, Ky.	50000
	<b>WDAY</b> 940 Fargo, N. D.	1000		<b>WFB</b> 1300 New York, N. Y.	1000		<b>WHAT</b> 1310 Philadelphia, Pa.	100
	<b>WDBJ</b> 930 Roanoke, Va.	1000		<b>WFBM</b> 1200 South Bend, Ind.	100		<b>WHAZ</b> 1300 Troy, N. Y.	500
	<b>WDBO</b> 580 Orlando, Fla.	1000		<b>WFAS</b> 1210 White Plains, N. Y.	100		<b>WHB</b> 860 Kansas City, Mo.	1000
	<b>WDEL</b> 1120 Wilmington, Del.	250		<b>WFBC</b> 1300 Greenville, S. C.	1000		<b>WHBB</b> 1500 Selma, Alabama	100
	<b>WDEV</b> 550 Waterbury, Vt.	500		<b>WFBG</b> 1310 Altoona, Pa.	100		<b>WHBC</b> 1200 Canton, Ohio	100
	<b>WDGY</b> 1180 Minneapolis, Minn.	1000		<b>WFBL</b> 1360 Syracuse, N. Y.	1000		<b>WHBF</b> 1210 Rock Island, Ill.	100
	<b>WDNC</b> 1500 Durham, N. C.	100		<b>WFBM</b> 1230 Indianapolis, Ind.	1000		<b>WHBI</b> 1250 Newark, N. J.	1000
	<b>WDOD</b> 1280 Chattanooga, Tenn.	1000		<b>WFBR</b> 1270 Baltimore, Md.	500		<b>WHBL</b> 1300 Sheboygan, Wis.	250
	<b>WDRC</b> 1330 Hartford, Conn.	1000		<b>WDFD</b> 1310 Flint, Mich.	100		<b>WHBQ</b> 1370 Memphis, Tenn.	100
	<b>WDSU</b> 1250 New Orleans, La.	1000		<b>WFEA</b> 1340 Manchester, N. H.	500		<b>WHBU</b> 1210 Anderson, Ind.	100
	<b>WDWS</b> 1370 Champaign, Ill.	100		<b>WFIL</b> 560 Philadelphia, Pa.	1000		<b>WHBY</b> 1200 Green Bay, Wis.	100
	<b>WIZ</b> 1020 Tuscola, Ill.	250		<b>WFLA</b> 620 Clearwater, Fla.	1000		<b>WHDF</b> 1370 Calumet, Mich.	100
	<b>WEAF</b> 660 New York, N. Y.	50000		<b>WFMD</b> 900 Frederick, Md.	500		<b>WHDH</b> 830 Boston, Mass.	1000
	<b>WEAN</b> 780 Providence, R. I.	500		<b>WFOR</b> 1370 Hattiesburg, Miss.	100		<b>WHDL</b> 1420 Olean, N. Y.	100
	<b>WEAU</b> 1050 Eau Claire, Wis.	1000		<b>WFOY</b> 1210 St. Augustine, Fla.	100		<b>WHEB</b> 740 Portsmouth, N. H.	250
	<b>WEBC</b> 1290 Duluth, Minn.	1000		<b>WFTC</b> 1200 Kinston, N. C.	100		<b>WHEC</b> 1430 Rochester, N. Y.	500
	<b>WEBQ</b> 1210 Harrisburg, Ill.	100		<b>WGAL</b> 1500 Lancaster, Pa.	100		<b>WHEF</b> 1500 Kosciusko, Miss.	100
	<b>WEBR</b> 1310 Buffalo, N. Y.	100		<b>WGAN</b> 640 Portland, Me.	500		<b>WHFC</b> 1420 Cleora, Ill.	100
	<b>WEDC</b> 1210 Chicago, Ill.	100		<b>WGAR</b> 1450 Cleveland, Ohio	500		<b>WHIO</b> 1260 Dayton, Ohio	1000
	<b>WEED</b> 1420 Rocky Mount, N. C.	100		<b>WGBB</b> 1210 Freeport, N. Y.	100		<b>WHIP</b> 1480 Hammond, Ind.	5000
	<b>WEEL</b> 590 Boston, Mass.	1000		<b>WGBF</b> 630 Evansville, Ind.	500		<b>WHIS</b> 1410 Bluefield, W. Va.	500
	<b>WEEU</b> 830 Reading, Pa.	1000		<b>WGBI</b> 880 Scranton, Pa.	500		<b>WHJB</b> 620 Greensburg, Pa.	250
	<b>WEGL</b> 1400 Brooklyn, N. Y.	500		<b>WGCM</b> 1210 Gulfport, Miss.	100		<b>WHK</b> 1390 Cleveland, Ohio	1000
	<b>WEHS</b> 1420 Cleora, Ill.	100		<b>WGES</b> 1360 Chicago, Ill.	500		<b>WHKC</b> 640 Columbus, Ohio	500
	<b>WELI</b> 900 New Haven, Conn.	500		<b>WGH</b> 1310 Newport News, Va.	100		<b>WHLS</b> 1370 Virginia, Minn.	100
	<b>WELL</b> 1420 Battle Creek, Mich.	100		<b>WGL</b> 1370 Fort Wayne, Ind.	100		<b>WHN</b> 1010 New York, N. Y.	1000
	<b>WEMP</b> 1310 Milwaukee, Wis.	100		<b>WGN</b> 720 Chicago, Ill.	50000		<b>WHO</b> 1000 Des Moines, Iowa	50000
	<b>WENR</b> 870 Chicago, Ill.	50000		<b>WGNV</b> 1210 Newburgh, N. Y.	100		<b>WHOM</b> 1450 Jersey City, N. J.	250
	<b>WEOA</b> 1370 Evansville, Ind.	100		<b>WGPC</b> 1420 Albany, Ga.	100		<b>WHP</b> 1430 Harrisburg, Pa.	500
	<b>WESG</b> 850 Elmira, N. Y.	1000		<b>WGR</b> 550 Buffalo, N. Y.	1000		<b>WIBA</b> 1280 Madison, Wis.	1000
	<b>WEST</b> 1200 Easton, Pa.	100		<b>WGRC</b> 1370 New Albany, Ind.	250		<b>WIBG</b> 970 Glenside, Pa.	100
	<b>WEVD</b> 1300 New York, N. Y.	1000		<b>WGST</b> 890 Atlanta, Ga.	1000		<b>WIBM</b> 1370 Jackson, Mich.	100
	<b>WEW</b> 760 St. Louis, Mo.	1000		<b>WGY</b> 790 Schenectady, N. Y.	50000		<b>WIBU</b> 1210 Poynette, Wis.	100
	<b>WEXL</b> 1310 Royal Oak, Mich.	50		<b>WHA</b> 940 Madison, Wis.	5000		<b>WIBW</b> 580 Topeka, Kans.	1000
				<b>WHAM</b> 1150 Rochester, N. Y.	50000			

