

**THE OCTOBER 1935**

# **RAD** IO IN **D** EX

**The All-wave DX Log of the World**



**25<sup>c</sup>**

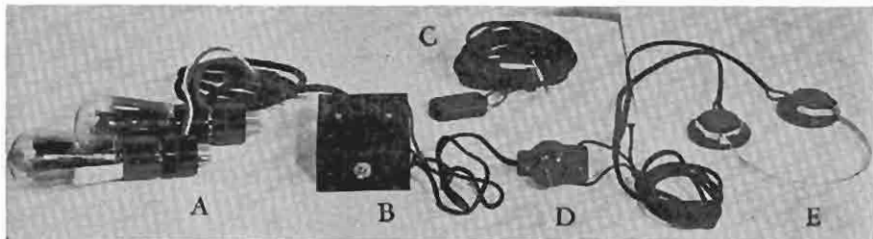
**30c in  
Canada**

The Radio Stations of the Whole  
World Listed by Frequencies, by  
Locations and by Call Letters

**No. 92**

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# The "Perfect" Method of Using Head Phones



"A". The small socket adapter or adapters are placed under the power tubes where they remain.

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"C". By inserting this extension cord and connector, the phones may be used at a distance of 15 feet from the set. Price 50c. (In Ohio, 52c)

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## THE RADEX PRESS INC.

Conneaut, Ohio

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— FROM ALL THE WORLD



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Street.....

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

October 1, 1935



# RADIO INDEX

Reg. U. S. Patent Office



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TWELFTH YEAR

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# Anyone Can Build *this* All-Wave Crystal Set

• • • By B. FRANCIS DASHIELL

Last year this magazine published a noteworthy series of articles by Mr. Dashiell entitled "The Beginner's Story of Radio." These have since been published in bookform and may be secured from the publishers of this magazine at fifty cents the copy.

Now we are publishing in every other issue a second series which will be practically a continuation of the first. After all, there is only one way to learn to do a thing and that is by *doing* it. Building a radio set is a fascinating undertaking and will do more to teach the fundamentals of the science than reading a thousand books.

In this issue Mr. Dashiell begins with the construction of the simplest form of radio receiver—the crystal set. This requires neither tubes nor electric current. Many happy evenings lie ahead of those of our readers who follow this series of articles and construct the simple sets Mr. Dashiell well describe. To such we urge that they read again "The Beginner's Story of Radio." The Editor

**B**UILDING a radio set is a fascinating job. In fact, most people learned about radio during their struggles with coils, condensers, crystals and tubes. It was not so long ago that one had to build his own set in order to have one. The early wireless experimenters worked amid a confusion of wires and homemade parts, but when we consider the crude apparatus that was used, the results obtained seem only a little short of miraculous.

Crystal sets were the pioneers of radio. It is remarkable what can be done with a crystal in the hands of a careful operator. If we profit by the mistakes of the old timers we may build a crystal set in a few hours. Let us, then, turn back the years to assemble radio's most simple pioneer type of receiver—the crystal set. It will be our first step toward the construction of more efficient and interesting sets. But you will be surprised with what a crystal can do, and its fine tone will more than please you.

## The Detector or Rectifier

The crystal receiver is so named because a piece of some kind of

crystal is used as a detector instead of the tubes we know so well. It is generally understood that radio signals, which pass through the air, cannot immediately be utilized. These waves vibrate too rapidly, for they are high-frequency alternating currents, and, as such, are far beyond the hearing limits of the human ear. So it becomes necessary first to detect these signals. Actually, the word "detector" is a misnomer, for the device used for that purpose does not detect; it rectifies. The detector, then, is a "rectifier" of alternating currents.

Many kinds of detector-rectifiers have been devised. Most persons assume that the crystal was the earliest detector. This is not the case. Hertz, back in 1887, demonstrated the inductive reception of electromagnetic waves by making a tiny spark jump between the ends of a loop of wire some distance from an induction coil transmitter. It was when these "Hertzian" waves were applied to a system of wireless telegraphy by Marconi, early in the '90s, that signal communication through the air became possible.

## Early Detectors

Marconi used a detector which he called a "coherer." It consisted of a small glass tube filled with iron filings, and fitted at its ends with brass plugs. These loose particles presented high resistance to the flow of a battery current, but, when a radio wave passed in from the antenna it electrified the filings and caused them to cohere. Conductivity was increased and the battery current passed through to operate a telegraph relay. This principle was discovered by Hughes as early as 1879. Marconi also used a mechanical magnetic de-

lector, but it was too bulky and not at all sensitive. Yet, in spite of all this crudeness, Marconi, early in 1902, heard his first trans-Atlantic signals being transmitted from a spark station located in England.

Following the pioneer work of Maxwell, Hughes and Hertz who first devised detectors of electric waves, came the application of Marconi's detectors; then the crystals and tubes. The use of crystals took the wireless world by storm. Every kind of crystal was tested, and some were exploited through the use of patents, as, for instance, the silicon crystal detector, which cost fifteen dollars if you wanted one badly enough.

### Crystals Are Rectifiers

Not all crystals are suitable for radio detection. A crystal must possess decided rectifying properties. That is, it must be capable of converting the alternating current frequencies received from the antenna into uni-directional or pulsating direct currents. So, if a crystal permits a large current to flow in one direction only, and a very small current, or none at all, in the opposite direction, it will make a good detector-rectifier. Crystals do not amplify and can be used only for detection. Do not confuse this type of crystal with the piezo-electric crystal used to pass only one frequency.

Most crystals rectify alternating currents when in contact with a piece of dissimilar metal; but some crystals also work when in contact with a different kind of crystal. Still other crystals will rectify only when used with a local battery. The experimenter will find he can use any of these crystals in his set.

### Kinds of Crystals

Crystals that operate best alone, without a local battery current, are: Silicon, galena, iron pyrites, and a piece of zincite used in contact with a piece of bornite. Crystals that func-

tion best with a local battery are: Carborundum and molybdenite.

Silicon is an element that is electrically fused into metallic lumps presenting a graphite-like, crystalline appearance. Galena is a rich lead-sulphide ore that has crystallized in cubic and octahedral crystals, and which runs as high as 60 per cent lead. The crystals are heavy and possess a lead-gray color with a bright luster. Iron pyrites crystals present a yellow luster; they are high in iron and sulphur content, and frequently are known as "fools gold." Those early American settlers who sent a ship load of this ore back to England thinking it was gold, did not realize how appropriately this appellation would later apply to gullible wireless experimenters who paid ten dollars for iron pyrites detectors that sold under a patented name!

Zincite is a native ore of zinc oxide or red zinc, while bornite is a sulphide of iron and copper—a valuable copper ore. Carborundum is the commercial raw product that results when silicon and carbon are fused together in an electric furnace. Molybdenite is a blue-gray, flaky and graphite-like element, somewhat resembling mica.

### The Galena Detector

Galena is the most satisfactory crystal for rectifying radio waves. So, for all purposes, the detector used in our description is made of galena. Galena is utilized in connection with some dissimilar metal, bronze, copper or brass being particularly suitable. Best results are obtained by using a bronze or brass wire in light contact with a bright, freshly cleft fracture of the galena. Do not handle crystals with the fingers as the least oil or moisture will render the sensitive surface inefficient.

One end of the wire should be sharpened to a point, and the wire twisted in a coil so that its tension

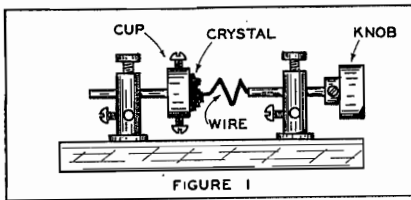


FIGURE 1

will be constant once it is set to the surface of the crystal. Often the entire face of a piece of galena must be searched in order to find a sensitive spot. Or the crystal must be fractured several times, and many pieces tested, before a super-sensitive spot will be located. A small piece of crystal is best; a lump that will hardly cover a ten cent piece is sufficient.

A crystal detector is easy to construct. In fact, a piece of wire wrapped around a crystal, and a second piece of wire touching the face of the crystal, will provide a perfect detector. This arrangement, however, is crude and unstable. A simple type of detector is shown in Figure 1. Two binding posts are fastened to a hard-rubber or bakelite base. One post supports a short brass rod carrying a brass cup or spring clip which holds the piece of galena. The other binding post supports a movable arm that carries on one end the fine contact wire—or "cat whisker." This arm, with its insulated knob, enables the listener to make light contact with any part of the surface of the galena.

### A Fundamental Circuit

Place the detector between a large antenna and a good ground connection. Then attach a pair of sensitive (2,000 ohms or more) radio headphones to both sides of the crystal detector. This is a fundamental untuned circuit. Signals within the wavelength of the antenna will be heard. However, audible sounds from phones can be obtained only from powerful stations which send out waves that are damped, modu-

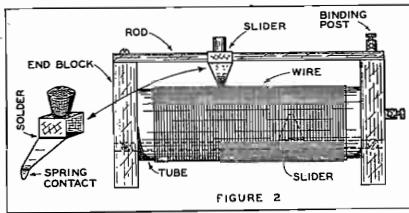
lated or interrupted. No continuous wave (c. w.) signals can be heard.

The above circuit is not suited for reception because the resistance of the crystal, when placed in series with the antenna and ground, will interfere with the unrestricted flow of the radio-frequency waves from the antenna. Therefore, in order to get the best operation possible from a crystal the detector must be removed from its position directly in the antenna circuit and placed in a separate circuit that is "coupled" to the antenna. This is accomplished by means of a tuning coil. The duty of a tuning coil is to "tune" the antenna circuit to a desired signal while excluding all others.

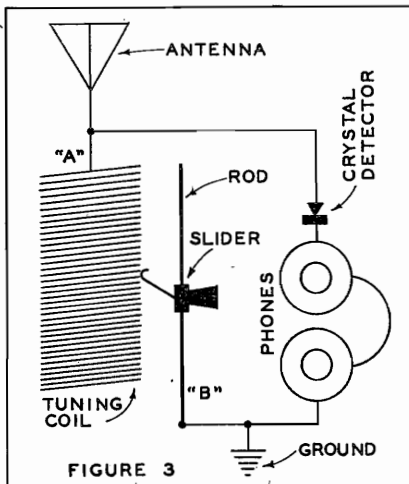
### The Tuning Coil

Now, when a tuning coil is used for short waves it should have very few turns of wire; for broadcast waves a moderate number only is necessary; and, for long waves, it must have many turns. Since the circuits of a crystal receiver are not critical we may use one large coil for tuning purposes. This will cover the long and short wave bands, and we shall have an all-wave crystal set. But, an adjustable device must be arranged so that the coil can be changed in size and inductance by cutting turns of wire in or out, one loop at a time. This is accomplished by means of a sliding contact. Changing the size or length of a coil by adding or removing loops of wire tends to increase or decrease, respectively, its impedance or inductance to high-frequency antenna currents. Thus a tuning coil can be made variable throughout its entire length, and it will tune to all wave lengths within its range. (Read again Chapter Five of *The Beginner's Story of Radio*).

A simple type of tuning coil is shown in Figure 2. It consists of a cardboard or fiber tube fastened between two square, wooden end-



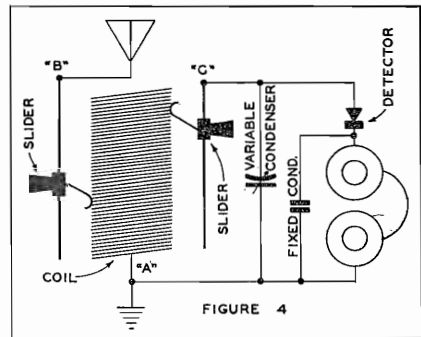
blocks. The tube should be eight inches long and two inches in diameter. It is wound closely with No. 22 copper wire, either enameled or single-silk covered, to within one-half an inch of each end. You will need about  $4\frac{1}{2}$  ounces of this wire for the purpose. Along the top of the coil, supported at either end by the end blocks, place a square brass rod. Over this rod fit a length of spring brass that has been bent at one end so as to wrap around the rod, as shown in Figure 2. Attach a small insulated knob. The end of the strip should be rounded off and pointed as a slider arm to make contact with the turns of wire. The insulation of the wire should be scraped off for a width of one-half an inch with a file or knife for the full length of the coil. The contact arm, sliding along this scraped strip,



will make contact with each individual turn of wire.

### Tuning The Circuit

The tuning coil is placed in the radio circuit as shown in Figure 3. One end of the coil, which has been attached to a binding post placed on an end block, is connected to the antenna. The binding post on the slider rod "B" is attached to the ground. The crystal detector and headphones should be inserted in series between "A" and "B," as indicated. Tuning the coil with its slider causes it to respond to radio signals having different wave lengths. This arrangement of a single-circuit



tuner is one of the basic methods of tuning a circuit. It is obsolete, of course, in modern radio receivers. (See Chapter Four of *The Beginner's Story of Radio*).

This tuner can be further improved by adding a second rod and slider as shown by the dotted lines in Figure 2. It should be placed in a circuit as shown in Figure 4. This is a two-slide tuner with two "closed" circuits that are "closely coupled." It permits the coupling of two circuits conductively, each of which may be individually tuned. The frequency of the antenna or primary circuit is tuned by moving the slider "B" on its rod, and the frequency of the detector or secondary circuit is tuned

*(Continued on page 58)*



# READING *The Editor's Mail*

**T**HE enlarged issue of September, combining the *DX Log of the World* with RADEX, is now on the newsstands as this is written but not enough time has expired to bring the usual "brickbats and bouquets." Certainly the issue contained about all the information our readers could possibly request. So little space is left for articles that we will adopt a policy of alternating the short wave information and that covering the broadcast stations in foreign countries. Next month, the short-wave data will again appear, corrected to date and amplified by information received from our readers. Then in December the foreign stations will be included with, we hope, much additional data to be supplied by our readers covering addresses and hours on the air.

We again ask our correspondents to bear in mind that all mail should now be addressed to us at Conneaut, Ohio, and not to Cleveland. Also to write of DX, short-wave and radio troubles on separate sheets so they may be referred to the proper editor.

The business office asks us to invite our readers to study the advertisements of the Scott and Midwest receivers which will be found regularly in our pages. The b. o. is of the opinion that these firms, which help to make this publication possible, are entitled to special consideration by our readers. We are sorry we cannot comply with this request as the advertising columns are outside the jurisdiction of the Editor.

## Hours on the Air

In this issue, the Sunday time on the air for North American broadcast stations is given. Next month, the hours for Saturday will be shown and, in the December issue, the time will be given for the week-days. We had hoped to be able to show all these



*Here we have a peek behind the scenes while Amos and Andy are broadcasting. Gosden is arguing as the lordly "Kingfish" while Correll, back for the moment in his favorite role, holds up Andy's part in the argument. Programs may come and programs may go but Amos 'n' Andy go on forever.*

times in each issue but many of them were altogether too lengthy and involved to permit it. Under present plans, the time for the whole week will be given in three issues instead of seven as heretofore.

We extend our thanks to those hundreds of stations which filled out and returned our questionnaire promptly. The information contained thereon is absolutely necessary and the cooperation of these stations is greatly appreciated.

A considerable number of stations indicate that they are no longer furnishing "Ekko" stamps. A letter to the Ekko Company is returned indicating that they are no longer in business. In perhaps another year the "Ekko" stamps will be exhausted.

Several stations indicate that they do not care to verify reception. A great many say that listeners do not send return postage. The selfish and penurious are thus gradually destroying the verification privilege. A few stations state that return postage is not necessary but we, nevertheless, urge our readers to send return postage when reporting reception.

### Some Station Comment

VONF, St. John's, Newfoundland, write that Newfoundland stamps must be enclosed to insure verification. U. S. stamps are, of course, worthless to them and it is contrary to the Newfoundland postal regulations to enclose coins in letters.

E. R. Morris, General Manager of the Associated Broadcasting System, P. O. Box 6, San Diego, Calif., writes: "XEFL of Tijuana, Mexico, is and has been off the air for many months. As the situation now stands, to the best of our knowledge, the only border station operating in this area (Lower California) is XEMO. It is doubtful, in view of political conditions in Mexico, if there will be any border stations in operation more than another few weeks. We ourselves have closed all our stations and have stopped construction of the new ones we had licenses for, so that ends our story. By way of explanation, Tijuana was 'closed tight' a few weeks ago. Please direct all future matters to me personally as the offices have been given up."

CJKL, Kirkland Lake, Ont., report their frequency as 1310 still although the CRC shows them moved to 530. They write: "We are unable to give our hours as our power is being stepped up to 1000 watts shortly and CRC programs taken." We wonder how many b. c. sets will be able to tune as low as 530.

CMBZ, Havana, Cuba, state: "We are on the air daily from 7 a. m. to 12 p. m. featuring Cuban typical music, American popular music, operatic, etc., and literary essays. The radio audience will place the management under many obligations by mailing to us a postcard, advising whether our programs are heard in the U. S. A."

CMHX, Cienfuegos, Cuba, is one of the few stations stating that return postage is unnecessary. This makes GMHX rather unique among Cuban stations.

KFJR, Portland, Ore., warns that reports of reception must be accurate. "Reports that cannot be verified will not be answered."

KFPL, Dublin, Texas, furnishes a verification certificate in three colors. The charge is ten cents.

KGKB, Tyler, Texas, advise that they have an application pending for full day time and share time at night with a proposed station on 1500 kcs. in Dallas.

KGNF, North Platte, Nebr., send a picture postcard of their station for a two-cent stamp. KGVO, Missoula, Mont., send a photograph for fifteen cents.

KLCN, Blytheville, Ark., insist upon a self-addressed, stamped envelope for return of verification. Likewise WAGM, Presque Isle, Maine.

KOOS, Marshfield, Ore., writes: "We have an application in to increase to 500 watts daytime which may be OK'd any day now. We just recently were granted the change from 1200 to 1390 and will be on the new frequency in a few days."

KVI, Tacoma, Wash., asks us to note that they are a full-time Columbia and Columbia-Don Lee network outlet.

W1XX on short waves carries all WBZ programs, says the latter.

WCOP, Boston, Mass., state that they will verify "as soon as the stenog force is working."

WFDF, Flint, Mich., ask five cents for verification.

W4XB broadcasting on a frequency of 6040 kcs., and relaying the regularly scheduled programs of WIOD, is owned by the Isle of Dreams Broadcasting Corp. W4XB signs on at noon and off at 2 p. m.; on again at 5:30 until midnight.

XEAW, Reynosa, Tamps, Mexico, state that they require a stamped and addressed envelope for verification. This being the case, listeners must provide themselves with Mexican stamps.

*(Continued on page 58)*

# The SCOTT High-Fidelity Receiver

All-Wave Full-Range

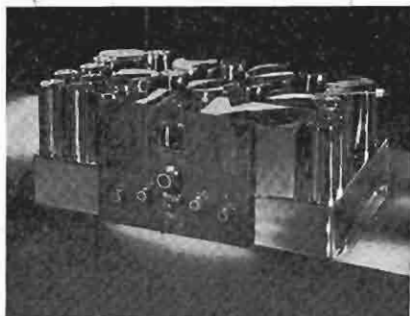
• • • By B. FRANCIS DASHIELL

IT IS a far cry from the first "World's Record Super Eight" broadcast radio set built in 1924 by E. H. Scott to his newest "Full Range High-Fidelity" all-wave receiver of 1935-36. When Mr. Scott carried his first commercial set to New Zealand eleven years ago to prove that reception from stations six to nine thousand miles distant was consistently possible, he amazed the radio world and immediately launched the beginning of a successful enterprise that was destined to become famous. Later, in 1929, Mr. Scott pioneered the all-wave field with the presentation of his "Shield Grid Nine" all-wave set. Since that time record-breaking models have appeared in 1930, 1931, 1932, 1934 and 1935.

The creation of six highly successful all-wave superheterodyne receivers has made Mr. Scott's name well known throughout the world. During all these years there has been a policy that all sets must be "custom built." Radio sets do not pour out of the big, three-story laboratory-factory in Chicago in huge quantities through high-speed production methods, but rather are limited by the number that can be built and tested by craftsmen of many years of radio experience in the Scott laboratory.

## Testing And Tuning

At the Scott factory each step of construction and assembly is carefully checked and tested. Then, when the set is completed it must go through a series of precision measurements and adjustments which assure keenness of selectivity and sensitivity, full range and fidelity of tone, and accuracy of calibration. A specially built oscillation generator, which gives a remarkable radio sig-



*Chassis of the Scott All-Wave Full-Range, High-Fidelity Receiver*

nal reading as low as .1 microvolt at all frequencies, is used for the calibration and oscillation tests. Finally, each set must demonstrate its ability in actual performance on the air by bringing in, with good volume, many stations on all waves from Europe, South America, Australia and North America.

The Scott "Full Range High-Fidelity Receiver" is built around the time-tested and efficient superheterodyne circuit. It covers wave lengths between 13 and 555 meters. The set will provide selectivity from as sharp as 2 kilocycles selectivity for DX reception to as wide as 16 kcs. for local stations. The receiver gives faithful reproduction of all audible frequencies within the full tonal range of the human ear—from 25 to 16,000 cycles. The average small set fitted with a single speaker seldom covers an audio range of more than 100 to 7,000 cycles and, therefore cannot respond to low bass notes and high harmonics and overtones. Full 35 watts of undistorted power operates three loud speakers—one of which covers the low and medium sound frequencies, and the other two, the

high frequencies. This arrangement provides clear and life-like reproduction of sound at all volumes.

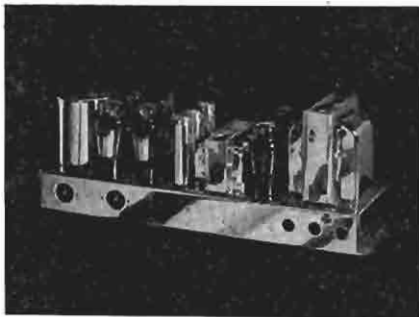
### Twenty-Three Tubes

Here is an improved superheterodyne circuit employing seventeen tubes in the receiver chassis and six tubes in the power unit. There are 23 tubes in all, twenty-one of the latest six-volt glass tubes and the two voltage regulators in the circuit. The Scott engineers have not succumbed to the present furor over the metal tubes. The conventional glass tubes are still used in this newest set of the modern Scott line, and it is indicated by the manufacturers that since metal tubes are new, and because certain disadvantages still exist which as yet have not been compensated for, metal tubes will not replace standard glass tubes at the present time in Scott all-wave sets.

All-wave sets are divided into two or more tuning sections. The Scott high-fidelity receiver makes use of four wave bands, called the white, blue, red and green bands. These four tuning bands embrace the entire range of 13 to 555 meters by four steps, and are selected by means of a multi-contact switch operated by a wave changing knob on the front of the panel.

### Highly Developed Coils

In this receiver the coils are wound on tubes that are spaced around an octagonal support. None of the eight coils are parallel to each other, and, therefore, interaction between high-frequency fields is impossible. The wave changing mechanism cuts in these coils at will according to the wave band selected. A few words about the new intermediate-frequency transformers may not be amiss. These units are accurately air tuned. Both the primary and secondary windings are permanently tuned with tiny air-dielectric variable condensers. The two coils are partially



*Power Assembly of the Scott*

separated by a shielding plate, and the whole unit encased in a sealed shielding can that prevents moisture and dust from entering and disturbing the accurate i.f. setting originally adjusted at the factory.

When a radio signal comes down from the antenna it passes through the antenna radio-frequency coil and into a type 6D6 r.f. pentode tube. Then a 6A7 pentagrid converter, or first detector tube, receives this amplified signal and, in connection with the output from a type 76 supertriode oscillator tube, provides the converted intermediate-frequency signal that is now fed into a type 39/44 super-control r.f. amplifier pentode tube.

### Arrangement Of Tubes

In the intermediate-frequency circuit there are three 39/44 i.f. tubes, but the fourth, or last i.f. tube, is a type 6D6 r.f. pentode. The output of this tube is sent directly into the second detector—a type 76 supertriode detector tube. Automatic volume control, which operates with even level on all wave bands, is obtained with a type 6B7 double-diode pentode tube. Type 76 tubes are used separately for noise suppression; tuning-meter control; and beat oscillation for reception of c.w. signals, as well as the location of weak, distant stations.

From the second detector the signal receives its first audio amplification. This tube is a type 6C6 connected to the detector by means of resistance coupling. Then, this amplified output passes through a push-pull transformer-coupled second audio amplifier utilizing two more type 6C6 tubes. The amplified signal is carried to the power amplifier chassis through a cable and socket connection.

### The Power Amplifier

Because the Scott is a large receiver it does not combine its power-pack and speaker amplifier with the receiver chassis. Such a multi-tube receiver cannot well be built on a single chassis, so wise engineering provides separation of powerful currents and power sources, and spacing of the elements that tend to create excessive heat.

A sturdy chassis carries the power amplifier. There is a large power transformer which steps up the house lighting current to very high voltages. The output of the two 6C6 push-pull power tubes in the radio receiver is carried down to the power amplifier by means of a cable and is fed into the input of a second push-pull audio transformer connected to four 2A3 power tubes arranged in two sets of a pair of tubes each in parallel. The power amplifier is constructed along the same substantial and attractive lines as the radio-receiver chassis.

### The Three Speakers

The powerful output of this amplifier passes through a device called a

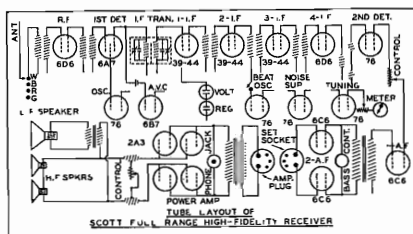
10,000 cycle attenuator. The purpose of this unit is to control those frequencies which lie in the higher register and which operate two small loud speakers. There is also a bass note control, which operates on the large speaker so as to accentuate or subdue the bass or lower frequency response. Two knobs on the front of the receiver are used to control the full audio range and high fidelity of the set. The high-fidelity control is continuously variable, while the bass control is divided into five steps or shades of bass-note brilliancy.

It has been previously mentioned that this receiver uses three individual loud speakers. As it is rather well known that higher sound frequencies tend to reflect and travel out in a straight line from their source, while lower frequencies spread out in all directions, it can be seen why three speakers are used to obtain a complete spreading of all frequencies throughout the room in which the radio set is located.

The two small, high-frequency speakers are connected in series while the larger speaker is wired separately. A cable with plug attaches the speaker assembly to a socket in the power amplifier chassis. This arrangement reproduces a full tonal range that is audible to the human ear and completely fills the entire room with all audio frequencies. Placing a large speaker so as to face directly forward, and two smaller speakers a little above and to either side, each pointed slightly outward at an angle, secures a sound distribution to all corners of the room.

*Radio manufacturers are invited to submit their sets to us for test. Mr. Carleton Lord will use them in actual DX work and publish his findings.*

*In each issue of this magazine, Mr. Dashiell will describe some one of the leading radio receivers. Do not miss one of the series as these articles will help you in deciding upon your next set.*



# Do British Stations

## Want U. S. Listeners?

• • • By PAGE TAYLOR

**S**INCE the inauguration of the Daventry transmitters of the British Broadcasting Corp. in December, 1932, many shortwave fans in this country have been displeased with the manner in which the BBC answers their reports. It has been the belief of the Editor, however, that any kind of a positive acknowledgement from any station should constitute a verification and that listeners should accept the attractive little cards from England as QSL's; readers must have noted the consistency with which the Editor has upheld these cards. In the Midsummer Edition of this magazine considerable space was devoted to a discussion of the BBC policy, but since writing that article a number of persons have received "verifications" from GSL; verifications of a nature which causes us to doubt that the BBC really appreciates reception reports from the U. S. A.

### Britain Asks for Reports

It will be recalled that about a year ago test transmissions from GSL were undertaken. In view of the fact these tests were not advertised in advance and the broadcasts were of an experimental nature, and particularly because reports were requested over the air, listeners optimistically looked forward to receiving positive confirmations in response to their reports. This optimism was not rewarded. Replies have come back from England, some persons receiving the customary cards and others, letters that not only failed to verify but stated that to verify such reports would serve the BBC no useful purpose! The let-

ter continues, however, that they are always glad to have reports as they are of assistance in developing the shortwave service and therefore result in improved reception for the reporters. Ordinarily, reports do result in improved reception, but not in this one case.

### Avoiding the U. S.

There can be no doubt that the German stations endeavor to improve their reception in this country as they use frequencies favorable to us, their aeriels are directed towards us and their programs are addressed to us. There are six Empire transmissions from Daventry and none is directed towards the United States; each of the six transmissions employs directional antennae pointed as follows: Trans. 1, towards the Antipodes. No. 2 towards Malaya and the Far East. No. 3 to India, Burma and Ceylon. No. 4a to South and East Africa and 4b to West Africa and islands of the South Atlantic. No. 5 is designed to serve Canada and the West Indies and No. 6 is primarily for reception in Western Canada.

Unfortunately (or fortunately?) it is not yet possible to confine a radio signal into a beam narrow enough that it can be heard in only one country, but knowledge of the propagation of radio waves increases and it may some day be possible to exclude undesired listeners from any transmission. The signals as transmitted from Daventry are concentrated into a beam 68 degrees wide, but there is now under construction a new Empire transmitter with new aeriels capable of emitting beams with a width of only 40 degrees. "Thus a much more intense signal



*Situated in a very remote and lofty position at Gebbies Pass, 18 miles from Christchurch, New Zealand. 3YA is a favorite mark for American DXers. The programs are relayed by wire from the studio in the city. One of the two 300-foot towers is shown in the photo.*

will be concentrated on a smaller area." And American listeners will then be rewarded for their reports by better reception in Newfoundland and the Falkland Islands.

#### **What About the British-Americans?**

It seems to us that the BBC, in failing in any way to recognize its American audience is overlooking its largest potential audience in the world. We know that British radio stations are supported by British taxpayers and there is no good reason why those tax-payers should pay to entertain us "Yankees," but they surely must be willing to afford entertainment from the homeland for their own people resident here. According to United States census figures for 1930 (the latest available source of reliable information) there are resident in the United States nearly seven million people who were born under the British flag.

We learn from these census figures that 4,354,518 persons have immigrated to this country from the British Isles alone. Although figures are available showing the number of immigrants from each section of the world, it is sufficient to state that Britain's total contribution to our population is 6,848,511 persons. Of course, all these people do not have

radio sets, but according to the International Broadcasting office at Geneva, Switzerland, the United States leads the world in the number of receivers with 162.23 radios per 1000 of population. Thus we calculate that our six odd million British friends own 1,111,033 receiving sets, or more receivers than exist in any locality to which Empire transmissions are addressed.

British countries represented in Transmission No. 1 are Australia with 644,409 radios; New Zealand with 135,312 and British Oceania with 250 for a total of 779,971. Other totals follow: Trans. No. 2, heard on 4,382 sets. No. 3, 17,220. Trans. 4a with 107,813 and 4b a total of 516 sets. No. 5 boasts 555,019 receivers.

#### **A Suggestion to the B.B.C.**

At the present time, due to our proximity to Canada, it is possible to enjoy good reception of some of the Empire broadcasts and it must be admitted that many of the most delightful programs on the air are heard from London, but the time may come, perhaps not soon, when directional aerials will be efficient enough to exclude undesired listeners from any broadcast. American listeners join us, we know, in requesting the BBC to remember its large and sympathetic American audience. Many reasons contribute to the fact they cannot specifically verify reception, so we would like to feel that our reports will result in a desire to provide improved reception here. It naturally goes without saying that unless reports are encouraged in some manner they will eventually cease. Incidentally, we wonder if, some time this winter, the BBC could address a program of an hour or so to the British listeners in this country. Key words or some sort of identification symbols could be used so reports could be positively verified with a minimum of effort. We know that if such a program were

broadcast with the promise reports would be verified the BBC would increase their good-will to a point that the broadcast would be amply repaid. The number of reports they would receive would, we are sure, surprise even the BBC.

#### The German Attitude

Following this British discussion the following letter from Germany fits in quite nicely; this letter leaves no doubt that the Germans really try to provide their listeners here with maximum reception. "With regard to the interference which our American friends reported in connection with reception of DJC, this is a matter which we are afraid can be settled only at the next International Shortwave Congress. When traffic threatens to get unpleasantly congested it is time for all concerned, in their mutual interest, to decide upon common 'rules of the road' and stick to them. We older stations of national responsibility have learned to 'drive on the radio thoroughfares', so to say, but these recent South and Central American ones have yet to learn to manage the steering wheel more sportingly! In the meantime we hope that now we have used DJD for our North American programs in addition to DJC since May 1st you have been able to dodge their obstreperousness and get real good reception on the other channel."

#### Some New Stations

A number of new stations have made their appearance, or are about to make their appearance. This information on three Venezuelans is through the courtesy of the Radio Club Venezolano. Of first importance is YV1ORS because this one has already been heard. It is located in San Cristobal and is known as "La Voz de Tachira." YV1ORSC works on 5720 kc/s. irregularly in the evenings.

YV8RB, "La Voz de Lara," at Barquisimeto works on 5880 kc/s.

and YV9RC at Caracas is on 6400 kc/s. These stations are both conducting tests and should be on regular schedules soon.

"Could someone tell me who the Costa Rican near 6400 is?" inquires Bill Bundlie, 614 N. 6th St., Grand Forks, N. D. I have to date received 52 stations, half of which are foreign, including HJ4ABA, 4ABE, 1ABB, VK3ME, 2ME, 3LR, and JVM." The Costa Rican is not a new station but it has just made an appearance on a new frequency, 6410 kcs. It is TIPG, "La Voz de la Victor" at San Jose. Perry Girton is the owner, Apartado 225, the address.

#### Some Summer Reception

"My log of s.w. stations totals about 150," summarizes Samuel Meyer, Jr., 83 Canterbury Road, Rochester, N. Y. "At the present I am using a Pilot converter with a 9-tube K-62 General Electric. I notice a contributor refers to HJ5ABE as a 20-meter amateur, but they transmit musical programs sponsored by commercial interests and despite the frequency I believe they should be considered as a regular s.w. broadcast station. They are not in the 20-meter fone band. A verification from them states that they work on exactly 14.000 megs. and the address is given as Estacion Radio-difusora Colombiana, Apartado 50, Cali, Colombia."

"Shortwave reception seems to have been quite remarkable this summer," writes Ray N. Putnam, 920 12th Ave., Fargo, N. Dak. "I have been able to receive JVH and VPD nearly any night at all and I have had numerous phone stations from all over the world, such as VIZ3 at Melbourne, HBH and HBJ Switzerland, KTO Manila, JVF and JVE Tokyo and several others. I have had two strange phones, one on 18.000 megs. at 10.30 a.m. and the other on 14.710 megs. near noon-time. The first sounded like a Ger-



man and the second like an Italian.”

The 18 megacycle station might have been PMC as the Javanese stations have been very active lately.

#### On the Other Side

From the West Australia Wireless News (Perth) we learn that YDA of Bandoeng, Java, has moved to a wavelength of 27.26 meters or 11.000 megs. This frequency is assigned to PLP, a telephony station, and initial tests were carried out on PLP to determine the effectiveness of this frequency. Numerous reports of reception in the U. S. A. have been seen but none of the reports properly identified the station as YDA.

It is quite probable that out of the war clouds gathering in Europe and Africa will come some new shortwave stations. In fact, a few unidentified stations have already been heard on frequencies of 7250, 11500, 11540 and 11670 kc/s. Another station, on 14.710, is located in Massawa, Eritrea, and it is very likely this is the station reported by Mr. Putnam a few paragraphs back. These stations are all well-heard in the United States in the mornings between 8 a.m. and noon, EST.

#### Experimental S.W. Work

The Explorer II, the National Geographic Society's stratosphere balloon, has been repaired and will take the air again, according to latest reports. The National Broadcasting Co. was recently granted a license for a special experimental station W10XFH to work on 13050 kc/s. with 10 watts power, the purpose of this station being to obtain propagation data for the proposed flight. This license is granted for the month of October only.

The FCC also granted a Construction Permit to the Advertisers' Publishing Co., Ltd., of Honolulu, for a relay broadcasting station to work on 11.850 and 15.230 megs.

Edgar J. Anzola, Director of YV2RC, writes, "We are pleased to

let you know that since July 23rd we have been working with our new 1 kw. transmitter. It seems that it is reaching foreign countries with very large volume as reports are pouring in already and increasing every day." YV2RC is dedicating special programs to foreign radio clubs every Tuesday night from 8:30 to 9 p.m., EST and listeners are especially urged to report on these specials. Attention is invited to the fact that the new mailing address is Apartado 2009. The schedule of the special transmissions is here given: Oct. 1, Chicago Shortwave Radio Club. Oct. 8, San Francisco Examiner. Oct. 15, Anglo-American Radio & Television Society (England). Oct. 22, International Shortwave Club. Oct. 29, Short Wave League. Nov. 5, The New York Sun. Nov. 12, New Zealand DX Radio Association. Nov. 19, The Transatlantic DX Club. Nov. 26, Indian Radio Amateur's League.

#### Another Report from Africa

"The reception on shortwaves has been fairly consistent and as is usual during the winter months there has been little falling off in strength and clarity of signals generally," reports A. C. Lyell of Johannesburg, South Africa. "Although I have been successful in picking up quite a few stations I do not propose to attach



*In this picture we present a view of the transmitter and building of the famous ORK, Belgian Colonial station. Located at Ruysselede with 11,000 watts on 10,330 megacycles. this station broadcasts daily.*

any significance to any particular pick-up unless I have been able to procure a verification in the usual way from the stations concerned. The problem of identifying South Americans, Colombians in particular, is becoming an increasingly difficult one, and the difficulty becomes even more acute because of their apparent reluctance to answer letters. Up to the present YV2RC, YV3RC and HKE seem to be the only exceptions. The following verifications have, however, come to hand: OXY, 49 metres; OER2 49.4 m.; 2RO, PHI, CT1GO and seven of the Zeesen stations. Owing to the refusal of the BBC to verify any of its transmissions it has unfortunately become unavoidable to ignore, in this country at any rate, all transmissions from Great Britain, from the point of view of securing verifications. As a matter of fact, in view of the South African Radio Contest now in progress, some rather pointed and spirited references have lately appeared in the press in various parts of the country in connection with this regrettable and inexplicable attitude. The position may well be described by stating that a good deal of resentment appears to have been provoked as a result of this attitude of the BBC towards its reporting listeners."

Perhaps Mr. Lyell can be consoled by the fact that he and his shortwave friends in South Africa will receive the benefit of improved reception conditions as knowledge of the radio art progresses. When the new aerials are put into use he will have the advantage of signals centered right on Johannesburg, while we will be listening to whatever might "slop over" from the Canadian transmission.

#### **The Foreign "Hams"**

"Now that the lower frequencies are static-choked DXers should try the 20-meter band where remarkable reception prevails," suggests Leon

Papernow, 2479 Bedford Ave., Brooklyn, N. Y. "A word to those who have yet to hear a foreign ham: tune just outside either end of the band. Amateurs in other countries are not so severely restricted as the Americans and they usually work very close to the outside limits. Some of the most consistent stations are F8DR, HB9AQ, EA4AO, G5NI, and many South Americans and Mexicans. Altogether I have heard 33 countries. The best time for Europeans is 5-7 pm. EST, and for the Australians is from midnight to 1 am. The best Aussies are VK2EP, 2BQ and 3KX. My receiver is a 4-tube home-made set."

Station COCD, "La Vox del Aire," at Vedado, Havana, Cuba, advises us that they work on 6.130 megs. with a power of 350 watts. Their current schedule is Sundays from 5 to 11 pm and weekdays from 11 am to midnight. After 10 pm COCD is one of the best stations in the 49 meter band and listeners should not fail to tune for their spirited programs and report on them to the Hotel Palace, G and 25th, Vedado. COCD relays CMCD.

#### **Two New Swiss**

"Reception below 13.5 megs. has been very good this summer," reports George Curl, Meredith, N. H. "Two new Swiss stations, HBJ and HBO on 16.1 and 13.8 megs. respectively were heard relaying a program from St. Bernard Pass to the NBC. I also head a new Honduran phone near 14 megs. located at Tegucigalpa, and another Honduran was heard near 6.1 megs. talking to Costa Rica. This station was, I believe, HRP-1 and the operator mentioned that he expected to have the station on the air regularly within two months.

Irving Goodeve, 210 Chestnut, Kalamazoo, Mich., has verified a number of 20 meter amateurs and gives most of the credit for his re-

*(Continued on page 57)*

# Trouble Symptoms and Remedies

••• By the TECHNICAL EDITOR

**L**IKE many of our readers, John P. Van Tighem, residing in Great Falls, Mont., has an old set that he would like to convert over to a short-wave receiver. "Is it possible to change the coils and condensers in my Browning-Drake set so as to make a short-wave receiver out of it?" asks Mr. Van Tighem.

We wish to call your attention to an article in the June, 1935, issue of **RADEX**, which goes into detail about converting old sets into short-wave receivers. We think that you can follow the advice given in that article, unless your set is either a model 70 or 71. In that case it is not advisable to attempt the change because of the peculiar design of the circuits involved.

## Weak Short-Wave Signals

When Stanley Bogdan, of Chicago, Ill., wrote of his troubles he touched on a common ailment prevalent in many sets. "I have a Detrola 7-tube midget set," writes Mr. Bogdan. "It has a tuning range covering four bands, but I can hardly receive any signals on the bottom, or 6 to 22 megacycle band, even though all the other bands work well. Why is this?"

This weakness on the very short-end band indicates that the oscillator tube is not creating the high frequencies needed to beat against the incoming signal in order to produce the necessary intermediate frequency to operate the set at this low wave band. Replacing the oscillator tube, trying several tubes until one is found that is a good oscillator at the highest frequencies, often corrects the trouble.

The above is a common failure on the short waves. Also, you may expect failure in one of the coils, that

one which connects to the grid of the r.f. tube when the very highest frequency band is switched on. A broken wire or poor contact in this coil may cause the trouble. Look also for defective switching contacts, improper voltage on the plate of the r.f. and first detector tubes when this coil is used, or defective resistors and condensers in those particular sections of the circuit.

## Weak and Distorted

Mr. Buster Walker, who writes from Atoka, Oklahoma, asks: "I have a Midwest, 1934, 16-tube set which does not seem to have much power, and when the volume is turned down it becomes distorted. What is the intermediate frequency of this set? How shall I go about balancing the circuit to correct the trouble?"

The intermediate frequencies of the Midwest sets are as follows: RT is 456 kcs. The same frequency is also found in models A, B, D, PR and RM-16. You have not stated the model number, and perhaps you can pick out your i.f. from the above.

Distortion usually appears with weak signals. There are so many reasons that a good service man may be needed to locate source and perform the work necessary when re-balancing is required in this complicated circuit. Look for the following: Excessive or insufficient grid bias due to defective biasing resistors and condensers in the cathode circuits of certain tubes, mostly the audio system; improperly acting AVC tubes; defective tone or volume controls; overloading of tubes; defective coupling or blocking condensers in the r.f., i.f. or a.f. circuits; gassy tubes; and leaking coupling between plate of one tube and grid of

another. Then there is the possibility of trouble in the speaker cone and its voice coil.

#### **Hum And Tube Data**

The old question of hum is revived again by Murray Wilson, of Port Arthur, Ontario, when he writes the following letter: "My Sonora set, model 80, has a bad hum as soon as the switch is turned on. Tuning does not change it. There is a high-tension power line that passes by the front of my home. Can it be the cause of the trouble? As I wish to learn more about tubes will it be possible for me to obtain some publication showing the characteristics of all the tubes."

Hum in radio receivers, of the kind described, may be due to some defect in the audio or power circuits. A defective bypass or coupling condenser in the audio tube circuits, or filter electrolytic condenser in the power unit, will cause such trouble. Test all the condensers in these two sections of the circuit.

You have not indicated whether the hum has always been present. If it is of recent origin then it must be in the set and not due to induction from the power line. If you are rather suspicious of the power wires why not carry the set off some distance and try it in another location that is free of power lines.

Untunable hum, which can be heard all over the dial at all times, may be a.c. hum from the power circuit of the set. It spreads through the set because of a breakdown of a filtering circuit. Look for trouble in these circuits (condensers and resistors) and in any audio tubes that use filaments only, such as the type 45.

Write to the Sylvania Tube Company, Emporium, Pa., and enclose ten cents for their complete book giving technical data on tubes. Or to the RCA Radiotron Co., Harrison, N. J., for their similar book, costing twenty-five cents. The Raytheon Tube Co., 30 East 42nd Street, New

York, N. Y., has a free 1935 tube chart that you may receive upon request.

#### **Silver-Marshall 730**

When H. C. Johnson, of Springfield, Mass., wonders why his Silver-Marshall, model 730, battery set, does not work well he refers us to a circuit used in building the set. "I enclose a sketch of this set," advises Mr. Johnson, "and many times when I try to operate the set with 135 volts the primary of the first audio transformer burns out. What is wrong?"

When you place 135 volts on the primary of the S-M first audio transformer you not only overload the coil and its coupling condenser but you tend to overload the plate of the tube and thus weaken its action and bring about considerable distortion. No detector tube in a circuit of this kind should have more than 45 to 90 volts on its plate.

So your circuit is wrong in this respect. The plate of the detector tube and the plate of the last audio power tube should not be connected to the same B battery or 135 volts. Incidentally, this type of audio transformer, while being excellent for tone, gives trouble by breaking under high voltages. A common trouble is the breaking down of the coupling condenser between the internal resistance and winding. This permits a leakage of the B voltage to the grid of the audio tube following the detector. It causes distortion and weak signals, and tends to run down the B battery faster. We suggest testing and replacement with any good type of audio transformer of the conventional type. A 2 to 1 ratio in the first stage, and a 3 to 1 ratio in the second stage.

#### **Matched Tubes**

The subject of matched tubes is worrying Mr. Edwin F. Dreher, of Novato, Calif. He wishes to "match the tubes in my Edison t-r-f receiver".

Matched tubes mean little to any set except that they should be good tubes which have the characteristics established for the type of tubes in question. Thus, if a tube has certain values of plate resistance, mutual conductance, amplification factor, etc., then, when you purchase tubes you should see their readings match the standards of the manufacturer. Now, if two or more similar tubes are used, they should be matched so that all will be equal. You would not want one good i.f. amplifier connected next to a poor tube performing the same duties. Then, too, the matching of tube characteristics, such as impedance, etc., so as to balance certain parts of the circuit that has been designed about the factors of the tube in question.

However, the general opinion is that, if tubes are good and test according to specifications, further matching means little in the real operation of the set. The selection of an oscillator tube in superheterodyne sets is important, particularly in all-wave sets.

If you have access to a supply of new tubes a matched set will soon be found that works perfectly. Dealers are loath to do this as it takes time and causes a lot of tubes to be opened and tested. We doubt whether any dealer will go to all this trouble. We do believe that a careful matching is one way of getting good results, but we have never been turned loose in a big stock of tubes. Some tube manufacturers provide factory-assembled kits of matched tubes for certain of their sets, namely, the Philco people.

The testing values of the 50, 81, 27 and 26 types of tubes used in your set will be found in any tube chart or maker's specifications. The length of time a tube will remain matched is problematical. The filament and cathode of a tube will change in its emission values, some quicker than others, and no two tubes will paral-

lel each other in action during their life. One tube may last twice as long as another.

### Set Skips Signals

Some hum trouble and signal skipping is reported by George Wood, of Komoka, Canada. In an inquiry to RADEX, Mr. Wood asks: "A hum comes in my set after it has been running a while and it increases in loudness as I give the set more volume; also, that the set skips signals on the 22-35 meter band and I can hear some broadcast stations on the 12-25 meter band."

Hum may be caused by a number of defects. Chiefly among these are defective power tubes, broken bypass condensers and defective biasing resistors. Sometimes, after a set warms up, some resistor or condenser will break open its circuit or short-circuit due to thermal or heating action created by the internal warming of the set and parts. In such cases it is necessary to test out all the resistors and condensers and replace those found to be defective. A bad audio tube will give similar trouble. You will also see another answer along this same line in this department.

Skipping signals on one band is caused perhaps by a poor oscillator tube. The tube may not function properly at these high frequencies and should be replaced with a new one. Then, too, there are other reasons which any good serviceman can quickly locate by means of his instrumental equipment, something that the amateur experimenter lacks in his home. Failure to obtain signals on one band also may mean a broken connection or poor contacts in the band switch, one point only, of the section of the circuit involved.

Broadcast reception on the low-wave band is caused by an "image-frequency" condition which seldom can be entirely eliminated. As you have not mentioned the make of set in question we cannot offer much ad-

vice. It is due to certain combinations of the intermediate frequencies created within the set and the incoming broadcast signals—harmonics. Sometimes an efficient serviceman can make some adjustments to the i.f. and first detector circuit that will prevent some of this repeating of broadcast signals in the short-wave bands.

### **New Tubes In Radiola 3**

Ross Russell, of Fayette, Ohio, has held to his old Radiola III so long he thinks it time for more up-to-date tubes. "What tubes can I use in place of the 201As now in my set?" asks Mr. Russell. "Also, can I use a power pack with this battery set?"

There is no suitable 5-volt tube that can be substituted for the 201A in a battery set. However, you may use a 12A in place of the 201A in the audio stage. The 12A is particularly valuable in the output stage where a tube of moderate battery requirements is needed. It gives very good tone and volume. At least 135 volts B battery with a maximum of 15 volts C battery will be necessary for this tube.

Any good battery eliminator or power pack will work nicely provided it gives the necessary voltage and current output. But, for a set of this kind, batteries are the best and quietest.

### **S.W. On Radiola 3**

Another owner of a Radiola III is Harold A. Shippy, of Wetherfield, Conn. He writes: "Can I convert my old RCA Radiola III so as to obtain some of the short waves in addition to the broadcast waves, or just the shortwaves alone?"

To convert the Radiola III into a short-wave set you can proceed as follows: Remove the r.f. coils from the set; also, the input condensers. Detach the r.f. coil lead from terminal No. 1 of the first audio trans-

former. Wind a suitable antenna coil having a little more than one-half the number of turns now on the old antenna coil; also a coil for grid and plate. The new grid coil should also have about one-half the number of turns now on the old secondary of the r.f. coil. The new plate coil, or feedback, of the three-circuit tuner being arranged, may have about 7 turns of wire. Use a .00015 mfd. variable condenser for tuning and a 50,000 ohm variable resistor for regeneration control. This control is placed in series with the B or No. 2 terminal of the first audio transformer and the source of plate or B current. Add a bypass condenser, of .002 mfd., between the bottom of the grid or secondary coil and No. 1 terminal of the audio transformer.

### **His Bosch Has Hum**

This hum occurs in a Bosch receiver. "My Bosch all-wave receiver has a hum that persists at all times on all bands," writes Ellwood Beiber, of Marion, Iowa. "What can I do to stop it?"

Hum of this kind, which is not tunable hum, is likely caused by some breakdown in the filter or power circuit. If a filter condenser in the powerpack opens the hum that is being filtered out will get into the circuit. If a center-tap resistor is used with a filament-type power tube check it and replace if even slightly defective. These center-tap resistors are used to prevent audio hum in the tube.

You have not indicated the special model of this Bosch set. Hum in Bosch receivers, in general, may be due to a shorted r.f. bias resistor. Or it may be possible to reduce the hum by connecting a 2.0 mfd. condenser, rated at 600 volts, from one side of the speaker field to the chassis. Try both ends of the speaker field winding and use the one that gives the best results.

### **Kadette Seems Weak**

Reception on board ship is not always so satisfactory. Mr. L. H. Johnson, an officer of the S. S. Bessemer City, writes from Calcutta, India: "My Kadette ac-dc set does not bring in stations above 32 meters and on up to the broadcast band. When I return to New York can I replace the coil and thus improve reception on the longer waves when in far-off regions?"

When an attempt is made to cover a large portion of the high frequency spectrum with only one coil, difficulty is experienced in getting the oscillator tube to oscillate on the longer waves if the shorter waves are efficient, or vice versa. Of course, you cannot expect this set to cover very great distances on the broadcast band. Not all tubes make good oscillators and it may be necessary to try several tubes before a good one is discovered.

