

N.S.E.

THE NOVEMBER 1936

25^c

RADIO IN DEX

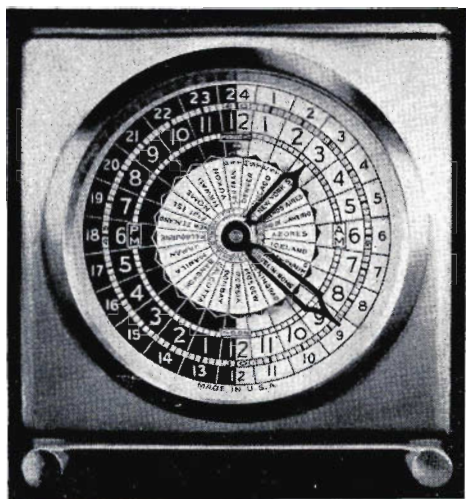
The All-wave DX Log of the World



What About Television?
The 1936 Radio Exposition
Tuning the Foreign Stations
The Short Wave Stations
of the World

No. 103

AN INTERNATIONAL CLOCK



Modernistic Design of Brushed Brass

PRICE
\$3.95

**ESSENTIAL FOR WORLD WIDE RADIO
RECEPTION**

What DXers Have Always Wished For!

So Simple a Child Can Use It. Just set so your own time zone appears through the hour hand. No further adjustments are necessary.

**THE RADEX PRESS
CONNEAUT, OHIO**

Tells time like an ordinary clock and automatically shows authentic time in every other zone around the world.

Actual size is $5\frac{1}{4}$ inches high by $4\frac{3}{4}$ inches wide.

Has A. M. and P. M. divided dial and 24-hour dial. 40-Hour Movement.



SCOTT PERFORMANCE Begins WHERE THE OTHERS STOP

● Here's a target for distance sharpshooters all over the world to level guns at! Here is proof that the SCOTT ALLWAVE is the finest receiver in the world!

From F. L. Stitzinger in Pennsylvania comes this verified list of 34 foreign countries, 98 foreign stations, 1651 foreign programs—not merely logged, but verified! All within a short six months period! No other receiver in the world has equalled this verified world record performance during any six consecutive months tuning!—Argentina, Australia, Belgian Congo, Bermuda, Bolivia, Brazil, Belgium, Canada, Columbia, Costa Rica, Cuba, Denmark, Ecuador, England, Federated Malay States, France, Germany, Hawaii, Holland, Indo-China, Italy, Japan, Java, Kenya Colony, Mexico, Morocco, Peru, Portugal, Republic Dominica, Russia, Spain, Uruguay, Venezuela! Every station, every program, verified!



E. H. SCOTT, designer and custom-builder of world's finest radio receivers since 1924

MR. SCOTT'S PERSONAL MESSAGE TO YOU

Says Mr. Scott: "Mr. Stitzinger's list is only one of thousands which SCOTT owners constantly send in to our laboratories—SCOTT owners receive and have verified 3 times as many foreign stations as are received on sets of other radio manufacturers... SCOTT ALLWAVE receivers are giving distinguished service in more than 146 countries throughout the world... We have over 600 expert 'Installation and Service representatives' over entire United States alone—to give you instant service should you ever need it. This, even though every SCOTT receiver carries five year guarantee of perfect service."

FACTS ARE YOUR GUARANTEE

Here is reception not even approached by any other receiver anywhere on earth—regardless

of price! This is not "sales talk." These are vital facts—of deep interest to every DX enthusiast.

To enjoy the really great world music, to hear the tremendous events which are moulding history—still to be in tomorrow's headlines—you must have high Class "A" speaker power.

SCOTT 23 TUBE ALLWAVE has 35 Watts Strictly Class "A" Power, 50 watts Class "AB" power—6 times undistorted output of average receiver—for vaster distances.

Bullet-Direct Variable Selectivity 2 to 16 KC—3 times better than selectivity of average receiver—to pierce through powerful local stations and bring in weak distant stations thousands of miles distant.

6 Microvolt Sensitivity—Twice that of any other radio receiver.

25 to 16,000 Cycle Hi-Fidelity—provably twice the tonal range of any other high fidelity receiver—a fact which we can demonstrate in any comparative test.

Dial Calibration—accurate on all tuning bands for the first time in radio history.

Foreign Station Locator—tunes in the short wave stations instantly.

More Important PERFORMANCE Features Than Any Other Receiver—including True Bass Control—True Separate Treble Control—23 Tubes, New Highest Efficiency Type—Oversize Construction throughout—Includes many advanced laboratory developments which cannot be incorporated in production type radio receivers.

Compare It in Your Home

These celebrities demand the world's finest quality—all are SCOTT owners—Toscanini—Guy Lombardo—Eddie Cantor—Walter Winchell—Ted Husing—Rudy Vallee—Al Jolson—and hundreds more. The SCOTT is the choice of Presidents and Princes all over the world.

Unqualifiedly guaranteed to bring you more foreign stations with stronger volume, with more crystal clear tone, with less noise than any other receiver in the world—in your own home! 30 days' trial. You can own the SCOTT for no more than you would pay for an ordinary receiver.

The Secret of Superiority

How is such an unequalled guarantee possible? The SCOTT is strictly custom-built—to highest precision standards known. Sent to you direct from laboratories—fully adjusted and proved, with nationwide installation service.

Read coupon below—NOW—and decide right now—without delay—to send for the most thrilling story of world-covering performance in the history of radio!

Visit our new permanent salon at 630 Fifth Ave., Rockefeller Center, New York City or 115 N. Robertson Blvd., Los Angeles, Cal.



SEND THIS COUPON TODAY—DETAILS FREE

E. H. SCOTT RADIO LABORATORIES, Inc.

4424 Ravenswood Ave., Dept. 15T6, Chicago, Ill.

Send "94 PROOFS" of the SCOTT'S superior tone and DX performance, and particulars of 30-day home trial anywhere in U. S. A.

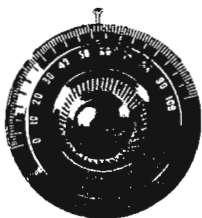
Name.....

Street.....

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

Builder of WORLD'S FINEST CUSTOM-BUILT RADIO RECEIVERS Since 1924

NOVEMBER 1, 1936



RADIO INDEX

Reg. U. S. Patent Office

FRED CLAYTON BUTLER
Editor and Publisher

ASSOCIATE EDITORS

B. FRANCIS DASHIELL, *Technical*
PAGE TAYLOR, *Short Waves*
CARLETON LORD, *Broadcast*



THIRTEENTH YEAR

NUMBER 103

CONTENTS

Frontispiece—Annadell Kiger as *Isabell Ricks* with *Ma Perkins*

	PAGE
Looking in on the New York Radio Exposition, <i>by R. H. Tomlinson</i>	3
What Has Become of Television? <i>by B. Francis Dashiell</i>	6
Around Europe on the Short Waves, <i>by Page Taylor</i>	10
Supporting the Commentators, <i>by Robert H. Weaver</i>	20
Logging Foreigners in the South, <i>by Isaac T. Davis</i>	21
In the World of DX, <i>by Carleton Lord</i>	23
Bringing In the Foreign Broadcasters, <i>with "Count de Veries"</i>	30
Tuning the Amateurs, <i>by B. L. Ahman, Jr.</i>	33
The Month's Changes in Station Data	36
What's on the Air Tonight? <i>The Programs, Hour by Hour</i>	41
Classified Index to Your Favorite Features	46
Around the Clock on the Short Waves	95
Quick Index to All Station Data	96

\$1.75 Per Year

25c Per Copy

See Subscription Blank on Page 96
Published Monthly Excepting July and August

THE RADEX PRESS

Publication Office: - 326 Penton Bldg., Cleveland, Ohio
Editorial and Advertising Office: - - - - - Conneaut, Ohio

Entered as second-class matter April 23, 1931, at the postoffice at Cleveland, Ohio, under the Act of March 3, 1879.

Printed in U. S. A.

Looking In On The Radio Show

• • • By R. H. TOMLINSON

IF WE are to believe the managers of the various exhibits at the recent Electrical and Radio Exposition in New York, the coming season will probably be one of the most prosperous in radio history. Judging by overheard conversations and by one hundred definite interviews, this feeling was shared by most of the visitors at the show.

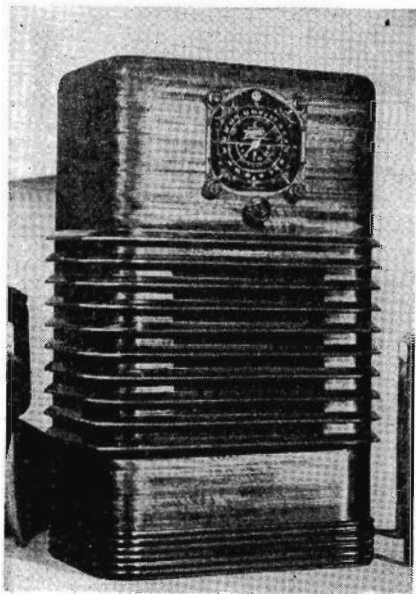
After spending five hours browsing around the displays, picking out and inspecting models which should interest DXers, it wasn't hard to single out the outstanding attractions of the new models.

First to attract the eye are the many new dial improvements and the novel visual-tuning arrangements. For the latter, the makers have coined such names as "Viso-Glow," "Magic Eye," "Shadow Beam," "Tel-Eye," "Flashograph" and "Glowing Beam." The dials are referred to in terms of "precision," "automatic," "photochromatic," "colorama" and "teledial."

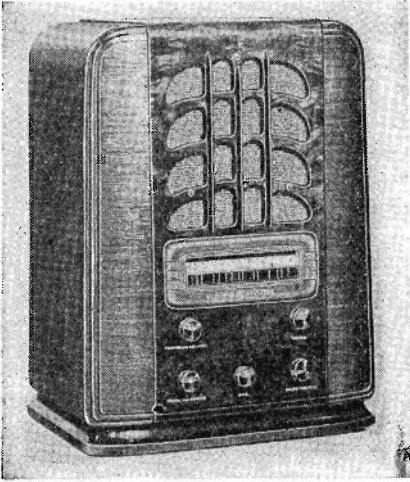
In the opinion of one hundred visitors stopped at the different exhibits, the dial and visual-tuning gadgets were the principal point of interest, being specified by thirty of those interviewed. Twenty visitors spoke of improvements in speakers and quality of reproduction. Eighteen were of the opinion that improved foreign tuning was outstanding. Ten went on record as favoring the metal tubes, while a like number were positive that increased selectivity and sensitivity were the high spots. Eight preferred the new cabinet designs, while four took me for a salesman of some sort and refused to answer.

Upon entering the auditorium, the first exhibit to be seen is the large Zenith line, and some of their new models are certainly eye-openers. The best bets for the average DXer

seemed to be the Zephyr Model 10-S-157, in ebony finish, and the Model 10-S-155. Both of these are 10-tube console jobs. The 8-tube table Model 8-S-129 also looks as though it would go places. All three of these models have attractive, oversize dials, acoustic adapters, split-second bandspread tuning, voice-music high fidelity control, target (visual) tuning and metal tubes. A new Zenith feature which should appeal to DXers is the "Privacy Plug-In," an adapter and cord for silencing the speaker, a pair of phones and a control box for adjusting volume. Prices on these three models are astonishingly low. Other Zenith models include four for the



Several of the cabinet types of Zenith's "Year-Ahead" radios have been given the name "Zephyr," because they are styled much like a stream-lined engine. This 10-tube receiver covers all the radio bands. The Model 10-S-157 is shown.



One of the new General Electric table model receivers is shown here. This 10-tube receiver is the Model E-101 and tunes all the short-waves as well as the broadcast band.

farm, two for the boat or trailer, eleven AC-DC jobs, and 21 more standard AC models.

One of the most interesting displays was that of the General Electric line, covering eight table models, eight consoles and two radio-phonograph combinations. Something new this season, and exclusive with the GE sets, is "Focused Tone," which makes it practically impossible to tune in a station off exact resonance. While the dial pointer nears a strong carrier, the frequency control goes into action, swinging the tuning circuits automatically into sharp resonance. As this happens the dial lights change from red to green, showing that the set is properly tuned. This feature can be cut in or out at will.

From air tests, I can say that the GE line includes some mighty nice sets. The E-101 10-tube table model, the E-86 8-tube console and the E-105 10-tube console should appeal to the DXer's tuning tastes as well as to his pocketbook. All three cover the frequencies from 540 to 18,000 kcys. Higher priced models have an

added band of 140 to 410 kcys.

Majestic, "Mighty Monarch of the Air," is back on the market, displaying five consoles and six table models and featuring a "super-colotura" speaker, radio-eye for precision tuning, full-vision dials and illuminated controls. The 8-tube Model 850, a console job, and the table model 85 are threeband receivers which should appeal to DXers. Be prepared for a shock when the prices are quoted.

The Crosley exhibit attracted lots of attention. The main feature from a spectacular angle was a huge \$1500 model containing five speakers and employing three separate audio channels. According to the manager of the display, this was "mainly for some radio nut." The console Model 1199 seems to be the best bet here, having eleven tubes and covering from 540 to 18,000 kcys. This set boasts a "Mystic Eye," bass and treble compensator, six-position high-fidelity switch, auto-expressionator (volume expansion) and easy-to-read oversize dial, tuning indicator and many other features. The 7-tube table Model 745 should not be overlooked for DX purposes.

The Stromberg Carlson display contained twenty-seven new models. Twelve of these were in consoles which featured the "acoustical labyrinth," a series of long baffles placed around the speaker for improved tone quality. For the DXer wanting the very best, the console Model 145-L is to be recommended. This is a 10-tube job, covering 145 to 370 kcys. and 525 to 18,000 kcys, and featuring adjustable high-fidelity control and an 11-inch speaker. Other innovations include beam power output tubes, carpin-shoe leather speaker cone support, cathode ray tuning and a swell dial. For listeners of average means, the 7-tube 130-U table model should be a good bet, while the battery-operated console Model 115 has an appeal for rural listeners.

RCA Victor was showing twenty-

seven models in their display. Some of the features to be found were a new dial with good band-spread, "Magic Eye" visual tuning, metal tubes, a music-speech control, and an automatic tone compensator. Then there is the "Magic Voice." The speaker is enclosed in an acoustically sealed chamber, in which there are five organ-like pipes. This is supposed to give excellent reproduction and to eliminate the boom. The Magic Voice Model 10-K seems to be the logical preference of DXers. This is a 10-tube, 5-band console job covering 150 to 410 kcys and 530 to 60,000 keys. The Magic Eye Model 8-T, an 8-tube table set tuning between 530 and 23,000 kcys, seems to be second choice in the smaller models.

The Grunow exhibit contained three of their new "Teledial" models—the Teledial Twelve, Super-Twelve and

Fifteen—as well as standard jobs without this feature. For the DXer, the Grunow Eleven is tops—eleven tubes, large dial, cathode ray tuning, etc.

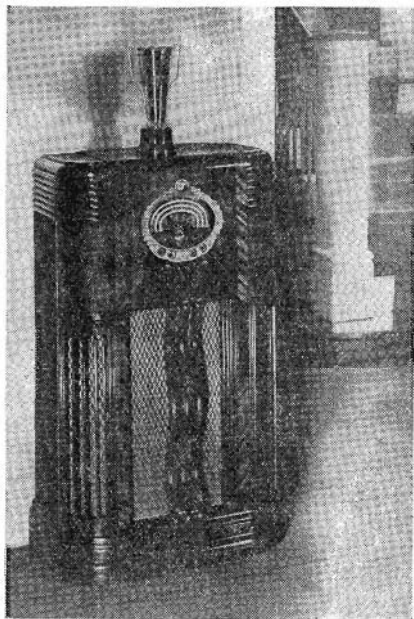
The Pilot display had many attractive models, with the 11-tube table Model X-114 leading in DX interest. This is the famous Super Dragon and features headphone jack, phonograph connection, two-speed dial and band spread. Second choice here is the Model 23, three tuning bands, seven tubes, split-second tuning and a good band-spread arrangement. This model is for AC-DC operation.

Summing up, it appeared that the principal improvements over last year's models are in the dials, which showed marked increases in size, and in the visual tuning methods employed. Behind the scenes, but none the less important, are advances in speaker design. I found speakers running up to eighteen inches in diameter, with the average being about twelve. Some of the higher priced sets, such as the \$1500 Crosley and the \$750 Zenith, had as many as five speakers. Metal tubes seem to be standard equipment now, except in the audio end of the high fidelity models.

WJAG DX Special

The annual DX program of WJAG, Norfolk, Nebraska, will be held Friday, November 13th from 12:30 to 6:30 a.m. CST. Dedication will be made to all DX Clubs who request it. This will be an excellent opportunity to hear this popular station. The broadcast will be on 1060 kcys. with 1000 watts.

It is not clear from the notice from the station whether this program will be given Friday morning or Friday night. We assume it will be Thursday night or Friday morning. This instance indicates how confusing our 12-hour clock can be. It demonstrates why RADEX uses the International or 24-hour system.



The Majestic 850 features radio beam tuning. World-wide reception is assured on the three tuning bands and tuning is made easy by means of the radio eye. This model employs 8 tubes.

What Has Become of TELEVISION?

● ● ● By B. FRANCIS DASHIELL

IN THE Nation's capital an internationally famous hotel adds to its widely circulated advertisements this statement: "When television arrives we shall have it." That is just what many people are thinking and wishing for themselves, but who knows when television will arrive?

Television is far from being ready to be tried out on the listening, or, shall we say, the seeing, public. Many years have elapsed since the pioneers in this branch of radio optics showed shuddering shadows on a screen for the benefit of awed spectators and newspaper reporters. We were told that television was just around the corner. But now we wonder whether television has finally become lost after it seemed so fraught with great possibilities. Can television come back, and will it ever be a practical thing?

The Idea Remains

The principles of television were discovered long ago. And, like the fundamentals underlying radio, those of television have changed but little. Refinements appear here and there, but under it all the simple idea remains. But the man or corporation owning and controlling the patents of television is going to have a lot to say about when television is to become the practical, inexpensive servant of the public.

Without doubt, this about places the finger of opinion on the crux of the whole matter. Squabbles over patents; assignments in the air lanes; the contradictions of inventors; the battles in the short-wave bands; monopolistic fights for exclusive control; the regulations of the Federal Communications Commission, and other things, all tend

to complicate the television situation as it is today.

Intensive Tests

But scientists, with their usual indifference toward things mundane, are working intensively with television's problems. Much has been discovered since the "old guard" developed its crude transmitters and receivers. One man made a fortune from his fundamental patents but did not live to enjoy it; thousands of average Americans invested millions in the stock of television corporations; a few broadcasts were made and a few complicated receivers were sold. Then came the long silence, with its present awakening. Now, the question is asked, who owns television today and who will control its destiny?

Intensive studies and tests are being conducted in all television laboratories more than ever before. They are being carried on experimentally in every conceivable frequency band in the radio spectrum. But interference has been met at nearly every hand, and science has been discouraged. Static cannot be tolerated in the realm of television. What can be done to overcome these interferences?

What Power?

Super-power, such as that of station WLW, and one or two others, was once thought to hold the solution of good television transmission. It is still advocated by a few engineers. But television requires a wide band, and if only a few long-wave broadcasting channels were allocated for visual broadcasting on super power there would be little room left for the thousands of already congested stations operating throughout the world. Then, too, radio waves do not respect national boundaries;

interferences may come from distant lands that care very little about America's television problems.

So, before television becomes a sensible, practicable member of our radio family, there must be accord among regulating agencies so that definite and clear channels may be assigned for experimental and actual broadcasts. The thousands of careful tests that have been conducted show that neither super-power nor standard broadcasting channels will solve the problem.

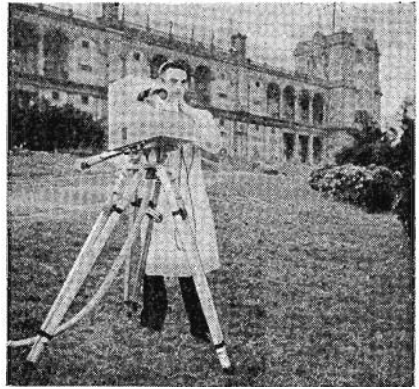
Ultra Short Waves

The short waves seem to hold a natural affinity for television. Perhaps the shorter the better, but there is no positive conclusion on this point, except the accord of many men who have made the experiments which have been conducted up to this time. Of course, if the thing is to be accomplished in the ultra short wave bands, such as one meter or less, there might be little of much value left in it for the average listening, or seeing, public.

Engineers realize this, and a move is now on hand to grab into the amateur wave bands for more easily received wave lengths. This, of course, raised a great howl. The radio amateurs have been pushed about for many years. There are many thousands of them in America alone, and they have practically made short-wave radio what it is today. They proved to a sceptical lot of scientists what could be done in the short waves soon after they were shoved down below 200 meters many years ago.

Hard On Amateurs

Later they were squeezed tighter, being forced to give up most of the 200-meter reservation. Today they manage to operate around the world with an astonishing low power in a congested air lane that beggars description. Now the television influences would like to make a raid into the little that is left to the



Television programs are broadcast regularly in England from the new studios at Alexandra Palace. This is the Marconi television camera transmitting scenes outside the Palace. Two different systems of television transmission are in use in England, each requiring entirely different equipment for transmission and reception. Photo courtesy of the BBC.

honest, aspiring amateur. And many of these amateurs are real television experts, just as they have been progressive radio builders and inventors for a score of years.

Television might settle down around the 1 to 5 meters band someday. Just how this can provide decent reception for the average radio listener who seldom can tune his all-wave set with satisfaction when he gets below 18 meters, is hard to understand. Perhaps by the time television has fully blossomed radio reception on the ultra-short waves will be a simple matter for the average radio listener.

Popular Waves

Down in this region of very short waves there are thousands of wave channels. Tuning is very sharp, and low power can be used to cover the range of the transmitter. But these waves act in a different manner from those to which we are accustomed. At the present time it is an experimental part of the radio spectrum. Static and other interferences seldom affect such reception. This is in favor of television, but there are other

features which are less desirable when the listening public is considered.

Television has not been at a standstill during the battle for assignment of wave bands. The big corporations conduct daily tests here and there. But there should be opportunity for everyone to conduct his experiments, for radio amateurs, experimenters and commercial concerns alike need equal opportunity on the air lanes. Monopoly should be carefully guarded against in the popular wave bands of the air.

Standards Needed

Since the early days of Jenkins, Ranger, Baird and others of the original television investigators, a crop of new names has sprung up. And much of their impressive scientific work is being done in the great laboratories of the radio and electrical organizations — such as the Radio Corporation of America, General Electric Co., Bell Telephone, Philco Television, and several others. But this does not mean that one of these combines should gain control of wave bands suitable for television. The situation promises a real fight.

There also arises, quite naturally, the question of standardization before television can be offered the public as a finished product. Certainly this is a science that must be exact. Should a number of corporations begin broadcasting on television chains or networks with their own individual methods, each of which may require a receiver that synchronizes only with certain transmitters, there will be great confusion on the visual wave bands. No one would care to purchase a machine that can tune to only one transmitter and prove useless as far as other broadcasts are concerned.

Price Of Sets

The establishment of a single standard is imperative. The radio enthusiast must be able to tune to any



This mademoiselle's experience with the Opera Comique and the Folies Bergere of Paris won Rachel Carlay a permanent part as singing star of the Manhattan Merry Go Round, one of the popular programs without which Sunday evening would be incomplete. Miss Carlay is about 26 years of age and was born in Brussels, Belgium. The Merry Go Round features Oliver Smith and Andy Samella's Orchestra as well as Rachel, at 9 p.m. on the Red.

television station. Prices of receivers must be arranged so as to fall within the range of the average pocketbook. Television can never become successful unless it first is made popular by price and adaptability in the home. Perhaps a television machine can be made to sell for about twice the cost of a good radio receiver.

The Radio Manufacturers' Association is now working on the problem of television. The Federal Communications Commission of the U. S. Government also is holding hearings, and may soon assign some permanent wave bands so television can get a start. All this will tend to smooth matters so that television can plan for a sane, standardized and practical inauguration in America.

Is Television Alive?

What is television accomplishing? It is a fact that this branch of radio science is advancing remarkably, but has been held down by the almost hopeless situation that exists,

not to mention the economic condition. Perhaps one of the most interesting experiments for the transmission of television signals by radio, in a realm of little or no interference, is that which is being conducted between New York and Philadelphia.

Atop the great Empire State Building in New York City, is an ultra-short-wave transmitter. It operates on 99.5 megacycles, or 99,500 kilocycles — almost 3 meters. But its range is less than 30 miles, as far as people on earth are concerned. This is a point just above the horizon, for these waves travel out in a straight line and pass into space beyond the horizon at the curve of the earth. That is why the transmitter must be placed as high as possible above the earth's surface, so as to make the distant horizon far away.

Actual Transmissions

At New Brunswick, N. J., where the wave comes to earth, a second station relays the signals to a third station also in New Jersey. From there the signal is relayed again to Philadelphia where perfect reproduction of the pictures and printed matter is obtained. This is a "still" picture circuit, but it serves to illustrate the possibilities of ultra-short waves and their limitations.

We must remember that television does not always apply to radio. Images, both still and moving, can be transmitted by wire as well as radio. In fact, those carried by wire, such as most of the "still" or, what are popularly termed "Wire-photo", pictures, that we see every day in the papers, are far superior to those sent through the air. Wire transmission eliminates fading, static and other interference. So, as far as television goes, it is an actual, and rather widely used fact, when wire transmission is considered. The present difficulty lies chiefly with television by air—radiovision broad-

casting, if you care to call it by that name.

Television A Fact

For land-wire television there is being built a special test circuit. It consists of a long metal tube containing a wire that runs through it, parallel to the sides, and spaced in the center. It is held in position with rubber insulating discs set at regular intervals. The tube is filled with gas. This "coaxial" cable is now being installed between New York and Philadelphia, and will be tried out for television. It should make it possible for us to see each other while we speak by telephone.

Television by air, too, is an accomplished fact. Once the many difficulties of air, monopoly, standards, patents, and the opportunity for all to participate in the services, are ironed out, it is expected that rapid advances toward actual broadcasts will have been effected.

What Goes On?

At the present time RCA is making regular motion visual broadcasts on certain frequencies to a number of their own receiving machines located at different points. This concern has also issued several semi-private publications telling about the progress and methods of their work, one of which is a large book that may be purchased. It is recommended to those who wish to study the question of television very thoroughly. Then, too, the Farnsworth Television Corporation is ready to make actual broadcasts and is doing much preliminary work.

On the Pacific Coast the Lee Broadcasting System, together with the DeForest people, have been presenting regular visual radio programs to a limited number of receiving machines. The Television Corporation of America, too, is making many broadcasts on the high frequency band. In England regular tests are conducted through the air,

(Continued on page 22)

Around Europe by SHORTWAVE

• • • By the SHORTWAVE EDITOR

THIS month is what we consider an "in-between" month. It is late enough in the year that shortwaves still have some of the summer peculiarities, and early enough that some winter effects are becoming noticeable. Better reception is had on lower frequencies now than a month or two ago and night-time reception is improving, but the high frequencies are not out of the question and daytime reception is still good. It is a good season to go fishing for stations.

A guide to all the principal European stations is given here, with their time on the air, addresses where required, and identification symbols where helpful.

There are two shortwave stations in Lisbon, Portugal. One of them, **CSW**, is reported this month by Fred Van Voorhees, Miller Place, N. Y. The frequency was announced as 9540 kcs. but the actual frequency was nearer to 9550. Announcements were in Portugese and English. This station, known as the National Broadcasting Station, was heard between 1700 and 1800, EST.



London calling! The senior Empire announcer, W. M. Shewen, is shown at the microphone at Broadcasting House, London. The Empire programs are radiated six times daily over the shortwave transmitters at Daventry. Photo courtesy of the BBC.

The other Lisbon station is the well-known **CT1AA** on 9650 kcs. This 2 kw. station, known as "Radio Colonial," is received with very good volume at times, on its regular schedule of 1500 to 1800 on Tuesdays, Thursdays and Saturdays. Although frequent announcements are heard in English, identification is facilitated by the interval signal of three cuckoos. Reports are acknowledged by the owner, Sr. Abilio Nunes dos Santos, Jr., Av. Antonio Augusto d'Aguiar 144.

Germany

We believe everyone is well agreed that the German stations easily rank with the best transmitters in the world. The address of the German stations is Reichsrundfunkgesellschaft, Masurenallee, Berlin-Charlottenberg 9, and reports from listeners are welcome. The Zeesen stations can always be identified by the music-box tune which precedes each program. Their schedule for this month follows:

- DJA**, 9.560 megs., 0005-0515; 1650-2245.
- DJB**, 15.200 megs., 0005-0515; 0555-1100; 1650-2245.
- DJD**, 11.770 megs., 1135-1630; 1650-2245.
- DJE**, 17.760 megs., 0005-0515; 0555-1100.
- DJL**, 15.110 megs., 0000-0200; 0800-0900; 1135-1630. On Sundays only from 0600-0800.
- DJN**, 9.540 megs., 0005-0515; 1650-2245.
- DJQ**, 15.280 megs., 0600-0800; 0815-1100; 1650-2245.
- DJR**, 15.340 megs., 0800-0900.

One of the most interesting of the European stations for the past few months has been **EAQ**. DXers have enjoyed listening to first hand reports on the civil war from this sta-

tion, and to conflicting reports broadcast from a station set up by the rebels. The rival station is EHZ in the Canaries. EAQ works on 9862 kcs. daily from 1715 to 2115 and on Saturdays from 1200 to 1400. A few letters that have come through Spain recently have been opened, censored, and rubber stamped before forwarding, making interesting mementos for the few DXers getting them.

The British stations at Daventry have altered their schedules slightly from last month.

Trans. I, **GSD**, 11750 and **GSB**, 9510, from 0215 to 0420.

Trans. II, **GSG**, 17790 and **GSH**, 21470, from 0600 to 0815.

Trans. III, **GSF** and **GSG** from 0900 to 1200.

Trans. IV, three of the following stations will be used: **GSB**, 9510, **GSD**, 11750, **GSF**, **GSG**, or **GSO**, 15180, from 1215 to 1745.

Trans. V, **GSC**, 9580, **GSD**, **GSP**, 15310, from 1800 to 2000.

Trans. VI, **GSC** and **GSF** from 2100 to 2300.

From the Blue Danube

From Budapest on the Blue Danube come programs every Sunday over broadcasters **HAS3** and **HAT4**, the two stations that are making Hungary famous. Announcements are made in three languages, French, English and Hungarian. Letters addressed to Radiolabor, Budapest, will reach them. **HAS3** is heard between 9 and 10 on Sunday mornings on 15370 kcs. and **HAT4** works from 6 to 7 on Sunday afternoons on 9125 kcs.

The League of Nations operates a number of transmitters at Prangins, near Geneva, in Switzerland, but two of their stations transmit programs regularly every Saturday afternoon from 1730 to 1815, EST.

HBL on 9595 and **HBP** on 7797 are the two broadcasters. The same program is radiated over both stations, and consists of talks on activ-

ities of the League. The talks are presented in three languages, French, English and Spanish. Reports should be addressed to the Information Section of the League.

The Vatican station is one of the most interesting of all the shortwave broadcasters in Europe. This station works on two frequencies but we list only one, 15120 kcs.; the other is not audible in this country. **HVJ** broadcasts programs in various languages every morning from 10 to 10:30 but reports are not very frequent. However, when special broadcasts are scheduled from **HVJ**, it enjoys one of the largest audiences of any one station in the entire world. Reports are acknowledged, usually with a photograph, and should be addressed to the Pontificia Accademia Della Scienze, Citta del Vaticano. Preceding transmissions from **HVJ**, a clock can be heard ticking for ten minutes. During broadcasts, the words "Laudatur Jesus Christus" are used often.

Feminine Announcers

In Italy there are many shortwave transmitters, but the broadcasting stations are located at Prato-Smeraldo, near Rome. The stations all have the call letters **I2RO**, although the announcers leave off the "I". The call letters are followed by numbers to indicate the various frequencies; **2RO4** is on 11810 kcs. and **2RO3** is on 9635 kcs. Feminine announcers are favored in Italy and this fact aids in identifying Italian stations. As the shortwavers relay long wave stations often, the lady is heard to announce "Radio Roma-Napoli," and this is followed by a man, as a rule, who says "2RO" in English. On signing off the two Italian anthems are played, "Gioventezza" and the Facisti Hymn. The address is E. I. A. R., Via Montella 5, Roma.

Among the newer stations in Europe is **LZA**, Sofia, Bulgaria, 14970 kcs. It has been reported by a number of fans but it is not a very easy

station to get. The time to tune is on Sundays between midnight, Saturday, and 4:30 Sunday afternoon. The weekday schedule is from 5 to 7 in the mornings and from 12 to 2:45 in the afternoons.

The Belgian station **ORK**, at Brussels has not made a change in any respect for months, which is what we like to see most of the stations do. The frequency of 10330 and the schedule from 1:30 to 3 p.m. can be relied upon. It may be a little difficult for some to identify, however, because announcements are in French and Flemish with a little English. They sign off with "La Brabaconne." Address letters to Direction des Radiocommunications, Bruxelles.

The Pioneer PCJ

One of the earliest stations in the world was PCJ in Hilversum, Netherlands. This was the station that established the fact that transmissions could be carried on between the ends of the world, that is, between Holland and Java. PCJ enjoyed the distinction of being the most popular station in existence, and its announcer, Edward Startz, about the best-known man among DXers. Mr. Startz still announces over PCJ and PHI, and because of his ability to speak several languages fluently has made thousands of friends. These are the "Happy Stations" and everyone should listen to them if they wish good music, cheerful, informal announcements and excellent reception. Each station uses two frequencies, PCJ working on 9590 and 15220, and PHI using 11725 and 17775 kcs. On 9590, PCJ is heard Sundays from 1900 to 2000 and on Wednesdays from 1900 to 2200. The 15220 kcs. frequency of PCJ is used on Sunday from 0630 to 0730; Tuesday from 0400 to 0600 and Wednesday from 0700 to 1100. The frequencies of PHI are alternated with the seasons, 11725 in the winter and 17775 in the summer. Tune for them this month on 11725 on Sundays from 1300-

1400 and every day except Tuesday and Wednesday from 0730 to 0930, EST.

Stations in the Soviet Union are numerous, but information concerning them is scarce. Mme. Inna Marr at Radio Centre, Moscow, keeps us quite well advised on the schedules and wavelengths of those stations broadcasting in English, so perhaps we should be satisfied. The newest of the Moscow stations is **RAN** but its frequency is already in dispute; it seems to use both 9520 and 9615. It is heard frequently with excellent volume between 1900 and 1930, EST. We believe **RKI** is the best of the Russians. It uses 15090 kcs. from 10 to 11 a.m., Sundays. **RNE** is the poorest of the broadcasters but the most active. English programs are broadcast Sundays on 12000 kcs. (25 meters exact) from 6 to 7 a.m.; 10 to 11 a.m. and 4 to 5 p.m. These programs are interspersed with programs in other languages, so the station does not leave the air.

Parisian Programs

The French Republic operates a group of stations known as "Radio Coloniale." The frequencies are three in number: **TPA2**, 15243 kcs.; **TPA3**, 11885 kcs.; and **TPA4**, 11720 kcs. Reports of reception should be addressed to 103, Rue de Grenelle, Paris VII. Identification is made easy (if one is lucky enough to tune in near the end of a broadcast) by the fact they sign off with the "Marseillaise." The schedule in effect at present is:

TPA2, 0100-0140; 0455-1000.

TPA3, 0100-0140; 0155-0400;
1115-1700.

TPA4, 1715-2400.

One of the newest stations in Europe, but already among the most popular, is "Radio Podebrady," at Prague, Czechoslovakia. The original tests from this transmitter were heard on three wavelengths, 19.698 meters, 25.51 m. and 49.05 meters. Joe Tamele of 13201 Coath Ave., Cleveland, Ohio, one of the first to

report Prague, has a verification from them stating that most of their reports were received on the 19 meter wavelength so that is the one they will use most frequently in subsequent tests to the USA.

"Like all good readers of RADEX, I would like to see the ideal letter appear in it, so I'm sending my contribution," volunteers Fred Van Voorhees, Box 125, Miller Place, N. Y. "I do not care to read about the good catches made by anyone if he only lists the call letters with no other information. **WPHT**, Cambridge, Ohio seems to be silent as **WQFT**, same frequency, 1.596 megas., announces its location as Cambridge. A new station for the Maryland State Police has been heard testing on about 1.706 megas. with the call **WHWN**. **WPGU**, Cohasset, Mass., has been heard quite regularly on 1.712 megas."

A DX Program

A DX Tip for shortwave listeners comes from Bernard Ahman, Jr., 3313 Westerwald Ave., Baltimore, Md. On November 20 the two General Electric stations at Schenectady, N. Y., will broadcast a special program between 3 and 4 p.m., EST, for the Newark News Radio Club. The stations are **W2XAD** and **W2XAF**, 15330 and 9530 kcs. respectively. A highly interesting program is promised by the manager of the stations, Mr. Darlington.

"I received a verification from a new station in Cartagena, Colombia," postcards Milton Schwartz, 1056 Shendoah St., Los Angeles, Calif. "This station is **HJ1ABE**, working on 9500 kcs. or 31.58 meters and relaying the programs of 'El Progreso Cartagenero.' The address given on the verification is P. O. Box 31. Their transmitter is a 1000 watt Collins."

Mr. G. Saladin, Director of station **HLX** in Trujillo, D. R., officially advises us that the frequency of their shortwave transmitter has been changed from 6131 to 6340 kcs. This 500 watt station transmits on the fol-



The Bronx Owl, Carl Forestieri, is shown here surrounded by a few of his best verifications. To the right are his BCB verifications and on the left those he has received on shortwaves. His Super Ace certificate in the NNRC is also shown.

lowing schedule: Sundays, 0745-1045; weekdays from 1215 to 1315; Tuesday and Friday from 2015 to 2215, EST.

New Cubans

From Arthur Viner, 4554 Kenwood Ave., Chicago, Ill., comes a summary of his shortwave results. "A new Cuban, **COCX** has been heard relaying CMX quite regularly after 1730, EST, just below the 25-meter band or on about 11.68 megas." Arthur tells us. "On 31 meters **COCQ** is about the best-heard station at the present time. Some of my better catches on the shortwaves are **VIZ3**, **VE9AS**, **WVD**, **HAT4**, all verified, **VP3MR**, **HH3W**, **JVF**, the Schooner



Several young ladies have made good as poets on the radio, but listeners acclaim Mary Livingstone as radio's poet laureate. Mary, with Jack Benny, is returning to the air lanes soon and her admirers no doubt are looking forward to hearing some of her new verse. She is called the "Pulitzer Poetess—perhaps."

Morrissett, W10XDA, and many amateurs and commercial code stations. All together, I have heard 23 countries on voice, and 45 countries on code." Mr. Viner postscripts his letter, telling us he got up at three o'clock the following morning and heard seven Australian amateurs and one Hawaiian on 20 meters. VK2ME was producing a beautiful signal at the time, and PCJ was on the air sending a program in Dutch to the East Indies. The Japanese station on the air was JVM on 10740 kcs.

"Using a five-tube table model General Electric radio for six weeks, I have so far logged 84 stations on shortwaves," contributes J. F. Finlay, 352 Robie St., Halifax, N. S. "Among my better catches are VK3ME, VK3LR, VPD, RAN, PRF5, COCQ, ORK, Prague and several others. Incidentally, a few items of information which I have not yet seen

in RADEX are given here: **GBT**, the s. s. "Queen Mary" works **WOY** and **GBC** on an announced frequency of 13210 kcs. **COCQ**, Havana, Cuba, relays **CMQ**, in the 31 meter band, slightly lower in frequency than **CT1AA**. **COCX**, also in Havana, announces in English and relays **CMX** on the approximate frequency of 11580 kcs. **HJ1ABE**, Cartagena, Colombia, La Voz de los Laboratorios Fuentes, now works on an announced frequency of 9500 kcs. **PDK**, Kootwijk, Netherlands, announces "Hier is Amsterdam" and broadcasts to the East Indies every afternoon from 1500 to 1615, EST, on 10410 kcs. **HJ1ABB**, Barranquilla, Colombia, has been heard numerous times on 9600 kcs."

Joseph Morsello, 15 E. Upsal St., Philadelphia, Pa., wishes to correspond with DXers and amateurs throughout the world. Joseph uses a National SW-3 receiver and has been tuning for about three years. He wishes also to exchange photographs.

N for Normandie

"While looking over my shortwave log a few days ago, the following notes came to my attention," states Howard M. Phillips, 2016 Otis St., N. E., Washington, D. C. "A new station, **HIN**, was logged on two different frequencies, 6223 kcs. and 11490 kcs. The operating schedule was announced over the air as 1700 to 1800, EST, on 11490 kcs., and on 6223 from 1220 to 1400 and 1900 to 1930, EST. In addition to this announced schedule, I have heard it on 6223 kcs. between 2030 and 2100. **HJ2ABC**, Cucuta, Colombia, has been heard several times on 9570 kcs. between 1830 and 2200, EST. The receiver in use here is a Silvertone Model 1918A and I am quite well pleased with it." Mr. Phillips lists also a few amateur stations which have been covered in the amateur column appearing in this issue of RADEX.

Another newcomer to the short-wave ranks is Maxwell Grimm, Springfield, N. S. He uses a Canadian Serenader 5-tube set which tunes from 5950 to 18000 kcs., and has heard thirty stations on three continents already.

"I bought a Westinghouse 6-tube receiver in June and believe you will agree with me that it is a very good set when you read the list of stations I have heard already," acclaims a reader who signs "W. B.", 189 Park St., Sydney, N. S. "I have heard all the listed Zeesen stations except DJC and DJM; the three French-colonial stations; seven of the Daventry transmitters; three Australians, six Japanese, VPD in Suva; PCJ in the Netherlands; Czechoslovakia, Hungary, numerous South Americans, etc., etc. Three of the Russian stations also are in my log. I hope in due time to have verifications back from most of these broadcasters."

Strangers

"Recently I obtained a 16-tube Airline receiver which, as nearly as I could tell from tests and comparisons was the most efficient for the price asked, and I am more than satisfied with the results. I have kept an accurate tabulation of all the stations I have heard, but three of them have me puzzled; they are WUEX, WUEV and WUEW. They may be navy stations, judging by the conversations heard. For the information of other listeners, KKP at Kahuku, Hawaii, is on the air from 2230 to 2300, CST, with a special broadcast for the Columbia Network, on 16030 megs. Consistent reception of DJB in Berlin has been enjoyed here, while the BBC stations at London, the French transmitters and the League of Nations broadcasters are only a little less consistent. The only complaint I may have is that the South American and other Spanish-speaking stations do not announce their calls and locations very frequently in English so I am unable to identify them."

Replying to our questionnaire, station CMX at Havana Cuba, gave us a little information about their new shortwave transmitter, COCX. This shortwaver does not have, as yet, a definite frequency assignment, working in the vicinity of the 25-meter band. Reports are verified by "Casa Lavin," Francisco A. Lavin, Manager, P. O. Box 32, Havana.

He Draws a Blank

"A few days ago, after 18 months of waiting, I received a confirmation of my report to YDA at Bandoeng, Java," states Emile C. Page, 1716 N. Highland Ave., Glendale, Calif., "This reply was in the form of a brochure, with a slip attached reading: 'Owing to the fact that our office was flooded with foreign reports and the broadcast hours and wavelengths as well as the number of our transmitters were subject to many alterations we have not been able to answer your report before now. From now on, however, changes in wavelengths and times are not apt to happen.' There is a verification blank on one of the pages, but mine is a blank. They didn't fill it in so it is not very satisfactory to me as a verification. I have never mailed a request for confirmation outside of the USA without enclosing an International Reply Coupon. About two months ago I wrote to another NIROM station, YDB, and it will be interesting to know how I fare with that one, now that they have straightened out their troubles."

Ralph Gozen, the well-known shortwaver of Yonkers, has moved to 1090 Eastern Parkway, Brooklyn, N. Y. This month, as usual, he sent in a lot of valuable information. "The new Italian call letters for the Addis Ababa stations are IUA, 5.88 megs, formerly ETG; IUB, 7620 kcs., formerly ETD; IUC, 11955 and IUD, 18270 kcs. A new Moscow transmitter is RV96 on 15180 kcs. Sundays from 1300 to 1400, EST. It is rumored that a new Chilean station is under construction to work on

9540 kcs, so its call letters will be **CB940**.