NORTH AMERICAN B. C. STATIONS BY CALLS

	<b>WIBX</b> 1200	100		<b>WJTN</b> 1210	50		<b>WMAL</b> 630	250
	Utica, N. Y.			Jamestown, N. Y.			Washington, D. C.	
	<b>WICC</b> 600	500		<b>WJW</b> 1210	100		<b>WMAQ</b> 670	50000
	Bridgeport, Conn.			Akron, Ohio			Chicago, Ill.	
X	<b>WIL</b> 1200	100	X	<b>WJZ</b> 760	50000	X	<b>WMAS</b> 1420	100
	St. Louis, Mo.			New York, N. Y.			Springfield, Mass.	
	<b>WILL</b> 580	250		<b>WKAQ</b> 1240	1000		<b>WMAZ</b> 1180	1000
	Urbana, Ill.			San Juan, P. R.			Macon, Ga.	
	<b>WILM</b> 1420	100		<b>WKAR</b> 850	1000		<b>WBMC</b> 1420	100
	Wilmington, Del.			East Lansing, Mich.			Detroit, Mich.	
X	<b>WIND</b> 560	1000	X	<b>WKBB</b> 1500	100	X	<b>WMBD</b> 1440	500
	Gary, Ind.			East Dubuque, Ill.			Peoria, Ill.	
	<b>WINS</b> 1180	1000	X	<b>WKBH</b> 1380	1000		<b>WMBG</b> 1210	100
	New York, N. Y.			LaCrosse, Wis.			Richmond, Va.	
	<b>WIOD</b> 1300	1000		<b>WKBI</b> 1420	100		<b>WMBH</b> 1420	100
	Miami, Fla.			Cicero, Ill.			Joplin, Mo.	
	<b>WIP</b> 610	1000		<b>WKBN</b> 570	500	X	<b>WMBI</b> 1080	5000
	Philadelphia, Pa.			Youngstown, Ohio			Chicago, Ill.	
X	<b>WIRE</b> 1400	500	X	<b>WKBO</b> 1200	100		<b>WMOB</b> 1310	100
	Indianapolis, Ind.			Harrisburg, Pa.			Auburn, N. Y.	
	<b>WIS</b> 560	1000		<b>WKBV</b> 1500	100		<b>WMBQ</b> 1500	100
	Columbia, S. C.			Richmond, Ind.			Brooklyn, N. Y.	
X	<b>WISN</b> 1120	250	X	<b>WKBW</b> 1480	5000		<b>WMBR</b> 1370	100
	Milwaukee, Wis.			Buffalo, N. Y.			Jacksonville, Fla.	
	<b>WJAC</b> 1310	100		<b>WKBZ</b> 1500	100		<b>WMC</b> 780	1000
	Johnstown, Pa.			Muskegon, Mich.			Memphis, Tenn.	
X	<b>WJAG</b> 1060	1000	X	<b>WKBU</b> 1500	100		<b>WMCA</b> 570	500
	Norfolk, Neb.			Griffin, Ga.			New York, N. Y.	
	<b>WJAR</b> 890	1000		<b>WKOK</b> 1210	100		<b>WMEX</b> 1500	100
	Providence, R. I.			Sanbury, Pa.			Boston, Mass.	
	<b>WJAS</b> 1290	1000	X	<b>WKRC</b> 550	1000		<b>WMFD</b> 1370	100
	Pittsburgh, Pa.			Cincinnati, Ohio			Wilmington, N. C.	
X	<b>WJAX</b> 900	1000	X	<b>WKY</b> 900	1000		<b>WMFF</b> 1310	250
	Jacksonville, Fla.			Oklahoma City, Okla.			Plattsburg, N. Y.	