It does not generally pay to attempt changing the ratio between the feed-back and the grid coils in a circuit of this kind. It is difficult to attempt increasing the plate voltage of the oscillator to obtain greater oscillation on the longer waves. This is why we suggest that you try several tubes until you get a good one. In the design of the receiver it would have been much better to divide the short-wave section into at least two bands, so that the characteristics of a coil on each band could be made suitable for the tube used as an oscillator. Any attempt to change coils in a compact set such as the Kadette will be just so much grief to you, but, if you wish, you should be able to get coils at the Wholesale Radio Service, New York City, or some other large radio supply concern, when you reach that port.

### **Stewart-Warner Repeats**

A well-known radio phenomenon is giving Ralph Boswell, who lives in Milwaukee, Wis., much concern. He asks us in a recent letter: "I

receive the same signal at several places on the dial of my Stewart-Warner receiver, and I am wondering what is wrong".

Your trouble, defined as "repeat points", is due to the design of the high-frequency tuning system of the set. Image frequencies, as they are called, are due to combinations of the incoming carrier wave with the oscillator frequency, producing an intermediate frequency to which the i.f. amplifier is tuned. It occurs in the best of sets at certain times. No one has entirely eliminated it.

Ordinarily the oscillator frequency is higher than the signal frequency by an amount numerically equal to the intermediate frequency. For example, if you are receiving a carrier wave of 10,000 kcs., the oscillator in your receiver will be producing a continuous wave of 10,456 kcs. The i.f. peak of your set is 456 kcs. If the receiver is now tuned to a point on the dial corresponding to a signal of 9,088 (actually about 9,080 or 9,090) kcs., the oscillator will be producing this frequency plus the i.f. which is 456 kcs., totalling 9,544 kilocycles. This differs with our original 10,000 kcs., station signal by 456 kcs., and, since the signal is not attenuated very severely by the tuning mechanism in the r.f. amplifier, it reaches the first detector with sufficient energy to reproduce a signal throughout the i.f. and a.f. systems.

This condition cannot be avoided unless the design of the r.f. and i.f. system is revised or a new intermediate frequency determined. This, is usually impracticable. Ordinarily, we consider the reception of image frequencies beyond the scope of design for most popular receivers.

*Readers are invited to submit their radio problems for analysis. Replies will be made by mail as rapidly as possible and later the question will be discussed by Mr. Dashiell in these columns.*

# The Monthly RADIO FORUM

● ● ● By the DX EDITOR

**R**ADEX is pleased to announce the appointment of Carleton Lord as DX Editor. Mr. Lord is well and favorably known to radio enthusiasts everywhere. He started his DX work back in 1924 and has a record of 927 b. c. b. stations heard with 887 verified. This log was compiled in four years. Mr. Lord is a Director of the Newark News Radio Club and a member of the International DXers Alliance. His wide experience in radio and broad acquaintance bring new strength to this magazine.

**O**NE of the most gratifying phases of DXing is the fine spirit of co-operation which is shown by virtually every person associated with this popular hobby. Whether it be the broadcasters, the club officials or the DXers themselves, it seems that everybody is doing his level best to further this interesting game.

Every year, when we send out our regular questionnaires to the stations, we have an opportunity to judge the attitude of station officials towards DXers and DXing. Despite suggestions one hears that this type of dial twisting is losing its appeal, we fail to find any such indications in the replies received.

## A Courteous Station

While some stations merely expressed their policies on our printed forms, others took the trouble to send us a personal letter. The following reply from Lester W. Zellmer, Assistant Engineer of WTRC, is just

a sample of what the others have said:

"Enclosed you will find questionnaire card mailed to this station. We appreciate your sending this card, as WTRC is always willing and ready to co-operate in furthering greater interest in the popular winter pastime of DXing.

"Last season, we dedicated quite a few programs to the three leading clubs, the NNRC, CDXR and NRC. Our response was very satisfactory, when we consider that WTRC received reports from 39 states of the Union, all provinces of Canada, and seven reports from New Zealand.

"As Assistant Engineer of WTRC, I have taken full responsibility for running out scheduled DX programs and arranging publicity for them through the medium of various DX magazine and radio clubs. We broadcast daily except Sunday all DX tips furnished us by the clubs, besides running a weekly DX column in the Elkhart Truth, our local newspaper."

## WBIG Offers Service

"During the winter months," writes Edney Ridge of WBIG, Greensboro, N. C., "we give a monthly DX program featuring our studio orchestra and the best talent in this area. We gave several last year dedicated to the Newark News Radio Club, the Canadian DX Relay and one in honor of the Hon. Josephus Daniels, United States Ambassador to Mexico, a native of North Carolina, which was heard throughout Mexico and South America. We will keep you informed of any special DX program and assure you that we will co-operate with you fully at all times."

A tabulation of the replies received



from the smaller stations shows that an overwhelming majority is planning one or more special programs during the current season. Of the 232 definite replies received as we go to press, one hundred and three promised specials but gave no dates; forty-five gave their schedules; twenty-five said that it was probable that they would transmit DX programs; twelve said "perhaps"; twenty-two were undecided; eighteen promised to go on when requested; and but seven said that they were doubtful.

#### New Stations to be Heard

A further study of the replies indicates that ample opportunity will be afforded DXers to hear the new stations recently licensed by the FCC. Of these, KFRO will have several DX programs, KHSL proposes to schedule some in the future, KIUF expects to be on at least once, KIUM promises its share; KIUP advises that it will be broadcasting every Sunday morning from 1:00 to 5:00 AM, EST; WCMI promises a monthly program, and KWBG, WLEU, WMFD, WMFF, WMFJ, WMFN, WMFR, WPAR and WTAL say "Yes."

Of special interest is the reply from the management of WLW and WSAI who say, "No regular schedule, but glad to put on special programs."

So, to our friends the broadcasters, without whose interest and co-operation DXing would die, we take off our hats and say, "More power to you!"

While a great many letters from readers contain resumes of logs, this seems to be the time of year when such reports are received to the total exclusion of all others. What with last year's problems decidedly a dead issue and no time for comment on reception this fall, listeners enjoy the opportunity to look back on past experiences and talk over their more poignant memories.

This is, after all, one of the most pleasant sides of DXing. When old man static and interference have been forgotten, when the thoughts of delinquent veries and lost specials are gone, it is a great satisfaction to remember the time we logged our first European or picked LS2 out from behind W O A I. Looking through our logs, each verification brings back some vivid association, while an increase in stations heard justifies a glow of pleasure.

#### Personal Experiences

"Just a few lines to thank RADEX," briefs Raphaël Geller, Secretary-Treasurer of the Globe Circlers DX Club, 1652 Radcliff Ave., Bronx, N. Y. "for you have been responsible for my contacts with a swell bunch of pen pals. Well, one DX season has gone and another will soon be in full swing. My verified log is now well over the 400 mark and I aim to hit 550 before the new season is over. JOBK-1 sends a swell verie and they sure did answer promptly, as did CX26 and CP4, but some of these U. S. stations seem to take years. How come? I am a member of quite a few DX clubs and I'll be only too glad to send a sample bulletin of the GCDXC to all who send in a request. We have a world-wide membership and dues are still \$1.25 per year."

"I have been DXing for the past two years," announces Donald W. Shields, Box 345, Roseville, Ohio, "and although I have not tried to verify every station heard, I have several veries of which I am very proud. My best on the broadcast band include 1YA, 4QG, 3LO, 2BL, 5CK, KGU, TGW, HHK, and LR5. On short waves, I have verified RNE, KBP, JVM, IAR, YV4RC, HJ5ABD, HC1FC, OAX4B, TI2RC, KJ4ABE, K6CMC, G5ML, YV6RV, CT1AA, HB9AQ, HJ1ABD and LU6AP among others. HB9AQ sent me a fine picture of his station, the very best I have ever seen."

"It has been ten years since I commenced DXing," records Duane McMurray, 501 S. Main St., Maquoketa, Ia., "and I have started a new log with each new receiver. On my present set, a six-tube Atwater Kent Model 90, I have heard a total of 536 stations since January, 1932. All of these stations are now in active operation. Whenever a station is deleted, it is scratched from the log. The same applies when a call or location is changed, although I re-instate it when I hear it again on its new call or location. I have about 200 veries and my log covers every state except Maine and Vermont."

"I started DXing with a four-tube Aetna Model 400 receiver on March 20, 1935," greets twelve-year-old Dick Henry, 103 Cherry Road, Syracuse, N. Y. "During the first three months, I received 140 stations on the broadcast band. The first month, I used an aerial eliminator because my location is poor, but I now have a 40-foot antenna which is entirely satisfactory. My best catch so far is the 100-watt KIDW in Lamar, Colo. I have also received 10AK, XEAW, XEPN, KFI, KMBC and many stations in Mexico and Canada. I did plenty of DXing one month and, every time I thought I had a good station, it turned out to be WEXL."

"Just a short report on reception in Central California during June and July," offers Clyde E. Lowe, 730 K St., Merced, Cal. "Australia and New Zealand stations have been giving some excellent signals, with 1YA, 3AR, 3LO, 4QG, 4BC and 5CL outstanding. These stations have been played every Saturday morning during these two months. On the morning of August 3rd, I had 6IX for twenty minutes and, on August 1st, I heard a wrestling match from 6ML. On my Majestic 61, I have also heard six Japs and two Chinese broadcasters."

#### Averaged 13 a Night

"Since April 1933, I have done but little DXing," preambles Russell

Geiges, Poland, Ohio, "due to some difficult work in school, but I am rararin' to start up again this fall. When I stopped listening, I had about 300 BC stations in the United States, Canada, Cuba and Mexico, although I was never successful in landing a TA or a TP. On the few nights I did sit up during this time, I averaged about 13 stations a night. This year, I hope to hit the air often and would appreciate information about membership in a good DX club."

"The new Ashland, Ky., station, WCMI, is now on a regular broadcasting schedule," advises Lloyd Harrison, 130 S. Hague Ave., Columbus, Ohio. "Our local 100-watt WCOL has just erected a new vertical radiating tower on top of 'Radio Center,' which also houses the studios of WBNS. This is 101 feet high and is 301 feet above the street level."

"As I look forward to the new season, I find that my log contains a total of 665 stations. Included in the best verifications are 10AK, 10BQ, 10BP, KFPM, KXL, KWG, KPJM, CFCT, XETH, HHK, LR5, and WNEL. There are twelve 50-watters and 205 100-watters. My receiver is a nine-tube McMillian. I believe that I am the only listener in this country using this make of set."

"In your Midsummer Edition," bemoans W. J. Mulock, 8 Cluny Drive, Toronto, Ont., "you announced your intention to combine the DX LOG with RADEX in one volume. I hope this will not mean the beginning of the end for RADEX. So many magazines have become entirely devoted to short waves. To me, RADEX has always been *the* magazine for the broadcast band DXer and in the future I sincerely trust that it will remain the same. One likes to know how other DXers are getting along in their radio quests, so *please* don't remove the section devoted to the letters from readers!"

We trust that an inspection of the September issue has allayed Mr.

Mulock's fears. It is our hope that the merging of these two publications has resulted in a happy combination of valuable information for all listeners.

### More About Interference

Last issue, after remarking about being afflicted with 'steen odd varieties of interference, Charles Hesterman submitted a log which seemed to include virtually every well-known foreign station in the world. Just to keep the chain unbroken, Bill Savage, 270 1/2 King St. East, Hamilton, Ont., submits his first report.

"My location is anything but ideal," he confesses. "I am living in an apartment on a street car line, with a beauty parlor on the first floor and many stores with electrical machines in the immediate neighborhood. With that barrage of interference, I have managed to log over 700 stations. Among the best are JOJK, JOOK, JOKK, Graz, Brussels 2, Nice, Cote d'Azur, Bucharest, Monte Ceneri, 1YX, 2NC, 2YC, 3AW, 3ZM, 5AD and 2TM, the latter a 50-watter at Tamworth, Australia. For DXing, I use an 11-tube Marconi receiver, with an inverted 'L' aerial 150 feet long."

Just now, we are looking for a report from a DXer in an ideal location, where there is no interference, no static, no fading but, probably, no radio.

"Last season, my third at DX, brought me about 330 new stations in seven months," recapitulates Murray D. Bryce, Route 1, Royal Oak, B. C. "That brought my grand total to 518. Among my best best catches are 2WL, Wollongong, Australia, 50 watts, heard at 4:00 AM on last February 22nd; 3HA, Hamilton, Australia, 300 watts, from which I heard a half hour bag pipe concert and the call announced three times; 7UV, 250 watts; 4TO, 200 watts; LR8, KFPM, WOCL, WEXL, WCAZ and WTRC. With the approach of fall, I am looking forward to the return of DX and, my ancient 4-tube Browning-

Drake by my bed, I hope to re-visit my radio friends across the ocean."

### 5300 Stations Heard!

"I sure get a 'wallop' out of logging stations," maintains Cecil Owens, P. O. Box 194, Brownstown, Ind., "and although I have an outfit that is hard to beat for bringing in distant stations, I am compelled to give RADEX its share of praise for all the data and information which has enabled me to build up one of the finest logs in the country. At present, my log stands at exactly 5300 stations heard. This, of course, includes amateurs, police, airports, airplanes, ships, commercial phones, short wave relays as well as broadcast band stations."

"The recently licensed station in New Britain, Conn., WNBC, is now operating on 1380 kcys. with 250 watts power," avers Kenneth I. Albrecht, 241 Palm St., Hartford, Conn. "They are using high fidelity equipment and their address is 147 Main St., New Britain."

"I have been DXing for a little over two years," admits Robert Hyland, 216 E. Grand Ave., Springfield, Ohio, "and have logged a total of 562 stations on my 5-tube Gloritone Model 26, using one of your Perfect Phone Adapters. I have heard stations in every state and province and consider by best catches to be TGW, HHK, 1YA, 2YA, 4BC, 2CO, LR8, LR5, XEE, CMOA, CMBZ and a number of the smaller stations on the Pacific Coast. I owe most of my good results to the Canadian DX Relay, of which I am a member, and to RADEX."

### Making Your Own Verie

"Just received the September issue," advises Elwin H. Bullard, P. O. Box 170, Drummondville, Que., "and notice the talk about verifications. Possibly readers would be interested in the verification form card which I prepare for CDXR members. At the top is printed 'CANADIAN DX RELAY, OFFICIAL VERIFICATION

CARD.' The card itself reads: 'Dear CDXR Member, This will verify your reception of Radio Station \_\_\_\_\_. We have checked your report with our station log of that date and are pleased to inform you that it is correct. Signed \_\_\_\_\_.' The member addresses the card to himself, puts on a stamp, fills in the station call and location and mails it, together with his report, to the station. Then, the station merely has to sign the card and drop it in the mail. We have found that stations who would not verify under other circumstances will reply on this form. Besides providing an almost-sure means of obtaining a verification which will pass the utmost scrutiny, this is quite an economical form. For submitting reports, we have printed an official form which gives blanks for the information usually of value to broadcasters. Both report and verification forms are sold for twenty-five cents a hundred post paid, which amounts to just cost plus postage. So far, I have sold over 50,000 report forms and about 18,000 verification cards."

"When listening to VK3LR, Melbourne," reports Bezaleel Jones, Rampart, Alaska, "it comes in loud enough, but there is a queer sound at the end of each sentence as though the speaker was inside a barrel or drum. Has anyone else had the same sort of reception?"

#### Another Mystery

"Reception has been very good here this summer," observes Robert Nestor, R. D. 3, Sayre, Okla. "I have caught 31 new stations, of which 29 are 100-watters, in less than five hours of time at the dials. One of these is still unidentified. I hear him every morning on 650 Keys, but he never gives his call. Has anyone else heard him?"

"Since my last report," proclaims Vane A. Jones, 1105 West 35th St., Indianapolis, Ind., "I have verified WIRE, WKBF, KTUL, KVSO, CMBX, WILL and WBAA. My total is now 505 heard. Nine of us Indi-

ana DXers traveled East the first of May and attended the big NNRC party. It was a bang-up affair and we all had a swell time."

"Station WGCM will have 500 watts unlimited time on 1120 Keys about November 1st," advises W. H. Hardy, Jr., of that station. "Our operating schedule will then be the same as at present—8:00 AM to 2:00 PM and 4:00 PM to 10:00 PM weekdays and from 12:00 noon to 2:00 PM on Sundays. We contemplate broadcasting a special DX program every other Saturday night from about midnight to 3:00 AM."

#### Wants Details

As reported last month, readers were very conscientious in sending in their replies to our questionnaires about the material they wanted to read in RADEX. Some went even farther and wrote long letters which have assisted us immeasurably in lining up future features. A typical letter comes from Dr. Harold R. Jacobs, 991-05 Boulevard, Rockaway Beach, N. Y.

"In publishing reports from readers," he proposes, "I suggest that you use only those which contain information of value to other listeners. This would include the exact time at which a station was heard, its QSA-R condition, etc. It is of no interest to read that Pink-Ears of Headphone, Ky., has logged 435 stations, including XXX, YYY and ZZZ. If his article mentioned that YYY was heard at 5:50 AM on 708 Keys, QSA-1, R-O, it would provide information of value to others.

"As for the articles on construction, I suggest that these be limited to subjects which can be used to improve DX. I have in mind antenna tuners, beat oscillators, new antenna designs, discussions of directional aeriels, etc. Such would be preferable to articles which belong solely in an experimenter's publication.

"Let us have as many station lists as possible, all giving complete, de-

talled information. You could probably omit everything else from the magazine and it would be of infinite value because of these lists alone. Give time schedules, identifying notes, special broadcasts and all available data which will assist listeners in increasing their logs.

"In my own particular case, I would be greatly interested in articles on the elimination, or at least the reduction, of interference, and I daresay that all other listeners are likewise concerned with this problem. Let us have information on how to locate sources of interference, where to apply for relief and what to do when the source is traced. It would be an excellent idea to start a campaign to have the FCC take over the elimination of this evil.

#### What To Do

"At my location, for example, I am beset with a form of QRN which will probably make DX quite impossible. I have referred the matter to the local electric company, but they have been unable to do anything about it. Apparently there is no way to have the condition corrected. Or do you know of one? The FCC says that they have no jurisdiction in such matters, so this is where Canada does things better than we do.

"Until March, last season was most successful for me. Until the aforementioned QRN started up, my log included such verified catches as KGU, YV1RC, CPC, CP4, HJN, 4QG, 2UE, Poste Parisien, Fecamp, Leipzig, Rennes, Bordeaux, Munich, Breslau, Praha, Milan, Frankfurt, and LR5. Cardiff as also definitely logged, but of course the BBC never verifies. I was all set for the TP season, but all I got was QRN and the outlook is pretty glum." What, no times or QSA-R data on those catches, Doctor?

"This trying to get verifications from foreigners is beginning to drive me nuts," laments R. H. Tomlinson, 125 Terrace Ave., Port Chester, N. Y.

"Sent a report to IYA a long time ago and gave 'em a lot of dope. Four weeks later, Ed Goss sends one which is about a quarter as long as mine. By another month, his report was verified and I'm still waiting. IYA was about the only TP that could be copied here with any success, although a dozen or so others could be heard faintly, and then they won't verify for me.

#### Verifying Europeans

"But that's nothing. Everyone knows how easy Poste Parisien is to get verified. Well, I logged them on October 15th and sent in a 30-minute report. In November, I sent a follow-up of this report. Then in December, I had them on an IBC program between 5:00 and 6:00 PM and sent in a full hour's report. Along comes February and still no reply. On March 15th, I sent a fourth report, reminding them of the three which had been unanswered all this time and raking them over the coals in general. By golly, if I don't get my veries back in 17 days. And PP isn't the only European offender. It took three letters to Stuttgart and two to the other Germans, with the last one going to the head man of the RRG. Four letters were required to get a reply from OKB and the same number from OKM and OKR. In the end, I got a letter saying that all the reports had been turned over to Prague and doggone if Prague didn't turn around and verify their station OKP, which I hadn't heard. Such is the life of a DXer and I'm glad the season's over for a few months. The expense of postage and reply coupons would bankrupt me, while the mental grief would have put me in the bug-house for keeps."

"I got myself a new Grunow the first of the year," gloats E. G. Goss, 666 Park Place, Brooklyn, N. Y., "but had only two weeks to work on the Europeans, as they faded out for

*(Continued on page 57)*

# USING PHONES *with* Radio Sets

**T**HERE are many cases where it is not desirable to use the loud speaker. Very often one wants to listen to the radio when others in the house are asleep or ill. Residents of apartment houses, too, often forego the pleasure of radio for fear of disturbing their neighbors. In these instances, headphones are a friend in need.

While phones will not, of course, eliminate static, they do help to minimize it. With phones the volume may be turned down much lower than with the speaker and this increases the signal-to-noise ratio. Phones, too, shut out the room noises and, bringing the signals direct to the ears, enable one to identify many a distant station they would not otherwise.

## For the Deaf

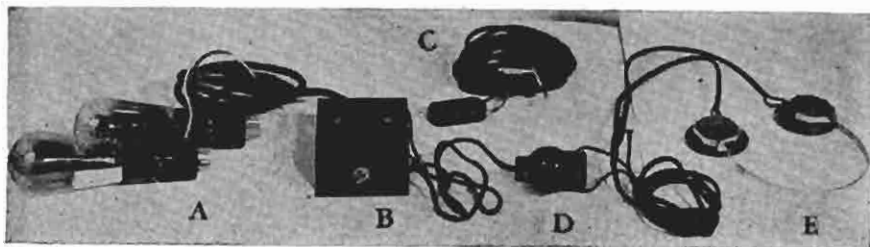
Radio offers to the hard-of-hearing a wealth of pleasure that is ordinarily denied them. To them the phones are a God-send. Their difficulty has been to listen to the phones and at the same time not to interfere with the enjoyment of the rest of the family who wish to listen to the programs via the loud speaker.

Oftentimes one wants to listen to phones from his easy chair and not be forced to sit at the set. The trouble heretofore has been to regulate the volume of the signals without constantly going to the receiver to do it.

All of these difficulties have now been met and eliminated by the "Perfect" method of using phones. This is illustrated in our picture. "B" is the Perfect Phone Adapter. It consists of a small metal box which may be mounted on the underside of the console or table where it will be out of sight and yet readily accessible. A cable to which are attached one or two small socket adapters "A", as the set may require, leads from the box. These adapters are placed under the power tube or tubes of the set where they remain. Placing these adapters in the sockets and inserting the tubes in the adapters is all the installation required.

In the top of the box is a small jack which receives the tips of the phones. At the front is a toggle-switch which cuts the speaker on or off as may be desired. When one wishes to listen at the set, the tips of the phones are inserted, the switch is set as desired and the volume of the signals is controlled from the set itself.

"D" is a distant volume control. When the tips of the volume control are inserted in the box in place of the phones, it becomes a "Lady Esther Eliminator." That is, one may carry the control to his easy chair and regulate the volume of the speaker from a distance—turning up the volume for the music, turning it down for the talks, or silencing the speaker altogether when the "blurbs" are on.



## NATIONAL HEARING WEEK

October 20-26

### ■ TRIMM ■ FEATHERWEIGHT HEADSETS

attached to the radio receiver will help the Hard of Hearing to go "Forward" to a new and better world of sound.

Light in weight—Precision built—  
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If greater distance is desired, the connecting cord "C" may be inserted between the set and the volume control. This cord is ten feet in length. The control is a small device which fits the hand. Turning the knob regulates the volume from silence to maximum.

#### Using an Additional Speaker

The volume control also contains two tip-jacks into which the tips of the phone cords may be inserted. This permits the phones to be used at a distance of 15 feet from the set and yet the volume may be controlled without going to the receiver.

If desired, an extra speaker of the dynamic type may be used in another room of the house. The wires leading from this speaker may be connected either at the distant volume control or at the set. With this arrangement, either of the speakers may be silenced without interfering with the other.

All in all, the "Perfect" method of using phones adds greatly to the convenience of any radio set and brings new convenience and enjoyment in its use.

*Complete list of the short wave stations of the world will be found in the November RADEX.*

## Tuning the Foreigners

**N**O MATTER how much success a DXer may have in logging stations in his own country, he is never satisfied until he has been able to tune in a foreign station. Whether it be a European or a South American, a broadcaster in Asia or the Antipodes, the logging of an overseas station remains his one goal in life. When he is finally successful, the thirst for foreigners continues unabated and it is likely that he will never be completely satisfied.

However, as the new season gets under way, he will have another shot at his principal targets. While many DXers believe that they know all the tricks of foreign tuning, there is never any harm in reviewing the problem and picking up any stray tips.

#### Making Ready

Before any tuning is done, some attention should be paid to the receiving equipment. While few of us can afford to start off each season with a new receiver, an inspection of the "vitals" may work wonders. Get the dust out of the condensers, clean the sockets and inspect the tubes. Owners of superheterodyne receivers are often agreeably surprised at improved reception brought about by a re-alignment job by a competent serviceman. Such work is quite inexpensive, costing from three to five dollars, and is usually well worth the cost. Most listeners don't think of their tubes until the set commences to go dead. However, just as a bad spark plug will waste one gallon of gasoline in ten, a weak tube can and will waste ten Aussies or Europeans out of ten.

Formerly, many DXers thought that just any kind of an aerial was satisfactory. Because they might be unable to detect any appreciable

difference in the results brought by a bed spring or a long, high, outside installation, they were usually content to get along with the most convenient system. And they always wondered why they never heard a foreign station worthy of note.

Be sure that all connections are well-soldered and that there is no chance for bare wires to be grounded anywhere. A tree or a vine may have grown during the summer to the extent that it will brush against the wire.

The chances are that most of us ought to put up a brand new aerial and take advantage of the latest developments in noise-reducing equipment. It is really remarkable how much racket can be reduced by the use of a good system and it is hardly necessary to remind DXers that it doesn't take much buzzing to drown out a weak foreigner. So, the more noise we can eliminate, the better chance we have to pull in desired stations.

Next to the receiver and antenna installation, the most important point is the knowledge of when and where to tune. Needless to say, if a station isn't on the air or if conditions make it impossible for its signals to reach the aerial, no amount of equipment will enable the listener to hear that station.

### Hearing The Antipodes

The season for Australian and New Zealand reception will arrive first this fall, but, unlike former years, it is going to be difficult to predict just which stations will be heard. As most DXers are already aware, a sweeping re-allocation of stations took place in Australia on the first of September. No less than seventeen new stations have come into existence and most of the old stand-bys have been switched to new frequencies.

On local stations, a change of wavelengths makes little difference,

but there is no telling what effect a switch will have on a foreigner. SBH, Horby, Sweden, was a regular visitor on these shores when it was on 1166 Kcys, but a change to 1131 virtually ended its appearances. Fecamp was seldom heard on 1328, but provided an excellent signal when it changed to 1456. The old 2YA on 720 was a regular, but seemed to lose its potency on 570.

Consequently, past experience can be of little assistance and about the only thing we can do is point out the changes and let our readers try their luck.

Of the new Aussies, three will use 10 KW. These are: 2CR, Cumnock, N. S. W., 550 Kcys; 6WA, Minding, W. Austr., 560 Kcys; and 3WV, Horsham, N. S. W., 580 Kcys. Four of the new transmitters will use 7 KW and they are: 4QN, Clevedon, Qsld., 600 Kcys; 2NR, Lawrence, N. S. W., 700 Kcys; 7NT, Kelso, Tasmania, 750 Kcys; and 3GI, Longford, Vic., 830 Kcys. Other newcomers include: 6GF, Kalgoorlie, W. Austr., 720 Kcys, 2000 watts; 4AK, Toowoomba, Qsld., 1220 Kcys., 1000 watts; and a slew of low-power stations.

Of our old friends, 7ZL has switched from 580 to 590, 2FC from 665 to 610, 3AR from 610 to 630, 2CO from 560 to 670, 2BL from 855 to 740, 3LO from 880 to 770, 4QG from 760 to 800, 2GB from 950 to 870, 2UE from 1025 to 950, 2KY from 1070 to 1020, and 2CH from 1210 to 1190. Other changes, too numerous to list, will be noticed when a reference is made to the station indices.

Of these new stations, 6WA will commence operation this month, 2CR is scheduled to start up in November, and 6GF won't be heard until December. All others are supposed to be transmitting at present.

Over in New Zealand, 3YA's new 10-KW transmitter should be pound-



ing out its signals on 720 Keys now, while 4YA is scheduled to boost its power on 790 Keys to 10 KW in December.

### Be Patient

So much for the changes. About the only thing listeners can do is "park" on these frequencies and see what happens. We say "park" advisedly, for a signal may be a good R5 at one time and completely inaudible five minutes later. Therefore, if a signal isn't heard the first time you reach a channel, stick around for a while. You may be surprised at what happens.

Ordinarily, signals from the Antipodes start coming in as early as 3:30 AM, EST, although they are best heard between 4:00 or 4:30 and daybreak. Last year, 1 YA was logged as early as 2:30, but that was an exceptional case.

October and November will bring best reception this fall, while March and April will be high spots next spring.

Everything considered, DXers should enjoy a good season insofar as the Aussies and Zedders are concerned. Most listeners will recall how poor reception was last spring, and yet the 10-KW 1YA was able to break through when most of the old stand-bys were virtually inaudible. Consequently, with favorable reception conditions, the new stations will not have to wait long before being entered in the logs of many DXers.

### Concerning The South Americans

Due to the similarity of time, it is very difficult to log any of the South American stations on their regular transmissions. While the successful reception of specials from LR5, CX26, CPX, CP4, HJN and YV1BC (now YV1RC) shows that signals will cover this country, the barrage of domestic stations during the evening hours makes a catch from this continent very rare.

During the past season, DXers re-

ported LS2 in back of WOAI, LR3 in back of the jumble on 950, LR4 in back of the 890 crowd and YV1RC behind CKY and XEAW, so it is probable that similar reception will be enjoyed this fall. While the Argentine stations operate on even frequencies and are thus more difficult to hear, some of the other more-powerful South Americans use split frequencies and listeners with selective receivers may be able to separate them from the domestic transmitters.

As with signals from the Antipodes, South American stations are received best in October, November, March and April, when our fall and spring correspond with their spring and fall respectively. The best time to tune for their regular transmissions is in the early evening hours before American stations reach a signal peak. Occasionally, they may be heard just before daybreak when they commence another day's broadcasting.

Unfortunately, even when these stations are logged, it is very difficult, if not impossible, to obtain a verification. About the only ones upon whom we can rely are those which put on special programs, so it is to be trusted that the various DX clubs will continue their "missionary" work in this connection.

### Mystery of the Japs

Oddly enough, reception of Japanese and Chinese stations is limited practically to the West Coast, where they are reported with excellent volume and quality. Just why these strong signals fail to penetrate to the Eastern seaboard cannot be said, but the fact remains that few of them are reported East of the Mississippi.

The season for the Japs should coincide with our own best DX weather, since their winter corresponds to ours. The best time to hear them is the hour before daybreak when the maximum amount of

darkness covers the intervening distance. However, October 10th of last year yielded the greatest DX reception of Japanese and Chinese stations in the memory of DXers. No fewer than twenty of the Japs were heard throughout this country, while many of the medium-power Chinese stations were also logged with good volume. So, there is no telling what can be expected from this game of DX.

### **The Europeans**

European stations can be divided into two classes: those which are heard in the early evening and those which are best received in the early morning. In the former case, reception must be obtained before the local stations reach their peak of signal strength. During the late fall and winter, these stations are heard as early as 4:30 PM on the Atlantic seaboard and reach their strongest point between 5:00 and 6:00. By the latter time, the locals have become too loud for separation.

In picking the stations to tune in early evening, it is necessary to consider their schedules. Virtually all of the Europeans sign off between 11:00 PM and midnight, their time. In the case of mid-continental stations, this would be 5:00 and 6:00 PM, EST. Stations operating on Greenwich or corresponding times will thus leave the air between 6:00 and 7:00.

Reception of these early-evening stations is limited almost exclusively to listeners in the Atlantic and Eastern time belts. In fact, it is only those on the actual coastline who can enjoy consistent reception.

By far the best time to hear Europeans is in the early morning hours when most of the channels are clear. Some of the Germans come on at midnight, EST, but are usually unable to break through the local stations until 1:00 or 1:30. The Italians commence their day's broad-

casting between 1:30 and 2:30, as do many of the others. Poste Parisien, the most famous of the Europeans, signs on at 2:10 and you can set your watch by that. Fecamp and a few of the other French stations can be heard about this time. All European signals begin to fade about 2:30 and are generally gone by 3:00, with the Germans and Italians the first to leave.

Here again it is necessary to consult a schedule, so, for the convenience of readers, we are publishing a list of forty-eight of the most frequently heard European stations on page 33. This list gives different means of identifying each station and, where available, the times at which they sign on and off. (The times, given in Eastern Standard, are in the 24-hour form. Thus, while 0230 will be 2:30 AM, EST, 1900 will be 7:00 PM.) A study of these schedules will enable listeners to determine the stations which will be heard in the early evening and those which may be tuned in the early morning.

### **A Blank For Africa**

Just about the most-sought-after stations are those on the continent of Africa. While there are a number which transmit with a fair amount of power, reports of reception of these broadcasters are few and far between. Algiers has a 12-KW station on 941 Kcys and this has been heard in the early evenings before the 940 channel becomes too jumbled. Cairo's 20-KW transmitter, using 620 Kcys, has never been heard in this country so far as we know. An even more powerful 25-KW station at Rabat, Morocco, operates on 601 Kcys, but is seldom heard. The Union of South Africa has three 10-KW transmitters at Cape Town, Grahamstown and Johannesburg which have thus far failed to reach North American listeners.

There are two ways of going after foreign stations—fishing and tuning. When “fishing,” the DXer runs up and down his dial looking for signals and stopping whenever he finds a carrier which looks promising. When “tuning,” he decides in advance which station he wants, tunes to the correct frequency at the right time, and waits for results.

Both methods have their good and bad points. The “fishing” DXer will miss stations which have faded out completely as he passes their frequency, while the “tuning” DXer will wait for the signal to pick up again. On the other hand, the tuner will concentrate on a chosen few and pass up others which might be located by fishing. Possibly a combination of the two will work to best results.

## Europeans Worth Trying For

(Times are EST)

- Budapest, Hungary, 546 kcs. 120 kw.  
Call—“Hallo! Itt Radio Budapest”. Interval signal—phrase of nine notes in two part harmony. Schedule—Sundays, 0415-1915; weekdays 0145-1915.
- Beromunster, Switzerland, 556 kcs. 100 kw.  
Call—“Hallo! Hier Schweizerischer Landesender Beromunster. Program von Berne (or Basle or Zurich)”. Interval signal—music box, carillon or chimes. Announcers—men. Schedule—Sundays, 0400-1700; weekdays, 0700-1715.
- Athlone, Irish Free State, 565 kcs. 60 kw.  
Call—(in Irish and English)—“Radio Atha Luain. Atha Cliath. Agus Corcaighel!” Announcer—woman. Schedule—Daily, 0830-1800.
- Stuttgart, Germany—547 kcs. 100 kw.  
Call—“Hier ist der Reichssender Stuttgart!” Interval Signal—Three notes (C, D and G) on metal bars. Announcer—man. Schedule—Daily, 0100-2100.
- Grenoble, France, 583 kcs. 15 kw  
Call—“Allo! Allo! Ici le Poste Radiotelephonique de la Region des Alpes a Grenoble!” Announcer—man.
- Vienna, Austria, 592 kcs. 100 kw.  
Call—“Hallo! Hallo! Radio Wien!” Interval Signal—ticking of metronome. Announcer—man. Schedule—Sundays, 0315-2000; weekdays, 0410-2000.
- Rabat, Morocco, 601 kcs. 25 kw.  
Call—“Ici Radio-Moroc! Station de l’Office Cherifien des Postes et Telegraphes!” Announcer—man. Interval signal—ticking of metronome.
- Florence, Italy, 610 kcs. 20 kw.  
Call—“Ente Italiano Audizioni Radiofoniche EIAR (pronounced eh-yar), Stazione di Firenze Milano-Torino-Genova-Trieste!” Announcers—men and women. Interval signal—music box.
- Brussels I, Belgium, 620 kcs. 15 kw.  
Call—“Ici Bruxelles I.N.R.I.” in French. Announcer—man. Interval signal—first bars of Belgian popular song on chimes. Schedule—Sundays, 0430-1900; weekdays, 0700-1800.
- Lisbon, Portugal, 629 kcs. 20 kw. ■ □  
New station. No information available.
- Prague I, Czechoslovakia, 638 kcs. 120 kw.  
Schedule—Sundays, 0130-1830; weekdays, 0100-1800.
- Cologne, Germany, 658 kcs. 100 kw. ■  
Call—“Hier ist der Reichssender Koin!” Announcers—men and women. Interval signal—Opening bars of “Postillon Song”. Schedule—Daily, 0100-1900.
- NR, Manchester, England, 668 kcs. 50 kw.  
Schedule—Sundays, 0730-1730; weekdays, 0515-1900.
- Soottens, Switzerland, 677 kcs. 25 kw.  
Call—“Ici Emmitter National Suisse Romand!” Announcers—men and women. Interval Signal—“R.S.R.” in Morse and chimes. Schedule—Sundays, 0500-1715; weekdays, 0730-1715.
- Stockholm, Sweden, 704 kcs. 55 kw.  
Call—“Stockholm Rundradio!” Announcer—man. Schedule—Sundays, 0415-1900; weekdays, 0245-1800.
- Rome, Italy, 713 kcs. 50 kw.  
Call—“Ente Italiano Audizioni Radiofoniche EIAR (pronounced eh-yar). Stazione di Roma!” Announcer—woman. Interval signal—popular air in three different keys. Schedule—Sundays, 0440-1800; weekdays, 0230-1800.
- Munich, Germany, 740 kcs. 100 kw.  
Call—“Hier ist der Reichssender Munchen und seine Nebensender!” Interval signal—bell item from Parsifal. Schedule—Daily, 0100-1900.
- Marseilles, France, 749 kcs. 5 kw.  
Call—“Allo! Allo! Ici la Station de Radio-diffusion de Marseilles!” Interval signal—three notes; G, E flat, F.
- SR, Falkirk, Scotland, 767 kcs. 50 kw.  
Schedule—Sundays, 0730-1730; weekdays, 0515-1900.
- Leipzig, Germany, 785 kcs. 120 kw.  
Call—“Hier ist der Reichssender Leipzig und seine Nebensender!” Interval signal—four notes: B flat, A, C, B natural. Schedule—Daily, 0100-1900.
- EAJL, Barcelona, Spain, 795 kcs. 5 kw.  
Call—“Aqui estacion EAJL (pronounced eh-ah-hota-oono) Union Radio Barcelona, instalada en la cumbre del Tibidabo, Parque del Hotel Florida.” Announcer—man. Schedule—Daily, 0315-2000.
- WR, Cardiff, England, 804 kcs. 750 kw.  
Schedule—Sunday, 0730-1730; weekdays, 0515-1900
- Milan I, Italy, 814 kcs. 50 kw.  
Call—“Ente Italiano Audizioni Radiofoniche EIAR (pronounced eh-yar), Stazione di Milano-Torino-Genova-Trieste-Firenze!” Announcers—men and women. Interval signal—Nightingale (music box).
- Bucharest, Roumania, 823 kcs. 12 kw.  
Call—“Atentione! Aci Radio Bucharest pe treisute sasezeci si patru virgula cince metri!” Repeated in French, German and Italian. Announcer—woman. Opening signal—Metronome beating for five minutes. Schedule—Sundays, 0530-1930; weekdays, 0700-1930.
- Berlin, Germany, 841 kcs. 100 kw.  
Call—“Hier ist der Reichssender Berlin!” Announcer—man. Interval signal—phrase of eight notes. Schedule—Daily, 0100-1900.
- Strasbourg, France, 859 kcs. 35 kw.  
Call—“Allo! Allo! Ici Radio Strasbourg (PTT)!” Announcements in French and German. Opening signal—deep-toned bell sounding for five-second periods. Schedule—Daily, 0545-1815.
- L.R, London, England, 877 kcs. 50 kw.  
Schedule—Sundays, 0730-1730; weekdays, 0515-1900.
- Hamburg, Germany, 904 kcs. 100 kw.  
Call—“Hier ist der Reichssender Hamburg und seine Nebensender!” Interval signal—bars from folk tune. Schedule—Daily, 0100-1900.
- Toulouse, France, 913 kcs. 60 kw.  
Call—“Allo! Ici Radio Toulouse! Emissions de la

Radiophonie du Midi!" Announcer—man. Interval signal—Gong sounded at second intervals. Schedule—Sundays, 0600-1930; weekdays, 0300-1930.

Brno, Czechoslovakia, 922 kes. 32 kw. Call—"Halo! Halo! Brno (pronounced Brrr-no) vysila!" Announcer—man. Interval signal—Four chords on harp. Schedule—Sundays, 0130-1830; weekdays, 0100-1800.

Brussels 2, Belgium, 932 kes. 15 kw. Call—"Hier Brussel NBR!" in Flemish. Announcer—man. Interval signal—first few bars of Flemish folk song. Schedule—Sundays, 0430-1900; weekdays, 0700-1800.

Breslau, Germany, 950 kes. 100 kw. "Hier ist der Reichssender Breslau und seine Nebensender!" Announcer—man. Interval signal—first bars of "Hohenfriedber" march. Schedule—daily, 2400-1900.

P.P., Paris, France, 959 kes. 60 kw. Call—"Ici le Poste Parisien Paris" (frequently given in English as well as French.) Announcers—men and women. Opening signal—"Marche de Sambre et Meuse". Interval signal—first six notes of the Air from the opera **Louise**. Schedule—Daily, 0210-1900.

Hilversum, Holland, 995 kes. 20 kw. Call—"Hier Hilversum, Holland!" Announcer—man. Schedule—Sundays, 0335-1840; weekdays, 0240-1840.

Bratislava, Czechoslovakia, 1004 kes. 13.5 kw. Call—"Halo! Bratislava vysila!" Announcer—woman. Interval signal—four chords on harp. Schedule—Sundays, 0500-1830; weekdays, 0100-1900.

MR, Daventry, England, 1013 kes. 50 kw. Schedule—Sundays, 0730-1730; weekdays, 0515-1900.

Konigsberg, Germany, 1031 kes. 60 kw. Call—"Hier ist der Reichssender Konigsberg und seine Nebensender!" Announcers—men and women. Interval signal—few bars from "Wild flutet der See". Schedule—Sundays, 0100-1900; weekdays, 2400-1900.

Rennes, France, 1040 kes. 40 kw. Call—"Allo! Allo! Ici le Poste Radiodiffusion de Rennes!" Announcer—man.

SN, Falkirk, Scotland, 1050 kes. 50 kw. Schedule—Sundays, 0730-1730; weekdays, 0515-1900.

Bordeaux, France, 1077 kes. 30 kw. Schedule—Daily, 0300-1830.

EAJ7, Madrid, Spain, 1095 kes. 7 kw. Call—"EAJ7 (pronounced eh-ah-hota-sieteh) Union Radio Madrid!" Announcers—men and women. Opening signal—Siegfried's bugle-call theme, usually on the piano. Schedule—Daily, 0400-2000.

Fecamp, France, 1113 kes. 10 kw. Call—"Ici Radio Normandie!" Announcers—men and women. Schedule—Daily, 0200-2100.

Moravska-Ostrava, Czechoslovakia, 1113 kes. 11.2 kw. Call—"Halo, Moravska Ostrava vysilani!" Announcer—man. Interval signal—four chords on harp. Schedule—Sundays, 0130-1830; weekdays, 0100-1800.

Turin, Italy, 1140 kes. 7 kw. Call—"Ente Italiano Audizioni Radiofoniche ETAR (pronounced eh-yar) Stazione di Torino-Milano-Genova-Trieste-Firenze!" Announcers—men and women. Interval signal—song of nightingale (music box). Schedule—Sundays, 0435-1815; weekdays, 0230-1815.

Monte Ceneri, Switzerland, 1167 kes. 15 kw. Call—"Radio Svizzera Italiana-Implanto nazionale, Monte Ceneri!" Interval signal—peal of church bells. Schedule—Daily, 0600-1730.

Frankfurt, Germany, 1195 kes. 25 kw. Call—"Hier ist der Reichssender Frankfurt und seine Nebensender!" Announcers—men and women. Interval signal—few bars from "Zum Rhein, zum Rhein!". Schedule—Daily, 0100-2100.

Lille, France, 1213 kes. 60 kw. Call—"Allo! Allo! Ici Radio PTT de Nord a Lille!"

Eiffel Tower, Paris, France, 1456 kes. 5 kw. Schedule—Daily, 0300-0500.

## Monthly Notes of the I.D.A.

● ● ● By James T. Spalding

**H**ERE'S some good news: membership is rapidly increasing and our goal of one thousand members by Christmas seems assured. We recently welcomed the entire Pacific Shortwave Club as new members. Their president, John Clark, becomes Asiatic Editor of the G. C.

\* \* \*

Jim Maguire of Calgary, Alberta, has been appointed Provincial Publicity Director, and is angling for a DX period over CFCN in addition to his column in the Calgary Herald.

\* \* \*

The Regina Jubilee Chapter was recently formed by Bill Ansell and Lloyd Westmoreland. Formal announcement of the Kalamazoo Chapter will soon be made, a sufficient number of members having already been enrolled.

\* \* \*

Radio Fellowship Chapter, Los Angeles, has a membership of sixty DX'ers and a new club house overlooking the city will soon be built.

\* \* \*

The leaders in the Randolph Trophy Contest include: Charles Hesterman, Canada, 6265 points; W. K. Walton, England, 5390; Leo De Roo, Hawaii, 4141; Warren Reichert, Mass., 3665; and R. T. Cooles, England, 3030.

\* \* \*

Our friend, Bob Hamilton of Scotland, has been having his troubles identifying the South Americans. This is not unusual, and we would like to see all foreign stations emulating the German Stations, who announce in several languages.

Brian Mitchell, Cape., S. A., writes that a new B. C. Station was opened on July 15. It is "Pieter Maritzburg" in Maritzburg, South Africa, relaying Durban on 400 meters, with a power of 10 KW.

\* \* \*

Our very good friend Hector McCormick, owner of HJ2ABD, writes that his original Xmitter was dropped in the Magdalena River while in transit, but the new one will start testing by Sept. 25. One of the first programs will be dedicated to I.D.A. and two of his I.D.A. friends, Weber and Spalding. All DX'ers are urged to watch the 49 meter band for this one as reports are requested and will be verified by a nice QSL card. The address is "Radio Bucaramanga, Calle 2A, No. 1205, Bucaramanga, Columbia, S. A.

\* \* \*

Joseph Mercieca of Malta, has introduced the sport of veri' collecting there and reports good success. While Malta has no stations, we have several enthusiastic DX'ers there who report good reception.

\* \* \*

Moscow is soon to have a 120 KW station on SW which will be heard all over the world, according to the British Globe Circler. C. K. McVonnan, the Editor of the B.G.C., spent an enjoyable vacation in the Rhineland.

\* \* \*

With increased power this year, the European and Australian stations should be heard better than ever before, and from advance reports from the Foreign Affairs Dep't., there will be a great number of special broadcasts for I.D.A. We therefore suggest that all DX'ers renew their membership subscriptions in order to get information about these programs. DX'ers who have not already joined should do so at once. Information about membership may be obtained by addressing "The Publicity Dept.", James Spalding, Director, 2710 Alford Ave., Louisville, Ky.

## Reception in England

• • • by R. T. Coales\*



*The radio corner of R. T. Coales, Southsea, England. The set is H. M. V. 9-valve super-heterodyne with a short wave converter using two valves. Friend Coales is an enthusiastic tuner.*

**T**HE past season has been a very poor one so far as DX reception on the broadcast band is concerned. During November, the U. S. A. transmitters were in fine form, but ever since, with the exception of a few tolerably good nights, it has been very hard to hear any American station.

The two previous winters brought such good results that I was inclined to take good signals from the States for granted and I had hoped to verify a hundred stations. Up to the end of November, forty-four of your stations had been reported, while since then only four new ones were identified. This will show how conditions fell away.

Perhaps there has been an increase of sun-spot activity, which would account for it. However, strangely enough, reception from South America has been consistently satisfactory.

Unfortunately, few of these stations seem willing to verify, the only ones to reply so far are LR5, LS2, CPX and YV1RC. From Porto Rico, I have received veries from WKAQ and WNEL, while Egypt provided a fine verification from Cairo. I heard

CMCY on February 28th, but have yet to receive a reply. Happily, it is most rare for a United States or Canadian station to fail to verify.

Owing to the poor conditions, I have been unable to hear twenty American stations which I verified in the winter of 1933-34. I believe that my best catches in the States were WSMB, WFEA, WBBR, KPO, WTOC, KOA, KSL and WORK—all verified.

Last year, in the I.D.A. contest, I verified 71 stations. This year, with a far superior receiver — a nine-valve H.M.V. super—I have only verified 53. However, when I bought my new set last fall, it took me some time to have earphones installed, so I probably lost quite a few good catches while reception was good at that time. Altogether, I have verified a total of 86 different stations on the broadcast band—all of these being more than 3000 miles distant.

The British I.D.A. short wave contest is now on, with general conditions excellent. Many 20-meter "W" hams are heard on phone. W2XAF, W2XAD and W8XX (19 meters) show splendid signal strength. Considering their low power, the South Americans come through remarkably well, with YV6RC outstanding.

Last November, I had a very interesting visit from Sidney Mead, engineer and announcer of WCSH. He is a local man and, by an extraordinary coincidence, I happened to hear him announcing over WCSH way back in November, 1933.

\*54 Chelsea Road, Southsea, England.

*In tuning for foreign stations it is necessary to know their time. The RADEX Map of the World automatically converts their time to your time. Just turn the dial and the proper time is shown. Price 25c postpaid.*

## USE HEAD PHONES FOR DISTANCE

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If you desire the finest Phones made, we recommend the Trimm "Featherweight" which weigh but four ounces complete. These were designed especially for the hard-of-hearing, airplane pilots, short-wave work, etc. We believe them to be the very finest made. The price is \$8.05 postpaid.

*(In Ohio add 3% for state sales tax)*

**The Radex Press Inc.**  
Conneaut, Ohio

# Club Cooperation Comes at Last

• • • By CARLETON LORD

**C**OINCIDENTAL with the opening of the new season comes word that the much-discussed plan for inter-club co-operation has finally been accepted by the leading DX societies. With this agreement on matters of paramount importance, the clubs concerned have taken one of the most important forward steps in the history of DXing as an organized hobby.

Intended primarily as an instrument to prevent clashing of special broadcasts, the plan seems to have grown into a virtual code of ethics for DXing and, as such, it should have lasting benefits.

The working of the plan\*, although somewhat cumbersome, appears to be adequate in its coverage of vital problems. A Clearing House has been established and to this central point all CPC chairmen will send weekly reports listing all of the DX programs arranged by their respective clubs. These reports will be checked against each other and then combined into a composite report, listing all programs arranged by all clubs, and this will then be sent to each CPC chairman.

## Whose Program?

It will be the duty of each chairman to advise his committee members to refrain from arranging specials which will conflict with those already scheduled and "passed on" by the Clearing House. When it is found that two or more stations are going to transmit programs on the same frequency at the same time, the station whose notice bore the earliest postmark will have the "right of way" and conflicting broadcasts will be cancelled by the club which arranged them.

The only exceptions to this rule will be foreign stations, which will

take precedence at all times, and government frequency checks dedicated to individual clubs. The latter, of course, cannot conflict with each other.

The Clearing House will be operated by Miss Emily Griswold, 326 N. Main St., West Hartford, Conn., and upon her shoulders will fall the burden of checking on the hundreds of special transmissions scheduled each season.

The balance of the plan deals with the ethics of inter-club relations. This covers points which have long been sources of controversies, and so a final agreement on these clauses will go a long way towards eliminating the friction which can only harm DXing as a whole.

## To Prevent "Chiseling"

Under the plan, each club agrees that it will not make unfair use of information supplied them by the Clearing House. This appears to be aimed in particular at a few clubs which have made a practice of writing to stations transmitting for another club and requesting that a portion of that program be dedicated to them. Needless to say, this "chiseling" must be condemned and its elimination cannot be commended too highly.