"I certainly have had a lot of trouble getting the Roman station verified," Mr. Gozen complains. "First, I sent a report to **12RO3** and received a letter but they forgot to enclose the veri card. Later, I reported **2RO4** and stated they didn't send me a card for the other station. Now I have a card verifying transmitter No. 3 but none for No. 4. Since March 6 of this year I have verified 32 stations and have 25 reports out to the other stations."

War in Spain

A station believed to be **EHZ** in the Canary Islands is reported by Capt. Oxrieder, 122 E. Hamilton Ave., State College, Pa. This station is on the air nearly every evening from about 1800 to 2000 with a multilingual program, on 10370 kcs. The languages spoken are French, Spanish, German, English and maybe others. "Station **HJ4ABE** has moved up again in frequency," reports Capt. Oxrieder. "The new frequency is 6097 or 98 kcs. and it is drowned out when **W2XE** comes on the air as there is too much difference in the signal strength. **YNLF** has moved again also, now coming in on 9630 kcs. **HJ4ABD** has moved to 6135 (I believe it is assigned to 6138). **YV7RMO** is on 6070. **XEWI** is now on 11900 and I have a veri showing this frequency. **HJ1ABJ** in Santa Marta is on 6018, on the low frequency side of **XEUW**, which is on 6020 kcs. **HJ3ABD** has returned to 6050 and seems to show signs of staying there. **HI3C** at La Romana has moved again, this time to 6725 kcs. **TIEP** wanders around a lot and it is hard to tell what frequency he should be listed on; 6676 kcs. seems to be the best bet. **HJ3ABF**, the old **HKF**, has been reported on 6070 and near 9500 and 9590 but I am sure it is on 6170 kcs. The station on 9590 is **HJ2ABC**, La Voz de Cucuta. **COCX** is, I believe, the world's worst mover; he has been on 12165, moved

one night from 12135 to 12125 kcs. and back up to 12160; he has been on 11540, 11430 and many other frequencies. This may be due to the fact it has no definite frequency assignment."

Let's Verify

WHILE some listeners continue to debate the familiar question of "To verify or not to verify," the average DXer seems to be concentrating his efforts on getting all of his catches confirmed. Regardless of how the verie is to be counted or when it shall be discarded, the important point is to get the verification — and then decide what to do with it.

As listeners settle down once more for regular turns at the dials, it may not be amiss to consider the matter of submitting reports. While it is admitted that there can be no uniform system, the general station response can be improved by a wise decision on what shall and shall not be done when reporting.

Essentially, a verification is accepted proof that a listener has tuned in a certain station. When we write for a verie, we are asking a broadcaster to confirm the fact that we heard his station and, it follows, we must send definite information which he can check with his records.

Obviously, then, the whole process of verifying commences when the station is tuned in. It is absolutely necessary that we log the greatest amount of material possible, for only with a complete report can we give evidence that we deserve a confirmation.

Unless pressed for time, every listener should endeavor to take down a full report for a period of fifteen minutes — listing selections heard, announcements other than just for titles of selections, station identification by call letters, etc. Under favorable reception conditions, three successive selections should be

the least amount of program material reported.

Of course, obstacles to complete reports are often encountered in the form of weak signals, frequent periods of severe fading, and interference from nearby stations. In such cases, listeners should make every effort to take down as much data as possible, even though it may be necessary to stick with a station for as much as an hour before a comprehensive report is available.

Network stations are usually hard nuts to crack. For obvious reasons, few stations will verify reports covering chain programs. Possibly the best chance for identification material is the spot announcement in the regular station breaks, since mention of the local advertiser is often considered ample proof of reception. Late at night, many chain broadcasters carry local dance programs, which are always suitable for reporting. Another good bet is the station sign-off, when the announcer may give his name and the time at which the station will return to the air next morning.

Other bug-a-boos are foreign stations which announce in an unknown language and play unfamiliar music. About the only way to report them is to take down everything which is heard. Make a note of every selection, mentioning the type of music and specifying whether it was an orchestral number, or a vocal or instrumental solo. Long announcements should always be reported, with mention of whether it was a man or woman speaking. The longer these reports are made, the better the chance to receive a confirmation.

Frequently, a listener may hear a familiar selection, yet be unable to identify it from memory or announcement. A good way to overcome this obstacle is to keep handy a list of recent record releases from the prominent studios. Reference to this list may recall to mind the title of a selection heard. This tip is par-



Football's "Galloping Ghost," Harold "Red" Grange is heard in the role of gridiron forecaster and analyst in his series of thrice-weekly broadcasts over NBC Networks. On Fridays at 10:30 pm, over the Red Network, he discusses game to be played the following day. At 7 pm Saturdays, also on the Red, he reports on the outcome of leading games played during the day. He also is heard on Mondays during the Greater Sinclair Minstrels broadcast at 9 pm.

ticularly valuable on DX programs, when popular recordings are the principal fare.

When reporting any station, it is essential that the correct time of each item be given. It is always a good idea to check your watch or clock with the various time signals before settling down for a turn at DXing.

When reporting to stations on the North American continent, the listener may content himself with giving his local time. For foreign stations, it is well to convert the hour into Greenwich Mean Time. In doing this, it must be remembered that, while it may be one day in your location, it may be another by GMT. For instance, 11:00 PM, EST, on

October 1st will be 0400 GMT, October 2nd.

No matter how accurate and complete a report may be, it will be valueless if sent to the wrong station. Thus, a listener should take care that each station reported has been identified.

Although most domestic stations may be identified without much trouble, every DXer is occasionally faced with a weak signal which cannot be traced definitely. On this score, listeners take sides; some holding that no report should be sent unless the call is heard.

On the other hand, not a few DXers contend that it is quite all right to report reception if you are *reasonably sure* of a station's identity. This is particularly true when, by a process of logical elimination, it is apparent that but one station within range can be operating on a certain frequency at a given time.

In case this "reasoning process" is used, the listener should state in his report that he *believes* he heard the station. Under such circumstances, no positive claim of reception should be made and the question of verifying should be left entirely to the discretion of the station.

After the broadcaster has been identified and the program taken down, every listener should pay particular attention to the manner in which he writes his report. He should remember that he is asking a favor and that no station is under obligation to verify. The report should be expressed in courteous terms and the kindness of a confirmation should be requested, not demanded.

Although some listeners contend that reception data is wasted on some stations, there are undoubtedly many broadcasters who are very much interested in learning just how their signals are received at distant points. The inclusion of information on signal strength, quality, fading,

possible interference from stations on the same or adjoining channels, and local weather conditions shows a desire to co-operate and no report is complete without this data.

Following is a suggested verification request form:

ROBERT M. DAILY,
57 GLENDALE AVENUE,
NEW YORK, N. Y., U. S. A.
October 21, 1986

Radio Station 2NZ,
Narrabi, N.S.W., Australia.
Gentlemen:

This will report reception of Station 2NZ on 1170 keys between 4:30 and 5:00 AM, EST, (0930 to 1000 GMT) this morning, October 21st, when the following program was heard:

EST	GMT	
4:30	0980	Station identification; announcing a program of Victor Herbert selections.
4:32	0932	By orchestra, "March of the Toys".
4:39	0939	Soprano solo, "Kiss Me Again".
4:45	0945	By orchestra, "It's a Great Day Tonight for the Irish".
4:50	0950	Tenor solo, "My Dream Girl".
4:55	0955	By orchestra, "Pan Americana".
5:00	1000	Station identification.

Your transmission was received with fair volume, about R4. Quality was good at all times. Slight fading was noticed, occurring every five minutes and lasting about 30 seconds. Weather conditions here in New York were excellent for reception. Sky was clear, static light, and temperature about 32°. My receiver is a 10-tube Little Giant Air Hopper. No interference from other stations was observed.

If this report checks your station log, will you kindly send me a letter or card of verification? An International Reply Coupon for return postage is enclosed.

Thanking you in advance for your courtesy, I am,

Yours sincerely,
Robert M. Daily.

This form seems to cover all of the essential points necessary for a complete report. It will be noted that the program heard has been itemized, making for easy checking with the station log. It is always well to keep away from wordy letters, stick to the matter at hand, and don't forget return postage.

Some DXers believe that they stand a better chance of receiving a verie if they report excellent volume, fine quality, lack of fading and other complimentary exaggerations, regardless of the actual facts. We feel that the stations appreciate the truth

about reception conditions, even if it is derogatory. Constructive criticism may enable them to improve their equipment, while obvious flattery is of no value.

Despite constant hammering on the subject, many listeners continue to ignore the absolute necessity of enclosing return postage with their reports. There is no reason for not being aware of this vital part of every verification request. If a DXer cannot afford the expense, he should join the clan of non-verifiers and cease being a harmful parasite. If he thinks he is wise and is putting something over on the stations, he is

four and six cent denominations. In the latter cases, half of the card may be used for the report and the other half for the return verification.

Recently, a number of listeners have complained that their three-cent stamps to American stations brought nothing but post card veries. While it is admitted that station letterheads are to be preferred, a station's policy in this connection should be respected. After all, it takes time and money to check a report and they are certainly entitled to two of the three cents.

A simple system of handling station reports involves the use of a small card index file. When a new broadcaster is heard, the call, location, frequency and power are noted in the upper left-hand corner. Immediately below and in the center of the card, should appear the date of reception. Next will come the itemized program heard. The upper right-hand corner may be used for noting reception data. At the bottom of the card should appear the date when the report has been sent to the station.

In this connection, it is well to remember that all reports should be mailed as soon as possible after reception. If a station is heard early one morning, the verification request should be on its way that night, and never more than 48 hours after reception.

When the report has been mailed, the station card can be filed away by call letters. When the verie comes back, the card can be removed from the file and either destroyed or kept in another index for future reference. Some DXers like to fasten the card to their verie and have a complete and permanent record of each station heard.

Once a week, the listener can go through his file, note the stations which are delinquent and prepare a follow-up report. It seems to be customary to allow a station from

Radio Algiers Algiers, Algeria 941 kc - 12,000 watts Dist. 4370 miles.	30-365
This will verify your reception of Radio Algiers at 5:00 PM, EST, on January 11, 1935.	
RADIO R.T.T. 28 JAN 1935 ALGER	Signed, <i>[Signature]</i> with Compliments (for the station)

A verification from Radio-Alger, illustrating the method of submitting an International Postal Union postal card to foreign stations for verification. The message was already typed in by the writer and all the station had to do was check the report, sign and rubber stamp the card, and return it. This method sometimes works when others fail.

due for some painful publicity.

When reporting to a station in the United States, the enclosure of a three-cent stamp is customary. For foreign stations, an International Reply Coupon or a stamp of the country in question, obtainable from stamp exchanges, is necessary.

A more economical, yet ethical, way of supplying return postage is the use of post cards on which a verification form has been typed, ready for signing by the station. A sample of this type of verie is shown in the accompanying picture. A penny card will suffice for stations in the United States. For foreign stations, the post office sells double return cards in

four to six weeks before writing a second letter to a domestic station; three months, to a foreigner.

The first follow-up may be in the form of a card or letter and should merely call attention to the fact that a previous report had been overlooked. In case the original request may have been lost, it is a good idea to repeat the program details. Return postage may be enclosed with the first follow-up, but since this is primarily a reminder, it is hardly necessary.

If another month or so passes and it is evident that a second follow-up will be necessary, the use of a form verification on a post card is suggested. Once again the attention of the station should be called to the delinquent confirmation. Under no circumstances should a listener become abusive in his language, as that will hurt the chances of himself as well as other DXers.

In most cases, a maximum of two follow-up letters should bring in the desired verification. If, however, the confirmation is still missing and it is known that other DXers have received veries from the station in question, the DXer should consider the possibility that his report may have been in error. If possible, he should log the station again and commence the process of verifying once more.

A possible source of assistance is the radio editor of the local paper. In most cases, the stations are dependent upon the newspaper for publicity and a radio editor is, therefore, in a position to ask favors.

In many instances, a fellow radio club member or even a reader of RADEX, located in the city in question, may be willing to intercede on your behalf.

Many of these points may seem "old stuff" to some DXers, but they are often neglected by old-timers and are essential bits of information for the neophytes.

Support The Commentators

● ● ● By ROBERT H. WEAVER
President, National Radio Club

AS ANOTHER DX season swings into a ction, DXers should remember the problems confronting a DX commentator and how, by a little effort, they can assist him in putting over a successful program. As this is the third year during which I have had the privilege of broadcasting DX tips and news, I feel that I am qualified to speak on the subject.

The success of a DX tip program depends largely upon the information which the commentator has at his disposal. Since most of these broadcasts run from fifteen to thirty minutes in length, it is obvious that a vast amount of material is necessary for an interesting program.

These broadcasts are put on for the particular benefit of the DXer. Therefore, if he receives a certain amount of enjoyment from such a program, it is essential that he cooperate with the commentator whenever possible.

At the end of each broadcast, the commentator usually requests all listeners to send in all information which may be of interest to other DXers. This material is used to build up the program and to stimulate interest in DXing.

Also, in an effort to learn whether his broadcasts are popular, the commentator asks for a response to his program. I have found that it is particularly hard to get the DXers to abide by this request. There are many weeks when I, as well as other DX commentators, find the response very disappointing.

This indicates one of two things. Either the commentator is not capable of presenting an interesting program, or the DXers themselves lack the incentive to respond to the broadcasts



Homer Rodeheaver, who is estimated to have directed more than 70,000,000 people in song during the past 30 years, is now conductor of the Palmolive "Community Sing" broadcast on Wednesdays from 9:30 to 10 p.m. EST over the Columbia Network. One time associate of the late Billy Sunday, Rodeheaver has gained fame as a trombone soloist as well as a song leader. He says he will not play the trombone often during the programs, however, because the trombone has to be seen to be appreciated. Its chief attraction seems to be the sliding motion rather than the music.

which can be so valuable to them. Since the comments which are received usually applaud this type of program, it is my belief that the fault lies with the listeners.

It must be remembered that a DX commentator has one of the most difficult of all programs to prepare. A large number of his listeners are not familiar with DXing and may not understand what is being said. Thus, it is necessary that the commentator be given every assistance in conducting a broadcast which will be of interest to everyone.

Therefore, all DXers are urged to pitch in and do whatever they can to make these programs a success. If the response falls off, the stations will be justified in assuming that there is insufficient interest to justify the regular donation of time. As a result, the DXers will lose their opportunity to receive the latest DX news and tips, all because they failed to do their part.

Attention is called to several tip

periods which are now on the air each week: KFAC, 1300 kcys, Los Angeles, Calif., Tuesdays from 1:00 to 1:30 AM; W2XAF, 9530 kcys, Schenectady, N. Y., Thursdays from 5:35 to 6:00 PM; KDKA, 980 kcys, Pittsburgh, Pa., Fridays at midnight; CFAC, 930 kcys, Calgary, Alta., Sundays from 1:00 to 1:15 AM; and WORK, 1320 kcys, York, Pa., Thursdays from 8:45 to 9:00 PM. All times are Eastern Standard. In addition, WEEU, 830 kcys, Reading, Pa., is expected to have a regular period on Saturdays, although the time has not as yet been determined.

DXers are urged to do everything possible to make these programs a big success and to keep them on the air.

Logging Foreigners In The South

● ● ● By Isaac T. Davis
Elkhart, Texas

IN THIS locality, trans-Pacific stations are much easier to hear and far more consistent than those across the Atlantic. During the past season—February, March and April—on almost any morning when static was not too high, signals could be heard from some of the Aussies and Zedders after 3:00 AM, CST. Sometimes, they could be heard until after sun-up.

When tuning for the Southern TP's, I always tune to three different channels. I usually turn the set on around 4:00 A.M., and then turn the volume up until the static can be heard plainly, but not too loud. I then tune to the WSM channel on 650 kcys to see if 1YA is pushing through. Whether or not I heard him, I stay on the 650 channel for five minutes. Next, I turn to 790, WGY's channel, for a try at 4YA—the loudest of all TP's. I stay there for another five minutes. Finally, I move over to 720 for 3YA and, as

with the other two, I remain for five minutes.

If, after tuning to these three specified channels for a period of five minutes each I have not heard a signal, I know that it's no use to try for the other Aussies or Zedders. Since 1YA, 3YA and 4YA are always more consistent than the other TP's, absence of a signal from them indicates a pretty poor morning.

If the YA's are coming in good, I next turn to WMAQ's frequency, 670 keys., for the easiest of all the Aussies, 2CO at Corowa. If I am successful with 2CO, I run over the dial, stopping at 570 for 2YA; at 640 for 5CK; 710, 7NT; 730, 5CL; 740, 2BL; 770, 3LO; 800, 4QG; 990, 2GZ; 1020, 2KY; 1110, 2UW; 1120, 4BC; and 1190, 2CH. If these are coming in, I fish for other and smaller stations. I heard several of the low power stations on half a dozen mornings last spring, but all DXers, veterans or neophytes, should "test" the reception conditions by trying for the stronger stations first.

The Asiatics

For the Japs and Chinese, there isn't much luck East of the Rockies. However, JOAK2 on 590, JOBK2 on 1085 and XGOA on 660 filter through at times. Try for them after 4:00 AM, CST. They improve towards sun-up, but early U. S. stations come on and spoil reception just as the Japs are reaching a peak.

I find that Sunday mornings offer the best DX possibilities, since most stations do not sign on as early as on week days and, therefore, cannot offer as much interference.

Of the TA's, I find Munich on 740 to be the easiest. Try for him just as soon as WSB signs off. Cologne, 658, is the next best bet. However, because of our geographical location, the TA's are very difficult and, unless a listener is very lucky, he must be very persistent to be rewarded with a signal from across the Atlantic.

Of all foreign stations, the South

Americans put the strongest signals into most parts of the United States. Unfortunately, similarity in hours of operation cause those which can be heard during the evening hours to be sprinkled with QRM from our locals. Anyone seeking his first TA should tune to 670 and see if LS4 is going to break through WMAQ. LR6 is usually a good bet to be heard behind WLS-WENR on 870 some evenings. Of course, the best reception of the SA's is to be had on early morning tests, when they sure pound through.

To sum up, the best way to hear a TP or a TA is to *tune*, not *fish*, for certain stations. After the more powerful stations have been logged, the listener may then try his luck at fishing, but he should always fish slowly, with a "taut line."

Last season, April afforded the best TP reception. December and January have been the best months for the Japs and Chinese, while the same months have brought the best European results.

What of Television?

(Continued from page 9)

and here in America we find some of the large colleges, such as Harvard and Columbia, doing the same.

But most of these test broadcasts are semi-private. They are scheduled to investigators, and as the systems are different no practical receivers are available generally to the public so that nearby transmitters can be utilized. As the situation is at this time, no one can step up and purchase a television receiver, tune it in on some visual broadcasting station, here or there, and watch the happenings throughout the country. There is a limited amount of this, it is true, but no radio engineer cares to predict that visual broadcasting has arrived, or that it is even "just around the corner".

In the WORLD of DX

••• By CARLETON LORD

SINCE the formation of the Newark News Radio Club nine years ago, DXing has been an organized hobby, advanced by the co-operation of all its devotees.

Cooperation has brought special courtesy programs, facilities for the prompt exchange of tips and news, clarification of the verification problem, and the opening of foreign fields for dialing. As we know it today, DXing is a far cry from the hit-or-miss system of a dozen years ago.

Perhaps this approach to a Utopian state of affairs has made the listener less conscious of his own obligations to the hobby. At any rate, it is becoming increasingly evident that there is a marked tendency to pass over the support and cooperation which are so necessary to the continued good health of DXing.

Many listeners apparently are of the opinion that the payment of dues to one or more radio clubs and the purchase of a favorite magazine constitute their share of support. Of course, they will report to a station when a verification is desired, but that is for their personal benefit.

In another section of this issue, Robert H. Weaver, president of the National Radio Club, appeals for the support of DXers in providing reports for various DX tip programs. Such broadcasts are provided for the special benefit of long distance listeners. For it to be necessary for a commentator to beg for news is indeed a sad situation.

But that is by no means all! Practically every DXer in the country has, at some time or other, bewailed the channel hogging of the all-night stations. Judging from the letters which we have received, listeners would go to almost any extreme to clear up the affected frequencies. So,

when the time for united effort arrives, what happens?

In the Midsummer issue, Robert R. Rawstron suggested that readers prepare letters of protest to the F. C. C. Instead of sending them direct to Washington, it was felt that a better impression would be made if they came to us for collection and forwarding in one large bundle. By submitting this idea to our readers, we indicated our belief that such a plan would at least receive some attention by the Commission.

As we go to press, four months after the appearance of this suggestion, we have received exactly one letter of protest—and that was from the originator of the plan, Mr. Rawstron!

In the same Midsummer issue, we asked readers to send in ideas on what constitutes an efficient aerial and ground installation. This information was to be shaped into an article covering the entire subject. This article appeared in the September issue, but we had barely a dozen letters to consider in its preparation.

For years it has been an accepted fact that courtesy programs should receive the unqualified support of the members of the club to which the broadcast was dedicated. Regardless of whether a station had been verified, it has been the duty of every member to report on the program and to thank the station for the courtesy.

From the broadcasters themselves, there is ample evidence that this obligation is being fulfilled by too few listeners. Typical reaction is that of James R. Curtis, president of Station KFRO, Longview, Texas.

"Last season," he writes, "we did not have as many reports as during the previous year. This can possibly

be attributed to the fact that in 1935 we were a new station, and the 1935-36 season was our second year. Unless there is a better mail response on our first program this year, we will not put on any more special broadcasts. It appears that the regular FCC frequency test is satisfactory for most DX programs, and that is what we intend to use this year."

From this point of reasoning, it is but a short jump to the policy of no DXes and no verifications. Such, for instance, is the belief of Irving Vermilya, General Manager of Station WNBH, New Bedford, Mass., who writes:

"It is my opinion that a so-called DX program has no particular value to any of the broadcasting stations and, therefore, I believe that the practice should be discontinued. As far as the DX listeners are concerned, the only benefit obtained by

them is the possible thrill of hearing their radio cover long distances—and that can be accomplished on the short waves."

It would not be difficult to note additional points to show that DXing has not been receiving the cooperation and support which it needs. The possible blame for this condition can be distributed in a number of directions. Many of the old-time DXers, who formerly were exceedingly active, may have lost their interest in the hobby. The younger generation, accustomed to the leadership of the veterans, may not realize that it is high time that they began lending an active hand.

But whatever the reason, present-day listeners must remember that everyone can and should support DXing to the best of their abilities. Club officials and radio editors will continue to push the interest of the listener at large, but they must receive support and cooperation.

Verifying Again

As long as DXers desire confirmation of their reception, just so long will verifying remain a major problem in the minds of most listeners. Fortunately for the hobby, the great majority of American and Canadian stations will verify correct reports.

A few stations announce a definite policy of issuing no verifications under any circumstances. Typical reason for such a stand comes from Stations KASA, Elk City, Okla.

"Our situation as regards the answering of DX mail," advises F. E. Mayhew, Supervisor, "is not an arbitrary one. Rather, it is entirely individual with our station. Our staff is small, and we have hardly time to take care of the essential duties that are required to operate the station successfully. We are strictly a community station, with the interests of our listeners only at heart. Our commercialization is only such as will cover the actual operating expenses of the station. Therefore, it is only



A recent portrait of Helen Hayes, who is in her second season on the NBC-Blue Network. This year she dramatizes the novel "Bambi," heard Mondays at 8 pm, EST. Hollywood offers have been frequent but Miss Hayes confines her performance to radio and the New York stage.

natural that we have no nation-wide interests that can be accelerated by answering DX mail."

Somewhat along the same line, yet revealing a dangerous pitfall for DXers, is the attitude of the new WJRD at Tuscaloosa, Ala. Writes their Chief Engineer, J. G. Cobble:

"The average DXer and DX club seem to have the opinion that they are putting a station under an obligation when they make a report on reception. This is a false impression. In the first place, it is a reflection on a local service station to cover too much DX territory, since it shows that the sky wave is too pronounced. The FCC frowns on this and their first check for faulty antenna performance is to inquire as to the DX ability of the station.

"Second, we are not interested in anything beyond our normal primary and secondary service areas. We can get a reliable picture of our coverage in these areas by a simple field intensity survey. Third, when certain unsolicited reports are not answered, the writers immediately send threatening letters. In extreme cases, they report the matter to the local Chamber of Commerce, with the request that the station be forced to reply to a report which was not asked for.

"I will concede that a regional or clear-channel station stands to benefit from DX mail, but to the smaller stations this verie business is becoming a nuisance."

When stations like KASA and WJRD frankly state their policy of non-verifying, listeners must recognize the reasons for this action and applaud the truthful announcement. If such broadcasters are ever subjected to threatening letter and complaints to chambers of commerce, we invite the stations to forward the names of such "DXers" for publication in RADEX.

Unfortunately, there are a few stations who tell us that they will verify correct reports for return postage,

and then apparently adopt an opposite policy when the DX mail commences to come in. Some of these stations may occasionally confirm a scattered few reports after a number of follow-up letters, while the others appear to be even less considerate of their previous promises.

Several of the radio clubs report consideration of a central committee to check up on the latter class of stations and to list the broadcasters who continue to overlook DX mail.

Aerials and Such

From time to time, we have recommended various types of antenna installations which should give maximum reception in a given location. In our wildest moments, we would never suggest that listeners attempt the hook-up which is used by Augustine Lawrence, 8 Pine St., Nantucket (Island), Mass.

"Using a 1936 Philco Model 610B," he pens, "my aerials consists of a five foot piece of wire inserted in the castor of an iron bed. The regularly-supplied 25 feet of antenna wire is attached to the ground clip of the radio and strung out the window, winding around a galvanized iron pipe. I have put pieces of asbestos around the unshielded tubes and have covered the tips with pieces of 1/2" rubber tubing. To prevent vibration, I have placed an old blanket over the top of the wooden cabinet. I don't yet know why or how it works, but it sure does perform to perfection."

"I have tried numerous aerials on by Gilfillan Model 30," admits Arvid E. A. Astad, 1211 Henry St., Berkeley, Calif., a shut-in, "but never was satisfied with the results. I finally found that, by grounding the aerial post on the set and not using the ground post, I was able to top any results obtained with an outside wire."

"As a means of reducing local interference," advises Tom Black, 143 Carroll St., Pittston, Pa., "I have

wound the lead-in of a standard inverted-L aerial around a free piece of wire. One end of this wire reaches as high as the flat-top, while the other end is run to a separate ground."

"With my new 8-tube Silvertone," reports Lloyd Harrison, 130 S. Hague Ave., Columbus, Ohio, "I am using 200 feet of wire arranged as three spokes of a wheel. The lead-in is taken from the center, where the three spokes join. This gives me a non-directional aerial which receives equally well from any point of the compass. My ground is a nine foot iron stake into the ground and connected with a two foot piece of galvanized heating pipe. Both are moistened frequently."

"On the matter of grounds," briefs H. P. Rosenbrock, 252 N. Fourth St., Clifton, N. J., "I have tried radiators, driven pipes and rods, and finally a 25-gallon submerged oil tank which serves as a rain drain. They all seem to work the same."

Summer Records

While most DXers seem to close up shop every spring for an annual summer hibernation, a few hardy souls brave heavy static on the chance that a few new catches may be entered in their logs. Recent reports indicate that the past summer has provided its share of new stations.

"During the summer," recalls Robert Hyland, 216 E. Grand Ave., Springfield, Ohio, "I heard LR5 seven times and LS2 twice. On June 21st, the first day of summer, I heard YV1RC with R8 volume. In May, I heard the three Hawaiians—KHBC, KGMB and KGU—with the latter weaker than the other two. Because of this kind of reception in the warm months, I am of the opinion that the coming season will be somewhat better than last year."

"Incidentally, on some SW QSL cards belonging to a friend of mine, I note that there are a number of

heretofore unknown BCB stations working in conjunction with YV12RM, YV11RB, HH2S and HI8Q. YV12RM, Maracay, Venezuela, is on 1150 keys; YV11RB, Bolivar, Venezuela, 1400 keys; HH2S Port au Prince, Haiti, 1125 keys; and HI8Q, Trujillo, D. R., 1475 keys. I know of one DXer already who has heard HH2S on 1125."

"Haven't done so much DXing," admits S. R. Lewis, R. D. 3, Box 660, Toledo, Ohio, "but did snag two new BCB stations during the recent frequency checks. KCMO and WFOR were the first new medium-wave stations to be heard on the Scott. One thing to cheer about is the reception of verie from TIPG, which has been out since last December."

"Have been after the South Americans all summer," offers R. H. Tomlinson, 125 Terrace Ave., Port Chester, N. Y. "Strange as it may seem, I've done even better with them than last winter. On several occasions, there have been as many as 15 SA's coming in on the speaker, with the American stations on the same or adjacent frequencies not even heard except for an occasional whistle. SA veries now total 28, with about a dozen more due any time. Among the better catches are two 250-watt stations in Brazil and one 500-watter in the Argentine. The others range from 1 KW up. Heretofore, I haven't even thought of DX after April, so see what a lot of chaps are missing."

The All-Night Situation

There is little need to remind readers of the activities of the all-night stations last season. Channel after channel was blocked during the DX hours and untold interference was experienced. While reports for the new season are not complete, there is reason to believe that there will be fewer late programs during the coming months.

"The old blockade on 780 by KTM and KELW is a thing of the past," avers Charles C. Norton,

President of the Universal Radio DX Club, 2018 Green St., San Francisco, Calif., "as KEHE is only on the air from 6:00 AM to midnight, PST. KRE and KJBS are still all-nighters, with KRE on a 24-hour schedule."

"For the past few months, WHN has been operating until 2:00 AM and then sign off until 7:00 AM, EST," points out G. R. Windham, Chief Engineer. "At the present time, we do not intend to increase our schedule of broadcasting during the early morning hours, so we do not believe that our station is causing a great deal of interference with DX listeners. We hope that this information will place WHN on good standing with your readers."

"At present time, we are not contemplating any late programs for the coming winter," informs Frank J. Kotnour, Commercial Manager of Station WEDC, Chicago. "The reason for discontinuing these after-midnight broadcasts was due to a ruling of the FCC."

"Present plans call for WEXL to be on the air from 8:00 AM to 4:00 AM, EST, daily except Sunday," announces Ellis C. Thompson, Station Manager. "We sign off at midnight Saturdays to return at 8:00 AM Monday morning. We are also silent after 2:00 AM from the 8th to the 14th of each month, because of the FCC frequency check programs."

"The regular schedule of WJBK calls for transmissions twenty-four hours a day," writes James F. Hopkins, owner of Detroit's 1500 kcys station, "with the exception of a stand-by between 2:00 and 7:00 AM when the government monitoring tests are being conducted."

"Station WNEW inaugurated its 24-hour schedule on August 2nd, 1935," submits M. J. Weiner, Chief Engineer. "At that time, our transmitter was being used by another station in Newark, with whom we share time on Sunday and Monday of each week. Taking cognizance of the

fact that many DXers wished to log stations on the 1250 kcys channel, and for certain other reasons, we arranged to shut down every Monday morning between the hours of 2:00 and 7:00 AM, EST. This schedule of operation was maintained until March of this year, at which time the station with whom we share time reverted to the use of its own transmitter and began to use the aforementioned silent hours. As a result, with the exception of the FCC frequency checking periods, the 1250 channel is never idle."

Information of the future policies of the other all-night stations has not been received as yet. However, it would seem that DXers are getting something of a break. We know that the 1210 and 1010 channels will be open in the East, while 780 will be vacant in the West. The stand-by of WEXL on Sunday mornings opens the 1310 channel for DX and test purposes. KRE, of course, will continue to be a problem for West Coast listeners, while KJBS was never a great source of interference.

While many late stations continued broadcasting during the monthly frequency checks last year, it appears that such will not be the case during the coming winter. This means that approximately one fourth of the early-morning hours will be available for DXing—and listeners certainly should have no kick on that score.

Reports and Resumes

"During the 1935-36 DX season," greets Carl Forestieri, 2354 Cambreleng Ave., New York City, "I logged 64 new stations. Today, I have a list of 860 stations heard, with 855 verified. The missing five are Toulouse, Strasbourg, Genoa, XERA and XEFZ. Among the best veries from last season are LR1-3-4, Milan, Turin, Bari, Bordeaux, Rennes, Algiers, CNR, a number of small Mexican, and several 100-watt-ers on the Pacific Coast. It is inter-

esting to note that all of the 34 Cubans logged have been verified, while only two—XERA and XEFZ—of my 37 Mexicans are missing. During seven years of DXing, I have used only two receivers. From 1929 to 1934, I had a Zenith 35 PX. Since then, I have tuned an 11-tube At-water Kent 711."

"I purchased a four-tube Century receiver in December 1933," supplies Ned Burks, Box 725, Lexington, Va. "Since then, I have logged 545 stations, of which the best are KFEL-KVOD, KGHL, KHJ, KJR, KFAC, XEAQ, XEMO, KROW KFKA and KDYL. I have heard stations in 41 of the 48 states, and hope to add the rest this season. Incidentally, WDEJ is building a 312-foot vertical antenna and a new studio building."

"At this time last year," recalls John H. Terziev, 109 Cherry Rd., Syracuse, N. Y., "my log stood at 245 stations. By DXing week-ends and vacations, I hoped to raise the total to around 400 by last summer. I was getting along okay until I ran across the April frequency checks. The first two mornings, I tuned just by fishing and got myself 14 new stations. The last four mornings, I used the schedule printed in RADEX, and got as many as 23 and 24 in one night. In one week, I increased my log by a even 100 stations. The log stands now at 509, quite a bit higher than my goal, and the better catches include LR1, LR4, XEFB, KHBC, KXA, CJOC, KXO, KDON, KVL, KRNR and KWG. All this has been on a small four-tube Philco purchased in January 1934."

"I should like to purchase old copies of RADEX, dating from 1920 to 1927," announces Ed Nesbitt, 109 W. Woodbine St., Chevy Chase, Md. "If readers have such issues for sale, please have them write to me."

RADEX didn't commence publication until 1924, but we imagine that there are still a few old copies since that date floating around.

The CDXR Looks Ahead

● ● ● By CHARLES HESTERMAN
President

THE announcement last summer, that Fred Bisset would be obliged to resign from the presidency of the Canadian DX Relay, came as a bolt from the blue to all CDXR members. We sincerely regretted the loss of the man who had guided the club from its inception to its present place in the DX world.

The reorganization which followed has now been completed and we wish to announce our plans for the future.

It is our opinion that DXing on the broadcast band can produce more genuine pleasure than any other form of listening. We feel that this is due to the fact that reception of a distant station on the medium waves is a real achievement, while extreme DX on short waves is to be expected.

We intend, therefore, to confine our activities exclusively to DX on the BCB. We believe that there are enough broadcast listeners to warrant the existence of a strictly BCB organization. By this stand, we are nailing our colors to the mast, to stand or fall by the response of the DXers.

We plan to cover, as completely as possible, the foreign as well as the domestic fields. As we see it, the domestic field is a sort of primary education in DX work, where the listener whets his appetite for foreign reception. We intend our bulletins to give every encouragement to the beginner in DX as well as to the old-timer.

Our present schedule calls for the distribution of bulletins every two weeks during the winter season, once a month in the summer. We will continue to forward bulletins to all paid-up members until their memberships expire, at which time we hope that

our new set-up will have won its spurs and that renewals will be forthcoming.

The dues will be but a dollar a year and all communications should be addressed to the Canadian DX Relay, 2014 Lorne Ave., Saskatoon, Sask., Canada.

The Export Zenith

● ● ● By E. L. Peters*

RELATIVELY only a few of the DXing fraternity are in a position to own and operate a custom-built receiver. The vast majority, like myself, have to turn to the low and medium price fields for our new outfits.

Considerable thought was given to the selection of my new receiver. Primarily a foreign BCB DXer, I wanted one which incorporated the long waves. I finally chose one which seemed to suit my particular needs. This was a 1936 Export Zenith, Model 9-A-54, a nine tube job which covered every important wave band from 13 to 2100 meters.

I have found this set to have many desirable features, not the least of which is the large "magnavision" dial, six inches in diameter and in various colors. The more important trans-Atlantic stations are located by name on the dial, which is calibrated entirely in meters. Companion sets, minus the long wave band, are calibrated in kilocycles.

The tuning arrangement is very similar to that of the Stromberg-Carlson described in May RADEX. Dual ratio planetary reduction is operated from two tuning knobs placed concentrically. This is very smooth in operation. There are also the usual controls for band changing, tone and volume.

The twelve-inch concert speaker, over-tone amplifier and fine baffle contribute in no small way to the superb tone of this receiver.

In operation, the first thing to be noticed is the low noise level, which enables me to pick up and amplify the weakest signals with plenty of power in reserve. I rarely find it necessary to advance the volume control more than one-third for any signal. Other features are ample selectivity and sensitivity, split-second tuning and triple filtering.

In actual performance, this set has proved to be a real distance getter. In spite of the fact that it arrived a bit late (February 13th) for good TA reception, many of these stations were heard on both long and medium waves. Of the long wavers, those logged were Huizen, Lahti, Moscow, Radio Paris, Motala, Deutschlandsender, Luxembourg and Kalundborg. These stations were received much later in the season than broadcasters on the medium waves.

On the regular broadcast band, many TA, TP and SA signals have been heard, with 25 or more South Americans being quite common in a single evening. Trans-Pacific signals were below normal, but about 20 were audible, poor to fair. 4YA and 3TR were reported and verified, and the latter gave me credit for their most distant report. Stations as far distant as Chicago were regular day-time fare.

So far, with the exception of 20-meter foreign phones, the short wave bands have been tuned chiefly for program value, and very little DXing has been attempted. About 125 of the hams have been logged, exclusive of Mexicans and Cubans. The best catches probably include IIT, LY1J, SU8MA, SU1CH, SU1RO, E12J (7 watts, Dublin), FB8AG (Madagascar), CE1AR, CE1BC, in addition to 27 VK's, 26 G's and numerous SA's and TA's.

In my opinion, this export Zenith has exceeded all expectations. It seems to be well-engineered and well-built throughout, and it has been a pleasure to operate.

*Box 65, Westport, Nova Scotia.

Logging the Foreign Broadcasters

with COUNT DE VERIES

THE reception of a foreign station on the broadcast band is a happy occasion for most DXers. For the neophyte, it is a sign that he is progressing along the road to DX efficiency; for the old-timer, it is a welcome addition to an ever-growing log. For every listener, it is usually the result of careful planning, skillful tuning and a measure of old-fashioned good luck.

While most of us are not fortunate enough to be located where signals from across the seas crowd our locals, nearly every listener has more than a few potential foreign catches playing on his aerial during the course of a winter season. The big question, then, is how to reach out and pull them through our speakers and phones.

It goes without saying, of course, that reasonably efficient equipment is a primary requisite for foreign reception. This does not necessarily mean that a listener must possess a fifteen or twenty tube set, although they are a big help in many cases. The average seven to ten tube receiver of recent vintage can do wonders if it is properly aligned, if its tubes are in good shape and if it is hooked to a good aerial.

The really essential point is the knowledge of when and where to tune. While many DXers believe that they know all the tricks of foreign tuning, many valuable tips may be picked up by a review of the problem.

The Antipodes

Foreign reception of the broadcast band is a seasonal affair. First to arrive this year will be the Australian and New Zealand stations. They will hit a peak in October and November, while March and April will be high spots next spring.

Because of the extreme distances over which these signals must travel, they are necessarily very weak when they reach our aeriels. This is a point which must be remembered, as care and patience in dialing are essential for good results. Since the signals are weak even at a maximum, a period of fading can easily make them inaudible. Therefore, if a station is not heard when first tuning to a certain frequency, it is usually a good idea to stick around a few minutes to see if they fade in again.

For all long distance reception, it is necessary to have darkness over as much as possible of the path traveled by the signal. Stations in New Zealand ordinarily make their bow each morning at about 0400 EST, when it is 2030 down there. It is then, but 1900 in Eastern Australia, so the Aussies are seldom heard until a little later. From then until daylight over here, the stations get stronger.

When trying for the broadcasters Down Under, it is a good idea to tune carefully for definite stations on certain frequencies. Then, if reception appears to be good, a certain amount of *fishing* will be in order. The following stations in Australia and New Zealand are recommended as having a good chance of being heard: In all station lists, the frequency in kilocycles is given first; followed by the call letters, if any; the power in kilowatts; and the location.

550	2CR	10	Cumnock, Ausl.
560	6WA	10	Minding, Ausl.
570	2YA	5	Wellington, N. Z.
580	3WV	10	Horsham, Ausl.
590	7ZL	1	Hobart, Ausl.
600	4QN	7	Cleveland, Ausl.
610	2FC	3	Sydney, Ausl.
630	3AR	4.5	Melbourne, Ausl.
640	5CK	7.5	Crystal Brook, Ausl.
650	1YA	10	Auckland, N. Z.
670	2CO	1	Corowa, Ausl.
690	6WF	3.5	Perth, Ausl.
700	2NR	7	Lawrence, Ausl.

720	3YA	10	Christchurch, N. Z.
730	5CL	2	Adelaide, Ausl.
740	2BL	3	Sydney, Ausl.
750	7NT	7	Kelso, Ausl.
770	3LO	3.5	Melbourne, Ausl.
790	4YA	10	Dunedin, N. Z.
800	4QG	2.5	Brisbane, Ausl.
830	3GI	7	Longford, Ausl.
870	2GB	1	Sydney, Ausl.
910	4RK	2	Rockhampton, Ausl.
950	2UE	1	Sydney, Ausl.
980	6AM	1	Northam, N. Z.
990	2GZ	2	Orange, Ausl.
1020	2KY	1	Sydney, Ausl.
1040	5PI	2	Port Pirie, Ausl.
1110	2UW	1	Sydney, Ausl.
1120	4BC	1	Brisbane, Ausl.
1190	2CH	1	Sydney, Ausl.
1220	4AK	1	Oakey, Ausl.
1230	2NC	2	Newcastle, Ausl.
1270	2SM	1	Sydney, Ausl.

This list of stations includes those which were reported regularly last season, as well as the more powerful of the new transmitters. For Pacific Coast listeners in favorable locations, a complete list of Aussies and Zedders was published in the October issue.

South America

Reception of South American stations provide a stiff test of DX skill. As these stations broadcast while our locals are on the air, the odds are against receiving very many of them. Occasional DX and test programs, similar to the Bureau of Standards tests last winter, are just about the only sure means of increasing one's log of SA's.

An increasing number of DXers, however, have found that the early evening hours may be happy hunting grounds for stations to the South. By tuning to the frequencies of the more powerful stations before the dominant local has reached a peak, it is often possible to pick up a station in Brazil or Argentina. For listeners with ultra-selective receivers, split-frequency tuning is often a fertile field.

South Americans worth watching are:

590	LS10	6	Buenos Aires, Arg.
600	PRH2	25	Porto Alegre, Brazil
630	LS3	5	Buenos Aires, Arg.
650	CX6	10	Montevideo, Uruguay
670	LS4	7	Buenos Aires, Arg.
681	HJN	5	Bogota, Colombia
710	LS1	5	Buenos Aires, Arg.
759	LR7	15	Buenos Aires, Arg.
	PRA8	3	Pernambuco, Brazil

780	LT1	4	Rosario, Arg.
	PRE7	5	Sao Paulo, Brazil
790	LR10	10	Buenos Aires, Arg.
810	PRA6	10	Sao Paulo, Brazil
820	PRH8	5	Rio de Janeiro, Brazil
830	LR5	29	Buenos Aires, Arg.
850	CX10	10	Montevideo, Uruguay
860	PRA3	2.5	Rio de Janeiro, Brazil
870	LR6	26	Buenos Aires, Arg.
900	PRF3	5	Sao Paulo, Brazil
910	LR2	12	Buenos Aires, Arg.
923	PRF4	10	Rio de Janeiro, Brazil
950	LR3	31	Buenos Aires, Arg.
990	YVIRC	5	Caracas, Venezuela
990	LR4	16	Buenos Aires, Arg.
1005	HJ3ABH	2	Bogota, Colombia
1017	PRB9	5	Sao Paulo, Brazil
1030	LR9	5	Buenos Aires, Arg.
1040	CP4	10	La Paz, Bolivia
1050	CX26	2	Montevideo, Uruguay
1070	LR1	50	Buenos Aires, Arg.
1080	LT3	4.5	Rosario, Arg.
1110	LS5	5	Buenos Aires, Arg.
1120	PRH3	10	Sao Paulo, Brazil
1150	LR8	7	Buenos Aires, Arg.
1190	LS2	30	Buenos Aires, Arg.
1220	PRE3	10	Rio de Janeiro, Brazil
1230	LS8	15	Buenos Aires, Arg.
1270	LS9	6	Buenos Aires, Arg.
	PRE5	7	Rio de Janeiro, Brazil
1295	PRA5	5	Sao Paulo, Brazil
1350	LS6	6	Buenos Aires, Arg.