	<b>WJAY</b> 610	500		<b>WKZO</b> 590	1000	X	<b>WMFG</b> 1210	100
	Cleveland, Ohio			Kalamazoo, Mich.			Hibbing, Minn.	
X	<b>WJBC</b> 1200	100	X	<b>WLAC</b> 1470	5000		<b>WMFJ</b> 1420	100
	Bloomington, Ill.			Nashville, Tenn.			Daytona Beach, Fla.	
X	<b>WJBK</b> 1500	100	X	<b>WLAK</b> 1310	100		<b>WMFN</b> 1210	100
	Detroit, Mich.			Lakeland, Fla.			Clarksdale, Miss.	
X	<b>WJBL</b> 1200	100	X	<b>WLAP</b> 1420	100		<b>WMFO</b> 1370	100
	Decatur, Ill.			Lexington, Ky.			Decatur, Ala.	
	<b>WJBO</b> 1420	100	X	<b>WLB</b> 1250	1000		<b>WMFR</b> 1200	100
	Baton Rouge, La.			Minneapolis, Minn.			High Point, N. C.	
	<b>WJBR</b> 1420	100		<b>WLBC</b> 1310	100	X	<b>WMIN</b> 1370	100
	Gastonia, N. C.			Muncie, Ind.			St. Paul, Minn.	
	<b>WJBW</b> 1200	100		<b>WLBL</b> 900	2500		<b>WMMN</b> 890	500
	New Orleans, La.			Stevens Point, Wis.			Fairmont, W. Va.	
	<b>WJBY</b> 1210	100		<b>WLBZ</b> 620	500		<b>WMPC</b> 1200	100
	Gadsden, Ala.			Bangor, Me.			Lapeer, Mich.	
X	<b>WJDX</b> 1270	1000	X	<b>WLEU</b> 1420	100		<b>WMSD</b> 1420	100
	Jackson, Miss.			Erie, Pa.			Sheffield, Ala.	
	<b>WJEJ</b> 1210	100		<b>WLLH</b> 1370	100	X	<b>WNT</b> 600	1000
	Hagerstown, Md.			Lowell, Mass.			Cedar Rapids, Iowa	
	<b>WJIM</b> 1210	100		<b>WLMU</b> 1210	100	X	<b>WNAC</b> 1230	1000
	Lansing, Mich.			Middlesboro, Ky.			Boston, Mass.	
X	<b>WJJD</b> 1130	20000	X	<b>WLNH</b> 1310	100	X	<b>WNAD</b> 1010	1000
	Chicago, Ill.			Laconia, N. H.			Norman, Okla.	
X	<b>WJMS</b> 1420	100	X	<b>WLS</b> 870	50000	X	<b>WNAX</b> 570	1000
	Ironwood, Mich.			Chicago, Ill.			Yankton, S. D.	
	<b>WJNO</b> 1200	100		<b>WLTH</b> 1400	500		<b>WNBC</b> 1380	250
	W. Palm Beach, Fla.			Brooklyn, N. Y.			New Britain, Conn.	
X	<b>WJR</b> 750	50000	X	<b>WLVA</b> 1200	100		<b>WNBF</b> 1500	100
	Detroit, Mich.			Lynchburg, Va.			Binghamton, N. Y.	
	<b>WJRD</b> 1200	100	X	<b>WLW</b> 700	500000		<b>WNBH</b> 1310	100
	Tuscaloosa, Ala.			Cincinnati, Ohio			New Bedford, Mass.	
	<b>WJSV</b> 1460	10000		<b>WLWL</b> 1100	5000		<b>WNBR</b> 1430	500
	Washington, D. C.			New York, N. Y.			Memphis, Tenn.	