Further, each club agrees that it will not take names and addresses from publications of other clubs for the purpose of soliciting membership. This point has long been the principal reason why one of the larger clubs has refused to consider any suggestion of co-operation with other DX organizations, and its final settlement cannot help but react favorably.

Finally, each club agrees that it will not publish in its bulletins or tip sheets the special programs ar-

ranged by another club without first having received definite permission from the other club to do so.

### Growth of the Idea

The early history of the pact can best be traced by its indefatigable champion. "When I started in as the CPC Chairman of the CDXR," writes Edwin H. Bullard, CPC Chairman of the CDXR, "I could see where co-operation was needed. Everyone was suggesting that week-ends be divided among the clubs, but I could see that this would never work out. After a while, I thought of the idea of notifying other clubs of programs arranged so that they would not schedule any broadcasts which would conflict. During my holidays in the summer of 1934, I went to York, Pa., and talked the matter over with Bob Weaver, president of the NRC. And so was started the co-operation plan between the NRC and CDXR. Later on, the IDA came in, to be followed by the GCRDXC and finally the URDXC of California. By this time, I could see that we had to make another change and I thought of the Clearing House. I finally secured the services of Miss Griswold to take over this job and I am convinced that she will handle the work in a creditable manner."

While the plan was used last season by the NRC, IDA, CDXR, GCRDXC and URDXC, it was not until this summer that the NNRC entered the fold. The idea of preventing the clashing of DX programs was all right, they argued, but why co-operate on one phase when there were so many other points to be straightened out?

Consequently, Mr. Bullard traveled to Newark in June and talked the matter over with President Irving R. Potts and other officials. As a result of this conference, the original plan was amended to include the clauses concerning solicitation of membership and publication of tips originating with other clubs.

The amended plan was then re-

submitted to the clubs concerned and, as we go to press, it has been approved by the NNRC and the NRC. The confirmation by the other organizations is expected to be forthcoming in the near future and this final agreement will undoubtedly work to the advantage of the entire DXing fraternity.

If all of the clubs concerned approve the plan, it will embrace the NNRC, NRC, IDA, CDXR, GCDXC (formerly the GCRDXC) and the URDXC. Upon a majority vote of these clubs, additional organizations may be admitted to the co-operating group. At present, the Mid-Co DX Exchange has petitioned for entrance and Mr. Bullard requests that other interested clubs communicate with him at P. O. Box 170, Drummondville, Que., Canada.

### Some Mooted Points

Analysis of the plan in detail brings up two points which may prove to be boomerangs. While it is admittedly impossible to formulate a perfect plan on the first draft, consideration of these two possible weaknesses may pave the way for an even better agreement in the future.

It will be noticed that the fundamental action of the plan is aimed at the elimination of conflicting DX programs. This, of course, is praiseworthy and a step in the right direction.

Under the present agreement, a club which has arranged a special program will, through the medium of the Clearing House, notify other clubs so that no conflicting programs will be arranged. Unfortunately, this assumes that there will be sufficient leeway, between the time the broadcast is confirmed and the date of the transmission, for another program to be scheduled.

However, every CPCman knows that, while it may take weeks and even months to line up a program, final confirmation usually arrives a week or two before the broadcast. Consequently, it is then too late to



prevent the scheduling of a conflicting program.

Considering the fact that five or six CPCmen from as many clubs will be endeavoring to schedule programs from stations on the same channel, it isn't hard to see that conflicts are bound to occur. Under the plan, such clashing will be eliminated by giving the "right of way" to the station whose confirmation was postmarked first and the other broadcasts will be cancelled summarily.

While the station having the right of way will undoubtedly appreciate the clear channel, what will be the reaction of the broadcasters whose transmissions are ruled out?

Thus, it seems that the plan fails to prevent the *scheduling of conflicting programs*, except in a few cases, and merely provides a remedy when conflicts arise.

This observation, of course, is made before the plan has had a trial and it remains to be seen just how it will work out. The results may be all that the sponsors could desire, or they may necessitate further changes in the agreement.

#### Just a Suggestion

In this connection, RADEX offers the following suggestion: Let the CPCmen of the different clubs who are assigned to the same frequency get together by mail and divide the time among themselves.

For example, each club has a committeeman assigned to the 1200 keys channel. Let the NNRC CPCman, for instance, have the exclusive right to schedule programs on this channel during the second week of each month. All other CPCmen will agree not to line up specials on this frequency during this week of each month. Then, the CDXR will take the third week and the NRC will assume charge of the fourth. Smaller clubs could be given certain days and hours of the weeks which are assigned to the big-three. The IDA, of course, would not enter into this, due to the nature of their programs.

This arrangement would be made by the individual committeemen and should in no way affect the general operation of the plan. However, it would tend to *eliminate the scheduling of conflicting programs* and, for that reason alone, it may be worthy of consideration.

#### Shall Programs be Secret?

Finally, there is the clause which forbids a club to publish announcements of specials by another organization without definite permission to do so. Were it not for the avowed intention of one club to withhold this permission, such a point would have little importance. As it is, this clause may prove to be a serious defect in the plan.

On this question, there are two points of view. One faction holds that a confirmed special is the same as a copyrighted newspaper or magazine "scoop." It is the exclusive property of the club which arranges it and should not be distributed to listeners who have not contributed to the support of the organization to which the special will be dedicated.

On the other hand, opponents of this stand insist that every station is entitled to the greatest possible publicity on one of its specials. They contend that the limitation of the notice of a DX program to the members of one club is unfair to station and listener alike.

One wag suggests that the club in question forbid its members to listen to specials dedicated to another club.

It is difficult to say which stand is right, both having their own merits, but the latter will probably appeal to the broadcasters and, after all, upon them depends the future of DXing.

In spite of these two possible weaknesses, the acceptance of the plan remains one of the most forward steps yet taken by the DX clubs.

*\*The plan as adopted is printed on page 57.*

# What the Stations Expect

• • • *From the New Zealand Radio Times*

**P**ROBABLY the most important part of dxing nowadays is the preparing of reports, for unless one sends a good report a verification cannot be expected.

Formerly, the actual method of reporting was not considered as a very important factor in gaining a verification, and as long as a definite item was named or a part of the program described, a verification was usually forthcoming.

Now, however, stations require informative reports which can be made use of by the station engineers. Station officials rely a great deal on dxers for the necessary information on how their station is getting out, and the quality of signals. Comprehensive reports with such information are welcomed and are certain to be acknowledged, usually with an extra word or two of thanks.

Naturally, in order to report to a station correctly, something definite must be heard—a set of call letters with the exact time of announcements, a number of items, with their titles, and description of the numbers, the type of music, vocal refrains, if any, and by male or female, etc. Probably the two most important facts of a report are the "volume" and "quality." The standard code is rapidly becoming universally known, and is recognized in most countries. I would therefore advise all dxers to become acquainted with the volume code, i. e., "R," and the quality code, i. e., "QSA," and to use them when reporting. (See Footnote.)

Next comes "fading," another important item in a report. Fading is caused by various factors, though mainly by atmospherical conditions. Interference caused by a station lo-

cated on a close frequency blotting out the original stations is not fading, even though signals disappear. It is heterodyne interference, and mention should be made of such. Fading may be rapid or slow. Rapid fading is a characteristic of stations on high frequencies, i. e., 1200 k.c. and higher, and slow fading usually occurs with stations on the low frequencies. Special mention should be made of the exact type of fading.

Static is not of much importance, as this is mostly local, but mention of this will explain any difficulty in getting announcements and give some idea of what the signals had to be received through.

An accurate description of the receiver must be given. State the number of valves and the type of set—whether tuned radio frequency or superhet. Particulars of the type of aerial and earth installation should always be given as these are of interest to the technical staff.

Lastly, a word of thanks to the station for the trouble you have put them to in checking the report, which, after all, is common courtesy, and, if possible, include return postage. Reports should not be scribbled but written legibly on the standard report forms of the DX Club. If all these points are followed, dxers can rest assured that in due course a verification will be received, together with the station's thanks. In this way the term "black-listed stations" would soon cease to exist.

#### Reception Symbols

- R1—The faintest signal that can be heard on headphones.
- R2—A weak headphone signal.
- R3—Audible but only partially readable.
- R4—A fair signal.
- R5—A good headphone or a weak speaker signal.
- R6—Fair speaker volume.
- R7—Strong volume.
- R8—Very strong volume.
- R9—Extremely strong, maximum volume.

QSA1—Unintelligible.  
 QSA2—Signals which can be understood only now and then.  
 QSA3—Poor signals, understood with difficulty.  
 QSA4—Good signals, quite easily understood.  
 QSA5—Perfectly understandable.  
 S—Slight fading.  
 SS—Deep fading.  
 SSS—Complete fadeout.  
 R—Rapid fading.  
 N—No fading.  
 X—Slight static.  
 XX—Rather bad static.  
 XXX—Very heavy static.  
 N—No static.

15	kanz	keen-say	finf-tsane	keen-zy
16	saze	deesi-sae	sex-tsane	deza-sayz
17	deece-set	deesi-sate	seeben-tsane	deza-setl
18	deece-hweet	deesi-och	okt-tsane	dez-oyto
19	deece-nerf	deesi-nooavay	noin-tsane	deza-novay
20	vant	vain-tay	tsvantsig	veentay
30	traynt	trayntah	dry-tsig	tree-teh
40	karant	karentah	feer-tsig	qwurrenteh
50	sankant	seen-kentah	finf-tsig	seen-kwenteh

## Foreign-Language Calls

THE following table gives the names of the letters of the alphabet and of the simple numerals in the more common languages of broadcasting. An English equivalent of the pronunciation of the letter names and numerals is included to facilitate interpretation of the announcement of the various station call letters.

	French	Spanish	German	Portuguese
a	ah	ah	ah	ah
b	bay	bay	bay	bay
c	say	say (thay)	tsay	say
d	day	day	day	day
e	ay	ay	ay	ay
f	ef	effay	ef	effay
g	zhay	hay	gay	hay
h	asch	ah-chay	hah	ah-hay
i	ee	ee	ee	ee
j	zhee	ho-tah	yot	ah-tah
k	kah	kah	kah	kah
l	el	ellay	el	ellay
m	em	emmay	em	emmay
n	en	ennay	en	ennay
o	o	o	o	o
p	pay	pay	pay	pay
q	coo	coo	coo	coo
r	air	erray	air	erray
s	ess	essay	ess	essay
t	tay	tay	tay	tay
u	eu	oo	oo	oo
v	vay	vay	low	vay
w	double-vay	dooble-vay	vay	dooble-vay
x	eeks	eekls	icks	eekls
y	egrek	egree-ay-gah	ipsilon	egreego
z	zed	zed	tset	zed
1	unh	uno	ine	oon
2	der	doce	tswi	dois
3	trwa	trace	dry	trezh
4	katth	kwah-tro	feer	kwah-tro
5	sank	sinko	finf	seenko
6	seece	sase	sex	sase
7	set	sate	seeben	seti
8	hweet	och	okt	oyto
9	nerf	noo-a-vay	noin	novay
10	deece	de-ais	tsane	dezh
11	onze	on-say	elf	ohnzl
12	doze	do-say	tsvelf	dohzl
13	traze	trasay	try-tsane	trehzi
14	katorz	katorsay	feer-tsane	ka-tawr-zy

## Our Cuban "Ambassador"



ON THE roster of men who have done much for DXers and DXing, the name of Alec Kinghorn stands out. From his home in Havana, he has spread the gospel of the Midnight Marauders among the Cuban stations and most DXers are aware of the results of his work.

When he isn't announcing DX programs and taking care of requests for verifications, Alec is busy soliciting more special broadcasts and obtaining the co-operation of station managers on DX matters. From a chaos of indifference and even utter ignorance, he has brought about a situation which, while by no means Utopian, is at least encouraging, and there are probably

few DXers who cannot trace a valued verification to his work.

Alec was born in Havana twenty-five years ago, the son of a British civil engineer who had then been in Cuba about five years. Due to the nature of his father's work, considerable travelling was the order, and the Kinghorn family covered the Island of Cuba extensively in addition to longer trips to Santo Domingo, England, Scotland and Canada. Despite this, Alec still has the wander-lust and looks forward to more globe-trotting.

Most of his education was obtained in Havana, where he was graduated from high school in 1930. In the same year, he entered the University of Havana and commenced a course in Electrical Engineering. However, due to the killing of a number of students during the Machado regime, the University was closed and he was obliged to continue his studies by correspondence.

#### Becomes Interested in Radio

The radio bug first bit him back in 1924, when he built a cigar box crystal set. The first station he ever heard was the old PWX, now known to thousands of listeners as the Cuban Telephone Company's transmitter, CMC. For a while, radio held little interest for him. This was probably due to the fact that his allowance wouldn't buy admissions to picture shows when it had been used for radio components. Besides, there was the early-day trouble in obtaining reliable circuits and parts. Consequently, radio was set aside until he could earn his own money.

Early in 1930, he made his first visit to a radio station. Calling at the studios of CMCA, he met the chief engineer, J. M. Gonzalez, who showed him about the plant and gave him a chance to speak into the mike. This was undoubtedly the greatest thrill of his life and he still treasures its memory.

The following day, he spoke again

and had his family and friends listening in. They all thought he did well, but had a difficult time recognizing his voice.

He continued to go around to the station every day and obtained quite a bit of practice as an announcer and commentator. Then, Engineer Gonzalez put on a DX program and didn't tell him about it.

A few days later, letters commenced to come in and Alec watched the station operators indulge in what must have been a common practice with Cuban stations at the time. They would open the envelopes, take out a quantity of coins and then throw the letters in the waste basket. Then would follow an invitation to coffee or drinks.

Alec wondered why those letters contained dimes. Why did the writers enclose money? And why did the personnel take no heed of the correspondence? It began to look mighty queer.

At last he got hold of one of the letters. It was from an American listener who had sent a reception report and asked for a verification. A dime was enclosed to cover postage and handling costs.

Alec went to Gonzalez. "Why," he asked, "don't you answer these letters?" Gonzalez was indifferent. They had never paid any attention to them before, so why should they start now? Anyhow, it was quite nice of so many listeners to send money. They must have liked the programs to be willing to pay for them. Besides, those dimes bought lots of coffee and drinks for the men. Salaries weren't very large and every little bit helped.

However, if Senor Kinghorn wished to tie into the stack of letters and get off the verifications, it would be quite all right with Senor Gonzalez and CMCA. In fact, Senor Kinghorn's insinuations were most disconcerting, and it might be well to take care of the mail which fol-

lowed every late broadcast.

#### **Undertakes Verifications**

Senor Kinghorn was willing. It took considerable scraping to buy enough three-cent stamps to mail the verifications—Senor Gonzalez apparently still thought that the dimes should buy coffee and drinks for the staff—but every correct report was finally verified. And that was how Alec made his first contacts with American DXers.

Shortly afterward, CMCA put on another DX broadcast and this time Alec was installed as an announcer. It was his first experience in this capacity and he still recalls the thrill.

This broadcast brought a flood of reports, no doubt due to Alec's fluent English, and it was quite a task to check all of the letters with the station's log. It was most enjoyable to read correspondence from all parts of the United States and Canada and, despite the work involved, he started a campaign for more DX transmissions.

A little later, he was introduced to Mr. Estefani, one of the owners of CMBY. This contact resulted in an early special program for DXers with Alec at the mike. While the station had put on a number of previous DX programs, reports had been unanswered due to lack of time on the part of the small station staff. However, Mr. Estefani was really interested in DXing and promised that all future reports would be verified, even if he had to handle it himself.

During the winter of 1932-1933, CMBY inaugurated a series of "Smart Hour" DX broadcasts, with Alec as director and announcer. A special verification card, showing a view of the Hotel Alcazar, was printed and the record shows that every correct report was verified. As there were several hundred of these, the size of the job which Alec undertook that winter can be appreciated.

#### **Makes U. S. Contact**

The following spring, the Newark

News Radio Club asked him to act as its official Cuban representative and to assist members in obtaining verifications from delinquent stations. As most Cuban broadcasters fell in that category, this was no small assignment, yet he started to work and was soon instrumental in reducing the blacklists in the logs of not a few DXers.

It was at this time that his work first began to attract the attention of American listeners. With the announcement that DXers should send him their report, together with ten cents to cover costs of handling and postage, listeners hailed him as a benefactor of DXing, and promptly swamped him with correspondence.

Upon receiving a report on a delinquent station, Alec immediately forwarded the information to the station officials. If the station was out of town, the report was sent by mail; if it was a Havana broadcaster, Alec made a personal call at the studios. When the station responded with a confirmation, he forwarded it to the listener. Counting the cost of postage to and from the station and then back to the United States, the ten cents were soon consumed. When many DXers thought that a dime would take care of a multitude of reports, it was just a case of digging into his own pockets to cover the deficiency, for, when it was humanly possible to obtain a verification, no listener was ever disappointed.

When his work for the NNRC became known, other clubs asked him to act in similar capacities for them and it wasn't long before he added the work of the IDA, CDXR and NRC to his already sizable burden.

During the whole of his activities on the part of American DXers, he has been able to maintain his original enthusiasm for the work. His extensive correspondence has rewarded him with many treasured friendships, which he values more than any monetary remuneration.

As yet, he has met but one of his correspondents. This was Karl T. Soule, Jr., of New York, who stopped off in Havana for a day. However, Alec hopes that his wanderlust will at least enable him to visit the United States once more and meet his many DX friends.

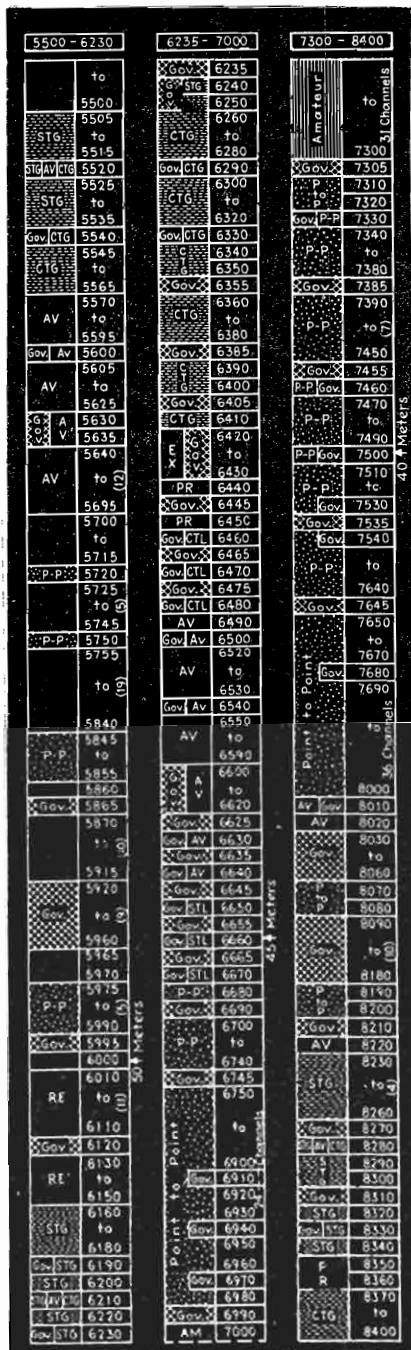
With the new deal for Cuban broadcasting under way, it is difficult to predict just how it will affect Alec's future activities. It seems logical that the weeding out of the irresponsible broadcasters will pave the way for work of even greater benefit to the listeners, but time alone can tell.

## The Frequency Charts

THE diagram which follows is one of a series which began in our May, 1935, issue and which will be concluded in a subsequent number. The complete set of these charts will give in diagrammatic form a picture of the allocation of frequencies to various radio services. These charts should be saved and mounted as they will be of great assistance in tuning, particularly in the short wave field. We are indebted to "Radio Retailing," a journal for dealers and servicemen, for these diagrams.

We repeat again the key to the symbols.

- AG—Agriculture.
  - AM—Amateur.
  - AV—Aviation.
  - BC—Broadcast, clear channel.
  - BE—Broadcast, experimental.
  - BL—Broadcast, local channel.
  - BP—Broadcast, pickup.
  - BR—Broadcast, regional channel.
  - CH—Coastal, harbor.
  - CTG—Coastal, telegraph.
  - CTL—Coastal, telephone.
  - EM—Emergency, (special).
  - EX—Experimental, (general).
  
  - FI—Fire (marine).
  - GE—Geophysical.
  - Gov.—Government.
  - PM—Police, municipal.
  - P-P—Point to point (fixed).
  - PR—Press, (mobile).
  - PS—Police, state.
  - RE—Relay, broadcast experimental<sup>#</sup>
  - SH—Ship, harbor.
  - STG—Ship, telegraph.
  - STL—Ship, telephone.
  - TV—Television.
- Blank Unassigned<sup>†</sup>



# What About TELEVISION?

**I**F YOU are hesitating about purchasing a new radio set for this winter's pleasure for fear that Television may be "just around the corner," the following article from "Radio Retailing" may assist you in making up your mind:

"U. S. Leading in World Race to Television"; "Early Success Predicted"; "Now on Verge of Reality." These, and similar glaring headlines, continue to appear with disturbing regularity in the columns of the daily press. Because of their retarding influence on set sales, dealers should once more become familiar with the truth regarding the actual date of the introduction of *practical commercial* television for public purchase and use.

**Television positively will not be available to Mr. and Mrs. John Q. Consumer during the coming radio season. It is extremely doubtful if television receivers will be a factor at any time during 1936.**

Because of the many rumors that this art has reached a state of practical perfection abroad, let us first consider this angle.

In June, Andrew W. Cruse, chief of the United States Department of Commerce, Electrical Equipment Division, sailed for Europe to investigate the status of the visual transmission in England, France and Germany. The day he sailed Mr. Cruse called at the editorial offices of *Radio Retailing* and promised the writer a report of his findings. Mr. Cruse has returned. Here are his summations:

## England

The British Broadcasting Corporation is offering low definition programs of short duration twice weekly, transmitted on 261 meters with accompanying sound on 398 meters, using separate transmitters for each. For television the Baird system is used employing mechanical scanning giving a 30-

line picture, 12 frames per second. These programs, states Mr. Cruse, have an objectionable flicker. The British Postal authorities estimate less than a hundred receivers in use.

High definition television also is being transmitted, but on a purely experimental basis, with no receivers in public service. Television in England is on a strictly experimental basis, with no prospect of public use for another 18 months.

## Germany

The Ministry of Propaganda now provides a two-hour program three nights a week and the Post Office supplies programs in mornings and afternoons as well as alternate evenings. These programs are 180-line, 25 frame, sequentially-scanned transmissions from a 7-meter transmitter in Berlin and are viewed by the public at several places in Berlin. They are proving popular, although nearly all of the program is provided by films. The quality is excellent, says Mr. Cruse.

About 25 ultra-shortwave transmitters with 20-kw. power will be required to cover main population centers, it is estimated, and a survey of locations has been started with a portable 20-kw. transmitter for both sound and television.

No high definition television receivers are being sold, but all principal manufacturers plan to show models at the August radio show, when they will be available for sale.

"Television is moving ahead in Germany on what certainly appears to be a most thorough basis," says Mr. Cruse, "and the cost is being carried by the license fees plus an additional government appropriation."

## France

France is behind England and Germany in television development. The French Ministry of Telegraphs is plan-

ning 180-line transmission in the near future.

"But it is in the other two countries where we may expect some really significant and practical television results within the next two years," concluded Mr. Cruse.

#### And in the United States

Plans for the development of television in the United States have recently been covered in *Radio Retailing*. The most outstanding statement being that of David Sarnoff, president of the Radio Corporation, contained in a recent report to the directors of that company.

RCA has allotted \$1,000,000 for the erection of a television station and the manufacture of receiving equipment for trial reception tests.

In a recent article under the title, "Radio Opens Its Eyes," which appeared in the magazine *This Week* under date of July 7, Mr. Sarnoff quite frankly dwelt upon the many difficulties which yet must be overcome before television will be ready for dealermerchandising and for home use.

Television has emerged from the laboratory and has now entered the field of experimental stage. This does not mean, however, that the commercial stage is "just around the corner." The following statements by Mr. Sarnoff accurately portray the present status of television in the United States:

"We are at a spot in television right now when ill-considered haste might mean the very opposite of speed. Television bears no relation to the present system of sound broadcasting. Television promises to supplement the present broadcasting service by adding sight to sound. It will not supplant or diminish the importance of broadcasting by sound. There is no longer any question about the clarity and sharpness of transmitted images. (Referring to laboratory transmission and reception.)

"However, the mere fact that clear

and pleasing pictures can be transmitted between two groups of engineers working under the most careful scientific control is far from positive evidence that a continuous stream of pictures may be broadcast over 3,000,000 square miles of territory to 130,000,000 people, even if all facilities for doing so were ready, which of course they are not.

"Great improvements unquestionably are ahead in this new art of the radio waves. The very rapidity of recent progress stands as warning that we are far from a reasonably stabilized development. It would be economic folly to set up a nationwide system at tremendous cost, only to find it hopelessly inadequate in a short time.

*"Clearly the next stage of television is proper field demonstration by which the basis may be set for technical standards. A few years from now the story may be—we hope it will be—different."*

## Don't Remain in Ignorance of Radio

Surely you must want to know something of what happens in your set when you turn the dials. For the first time, we believe, the fundamentals of radio have been set forth in clear and easily-understandable language in Mr. Dashiell's

### The Beginner's Story of Radio

In simple words, as nearly non-technical as possible, Mr. Dashiell conducts you through your radio set pointing out each part and explaining its function. This is an excellent book for boys but equally as fascinating for grown-ups.

Bound in leatherette, profusely illustrated, printed in large, clear type, the price is now

Only Fifty Cents  
Postpaid

**The Radex Press Inc.**  
Conneaut, Ohio



## Radio Miscellany

**M**AN power operates the new Peshawar station on the Northwest frontier in India. The batteries are charged by an automobile generator, belt-driven from the rear wheels of specially mounted bicycles. Natives pedal for two hours daily, the energy being converted into news bulletins, talks on hygiene, agriculture, music, native songs and readings from the Koran. (What, no Lady Esther? Ed.)

\* \* \*

The newest alibi of New Zealand listeners, who have been detected operating receivers without licenses, is that they are on relief and cannot afford the fee of twenty-five shillings. Oddly enough, two out of three "pirates" prosecuted recently owned the latest model all-wave receivers imported from the United States.

\* \* \*

Radio operators in aircraft flying over the Valley of Kings in Egypt report that signals disappear in this sector, although communication is good before and after crossing. While some people would have us believe that this is due to occult influences of the dead Pharaohs, the more logical theory holds that disturbances are caused by particles of whirling sand which have become electrified by rubbing against each other.

\* \* \*

The principal Rome transmitter, 1RO, will soon double its present power of 50 KW and may even go as high as 120 KW. Experiments and investigations are now being held to prepare the technical plans, and the work will be completed before the end of the year.

\* \* \*

Receivers may be installed in Paris taxis so long as they are not audible on the street and no extra charge is made to fares.

French State stations have adopted the following official signature tunes as a means of identification: Radio-Paris — *La Victoire En Chantant*; Paris PTT—*Si Le Roin 'Avait Donne Paris*; Bordeaux—*Se Quanto*; Montpellier—*La Marche Des Rois*; Marseilles — *O Magali*; Toulouse — *Les Montagnards*; Lille—*Le P'tit Quinquin*; and Lyons—*Le Bon Roi Dagobert*. So, all we have to do to identify a Frenchman is to hear one of these tunes, if we can hear the station.

\* \* \*

Ravag, Austrian broadcasting control organization, has announced plans for a new *Funkhaus*, or Austrian Radio City, to be erected in Vienna. Costing \$1,250,000, the building will contain eighteen studios and fifteen rooms for rehearsal purposes, in addition to liberal accommodations for other departments. Construction will require two years.

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# 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-6:00 p.m., C-5:00, M-4:00, P-3:00**  
**C — Buck Rogers 25th Century**  
 CKLW WAAB WABC WCAU WFBL  
 WHK WJAS WJSV WKBW WOKO

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

**E-6:45 p.m., C-5:45, M-4:45, P-3:45**  
**C — Concert Miniatures**  
 CFRB CKLW KFAB KFH KGKO  
 KLRA KLZ KMBC KRLL KRNT  
 KSCJ K TSA KTUL KWKH WAAB  
 WABC WBBM WBIG WBNS WBRC  
 WBT WCAO WCCO WCOA WDAE  
 WDBO WFBL WFBM WFEA WGR  
 WGST WHAS WHEC WHK WHP  
 WICC WISN WJSV WKRC WLAC  
 WLZB WMBD WMBG WOKO WORC  
 WOWO WWSJ WSMK WSPD WVVVA

**B — Lowell Thomas**  
 CRCT KDKA WBAL WBZ WBZA  
 WFLA WGAR WHAM WIOD WJAX  
 WJZ WLW WMAL WRVA WSYR

**E-7:00 p.m., C-6:00, M-5:00, P-4:00**  
**C — Myrt and Marge**  
 WABC WADC WBT WCAO WCAU  
 WDAE WDBO WEAN WFBL WGR  
 WJAS WJSV WKRC WNAC WOKO  
 WQAM WSPD WTOC WVVVA

**R — Amos 'n' Andy**  
 CRCT KYW WBen WCAE WCHS  
 WDAF WEEI WFBR WGY WJAR  
 WLW WRC WTAG WTIC

**E-7:15 p.m., C-6:15, M-5:15, P-4:15**  
**C — Patti Chapin**  
 CFRB CKLW KFAB KFH KGKO  
 KLRA KLZ KMBC KRLL KRNT  
 KSCJ K TSA KTUL KWKH WAAB  
 WABC WBBM WBIG WBNS WBRC  
 WBT WCAO WCCO WCOA WDAE  
 WDBO WDNC WFBL WFBM WFEA  
 WGR WGST WHAS WHEC WHK  
 WHP WICC WISN WJSV WKRC  
 WLAC WLZB WMBD WMBG WOKO  
 WORC WOWO WWSJ WSMK WSPD  
 WVVVA

**R — Uncle Ezra**  
 KYW WBen WCAE WCHS WDAF  
 WDAF WEEI WFBR WGY WHO

WHIO WJAR WMAQ WOW WRC  
 WSAI WTAG WTAM

**B — Tony and Gus**  
 KDKA WBAL WBZ WBZA WCKY  
 WENR WFIL WFLA WGAR WHAM  
 WIOD WIS WJAX WJZ WMAL  
 WPTF WSOE WSYR WTAR WNNC

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**  
**C — Singin' Sam**  
 CKLW KFAB KMOX KRNT WABC  
 WADC WBBM WCAO WCAU WCCO  
 WDRC WEAN WFBL WFBM WGR  
 WHAS WHK WJAS WJSV WKRC  
 WNAC WOKO WSPD

**B — Lum and Abner**  
 WBZ WBZA WENR WJZ WSYR

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

**B — Dangerous Paradise**  
 KDKA KOIL KSO KTBS KWK  
 WBAL WBAP WBZ WBZA WENR  
 WFIL WHAM WJZ WLW WMAL  
 WREN WSB WSM WSMB WSYR

**E-8:00 p.m., C-7:00, M-6:00, P-5:00**  
**C — Guy Lombardo and Orchestra**  
 KLRA KWKH WABC WBIG WBT  
 WCAO WCAU WDBJ WDNC WDOD  
 WDRC WDSU WEAN WESG WFBL  
 WGR WHP WIBX WICC WJAS  
 WJSV WLAC WMAS WNAC WNOX  
 WOKO WORC WPG WREC WWSJ  
 WVVVA

**B — Fibber McGee and Molly**  
 KDKA KDYL KFI KGW KHQ KOA  
 KOIL KOMO KPO KSO WBAL  
 WBZ WBZA WCKY WFIL WGAR  
 WHAM WJZ WLS WMAL WMT  
 WREN WSYR

**E-8:30 p.m., C-7:30, M-6:30, P-5:30**  
**C — One Night Stands**  
 CKLW KFAB KMBC WABC WADC  
 WBBM WBT WCAO WCAU WDRC  
 WEAN WFBL WGR WHEC WHK  
 WHP WICC WJAS WJSV WKRC  
 WLZB WMAS WMBG WNAC WOKO  
 WORC WSPD

**R — Voice of Firestone**  
 CFCF CRCT KFYP KPRC KSD  
 KSTP KTBS KTHS KYW WAPI  
 WAVE WBen WCAE WCHS WDAF  
 WDAY WEAF WEBC WEEI WFAA  
 WFRB WFLA WGY WHO WHIO  
 WIBA WIOD WIRE WIS WJAR  
 WJAX WJDX WKY WLW WMAQ  
 WMC WOAI WOW WPTF WRC  
 WRVA WSB WSM WSMB WSOE  
 WTAG WTAM WTAR WTIC  
 WTMJ WWJ WNNC

**B — Evening in Paris**  
 KDKA KOIL KSO KWK WBAL  
 WBZ WBZA WCKY WFIL WGAR  
 WHAM WJZ WLS WMAL WMT  
 WREN WSYR

**E-9:00 p.m., C-8:00, M-7:00, P-6:00**  
**C — Lux Radio Theatre**  
 CFRB CKAC CKLW KDB KERN  
 KFAB KFBC KFYP KFRC KGB  
 KHJ KLRA KLZ KMBC KMJ KMOX  
 KOIN KOMA KRLL KRNT KSL  
 KTRH K TSA KTUL KVI KWG  
 WABC WADC WBBM WBNS WBRC  
 WBT WCAO WCAU WCCO WDAE  
 WDBJ WDRC WDSU WEAN WFBL  
 WFBM WGST WHAS WHEC WHK  
 WICC WISN WJAS WJSV WKBW  
 WKRC WLAC WNAC WNAX WOKO  
 WORC WQAM WREC WSPD

**R — A. & P. Gypsies**  
 KSD KYW WBen WCAE WCHS  
 WDAF WEAF WEEI WGY WHO  
 WHIO WIRE WJAR WMAQ WOW  
 WRC WSAI WTAG WTAM WTIC  
 WWJ

**B — Sinclair Minstrels**  
 KDKA KDYL KFYP KOA KOIL  
 KPRC KSO KSTP KTBS KVOO KWK  
 WBAL WBZ WBZA WDAY WEBC  
 WFAA WFLA WGAR WHAM WIBA  
 WIOD WIS WJAX WJDX WJZ WKY  
 WLS WLW WMAL WMC WMT  
 WOAI WPTF WREN WRVA WSB  
 WSM WSMB WSOE WSYR WTAR  
 WTMJ WNNC

**E-9:30 p.m., C-8:30, M-7:30, P-6:30**  
**R — Grace Moore**  
 KDYL KFI KFSD KFYP KGHL  
 KGIR KGW KHQ KOA KOMO KPO  
 KPRC KSD KSTP KTAO KTBS  
 KVOO KYW WAVE WBen WCAE

## MONDAY (Continued)

WCSE WDAF WDAY WFAF WBCB  
WEEI WFBR WFLA WGY WHO  
WHIO WIBA WIOD WIRE WIS  
WJAR WJAX WJDX WKY WLW  
WMAQ WMC WOAI WOW WPTF  
WRC WRVA WSB WSM WSMB  
WSOC WTAG WTAM WTAR WTMJ  
WWJ WWNC

### B — Princess Pat Players

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

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

#### C — Wayne King's Orchestra

CKLW KDB KERN KFAB KFBK  
KFPY KPRC KGB KHJ KLZ KMBC  
KMJ KMOX KOIN KOL KRLL  
KVI KWG WAAB WABC WADC  
WBMM WBNS WCAO WCAU WCOA  
WDRB WDSU WEAN WFBL WFBM  
WHAS WHK WIBW WJAS WJSV  
WKBW WKRC WOKO WSPD

### R — Contended Program

KDYL KFI KGW KHQ KOA KOMO  
KPO KSD KYW WBNB WCAE  
WCSE WDAF WFAF WEI WFAA  
WFRB WGY WHO WJAR WMAQ  
WOW WRC WSAI WTAG WTAM  
WTIC WWJ

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

#### C — March of Time

CKLW KDB KERN KFAB KFBK  
KFPY KPRC KGB KHJ KLZ KMBC  
KMJ KMOX KOIN KOL KRLL  
KRNT KSL KVI KWG WABC WADC  
WBMM WCAO WCAU WCCO WDRB  
WDSU WEAN WFBL WFBM WGST  
WHAS WHK WJAS WJSV WKBW  
WKRC WNAC WOKO WSPD

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

#### C — Tito Guizar, Tenor

CFRB CKAC CKLW KDB KFBK  
KFH KGB KGKO KHJ KLRA KLZ  
KMBC KOH KOL KOMA KRLL  
KSL KTRH KTSa KVI KVOR KWG  
KWKH WAAB WABC WADC WALA  
WBMM WBIG WBNS WBRB WBT  
WCAO WDAE WDBO WDNB WDOD  
WDRB WFBL WFBM WGR WGST  
WHAS WHK WHP WIBW WIBX  
WISN WJAS WJSV WKBN WKBW  
WKRC WLAC WLZB WMBR WNOX  
WOKO WORC WOWO WPG WQAM  
WREB WSBT WSFA WSMK WSPD  
WTOC

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

#### C — Myrt and Marge

KDB KERN KFAB KFBK KFPY  
KPRC KGB KHJ KLRA KLZ KMBC  
KMJ KMOX KOIN KOL KOMA  
KRLL KSL KTRH KVI KWG  
WALA WBMM WBRB WCCO WDSU  
WFBM WGST WHAS WLAC WREB  
WSFA

#### C — Dance Orchestra

CKAC CKLW KDB KFBK KFH  
KGB KGKO KHJ KLRA KLZ KMBC  
KOH KOL KRLL KSL KTRH KVI  
KVOR KWG KWKH WABC WADC  
WALA WBIG WBNS WBRB WBT  
WCAO WDAE WDBO WDNB WDOD  
WDRB WFBM WGST WHAS WHK  
WHP WIBX WJAS WJSV WKBN  
WKBW WKRC WLAC WLZB WMBR  
WNOX WOKO WORC WOWO WPG  
WQAM WREB WSBT WSFA WSJS  
WSMK WSPD WTOC

### R — Amos 'n' Andy

KDYL KFI KGW KHQ KOA KOMO  
KPO KPRC KSD KTHS WDAF  
WFAA WHIO WKY WMAQ WMC  
WQAM WOW WSB WSM WSMB  
WTAM WWJ

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

#### C — Singin' Sam

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

### B — Tony and Gus

KDYL KFI KPSD KFYR KGHL  
KGIR KGW KHQ KOA KOIL KOMO  
KPO KSO KSTP KTAR KTBS KTHS  
KWK WAPI WAVE WDAY WBCB  
WFAA WIBA WIRE WJDX WMC  
WMT WOAI WREN WSB WSM  
WSMB WTMJ

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

#### C — Dance Orchestra

WABC WBRB WBT WCAO WCAU  
WCOA WDAE WDBJ WDBO WDOD  
WDRB WEAN WFEA WICC WJSV  
WLAC WLZB WMAS WMBG WMBR  
WNAC WNOX WORC WREB WSFA  
WSJS WTOC

### C — One Night Stands

KDB KERN KFBK KFPY KPRC  
KGB KHJ KMJ KMOX KOIN KOL  
KRNT KSCJ KSL KVI KWG WCCO  
WFBM WHAS

### R — Voice of Firestone

KDYL KPSD KGHL KGIR KGU  
KGW KHQ KOA KOMO KPO KTAR

## TUESDAY

### E-6:00 p.m., C-5:00, M-4:00, P-3:00

#### C — Buck Rogers, See Monday

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

#### C — Carson Robison

WAAB WABC WCAU WDRB WEAN  
WFBL WGR WHEC WOKO

### E-6:30 p.m., C-5:30, M-4:30, P-3:30

#### C — Russian Bear Orchestra

KLRA WABC WALA WBIG WBRB  
WBT WCOA WDAE WDBJ WDBO  
WDNB WDOD WDRB WGST WLAC  
WLZB WMAS WMBG WMBR WNOX  
WORC WQAM WREB WSFA WSJS  
WTOC

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

#### B — Lowell Thomas, See Monday

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

#### C — Myrt and Marge, See Monday

### R — Amos 'n' Andy, See Monday

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

#### R — Popeye, The Sailor

KFYR KSD KYW WBNB WCAE  
WCSE WDAF WDAY WFAF WBCB  
WFBH WGY WHIO WIBA WIRE  
WJAR WMAQ WOW WRC WSAI  
WTAG WTAM WWJ

### B — Tony and Gus, See Monday

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

#### C — Kate Smith

CKLW KFAB KMBC KMOX KRLL  
KTRH WABC WADC WBMM WBNS  
WBRB WBT WCAO WCAU WDRB  
WEAN WFBL WFBM WGST WHAS  
WHK WJAS WJSV WKBW WKRC  
WMBG WMBR WNAC WOKO

### 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 — Frank Munn; Bernice Claire

CKLW KFAB KMBC KMOX KRNT  
WABC WADC WBMM WCAO WCAU  
WDRB WEAN WFBL WFBM WGR  
WHAS WHK WJAS WJSV WKRC  
WNAC WOKO WSPD

### R — Leo Reisman's Orchestra

KSD KYW WBNB WCAE WCSE  
WDAF WFAF WEEI WFBR WFLA  
WGY WHIO WIOD WIS WJAR WJAX  
WMAQ WOW WPTF WRC WSOC  
WTAG WTAM WTAR WTIC WWJ  
WWNC

### B — Eno Crime Clues

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

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

#### C — Lawrence Tibbett

CFRB CKAC CKLW KDB KERN  
KFAB KFBK KFH KFPY KPRC  
KGB KGKO KHJ KLRA KLZ KMBC  
KMJ KMOX KOH KOIN KOL KOMA  
KRLL KRNT KSCJ KSL KTRH  
KSLA KTUL KVI KVOR KWG  
KWKH WABC WACO WADC WALA  
WBMM WBIG WBNS WBRB WBT  
WCAO WCAU WCCO WCOA WDAE  
WDBJ WDBO WDNB WDOD WDRB  
WDSU WEAN WFBL WFBM WGST  
WHAS WHK WIBW WISN WJAS  
WJSV WKBW WKRC WLAC WMBG  
WMBR WNAC WNAX WNOX WOC  
WOKO WQAM WREB WSFA WSJS  
WSPD WTOC

### R — Wayne King and Orchestra

KFYR KPRC KSD KSTP KTB  
KV00 KYW WAVE WBNB WCAE  
WCSE WDAF WDAY WFAF WEEI  
WFAA WGY WHO WIBA WIRE  
WJAR WJDX WKY WMAQ WMC  
WOAI WOW WRC WSAI WSB WSMB  
WTAG WTAM WTIC WTMJ WWJ

### B — Edgar Guest in Walcom's Valley

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

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

#### C — Lud Gluskin and Orchestra

CKLW KDB KERN KFAB KFBK  
KFPY KPRC KGB KGKO KHJ  
KLRA KLZ KMBC KMJ KMOX  
KOIN KOL KRLL KSCJ KSL KTRH  
KSLA KTUL KVI KWG WABC  
WADC WBNB WBRB WBT WCAU  
WCCO WDBO WDNB WDRB WDSU  
WEAN WFBL WFBM WHAS WHEC  
WHK WIBX WISN WJAS WJSV  
WKBW WKRC WLAC WNAC WOKO  
WOW WREB WSPD

### R — Ben Bernie and Orchestra

KSD KYW WBNB WCAE WCSE  
WFAF WEEI WFBR WGY WHO  
WJAR WMAQ WOW WRC WSAI  
WTAG WTAM WTIC WWJ

### B — N.T.G. and His Girls

KDKA KDYL KFI KGW KHQ KOA  
KOIL KOMO KPO KSO WBAL  
WBZ WBZA WFIL WGAR WHAM  
WJZ WLS WLW WMAL WMT  
WREN WSYR

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

#### C — Fred Waring and Orchestra

CFRB CKAC CKLW KDB KERN  
KFAB KFBK KFH KFPY KPRC  
KGB KGKO KHJ KLRA KLZ KMBC

## TUESDAY (Continued)

KMJ KMOX KOH KOIN KOL KOMA  
KRLD KSCJ KSL KTSA KVI KVOR  
KWG KWKH WABC WACO WADC  
WALA WBBM WBIG WBNS WBRC  
WBT WCAO WCAU WCCO WCOA  
WDAE WDBJ WDBO WDNC WDOD  
WDRS WDSU WEAN WFBL WFBM  
WGST WHAS WHEC WHK WHP  
WIBX WIBC WICC WISN WJAS  
WJSV WKBN WKBW WKRC WLAC  
WLBZ WMAS WMBD WMBR WNAC  
WNAK WNOX WOC WOKO WORC  
WOWO WPG WQAM WREC WSBT  
WSFA WSJS WSMK WSPD WTCC

**R — Eddie Duchin and Orchestra**  
KDYL KFI KFSD KFYP KHGL  
KGIR KWG KHQ KOA KOMO KPO  
KPRC KSD KSTP KTAR KTBS  
KVOO KYW WAVE WBAP WBEN  
WCAE WCHS WDAF WDAY WFAF  
WEBC WEEL WFBR WFLA WGY  
WHO WHIO WIBA WIOD WIRE  
WIS WJAR WJAX WJDX WKY  
WLW WMAQ WMC WOAI WOW  
WPTF WRC WRVA WSB WSM  
WSMB WSOC WTAG WTAM WTAR  
WTIC WTMJ WWJ WNNC

**B — Helen Hayes, Drama**  
KDKA KDYL KFI KGW KHQ KOA  
KOIL KOMO KSO KWK WAVE  
WBAL WBZ WBZA WCKY WFIL  
WGAR WHAM WJDX WJZ WLS  
WMAL WMC WMT WREN WWSR  
WSM WSMB WSYR

**E-10:00 p.m., C-9:00, M-8:00, P-7:00**  
**R — Swift Studio Party**  
KDYL KFI KFYP KWG KHQ KOA  
KOMO KPO KPRC KSD KSTP  
KTBS KTHS KYW WBAP WBEN  
WCAE WCHS WDAF WDAY WFAF  
WEBC WEEL WFBR WGY WHIO  
WIBA WJAR WKY WLW WMAQ  
WOAI WOW WRC WTAG WTAM  
WTIC WTMJ WWJ

**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**  
CFRB CKLW KDB KFBK KFH  
KFYP KFRC KGB KGKO KHJ  
KLRA KLZ KMBC KMOX KOH KOL  
KOMA KRLD KSL KTRH KTSA  
KTUL KVI KVOR KWG KWKH  
WABC WACO WADC WALA WBIG  
WBNS WBRC WBT WCAO WDAE  
WDBJ WDBO WDNC WDOD WDRS  
WDSU WFBL WFBM WFEA WGST  
WHAS WHEC WHK WHP WIBX  
WIBX WICC WJAS WJSV WKBN  
WKBW WKRC WLAC WLBZ WMAS  
WMBG WMBR WNOX WOKO  
WORC WOWO WPG WQAM WREC  
WSBT WSFA WSJS WSMK WSPD  
WTCC

**R — Amos 'n' Andy, See Monday**  
**C — Myrt and Marge, See Monday**

**E-11:15 p.m., C-10:15, M-9:15, P-8:15**  
**B — Tony and Gus, See Monday**

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**  
**R — Leo Reisman's Orchestra**  
KDYL KFI KFSD KFYP KHGL  
KGIR KWG KHQ KOA KOMO KPO  
KPRC KTAR KTBS WAPI WAVE  
WBAP WDAY WEBC WIBA WIRE  
WJDX WKY WMC WOAI WSB WSM

## WEDNESDAY

**E-6:00 p.m., C-5:00, M-4:00, P-3:00**  
**C — Buck Rogers, See Monday**

**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**  
**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**

**C — Myrt and Marge, See Monday**

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

CKLW KDB KFBK KFH KFPY  
KFRC KGB KGKO KHJ KLRA KLZ  
KMBC KMOX KOH KOL KRLD  
KRNT KSCJ KTRH KTSA KTUL  
KVOR KWG KWKH WABC WACO  
WADC WALA WBBM WBRC WBT  
WCAU WCOA WDAE WDBJ WDBO  
WDNC WDRS WEAN WESG WFBL  
WFBM WGR WGST WHAS WHK  
WIBX WISN WJAS WJSV WKBN  
WKRC WMBG WNAC WNOX  
WOKO WOWO WQAM WREC WSJS  
WSMK WSPD WTCC WVVVA

**R — Uncle Ezra, See Monday**  
**B — Tony and Gus, See Monday**

**E-7:30 p.m., C-6:30, M-5:30, P-4:30**  
**C — Kate Smith, See Tuesday**

**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**

**B — Dangerous Paradise, See Monday**

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

CKLW KFBK KMBC KMOX KRNT  
WABC WADC WBBM WCAO WCAU  
WCCO WDRS WEAN WFBL WFBM  
WGR WHAS WHEC WHK WJAS  
WJSV WKRC WLBZ WNAC WOKO  
WSPD

**R — One Man's Family**  
KDYL KFI KFYP KWG KHQ KOA  
KOMO KPRC KSD KSTP KTAR  
KTBS KTHS KVOO KYW WAPI  
WAVE WBEN WCAE WCHS WDAF  
WDAY WFAF WEBC WEEL WFBR  
WFLA WGY WHO WHIO WIBA  
WIOD WIRE WIS WJAR WJAX  
WJDX WKY WLW WMAQ WMC  
WOAI WOW WPTF WRC WRVA  
WSB WSM WSMB WTAG WTAM  
WTIC WTMJ WWJ WNNC

**B — Life Savers Rendezvous**  
KDKA KOIL KSO WBAL WBZ  
WBZA WCKY WFIL WGAR WJZ  
WLS WMAL WMT WREN WSYR

**E-8:15 p.m., C-7:15, M-6:15, P-5:15**  
**C — Emery Deutsch's Orchestra**

CKLW KDB KFBK KFH KFPY  
KFRC KGB KGKO KHJ KLRA KLZ  
KMBC KMOX KOH KOL KRLD  
KRNT KSCJ KTRH KTSA KTUL  
KVOR KWG KWKH WABC WACO  
WADC WALA WBBM WBT WCAU  
WCOA WDAE WDBJ WDBO WDNC  
WDRS WEAN WESG WFBL WFBM  
WGR WGST WHAS WHK WIBX  
WISN WJAS WJSV WKBN WKRC  
WLAC WMAS WMBG WNAC WNOX  
WOKO WOWO WQAM WREC WSJS  
WSMK WSPD WTCC WVVVA

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

CFRB CKAC CKLW KDB KERN

KFAB KFBK KFH KFPY KFRC  
KGB KHJ KLRA KLZ KMBC KMJ  
KMOX KOIN KOL KOMA KRLD  
KRNT KSCJ KSL KTRH KTSA  
KTUL KVI KVOR KWG KWKH  
WABC WADC WBBM WBNS WBRC  
WBT WCAO WCAU WCCO WDAE  
WDBJ WDBO WDRS WDSU WEAN  
WFBL WFBM WFEA WGST WHAS  
WHEC WHK WHP WIBX WIBX  
WICC WJAS WJSV WKBW WKRC  
WLAC WLBZ WMAS WMBD WMBG  
WMBR WNAC WNAK WNOX WOKO  
WORC WPG WQAM WREC WSPD

**B — House of Glass; Drama**  
KDKA KOIL KSO KWK WBAL  
WBZ WBZA WFIL WFLA WGAR  
WHAM WIOD WIS WJAX WJZ  
WLS WLW WMAL WMT WPTF  
WREN WSOC WSYR WTAR WNNC

**R — Wayne King, See Tuesday**

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

CKAC CKLW KDB KERN KFBK  
KFYP KFRC KGKO KHJ KLRA  
KLZ KMBC KMJ KOIN KOL KSL  
KTUL KVI KWG WAAB WABC  
WADC WALA WBBM WBIG WBNS  
WBRC WBT WCAO WCOA WDAE  
WDBJ WDBO WDNC WDRS WDSU  
WFBL WFBM WFEA WGST WHAS  
WHEC WHP WICC WJAS WJSV  
WKBW WKRC WLAC WLBZ WMBG  
WMBR WNOX WOKO WORC WOWO  
WPG WQAM WREC WSBT WSPD  
WTCC