This list is by no means complete, nor is it to be construed that the broadcasters noted will be heard. Rather, it is a short listing of the more powerful stations, and as such, it should be of value to the listener who likes to go fishing.

Trans-Atlantics

European stations, which are heard best in November, December and January, may be divided into two general classes—those which may be logged in the early evening, between 1700 and 1900 EST, and those which must be tuned in the early morning, between 0100 and 0300, EST. Therefore, for successful trans-Atlantic tuning, a knowledge of the stations' schedules is essential.

In the first class, we find the stations which broadcast until 2300 or 2400 and later GMT. They are the hardest to receive, since they must break through a barrier of domestic transmitters. However, shortly after dark and before the locals reach their peaks, listeners along the Atlantic Coast have had any number of good catches in this class.

The early-morning group includes the stations which sign on early for the day. Some of the Germans come

on at midnight EST, but they are seldom heard until 0100 or later. Between 0100 and 0200, many of the French and Italian stations commence broadcasting. By 0300 most of them have faded out.

In the following list of European stations, we are listing those which have been heard with fair regularity in the United States and Canada. When known, their times of sign-on and sign-off are given in Eastern Standard. This will enable DXers to decide when to tune for them.

546	HAL	120	Budapest, Hungary. Weekdays—0045-1815; Sunday—0315-1900.
556	.....	100	Beromunster, Switz. Weekdays—0600-1630; Sundays—0130-1630.
565	.....	60	Athlone, Ireland. Daily—0830-1800.
574	.....	100	Stuttgart, Germany. Daily—0000-2000.
583	.....	15	Grenoble, France. Daily—0300-1730.
592	.....	120	Vienna, Austria. Daily—0310—1900.
610	IIPI	20	Florence, Italy. Weekdays, 0130-1730; Sundays, 0310-1730.
629	CTIAA	20	Lisbon, Portugal. Daily 0700-1900.
633	OKP	120	Praha, Czech. Daily 0030-1730.
648	.....	90	Lyons, France. Daily 0215-1800.
658	.....	100	Cologne, Germany. Daily 0000-1800.
668	.....	70	Manchester (No. Reg.). Eng. Weekdays, 0515-1900; Sundays, 0730-1745.
677	.....	100	Sottens, Switz. Weekdays, 0630-1630; Sundays, 0355-1630.
695	.....	120	Paris, France. (PTT) Daily 0300-1800.
704	.....	55	Stockholm, Sweden. Weekdays, 0145-1700; Sundays, 0300-1700.
713	IIRO	50	Rome, Italy. Weekdays, 0130-1730; Sundays, 0335-1730.
740	.....	100	Munich, Germany. Daily 0000-1800.
749	.....	120	Marseilles, France. Daily 0245-1700.
767	.....	50	Falkirk, Scotland. (Scottish Regional) Weekdays, 0515-1900; Sundays, 0730-1730.
776	.....	120	Toulouse, France. (PTT) Daily, 0330-1730.
785	.....	120	Leipzig, Germany. Daily 0000-1800.
795	.....	7.5	Barcelona, Spain. Daily, 0215-1900.
804	.....	70	Cardiff, G. B. (West Regional) Weekdays, 0515-1900; Sundays, 0730-1745.
814	IIIM	50	Milan, Italy. Weekdays, 0130-1730; Sundays, 0330-1730.
823	.....	12	Bucharest, Romania. Weekdays, 0600-1730; Sundays, 0430-1830.
841	.....	100	Berlin, Germany. Daily 0000-1800.
859	.....	35	Strasbourg, France. Weekdays, 0545-1900; Sundays, 1630-1900.
877	.....	50	London, Eng. (London Regional) Weekdays, 0515-1930; Sundays, 0730-1745.

904	.....	100	Hamburg, Germany. Daily 0000-1800.
913	.....	60	Toulouse, France. Daily 0300-1930.
932	.....	15	Brussels No. 2, Belgium. Weekdays, 0700-1900; Sundays, 0500-1900.
950	.....	100	Breslau, Germany. Daily 2300-1800.
959	.....	60	Paris, France. (Poste Parisien) Daily 0210-1800.
968	.....	30	Bordeaux, France.
977	.....	100	Belfast, Ireland.
995	.....	60	Hilversum, Holland. Daily 2300-1800.
1004	.....	13.5	Bratislava, Czech. Daily 0030-1730.
1013	.....	70	Davenport, England. (Midland Regional) Weekdays, 0545-1815; Sundays, 1130-1745.
1031	CTIGL	5	Paredo, Portugal
.....	.....	100	Konigsburg, Germany. Daily 0000-1800.
1040	.....	120	Rennes, France. Daily 0300-1730.
1050	.....	50	Falkirk, Scotland. (Scottish National) Weekdays, 0545-1815; Sundays, 1130-1745.
1059	IIBA	20	Barl, Italy. Weekdays, 0130-1730; Sundays, 0335-1730.
1077	.....	30	Bordeaux, France. Daily 0300-1730.
1095	EAJ7	10	Madrid, Spain. Daily 0300-1900.
1113	OKK	11.2	Moravska, Czech. Daily 0030-1730.
.....	.....	10	Pecamp, France. (Radio Normandie) Daily 0200-2100.
1131	SBH	10	Horby, Sweden. Weekdays, 0145-1700; Sundays, 0300-1700.
1167	.....	15	Mt. Ceneri, Switz. Weekdays, 0600-1700; Sundays, 0430-1630.
1185	.....	60	Nice, France.
1195	.....	25	Frankfurt, Germany. Daily 0000-2000.
1213	.....	60	Lille, France. (Radio PTT Nord) Daily 0300-1730.
1222	.....	50	Bologna, Italy. (Radio Marconi)
1276	.....	27	Juan-les-Pins, France. (Radio Cote d'Azur)
1393	.....	25	Lyons, France.

The Far East

Stations in Japan, China and other Far Eastern countries are frequently heard on our West Coast, although their signals seem to have a difficult time crossing the Rockies. When audible, their signals are best heard in November, December and January between 0500 EST and daylight.

The following list of Far East stations include the more powerful broadcasters which have been reported from time to time.

560	MTCY	100	Hsinking, Manchoukuo
560	XGOH	10	Chengtu, China
590	JOAK2	10	Tokyo, Japan
610	JODK2	10	Seoul, Korea
618	KZRM	50	Maula, P. I.
660	XGOA	75	Nankang, China
670	JFAK	10	Taihoku, Formosa
750	HS7PJ	15	Bangkok, Siam
750	JOBK1	10	Osaka, Japan

770	JOHK	10	Sendai, Japan
790	JOGK	10	Kumamoto, Japan
810	JOCK1	10	Nagoya, Japan
830	JO1K	10	Sapporo, Japan
840	F31CD	12	Saigon, Fr. Indo China
850	JOFK	10	Hirshima, Japan
900	JODK1	10	Seoul, Korea
1010	XGOW	5	Hangchow, China
1085	JOBK2	10	Osaka, Japan
1170	JOCK2	10	Nagoya, Japan

The Dark Continent

American reception from Africa is as near a complete blank as may be had in radio. Only on the Atlantic seaboard have listeners been fortunate to tune in these stations, and reports are few and far between. Algiers, Algeria, on 941 kcys with 12 KW appears to be the best bet. Their schedule calls for transmissions between 0800 and 1800 EST, but it is only just before dark that they may be heard. The Rabat, Morocco, station on 601 kcys, with 25 KW power, is infrequently reported at the same time as Algiers. Cairo, Egypt, 620 kcys, 20 KW, is the only other North African station with a chance of being heard, but no reports of them have been received.

In the Union of South Africa, there are four 10 KW stations which might be heard in the fall and spring. They are: ZTC, Cape Town, 600 kcys; ZUG, Grahamstown, 560 kcys; ZTJ, Johannesburg, 645 kcys; and Martziburg, 750 kcys (no call known).

In Conclusion

The only successful way to tune foreign stations in any part of the world is to consider the season of the year and the time of day in which to tune. Pick out the more powerful stations, dial their frequencies at the proper time, and see what happens. If a signal isn't heard, wait around a few minutes on the chance that it may have faded out when you tuned in. If the larger stations are found to be coming in well, try for a few of the medium power broadcasters. The whole process of dialing should be systematic—tuning for definite stations at specified hours of the day.

When the orderly "spot tuning" has brought results, the DXer may try

some "fishing." Running up and down the broadcast band, he may stop at audible carriers and see what is there. This type of tuning, however, is bound to miss a large percentage of weak signals and should only be used when going after something out of the ordinary.

Tuning the AMATEURS

• • • B. L. AHMAN, JR.
N. N. R. C. Publicity Director

A LARGE number of shortwave fans are becoming interested in listening to the amateur transmissions. Those who have tuned for several seasons have turned to these bands looking for new DX, countries not heard on the regular broadcasting bands, while the beginner turns to them as they offer the easiest way to quickly build up a log. This initial column shall be addressed to those s.w. fans who have not yet tried the "hams."

Roughly, the amateur bands are on 10, 20, 40, 80 and 160 meters. Phone is used on each band except that United States operators are not permitted to use phone on 40 meters. For DX, however, the 20 meter band between 14000 and 14300 kcs. is the most consistent for worldwide work and it holds up quite well for the entire year. Since local conditions determine the amount of success anyone might have, it is difficult for any writer to give a definite list of stations which any reader may try for, but by sifting numerous reports from tuners in all parts of the country an excellent idea may be obtained of what might be expected.

Following is a list of the ten most consistently received amateurs that will verify for an International Reply Coupon. Tune for them and write to them.

1. G5NI, Bill Nightingale, Beaks Hill Road, Kings Norton, Birmingham

ham, England. This station is on 14087 kcs. and is heard nearly every night from 1700-2000 EST.

✓ 2. HH2B, Gertrude Bleo, Box G, Port-au-Prince, Haiti. She uses a frequency of 14140 kcs. and was heard between 2100 and 2300 during the summer but will probably be on the air earlier this winter.

✓ 3. NY2AE, U. S. Submarine Base, Coco Solo, Canal Zone, uses a power of 700 watts on various frequencies in the 20 meter band but is so loud that it is never difficult to locate it. It is heard usually commencing at 1:30 EST and continuing until the early morning hours.

4. HI5X, Walter Fox, Boca Chica, Dominican Republic, a 100 watt station on 14090 kcs. heard with a loud, clear signal after 1900.

5. CE1BC, John N. Pyster, Barquito Chanarel, Chile. He uses 130 watts on 14050 kcs., speaking in Spanish and English nearly every night between 2000 and 2400.

6. COGOM, Frank H. Jones, Tuinicu, Cuba. This station is operated by one of Cuba's radio pioneers; has a powerful signal on 14260 kcs.

✓ 7. VP6YB, Thomas A. Archer, Claradon, Pine Road, Barbados. This station is heard best after 1900, EST. Two frequencies are used, 14180 and 14275 kcs. The power is 85 watts.

8. PY2CK, Santos, Brazil, Caixa Postal 317. This station uses a frequency right under G5NI but a good receiver will separate them. He uses excellent English but constantly apologizes for his accent.

9. G6XR, Henry V. Cook, 78 Wyken Ave., Wyken, Coventry, Warwickshire, England. The frequency of this station is about 14125 kcs. and he usually works from 1730 until midnight. He is a good talker and replies promptly.

✓ 10. HI7G, H. H. Goslin, Calle Cesar Nicolas Pensan, Ciudad Trujillo, D. R., works very close to HI5X in frequency. His hours are nightly from 1730 to 2300. This station promptly replies with an attractive QSL card.

These are what we consider the ten leading amateur stations at the present time. If readers would like a continuation of this amateur discussion, with bigger and better stations tabulated each month, send a card or a letter to the Shortwave Editor or direct to Mr. Ahman.

Around the World of Radio

OF VITAL interest to the broadcasters, the radio industry and the listeners is the hearing scheduled by the Federal Communications Commission for October 5th. As a means of considering possible re-allocation of the broadcast spectrum, the Commission plans to survey technical broadcasting problems and to seek from stations advance information as to what improvements, if any, should be made in the present allocation.

The theme behind the hearings is that developments since the last allocations in 1928 make desirable a realignment of the broadcast band. It is felt that engineering advances have been such that it may be necessary to shift stations to procure maximum benefits from available facilities.

Questions to be considered include super power of the WLW variety, horizontal increases in station power in the regional and local categories, duplication on clear channels and their reduction, and the setting up of a new classification of stations in the 1500-1600 kcys band.

As a part of the hearings, the Engineering Division of the FCC is expected to introduce the results of its clear-channel survey showing reception results of stations throughout the country. It is believed that this survey may disclose the advisability of reducing the number of clear channels from the theoretical 40 to 20 or 25.

Of interest to most listeners is the matter of super-power broadcasting. Hearings on the applications of WHO, KNX, WJZ, WGN, KDKA, WJR, KFI, WSM, WHAS and WBZ for authority to use 500,000 watts, previously scheduled for September 24th, have been postponed indefinitely. This is believed to be the result of protests on the ground that FCC regulations, which now specify a maximum power of 50,000 watts, should be amended before individual applications should be considered. It is also likely that the Commission decided to await the outcome of the hearings and learn the general sentiment concerning super-power broadcasting.

Europeans Boost Power

While the United States debates general power increases, European stations continue to add kilowatts. A survey by *Wireless World* indicates that the total power of European stations will increase by 1700 kilowatts to attain a total of 8000 KW in 1937.

The number of 100 KW stations will be boosted from 26 to 44 during the year, while the number using more than 50 but less than 100 KW will jump from 46 to 64.

In the medium and long wave groups, the following increases are expected: Athlone, 60 to 100 KW; two Brussels stations from 15 to 100 KW; Kuanas, Lithuania, 7 to 100 KW; a new 100 KW station in Southern Sweden, a new 100 KW station at Vakarel, Bulgaria; two new 120 KW stations at Rome; Praha II from 5 to 60 KW and a new 60 KW station near Kosice; two 120 KW stations, one near Bordeaux and the other near the center of France; and a new 200 KW long wave transmitter to replace the 80 KW Radio-Paris and to be called Poste National. All are now under construction.

Spain is said to be planning to modernize its set-up with a 150 KW long wave station at Madrid. Yugo-

Midwest For Sale

For Sale—1935 Midwest All-wave. Sixteen tubes, 10 new. Verified reception from all continents on BCB. WAC on SW. Extras: Built-in phone jack, phone adapters, 20,000-ohm phones, spare tubes. Beautiful two-tone walnut organ-style console. Full price \$50. Robert R. Rawstron, 16 Marconi Road, Worcester, Mass.

slavia talks of increasing the power of all present transmitters. Warsaw is to build a 20 KW station and a new 100 KW transmitter is planned near Cracow. Czechoslovakia contemplates two 100 KW stations in 1938 and a British station is reported to have received a contract calling for the construction of a new Estonian station. Russia, believed to have 50 broadcasters, is understood to be planning five more in 1937.

In the short wave field, France is building four 100 KW transmitters. Germany is completing four powerful stations and Great Britain is embarking on further high frequency development. Germany is also understood to be constructing a "mystery" super-power Deutschlandsender to be in operation next year.

Direct broadcasting to foreign listeners is increasing in Europe, with Italy taking the lead. Il Duce's stations broadcast to the world in 18 languages last year and received nearly 60,000 letters from foreign listeners.

Canada Follows Suit

With the opening this fall of a new 5000 watt transmitter for CRCV, Vancouver, the Canadian Radio Commission takes another step forward towards better service for Canadian listeners.

The new equipment, contract for which has already been let, will be built on recently-purchased property on Lulu Island. The single 400 foot tower incorporates the latest advances in antenna design and is the

first of its type in Canada. More than 50,000 feet of buried wire will make up the ground system.

The transmitter itself is of standard design, but is being modified extensively to be ready for future developments. It will feed the antenna through a concentric transmission line, said to be the most modern and effective type known today.

German Television Service

What is claimed to be the first public television-telephone service in the world was officially opened at Leipzig on May 25th. The service is conducted over a specially constructed cable between this city and Berlin. Satisfactory tests of the apparatus were made in connection with the last Leipzig Spring Fair, but a certain amount of experimentation was considered necessary before the facilities could be placed permanently at the disposal of the public.

For each television conversation up to three minutes, a fee of three marks (\$1.20 at current rate of exchange) is charged, with an additional charge of Rm 0.50 (\$0.20) for getting specific parties to the apparatus.

THE MONTH'S CHANGES IN STATION DATA

NEW

820 XEBZ Mexico City, D. F.

POWER

570	WSYR	Syracuse, N. Y.	1000 from 250
580	WILL	Urbana, Ill.	250 from 1000
830	WPRO	Providence, R. I.	500 from 250
680	CMCG	Havana, Cuba,	1000 from 150
	WPTF	Raleigh, N. C.,	1000 from 5000
890	WMMN	Fairmont, W. Va.,	500 from 250
940	WHA	Madison, Wis.,	5000 from 2500
1000	CMBZ	Havana, Cuba,	500 from 150
1030	CMCY	Havana, Cuba,	5000 from 1000
1120	CMKM	Manzanillo, Cuba,	200 from 50

FREQUENCY

720	XEH	Monterrey, N. L.,	from 1150
780	XEPN	Piedras Negras, Coah.,	from 590
960	CFRN	Edmonton, Alta.,	from 1260
1160	XED	Guadalajara, Jal.,	from 1155
1280	CMCU	Havana, Cuba,	from 1460
1390	CJGX	Yorkton, Sask.,	from 580
1450	XEF	Juarez, Chih.,	from 980

Let The Wind Run Your Radio

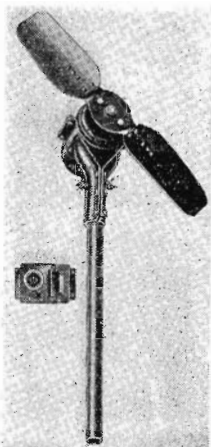
WHEN Don Quixote opened his one-man warfare against windmills, away back in the sixteenth century, he might have deprived us of a new way of running our battery radios. For ages the wind has been pumping water and turning mills, as well as behaving in less friendly attitudes. But now, if you live in the rural sections of this land and are compelled to use battery sets, the wind can be utilized to keep your batteries charged at all times.

The device which makes this possible is called a "Wincharger." It is really just a tiny windmill, or propeller blade, that drives a direct connected generator. Of course, there might sometimes be a slight hiatus when the breezes die down or a calm persists too long, but if the battery has been well charged it will carry over during the non-charging period. The whole thing is not unlike your automobile battery system—running keeps the battery automatically charged.

The Wincharger

As long as there is a breeze the charger runs and will keep any high-ampereage 6-volt battery fully charged. An automatic switch cuts in as the generator current reaches the charging rate when a breeze springs up, and if the radio does not pull too heavily on the battery continuous service will be rendered. When the wind is not sufficient to generate a suitable current, the charger automatically is cut off from the battery.

The manufacturer of this remarkable charger makes a number of types. In localities where prevailing breezes are rather constant, such chargers are very useful and solve a problem in isolated regions that has long bothered battery-set owners.



This wind-driven generator keeps your storage battery up. The device shown to the right is an ammeter which can be installed on the instrument panel of the car if the windcharger is used on a trailer.

There is a charger that can be attached to the top of an automobile trailer for the radio, and this relieves the car battery of a serious drain. In this case the motion of the car creates its own breeze for the little propeller. It also may be placed on boats.

(Details and prices of these sturdy units may be obtained by writing and mentioning RADEX. Communicate direct with the Wincharger Corporation, 2700 Hawkeye Drive, Sioux City, Iowa.)

Rumors concerning WHK and WGAR in Cleveland were stifled when WHK renewed its contract with CBS. It was thought in some quarters that WGAR, NBC-Blue outlet in Cleveland, would join its sister station, WJR of Detroit (both are owned by the Richards-Fitzpatrick interests) on the CBS. If this had occurred WHK would have gone NBC. The new contract between CBS and WHK is for three years.

Who's Who on the Airways

• • • By "BETTY"

FROM obscurity to fame overnight is the story of Jimmy Newell, new CBS tenor. He tried to break into pictures ever since he could walk but the best he could do was "dub" for voiceless film stars. Then he was engaged on twenty-four hours' notice by Eddy Duchin for the current Burns and Allen series. Overnight the scene changed; Warner Brothers, Fox and Paramount all began to bid for his services, but Jimmy says he will stick to radio. Newell is over 6 feet tall, weighs 185 pounds, is well built and good looking.

A new Tuesday night program on the NBC features authentic western ballads sung by real westerners. Followers of the Show Boat Programs have found their old friends Louise Massey and her Westerners starring in their own program this fall, the Log Cabin Bar Z Ranch. This spot should be an easy one for these entertainers to act because Louise and three of the Westerners come from a ranch in Lincoln County, New Mexico, and another of the cast spent his boyhood on cattle ranches in the Southwest. The new program is heard at 8 pm Tuesdays on the NBC-Blue.

Wendell Hall, the Red Headed Music Maker, and Milton Berle, comedian, share honors on the new Gillette Community Sing program. This is Berle's first big network assignment as a matter of ceremonies, but Hall has been starring as an entertainer on the Columbia Network off and on since 1929.

In vaudeville, before his radio days, he was billed as the Singing Xylophonist. Fifteen years ago, 1921 to be exact, Wendell Hall played the xylophone for a Chicago station, but one day he took a ukelele along

to work instead and sang a little ditty he wrote himself. It was "It Ain't Gonna Rain No More," a song that has sold two million records and one million copies of sheet music. This, however, is not the only song he ever wrote; 367 of his more than 500 songs have been published.

Kate Smith is now heard in her Bandwagon Variety Show with Babe Ruth. The Babe is no stranger to radio, but of course he has always talked about baseball on his radio appearances. One day while playing golf Kate met the Bambino and he confessed to her that he would rather be a comedian than talk baseball, so Kate gave him his chance. Before Miss Smith became a radio star her vocal talents were considered secondary to her antics as a comedienne. Listen for this team at 8 pm Thursday on the CBS.



Here is a Hollywood girl who doesn't want to be a picture star. Trudy Wood, a twenty-year-old miss, has already spurned four film offers in order to stick to the work she likes best. She is heard on Fred Astaire's Packard Hour on Tuesdays at 9:30 pm, EST.

In celebration of its Tenth Anniversary, the National Broadcasting Company has planned many outstanding programs for November. Complete details are lacking now, but it is understood that late in the month a massive two-hour program will be broadcast during which every country in the world will be heard. Short-wave fans should be on the lookout for preliminary tests preceding this program.

A true story from the CBS. Out of the mass of anecdotes accumulated since Columbia's Community Sing series was started comes a tale of a Pawtucket, R. I., lady who is hard of hearing. Like many other listeners she likes to sit at her set and sing along with the 1000 voices in the CBS Playhouse in New York, but she had to tune her set high in volume in order to hear the program. Neighbors were prompt to complain and the police came. Then someone told Irving Kaufman, the director of the program, about her plight. He arranged to have earphones installed in her set and now everything is serene

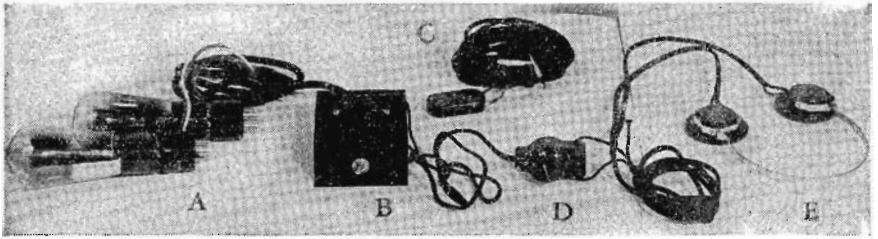
in Pawtucket. Moral: With the Perfect Phone Adapter you can listen in comfort and not disturb anyone.

* * *

Starlines . . . "Scoop Ward" in "News of Youth" on the CBS is really Laddie Seamon . . . is only nineteen years old . . . has been in radio for nine years . . . has appeared in the "American School of the Air" and "The March of Time" . . . has been a writer and a reporter and in his spare time is a painter and an expert at the foils . . . has two pets, a cat named "Cat" and dog named "Dog."

* * *

Walter Woolf King and Frank Crumit have been made Admirals of the Great Lakes Exposition at Cleveland, Ohio. To prove their rank they were presented with scrolls of commission and crowned with honest-to-goodness admiral's hats.



The "Perfect" Phone Adapter

You can install it yourself in just a minute or two without tools, and it cannot harm the set in any way. The speaker can be silenced while the 'phones are being used. Price postpaid\$3.95

With the Distant Volume Control (D) you can control the volume of the speaker from your easy chair. Useful for cutting out advertising "blurbs." Price\$2.00

Featherweight, 24,000-ohm headphones are the finest and most sensitive made. They weigh only 4 ounces. Yours for only\$8.05

*All prices postpaid. If you live in Ohio
add 3% for State Sales Tax.*

*In ordering be sure
to give make and model
of receiver and a
list of the tubes used.*

**The Radex Press
Conneaut, Ohio**

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 WDRC WEAN
 WFBL WGR WHEC WOKO

E-6:45 p.m., C-5:45, M-4:45, P-3:45
C — Rentrow of the Mounted
 KPAB KFH KLRA KMBC KMOX
 KOMA KRLL KRNT KSCJ KTUL
 KWKH WABC WADC WBBM WBNS
 WCCO WDRC WFBM WGR WHEC
 WHK WIBX WICC WISN WJR
 WJSV WKBN WJAS WMBG WNAC
 WNBH WOC WREC WSMK WSPD
 WWVA

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
R — Amos 'n' Andy
 KYW WHEB WCAE WCSH WFEAF
 WEEI WFBR WGY WJAR WLW
 WRC WTAG WTIC

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C — Popeye the Sailor
 KPAB KLZ KMBC KMOX KRNT
 KSL WABC WADC WBBM WBNS
 WCAO WCAU WDRC WEAN WFBL
 WFBM WGR WHAS WHEC WHK
 WIBX WICC WJAS WJSV WKRC
 WNAC WOC WOKO WORC WSMK

R — Uncle Ezra's Radio Station
 KPRC KTBS KTBS KVOO KYW
 WBAP WBEW WCAE WCKY WCSH
 WDAF WDAF WEEI WFBR WGY
 WHH WIRE WJAR WKY WMAQ
 WQAI WOOD WOV WRC WTAG
 WTAM WTIC

E-7:30 p.m., C-6:30, M-5:30, P-4:30
C — Goose Creek Parson
 KPAB KMBC WABC WBBM WBNS
 WBT WCAO WCAU WDAE WDBJ
 WDBO WDRC WEAN WFBL WGR
 WGST WHEC WHK WICC WJAS
 WJR WJSV WKRC WLZB WMBG
 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 KRLL WABC
 WBBM WBT WCAO WCAU WCCO
 WDRC 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 KPAB KFBK KFH
 KFPY KPRC KGB KHJ KLRA KLZ
 KMBC KMJ KMOX KOIN KOL
 KRLL KRNT KSL KTRH K TSA
 KTUL KVI KWG WABC WBBM
 WBRW WBT WCAO WCAU WCCO
 WDRC WFBL WFBM WGR WGST
 WHAS WHK WJAS WJR WJSV
 WKRC WLAC WMBR WNAC WNAW
 WNOX WROC WWL

R — Fibber McGee and Molly
 KSD KYW WBEW WCAE WCKY
 WCSH WDAF WFAF WEEI WFBR
 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 WFBY
 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
 KPAB KMBC WABC WADC WBBM
 WBT WCAO WCAU WDRC WEAN
 WFBL WGR WGST WHEC WHK
 WHP WICC WJAS WJR WJSV
 WKRC WLZB WMAS WNAC WOKO
 WORC WSPD

R — Voice of Firestone
 CFCE CRCT KFYZ KPRC KSD
 KSTP KTBS KVOO KYW WAVE
 WREN WCAE WOSC WCSH WDAF
 WDAY WFAF WFCB WEEI WFAA
 WFCB WFBR WFLA WGY WHO
 WHIO WIBA WIOD WIRE WIS
 WJAR WJAX WJDX WKY WMAQ
 WMC WOAI 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

WBZA 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 KPAB
 KFBK KFPY KPRC KGB KHJ
 KLRA KLZ KMBC KMJ KMOX
 KOIN KOL KOMA KRLL KRNT
 KSL KTRH K TSA KTUL KVI KWG
 WABC WADC WBBM WBNS WBRW
 WBT WCAO WCAU WCCO WDAE
 WDBJ WDRC WEAN WFBL WFBM
 WFTS WHEB WHEC WHK WICC
 WISN WJAS WJR WJSV WKBW
 WKRC WLAC WNAC WNAW WNOX
 WORC WQAM WREC WWL

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

B — Sinclair Greater Minstrels
 KDKA KDYL KFYZ KOA KOIL
 KPRC KSO KSTP KTBS KTBS
 KVOO KWK WBAL WBZ WBZA
 WDAY WFCB WFAA WFLA WGAR
 WHAM WIBA WIOD WIS WJAX
 WJDX WJZ WKY WLS WLW WMAL
 WMC WMT WOV 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
 KFYZ KPRC KSD KSTP KTBS
 KVOO KYW WBEW WCAE WCSH
 WDAF WDAY WFAF WFCB WFAA
 WFBR WGY WHO WIBA WJAR
 WKY WLW WMAQ WOAI WOV
 WRC WTAG WTAM WTIC WTMJ
 WWJ

E-10:00 p.m., C-9:00, M-8:00, P-7:00
R — Contented Program
 CFCE CRCT KDYL KFI KGW
 KHQ KOA KOMO KPO KPRC KSD
 KYW WBEW WCAE WCSH WDAF
 WFAF WEEI WFBR WFLA WGY
 WHO WIOD WIS WJAR WJAX
 WKY WMAQ WMC WOAI WOV
 WPTF WRC WRVA WSB WSM

MONDAY (Continued)

WTAG WTAM WTAR W TIC WWJ
WNNC

C — Wayne King and Orchestra
KDB KERN KFAB KFBK KFPY
KPRC KGB KHJ KLZ KMBC
KMJ KMOX KOIN KOL KRNT
KSL KVI KWG WAAB WABC
WADC WBBM WBNS WBT WCAO
WCAU WCCO WDRS WEAN WFBL
WFBM WHAS WHK WIBW WJAS
WJR WJSV WKBW WKRC WOKO
WSPD WWL

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

C — The March of Time
KDB KERN KFAB KFBK KFPY
KPRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KRLL KRNT
KSL KVI KWG WABC WADC
WBBM WBT WCAO WCAU WCCO
WDAE WDBO WDRS WEAN WFBL
WFBM WGST WHAS WHEC WHK
WJAS WJR WJSV WKBW WKRC
WNAC WOKO WQAM WSPD WWL
(This program may go off the air.)

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

C — Goose Creek Parson
KDB KERN KFBK KFH KFPY
KPRC KGB KHJ KLRA KLZ KMJ
KOIN KOL KOMA KRLL KRNT
KSL KTRII K TSA KTUL KVI KWG
KWKH WBRW WCCO WFBM WHAS
WISN WLAC WREC WWL

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

C — Dance Orchestra
CFRB CKAC WAAB WABC WADC
WCAO WCAU WDRS WFBL WFEA
WHEC WHK WIBX WJAS WKBN
WKBW WLZB WMSA WOKO WORC
WPG WSBT WSPD

R — Amos 'n' Andy

KDYL KFI KGW KHQ KOA KOMO
KPO KPRC KSD WBAP 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 KPRC
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 WBRW WBT
WCAO WCAU WDAE WDBJ WDBO
WDNC WDOD WDRS WEAN WFBL
WFBM WFEA WGST WHAS WHEC
WHK WIBX WICC WJAS WJR
WJSV WKBW WKBW WKRC WLAC
WLZB WMSA WMBG WMBR WNOX
WOKO WORC WQAM WREC WSBT
WSJS WSMK WSPD WTCO

C — Pick and Pat

KDB KERN KFBK KFPY KPRC
KFB KGKO KHJ KLRA KLZ KMJ
KMOX KOIN KOL KOMA KRLL
KRNT KSCJ KSL KTUL KVI KWG
KWKH WACO WABC WCCO 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
WDRS WEAN WFBL WHK WIBX
WICC WJR WKBW WLZB WNAC
WOKO WORC WWVA

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

S — Lowell Thomas, See Monday

C — Renfrew, See Monday

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

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

C — Ted Husing Sportcast

WABC WADC WBIG WBNS WBT
WCAO WCAU WDAE WDBJ WDBO
WDRS WFBL WGR WGST WHEC
WHK WHP WIBX WICC WKBN
WMAS WMBG WMBR WNBFB
WOKO WORC WQAM WSJS WTCO
WWVA

R — Voice of Experience

KDYL KFI KFYR KGW KHQ KOA
KOMO KPO KSD KSTP KYW WBN
WCAE WCSH WDAF WDAY WFAF
WHEC WHEI WFBR WGY WHO
WIBA WJAR WLW WMAQ WOW
WRC WTAG WTAM W TIC

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 WDRS
WEAN WFBL WFBM WGR WHAS
WHK WJAS WJR WJSV WKRC
WMAS WNAC WOKO WSPD

R — Leo Reisman and Orchestra

KFYR KPRC KSD KSTP KTBS
KVOO KYW WBAP WBN WCAE
WCSH WDAF WDAY WFAF WEEI
WFBR WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WJDX
WKY WLW WMAQ WOW WPTF
WRC WRVA WSOB WTAG WTAM
WTAR W TIC WT MJ WWJ WNNC

B — Log Cabin Bar Z Ranch

KDKA KOIL KSO KWK WBAL
WBZ WBZA WFIL WGAR WHAM
WIRE WJZ WLS 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 GRCM KFAB KFH KLRA
KMBC KMOX KOMA KRLL KRNT
KSL KTRH K TSA KTUL WABC
WADC WBBM WBNS WBRW WBT
WCAO WCAU WCCO WDAE WDBJ
WDRS WEAN WFBL WFBM WGR
WGST WHAS WHEC WHK WICC
WISN WJAS WJR WJSV WKRC
WLAC WMAS WMBD WMBG
WNAC WNAX WOKO WORC WQAM
WREC WWL

R — Wayne King and Orchestra

KFYR KPRC KSD KSTP KTBS
KVOO KYW WAVE WBAP WBN
WCAE WCKY WCSH WDAF WDAY
WFAF WHEC WHEI WFBR WGY
WHO WHIO WIBA WIRE WJAR
WJDX WKY WMAQ WMC WOAI
WOW WRC WSB WSMB WTAG
WTAM W TIC WT MJ 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 KRLL
KRNT KSCJ KTRH K TSA KTUL
KWKH WABC WACO WADC WALA
WBBM WBIG WBNS WBRW WBT
WCAO WCAU WCCO WDAE WDBJ
WDBO WDNC WDOD WDRS WEAN
WFBL WFBM WFEA WGST WHAS
WHEC WHK WHP WIBW WIBX
WICC WISN WJAS WJR WJSV
WKBW WKBW WKBW WKRC
WLAC WLZB WMSA WMBD WMBG
WMBR WMMN WNAC WNAX
WNFB WNOX WOC WOKO WORC
WOWO WPG WQAM WREC WSBT
WSPA WSJS WSPD WTCO WWL

R — Vox Pop; Sidewalk Interviews

KSD KYW WBN WCAE WCKY
WCSH WDAF WFAF WEEI WFBR
WGY WHO WHIO WIRE WJAR
WMAQ WOW WRC WTAG WTAM
W TIC WWJ

B — Ben Bernie and Orchestra

KDKA KDYL KFI KFSD KFYR
KGW KHQ KOA KOIL KOMO KPO
KPRC KSO KSTP KTAR KTBS
KVOO KWK WAVE WBAL WBAP
WBZ WBZA WDAY WHEC WFIL
WFLA WGAR WHAM WIBA WIOD
WIS WJAX WJDX WJZ WKY WLS
WLW WMAL WMC WMT WOAI
WPTF WREN WRVA WSB WSM
WSMB WSOB WSYR WTAR WT MJ
WNNC WXYZ

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

C — Camel Caravan

KDB KERN KFAB KFBK KFH
KFPY KPRC KGB KGKO KHJ
KLRA KLZ KMBC K MJ KMOX
KOH KOIN KOL KOMA KRLL
KRNT KSCJ KSL KTRH K TSA
KTUL KVI KVOR KWG KWKH
WABC WACO WADC WALA WBBM
WBIG WBNS WBRW WBT WCAO
WCAU WCCO WDAE WDBJ WDBO
WDNC WDOD WDRS WEAN WFBL
WFBM WFEA WGST WHAS WHEC
WHK WHP WIBW WIBX WICC
WJAS WJR WJSV WKBW WKBW
WKRC WLAC WLZB WMSA WMBD
WMBG WMBR WNAC WNAX
WNOX WOKO WORC WOW WPG
WQAM WREC WSBT WSPA WSJS
WSPD WTCO WWL

R — Fred Astaire; Johnny Green

CRCT KDYL KFI KFYR KGW
KHQ KOA KOMO KPO KPRC KSD
KSTP KTBS KTBS KVOO KYW
WAVE WBAP WBN WCAE WCKY
WCSH WDAF WDAY WFAF WHEC
WEEI WFBR WFLA WGY WHO
WHIO WIBA WIOD WIRE WIS
WJAR WJAX WJDX WJZ WMAQ
WMC WOAI WOW WPTF WRC
WRVA WSM WSMB WSOB WTAG
WTAM WTAR W TIC WT MJ WWJ
WNNC

B — Husbands and Wives

KECA KEX KFSD KGA KGO KJR
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

C — March of Time, See Monday

TUESDAY (Continued)

E-11:00 p.m., C-10:00, M-9:00, P-8:00
C — Dance Orchestra
CKAC WAAB WABC WADC WCAO
WCAU WDRC WFBL WFEA WHEC
WHK WIBX WJAS WJSV WKBW
WLBZ WMAS WOKO WORC WSPD
WSPD

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 CKAC KLRA KSCJ WAAB
WABC WADC WALA WBBM WBNS
WBRC WBT WCAU WCCO WDAE
WDBJ WDBO WDNC WDOJ WDRC
WEAN WFBL WFBM 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 WRCB WSPD
WSJS WSMK WSPD WTOC

R — Leo Reisman and Orchestra
KDYL KFI KFSD KGHL KGIR
KGW KHQ KOA KOMO KPO KTRAR

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
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
KFRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KRLL KRNT
KSL KVI KWG WABC WBBM
WBNS WCAU WCAU WCCO WDRC
WEAN WFBL WFBM WGR WHAS
WHEC WHK WJAS WJR WJSV
WKRC WLAC WMBG WNAC WOKO
WTOC WWL

B — Folies de Paree
KDKA KOIL KSO KWK WBAL
WBZ WBZA WCKY WFIL WGAR
WHAM WHIO WIRE WJZ WLS
WMAL WMT WREN WSYR WXYZ

R — One Man's Family
KDYL KFI KFIR KGW KHQ KOA
KOMO KPO KPRC KSD KSTP
KTRAR KTBS KTHS KVOO KYW
WAPI WAVE WBAP WBEN WCAE
WCSH WDAF WDAY WEAF WECB
WEEI WFAA WFBR WFLA WGY
WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WOAI 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

CKAC KFAB KFH KLRA KMBC
KMOX KOMA KRLL 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 — Lavender and Old Lace
KDKA KOIL KSO KWK WBAL
WBZ WBZA WFIL WGAR WHAM
WJZ WLS 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 KFRC KGB KGKO KGMB
KHJ KLRA KLZ KMBC KMJ
KMOX KOH KOIN KOL KOMA
KRLL KRNT KSCJ KSL KTRH
KTSa KTUL KVI KVOR KWG
KWKH WABC WACO WADC WALA
WBBM WBIG WBNS WBRC WBT
WCAO WCAU WCCO WCOA WDAE
WDBJ WDBO WDNC WDOJ WDRC
WEAN WFBL WFBM WFEA WGST
WHAS WHEC WHK WHP WIBW
WIBX WICC WISN WJAS WJR
WJSV WKBW WKBW WKRC WLAC
WLBZ WMAS WMBD WMBG
WMBR WNAC WNAX WNBX WNOX
WOC WOKO WORC WOWO WPG
WQAM WREC WSFA WSJS WSPD
WTOC WWL

R — Town Hall Tonight

KFYR KPRC KSD KSTP KTBS
KTHS KVOO KYW WAVE WBEN
WCAE WCSH WDAF WDAY WEAF
WEGE WEEI WFAA WFBR WFLA
WGY WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WOAI WOW WPTF WRC WSB
WSM WSMB WSOC WTAG WTAM
WTAR WTIC WT MJ 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 KFRC KGB KGMB KHJ
KLRA KLZ KMBC KMJ KMOX
KOH KOL KOMA KRLL 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 WJSV
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 KFRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOIN KOL
KOM A KRLL KRNT KSL KTRH
KTSa KTUL KVI KWG KWKH
WABC WACO WBBM WBNS WBRC
WBT WCAO WCAU WCCO WDAE
WDBJ WDBO WDRC WEAN WFBL
WFBM 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 KFIR KGHL
KGIR KGU KGW KHQ KOA KOMO
KPO KPRC KSD KSTP KTRAR
KTBS KTHS KVOO KYW WAVE
WCAE WCSH WDAF WDAY
WEAF WECB WFAA WFBR WFLA
WGY WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WNAC WOAI WOW WPTF
WRC WRVA WSB WSM WSMB
WSOC WSUN WSYR WTAG WTAM
WTAR WTIC WT MJ WWJ WWNC

E-10:30 p.m., C-9:30, M-8:30, P-7:30
C — March of Time, See Monday

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
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

CKAC KLRA WAAB WABC WADO
WALA WBBJ WBT WCAO WCAU
WDAE WDBJ WDBO WDNC WDOI
WDRC WEAN WFBL WFBM 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 KFRC
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
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 — Ted Husling, See Tuesday

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
KFRC KGB KHJ KLZ KMJ KMOX
KOIN KOL KVI KWG WABC WBBM
WCAO WCAU WCCO WEAN WEEI
WFBL WFBM WGR WHEC 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 KRLL KRNT
KTRH WABC WADC WBBM WBIG
WBNS WBRC WBT WCAO WCAU
WCCO WDAE WDBJ WDRC WEAN
WEEI WFBL WFBM WGR WGST
WHAS WHK WHP WIBX WJAS
WJR WJSV WKBW WKRC WLBZ
WMAS WMBG WMBR WOC WOKO
WSPD WTOC WWL WWVA

THURSDAY (Continued)

R — Rudy Vallee's Variety Hour
CFBC CRCT KDYL KFI KFYZ
KGW KHQ KOA KOMO KPO KSD
KSTP KTAR KYW WBBN WCAE
WCSH WDAF WDAY WFAE WDFB
WEEI WFBF WGY WJW WJAR
WLW 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
CFBC CKAC KDB KERN KFAB
KFBK KFH KFPY KFRC KGB
KGKO KLRA KLZ KMBC WMJ
KMOX KOIN KOL KOMA KRLD
KRNT KSCJ KSL KTRH K TSA
KTUL KVI KVOR KWG KWKH
WABC WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCOA WDAE WDBJ
WDBO WDNC WDDO WDRC WEAN
WFBL WFBM WFEA WGST WHAS
WHFC WHK WHP WIBW WIBX
WICC WISN WJAS WJR WJSV
WKBN WKBW WKRC WLAC WLWB
WMAS WMBD WMBG WMBR
WMNN WMNN WNAW WNOX WOC
WOKO WORO WOW WPG WQAM
WREC WSFA WSJS WSPD WTOG WWL