## NORTH AMERICAN B. C. STATIONS BY CALLS

	<b>WNEX 1260</b> 1000 Springfield, Vt.		<b>WPRO 630</b> 500 Providence, R. I.		<b>WSGN 1310</b> 100 Birmingham, Ala.
	<b>WNEZ 1290</b> 100 Saranac Lake, N. Y.		<b>WPRP 1420</b> 100 Ponce, P. R.		<b>WSIX 1210</b> 100 Springfield, Tenn.
	<b>WNEL 1290</b> 1000 San Juan, P. R.		<b>WPTF 680</b> 1000 Raleigh, N. C.		<b>WSJS 1310</b> 100 Winston-Salem, N. C.
	<b>WNEW 1250</b> 1000 Newark, N. J.		<b>WQAM 560</b> 1000 Miami, Fla.		<b>WSM 650</b> 50000 Nashville, Tenn.
	<b>WNLC 1500</b> 100 New London, Conn.		<b>WQAN 880</b> 250 Scranton, Pa.		<b>WSMB 1320</b> 1000 New Orleans, La.
	<b>WNNY 1420</b> 100 Watertown, N. Y.		<b>WQBC 1360</b> 1000 Vicksburg, Miss.		<b>WSMK 1380</b> 200 Dayton, Ohio
	<b>WNOX 1010</b> 1000 Knoxville, Tenn.		<b>WQDM 1370</b> 100 St. Albans, Vt.		<b>WSOC 121½</b> 100 Charlotte, N. C.
	<b>WNRI 1200</b> 100 Newport, R. I.		<b>WRAC 1370</b> 100 Williamsport, Pa.		<b>WSPA 920</b> 1000 Spartanburg, S. C.
	<b>WNYC 810</b> 1000 New York, N. Y.		<b>WRAW 1310</b> 100 Reading, Pa.		<b>WSPD 1340</b> 1000 Toledo, Ohio
	<b>WOAI 1190</b> 50000 San Antonio, Texas		<b>WRAX 920</b> 250 Philadelphia, Pa.		<b>WSPR 1140</b> 500 Springfield, Mass.
	<b>WOC 1370</b> 100 Davenport, Iowa		<b>WRBL 1200</b> 100 Columbus, Ga.		<b>WSUI 880</b> 500 Iowa City, Iowa
	<b>WOI 640</b> 5000 Ames, Iowa		<b>WRC 950</b> 500 Washington, D. C.		<b>WSUN 620</b> 1000 St. Petersburg, Fla.
	<b>WOKO 1430</b> 500 Albany, N. Y.		<b>WRDO 1370</b> 100 Augusta, Me.		<b>WSVA 550</b> 500 Harrisonburg, Va.
	<b>WOL 1310</b> 100 Washington, D. C.		<b>WRDW 1500</b> 100 Augusta, Ga.		<b>WSVS 1370</b> 50 Buffalo, N. Y.
	<b>WOMT 1210</b> 100 Manitowoc, Wis.		<b>WREC 600</b> 1000 Memphis, Tenn.		<b>WSYB 1500</b> 100 Rutland, Vt.
	<b>WOOD 1270</b> 500 Grand Rapids, Mich.		<b>WREN 1220</b> 1000 Lawrence, Kans.		<b>WSYR 570</b> 1000 Syracuse, N. Y.
	<b>WOPI 1500</b> 100 Bristol, Tenn.		<b>WRGA 1500</b> 100 Rome, Ga.		<b>WTAD 900</b> 500 Quincy, Ill.
	<b>WOR 710</b> 50000 Newark, N. J.		<b>WRJN 1370</b> 100 Racine, Wis.		<b>WTAG 580</b> 500 Worcester, Mass.
	<b>WORC 1280</b> 500 Worcester, Mass.		<b>WRK 1410</b> 500 Rockford, Ill.		<b>WTAL 1310</b> 100 Tallahassee, Fla.
	<b>WORK 1320</b> 1000 York, Pa.		<b>WROL 1310</b> 100 Knoxville, Tenn.		<b>WTAM 1070</b> 50000 Cleveland, Ohio
	<b>WORL 920</b> 500 Boston, Mass.		<b>WRR 1280</b> 500 Dallas, Texas		<b>WTAQ 1330</b> 1000 Green Bay, Wis.
	<b>WOS 630</b> 500 Jefferson City, Mo.		<b>WRUF 830</b> 5000 Gainesville, Fla.		<b>WTAR 780</b> 500 Norfolk, Va.
	<b>WOSU 570</b> 750 Columbus, Ohio		<b>WRVA 1110</b> 5000 Richmond, Va.		<b>WTAW 1120</b> 500 College Station, Tex.
	<b>WOV 1130</b> 1000 New York, N. Y.		<b>WSAI 1330</b> 1000 Cincinnati, Ohio		<b>WTAX 1210</b> 100 Springfield, Ill.
	<b>WOW 590</b> 5000 Omaha, Neb.		<b>WSAJ 1310</b> 100 Grove City, Pa.		<b>WTBO 800</b> 250 Cumberland, Md.
	<b>WOWO 1160</b> 10000 Fort Wayne, Ind.		<b>WSAN 1440</b> 500 Allentown, Pa.		<b>WTCN 1250</b> 1000 Minneapolis, Minn.
	<b>WPAD 1420</b> 100 Paducah, Ky.		<b>WSAR 1350</b> 1000 Fall River, Mass.		<b>WTEL 1310</b> 100 Philadelphia, Pa.
	<b>WPAR 1420</b> 100 Parkersburg, W. Va.		<b>WSAU 1370</b> 100 Wausau, Wis.		<b>WTFI 1450</b> 500 Athens, Ga.
	<b>WPAX 1210</b> 100 Thomasville, Ga.		<b>WSAY 1210</b> 100 Rochester, N. Y.		<b>WTHT 1200</b> 100 Hartford, Conn.
	<b>WPAY 1370</b> 100 Portsmouth, Ohio		<b>WSAZ 1190</b> 1000 Huntington, W. Va.		<b>WTIC 1040</b> 50000 Hartford, Conn.
	<b>WPEN 920</b> 250 Philadelphia, Pa.		<b>WSB 740</b> 50000 Atlanta, Ga.		<b>WTJS 1310</b> 100 Jackson, Tenn.
	<b>WPG 1100</b> 5000 Atlantic City, N. J.		<b>WSBC 1210</b> 100 Chicago, Ill.		<b>WTMJ 620</b> 1000 Milwaukee, Wis.
	<b>WPHR 880</b> 500 Petersburg, Va.		<b>WSBT 1360</b> 500 South Bend, Ind.		<b>WTMV 1500</b> 100 East St. Louis, Ill.
	<b>WPRA 1370</b> 100 Mayaguez, P. R.		<b>WSFA 1410</b> 500 Montgomery, Ala.		