**R — Town Hall; Fred Allen**  
KSD KYW WBEN WCAE WCHS  
WDAF WFAF WEEL WFBR WGY  
WHO WJAR WLW WMAQ WOW  
WRC WTAG WTAM WTIC WWJ

**B — John Charles Thomas**  
KDKA KDYL KFI KGW KHQ  
KOA KOIL KOMO KPO KSO KWK  
WBAL WBZ WBZA WCKY WENR  
WFIL WGAR WHAM WIRE WJZ  
WLS WMAL WMT WREN WSYR

**E-9:30 p.m., C-8:30, M-7:30, P-6:30**  
**B — Warden Lawes; Drama**

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

**C — Presenting Mark Warnow**

CFRB CKAC CKLW KDB KERN  
KFBK KFYP KFRC KGKO KHJ  
KLRA KLZ KMBC KMJ KOIN KOL  
KSL KTUL KVI KWG WAAB WABC  
WADC WALA WBIG WBNS WBRC  
WBT WCAO WCOA WDAE WDBJ  
WDBO WDNC WDOD WDRS WDSU  
WFBL WFBM WFEA WGST WHAS  
WHEC WHP WIBX WICC WJAS  
WJSV WKBW WKRC WLAC WLBZ  
WMAS WMBG WMBR WNOX WOKO  
WORC WOWO WPG WQAM WREC  
WSBT WSFA WSJS WSMK WSPD  
WTCC

**E-10:00 p.m., C-9:00, M-8:00, P-7:00**  
**R — Log Cabin Musical**

KDYL KFI KGW KHQ KOA KOMO  
KPO KPRC KSD KTBS KTHS KYW  
WBEN WCAE WCHS WDAF WFAF  
WEEL WFAA WGY WHIO WJAR  
WKY WMAQ WOAI WOW WRC  
WSAI WTAG WTAM WTIC WWJ

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**  
**R — Ray Noble and Orchestra**

KDYL KFI KGW KHQ KOA KOMO

## WEDNESDAY (Continued)

KPO KPRC KSD KTBS KTHS KVOO  
KYW WAVE WBNB WCAE WCHS  
WDAF WFAE WVEE WFAA WFBW  
WGY WHO WHIO WIRE WJAR  
WJDX WKY WLW WMAQ WMC  
WMOB WOV WRC WSB WSM  
WSMB WTAG WTAM WTV WTVJ

**C — March of Time, See Monday**

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

**C — Myrt and Marge, See Monday**

**R — Amos 'n' Andy, See Monday**

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

**C — Claude Hopkins' Orchestra**  
CFRB CKAC KDB KFAB KFH  
KFPY KFRC KGB KGKO KHJ  
KLRA KLZ KMBC KOH KOL  
KOMA KRLD KRNT KSCJ KTRH  
KTSa KTUL KVI KVOR KWKH  
WAAB WABC WACO WADC WALA  
WBMB WBIG WBNB WBRW WBT  
WCAO WCCO WCOA WDAE WDBJ  
WDBO WDNC WDOD WDRW WFSB  
WFBM WFEA WGR WGST WHAS  
WHBC WHK WHP WIBW WIBX  
WICC WISN WJAS WJWS WKRC  
WLAC WLWB WMAS WMBD WMBG  
WMBR WNOX WOC WOKO WORC  
WOWO WPG WQAM WREC WSBT  
WSFA WSJS WSMK WSPD WTOC

**B — Tony and Gus, See Monday**

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

**B — House of Glass; Drama**  
KDYL KFI KFYZ KGW KHQ  
KOA KOMO KPO KPRC KTBS  
WAPI WAVE WDAY WFAA WIBA  
WIRE WJDX WKY WMC WQAI  
WSB WSMB WSMW WTMJ

## THURSDAY

**E-6:00 p.m., C-5:00, M-4:00, P-3:00**

**C — Buck Rogers, See Monday**

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

**C — Carson Robison, See Tuesday**

**E-6:30 p.m., C-5:30, M-4:30, P-3:30**

**C — Russian Bear Orchestra**  
KLRA WAAB WABC WALA WBIG  
WBRW WCOA WDAE WDBJ WDBO  
WDNC WDOD WDRW WGST WLAC  
WLWB WMAS WMBG WMBR WORC  
WQAM WREC WSFA WSJS WTOC

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

**B — Lowell Thomas, See Monday**

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

**C — Myrt and Marge, See Monday**

**R — Amos 'n' Andy, See Monday**

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

**C — Buddy Clark, Singer**

CFRB CKLW KFAB KFH KGB  
KLRA KLZ KMBC KMOX KRLD  
KRNT KSCJ KSL KTSa KTUL  
KWG KWKH WAAB WABC WACO  
WBMB WBIG WBNB WBRW WBT  
WCOA WDAE WDBO WDNC WDOD  
WDRW WDSU WFBL WFBM WFEA  
WGR WGST WHAS WHBC WHP  
WIBX WJWS WKRC WLAC WLWB  
WMBD WMBG WMBR WOKO  
WORC WOWO WQAM WREC WSJS  
WSMK WSPD WVVV

**B — Tony and Gus, See Monday**

**R — Popeye, See Tuesday**

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

**C — Kate Smith, See Tuesday**

**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 — Harv and Esther**

CKLW KFAB KMBC KMOX KRNT  
WABC WADC WBBM WBNB WCAO  
WCAO WCCO WDRW WEAN WFBL  
WFBM WGR WHAS WHK WJAS  
WJWS WKRC WNAC WOKO WSMK  
WSPD

**R — Rudy Vallee's Variety Hour**

CFCF CRCT KDYL KFI KFYZ  
KGW KHQ KOA KOMO KPO KSD  
KSTP KTAR KYW WBNB WCAE  
WCHS WDAF WDAY WFAE WJBC  
WVEE WFBW WGY WHO WJAR  
WLW WMAQ WOW WRC WTAG  
WTAM WTV WTMJ WTVJ

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

**C — Atwater Kent Concert**

CKAC CKLW KDB KERN KFBK  
KFPY KFRC KGB KHJ KLZ KMBC  
KMJ KMOX KOIN KOL KOMA  
KRLD KRNT KSL KTSa KVI KWG  
WABC WADC WBBM WBT WCAO  
WCAO WCCO WDAE WDBO WDRW  
WDSU WEAN WFBL WFBM WGR  
WGST WHAS WHK WJAS WJWS  
WKRC WLAC WLWB WMBR WNAC  
WOKO WQAM WREC WSPD

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

**C — Charles Hanson Towne**

CFRB CKAC CKLW KDB KERN  
KFAB KFBK KFH KFPY KFRC  
KGB KGKO KHJ KLRA KMJ  
KMOX KOH KOIN KOL KOMA  
KRLD KSCJ KSL KTRH KTSa  
KTUL KVI KVOR KWG KWKH  
WABC WACO WADC WALA WBBM  
WBIG WBNB WBRW WBT WCAO  
WCAO WCCO WCOA WDAE WDBJ  
WDBO WDNC WDOD WDRW WDSU  
WFBM WFBM WFEA WGST WHAS  
WHBC WHK WHP WIBW WIBX  
WICC WISN WJAS WJWS WKBW  
WKRC WLAC WLWB WMAS  
WMBD WMBR WNAX WNOX  
WOC WOKO WORC WOWO WPG  
WQAM WREC WSBT WSFA WSJS  
WSMK WSPD WTOC

**R — Maxwell House Show Boat**

KDYL KFI KFSD KFYZ KGHL  
KGRW KGW KHQ KOA KOMO  
KPO KPRC KSD KSTP KTAR  
KTBS KYW WAPI WAVE WBPB  
WBNB WCAE WCHS WDAF WDAY  
WFAE WFBM WVEE WFBW WFLA  
WGY WHO WHIO WJAS WJDX  
WJWS WMAQ WMC WQAI WOV  
WPTF WRC WRVA WSAI WSM  
WSM WSMB WSOC WTAG WTAM  
WTAR WTV WTMJ WTVJ WVVV

**B — Death Valley Days**

DKKA KOIL KSO KWK WBAL  
WJZ WBZA WFIL WGAR WHAM  
WJZ WLS WLW WMAL WMT  
WREN WSYR

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

**C — Manhattan Choir**

CKLW KFAB KFBK KFH KGB  
KGKO KHJ KLRA KLZ KMBC  
KMOX KOL KOMA KRLD KRNT  
KSCJ KTRH KTSa KTUL KVI  
KWG KWKH WAAB WABC WACO

WADC WALA WBBM WBIG WBNB  
WBRW WBT WCAO WCAO WCCO  
WDAE WDBJ WDBO WDNC WDOD  
WDRW WDSU WFBL WFBM WFEA  
WGST WHAS WHBC WHK WHP  
WIBW WIBX WICC WISN WJAS  
WJWS WKBW WKWB WKRC WLAC  
WLWB WMAS WMBD WMBG  
WMBR WNAC WNAX WOKO WORC  
WOWO WQAM WRC WSFA WSJS  
WSMK WSPD WTOC

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

**C — Marty May, Comedian**

CFRB CKAC CKLW KDB KERN  
KFAB KFBK KFH KFPY KFRC  
KGB KGKO KHJ KLRA KMJ  
KMOX KOH KOIN KOL KOMA  
KRLD KSCJ KSL KTRH KTSa  
KTUL KVI KVOR KWG KWKH  
WABC WACO WADC WALA WBBM  
WBIG WBNB WBRW WBT WCAO  
WCAO WCCO WCOA WDAE WDBJ  
WDBO WDNC WDOD WDRW WDSU  
WFBM WFBM WFEA WGST WHAS  
WHBC WHK WHP WIBW WIBX  
WICC WISN WJAS WJWS WKBW  
WKRC WLAC WLWB WMAS  
WMBD WMBR WNAX WNOX WOC  
WOKO WORC WOWO WPG WQAM  
WREC WSBT WSFA WSJS WSMK  
WSPD WTOC

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

**C — Horace Heidt's Orchestra**

CKLW KDB KERN KFAB KFBK  
KFH KFPY KFRC KGB KHJ KLRA  
KLZ KMBC KMJ KMOX KOIN  
KOL KRLD KRNT KSL KTRH  
KTSa KTUL KVI KWG WABC  
WBBM WBNB WBRW WBT WCAO  
WCAO WCCO WDBO WDRW  
WDSU WFBL WFBM WGST WHAS  
WHK WISN WJAS WJWS WKBW  
WKRC WLAC WMBG WNAC  
WNAX WOC WOKO WQAM WREC

**R — Paul Whiteman's Music Hall**

CFRF CRCT KDYL KFI KFYZ  
KGW KHQ KOA KOMO KPO KPRC  
KSD KSTP KTAR KTBS KTHS  
KYW WAPI WAVE WBPB WBNB  
WCAE WCHS WDAF WDAY WFAE  
WFBM WVEE WFBW WFLA WGY  
WHO WJAS WJDX WJWS WJAX  
WJAX WJDX WJWS WJWS WMAQ  
WMC WQAI WOV WPTF WRC  
WRVA WSB WSM WSMB WTVJ  
WTAM WTV WTMJ WTVJ WVVV

**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 — Dance Orchestra**

CFRB CKAC CKLW KDB KERN  
KFAB KFBK KFH KFPY KFRC  
KGB KGKO KHJ KLRA KMBC  
KMJ KMOX KOH KOIN KOL KOMA  
KRLD KSCJ KSL KTRH KTSa  
KTUL KVI KVOR KWG KWKH  
WABC WACO WADC WALA WBBM  
WBIG WBNB WBRW WBT WCAO  
WCAO WCCO WCOA WDAE WDBJ  
WDBO WDOD WDRW WDSU WFBL  
WFBM WFEA WGST WHAS WHBC  
WHK WHP WIBW WIBX WICC  
WISN WJAS WJWS WKBW WKRC  
WLAC WLWB WMAS WMBD  
WMBR WNAX WNOX WOC WOKO  
WORC WOWO WPG WQAM WREC  
WSBT WSFA WSJS WSMK WSPD  
WTOC

## THURSDAY (Continued)

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

### C — Dance Orchestra

CFRB CKAC CKLW KDB KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KOH KOIN KOMA KRLD KSL KTRH KTSa KTUL KVOR KWG KWKH WAAB WABC WACO WADC WALA WBIG WBNS WBRC WBT WCAO WCOA WDAE WDBJ WDBO WDNC WDDO WDRC WDSU WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WJAS WJSV WKBN WKBW WKRC WLAC WLBZ WMAS WMBG WMBR WNAC WNOX WOKO WORC WOWO WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC

R — Amos 'n' Andy, See Monday

C — Myrt and Marge, See Monday

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

B — Tony and Gus, See Monday

## FRIDAY

E-6:00 p.m., C-5:00, M-4:00, P-3:00

### C — H. V. Kattenborn

CKLW KDB KERN KFAB KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KOH KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSa KTUL KVI KVOR KWG KWKH WAAB WABC WACO WADC WALA WBBM WBIG WBNS WBRC WCAO WCOA WDAE WDBJ WDBO WDNC WDDO WDSU WEAN WESG WFBL WFBM WFEA WGST WHAS WHEC WHP WIBW WIBX WISN WJAS WJSV WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WNOX WOC WOKO WORC WOWO WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC

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

C — Bobby Benson, See Monday

E-6:30 p.m., C-5:30, M-4:30, P-3:30

### C — Allan Leaffer's Orchestra

KLRA WABC WALA WBIG WBRC WCOA WDAE WDBJ WDBO WDNC WDDO WDRC WDSU WGST WLAC WLBZ WMBR WORC WQAM WREC WSFA WSJS WTOC

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

B — Lowell Thomas, See Monday

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

C — Myrt and Marge, See Monday

R — Amos 'n' Andy, See Monday

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

R — Uncle Ezra, See Monday

C — Tony and Gus, See Monday

C — Lazy Dan, Minstrel Man

KFAB WABC WADC WBBM WCAO WCAU WDRC WEAN WGR WJAS WJSV WKRC WOKO WSPD

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

B — Dangerous Paradise, See Monday

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

### C — Johnny Green and Orchestra

WABC WCAU WDRC WEAN WFBL WGR WHEC WICC WLBZ WMAS WNAC WOKO WORC

### R — Cities Service Concert

CRCT KDYL KOA KPRC KSD KSTP KTBS KTHS KVOO KYW WBAP WBEN WCAE WCSH WDAF WDAF WDAF WEEI WFAA WFBR WGY WHO WHIO WIOD WJAR WKY WMAQ WAIW WOW WRC WRVA WSAI WTAG WTAM WTIC WTMJ WWJ

### B — Irene Rich; Dramatic Sketch

KDKA KDYL KFI KGW KHQ KOIL KOMO KPO KSO KTAR WAVE WBAL WBZ WBZA WGR WHAM WIRE WJZ WLS WMAL WMC WMT WREN WSB WSM WSyr

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

### C — Broadway Varieties

CKLW KALE KDB KERN KFAB KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KOMA KRNT KSL KWG WABC WADC WBNS WBRC WBT WCAO WCAU WCCO WDRC WDSU WEAN WFBL WFBM WGR WGST WHAS WHK WJAS WJSV WKRC WMAS WMBG WNAC WOKO WSPD

### B — Ruth Etting; Red Nichols

KDKA KDYL KFI KFSD KGW KHQ KOIL KOMO KPO KSO KTAR KWK WBAL WBZ WBZA WFL WGR WHAM WJZ WLS WLW WMAL WMT WREN WSyr

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

### C — Hollywood Hotel

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

### R — Frank Munn; Vivienne Segal

KSD KYW WBEN WCAE WCSH WDAF WDAF WEEI WFBR WGY WJAR WJW WMAQ WOW WRC WTAG WTAM WWJ

### B — Palmolive Beauty Box Theatre

CFRC CRCT KDKA KFYR KOIL KPRC KSO KSTP KTBS KWK WAPI WAVE WBAL WBZ WBZA WCKY WDAY WECB WENR WFAA WFL WFLA WGR WHAM WIBA WIOD WIRE WIS WJAX WJDX WJZ WKY WLS WMAL WMC WMT WOJ WPTF WREN WRVA WSB WSM WSMB WSOC WSyr WTAR WTMJ WWNC

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

### R — True Story Court

KSD KYW WBEN WCAE WCSH WDAF WEEI WFBR 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

### C — Richard Himber and Orchestra

CKLW KFAB KFH KMBC KMOX WAAB WABC WADC WBBM WBNS WBT WCAO WCAU WCCO WDRC WFBL WFBM WGST WHAS WHK

WJAS WJSV WKBW WKRC WOKO WSBT WSPD

### R — Compana's First Nighter

KDYL KFI KGW KHQ KOA KOMO KPO KPRC KSD KSTP KYW WBEN WCAE WCSH WDAF WDAF WECB WEEI WFAA WFBR WGF WHO WJAR WKY WLW WMAQ WMC WOAI WOW WRC WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ

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 — Myrt and Marge, See Monday

R — Amos 'n' Andy, See Monday

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

B — Tony and Gus, See Monday

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

### C — Luigi Romanelli's Orchestra

CKLW KFAB KFBK KGKO KLZ KRLD KRNT KSCJ KTRH WABC WACO WBBM WDBJ WDBO WDDO WFBM WGST WHP WISN WJAS WLAC WMBD WNAC WNOX WOC WORC WOWO WSMK

### B — Palmolive Beauty Box Theatre

KDYL KFI KFSD KGHL KGIR KGW KHQ KOA KOMO KPO KTAR WLW

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

### C — Richard Himber's Orchestra

KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMJ KOIN KOL KVI KWG

## SATURDAY

E-6:00 p.m., C-5:00, M-4:00, P-3:00

### C — Frederic William Wile

CKLW KDB KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KOH KOIN KOL KOMA KRLD KSCJ KSL KTSa KTUL KVI KVOR KWG KWKH WAAB WABC WACO WADC WBBM WBIG WBRC WBT WCAO WCAU WDAE WDBJ WDBO WDNC WDDO WDRC WESG WFBL WFBM WGST WHAS WHEC WHK WHP WIBW WIBX WISN WJSV WKBW WLAC WLBZ WMBD WMBG WMBR WNOX WOC WOKO WORC WOWO WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWVA

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

### C — Saundra Brown

CKLW KDB KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KOH KOIN KOL KOMA KRLD KSCJ KSL KTSa KTUL KVI KVOR KWG KWKH WAAB WABC WACO WADC WBBM WBIG WBRC WBT WCAO WCAU WDAE WDBJ WDBO WDNC WDDO WDRC WESG WFBL WFBM WGST WHAS WHEC WHK WHP WIBW WIBX WISN WJSV WKBW WLAC WLBZ WMBD WMBG WMBR WNOX WOC WOKO WORC WOWO WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWVA

E-6:30 p.m., C-5:30, M-4:30, P-3:30

### C — Allan Leaffer's Orchestra

CFRB CKAC CKLW KDB KERN KFAB KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KOH KOIN KOL KOMA KRLD KSCJ KSL KTSa KTUL KVI KVOR KWG

## SATURDAY (Continued)

KWKH WAAB WABC WACO WADC  
WBBM WBIG WBNS WBRC WCAO  
WCAU WCOA WDAE WDBJ WDBO  
WDNC WDOO WDRC WEAN WESG  
WFBL WFEA WGST WHAS WHEC  
WHK WHP WIBW WIBX WICC  
WISN WJAS WJSV WKWB WKRC  
WLAC WLWB WMAS WMBG WMBR  
WNOX WOC WOKO WORC WOWO  
WQAM WREC WSBT WSFA WSJS  
WSMK WSPD WTOC WVVVA

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

**C — Atlantic Family; Fran Parker**  
WABC WADC WDAE WDBJ WBNS WBT  
WCAO WCAU WDAE WDBJ WDBO  
WDNC WEAN WFBL WHEC WHK  
WHP WICC WJAS WKBN WKWB  
WMAS WMBG WMBR WNAC  
WOKO WORC WPG WQAM WSJS  
WTOC

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

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

**R — Briggs Sport Review**  
KDYL KFYR KOA KSD KSTP  
KYW WAPI WAVE WBEN WCAE  
WCBS WDAY WFAE WIBC WEEL  
WFBR WFLA WGY WHIO WIBA  
WIOD WIRE WIS WJAR WJAX  
WJDX WMAQ WMC WOW WPTF  
WRC WRVA WSAI WSB WSM  
WSMB WSOC WTAG WTAM WTAR  
WTIC WWJ WNNC

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

**R — Lennie Hayton and Orchestra**  
KDYL KFI KFSD KFYR KGHL  
KGRG KGU KGW KHQ KOA KOMO  
KPO KPRC KSD KSTP KTAR  
KTBS KTHS KVOO KYW WAPI  
WAVE WBAP WBEN WCAE WCBS  
WDAF WDAY WFAE WIBC WEEL  
WFAA WFBF WFLA WGY WHO  
WHIO WIBA WIOD WIRE WIS  
WJAR WJAX WJDX WKY WLW  
WMAQ WMC WOA W W WPTF  
WRC WRVA WSB WSM WSMB  
WSOC WTAG WTAM WTAR WTIC  
WTMJ WWJ WNNC

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

**R — G-Men; Drama**  
KDYL KFI KFSD KFYR KGHL  
KGRG KGU KGW KHQ KOA KOMO  
KPO KPRC KSD KSTP KTAR  
KTBS KYW WAPI WAVE WBEN  
WCAE WCBS WDAF WDAY WFAE  
WIBC WEEL WFBR WFLA WGY  
WHO WHIO WIBA WIOD WIRE  
WIS WJAR WJAX WJDX WKY  
WLW WMAQ WMC WOA W W WPTF  
WRC WRVA WSB WSM WSMB  
WSOC WTAG WTAM WTAR WTIC  
WTMJ WWJ WNNC

**C — Chesterfield, See Wednesday**

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

**C — California Melodies**  
CFRB CKLW KDB KFAB KFH  
KFRC KGKO KHJ KLRA KLZ  
KOH KOL KOMA KRLD KSCJ KSL  
KTSA KVI KVOR KWG KWKH  
WAAB WABC WACO WADC WBBM  
WBIG WBNS WBRC WCAU WCCO  
WCOA WDBJ WDBO WDNC WDOO  
WFBF WFBM WFEA WGST WHAS  
WHEC WHK WHP WIBX WICC  
WISN WJSV WKRC WLAC WLWB  
WMAS WMBR WNOX WOC WOKO

WORC WOWO WQAM WREC WSFA  
WSJS WSMK WSPD WTOC

**R — Al Johnson; Victor Young**

KDYL KFI KFSD KFYR KGHL  
KGRG KGU KGW KHQ KOA KOMO  
KPO KSD KSTP KTAR KYW WBEN  
WCAE WCBS WDAF WDAY WFAE  
WIBC WEEL WFLA WGY WHO  
WHIO WIBA WIOD WIS WJAR  
WJAX WLW WMAQ WOW WPTF  
WRC WRVA WSOC WTAG WTAM  
WTAR WTIC WTMJ WWJ WNNC

**B — National Barn Dance**

KDKA KOIL KSO KWK WBAL  
WBZ WBZA WFIL WGAR WHAM  
WIRE WJZ WLS WMAL WMT  
WREN WYSR

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

**C — Dance Orchestra**  
CFRB CKAC CKLW KDB KFBK  
KFH KFPY KFRC KGB KGKO  
KHJ KLZ KMOX KOH KOIN KOL  
KRLD KSCJ KSL KTSa KTUL  
KVI KVOR KWG KWKH WAAB  
WABC WACO WADC WBBM WBIG  
WBNS WBRC WCAU WCCO WDBJ  
WDBO WDNC WFBF WFBM WGST  
WHAS WHEC WHK WHP WIBW  
WIBX WISN WJAS WJSV WKRC  
WLAC WLWB WMAS WMBD WMBR  
WNOX WOC WORC WPG WREC  
WSFA WSJS WSMK WSPD WTOC  
WVVVA

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

**C — Dance Orchestra**  
CKLW KDB KERN KFBK KFH  
KFPY KFRC KGB KGKO KLRA  
KLZ KMBC KMOX KOH KOIN  
KOL KOMA KRLD KTSa KTUL  
KVI KVOR KWG KWKH WABC  
WACO WADC WBBM WBIG WBNS  
WBRC WBT WCAO WCAU WCOA  
WDAE WDBJ WDBO WDNC WDOO  
WDRC WFBF WFBM WFEA WGST  
WHAS WHEC WHK WHP WIBW  
WIBX WICC WJAS WJSV WKWB  
WKRC WLAC WLWB WMAS WMBR  
WNOX WOC WORC WPG WQAM  
WREC WSBT WSFA WSJS WSMK  
WSPD WTOC WVVVA

**B — National Barn Dance**

KDYL KFI KFYR KGW KHQ  
KOA KOMO KPO KPRC KSTP  
KTBS KTHS KVOO WAVE WBAP  
WDAY WIBC WIBA WJDX WKY  
WLW WMC WOA WSB WSMB

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

**C — Dance Orchestra**  
CFRB CKAC CKLW KDB KERN  
KFAB KFBK KFH KFPY KFRC  
KGKO KHJ KLRA KOH KOL KOMA  
KRLD KSCJ KSL KTSa KTUL  
KVOR KWKH WABC WACO WADC  
WBBM WBIG WBNS WBRC WBT  
WCAO WCAU WCCO WCOA WDAE  
WDBJ WDBO WDNC WDOO WDRC  
WEAN WFBL WFBM WFEA WGST  
WHAS WHEC WHK WHP WIBW  
WIBX WICC WISN WJAS WJSV  
WKWB WKRC WLAC WLWB WMAS  
WMBD WNAC WNAX WNOX WOKO  
WORC WPG WQAM WREC WSBT  
WSFA WSJS WSMK WSPD WTOC  
WVVVA

**E-12:00 p.m., C-11:00, M-10:00, P-9:00**

**C — Dance Orchestra**  
CKAC CKLW KDB KERN KFBK  
KFH KFPY KGB KGKO KLRA KLZ  
KOH KOIN KOL KOMA KRLD

KSL KTSa KTUL KVI KVOR KWG  
KWKH WABC WACO WADC WBNS  
WBRC WBT WCAO WCAU WCOA  
WDBJ WDBO WDNC WDOO WEAN  
WFBL WFBM WHAS WHK WHP  
WIBX WICC WKWB WKRC WLAC  
WMBR WNAC WNOX WOC WOKO  
WQAM WREC WSBT WSFA WSJS  
WSMK WSPD WTOC

## SUNDAY

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

**C — Salt Lake Tabernacle Choir**  
CKLW KFAB KFBK KFH KGKO  
KLRA KLZ KOMA KRLD KRNT  
KSCJ KSL KTRH KTSa KTUL  
KWKH WACO WADC WALA WBIG  
WBNS WBRC WBT WCAO WCCO  
WCOA WDAE WDBJ WDBO WDNC  
WDOO WDRC WDSU WESG WFBL  
WFEA WGST WHP WIBW WIBX  
WISN WJAS WJSV WKBN WLAC  
WLWB WMAS WMBD WMBR WNAC  
WNAK WOC WOKO WORC WOWO  
WPG WQAM WREC WSFA WSJS  
WSMK WSPD WTOC

**R — Major Bowes' Capitol Family**

KDYL KFYR KOA KPRC KSTP  
KTBS KVOO WAPI WCAE WDAF  
WDAY WFAE WIBC WFAA WFBF  
WFLA WGY WHO WHIO WJAR  
WJAX WKY WMAQ WMC WOA  
WRC WRVA WSAI WSMB WTAG  
WTAM WNNC

**E-12:00 a.m., C-11:00, M-10:00, P-9:00**

**B — Tastyest Matinee**  
KDKA WBAL WBZ WBZA WCKY  
WJZ WMAL WYSR

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

**C — Musical Footnotes**  
CKLW KMBC KMOX KRNT WABC  
WBBM WBNS WCAU WCCO WGR  
WHAS WHK WJAS WJSV WKRC  
WNAC

**B — Radio City Music Hall**

CFPC CROC KDKA KDYL KFI  
KFYR KGO KGW KHQ KOA KOIL  
KOMO KPRC KSO KVOO WAPI  
WBAL WBZ WBZA WCKY WDAY  
WIBC WJAR WHAM WIS WJDX  
WJZ WKY WMAL WOA W W WREN  
WSMB WYSR WNNC

**E-1:30 p.m., C-12:30, M-11:30, P-10:30**

**C — Eddie Dunstetter at Organ**  
CFRB CKAC CKLW KFAB KFH  
KGKO KLRA KLZ KMBC KOH  
KOMA KRLD KRNT KSCJ KTRH  
KTSa KVOR KWKH WABC WACO  
WADC WALA WBIG WBNS WBRC  
WBT WCAO WCCO WCOA WDAE  
WDBJ WDBO WDNC WDOO WDRC  
WESG WFBF WFBM WGR WGST  
WHAS WHEC WHP WIBW WIBX  
WISN WJAS WJSV WKBN WKRC  
WLAC WLWB WMBD WMBR WOC  
WOKO WORC WPG WQAM WREC  
WSBT WSFA WSJS WSMK WSPD  
WTOC WVVVA

**E-1:45 p.m., C-12:45, M-11:45, P-10:45**

**C — Sisters of the Skillet**  
CKLW KDB KERN KFAB KFBK  
KFPY KFRC KGB KHJ KLZ KMBC  
KMJ KMOX KOIN KOL KOMA  
KRLD KSL KTRH KTSa KVI KWG  
WABC WADC WBBM WBNS WBRC  
WBT WCAO WCAU WCCO WDBJ  
WDRC WDSU WEAN WFBM WGST  
WHAS WHEC WHK WIBX WICC



# SUNDAY (Continued)

WJAS WJSV WKWB WKRC WNAC  
WNOX WOKO WORC WREC WTCC

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

**C—Johnny Augustine and Orchestra**  
CFRB CKAC CKLW KDB KERN  
KFBK KFBK KFH KFPY KFRC  
KGB KGKO KHJ KLRA KMBC  
KMOX KOH KOL KOMA KRLD  
KRNT KSCJ KTRH K TSA KVI  
KVOR KWG KWKH WABC WADC  
WALA WBIG WBNS WBRC WBT  
WCAO WCAU WCCO WCOA WDAE  
WDBJ WDOD WEAN WESG WFBL  
WFBM WGR WGST WHAS WHEC  
WHK WHP WIBW WIBX WICC  
WJAS WJSV WKBN WKWB WKRC  
WLAC WLWB WMAS WMBD WMBR  
WNAC WOC WOKO WORC WOWO  
WPG WQAM WREC WSBT WSFA  
WSJS WSMK WSPD WTOG WVVVA

**E-2:45 p.m., C-1:45, M-12:45, P-11:45**

**C—Eton Boys, Quartet**  
CKLW KERN KFPY KFRC KGB  
KGKO KHJ KLZ KMBC KMJ  
KMOX KOIN KOL KOMA KRLD  
KRNT KSCJ KSL KVI KVOR KWG  
WABC WACO WADC WBBM WBNS  
WBRC WBT WCAO WCAU WCCO  
WDBJ WDOD WDBC WDSU WEAN  
WESG WFBL WFBM WGST WHAS  
WHEC WHK WIBW WIBX WJAS  
WJSV WKBN WKWB WKRC WLAC  
WMBG WNAC WOKO WOWO  
WSPD

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

**C—Symphonic Hour, Howard Barlow**  
CFRB CKAC CKLW KERN KFBK  
KFH KFPY KFRC KGB KGKO  
KHJ KLRA KLZ KMBC KMOX  
KOH KOL KOMA KRLD KRNT  
KSCJ KSL KTRH K TSA KVI  
KVOR KWG KWKH WABC WACO WADC  
WALA WBBM WBNS WBRC WBT  
WCAO WCO WDAE WDBJ WDOD  
WDNC WDOD WDBC WDSU WEAN  
WESG WFBL WFBM WFEA WGR  
WGST WHAS WHEC WHK WHP  
WIBW WIBX WICC WISN WJAS  
WKBN WKWB WKRC WLAC WLWB  
WMAS WMBD WMBG WMBR  
WNOX WOC WOKO WORC WPG  
WQAM WREC WSBT WSFA WSJS  
WSMK WSPD WTOG

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

**R—Penthouse Serenade**  
KSD KYW WBEN WCAE WCHS  
WDAF WFAF WEEI WFBR WGY  
WHK WHIO WJAR WMAQ WOV  
WRC WSAI WTAG WTAM WTIC  
WVWJ

**E-4:00 p.m., C-3:00, M-2:00, P-1:00**

**C—St. Louis Parade**  
CFRB CKAC CKLW KDB KERN  
KFBK KFH KFPY KGB KGKO  
KHJ KLRA KLZ KMBC KMOX  
KOH KOIN KOL KOMA KRLD  
KRNT KSCJ KSL KTRH K TSA  
KVOR KWG KWKH WAAB WABC  
WACO WADC WALA WBBM WBIG  
WBNS WBRC WBT WCAO WCCO  
WDAE WDBJ WDOD WDNC WDOD  
WDBC WDSU WEAN WESG WFBL  
WFBM WFEA WGR WGST WHAS  
WHEC WHK WHP WIBW WIBX  
WICC WISN WJAS WKBN WKWB  
WKRC WLAC WLWB WMAS WMBD  
WMBG WMBR WNOX WOC WOKO

WORC WPG WQAM WREC WSBT  
WSEA WSJS WSMK WSPD WTCC

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

**C—Abe Lyman's Orchestra**  
CFRB CKLW KFAB KMBC KMOX  
KRNT WAAB WABC WADC WBBM  
WCAO WCAU WCCO WDBC WEAN  
WFBL WFBM WGR WHAS WHEC  
WHK WJAS WJSV WKRC WOKO  
WSPD

**R—Rhythm Symphony**

KDYL KFI KFSD KFYR KGW  
KHQ KOA KOMO KPO KPRC  
KSTP KTBS KTHS KVOO KYW  
WAPI WAVE WABW WBNB WCAE  
WCSH WDAF WFAF WFBM WEEI  
WFBR WFLA WGY WHO WHIO  
WIBA WIOD WJAR WJAX WJDX  
WKY WMAQ WMC WOAI WOW  
WPTF WRC WRVA WSAI WSB  
WSM WSMB WTAG WTAM WTIC  
WTMJ WVVJ

**B—Roses and Drums**

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

**E-5:30 p.m., C-4:30, M-3:30, P-2:30**

**C—Frank Crummit-Julia Sanderson**  
CKLW KFH KMBC KMOX KOMA  
KTUL WAB WABC WADC WBNS  
WCAO WCAU WDBC WDSU WEAN  
WFBL WFBM WGR WHAS WHEC  
WHK WIBX WICC WJSV WMAS  
WOKO WORC WSPD WVVVA

**R—Dream Drama**

KYW WBEN WCAE WCHS WDAF  
WFAF WEEI WFBR WGY WJAR  
WMAQ WRC WSAI WTAG WTAM  
WTIC WVVJ

**B—Bob Becker's Dog Chats**

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

**E-5:45 p.m., C-4:45, M-3:45, P-2:45**

**B—Gabriel Heatter, Talks**  
KDKA KOIL KSO WBAL WBZ  
WBZA WENR WFIL WGAR WHAM  
WJZ WMAL WREN WSYR

**E-6:00 p.m., C-5:00, M-4:00, P-3:00**

**C—National Amateur Night**  
CFRB CKLW KERN KFAB KFBK  
KFPY KFRC KGB KHJ KLZ KMBC  
KMJ KMOX KOIN KOL KRLD  
KSL KVI KWG WAAB WABC  
WBBM WBNS WBT WCAO WCAU  
WCCO WDBC WDSU WFBL WFBM  
WGST WHAS WHEC WHK WJAS  
WJSV WKWB WKRC WOKO WOWO  
WVRC

**E-6:30 p.m., C-5:30, M-4:30, P-3:30**

**C—Smiling Ed McConnell**  
CKLW KMOX WAAB WABC WBBM  
WCAU WCCO WDBC WEAN WFBL  
WHAS WJAS WJSV WKWB WKRC

**B—Compana's Grand Hotel**

KDKA KDYL KFI KGW KHQ KOA  
KOIL KOMO KPO KSO KSTP KWK  
WBAL WBZ WBZA WCKY WBCB  
WENR WHAM WJZ WMAL WMT  
WREN WSYR

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

**C—Voice of Experience**  
CKLW KMBC KMOX WAAB WABC  
WADC WBBM WBT WCAO WCAU  
WCCO WDBC WEAN WFBL WFBM

WHAS WHEC WHK WJAS WKWB  
WKRC WSPD WVVVA

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

**C—Alexander Woolcott**  
KDB KERN KFBK KFPY KFRC  
KGB KHJ KLZ KMBC KMOX KOIN  
KOL KSL KVI KWG WABC WBBM  
WCAO WCAU WCCO WDBC WFBL  
WGR WHAS WHK WJAS WJSV  
WKRC WNAC WOKO

**B—Jack Benny; Johnny Green**

KDKA KFYR KOIL KFRC KSO  
KSTP KTBS KTHS KVOO KWK  
WAPI WAVE WBAL WBAW WBZ  
WBZA WCKY WDAY WBCB WENR  
WFIL WFLA WGAR WHAM WIBA  
WIOD WIRE WJAX WJZ WKY  
WMAL WMC WMT WOAI WPTF  
WREN WRVA WSB WSMB WSMC  
WSOC WSYR WTAR WTMJ

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

**R—Fireside Recitals**  
KSD KYW WBEN WCAE WCHS  
WDAF WFAF WFBR WGY WHIO  
WIRE WJAR WMAQ WOV WRC  
WSAI WTAG WTAM WTIC WVVJ

**B—Sidewalk Interviews**

KDKA KOIL KSO KWK WBAL  
WBZ WBZA WCKY WGAR WHAM  
WJZ WLS WMAL WMT WREN  
WSYR

**C—Gulf Headliners; Phil Baker**

CKLW KLRA KRLD KTRH K TSA  
KWKH WABC WACO WADC WALA  
WBIG WBNS WBRC WBT WCAO  
WCAU WCOA WDAE WDBJ WDOD  
WDNC WDOD WDBC WDSU WEAN  
WESG WFBL WFBM WFEA WGR  
WGST WHAS WHEC WHK WHP  
WICC WJAS WJSV WKBN WKRC  
WLAC WLWB WMAS WMBR WNAC  
WNOX WOKO WORC WOWO WQAM  
WREC WSBT WSFA WSJS WSMK  
WSPD WTOG WVVVA

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

**R—Sunset Dreams; Morin Sisters**  
CFRC KSD KYW WBEN WCAE  
WCHS WFAF WFBR WGY WHO  
WHIO WIRE WJAR WLW WMAQ  
WRC WTAG WTAM WTIC WVVJ

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

**R—Major Bowes' Amateur Hour**  
CFRC CRCT KDYL KFI KFYR  
KGW KHQ KOA KOMO KPO KPRC  
KDB KSTP KTAR KTHS KVOO  
KYW WAPI WAVE WBNB WBZ  
WBZA WCAE WCHS WDAF WDAY  
WFAF WFBM WFEA WFBR WFLA  
WGY WHO WIOD WIS WJAR  
WJAX WJDX WKY WLW WMAQ  
WMC WOAI WOV WPTF WRC  
WRVA WSB WSM WSMB WTAG  
WTAM WTAR WTIC WTMJ WVVJ  
WVNC

**C—Eddie Cantor**

CKLW KDB KERN KFAB KFBK  
KFPY KFRC KGB KHJ KLRA KLZ  
KMBC KMJ KMOX KOIN KOL  
KOMA KRLD KSL KTRH K TSA  
KTUL KVI KWG WAAB WABC  
WADC WBBM WBRC WBT WCAO  
WCAU WCCO WDBC WDSU WEAN  
WFBL WFBM WGR WGST WHAS  
WHK WJAS WJSV WKRC WOKO  
WOWO WSPD

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

**C—America's Hour, Drama**  
CFRB CKAC: CKLW KDB KERN  
KFAB KFBK KFH KFPY KFRC



## SUNDAY (Continued)

KGB KGKO KHJ KLRA KLZ KMBC  
 KMJ KMOX KOH KOIN KOL KOMA  
 KRLD KRNT KSCJ KSL KTRH  
 KTSa KTUL KVI KFOR KWG  
 KWKH WABC WACO WADC WALA  
 WBIG WBNS WBRC WBT WCAO  
 WCAU WCOB WCOA WDAE WDBJ  
 WDBO WDNC WDOD WDRC WDSU  
 WEAN WFBL WFBR WFEA WGR  
 WGST WHAS WHBC WHK WHP  
 WIBW WIBX WICC WISN WJAS  
 WJSV WKBN WKRC WLAC WLBB  
 WMAS WMBD WMBR WNAC  
 WNAK WNOX WOC WOKO WORC  
 WOWO WQAM WREC WSBT WSFA  
 WSJS WSMK WSPD WTOG

**R — Manhattan Merry-G-ound**  
 CFCF KDYL KFI KFJR KWG  
 KHQ KOA KOMO KPO KSD KSTP  
 KYW WBBN WCAE WCSH WDAF  
 WDAY WEAF WEBC WFBR WGY  
 WHO WHIO WIBA WJAR WMAQ  
 WOW WRC WSAI WTAG WTAM  
 WTC WTMJ WWJ

**B — Charles Previn and Orchestra**  
 KDKA KOIL KSO KWK WBAL  
 WBZ WBZA WENR WFIL WGAR  
 WHAM WJZ WLW WMAL WMT  
 WREN WSYR

**E-9:30 p.m., C-8:30, M-7:30, P-6:30**  
**R — Album of Familiar Music**  
 CFCF CRCT KDYL KFI KFJR  
 KWG KHQ KOA KOMO KPO KPRC  
 KSD KSTP KTBS KVOO KYW  
 WAVE WBBN WCAE WCSH WDAF  
 WDAY WEAF WEBC WEEI WFAA  
 WFBR WFLA WGY WHO WHIO

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

**B — Walter Winchell**  
 KDKA KOIL KSO KWK WBAL  
 WBZ WBZA WENR WFIL WGAR  
 WHAM WJZ WLW WMAL WMT  
 WREN WSYR

**E-10:00 p.m., C-9:00, M-8:00, P-7:00**  
**C — Wayne King's Orchestra**  
 CKLW KDB KERN KFAB KFBK  
 KFPY KFRC KGB KHJ KLZ KMBC  
 KMJ KMOX KOIN KOL KRLD  
 KSL KVI KWG WAAB WABC  
 WADC WBBM WBNS WCAO WCAU  
 WCCO WDRC WDSU WFBL WFBR  
 WHAS WHK WIBW WJAS WJSV  
 WKBW WKRC WSPD

**E-10:30 p.m., C-9:30, M-8:30, P-7:30**  
**C — Bonay Venuta, Songs**  
 CFBK CRAC CKLW KDB KERN  
 KFH KFPY KFRC KGB KGKO  
 KHJ KLRA KLZ KMBC KMOX  
 KOH KOL KOMA KRLD KRNT  
 KSCJ KTRH KTSa KTUL KVI  
 KFOR KWG KWKH WAAB WABC  
 WADC WALA WBIG WBNS WDAE  
 WBT WCAO WCAU WCCO WDAE  
 WDBJ WDBO WDNC WDOD WFL  
 WFEA WGST WHAS WHBC WHP  
 WHP WIBW WIBX WISN WJAS  
 WJSV WKBN WKBW WKRC WLAC  
 WLBB WMAS WMBD WMBG  
 WMBR WNOX WOC WORC WQAM  
 WREC WSBT WSFA WSMK WSPD  
 WTOG

**E-11:00 p.m., C-10:00, M-9:00, P-8:00**  
**C — Musical Mirror**  
 CKAC CKLW KFAB KFBK KFH  
 KGKO KHJ KLRA KLZ KMBC  
 KMOX KOH KOL KOMA KRLD  
 KRNT KSCJ KSL KTRH KTSa  
 KTUL KFOR KWG WABC WACO  
 WADC WALA WBBM WBIG WBNS  
 WBRC WBT WCAO WCCO WCOA  
 WDAE WDBJ WDBO WDNC WDOD  
 WDRC WDSU WFBL WGST WHEC  
 WHK WHP WIBX WISN WJSV  
 WKBW WKRC WLAC WMAS WMBD  
 WMBG WMBR WNAX WOC WOKO  
 WPG WQAM WREC WSBT WSFA  
 WSJS WSMK WSPD WTOG

**R — Sunset Dreams; Morin Sisters**  
 KDYL KFI KFSD KGW KHQ KOA  
 KOMO KPO KPRC KTR KTB  
 KTHS WBAF WDAF WYK WQAI

**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  
 KTR KTB KTHS WAPI WAVE  
 WBAF WJDX WMC WSB WSM  
 WMSB

**E-11:30 p.m., C-10:30, M-9:30, P-8:30**  
**B — Jack Benny; Johnny Green**  
 KDYL KFI KFSD KGHL KGIR  
 KGW KGW KHQ KOA KOMO KPO  
 KTB

**E-12:00 p.m., C-11:00, M-10:00, P-9:00**  
**B — Charles Previn and Orchestra**  
 KDYL KFI KGW KHQ KOA KOMO  
 KPO

## CLASSIFIED INDEX TO CHAIN PROGRAMS

*Time in Eastern Standard*

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

*These features are correct at the time of going to press,  
but changes are being made daily.*

### CONCERTS

Atwater Kent Concert, 8:30 p.m. Thursday, C  
 Concert Miniatures, 6:45 p.m. Monday, C  
 Radio City Music Hall, 12:30 p.m. Sunday, B  
 Symphonic Hour, 3:00 p.m. Sunday, C

### DANCE BANDS

Victor Arden, 8:00 p.m. Thurs.; 8:30 p.m. Fri., C  
 Johnny Augustine, 2:00 p.m. Sunday, C  
 Ben Bernie, 9:00 p.m. Tuesday, R  
 Emery Deutsch, 8:15 p.m. Wednesday, C  
 Eddie Duchin, 9:30 p.m. Tuesday, R  
 Lud Gluskin, 9:00 p.m. Tuesday, C  
 Al Goodman, 9:00 and 11:30 p.m. Friday, B  
 Johnny Green, 8:00 p.m. Friday, C; 7:00 and 11:30  
 p.m. Sunday, B  
 Lennie Hayton, 8:00 p.m. Saturday, R  
 Horace Heidt, 10:00 p.m. Thursday, C  
 Richard Himber, 10:00 and 12:30 p.m. Friday, C  
 Johnny Johnson, 12:00 noon Sunday, B  
 Wayne King, 10:00 p.m. Sun. and Mon., C; 8:30 p.m.  
 Tues. and Wed., R  
 Allan Leifer, 6:30 p.m. Friday and Saturday, C  
 Guy Lombardo, 8:00 p.m. Monday, C  
 Abe Lyman, 5:00 p.m. Sun., C; 9:00 p.m. Friday, R  
 Red Nichols, 8:30 p.m. Friday, B  
 Ray Noble, 10:30 p.m. Wednesday, R  
 Charles Previn, 9:00 and 12:00 p.m. Sunday, B  
 Leo Reisman, 8:00 and 11:30 p.m. Tuesday, R

Harry Salter, 10:00 p.m. Wednesday, R  
 Rudy Vallee, 8:00 p.m. Thursday, R  
 Fred Waring, 9:30 p.m. Tuesday, C  
 Paul Whiteman, 10:00 p.m. Thursday, R  
 Victor Young, 9:30 p.m. Saturday, R

### DIALOG

Fred Allen, 9:00 p.m. Wednesday, R  
 Amos 'n' Andy, 7:00 and 11:00 p.m. daily except Sat.  
 and Sun., R  
 Phil Baker, 7:30 p.m. Sunday, C  
 Jack Benny, 7:00 and 11:30 p.m. Sunday, B  
 Burns and Allen, 8:30 p.m. Wednesday, C  
 Eddie Cantor, 8:00 p.m. Sunday, C  
 Fibber McGee and Molly, 8:00 p.m. Monday, B  
 Harv and Esther, 8:00 p.m. Thursday, C  
 Lum and Abner, 7:30 p.m. daily, except Sat. and Sun., B  
 Marty May, 9:30 p.m. Thursday, C  
 Piek and Pat, 8:30 and 11:30 p.m. Monday, C  
 Popeye, The Sailor, 7:15 p.m. Tues., Thurs. and Sat., R  
 Sisters of the Skillet, 1:45 p.m. Sunday, C  
 Stoopnagle and Budd, 9:30 p.m. Tuesday, C

### DRAMA

America's Hour, 9:00 p.m. Sunday, C  
 Dangerous Paradise, 7:45 p.m. Mon., Wed. and Fri., B  
 Death Valley Days, 9:00 p.m. Thursday, B  
 Dream Drama, 5:30 p.m. Sunday, R  
 Eno Crime Clues, 8:00 p.m. Tuesday, B

First Nighter, 10:00 p.m. Friday, R  
 G-Men, 9:00 p.m. Saturday, R  
 Grand Hotel, 6:30 p.m. Sunday, B  
 Helen Hayes, 9:30 p.m. Tuesday, B  
 House of Glass, 8:30 and 11:30 p.m. Wednesday, B  
 Warden Lawes, 9:30 p.m. Wednesday, B  
 Lux Theatre, 9:00 p.m. Monday, C  
 Myrrt and Marge, 7:00 and 11:00 p.m. daily, except Sat. and Sun., C  
 One Man's Family, 8:00 p.m. Wednesday, R  
 Princess Pat Players, 9:30 p.m. Monday, B  
 Irene Rich, 8:00 p.m. Friday, B  
 Buck Rogers, 8:00 p.m. Mon., Tues., Wed., Thurs., C  
 Roses and Drums, 5:00 p.m. Sunday, B  
 Tony and Gus, 7:15 and 11:15 p.m. daily, except Sat. and Sun., B  
 True Story Court, 9:30 p.m. Friday, R  
 Welcome Valley, 8:30 p.m. Tuesday, B

#### POPULAR PROGRAMS

A. and P. Gypsies, 9:00 p.m. Monday, R  
 Atlantic Family, 7:00 p.m. Saturday, C  
 Album of Familiar Music, 9:30 p.m. Sunday, R  
 Major Bowes, 11:30 a.m. and 8:00 p.m. Sunday, R  
 Broadway Varieties, 8:30 p.m. Friday, C  
 California Melodies, 9:30 p.m. Saturday, C  
 Chesterfield Program, 9:00 p.m. Wed. and Sat., C  
 Cities Service Concert, 8:00 p.m. Friday, R  
 Contented Program, 10:00 p.m. Monday, R  
 Evening in Paris, 8:30 p.m. Monday, B  
 Fireside Recitals, 7:30 p.m. Sunday, R  
 Fleischmann Variety, 8:00 p.m. Thursday, R  
 Gulf Headliners, 7:30 p.m. Sunday, C  
 Hollywood Hotel, 9:00 p.m. Friday, C  
 Life Savers Rendezvous, 8:00 p.m. Wednesday, B  
 Manhattan Merry-Go-Round, 9:00 p.m. Sunday, R  
 March of Time, 10:30 p.m. daily, except Sat. and Sun., C  
 Maxwell House Show Boat, 9:00 p.m. Thursday, R  
 Musical Footnotes, 12:30 p.m. Sunday, C  
 National Amateur Night, 6:00 p.m. Sunday, C  
 National Barn Dance, 9:30 and 11:00 p.m. Saturday, B  
 N.T.G. and His Girls, 9:00 p.m. Tuesday, B  
 Palmolive Beauty Box, 9:00 and 11:30 p.m. Friday, B  
 Penthouse Serenade, 3:30 p.m. Sunday, R  
 Rhythm Symphony, 5:00 p.m. Sunday, R  
 St. Louis Parade, 4:00 p.m. Sunday, C  
 Sinclair Minstrels, 9:00 p.m. Monday, B  
 Swift Studio Party, 10:00 p.m. Tuesday, R  
 Town Hall Tonight, 9:00 p.m. Wednesday, R  
 Uncle Ezra, 7:15 p.m. Mon., Wed., Fri., R  
 Voice of Firestone, 8:30 and 11:30 p.m. Monday, R

#### SINGERS

Michael Bartlett, 7:00 and 11:30 p.m. Sunday, B  
 Sandra Brown, 6:15 p.m. Saturday, C  
 Patti Chaplin, 7:15 p.m. Monday, C  
 Bernice Clair, 5:00 p.m. Sunday; 8:00 p.m. Tuesday, C  
 Buddy Clark, 7:15 p.m. Thursday, C  
 Crumit-Sanderson, 5:30 p.m. Sunday, C  
 Vivian Della Chiesa, 12:30 p.m. Sunday, C  
 Jessica Dragonette, 8:00 p.m. Friday, R  
 Eton Boys, 2:45 p.m. Sunday, C  
 Ruth Etting, 8:30 p.m. Friday, B  
 Foursome, 8:00 p.m. Wednesday, C  
 Helen Jepson, 10:00 p.m. Thursday, R  
 Al Jolson, 9:30 p.m. Saturday, R  
 Frances Langford, 9:00 p.m. Friday, C  
 Lazy Dan, 7:15 p.m. Friday, C  
 Elizabeth Lennox, 8:30 p.m. Friday, C  
 Nino Martini, 9:00 p.m. Saturday, C  
 Grace Moore, 9:30 p.m. Monday, R  
 Morin Sisters, 7:45 and 11:00 p.m. Sunday, R  
 Frank Munn, 8:00 p.m. Tuesday, C; 9:30 p.m. Sunday, and 9:00 p.m. Friday, R  
 Frank Parker, 7:00 p.m. Saturday, C  
 Lily Pons, 9:00 p.m. Wednesday, C  
 Dick Powell, 9:00 p.m. Friday, C  
 Carson Robison, 6:15 p.m. Tues. and Thurs., C  
 Lanny Ross, 9:00 p.m. Thursday, R  
 Vivienne Segal, 9:30 p.m. Sunday and 9:00 p.m. Friday, R  
 Singin' Sam, 7:30 and 11:15 p.m. Monday, C  
 Smiling Ed McConnell, 6:30 p.m. Sunday, C  
 Kate Smith, 7:30 p.m. Tues., Wed. and Thurs., C  
 Conrad Thibault, 10:00 p.m. Wed.; 9:00 p.m. Thursday, R  
 John Charles Thomas, 9:00 p.m. Wednesday, B  
 Lawrence Tibbett, 8:30 p.m. Tuesday, C  
 Benay Venuta, 10:30 p.m. Sunday, C  
 Virginia Verrill, 8:00 p.m. Friday, C

#### TALKS

Bob Becker's Dog Chats, 5:30 p.m. Sunday, B  
 Boake Carter, 7:45 p.m. daily, except Sat. and Sun., C  
 Thornton Fisher, 7:45 p.m. Saturday, R  
 Gabriel Heatter, 5:45 p.m., Sunday, B  
 H. V. Kaitenborn, 6:00 p.m. Friday, C  
 Sidewalk Interviews, 7:30 p.m. Sunday, B  
 Lowell Thomas, 6:45 p.m. daily, except Sat. and Sun., B  
 Charles Hanson Towne, 9:00 p.m. Thurs., C  
 Voice of Experience, 6:45 p.m. Sunday, C  
 Frederic William Wile, 6:00 p.m. Saturday, C  
 Walter Winchell, 9:30 and 11:15 p.m. Sunday, B  
 Alexander Woolcott, 7:00 p.m. Sunday, C

When a fire broke out in a village near Rome, there was no fire department or telephone to summon aid. A radio amateur in the village sent out a message which was picked up by a listener in Copenhagen, who promptly telephoned the authorities in Rome.