R — Maxwell House Show Boat

KDYL KFI KFSD KFYZ KGH
KGIR KWK KHQ KOA KOMO KPO
KPRC KSD KSTP KTAR KTBS
KYW WAPI WAVE WBAP WBBN
WCAE WCSH WDAF WDAY WFAE
WFCB WEEI WFBF WFLA WGY
WHO WHIO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WOAI WOW WPTF WRC
WRVA WSAI WSB WSM WSNB
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 KFBK
KFH KFPY KFRC KGB KGKO
KGMB KHJ KLRA KLZ KMBC
KMJ KMOX KOH KOIN KOL KOMA
KRLD KRNT KSCJ KSL KTRH
K TSA KTUL KVI KVOR KWG
KWKH WABC WACO WADC WALA
WBBM WBIG WBNS WBRC WBT
WCAO WCAU WCCO WCOA WDAE
WDBJ WDBO WDNC WDDO WDRC
WEAN WEI WFBL WFBM WFEA
WGST WHAS WHFC WHK WHP
WIBW WIBX WICC WISN WJAS
WJR WJSV WKBN WKBW WKRC
WLAC WLWB WMAS WMBD WMBG
WMBR WMNN WNAW WNOX WOC
WOKO WORO WOW WPG WQAM
WREC WSFB WSFA WSJS WSMK
WSPD WTOG WWL

R — Bing Crosby; Bob Burns

CFBC CRCT KDYL KFI KFYZ
KGW KHQ KOA KOMO KPO KPRC
KSD KSTP KTAR KTBS KTHS
KVOO KYW WAVE WBAP WBBN
WCAE WCSH WDAF WDAY WFAE
WFCB WEEI WFBF WFLA WGY
WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WOAI WOW WPTF WRC
WRVA WSB WSM WSNB WSOC
WTAG WTAM WTAR WTIC WTMJ
WTMJ WWJ WWNC

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

C — March of Time, See Monday

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

C — Dance Orchestra
WAAB WABC WADC WCAO WCAU
WFBL WHK WIBX WJSV WKBN
WKBW WLWB WMAS WOKO WORC
WPG WSBT WSPD

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

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

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 KFBK KFPY
KFCB 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
WJR WGST WHAS WHK WJAS
WJR WJSV WKRC WMAS WMBG
WNAW WOKO WWL

R — Cities Service Concert

CRCT KFYZ KOA KPRC KSD
KSTP KTBS KTHS KVOO KYW
WBAP WBBN WCAE WCSH WDAF
WDAY WFAE WFCB WEEI WFAA
WFBF WGY WHO WHIO WIBA
WIOD WJAR WKY WNAQ WOAI
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 WBZA 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 WBZA WFIL 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 KFBK KFH
KFPY KFRC KGB KGKO KGMB
KHJ KLRA KLZ KMBC KMJ KMOX
KOH KOIN KOL KOMA KRLD
KRNT KSCJ KSL KTRH K TSA
KTUL KVI KVOR KWG KWKH
WABC WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCOA WDAE WDBJ
WDBO WDNC WDDO WDRC WEAN
WFBL WFBM WFEA WGST WHAS
WHFC WHK WHP WIBW WIBX
WICC WISN WJAS WJR WJSV
WKBW WKRC WLAC WLWB WMAS
WMBD WMBG WMBR WNAW

WNAW WNBW WNOX WOC WOKO
WORC WOWO WPG WQAM WREC
WSFA WSJS WSMK WSPD WTOG
WWL

B — Death Valley Days

KDKA KDYL KFI KGW KHQ
KOIL KOMO KPO 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 — Hollywood Hotel

CFBC CKAC KDB KERN KFAB
KFBK KFH KFPY KFRC KGB KHJ
KLRA KLZ KMBC KMJ KMOX
KOIN KOL KOMA KRLD KRNT
KSCJ KSL KTRH K TSA KTUL KVI
KVOR KWG KWKH WABC WADC
WBBM WBNS WBRC WBT WCAO
WCAU WCCO WDAE WDBJ WDBO
WDRC WEAN WFBL WFBM WFEA
WGST WHAS WHFC WHK WHP
WIBW WIBX WICC WJAS WJR
WJSV WKBW WKRC WLAC WLWB
WMAS WMBD WMBG WMBR
WNAC WNAW WNOX WOKO WORC
WPG WQAM WREC WSPD WWL

R — Frank Munn; Bernice Claire

KSD KYW WBBN WCAE WCSH
WDAF WFAE WEEI WFBF WGY
WJAR WLW WMAQ WOW WRC
WTAG WTAM WWJ

B — Fred Faring

KDKA KDYL KFYZ KOA KOIL
KPRC KSO KSTP KTBS KWK
WAPI WAVE WBAL WBZ WBZA
WDAY WFCB WFAA WFIL WFLA
WGAR WHAM WIBA WIOD WIS
WJAX WJDX WJZ WKY WLS WLW
WMAL WMC WMT WOAI WOOD
WPTF WREN WRVA WSB WSM
WSB 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 WBBN WCAE WCSH
WFAE WEEI WFBF WGY WHO
WHIO WJAR WMAQ WOW WRC
WTAG WTAM WTIC WWJ

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

R — First Nighter; Drama

KDYL KFI KFYZ KGW KHQ KOA
KOMO KPO KPRC KSD KSTP
KTBS KTHS KYW WAVE WBBN
WCAE WCSH WDAF WDAY WFAE
WFCB WEEI WFAA WFBF WFLA
WGY WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WPTF WRC WRVA WSB
WSM WSNB 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 WML
WMT WREN WSYR WXYZ

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

R — "Red" Grange, Football

KDYL KFYZ KOA KPRC KSD
KSTP KTBS KYW WAVE WBBN
WCAE WCKY WCSH WDAF WDAY
WFAE WFCB WEEI WFAA WFBF
WFLA WGY WHO WIBA WIOD
WIRE WIS WJAR WJAX WJDX
WKY WMAQ WMC WOAI WOW
WPTF WRC WRVA WSB WSNB
WSOC WTAG WTAM WTAR WTIC
WTMJ WWJ WWNC

FRIDAY (Continued)

C - March of Time, See Monday

E-11:00 p.m., C-10:00, M-9:00, P-8:00
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 WDOE WDRB WFBL
WFEA WGST WHEC WHK WIBX
WISN WJVR WJWB WLAC
WLBZ WMA5 WMBD WMBG
WMBR WNAX WNOX WQOC WORC
WOPG WQAM WREC 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-6:30 p.m., C-5:30, M-4:30, P-3:30
C - Royal Football Talks
KGB KMOX WAAB WABC WBBM
WCAU WHAS WHK WJAS WJR
WKBW

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

R - Harold "Red" Grange
KDYL KFYR KOA KPFC KSD
KSTP KTKS KYW WAVE WBEN
WCAE WCBY WCSH WDAF WDAY
WEAF WEBC WEEI WFAA WFRB
WFLA WGY WHIO WIBA WIOD
WIRE WIS WJAR WJAX WJDX
WKY WMAQ WMC WOAI WOW
WPTF WRC WRVA WSB WSBM
WSOC WTAG WTAM WTAR WTTIC
WTMJ WWJ WWNC

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C - Ted Husing, See Tuesday

E-7:30 p.m., C-6:30, M-5:30, P-4:30
C - Carborundum Band, list of
stations not available.

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 KTSa KTUL KWKH WABC
WBBM WBNS WBRC WBT WCAO
WCAU WCCO WDAE WDBJ WDBO
WDRB WDRG WEAF WFBL WFBM WGR
WGST WHAS WHEC WHK WHP
WICC WISN WJAS WJR WJSV
WKRK WLAC WLBZ WMBG WMBR
WNAC WOKO WORC WQAM WREC
WTOC WWL

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

C - Ed Thorgersen
CKAC KDB KERN KFAB KFBK
KFPY KFRC KGB KHJ KLZ
KMBC KMJ KMOX KOIN KOL
KOMA KRND KRNT KSL KTRH
KTSa KTUL KVI KWG WABC
WBBM WBRC WBT WCAO WCAU
WCCO WDAE WDBJ WDBO WDRG
WEAN WFBL WFBM WGR WGST
WHAS WHEC WHK WISN WJAS
WJR WJSV WKRC WLAC WMBG
WMBR WOKO WORC WQAM WREC
WWL

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

C - Floyd Gibbons; Vincent Lopez
KDB KERN KFAB KFBK KFPY
KFRC KGB KHJ KLRA KLZ KMBC
KMJ KMOX KOIN KOL KOMA

KRLD KRNT KSL KTRH KTSa
KVI KWG WABC WBBM WBNS
WBT WCAO WCAU WCCO WDAE
WDBO WDRB 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 WFRB WGY WJAR
WMAQ WNAC WOW WRC WTAG
WTAM WTTIC WWJ

B - National Barn Dance
KDKA KOIL KPFC KSO KTBS
KTBS KWK WABY WAPI WAVE
WEAL WBAF WBY WBZA WFIL
WFLA WGAR WHAM WIOD WIRE
WIS WJAX WJDX WJZ WKY WLS
WMAL WMC WMT WOAI WOOD
WPTF WREN WRVA WSB WSBM
WSOC WSUN WSYR WTAR WWNC
WXXZ

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

C - Mary Eastman; Gus Haenschen
KDB KERN KFAB KFBK KFH
KFPY KFRC KGB KGKO KHJ
KLRA KLZ KMBC KMJ KMOX
KOIN KOL KOMA KRND KTRH
KTSa KTUL KVI KWG KWKH
WALA WBBM WBIG WBNS WBRC
WBT WCAO WCAU WDAE WDBO
WDOE WEAN WFBL WFBM WGST
WHAS WHEC WHK WJAS WJR
WJSV WKBW WLAC WMBD WMBR
WNOX WOC WQAM WREC WSFA
WSPD WTOC WWL WWVA

R - Shell Chateau
KDYL KFI KFSD KFYR KGHL
KGIR KGW KHQ KOA KOMO KPO
KSD KSTP KTAR KYW WBEN
WCAE WCSH WDAF WDAY WEAF
WEBC WEEI WFRB WGY WIBA
WJAR WLW WMAQ WOW WRC
WTAG WTAM WTTIC WTMJ WWJ

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

C - Your Hit Parade
KERN KFAB KFBK KFH KFPY
KFRC KGB KGKO KGMB KHJ
KLRA KLZ KMBC KMJ KMOX
KOH KOIN KOL KOMA KRND
KRNT KSCJ KSL KTRH KTSa
KTUL KVI KVOR KWG KWKH
WABC WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCOA WDAE WDBJ
WDBO WDNC WDOE WDRB WEAN
WFBL WFBM WFEA WGST WHAS
WHEC WHK WIP WIBW WIBX
WICC WISN WJAS WJR WJSV
WKBW WKRC WLAC WLBZ WMA5
WMBD WMBG WMBR WNAC
WNAX WNOX WOC WOKO WORC
WPG WQAM WREC WSBT WSFA
WSJS WSPD WTOC WWL WWVA

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 KRND
KSCJ KSL KTRH KTSa KVOR
KWKH WABC WACO WADC WALA
WBBM WBNS WBRC WBT WCAO
WCAU WCCO WDAE WDBJ WDBO
WDNC WDOE WDRB WFBL WFBM
WFEA WGST WHAS WHEC WHK
WIBW WIBX WICC WISN WJAS
WJR WJSV WKBW WKRC WLAC
WLBZ WMA5 WMBD WMBG
WMBR WNAX WNOX WOC WOKO
WORC WQAM WREC WSBT WSJS
WSMK WSPD WTOC

B - National Barn Dance

KDYL KFI KFSD KFYR KGHL
KGIR KGW KHQ KOA KOMO
KPO KSTP KTAR WDAY WEBC
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 KTSa KVOR KWKH WABC
WACO WADC WALA WBNS WBRC
WBT WCAO WCAU WDAE WDBJ
WDBO WDNC WDOE WDRB WEAN
WFBL WFBM WFEA WGST WHAS
WHEC WHK WIBW WIBX WICC
WJAS WJR WKBW WKRC WLAC
WLBZ WMA5 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 KFBK KFBK
KFBK KFPY KFRC KGB KGVO
KMBC KOH KOL KRND KSL KTRH
KTSa KVI KVOR KWG KWKH
WABC WACO WADC WALA WBNS
WBRC WCAO WCCO WDAE WDBJ
WDBO 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 CKAC KFH KGKO KLRA
KFLY KFRC KGB KLZ KOH KOL
KRND KSL KTRH KTSa KVI
KVOR KWG WABC WACO WADC
WALA WBIG WBNS WBRC 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

C - Radio City Music Hall

BPFC CRCT KDKA KDYL KFI
KFYR KGO KGW KHQ KOIL KOMO
KFRC KSO KVOO WAPI WBAL
WBY WBZA WCKY WDAY WEBC
WGAR WHAM WIS WJDX WJZ
WKY WMAL WOAI WREN WSBM
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 KRND KSCJ KTRH
KTSa KVOR WABC WACO WADC
WALA WBIG WBRC WCAO WCAU
WCCO WDAE WDBJ WDBO WDRB
WEAN WESG WFBL WFBM WFEA
WGR WHAS WIBX WJAS WJSV
WKBW 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 KRND
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 WKBW WKRC WLAC
WLBZ WMBR WNBW WOC WOKO

SUNDAY (Continued)

WORC WPG WQAM WREC WSBT
WSJS WSFD WTOC WWVA

E-2:00 p.m., C-1:00, M-12:00, P-11:00

C — Pittsburgh Symphony
KFAB KLRA KLZ KMBC KMOX
KOMA KRLD KRNT KTRH K TSA
KTUL KWKH WABC WADC WBBM
WBNS WBRC WBT WCAO WCAU
WCCO WDAE WDBJ WDBO WDRC
WEAN WFBL WFBM WGST WHAS
WHEC 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

CFCE CRCT KDKA KDYL KFI
KFYR KGU KGW KHQ KOA KOIL
KOMO KPO KPRC KSO KSTP
KTBS KTHS KVOO KWK WAPI
WAVE WBAL WBZ WBZA WCKY
WDAY WGBL WENR WFAA WFIL
WFLA WGAR WHAM WHIO WJAX
WIOD WIRE WIS WJAX WJDX
WJZ WKY WMAL WMC WMT
WQAI WPTF WREN WRVA WSB
WSM WSMB WSOC WSYR WTAR
WTMJ WWNC WXYZ

E-3:30 p.m., C-2:00, M-1:00, P-12:00

C — Everybody's Music

CFRB CKAC KERN KFH KFPY
KTRC KGB KGK KHJ KLZ KMBC
KMOX KOH KOL KOMA KRNT
KSCJ KSL KTRH K TSA KVI KVOR
KWG WAAB WABC WACA WBIG
WBNS WBRC WBT WCAO WCCO
WDAE WDBJ WDRC WEAN WESG
WFBL WFBM WFEA WGST WHAS
WHK WHP WIBW WIBZ WICC
WJAS WKBN WKBW WKRC WLAC
WLBZ WMBD WMBG WMBR
WNBF WNOX WOC WOKO WORC
WPG WQAM WREC WSBT WSJS
WSMK WSPD WTOC

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
WEAF WEBC WFBM WGY WHIO
WIBA WJAR WMAQ WNAC WWR
WRC WSAI WTAG WTAM WTIC
WVJ

E-5:00 p.m., C-4:00, M-3:00, P-2:00

R — Marion Talley, Soprano
KDYL KFI KFYR KGW KHQ KOA
KOMO KPO KSTP KYW WBEN
WCAE WCKY WCSH WDAF WDAY
WEAF WEBC WFBM 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 KTBS KTHS KVOO
KWK WABY WAPI WAVE WBAL
WBAP WBZ WBZA WENR WENR
WFIL WFLA WGAR WHAM WIOD
WIS WJAX WJDX WJZ WKY WJAX
WMAL WMC WMT WQAI WPTF
WREN WRVA WSB WSM WSMB
WSOC WSUN WSYR WTAR WSNB
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
WDRC WEAN WFBL WFBM WGR
WHAS WHEC WHK WIBX WICK
WJR WJSV WMAW WOKO WORC
WSPD WWVA

R — Smiling Ed McConnell

KDYL KFI KFYR KGIR KGW KHQ
KOMO KPO KSTP KYW WBEN
WCAE WCSH WDAF WDAY WEAF
WEBC WFBM WGY WHIO WIBA
WJAR WLW WMAQ WNAC WOW
WRC WTAG WTAM WTIC WTMJ
WVJ

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 WMAW 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 KFBC KFPY
KTRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KOMA KRLD
KSL KTRH K TSA KVI KWG WABC
WBBM WBNS WBT WCAO WCAU
WCCO WDAE WDRC WEAN WFBL
WFBM WGST WHAS WHEC 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 — Coming; Rubinoff

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

C — America Dances; Lud Gluskin

KERN KFAB KFBB KFBC KFH
KFPY KFRC KGB KGVO KMBC
KOH KOL KRLD KTRH K TSA
KVI KVOR KWKH WABC WACO
WADC WALA WBBM WBIG WBRC
WACO WCCO WDAE WDBO WDNC
WDRC WEAN WEEI WFBL WFBM
WFEA WGR WHAS WICC WJAS
WJR WJSV WKRC WLZ WMBD
WMBG WMBR WMMN WOC WOKO
WORC WPG WQAM WREC WSBT
WSJS WSPD WTOC

R — Jack Benny; Mary Livingstone

KSD KYA KYW WBEN WCAE
WCSH WDAF WEAF WFBM WGY
WHIO WJAR WLW WMAQ WNAC
WOW WRC WTAG WTAM WTIC
WVJ

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

C — Phil Baker; Hal Kemp

KLRA KLZ KRLD KTRH K TSA
KTUL KWKH WABC WACO WADC
WALA WBIG WBNS WBRC WBT
WCAO WCAU WCOA WDAE WDBJ
WDBO WDNC WDOD WDRC WEAN
WFBL WFBM WFEA WGR WGST
WHAS WHEC WHK WHP WIBX
WICK WJAS WJR WJSV WKBN
WKRC WLAC WLZ WMAS WMBR
WNAC WNOX WOKO WORC WQAM
WREC WSBT WSFA WSJS WSMK
WSPD WTOC WWL WWVA

R — Fireside Recitals

KSD KYW WBEN WCAE WCSH
WDAF WEAF WFBM WGY WHIO
WIRE WJAR WMAQ WOV WRC
WSAI WTAG WTAM WTIC WWJ

B — Ozzie Nelson; Bob Ripley

KDKA KOIL KPRC KSO KTBS
KTHS KVOO KWK WAPI WAVE
WBAL WBAP WBZ WBZA WCKY
WFIL WGAR WHAM WHIO WIRE
WJDX WJZ WKY WLS WMAL WMC

WMT WOAI WREN WSB WSM
WSMB WSYR WXYZ

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

R — Sunset Dreams; Morin Sisters

CFCE CRCT KSD KYW WBEN
WCAE WCSH WDAF WEAF 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

C — 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 WBIG WBNS
WBRC WBT WCAO WCAU WCCO
WDAE WDBJ WDBO WDOD WDRC
WEAN WFBL WFBM WFEA WGR
WGST WHAS WHEC WHK WHP
WIBW WIBZ WICC WISN WJAS
WJR WJSV WKBW WKRC WLAC
WLBZ WMAS WMBD WMBR
WNAX WNOX WOC WOKO WORC
WQAM WREC WSBT WSFA WSMK
WTOC WWL WWVA

R — Good Will Court

CFCE CRCT KDYL KFI KFYR
KGW KHQ KOA KOMO KPO KPRC
KSD KSTP KTR KTRH KTHS
KVVO KYW WAPI WAVE WBEN
WCAE WCSH WDAF WDAY WEAF
WEBC WFAA WFBM WFLA WGY
WHIO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WNAC WOAI WOV WPTF
WRC WRVA WSB WSM WSMB
WSOC WSUN WTAG WTAM WTAR
WTIC WTMJ WTV WWNC

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

C — Eddie Cantor; Bobby Breen

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

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

R — Manhattan Merry-Go-Round

CFCE KDYL KFI KFYR KGW
KHQ KOA KOMO KPO KPRC KSD
KSTP KTBS KTHS KYW WAVE
WBEN WCAE WCKY WCSH WDAF
WDAY WEAF WEBC WEEI WFAA
WFBM WFLA WGY WHIO WHIO
WIBA WIOD WIRE WIS WJAR
WJAX WJDX WKY WMAQ WMC
WOAI WOV WPTF WRC WRVA
WSB WSM WSMB WSOC WTAG
WTAM WTAR WTIC WTMJ WWJ
WWNC

C — Ford Sunday Evening Hour

CFBE CKAC 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 KWG
KWKH WABC WACO WADC WALA
WBBM WBIG WBNS WBRC WBT

SUNDAY (Continued)

WCAO WCAU WCCO WCOA WDAE
 WDBJ WDBO WDNC WDDO WDRC
 WEAN WFBL WFBN WFEA WGR
 WGST WHAS WHFC WHK WHP
 WIBW WIBX WICC WISN WJAS
 WJR WJSV WKBN WKRC WLAC
 WLBY WMAS WMBD WMNR WNAC
 WNAX WOC WOKO WORC WQAM
 WREC WSBT WSFA WSJS WSPD
 WTOG WWL WWVA

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-5:30

R — Album of Familiar Music

CFCF CRCT KDYL KFI KFJR
 KGHL KGIR KGW KHQ KOA
 KOMO KPO KPRC KSTP
 KTBS KYW WAPI WAVE
 WBN WCAE WCHS WDAF
 WDAY WFAF WFCB WFFA
 WFBZ WFLA WGY WHO WIII
 WJBA WJOD WIS WJAR WJAX

WJDX WKY WMAQ WMC WOAI
 WOW WPTF WRC WRVA WSAI
 WVB WSM WSBM WSOB WTAG
 WTAM WTAR WTMJ WWJ WWNC

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

C — Gillette Community Sing

CPRB CKAC KDB KERN KFAB
 KFBB KFBK KFH KFPY KPRC
 KGB KGKO KGMB KGVO KHJ
 KLRA KLZ KMBC KMJ KMOX
 KOH KOIN KOL KOMA KRLL
 KRNT KSCJ KSL KTRH K TSA
 KTUL KVI KVOR KWG KWKH
 WABC WACO WADC WALA WBBM
 WBIG WBNS WBRC WBT WCAO
 WCAU WCCO WCOA WDAE WDBJ
 WDBO WDNC WDDO WDRC WEAN
 WFBL WFBN WFEA WGST WHAS
 WHFC WHK WHP WIBW WIBX
 WICC WISN WJAS WJR WJSV
 WKBN WKBW WKRC WLAC WLBY
 WMAS WMBD WMBG WMNR
 WMMN WNAC WNAX WNOX WOC
 WOKO WORC WOWO WPG WQAM
 WREC WSBT WSFA WSJS WSMK
 WSPD WTOG WWL

R — General Motors Concert

CFCF CRCT KDYL KFI KFJR
 KGHL KGIR KGW KHQ KOA
 KOMO KPO KPRC KSTP KTAR
 KTBS KTHS KYW WAPI WAVE
 WBN WCAE WCKY WCHS WDAF
 WDAY WFAF WFCB WFAA WFBZ
 WFLA WGY WHO WIII WJBA
 WJOD WIRE WIS WJAR WJAX
 WJDX WKY WMAQ WMC WNAC

WOAI WOOD WOW WPTF WRC
 WRVA WSB WSM WSBM WSOB
 WSUN WTAG WTAM WTAR WTIC
 WTMJ WWJ WWNC

B — Edwin C. Hill

KDKA KECA KFSD KGA KGO
 KJR KLO KOIL KSO KWK WBAL
 WBZ WENR WFB WGR 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

KDB KERN KFBB KFBK KFPY
 KFRC KGB KGKO KHJ KLZ KMJ
 KOH KOIN KOL KSL KVI KWG

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 WSBM

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

B — Paul Whiteman's Musical Varieties

KDKA KECA KFSD KGA KGO KJR
 KPRC KTBS KTHS WAPI WAVE
 WBAP WJDX WKY WMC WOAI
 WSB WSM WSBM

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
 Everybody's Music, 3 p.m. Sun., C
 Ford Concert, 9 p.m. Sun., C
 General Motors Concert, 10 p.m. Sun., R
 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
 Ben Bernie, 9:00 p.m. Tues., B
 Jimmie Dorsey, 10 p.m. Thurs., R
 Lad Gluskin, 7 p.m. Sun., 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
 Kay Kyser, 8:30 Sat., 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
 Leo Reisman, 8 and 11:30 p.m. Tues., R
 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 Valen, 8 p.m. Thurs., R
 Peter Van Steeden, 9 p.m. Wed., R
 Don Voorhees, 5:30 p.m. Sun., 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

DIAL OG

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 p.m. Sun., C
 Easy Aces, 7 p.m. Tues., Wed., Thurs., B
 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
 Joe Penner, 6 p.m. Sun., C
 Plek 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

DRAMA

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., O
 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
 True Story Court, 9:30 p.m. Fri., R
 Welcome Valley, 8:30 p.m. Tues., B

POPULAR PROGRAMS

Album of Familiar Music, 9:30 p.m. Sun., R
 Major Bowes, 11:30 a.m. Sun. and 9 p.m. Thurs., C
 Broadway Varities, 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
 Hammerstein'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
 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. Mon. thru Fri., C
 Maxwell House Show Boat, 9 p.m. Thurs., R
 Meiodiana, 8:30 p.m. Mon., B
 National Barn Dance, 9:00 and 11:30 p.m. Sat., B
 Packard Hour, 9:30 p.m. Tues., R
 Sears, Then and Now, 10 p.m. Thurs., C
 Striclair 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
 Bobby Breen, 8:30 p.m. Sun., C
 Rachel Carlay, 9 p.m. Sun., R
 Charlotterrs, 7:30 p.m. Thurs., C
 Bernice Claire, 9 p.m. Fri., R, and 8:30 Mon., B
 Bing Crosby, 10 p.m. Thurs., R
 Fifi 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
 Wendell Hall, 10 p.m. Sun., C
 Helen Jepson, 9 and 11:15 p.m. Thurs., R
 Elizabeth Lennox, 8:00 p.m. Fri., C
 Nino Martini, 9 p.m. Wed., C
 Ed McConnell, 8:30 p.m. Sun., R
 Lucy Monroe, 9:30 p.m. Sun., R, 8:30 p.m. Wed., B
 Morin Stroes, 7:45 and 11 p.m. Sun., R
 Frank Munn, 9:30 p.m. Sun. and 9 p.m. Fri., R
 Jan Peerce, 6:30 p.m. Sun., C
 Carmella Fonselle, 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
 Singin' Sam, 8:15 Fri., B
 Kate Smith, 8 p.m. Thurs., C
 Oliver Smith, 5 p.m. Sun., C
 Judy Starr, 7:30 p.m. Thurs., C
 Marion Talley, 10 p.m. Fri., R
 Franca White, 8 p.m. Sun., C

TALKS

Boake Carter, 7:45 p.m. Mon. thru Fri., C
 Floyd Gibbons, 9 p.m. Sat., C
 "Red" Grange, 10:30 Fri. and 7 p.m. Sat., R
 Eddie Guest, 8:30 p.m. Tues., B
 Edwin C. Hill, 10 p.m. Sun., B
 Ted Husling, 7:15 p.m. Tues., Thurs., Sat., C
 Bob Ripley, 7:30 Sun., B
 Sidewalk Interviews, 9 p.m. Tues., R
 Lowell Thomas, 6:45 p.m. Mon., thru Fri., B
 Ed Thorzersen, 8:30 p.m. Sat., C
 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

The Milwaukee Journal, operators of WTMJ, want a new station on the so-called high-fidelity band. The 1570 kcs spot is requested and 1000 watts full time. It was recently stated by the FCC that no further assignments would be made between 1500 and 1600 kcs.

* * *

KGBZ at York, Nebr. has certainly had its ups and downs lately. When it was deleted Dr. George R. Miller, the owner, petitioned the U. S. Court of Appeals to grant a stay, holding that the FCC had failed to give the station a fair hearing prior to the deletion order. The stay order was granted, but after-

wards negotiations were made to sell its half-time facilities to KMA at Shenandoah, Iowa for about \$50,000. On the completion of this transaction it is believed that KGBZ's troubles are over. It was originally ordered deleted because of improper programs and because it was not believed the station sufficiently served public interest.

* * *

The world's largest single radio network now consists of 105 stations. On the 9th of August two Montana stations joined the CBS, KFBB in Great Falls and KGVO in Missoula, making the first CBS outlets in that state.

Short Wave Stations By Frequencies

Police Broadcasters are shown in italics.

Megs.	Meters		Megs.	Meters	
1.596	187.84	✓WPGG Findlay, Ohio			WAKV Fall River, Mass.
		✓WPGQ Columbus, Ohio			✓WPDB Chicago, Ill.
		✓WPHC Massillon, Ohio			WPDC Chicago, Ill.
		✓WPHK Wilmington, Ohio			✓WPDD Chicago, Ill.
		✓WQFT Portable in Ohio			✓WPPU Pittsburgh, Pa.
1.606	189.69	KGXW Port Alexander, Alaska			WPEL Arlington, Mass.
1.610	186.22	✓WQPC Chicago, Ill.			WPEH Somerville, Mass.
		✓WQPD DeQuoin, Ill.			WPEI E. Providence, R. I.
		✓WQPF Effingham, Ill.			WPEA Newton, Mass.
		✓WQPG Sterling, Ill.			WPFN Fairhaven, Mass.
		✓WQPM Macomb, Ill.			✓WPGF Providence, R. I.
		✓WOPP Pontiac, Ill.			WPGU Cohasset, Mass.
		✓WQPS Springfield, Ill.			WPGV Boston, Mass.
1.622	184.85	KGXU Port Armstrong, Alaska			✓WPHG Medford, Mass.
		KIJI Port Conclusion, Alaska			WQFL Oak Park, Ill.
		KIJK Washington Bay, Alaska	2.318	129.34	✓WQFX Waukegan, Ill.
		KIJO Port Herbert, Alaska			CYQ Toronto, Ont.
		KIJS Newport Walter, Alaska	2.342	128.02	CGZ Vancouver, B. C.
		KIJV Deep Cove, Alaska	2.366	126.72	✓WAKC Freehold, N. J.
		KIOG Red Bluff Bay, Alaska	2.382	125.87	KCHT Brownsville, Texas
1.534	183.48	✓WPHF Marion County, Ind.			KCHV Corpus Christi, Tex.
		✓WPHS Culver, Ind.			✓KNFE Duluth, Minn.
		✓WPHU Jasper, Ind.			✓KNHB Green Bay, Wis.
		✓WQFE Seymour, Ind.			✓WAKE Oshkosh, Wis.
		✓WQFW Columbia City, Ind.			WPDN Auburn, N. Y.
1.642	182.59	✓WRDS E. Lansing, Mich.			✓WPEA Syracuse, N. Y.
1.658	180.83	✓KNHD Redwood Falls, Minn.			✓WPFM Birmingham, Ala.
		KSW Berkeley, Calif.	2.390	125.45	WPGW Mobile, Ala.
		WPGC S. Schenectady, N. Y.			CJW St. John, N. B.
1.666	179.96	✓WMP Framingham, Mass.	2.396	125.14	CJZ Verdun, P. Q.
		✓WPEL W. Bridgewater, Mass.	2.406	124.61	YIYW Winnipeg, Man.
		✓WPEV Portable in Mass.			KGHZ Little Rock, Ark.
		✓WPEW Northampton, Mass.			KGPW Salt Lake City, Utah
		..... Nashville, Tenn.	2.414	124.30	KNHE Fort Smith, Ark.
1.674	179.10	KGHK Palo Alto, Calif.			KACE Olympia, Wash.
		KGZT Santa Cruz, Calif.			KACJ Wenatchee, Wash.
		✓KIUK Jefferson, Mo.			KACK Bellingham, Wash.
		✓WVSP Harrisburg, Pa.			KACN San Buenaventura, C.
1.682	178.25	KACC Fairfield, Iowa			KACO Tracy, Calif.
		KACD Atlantic, Iowa			KACS Bakersfield, Calif.
		KGHO Des Moines, Iowa			KACV Walla Walla, Wash.
		KNFN Waterloo, Iowa			KGHS Spokane, Wash.
		KNFO Storm Lake, Iowa			KCHW Centralia, Wash.
1.692	177.19	WQFT Portable in Ohio			KCPA Seattle, Wash.
1.698	176.57	KNCG Phoenix, Ariz.			KCPF Santa Fe, N. Mex.
		WAKJ Duval County, Fla.			KGPS Bakersfield, Calif.
		..... Portable in Maryland			KGZA Fresno, Calif.
1.706	175.74	KGPC St. Louis, Mo.			KGZM El Paso, Texas
		✓WKDU Cincinnati, Ohio			KGZN Tacoma, Wash.
		✓WPET Lexington, Ky.			KCZO Santa Barbara, Calif.
1.710	175.33	CZ6F Hamilton, Ont.			KCZY Aberdeen, Wash.
1.712	175.13	COL2 Havana, Cuba			KCZX Albuquerque, N. M.
		KACU Gladeview, Texas			KNFA Clovis, N. Mex.
		KCHY Whittier, Calif.			KNFI Mt. Vernon, Wash.
		KCJX Pasadena, Calif.			KNFP Everett, Wash.
		KCPJ Beaumont, Texas			KNCU Yakima, Wash.
		KCPL Los Angeles, Calif.			KNGY Lodi, Calif.
		KCPQ Honolulu, T. H.			✓WCK Detroit, Mich.
		KCPR Fort Worth, Texas			✓WMO Highland Park, Mich.
		KCZB Houston, Texas			WPPA Tulare, Calif.
		KCZL Shreveport, La.			WPDJ Passaic, N. J.
		KCZQ Waco, Texas			✓WPDX Detroit, Mich.
		KCZY San Bernardino, Cal.			✓WPDY Atlanta, Ga.
		KNFJ Pomona, Calif.			✓WPFH Baltimore, Md.
		KNGE Cleburne, Texas			WPEI Columbus, Ga.
		KNGL Galveston, Texas			WPGH Albany, N. Y.
		KNHF Denton, Texas			✓WPGJ Utica, N. Y.
		✓KVP Dallas, Texas			WPGM La Grange, Ga.
		✓VYR Montreal, P. Q.			WQFB Macon, Ga.
		WAKF Everett, Mass.			WQFJ Oneonta, N. Y.
					WQFY Augusta, Ga.
					✓WRDR Crosse Pointe, Mich.
					..... Herkimer, N. Y.
					..... Stockton, Calif.

SHORT WAVE STATIONS BY FREQUENCIES

Megs.	Meters			Megs.	Meters		
2.416	124.09	CZG	Prince Rupert, B. C.			WPEE	Brooklyn, N. Y.
2.422	123.79	KACA	Atchison, Kans.			WPEF	Bronx, N. Y.
		KACI	Eureka, Calif.			WPEG	New York, N. Y.
		KGPE	Kansas City, Mo.			WPEP	Kenosha, Wisc.
		KGPG	Vallejo, Calif.			WPHF	Richmond, Va.
		KGZC	Topeka, Kans.			WQFG	Roanoke, Va.
		KNGF	Sacramento, Calif.			WQFH	Lynchburg, Va.
		KNGV	Salina, Kans.			WQFI	Petersburg, Va.
		WMIJ	Buffalo, N. Y.			.....	Huron, S. Dak.
		WNFP	Niagara Falls, N. Y.			.....	Iola, Kans.
		WPDR	Rochester, N. Y.	2.458	121.97	KACM	Big Spring, Tex.
		WPDW	Washington, D. C.			KGZI	Wichita Falls, Tex.
		WPFU	Portland, Me.			KGZW	Lubbock, Texas
		WPHB	Nashua, N. H.			KNFB	Idaho Falls, Idaho
		2.430	123.38	KGPB	Minneapolis, Minn.			KNGW	Brownwood, Texas
KGZJ	Phoenix, Ariz.					WPDC	Youngstown, Ohio
KNGP	Shreveport, La.					WPDO	Akron, Ohio
KNHG	Prescott, Ariz.					WPDV	Charlotte, N. C.
WAKH	Bloomfield, N. J.					WPFS	Asheville, N. C.
WCPD	Charleston, S. C.					WPGD	Rockford, Ill.
WPDJ	Columbus, Ohio					WPHD	Steubenville, Ohio
WDDM	Dayton, Ohio					WQFZ	Ottawa, Ill.
WDDS	St. Paul, Minn.					WRBH	Cleveland, Ohio
WPEK	New Orleans, La.					.....	Urbana, Ill.
WPEF	Highland Park, Ill.			2.466	121.58	KGOZ	Cedar Rapids, Iowa
WPEK	Hackensack, N. J.					KGPD	San Francisco, Calif.
WPGI	Portsmouth, Ohio					KGPI	Omaha, Nebr.
WPHO	Zanesville, Ohio					KGPK	Sioux City, Iowa
WQFO	Lancaster, Ohio			KGPM	San Jose, Calif.		
.....	Baton Rouge, La.			KGPN	Davenport, Iowa		
2.442	122.77	KGHU	Austin, Texas			KGZG	Des Moines, Iowa
		KGPP	Portland, Ore.			WAKB	New London, Conn.
		KGXP	Denver, Colo.			WAKG	Clearwater, Fla.
		KGZH	Klamath Falls, Ore.			WPEC	Memphis, Tenn.
		KGZR	Salem, Ore.			WPDM	Woonsocket, R. I.
		KNHM	Fargo, N. Dak.			WPFV	Pawtucket, R. I.
		WAKO	Ft. Lauderdale, Fla.			WPFW	Bridgeport, Conn.
		WMDZ	Indianapolis, Ind.			WPGA	Bay City, Mich.
		WUDE	Louisville, Ky.			WPGB	Port Huron, Mich.
		WPDF	Flint, Mich.			WPGK	Cranston, R. I.
		WPDH	Richmond, Ind.			WPGX	Worcester, Mass.
		WDDL	Lansing, Mich.			WPHA	Fitchburg, Mass.
		WPEB	Grand Rapids, Mich.			WPHN	Tampa, Fla.
		WPEB	Saginaw, Mich.			WPHP	Jackson, Mich.
WPEC	Muskegon, Mich.			WQFA	New Haven, Conn.		
WPEE	Reading, Pa.			WQFC	Gainsville, Fla.		
WPEG	Jacksonville, Fla.	2.474	121.19	WQFK	Clearwater, Fla.		
WPFU	Lakeland, Fla.			KGHC	Las Vegas, Nev.		
WPEX	Palm Beach, Fla.			KGHM	Reno, Nev.		
WPEZ	Miami, Fla.			KNFH	Garden City, Kans.		
WPGI	Binghamton, N. Y.			KNGH	Dodge City, Kans.		
WPGP	Muncie, Ind.			WAKI	Sandusky, Ohio		
WPHM	Orlando, Fla.			WPPD	Philadelphia, Pa.		
WQFM	Wilkes-Barre, Pa.			WPFQ	Knoxville, Tenn.		
WQFQ	Lafayette, Ind.			WPFQ	Swarthmore, Pa.		
.....	Connersville, Ind.			WPFZ	Asheville, N. C.		
2.450	122.38	KACF	Chickasha, Okla.			WPGZ	Johnson City, Tenn.
		KACL	Altus, Okla.			WPHY	Elizabethtown, Tenn.
		KACP	Ponca City, Okla.			WQFY	Mansfield, Ohio
		KACR	Seminole, Okla.	2.482	120.80	WRDQ	Toledo, Ohio
		KAPB	Cushing, Okla.			KGZE	San Antonio, Texas
		KAPC	Drumright, Okla.			WPGT	New Castle, Pa.
		KAPD	El Dorado, Kans.			WPHZ	Oil City, Pa.
		KAPE	Norman, Okla.			WQFF	Monessen, Pa.
		KAPF	Okmulgee, Okla.			WQFU	Sharon, Pa.
		KGHN	Hutchinson, Kans.	2.490	120.41	KACO	Kalatoch, Wash.
		KGHP	Jawton, Okla.			KGHD	Seattle, Wash.
		KGPH	Oklahoma City, Ok.			KGHX	Santa Ana, Calif.
		KGPO	Tulsa, Okla.			KGZD	San Diego, Calif.
		KGPP	Wichita, Kans.			KGZU	Lincoln, Nebr.
KGZF	Chanute, Kans.			KNFC	Olympia, Wash.		
KGZP	Coffeyville, Kans.			KNFK	Bellingham, Wash.		
KNCK	Duncan, Okla.			KNFM	Compton, Calif.		
KNGM	Rapid City, S. Dak.			KNFX	Ellensburg, Wash.		
KNGT	Muskogee, Okla.			KNGB	Yakima, Wash.		
KNHC	Ada, Okla.			KNGC	Vancouver, Wash.		
WPKD	Milwaukee, Wisc.			KNGD	Walla Walla, Wash.		
				KNGJ	El Centro, Calif.		