NORTH AMERICAN B. C. STATIONS BY CALLS

	<b>WTNJ 1280</b>	<b>500</b>		<b>XECW 1310</b>	<b>10</b>	<input checked="" type="checkbox"/>	<b>XERA 840</b>	<b>350000</b>
	Trenton, N. J.			Mexico City, D. F.			Villa Acuna, Coah.	
	<b>WTOC 1260</b>	<b>1000</b>		<b>XED 1160</b>	<b>2500</b>		<b>XES 990</b>	<b>250</b>
	Savannah, Ga.			Guadalajara, Jal.			Tampico, Tams.	
	<b>WTRC 1310</b>	<b>100</b>		<b>XEE 1210</b>	<b>50</b>		<b>XET 690</b>	<b>500</b>
	Elkhart, Ind.			Durango, Dgo.			Monterrey, N. L.	
	<b>WVFW 1400</b>	<b>500</b>		<b>XEF 1450</b>	<b>100</b>		<b>XETB 1310</b>	<b>125</b>
	Brooklyn, N. Y.			Juarez, Chih.			Torreón, Coah.	
<input checked="" type="checkbox"/>	<b>WWAE 1200</b>	<b>100</b>		<b>XEFA 1180</b>	<b>500</b>		<b>XETF 1220</b>	<b>30</b>
<input checked="" type="checkbox"/>	Hammond, Ind.			Mexico City, D. F.			Vera Cruz, Ver.	
<input checked="" type="checkbox"/>	<b>WWJ 920</b>	<b>1000</b>		<b>XEFB 1420</b>	<b>100</b>		<b>XETH 1210</b>	<b>100</b>
<input checked="" type="checkbox"/>	Detroit, Mich.			Monterrey, N. L.			Puebla, Pue.	
	<b>WWL 850</b>	<b>10000</b>		<b>XEFC 550</b>	<b>250</b>		<b>XEU 1010</b>	<b>250</b>
	New Orleans, La.			Merida, Yuc.			Vera Cruz, Ver.	
	<b>WWNC 570</b>	<b>1000</b>		<b>XEFE 1340</b>	<b>250</b>		<b>XEW 890</b>	<b>50000</b>
	Asheville, N. C.			Laredo, Tams.			Mexico City, D. F.	
	<b>WWRL 1500</b>	<b>100</b>		<b>XEFI 1440</b>	<b>250</b>		<b>XEWZ 1150</b>	<b>100</b>
	Woodside, N. Y.			Chihuahua, Chih.			Mexico City, D. F.	
	<b>WWSW 1500</b>	<b>100</b>		<b>XEFJ 1230</b>	<b>100</b>		<b>XEX 1310</b>	<b>125</b>
	Pittsburgh, Pa.			Monterrey, N. L.			Monterrey, N. L.	
<input checked="" type="checkbox"/>	<b>WWVA 1160</b>	<b>5000</b>		<b>XEFL 1150</b>	<b>250</b>		<b>XEXM 610</b>	<b>....</b>
<input checked="" type="checkbox"/>	Wheeling, W. Va.			Tijuana, L. C.			Mexico City, D. F.	
	<b>WXYZ 1240</b>	<b>1000</b>	<input checked="" type="checkbox"/>	<b>XEFO 940</b>	<b>5000</b>		<b>XEY 1000</b>	<b>10</b>
	Detroit, Mich.			Mexico City, D. F.			Merida, Yuc.	
	<b>WIXBS 1530</b>	<b>1000</b>		<b>XEFV 1210</b>	<b>100</b>		<b>KEYZ 780</b>	<b>10000</b>
	Waterbury, Conn.			Juarez, Chih.			Mexico City, D. F.	
	<b>WZXR 1550</b>	<b>1000</b>		<b>XEFW 1310</b>	<b>250</b>		<b>KEZ 630</b>	<b>500</b>
	Long Island City, N. Y.			Tampico, Tams.			Merida, Yuc.	
<input checked="" type="checkbox"/>	<b>WXAI 1550</b>	<b>1000</b>		<b>XEFZ 1370</b>	<b>100</b>		<b>KEZZ 1370</b>	<b>100</b>
<input checked="" type="checkbox"/>	Bakersfield, Calif.			Mexico City, D. F.			San Luis Potosí, S. L. P.	
<input checked="" type="checkbox"/>	<b>W9XB 1530</b>	<b>1000</b>		<b>XEG 1270</b>	<b>200</b>		<b>XFA 1310</b>	<b>5</b>