\* \* \*

More stations are planned for Portugal. A 20-KW short wave transmitter will be erected in Lisbon for overseas work; national relay stations at Oporto and Algarve, using 20 KW and 5 KW respectively, will be built; and additional relays in the Azores and at Madeira will be

constructed. Also, the power of *Emissora Nacional* will be jumped to 100-KW.

\* \* \*

Spanish authorities are planning a new network of stations. The new long-wave National transmitter at Madrid will have a power of 150-KW. Six medium-wave stations, of from 20 to 60 KW, will be erected at Madrid, Barcelona, Valencia, Seville, La Coruna and Vizcaya. Relay stations will be built at Tenerife (Canary Islands), Murcia and Oviedo. The former will use 10 KW, while the latter two will have 5 KW.

*North American B. C. Stations by Frequencies with Sunday's Time on the Air*

XEFW	ak	250	....	Tampico, Tams.	C—11:00-14:00
XEX	ak	125	....	Monterrey, N. L.	C—.....
XFA	z	5	....	Aguascalientes, Ags.	C—.....

**1320 kilocycles (227.1)**

CMOX	ak	250	....	Havana, Cuba	E—10:00-12:00; 20:00-23:00
KGHF	ak	500	....	Pueblo, Colo.	M—10:00-16:00
KGMB	ak	1000	C	Honolulu, T. H.	L—8:30-22:00
KID	ae	250	(.5)	Idaho Falls, Idaho	M—9:00-21:00
KRNT	ak	500	C (1)	Des Moines, Iowa	C—7:30-24:00
WADC	ae	1000	C (2.5)	Akron, Ohio	E—8:00-24:00
WORK	ak	1000	....	York, Pa.	E—10:45-18:00
WSMB	ak	500	N	New Orleans, La.	C—7:00-24:00

**1330 kilocycles (225.4)**

CMHK	z	250	....	Cruces, Cuba	E—9:30-12:00; 13:00-15:30
KGB	ag	1000	C (2.5)	San Diego, Calif.	P—8:00-24:00
KMO	ak	250	....	Tacoma, Wash.	P—6:45-23:00
KSCJ	aj	1000	1C (2.5)	Sioux City, Iowa	C—8:00-23:00
WDRG	ae	1000	C (5)	Hartford, Conn.	E—8:45-24:00
WSAI	ak	1000	R (2.5)	Cincinnati, Ohio	E—8:00-24:00
WTAQ	ae	1000	1	Eau Claire, Wis.	C—10:30-17:45

**1340 kilocycles (223.7)**

CMJL	z	100	....	Camaguey, Cuba	E—.....
KGDY	ak	250	D	Huron, S. D.	C—9:00-15:00
KGIR	ak	1000	N (2.5)	Butte, Mont.	M—9:00-23:00
KGNO	ak	250	....	Dodge City, Kans.	C—10:30-19:00
WCOA	ak	500	C	Pensacola, Fla.	C—8:00-23:00
WFEA	ae	500	C (1)	Manchester, N. H.	E—8:45-23:00
WSPD	ae	1000	C (2.5)	Toledo, Ohio	E—8:00-1:00
XFD	z	350	....	Jalapa, Ver.	C—.....

**1350 kilocycles (222.1)**

CMCA	z	250	....	Havana, Cuba	E—11:00-14:00; 21:00-22:00
KIDO	ak	1000	(2.5)	Boise, Idaho	M—10:30-16:30
KWK	ak	1000	B (5)	St. Louis, Mo.	C—7:00-24:00
WAWZ	ae	500	1 (1)	Zarephath, N. J.	E—6:00-9:00; 11:00-12:30; 15:00-16:30; 19:20-30
WBNX	ae	250	1	New York, N. Y.	E—12:30-15:00; 16:30-18:00

**1360 kilocycles (220.4)**

CMJH	dk	100	....	Ciego de Avila, Cuba	E—8:00-9:30; 10:00-14:00; 17:00-22:00
KCRC	ak	250	....	Enid, Okla.	C—10:00-18:00
KGFR	ak	1000	....	Long Beach, Calif.	P—7:00-23:00
WGSC	ak	500	(1)	Charleston, S. C.	E—9:00-15:30; 18:00-21:30
WBFL	ak	1000	C (5)	Syracuse, N. Y.	E—9:00-1:00
WGES	ae	500	1	Chicago, Ill.	C—8:00-17:00; 23:00-1:00
WQBC	ak	1000	D	Vicksburg, Miss.	C—10:00-11:00; 12:00-14:00
WSBT	ak	500	1	South Bend, Ind.	C—8:00-24:00

**1370 kilocycles (218.8)**

CKCW	ak	100	F	Moncton, N. B.	A—8:00-9:30; 12:00-14:00; 17:00-19:30
CMGE	ak	50	....	Cardenas, Cuba	L—Silent
KAST	ak	100	D	Astoria, Ore.	P—Silent
KELD	z	100	P	El Dorado, Ark.	C—.....
KERN	ak	100	....	Bakersfield, Calif.	P—8:00-24:00
KFGQ	ak	100	....	Boone, Iowa	C—8:30-9:00; 14:30-16:00; 19:30-21:00; 23-24
KFJM	ak	100	(.25)	Grand Forks, N. D.	C—7:00-21:00
KFJZ	ae	100	....	Fort Worth, Texas	C—7:00-23:00
KFRO	ak	100	D	Longview, Texas	C—8:00-ss
KGAR	ae	100	(.25)	Tucson, Ariz.	M—9:30-21:00
KGFG	bk	100	....	Oklahoma City, Ok.	C—8:00-11:00; 15:00-18:00; 19:00-24:00
KGFL	ak	100	4	Roswell, N. M.	M—15:00-17:30
KGKL	ak	100	(.25)	San Angelo, Texas	C—8:45-14:00
KICA	ak	100	4	Clovis, N. M.	M—11:00-16:30
KIUP	ak	100	P	Durango, Colo.	M—10:00-16:00
KLUF	z	100	(.25)	Galveston, Texas	C—.....
KMAC	ak	100	5	San Antonio, Texas	C—7:00-9:00; 11-12:30; 14-16; 18-20; 22-00:30
KONO	ak	100	5	San Antonio, Texas	C—9:00-11:00; 12:30-14:00; 16-18; 20-22

### 1290 kilocycles (232.4)

KDYL	ak	1000	N	Salt Lake City, Utah	M-6:20-1:00
KLCN	ak	100	D	Blytheville, Ark.	C-8:00-18:00
KTRH	ak	1000	C (5)	Houston, Texas	C-8:00-24:00
WEBC	ae	1000	N (5)	Superior, Wis.	C-8:00-24:00
WJAS	ak	1000	C (2.5)	Pittsburgh, Pa.	E-9:00-24:00
WNBZ	z	100	D	Saranac Lake, N. Y.	E-.....
WNEL	ak	500	....	San Juan, P. R.	E-9:00-14:00; 17:00-23:00

### 1300 kilocycles (230.6)

HIZ	z	10	....	Santo Domingo, D.R.	E-.....
KALE	ak	500	3C	Portland, Ore.	P-9:00-22:30
KFAC	ak	1000	....	Los Angeles, Calif.	P-8:00-23:00
KFH	ak	1000	C	Wichita, Kans.	C-8:00-24:00
KFJR	ag	500	3	Portland, Ore.	P-Silent
WBBR	ae	1000	1	Brooklyn, N. Y.	E-8:00-11:00; 15:00-20:00
WEVD	ak	1000	1	New York, N. Y.	E-11:00-15:00; 20:00-21:00; 22-23; 0-1
WEAB	ae	1000	1	New York, N. Y.	E-21:00-22:00; 23:00-24:00
WFBC	ak	1000	(5)	Greenville, S. C.	E-8:30-22:30
WHAZ	ae	500	1	Troy, N. Y.	E-Silent
WIOD	ak	1000	N	Miami, Fla.	E-8:00-24:00

### 1310 kilocycles (228.9)

CHCK	ak	50	....	Charlottetown, P.E.I.	A-11:00-13:30; 16:00-17:00; 19:00-20:30
CJLS	ak	100	....	Yarmouth, N. S.	A-Silent
KCKV	ak	100	F	Quebec, Que.	E-12:00-23:00
KCRJ	ak	100	D	Jerome, Ariz.	M-Silent
KFPL	dk	100	(.25)	Dublin, Texas	C-18:30-21:15
KFXR	ak	100	(.25)	Oklahoma City, Ok.	C-9:00-22:00
KFYO	dk	100	(.25)	Lubbock, Texas	C-8:00-13:00; 16:00-19:00
KGCX	ak	100	(.25)	Wolf Point, Mont.	M-11:30-13:45
KGEZ	aj	100	....	Kalispell, Mont.	M-9:00-14:00
KGFV	ak	100	....	Kearney, Neb.	C-8:30-12:00
KINY	ak	100	....	Juneau, Alaska	L-13:00-17:00
KIT	ak	100	(.25)	Yakima, Wash.	P-9:00-22:00
KIUJ	ak	100	....	Santa Fe, N. Mex.	M-10:30-16:30
KMED	ck	100	(.25)	Medford, Ore.	P-10:00-12:00
KRMD	ak	100	....	Shreveport, La.	C-7:00-21:00
KROC	z	100	P	Rochester, Minn.	C-.....
KTSM	ak	100	....	El Paso, Texas	M-8:00-9:30; 13:00-18:00
KVOL	ak	100	....	Lafayette, La.	C-12:00-21:00
KXRO	ak	100	....	Aberdeen, Wash.	P-10:00-19:00
WAML	ak	100	....	Laurel, Miss.	C-12:00-19:00
WBEO	ae	100	....	Marquette, Mich.	C-9:00-13:30
WBOW	ak	100	(.25)	Terre Haute, Ind.	C-8:30-22:00
WBRE	ak	100	....	Wilkes Barre, Pa.	E-10:00-22:30
WCLS	ak	100	....	Joliet, Ill.	C-9:00-20:30
WCMJ	ak	100	D	Ashland, Ky.	E-9:30-24:00
WDAH	ak	100	S	El Paso, Texas	M-9:30-12:00; 19:30-21:00
WEBR	aeH	100	(.25)	Buffalo, N. Y.	E-8:30-24:00
WEXL	ak	50	....	Royal Oak, Mich.	E-8:30-24:00
WFBG	ae	100	3	Altoona, Pa.	E-10:45-16:30; 18:15-22:00
WFDK	mk	100	....	Flint, Mich.	E-9:00-24:00
WGH	aj	100	(.25)	Newport News, Va.	E-8:30-22:30
WHAT	z	100	4	Philadelphia, Pa.	E-7:00-10:15; 20:00-24:00
WISC	z	100	PD	Milwaukee, Wis.	C-.....
WJAC	ae	100	3	Johnstown, Pa.	E-8:00-10:30; 16:30-18:15
WLBC	ak	50	6 (1)	Muncie, Ind.	C-8:30-16:30
WLNH	ak	100	....	Laconia, N. H.	E-.....
WMBO	ak	100	....	Auburn, N. Y.	E-10:30-14:00; 18:00-20:30
WMFF	ak	100	D (.25)	Plattsburg, N. Y.	E-10:30-16:00
WNBH	ak	100	(.25) C	New Bedford, Mass.	E-8:45-23:30
WOL	ak	100	....	Washington, D. C.	E-9:00-24:00
WRAW	ak	100	....	Reading, Pa.	E-18:30-20:30
WRQL	ak	100	(.25)	Knoxville, Tenn.	C-8:30-23:00
WSAJ	ae	100	....	Grove City, Pa.	E-16:30-17:30
WSGN	ak	100	(.25)	Birmingham, Ala.	C-7:00-21:00
WSJS	ak	100	C	Winston-Salem, N.C.	E-8:00-24:00
WTAL	ak	100	P	Tallahassee, Fla.	E-7:00-23:00
WTFL	ce	100	4	Philadelphia, Pa.	E-12:30-15:00; 17:00-20:00
WTJS	ak	100	(.25)	Jackson, Tenn.	C-10:00-15:30
WTRC	ak	50	6 (1)	Elkhart, Ind.	C-11:00-12:00; 17:00-21:00
XEAJ	z	15	....	Oaxaca, Oax.	C-.....
XECW	z	10	....	Mexico City, D. F.	C-.....

1230 kilocycles (243.8)

GJOC	ak	100	F	Lethbridge, Alta.	M-9:00-22:30
CMCB	ak	150	.....	Havana, Cuba	E-10:00-23:00
KGBX	ak	250	(.5)	Springfield, Mo.	C-7:00-13:00; 16:00-23:00
KGGM	ak	500	(.5)	Albuquerque, N. M.	M-11:00-18:00
RVA	ak	1000	C	San Francisco, Calif.	P-8:00-23:00
WFBM	ak	1000	C	Indianapolis, Ind.	C-7:00-24:00
WNAC	ak	1000	C (2.5)	Boston, Mass.	E-8:00-1:00
XEPJ	ak	100	.....	Monterrey, N. L.	C-Silent

1240 kilocycles (241.8)

CJGB	ak	1000	F	Sydney, N. S.	A-15:00-24:00
CMHB	z	50	I	San Spiritus, Cuba	.....
KGCU	ak	250	I	Mandari, N. D.	M-12:00-17:00; 18:45-21:00
KLPM	ak	250	I	Minot, N. D.	C-9:00-11:45; 13:30-14:30; 17:00-20:00
KTAT	ak	1000	.....	Twin Falls, Idaho	C-7:00-23:30
KTFI	ak	1000	.....	Fort Worth, Texas	M-10:00-23:15
WRAO	ak	1000	.....	San Juan, P. R.	A-11:00-24:00
WXYZ	ak	1000	B	Detroit, Mich.	E-9:00-24:00
XEAL	z	100	.....	Mexico City, D. F.	C-13:00-16:00
XEKL	z	500	.....	Leon, Guan.	.....
XELA	z	50	.....	Saltillo, Coah.	.....

1250 kilocycles (239.9)

CMGC	ak	250	1255	Havana, Cuba	A-8:00-12:00; 18:00-24:00
KROC	ak	1000	.....	Sancti Spiritus, Cuba	E-8:00-14:00; 19:00-22:00
WCAJ	ah	1000	C (2.5)	Northfield, Minn.	P-6:00-24:00
WPSD	ak	1000	C	New Orleans, La.	C-8:15-9:30; 15:00-16:00; 19:00-20:00
WHBI	ak	1000	C (2.5)	Newark, N. J.	C-8:00-24:00
WHLB	ak	1000	2	Minneapolis, Minn.	E-8:00-10:00; 12:30-18:30; 21:00-24:00
WNEV	ak	1000	2 (2.5)	Minneapolis, Minn.	C-Silent
WTCN	ak	1000	2 (5)	Minneapolis, Minn.	C-9:30-15:00; 16:00-19:00; 20:00-24:00

1260 kilocycles (238.0)

GFRN	ak	100	.....	Edmonton, Alta.	M-11:00-22:00
KGYO	ak	1000	B (2.5)	Council Bluffs, Iowa	M-10:00-20:00
KOIL	ak	1000	D	Port Arthur, Texas	C-8:00-1:00
KPAC	ak	500	D	Weslaco, Texas	C-7:00-ss
KRGV	ak	500	.....	Weslaco, Texas	C-7:00-21:00
KVOA	ak	1000	D	Fayetteville, Ark.	C-10:00-18:00
KVOA	ak	500	R	Tucson, Ariz.	M-7:00-9:00; 11:00-15:00; 18:00-21:00
WHIO	ak	1000	D	Dayton, Ohio	E-8:00-24:00
WNBX	ak	1000	D	Springfield, Vr.	E-10:30-12:00
WTOC	ak	1000	C	Savannah, Ga.	E-8:00-24:00

1270 kilocycles (236.1)

CMHD	dk	250	.....	Caibarien, Cuba	E-8:00-21:00
HIX	ak	1000	.....	Santo Domingo, D.R.	E-8:00-21:00
KGCA	ak	100	2D	Decorah, Iowa	C-10:45-12:00
KOL	ak	1000	C (2.5)	Seattle, Wash.	P-8:00-24:00
KVOR	ak	1000	C	Colorado Spgs., Colo.	M-9:30-22:00
KWLC	ak	100	2D	Decorah, Iowa	E-9:30-10:30
WVSH	ak	500	a	Grand Rapids, Mich.	E-9:00-24:00
WFBR	ak	500	R	Baltimore, Md.	E-9:00-24:00
WJDX	ak	1000	N (2.5)	Jackson, Miss.	C-10:30-23:00
WOOD	ak	500	a	Grand Rapids, Mich.	E-9:00-24:00
XEG	ak	200	.....	Ensenada, L. C.	P-.....
XFB	ak	250	.....	Jalapa, Ver.	C-.....

1280 kilocycles (234.2)

CMCU	z	150	.....	Havana, Cuba	E-10:00-12:00; 13:00-16:00; 18:00-21:00
KFCB	ak	1000	(2.5)	Great Falls, Mont.	E-9:00-21:00
WCGM	ak	500	I	Camden, N. J.	E-10:15-12:30; 15:00-17:00
WCPJ	ak	500	I	Asbury Park, N. J.	M-9:00-10:15; 12:30-15:00; 20:00-24:00
WDDO	ak	1000	C (5)	Chattanooga, Tenn.	C-7:00-23:30
WIBA	ak	1000	C	Madison, Wis.	C-8:00-24:00
WORC	ak	500	C	Worcester, Mass.	E-9:00-23:30
WRR	ak	500	I	Dallas, Texas	E-7:30-22:30
WTNJ	ak	500	I	Trenton, N. J.	E-17:00-20:00; 21:00-24:00
XEMX	z	12	.....	Mexico City, D. F.	C-.....

Call Letters	Frequency	City	State
WJWB	100	New Orleans	La.
WKBO	100	Harrisburg	Pa.
WKJC	100	Lancaster	Pa.
WLVK	100	Lynchburg	Va.
WMFR	100	High Point	N. C.
WNPC	100	Lapeer	Mich.
WRBL	100	Newport	R. I.
WRAE	100	Columbus	Ga.
WVAE	100	Hammond	Ind.

1210 kilocycles (247.8)

E	10:30-12:30	Sturford	Ont.
M	11:00-23:00	Akharik	N. W. T.
M	11:00-23:00	Prince Albert	Sask.
F	12:30-13:30	Hull	Que.
E	13:30-13:30	Cobalt	Ont.
E	15:00-19:00	Santa Clara	Cuba
E	10:00-12:00	Elk City	Okl.
C	7:00-12:00	Devils Lake	N. D.
C	11:00-14:00	Del Monte	Calif.
P	11:00-14:00	Klamath Falls	Ore.
P	8:00-22:30	Lincoln	Neb.
C	11:00-14:00	Fort Smith	Ark.
C	9:00-16:00	Cape Girardeau	Mo.
P	15:00-18:45	San Bernardino	Cal.
P	10:00-21:15	Olympia	Wash.
P	10:00-21:15	Eureka	Calif.
M	10:00-19:00	Garden City	Kans.
P	9:30-12:30	Pasadena	Calif.
C	10:00-18:00	Ardmore	Okla.
C	9:00-15:00	Shreveport	La.
C	9:00-15:00	Watertown	S. D.
E	10:00-22:00	Zanesville	Ohio
E	13:00-24:00	Wilkes Barre	Pa.
E	11:00-12:00	Richmond	Va.
E	11:00-12:00	Red Bank	N. J.
E	18:30-19:00	Chicago	Ill.
E	11:00-14:00	Chicago	Ill.
E	17:00-19:00	Harrisburg	Ill.
C	8:30-10:15	Chicago	Ill.
C	8:30-10:15	White Plains	N. Y.
E	9:00-18:00	Freeport	N. Y.
E	18:00-21:00	Freeport	N. Y.
C	12:00-23:00	Rock Island	Ill.
C	12:00-23:00	Chester	N. Y.
C	9:00-24:00	Anderson	Ind.
C	8:30-17:00	Poynter	Wis.
C	6:00-12:10	Gadsden	Ala.
E	6:30-23:00	Lansing	Mich.
E	9:00-22:30	Akron	Ohio
E	9:00-13:00	Sunbury	Pa.
E	11:30-17:30	Richmond	Va.
C	11:30-24:00	Hibbing	Minn.
C	8:00-18:00	Clarke	Miss.
C	9:00-12:30	Jamesstown	N. Y.
C	8:00-14:00	Manitowoc	Wis.
D	250	Thomasville	Ga.
4	100	Chicago	Ill.
N	(.25) 100	Springfield	Tenn.
C	11:00-12:00	Charlottesville	N. C.
E	9:00-24:00	Springfield	Ill.
C	8:00-22:30	Durango	Dgo.
C	9:00-15:00	Puarez	Chih.
P	8:30-11:00	Tijuana	L. C.
C	8:30-11:00	Puebla	Pue.

1220 kilocycles (245.8)

CMJE	z	50	Camaguey	Cuba
KFKU	ae	1000	Lawrence	Kas.
KTW	ae	1000	Seattle	Wash.
KWSC	ae	1000	Pullman	Wash.
WCAD	ak	500	Canton	N. Y.
WCAL	ak	1000	Pittsburgh	Pa.
WDVA	ae	1000	Tampa	Fla.
WREN	ak	1000	Lawrence	Kas.
XETL	ak	12	Veracruz	Ver.

KVOO ak 25000 1N Tulsa, Okla. C-7:30-20:15  
 WAPI ae 5000 1N Birmingham, Ala. C-8:30-ss; 20:15-23:30

1150 kilocycles (260.7)

CMJF z 200 .... Camaguey, Cuba E-.....  
 WHAM ae 50000 B Rochester, N. Y. E-7:30-00:30  
 XED ak 2500 1155 Guadajajara, Jal. C-8:00-9:00; 12:00-24:00  
 XEH ak 250 .... Monterrey, N. L. C-Silent  
 XEWZ ak 100 .... Mexico City, D. F. C-12:00-1:00

1160 kilocycles (258.5)

CMHJ z 100 .... Cienfuegos, Cuba E-8:00-8:30; 10:00-15:00; 17:30-22:30  
 WOWO ae 10000 1C Fort Wayne, Ind. C-7:30-17:00; 19:30-24:00  
 WWVA ak 5000 1C Wheeling, W. Va. E-7:00-20:30  
 XEC z 30 .... Tijuana, L. C. P-.....

1170 kilocycles (256.3)

CMBD z 150 .... Havana, Cuba E-.....  
 WCAU ae 50000 C Philadelphia, Pa. E-9:00-1:00

1180 kilocycles (254.1)

CMJO ak 50 .... Ciego de Avila, Cuba E-9:00-13:00; 18:00-22:00  
 KEX ak 5000 2N Portland, Ore. P-8:00-17:30; 20:00-24:00  
 KOB ak 10000 2 Albuquerque, N. M. M-Silent  
 VE9EK ak 10 1185 Montmagny, Que. E-.....  
 WDG Y ak 1000 Dn (5) Minneapolis, Minn. C-6:30-18:30  
 WINS ak 1800 .... New York, N. Y. E-6:00-19:30  
 WMAZ ak 1000 .... Macon, Ga. E-8:30-19:30  
 XEFA z 500 .... Mexico City, D. F. C-.....

1190 kilocycles (252.0)

CMKV z 50 .... Santiago, Cuba E-.....  
 HIJ z 15 1195 Santo Domingo, D.R. E-.....  
 VONF ak 500 1195 St. John's, Nfld. L-Silent  
 WATR ak 100 D Waterbury, Conn. E-10:00-17:15  
 WOAI ak 50000 N San Antonio, Texas C-8:00-23:00  
 WSAZ ak 1000 .... Huntington, W. Va. E-12:00-18:45

1200 kilocycles (249.9)

CHAB ak 100 F Moose Jaw, Sask. M-8:45-22:00  
 CKNX ak 50 .... Wingham, Ont. E-11:00-13:00; 16:30-20:30  
 CKTB ae 100 F St. Catherines, Ont. E-10:45-24:00  
 CMCJ ak 350 .... Havana, Cuba E-.....  
 KADA ak 100 D Ada, Okla. C-10:30-17:45  
 KBTM ak 100 D Jonesboro, Ark. C-7:30-18:30  
 KFJB ak 100 (.25) Marshalltown, Iowa C-8:00-9:00; 11:00-14:00; 17:30-20:30  
 KFXD ae 100 (.25) Nampa, Idaho M-11:00-16:30  
 KFXJ ak 100 (.25) Grand Junction, Col. M-9:00-21:00  
 KGDE ak 100 (.25) Fergus Falls, Minn. C-9:00-21:00  
 KGEK ak 100 .... Sterling, Colo. M-11:00-12:15  
 KGFJ ae 100 .... Los Angeles, Calif. P-24 hours daily  
 KGHl ak 100 (.25) Little Rock, Ark. C-11:00-14:00  
 KMLB ak 100 .... Monroe, La. C-9:00-13:00; 18:00-22:00  
 KSUN ak 100 D Lowell, Ariz. M-8:30-17:45  
 KVOS dk 100 .... Bellingham, Wash. P-9:00-21:00  
 KWG ak 100 C Stockton, Calif. P-8:00-24:00  
 WABI ak 100 .... Bangor, Maine E-9:00-14:00; 18:00-22:00  
 WAIM ak 100 .... Anderson, S. C. E-9:45-15:30  
 WBBZ ak 100 .... Ponca City, Okla. C-8:00-15:00  
 WBNO ak 100 1 New Orleans, La. C-10:00-13:00; 17:00-21:00  
 WCAT ak 100 D Rapid City, S. D. C-Silent  
 WCAX ak 100 .... Burlington, Vt. E-Silent  
 WCLO ak 100 .... Janesville, Wis. C-Silent  
 WFAM ak 100 8 South Bend, Ind. C-8:00-24:00  
 WFBE ak 100 (.25) Cincinnati, Ohio E-8:00-23:00  
 WHBC ak 100 2 (.25) Canton, Ohio E-12:00-15:00; 18:00-21:00  
 WHBY ak 100 (.25) Green Bay, Wis. C-10:00-21:00  
 WBX aej 100 (.3) C Utica, N. Y. E-8:45-1:00  
 WIL ak 100 (.25) St. Louis, Mo. C-9:00-23:00  
 WJBC ak 100 6 Bloomington, Ill. C-8:30-10:00; 12:30-18:00  
 WJBL ak 100 6 Decatur, Ill. C-10:00-12:00; 18:00-22:00

North American B. C. Stations by Frequencies with Sunday's Time on the Air

CRCK	ak	1000	F	Quebec, Que.	E-16:30-24:00
KFBI	ak	5000	Dn	Abilene, Kans.	C-8:00-18:45
KNX	ak	50000	....	Hollywood, Calif.	P-7:00-22:30
TIFA	z	75	San	Jose, C. R.	C-.....

1060 kilocycles (282.8)

CMK	ae	250	....	Havana, Cuba	E-10:00-12:00; 18:00-24:00
WHIS	ae	10000	N	Hot Springs, Ark.	C-10:00-17:00; 20:00-23:00
VOAC	z	40	1065	St. John's, Nfld.	L-.....
WBAL	ak	10000	B	Baltimore, Md.	E-8:00-24:00
WJAG	ak	1000	D	Norfolk, Neb.	C-10:00-ss
XEA	ak	125	....	Guadalajara, Jal.	C-8:30-9:00; 20:00-23:00

1070 kilocycles (280.2)

CMHA	z	50	....	Sagua la Grande, C.	E-.....
KJBS	ak	500	Dn	San Francisco, Calif.	P-00:00-ss
WCAZ	ak	100	D	Carthage, Ill.	C-10:00-15:30
WDZ	ak	100	D	Tuscola, Ill.	C-9:00-16:45
WTAM	ak	50000	R	Cleveland, Ohio	E-7:00-1:00

1080 kilocycles (277.6)

WBT	ak	50000	C	Charlotte, N. C.	E-10:00-24:00
WCBF	ak	5000	1Dny	Waukegan, Ill.	C-9:00-11:00; 14:30-17:15
WMBI	ae	5000	1Dn	Chicago, Ill.	C-11:00-15:30
XEMA	z	50	....	Tampico, Tams.	C-.....

1090 kilocycles (275.1)

KMOX	ak	50000	C	St. Louis, Mo.	C-8:00-24:00
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1100 kilocycles (272.6)

GRCV	ak	500	F	Vancouver, B. C.	P-12:00-23:00
KGDM	ak	1000	D	Stockton, Calif.	P-6:00-ss
WLWL	ae	5000	I	New York, N. Y.	E-15:15-16:30; 20:00-21:15
WPG	ak	5000	1C	Atlantic City, N. J.	E-8:30-15:15; 16:30-20:00; 21:15-00:30
XEL	z	250	....	Mexico City, D. F.	C-.....

1110 kilocycles (270.1)

CMGO	ak	250	....	Havana, Cuba	E-9:00-12:00
KSOO	ak	2500	Dn	Sioux Falls, S. D.	C-9:30-18:30
WRVA	ae	5000	N	Richmond, Va.	E-10:00-24:00
XELO	z	10000	....	Piedras Negras, Co.	C-.....

1120 kilocycles (267.7)

CHLP	ak	100	....	Montreal, Que.	E-17:00-23:00
CHSJ	ak	500	F (1)	St. John, N. B.	A-11:00-12:15; 18:00-24:00
CKOC	ae	500	F (1)	Hamilton, Ont.	E-10:00-12:00
CKX	ak	100	F	Brandon, Man.	C-16:00-23:30
CMGF	ak	100	....	Matanzas, Cuba	E-.....
CMKM	z	50	....	Manzanillo, Cuba	E-.....
KFIO	ae	100	D	Spokane, Wash.	P-8:00-17:00
KFSG	ag	500	a (1)	Los Angeles, Calif.	P-10:30-12:45; 14:30-16:30; 18:30-24:00
KRKO	aj	500	a (1)	Los Angeles, Calif.	P-7:45-10:30; 12:30-19:00
KRSC	ak	100	D	Seattle, Wash.	P-6:00-ss
WCOP	ak	500	DP	Boston, Mass.	E-8:00-ss
WDEL	ak	250	(.5)	Wilmington, Del.	E-10:00-22:30
WGCM	ae	500	(i)	Mississippi City	C-12:00-14:00
WISN	ak	250	(i)	Milwaukee, Wis.	C-8:00-24:00
WTAW	ae	500	....	College Station, Tex.	C-8:30-9:30

1130 kilocycles (265.3)

CMJI	ak	50	....	Ciego de Avila, Cuba	E-10:00-10:30; 18:00-22:00
KSL	ae	50000	C	Salt Lake City, Utah	M-7:00-24:00
WJJD	ak	20000	Dn	Chicago, Ill.	C-7:00-18:45
WVOV	ag	1000	D	New York, N. Y.	E-8:00-15:15; 16:30-18:00

1140 kilocycles (263.0)

CMBG	z	200	....	Havana, Cuba	E-.....
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*North American B. C. Stations by Frequencies with Sunday's Time on the Air*

KMBC	ae	1000	C (5)	Kansas City, Mo.	C—7:30-24:00
WRC	ak	500	R (1)	Washington, D. C.	E—8:00-24:00

**960 kilocycles (312.3)**

CKY	ak	15000	F	Winnipeg, Man.	C—11:00-23:00
CMCD	ak	250	....	Havana, Cuba	E—17:00-23:00
XEAW	ak	50000	....	Reynosa, Tams.	C—19:00-10:00

**970 kilocycles (309.1)**

KJR	z	5000	N	Seattle, Wash.	P—8:00-24:00
WCFL	ae	1500	B	Chicago, Ill.	C—8:00-24:00
WIBG	ak	100	D	Glenside, Pa.	E—9:30-ss

**980 kilocycles (303.9)**

KDKA	ae	50000	B	Pittsburgh, Pa.	E—9:00-1:00
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**990 kilocycles (302.8)**

WBZ	ak	50000	BSy	Boston, Mass.	E—8:00-1:00
WBZA	ak	1000	BSy	Springfield, Mass.	E—8:00-1:00
XEAF	ak	500	....	Nogales, Sonora	M—8:00-15:00; 18:00-22:00
XEK	ak	100	....	Mexico City, D. F.	C—.....
XES	dk	250	....	Tampico, Tams.	C—11:00-15:00

**1000 kilocycles (299.8)**

CMBZ	ak	250	....	Havana, Cuba	E—7:00-24:00
KFVD	ak	250	Dn	Los Angeles, Calif.	P—8:00-18:30; 21:15-24:00
TIGH	z	500	....	San Jose, C. R.	C—.....
WHO	ak	50000	R	Des Moines, Iowa	C—6:00-24:00
XEY	z	10	....	Merida, Yuc.	C—.....

**1010 kilocycles (296.9)**

CHML	ak	50	F	Hamilton, Ont.	E—10:00-23:00
CHWC	ak	500	3F	Regina, Sask.	M—15:30-21:00
CKCD	ak	100	....	Vancouver, B. C.	P—20:45-21:00
CKCK	ak	500	3F	Regina, Sask.	M—10:00-16:00; 21:00-24:00
CKCO	z	100	....	Ottawa, Ont.	E—.....
CKIC	ak	50	....	Wolfville, N. S.	A—Irrregular
CKWX	ak	100	F	Vancouver, B. C.	P—7:00-24:00
CMJA	z	50	....	Camaguey, Cuba	E—.....
KGGF	ak	1000	2	Coffeyville, Kans.	C—13:30-17:00
KQW	ak	1000	....	San Jose, Calif.	P—9:00-24:00
TIGA	z	30	1014	Cartago, C. R.	C—.....
WHN	ae	1000	(5)	New York, N. Y.	E—8:00-1:00
WIS	ae	500	N (1)	Columbia, S. C.	E—9:00-24:00
WNAD	ae	1000	2 (1)	Norman, Okla.	C—Silent
XEU	ak	250	....	Veracruz, Ver.	C—7:00-8:30; 10:00-15:00; 18:00-23:00

**1020 kilocycles (293.9)**

KYW	ak	10000	R	Philadelphia, Pa.	C—8:00-1:00
XEJ	ak	1000	....	Juarez, Chih.	C—10:00-14:00; 17:00-23:30

**1030 kilocycles (291.1)**

CFCN	ak	10000	F	Calgary, Alta.	M—9:30-22:30
CKLW	ag	5000	....	Windsor, Ont.	E—8:00-1:00
CMCY	ak	1000	....	Havana, Cuba	E—20:30-22:30
XEB	ak	10000	....	Mexico City, D. F.	C—9:00-23:00

**1040 kilocycles (288.3)**

KRLD	ae	10000	C	Dallas, Texas	C—7:30-23:00
KWJJ	ak	500	....	Portland, Ore.	P—7:00-17:30; 21:00-3:00
WKAR	ae	1000	D	East Lansing, Mich.	E—Silent
WTIC	ah	50000	R	Hartford, Conn.	E—9:30-24:00

**1050 kilocycles (285.5)**

CMKD	ak	250	....	Santiago, Cuba	E—7:30-22:30
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North American B. C. Stations by Frequencies with Sunday's Time on the Air

KFPY	ak	1000	C	Spokane, Wash.	P—9:00-24:00
KUSD	ae	500	2	Vermillion, S. D.	C—16:00-17:00 irregularly
WBAA	ak	1000	D	W. Lafayette, Ind.	C—Silent
WILL	ak	250	2 (1)	Urbana, Ill.	C—Silent
WGST	ak	500	C (1)	Atlanta, Ga.	C—8:00-24:00
WJAR	ae	500	R	Providence, R. I.	E—9:00-1:00
WMMN	ak	500	(1)	Fairmont, W. Va.	E—10:30-21:00
XEW	ak	50000	....	Mexico City, D. F.	C—10:00-24:00

900 kilocycles (333.1)

KGBU	ak	500	....	Ketchikan, Alaska	L—10:00-24:00
KHJ	ae	1000	C (5)	Los Angeles, Calif.	P—8:00-1:00
KSEI	ck	250	(.5)	Pocatello, Idaho	M—.....
WBEN	ak	1000	R	Buffalo, N. Y.	E—9:00-24:00
WFMD	z	500	DP	Frederick, Md.	E—.....
WJAX	ae	1000	N (5)	Jacksonville, Fla.	E—9:00-24:00
WKY	ae	1000	N	Oklahoma City, Ok.	C—8:00-24:00
WLBL	ak	2500	D	Stevens Point, Wis.	C—Silent
WMFI	z	500	DP	New Haven, Conn.	E—.....
WTAD	ak	500	D	Quincy, Ill.	C—10:00-ss

910 kilocycles (329.6)

CJAT	ak	250	F	Trail, B. C.	P—10:30-22:30
CRCM	ak	5000	F	Montreal, Que.	E—17:00-23:30
XENT	ak	65000	....	Nuevo Laredo, Tams.	C—19:30-22:30

920 kilocycles (325.9)

GMX	ae	650	....	Havana, Cuba	E—8:00-1:00
HHK	ae	1000	....	Port-au-Prince, Haiti	E—Silent
KFEL	ak	500	a	Denver, Colo.	M—7:30-1:00
KOMO	ak	1000	N (5)	Seattle, Wash.	P—8:00-23:00
KPRC	ak	1000	N (5)	Houston, Texas	C—8:00-24:00
KVOD	ak	500	a	Denver, Colo.	M—7:30-1:00
WAAF	ak	500	D	Chicago, Ill.	C—6:00-17:15
WBSO	ae	500	D	Babson Park, Mass.	E—8:30-17:00
WPEN	ak	250	(.5) 1	Philadelphia, Pa.	E—8:00-22:00
WRAX	ak	250	i (.5)	Philadelphia, Pa.	E—8:00-22:00
WSPA	ae	1000	D	Spartanburg, S. C.	E—10:00-19:30
WWJ	ak	1000	R	Detroit, Mich.	E—8:00-24:00
XEAA	ak	200	....	Mexicali, L. C.	P—6:00-22:00

930 kilocycles (322.4)

CFAC	ak	100	F	Calgary, Alta. /	M—9:00-22:30
CFCH	ak	100	F	North Bay, Ont.	E—11:00-12:30; 15:00-23:00
CFLC	ae	100	....	Prescott, Ont.	E—19:00-20:30
CHNS	ae	1000	F	Halifax, N. S.	A—18:00-24:00
CKPK	ae	100	F	Brantford, Ont.	E—9:30-23:00
CKPR	ak	100	F	Fort William, Ont.	E—17:00-22:00
KGBZ	ak	1000	2 (2.5)	York, Neb.	C—9:15-11:15; 13:30-15; 16:30-18; 19-20:30
KMA	ak	1000	2 (2.M)	Shenandoah, Iowa	C—8-9:15; 11:15-13:30; 15-16:30; 18-19
KROW	ak	1000	....	Oakland, Calif.	P—8:00-2:00
TIRH	z	50	....	San Jose, C. R.	C—.....
WBRC	ak	1000	C	Birmingham, Ala.	C—7:00-23:00
WDBJ	ae	1000	C	Roanoke, Va.	E—8:00-24:00

940 kilocycles (319.0)

CMBC	de	200	....	Havana, Cuba	E—14:00-23:00
KOIN	ak	1000	C (2.5)	Portland, Ore.	P—8:00-24:00
VOAS	ak	100	....	St. John's, Nfld.	L—Silent
WAAT	ae	500	D	Jersey City, N. J.	E—6:30-18:00
WAVE	bk	1000	N	Louisville, Ky.	C—8:00-24:00
WCSH	ae	1000	R (2.5)	Portland, Maine	E—8:45-24:00
WDAY	ae	1000	N (5)	Fargo, N. D.	C—8:00-24:00
WHA	ak	1000	D (5)	Madison, Wis.	C—Silent
XEFO	ak	5000	(XFO)	Mexico City, D. F.	C—7:00-24:00

950 kilocycles (315.6)

CRCS	ak	100	F	Chicoutimi, Que.	E—15:00-23:30
KFWB	ak	1000	(2.5)	Hollywood, Calif.	P—8:00-23:30
KHSL	ak	250	D	Chico, Calif.	P—8:00-ss

800 kilocycles (374.8)

WBAP	ak	50000	Na	Fort Worth, Tex.	C—10:00-12:00; 15:00-18:00; 21:00-23:30 ]]
WFAA	ak	50000	Na	Dallas, Tex.	C—8-10; 12-15; 18-21; 23:30-24:00
WTBO	ak	250	D	Cumberland, Md.	E—11:00-ss

810 kilocycles (370.2)

CMGF	ak	250	815	Havana, Cuba	E—12:00-14:00
CMHW	dk	100	....	Cienfuegos, Cuba	E—10:00-11:00; 14:00-15:00
WCCO	ae	50000	C	Minneapolis, Minn.	C—8:00-24:00
WNVC	ak	1000	D	New York, N. Y.	E—9:00-one hour after ss
XFC	z	350	....	Aguaascalientes, Ags.	C—.....

820 kilocycles (365.6)

WHAS	aj	50000	C	Louisville, Ky.	C—8:00-24:00
XETW	dk	500	....	Mexico City, D. F.	C—.....

830 kilocycles (361.2)

KOA	ak	50000	N	Denver, Colo.	M—8:00-24:00
WEEU	ak	1000	D	Reading, Pa.	E—8:00-ss
WHDH	ae	1000	Dn	Boston, Mass.	E—7:00-21:00
WRUF	ae	5000	Dn	Gainesville, Fla.	E—8:30-19:15

840 kilocycles (356.9)

CFQC	ak	1000	F	Saskatoon, Sask.	M—11:00-23:00
CMQ	ak	500	....	Havana, Cuba	E—6:55-1:00
CRCT	ak	5000	F	Toronto, Ont.	E—11:00-24:00
VOGY	ak	400	....	St. John's, Nfld.	L—Silent
XEP	z	500	....	Mexico City, D. F.	C—.....

850 kilocycles (352.7)

KIEV	ak	100	D	Glendale, Calif.	P—6:00-18:00
KWKH	ae	10000	C	Shreveport, La.	C—19:45-24:00
TIEP	z	500	....	San Jose, C. R.	C—.....
WESG	ak	1000	C	Elmira, N. Y.	E—10:00-18:15
WWL	ae	10000	....	New Orleans, La.	C—8:00-24:00
XEFE	z	250	....	Nuevo Laredo, T.	C—.....

860 kilocycles (348.6)

WABC	ak	50000	C	New York, N. Y.	E—8:00-2:00
WHB	ak	1000	D	Kansas City, Mo.	C—6:00-17:45
XEMO	ak	5000	....	Tijuana, L. C.	P—16:30-23:00

870 kilocycles (344.6)

WENR	ak	50000	Na	Chicago, Ill.	C—12:00-18:30; 20:00-1:00
WLS	ae	50000	Na	Chicago, Ill.	C—8:00-12:00; 18:30-20:00

880 kilocycles (340.7)

CFJC	ak	100	F	Kamloops, B. C.	P—18:00-19:30
CMBN	z	150	....	Havana, Cuba	E—.....
CRCO	ak	1000	F	Ottawa, Ont.	E—9:30-24:00
KFKA	ak	500	2 (1)	Greeley, Colo.	M—16:30-19:00
KLX	ae	1000	....	Oakland, Calif.	P—12:00-23:00
KPOF	ae	500	2	Denver, Colo.	M—7:30-9:00; 11-12; 15-16; 19:30-20:30
WCOC	ae	500	(1)	Meridian, Miss.	C—7:30-14:00; 17:00-22:30
WGBI	ae	500	1	Scranton, Pa.	E—13:00-22:30
WPHR	ak	500	D	Petersburg, Va.	E—7:30-ss
WQAN	ae	250	1	Scranton, Pa.	E—Silent
WSUI	ae	500	(1)	Iowa City, Iowa	C—14:00-18:00; 19:00-21:00; 21:15-21:45

890 kilocycles (336.9)

CJIC	ak	100	D	S. Ste. Marie, Ont.	C—11:00-14; 17:00-20:00
KARK	ak	250	(.5)	Little Rock, Ark.	C—7:30-22:00
KPNF	ak	500	2 (1)	Shenandoah, Iowa	C—8:00-12:00; 14:00-18:00; 17:00-18:45

700 kilocycles (428.3)

RDN z 500 706 San Salvador, E. S. L—.....  
 WLW ak 50000 N Cincinnati, Ohio E-7:00-1:30

710 kilocycles (422.3)

KMPC ak 500 .... Beverly Hills, Calif. P-7:00-18:00; 21:00-1:00  
 KPCE ae 250 .... Seattle, Wash. P-5:30-ss; 22:00-4:00  
 WOR ak 50000 .... Newark, N. J. E-10:00-00:30  
 XEN ak 1000 .... Mexico City, D. F. C-9:00-10:00; 13:00-16:00; 19:00-24:00

720 kilocycles (416.4)

WGN ak 50000 .... Chicago, Ill. C-9:00-1:30

730 kilocycles (410.7)

CFPL ak 100 F London, Ont. E-11:00-12:30; 18:30-23:30  
 CJCA ah 1000 F Edmonton, Alta. M-10:45-16:00; 17:00-22:30  
 CKAC ck 5000 C Montreal, Que. E-10:30-1:00

740 kilocycles (405.2)

KMMJ ae 1000 D Clay Center, Neb. C-Irregular  
 KTRB ak 250 D Modesto, Calif. P-8:30-17:30  
 WHEB ak 250 D Portsmouth, N. H. E-9:00-18:00  
 WSB ah 50000 N Atlanta, Ga. C-6:55-24:00

750 kilocycles (399.8)

CMCW dk 150 .... Havana, Cuba E—.....  
 KGU aj 2500 N Honolulu, T. H. L-8:45-22:30  
 WJR ak 50000 C Detroit, Mich. E-8:00-24:00  
 XEAM z 7.5 .... Matamoros, Tams. C-.....

760 kilocycles (394.5)

CMHX ak 500 (.15) Cienfuegos, Cuba E-8:00-22:00  
 KXA ae 250 (.5) Seattle, Wash. P-7:30-ss; 22:00-24:00  
 WBAL ae 1000 BSy Baltimore, Md. E-8:00-1:00  
 WEW ae 1000 D St. Louis, Mo. C-6:00-ss  
 WJZ ck 50000 BSy New York, N. Y. E-8:00-1:00  
 XEOK z 250 .... Tijuana, L. C. P-.....

770 kilocycles (389.4)

CMBS ak 150 .... Havana, Cuba E-Silent  
 KFAB ae 1000 CSy Lincoln, Neb. C-9:00-24:00  
 WBBM ae 50000 CSy Chicago, Ill. C-7:45-1:30

780 kilocycles (384.4)

CHWK dk 100 F Chilliwack, B. C. P-12:00-22:30  
 CKSO ak 1000 F Sudbury, Ont. L-11:00-13:00; 17:00-23:00  
 CMJK ak 250 .... Camaguey, Cuba E-Silent  
 KEHE ak 500 2 (1) Los Angeles, Calif. P-6:00-10:00; 13:00-17:00; 20:00-4:00  
 KELW ak 500 2 Burbank, Calif. P-10:00-13:00; 17:00-20:00; 4:00-6:00  
 KFDY ae 1000 D Brookings, S. D. C-Silent  
 KFOD ck 250 .... Anchorage, Alaska L-17:00-19:00  
 KGHL ak 1000 N (2.5) Billings, Mont. M-8:00-23:00  
 WEAN ae 500 C Providence, R. I. E-8:00-1:00  
 WMC ak 1000 N (2.5) Memphis, Tenn. C-6:45-24:00  
 WTAR ae 500 N (1) Norfolk, Va. E-8:30-24:00  
 XEYZ z 10000 .... Mexico City, D. F. C-10:00-23:00

790 kilocycles (379.5)

CMOA z 150 .... Havana, Cuba E—.....  
 KGO ak 7500 N San Francisco, Calif. E-8:00-24:00  
 WGY ak 50000 R Schenectady, N. Y. E-9:00-00:30

North American B. C. Stations by Frequencies with Sunday's Time on the Air

KFSD	ae	1000	N	San Diego, Calif.	P-8:00-24:00
WCAC	ak	500	2	Storrs, Conn.	E-Silent
WCAO	ae	500	C (1)	Baltimore, Md.	E-9:00-24:00
WICC	ae	500	2 C (1)	Bridgeport, Conn.	E-.....
WMT	ak	1000	B (2.5)	Cedar Rapids, Iowa	C-7:00-24:00
WREC	ak	1000	C (2.5)	Memphis, Tenn.	C-7:00-24:00

610 kilocycles (491.5)

KFRC	ck	1000	C (5)	San Francisco, Calif.	P-8:00-24:00
WDAF	ak	1000	R (5)	Kansas City, Mo.	C-8:00-23:00
WIP	ae	1000	....	Philadelphia, Pa.	E-8:00-1:00
WJAY	ae	500	D	Cleveland, Ohio	E-8:00-17:45
XFX	ak	500	....	Mexico City, D. F.	C-.....