SHORT WAVE STATIONS BY FREQUENCIES

Megs.	Meters		Megs.	Meters		Megs.	Meters	
		<i>KNGN</i> Norfolk, Nebr.	4.178	71.76	<i>WOO</i> Ocean Gate, N. J.			
		<i>KNGQ</i> Wenatchee, Wash.	4.253	70.50	<i>WKF</i> Lawranceville, N. J.			
		<i>KNGR</i> Spokane, Wash.	4.273	70.16	<i>RV15</i> Khabarovsk, USSR.			
		<i>KNGZ</i> Ephrata, Wash.	4.512	66.44	<i>ZFS</i> Nassau, Bahamas			
		<i>WAKA</i> Huntington, Ind.	4.600	65.18	<i>HC2ET</i> Guayaquil, Ecuador			
		<i>WAKK</i> Frankfort, Ind.	4.753	63.08	<i>WOO</i> Ocean Gate, N. J.			
		<i>WPDZ</i> Kokomo, Ind.	4.755	63.05	<i>CFU</i> Rossland, B. C.			
		<i>WFP</i> Fort Wayne, Ind.	4.795	62.53	<i>VE9BK</i> Vancouver, B. C.			
		<i>WPGN</i> Clarksburg, W. Va.	4.820	62.20	<i>GDW</i> Rugby, England			
		<i>WPGO</i> South Bend, Ind.	4.865	61.63	<i>VDO</i> Vancouver, B. C.			
		<i>WPGS</i> Huntington, N. Y.	5.000	59.96	<i>WVV</i> Beltsville, Md.			
		<i>WPHI</i> Mineola, N. Y.	5.025	59.67	<i>ZFA</i> Hamilton, Bermuda			
		<i>WPHJ</i> Charleston, W. Va.	5.520	54.32	<i>T15HH</i> San Ramon, Costa Rica			
		<i>WPHQ</i> Fairmont, W. Va.	5.710	52.51	<i>TGS</i> Guatemala City, Guat.			
		..... Parkersburg, W. Va.	5.720	52.42	<i>YV1ORSC</i> San Cristobal, Venezuela			
		..... Marion, Ind.	5.730	52.32	<i>JVV</i> Nazaki, Japan			
2.506	119.64	<i>WOU</i> Marsfield, Mass.	5.760	52.05	<i>HJ4ABD</i> Medellin, Colombia			
2.512	119.36	<i>KGM</i> Ketchikan, Alaska	5.780	51.87	<i>OAX4D</i> Lima, Peru			
		<i>KLB</i> Port Althorp, Alaska	5.790	51.78	<i>JVU</i> Nazaki, Japan			
		<i>KLC</i> Kake, Alaska	5.800	51.69	<i>YV2RC</i> Caracas, Venezuela			
		<i>KLE</i> Rose Inlet, Alaska	5.810	51.60	<i>YV7RMO</i> Maracaibo, Venez.			
2.538	118.13	<i>KDH</i> Port Alexander, Aaa.	5.820	51.52	<i>CEC</i> Santiago, Chile			
		<i>KILD</i> Cordova (Eyak River)Aaa.	5.830	51.43	<i>TIGPH</i> San Jose, Costa Rica			
2.566	116.84	<i>KFF</i> Union Bay, Alaska	5.850	51.25	<i>TDD</i> Shinkio, Manchukuo			
		<i>KHV</i> Nakeen, Alaska	5.865	51.12	<i>YV5RMO</i> Maracaibo, Venez.			
		<i>KLA</i> Waterfall, Alaska	5.875	51.03	<i>H11J</i> San Ped. de Macoris, D.R.			
		<i>KLD</i> Hidden Inlet, Aaa.	5.885	50.95	<i>HRN</i> Tegucigalpa, Honduras			
2.604	115.14	<i>WVD</i> Seattle, Wash.	5.890	50.90	<i>HCK</i> Quito, Ecuador			
		<i>WXH</i> Ketchikan, Alaska	5.895	50.86	<i>JIC</i> Taihoku, Taiwan			
2.616	114.61	<i>KAEB</i> Hydaburg, Alaska	5.915	50.69	<i>YV8RB</i> Barquisimeto, Venez.			
		<i>KAED</i> Angoon, Alaska	5.940	50.47	<i>HH2S</i> Port-au-Prince, Haiti			
		<i>KAEF</i> Jack Wade, Alaska	5.950	50.39	<i>TG2X</i> Guatemala City, Guat.			
		<i>KAEP</i> Tenakee, Alaska	5.980	50.14	<i>HJN</i> Bogota, Colombia			
		<i>KION</i> Tin City, Alaska	5.985	50.10	<i>YNFL</i> Managua, Nicaragua			
2.632	113.91	<i>KIJW</i> Shearwater Bay, Aaa.	6.000	49.97	<i>HJ2ABD</i> Bucaramanga, Colombia			
		<i>KIJX</i> Kadiak Island, Alaska	6.005	49.93	<i>XEWI</i> Mexico City, D. F.			
		<i>KIMA</i> Port Hobron, Alaska	6.010	49.89	<i>TGWA</i> Guatemala City, Guat.			
		<i>KIOC</i> Port Wakefield, Alaska	6.012	49.87	<i>XEBT</i> Mexico City, D. F.			
		<i>KIOD</i> Nollie Juan, Alaska	6.014	49.85	<i>CFCX</i> Montreal, P. Q.			
		<i>KIOH</i> Iron Creek, Alaska	6.018	49.82	<i>HP5K</i> Colon, Panama			
		<i>KIOI</i> Akutan, Alaska	6.020	49.80	<i>CJCX</i> Sydney, N. S.			
2.726	109.98	<i>WANB</i> Dinsmore, Fla.	6.025	49.76	<i>COCO</i> Havana, Cuba			
2.912	102.96	<i>KHW</i> Akutan, Alaska	6.030	49.72	<i>HJ1ABC</i> Quibdo, Colombia			
		<i>KHZ</i> Port Hobron, Alaska	6.040	49.64	<i>HJ3ABH</i> Bogota, Colombia			
2.986	100.41	<i>KIJP</i> Uganik, Alaska	6.042	49.62	<i>H13U</i> Santiago, D. R.			
		<i>KIJR</i> Port San Juan, Alaska	6.045	49.60	<i>ZHI</i> Singapore, Straits Sett'l's			
		<i>KIJU</i> Todd, Alaska	6.050	49.56	<i>DJC</i> Zeesen, Germany			
2.994	100.14	<i>KIEJ</i> Poorman, Alaska	6.055	49.52	<i>XEUW</i> Veracruz, Ver.			
		<i>KIHK</i> Circle, Alaska	6.060	49.48	<i>HJ1ABJ</i> Santa Marta, Colombia			
		<i>KIIL</i> Fort Yukon, Alaska	6.062	49.47	<i>HP5B</i> Panama City, Panama			
		<i>KIIM</i> Hot Springs, Alaska	6.064	49.46	<i>W1XAL</i> Boston, Mass.			
		<i>KINN</i> Eagle, Alaska	6.042	49.62	<i>W4XB</i> Miami, Fla.			
		<i>KIIO</i> McGrath, Alaska	6.045	49.60	<i>YDA</i> Tandjongpriok, N.E.I.			
		<i>KIJB</i> Cape Pole, Alaska	6.048	49.58	<i>HJ1ABG</i> Barranquilla, Colombia			
		<i>KILY</i> Excursion Inlet, Alaska	6.049	49.57	<i>H19B</i> Santiago, D. R.			
		<i>KNBZ</i> Pillar Bay, Alaska	6.050	49.56	<i>GSA</i> Davenport, Gt. Britain			
2.998	100.00	<i>WXE</i> Anchorage, Alaska	6.055	49.52	<i>HJ3ABD</i> Bogota, Colombia			
3.040	98.63	<i>YDA</i> Tandjong Priok, Java	6.060	49.48	<i>W3XAU</i> Philadelphia, Pa.			
3.093	96.94	<i>KAED</i> Angoon, Alaska	6.062	49.47	<i>W8XAL</i> Cincinnati, Ohio			
		<i>KIAP</i> Rose Inlet, Alaska	6.070	49.39	<i>CFRX</i> Toronto, Ont.			
		<i>KIAW</i> Port Althorp, Alaska	6.080	49.31	<i>DJM</i> Zeesen, Germany			
		<i>KIAY</i> Ketchikan, Alaska			<i>HP5F</i> Colon, Panama			
		<i>KIBA</i> Kake, Alaska			<i>W9XAA</i> Chicago, Ill.			
		<i>KICI</i> View Cove, Alaska						
3.100	96.72	<i>KIIP</i> Luckyshot, Alaska						
3.190	93.99	<i>KI1J</i> Tanana, Alaska						
		<i>KI1K</i> Circle, Alaska						
3.265	91.83	<i>KIBZ</i> Waterfall, Alaska						
		<i>KICE</i> Nakeen, Alaska						
		<i>KICG</i> Union Bay, Alaska						
		<i>KIDE</i> Hidden Inlet, Alaska						
4.098	73.16	<i>WND</i> Hialeah, Fla.						

SHORT WAVE STATIONS BY FREQUENCIES

Megs.	Meters		Megs.	Meters		
6.085	49.27	HJ5ABD	6.814	44.00	HIH	San Ped. de Macoris, D.R
6.090	49.23	✓CRCX	6.860	43.71	KEL	Bolinas, Calif.
6.092	49.22	HJ4ABE	6.905	43.42	GDS	Rugby, Gt. Britain
6.100	49.15	HJ4ABL ✓W3XAL W9XF	7.100	42.23	FOSAA	Papeete, Tahiti
6.110	49.07	GSL HJ4ABB	7.220	41.53	VP3BG	Georgetown, Br. Guiana
6.115	49.03	.....	7.280	41.18	HJ1ABD	Cartagena, Colombia
6.120	48.99	W2XE YDAS	7.380	40.63	XECR	Mexico City, D. F.
6.122	48.97	HJ3ABX	7.520	39.87	KKH	Kahuku, T. H.
6.130	48.91	COCD TGXA VE9HX XEOK	7.797	38.47	✓HBP	Geneva, Switzerland
6.135	48.87	HJ4ABP	7.850	38.19	HC2JSB	Guayaquil, Ecuador
6.140	48.83	W8XK	7.900	37.95	VE9EW	Toronto, Ont.
6.150	48.75	CB615 ✓CJRO HI5N	7.920	37.86	GDP	Rugby, Gt. Britain
6.155	48.74	COKG	7.960	37.67	VLZ	Sydney, Australia
6.165	48.63	YV3RC	8.050	37.24	WXA	Juneau, Alaska
6.170	48.60	HJ2ABA HJ3ABF	8.075	37.13	WEZ	Rocky Point, N. Y.
6.182	48.50	XEXA	8.095	37.04	VLK	Sydney, Australia
6.185	48.48	HI1A	8.560	35.03	WOO	Ocean Gate, N. J.
6.230	48.13	OAX4G	8.565	35.00	HAT3	Budapest, Hungary
6.235	48.09	HRD	8.575	34.96	TYD2 YCP	Pontoise, France Balikpapan, N.E.I.
6.243	48.03	HIN	8.590	34.90	YNVA	Managua, Nicaragua
6.280	47.74	CO9WR HIG	8.620	34.78	WVD	Seattle, Wash.
6.300	47.59	HJ1ABH YV12RM	8.665	34.60	CO9JQ	Camaguey, Cuba
6.315	47.48	HI2	8.680	34.54	GBC	Rugby, Gt. Britain
6.330	47.36	JZG	8.690	34.50	VWZ	Kirkee, India
6.356	47.17	HRP1	8.750	34.26	ZBW	Hong Kong
6.375	47.03	YV4RC	8.900	36.50	HCJB	Quito, Ecuador
6.400	46.85	YV9RC	9.010	33.28	KEJ	Bolinas, Calif.
6.410	46.77	✓TIPG	9.020	33.24	GCS	Rugby, Gt. Britain
6.420	46.70	HI15	9.045	33.15	VWY	Kirkee, India
6.425	46.66	W2XGB W3XL W9XF W9XBS	9.125	32.86	HAT4	Budapest, Hungary
6.446	46.50	HJ1ABB	9.168	32.70	YVR	Maracay, Venezuela
6.450	46.48	HJ4ABC	9.280	32.31	OCB	Rugby, Gt. Britain
6.480	46.27	HI4V	9.415	31.84	PLV	Bandoeng, N. E. S.
6.500	46.13	HIL HI4D	9.428	31.80	✓COCH	Havana, Cuba
6.520	45.98	YV6RV	9.448	31.74	WES	Rocky Point, N. Y.
6.545	45.81	YV11RB	9.450	31.73	TG1X	Guatemala City, Guat.
6.550	45.76	TIRCC	9.460	31.69	XGOX WKJ	Nanking, China New Brunswick, N. J.
6.620	45.29	PRADO	9.470	31.66	WET	Rocky Point, N. Y.
6.630	45.22	HIT	9.480	31.63	KES	Bolinas, Calif.
6.650	45.09	HC2RL	9.490	31.59	OXY VK3ME	Copenhagen, Denmark Melbourne, Australia
6.662	45.00	WXH	9.500	31.56	HJ1ABE	Cartagena, Colombia
6.672	44.94	YVQ	9.505	31.54	XEFT PRF5	Veracruz, Ver. Rio de Janeiro, Brazil
6.700	44.75	TIEP	9.510	31.53	✓GSB HJU	Daventry, Gt. Britain Buenaventura, Colombia
6.750	44.42	HI3C JVT	9.520	31.49	RAN XEDQ	Moscow, USSR. Guadalajara, Jal.
6.755	44.38	WOA	9.530	31.46	✓W2XAF	Schenectady, N. Y.
6.800	44.09	HI7P	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	12.000	24.99	RNE	Moscow USSR.
9.600	31.23	CB960	12.225	24.53	TFJ	Reykjavik, Iceland
9.605	31.21	HP5J	12.290	24.49	GBU	Rugby, Gt. Britain
9.615	31.18	√HJ1ABP	12.830	23.36	CNR	Rabat, Morocco
9.617	31.18	HH3W	12.840	23.35	WOO	Ocean Gate, N. J.
9.635	31.12	√I2RO	13.075	22.93	VPD	Suva, Fiji
9.640	31.10	YDB	13.380	22.41	IDU	Asmara, Eritrea
9.650	31.07	CT1AA	13.410	22.36	WCT	San Juan, Puerto Rico
9.660	31.03	LRX	13.585	22.05	GBB	Rugby, Gt. Britain
9.670	31.01	TI4NRH	13.880	21.60	VJZ	Raboul, New Guinea
9.675	30.99	DZA	13.990	21.43	GBA2	Rugby, Gt. Britain
9.700	30.91	CQN	14.440	20.76	GBW	Rugby, Gt. Britain
√ 9.755	30.74	COCQ	14.590	20.55	WMN	Lawrenceville, N. J.
9.862	30.40	EAQ	14.640	20.48	JVH	Nazaki, Japan
9.870	30.38	WON	14.960	20.04	YSL	San Salvador, El Salv.
9.895	30.30	LSN	14.970	20.03	LZA	Sofia, Bulgaria
9.950	30.13	GCU	15.000	19.99	WWV	Beltsville, Md.
9.990	30.01	KAZ	15.055	19.91	WNC	Hialeah, Fla.
10.000	29.98	WWV	15.090	19.87	RKI	Moscow, USSR.
10.040	29.86	HII	15.120	19.83	HVJ	Vatican City
10.042	29.85	DZB	15.140	19.80	√GSF	Daventry, Gt. Britain
10.055	29.82	SUV	15.175	19.76	RV96	Moscow, USSR.
		ZFB	15.180	19.75	√GSO	Daventry, Gt. Britain
10.135	29.58	OPM	15.200	19.73	DJB	Zeesen, Germany
10.160	29.51	RIO	15.210	19.71	√W8XK	Pittsburgh, Pa.
10.220	29.34	PSH	15.220	19.70	PCJ	Hilversum, Netherlands
10.250	29.25	LSL	15.230	19.69	.....	Prague, Czechoslovakia
10.260	29.22	PMN	15.245	19.67	√TPA2	Pontoise, France
10.285	29.15	DZC	15.260	19.65	GSI	Daventry, Gt. Britain
10.290	29.14	HPC	15.270	19.64	W2XE	New York N. Y.
10.330	29.02	ORK	15.290	19.61	LRU	Buenos Aires, Argentina
10.335	29.01	ZFD	15.310	19.58	√GSP	Daventry, Gt. Britain
10.610	28.25	WEA	15.330	19.56	√W2XAD	Schenectady, N. Y.
10.660	28.13	JVN	15.340	19.55	DJR	Berlin, Germany
10.670	28.10	CEC	15.355	19.52	KWU	Dixon, Calif.
10.740	27.92	JVM	15.360	19.52	DZG	Zeesen, Germany
10.770	27.84	GCP	15.370	19.51	HAS3	Budapest, Hungary
10.840	27.66	KWV	15.415	19.45	KWO	Dixon, Calif.
10.955	27.37	HS8PJ	16.140	18.58	GBX	Rugby, Gt. Britain
11.000	27.26	PLP	17.080	17.55	GBC	Rugby, Gt. Britain
11.290	26.56	HIN	17.120	17.51	WOO	Ocean Gate, N. J.
11.490	26.09	PLO	17.310	17.32	W3XL	Bound Brook, N. J.
11.595	25.86	VRR4	17.480	17.15	VWY2	Kirkee, India
11.650	25.73	COCX	17.760	16.88	W2XE	New York, N. Y.
11.715	25.59	TPA4	17.775	16.87	PHI	Hilversum, Netherlands
11.720	25.58	√CJRX	17.780	16.86	√W3XAL	Bound Brook, N. J.
11.750	25.52	√GSD	17.790	16.85	GSG	Daventry, Gt. Britain
11.760	25.50	.....	18.310	16.40	GAS	Rugby, Gt. Britain
11.770	25.47	√DJD	18.350	16.34	WLA	Lawrenceville, N. J.
11.790	25.43	√W1XAL	18.620	16.10	√GAU	Rugby, Gt. Britain
11.795	25.42	DJO	18.670	16.06	OCI	Lima, Peru
11.810	25.39	I2RO	18.830	15.92	PLE	Bandoeng, N. E. I.
11.820	25.37	GSN	19.480	15.39	GAD	Rugby, Gt. Britain
11.830	25.34	W2XE	19.630	15.27	VQG	Nairobi, Kenya
		√W9XAA	19.650	15.26	LSN5	Buenos Aires, Argentina
		DJP	20.380	14.71	GAA	Rugby, Gt. Britain
11.855	25.29	GSE	21.470	13.96	√GSH	Daventry, Gt. Britain
11.860	25.28	GSE	21.520	13.93	√W2XE	New York, N. Y.
11.870	25.25	√W8XK	21.530	13.93	GSJ	Daventry, Gt. Britain
11.880	25.24	√TPA3	21.540	13.92	W8XK	Pittsburgh, Pa.
			26.100	11.49	GSK	Daventry, Gt. Britain

SHORT WAVE STATIONS BY LOCATIONS

MEXICO (XAA-XFZ)	PERU (OAA-OCZ)	Mobile WPGW 2.382	KIMA 2.632 Port San Juan KIJR 2.986	Lodi KNGY 2.414	Jacksonville WVFG 2.442
Guadalajara	Lima	ALASKA	P. Wakefield KIOC 2.632	Los Angeles KGFL 1.712	Lakeland WPFT 2.442
XEDQ 9.520	OAX4D 5.780 OAX4G 6.230 OCI 18.670	Akutan	Red Bluff KIOG 1.622	Palo Alto KGHK 1.674	Miami WPFZ 2.442 W4XB 6.040
Mexico City	PHILIPPINE ISLANDS (K)	Anchorage	Rose Inlet KIAP 3.093 KLE 2.512	Pasadena KGJX 1.712	Orlando WPHM 2.442
XEBT 6.000 XECR 7.380 XEWI 5.985 XEXA 6.182	Manila KAZ 9.990	Angoon	Shearwater Bay KIJW 2.632	Pomona KNFJ 1.712	Palm Beach WPFX 2.442
Tijuana	PORTUGAL (CSA-CUZ)	KAED 2.616 KAED 3.093	Tanana	Sacramento KNGF 2.422	Tampa WPHN 2.466
XEOK 6.130	Lisbon CT1AA 9.650	Cape Pole KIJB 2.994	KIJJ 3.190 Tenakee KAEP 2.616	San Bernardino KGZY 1.712	GEORGIA
Veracruz	SIAM (HSA-HSZ)	Circle KIHK 2.994 KIKK 3.190	Tin City KION 2.616	San KACN 2.414	Atlanta WVDPY 2.414
XEFT 9.505 XEUW 6.020	Bangkok HS8PJ 10.955	Cordova KILD 2.538 Deep Cove KHP 1.622	Todd KIJU 2.986	San Diego KGZD 2.490	Augusta WQFV 2.414
MOROCCO	SPAIN (EAA-EHZ)	Eagle KIIN 2.994	Uganik KIJP 2.986	San Francisco KGPD 2.466	Columbus WRFI 2.414
Rabat	Madrid EAQ 9.862	Excursion Inlet KILY 2.994	Union Bay KFF 2.566 KICG 3.265	San Jose KGPJ 2.466	La Grange WPGM 2.414
CNR 12.830	NETHERLANDS (PAA-PIZ)	Fort Yukon KIIL 2.994	View Cove KICI 3.093	Santa Ana KGHX 2.490	Macon WQFB 2.414
NETHERLANDS (PAA-PIZ)	Hilversum	Hidden Inlet KIDE 3.265 KLD 2.566	Washington Bay KIJK 1.622	Santa Barbara KGZO 2.414	HAWAII
PCJ 9.590 PCJ 15.220 PHI 17.775	NETHERLAND EAST INDIES (PKA-POZ; YBA-YHZ)	Hot Springs KIIM 2.994	Waterfall KIBZ 3.265 KLA 2.566	Santa Cruz KGZT 1.674	Honolulu KGPQ 1.712
NETHERLAND EAST INDIES (PKA-POZ; YBA-YHZ)	Batikpapan	Hydaburg KAEB 2.616	Wrangeli KDK 2.538	Tracy KACO 2.414	Kahuku KKH 7.520
YCP 8.575	Singapore ZHI 6.018	Iron Creek KIOH 2.632 Jack Wade KAEF 2.616	ARIZONA	Tulare WPDA 2.414	IDAHO
NETHERLAND EAST INDIES (PKA-POZ; YBA-YHZ)	SWITZERLAND (HBA-HBZ)	Juneau WXA 8.050	Phoenix KNGG 1.698 KGZJ 2.430	Vallejo KGPV 2.422	Idaho Falls KJFB 2.458
Bandoeng	Geneva HBL 9.595 HBP 7.797	Kadiak Island KIJX 2.632	Prescott KNHG 2.430	Whittier KGYH 1.712	ILLINOIS
PLE 18.830 PLO 11.490 PLP 11.000 PLV 9.415 PMN 10.260 YDA5 6.120	TAHITI	Kake KIBA 3.093 KLC 2.512	ARKANSAS	COLORADO	Chicago
Sourabaya	Papeete FOSAA 7.100	Ketchikan KGM 2.512	Fort Smith KNHE 2.406	Denver KGPX 2.442	WVDB 1.712 WVDF 1.712 WVDP 1.712 WQDC 1.610 W9XAA 6.930 W9XAA 11.850 W9XBS 6.425 W9XF 6.100 W9XF 6.425
YB 9.640	TAIWAN (J)	Kiay KIAY 3.093	Little Rock KGHZ 2.406	CONNECTICUT	DeQuoin WQPD 1.610
Tandjongpriok	Taihouku JIC 5.890	WXH 2.604 WXH 6.662	CALIFORNIA	Bridgeport WPFV 2.466	Effingham WQFF 1.610
YDA 6.040	NEW GUINEA	Luckyshot KIIP 3.100	Bolinas KEE 7.715 KEJ 9.010 KEL 6.860 KES 9.480	New Haven WQFA 2.466	Highland Park WFPD 2.430
NEW GUINEA	Raboult VJZ 13.880	McGrath KIIO 2.994	Berkeley KSW 1.658	New London WAKB 2.466	Macomb WQPM 1.610
NICARAGUA (YNA-YNZ)	UNION OF SOCIALIST SOVIET REPUBLICS (R; U)	Nakeen KHV 2.566 KICE 3.265	Bakersfield KACS 2.414 KGPS 2.414	DISTRICT OF COLUMBIA	Oak Park WQFL 1.712
Managua	Baku RIO 10.160	Nellie Juan KIOD 2.632	Bolinas KEE 7.715 KEJ 9.010 KEL 6.860 KES 9.480	Washington WPDW 2.422	Ottawa WQFZ 2.458
YNLF 9.590 YNVA 8.590	Khabarovsk RV15 4.273	Newport Walter KIJS 1.622	Compton KNFM 2.490	FLORIDA	Pontiac WQPP 1.610
NORWAY (LAA-LNZ)	Moscow	Pillar Bay KNBZ 2.994	Dixon KWN 21.060 KWO 15.415 KWU 15.355 KWV 10.840	Clearwater WAKG 2.466 WQFK 2.466	Rockford WVPGD 2.458
Jeloy LKJ1 9.540	RAN 9.520 RKI 15.090 RNE 12.000 RV96 15.175	Poorman KIEJ 2.994	Eureka KNGJ 2.490	Dinsmore WANB 2.726	Starling WQPG 1.610
PANAMA (HPA-HPZ)	UNITED STATES (K; N; W)	Port Alexander KDB 2.538	El Centro KNGJ 2.490	Duval County WAKJ 1.698	Springfield WQPS 1.610
Colon	ALABAMA	Port Althorp KIAW 3.093	Fresno KACI 2.422	Ft. Lauderdale WAKO 2.442	Waukegan WQFJ 1.712
HP5F 6.080 HP5K 8.005	Birmingham WPFM 2.382	Port Conclusion KIJI 1.622	Fresno KACI 2.422	Gainesville WQFC 2.466	
Panama City	ALABAMA	Port Herbert KIJO 1.622	Fresno KACI 2.422	Hialeah WND 4.098	
HP5B 6.030 HP5J 9.605	Birmingham WPFM 2.382	Port Hobron KHZ 2.912	Fresno KACI 2.422	WNC 15.055	

SHORT WAVE STATIONS BY LOCATIONS

INDIANA	KENTUCKY	Flint	NEW HAMPSHIRE	Mineola	Wilmington
Columbia City WQFW 1.634	Lexington WPET 1.706	WPDF 2.442	Nashua WPHB 2.422	WPGS 2.490	WPHK 1.596
Culver WPHS 1.634	Louisville WPDE 2.442	Grand Rapids WPEB 2.442		New York WPEG 2.450	Youngstown WPDG 2.458
Fort Wayne WPDZ 2.490		Grosse Pointe WRDR 2.414		Niagara Falls WNFP 2.422	Zanesville WPHO 2.430
Frankfort WAKK 2.490	LOUISIANA	Highland Park WMO 2.414	NEW JERSEY	Oncota WQFJ 2.414	OKLAHOMA
Huntington WAKA 2.490	New Orleans WPEK 2.430	Jackson WPHP 2.466	Bloomfield WAKH 2.430	Rochester WPDR 2.422	Ada KNHC 2.450
Indianapolis WMDZ 2.442	Shreveport KGZL 1.712	Lansing WPDJ 2.442	Bound Brook W3XAL 6.100	Rocky Point WEA 10.610	Altus KACL 2.450
Jasper WPHU 1.634	KNGP 2.430	Manitou Island WWAJ 3.410	W3XL 6.425	WES 9.448	Chickasha KACF 2.450
Kokomo WPDJ 2.490	MAINE	Marquette WWM 3.410	W3XL 17.310	WET 9.470	Cushing KAPB 2.450
Lafayette WQFQ 2.442	Portland WPFU 2.422	Muskegon WPCF 2.442	Erehold WAKC 2.366	WEZ 8.075	Drumright KAPC 2.450
Marion 2.490	MARYLAND	Passage Island WPFH 2.442	Hackensack WPKF 2.430	Schenectady W2XAD 15.330	Duncan KNGK 2.450
Marion County WPHIE 1.634	Baltimore WPFH 2.414	Rock of Ages WWM 3.410	Lawrenceville WKF 4.253	W2XAF 9.530	Lawton KGHP 2.450
Muncie WPGP 2.442	Boltsville WVV 5.000	Sault Ste. Marie WJ 3.410	WKF 19.220	S. Schenectady WPGC 1.658	Muskogee KNGT 2.450
Richmond WPDH 2.442	WVV 10.000	Port Huron WPGB 2.466	WLA 18.350	Syracuse WPEA 2.382	Norman KAPE 2.450
Seymour WQFE 1.634	WVV 15.000	Rock of Ages WWM 3.410	WLN 14.590	Utica WPGJ 2.414	Oklahoma City KGFH 2.450
South Bend WPGN 2.490	MASSACHUSETTS	Saglimaw WJ 3.410	WOA 6.755	Yonkers WPFY 2.442	Okmulgee KAPF 2.450
IOWA	Arlington WPED 1.712	Selfridge Field VK1 6.425	WON 9.870	NORTH CAROLINA	Ponca City KACP 2.450
Atlantic KACD 1.682	Boston WPGV 1.712		New Brunswick WKJ 9.460	Asheville WPF5 2.458	Seminole KACR 2.450
Cedar Rapids KGOZ 2.466	Boltsville WIXAL 6.040		Ocean Gate WOO 4.178	WPF6 2.474	Tulsa KGPO 2.450
Davenport KGPB 2.466	WIXAL 11.790		WOO 4.753	Charlotte WPDV 2.458	OREGON
Des Moines KGHO 1.682	Cohasset WPGU 1.712		WOO 8.560	NORTH DAKOTA	Klamath Falls KGGH 2.442
KGZG 2.466	Everett WAKF 1.712		WOO 12.840	Fargo KNHM 2.442	Portland KGGP 2.442
Fairfield KACC 1.682	Fairhaven WPFN 1.712	MINNESOTA	WOO 17.120	OHIO	Salem KGGZ 2.442
Sioux City KGPB 2.466	Fitchburg WPHA 2.466	Duluth KNFE 2.382	Passaic WPDJ 2.414	Akron WPDO 2.458	PENN- SYLVANIA
Storm Lake KNFO 1.652	Framingham WMP 1.666	Minneapolis KGPB 2.430	Wayne W2XE 6.120	Cincinnati WKDU 1.706	Harrisburg WPSF 1.674
Waterloo KNFN 1.582	Marshfield WOU 2.506	Redwood Falls KNHD 1.658	W2XE 11.830	Cleveland WRBH 2.458	Monessen WQFF 2.482
KANSAS	Medford WPHG 1.712	St. Paul WPDS 2.430	W2XE 15.270	Columbus WPGI 2.430	New Castle WPGT 2.482
Atchison KACA 2.422	Mills WIXK 9.570		W2XE 17.760	Dayton WPDH 2.430	Oil City WPHZ 2.482
Chanute KGZF 2.450	Newton WPIA 1.712		W2XE 21.520	Findlay WPGG 1.596	Philadelphia WPPD 2.474
Coffeyville KGZP 2.450	Northampton WPEW 1.666		NEW MEXICO	Lancaster WQFO 2.430	W3XAU 6.060
Dodge City KNGH 2.474	Somerville WPEH 1.712		Albuquerque KGZX 2.414	Mansfield WQFY 2.474	W3XAU 9.590
Elderado KAPD 2.450	W. Bridgewater WPEL 1.666		Clovis KNFA 2.414	Massillon WPHC 1.596	Pittsburgh WPDU 1.712
Garden City KNFH 2.474	Worcester WPGX 2.466		Santa Fe KGPB 2.414	Portsmouth WPGI 2.430	W8XK 6.140
Hutchinson KGNH 2.450	MICHIGAN			Sandusky WAKI 2.474	W8XK 11.870
Salina KNGV 2.422	Bay City WPGA 2.466			Staubenville WPHD 2.458	W8XK 15.210
Topeka KGZC 2.422	Detroit WCK 2.414			Toledo WRDQ 2.474	W8XK 21.540
Wichita KGPZ 2.450	W. Lansing WLDX 2.414				Reading WPF6 2.442
	WRDS 1.642				Sharon WQFU 2.482
					Swarthmore WPFQ 2.474
					Wilkes-Barre WQFM 2.442

SHORT WAVE STATIONS BY LOCATIONS

PUERTO RICO	TENNESSEE	El Paso	WASHINGTON	Walla Walla	VATICAN STATE (HVA-HVZ)
San Juan	Elizabethton	KGZM 2.414	Aberdeen	KACV 2.414	
WCT 13.410	WPHY 2.474	Fort Worth	KGZV 2.414	KNGD 2.490	
	Johnson City	KGPR 1.712	Bellingham	Wenatchee	
RHODE ISLAND	WPGZ 2.474	Galveston	KACK 2.414	KACJ 2.414	Vatican City
	Knoxville	KNGL 1.712	KNFK 2.490	KNGQ 2.490	HVJ 15.120
Cranston	WPFQ 2.474	Gladewater	Centralia	Yakima	VENEZUELA (YVA-YWZ)
WPGK 2.466	KACU 1.712	KACU 1.712	KGHW 2.414	KNGB 2.490	
E. Providence	Memphis	Houston	Ellensburg	KNGU 2.414	
WPEI 1.712	WPEC 2.466	KGZB 1.712	KNFX 2.490	WEST VIRGINIA	Barquisimeto
Pawtucket	Nashville	Lubbock	KNGZ 2.490	Charleston	YV3RB 5.895
WPFV 2.466	..... 1.666	KGZW 2.458	Ephrata	WPHI 2.490	Bolivar
Providence	TEXAS	San Antonio	KNGZ 2.490	Clarksburg	YV11RB 6.545
WPGF 1.712		KGZE 2.482	Everett	WPFJ 2.490	Caracas
Woonsocket	Austin	Waco	KNPF 2.414	Fairmont	YV2RC 5.800
WPEM 2.466	KGHU 2.442	KGZQ 1.712	KALF 2.490	WPHJ 2.490	YV3RC 6.165
	Beaumont	Wichita Falls	KACQ 2.490	Parkersburg	YV4RC 6.375
SOUTH CAROLINA	KGPI 1.712	KGZE 2.482	Mt. Vernon	WPHQ 2.490	YV9RC 6.400
	Big Spring	UTAH	KNFI 2.414		Maracaibo
Charleston	KACM 2.458	Salt Lake City	Olympia	WPHQ 2.490	YV5RMO 5.850
WCPD 2.430	Brownsville	KGPW 2.406	KACE 2.414		YV7RMO 5.810
	KGHT 2.382	VIRGINIA	KNFG 2.490	WISCONSIN	Maracay
SOUTH DAKOTA	Brownwood	Lynchburg	Seattle	Green Bay	YVQ 6.672
	KNGW 2.458	WQFH 2.450	Spokane	KNBH 2.382	YVR 9.168
Huron	Cleburne	Petersburg	KGPA 2.414	Kenosha	YV12RM 6.300
..... 2.450	KNGE 1.712	WQFI 2.450	WVD 2.604	WPEP 2.450	San Cristobal
Rapid City	Corpus Christi	WQFI 2.450	WVD 8.620	Milwaukee	YV10RSC 5.720
KNGM 2.450	KGHV 2.382	Richmond	Spokane	WPDK 2.450	Valencia
	WKPV 1.712	WPHF 2.450	KGHS 2.414	Oshkosh	YV6RV 6.520
	Denton	Roanoke	KNGR 2.490	WAKE 2.382	YUGO SLAVIA
	KNHF 1.712	WQFG 2.450	Tacoma		Belgrade
			KGZN 2.414		..... 6.100
			Vancouver		
			KNGC 2.490		

Numerous improvements in broadcasting in France are expected soon. First, the French Government has purchased the privately-owned station "Radio-Paris", but it has been decided to replace this station by a larger one, working on the same wavelength but situated in the center of France. This new station will commence operations in 1937.

The Eiffel Tower station will be transferred to a place outside of Paris because of the Exposition to be held there in 1937. The Lyon Tramoyes station located at Tramoyes (Ain) will replace the Lyon-La Doua station. A new station situated at Muret, the Pyrennees station, with a power of 120 kw. should be conducting its trial broadcasts at the present time. Many of the stations have had their power increased to 100 kw., particularly Marseilles PTT, Strasbourg Brumath, Rennes-Bretagne and Toulouse PTT.

There are 35,700 wireless transmitting stations in the world, but only 7,700 of these broadcast entertainment programs. The remainder are engaged in communication with ships, aircraft, etc.

Rules concerning "emergency" service have been clarified by the FCC. Among the new regulations is one that municipal police stations cannot have power in excess of 500 watts and that the maximum power assigned to state police will be 5000 watts days and 1000 watts nights. A table has been drawn up showing the maximum power to be assigned any police station in accordance with the population of the city. Cities under 100,000 will have to get along with a station of 50 watts or less. For each additional 100,000 persons, 50 watts power can be added, up to 700,000. Above this figure, the maximum power, 500 watts, is granted.

SHORT WAVE STATIONS BY CALLS

WPHY 2.474	WQFO 2.430	WQPS 1.610	WIXAL 11.790	W3XL 17.310	XEDQ 9.520	YV2RC 5.800
WPHZ 2.482	WQFQ 2.442	WRBH 2.458	W3XK 9.570	W4XB 6.040	XEFT 6.120	YV3RC 6.165
WPSP 1.674	WQFT 1.596	WRDQ 2.474	W3XAD 15.330	W8XA 6.060	XEOK 6.130	YV4RC 6.375
WQFA 2.466	WQFT 1.692	WRDR 2.414	W2XAF 9.530	W8XK 6.140	XEUW 6.020	YV5RMO 6.850
WQFB 2.414	WQFV 2.414	WRDS 1.642	W2XE 6.120	W8XK 11.870	XEWI 5.985	YV6RV 6.520
WQFC 2.466	WQFW 1.634	WVD 2.604	W2XE 11.830	W8XK 15.210	XEXA 6.182	YV7RMO 5.810
WQFE 1.634	WQFX 1.712	WVO 8.620	W2XE 15.270	W8XK 21.540	XGOX 9.460	YV8RB 5.895
WQFF 2.482	WQFY 2.474	WVV 5.000	W2XE 17.760	W8XAA 6.080	YCP 8.575	YV9RC 6.400
WQFG 2.450	WQFZ 2.458	WVW 10.000	W2XE 21.520	W8XAA 11.830	YDA 6.040	YV10RS 5.720
WQFH 2.450	WQPC 1.610	WVW 15.000	W2XGB 6.425	W8XBS 6.425	YDA5 6.120	YV11RB 6.545
WQFI 2.450	WQPD 1.610	WXA 8.050	W3XAL 6.100	W8XF 6.100	YDLF 5.950	YV12RM 6.300
WQFJ 2.414	WQPP 1.610	WXE 2.998	W3XAL 17.780	W8XF 6.425	YNVA 8.590	ZBW 8.750
WQFK 2.466	WQPG 1.610	WXH 2.604	W3XAU 6.060	XEBT 6.000	YSL 14.960	ZFA 5.025
WQFL 1.712	WQPM 1.610	WXH 6.662	W3XAU 9.590	XECR 7.380	YVQ 6.672	ZFB 10.055
WQFM 2.442	WQPP 1.610	WIXAL 6.040	W3XL 6.425		YVR 9.168	ZFD 10.335
						ZFS 4.512

Application for change of ownership of WFLA, Clearwater, Fla., has been filed with the FCC. No money will be involved. It is sought to transfer the station from the Clearwater Chamber of Commerce to the Florida West Coast Broadcasting Co., who have agreed to buy the equipment only. The City of St. Petersburg would retain its half interest (WSUN) for its own use.

* * *

In celebration of its 16th anniversary on the air, WWJ of Detroit formally opened its new broadcasting plant this summer. The new installation cost one million dollars, it is reported; it is located across the street on Lafayette Blvd. from the Detroit News Building, and the transmitter is situated at 8-Mile and Meyer Roads. The studio building was designed by Albert Kahn. There are four large studios which may be viewed from observation rooms, and there are numerous smaller studios. In the lobby of the transmitter room, behind a glass partition, WWJ's original transmitter is on display. With this station WWJ commenced regular broadcasting on Aug. 20, 1920.

* * *

With the expiration of the present Don Lee contract with CBS on Dec. 29, it is expected that the Mutual system will extend from Chicago to Los Angeles via Denver. When

Mutual takes over the Don Lee stations, KNX in Los Angeles and KSFO in San Francisco will become the CBS outlets in those cities.

* * *

Call letter changes are becoming more numerous. The new Watsonville, Calif. station, not yet on the air, has had two; originally assigned KWAT this has already been changed to KHUB. F. W. Atkinson is the owner of the station which will work with 250 watts on 1310 kcs. WPFB in Hattiesburg, Miss. is now using the sign WFOR. In Rapid City, S. Dak., KBHB, not yet on the air, has already been changed to KOHB.

* * *

WJSV, the CBS station serving Washington, D. C., wishes to move its main studios from Alexandria, Va., across the Potomac from the Capital City, into the city of Washington. If the move is granted they will move into the Earle Building, where their business offices already are located.

* * *

A new local station in Carlsbad, N. Mex. was authorized by the FCC. The station will operate on 1210 kcs. with 100 watts unlimited time. Partners in the organization are Barney Hubbs, A. J. Crawford, Jack Hawkins and Harold Miller, doing business as the Carlsbad Broadcasting Co.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

540 kcys. (555.2)

CJRM ak 1000 F Moose Jaw, Sask. —Su. 1400-0100; †0930-0130

550 kcys. (545.1) 1549

CFNB mk 500 F (1) Fredericton, N. B. —Su. 1000-1100; †0700-2300
 —Su. 0930-1330; 1600-1730; 2215-2315. †0800-0900; 1030-1045; 1315-1345; 1600-1645; 2300-2400
 KFUD ae 500 2 (1) St. Louis, Mo. —Su. 0900-0100; †0800-0100
 —†1200-2400
 KFVR ae 1000 N (5) Bismarck, N. D. —Su. 0900-0100; †0800-0100
 KOAC ak 1000 Corvallis, Ore. —†1200-2400
 KSD ak 1000 2R (5) St. Louis, Mo. —Su. 0900-0100; †0700-2400
 K TSA ak 1000 C (5) San Antonio, Tex.
 WDEV ae 500 D Waterbury, Vt.
 WGR ae 1000 C Buffalo, N. Y. —Su. 0900-0100; †0700-2400
 WKRC ak 1000 CX Cincinnati, Ohio
 W SVA ak 500 D Harrisonburg, Va.

560 kcys. (535.4)

KFDM ak 500 (1) Beaumont, Tex.
 ae 1000 C (5) Denver, Colo. —Su. 0900-0130; †0830-0200
 KSFO ak 1000 San Francisco, Cal. —Su. 1100-0400; †1000-0400
 KWTO ak 5000 D Springfield, Mo.
 WFIL ak 1000 B Philadelphia, Pa. —Su. 0800-2400; †0700-2400
 WIND ak 1000 (5) Gary, Ind. —M. 0600-0200; daily exc. M., 0600-0400
 WIS ae 1000 N (5) Columbia, S. C. —Su. 0800-2400; †0700-2400
 WOAM ak 1000 C Miami, Fla. —*0700-2400
 XEAO ak 250 (.15) Mexicali, L. C.
 XEFC ak 100 Merida, Yuc.

570 kcys. (526.0)

KGKO ak 250 C (1) Wichita Falls, Tex.
 KMTR ak 1000 Hollywood, Calif.
 KVI ak 1000 C Tacoma, Wash.
 WKBN ae 500 1C Youngstown, Ohio
 WMCA ak 500 X New York, N. Y.
 WNAX ak 1000 C (5) Yankton, S. D.
 WOSU ak 750 1 (1) Columbus, Ohio —M. thru F., 0900-1100; M thru Th., 1300-1500;
 —M., W., 2000-2200; F., 1900-2300; Sa. 1300-2300
 WSYR ak 1000 B Syracuse, N. Y. —Su. 0700-2400; †0700-0100
 WWNC ak 1000 N Asheville, N. C. —Su. 0800-0100; †0730-0100

580 kcys. (516.9)

CPPR ak 50 Prince Rupert, B.C.
 CHRQ ak 100 F Quebec, Que. —Su. 1200-2400; †0800-2400
 CKCL ag 100 F Toronto, Ont. —Su. 1000-2230; †0800-2400
 CKUA ak 500 Edmonton, Alta. —Su. 1030-0200; †1000-0300
 KMJ ak 500 C (1) Fresno, Calif. —†1030-1130; 1330-1500; †1730-1830
 KSAG ak 500 2 (1) Manhattan, Kans.
 WCHS ak 500 (1) Charleston, W. Va. —Su. 0800-2400; †0700-2400
 WDBO ak 1000 C Orlando, Fla. —†0900-1200; 1800-1900; 2300-0100
 WIBW ak 1000 C2 (5) Topeka, Kans. —Sa. 0730-0100; Su. 0900-2400; †0730-2400
 WILL ak 250 (1) Urbana, Ill.
 WTAG ae 500 RX Worcester, Mass.

590 kcys. (508.2) 1590

KHQ ak 1000 R (2.5) Spokane, Wash.
 WVEI ak 1000 RX Boston, Mass. —Su. 0815-1815; †0700-1815
 WKZO ak 1000 D Kalamazoo, Mich. —W. 0700-0100; daily exc. W., 0700-0330
 WOW ae 5000 R Omaha, Nebr.

600 kcys. (499.7) 1598

GFCF ae 400 FN Montreal, Que.
 CJOR ak 500 Vancouver, B. C. —Su. 0900-2315; †0745-0100
 CMW ak 1400 Havana, Cuba
 CRCW ak 500 F (1) Windsor, Ont. —Su. 1500-2330; †1630-2330
 FQN z 250 609 St. Pierre. Miq.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KFSD	ae	1000	B	San Diego, Calif.	
WCAO	ae	500	C (1)	Baltimore, Md.	
WICC	ae	500	C (1)	Bridgeport, Conn.	--Su. 0800-0100; †0700-0100
WMT	ak	1000	B (5)	Cedar Rapids, Ia.	--Su. 0830-0100; †0630-0100
WREC	c	1000	C (5)	Memphis, Tenn.	--Su. 0800-0100; †0730-0100

610 keys. (491.5)

KFRC	ck	1000	C (5)	San Francisco, Cal.	
WDAF	ak	1000	R (5)	Kansas City, Mo.	--Su. 0800-0100; †0730-0100
WIP	ak	1000	....	Philadelphia, Pa.	--Su. 0900-0100; †0700-0100
WJAY	ae	500	D	Cleveland, Ohio	
XEXM	z	....	....	Mexico City, D. F.	
XFX	ak	1000	....	Mexico City, D. F.	

620 keys. (483.6)

KGW	ak	1000	R (5)	Portland, Ore.	
KTAR	ae	1000	N	Phoenix, Ariz.	--Su. 1000-0115; †0900-0115
WFLA	ae	1000	Na (5)	Clearwater, Fla.	--Su. 0800-2400; M., W., F., 0700-0100
WHJB	ak	250	D C	Greensburg, Pa.	--Sign off at 1700
WLBZ	ak	500	C (1)	Bangor, Maine	
WSUN	ae	1000	Na (5)	St. Petersburg, Fla.	--Su. 0800-2400; Tu., Th., Sa., 0700-0100
WTMJ	ak	1000	N (5)	Milwaukee, Wis.	--Su. 0830-0100; †0715-0100

630 keys. (475.9)

CFCO	ak	100	F	Chatham, Ont.	--Su. 0930-1215; 1345-2200; †0800-1330; 1700-2230
CFCY	ae	1000	F	Charlottetown, P.E.I.	--Su. 1000-1200; 1700-2300; †0900-1200; 1600-2300
CJRC	ak	1000	F	Winnipeg, Man.	--*0830-0030
CKOV	ak	100	F	Kelowna, B. C.	--Su. 1330-0130; †1100-1500; 2000-0130
KFRU	ak	500	I (1)	Columbia, Mo.	--Sa. 0700-2300; Su. 0830-ss; †0700-2130
KCFX	ak	200	D	Pierre, S. D.	
WGBF	ak	500	I	Evansville, Ind.	
WVMA	ak	250	B (5)	Washington, D. C.	--Su. 0800-2400; †0700-0200
WOS	ak	500	1D	Jefferson City, Mo.	
WPRO	ak	500	(1)	Providence, R. I.	--Su. 0800-0100; †0700-0100
XEZ	z	500	....	Merida, Yuc.	