<input checked="" type="checkbox"/>	Kansas City, Mo.			Ensenada, B. C.			Agascalientes, Ags.	
	<b>XEA 1060</b>	<b>500</b>		<b>XEH 1150</b>	<b>250</b>		<b>XFB 1270</b>	<b>250</b>
	Guadalajara, Jal.			Monterrey, N. L.			Jalapa, Ver.	
	<b>XEAA 920</b>	<b>200</b>		<b>XEI 1370</b>	<b>125</b>		<b>XFC 810</b>	<b>350</b>
	Mexicali, B. C.			Morelia, Mich.			Agascalientes, Ags.	
<input checked="" type="checkbox"/>	<b>XEAC 1240</b>	<b>250</b>		<b>XEJ 1020</b>	<b>1000</b>		<b>XFD 1340</b>	<b>350</b>
<input checked="" type="checkbox"/>	Tijuana, L. C.			Juarez, Chih.			Jalapa, Ver.	
<input checked="" type="checkbox"/>	<b>XEAF 990</b>	<b>500</b>		<b>XEK 990</b>	<b>100</b>		<b>XFO 940</b>	<b>5000</b>
<input checked="" type="checkbox"/>	Nogales, Son.			Mexico City, D. F.			Mexico City, D. F.	
	<b>XEAG 1310</b>	<b>10</b>		<b>XEKL 1240</b>	<b>500</b>		<b>XFX 610</b>	<b>1000</b>
	Cordoba, Ver.			Leon, Guan.			Mexico City, D. F.	
	<b>XEAI 1240</b>	<b>100</b>		<b>XEL 1100</b>	<b>250</b>		<b>YNLF 1275</b>	<b>20</b>
	Mexico City, D. F.			Mexico City, D. F.			Managua, Nicaragua	
	<b>XEAM 750</b>	<b>7.5</b>		<b>XELA 1240</b>	<b>50</b>		<b>YNOP 1230</b>	<b>100</b>
	Matamoros, Tams.			Saltillo, Coah.			Managua, Nicaragua	
	<b>XEAO 560</b>	<b>250</b>	<input checked="" type="checkbox"/>	<b>XELO 1110</b>	<b>10000</b>		<b>YNVA 950</b>	<b>30</b>
	Mexicali, B. C.			Piedras Negras, Coah.			Managua, Nicaragua	
	<b>XEAQ 1090</b>	<b>1000</b>		<b>XEME 1240</b>	<b>15</b>			
	Rosarito, L. C.			Merida, Yuc.				
	<b>XEAS 1160</b>	<b>100</b>	<input checked="" type="checkbox"/>	<b>XEMO 860</b>	<b>5000</b>			
	Saltillo, Coah.			Tijuana, L. C.				
	<b>XEAT 1210</b>	<b>300</b>		<b>XEMX 1280</b>	<b>12</b>			
	Hidalgo, Chih.			Mexico City, D. F.				
<input checked="" type="checkbox"/>	<b>XEAW 960</b>	<b>50000</b>		<b>XEMZ 820</b>	<b>....</b>			
<input checked="" type="checkbox"/>	Reynosa, Tams.			Coronado Isl., L. C.				
	<b>XEAZ 1420</b>	<b>7</b>		<b>XEN 710</b>	<b>1000</b>			
	Guanajuato, Gto.			Mexico City, D. F.				
	<b>XEB 1030</b>	<b>10000</b>	<input checked="" type="checkbox"/>	<b>XENT 910</b>	<b>150000</b>			
	Mexico City, D. F.			Nuevo Laredo, Tams.				
	<b>XEBC 730</b>	<b>5000</b>		<b>XEOK 760</b>	<b>250</b>			
	Agua Caliente, L. C.			Tijuana, L. C.				
	<b>XEBH 930</b>	<b>500</b>		<b>XEOX 640</b>	<b>500</b>			
	Hermosillo, Sonora			Saltillo, Coah.				
	<b>XEBK 1000</b>	<b>100</b>		<b>XEP 1160</b>	<b>500</b>			
	Nuevo Laredo, Tams.			Juarez, Chih.				
	<b>XEBZ 820</b>	<b>100</b>	<input checked="" type="checkbox"/>	<b>XEPN 730</b>	<b>100000</b>			
	Mexico City, D. F.			Piedras Negras, Coah.				
	<b>XEC 1160</b>	<b>30</b>						
	Tijuana, L. C.							
	Agua Caliente, L. C.							