620 kilocycles (483.6)

KGW	ak	1000	N (5)	Portland, Ore.	P-8:00-24:00
KTAR	ae	1000	N	Phoenix, Ariz.	M-8:00-23:15
WFLA	ae	1000	Na (5)	Clearwater, Fla.	E-8:00-24:00
WHJB	ak	250	D	Greensburg, Pa.	E-9:00-ss
WLBZ	ak	500	C (1)	Bangor, Maine	E-8:45-24:00
WSUN	ae	1000	Na (5)	St. Petersburg, Fla.	E-Silent
WTMJ	ae	1000	N (5.)	Milwaukee, Wis.	C-7:30-00:30

630 kilocycles (475.9)

CFCO	ak	100	F	Chatham, Ont.	E-9:30-12:15; 13:30-15:00; 19:00-20:15
CFCY	ae	1000	F	Char't'w'n, P.E.I.	A-11:00-12:15; 20:00-24:00
CJGX	ae	500	F	Yorkton, Sask.	C-16:00-22:00
CKOV	ak	100	F	Kelowna, B. C.	P-10:30-23:00; 00:00-1:30
KFRU	ak	500	1 (1)	Columbia, Mo.	C-7:30-12:30; 14:30-ss; 19:00-21:00
KGFX	ak	200	D	Pierre, S. D.	C-.....
WGBF	ak	500	1	Evansville, Ind.	C-8:00-19:00
WMAL	ak	250	B (.5)	Washington, D. C.	E-8:00-24:00
WOS	ak	500	1D	Jefferson City, Mo.	C-Silent
WPRO	ak	250	....	Providence, R. I.	E-9:00-24:00
XEZ	z	500	....	Merida, Yuc.	C-.....

640 kilocycles (468.5)

CMBY	z	150	....	Havana, Cuba	E-.....
KFI	ah	50000	N	Los Angeles, Calif.	P-8:00-23:00
WAIU	ae	500	....	Columbus, Ohio	E-6:15-18:00
WOI	ae	5000	D	Ames, Iowa	C-Silent
XEOX	ak	250	....	Saltillo, Coah.	C-.....

650 kilocycles (461.3)

WSM	ae	50000	N	Nashville, Tenn.	C-8:00-24:00
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660 kilocycles (454.3)

CMCX	z	150	....	Havana, Cuba	E-.....
WAAW	ak	500	D	Omaha, Neb.	C-10:00-16:00
WEAF	ak	50000	R	New York, N. Y.	E-8:00-1:00

670 kilocycles (447.5)

WMAQ	ak	50000	N	Chicago, Ill.	C-8:00-1:00
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680 kilocycles (440.9)

CMCO	z	250	....	Havana, Cuba	E-.....
KFEQ	ak	2500	D	St. Joseph, Mo.	C-8:00-17:45
KPO	ak	50000	N	San Francisco, Calif.	P-8:00-24:00
VAS	akn	2000	685	Glace Bay, N. S.	A-23:00-23:10; 00:00-00:10
VOWR	ck	500	681	St. John's, Nfld.	L-11:00-18:30
WPTF	ae	5000	DnN	Raleigh, N. C.	E-9:00-23:00

690 kilocycles (434.5)

CFRB	ak	10000	C	Toronto, Ont.	E-10:30-24:00
CJCB	ak	100	F	Calgary, Alta.	M-9:30-10:45; 18:00-19:15
NAA	akn	1000	....	Arlington, Va.	E-10:10-10:15; 11:55-12:00; 21:55-22:05
XET	ak	500	....	Monterrey, N. L.	C-10:00-14:00

530 kilocycles (565.7)

CJKL ak 1000 .... Kirkland Lake, Ont. E—.....

540 kilocycles (555.2)

CJRM ak 1000 F Moose Jaw, Sask. M—11:00-22:30

550 kilocycles (545.1)

CFNB ak 500	F (1)	Fredericton, N. B.	A—11:00-12:00; 14:00-00:30
KFUO ae 500	2 (1)	St. Louis, Mo.	C—8:30-13:00; 15:30-16:30; 21:15-22:15
KFYR ae 1000	N (5)	Bismarck, N. D.	C—8:00-24:00
KOAC ak 1000	....	Corvallis, Ore.	P—Silent
KSD ak 1000	2R	St. Louis, Mo.	C—13:00-15:30; 16:30-21:15
KTSA ak 1000	C (5)	San Antonio, Texas	C—7:30-24:00
WDEV ae 500	D	Waterbury, Vt.	E—10:45-12:00
WGR ck 1000	C	Buffalo, N. Y.	E—9:00-1:00
WKRC ak 1000	C	Cincinnati, Ohio	E—7:00-1:00
WSVA ak 500	D	Harrisonburg, Va.	E—10:30-ss

560 kilocycles (535.4)

KFDM ak 500	(1)	Beaumont, Texas	C—8:30-15:00; 18:00-22:00
KLZ ae 1000	C	Denver, Colo.	M—7:45-24:00
KSFO ak 1000	....	San Francisco, Calif.	P—8:30-1:00
KWTO ak 5000	D	Springfield, Mo.	C—7:00-17:45
TGW ak 1000	565	Guatemala City	C—12:00-14:30
WFIL ak 1000	B	Philadelphia, Pa.	E—8:00-1:00
WIND ak 1000	(2.5)	Gary, Ind.	C—8:00-24:00
WNOX ak 1000	C (2)	Knoxville, Tenn.	C—7:30-23:30
WQAM ae 1000	C	Miami, Fla.	E—8:00-24:00
XEAO ak 250	(.15)	Mexicali, L. C.	P—7:00-23:00
XEFC ak 100	....	Merida, Yuc.	C—.....

570 kilocycles (526.0)

KGKO ak 250	C (1)	Wichita Falls, Tex.	C—8:00-23:30
KMTR ak 1000	....	Hollywood, Calif.	P—8:00-23:00
KVI ak 1000	C	Tacoma, Wash.	P—8:00-24:00
WKBN ae 500	1C	Youngstown, Ohio	E—9:00-24:00
WMCA ak 500	....	New York, N. Y.	E—9:00-2:00
WNAX ak 1000	C (5)	Yankton, S. D.	C—8:00-24:00
WOSU ak 750	1 (1)	Columbus, Ohio	E—Silent
WSYR ak 250	B	Syracuse, N. Y.	E—8:00-24:00
WWNC ak 1000	N	Asheville, N. C.	E—8:00-1:00

580 kilocycles (516.9)

CFPR z 50	....	Prince Rupert, B. C.	P—.....
CHRC ak 100	F	Quebec, Que.	E—12:00-23:00
CKCL ae 100	F	Toronto, Ont.	E—11:00-14:00; 16:00-20:30
CKUA ak 500	....	Edmonton, Alta.	M—Silent
KMJJ ak 1000	C	Fresno, Calif.	P—8:30-23:00
KSAC ak 500	2 (1)	Manhattan, Kans.	C—Silent
WCHS ak 500	(1)	Charleston, W. Va.	E—12:00-18:00
WDBO ae 1000	C	Orlando, Fla.	E—8:00-24:00
WIBW ak 1000	C2 (5)	Topeka, Kans.	C—8:00-24:00
WTAG ae 500	R	Worcester, Mass.	E—10:00-24:00

590 kilocycles (508.2)

KHQ ak 1000	N (2.5)	Spokane, Wash.	P—9:00-24:00
WEEI ak 1000	R	Boston, Mass.	E—9:00-24:00
WKZO ae 1000	D	Kalamazoo, Mich.	E—9:00-18:00
WOW ae 1000	R (5)	Omaha, Neb.	C—6:30-00:30
XEPN ak 50000	....	PiedrasNegras, Coah.	C—18:00-24:00

600 kilocycles (499.7)

CFCF ae 400	....	Montreal, Que.	E—12:30-23:00
CJOR ak 500	....	Vancouver, B. C.	P—10:30-21:00
CMW ak 1000	....	Havana, Cuba	E—10:00-15:00
CRCW z 500	F (1)	Windsor, Ont.	E—.....
FQN z 250	609	St. Pierre, Miquelon	L—.....

FOREIGN B. C. STATIONS BY CALLS

EAJ8	1258	JOCG	655	LV5	1120	PRG4	1442	SCQ	1312	XLIB	1450	2ZH	820
EAJ9	1492	JOCK-1	810	LV7	820	PRG5	720	SCR	1402	XLIF	1170	2ZJ	980
EAJ10	1492	JOCK-2	1175	LV9	900	PRG6	1500	SCS	1402	XLIJ	1310	2ZL	1240
EAJ11	1500	JODG	635	LV10	860	PRG7	1330	SCT	1402	XLIK	1330	2ZM	1150
EAJ12	1492	JODK-1	900	LV14	1240	PRG9	1220	SCU	1240	XLKB	1230	2ZO	1400
EAJ13	1492	JODK-2	610	MOHB	674	PRG2	1070	SCV	1402	XLKS	1490	2ZP	900
EAJ14	1500	JOFG	990	MTHAY	560	PYG2	1070	SCW	1402	XLWU	1250	2ZR	920
EAJ15	1022	JOFK	850	MTBY	590	PYG8	1250	SPTT	859	KXMA	600	3AK	1500
EAJ16	1492	JOGK	790	MTCY	560	RW9	720	TUA	1275	KXMB	980	3AR	630
EAJ17	1492	JOHK	770	MTFY	674	RW10	722	VPB	700	KXMC	700	3AW	1280
EAJ19	1022	JOIK	830	OAX4A	750	RW16	710	VQZLO	858	KXCL	1500	3BA	1320
EAJ20	1492	JOJK	710	OAX4B	1200	RW18	610	VUB	855	KXOM	1470	3BO	970
EAJ21	1492	JOKK	700	OAX4C	1300	RW17	686	VUC	810	KOPP	952.8	3DB	1030
EAJ23	1492	JOLK	680	OAX4E	980	RW20	1185	VUL	1200	XOST	855	3GI	830
EAJ24	1492	JONK	940	OAX4F	1080	RW22	617	VUM	770	XOTY	1000	3GL	1350
EAJ25	1502	JOOK	960	O4A4R	1210	RW23	676	XDFY	1270	XQHC	1300	3HA	1010
EAJ26	1502	JOPK	780	O4AK	1360	RW26	776	XGBL	870	XQHD	1360	3HS	1370
EAJ27	1492	JOQK	920	O4A0	1277	RW27	689	XGCK	990	XQHF	1480	3HZ	1180
EAJ29	1500	JORK	720	O6AD	1400	RW28	635	XGED	1340	XSRC	1330	3LO	770
EAJ30	1500	JOSK	735	O6AE	1350	RW28	725	XGKA	1140	XTOY	625	3MA	900
EAJ31	1492	JOTK	625	O6AU	1443	RW29	648	XGZD	1470	YLZ	583	3SH	1088
EAJ32	1500	JOUK	645	OFA	895	RW30	913	XGGW	1150	YN	648	3TR	1240
EAJ33	1492	JOVK	680	OFD	749	RW31	625	XGKA	895	YNCRG	870	3UZ	930
EAJ34	1492	JOXK	980	OFE	1450	RW32	635	XGKT	1240	YNOP	1230	3WR	1260
EAJ35	1500	JQAK	650	OFH	527	RW33	1050	XGLS	1230	YVIRC	960	3WU	580
EAJ36	1500	KZEG	780	OKB	922	RW34	522	XGML	714.3	YVSR	1200	3XY	1420
EAJ37	1500	KZIB	900	OKK	1113	RW35	598	XGOA	660	YV4RC	750	3YA	720
EAJ38	1500	KZRM	618.5	OKP	633	RW36	586	XGOC	1132	YVSRMO	1300	3YL	1060
EAJ39	1492	LKA	850	OKR	1004	RW38	662	XGOD	977.5	YV7RMO	1153	3YB	1200
EJ40	1500	LKB	850	ON4CE	1492	RW39	832	XGOE	1070	YV11RMO1034	3ZM	1370	
EJ41	1492	LKD	686	ON4CE	1500	RW40	959	XGOF	675	YV6RV	670	3ZE	1400
EJ42	1492	LKF	776	ON4EB	1492	RW41	563	XGOG	570	ZBW	845	3ZR	940
EJ43	1492	LKH	519	ON4RW	1500	RW42	565	XGOK	750	ZEK	620	4AC	980
EJ44	1492	LKI	845	PFBI	995	RW46	653	XGOP	950	ZILY	900	4BC	1120
EJ45	1500	LKK	1276	PP	959	RW46	686.5	XGOS	711	ZPI	1135	4BH	1380
EJ46	1492	LKM	1186	PRA2	750	RW48	704	XGOT	1220	ZP4	1275	4BK	1290
EJ47	1492	LKN	1357	PRA3	860	RW50	617	XGOW	1000	ZP5	1465	4CA	1470
EJ48	1492	LKO	1181	PRA4	840	RW51	794	XGOX	1070	ZP9	898	4CR	1000
EJ49	1500	LKP	850	PRA5	1295	RW52	546	XGOY	698	ZTB	790	4MB	1060
EJ51	1492	LKR	1348	PRA6	815	RW54	959	XGSM	1170	ZTC	600	4MK	1160
EJ52	1492	LKS	1276	PRA7	706	RW55	932	XGSS	610	ZTD	750	4PM	1360
EJ53	1492	LKT	629	PRA8	750	RW56	640	XGTM	840	ZTG	560	4QN	800
EJ55	1492	LP9	1430	PRA9	1000	RW57	1068	XGUT	1270	ZTJ	645	4OQ	600
F8CG	810	LR1	1070	PRB2	882	RW61	888	XGWH	830	ZTP	952	4RK	910
F31CD	840	LR2	910	PRB3	857	RW64	752	XGWT	1330	1YA	650	4RO	1330
HAE	1122	LR3	950	PRB4	960	RW65	734	XHGS	730	1YX	880	4TO	1170
HAE2	1438	LR4	990	PRB5	1415	RW67	968	XHHA	840	1ZB	1090	4WK	900
HAE3	1438	LR5	830	PRB6	1170	RW68	824	XHHA	1370	1ZM	1260	4YA	790
HAE4	1465	LR6	870	PRB7	800	RW69	968	XHHB	740	2AY	1480	4YO	1140
HAL	546	LR7	750	PRB8	1000	RW70	1040	XHHC	780	2BH	1360	4ZB	1010
HAL2	1321	LR8	1150	PRB9	1017	RW71	689	XHHD	880	2BL	740	4ZC	1280
HC2ET	1153	LR9	1030	PRC2	1090	RW73	859	XHHE	940	2CA	1050	4ZL	1220
HC2JB	1250	LR10	790	PRC3	920	RW74	680	XHHF	960	2CH	1190	4ZM	1010
HJN	681	LR11	1390	PRC4	1304	RW75	1095	XHHG	1020	2CO	670	4ZO	1010
HJ1ABA	1330	LS1	710	PRC5	1364	RW78	767	XHHH	1040	2CR	550	4ZP	620
HJ1ABM	1154	LS2	1190	PRC6	980	RW79	610	XHHI	900	2FC	610	4ZR	1340
HJ3ABD	1100	LS3	630	PRC7	1090	RW82	608	XHHJ	1080	2GB	870	4ZV	1450
HJ3ABE	1200	LS4	670	PRC8	1030	RW84	635	XHHL	1140	2GF	1210	5AD	1310
HJ3ABH	1005	LS5	1110	PRC9	1175	RW85	871	XHHM	1180	2GN	1390	5CK	640
HJ4ABJ	1000	LS6	1350	PRD2	932	RW86	1013	XHHN	1200	2HD	1140	5CL	730
HJ4ABK	1230	LS7	1310	PRD3	1207	SBA	704	XHHP	1260	2KB	1070	5DN	968
HSPI	857	LS8	1230	PRD4	1364	SBB	941	XHHS	1100	2KO	1410	5KA	1200
HS7PJ	882	LS9	1270	PRD5	1400	SBC	1312	XHHU	1160	2KY	1020	5MU	1450
I1BA	1059	LS10	590	PRD7	1430	SBD	601	XHHV	880	2MO	1440	5PI	1040
I1BZ	536	LS11	1430	PRD8	1132	SBH	1131	XHHX	920	2NC	1230	5RM	850
I1FI	610	LT1	780	PRD9	769	SCA	1402	XHHY	1240	2NR	700	6AM	1070
I1GE	986	LT3	1080	PRE2	1330	SCB	1402	XHKA	1050	2RN	1348	6BY	980
I1MI	814	LT4	760	PRE3	1220	SCC	1086	XHPA	1194	2SM	1270	6CK	1240
I1NA	1104	LT5	1160	PRE4	941	SCD	1402	XKRI	1071.4	2TM	1300	6GF	720
I1PA	565	LT7	1340	PRE5	1410	SCE	1402	XLHB	560	2UE	950	6IX	1400
I1RO	713	LT8	840	PRE6	740	SCF	1402	XLHD	720	2UW	1110	6KG	1210
I1TO	1140	LT9	1060	PRE7	788	SCG	1402	XLHE	1380	2WG	1150	6ML	1130
I1TR	1222	LT10	1300	PRE8	1270	SCH	1402	XLHF	1380	2WL	1430	6PR	880
JFAK	670	LT11	1260	PRE9	1315	SCI	1402	XLHI	760	2XN	1340	6WA	568
JFBK	720	LUHO	750	PRF2	725	SCJ	1530	XLHJ	760	2YA	670	6WF	698
JOAG	930	LU2	800	PRF3	900	SCK	1312	XLHL	800	2YB	570	7BU	1360
JOAK-1	870	LU6	1380	PRF4	923	SCL	1402	XLHM	1120	2YB	760	7HO	820
JOAK-2	590	LU7	1280	PRF6	1050	SCM	1402	XLHN	1200	2YC	840	7LA	1100
JOBG	970	LV1	730	PRF7	1380	SCN	1402	XLHO	1280	2YD	1170	7NT	750
JOBK-1	750	LV2	880	PRF9	1360	SCO	1312	XLHQ	1440	2ZD	1170	7UV	1460
JOBK-2	1085	LV3	620	PRG3	1280	SCP	1402	XLIA	1320	2ZF	960	7ZL	590

## FOREIGN B. C. STATIONS BY LOCATIONS

..... 1348	500	4BH 1380	600	Melbourne		2Wagga	1150	50
<b>KENYA</b>		4BK 1290	300	3AK 1500	50	Warwick		
Nairobi		4QG 800	2500	3AR 630	4500	4WK 900	50	
VQ7LO 858	600	Broken Hill		3AW 1280	600	Wollongong		
<b>MOROCCO</b>		2BH 1360	100	3DB 1030	600	2WL 1430	50	
Casablanca		Bunbury		3KZ 1180	600	<b>NEW ZEALAND</b>		
CNO 983	25	6BY 980	50	3LO 770	3500	<b>Auckland</b>		
Rabat		Burnie		3UZ 930	600	1YA 650	10000	
CNR 601	25000	7BU 1360	....	3XY 1420	....	1YX 880	500	
<b>SOUTH RHODESIA</b>		4CA 1470	....	3YB 1060	25	1ZB 1090	200	
Salisbury	681.8	Canberra		Minding		Balclutha		
.....	1500	2CA 1050	500	6WA 560	10000	4ZR 1340	5	
<b>TUNISIA</b>		Clevedon		Murray Bridge		Christchurch		
Tunis		4QN 600	7000	5MU 1450	50	3YA 720	10000	
TUA 1275	500	Corowa		Mildura		3YL 1200	500	
<b>UNION S. AFRICA</b>		2CO 670	7500	3MA 900	50	3ZM 1470	140	
Bloemfontaine		Crystal Brook		Newcastle		Cromwell		
ZTB 790	500	5CK 640	7500	2HD 1140	500	4ZC 1280	7	
ZYC 600	10000	5PI 1040	2000	2KO 1410	500	Dunedin		
Durban		Cummoek		2NC 1230	2000	4YA 790	500	
ZTD 750	1500	2CR 550	10000	Northam		4YO 1140	200	
Grahamstown		Geelong		6AM 1070	500	4ZB 1010	70	
ZTG 560	10000	3GL 1350	50	Northern Rivers		4ZL 1220	100	
Johannesburg		Glppsland		2NR 700	....	4ZM 1010	100	
ZTJ 645	10000	3GI 830	7000	Perth		4ZO 1010	25	
Maritzburg		Goulburn		6IX 1400	300	4ZW 1450	60	
.....	750	2GN 1390	100	6ML 1130	300	Gisborne		
Pretoria		Grafton		6PR 880	500	2ZJ 980	250	
ZTP 952	500	2GF 1210	50	6WF 690	3500	2ZM 1150	17	
<b>OCEANIA</b>		.....	7000	Port Moresby		Greymouth		
<b>AUSTRALIA</b>		Gunnedah		4PM 1360	100	3ZE 1300	50	
Adelaide		2MO 1440	50	Renmark		3ZR 940	400	
5AD 1310	300	Hamilton		5RM 850	1000	Hastings		
5CL 730	2000	3HA 1010	300	Rockhampton		2ZL 1240	50	
5DN 960	300	Hobart		4RK 910	2000	Invercargill		
5KA 1200	300	7HO 820	50	4RO 1330	50	4ZP 620	500	
Albury		7ZL 590	1000	Sale		Manurewa		
2A Y 1480	50	.....	1500	3TR 1240	250	1ZM 1260	50	
Ayr		Horsham		Shepparton		Masterton		
4A Y 980	30	3HS 1370	50	3WR 1260	60	2ZD 1170	8	
Ballarat		3WV 580	10000	Swan Hill		Napier		
3BA 1320	50	Kalgoorlie		3SH 1080	50	2ZH 820	65	
Bega		6GF 720	2000	Sydney		Nelson		
.....	1470	6KG 1210	500	2BL 740	3000	2ZR 920	50	
Bendigo		2KB 1070	....	2CH 1180	1000	New Plymouth		
3BO 970	200	Katoomba		2FC 610	3500	2YB 760	100	
Brisbane		2KJ 1070	....	2GB 870	1000	Palmerston N.		
4BC 1120	850	7NT 750	7000	2KY 1020	1000	2ZF 960	150	
		Launceston		2SM 1270	1000	2ZO 1400	100	
		7LA 1100	300	2UE 950	1000	Wairoa		
		.....	7000	2UW 1110	750	2ZP 900	150	
		Laurence		Tamworth		Wellington		
		2NR 700	7000	2TM 1300	50	2YA 570	5000	
		Lismore		Toowoomba		2YC 840	200	
		2XN 1340	50	4GR 1000	300			
		Mackay		Townsville				
		4MK 1160	100	4TO 1170	200			
		Maryborough		Ulverstone				
		4MB 1060	50	UTV 1460	300			

## FOREIGN B. C. STATIONS BY CALLS

CE58	585	CE101	1010	CE120	1205	CE146	1460	CW32	1180	CX2	570	CX34	1210
CE62	625	CE102	1020	CE122	1220	CNO	983	CW33	1200	CX4	610	CX36	1250
CE66	656	CE103	1035	CE124	1245	CNR	601	CW34	1220	CX6	650	CX38	1290
CE70	705	CE104	1040	CE125	1255	COA	1175	CW35	1240	CX8	690	CX40	1330
CE73	730	CE105	1050	CE126	1265	CPX	1300	CW36	1260	CX10	730	CX42	1370
CE76	765	CE106	1065	CE128	1285	CP4	1040	CW37	1280	CX12	770	CX44	1410
CE78	785	CE108	1085	CE131	1315	CT1AA	629	CW38	1300	CX14	810	CX46	1450
CE81	805	CE109	1090	CE133	1335	CT1GL	1031	CW39	1320	CX16	850	CX48	1490
CE82	825	CE110	1105	CE134	1345	CW9	720	CW40	1340	CX18	890	EAJ1	795
CE86	865	CE111	1115	CE135	1355	CW19	920	CW41	1360	CX20	930	EAJ2	731
CE87	875	CE112	1120	CE138	1380	CW23	1000	CW42	1380	CX22	970	EAJ3	850
CE88	885	CE114	1145	CE139	1390	CW25	1040	CW43	1400	CX24	1010	EAJ4	1492
CE90	905	CE115	1155	CE141	1410	CW27	1080	CW44	1420	CX26	1050	EAJ5	731
CE94	945	CE117	1170	CE142	1425	CW29	1120	CW45	1440	CX28	1090	EAJ6	1492
CE98	985	CE118	1185	CE143	1430	CW30	1140	CW46	1460	CX30	1130	EAJ7	1095
CE100	1005	CE119	1190	CE145	1450	CW31	1160	CW47	1480	CX32	1170		



**FOREIGN B. C. STATIONS BY LOCATIONS**

<b>Makhtach</b>			<b>SLIK</b> 1330 50			<b>Suchow</b>			<b>Maebashi</b>		
RW27	689	4000	<b>Chang-sha</b>			XGBL	870	25	JOBB	970	500
RW10	1438	100000	XGOH	570	1000	XGED	1340	15	<b>Matsuye</b>		
<b>Moscow</b>			XGTM	840	15	XGKT	1240	10	JOTK	625	500
RW39	832	100000	<b>Che-tsang</b>			XGLS	1230	100	Nagano		
<b>Mourmansk</b>			XGKC	990	7.5	XKRC	1330	10	JONK	940	500
RW79	610	10000	<b>Foo-chow</b>			XGSM	1170	25	Nagasaki		
<b>Naltchik</b>			XGOF	675	1000	XGUT	1270	10	JOAG	930	500
RW51	794	1000	<b>Hangchow</b>			XLIB	1450	10	<b>Nagoya</b>		
<b>Odessa</b>			XGOD	977.5	1000	<b>Taiyan</b>			JOCK-1	810	10000
RW13	968	10000	XGOW	1000	5000	XTOY	625	500	JOCK-2	1175	10000
RW69	968	3000	XHHA	1370	50	<b>Tientsin</b>			<b>Niigata</b>		
<b>Oufa</b>			<b>Honan</b>			XLKB	1280	50	JOQK	920	500
RW22	617	10000	XGOX	1070	200	XHKA	1050	50	<b>Okayama</b>		
<b>Oukhta</b>			<b>Hongkong</b>			<b>Tsinan</b>			JOCK	700	500
RW67	968	10000	ZBW	845	2000	XOCL	1500	7.5	<b>Osaka</b>		
<b>Oust-Abakansk</b>			ZEK	620	2000	XOST	855	500	JOBK-1	750	10000
RW50	617	2500	<b>Hsing-shih</b>			<b>Tsin-tao</b>			JOBK-2	1085	10000
RW84	635	1200	XGSS	610	15	XGGW	1150	50	Sapporo		
<b>Penza</b>			<b>Huchow</b>			<b>T'ung Hsien</b>			JOIK	830	10000
RW56	640	1200	XHGS	730	50	LUHO	750	20	<b>Sendal</b>		
<b>Petropavlovsk</b>			<b>Kashung</b>			<b>Wu-hu</b>			JOHK	770	10000
RW71	689	1200	XGKA	895	15	XDYF	1270	15	<b>Shizuoka</b>		
<b>Petrozavodsk</b>			XGML	714.3	7.5	XGWH	830	30	JOPK	780	500
RW29	648	10000	XLKS	1490	20	<b>Wusih</b>			<b>Tokushima</b>		
<b>Pratigorsk</b>			<b>Kwangsti</b>			XLIF	1170	15	JOCK	980	500
RW18	610	1000	XGOE	1070	1000	XLIJ	1310	50	<b>Tokyo</b>		
<b>Saransk</b>			<b>Nan-chang</b>			XLWU	1250	50	JOAK-1	870	10000
RW65	734	1000	XGOC	1132	500	<b>Yuen-nan</b>			JOAK-2	590	10000
<b>Simferopol</b>			<b>Nanking</b>			XGOY	698	500			
RW73	859	10000	XGOA	660	75000						
<b>Stalingrad</b>			<b>Ningpo</b>								
RW34	522	10000	XLIA	1320	15						
<b>Stalino</b>			<b>Peiping</b>								
RW26	776	10000	XGOP	950	100						
<b>Syktivkar</b>			XGOT	1220	500	<b>FORMOSA</b>					
RW41	563	1200	XHPA	1194	30	Taihoku			<b>Keijo</b>		
<b>Tchoboksary</b>			XOMO	1470	250	JFAK	670	10000	JODK-1	900	10000
RW74	680	1200	XOPP	952.8	100	Tainan			JODK-2	610	10000
<b>Tchobabinsk</b>			<b>Shanghai</b>			JFBK	720	1000			
RW68	824	1500	XHHA	840	150				<b>MANCHUOKUO</b>		
<b>Tchernigov</b>			XHHB	740	50	<b>INDIA</b>			<b>Dairen</b>		
RW86	1013	10000	XHHC	780	100	Bombay			JQAK	652	500
<b>Tchita</b>			XHHD	860	50	VUB	830	3000	<b>Harbin</b>		
RW52	546	20000	XHHE	940	1000	<b>Calcutta</b>			MOHB	674	1000
<b>Tiraspol</b>			XHFF	960	100	VUC	810	3000	<b>MTFY</b>	674	1000
RW57	1068	10000	XHHG	1020	100	Lahore			Hoten		
<b>Vinnetza</b>			XHHH	1040	100	VUL	882	100	ZILY	900	2000
RW75	1095	10000	XHHI	1060	100	<b>Madras</b>			<b>Hsinking</b>		
<b>Urdjonikidze</b>			XHHJ	1080	200	VUM	770	200	MTCY	560	100000
RW64	752	10000	XHHL	1140	100				<b>Mukden</b>		
<b>Vladivostok</b>			XHHM	1180	100	<b>INDO-CHINA</b>			MTBY	897	1000
RW28	635	300	XHHN	1200	100	Salgon			<b>Shinkyo</b>		
RW28	725	10000	XHHP	1260	100	F31CD	840	12000	MTAY	560	100000
RW32	635	10000	XHHR	1340	50				<b>PHILIPPINES</b>		
			XHHS	1100	100	<b>JAPAN</b>			<b>Manila</b>		
<b>YUGOSLAVIA</b>			XHHU	1160	100	Akita			KZEG	780	1000
<b>Belgrade</b>			XHHV	880	100	JOUK	645	300	KZIB	900	1000
.....	686	2500	XHHX	920	100	Asahikawa			KZRM	618.5	50000
<b>Ljubijana</b>			XHHY	1240	100	JOCC	655	300			
.....	527	5000	XLHB	560	45	Fukul			<b>SIAM</b>		
<b>Zagreb</b>			XLHD	720	100	JOFG	990	500	<b>Bangkok</b>		
.....	1086	700	XLHE	1380	75	Fukuoka			HSPJ	857	2500
			XLHF	1380	50	JOLK	680	500	HS7PJ	882	.....
<b>ASIA</b>			XLHI	760	7.5	<b>Hakodate</b>					
			XLHJ	760	100	JOVK	680	500	<b>AFRICA</b>		
			XLHL	800	100	<b>Hamamatsu</b>					
<b>CEYLON</b>			XLHM	1120	50	JODG	635	300	<b>ALGERIA</b>		
<b>Colombo</b>			XLHN	1120	200	Hiroshima			<b>Algiers</b>		
VPB	700	1750	XLHO	1400	100	JOFK	850	10000	.....	941	12000
			XLHU	1440	30	Kanazawa					
<b>CHINA</b>			XMHA	600	1000	JOJK	710	3000	<b>EGYPT</b>		
<b>Canton</b>			XMHB	980	500	Kochi			<b>Alexandria</b>		
XGOK	750	1000	XMHC	700	500	JORK	720	500	.....	1122	250
XKRI	1000	100	XOHC	1300	50000	<b>Kokura</b>			.....	1429	500
<b>Chang-Chow</b>			XOHD	1360	200	JOSK	735	1000	<b>Cairo</b>		
XGDZ	1174	10	XOHE	1480	200	<b>Kumamoto</b>			.....	620	20000
			XOHF	1480	200	JOJK	790	10000			
			<b>Shang-si</b>			<b>Kyoto</b>					
			XOTY	1000	50	JOOK	960	300			

## FOREIGN B. C. STATIONS BY LOCATIONS

ILLE 1348 2000	Manchester 1149 20000	Kristianssand 1276 500	Karlstad 1312 250
LL 1424 800	NR 668 50000.	LKK 1375 150	SCK 1312 250
PP 959 60000	Newcastle 1000	LKN 1357 150	Malmö 1312 1250
Eiffel 1456 5000	Plymouth 1474 300	Porsgrund LKP 850 700	SBC 1312 1250
Radio-Normandie 1113 10000		Rjukan LKR 1348 150	Motala 1389 15000
Rennes 1040 40000	<b>HOLLAND</b>	Stavanger LKS 1276 500	Norrköping SCO 1312 250
Strasbourg SPTT 859 40000	Hilversum PFB1 995 20000	Tromsø LKM 1186 100	Stockholm SBA 704 550.00
Toulouse 776 2000		Trondelag LKT 629 20000	Sundsvall SBD 601 10000
913 60000			Trollhattan SCO 1312 250
<b>GERMANY</b>	<b>HUNGARY</b>	<b>POLAND</b>	<b>SWITZERLAND</b>
Berlin 841 100000	Budapest HAL 546 120000	Cracow 1022 2000	Basle 1375 500
Bremen 1330 1500	Magyarovar HAE-2 1321 1250	Katowice 758 12000	Berne 1375 500
Breslau 950 100000	Miskolc HAE-3 1438 1250	Lodz 1339 1700	Beremunster 536 100000
Cassel 1195 1500	Nyiregyhaza HAE 1122 6200	Lwow 795 16000	Monte Ceneri 1167 15000
Coblenz 1195 2000	Pecs HAE-4 1465 1250	Poznan 868 16000	Sottens 677 25000
Cologne 658 100000	<b>IRISH FREE STATE</b>	Porun 986 24000	
Dresden 1285 250	Athlone 565 60000	Warsaw No. 2 1384 2000	<b>U. S. S. R.</b>
Flensburg 1330 1500	Cork 6CK 1240 1000	Wilno 536 16000	Alexandrovska RW38 662 2000
Frankfurt 1195 17000	Dublin 2RN 1348 500		Archangel RW36 586 10000
Freiburg 1195 5000	<b>ITALY</b>	<b>PORTUGAL</b>	Astrakhan RW35 598 10000
Gleiwitz 1231 5000	Bari IIBA 1059 20000	Lisbon CTIAA 629 20000	Dnepropetrovsk RW30 913 10000
Hamburg 904 100000	Bolzano IIBZ 536 10000	Paredo CTIGL 1031 5000	Elista RW48 704 2500
Hanover 1330 1500	Firenze IIFI 610 20000	<b>ROUMANIA</b>	Engels RW55 932 1000
Kaiserslautern 1195 1500	Genoa IIGE 986 10000	Bucharest 823 12000	Frounze RW82 608 2500
Konigsberg 1031 60000	Milan IIMI 814 50000		Gomel RW40 959 1000
Leipzig 1348 1500	No. 2 1348 4000	<b>SPAIN</b>	RW54 959 1000
Magdeburg 785 120000	Naples IINA 1104 1500	Alcala 1500 200	Gorki RW42 565 10000
Munich 1330 1500	Palermo IIPA 565 4000	Barcelona EAJ1 795 7500	Groznyl RW23 676 1000
Nurnberg 740 100000	Rome IIRO 713 50000	EAJ15 1022 3000	Igarka RW85 871 2000
Stettin 1267 2000	Trieste IITR 1222 10000	Madrid EAJ2 731 3000	Ijevsk RW78 767 3000
Stuttgart 1330 1500	Turin IITO 1140 7000	EAJ7 1095 10000	Lochar-Ola RW61 888 1000
Trier 574 100000	No. 2 1357 200	Oviedo EAJ19 1022 700	Ivanovo RW31 625 10000
1195 2000	<b>LATVIA</b>	San Sebastian EAJ8 1258 3000	Karaganda RW46 653 10000
<b>GREAT BRITAIN</b>	Kuldiga 1258 10000	Seville EAJ5 731 5500	RW46 686.5 1200
Aberdeen 1285 1000	Madonna 1104 50000	Valencia EAJ3 850 1500	Kazan RW17 686 10000
Belfast 977 1000	Riga YLZ 583 15000		Kharkov RW20 1185 10000
Bournemouth 1474 1000	<b>NORWAY</b>	<b>SWEDEN</b>	Kiev RW9 722 36000
Cardiff 804 50000	Aalesund LKA 850 350	Falun SCC 1086 2000	Krasnodar RW33 1050 1000
WR 1149 20000	Bergen LKB 850 1000	Goteborg SBB 941 10000	Kouibychew RW16 710 10000
Daventry MR 1013 50000	Bodo LKD 686 500	Horby SBH 1131 10000	Leningrad RW70 1040 19000
Falkirk SN 1050 50000	Fredrikstad LKF 776 700	Kariskrona SCJ 1530 200	Magnitogorsk 571 10000
SN 767 50000	Hamar LKH 519 700		
London LN 1149 20000			
LR 877 50000			

Swedish Common Wave 1402. See Index by Calls.

Spain has many stations of 100 watts or less on 1492 and 1500 kcs. For complete list see Index by Calls.

**FOREIGN B. C. STATIONS BY LOCATIONS**

<b>CHILE</b>			<b>Medellin</b>			<b>Paysandu</b>			<b>BULGARIA</b>		
<b>Concepcion</b>			HJ4ABK 1230 300	<b>ECUADOR</b>			CW35 1240 250	<b>Sofia</b>			
CE108 1085 100						CW39 1320 100			..... 850 1000		
CE124 1245 100						CW40 1340 30					
CE141 1410 100						CW44 1420 100					
<b>Curico</b>						<b>Rocha</b>			<b>CZECHOSLOVAKIA</b>		
CE120 1205 100						CW19 920 50			<b>Bratislava</b>		
<b>Magallanes</b>						<b>Saito</b>			OKR 1004 13500		
CE104 1040 100						CW23 1000 250			Brno 922 32000		
CE119 1190 100						CW31 1160 250			Kosice .....	1158 2600	
CE143 1430 100						CW32 1180 250			Moravska	OKK 1113 11200	
<b>Osorno</b>						CW34 1220 250			Praha	OKP 633 120000	
CE111 1115 100						CW36 1260 30			No. 2	1204 5000	
CE133 1335 100						CW38 1300 30					
<b>Rancagua</b>						<b>San Jose</b>			<b>DANZIG</b>		
CE139 1390 100						CW41 1360 50			Danzig	..... 1303 500	
CE145 1450 100						<b>Tucuaembo</b>					
<b>San Antonio</b>						CW30 1140 .....					
CE135 1355 100						CW46 1460 30					
<b>San Felipe</b>						<b>VENEZUELA</b>			<b>DENMARK</b>		
CE112 1120 100									<b>Copenhagen</b>		
<b>Santiago</b>									..... 1176 10000		
CE58 585 1000						<b>Caracas</b>			<b>ESTONIA</b>		
CE62 625 1000						YV1RC 960 5000			<b>Tallinn</b>		
CE66 665 1000						YV3RC 1200 3000			..... 731 20000		
CE70 705 1000						YV4RC 750 100			Tartu	..... 517 500	
CE78 785 1000						<b>Maracaibo</b>					
CE82 825 1000						YV5RMO 1300 150					
CE86 865 500						YV7RMO 1153 500					
CE90 905 1000						YV11RMO 1034 .....					
CE94 945 1000						<b>Valencia</b>					
CE98 985 1000						YV6RV 670 350					
CE100 1005 500						<b>EUROPE</b>					
CE102 1025 100											
CE106 1065 1000											
CE110 1105 1000											
CE114 1145 100											
CE118 1185 1000											
CE122 1225 1000											
CE126 1265 100											
CE131 1315 100											
CE134 1345 150											
CE138 1385 500											
CE142 1425 100											
CE146 1460 .....											
<b>Talcahuano</b>											
CE87 875 100											
<b>Talea</b>											
CE115 1155 100											
<b>Temuco</b>											
CE128 1285 500											
<b>Valdivia</b>											
CE103 1035 100											
<b>Valparaiso</b>											
CE76 765 10000											
CE81 810 1000											
CE88 885 1000											
CE105 1050 1000											
CE109 1090 105											
CE117 1170 250											
CE125 1250 1000											
<b>Vina del Mar</b>											
CE73 730 1000											
CE101 1010 1000											
<b>COLOMBIA</b>											
<b>Armenia</b>											
HJ4ABJ 1000 50											
<b>Barranquilla</b>											
HJ1ABA 1330 100											
<b>Bogota</b>											
HJN 681 500											
HJ3ABD 1100 50											
HJ3ABE 1200 1000											
HJ3ABH 1005 2000											
HJ3ABK 1320 50											
<b>Cartagena</b>											
HJ1ABM 1154 500											

**FOREIGN B. C. STATIONS BY FREQUENCIES**

**1440(208.2)**

CW45 .03 Durazno, Uru.  
 OA6U .05 Arequipa, Peru (1443)  
 PRG4 .25 Jabotical, Brz. Radio Club Jabotical (1442)  
 XLHQ .03 Shanghai, Chn.  
 2MO .05 Gunnedah, Ausl.  
 Spanish Common Wave (1447)

**1450(206.8)**

CE145 .1 Rancagua, Chl. Guillermo Espinosa. Brasil 1174. 16-17; 19-20; 22-23  
 CX46 1.5 Montevideo, Uru. Radio America, Camino Corrales 2808. 10-24  
 XLIB .01 Suchow, Chn.  
 4ZW .06 Duncedin, N. Z. Clarke & Woods, 136 George St. Mon. to Fri., 8-11; 15-17; 19-23; Sat. 8-11; 15-17; 19-24; Sun., 12-14; 19-23  
 5MU .05 Murray Bridge, Ausl.  
 ..... 5. Paris, F. (1456) Eiffel Tower

**1460(205.4)**

CE146 ... Santiago, Chl.

CW46 .03 Markoff Hnos. Tucuaembo, Uru.  
 HAE4 1.25 Pecs, Hun. (1465)  
 ON4EB .1 Antwerp, Belg. (1465)  
 ZP5 .15 Asuncion, Par. (1465)  
 4CA .. Cairns, Ausl.  
 7UV .3 Ulverstone, Ausl.  
 ..... 1.5 Dresden, G. (1465)  
 ..... .1 Courtral, Belg. (1465)  
 ..... .. Bega, Ausl.

**1470(204)**

XOMO .25 Pei-ping, Chn.  
 3ZM .14 Christchurch, N. Z. Green & Younger, 253 Brougham St. Mon. to Fri., 730-10; Tues. to Fri., 17-18; Mon., 19-22; Tues., 1845-22; Sat., 730-14; Sun., 11-14; 17-18; 19-22  
 ..... .3 Plymouth, G. B. (1474)  
 ..... 1. Bournemouth, G. B. (1474)

**1480(202.6)**

CW47 .1 Canelones, Uru. Rafael J. Espiga, 11-14; 16-23  
 XQHF .2 Shanghai, Chn.  
 2AY .05 Albany, Ausl. John Dower, 47 York St., (Sydney)

**1490(201.2)**

CX48 1.5 Montevideo, Uru. Ciulow y Abella (now bldg.)  
 ON4CE .1 Chatelineau, Big. (1492)  
 XLKS .02 Kashing, Chn.  
 No. 1 .1 Wallonia, Belg. (1492)  
 2TM .05 Tamworth, Ausl.  
 ..... .1 Binche, Big. (1492)  
 ..... .2 Nimes, F. (1492)  
 ..... .1 Courtral, Belg.  
 Spanish Common Wave (1492)  
 See EAJ in Index by Calls

**1500(199.9)**

PRG6 .25 Cruzeiro, Brz. Soc. Radio Mantiqueira  
 XOCL .0075 Tsinan, Chn.  
 3AK .05 Melbourne, Ausl. Hobart, Ausl.  
 ..... .25 Pietersaari, Fin.  
 ..... .2 Radio Alcalá, Sp.  
 Belgium has several 100 watt stations on 1500.

**1530(196.0)**

SCJ .2 Karlskrona, Swe.

**FOREIGN B. C. STATIONS BY LOCATIONS**

**SOUTH AMERICA**

**ARGENTINA**

Bahia Blanca  
 LU2 800 500  
 LU7 1280 200  
 Buenos Aires  
 LR1 1070 500  
 LR2 910 6000  
 LR3 950 12000  
 LR4 990 12000  
 LR5 830 16000  
 LR6 870 16000  
 LR7 750 1000  
 LR8 1150 5000  
 LR9 1030 5000  
 LR10 790 8000  
 LS1 710 5000  
 LS2 1190 25000  
 LS3 630 4500  
 LS4 670 6000  
 LS5 1110 4500  
 LS6 1350 3500  
 LS7 1310 3000  
 LS8 1230 20000  
 LS9 1270 5000  
 LS10 590 5000  
 Cordoba  
 LV2 880 7000  
 LV3 620 2000  
 Corrientes  
 LT7 1340 40  
 La Plata  
 LP9 1430 1500  
 LR11 1390 1000  
 LS11 1430 700

La Rioja  
 LV14 1240 200  
 Mar del Plata  
 LU6 1380 500  
 Mendoza  
 LT4 760 200  
 LV10 860 500  
 Parana  
 LT11 1260 250  
 Resistancia  
 LT5 1160 500  
 Rosario  
 LT1 780 5000  
 LT3 1080 3500  
 LT8 840 350  
 Salta  
 LV9 900 500  
 San Juan  
 LV1 730 1500  
 LV5 1120 700  
 Santa Fe  
 LT9 1060 200  
 LT10 1300 100  
 Tucuman  
 LV7 820 500

**BOLIVIA**

La Paz  
 CPX 1300 5000  
 CP4 1040 10000

**BRAZIL**

Arraaraquara  
 PRD4 1364 250  
 Bahia  
 PRA4 840 500

Bauru  
 PYG8 1250 250  
 Belem  
 PRC5 1360 100  
 Bello Horizonte  
 PRC7 1090 250  
 Campinas  
 PRC9 1175 250  
 Campos  
 PRF7 1380 500  
 Cruzeiro  
 PRG6 1500 250  
 Curitiba  
 PRB2 882 250  
 Fortaleza  
 PRE9 1315 500  
 Franca  
 PRB5 1415 50  
 Jabotical  
 PRG4 1442 250  
 Juiz de Fora  
 PRB3 857 250  
 Nitheroy  
 PRD8 1132 1000  
 Polotas  
 PRC3 920 250  
 Pernambuco  
 PRA8 750 3000  
 Porto Alegre  
 PRC2 1090 3000  
 PRF9 1360 500  
 Recife  
 PRA8 750 300  
 Rio Claro  
 PRF2 725 250  
 Rio de Janeiro  
 PRA2 750 1500  
 PRA3 860 2500

PRA9 1000 1000  
 PRB7 800 500  
 PRC6 980 1000  
 PRC8 1030 1000  
 PRD2 932 1000  
 PRD5 1400 1000  
 PRE2 1330 500  
 PRE3 1220 1000  
 PRE4 940 250  
 PRE5 1270 7000  
 PRF4 923 10000  
 PRF6 1050 10000  
 PRG3 1280 10000  
 Santos  
 PRB4 960 1000  
 PRG5 720 750  
 Sao Paulo  
 PRA5 1295 5000  
 PRA6 815 10000  
 PRA7 706 50  
 PRB6 1170 1000  
 PRB8 1000 50  
 PRB9 1017 5000  
 PRC4 1304 50  
 PRE7 788 5000  
 PRF3 900 5000  
 PRG9 1220 500  
 PRH3 1120 10000  
 PYG2 1070 10000  
 Sorocaba  
 PRD7 1430 250  
 PRD9 769 250  
 Taubate  
 PRD3 1207 250  
 Uberaba  
 PRE5 1410 250  
 PRE6 740 1500

FOREIGN B. C. STATIONS BY FREQUENCIES

St. Mon., 1230-1330;  
1645-1745; Wed.,  
1230-1330; Fri., 12-14;  
1645-1745; Sat. 2115-  
23  
..... .5 Danzig, Dan. (1303)

1310(228.9)

CE131 .1 Santiago, Chl. (1315)  
Los Cuatro Ases, Roman Diaz 1972. 14-1530; 2130-23  
LS7 3. Buenos Aires, Arg.  
PRE9 .5 Fortaleza, Brz. (1315)  
Ceara Radio Club  
SBC 1.25 Malmo, Swe. (1312)  
SCK .25 Karlstad, Swe. (1312)  
SCO .25 Norrkoping, Swe. (1312)  
SCQ .25 Trollhattan, Swe. (1312)  
XLIJ .05 Wusi, Ckn.  
5AD .3 Adelaide, Ausl.

1320(227.1)

CW39 1. Paysandu, Uru.  
Miguel Penna. 1030-1230; 1730-2245  
HAE2 1.25 Magyarovar, Hun. (1321)  
HJ3ABK .05 Bogota, Col.  
XLIA .015 Ningpo, Chn.  
3BA .05 Ballarat, Ausl.

1330(225.4)

CE133 .1 Osorno, Chl. (1335)  
Radio Austral  
CX40 .5 Montevideo, Uru.  
Radio Fenix, Chayos 4534; 8-24.  
HJ1ABA .1 Barranquilla, Cbl., E. J. Pellet B., P.O. Box 751  
PRE2 .5 R' de Janeiro, Brz. Soc. Radio Cajuti, Rua Conde de Bormfim 457.  
PRG7 .25 Jahu, Brz. Radio Club Jahuense  
XLIK .05 Changchow, Chn.  
XSRC .01 Suchow, Chn.  
4RO .05 Rockhampton, Ausl.  
..... 5. Montpellier, F. (1339)  
..... 2. Bremen, G.  
..... 2. Hanover, Ga.  
..... 2. Madgeburg, G.  
..... 2. Stettin, G.  
..... 2. Flensburg, G.  
..... 1.7 Lodz, Pol. (1339)

1340(223.7)

CE134 .15 Santiago, Chl. (1345)  
Luis Desmaras Los Leones, Camelia 2860 (bldg.)  
CW40 .03 Paysandu, Uru.  
LKR .15 Rjukan, Nor. (1348)  
LT7 .04 Corrientes, Arg.  
Radio Provinciade Corrientas  
XGED .015 Suchow, Chn.  
XHHR .05 Shanghai, Chn.  
2RN .5 Dublin, I. F. S. (1348)

2XN .05 Lismore, Aus.  
4ZR .004 Balclutha, N. Z.  
Renton & Clark, Clyde St. Thurs., 19-23; Fri., 14-15; Sun., 10-12; 18-2030  
No. 2 4. Milan, I. (1348)  
..... 2. Ile de F., F. (1348)  
..... .5 Salzburg, Aust. (1348)  
..... 2. Konigsberg, G. (1348)  
..... 1. Bordeaux, F. (1348)  
..... .5 Cairo, Eg. (1348)

1350(222.4)

CE135 .1 San Antonio, Chl. (1355)  
Puerto San Antonio Casa 12  
LKN .15 Notodden, Nor. (1357)  
LS6 3.5 Buenos Aires, Arg.  
Radio del Pueblo, Estados Unidos 1816  
OA6E .03 Arequipa, Peru  
3GL .05 Geelong, Ausl.  
No. 2 .2 Turin, I. (1357)

1360(220.4)

CW41 .05 San Jose, Uru.  
Radio San Jose 10-14; 18-23.  
OA4K .15 Lima, Peru  
PRC5 .1 Belem, Brz. (1364)  
Radio Club do Para Arraquarea, Brs. (1364)  
PRD4 .25 Radio Cultura Araraquarea, Ave. Feijo 25  
PRF9 .5 Porto Alegre, Brz.  
Empresa Radiodifusora  
XQHD 2. Shanghai, Chn.  
2BH .1 Broken Hill, Ausl.  
4PM .1 Port Moresby, Ausl.  
7BU .. Burnie, Ausl.  
No. 2 .1 Turin, I. (1366)

1370(218.8)

CX42 1. Montevideo, Uru.  
Colonial Brdcstg. Ave. Italia 3646. 11-24  
XHHA .05 Hangchow, Chn.  
3HS .05 Horsham, Ausl.  
..... .5 Basle, Swi. (1375)  
..... .5 Berne, Swi. (1375)

1380(217.3)

CE138 .5 Santiago, Chl. (1385)  
Radio Atiiviol, Gumer-sindo 135 (bldg.)  
CW42 .02 Artigas, Uru.  
LU6 .05 Mar del Plata, Arg.  
Radio Atlantica  
PRF7 .5 Campoos, Brz.  
XLHE .075 Shanghai, Chn.  
XLHF .05 Shanghai, Chn.  
4BH .6 Brisbane, Ausl.  
No. 2 2. Warsaw, Pol. (1384)  
..... 150. Motala, Sw. (1389) (testing)

1390(215.7)

CE139 .1 Rancagua, Chl.  
Jorge Romero, Ave.