640 keys. (468.5)

CMBC	dj	150	....	Havana, Cuba	
KFI	ak	50000	R	Los Angeles, Calif.	--*0945-0300
WHKC	ak	500	....	Columbus, Ohio	--Su. 0830-2015; †0630-2015
WOI	ae	5000	D	Ames, Iowa	
WSPG	z	500	P	Portland, Me.	
XEOX	ak	500	....	Saltillo, Coah.	

650 keys. (461.3)

TIGPH	ak	1000	....	San Jose, C. R.	
WVSM	ae	50000	N	Nashville, Tenn.	--Su. 0900-0100; †0730-0100

660 keys. (454.3)

WAAW	ae	500	D	Omaha, Neb.	--Su. 0900-1800; †0700-ss
WVEAF	ak	50000	R	New York, N. Y.	--Su. 0800-0100; †0730-0100

670 keys. (447.5)

WMAQ	ak	50000	N	Chicago, Ill.	--Su. 0900-0100; †0700-0100
------	----	-------	---	---------------	-----------------------------

680 keys. (440.9)

CMCG	ak	1000	....	Havana, Cuba	--*0700-2400
KFEQ	ak	2500	D	St. Joseph, Mo.	
KPO	ak	50000	R	San Francisco, Cal.	--*1100-0300
RDN	z	500	....	San Salvador, E. S.	
VAS	akn	2000	685	Glance Bay, N. S.	
VQWR	ck	500	681	St. John's, Nfld.	
WPTF	ak	1000	N (5)	Raleigh, N. C.	--Su. 0900-2300; †0700-2300

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

690 keys. (434.5) 690

✓CFRB	ae	10000	C	Toronto, Ont.	—Su. 1030-2400; †0800-2400
CJGJ	ak	100	F	Calgary, Alta.	—Su. 1200-0100; †0930-0100
NAAI	akn	1000	.....	Arlington, Va.	
XET	ak	500	.....	Monterrey, N. L.	

700 keys. (428.3) 700

WLW	ak	500000	N	Cincinnati, Ohio	—Su. 0800-0130; †0630-0130
-----	----	--------	---	------------------	----------------------------

710 keys. (422.3) 710

KIRO	ak	1000	.....	Seattle, Wash.	—Su. 1000-0400; †0900-0500
KMPC	ak	500	.....	Beverly Hills, Cal.	—Su. 1000-ss.; 0030-0400; †0900-ss.; 0030-0400
WOR	ak	50000	.....	Newark, N. J.	
XEN	ak	1000	.....	Mexico City, D. F.	

720 keys. (416.4) 720

✓WGN	ak	50000	.....	Chicago, Ill.	
XEH	ak	250	.....	Monterrey, N. L.	—†1000-2100

730 keys. (410.7) 730

CFPL	ak	100	F	London, Ont.	
CJCA	ak	1000	F	Edmonton, Alta.	—Sa. 0900-0300; Su. 1100-0100; †0900-0200
✓CKAC	ak	5000	CF	Montreal, Que.	—Su. 0900-0100; †0730-0100
CKPR	ak	100	F	Fort William, Ont.	—Su. 1500-2300; †0900-1400; 1700-2300
CMK	ae	3000	.....	Havana, Cuba	
XEBC	z	5000	.....	Agua Caliente, L.C.	
XEPN	ak	50000	.....	Piedras Negras, Ch.	

740 keys. (405.2) 740

KMMJ	ae	1000	D	Clay Center, Neb.	
KTRB	ak	250	D	Modesto, Calif.	—Su. 1130-2030; †0900-2030
WHEB	ak	250	D	Portsmouth, N. H.	
✓WSB	ae	50000	N	Atlanta, Ga.	—Su. 0755-0100; †0655-0100

750 keys. (399.8) 750

CMCW	dk	150	.....	Havana, Cuba	
KGU	aj	2500	N	Honolulu, T. H.	
✓WJR	ak	50000	C	Detroit, Mich.	
XEAM	z	7.5	.....	Matamoros, Tams.	

760 keys. (394.5) 760

CMHX	ak	200	.....	Cienfuegos, Cuba	
KXA	ae	250	(5)	Seattle, Wash.	
✓WBAL	ae	2500	BSy	Baltimore, Md.	
WEW	ae	1000	D	St. Louis, Mo.	—Su. 0900-1100; †0800-ss.
✓WJZ	ak	50000	BSy	New York, N. Y.	—Su. 0800-0100; †0730-0100
XEOK	ak	250	.....	Tijuana, L. C.	

770 keys. (389.4) 770

CMBS	ak	150	.....	Havana, Cuba	
KFAB	ak	10000	CSy	Lincoln, Neb.	—*0700-0100
WBBM	ae	50000	CSy	Chicago, Ill.	

780 keys. (384.4) 780

CHWK	dk	100	F	Chilliwack, B. C.	—Su. 1500-0100; †1100-1700; 2000-0115
CKSO	ak	1000	F	Sudbury, Ont.	—Su. 1500-2300; †0900-1400; 1700-2400
CMJK	ak	250	.....	Camaguey, Cuba	—Su. 1100-1300; †1100-1400; Sa. 1700-2300;
KEHE	ak	500	(1) X	Los Angeles, Calif.	†1800-2200
KFDY	ae	1000	D	Brookings, S. D.	—†1330-1500
KFOD	ck	250	.....	Anchorage, Alaska	
KGHL	ak	1000	N(5)	Billings, Mont.	—Su. 1100-0100; †1000-0100
WEAN	ae	500	CX	Providence, R. I.	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WMC ak 1000 N (5.) Memphis, Tenn. —Su. 0800-0100; †0745-0100
 WTAR ae 500 NX (1) Norfolk, Va.
 XEYZ z 10000 Mexico City, D. F.

790 keys. (379.5)

CMGH z 250 Matanzas, Cuba
 KGO ak 7500 B San Francisco, Cal. —Su. 1100-0300; †1000-0300
 WGY ak 50000 R Schenectady, N. Y. —Su. 0900-0100; †0700-0100

800 keys. (374.8)

HIX ak 700 Trujillo, D. R.
 TIX ak San Jose, C. R.
 —Su. 1100-1300; 1600-1900; 2300-0130; †0700-0800; 0930-1130; 1330-1600; 1830-1930; M., W., F., 2300-0030; Tu., Th., Sa., 2000-2300
 WBAP ak 50000 Na Fort Worth, Tex.
 —Su. 0900-1100; 1300-1600; 1900-2200; †0000-0930; 1130-1330; 1600-1830; M., W., F., 1930-2300; Tu., Th., Sa., 1930-2000; 2300-0030
 WFAA ak 50000 Na Dallas, Tex.
 —Su. 1030-ss.; †0830-ss.
 √WTBO ak 250 D Cumberland, Md.

810 keys. (370.2)

CMCF ak 600 Havana, Cuba
 WCGO ae 50000 C Minneapolis, Minn. —Su. 0900-0100; †0730-0100
 WNYC ak 1000 D New York, N. Y. —Su. 0900-1900; †0700-1900
 XFC z 350 Aguascalientes, Ags.

820 keys. (365.6)

CMHW ak 100 Cienfuegos, Cuba
 √WHAS aj 50000 C Louisville, Ky.
 XEBZ ae 100 Mexico City, D. F. —*1430-0400
 XEMZ z Coronado Isle, L. C.

830 keys. (361.2)

CMJX z Camaguey, Cuba
 KOA ak 50000 N Denver, Colo. —Su. 1000-0300; †0900-0200
 WEEU ak 1000 D Reading, Pa. —*0800-1700
 WHDH ae 1000 Dn Boston, Mass.
 WRUF ae 5000 Dn Gainesville, Fla. —Su. 0800-1830; †0700-1830

840 keys. (356.9)

CFQC ak 1000 F Saskatoon, Sask.
 CRCT ak 5000 PN Toronto, Ont.
 VOGY ak 400 St. John's, Nfld.
 XERA ck 250000 Villa Acuna, Coah.

850 keys. (352.7)

CMBN z 150 Havana, Cuba
 KIEV ak 250 D Glendale, Calif.
 TIEP z 500 San Jose, C. R.
 —Su. 0800-1800; †0730-1800
 √WESG ak 1000 C Elmira, N. Y. —†0700-1700
 WKAR ae 1000 D East Lansing, Mich.
 WWL ae 10000 C New Orleans, La. —Su. 0900-0100; †0730-0100

860 keys. (348.6)

√WABC ae 50000 C New York, N. Y. —Su. 0800-0100; †0730-0100
 WHB ak 1000 D Kansas City, Mo.
 XEMO ak 5000 Tijuana, L. C. —Su. 1100-0200; †0945-0300

870 keys. (344.6)

WENR ak 50000 Na Chicago, Ill. —Su. 1200-1830; 2000-2400; †1500-1900; †2030-2400
 WLS ae 50000 Na Chicago, Ill.

880 keys. (340.7)

CFJC ak 100 F Kamloops, B. C. —Su. 1500-0115; †1230-1630; 1830-0115
 CMQ ak 500 Havana, Cuba
 —Su. 1030-2400; †0800-0930; Sa. 1200-2400; †1200-1400; 1700-2400
 CRCO ak 1000 F Ottawa, Ont.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KFKA	ak	500	2 (1)	Greeley, Colo.	—Su. 1830-2030; †0730-0930; 1100-1630; 1830-2030; 2230-0100
KLX	ae	1000	....	Oakland, Calif.	
KPOF	ae	500	2	Denver, Colo.	
WCOG	ae	500	(1)	Meridian, Miss.	
WGBI	ae	500	1	Scranton, Pa.	—Su. 1230-2115; †0700-1230; 1330-1630; M., W., Th., Sa., 1730-2230; Tu., F., 1730-2000
WPHR	ak	500	D	Petersburg, Va.	—*0730-ss.
WQAN	ae	250	1	Scranton, Pa.	—†1230-1330; 1630-1730; M., W., F., 0900-0930; Tu., F., 2000-2200
WSUI	ae	500	(1)	Iowa City, Iowa	—Su. 1015-1045; †1000-2300

890 kcys. (336.9)

KARK	ak	250	(.5)X	Little Rock, Ark.	—Su. 0900-0100; †0700-0100
KFNF	ak	500	2 (1)	Shenandoah, Iowa	—Su. 0900-1300; 1500-1700; 1800-1945; †0630-1700; 1900-2200
KFPY	ak	1000	C (5)	Spokane, Wash.	—Su. 1200-0300; †0950-0300
KUSD	ae	500	2	Vermillion, S. D.	
WBAA	ak	500	(1)	W. Lafayette, Ind.	—Sa. 1200-1700; Su. 1500-1700; †1200-1800
WGST	ak	1000	C	Atlanta, Ga.	
WJAR	ae	1000	R	Providence, R. I.	—Su. 0900-0100; 0730-0100
WMMN	500	250	C (1)	Fairmont, W. Va.	—Su. 0900-0100; †0700-0100
XEW	ak	50000	....	Mexico City, D. F.	

900 kcys. (333.1)

KGBU	ak	500	X	Ketchikan, Alaska	
KHJ	ae	1000	C (5)	Los Angeles, Calif.	
KSEI	ae	250	(5)	Pocatello, Idaho	—Su. 1200-0100; †0930-0100
WBEN	ak	1000	R (5)	Buffalo, N. Y.	—Su. 0900-2400; M., Tu., Th., F., 0700-2400; W., Sa., 0700-0100
WELI	ak	500	D	New Haven, Conn.	—*0600-ss.
WFMND	ak	500	D	Frederick, Md.	—Su. 1000-ss.; †0630-ss.
WJAX	ak	1000	N (5)	Jacksonville, Fla.	—Su. 0800-2400; †0645-0100
WKY	ae	1000	N (5)	Oklahoma City, Okla.	—Su. 0900-0100; †0745-0100
WLBL	ak	2500	D	Stevens Point, Wis.	—†0900-1700; Sa. 0900-1400
WTAD	ak	500	D	Quincy, Ill.	—* -1745

910 kcys. (329.6)

CJAT	ak	1000	F	Trail, B. C.	—Su. 1345-0200; †1000-0200
CKY	ak	15000	F	Winnipeg, Man.	—Su. 1200-0030; †0800-0100
CRGM	ak	5000	F	Montreal, Que.	—*0500-2330
XENT	ak	150000	...	Nuevo Laredo, Tams.	

920 kcys. (325.9)

GMX	ae	1000	....	Havana, Cuba	—M., 1100-0100; daily exc. M., 0800-0100
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	a	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. C.	—*0630-1800
WWJ	ak	1000	R (5)	Detroit, Mich.	—Su. 0800-0030; †0600-0030
XEAA	ak	200	....	Mexicali, L. C.	

930 kcys. (322.4)

CFAC	ak	100	F	Calgary, Alta.	—Su. 1100-0100; †0900-0200
CFCH	ak	100	F	North Bay, Ont.	
CFLC	ae	100	....	Prescott, Ont.	—Su. 0700-2000; †0800-1000; 1200-1400; M., W., Th., Sa., 1700-1930; Tu., F., 1700-2200
CHNS	ae	1000	F	Halifax, N. S.	—Su. 1400-2300; †0730-1230; 1600-2300
CKPC	ae	100	F	Brantford, Ont.	
KMA	ak	1000	(2.5)	Shenandoah, Iowa	
KROW	ak	1000	....	Oakland, Calif.	—Su. 1100-0500; †0900-0500
TIRH	z	50	....	San Jose, C. R.	
WBRC	ak	1000	C	Birmingham, Ala.	—*0800-0030
WDBJ	ae	1000	C (5)	Roanoke, Va.	—Su. 0830-0030; †0700-2400
XEBH	ak	500	....	Hermosillo, Sonora	—*1300-1600; 2100-2400

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

940 keys. (319.0)

KOIN	ak	1000	C (5)	Portland, Ore.	
VOAS	ak	100		St. John's, Nfld.	
WAAT	ak	500	D	Jersey City, N. J.	—*0630-1800
WAVE	ak	1000	N	Louisville, Ky.	—Su. 0900-0100; †0800-0100
WGSH	ak	1000	R (2.5)	Portland, Maine	—Su. 0845-2400; †0800-2400
WDAY	ae	1000	N (5)	Fargo, N. D.	
WHA	ak	5000	D	Madison, Wis.	—†0900-1730
XEFO	ak	5000	(XFO)	Mexico City, D. F.	

950 keys. (315.6)

CJOC	ak	100	F	Lethbridge, Alta.	—Su. 1030-0030; †0900-0100
CMCD	ak	250		Havana, Cuba	—Su. 1000-2100; †1200-0100
CRCS	ak	100	F	Chicoutimi, Que.	—Su. 1500-2330; †1630-2300
KFWB	ak	1000	(5)	Hollywood, Calif.	
KHSL	ak	250	D	Chico, Calif.	—Su. 1100-1945; †1000-1945
KMBC	ae	1000	C (5)	Kansas City, Mo.	—Su. 0830-0103; †0655-0103
WRC	ak	500	R (1)	Washington, D. C.	
YNVA	z	30		Managua, Nic.	

960 keys. (312.3)

CFRN	ak	100	F	Edmonton, Alta.	—Sa. 0930-0200; Su. 1200-0100; †0930-1300
CHNC	ak	1000	F	New Carlisle, Que.	
XEAW	ck	50000		Reynosa, Tams.	

970 keys. (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 keys. (306.0)

WKDKA	c	50000	B	Pittsburgh, Pa.	
-------	---	-------	---	-----------------	--

990 keys. (302.8)

WBZ	c	50000	BSy	Boston, Mass.	—Su. 0800-0100; †0630-0100
WBZA	c	1000	BSy	Springfield, Mass.	
XEAF	ak	500		Nogales, Sonora	
XEK	ak	100		Mexico City, D. F.	
XES	dk	250		Tampico, Tams.	

1000 keys. (299.8)

CMBZ	ak	500	(1)	Havana, Cuba	—18 hours daily
KFVD	ae	250	Dn	Los Angeles, Calif.	—*0100-0700; Su. 1100-2015; †0900-2015
TIGH	z	500		San Jose, C. R.	
WHO	ak	50000	R	Des Moines, Iowa	—Su. 1000-0100; †0700-0100
XEBK	ak	100		Nuevo Laredo, Tams.	—Su. 1200-1500; †1000-2030
XEY	z	10		Merida, Yuc.	

1010 keys. (296.9)

CHML	ak	100	F	Hamilton, Ont.	—Su. 0900-2230; †0800-2400
CKCD	ak	100	1	Vancouver, B. C.	
CKCD	ak	100		Vancouver, B. C.	
CKCK	ak	500	3F	Regina, Sask.	—Su. 1200-0100; †0930-0200
CKCO	ak	100	F	Ottawa, Ont.	—*1200-2330
CKIC	ak	50		Wolfville, N. S.	
CKWX	ak	100	F 1	Vancouver, B. C.	—Su. 1200-0200; 0230-0400; M., Tu., Th., Sa., 1000-2230; W., F., 1000-2330; Th., Sa., 0000-0200
CMJA	ak	50		Camaguey, Cuba	
KGGF	ak	1000	2	Coffeyville, Kans.	
KOW	ae	1000		San Jose, Calif.	—Su. 1130-0300; †0930-0300
TIGA	z	30	1014	Cartago, C. R.	
WHN	ae	1000	(5)	New York, N. Y.	
WNAD	ae	1000	2	Norman, Okla.	
WNOX	ak	1000	C (2)	Knoxville, Tenn.	—Su. 0900-0100; †0630-0200
XEU	ak	250		Veracruz, Ver.	—*0800-0100

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1020 keys. (293.9)

KYW ak 10000 R Philadelphia, Pa. —Su. 0800-0100; †0705-2200
 WDZ ak 250 D Tuscola, Ill. —Su. 0900-1800; †0700-1800
 XEJ ak 1000 Juarez, Chih.

1030 keys. (291.1)

CFCN ak 10000 Calgary, Alta. —Su. 0800-0100; †0645-0130
 CKLW ae 5000 Windsor, Ont. —*1000-2400
 CMCY ak 5000 Havana, Cuba —*1000-2415
 XEB ak 10000 Mexico City, D. F.

1040 keys. (288.3)

KRLD ak 10000 C Dallas, Texas —*0700-0100
 KWJJ ak 500 Portland, Ore.
 KYOS z 250 DP Merced, Calif.
 WTIC ah 50000 R Hartford, Conn.

1050 keys. (285.5)

CMKD ak 250 Santiago, Cuba
 CRCK ak 1000 F Quebec, Que. —Su. 0900-1945; †0700-1945
 KFBI ak 5000 Dn Abilene, Kans. —Su. 1100-0230; †0930-0315
 KNX ak 50000 Hollywood, Calif.
 TIFA z 75 San Jose, C. R.

1060 keys. (282.8)

KTHS ak 10000 N Hot Springs, Ark. —*2100-2400; Su. 1100-ss.; †0900-ss.
 VOAC z 40 1065 St. John's, Nfld.
 WBAL ak 10000 B (25) Baltimore, Md. —Su. 0800-2400; †0700-2400
 WJAG ak 1000 D Norfolk, Neb.
 XEA ak 500 Guadalajara, Jal.

1070 keys. (280.2)

CMBX ak 500 Havana, Cuba
 CMHA z 50 Sagua la Grande, C.
 KJBS ak 500 Dn San Francisco, Cal. —*0100-2030
 WCAZ ak 100 D² Carthage, Ill.
 WTAM ak 50000 R Cleveland, Ohio —Su. 0700-2400; †0600-2400

1080 keys. (277.6)

WBT ak 50000 C Charlotte, N. C. —Su. 1000-2400; †0645-2400
 WCBD ak 5000 1Dn Waukegan, Ill.
 WMBI ak 5000 1Dn Chicago, Ill.

1090 keys. (275.1)

KMOX ak 50000 C St. Louis, Mo. —Sa. 0700-0130; Su. 0830-0100; †0700-0100
 XEAQ ak 1000 Rosarito, L. C.

1100 keys. (272.6)

CRCV ak 1000 FX Vancouver, B. C. —*0900-ss.
 KGDM ak 1000 D Stockton, Calif. —Su. 0900-0100; †0730-0100
 WKWH ae 10000 C Shreveport, La. —Su. 1515-1630; 2000-2115; †1800-2000; F., 1400-1500
 WLWL ae 5000 I New York, N. Y. —Su. 0900-1515; 1630-2000; 2115-2400; M., Tu., W., Th., Sa. 0900-1800; 2000-2400; F., 0900-1400; 1500-1800; 2000-2400
 WPG ak 5000 IC Atlantic City, N. J.
 XEL z 250 Mexico City, D. F.

1110 keys. (270.1)

CMCJ ak 500 Havana, Cuba
 KSOO ak 2500 Dn Sioux Falls, S. D. —Su. 1000-1845; †0700-1845
 WRVA ak 5000 N Richmond, Va. —Su. 1000-2400; †0700-2400
 XELO z 10000 Piedras Negras, Co.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1120 kcys. (267.7)

CHLP	ak	100	F	Montreal, Que.	--Su. 1700-2100; †0900-2300
CHSJ	ak	500	F (1)	St. John, N. B.	--Su. 1000-1100; †1400-2300; †0500-0505; 0630-2400
CKOC	ae	500	F (1)	Hamilton, Ont.	
CKX	ak	100	F	Brandon, Man.	
CMGF	dk	150	....	Matanzas, Cuba	
CMKM	ak	200	....	Manzanillo, Cuba	--†0800-1200; 1800-2200
KFIO	ae	100	D	Spokane, Wash.	
KFSG	ag	500	a (2.5)	Los Angeles, Calif.	
KRKD	ak	500	a (2.5)	Los Angeles, Calif.	--Su.. 0930-1330; 1530-1800; 1900-2200; †0900-2245; F., 2245-0300
KRSC	ak	100	DX	Seattle, Wash.	
WCOP	ak	500	D	Boston, Mass.	--*0800-1600
WDEL	ak	250	(.5)	Wilmington, Del.	--Su. 0900-2300
WISN	ak	250	(1) C	Milwaukee, Wis.	--Su. 0900-0190; †0800-0100
WTAW	ae	500	....	College Station, Tex.	

1130 kcys. (265.3)

CMJI	ak	150	....	Ciego de Avila, Cuba	--Su. 0700-2400; †1200-2200
KSL	ak	50000	C	Salt Lake City, Utah	--Sa. 0830-0200; Su. 0200-to 0300 M.; †0830-0300
WJJD	ak	20000	Dn	Chicago, Ill.	--Su. 0730-1845; †0600-1845
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	....	Springfield, Mass.	--Su. 0845-1745; †0700-1745

1150 kcys. (260.7)

CMJF	z	200	....	Camaguey, Cuba	
WHAM	ae	50000	B	Rochester, N. Y.	--Su. 0830-2400; 0700-2400
XEFL	ak	250	....	Tijuana, L. C.	
XEWZ	ak	100	....	Mexico City, D. F.	

1160 kcys. (258.5)

CMHJ	ak	175	....	Cienfuegos, Cuba	--Su. 0800-1800; M. 1100-2200; Tu., Th., Sa. 0800-2300; W., F., 0800-2200
WOWO	ae	10000	1C	Fort Wayne, Ind.	
WWVA	ak	5000	1C	Wheeling, W. Va.	--Su. 0700-2200; M., Tu., F., 0600-2030; W. 0600-2000; Th., 0600-2100; Sa., 0600-0200; Tu., Th., 2330-0100
XEAS	z	100	....	Saltillo, Coah.	
XEC	z	30	....	Tijuana, L. C.	
XED	ak	2500	....	Guadalajara, Jal.	--*1200-1630; 2000-2400
XEP	ak	500	....	Juarez, Chih.	--*0900-0200
XESL	z	....	....	Tijuana, L. C.	

1170 kcys. (256.3)

CMBD	ae	500	....	Havana, Cuba	--*0700-2400
√WCAU	ak	50000	C	Philadelphia, Pa.	--Su. 0900-0100; †0730-0100

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.	
WNS	ak	1000	....	New York, N. Y.	
WMAZ	ak	1000	....	Macon, Ga.	--Su. 0845-1900; †0700-1900
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	D	Waterbury, Conn.	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WOAI ak 50000 N San Antonio, Tex. —Su. 0900-0030; †0730-0030
 WSAZ ak 1000 Huntington, W. Va. —Su. 1200-1900; †0700-1900

1200 keys. (249.9) 1200

CHAB ak 100 F Moose Jaw, Sask. —Su. 1145-0030; †0900-0030
 CKNX ak 50 Wingham, Ont. —Su. 1100-1300; †1100-1400; 1800-2100; Sa. 2300-0100
 CKTB ag 100 F St. Catharines, Ont. —Su. 1045-1300; 1500-2330; †0930-2330
 CMCO ak 150 Havana, Cuba
 KADA ak 100 D Ada, Okla.
 KBTM ak 100 D Jonesboro, Ark.
 KDNC z 100 P Lewistown, Mont.
 KFJB ak 100 (.25) Marshalltown, Iowa —Su. 1300-1500; †0700-2200
 KFXD ae 100 (.25) Nampa, Idaho —Su. 1300-2000; †0800-2200
 KFKJ ak 100 (.25) Grand Junc., Colo.
 KGDE ak 100 (.25) Fergus Falls, Minn. —Su. 1000-2200; †0800-2200
 KGKJ ak 100 Sterling, Colo.
 KGFJ ae 100 Los Angeles, Calif. —24 hours daily
 KGHJ ak 100 (.25) Little Rock, Ark. —Su. 0900-1930; †0830-2300
 KMLB ak 100 Monroe, La.
 KSUN c 100 (.25) Lowell, Ariz. —Su. 1700-2230; †1100-2300; W. 2300-2400
 KVCV z 100 P Redding, Calif.
 KVEC z 250 DP San Luis Obispo, Cal.
 KVOS dk 100 Bellingham, Wash.
 KWG ak 100 C Stockton, Calif. —Su. 1030-0300; †1000-0300
 WABI ak 100 Bangor, Maine
 WAIM ak 100 XZ Anderson, S. C. —Su. 0900-1730; †0600-2200
 WAYX z 100 P Waycross, Ga.
 WBBZ ak 100 Ponca City, Okla. —Su. 0930-1830; †0800-2200
 WBNO ak 100 I New Orleans, La.
 WCAT ak 100 D Rapid City, S. D.
 WCAX ak 100 Burlington, Vt.
 WCLO ak 100 X Janesville, Wis.
 WCPQ ak 100 (.25) Cincinnati, Ohio —Su. 0800-2300; †0700-2330
 WEST ae 100 3 (.25) Easton, Pa.
 WFAM ak 100 8 South Bend, Ind.
 WHBC ak 100 (.25) Canton, Ohio
 WHBY ak 100 (.25) Green Bay, Wis.
 WIBX ak 100 (.3) C Utica, N. Y. —Su. 0900-0100; †0700-0106
 WIL ak 100 (.25) St. Louis, Mo.
 WJCB ak 100 6 (.25) Bloomington, Ill. —*1000-1330; 1600-2036
 WJBL ak 100 6 Decatur, Ill.
 WJBW ak 100 I New Orleans, La.
 WJNO ak 100 W. Palm Beach, Fla. —Su. 0900-2200; †0700-2300
 WJRD c 100 DP Tuscaloosa, Ala. —Su. 1230-1900; †0800-1100; 1500-1800; 2000-2300
 WKBO ak 100 3 (.25) Harrisburg, Pa. —Su. 0900-1600; †0700-2300
 WLVA ak 100 (.25) Lynchburg, Va.
 WMFR ae 100 D High Point, N. C.
 WMPC ak 100 (.25) Lapeer, Mich.
 WNR1 ak 100 (.25) Newport, R. I.
 WOLS z 100 DP Florence, S. C.
 WRBL ak 100 Columbus, Ga. —Su. 0900-1600; 0730-2100; †0800-2230
 WTHT ak 100 D Hartford, Conn. —Su. 0900-1715; 0700-1615
 WWAE ae 100 8 Hammond, Ind.

1210 keys. (247.8) 1210

CJCS ak 50 Stratford, Ont. —†0800-1330; 1700-2100
 CJCU z 50 Aklavik, N. W. T.
 CKBI ak 100 F Prince Albert, Sask. —Su. 1500-0100; †0945-0100
 CKCH ak 100 F Hull, Que.
 CKMC ak 50 Cobalt, Ont.
 CMHI ak 150 Santa Clara, Cuba
 KANS ak 100 P Wichita, Kans. —Su. 0800-2400; †0730-2400
 KASA ck 100 Elk City, Okla. —Su. 0800-2000; †0700-2000
 KDLR ak 100 Devils Lake, N. D. —*0730-2130
 KDON z 100 Del Monte, Calif.
 KFJI ak 100 Klamath Falls, Ore.
 KFOR ae 100 (.25) C Lincoln, Neb.
 KFPW ak 100 Fort Smith, Ark.
 KFVS ak 100 6(.25) Cape Girardeau, Mo. —Su. 1000-1700; 2230-0100; †1000-1300; M., W., F., 1700-2130; Tu., Th., Sat. 1700-2030; 2200-0100
 KFXM ak 100 9 San Bernardino, Calif. —M. Tu., Th., F., Sa., 0900-0300; Su. 1700-2145; M. 0000-0300; W., 0900-2200; Th. 0030-0300
 KGLO z 100 P Mason City, Iowa
 KGY ak 100 Olympia, Wash.
 KIUL ak 100 Garden City, Kans. —Su. 1200-2000; †0800-2200
 KLAH z 100 P Carlsbad, N. Mex.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KOCA	z	100	P	Kilgore, Texas	
KPPC	ak	100	9	Pasadena, Calif.	—Su. 1200-1600; 2145-2400; †1000-0030
KVSO	ak	100	.....	Ardmore, Okla.	—Su. 0800-1800; †0800-2300
KWTN	ak	100	.....	Watertown, S. D.	
TGW	ak	10000	.....	Guatemala City	
WALR	ak	100	.....	Zanesville, Ohio	
WBAX	ae	100	.....	Wilkes Barre, Pa.	
WBBL	ak	100	S	Richmond, Va.	
WELY	z	100	DP	Lima, Ohio	
WBRB	ak	100	3	Red Bank, N. J.	
WCOL	ak	100	.....	Columbus, Ohio	—Su. 1000-2200; †0700-2300
WCRW	ae	100	4	Chicago, Ill.	
WEBQ	ae	100	6(.25)	Harrisburg, Ill.	—*0700-1000; †1300-1700; Su., 1700-2230; M., W., F., 2130-0100; Tu., Th., Sa., 2030-2200
WEDC	ae	100	4	Chicago, Ill.	
WFAS	ak	100	3	White Plains, N. Y.	
WFOY	z	100	P	St. Augustine, Fla.	
WGBB	ae	100	3	Freeport, N. Y.	
WGCM	ae	100	(.25)	Gulfport, Miss.	
WGNV	ak	100	3	Newburgh, N. Y.	—†0730-0900; M., Tu., Th., F., 1100-1300; Sa., 0645-0900; 1130-1500; 2200-2400; Su. 0900-2400
WHBF	ak	100	(.25)	Rock Island, Ill.	—Su. 0800-0105; †0700-0105
WHBU	ak	100	(.25)	Anderson, Ind.	
WIBU	ak	100	(.25)	Poynette, Wis.	
WJBY	ak	100	.....	Gadsden, Ala.	—Su. 1100-2200; †0800-2230
WJEJ	ae	100	D	Hagerstown, Md.	
WJIM	z	100	(.25)	Lansing, Mich.	—†0800-2230; F., 2230-2300; Sa., 2230-0200; Su. 0930-2230
WJW	ae	100	(.25)	Akron, Ohio	
WKOK	ak	100	.....	Sunbury, Pa.	
WLMU	z	100	P	Middlesboro, Ky.	
WMBG	ak	100	C(.25)	Richmond, Va.	—Su. 1330-1630; 2130-2400; †0700-2400
WMFG	z	100	.....	Hibbing, Minn.	—Su. 1300-2200; †0730-2200
WMFN	ak	100	Y	Clarksdale, Miss.	
WOCL	ak	50	.....	Jamestown, N. Y.	
WOMT	ak	100	.....	Manitowoc, Wis.	
WPAX	ak	100	D	Thomasville, Ga.	—Su. 0900-1600; †0800-1800
WSAY	z	100	DP	Rochester, N. Y.	
WSBC	ae	100	4	Chicago, Ill.	—*0600-0830; 1000-1100; 1400-1530; 2000-2200; 2300-2400
WSIX	ak	100	Y	Springfield, Tenn.	
WSOC	ak	100	N(.25)	Charlotte, N. C.	—Su. 0900-2400; †0700-2400
WTAX	ak	100	.....	Springfield, Ill.	
XEAT	ak	300	(.25)	Hidalgo, Chih.	—Su. 1100-1700; 1100-2100
XEE	z	50	.....	Durango, Dgo.	
XEFV	ak	100	.....	Juarez, Chih.	
XETH	ak	100	.....	Puebla, Pue.	

1220 keys. (245.8) 1.210

CMJE	z	50	.....	Camaguey, Cuba	
KFKU	ak	1000	a (5)	Lawrence, Kans.	—†1530-1600; M., Tu., Th., Sa., 1900-1915; W., F., 1900-1930
KTW	ak	1000	S2	Seattle, Wash.	
KWSC	ae	1000	2 (5)	Pullman, Wash.	—†0945-1100; 1330-0030 (Th. to 2230 only)
TIVCA	ak	.....	1225	San Jose, C. R.	
WCAD	ak	500	D	Canton, N. Y.	—†1230-1330; 1500-1600; Su. irreg.
WCAE	ak	1000	R(5)	Pittsburgh, Pa.	—Su. 0800-0200; †0700-0230
WDAE	ae	1000	C (5)	Tampa, Fla.	—Su. 0800-?; †0730-?
WREN	ak	1000	Ba(5)	Lawrence, Kas.	—Su. 0900-0100; †0800-1530; 1600-1900; M., Tu., Th., Sa., 1915-0100; W. F., 1920-0100
XETF	ak	12	.....	Veracruz, Ver.	

1230 keys. (243.8)

CMCB	ak	150	.....	Havana, Cuba	
KGBX	ak	500	.....	Springfield, Mo.	
KGGM	ak	250	(.5)	Albuquerque, N. M.	—Su., 1245-2000; †0930-2330
KYA	ak	1000	N	San Francisco, Calif.	
WFBM	ae	1000	C(5)	Indianapolis, Ind.	—Su., 0800-0100; †0730-0100
WNAC	ak	1000	R (5)	Boston, Mass.	—Su., 0800-0100; †0630-0100
XEFJ	ak	100	.....	Monterrey, N. L.	—†1100-1500; 1800-2000
YNOP	z	100	.....	Managua, Nic.	

1240 keys. (241.8)

CJCB	ak	1000	F	Sydney, N. S.	—Su. 1400-2300; †0700-1300; 1500-2300
CMHB	z	50	.....	Sancti Spiritus, Cuba	
KGCU	ak	250	1	Mandan, N. D.	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KLPM	ak	250	1	Minot, N. D.	--Su. 1000-1245; 1430-1530; 1800-2100; †0800-1400; 1900-2045; 2300-0030
KTAT	ak	1000	....	Fort Worth, Texas	
KTFI	ae	1000	....	Twin Falls, Idaho	
WKAQ	ae	1000	....	San Juan, P. R.	
WXYZ	ak	1000	B	Detroit, Mich.	
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.	
WCAL	ah	1000	2(2.5)	Northfield, Minn.	
WDSU	ak	1000	....	New Orleans, La.	--Su. 0800-2400; †0700-2400
WHBI	ak	1000	1(2.5)	Newark, N. J.	--Su. 0700-1000; 1230-1830; 2100-to 0700 Mon., M. 1400-1700; 2000-2200
WLB	ak	1000	2	Minneapolis, Minn.	
WNEW	ae	1000	1(2.5)	Newark, N. J.	
WTCN	ak	1000	2 (5)	Minneapolis, Minn.	--Su. 1030-1600; 1700-2000; 2100-0100; †0700-1045; 2000-2400; M., Sa., 1015-1900; W., 1045-1900; Th., 1015-1045; 1330-2000

1260 kcys. (238.0)

KGVO	ak	1000	C	Missoula, Mont.	--Su. 1100-0100; †0900-0100
KOIL	ak	1000	B(2.5)	Council Bluffs, Ia.	
KPAC	ak	500	D	Port Arthur, Texas	--*0600-1745
KRGV	ae	500	....	Weslaco, Texas	--*0800-2300
KUOA	ak	1000	DX Y	Fayetteville, Ark.	
KVOA	ak	500	....	Tucson, Ariz.	
WHIO	ak	1000	C (5)	Dayton, Ohio	--Su. 0100-0200; 0800-2400; †0600-0100
WNBX	ak	1000	....	Springfield, Vt.	--Su. 1030-1800; †0715-1330; Sa. 1500-2100; 11600-2200
WTOC	ae	1000	C	Savannah, Ga.	--Su. 0830-2400; †0700-2400

1270 kcys. (236.1)

CMHD	dk	250	....	Caibarien, Cuba	
KGCA	ak	100	2D	Decorah, Iowa	
KOL	ae	1000	C(5)	Seattle, Wash.	
KVOR	ae	1000	C	Colorado Sp'gs, Colo.	--Su. 1100-0100; †0900-0100
KWLC	ak	100	2D	Decorah, Iowa	
WASH	ak	500	aN	Grand Rapids, Mich.	--Su. 0800-2400; †0700-2400
WFBR	ae	500	R (1)	Baltimore, Md.	--Su. 0900-2400; †0700-2400
WJDX	ae	1000	N(2.5)	Jackson, Miss.	
WOOD	ak	500	aN	Grand Rapids, Mich.	--Su. 0800-2400; †0700-2400
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	--*0655-0100; Su. 0200-0500
KFBB	ae	1000	C (2.5)	Great Falls, Mont.	
WCAM	ae	500	1	Camden, N. J.	--Su. 1015-1230; 1500-1700; M., W., F., 1030-1130; Mon. thru Fri., 1400-1700; M., 2000-2400; F., 2100-2400
WCAP	ae	500	1	Asbury Park, N. J.	--Su. 0600-1015; 1230-1500, M., W., F., 1130-1400; Tu., Th., Sa., 1030-1400; daily exc. Mon., 2000-2400
WDOD	ak	1000	C(5)	Chattanooga, Tenn.	--*0730-0030
WIBA	ae	1000	N(5)	Madison, Wis.	
WORC	ak	500	C	Worcester, Mass.	--Su. 0845-2315; †0800-2400
WRR	ak	500	....	Dallas, Texas	--Su. 0830-2330; †0800-2400
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	--*0800-0300
KLCN	ak	100	D	Blytheville, Ark.	
KTRH	ak	1000	C(5)	Houston, Texas	
WEBC	ak	1000	N (5)	Superior, Wis.	--Su. 0900-0100; †0800-0190
WJAS	ak	1000	C(5)	Pittsburgh, Pa.	--Sa., Su., 0730-2400; †0730-0030
WNBZ	ak	100	D	Saranac Lake, N. Y.	--Su. 1000-1400; †0930-ss.
WNEL	ak	1000	(2.5)	San Juan, P. R.	--*0630-2330

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1300 keys. (230.6)

KALE	ak	500	3C	Portland, Ore.	
KFAC	ak	1000	....	Los Angeles, Calif.	
KFH	ak	1000	C	Wichita, Kans.	
KFJR	ag	500	3	Portland, Ore.	—†1330-1730; M., 2000-2100; M., Th., Sa., 2200-2300; Tu., W., 2200-0200; F., 2200-0130
WBBR	ak	1000	1	Brooklyn, N. Y.	—Su., 0800-1100; 1500-2000; †0630-0700; 1000-1200; Tu., W., Th., F., 1800-2000
WEVD	ak	1000	1	New York, N. Y.	—Sa. 1000-1200; 1500-2100; Su. 0000-0300; †0000-0100; 0700-0900; †1500-1800; Daily exc. M., 2000-2100; 2200-2300
WFAB	ae	1000	1	New York, N. Y.	
WFBC	ak	1000	(5)N	Greenville, S. C.	
WHAZ	ae	500	1	Troy, N. Y.	—†1800-2400
WHBL	ae	250	....	Sheboygan, Wis.	
WIOD	ak	1000	N	Miami, Fla.	

1310 keys. (228.9)

CHCK	ak	50	...	Charlottetown, P.E.I.	
CJKL	ak	1000	F	Kirkland Lake, Ont.	
CJLS	ak	100	....	Yarmouth, N. S.	
CKCV	ak	100	F	Quebec, Que.	—Su. 1200-2300; †0755-2330
KCRJ	ak	100	D	Jerome, Ariz.	—Su. 0800-1000; †0700-1600; 1945-2245
KFPL	dk	100	(.25)	Dublin, Texas	—Su. 1030-2330; †0800-2400
KFXR	ak	150	(.2)	Oklahoma City, Okla.	—Su. 0900-1500; 1700-1915; †0800-2215; W., 2215-2400
KFYO	ak	100	(.25)	Lubbock, Texas	
KGCX	ak	100	(.25)XZ	Wolf Pt., Mont.	
KGEZ	ae	100	....	Kalispell, Mont.	—Su. 1100-1800; †0900-2300
KGFW	ak	100	....	Kearney, Neb.	—Su. 0930-1045; 1200-1300; 2030-2130; †0700-1430; 1630-2200
KHUB	z	250	DP	Watsonville, Calif.	
KINY	ak	100	....	Juneau, Alaska	—Su. 1500-1800; 2100-2400; †1200-0200; Sa. 0200-0300
KIT	ak	100	(.25)	Yakima, Wash.	
KIUJ	ak	100	....	Santa Fe, N. Mex.	
KMED	ck	100	(.25)	Medford, Ore.	
KPDN	z	100	DP	Pampa, Texas	
KRMD	ak	100	....	Shreveport, La.	
KROC	ak	100	....	Rochester, Minn.	—Su. 1000-0015; †0700-0015
KROY	z	100	DP	Sacramento, Calif.	
KRRV	z	100	DP	Sherman, Texas	
KTSM	ak	100	....	El Paso, Texas	—Su. 1000-1130; 1500-2030; †0830-0100
KVOL	ak	100	....	Lafayette, La.	—Su. 1200-1900; †0800-1500; 1700-2230
KXRO	ak	100	....	Lafayette, Wash.	—Su. 1300-2200; †1000-0200
WAML	ak	100	....	Laurel, Miss.	—Su. 1300-2000; †0800-1100; 1200-1500; 1700-2000; Sa. 2000-2230
WBEO	ae	100	....	Marquette, Mich.	—Su. 1000-1430; †1030-1730
WBOW	ak	100	(.25)	Terre Haute, Ind.	—*0700-2400
WBRE	ak	100	....	Wilkes Barre, Pa.	
WCLS	ak	100	....	Joliet, Ill.	
WCMI	ak	100	(.25)	Ashland, Ky.	—Su. 0900-2230; †0600-2330; Sa. 2330-2400
WDAH	ak	100	S	El Paso, Texas	—Su. 1130-1400; 2130-2230
WEBR	ak	100	B(.25)	Buffalo, N. Y.	—Su. 0000-0100; 0900-2400; †0700-2400
WEMP	ak	100	D	Milwaukee, Wis.	—Su. 0900-ss.; 0730-ss.
WEXL	ak	50	....	Royal Oak, Mich.	—*0800-2400; †0000-0400
WFBG	ae	100	3	Altoona, Pa.	
WFDH	ak	100	....	Flint, Mich.	—Su. 0900-2400; †0700-2400
WGH	ak	100	(.25)	Newport News, Va.	—Su. 0830-2230; †0700-2400
WHAT	ak	100	4	Philadelphia, Pa.	—Su. 0900-1015; 2000-2400; †1300-1400; M., W., F., 0900-1030; 1130-1200; M., F., 1700-1830; Tu., 0900-1200; 2030-2400; W., 1700-2400; Th. 0900-1100; Sa., 0900-1130; 1300-1600; 2100-2400
WJAC	ae	100	3	Johnstown, Pa.	
WLAK	z	100	....	Lakeland, Fla.	
WLBC	ak	100	6(.25)	Muncie, Ind.	—Su. 0930-1900; †0700-1900; 2030-2400
WLNH	ak	100	....	Laconia, N. H.	
WMBO	ak	100	....	Auburn, N. Y.	
WMFF	ak	250	D	Plattsburg, N. Y.	
WNBH	ak	100	(.25)	New Bedford, Mass.	—Su. 0845-2315; †0730-2315; Sa. to 2400
WOL	ae	100	XZ	Washington, D. C.	—Su. 0800-2400; †0700-0100
WRAW	ak	100	....	Reading, Pa.	—Su. 1800-?; †0700-1300; †1630-2230; Sa. 1700-2300
WRQL	ak	100	(.25)	Knoxville, Tenn.	
WSAJ	ae	100	(.25)	Grove City, Pa.	
WSGJ	ak	100	(.25)	Birmingham, Ala.	
WSJS	ak	100	C	Winston-Salem, N.C.	—Su. 0830-2400; †0800-2400
WTAL	ak	100	....	Tallahassee, Fla.	—Su. 0900-2200; †0800-2200
WTFL	ce	100	4	Philadelphia, Pa.	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WTJS	ak	100	(.25)	Jackson, Tenn.	
WTRC	ak	100	6(.25)	Elkhart, Ind.	—Su. 1200-2215; †0700-2030
XEAG	z	10	....	Cordoba, Ver.	
XECW	z	10	....	Mexico City, D. F.	
XEFW	ak	250	....	Tampico, Tams.	—Su. 1130-1600; †1100-2200
XETB	ak	125	....	Torreón, Coah.	
XEX	ak	125	....	Monterrey, N. L.	
XFA	z	5	....	Aguascalientes, Ags.	