Eastern Time A. M.						Eastern Time	
						A. M.	P. M.
00:00							
00:15							
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11:45							
	OEFCX, Montreal, 6,005						
	DJA, Berlin, 9,560						
	DJB, Berlin, 15,200						
	DJD, Berlin, 11,770						
	DJE, Berlin, 17,760						
	DJN, Berlin, 9,540						
	DJQ, Berlin, 15,280						
	GSB, Daventry, 9,510						
	GSD, Daventry, 11,750						
	GSF, Daventry, 15,140						
	GSG, Daventry, 17,790						
	GSH, Daventry, 21,470						
	GSO, Daventry, 15,180						
	GSP, Daventry, 15,310						
	HASB, Budapest, 15,370						
	HVA, Vatican City, 15,120						
	JVM, Nazari, 10,740						
	JVN, Nazari, 10,660						
	PHI, Hiversum, 11,725						
	RKI, Moscow, 15,090						
	RNE, Moscow, 12,000						
	RNE, Moscow, 12,000						
	RV15, Khabarovsk, 4,273						
	TPA2, Paris, 15,250						
	TPA3, Paris, 11,880						
	TPA4, Paris, 11,720						
	VK3ME, Sydney, 9,585				Sunday		
	VK3LR, Melbourne, 9,580						
	VK3ME, Melbourne, 9,510				Sunday		
	VPD, Suva, 13,075						
	W1XR, Mills, 9,570						
	W2XAD, 96th'dy, 15,330						
	W2XE, Wayne, 21,620						
	W8XR, Pittsburgh, 21,340						
	W9XF, Chicago, 6,100						
	YDAS, Bandong, 6,120						

23-35



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## AROUND THE CLOCK ON THE SHORT WAVES

The time is given by the 24-hour clock. Noon is always 12:00 but midnight may be either 00:00 or 24:00. To change time to your own clock, subtract twelve from p.m. hours. Thus 18:30 is 6 p.m. and 23:00 is 11:00 p.m. The time lines used in charts are for Eastern Standard. Those living in other zones may clip out the lines below and paste them over the EST lines. The following strips are for Central Standard Time. For MST, start with 10:00 and 22:00. For PST with 09:00 and 21:00.

Central Time A. M.	23:00
Central Time P. M.	11:15
Central Time P. M.	11:30
Central Time P. M.	11:45
Central Time P. M.	12:00
Central Time P. M.	12:15
Central Time P. M.	12:30
Central Time P. M.	12:45
Central Time P. M.	13:00
Central Time P. M.	13:15
Central Time P. M.	13:30
Central Time P. M.	13:45
Central Time P. M.	14:00
Central Time P. M.	14:15
Central Time P. M.	14:30
Central Time P. M.	14:45
Central Time P. M.	15:00
Central Time P. M.	15:15
Central Time P. M.	15:30
Central Time P. M.	15:45
Central Time P. M.	16:00
Central Time P. M.	16:15
Central Time P. M.	16:30
Central Time P. M.	16:45
Central Time P. M.	17:00
Central Time P. M.	17:15
Central Time P. M.	17:30
Central Time P. M.	17:45
Central Time P. M.	18:00
Central Time P. M.	18:15
Central Time P. M.	18:30
Central Time P. M.	18:45
Central Time P. M.	19:00
Central Time P. M.	19:15
Central Time P. M.	19:30
Central Time P. M.	19:45
Central Time P. M.	20:00
Central Time P. M.	20:15
Central Time P. M.	20:30
Central Time P. M.	20:45
Central Time P. M.	21:00
Central Time P. M.	21:15
Central Time P. M.	21:30
Central Time P. M.	21:45
Central Time P. M.	22:00
Central Time P. M.	22:15
Central Time P. M.	22:30
Central Time P. M.	22:45
Central Time A. M.	11:00
Central Time A. M.	11:15
Central Time A. M.	11:30
Central Time A. M.	11:45
Central Time A. M.	12:00
Central Time A. M.	12:15
Central Time A. M.	12:30
Central Time A. M.	12:45
Central Time A. M.	13:00
Central Time A. M.	13:15
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Central Time A. M.	17:15
Central Time A. M.	17:30
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Central Time A. M.	18:00
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Central Time A. M.	18:30
Central Time A. M.	18:45
Central Time A. M.	19:00
Central Time A. M.	19:15
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Central Time A. M.	19:45
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Central Time A. M.	20:45
Central Time A. M.	21:00
Central Time A. M.	21:15
Central Time A. M.	21:30
Central Time A. M.	21:45
Central Time A. M.	22:00
Central Time A. M.	22:15
Central Time A. M.	22:30
Central Time A. M.	22:45