O'Higgins 128. 1130-1230; 18-20  
LR11 1. La Plata, Arg.  
Radio Univ. Nac. de La Plata  
2GN .1 Goulburn, Ausl.  
..... 5. Radio-Lyons, F. (1393)

1400(214.2)

CW43 .02 Melo, Uru.  
Difusora Electra (bldg.)  
OA6D .15 Arequipa, Peru  
PRD5 1. R' de Janeiro, Brz.  
Dpto. de Educacao da Prof. Largo da Carioca 5  
XLHO .1 Shanghai, Chn.  
ZZO .1 Palmerston, N. Z.  
J. V. Kyle, 50 Waldegrave St. Tues., 1830-22; Sun. 10-1230  
6IX .3 Perth, Ausl.  
Swedish Common Wave (1402)  
See SC in Index by Calls

1410(212.6)

CE141 .1 Concepcion, Chl.  
Radio Phillips, Cau-polican 370.  
CX44 .2 Montevideo, Uru.  
SADREP, Solis Grande 912. 8-2  
PRB5 .05 Franca, Brz. (1415)  
Radio Club Hertz Uberaba, Brz.  
PRE5 .25 Radio Soc. Triangulo Minero  
2KO .5 Newcastle, Ausl.  
Portuguese Common Wave (1411)

1420(211.1)

CE142 .1 Santiago, Chl. (1425)  
S. Pitz y Cia (bldg.)  
CW44 .1 Paysandu, Uru.  
..... .8 Paris, F. (1424)  
Radio LL  
LS11 1. Buenos Aires, Arg.  
OFE .7 Tampere, Fin.  
IZS .05 Auckland, N. Z.  
3XY .. Melbourne, Ausl.  
..... 1.5 Beziere, F. (1429)  
..... .5 Alexandria, Eg. (1429)  
..... .5 Turku, Fin. (1429)

1430(209.7)

CE143 .1 Magallanes, Chl.  
Santiago G. Aguilera. Valdivia 250  
HAE3 1.25 Miskolc, Hung. (1438)  
LP9 1.5 La Plata, Arg.  
LS11 .7 La Plata, Arg.  
Radio Prov. de Bs. Aires  
PRD7 .25 Sorocaba, Brz.  
Radio Club Sorocaba  
RW10 100. Minsk, U.S.R. (1438)  
2WL .05 Wollongong, Ausl. (1435)  
Russell Yeldon, Wollongong Brdcstg. Co., "Ferranti Products".

FOREIGN B. C. STATIONS BY FREQUENCIES

XHHM .1 Shanghai, Chn.  
3KZ .6 Melbourne, Ausl., S. Morgan, 64 Elizabeth St., "The Brighton Brdcastg. Service".

1190(252)

CE119 .1 Magallanes, Chl. Radio Austral, Independencia s/n. 20-23 Buenos Aires, Arg. Radio Prieto, Bolivar 1356  
LS2 25. Peiping, Chn. (1194) Sydney, Ausl.  
XHFA .03 Frankfurt, G. (1195) Eschersheimer Landstrabe No. 33.  
2CH 1. Sydne, Ausl.  
..... 25. Sydney, G. (1195) Kaiserslautern (1195)  
..... 5. Trier, G. (1195)  
..... .5 Cassel, G. (1195)  
..... 2. Coblenz, G. (1195)

1200(249.9)

CE120 .1 Curico, Chl. (1205) Melw 11  
CW33 .075 Florida, Uru. Omar F. Barreiro. 11-13; 2030-23  
HJ3ABE 1. Bogota, Clb., Uribe y Moreno, P. O. Box 317.  
PRD3 .25 Taubate, Brz. (1207) Soc. Radio Bandeirante  
XHHN .1 Shanghai, Chn.  
YV3RC 3. Caracas, Vnz. Bajos Pasaje Ramella Christchurch, N. Z.  
3YL .5 Adelaide, Ausl.  
SKA .3 No. 2 5. Prague, Cz. (1204)

1210(247.8)

CX34 .5 Montevideo, Uru. Radio Artigas, Millan 2370. 10-16; 18-23  
OA4AR .025 Lima, Peru  
2GF .05 Grafton, Ausl.  
6KG .5 Kalgoorlie, Ausl.  
..... 5 Lille, F. (1213) Radio PTT Nord (testing)  
..... South Queensland, Ausl.

1220(245.8)

CE122 1. Santiago, Chl. (1225) Radio Mayo, Bandera 154. 11-12; 21-23  
CW34 .25 Salto, Uru.  
11TR 10. Trieste, I. (1222)  
PRE3 10. Rio de Janeiro, Brz. Radio Transmissora Brasileira  
PRG9 .5 Sao Paulo, Brz. Radio Excelsior  
XGOT .5 Pei-ping, Chn.  
4ZL .1 Dunedin, N. Z. 243 Macandrew Rd. Mon., Thurs., 7-9; 1930-23; Tues., Wed., Fri., 7-9; Sat., 7-9; 19-23; Sun. 8-10

1230(243.8)

HJ4ABK .3 Medellin, Clb.  
LS8 20. Buenos Aires, Arg. Radio Stentor, Florida 8  
XGLS .1 Suchow, Chn.  
2NC 2. Newcastle, Ausl.  
..... 5. Gleiwitz, G. (1231)

1240(241.8)

CE124 .1 Concepcion, Chl. (1245) Rolando Beckendorf, Ave. Argentina 977  
CW35 .25 Paysandu, Uru. Buenaventura y Mahler. 9-13; 17-22  
LV14 .2 La Rioja, Arg. Radio Provincia de La Rioja  
XGKT .01 Suchow, Chn.  
XHHY .1 Shanghai, Chn.  
2ZL .05 Hastings, N. Z. John Holden, 609 Park Rd. Thurs., 1830-23; Sun. 930-1200  
3TR .25 Safe, Ausl. A. Gilchrist, Raymond St., "Gippsland's Radio Station."  
6CK 1. Cork, I. F. S.  
..... 2. Juan-les-Pins, F (1249). Radio Cote d' Azur.  
..... .2 Swedish Relay Stations.

1250(239.9)

CE125 1. Valparaiso, Chl. David Wallace, Esmerald 1111. 13-14; 19-20; 2130-22.  
CX36 .25 Montevideo, Uru. Centenario Brdcastg. Ignacio Nunez 2133. 9-14; 17-24.  
EAJ8 3. Sn. Sebastian. Sp. (1258)  
HC2JB .03 Guyaquil, Ec.  
PYG8 .25 Bauru, Brz.  
XLWU .05 Wusih, Chn.  
No. 3 1. Rome, I. (1258)  
..... 10. Kuldiga, Lat. (1258)

1260(238)

CE126 1. Santiago, Chl. (1265) Consorcio Espanol, Gran Ave. 2564. 9-10; 16-17; 21-22.  
CW36 .03 Salto, Uru.  
LT11 .25 Parana, Arg. Radio Provincia de Entre Rios.  
XHHP .1 Shanghai, Chn.  
IZM .05 Manurewa, N. Z. W. Rodgers, Massey Rd. Mon. 9-1130; 14-17; 19-22; Tues. to Fri. 9-1130; 19-2130; Sat. 9-14; 19-2300; Sun., 10-15.  
3WR .06 Shepparton, Aus.  
..... 2. Nurnberg, G. (1267)

1270(236.1)

LKK .5 Christiansand, Nor. (1276)  
LKS .5 Stavanger, Nor. (1276)  
LS9 5. Buenos Aires, Arg. Radio La Voz del Aire, Pozos 439.  
OA40 .1 Lima, Peru (1277)  
PRE8 7. Rio de Janeiro, Brz. Soc. Radio Nacional Rua Buenos Aires 120.  
TUA .5 Tunis, Tun. (1275)  
XDYF .15 Wu-hu, Chn.  
XGUT .01 Suchow, Chn. 76  
ZP4 .15 Asuncion, Par. (1275)  
25M 1. Sydney, Ausl. 46 Carrington St., "Double D Eucalyptus" EST Daily 22-8.

1280(234.2)

CE128 .5 Temuco, Chl. Luis Brain. 14-15; 20-22.  
CW37 .025 Colonia, Uru. N. Gonzales Moreno. 9-11; 14-18; 20-23.  
LU7 .2 Bahiablanca, Arg. Radio Gen. San Martin, Calle Saromiento 60.  
PRG3 10. Rio de Janeiro, Brz. 9-11; 14-18; 20-23.  
XLKB .05 Tien-tsin, Chn.  
3AW .6 Melbourne, Ausl.  
4ZC .007 Cromwell, N. Z. John I. Bitton, Lowburn Ferry. Mon., 19-21; Mon. to Sat., 12-13; Sat. 1730-19.  
..... 1. Aberdeen, G.B. (1285)  
..... .25 Dresden, G. (1285)

1290(232.4)

CX38 .5 Montevideo, Uru. Ramon Puyal, Caigua 3710. 11-14; 18-23.  
PRA5 5. Sao Paulo, Brz. (1295) Radio Club de Sao Paulo, Rua 7 de Abril  
4BK .3 Brisbane, Ausl.  
..... 15. Linz, Aust. (1294)  
..... 5. Dornbirn, Aust. (1294)  
..... 4.2 Klagenfurt, Aust. (1294)  
..... 5. Vorarlberg, Aus. (1294)

1300(230.6)

CPX 5. La Paz, Bol.  
CW38 .03 Salto, Uru.  
LT10 .1 Santa Fe, Arg. Radio del Inst. Soc. de la Univ. Nac. del Litoral  
OAX4C .. Lima, Peru, Estacion Radiodifusora DUSA, Calle de Plumeros  
PRC4 .05 Amparo, Brz. (1304)  
XQHC 50. Shanghai, Chn.  
YV5RMO .15 Maracaibo, Vnz.  
2TM .. Tamworth, Ausl.  
3ZE .05 Greymouth, N. Z. Schaeffs Ltd., Mackay

**FOREIGN B. C. STATIONS BY FREQUENCIES**

**11BA** 20. Bari, I. (1059) EIAR  
Stazione di Bari  
**PRF6** 10. Rio de Janeiro, Brz.  
**RW33** 1. Krasnodar, USR.  
**XHKA** .05 Tien-tsin, Chn.  
**ZCA** .5 Canberra, Ausl.  
..... 50. Falkirk, G. B. Scot-  
tish National

**1060(282.8)**

**CE106** 1. Santiago, Chl.  
Sud America, Gol-  
colea 0122. 11-13;  
17-18  
**LT9** .2 Santa Fe, Arg.  
Radio Roca Soler  
**RW57** 4. Tiraspol, USR. (1068)  
**XHHI** .1 Shanghai, Chn.  
**3YB** .025 Melbourne, Ausl.  
**4MB** .05 Maryborough, Ausl.

**1070(280.2)**

**LR1** .5 Buenos Aires, Arg.  
Radio El Mundo  
**PYG2** 10. Sao Paulo, Brz. Ra-  
dio Tupy Sao Paulo  
**XGOE** 1. Kwangsti, Chn.  
**XGOX** .2 Honan, Chn.  
**2KB** .. Katoomba, Ausl.  
**6AM** .5 Northam, Ausl.  
..... 30. Bordeaux, F. (1077)  
Bordeaux - Lafayette  
Hotel des PTT, 220  
Chemin de Tondou

**1080(277.6)**

**CE108** .1 Concepcion, Chl.  
(1085) El Sur, Freyre  
799. 14-15; 20-22  
**CW27** .25 Salto, Uru.  
Ernesto Popelka. 8-  
14; 17-23  
**JOBK2** 10. Osaka, J. (1085)  
**LT3** 3.5 Rosario, Arg.  
Radio Soc. Rural de  
Cerealistas, Pte. Roca  
770  
**OAX4F** .05 Lima, Peru  
**SCC** 2. Falun, Swe. (1086)  
**XHHJ** .08 Shanghai, Chn.  
**ZP7** .7 Asuncion, Par. (1083)  
**3SH** .05 Swan Hill, Ausl.  
..... .7 Zagreb, Yu. (1086)

**1090(275.1)**

**CE109** .1 Valparaise, Chl.  
Zenith, Atahualpa  
(816) 13-14; 2130-2330  
**CX28** 3. Montevideo, Uru.  
**EAJ7** 10. Madrid, Sp. (1095)  
Union Radio Station  
EAJ7, Aptdo 745.  
**PRC2** 3. Porto Alegre, Brz.  
Radio Soc. Gaucha,  
Galerie Chaves  
**PRC7** .25 Bello Horizonte, Brz.  
Soc. Radio Minheira  
Vinnitsa, USR. (1095)  
**RW75** 10. Auckland, N. Z.  
**1ZB** .2 153 Krangahape Rd.  
Mon., 9-1030; 1930-  
2230; Tues. to Sat.,  
9-1030; Wed. 20-22

**1100(272.6)**

**CE110** 1. Santiago, Chl. (1105)  
Mavis, Ave. J. D.  
Canas 655. 12-13;  
21-23  
**HJ3ABD** .05 Bogota, Col.  
Alford's Radio, Calle  
16. No. 5-40  
**IINA** 1.5 Naples, I. (1104)  
**XHHS** .15 Shanghai, Chn.  
**7LA** .3 Lancaster, Ausl.  
..... 50. Madona, Lat. (1104)

**1110(270.1)**

**CE111** .1 Osorno, Chl. (1115)  
David Arriagada,  
Baquedano 715  
**LS5** 4.5 Buenos Aires, Arg.  
Radio Rivadavia,  
Callao 1526  
**OKK** 11.2 Moravska, Cz. (1113)  
**2UW** .75 Sydney, Ausl., J. M.  
Prentice, Box 241D,  
GPO. "At the Cross  
Roads of Sydney".  
2 1/2 hrs. daily.  
..... 10. Normandie, F. (1113)  
Fecamp

**1120(267.7)**

**CE112** .1 San Felipe, Chl.  
Ilustre Municipalidad,  
Baquedano 715  
**CW29** .05 Mercedes, Uru.  
Bautista Abbe. 1130-  
13; 1830-2230  
**HAE** 6.2 Nyiregyhaza, Hung.  
(1122)  
**LV5** .7 San Juan, Arg.  
Radio Los Andes, G.  
Acha 362  
**PRH3** 10. Sao Paulo, Brz.  
Radio Piratininga  
**XLHM** .05 Shanghai, Chn.  
**XLHN** .05 Shanghai, Chn.  
**4BC** 1. Brisbane, Ausl., R. F.  
Roberts, 43 Adelaide  
St., EST. Daily 2130-  
830; Sun., 3-7:30.  
..... .25 Alexandria, Eg. (1122)  
..... 1. Newcastle, G.B. (1122)

**1130(265.3)**

**CX30** .5 Montevideo, Uru.  
Radio Nacional, Por-  
venir 2384. 9-24.  
**PRD8** 1. Nitheroy, Brz. (1132)  
Radio Club Flumini-  
nense  
**SBH** 10. Horby, Swe. (1131)  
**XGOC** .5 Nan-chang, Chn.  
(1132)  
**ZP1** 1. Asuncion, Par. (1135)  
**6ML** .3 Perth, Ausl.

**1140 (263)**

**CE114** .1 Santiago, Chl. (1145)  
Spencer y Vivado,  
Roman Diaz 1132.  
13-14; 2130-2330  
**CW30** .. Tucuaembo, Uru.

**11T0** 7. Turin, I.  
**XHHL** .1 Shanghai, Chn.  
**2HD** .5 Newcastle, Ausl.  
**4YO** .2 Dunedin, N. Z.  
..... 20. London National.  
G.B. (1149)  
..... 20. North National, G.B.  
(1149)  
..... 20. West National, G.B.  
(1149)

**1150(260.7)**

**CE115** .1 Talca, Chl. (1155)  
Enrique Garcia, Mo-  
lino Holman  
**HC2ET** .3 Guayaquil, Ec. (1153)  
**HJ1ABM** .05 Cartagena, Cib. (1154)  
**LR8** 5. Buenos Aires, Arg.  
Radio Paris, Cangallo  
860  
**XGGW** .05 Tsin-tao, Chn.  
**YV7RMO** .5 Maracaibo, Venez.  
(1153)  
**2WG** .05 Wagga, Aus.  
**2ZM** .017 Gisborne, N. Z.  
..... 2.6 Kosice, Cz. (1158)

**1160(258.5)**

**CW31** .25 Salto, Uru.  
Salvador E Pera. 9-  
1230; 16-23  
**LT5** .5 Resistencia, Arg.  
Radio Chaco. Av.  
9 de Julio  
**XHHU** .1 Shanghai, Chn.  
**4MK** .1 Mackay, Ausl.  
..... 15. Mite, Ceneri, Sw.  
(1167)  
Report to PTT Berne,  
Speighergrasse No. 6

**1170(256.3)**

**CE117** .25 Valparaiso, Chl.  
A Garcia y Cia, Cerro  
Carcel 47  
**CX32** .5 Montevideo, Uru.  
Radio Marconi, Gen.  
Hornos 537. 10-2  
**JOCK2** 10. Nagoya, J. (1175)  
**PRB6** 1. Sao Paulo. Radio  
Cruceiro de Sul, Lar-  
go da Misericordia 4  
**PRC9** .25 Campinas, Brz.  
Radio Educadora di  
Campinas  
**XGDZ** .01 Changchow, Chn.  
**XGSM** .025 Suchow, Chn.  
**XLIF** .015 Wusih, Chn.  
**2ZD** .008 Masterton, N. Z.  
W. D. Ansell, 7 Rimu  
St. Mon. to Sat.  
20-22; Sun. 930-11;  
20-22  
**4T0** .2 Townsville, Aus.  
..... 10. Cophgen., Den. (1176)  
Strats Radio Fonien  
Helberggrade No. 7.

**1180(254.1)**

**CE118** 1. Santiago, Chl. (1185)  
Siam. Boliver 1551  
**CW32** .25 Salto, Uru.  
**LKM** .1 Tromso, Nor. (1186)  
**RW20** 10. Kharkov, USR. (1185)

FOREIGN B. C. STATIONS BY FREQUENCIES

7-9; 18-22; Sat. 7-9; 15-17; 18-1830; 19-21  
 ..... 12. Algiers Alg. (941) Radio PTT du Govt. Gen., Rue Berthezene, Alger, Algeria, N. Af.

**950 (315.6)**

LR3 12. Buenos Aires, Arg. Radio Belgrano, Belgrano 1841  
 PP 60. Paris, F. (959) Poste Parisien, 4 Rue du General-Foy.  
 PRF8 .5 Bahia, Brz. (959) Radio Commercial da Bahia  
 RW40 1. Gomel, U.S.R. (959)  
 RW54 1. Gomel USR. (959)  
 XGOP .1 Peiping, Chn.  
 XOPP .1 Peiping, Chn. (952.8)  
 ZTP .5 Pretoria, S. Af. (952)  
 ZUE 1. Sydney, Ausl. Rex Shaw, 296 Pitt St., EST Mon., to Fri., 2230-8; Sat. to 9: Sun., 2230-8.  
 ..... 100. Breslau, G. Schlesische Funkstunde, GMBH, Breslau 18

**960 (312.3)**

JOOK .3 Kyoto, J.  
 PRB4 1. Santos, Brz. Radio Club de Santos, Rua de Pedro II 16. Odessa USR. (968)  
 RW13 10. Oukhta, USR (968)  
 RW67 2. Odessa USR (968)  
 RW69 10. Shanghai, Chn.  
 XHHF .1 Caracas, Venez. (961)  
 YVIRC 5. Caracas, Venez. (961) Brdstg. Caracas, Apt de Correos 2009. Sun. 9-23; weekdays 16-23  
 2ZF .15 Palmerston, N. Z. King St., Mon., Thurs., Sat., 20-22; Wed. 1815-22; Fri., Sun., 19-2130  
 5DN 3. Adelaide, Ausl.

**970 (309)**

CX22 .25 Montevideo, Uru. Fada Radio, Larranga 278, 1030-1530; 17-23  
 JOBG .5 Maebashi, J.  
 3BO .2 Bendigo, Ausl.  
 ..... 1. Belfast, GB (977)

**980 (303.9)**

CE98 1. Santiago, Chl. (985) Radio Bayer, E. Llanos 35. 13-14; 1930-2330  
 CNO .025 Casablanca, Mor. (983)  
 HGE 10. Genoa, I. (986) EJAR Stazione di Genova, Tokushima, J. T. Tsutsumi, Chf. Engr. EST Daily 2205-730; Sun., 2230-730.

QAX4E .05 Lima, Peru, Juan P. Goincochea, Jiron Ocona No. 158  
 PRC6 1. R'de Janeiro, Brz. Soc. Radio Phillips, Rua Sacadura Cabral 43  
 XMBH .5 Shanghai, Chn.  
 ZTP .5 Pretoria, S. Af. (985)  
 2ZJ .25 Gisborne, N. Z. 229 Gladstone Rd. Mon., Fri., Sat., 19-22; Tues., Wed., 12-1330; 19-22; Thurs., 19-20  
 4AY .03 Ayr., Ausl. Norman L. Dahl, Airdmillon Rd. "The Voice of the Cane Fields" EST Daily 2-8; Sun. 330-730.  
 6BY .05 Bunbury, Ausl.  
 ..... 24. Torun, Pol. (986) (Testing)

**990 (302.8)**

JOFG .5 Fukui, J.  
 LR4 12. Buenos Aires, Arg. Radio Splendid, Cal-lao 1526. Daily 11-24 Hilversum, Hol. (995) Heir Radio Hilversum, Ouden, Engweg, 4.  
 PFBI 20. Shanghai, Chn. Central NSW, Ausl.

XGCK .03 Shanghai, Chn.  
 ..... .. Central NSW, Ausl.

**1000(299.8)**

CE100 .5 Santiago, Chl. (1005) La Nacion, Fontecilla 66  
 CW23 .25 Salto, Uru. Modesto Llantada. 10-1230; 17-20  
 HJ3ABH 2. Bogota, Col. (1005) "La Voz de La Victor", Aptdo 565. Sun., 12-14; 16-21; Wednesdays 1130-14; 18-23.  
 HJ4ABJ .05 Armenia, Col.  
 OKR 13.5 Bratislava, Cz. (1004)  
 PRA9 1. Rio de Janeiro, Brz. Radio Soc. Mayrink Veiga, Rua Mayrink Veiga 17  
 PRB8 .05 Mogy das Cruces, Brz.  
 XGOW 5 Hangkow, Chn.  
 XKRI 1 Canton, Chn.  
 XOTY .05 Shang-si, Chn.  
 ZP3 .3 Asuncion, Par.  
 4GR 3 Toowoomba, Ausl.

**1010(296.9)**

CE101 1. Vina del Mar, Chl. Los Castanos Ave. 393. 1230-1330; 18-19; 21-22  
 CX24 5. Montevideo, Uru.  
 PRB9 5. Sao Paulo, Brz. (1017) Radio Soc. Record, Praca da Republica 17  
 RW86 5. Tchernigov, USR. (1013)  
 3HA .3 Hamilton, Ausl. 37

Gray St., "The Age Brdstg. Service", EST. Daily 2:45-7:30; Sun., 3:45-8.  
 4ZB .07 Dunedin, N. Z. 180 Rattray St. Wed. 1830-23; Thurs., 18-23; Sun., 10-12  
 4ZM .1 Dunedin, N. Z. McCracken & Wells, 17 George St. Weekdays 10-12; Mon. to Thurs., 13-14; 15-17; Tues., 18-23  
 4ZO .025 Dunedin, N. Z.  
 ..... 50. Daventry, G.B. (1013) Midland Regional.

**1020(293.9)**

CE102 .1 Santiago, Chl. (1025) Nacimiento, J. Infante 2290. 13-14; 2130-2330  
 EAJ15 3. Barcelona, Sp. (1022)  
 EAJ19 .7 Oviedo, Sp. (1022)  
 XHHG .1 Shanghai, Ch.  
 2KY 1. Sydney, Ausl.  
 ..... 2. Cracow, Pol. (1022)

**1030(291.1)**

CE103 .1 Valdivia, Chl. (1035) Carlos Kahler, Isla Teja  
 CT1GL 5. Parede, Por. (1031) Radio Club Portuguese.  
 LR9 5. Buenos Aires, Arg. Radio Fenix, Santa Fe 1174  
 PRC8 1. Rio de Janeiro, Brz. Radio Soc. Guanabara, Rua 1st de Mayo 123  
 YV11RMO .1 Maracaibo, Venez. (1034)  
 3DB .6 Melbourne, Ausl. (1031)  
 ..... 60. Konigsberg, G. (1031)

**1040(288.3)**

CE104 .1 Magallanes, Chl. Ramon Verde Sanchez, Mexicana 936. 1630-1730; 18-19; 2130-2230  
 CP4 10. La Paz, Bol. Carlos Lopez Vedela, Casilla 637  
 CW25 .5 Durazno, Uru. Artola Evangelisti y Cia. 10-13; 18-23  
 RW70 10. Lenigrad, USR.  
 XHHH .1 Shanghai, Chn.  
 5PI 2. Port Pirie, Ausl.  
 ..... 40. Rennes-Bretagne, F.

**1050(285.5)**

CE105 1. Valparaiso, Chl. Radio Valparaiso, Prat 773. 1230-1315; 17-18; 2130-2235  
 CX26 2. Montevideo, Uru. Radio Uruguay, Millan 2370. 9-1430; 16-23



FOREIGN B. C. STATIONS BY FREQUENCIES

Chf. Engr. EST Daily.  
4 a.m.-7:30 a.m.  
LR5 16. Buenos Aires, Arg.  
Radio Excelsior, Mal-  
pu 462  
RW39 100. Moscow, U.S.R. (832)  
Innan Marr, Esq.  
Moscow-Stalin Radio  
Station.  
XGWH .03 Wuhu, Chn.  
3GI 7. Gippsland, Ausl.

840 (356.9)

F31CD 12. Saigon, Indo.  
Cie Generale de Tele-  
graphie sans Fil, P. O.  
Box, 238  
LT8 .35 Rosario, Arg.  
Julio Blomberg, Sar-  
miento 958  
PRA4 .5 Bahia, Brz. Radio  
Soc. da Bahia  
XGTM .015 Chang-sha, Chn.  
XHHA .15 Shanghai, Chn.  
ZBW 2. Hongkong, C. (845)  
The Secretary, Hong  
Kong Brcdstg. Com.,  
P. O. Box 200.  
2YC .2 Wellington, N. Z.  
Featherstone St.  
Mon. to Sat., 19-20  
Berlin, G. (841)  
..... 100. Radio Reichsender,  
Berlin Brcdstg. House

850 (352.7)

CX16 1. Montevideo, Uru.  
SADREP, Av. S. Mar-  
tinez 13500; 8-1  
EAJ3 1.5 Valencia, Sp.  
HSP1 2.5 Bangkok, Siam  
(857)  
JOFK 10. Hiroshima, J.  
LKA .35 Aalesund, Nor.  
LKB 1. Bergen, Nor.  
LKP .7 Porsgrund, Nor.  
PRB3 .25 Juiz de Fora, Brz.  
(857)  
Radio Soc. de Juiz de  
Fora, Parque Herald  
Simferopol, USR.  
RW73 10. Nairobi, Ken. (858)  
VUB 3. Bombay, In. (855)  
XOST .5 Tsinan, Chn. (855)  
5RM 1. Renmark, Ausl.  
..... 1. Sofia, Bul.  
..... 35. Strasbourg, F. (859)  
Radio Strasbourg  
PTT, 30 Rue du 22  
Nov.

860 (348.6)

CE86 .5 Santiago, Chi. (865)  
Otto Becker, Ahuma-  
da 113, 10-1230; 15-  
17; 19-22.  
LV10 Mendoza, Arg.  
PRA3 2.5 Rio de Janeiro, Brz.  
Radio Club de Brasil,  
Rua Betancourt da  
Silva 21  
XHHD .05 Shanghai, Chn.

..... 16. Poznan, Pol. (868)  
..... 6 Agen, F. (868)

870 (344.6)

CE87 .1 Talcahuano, Chi.  
(875) Francisco Mor-  
ales, Aldea 96  
JOAK1 10. Tokyo, J. M. Toma-  
becio, EST Daily 4  
a.m.-7:30 a.m.  
LR6 16. Buenos Aires, Arg.  
La Nacion, Florida  
347  
RW85 2. Igarka, USR. (871)  
XGBL .025 Suchow, Chn.  
2GB 1. Sydney, Ausl. "The  
Nation's Station",  
Adyar House, 29  
Bligh St., Daily EST  
2130-830; Sun. 22-730.  
..... 50. London, G.B. (877)  
London Regional.

880 (340.7)

CE88 .1 Valparaiso, Chi.  
El Mercurio de Val-  
paraiso, Casiono de  
Vina del Mur. 1230-  
1345; 1630-1730; 20-23  
HSTPJ .. Bangkok, Siam (882)  
LV2 7. Cordova, Arg.  
Radio Central, San  
Lorenzo 339  
PRB2 .25 Curityba, Brz. (882)  
Radio Club Para-  
naense  
Iochar-Ola, USR.  
(888)  
VUL .1 Lahore, In. (882)  
XHHV .1 Shanghai, Chn.  
YV2RC .1 Caracas, Venez. (882)  
6PR .5 Perth, Ausl.  
1YX .5 Auckland, N. Z.  
Karangahape Road,  
Mon. to Sat., 19-20  
..... 15. Graz, Aust. (886)

890 (326.9)

CX18 .75 Montevideo, Uru.  
Difusora El especta-  
dor, E. Martinez Esq.  
J. Paulier, 11-14;  
1730-24  
MTBY 2. Mukden, Chn.  
OFA 10. Helsinki, Fin. (895)  
XGKA .015 Kashing, Chn. (895)  
ZP9 1.5 Asuncion, Par. (898)  
..... 5 Limoges, F. (895)

900 (333.1)

CE90 1. Santiago, Chi. (905)  
El Mercurio, Com-  
pania esq. Morande.  
15-1630; 21-24  
Keijo, Ko.  
JODK1 10. Manila, P. I.  
KZIB 1. Salta, Arg.  
LV9 .5 G. Sanches y Cia.,  
Alberdi 110  
PRF3 5. Sao Paulo, Brz.  
ZLY 2. Hoten, Mnch.  
Z2P .105 Walroa, N. Z.  
E. A. Perry, 128

Queen St. Daily 7-9;  
Tues., 18-2230; Sun.  
8-930.  
3MA .05 Mildura, Ausl.  
4WK .05 Warwick, Ausl.  
..... 100. Hamburg, G. (904)  
Radio Reichsender  
Hamburg

910 (329.6)

LR2 6. Buenos Aires, Arg.  
Radio, Bolivar 1356  
Argentina  
Dnepropetrovsk,  
USR. (913)  
RW30 10. Rockhamton, Ausl.  
4RK 2. Toulouse, F. (913)  
..... 60. Villa Schmidt, Rue  
Monie  
..... 5 Limoges, F. (913)

920 (325.9)

CW19 .05 Rocha, Uru.  
Arispuru y Machado,  
10-13; 18-21  
JOQK .5 Nilgata, J.  
OKB 32. Brno, Cz. (922)  
PRC3 .25 Pelotas, Brz.  
Soc. Radio Pelotense  
R'de Janeiro, Brz.  
PRF4 10. (923). Soc. Anonima  
"Journal do Brasil"  
Shanghai, Chn.  
XHHX .1 Nelson, N. Z.  
Z2R .05 Trafalgar St. Mon.,  
Wed. 17-22; Tues.,  
Thurs., Sat., 18-22;  
Sat. 1430-1630; 18-22;  
Sun., 1045-13; 1815-  
2130

930 (322.4)

CX20 2. Montevideo, Uru.  
Radio Monecarlo,  
Humberto I No. 3.  
11-1430; 16-24  
JOAG .5 Nagasaki, J.  
PRD2 1 R'de Janeiro, Brz.  
(932) Soc. Radio Cru-  
ceiro do Sul; Rua  
Mariz e Barros 270  
RW55 1. Engels, USR. (932)  
3UZ .6 Melbourne, Ausl.  
No. 2 15. Brussels, Belg. (932)

940 (319)

CE94 1. Santiago, Chi. (945)  
Chilena Consolidada,  
E. Llanos 35. 12-14;  
17-20; 21-24  
JONK .5 Nagano, J. K. Yana-  
da, Dir. EST Daily  
4-1930  
PRE4 .25 Rio de Janeiro, Brz.  
(941). Soc. Radio  
Cultura "A Voz do  
Espaco"  
SBB 10. Goteborg, Swe. (941)  
XHHE 1. Shanghai, Chn.  
3ZR .4 Greymouth, N. Z.  
West Coast Radio  
Soc., Bright St., Cob-  
den. Mon. to Fri.,

FOREIGN B. C. STATIONS BY FREQUENCIES

JOKK .5 1230; 16-20; 22-24  
 Okayama, J.  
 PRA7 .05 Sao Paulo, Brz., Rua  
 Tibirica 26  
 RW48 2.5 Elista, USSR. (704)  
 SEA 55. Stockholm, Swe. (704)  
 VPB 1.75 Colombo, Cey. (705)  
 XMHC .5 Shanghai, Chn.  
 ZP15 .. Villarrica, Par.  
 2NR 7. Lawrence, Ausl.

710 (422.3)

IIRO 50. Rome, I. (713)  
 JOJK 3. Kanazawa, J.  
 LSI 5. Buenos Aires, Arg  
 Radio Municipal,  
 Teatro, Colon  
 RW16 10. Kouibychew, USSR.  
 XGML .0075 Kashing, Chn. (714.3)  
 XGOS 1 Chunching Chn. (711)

720 (416.4)

CW9 .12 Colonia, Brz. Ernesto  
 W. Labbe (bldg.)  
 JFBK 1. Tainan, For.  
 JORK .5 Kochi, J. Mr. Mat-  
 suo, Mgr., EST Daily  
 10:15 p.m.-7:30 a.m.;  
 Sun., 10:30 p.m.-7:30  
 a.m.  
 PRF2 .25 Rio Claro, Brz. (725)  
 Radio Club of Rio  
 Claro  
 PRG5 .75 Santos, Brz. Radio  
 Atlantica  
 RW9 36. Kiev, USSR. (722)  
 RW28 10. Viavivos, USSR (725)  
 XLHD .1 Shanghai, Chn.  
 3YA 10. Christchurch, N. Z.  
 Gloucester St. Con-  
 tinuous 10-22 week-  
 days; Sat., 15-23;  
 Sun., 9-11; 13-1630;  
 1730-22  
 6GF 2. Kalgoorlie, Ausl.

730 (410.7)

CE73 1. Vina del Mar, Chl.  
 La Union, Ave. Por-  
 tales 528  
 CX10 1. Montevideo, Uru.  
 Internacional Brc-  
 dstg. Industria 2840;  
 11-15; 16-24  
 EAJ2 3. Madrid, Sp. (731)  
 Radio-Espana  
 EAJ5 5.5 Seville, Sp. (731)  
 JOSK 1. Kokura, J. (735)  
 LV1 1.5 San Juan, Arg. Radio  
 Graffigna, C. de  
 Correo 44  
 RW65 1. Saransk, USSR. (734)  
 XHGS .05 Huchow, Chn.  
 5CL 2. Adelaide, Ausl.  
 ..... 20. Tallin, Est. (731)

740 (405.2)

OFD 1. Pori, Fin. (749)  
 PRE6 1.5 Uberaba, Brz.  
 XHHB .05 Shanghai, Chn.  
 2BL 3. Sydney, Ausl.  
 ..... 100. Munich, G., Funk-  
 haus Rundfunkplatz  
 No. 1

..... 5. Marseilles, F. (749)  
 PTT  
 ..... 2. Sortavala, Fin. (749)

750 (399.8)

JOBK1 10. Osaka, J.  
 LR7 1. Buenos Aires, Arg.  
 LUHO .02 T'ung Hsien, Chn.  
 OAX4A 1.5 Lima, Peru. Daily 11  
 a.m.-1 p.m.; 6-7; 9-11  
 p.m.  
 PRA2 1.5 Rio de Janeiro, Brz.  
 Rua da Carcoca 45  
 PRA8 3. Pernambuco, Brz.  
 Ave. Cruz Cabuga 394  
 Urdjonikidze, USSR.  
 RW64 10. (752)  
 XGOK 1. Canton, Chn.  
 YV4RC .1 Caracas, Vnz.  
 ZTD 1.5 Durban, S. Af.  
 7NT 7. Kelso, Ausl.  
 ..... 12. Katowice, Pol. (758)  
 ..... 10. Maritzburg, S. Af.

760 (394.5)

CE76 10. Valparaiso, Chl. (765)  
 Coop. Viticultura, Ed.  
 La Nacion, 9 Piso  
 LT4 .2 Mendoza, Arg.  
 PRD9 .25 Sorocaba, Brz. (769)  
 Radio Soc. Sorocaba  
 RW78 3. Ijevsk, USSR. (767)  
 XLHI .0075 Shanghai, Chn.  
 XLHJ .1 Shanghai, Chn.  
 2YB .1 New Plymouth, N. Z.  
 Empire Bldg., King  
 St. Mon. 19-22; Wed.  
 1830-22; Sat. 1830-  
 2230; Sun. 18-22  
 ..... 50. Falkirk, G.B. (767)  
 Scottish Regional

770 (389.4)

CX12 1. Montevideo, Uru.  
 Radio Westinghouse,  
 Itacabo 2620; 10-23  
 JOHK 10. Sendai, J.  
 LKF .7 Frederikstad, N. (776)  
 RW26 10. Stalino, U.S.R. (776)  
 VUM .2 Madras, In.  
 3LO 3.5 Melbourne, Ausl.  
 ..... 2. Toulouse, F. (776)  
 PTT

780 (384.4)

CE78 1. Santiago, Chl. (785)  
 Huke, Providencia;  
 10-1130; 13-14; 1830-  
 20; 2130-24  
 JOPK .5 Shizuoka, J.  
 KZEG 1. Manila, P. I.  
 LT1 5. Rosario, Arg.  
 Radio Litoral, Cor-  
 doba 1049  
 PRE7 5. Sao Paulo, Brz. (788)  
 Radio Cosmos, Praca  
 Marechal Deodoro 52  
 Hangchow, Chn.  
 XGOD 1. (977.5)  
 XHHC .1 Shanghai, Chn.  
 ..... 120. Leipsig, G. (785)  
 Temporarily on low  
 power.

790 (379.5)

EAJ1 5. Barcelona, Sp. (795)  
 Union Radio.  
 JOGK 10. Kumamoto, J.  
 LR10 8. Buenos Aires, Arg.  
 Radio Cultura, Bel-  
 grano 1841  
 RW51 1. Natchik, USSR. (794)  
 ZTB .5 Bloemfontaine, S. Af.  
 4YA .5 Dunedin, N. Z.  
 Stuart St. Continu-  
 ous 10-22 weekdays;  
 Sat. 15-23; Sun., 9-11;  
 13-1630; 1730-22  
 ..... 16. Pwov, Pol. (795)  
 Polskie Radio SA,  
 Rozglosnia we  
 Lwowie

800 (374.8)

LU2 .5 Bahiablanca, Arg.  
 Radio Educadora do  
 Brasil, Rua Senador  
 Dantas 82  
 PRB7 .5 Rio de Janeiro, Brz.  
 XLHL 1.5 Shanghai, Chn.  
 4QG 2.5 Brisbane, Ausl.  
 ..... 50. Cardiff, G.B. (804)  
 West Regional

810 (370.2)

CE81 1. Valparaiso, Chl.  
 Chilena Consolidada,  
 Edwards 383.  
 CX14 5. Montevideo, Uru.  
 El Espectador Ltd.,  
 Lanus 5760. 10-24  
 IIMI 50. Milan, I. (814)  
 Radio Milano, Corso  
 28, Ottobre 102, Mi-  
 lano 134  
 JOCK1 10. Nagoya, J.  
 PRA6 10. Sao Paulo, Brz. (815)  
 Radio Educadora  
 Paulista, Rua Jose  
 Bonifacio 12  
 VUC 3. Calcutta, In.

820 (365.6)

CE82 1. Santiago, Chl. (825)  
 El Diario Ilustrado,  
 Moneda 1158. 9-10;  
 12-14; 16-1830; 20-24  
 LV7 .5 Tucuman, Arg.  
 G. Acha Munoz y Cia.  
 Mendoza 437  
 PRH8 5. Rio de Janeiro, Brz.  
 Radio Ipanema  
 RW68 1.5 Tcheliabinsk, U.S.R.  
 (824)  
 2ZH .065 Napier, N. Z.  
 C. B. Hansen & Co.,  
 59 Latham St., Mon.,  
 Tues., Fri., 12-14; 19-  
 2230; Wed., 12-14;  
 1830-230; Thurs., 12-  
 14; Sat., 10-17; 19-  
 23; Sun. 12-15  
 THO .05 Hobart, Ausl.  
 ..... 12. Bucharest, Ru. (823)

830 (361.2)

JOIK 10. Sapporo, J. T. Okada,

FOREIGN B. C. STATIONS BY FREQUENCIES

Berne, Speichergrasse No. 6.

**560 (535.4)**

I1PA 4. Palermo, I. (565)  
 MTAY 100. Shinkyo, Mch.  
 MTCY 100. Hsinking, Mch.  
 RW41 1.2 Syktyvkar, USSR (563)  
 RW42 10. Gorki, USSR. (565)  
 XLHB .06 Shanghai, Chn.  
 ZTG 10. Grahamstown, S. Af.  
 6WA 10. Minding, Ausl.  
 ..... 60. Athlone, IFS (565)  
 Radio Atha Luain.

**570 (526)**

CX2 .. Montevideo, Uru.  
 XGOH 1. Changsha, Chn.  
 2YA 5. Wellington, N. Z.  
 Featherstone St.,  
 Mon., Fri., Sat., 10-  
 23; Tues., Wed.,  
 Thurs. 10-22; Sun.,  
 00-11; 13-1730; 18-22  
 ..... 100. Stuttgart, G. (574)  
 Charlottenplatz No.1  
 ..... 10. Magnitogorsk, U.S.R.  
 (571)

**580 (516.9)**

CE58 1. Santiago, Chl. (585)  
 Siam I. Villaseca  
 (420)  
 RW36 10. Archangel, USSR (586)  
 RW54 10. Khabarovsk, USSR  
 YLZ 15. Riga, Lat. (583)  
 3WV 10. Horsham, Ausl.  
 7ZL 1. Hobart, Ausl.  
 ..... 20. Lisbon, Por. (629)  
 ..... 15. Grenoble, F. (583)

**590 (508.2)**

JOAK2 10. Tokyo, Jap. M.  
 Tomabecio, EST.  
 Daily 4 a.m.-7:30 a.m.  
 LS10 5. Buenos Aires, Arg.  
 Radio Callao, Callao  
 (666)  
 RW35 10. Astrakhan, USSR (598)  
 7ZL 1. Hobart, Ausl.  
 ..... 100. Vienna, Aust. (592)  
 Wein No. 1, Johan-  
 nesgrasse No. 4B.

**600 (499.7)**

CNR 25. Rabat, Mor. (601)  
 Radio Maroc, Office  
 Cheriffien des Postes  
 et Telegraphes.  
 PRH2 25. Porto Alegre, Brz.  
 (now building)  
 RW82 2.5 Frounze, U.S.R. (608)  
 SBD 10. Sundsvall, Swe. (601)  
 XMHA 1. Shanghai, Chn.  
 ZTC 10. Cape Town, S. Af.  
 4QN 7. Clevedon, Ausl.

**610 (491.5)**

CX4 1. Montevideo, Uru.  
 Direccion de Agrono-  
 mia, Millan, 746; 10-

12; 17-19  
 Florence, I. EIAR  
 Stazione di Firenze.  
 JODK2 10. Keljo, Ko.  
 KZRM 50. Manila, P. I. (618.5)  
 RW18 1. Prätigorsk, USSR  
 RW20 10. Oufa, U.S.R. (617)  
 RW50 2.5 Oust Abakansk, USSR  
 (617)  
 RW79 10. Murmansk, U.S.R.  
 XGSS .015 Hsing-shih, Chn.  
 2FC 3.5 Sydney, Ausl.

**620 (483.6)**

CE62 1. Santiago, Chl. (625)  
 Radio Chilena, Ed.  
 Mutual 930-1130;  
 1230-15; 1630-24  
 CT1AA 20. Lisbon, Por. (629)  
 Emissora Nacional.  
 Matsuye, Jap. (625)  
 JOTK .5 Trondelag, Nor. (629)  
 LKT 20. Cordoba, Arg.  
 LV3 2. Ivanovo, U.S.R. (625)  
 RW31 10. Taiyan, Chn. (625)  
 XTOY .5 Hong Kong, Chn.  
 ZEK 2. Invercargill, N. Z.  
 4ZP .5 R. T. Parsons, 155  
 Layard St. N  
 No. 1 15. Brussels, Belg. la  
 Rue du Bastion  
 ..... 20. Cairo, Egypt.  
 ..... 20. Jerusalem, Pal.

**630 (475.9)**

JODG .3 Hamamatsu, Jap.  
 (635)  
 LS3 4.5 Buenos Aires, Arg.  
 Radio Mayo, Callao  
 1526  
 OKP 120. Prague, Cz. (633)  
 The Radio Journal,  
 Praha, Cz.  
 RW28 .3 Vladivost'k, U.S.R.  
 (635)  
 RW32 10. Vladivostok, USSR.  
 (635)  
 RW84 1.2 Oust-Abrakomsk,  
 U.S.R. (635)  
 3AR 4.5 Melbourne, Ausl.  
 ..... 7. Launceston, Ausl.

**640 (468.5)**

JOUK .3 Akita, J. (645)  
 RW29 10. Petrozavodsk, U.S.R.  
 (648)  
 RW56 1.2 Penza, U.S.R.  
 YN 100. Lyons, F. (648). La  
 Doua (testing).  
 ZEK .5 Hong Kong, Chn.  
 GMT Mon., Thurs.,  
 Sat., from 12:30. The  
 Secretary, Hong Kong  
 Brdcstg. Com., P. O.  
 Box 200.  
 ZTJ 10. Johannesburg, S. Af.  
 (645)  
 5CK 7.5 Crystal Brook, Ausl.

**650 (461.3)**

CX6 10. Montevideo, Uru.  
 Estacion Oficial, Mar-

tin Fierro 2603. 12-  
 14; 17-23  
 JOCG .3 Asahikawa, J. (655)  
 Pres. NBC, Hokkaido  
 Asahikawa Branch.  
 EST Daily 11 p.m.-  
 7:30 a.m.  
 JQAK .5 Dairen, Mnch. (652)  
 RW46 10. Karaganda, USSR (653)  
 1YA 10. Auckland, N. Z.  
 Karangahape Rd.  
 Continuous 10-22  
 weekdays. Sat., 15-  
 23; Sun. 9-11; 13-  
 1630; 18-22  
 ..... 100. Cologne, G. (658)  
 Dagoberstrabe No. 38

**660 (454.3)**

CE66 1. Santiago, Ch. (665)  
 Union Espanola, De-  
 licias 1159 (now bldg.)  
 XGOA 75. Nanking, Chn.  
 RW38 2. Alexandrovsk USSR.  
 (662)  
 ..... 7. Grafton, Ausl.  
 ..... 50. Manchester, G. B.  
 (668) North Regional

**670 (447.5)**

JFAK 10. Taihoku, For.  
 LS4 6. Buenos Aires, Arg.  
 MOHB 1. Harbin, Mnch. (674)  
 MTFY 1. Harbin, Mnch. (674)  
 RW23 1. Grozny, U.S.R. (676)  
 XGOF 1. Fochow, Chn. (675)  
 YVGRV .35 Valencia, Vnz.  
 2CO 7.5 Coroca, Ausl.  
 ..... 25. Sottens, Swi. (677)  
 Report to PTT Berne,  
 Speichergrasse No. 6.

**680 (440.9)**

HJN .5 Bogota, Col. (681)  
 JOLK .5 Fukuoka, J.  
 JOVK .5 Hakodate, J.  
 LKD .5 Bodo, Nor. (686)  
 RW17 10. Kazan, USSR. (686)  
 RW27 4. Makshatch, USSR. (689)  
 RW46 1.2 Karaganda, USSR.  
 (686.5)  
 RW71 1.2 Petropavlovsk, USSR.  
 (689)  
 RW74 1.2 Tcheboksarv, U.S.R.  
 XGOK 1. Canton, Chn. (682)  
 ..... 2.5 Belgrade, Yug. (686)  
 ..... 1.5 Salisbury, S. Af.  
 (681.9)

**690 (434.5)**

CX8 1. Montevideo, Uru.  
 Estacion Oficial  
 XGOW .5 Yuen-nan, Chn.  
 6WF 3.5 Perth, Ausl.  
 ..... 7. Paris, F. (695) FPTT  
 Ecole Superieure des  
 Postes et Telegraphes

**700 (428.3)**

CE70 1. Santiago, Chl. (705)  
 Ultimas Noticias,  
 Compania 1288; 1130-

## LONG WAVE STATIONS BY LOCATIONS

<p><b>Tashkent</b> 256 ..... <b>Tiflis</b> 280 ..... <b>Ufa</b> 436 ..... <b>Voronezh</b> 414 .....</p> <p><b>UNITED STATES</b></p> <p><b>ALABAMA</b></p> <p>Birmingham WWAT 224 Mobile WWBF 248</p> <p><b>ARIZONA</b></p> <p>Kingman KCAH 350 Tucson KCAM 338 Winslow KCAE 308</p> <p><b>ARKANSAS</b></p> <p>Little Rock KCAJ 272</p> <p><b>CALIFORNIA</b></p> <p>Fresno KCU 344 Los Angeles KCT 260 Oakland KCV 242</p> <p><b>COLORADO</b></p> <p>Pueblo KCAR 302</p>	<p><b>DISTRICT OF COLUMBIA</b></p> <p>Washington WWX 272</p> <p><b>FLORIDA</b></p> <p>Jacksonville WWAV 344 Key West WBP 332 Miami WWAF 272 Titusville WWCB 254</p> <p><b>GEORGIA</b></p> <p>Atlanta WHZ 266</p> <p><b>IDAHO</b></p> <p>Boise KCR 242 Idaho Falls KCAD 359</p> <p><b>ILLINOIS</b></p> <p>Chicago KDA 350</p> <p><b>IOWA</b></p> <p>Iowa City KIS 272</p> <p><b>KANSAS</b></p> <p>Wichita WEK 332</p>	<p><b>LOUISIANA</b></p> <p>New Orleans WWAG 338 Shreveport KCAK 230</p> <p><b>MASSACHUSETTS</b></p> <p>Boston WSX 266</p> <p><b>MICHIGAN</b></p> <p>Jackson WWAR 320</p> <p><b>MINNESOTA</b></p> <p>Minneapolis KCAQ 266</p> <p><b>MISSISSIPPI</b></p> <p>Jackson WWAQ 260</p> <p><b>MISSOURI</b></p> <p>Kansas City KRC 359 St. Louis KCQ 290 Springfield KCAV 254</p> <p><b>MONTANA</b></p> <p>Butte KCAC 284</p> <p><b>NEBRASKA</b></p> <p>North Platte KVM 284</p>	<p>Omaha KJF 320</p> <p><b>NEVADA</b></p> <p>Elko KOJ 314 Reno KJK 254</p> <p><b>NORTH CAROLINA</b></p> <p>Greensboro WRW 320 Raleigh WWBI 350</p> <p><b>N. DAKOTA</b></p> <p>Fargo KCAN 365</p> <p><b>N. MEXICO</b></p> <p>Albuquerque KCAF 230</p> <p><b>NEW JERSEY</b></p> <p>Newark WWU 338</p> <p><b>NEW YORK</b></p> <p>Albany WWAH 320 Buffalo WWAB 266</p> <p><b>OHIO</b></p> <p>Cincinnati WWAS 332 Cleveland WWO 344</p>	<p><b>OKLAHOMA</b></p> <p>Oklahoma City KCCA 350 Tulsa KCAA 296</p> <p><b>OREGON</b></p> <p>Medford KCX 266 Portland KCY 332</p> <p><b>PENN-SYLVANIA</b></p> <p>Bellefonte WWQ 224 Harrisburg WWHP 242 Pittsburgh WWAP 254</p> <p><b>SOUTH CAROLINA</b></p> <p>Charleston WWAW 332 Spartanburg WET 248</p> <p><b>TENNESSEE</b></p> <p>Chattanooga WWHS 338 Memphis WWAU 326 Nashville WWAC 236</p> <p><b>TEXAS</b></p> <p>Amarillo KCAK 248</p>	<p>Big Spring KCAP 326 El Paso KCAO 242 Ft. Worth KKJ 365 Houston KCAU 332 San Antonio KCAW 254</p> <p><b>UTAH</b></p> <p>Milford KCAT 320 Salt Lake KGD 338</p> <p><b>VIRGINIA</b></p> <p>Richmond WNR 260</p> <p><b>WASHINGTON</b></p> <p>Pasco KCS 260 Seattle KCZ 365 Spokane KCAS 344</p> <p><b>WISCONSIN</b></p> <p>La Crosse WSG 224</p> <p><b>WYOMING</b></p> <p>Cheyenne KSG 326 Rock Spring KDN 290</p>
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## LONG WAVE STATIONS BY CALLS

CYW 248	KCAO 242	KCS 260	KKJ 365	VFT 248	WWAB 266	WWAV 344
KCAA 296	KCAP 326	KCT 260	KLK 254	VFU 314	WWAC 236	WWAW 332
KCAC 284	KCAQ 266	KCU 344	KOJ 314	VXR 326	WWAF 272	WWBC 254
KCAD 359	KCAR 302	KCV 242	KRC 359	WBP 332	WWAG 338	WWBF 248
KCAE 308	KCAS 344	KCX 332	KSG 326	WEK 352	WWAH 320	WWBI 350
KCAF 230	KCAT 320	KCY 332	KVM 284	WET 248	WWAP 254	WWHP 242
KCAG 248	KCAU 332	KCZ 365	VFN 332	WHZ 266	WWAQ 260	WWHS 338
KCAH 350	KCAV 254	KDA 350	VFP 332	WNR 260	WWAR 320	WWO 344
KCAJ 272	KCAW 254	KDN 290	VFQ 296	WRW 320	WWAS 332	WWQ 224
KCAK 230	KCAZ 350	KGD 338	VFR 314	WSG 224	WWAT 224	WWU 338
KCAM 338	KCQ 290	KIS 272	VFS 326	WSX 266	WWAU 326	WWX 272
KCAN 365	KCR 242	KJF 320				

## FOREIGN B. C. STATIONS BY FREQUENCIES

Wavelength in meters is given in parentheses following frequencies in kilocycles. Entering dial number in square provided will enable you to identify stations heard. Power is given in second column in kilowatts and decimals thereof. Actual frequency is given in parentheses. While call letters are given wherever possible, very few European stations use these calls. Time is Local unless otherwise stated.