1320 kcys. (227.1)

CMOX	ak	200	....	Havana, Cuba	
KGHF	am	500	....	Pueblo, Colo.	—Su. 1230-1830; 0930-2345
KGMB	ak	1000	C	Honolulu, T. H.	
KID	ae	500	(1)	Idaho Falls, Idaho	
KRNT	ak	500	C(1)	Des Moines, Iowa	
WADC	ae	1000	C(5)	Akron, Ohio	—*0700-0100
WORK	ak	1000	....	York, Pa.	—Su. 1045-2030; †0800-2200
WSMB	ak	1000	N	New Orleans, La.	

1330 kcys. (225.4)

CMHK	z	250	....	Crucés, Cuba	
CMKW	z	....	....	Santiago, Cuba	
KGB	ag	1000	C(2.5)	San Diego, Calif.	—Su. 1100-0300; †1000-0400
KMO	ak	250	....	Tacoma, Wash.	—Su. 1300-2200; †0900-0300
KSCJ	ak	1000	C(2.5)	Sioux City, Iowa	—Su. 0900-0100; †0700-0100
WDRC	ae	1000	C(5)	Hartford, Conn.	—Su. 0930-2400; †0700-2400
WSAI	ak	1000	N(2.5)	Cincinnati, Ohio	—Su. 0800-0100; †0700-0100
WTAQ	ae	1000	....	Green Bay, Wis.	

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.	—Su. 1000-1500; †0800-1845
KGIR	ak	1000	N(2.5)	Butte, Mont.	—Su. 1100-0100; †1000-0100
KGNO	ak	250	....	Dodge City, Kans.	
WCOA	ak	500	C	Pensacola, Fla.	—Su. 0900-2400; †0830-2400
WFEA	ae	500	C(1)	Manchester, N. H.	—Su. 0845-2400; †0800-2400
WSPD	ae	1000	C(5)	Toledo, Ohio	—Su. 0830-0100; †0630-0100
XEFE	z	250	....	Nuevo Laredo, Tams.	
XFD	z	350	....	Jalapa, Ver.	

1350 kcys. (222.1)

CMCA	z	250	....	Havana, Cuba	—Su. 1230-2000; †1000-2400
KIDO	ak	1000	(.25)	Boise, Idaho	—Su. 0800-0100; †0630-0100
KWK	ak	1000	B(5)	St. Louis, Mo.	—Daily exc. Tu., Sa., 0600-0900; Tu., Sa., 0745-0845; Su. 1100-1230; 1500-1630; 1900-2030; M., W., 1900-2030; Tu., Th., F., Sa., 1700-1830
WAWZ	ae	500	I(1)	Zarephath, N. J.	—Su. 0900-1100; 1230-1500; 1630-1900; 2030-0015; †0900-1700; M., W., 1700-1900; 2030-0015; Tu., Th., F., Sa., 1830-0015
WBNX	ae	1000	I	New York, N. Y.	

1360 kcys. (220.4)

CMJH	dk	50	....	Ciego de Avila, Cuba	
KCRC	ak	250	....	Enid, Okla.	—*0800-2300
KGER	ak	1000	....	Long Beach, Calif.	
WCSC	ak	500	(1)N	Charleston, S. C.	—Su. 0800-2400; †0700-2400
WFBL	ak	1000	C(5)	Syracuse, N. Y.	—Su. 0900-0100; †0700-0100
WGES	ae	500	I	Chicago, Ill.	
WQBC	ak	1000	D	Vicksburg, Miss.	
WSBT	ak	500	I	South Bend, Ind.	

1370 kcys. (218.8)

CKCW	ak	100	F	Moncton, N. B.	
CMGE	ak	150	....	Cardenas, Cuba	—Su. 0800-2200; †1000-1300; 1900-2230
HIZ	z	10	....	Trujillo, D. R.	
KAST	ak	100	D	Astoria, Ore.	—†1100-2030
KCMO	ak	100	....	Kansas City, Mo.	—Su. 0000-0500; 0700-0100; †0700-0200
KELD	z	100	....	El Dorado, Ark.	
KERN	ak	100	....	Bakersfield, Calif.	*1100-0300
KFGQ	ak	100	....	Boone, Iowa	—Su. 0830-1000; 1130-1230; 1530-1700; †0700-0830; 1030-1100; 1300-1400
KFJM	ak	100	(.25)XZ	Grand Forks, N. D.	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KFJZ	ae	100	(.25)	Fort Worth, Texas	
KFRD	ak	100	D	Longview, Texas	—Su. 0900-ss.; †0700-ss.
KGAR	ae	100	(.25)	Tucson, Ariz.	
KGFG	bk	100	....	Oklahoma City, Okla	
KGFL	ak	100	4	Roswell, N. M.	
KGKL	ak	100	(.25)	San Angelo, Texas	
KICA	ak	100	4	Clovis, N. M.	—Su. 1300-1830; †0900-1830; 2130-2300
KLUP	ak	100	....	Durango, Colo.	—Su. 1300-1830; †1000-2300
KLUF	ak	100	(.25)	Galveston, Texas	—Su. 1000-1515; 1900-2130; †0900-1600; 1800-2400
KMAC	ak	100	5	San Antonio, Tex.	—*2300-0130; Su. 0800-1000; 1200-1330; 1500-1700; 1900-2100; †0800-0930; 1100-1200; 1300-1430; 1700-1900; 2000-2100
KOBH	ak	100	P	Rapid City, S. Dak.	—Su. 1100-2000; †0800-2400
KONO	ak	100	5	San Antonio, Tex.	—Su. 1000-1200; 1330-1500; 1700-1900; 2100-2300; †0700-0800; 0930-1100; 1200-1300; 1430-1700; 1900-2000; 2100-2300
KRE	ak	100	(.25)	Berkeley, Calif.	—24 hours daily
KRKO	ak	50	I	Everett, Wash.	
KSLM	ak	100	....	Salem, Ore.	—Su. 1200-2345; †1000-0100
KTEM	z	100	DP	Tempe, Texas	
KUJ	ak	100	....	Walla Walla, Wash.	
KVL	ak	100	I	Seattle, Wash.	
KWYO	ak	100	(.25)	Sheridan, Wyo.	—Su. 1000-1400; 1900-2330; †0900-2400
WABY	ak	100	B	Albany, N. Y.	—*0700-2400
WAGF	ak	250	D	Dothan, Ala.	—Su. 0900-1730; †0900-ss.
WATL	ak	100	....	Atlanta, Ga.	
WBNY	ak	100	2(.25)	Buffalo, N. Y.	—Su. 1000-2400; †0730-0830; 1000-2400
WBTM	ak	100	(.25)	Danville, Va.	—Su. 1000-1300; †0700-1400; 1700-2200
WCBM	ae	100	(.25)	Baltimore, Md.	
WDAS	ag	100	(.25)	Philadelphia, Pa.	—*0800-2400
WDWS	ak	100	DP	Champaign, Ill.	—On air Dec. 1, 1936
WEOA	z	100	....	Evansville, Ind.	
WEXP	z	100	DP	Clarksburg, W. Va.	
WFOR	ak	100	....	Hattiesburg, Miss.	—Su. 1300-1900; †0800-2100
WGL	ae	100	C	Fort Wayne, Ind.	
WGRC	z	250	DP	New Albany, Ind.	
WHBQ	ak	100	....	Memphis, Tenn.	—Su. 0900-2230; †0800-2330
WHDF	ak	100	(.25)	Calumet, Mich.	—Su. 1030-1345; 1630-1800; †1145-1330; M., W., F., 1630-1845; Tu., Th., Sa., 1630-1830
WHLB	ak	100	P	Virginia, Minn.	
WIBM	ak	100	(.25)	Jackson, Mich.	—*0630-0030
WLHL	ak	100	(.25)	Lowell, Mass.	—Su. 0800-2400; †0730-2400
WMBR	ak	100	C(.25)	Jacksonville, Fla.	—Su. 0830-2400; †0730-2400
WMFD	ak	100	D	Wilmington, N. C.	
WMFO	ak	100	D	Decatur, Ala.	—Su. 1030-1830; †0800-1830
WMIN	ak	100	P	St. Paul, Minn.	—*0700-0100
WOC	ak	100	C(.25)	Davenport, Iowa	—Su. 1000-0100; †0700-0100
WPA Y	ak	100	....	Portsmouth, Ohio	—Su. 0930-2030; †0700-2215
WPRA	z	100	(.25)P	Mayaguez, P. R.	
WQDM	ae	100	DXZ	St. Albans, Vt.	
WRAK	ak	100	(.25)	Williamsport, Pa.	
WRDO	ae	100	....	Augusta, Maine	
WRJN	ak	100	(.25)	Racine, Wis.	—Su. 0800-2400; †0845-2400
WSVS	ak	50	D2	Buffalo, N. Y.	
XEFZ	ak	100	....	Mexico City, D. F.	
XEL	ak	125	....	Morelia, Mich.	
XEZZ	z	100	...	San Luis Potosi, SLP.	

1380 keys. (217.3)

CMCR	z	150	....	Havana, Cuba	
KOH	ak	500	C	Reno, Nev.	—*1100-0300
KQV	ae	500	1C	Pittsburgh, Pa.	—Su. 0900-1930; †0700-2200
WALA	af	500	C(1)	Mobile, Ala.	—Su. 1000-2300; †0830-2400
WKBH	ae	1000	....	LaCrosse, Wis.	
WNBC	ak	250	D	New Britain, Conn.	—Su. 0800-ss.; †0700-ss.
WSMK	ak	200	1C	Dayton, Ohio	

1390 keys. (215.7)

CJGX	ak	100	....	Yorkton, Sask.	—*0830-1530; 1800-0030
CMJC	z	150	....	Camaguey, Cuba	
HIH	ak	15	1395	San Ped. de Macoris	
KLRA	ae	1000	C(2.5)	Little Rock, Ark.	
KOOS	ae	250	D	Marshfield, Ore.	—Su. 1500-1900; †1000-1945
KOY	ae	500	(1)	Phoenix, Ariz.	
W ^h HK	ae	1000	C(2.5)	Cleveland, Ohio	—Su. 0800-2400; †0700-2400

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1400 keys. (214.2) 1330

CMGC	ad	150	....	Matanzas, Cuba	—M., 1000-2300; daily exc. Su., M., 0800-2300
CMKR	z	100	....	Santiago, Cuba	
KHBC	z	250	....	Hilo, T. H.	
KLO	ak	500	B	Ogden, Utah	—Su. 1100-0100; †1000-0100
KTUL	ak	500	C(1)	Tulsa, Okla.	
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.	
WVIRE	ak	500	R(1)	Indianapolis, Ind.	—Su. 0900-0100; †0730-0100
WLTH	ak	500	2	Brooklyn, N. Y.	—Su. 1030-1200; 1500-1630; 2230-2400; M. 1330-1600; 2100-2230; Tu. 1130-1330; 1930-2100; W., 1600-1800; 2200-2400; Th. 0700-1130; 1800-1930; F. 1330-1600; 2100-2200; Sa. 1100-1330; 1800-1930
WVFW	ak	500	2	Brooklyn, N. Y.	

1410 keys. (212.6) 1330

CKFC	ak	50	5	Vancouver, B. C.	
CKMO	ag	100	5F	Vancouver, B. C.	
KGNC	ae	1000	(2.5)	Amarillo, Texas	
WAAB	ak	500	....	Boston, Mass.	—24 hours a day
WBCM	ae	500	....	Bay City, Mich.	—*0900-0030
WHIS	ak	500	(1)	Bluefield, W. Va.	
WROK	ak	500	....	Rockford, Ill.	—Su. 0930-2400; †0730-2400
WSFA	ak	500	C(1)	Montgomery, Ala.	—*0730-2400

1420 keys. (211.1) 1330

CKGB	ak	100	F	Timmins, Ont.	—Su. 1100-1230; 1645-2330; †1100-1330; 1630-2330
CMCQ	z	250	....	Havana, Cuba	
KABC	ak	100	(.25)	San Antonio, Texas	—Su. 0900-2300; †0700-0015
KABR	ak	100	....	Aberdeen, S. Dak.	—Su. 1000-1800; †0800-2300
KALB	z	100	D	Alexandria, La.	—Su. 1000-1900; †0800-ss.
KBPS	aj	100	4	Portland, Ore.	
KCMC	ak	100	....	Texarkana, Ark.	
KEUB	z	100	P	Price, Utah	
KFIZ	ak	100	....	Fond du Lac, Wis.	
KGFF	ak	100	(.25)	Shawnee, Okla.	—*0800-2200
KGGG	ak	100	....	San Francisco, Cal.	
KGHW	ak	100	1	Alamosa, Colo.	—*0930-1730; 2000-2230
KIDW	ak	100	1	Lamar, Colo.	—Su. 1300-1630; †0900-2000
KIUN	ak	100	....	Pecos, Texas	—Su. 0900-1400; 1700-2200; †0800-2200
KNET	z	100	D	Palestine, Texas	
KORE	ae	100	E	Eugene, Ore.	
KRBC	ak	100	P	Abilene, Tex.	—*0800-2200
KRLC	ak	100	....	Lewiston, Idaho	—Su. 1200-2400; †0930-0100
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	
WAPO	ak	100	DP	Chartanooqa, Tenn.	—Su. 0800-1900; †0700-1900
WAZL	ak	100	2	Hazleton, Pa.	—Su. 1200-1930; †0900-1330; 1600-2200
WCBS	ak	100	....	Springfield, Ill.	—Su. 0900-2300; †0800-2300
WCHV	ak	100	3(.25)	Charlottesville, Va.	—Su. 1000-2000; †0700-2000; Sa. 2300-2400
WEED	ak	100	3 X	Rocky Mount, N. C.	
WEHS	ak	100	a	Cicero, Ill.	—Su. 1600-2000; †1600-1800
WELL	ak	100	....	Battle Creek, Mich.	—Su. 1045-2400; †0730-2400
WGPC	ak	100	....	Albany, Ga.	
WHDL	ak	100	D	Olean, N. Y.	—Su. 0800-1730; †0700-ss.
WHFC	ae	100	a	Cicero, Ill.	—Su. 0700-1600; 2000-0100; †0700-1330; 1800-2100; 2300-0100; Sa. 1800-0100
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.	—†1330-1600; †2100-2300
WLAP	ak	100	(.25)	Lexington, Ky.	
WLBF	ak	100	Z	Kansas City, Kan.	—Su. 1000-2300; †0755-2300
WLEU	ak	100	(.25)	Erle, Pa.	
WMAS	ak	100	C(.25)	Springfield, Mass.	—Su. 0800-2400; †0700-2400
WMBC	ae	100	(.25)	Detroit, Mich.	
WMBH	ak	100	(.25)	Joplin, Mo.	
WMFJ	ak	100	....	Daytona Beach, Fla.	
WMSD	ak	100	....	Sheffield, Ala.	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WPAD ak 100 (.25) Paducah, Ky.
 WPAR ak 100 Parkersburg, W. Va.
 WPRP z 100 P(.25) Ponce, P. R.
 XEAZ g 7 Guanajuato, Gto.
 XEFB ak 100 Monterrey, N. L.

1430 kcys. (209.7) 1430

CMJP ak 75 Camaguey, Cuba
 KECA ak 1000 (5) B Los Angeles, Calif. —*1000-0300
 KGNF ak 1000 D North Platte, Neb. †0800-1815
 KSO ak 500 B (1) Des Moines, Iowa
 WBNS ak 500 C (1) Columbus, Ohio —Su. 0700-2400; †0630-2400
 WHEC ak 500 C (1) Rochester, N. Y. —Su. 0800-2400; †0700-2400
 ✓WHP ak 500 C (1) Harrisburg, Pa.
 WNBR ak 500 (1) Memphis, Tenn. —Su. 1030-2230; †0830-2310
 WOKO ae 500 C (1) Albany, N. Y. —Su. 0845-0100; †0800-0100

1440 kcys. (208.2) 1440

CMOA z 150 Havana, Cuba
 HP50 z 25 Colon, Panama
 KDFN ak 500 Casper, Wyo.
 KLS ae 250 D Oakland, Calif. —Su. 1100-1930; †0900-2045
 KXYZ ak 1000 Houston, Texas
 TIFS z 7.5 (1441) Cartago, C. R.
 WBIG ae 500 C (1) Greensboro, N. G. —Su. 0830-2330; †0630-2330
 ✓WCBA aj 500 a Allentown, Pa. —Su. 1000-2300; †0730-2330
 WMBD ak 500 C (1) Peoria, Ill. —Su. 0900-0100; †0700-2400
 WSAN aj 500 a Allentown, Pa. —M., 1300-1700; Tu., Th., Sa., 1300-2330
 XEFI ae 250 Chihuahua, Chih.

1450 kcys. (206.8) 1450

CFCT ae 75 (.05) Victoria, B. C. —*1045-1630; 2030-0015; Su. 0300-0500
 CHGS ae 50 F Summerside, P.E.I. —Su. 1000-1200; 1400-2200; †0630-0730; 0900-1330; 1500-2200
 KIEM ak 500 Eureka, Calif. —Su. 1200-0030; †1000-0100
 KTBS ak 1000 N Shreveport, La. —Su. 0900-0100; †0730-0100
 WGAR ak 500 B (1) Cleveland, Ohio —Su. 0800-2400; †0700-2400
 WHOM ae 250 Jersey City, N. J. —*0700-2400
 WSAR ae 1000 Fall River, Mass.
 WTFI ak 500 Y Athens, Ga.
 XEF ak 100 Juarez, Chih. —*0900-2400

1460 kcys. (205.4) 1460

CMKF z 50 Holguin, Cuba
 KSTP ak 1000 N (25) St. Paul, Minn. —Su. 0900-0100; †0700-0200
 ✓WJSV ak 1000 C Washington, D. C.

1470 kcys. (204.0) 1470

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

1480 kcys. (202.6) 1480

KOMA ak 5000 C Oklahoma City, Okla. —Su. 0900-0100; †0730-0100
 WKBW ae 5000 C Buffalo, N. Y. —Su. 0930-2400; †0800-0100

1490 kcys. (201.2) 1490

KFBK ak 5000 C Sacramento, Calif. —Su. 1030-0300; †1000-0300
 WCKY ae 5000 N Covington, Ky. —Su. 0800-2400; †0700-2400

1500 kcys. (199.9) 1500

CJIC ak 100 ... Sault Ste. Marie, Ont. —Su. 1100-1500; †1000-2200
 CMCX z 150 Havana, Cuba
 KBIX z 100 Muskogee, Okla. —Su. 1045-1900; †0800-2300
 KBST z 100 P Big Spring, Tex.
 KDB ak 100 C Santa Barbara, Cal.
 KGFI ak 100 (.25) Corpus Christi, Tex.
 KGFK ak 100 Y Moorhead, Minn.
 KGKB ak 100 Tyler, Texas
 KGKY ak 100 (.25) Scottsbluff, Neb. —Su. 1200-0200; †0830-1630; 1900-2300

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KNEL	ak	100	D	Brady, Texas	—Su. 0900-1800; †0800-1800
KNOW	ak	100	C	Austin, Texas	—*0800-ss.
KOTN	ak	100	D	Pine Bluff, Ark.	—*0800-2200
KOVC	ak	100	P	Valley City, N. Dak.	
KPLC	ak	100	....	Lake Charles, La.	
KPLT	z	100	DP	Paris, Texas	
KPO	ak	100	(.25)	Wenatchee, Wash.	
KRNR	ak	100	D	Roseburg, Ore.	—Daytime only.
KTEP	z	100	P	El Paso, Texas	
KUTA	z	100	P	Salt Lake City, Utah	
KVOE	ak	100	....	Santa Ana, Calif.	—Su. 1400-1545; 2200-0200; †1200-0200
KXO	ak	100	....	El Centro, Calif.	—Su. 1200-1400; †1100-1700; 1800-2400
WCNW	ak	100	1 (.25)	Brooklyn, N. Y.	—Su. 0900-1100; †1400-1800; Sa. 1500-2100; Su. 2300-2400; M., F., 2000-2200; W., 2200-2400
WDNC	ae	100	C	Durham, N. C.	—*0730-0030
WGAL	ae	100	(.25)	Lancaster, Pa.	
WHBB	ak	100	D	Selma, Ala.	—Su. 0800-ss.; †0730-ss.
WHEF	ak	100	(.25)	Kosciusko, Miss.	—Su. 0900-ss.; †0730-1500; 1700-2200
WJBK	ae	100	(.25)	Detroit, Mich.	—24 hours daily
WKBB	ak	100	(.25)	E. Dubuque, Ill.	
WKBV	ak	100	(.25)	Richmond, Ind.	
WKBZ	ak	100	(.25)	Muskegon, Mich.	—Su. 0730-2200; †0700-2200
WKEU	ak	100	D	Griffin, Ga.	
WMBQ	ae	100	1	Brooklyn, N. Y.	
WMEX	ak	100	(.25)	Boston, Mass.	
WNEF	ae	100	C	Binghamton, N. Y.	
WNLC	ak	100	D	New London, Conn.	
WOPI	ae	100	....	Bristol, Tenn.	—Su. 1030-2130; †0700-2300
WRDW	ak	100	....	Augusta, Ga.	—Su. 0900-2100; †0700-2100
WRGA	ak	100	(.25)	Rome, Ga.	—Su. 0900-2300; †0800-2300
WSYB	ak	100	....	Rutland, Vt.	—Su. 1000-1100; †1000-1300; 1700-2100
WTMV	ak	100	....	East St. Louis, Ill.	
WWRL	ak	100	1 (.25)	Pittsboro, N. Y.	—*0800-0900; 1100-1400; 2000-2400
WWSW	ae	100	(.25)	Wittsburgh, Pa.	

1510 keys. (198.6)

CFRC	ak	100	F	Kingston, Ont.	—Su. 0600-2300; †1200-1300; 1730-2300
CKCR	ak	100	....	Waterloo, Ont.	—Su. 1000-1400; 1700-2200; †0800-2300

1530 keys. (196.0)

WIXBS	ak	1000	....	Waterbury, Conn.	—Su. 0900-2400; †0800-2400
W9XBY	ak	1000	....	Kansas City, Mo.	—Su. 0900-0130; †0800-0330

1550 keys. (193.4)

W2XR	ak	1000	....	Long Isl. City, N.Y.	—Su. 1700-2100; †1000-1200; 1700-2115
W6XAI	ak	1000	....	Bakersfield, Calif.	—Su. 1100-0200; †1000-0200

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.

Second Column Symbols	k	Has no stamps.	n	Verifies for 5c.	P	Has construction permit only.	
a	Verifies reception for return postage.	m	Weather or time only.	R	National "Red" network.	S	Sunday only.
b	Verifies only occasionally.	z	No information available.	Sy	Synchronized.	X	Has permit to increase power.
c	Does not verify.			Y	Has permit to change location.	Z	Has permit to change frequency.
d	Verification 10c; letter 25c.	Fourth Column Symbols		a-b-c.	Small letters show stations using same transmitter.	1-2-3.	Figures denote stations sharing time.
e	Sends Ekko stamp for 10c.	B	National "Blue" network.	....	No information.		
f	Sends Ekko stamp for 5c.	C	Columbia network.				
g	Sends Ekko stamp for postage.	D	Day time only.				
h	Sends own station stamp for 10c.	Dn	Day time with occasional evening hours.				
i	Sends own station stamp for 5c.	F	Canadian Radio Brdestg. Commission.				
j	Sends own station stamp for postage.	N	National "Red" and "Blue"				

Time on the Air

All times are shown in Eastern Standard. * Daily; † Daily except Sunday; ‡ Daily except Saturday and Sunday. Su. Sunday; M. Monday; Tu. Tuesday; W. Wednesday; Th. Thursday; F. Friday; Sa. Saturday. 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. The letters ss indicate sunset.

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 WAPI 1140 5000 N WBRC 930 1000 C WSGN 1310 100	Bakersfield KERN 1370 100 C W6XAI 1550 1000	KGDM 1100 1000 KWG 1200 100 C	WRUF 830 5000 Jacksonville WJAX 900 1000 N WMBR 1370 100 C
Decatur WMFO 1370 100	Berkeley KRE 1370 100	Watsonville KHUB 1310 250	Lakeland WLAK 1310 100
Dothan WAGF 1370 280	Beverly Hills KMPC 710 500	COLORADO	Miami WIOD 1300 1000 N WQAM 560 1000 C
Gadsden WJBY 1210 100	Chico KHSL 950 250	Alamosa KGIW 1420 100	Orlando WDBO 580 1000 C
Mobile WALA 1380 500 C	Del Monte KDON 1210 100	Colorado Springs KVOR 1270 1000 C	Pensacola WCOA 1340 500 C
Montgomery WSFA 1410 500 C	El Centro KXO 1500 100	Denver KFEL 920 500 KLZ 560 1000 C KOA 830 50000 N KPOF 880 500 KVOD 920 500	St. Augustine WFOY 1210 100 St. Petersburg WSUN 620 1000 N Tallahassee WTAL 1310 100
Selma WIIB 1500 100	Eureka KIEM 1450 500	Durango KIUP 1370 100	Tampa WDAE 1220 1000 C
Sheffield WMSD 1420 100	Fresno KMJ 580 500 C	Grand Junction KFXJ 1200 100	West Palm Beach WJNO 1200 100
Tuscaloosa WJRD 1200 100	Glendale KIEV 850 250	Greeley KFKA 880 500	GEORGIA
ALASKA	Hollywood KFWB 950 1000 KMTR 570 1000 KNX 1050 50000	Lamar KIDW 1420 100	Albany WGPC 1420 100
Anchorage KFQD 780 250	Long Beach KFOX 1250 1000 KGER 1360 1000	Pueblo KGFH 1320 500	Athens WTFI 1450 500
Junoau KINY 1310 100	Los Angeles KECA 1430 1000 B KEHE 780 500 KFAC 1300 1000 KFI 640 50000 R KFSG 1120 500 KFVD 1000 250 KGFJ 1200 100 KHJ 900 1000 C KRKD 1120 500	Sterling KGEK 1200 100	Atlanta WATL 1370 100 WGST 890 1000 C WWSB 740 50000 N
Ketchikan KGBU 900 500	Merced KYOS 1040 250	CONNECTICUT	Augusta WRDW 1500 100
ARIZONA	Modesto KTRB 740 250	Bridgeport WICC 600 500 C	Columbus WRBL 1200 100
Jerome KCRJ 1310 100	Oakland KLS 1440 250 KLX 880 1000 KROW 930 1000	Hartford WDRG 1330 1000 C WTIC 1040 50000 R WTHT 1200 100	Griffin WKUE 1500 100
Lowell KSUN 1200 100	Pasadena KPPC 1210 100	New Britain WNBC 1380 250	Macon WMAZ 1180 1000
Phoenix KOY 1390 500 KTAR 620 1000 N	Redding KVCV 1200 100	New Haven WELI 900 500	Rome WRGA 1500 100
Tucson KGAR 1370 100 KVOA 1260 500	Sacramento KFBK 1490 5000 C KROY 1310 100	New London WNLC 1500 100	Savannah WTOC 1260 1000 C
Yuma KUMA 1420 100	San Bernardino KFXM 1210 1000	Waterbury WATR 1190 100	Thomasville WPAX 1210 100
ARKANSAS	San Diego KFSD 600 1000 B KGB 1330 1000 C	WIXBS 1530 1000	Waycross WAYX 1200 100
Blytheville KLCN 1290 100	San Francisco KFRC 610 1000 C KGGC 1420 100 KGO 790 7500 B KJBS 1070 500 KPO 680 50000 R KSFO 560 1000 KYA 1230 1000 N	DELAWARE	HAWAII
El Dorado KELD 1370 100	San Jose KQW 1010 1000	Wilmington WDEL 1120 250 WILM 1420 100	Hilo KHBC 1400 250
Fayetteville KUOA 1260 1000	San Luis Obispo KVEC 1200 250	DISTRICT OF COLUMBIA	Honolulu KGMB 1320 1000 C KGU 750 2500 N
Fort Smith KFPW 1210 100	Santa Ana KVOE 1500 100	Washington WJWSV 1460 10000 C WMAL 630 250 B WOL 1310 100 WRC 950 500 R	IDAHO
Hot Springs KTHS 1060 10000 N	Santa Barbara KDB 1500 100 C	FLORIDA	Boise KIDO 1350 1000
Jonesboro KBTM 1200 100		Clearwater WFLA 620 1000 N	Idaho Falls KID 1320 500
Little Rock KARK 890 250 KGHI 1200 100 KLRH 1390 1000 C		Daytona Beach WMEFJ 1420 100	Lewiston KRLC 1420 100
Pine Bluff KOTN 1500 100			Nampa KFXD 1200 100
Texarkana KCMC 1420 100			Pocatello KSEI 900 250
			Twin Falls KTFI 1240 1000

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

ILLINOIS	Muncie	Covington	Fall River
Bloomington	WLBC 1310 100	WCKY 1490 5000 N	WSAR 1450 1000
WJBC 1200 100	New Albany	Lexington	Lowell
Carthage	WGRC 1370 250	WLAP 1420 100	WLLH 1370 100
WCZB 1070 100	Richmond	Louisville	New Bedford
Champaign	WKVB 1500 100	WAVE 940 1000 N	WNBH 1310 100
WDWS 1370 100	South Bend	WHAS 820 50000 C	Springfield
Chicago	WFAM 1200 100	Middlesboro	WBZA 990 1000 B
WAAF 920 1000	WSBT 1360 500 C	WLMU 1210 100	WMAS 1420 100 C
WBBM 770 50000 C	Terre Haute	Paducah	WSPR 1140 500
WCFL 970 5000 B	WBOW 1310 100	WPAD 1420 100	Worcester
WCRW 1210 100	West Lafayette		WORC 1280 500 C
WEDC 1210 100	WBAA 890 500	LOUISIANA	WTAG 580 500 R
WENR 870 50000 N		Alexandria	
WGES 1360 500	IOWA	KALB 1420 100	MICHIGAN
WGN 720 50000	Ames	Baton Rouge	Battle Creek
WJJD 1130 20000	WOI 640 5000	WJBO 1420 100	WELL 1420 100
WLS 870 50000 N	Boone	Lafayette	Bay City
WMAQ 670 50000 N	KFGQ 1370 100	KVOL 1310 100	WBCM 1410 500
WMBI 1080 5000	Cedar Rapids	Lake Charles	Calumet
WSBC 1210 100	WMT 600 1000 B	KPLC 1500 100	WHDF 1370 100
Cicero	Council Bluffs	Monroe	Detroit
WEHS 1420 100	KOIL 1260 1000 B	KMLB 1200 100	WJBK 1500 100
WHFC 1420 100	Davenport	New Orleans	WJZR 750 50000 C
WKBI 1420 100	WOC 1370 100 C	WBNO 1200 100	WMBC 1420 100
Decatur	Decorah	WDSU 1250 1000	WMWJ 920 1000 R
WJBL 1200 100	KGCA 1270 100	WJWB 1200 100	WXYZ 1240 1000 B
East Dubuque	KWLC 1270 100	WSMB 1320 1000 N	East Lansing
WKBB 1500 100	Des Moines	WWL 850 10000 C	WKAR 850 1000
East St. Louis	KRNT 1320 500 C	Shreveport	Flint
WTMV 1500 100	KSO 1430 500 B	KRMD 1310 100	WFDF 1310 100
Harrisburg	WHO 1000 50000 R	KTBS 1450 1000 N	Grand Rapids
WEBQ 1210 100	Iowa City	WKWKH 1100 1000 C	WASH 1270 500 N
Joliet	WSUI 880 500		WOOD 1270 500 N
WCLS 1310 100	Marshalltown	MAINE	Ironwood
Peoria	KFJB 1200 100	Augusta	WJMS 1420 100
WMBD 1440 500 C	Mason City	WRDO 1370 100	Jackson
Quincy	KGLO 1210 100	Bangor	WIBM 1370 100
WTAD 900 500	Shenandoah	WABI 1200 100	Kalamazoo
WROK 1410 500	KPNF 890 500	WLBZ 620 500 C	WKZO 590 1000 B
WHBF 1210 100	KMA 930 1000	Portland	Lansing
Springfield	Sioux City	WCSH 940 1000 R	WJIM 1210 100
WCBS 1420 100	KSCJ 1330 1000 C	WGAN 640 500	Lapeer
WTAX 1210 100	KANSAS	Presque Isle	WMPC 1200 100
Tuscola	Ablene	WAGM 1420 100	Marquette
WDZ 1020 250	KFBI 1050 5000		WBEQ 1310 100
Urbana	Coffeyville	MARYLAND	Muskegon
WILL 580 250	KGGF 1010 1000	Baltimore	WKBZ 1500 100
Waukegan	Dodge City	WBAL 760 2500 B	Royal Oak
WCBD 1080 5000	KGNO 1340 250	WBAL 1060 10000 B	WEXL 1310 50
	Garden City	WCAO 600 500 C	
INDIANA	KIUL 1210 100	WCBM 1370 100	MINNESOTA
Anderson	Hutchinson	WFBR 1270 500 R	Duluth
WHBU 1210 100	KWBG 1420 100	Cumberland	KDAL
Elkhart	Kansas City	WWTBO 800 250	Fergus Falls
WTRC 1310 100	WLBK 1420 100	Frederick	KGDE 1200 100
Evansville	Lawrence	WFMD 900 500	Hibbing
WEOA 1370 100	KFKU 1220 1000	Hagerstown	WMFG 1210 100
WGBF 630 500	WREN 1220 1000 B	WJEJ 1210 100	Minneapolis
Fort Wayne	Manhattan		WCCO 810 50000 C
WGL 1370 100 C	KSAC 580 500	MASSACHUSETTS	WDGY 1180 1000
WOWO 1160 10000 C	Topeka	Boston	WLB 1250 1000
Gary	WIBW 580 1000 C	WAAB 1410 500	WTCN 1250 1000
WIND 560 1000	Wichita	WBZ .990 50000 C	Moorhead
Hammond	KANS 1210 100	WCOP 1120 500	KGFK 1500 100
WWAE 1200 100	KFH 1300 1000 C	WEEI 590 1000 R	Northfield
Indianapolis	KENTUCKY	WHDH 830 1000 R	WCAL 1250 1000
WFBM 1230 1000 C	Ashland	WMEX 1500 100	Rochester
WIRE 1400 500 R	WCMJ 1310 100	WNAC 1230 1000 R	KROC 1310 100
		WORL 920 500	St. Paul
			KSTP 1460 10000 N
			WMIN 1370 100
			Virginia
			WHLB 1370 100

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<p style="text-align: center;">MISSISSIPPI</p> <p>Clarksdale WMFN 1210 100</p> <p>Gulfport WGCM 1210 100</p> <p>Hattiesburg WFOR 1370 100</p> <p>Jackson WJDX 1270 1000 N</p> <p>Kosciusko WHEF 1500 100</p> <p>Laurel WAML 1310 100</p> <p>Meridian WCOC 880 500</p> <p>Vicksburg WQBC 1360 1000</p> <hr/> <p style="text-align: center;">MISSOURI</p> <p>Cape Girardeau KFVS 1210 100</p> <p>Columbia KFRU 630 500</p> <p>Jefferson City WOS 630 500</p> <p>Joplin WMBH 1420 100</p> <p>Kansas City KCMO 1370 100</p> <p>KMBC 950 1000 C</p> <p>WDAF 610 1000 R</p> <p>WHB 860 1000</p> <p>W9XBY 1530 1000</p> <p>St. Joseph KFEQ 680 2500</p> <p>St. Louis KFUO 550 500</p> <p>KMOX 1090 5000 C</p> <p>KSD 550 1000 R</p> <p>KWK 1350 1000 B</p> <p>WEW 760 1000</p> <p>WIL 1200 100</p> <p>Springfield KGBX 1230 500</p> <p>KWTO 560 5000</p> <hr/> <p style="text-align: center;">MONTANA</p> <p>Billings KGHL 780 1000 N</p> <p>Butte KGIR 1340 1000 N</p> <p>Great Falls KFBB 1280 1000 C</p> <p>Kalispell KGEZ 1310 100</p> <p>Lewistown KDNC 1200 100</p> <p>Missoula KGVO 1260 1000 C</p> <p>Wolf Point KGX 1310 100</p> <hr/> <p style="text-align: center;">NEBRASKA</p> <p>Clay Center KMMJ 740 1000</p> <p>Kearney KGFW 1310 100</p> <p>Lincoln KFAB 770 1000 C</p> <p>KFOR 1210 100 C</p>	<p>Norfolk WJAG 1060 1000</p> <p>North Platte KGNF 1430 1000</p> <p>Omaha WAAW 660 500</p> <p>WOW 590 5000 R</p> <p>Scottsbluff KGGY 1500 100</p> <hr/> <p style="text-align: center;">NEVADA</p> <p>Reno KOH 1380 500 C</p> <hr/> <p style="text-align: center;">NEW HAMPSHIRE</p> <p>Laconia WLNH 1310 100</p> <p>Manchester WFEA 1340 500 C</p> <p>Portsmouth WHEB 740 250</p> <hr/> <p style="text-align: center;">NEW JERSEY</p> <p>Asbury Park WCAP 1280 500</p> <p>Atlantic City WVPG 1100 5000 C</p> <p>Camden WCAM 1280 500</p> <p>Jersey City WAAT 940 500</p> <p>WHOM 1450 250</p> <p>Newark WHBI 1250 1000</p> <p>WNEW 1250 1000</p> <p>WOR 710 50000</p> <p>Red Bank WBRB 1210 100</p> <p>Trenton WTNJ 1280 500</p> <p>Zarephath WAWZ 1350 500</p> <hr/> <p style="text-align: center;">NEW MEXICO</p> <p>Albuquerque KGGM 1230 250</p> <p>KOB 1180 10000</p> <p>Carlsbad KLAH 1210 100</p> <p>Clovis KICA 1370 100</p> <p>Roswell KGFL 1370 100</p> <p>Santa Fe KIUJ 1310 100</p> <hr/> <p style="text-align: center;">NEW YORK</p> <p>Albany WABY 1370 100 B</p> <p>WOKO 1430 500 C</p> <p>Auburn WMBO 1310 100</p> <p>Binghamton WNBK 1500 100 C</p> <p>Brooklyn WARD 1400 500</p> <p>WBBC 1400 500</p> <p>WBBR 1300 1000</p> <p>WGNW 1500 100</p> <p>WEGL 1400 500</p>	<p>WLTH 1400 500</p> <p>WMBO 1500 100</p> <p>WVWF 1400 500</p> <p>Buffalo WBEN 900 1000 R</p> <p>WBNY 1370 100</p> <p>WEBR 1310 100 B</p> <p>WGR 550 1000 C</p> <p>WKWB 1480 5000 C</p> <p>WSVS 1370 50</p> <p>Canton WCAD 1220 500</p> <p>Elmira WESG 850 1000 C</p> <p>Freeport WGBB 1210 100</p> <p>Jamestown WOCL 1210 50</p> <p>Long Island City W2XR 1550 1000</p> <p>Newburgh WGNV 1210 100</p> <p>New York WABC 860 50000 C</p> <p>WBNX 1350 10000</p> <p>WBOQ 860 50000</p> <p>WEAF 660 50000 R</p> <p>WEVD 1300 1000</p> <p>WFAB 1300 1000</p> <p>WHN 1010 1000</p> <p>WINS 1180 1000</p> <p>WJZ 760 50000 B</p> <p>WLWL 1100 5000</p> <p>WMCA 570 500</p> <p>WNYC 810 1000</p> <p>WOV 1130 1000</p> <p>Olean WHDL 1420 100</p> <p>Plattsburg WMFF 1310 250</p> <p>Rochester WHAM 1150 50000 B</p> <p>WHEC 1430 500 C</p> <p>WSA Y 1210 100</p> <p>Saranac Lake WNBZ 1290 100</p> <p>Schenectady WGY 790 50000 R</p> <p>Syracuse WFBL 1360 1000 C</p> <p>WSYR 570 1000 B</p> <p>Troy WHAZ 1300 500</p> <p>Utica WIBX 1200 100 C</p> <p>White Plains WFAS 1210 100</p> <p>Woodside WWRL 1500 100</p> <hr/> <p style="text-align: center;">NORTH CAROLINA</p> <p>Asheville WWNC 570 1000 N</p> <p>Charlotte WBT 1080 50000 C</p> <p>WSOC 1210 100 N</p> <p>Durham WDNC 1500 100 C</p> <p>Gastonia WJBR 1420 100</p> <p>Greensboro WBG 1440 500 C</p>	<p>High Point WMFR 1200 100</p> <p>Raleigh WPTF 680 1000 N</p> <p>Rocky Mount WEED 1420 100</p> <p>Wilmington WMFD 1370 100</p> <p>Winston-Salem WSJS 1310 100 C</p> <hr/> <p style="text-align: center;">NORTH DAKOTA</p> <p>Bismarck KFYR 550 1000 N</p> <p>Devils Lake KDLR 1210 100</p> <p>Fargo WDAY 940 1000 N</p> <p>Grand Forks KFJM 1370 100</p> <p>Mandan KGGU 1240 250</p> <p>Minot KLPF 1240 250</p> <p>Valley City KOVC 1500 100</p> <hr/> <p style="text-align: center;">OHIO</p> <p>Akron WADC 1320 1000 C</p> <p>WJW 1210 100</p> <p>Canton WHBC 1200 100</p> <p>Cincinnati WCPO 1200 100</p> <p>WVKRC 550 1000 C</p> <p>WVWL 700 500000 N</p> <p>WSAI 1330 1000 N</p> <p>Cleveland WGAR 1450 500 B</p> <p>WHK 1390 1000 C</p> <p>WJAY 610 500</p> <p>WTAM 1070 50000 R</p> <p>Columbus WBNS 1430 500 C</p> <p>WCOL 1210 100</p> <p>WHKC 640 500</p> <p>WOSU 570 750</p> <p>Dayton WHIO 1260 1000 C</p> <p>WSMK 1380 200 C</p> <p>Lima WBLV 1210 100</p> <p>Portsmouth WPAY 1370 100</p> <p>Toledo WSPD 1340 1000 C</p> <p>Youngstown WKBN 570 500 C</p> <p>Zanesville WALR 1210 100</p> <hr/> <p style="text-align: center;">OKLAHOMA</p> <p>Ada KADA 1200 100</p> <p>Ardmore KYSO 1200 100</p> <p>Elk City KASA 1210 100</p>
--	--	---	---