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**T**HE one who enjoys Radio naturally desires to know something about its seemingly miraculous character. Practically all of the books on Radio are very technical in language and description. RADEX, therefore, commissioned its Technical Editor, B. Francis Dashiell, to write "The Beginners' Story of Radio" in the simplest possible words and terms. This we have published in book form. There are 96 pages profusely illustrated with simple pictures and diagrams, bound in handsome leatherette.

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If you desire to hear a program in Germany which occurs at 6:00 a. m. their time, the dial shows that you must listen at midnight, EST. There are no mental calculations to make—no adding nor subtracting—the dial does it all.

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**CONNEAUT, OHIO**



*Sometimes I think there ought to be a law to make everyone do a little studying every week. I didn't think that a year ago because it looked like all the cards were stacked against me. But I am surely making good money now. Maybe my story will show you the way to larger earnings also.*

## I THOUGHT RADIO WAS A PLAYTHING

**But Now My Eyes Are Opened, and I'm Making Over \$40.00 a Week!**

\$40 a week! Man alive, a year ago I thought anyone making so much was just plain lucky.

Twelve months ago I was just barely getting by. It was the same old story—a little job; a salary as small as the job.

If you had told me that twelve months later I would be making \$40 a week in my own Radio business—I'd thought you were crazy.

But I am getting ahead of my story—let me tell you how it all started. I was hard up a year ago because I had been kidding myself—that's all—not because I had to be. I thought a fellow either had to be lucky or have a string of college degrees to make good money.

One day I picked up a magazine and an ad attracted me because it seemed to fit my case. It said "I will show you how to start a spare time or full time Radio service business of your own WITHOUT CAPITAL."

"They're trying to kid somebody," I thought, "but I'll find out what it's all about."

I wrote in and within a few days received a 64-page book telling about the opportunities in Radio, how I could prepare right at home in my spare time, and how they would show me how to start making money in my neighborhood selling and repairing Radio sets. It would have sounded too good to be true if the promises had not been backed up by nearly 100 letters from fellows who had taken their course and were very enthusiastic about it.

What has happened since seems almost like a dream. I started to take their course and soon I was ready to start making money in my neighborhood—as much as \$5 and \$15 a week. It wasn't long until I had saved enough money to start a little business of my own.

That business has since grown to the point where I am clearing an average of \$40 a week. All this took place under the watchful guidance of my friends at the National Radio Institute. They also offered to train me for other lines. Broadcasting Stations, Radio Manufacturers, Operating on Board Ship, Servicing Sets, Aviation Radio, Television, Short Wave, Automobile and Police Radio, Loud Speaker Systems are other fields their training covers. And to think, until the day I wrote for that book, I'd been wailing, "I never had a chance and will never have one because I have no pull or a good education!"

Friend—you may not be as bad off as I was—

but think it over—are you satisfied? Are you making as much money as you need? Would you sign a contract to stay where you are for the next ten years at the same salary? Those are the things you have to think about—because no one is going to make it his business to push you ahead—you must make it your own business.

Take my tip—write for their book, "Rich Rewards in Radio." It won't cost you anything except a postage stamp. It shows you a lot of things which I don't believe you know now about Radio—a lot of facts and figures on the opportunities in this new, fast-growing field. Where the jobs are, what they pay, how to get ready for them. Beginners as well as experienced men are making as much as \$500 to \$1,500 a year more as a result of N.R.I. training. And at the same time they send the book "Rich Rewards in Radio" they'll send you, without any cost or obligation, a Free Lesson to prove that their training is easy, practical, fascinating. The lesson they send "Radio Receiving Troubles—the Cause and Remedy" is valuable. And when you see how simple this lesson is to understand you'll know why many fellows with less than a grammar school education have mastered N.R.I. training and are now making good money as Radio Experts.

You are not placing yourself under any obligation by writing for this material as they will gladly send it to anyone who is ambitious and wants to get ahead. Mail the coupon in an envelope or paste it on a 1c postcard. Just address Mr. J. E. Smith, President, National Radio Institute, Dept. 6FO, Washington, D. C.

J. E. SMITH, President,  
National Radio Institute  
Dept. 6FO, Washington, D. C.

Dear Mr. Smith:

Without obligation, send me the sample lesson and your free book about spare time and full time Radio opportunities, and how I can train for them at home in spare time. (Please print plainly)

Name..... Age.....

Address.....

City..... State.....

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