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Enid KCRC 1360 250	Philadelphia KYW 1020 10000 R WCAU 1170 50000 C	Huron KGDY 1340 250 Pierre KGFY 630 200	Houston KPRC 920 1000 N KTRH 1290 1000 C KXYZ 1440 1000
Muskogee KBIX 1500 100	WFIL 560 1000 B WHAT 1310 100 WIP 610 1000 WPEN 920 250 WRAX 920 250 WTFL 1310 100	Rapid City KOBH 1370 100 WCAT 1200 100	Kilgore KCOA 1210 100 Longview KFRO 1370 100 Lubbock KFYO 1310 100 Midland KRLH 1420 100 Palestine KNET 1420 100 Pampa KPDN 1310 100 Paris KPLT 1500 100 Pecos KIUN 1420 100 Port Arthur KPAC 1260 500 San Angelo KGKL 1370 100 San Antonio KABC 1420 100 KMAC 1370 100 KONO 1370 100 K TSA 550 1000 C W OAI 1190 50000 N
Norman WNAD 1010 1000	Pittsburgh KDKA 950 50000 B KQV 1380 500 C WGAE 1220 1000 R WJAS 1290 1000 C WWSW 1500 100	Sioux Falls KSOO 1110 2500	Sherman KRRV 1310 100 Temple KTEM 1370 100 Tyler K GKB 1500 100 Waco WACO 1420 100 C Weslaco KRGV 1260 500 Wichita Falls K GKO 570 250 C
Oklahoma KFXR 1310 150 K GFG 1370 100 KOMA 1480 5000 C WKY 900 1000 N	Reading WFRU 830 1000 WRAW 1310 100	Vermillion KUSD 890 500	
Ponca City WBBZ 1200 100	Scranton WGBI 880 500 WQAN 880 250	Watertown KWTN 1210 100	
Shawnee K GFF 1420 100	Sunbury WKOK 1210 100	Yankton WNAX 570 1000 C	
Tulsa KTUL 1400 500 C KVOO 1140 25000 N	Wilkes-Barre WBAX 1210 100 WBRE 1310 100		
	Williamsport WRAC 1370 100		
	York WVORK 1320 1000		
OREGON	PUERTO RICO	TENNESSEE	
Astoria KAST 1370 100	Mayaguez W PRA 1370 100	Bristol W OPI 1500 100	
Corvallis KOAC 550 1000	Ponce W P RP 1420 100	Chattanooga W APO 1420 100 W DOD 1280 1000 C	
Eugene KORE 1420 100	San Juan W K A Q 1240 1000 W N E L 1290 1000	Jackson W T J S 1310 100	
Klamath Falls K F J I 1210 100		Knoxville W N O X 1010 1000 C W R O L 1310 100	
Marshfield K O O S 1390 250		Memphis W H B O 1370 100 W M C 780 1000 N W N B R 1430 500 W R E C 600 1000 C	
Medford K M E D 1310 100		Nashville W L A C 1470 5000 C W S M 650 50000 N	
Portland K A L E 1300 500 C K B F S 1420 100 K E X 1180 5000 N K F J R 1300 500 K G W 620 1000 R K O I N 940 1000 C K W J J 1040 500 K X L 1420 100	RHODE ISLAND	Springfield W S I X 1210 100	
Roseburg K R N R 1500 100	Newport W N R I 1200 100		
Salem K S L M 1370 100	Providence W I S 780 500 C W J A R 890 1000 R W P R O 630 500	TEXAS	
PENNSYLVANIA		Abilene K R B C 1420 100	UTAH
Allentown W C B A 1440 500		Amarillo K G N C 1410 1000	Ogden K L O 1400 500 B Price K E U B 1420 100 Salt Lake City K D Y L 1290 1000 R K S L 1130 50000 C K U T A 1500 100
WSAN 1440 500		Austin K N O W 1500 100 C	
Altoona W F B G 1310 100	SOUTH CAROLINA	Beaumont K F D M 560 500	
Easton W E S T 1290 100	Anderson W A I M 1200 100	Big Spring K B S T 1500 100	
Erie W L E U 1420 100	Charleston W C S C 1360 500 N	Brady K N E L 1500 100	
Glenside W I B G 970 100	W C S C 1360 500 N	College Station W T A W 1120 500	VERMONT
Greensburg W H J B 620 250 C	Columbia W I S 560 1000 N	Corpus Christi K G F I 1500 100	Burlington W C A X 1200 100
Grove City W S A J 1310 100	Florence W O L S 1200 100	Dallas K R L D 1040 10000 C W F A A 800 50000 N W R R 1280 500	Rutland W S Y B 1500 100
Harrisburg W H P 1430 500 C	Greenville W F B C 1300 1000 N	Dublin K F P L 1310 100	St. Albans W Q D M 1370 100
W K B O 1200 100	Spartanburg W S P A 920 1000	El Paso K T E P 1500 100 K T S M 1310 100 W D A H 1310 100	Springfield W N B X 1260 1000
Hazleton W A Z L 1420 100		Fort Worth K F J Z 1370 100 K T A T 1240 1000 W B A P 800 50000 N Galveston K L U F 1370 100	Waterbury W D E V 550 500
Johnstown W J A C 1310 100	SOUTH DAKOTA		VIRGINIA
Lancaster W G A L 1500 100	Aberdeen K A B R 1420 100		Arlington N A A 690 1000 Charlottesville W C H V 1420 100

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<p>Danville WBTM 1370 100</p> <p>Harrisonburg WSVA 550 500</p> <p>Lynchburg WLVA 1200 100</p> <p>Newport News WGH 1310 100</p> <p>Norfolk WTAR 780 500 N</p> <p>Petersburg WPHR 880 500</p> <p>Richmond WBBL 1210 100 WMBG 1210 100 C WRVA 1110 5000 N</p> <p>Roanoke WDBJ 930 1000 C</p> <hr/> <p style="text-align: center;">WASHINGTON</p> <hr/> <p>Aberdeen KXRO 1310 100</p> <p>Bellingham KVOS 1200 100</p> <p>Everett KRKO 1370 50</p> <p>Olympia KGY 1210 100</p> <p>Pullman KWSC 1220 1000</p> <p>Seattle 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>Spokane KFIO 1120 100 KFPY 890 1000 C KGA 1470 5000 B KHQ 590 1000 R</p> <p>Tacoma KMO 1330 250 KVI 570 1000 C</p> <p>Walla Walla KUJ 1370 100</p> <p>Wenatchee KPQ 1500 100</p> <p>Yakima KIT 1310 100</p> <hr/> <p style="text-align: center;">WEST VIRGINIA</p> <hr/> <p>Bluefield WHIS 1410 500</p> <p>Charleston WCHS 580 500</p> <p>Clarksburg WEXP 1370 100</p> <p>Fairmont WMMN 890 500 C</p> <p>Huntington WSAZ 1190 1000</p> <p>Parkersburg WPAR 1420 100</p> <p>Wheeling WWVA 1160 5000 C</p>	<p style="text-align: center;">WISCONSIN</p> <hr/> <p>Fond du Lac KFJZ 1420 100</p> <p>Green Bay WHBY 1200 100 WTAQ 1330 1000</p> <p>Janesville WCLO 1200 100</p> <p>LaCrosse WKBH 1380 1000</p> <p>Madison WHA 940 5000 WIBA 1280 1000 N</p> <p>Manitowoc WOMT 1210 100</p> <p>Milwaukee WEMP 1310 100 WISN 1120 250 C WTMJ 620 1000 N</p> <p>Poynette WIBU 1210 100</p> <p>Racine WRJN 1370 100</p> <p>Sheboygan WHBL 1300 250</p> <p>Stevens Point WLBL 900 2500</p> <p>Superior WEBC 1290 1000 N</p> <hr/> <p style="text-align: center;">WYOMING</p> <hr/> <p>Casper KDFN 1440 500</p> <p>Sheridan KWYO 1370 100</p> <hr/> <p style="text-align: center;">CANADA</p> <hr/> <p style="text-align: center;">ALBERTA</p> <hr/> <p>Calgary CFAC 930 100 F CFCN 1030 10000 CJGJ 690 100 F</p> <p>Edmonton CFRN 960 100 F CJCA 730 1000 F CKUA 580 500</p> <p>Lethridge CJOC 950 100 F</p> <hr/> <p style="text-align: center;">BRITISH COLUMBIA</p> <hr/> <p>Chilliwack CHWK 780 100 F</p> <p>Kamloops CFJC 880 100 F</p> <p>Kelowna CKOV 630 100 F</p> <p>Prince Rupert CFPR 580 50</p> <p>Trail CJAT 910 1000 F</p> <p>Vancouver CJOR 600 500 CKDC 1010 100 CKFC 1410 50 CKMO 1410 100 F CKWX 1010 100 F CROC 1100 1000 F</p> <p>Victoria CFCT 1450 75</p>	<p style="text-align: center;">MANITOBA</p> <hr/> <p>Brandon CKX 1120 100 F</p> <p>Winnipeg CJRC 630 1000 F CKY 910 15000 F</p> <hr/> <p style="text-align: center;">NEW BRUNSWICK</p> <hr/> <p>Fredericton CFNB 550 500 F</p> <p>Moncton CKCW 1370 100 F</p> <p>St. John CHSJ 1120 500 F</p> <hr/> <p style="text-align: center;">N. W. TERRITORY</p> <hr/> <p>Aklavik CJCU 1210 50</p> <hr/> <p style="text-align: center;">NOVA SCOTIA</p> <hr/> <p>Glace Bay VAS 685 2000</p> <p>Halifax CHNS 930 1000 F</p> <p>Sydney CJCB 1240 1000 F</p> <p>Wolfville CKIC 1010 50</p> <p>Yarmouth CJLS 1310 100</p> <hr/> <p style="text-align: center;">ONTARIO</p> <hr/> <p>Brantford CKPC 930 100 F</p> <p>Chatham CFCO 630 100 F</p> <p>Cobalt CKMC 1210 50</p> <p>Fort William CKPR 730 100 F</p> <p>Hamilton CHML 1010 100 F CKOC 1120 500 F</p> <p>Kingston CFRC 1510 100 F</p> <p>Kirkland Lake CJKL 1310 100 F</p> <p>London CFPL 730 100 F</p> <p>North Bay CFCH 930 100 F</p> <p>Ottawa CKCO 1010 100 F CRGO 880 1000 F</p> <p>Prescott CFLC 930 100</p> <p>St. Catharines CKTB 1200 100 F</p> <p>Sault Ste. Marie CJIC 1500 100</p> <p>Stratford CJCS 1210 50</p> <p>Sudbury CKSO 780 1000 F</p> <p>Timmins CKGB 1420 100 F</p>	<p>Toronto ✓CFRB 690 10000 C CKCL 580 100 F CRCT 840 5000 N</p> <p>Waterloo CKCR 1510 100</p> <p>Windsor CKLW 1030 5000 CRCW 600 500 F</p> <p>Wingham CKNX 1200 50</p> <hr/> <p style="text-align: center;">PRINCE EDWARD ISLAND</p> <hr/> <p>Charlottetown CFCY 630 1000 F CHCK 1310 50</p> <p>Summerside CHGS 1450 50 F</p> <hr/> <p style="text-align: center;">QUEBEC</p> <hr/> <p>Chicoutimi CRCS 950 100 F</p> <p>Hull CKCH 1210 100 F</p> <p>Montmagny VE9EK 1185 10</p> <p>Montreal CFCF 600 400 N CHLP 1120 100 F ✓CKAC 730 5000 C CRCM 910 5000 F</p> <p>New Carlisle CHNC 960 1000 F</p> <p>Quebec CHRC 580 100 CKCV 1310 100 F CRCK 1050 1000 F</p> <hr/> <p style="text-align: center;">SASKATCHEWAN</p> <hr/> <p>Moose Jaw CHAB 1200 100 F CJRM 540 1000 F</p> <p>Prince Albert CKBI 1210 100 F</p> <p>Regina CHWC 1010 500 F CKCK 1010 500 F</p> <p>Saskatoon CFQC 840 1000 F</p> <p>Yorkton CJGX 1390 100</p> <hr/> <p style="text-align: center;">NEWFOUNDLAND</p> <hr/> <p>St. John's VOAC 1065 40 VOAS 940 100 VOGY 840 400 VONF 1195 500 VOWR 681 500</p> <hr/> <p style="text-align: center;">MIQUELON</p> <hr/> <p>St. Pierre FQN 609 250</p>
--	---	---	---

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

CENTRAL AMERICA		Salttillo		NUEVO LEON		Cardenas	
		XEAS 1160 100		Monterrey		CMGE 1370 150	
		XELA 1240 50		XEFB 1420 100		Ciego de Avila	
		XEOX 640 500		XEFJ 1230 100		GMJH 1360 100	
COSTA RICA		Torrecon		XEH 1150 250		GMJI 1130 150	
		XETB 1310 125		XET 690 500		GMJO 1180 50	
Cartago		Villa Acuna		XEX 1310 125		Cienfuegos	
TIFS 1441 7.5		XERA 840 250000		PUEBLA		CMHJ 1160 175	
TIGA 1014 30				Puebla		CMHW 820 100	
San Jose		D. F.		XETH 1210 100		CMHX 760 200	
TIEP 850 500		Mexico City		SAN LUIS POTOSI		Cruces	
TIFA 1050 75		XEAI 1240 100		San Luis Potosi		CMHK 1330 250	
TIGH 1000 500		XEB 1030 10000		XEZZ 1370 100		Havana	
TIGPH 650 1000		XEBZ 820 100		SONORA		CMBC 640 150	
TIRH 930 50		XECW 1310 10		Hermosillo		CMBD 1170 500	
TIVCA 1225		XEFA 1180 500		Nogales		CMBG 1140 200	
TIX 800		XEFO 940 5000		XEBH 930 500		CMBN 850 150	
GUATEMALA		XEFZ 1370 100		TAMAULIPAS		CMBS 770 150	
Guatemala City		XEK 990 100		Matamoros		CMBX 1070 500	
TGW 1210 10000		XEL 1100 250		XEAM 750 7.5		CMBY 970 150	
TGX 1400 250		XEMX 1280 12		Nuevo Laredo		CMBA 1000 500	
HONDURAS		XEN 710 1000		XEBK 1000 100		CMCA 1350 250	
Tegucigalpa		XEW 890 50000		XEFE 1340 250		CMCB 1230 150	
HRN 1340 100		XEWZ 1150 100		XENT 910 150000		CMCD 950 250	
NICARAGUA		XEXM 610		Reynosa		CMCF 810 600	
Managua		XEYZ 780 10000		XEAW 960 50000		CMCG 680 1000	
YNLF 1275 20		XFX 610 1000		Tampico		CMCJ 1110 500	
YNOP 1230 100				XEFW 1310 250		CMCO 1200 150	
YNVA 950 30				XES 990 250		CMCQ 1420 250	
PANAMA		DURANGO		VERACRUZ		CMCR 1380 150	
Colon		Durango		Cordoba		CMCU 1280 500	
HP50 1440 25		XEE 1210 50		XEAG 1310 10		CMCW 750 150	
EL SALVADOR		GUANAJUATO		Jalapa		CMCX 1500 150	
San Salvador		Guajuato		XEJA 1270 250		CMCY 1030 5000	
RDN 680 500		XEAX 1420 7		XED 1340 350		CMK 730 3000	
MEXICO		Leon		Veracruz		CMOA 1440 150	
AGUASCALIENTES		XEKL 1240 500		XETF 1220 12		CMOK 1470 150	
Aguascalientes		JALISCO		XEU 1010 250		CMOX 1320 200	
XFA 1310 5		Guadalajara		YUCATAN		CMO 880 500	
XFC 810 350		XEA 1060 500		Merida		CMW 600 1400	
CHIHUAHUA		XED 1160 2500		XEY 1000 10		CMX 920 1000	
Chihuahua		LOWER CALIFORNIA		XEZ 630 500		Holgulin	
XEFI 1440 250		Agua Caliente		WEST INDIES		CMKF 1460 250	
Hidalgo		XEBC 730 5000		CUBA		CMKM 1120 200	
XEAT 1210 300		Coronado Island		Caibarien		CMKZ 1400 150	
Juarez		XEMZ 820		CMHD 1270 250		CMGF 1120 150	
XEFV 1210 100		Ensenada		Camaguey		CMGH 790 250	
XEF 1450 100		XEG 1270 200		CMJA 1010 50		Pinar del Rio	
XEJ 1020 1000		Mexicali		CMJC 1390 150		CMAB 1340	
XEP 1160 500		XEAA 920 200		CMJE 1220 50		Sagua la Grande	
COAHUILA		XEAO 560 250		CMJF 1150 200		CMHA 1070 50	
Piedras Negras		Rosarito		CMJK 780 250		Sancti Spiritus	
XELO 1110 10000		XEAQ 1090 1000		CMJL 1340 100		CMHB 1240 50	
XEPN 730 50000		Tijuana		GMJP 1430 75		Santa Clara	
		XEAC 1240 250		GMJX 830		CMHI 1210 150	
		XEC 1160 30		DOMINICAN REPUBLIC		Santiago	
		XEFL 1150 250		San Pedro de Macoris		CMKC 1250 150	
		XEMO 860 5000		HII 1395 15		CMKD 1050 250	
		XEOK 760 250		Trujillo		CMKR 1400 100	
		XESL 1160		HIJ 1195 15		CMKW 1330	
		MICHOACAN		HIX 800 700		CMKX 1190 75	
		Morelia		HIZ 1370 10		HAITI	
		XEI 1370 125		Port-au-Prince		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		CMCB 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		CMBN 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	150
	Edmonton, Alta.			Quebec, Que.			Havana, Cuba	
	CHAB 1200	100		CKCW 1370	100		CMCQ 1420	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.			Cohalt, 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	
	CHWC 1010	500		CKOV 630	100		CMGH 790	250
	Regina, Sask.			Kelowna, B. C.			Matanzas, Cuba	
	CHWK 780	100		CKPC 930	100		CMHA 1070	50
	Chilliwack, B. C.			Brantford, Ont.			Sagua la Grande, Cu.	
	CJAT 910	1000		CKPR 730	100		CMHB 1240	50
	Trail, B. C.			Fort Willam, Ont.			Sancti Spiritus, Cuba	
	CJCA 730	1000		CKSO 780	1000		CMHD 1270	250
	Edmonton, Alta.			Sudbury, Ont.			Caibarien, Cuba	
	CJCB 1240	1000		CKTB 1200	100		CMHI 1210	150
	Sydney, N. S.			St. Catharines, Ont.			Santa Clara, Cuba	
	CJCJ 690	100		CKUA 580	500		CMHJ 1160	175
	Calgary, Alta.			Edmonton, Alta.			Cienfuegos, Cuba	
	CJCS 1210	50		CKWX 1010	100		CMHK 1330	250
	Stratford, Ont.			Vancouver, B. C.			Cruces, Cuba	
	CJCU 1210	50		CKX 1120	100		CMHW 820	100
	Aklavik, N. W. T.			Brandon, Man.			Cienfuegos, Cuba	
	CJGX 1390	100		CKY 910	15000		CMHX 760	200
	Yorkton, Sask.			Winnipeg, Man.			Cienfuegos, Cuba	

NORTH AMERICAN B. C. STATIONS BY CALLS

CMJA 1010	50	HIH 1395	15	KEUB 1420	100
Camaguey, Cuba		San Pedro de M., D. R.		Price, Utah	
CMJC 1390	150	HIJ 1195	15	KEX 1180	5000
Camaguey, Cuba		Trujillo, D. R.		Portland, Ore.	
CMJE 1220	50	HIX 800	700	KFAB 770	10000
Camaguey, Cuba		Trujillo, D. R.		Lincoln, Neb.	
CMJF 1150	200	HIZ 1370	10	KFAC 1300	1000
Camaguey, Cuba		Trujillo, D. R.		Los Angeles, Calif.	
CMJH 1360	100	HP50 1440	25	KFBE 1280	1000
Ciego de Avila, Cuba		Colon, Panama		Great Falls, Mont.	
CMJI 1130	150	HRN 1340	100	KFBI 1050	5000
Ciego de Avila, Cuba		Tegucigalpa, Hond.		Ablene, Kans.	
CMJK 780	250	KABC 1420	100	KFBK 1490	5000
Camaguey, Cuba		San Antonio, Texas		Sacramento, Calif.	
CMJL 1340	100	KABR 1420	100	KFDM 560	500
Camaguey, Cuba		Aberdeen, S. Dak.		Beaumont, Texas	
CMJO 1180	50	KADA 1200	100	KFDY 780	1000
Ciego de Avila, Cuba		Ada, Okla.		Brookings, S. D.	
CMJP 1430	75	KALB 1420	100	KFEL 920	500
Camaguey, Cuba		Alexandria, La.		Denver, Colo.	
CMJX 830	....	KALE 1300	500	KFEQ 680	2500
Camaguey, Cuba		Portland, Ore.		St. Joseph, Mo.	
CMK 730	3000	KANS 1210	100	KFGQ 1370	100
Havana, Cuba		Wichita, Kans.		Boone, Iowa	
CMKC 1250	150	KARK 890	250	KFH 1300	1000
Santiago, Cuba		Little Rock, Ark.		Wichita, Kans.	
CMKD 1050	250	KASA 1210	100	KFI 640	50000
Santiago, Cuba		Elk City, Okla.		Los Angeles, Calif.	
CMKF 1460	250	KAST 1370	100	KFIO 1120	100
Holgulin, Cuba		Astoria, Ore.		Spokane, Wash.	
CMKM 1120	200	KBIX 1500	100	KFIZ 1420	100
Manzanillo, Cuba		Muskogee, Okla.		Fond du Lac, Wis.	
CMKR 1400	100	KBPS 1420	100	KFJB 1200	100
Santiago, Cuba		Portland, Ore.		Marshalltown, Iowa	
CMKW 1330	....	KBST 1500	100	KFJI 1210	100
Santiago, Cuba		Big Spring, Texas		Klamath Falls, Ore.	
CMKX 1190	75	KBTM 1200	100	KJAM 1370	100
Santiago, Cuba		Jonesboro, Ark.		Grand Forks, N. D.	
CMOA 1440	150	KCMC 1420	100	KFJR 1300	500
Havana, Cuba		Texarkana, Ark.		Portland, Ore.	
CMOK 1470	150	KCMO 1370	100	KFJZ 1370	100
Havana, Cuba		Kansas City, Mo.		Fort Worth, Texas	
CMOX 1320	200	KCRC 1360	250	KFKA 880	500
Havana, Cuba		Enid, Okla.		Greeley, Colo.	
CMQ 880	500	KCRJ 1310	100	KFKU 1220	1000
Havana, Cuba		Jerome, Ariz.		Lawrence, Kans.	
CMW 600	1400	KDB 1500	100	KFNF 890	500
Havana, Cuba		Santa Barbara, Calif.		Shenandoah, Iowa	
CMX 920	1000	KDFN 1440	500	KFOR 1210	100
Havana, Cuba		Casper, Wyo.		Lincoln, Neb.	
CRCK 1050	1000	KDKA 980	50000	KFOX 1250	1000
Quebec, Que.		Pittsburgh, Pa.		Long Beach, Calif.	
CRCM 910	5000	KDLR 1210	100	KFPL 1310	100
Montreal, Que.		Devils Lake, N. D.		Dublin, Texas	
CRCO 880	1000	KDNC 1200	100	KFPW 1210	100
Ottawa, Ont.		Lewistown, Mont.		Fort Smith, Ark.	
CRCS 950	100	KDON 1210	100	KFPY 890	1000
Chicoutimi, Que.		Del Monte, Calif.		Spokane, Wash.	
CRCT 840	5000	KDYL 1290	1000	KFOD 780	250
Toronto, Ont.		Salt Lake City, Utah		Anchorage, Alaska	
CRCV 1100	1000	KECA 1430	1000	KFRG 610	1000
Vancouver, B. C.		Los Angeles, Calif.		San Francisco, Calif.	
CRCW 600	500	KEHE 780	500	KFRD 1370	100
Windsor, Ont.		Los Angeles, Calif.		Longview, Texas	
FQN 609	250	KELD 1370	100	KFRU 630	500
St. Pierre, Miq.		El Dorado, Ark.		Columbia, Mo.	
HHK 920	1000	KERN 1370	100	KFSD 600	1000
Port-au-Prince, Haiti		Isakersfield, Calif.		San Diego, Calif.	

NORTH AMERICAN B. C. STATIONS BY CALLS

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

NORTH AMERICAN B. C. STATIONS BY CALLS

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

NORTH AMERICAN B. C. STATIONS BY CALLS

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

NORTH AMERICAN B. C. STATIONS BY CALLS

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

NORTH AMERICAN B. C. STATIONS BY CALLS

WIBX 1200 Utica, N. Y.	100	WJW 1210 Akron, Ohio	100	WML 630 Washington, D. C.	250
WICC 600 Bridgeport, Conn.	500	WJZ 760 New York, N. Y.	50000	WMAQ 670 Chicago, Ill.	50000
WIL 1200 St. Louis, Mo.	100	WKAQ 1240 San Juan, P. R.	1000	WMAS 1420 Springfield, Mass.	100
WILL 580 Urbana, Ill.	250	WKAR 850 East Lansing, Mich.	1000	WMAZ 1180 Macon, Ga.	1000
WILM 1420 Wilmington, Del.	100	WKBB 1500 East Dubuque, Ill.	100	WMBE 1420 Detroit, Mich.	100
WIND 560 Gary, Ind.	1000	WKBH 1380 LaCrosse, Wis.	1000	WMBD 1440 Peoria, Ill.	500
WINS 1180 New York, N. Y.	1000	WKBI 1420 Clcero, Ill.	100	WMBG 1210 Richmond, Va.	100
WIOD 1300 Miami, Fla.	1000	WKBN 570 Youngstown, Ohio	500	WMBH 1420 Joplin, Mo.	100
WIP 610 Philadelphia, Pa.	1000	WKBO 1200 Harrisburg, Pa.	100	WMBI 1080 Chicago, Ill.	5000
WIRE 1400 Indianapolis, Ind.	500	WKBV 1500 Richmond, Ind.	100	WMBO 1310 Auburn, N. Y.	100
WIS 560 Columbia, S. C.	1000	WKBW 1480 Buffalo, N. Y.	5000	WMBQ 1500 Brooklyn, N. Y.	100
WISN 1120 Milwaukee, Wis	250	WKBZ 1500 Muskegon, Mich.	100	WMBR 1370 Jacksonville, Fla.	100
WJAC 1310 Johnstown, Pa.	100	WKEU 1500 Griffin, Ga.	100	WMC 780 Memphis, Tenn.	1000
WJAG 1060 Norfolk, Neb.	1000	WKOK 1210 Sanbury, Pa.	100	WMCA 570 New York, N. Y.	500
WJAR 890 Providence, R. I.	1000	WKRC 550 Cincinnati, Ohio	1000	WMEX 1500 Boston, Mass.	100
WJAS 1290 Pittsburgh, Pa.	1000	WKY 900 Oklahoma City, Okla.	1000	WMFD 1370 Wilmington, N. C.	100
WJAX 900 Jacksonville, Fla.	1000	WKZO 590 Kalamazoo, Mich.	1000	WMFF 1310 Plattsburg, N. Y.	250
WJAY 610 Cleveland, Ohio	500	WLAC 1470 Nashville, Tenn.	5000	WMFG 1210 Hibbing, Minn.	100
WJBC 1200 Bloomington, Ill.	100	WLAK 1310 Lakeland, Fla.	100	WMFJ 1420 Daytona Beach, Fla.	100
WJBK 1500 Detroit, Mich.	100	WLAP 1420 Lexington, Ky.	100	WMFN 1210 Clarksdale, Miss.	100
WJBL 1200 Decatur, Ill.	100	WLB 1250 Minneapolis, Minn.	1000	WMFO 1370 Decatur, Ala.	100
WJBO 1420 Baton Rouge, La.	100	WLBC 1310 Muncie, Ind.	100	WMFR 1200 High Point, N. C.	100
WJBR 1420 Gastonia, N. C.	100	WLBF 1420 Kansas City, Kans.	100	WMIN 1370 St. Paul, Minn.	100
WJBW 1200 New Orleans, La.	100	WLBL 900 Stevens Point, Wis.	2500	WMNN 890 Fairmont, W. Va.	500
WJBY 1210 Gadsden, Ala.	100	WLBZ 620 Bangor, Me.	500	WMPC 1200 Lapeer, Mich.	100
WJDX 1270 Jackson, Miss.	1000	WLEU 1420 Erie, Pa.	100	WMSD 1420 Sheffield, Ala.	100
WJEJ 1210 Hagerstown, Md.	100	WLLH 1370 Lowell, Mass.	100	WMT 600 Cedar Rapids, Iowa	1000
WJIM 1210 Lansing, Mich.	100	WLMO 1210 Middlesboro, Ky.	100	WNAC 1230 Boston, Mass.	1000
WJJD 1130 Chicago, Ill.	20000	WLNH 1310 Laconia, N. H.	100	WNAD 1010 Norman, Okla.	1000
WJMS 1420 Ironwood, Mich.	100	WLS 870 Chicago, Ill.	50000	WNAX 570 Yankton, S. D.	1000
WJNO 1200 W. Palm Beach, Fla.	100	WLTH 1400 Brooklyn, N. Y.	500	WNBC 1380 New Britain, Conn.	250
WJR 750 Detroit, Mich.	50900	WLVA 1200 Lynchburg, Va.	100	WNBF 1500 Binghamton, N. Y.	100
WJRD 1200 Tuscaloosa, Ala.	100	WLW 700 Cincinnati, Ohio	500800	WNBH 1310 New Bedford, Mass.	100
WJSV 1450 Washington, D. C.	10000	WLWL 1100 New York, N. Y.	5000	WNBR 1430 Memphis, Tenn.	500

NORTH AMERICAN B. C. STATIONS BY CALLS

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

NORTH AMERICAN B. C. STATIONS BY CALLS

WTNJ 1280	500	XECW 1310	10	XERA 840	250000
Trenton, N. J.		Mexico City, D. F.		Villa Acuna, Coah.	
WTOC 1260	1000	XED 1160	2500	XES 990	250
Savannah, Ga.		Guadalajara, Jal.		Tampico, Tams.	
WTRC 1310	100	XEE 1210	50	XESL 1160	.....
Elkhart, Ind.		Durango, Dgo.		Tijuana, L. C.	
WVFW 1400	500	XEF 1450	100	XET 690	500
Brooklyn, N. Y.		Juarez, Chih.		Monterrey, N. L.	
WWAE 1200	100	XEFA 1180	500	XETB 1310	125
Hammond, Ind.		Mexico City, D. F.		Torreón, Coah.	
WWJ 920	1000	XEFB 1420	100	XETF 1220	12
Detroit, Mich.		Monterrey, N. L.		Veracruz, Ver.	
WWL 850	10000	XEFC 560	100	XETH 1210	100
New Orleans, La.		Merida, Yuc.		Puebla, Pue.	
WWNC 570	1000	XEFE 1340	250	XEU 1010	250
Asheville, N. C.		Laredo, Tams.		Veracruz, Ver.	
WWRL 1500	100	XEFI 1440	250	XEW 890	50000
Woodside, N. Y.		Chihuahua, Chih.		Mexico City, D. F.	
WWSW 1500	100	XEFJ 1230	100	XEWZ 1150	100
Pittsburgh, Pa.		Monterrey, N. L.		Mexico City, D. F.	
WWVA 1160	5000	XEFL 1150	250	XEX 1310	125
Wheeling, W. Va.		Tijuana, L. C.		Monterrey, N. L.	
WXYZ 1240	1000	XEFO 940	5000	XEXM 610	.....
Detroit, Mich.		Mexico City, D. F.		Mexico City, D. F.	
W1XBS 1530	1000	XEFV 1210	100	XEY 1000	10
Waterbury, Conn.		Juarez, Chih.		Merida, Yuc.	
W2XR 1550	1000	XEFW 1310	250	XEYZ 780	10000
Long Island City, N. Y.		Tampico, Tams.		Mexico City, D. F.	
W6XAI 1550	1000	XEFZ 1370	100	XEZ 630	500
Bakersfield, Calif.		Mexico City, D. F.		Merida, Yuc.	
W9XBY 1530	1000	XEG 1270	200	XEZZ 1370	100
Kansas City, Mo.		Ensenada, B. C.		San Luis Potosí, S. L. P.	
XEA 1060	500	XEH 1150	250	XFA 1310	5
Guadalajara, Jal.		Monterrey, N. L.		Agua Calientes, Ags.	
XEAA 920	200	XEI 1370	125	XFB 1270	250
Mexicali, B. C.		Morelia, Mich.		Jalapa, Ver.	
XEAC 1240	250	XEJ 1020	1000	XFC 810	350
Tijuana, L. C.		Juarez, Chih.		Agua Calientes, Ags.	
XEAF 990	500	XEK 990	100	XFD 1340	350
Nogales, Son.		Mexico City, D. F.		Jalapa, Ver.	
XEAG 1310	10	XEKL 1240	500	XFO 940	5000
Cordoba, Ver.		Leon, Guan.		Mexico City, D. F.	
XEAI 1240	100	XEL 1100	250	XFX 610	1000
Mexico City, D. F.		Mexico City, D. F.		Mexico City, D. F.	
XEAM 750	7.5	XELA 1240	50	YNLF 1275	20
Matamoros, Tams.		Saltillo, Coah.		Managua, Nicaragua	
XEAO 560	250	XELO 1110	10000	YNOP 1230	100
Mexicali, B. C.		Piedras Negras, Coah.		Managua, Nicaragua	
XEAQ 1090	1000	XEME 1240	15	YNVA 950	30
Rosario, L. C.		Merida, Yuc.		Managua, Nicaragua	
XEAS 1160	100	XEMO 860	5000		
Saltillo, Coah.		Tijuana, L. C.			
XEAT 1210	300	XEMX 1280	12		
Hidalgo, Chih.		Mexico City, D. F.			
XEAW 960	50000	XEMZ 820	.....	
Reynosa, Tams.		Coronado Isl., L. C.			
XEAZ 1420	7	XEN 710	1000		
Guanajuato, Gto.		Mexico City, D. F.			
XEB 1030	10000	XENT 910	150000		
Mexico City, D. F.		Nuevo Laredo, Tams.			
XEBC 730	5000	XEOK 760	250		
Agua Caliente, L. C.		Tijuana, L. C.			
XEBH 930	500	XEOX 640	500		
Hermosillo, Sonora		Saltillo, Coah.			
XEBK 1000	100	XEP 1160	500		
Nuevo Laredo, Tams.		Juarez, Chih.			
XEBZ 820	100	XEPN 730	50000		
Mexico City, D. F.		Piedras Negras, Coah.			
XEC 1160	30				
Tijuana, L. C.					

The Beginner's Story of Radio

By B. Francis Dashiell

should be in the hands of every radio listener. In this 96 page book, with the aid of many illustrations, Mr. Dashiell explains, in simple language, every action from the time the signal touches your aerial until it leaves the loud-speaker.

Beautifully bound in leatherette, well printed on good paper, you cannot afford to be without it at the new low price of

Only 35c postpaid—Add 2c tax if you live in Ohio

The Radex Press, Conneaut, Ohio

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, 18:00 is 6 p.m. and 23:00 is 11:00 p.m. The time lines used in charts are for Eastern Standard Time. Those living in other zones may slip 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	23:15	23:30	23:45	00:00	00:15	00:30	00:45	01:00	01:15	01:30	01:45	02:00	02:15	02:30	02:45	03:00	03:15	03:30	03:45	04:00	04:15	04:30	04:45	05:00	05:15	05:30	05:45	06:00	06:15	06:30	06:45	07:00	07:15	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45
Central Time P. M.	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45	13:00	13:15	13:30	13:45	14:00	14:15	14:30	14:45	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	22:00	22:15	22:30	22:45
Central Time P. M.	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45	13:00	13:15	13:30	13:45	14:00	14:15	14:30	14:45	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	22:00	22:15	22:30	22:45
Central Time P. M.	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45	13:00	13:15	13:30	13:45	14:00	14:15	14:30	14:45	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00	19:15	19:30	19:45	20:00	20:15	20:30	20:45	21:00	21:15	21:30	21:45	22:00	22:15	22:30	22:45

QUICK INDEX TO ALL STATION DATA

NORTH AMERICAN BROADCAST

Frequency ChecksNov., Page 32
 Owners' AddressNov., Page 59
 Time on the Air ..February, Page 78
 By FrequenciesNov., Page 59
 By LocationsNov., Page 76
 By CallsNov., Page 82
 The Month's Changes ..Nov., Page 36
 Frequency CheckOctober, Page 32

SHORT WAVE

By FrequenciesNov., Page 48
 By LocationsNov., Page 53
 By CallsNov., Page 57
 When to TuneNov., Page 95

FOREIGN BROADCAST

By FrequenciesOctober, Page 43
 By LocationsOctober, Page 52
 By Call LettersOctober, Page 57

LONG WAVE

By FrequenciesApril, Page 49
 By LocationsApril, Page 51
 By Call LettersApril, Page 52

MISCELLANEOUS

Which Is the Best Aerial March, 1935
 Eliminating NoisesApril, 1935
 Sets for the Short Waves April, 1935
 Short Wave SymbolsApril, 1935
 The "V" Doublet Antenna..May, 1935
 Recording Programs..December, 1935
 For Short Wave Beginners.....
 January, 1936
 Roster of DX Clubs.....March, 1936
 Apex StationsApril, 1936
 Assorted S.W. Information May, 1936
 A Tuned AntennaMay, 1936
 The Fading Problem.....May, 1936
 A Good Pre-Selector.....June, 1936
 Choosing an Aerial ..September, 1936

INSURE YOUR RADIO ENJOYMENT

SEND THIS BLANK TODAY

The Radex Press
 Conneaut, Ohio:

Enclosed find \$.....for which send me postpaid my choice of your offers
 as checked below:

- Program "slates" 1 for 10c 2 for 15c 4 for 25c
- One Radio World Map and Time Converter 25c
- One copy of the next RADEX 25c
- One year's subscription to RADEX, 10 issues.....\$1.75
- Two years.....\$3.25 Three years.....\$4.75
- Beginner's Story of Radio35

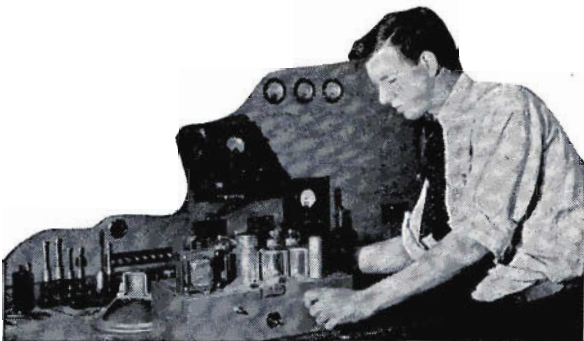
(If you live in Ohio, add 3% for State Sales Tax. No tax on Subscriptions.)

Write Name Plainly

Street and Number

City and State

I sometimes think there should be a law requiring everyone to spend some of his spare time training for the future. I once thought all the cards were stacked against me. Now I'm making good money. Maybe my experience will show you the way to better pay too.



I THOUGHT RADIO WAS A PLAYTHING

But Now My Eyes Are Opened--I'm Making Over \$30 a Week!

\$30 a week. Man alive, I used to think anyone making that much was just plain lucky.

A short time 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 I would soon be making \$30 and more a week in my own Radio business—I'd thought you were crazy. To me, Radio was a plaything. Now I know it's a big business where specialized training pays rich rewards.

But I am getting ahead of my story—let me tell you how it all started. I was hard up 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 train you 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 it 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 full time business of my own.

That business in a surprisingly short time grew to the point where I am clearing over \$30 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 jobs in Broadcasting Stations, Radio Factories, Radio Jobbers and Dealers, Aviation Radio, Television, Short Wave Stations, Automobile, Police Radio, Loud Speaker Systems, and other branches of Radio.

THINK IT OVER

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 Receiver Troubles—Their Cause and Remedy," is valuable. And when you read this lesson, you'll know why so many fellows 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. 6MO, Washington, D. C.**

J. E. Smith, President,
National Radio Institute
Dept. 6MO, Washington, D. C.

**MAIL THIS
COUPON**

Dear Mr. Smith:

Without obligation, send me the sample lesson and your 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.....

14X1

SAVE UP TO 50%

at Factory Prices!

**You'll Be Excited over MIDWEST'S
DIAL-A-MATIC Tuning and Exclusive ELECTRIK SAVER!**

Your radio enjoyment is doubled with Dial-A-Matic Tuning, the amazing new Midwest feature that makes this radio practically tune itself. Now, even a child can bring in ten perfectly tuned programs in ten seconds! It's a big thrill to whirl the dial . . . and then hear the station you want . . . come in instantly, automatically, perfectly. Zip-slip . . . the programs roll in perfectly tuned . . . as fast as you can press buttons! This new Midwest feature will perform new miracles of radio for you.



**New 1937
AIR-TESTED
5-BAND**

**16-Tube MIDWEST
Radio**

**9 to 2200
METERS**



30 Days FREE Trial!

Send for big FREE 40-page 1937 Midwest catalog—before you buy any radio—and see for yourself why scores of thousands of radio purchasers have saved up to 50% by ordering the Midwest factory - to - you way since 1920. Learn why Midwest radios are preferred by famous movie stars, orchestra leaders, musicians, sound technicians, and discriminating radio purchasers everywhere.

Once again, Midwest demonstrates its leadership by offering this amazingly beautiful, bigger, better, more powerful, 16-tube, 5-band world-wide radio—a startling achievement that makes the whole world your radio playground. Out-performs \$150 radios on point - for - point comparison. Powerful Triple - Twin Tubes (two tubes in one) give 20-tube results.

**BECOME YOUR OWN
RADIO DEALER**

Save the jobber's-retailer's profits that often amount to 50% of ordinary retail prices. Become your own radio dealer and buy at wholesale prices direct from the Midwest factory. Never before so much radio for so little money! Why pay more?

This super deluxe Midwest radio is so amazingly selective, so delicately sensitive, that it brings in distant foreign stations with full loud speaker volume on channels adjacent to powerful locals. You'll thrill



ELECTRIK-SAVER

This exclusive Midwest feature cuts radio wattage consumption 50% . . . enables them to operate on ordinary 7-tube sets . . . saves them up to 50 volts.

over its marvelous super-performance . . . glorious crystal-clear "concert realism" . . . and magnificent world-wide foreign reception. Scores of marvelous Midwest features, many of them exclusive, make it easy to parade the nations of the world before you. You can switch instantly from American programs . . . to Canadian, police, amateur, commercial, airplane and ship broadcasts . . . to the finest, most fascinating world-wide foreign programs.

Before you buy any radio, send for our big FREE 40-page 1937 catalog—and take advantage of Midwest's sensational factory-to-you values. You have a year to pay and terms are as low as 10¢ per day—and you secure the privilege of 30 days FREE trial in your own home. In addition you are triply protected with Foreign Reception Guarantee, Full-Year Warranty and Money-Back Guarantee.

Only **\$49.95** COMPLETE WITH GIBBY THEATRE SONIC SPEAKER (LESS TUBES)

TERMS AS LOW AS **\$5.00** DOWN

Only **MIDWEST** gives you **16 TUBES** • 5 WAVE BANDS
9 to 2200 METERS • ELECTRIK SAVER
• DIAL-A-MATIC TUNING •
• AUTOMATIC AERIAL ADAPTION •
DUAL AUDIO PROGRAM EXPANDER



MY MIDWEST NOT ONLY MEETS BUT SURPASSES MY MOST CRITICAL STANDARDS.
Bing Crosby



NO SET THAT I HAVE EVER OWNED HAS BROUGHT IN FOREIGN RECEPTION SO CONSISTENTLY AND SATISFACTORILY.
Gloria Stuart



MIDWEST RADIO CORP.

DEPT. E81 CINCINNATI, OHIO, U.S.A.
Established 1920 Cable Address MIRACO...All Codes

MAIL COUPON TODAY for

Free 30-DAY TRIAL OFFER and 40-PAGE FOUR-COLOR Free CATALOG

MIDWEST RADIO CORPORATION
Dept. E81, Cincinnati, Ohio
Without obligation on my part, send me your new FREE catalog and complete details of your liberal 30-day FREE trial offer. This is NOT an order.

Name.....
Address.....
Town..... State.....

Special offer and prices granted only when dealing direct with factory by mail