**520 (576.6)**

**LKH** .7 Hamar, Nor. (519)  
**OFH** 10. Viipuri, Fin. (527)  
**RW34** 10. Stalingrad, U.S.R. (522)  
 ..... 1. Innsbruck, Aust. (519)  
 ..... 5. Ljubljana, Yug. (527)  
 ..... 5. Tartu, Est. (517)

**530 (565.7)**

**IIBZ** 10. Bolzano, I. (536)  
 ..... 16. Wilno, Pol. (536)

**540 (555.2)**

**HAL** 120. Budapest, Hun. (546)

**Budapest VIII, Sandor Utea No. 7.**  
**RW52** 20. Tchita, U.S.R. (546)

**550 (545.1)**

**2CR** 10. Cumnock, Ausl.  
 ..... 100. Beromunster, Sw. (556). Report to PTT,

## LONG WAVE STATIONS BY FREQUENCIES

Kycs.	Meters	Power	Call	Location	Kycs.	Meters	Power	Call	Location
			KCV	Oakland, Calif.				WRW	Greensboro, N. C.
			WWHP	Harrisburg, Pa.				WWAH	Albany, N. Y.
245	1224	100.	.....	Leningrad, USR.				WWAR	Jackson, Mich.
248	1209		CYW	Strathburn, Ont.	326	920		KCAP	Big Spring, Tex.
			KCAG	Amarillo, Tex.				KSG	Cheyenne, Wyo.
			WET	Spartanburg, S. C.				WWAU	Memphis, Tenn.
			WWBF	Mobile, Ala.				VFS	Lethbridge, Alta.
			VFT	Red Deer, Alta.				VXR	Jarvis, Ont.
254	1180		KCAV	Springfield, Mo.	332	903		KCAU	Houston, Tex.
			KCAW	San Antonio, Tex.				KCY	Portland, Ore.
			KLK	Reno, Nev.				VFN	St. Hubert, Que.
			WWAP	Pittsburgh, Pa.				VFP	Forrest, Man.
			WWBC	Titusville, Fla.				WBP	Key West, Fla.
256	1169	25.	.....	Tashkent, USR.	332	903		WEK	Wichita, Kans.
260	1153		KCS	Pasco, Wash.				WWAS	Cincinnati, O.
			KCT	Los Angeles, Cal.				WWAW	Charleston, S. C.
			WNR	Richmond, Va.	338	887		KCAM	Tucson, Ariz.
			WWAQ	Jackson, Miss.				KGD	Salt Lake City, Utah
		60.	.....	Oslo, Nor.				WWAG	New Orleans, La.
266	1127		KCAQ	Minneapolis, Minn.				WWHS	Chatanooga, Tenn.
			KCX	Medford, Ore.				WWU	Newark, N. J.
			WHZ	Atlanta, Ga.	344	872		KCAS	Spokane, Wash.
			WSX	Boston, Mass.				KCU	Fresno, Calif.
			WWAB	Buffalo, N. Y.				WWAV	Jacksonville, Fla.
270	1100	5	.....	Godthaab, Grn.				WVO	Cleveland, O.
271	1106	100.	.....	Moscow II, USR.	350	857		KCAH	Kingman, Ariz.
272	1102		KCAJ	Little Rock, Ark.				KCCA	Oklahoma City
			KIS	Iowa City, Iowa				KDA	Chicago, Ill.
			WWAF	Miami, Fla.				WWBI	Raleigh, N. C.
			WWX	Washington, D. C.	355	845	10.	.....	Finmark, Nor.
278	1078		Common	Wave			20.	.....	Rostov-on-Don, USR
280	1071	35.	.....	Tiflis, USR.	359	835		KCAD	Idaho Falls, Ida.
284	1056		KCAC	Butte, Mont.				KRC	Kansas City, Mo.
			KVM	North Platte, Neb.			20.	.....	Budapest II, Hun.
290	1034		KCQ	St. Louis, Mo.	365	821		KCAN	Fargo, N. D.
			KDN	Rock Springs, Wyo.				KCZ	Seattle, Wash.
296	1013		KCAA	Tulsa, Okla.				KKJ	Ft. Worth, Tex.
			VFQ	Regina, Sask.	375	800	50.	.....	Sverdlovsk, USR.
302	993		KCAR	Pueblo, Colo.	392	765	.6	.....	Boden, Swe.
308	973		KCAE	Winslow, Ariz.	401	748	1.3	.....	Geneva, Swi.
314	955		KOJ	Elko, Nev.			100.	.....	Moscow III, USR.
			VFR	Maple Creek, Sask.	414	725	.6	.....	Ostersund, Swe.
			VFU	London, Ont.			10.	.....	Voronezh, USR.
320	937		KCAT	Milford, Utah	431	696	1.2	.....	Oulu, Fin.
			KJF	Omaha, Nebr.	436	688	10.	.....	Ufa, USR.

## LONG WAVE STATIONS BY LOCATIONS

AUSTRIA	QUEBEC	FRANCE	ICELAND	Oslo	TURKEY
Vienna ..... 240	St. Hubert VFN 332	Paris ..... 182	Reykjavik ..... 208	..... 260	Ankara ..... 230
CANADA	SASKATCHE- WAN	GERMANY	LITHUANIA	POLAND	Istanbul ..... 188
ALBERTA	Maple Creek VFR 314	Berlin ..... 191	Kaunas ..... 155	Warsaw ..... 224	USSR
Lethbridge VFS 326	Regina VFQ 296	GREAT BRITAIN	LUXEM- BOURG	RUMANIA	Irkoutsk ..... 200
Red Deer VFT 248	EUROPE	Droitwich ..... 200	Luxembourg ..... 230	Brasov ..... 160	Kharkov ..... 232
MANITOBA	DENMARK	NETHERLANDS	SWEDEN	Motala ..... 216	Leningrad ..... 245
Forrest VFP 332	Kalundborg ..... 238	GREENLAND	Boden ..... 392	Ostersund ..... 414	Minsk ..... 208
ONTARIO	FINLAND	Godhavn ..... 200	Moscow ..... 174	..... 414	Moscow ..... 271
Jarvis VXR 326	Lahti ..... 166	Godthaab ..... 270	Kootwijk ..... 160	..... 414	Moscow ..... 401
London VFU 314	Oulu ..... 431	Julianhaab ..... 158	NORWAY	SWITZERLAND	Novosibirsk ..... 218
Strathburn CYW 248		HUNGARY	Finmark	Geneva ..... 401	Rostov-on-Don ..... 355
		Budapest ..... 359			Sverdlovsk ..... 375

5:00-5:20	—	KGBX	1310	100	Springfield	2:30-2:50	—	WGNV	1210	100	Chester
5:10-5:30	—	WFLA	620	1000	Clearwater	2:40-3:00	—	WMBQ	1500	100	Brooklyn
5:10-5:30	—	WPAY	1370	100	Portsmouth	2:50-3:10	—	WGBB	1210	100	Freeport
5:10-5:30	—	KCMC	1420	100	Texarkana	3:00-3:20	—	WOKO	1430	500	Albany
5:20-5:40	—	KPLC	1500	100	Lake Charles	3:00-3:20	—	WJBC	1200	100	Bloomington
5:20-5:40	—	WHBU	1210	100	Anderson	3:00-3:20	—	KTRH	1330	500	Houston
5:20-5:40	—	WBBZ	1200	100	Ponca City	3:10-3:30	—	WDEV	550	500	Waterbury
5:30-5:50	—	WAIM	1200	100	Anderson	3:10-3:30	—	WGL	1370	100	Fort Wayne
5:30-5:50	—	WIBM	1370	100	Jackson	3:10-3:30	—	KFPW	1210	100	Fort Smith
5:30-5:50	—	KGFF	1420	100	Shawnee	3:20-3:40	—	WNYC	810	1000	New York
5:40-6:00	—	WMTFJ	1420	100	Daytona Beach	3:20-3:40	—	WVAE	1200	100	Hammond
5:40-6:00	—	WOMT	1210	100	Manitowoc	3:20-3:40	—	WTAW	1120	500	College Station
5:40-6:00	—	KNOW	1500	100	Austin	3:30-3:50	—	WVO	1130	1000	New York
						3:30-3:50	—	WLBC	1310	100	Muncie
						3:30-3:50	—	KASA	1210	100	Elk City
						3:40-4:00	—	WINS	1180	1000	New York
						3:40-4:00	—	WFAM	1200	100	South Bend
						3:40-4:00	—	KWLC	1270	100	Decorah
						3:50-4:10	—	WCAP	1280	500	Asbury Park
						3:50-4:10	—	WEXL	1310	100	Royal Oak
						4:00-4:20	—	WNBC	1380	250	New Britain
						4:00-4:20	—	WJAY	610	500	Cleveland
						4:00-4:20	—	KGCA	1270	100	Decorah
						4:10-4:30	—	WTNJ	1280	500	Trenton
						4:10-4:30	—	WBNS	1430	500	Columbus
						4:10-4:30	—	KFVS	1210	100	Cape Girardeau
						4:20-4:40	—	WLNH	1310	100	Laconia
						4:20-4:40	—	WWJ	920	1000	Detroit
						4:20-4:40	—	KGHL	780	1000	Billings
						4:30-4:50	—	KQV	1380	500	Pittsburgh
						4:30-4:50	—	KDLR	1210	100	Devil's Lake
						4:40-5:00	—	WLAP	1420	100	Lexington
						4:40-5:00	—	WOC	1370	100	Davenport
						4:50-5:10	—	WSMK	1380	200	Dayton
						4:50-5:10	—	KFXJ	1200	100	Grand Junction
						5:00-5:20	—	WAVE	940	1000	Louisville
						5:00-5:20	—	KFDM	560	500	Beaumont
						5:10-5:30	—	WADC	1320	1000	Akron
						5:10-5:30	—	KWTN	1210	100	Watertown
						5:20-5:40	—	WSPD	1340	1000	Toledo
						5:20-5:40	—	WVEW	760	1000	St. Louis
						5:30-5:50	—	WHK	1390	1000	Cleveland
						5:30-5:50	—	KWEA	1210	100	Shreveport
						5:40-6:00	—	WCMI	1310	100	Ashland
						5:40-6:00	—	WSUI	880	500	Iowa City
						5:50-6:10	—	KGGM	1230	250	Albuquerque

**October 3, 10, 17, 24, 31**

12:01-2:00 CFCN 1030 10000 Calgary

**Friday Mornings**

**October 4**

3:00-3:20	—	WJW	1210	100	Akron
3:00-3:20	—	KRMD	1310	100	Shreveport
3:10-3:30	—	WPAD	1420	100	Paducah
3:10-3:30	—	KOTN	1500	100	Pine Bluff
3:20-3:40	—	WCOL	1210	100	Columbus
3:20-3:40	—	KFXR	1310	100	Oklahoma City
3:30-3:50	—	WELL	1420	100	Battle Creek
3:30-3:50	—	KGEK	1200	100	Sterling
3:40-4:00	—	WALR	1210	100	Zanesville
3:40-4:00	—	KFPL	1310	100	Dublin
3:50-4:10	—	WMBC	1420	100	Detroit
3:50-4:10	—	WCAT	1200	100	Rapid City
4:00-4:20	—	WFDF	1310	100	Flint
4:00-4:20	—	KGCU	1240	250	Mandan
4:10-4:30	—	WFBE	1200	100	Cincinnati
4:10-4:30	—	KWYO	1370	100	Sheridan
4:20-4:40	—	WGAR	1450	500	Cleveland
4:20-4:40	—	KLPM	1240	250	Minot
4:30-4:50	—	WCLO	1200	100	Janesville
4:30-4:50	—	KGFG	1370	100	Oklahoma City
4:40-5:00	—	WCLS	1310	100	Joliet
4:40-5:00	—	KABC	1420	100	San Antonio
4:50-5:10	—	WJBL	1200	100	Decatur
4:50-5:10	—	KFJZ	1370	100	Fort Worth
5:00-5:20	—	WJBK	1500	100	Detroit
5:00-5:20	—	KSO	1430	250	Des Moines
5:10-5:30	—	WIBU	1210	100	Poynette
5:10-5:30	—	KGFI	1500	100	Corpus Christie
5:20-5:40	—	WHDF	1370	100	Calumet
5:20-5:40	—	WLBF	1420	100	Kansas City
5:30-5:50	—	WCRW	1210	100	Chicago
5:30-5:50	—	KGKB	1500	100	Tyler
5:40-6:00	—	WTAQ	1380	1000	Eau Claire
5:40-6:00	—	WMBH	1420	100	Joplin
5:50-6:10	—	WMFG	1210	100	Hibbing
1:41-1:49	—	CFCY	630	1000	Charlottetown

**October 18**

2:30-4:00 KADA 1200 100 Ada

**Saturday Mornings**

**October 5**

2:10-2:30	—	WBRB	1210	100	Red Bank
2:20-2:40	—	WWRL	1500	100	Woodside

**October 19**

1:01-1:09	—	CRCS	950	100	Chicoutimi
1:11-1:19	—	CJCB	1240	1000	Sydney
1:21-1:29	—	CHNS	930	1000	Halifax
1:31-1:39	—	CHRC	580	100	Quebec
1:41-1:49	—	CFCY	630	1000	Charlottetown
1:51-1:59	—	CJLS	1310	100	Yarmouth
2:11-2:19	—	CHSJ	1120	500	St. John
3:01-3:09	—	CHNC	1410	500	New Carlisle

**October 5, 12, 19, 26**

12:01-1:00	—	CMCO	1110	150	Havana
12:30-1:00	—	KDKA	980	50000	Pittsburgh
2:00-4:00	—	KIUN	1420	100	Peecos

**LONG WAVE STATIONS BY FREQUENCIES**

Kycs.	Meters	Power	Call	Location	Kycs.	Meters	Power	Call	Location	
155	1934	7.	.....	Kaunas, Lith.	218	1378	100.	.....	Novosibirsk, USR.	
158	1900	1.	.....	Julianhaab, Grn.	224	1338	.....	WSG	LaCrosse, Wis.	
160	1874	100.	.....	Kootwijk, Neth.	.....	.....	.....	WWAT	Birmingham, Ala.	
		150.	.....	Brasov, Rum.	.....	.....	.....	WWQ	Bellefonte, Pa.	
166	1806	40.	.....	Lahti, Fin.	.....	.....	.....	.....	Warsaw, Pol.	
174	1723	500.	.....	Moscow I, USR.	230	1304	.....	KCAF	Albuquerque, N. M.	
182	1647	80.	.....	Radio-Paris, F.	.....	.....	.....	KCAK	Shreveport, La.	
188	1599	5.	.....	Istanbul, Tur.	.....	.....	.....	.....	Ankara, Tur.	
191	1570	60.	.....	Berlin, G.	.....	.....	.....	.....	Luxembourg, Lux.	
200	1500	.5	.....	Godhavn, Grn.	232	1292	20.	.....	Kharkov, USR.	
		150.	.....	Droitwich, G. E.	236	1270	.....	WWAC	Nashville, Tenn.	
		35.	.....	Irkoutsk, USR.	238	1260	60.	.....	.....	Kalundborg, Den.
208	1441	35.	.....	Minsk, USR.	240	1249	.5	.....	.....	Vienna, Austria
		16.	.....	Reykjavik, Iceland	242	1239	.....	KCAO	El Paso, Tex.	
216	1388	150.	.....	Motala, Swe.	.....	.....	.....	KCR	Boise, Idaho	

7:30-7:50 KAST 1370 100 Astoria  
 7:40-8:00 KRRLC 1420 100 Lewiston  
 7:50-8:10 KINY 1310 100 Jueau

**October 21**

1:31-1:39 CJKL 530 1000 Kirkland Lake  
 2:00-2:09 CFNB 550 500 Fredericton

**October 7, 14, 21, 28**

1:00-2:00 WGES 1360 500 Chicago

**Tuesday Mornings**

**October 1**

1:00-3:00 CHWK 780 100 Chilliwack  
 2:00-2:20 WPAX 1210 100 Thomasville  
 2:10-2:30 WBHS 1200 100 Huntsville  
 2:20-2:40 WBBQ 1370 100 Memphis  
 2:30-2:50 WEED 1420 100 Rocky Mount  
 2:40-3:00 WOPI 1500 100 Bristol  
 2:50-3:10 WSMR 1320 500 New Orleans  
 3:00-3:20 WMBR 1370 100 Jacksonville  
 3:10-3:30 WNRA 1420 100 Muscle Shoals  
 3:20-3:40 WSJS 1310 100 Winston-Salem  
 3:30-3:50 WHEF 1500 100 Koscusko  
 3:40-4:00 KMLB 1200 100 Monroe  
 3:50-4:10 WAGF 1370 100 Dothan  
 4:00-4:20 WNEL 1290 500 San Juan  
 4:00-4:20 KWG 1200 100 Stockton  
 4:10-4:30 WTVS 1310 100 Jackson  
 4:10-4:30 KPJM 1500 100 Prescott  
 4:20-4:40 WPFM 1370 100 Hattiesburg  
 4:20-4:40 KERN 1370 100 Bakersfield  
 4:30-4:50 WGPC 1420 100 Albany  
 4:30-4:50 KKO 1500 100 El Centro  
 4:40-5:00 WBNO 1200 100 New Orleans  
 4:40-5:00 KIEM 1210 100 Eureka  
 4:50-5:10 WROL 1310 100 Knoxville  
 4:50-5:10 KLS 1440 250 Oakland  
 5:00-5:20 WDNC 1500 100 Durham  
 5:00-5:20 KHSL 950 250 Chico  
 5:10-5:30 WJBW 1200 100 New Orleans  
 5:10-5:30 KGMB 1320 250 Honolulu  
 5:20-5:40 WAML 1310 100 Laurel  
 5:20-5:40 KRE 1370 100 Berkeley  
 5:30-5:50 WSIX 1210 100 Springfield  
 5:30-5:50 KGU 750 2500 Honolulu  
 5:40-6:00 KGAR 1370 100 Tucson  
 5:50-6:10 KCRJ 1310 100 Jerome  
 6:00-6:20 KGDH 1100 1000 Stockton  
 6:10-6:30 KSUN 1200 100 Lowell  
 6:20-6:40 KTRB 740 250 Modesto  
 6:30-6:50 KUMA 1420 100 Yuma  
 6:40-7:00 KFBK 1310 100 Sacramento

**October 15**

1:00-3:00 XEAF 980 250 Nogales  
 3:30-4:30 KIDW 1420 100 Lamar

**October 1, 8, 15, 22, 29**

1:00-1:30 WBRE 1310 100 Wilkes-Barre  
 3:00-4:00 WDAY 940 1000 Fargo  
 5:00-5:15 WBNS 1430 500 Columbus

**Wednesday Mornings**

**October 2**

2:00-2:20 WWEBR 1310 100 Buffalo  
 2:10-2:30 WPNP 920 250 Philadelphia  
 2:20-2:40 WSAJ 1310 100 Grove City  
 2:30-2:50 WHIS 1410 250 Bluefield  
 2:40-3:00 WFBG 1310 100 Altoona  
 2:50-3:10 WPHR 880 500 Petersburg  
 3:00-3:20 WDAS 1370 100 Philadelphia  
 3:00-3:20 WKBB 1500 100 East Dubuque  
 3:00-3:20 KIUL 1210 100 Garden City  
 3:00-5:10 WIRE 1410 500 Indianapolis  
 3:10-3:30 WRBX 1410 250 Roanoke  
 3:10-3:30 WHBC 1200 100 Canton  
 3:10-3:30 KGIW 1420 100 Alamosa  
 3:20-3:40 WMBG 1210 100 Richmond  
 3:20-3:40 WTRC 1310 100 Elkhart  
 3:20-3:40 KICA 1370 100 Clovis  
 3:30-3:50 WSVS 1370 100 Buffalo  
 3:30-3:50 WBCM 1410 500 Bay City  
 3:30-3:50 KGHI 1200 100 Little Rock  
 3:40-4:00 WGH 1310 100 Newport News  
 3:40-4:00 WGBF 630 500 Evansville  
 3:40-4:00 KIDW 1420 100 Lamar

3:50-4:10 WOCL 1210 100 Jamestown  
 3:50-4:10 WRWOK 1410 500 Rockford  
 3:50-4:10 KBTM 1200 100 Paragou  
 4:00-4:20 WQAN 880 250 Seranton  
 4:00-4:20 WBOW 1310 100 Terre Haute  
 4:00-4:20 KFBB 1280 1000 Great Falls  
 4:10-4:30 WHEC 1430 500 Rochester  
 4:10-4:30 WOSU 570 750 Columbus  
 4:10-4:30 KGFJ 1370 100 Roswell  
 4:20-4:40 WSAZ 1190 1000 Huntington  
 4:20-4:40 WBEQ 1310 100 Marquette  
 4:20-4:40 KADA 1200 100 Ada  
 4:30-4:50 W GAL 1500 100 Lancaster  
 4:30-4:50 WKBN 570 500 Youngstown  
 4:30-4:50 W CAL 1250 1000 Northfield  
 4:40-5:00 WCAZ 1070 100 Carthage  
 4:40-5:00 KFJB 1200 100 Marshalltown  
 4:50-5:10 WIRE 1400 500 Indianapolis  
 4:50-5:10 WACO 1420 100 Waco  
 5:00-5:20 WIDZ 1070 100 Tuscola  
 5:00-5:20 KGDZ 1200 100 Fergus Falls  
 5:10-5:30 WLBL 900 2500 Stevens Point  
 5:10-5:30 WLB 1250 1000 Minneapolis  
 5:20-5:40 WBAA 890 1000 West Lafayette  
 5:20-5:40 WIL 1200 100 St. Louis  
 5:30-5:50 WTAD 900 500 Quincy  
 5:30-5:50 KGHF 1320 500 Pueblo  
 5:40-6:00 WXYZ 1240 1000 Detroit  
 5:40-6:00 KFRO 1370 100 Longview  
 5:50-6:10 WTMV 1500 100 East St. Louis  
 5:50-6:10 KFVS 1200 1000  
 4:00-5:00 WIL 1200 100 St. Louis

**October 16**

**October 30**

5:15-5:45 WALA 1380 500 Mobile  
**October 2, 9, 16, 23, 30**  
 1:30-2:00 WKBB 1500 100 East Dubuque

**Thursday Mornings**

**October 3**  
 2:00-2:20 KALB 1210 100 Alexandria  
 2:00-2:20 WSOB 1210 100 Charlotte  
 2:20-2:40 WMPF 1370 100 Wilmington  
 2:40-3:00 WJBO 1420 100 Baton Rouge  
 2:50-3:10 WCGM 1210 100 Mississippi City  
 3:00-3:20 WRDW 1500 100 Augusta  
 3:00-3:20 WBBY 1200 100 Green Bay  
 3:00-3:20 WDAH 1310 100 El Paso  
 3:10-3:30 WKAQ 1240 1000 San Juan  
 3:10-3:30 WJMS 1420 100 Ironwood  
 3:10-3:30 KLUF 1370 100 Galveston  
 3:20-3:40 WCSC 1360 500 Charleston  
 3:20-3:40 WEDC 1210 100 Chicago  
 3:20-3:40 KTSM 1310 100 El Paso  
 3:30-3:50 WBIG 1440 500 Greensboro  
 3:30-3:50 WKRC 550 1900 Cincinnati  
 3:30-3:50 KGKL 1370 100 San Angelo  
 3:40-4:00 WMFO 1370 100 Decatur  
 3:40-4:00 WJIM 1210 100 Lansing  
 3:40-4:00 KPMP 1310 15 Greenville  
 3:50-4:10 WQBC 1360 1000 Vicksburg  
 3:50-4:10 KFIZ 1420 100 Fond du Lac  
 3:50-4:10 KMAC 1370 100 San Antonio  
 4:00-4:20 WDBO 580 1000 Orlando  
 4:00-4:20 WEBQ 1210 100 Harrisburg  
 4:00-4:20 KFYO 1310 100 Lubbock  
 4:10-4:30 WNBR 1430 500 Memphis  
 4:10-4:30 WMPC 1200 100 Lapeer  
 4:10-4:30 KONO 1370 100 San Antonio  
 4:20-4:40 WQAM 560 1000 Miami  
 4:20-4:40 WBBF 1210 100 Rock Island  
 4:20-4:40 KABR 1420 100 Aberdeen  
 4:30-4:50 WDAE 1220 1000 Tampa  
 4:30-4:50 WKBB 1500 100 Muskegon  
 4:30-4:50 KFJM 1370 100 Grand Forks  
 4:40-5:00 WMPN 1210 100 Clarksdale  
 4:40-5:00 WCBSS 1420 100 Springfield  
 4:40-5:00 KIUI 1310 100 Santa Fe  
 4:50-5:10 KVOL 1310 100 Lafayette  
 4:50-5:10 WKBV 1500 100 Richmond  
 4:50-5:10 KFGQ 1370 100 Boone  
 5:00-5:20 WIOD 1300 1000 Miami  
 5:00-5:20 WTAX 1210 100 Springfield

1255	CMCG	Havana, Cuba, 150 to 250
1270	XEG	Ensenada, L. C., 500 to 200
1270	XFB	Jalapa, Ver., 1000 to 250
1320	WSMB	New Orleans, La., 1000 to 500
1340	CMJL	Camaguey, Cuba, 75 to 100
1340	XFD	Jalapa, Ver., 250 to 350
1350	CMCA	Havana, Cuba, 150 to 250
1360	CMJH	Ciego de Avila, Cuba, 50 to 100
1400	CMKR	Santiago, Cuba, 200 to 100
1430	KSO	Des Moines, Iowa, 250 to 500
1460	KSTP	St. Paul, Minn., 10000 to 25000
1470	CMOK	Havana, Cuba, 200 to 150

**FREQUENCIES**

560	XEFC	Merida, Yuc., from 1310
570	KGKO	Wichita Falls, Texas, from 1240
750	XEAM	Matamoros, Tams., from 960
850	KEFE	Nuevo Laredo, Tams., from 920
990	XEAF	Nogales, Son., from 980
1070	WDZ	Tuscola, Ill., from 1020
1155	XED	Guadalajara, Jal., from 1160
1160	XEC	Tijuana, L. C., from 1310
1390	KOOS	Marshfield, Ore., from 1200

**DELETED**

730	XEBC	Agua Caliente, L. C.
740	XELC	Mexico City, Mex.
830	CMC	Havana, Cuba
845	XEXX	Mexico City, Mex.
1040	CMGH	Matanzas, Cuba
1100	TIRC	San Jose, C. R.
1105	XEFG	Mexico City, Mex.
1150	XEFL	Tijuana, L. C.
1270	CMCP	Havana, Cuba
1300	CMKJ	Guantanamo, Cuba
1310	XELM	Mineral del Monte, Dgo.
1310	XETB	Torreón, Coah.
1320	CMCK	Havana, Cuba

**NEW**

1000	XEY	Merida, Yuc.
1100	XEL	Mexico City, Mex.
1210	XEMZ	Tijuana, L. C.
1310	XFA	Aguascalientes, Ags.
1420	KHBC	Hilo, T. H.
1420	.....	Palestine, Texas
1500	KNEL	Brady, Texas
1500	.....	Valley City, N. D.
1500	.....	Roseburg, Ore.
1500	.....	Selma, Ala.

**LOCATION**

750	XEAM	Matamoros, Tams., from Nuevo Laredo, Tams.
1340	XFD	Jalapa, Ver., from Orizaba, Ver.
1420	CMGI	Matanzas, Cuba, from Colon, Cuba
1430	CMJP	Camaguey, Cuba, from Moron, Cuba

**CALLS**

1120	WCOP	Boston, Mass., from WMFH
1210	KDON	Del Monte, Calif., from KFUH

**CHAINS**

1240	WXYZ	Detroit, Mich., new NBC (Blue)
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**The October DX Calendar**

of frequency checks and special programs for distant listeners arranged by the stations outside of their regular hours. All time is EST so that programs may be arranged in order.

**Sunday Mornings**

**October 6**

3:00-3:20	KLCN	1290	100	Blytheville
3:30-3:50	KXYZ	1440	500	Houston
3:50-4:10	KTUL	1400	500	Tulsa

4:00-4:20	KPAC	1260	500	Port Arthur
4:10-4:30	KGDY	1340	250	Huron
4:20-4:40	KRGV	1260	500	Weslaco
4:50-5:10	KARK	890	250	Little Rock
5:00-5:20	KGKO	1240	500	Wichita Falls
5:20-5:40	WJNAD	1010	1000	Norman
5:40-6:00	KUOA	1260	1000	Fayetteville

**October 13**

1:00-3:00	CMOX	1320	250	Havana
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**October 20**

1:01-1:09	CRCS	950	100	Chicoutimi
1:11-1:19	CJCB	1240	1000	Sydney
1:21-1:29	CHNS	930	1000	Halifax
1:31-1:40	CHRC	580	500	Quebec
1:51-1:59	CJLS	1310	100	Yarmouth
2:00-2:09	CFNB	550	500	Fredericton
2:11-2:19	CHSJ	1120	500	St. John
3:01-3:09	CHNC	1410	500	New Carlsisle
3:15 on	KGGM	1230	250	Albuquerque

**October 27**

12:01-4:00	CJRC	1390	100	Winnipeg
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**October 6, 13, 20, 27**

1:00-1:30	KFI	640	50000	Los Angeles
1:00-5:00	KIUP	1370	100	Ourango
2:30-4:00	CKWV	1010	100	Vancouver
3:00-4:30	CKOV	630	100	Kelowna

**Monday Mornings**

**October 7**

2:00-2:20	WCNW	1500	100	Brooklyn
2:00-2:20	WJAC	1310	100	Johnstown
2:10-2:30	WFAS	1210	100	White Plains
2:10-2:30	WRAK	1370	100	Williamsport
2:20-2:40	WNBF	1500	100	Binghamton
2:20-2:40	WCHS	580	500	Charleston
2:30-2:50	WAGM	1420	100	Presque Isle
2:30-2:50	WBTM	1370	100	Danville
2:40-3:00	WMFF	1310	100	Plattsburg
2:40-3:00	WLVA	1200	100	Lynchburg
2:50-3:10	WHDL	1420	100	Olean
3:00-3:20	WCAX	1200	100	Burlington
3:10-3:30	WSYB	1500	100	Rutland
3:10-3:30	WTEL	1310	100	Philadelphia
3:20-3:40	WIBX	1200	100	Utica
3:30-3:50	WQDM	1370	100	St. Albans
3:30-3:50	WKOK	1210	100	Sunbury
3:40-4:00	WMBO	1310	100	Auburn
3:40-4:00	WLEU	1420	3100	Eric
3:50-4:10	WABY	170	100	Albany
3:50-4:10	WBAX	1210	100	Wilkes-Barre
4:00-4:20	WCAD	1220	500	Canton
4:00-4:20	WHAT	1310	100	Philadelphia
4:00-4:20	KOOS	1900	100	Marshfield (1390)
4:10-4:30	WRDO	1370	100	Augusta
4:10-4:30	WBBL	1210	100	Richmond
4:10-4:30	KGBU	900	500	Ketchikan
4:20-4:40	WNBZ	1290	100	Saranac Lake
4:20-4:40	WBRE	1310	100	Wilkes-Barre
4:20-4:40	KGVO	1260	1000	Missoula
4:30-4:50	WMAS	1420	100	Springfield
4:30-4:50	KPQ	1500	100	Wenatchee
4:40-5:00	WRAW	1310	100	Reading
4:40-5:00	KGY	1210	100	Olympia
4:50-5:10	WAAT	940	500	Jersey City
4:50-5:10	KRKO	1370	100	Everett
5:00-5:20	WSYR	570	250	Syracuse
5:00-5:20	KFXD	1200	100	Nampa
5:10-5:30	KVL	1370	100	Seattle
5:20-5:40	KGEZ	1310	100	Kalispell
5:30-5:50	KUJ	1370	100	Walla Walla
5:40-6:00	KGCX	1310	100	Wolf Point
5:50-6:10	KFQD	780	250	Anchorage
6:00-6:20	KSEI	900	250	Pocatello
6:10-6:30	KVOS	1200	100	Bellingham
6:20-6:40	KIT	1310	100	Yakima
6:30-6:50	KRSC	1120	100	Seattle
6:40-7:00	KXRO	1310	100	Aberdeen
6:50-7:10	KFIO	1120	100	Spokane
7:00-7:10	KFJI	1210	100	Klamath Falls
7:10-7:30	KMED	1310	100	Medford
7:20-7:40	KORE	1420	100	Eugene



and finally, in desperation, I decided to forget my self-respect and report on them, one number or not. Then, as luck would have it, they were so poor that I couldn't get a thing, much less ten minutes.

"Milan came in fairly well, but you can't report on some bloke talking in a foreign language all the time. West Regional and Toulouse could have been copied, but I didn't bother with them for they never verify. Finally, when the Frenchman came on for the IDA and promised confirmations, he didn't register at all.

"Although I missed out on CT1GL and was quite disappointed, I did have fair luck with the South Americans, having sent reports to IRC, HJN, CPX, CP4, LR2, LR3, LR4, LR5 and LS2.

"The entire TP season was terrific. Static and noise only permitted reports to 1YA and 2BL, although 3YA, 2YA, 4QG, 2UE and 4BC could be heard faintly."

## Building Sets

(Continued from page 6)

by moving slider "C." Thus the r.f. antenna current passes through the coil section B-A, or from antenna to ground. This current sets up a magnetic field about the primary section, and these magnetic lines of force induce a similar but stronger current in the secondary portion B-A. This current is then detected and made audible in the phones.

A variable tuning condenser should next be connected between "C" and "A." It provides a more efficient circuit and adds to the sharpness of tuning. Also, when a small fixed condenser is shunted across the phones it will greatly improve the audibility. This condenser should have a capacity of .001 microfarad, while the variable condenser should have about .0005 microfarad.

(The next article which will appear in our December issue will deal

with improvements in the tuning of this circuit, and how to amplify the detector output for loud speaker operation).

## Editorial Mail

(Continued from page 8)

XEPN, Piedras Negras, Coah., Mexico, state they will increase their power to 100,000 watts after September 15th. Tough luck for the four 1000-watters on 590.

Our letter to WAML, Laurel, Miss., was returned to us marked "Out of business." Can some of our southern readers verify this for us?

W. G. Meek, 621 S. Marengo Ave., Pasadena, Calif., writes: "There is a new station on 820 kcs., XEMB, Coronado Island." The new list from the Mexican government does not show it. Can others verify and give power and owner?

WNEW, Newark, N. J., is now on a schedule of twenty-four hours a day which will be meat for the West Coast listener but poison for the East.

## MONTH'S CHANGES IN STATION DATA

### POWER

570	KGKO	Wichita Falls, Texas, 1000 to 250
610	WIP	Philadelphia, Pa., 500 to 1000
640	CMBY	Havana, Cuba, 125 to 150
680	WPTF	Raleigh, N. C., 1000 to 5000
750	CMCW	Havana, Cuba, 125 to 150
750	XEAM	Matamoros, Cuba, 50 to 7.5
760	CMHX	Cienfuegos, Cuba, 150 to 500
760	XEOK	Tijuana, L. C., 2500 to 250
770	CMBS	Havana, Cuba, 120 to 150
780	CMJK	Camaguey, Cuba, 150 to 250
790	CMOA	Havana, Cuba, 75 to 150
850	KIEV	Glendale, Calif., 250 to 100
860	XEMO	Tijuana, L. C., 2500 to 5000
890	WILL	Urbana, Ill., 1000 to 250
910	XENT	Nuevo Laredo, Tams., 60000 to 65000
920	CMX	Havana, Cuba, 500 to 650
940	WHA	Madison, Wis., 2500 to 1000
960	CMCD	Havana, Cuba, 200 to 250
960	XEAW	Reynosa, Tams., 10000 to 50000
990	XEAF	Nogales, Son., 250 to 500
1000	CMBZ	Havana, Cuba, 150 to 250
1020	XEJ	Juarez, Chih., 1250 to 1000
1060	CMK	Havana, Cuba, 1500 to 250
1070	WDZ	Tuscola, Ill., 250 to 100
1100	CRCV	Vancouver, B. C., 1000 to 500
1110	CMCO	Havana, Cuba, 150 to 250
1120	KRKB	Los Angeles, Calif., 1000 to 500
1140	CMBG	Havana, Cuba, 300 to 200
1155	XED	Guadalajara, Jal., 500 to 2500
1160	XEC	Tijuana, L. C., 50 to 30
1195	VONF	St. John's, Nfld., 5000 to 500
1230	CMCB	Havana, Cuba, 100 to 150

## Inter-Club Plan for Cooperation

1. The CPC Chairman of each club will send a weekly report to the Clearing House, listing all DXes definitely arranged, the notification to show call letters, frequency, location, date and Eastern Standard Time. (Frequency check dedications are excepted.)

2. The CPC Chairman of each club will receive a weekly report from the Clearing House, listing all DX programs reported to the Clearing House and the club which arranged the program. It will be the duty of each CPC Chairman to advise his committee members not to arrange any DXes that will clash with those already arranged.

3. Each club agrees that under no circumstances will they make unfair use of the information supplied them by the Clearing House reports. This includes the agreement that no club will write to a station scheduled for a DX program for another club and ask to have a portion of that DX program dedicated to their club.

4. Each club agrees that for all foreign DXes, they will do their utmost to give the foreign DX broadcast a clear frequency for the period of the DX and, if possible, also to keep the adjacent frequencies clear. Cuban and Mexican programs will not be considered foreign.

5. Each club agrees that it will not publish anything in its publications that will in any way be offensive to another club in the plan.

6. Each club agrees that it will not use the publications of any other DX Club in the plan to secure the names and addresses of members of other DX Clubs for the purpose of soliciting membership.

7. If the clearing house shall receive notice of two programs on the same frequency for the same period, the notice which shall have the earlier postmark shall receive priority—except in the case of foreign programs, which will be given priority in all cases. The Clearing House shall immediately notify the sender of the conflicting program of the necessity of canceling the conflicting broadcast.

8. Each club agrees that it will not publish or publicize the DX programs arranged by another club without the permission or request of that club. (Requests or permission to use DX programs must be made by the President of each club in the plan.) When permission is granted, clubs listing DX programs arranged by another club will give credit to the club that arranged the DX. If any program is to be shared with another club, it shall be so listed and credited.

## The Short Waves

*(Continued from page 16)*

sults to the Perfect Phone Adapter, which he uses with his 16B Philco. Because of the fact there are so many thousands of amateur stations around the world we do not like to commence listing these stations as it would be an endless task. A few

of them have proven to be so consistent, however, that a few of Mr. Goodeve's catches are here listed: G5BY, G5ML, G6XR and G5NI, England; ON4AC Antwerp, Belgium; CT1BY, Lisbon; LA1G, Oslo, Norway; F8DR, Paris; K4SA, Puerto Rico; HI7G, Santo Domingo; CE1BC, Chanarlquito, Chile; LU6AP, LU8DR and LU8AB, Argentina; K6BAZ, K6FJF and K6CIC, Hawaii; and X1Q and X1G, Mexico City. These stations are heard very nearly every night with good volume and listeners with good locations, selective receivers, and lots of patience should hear all of them.

An unsigned letter from a correspondent in Schenectady states that Schenectady seems to be a favorable spot for s.w. as the writer has logged over 100 stations since the first of this year. He reports a new Cuban station, CO9JQ, at Camaguey, on 8.886 megs. between 9:30 and 10 pm, EST, with a test program. An official list from Cuba states that CO9JQ is owned by Rafael Grimany, Calle General Gomez No. 4, and that the station uses 150 watts. The assigned frequency of this station is 8.665 megs. or 34.6 meters.

## The Monthly Forum

*(Continued from page 27)*

good on January 11th. However, in that time, I got reports out to Fe-camp, Frankfort, Rennes, Hamburg, EAJ7, Bordeaux, Praha and, of course, Poste Parisien. Also heard Berlin, Cologne, Munich, Milan, West Regional and Toulouse, but these were not good enough to copy.

"When I heard the three Germans, they were good for ten minutes or so, and then they either faded out or the noise ruined them. A ten-minute report may be all right for some stations, but not when a band selection or a speech in a foreign tongue takes up the entire period. Morning after morning I'd hear the same thing,

North American B. C. Stations by Frequencies with Sunday's Time on the Air

KRE	ak	100	(.25)	Berkeley, Calif.	P-7:00-24:00
KRKO	ak	50	1	Everett, Wash.	P-12:00-14:00
KSLM	ak	100	....	Salem, Ore.	P-9:00-22:00
KUJ	ak	100	....	Walla Walla, Wash.	P-7:45-22:00
KVL	ak	100	1	Seattle, Wash.	P-16:00-22:30
KWKQ	ak	100	....	Kansas City, Mo.	C-6:00-9:00; 12:00-15:00; 18:00-21:00
KWYO	ak	100	....	Sheridan, Wyo.	M-10:00-23:00
WABY	aj	100	....	Albany, N. Y.	E-Silent
WAGF	ak	100	....	Dothan, Ala.	C-8:00-17:15
WBTM	ak	100	(.25)	Danville, Va.	E-10:00-13:00
WCBM	ae	100	(.25)	Baltimore, Md.	E-.....
WDAS	ae	100	(.25)	Philadelphia, Pa.	E-7:30-24:00
WGL	ae	100	C	Fort Wayne, Ind.	C-14:00-18:00; 17:00-20:30
WHBO	ak	100	....	Memphis, Tenn.	C-10:30-21:00
WHDF	ak	100	(.25)	Calumet, Mich.	E-10:00-14:00; 16:30-20:30
WIBM	ak	100	(.25)	Jackson, Mich.	E-7:00-00:45
WJTL	ak	100	....	Atlanta, Ga.	C-8:00-24:00
WLLH	ak	100	(.25)	Lowell, Mass.	E-8:00-23:15
WMBR	ak	100	C	Jacksonville, Fla.	E-8:00-24:00
WMFD	ak	100	D	Wilmington, N. C.	E-10:00-14:00; 17:00-19:00
WMFO	z	100	D	Decatur, Ala.	E-.....
WOC	ak	100	C (.25)	Davenport, Iowa	C-9:00-24:00
WPAY	ak	100	....	Portsmouth, Ohio	E-10:00-19:00
WPFB	ak	100	....	Hattiesburg, Miss.	C-11:00-16:30; 19:00-21:00
WQDM	ae	100	D	St. Albans, Vt.	E-10:00-14:00
WRAC	ak	100	(.25)	Williamsport, Pa.	E-17:30-22:00
WRDO	ae	100	....	Augusta, Maine	E-10:30-13:30
WRJN	ak	100	....	Racine, Wis.	C-8:00-22:30
WSVS	ak	50	D	Buffalo, N. Y.	E-Silent
XEFZ	ak	100	....	Mexico City, D. F.	C-18:00-1:00
XEI	ak	125	....	Morelia, Mch.	C-19:00-21:00
XEZZ	z	100	....	San Luis Potosi, SLP	C-9:30-15:00; 17:00-22:00

1380 kilocycles (217.3)

CMBX	ak	150	....	Havana, Cuba	E-.....
KOH	ak	500	C	Reno, Nev.	P-8:00-24:00
KOV	ae	500	....	Pittsburgh, Pa.	E-9:00-24:00
WALA	af	500	C (1)	Mobile, Ala.	C-9:00-22:00
WKBH	ae	1000	....	LaCrosse, Wis.	C-10:00-21:30
WNBC	mk	250	D	New Britain, Conn.	E-8:00-17:15
WSMK	ak	200	C	Dayton, Ohio	E-8:00-1:00

1390 kilocycles (215.7)

CJRC	ak	100	F	Winnipeg, Man.	C-11:00-16:00; 19:00-21:00
CMJC	z	150	....	Camaguey, Cuba	E-.....
HHH	ak	15	1395	San Ped. de Macoris, DR	E-12:30-14:30; 18:30-20:30
KLRA	ae	1000	C (2.5)	Little Rock, Ark.	C-17:00-23:00
KOOS	ae	250	....	Marshfield, Ore.	P-8:00-21:00
KOY	ae	500	(1)	Phoenix, Ariz.	M-9:00-23:15
WHK	ae	1000	C (2.5)	Cleveland, Ohio	E-8:00-24:00

1400 kilocycles (214.2)

CMGC	z	100	....	Matanzas, Cuba	E-.....
CMKR	z	100	....	Santiago, Cuba	E-.....
KLO	ak	500	....	Ogden, Utah	M-9:00-21:30
KTUL	ak	500	C (1)	Tulsa, Okla.	C-6:30-24:00
TGX	ak	250	....	Guatemala City, Gt.	C-13:00-16:00
WARD	ak	500	2	Brooklyn, N. Y.	E-10:30-11:00; 19:00-21:00
WBBC	ae	500	2 (1)	Brooklyn, N. Y.	E-7:00-10:30; 15:00-16:30; 21:00-22:30
WIRE	ak	500	R (1)	Indianapolis, Ind.	C-8:00-24:00
WLTH	ak	500	2	Brooklyn, N. Y.	E-11:00-12:00; (13:30-14 or 15-16:30); 22:30-24
WVFW	ak	500	2	Brooklyn, N. Y.	E-12:00-13:15; 16:30-19:00

1410 kilocycles (212.6)

CHNC	ak	500	F (1)	New Carlisle, Que.	A-11:00-13:00; 18:00-24:00
CKFC	ak	50	5	Vancouver, B. C.	P-10:45-18:00; 19:30-21:00
CKMO	ag	100	5F	Vancouver, B. C.	P-.....
CMCR	z	150	....	Havana, Cuba	E-9:00-23:00
KGNC	ae	1000	(2.5)	Amarillo, Texas	C-6:00-10:00; 11:00-15:00; 17-19:30; 22-24
WAAB	ak	500	C	Boston, Mass.	E-9:30-23:00
WBCM	ae	500	....	Bay City, Mich.	E-9:00-00:45
WHBL	ae	500	4	Sheboygan, Wis.	C-13:00-16:30; 18:00-19:30
WHIS	ak	250	2 (.5)	Bluefield, W. Va.	E-9:00-17:00
WRBX	ae	250	2 (.5)	Roanoke, Va.	E-17:00-23:00

North American B. C. Stations by Frequencies with Sunday's Time on the Air

WROK	ak	500	4	Rockford, Ill.	C-16:00-13:00; 16:00-18:00; 20:00-22:30
WSFA	ak	500	C (1)	Montgomery, Ala.	C-6:30-22:30

1420 kilocycles (211.1)

CKGB	ak	100	....	Timmins, Ont.	E-.....
CKNC	ak	100	F	Toronto, Ont.	E-11:00-23:15
CMGI	z	50	.....	Matanzas, Cuba	E-.....
KABC	ak	100	(.25)	San Antonio, Texas	C-8:00-21:30
KABR	ak	100	D	Aberdeen, S. Dak.	C-.....
KALB	z	100	PD	Alexandria, La.	C-.....
KBPS	aj	100	4	Portland, Ore.	P-Silent
KCMC	ak	100	.....	Texarkana, Ark.	C-11:00-14:00; 18:00-20:00
KFFZ	ak	100	.....	Fond du Lac, Wis.	C-Silent
KGFF	ak	100	.....	Shawnee, Okla.	C-10:15-21:00
KGCC	ak	100	.....	San Francisco, Cal.	P-9:00-12:30; 14:30-17:00; 19:00-22:00
KGIW	ak	100	1	Alamosa, Colo.	M-Silent
KHBC	z	100	....	Hilo, T. H.	L-.....
KIDW	ak	100	1	Lamar, Colo.	M-11:00-15:30
KIUN	ak	100	P	Pecos, Texas	C-7:00-12:00; 16:00-19:00
KORE	ae	100	.....	Eugene, Ore.	P-10:00-15:00; 18:00-21:00
KRLC	ak	100	.....	Lewiston, Idaho	P-8:00-22:00
KUMA	ak	100	.....	Yuma, Ariz.	M-11:00-12:00; 18:00-21:00
KWBG	ak	100	.....	Hutchinson, Kans.	C-7:00-19:00
KXL	ae	100	4 (.25)	Portland, Ore.	P-8:00-24:00
WACO	ak	100	C	Waco, Texas	C-8:00-22:00
WAGM	ae	100	....	Presque Isle, Maine	E-10:00-12:00
WAZL	ak	100	2	Hazleton, Pa.	E-11:45-19:30
WCBS	ak	100	.....	Springfield, Ill.	C-7:00-22:00
WEED	ak	100	3	Rocky Mount, N. C.	E-8:00-17:00; 20:00-22:00
WEHC	ak	100	3 (.25)	Charlottesville, Va.	E-10:00-12:00
WEHS	ak	100	a	Cicero, Ill.	C-16:00-20:00
WELL	ak	100	.....	Battle Creek, Mich.	E-10:00-24:00
WGPC	ak	100	.....	Albany, Ga.	C-8:00-14:00
WHDL	ak	100	D	Olean, N. Y.	E-8:00-ss
WHFC	ae	100	a	Cicero, Ill.	C-7:00-16:00; 20:00-1:00
WILM	aj	100	2	Wilmington, Del.	E-Silent
WJBO	aj	100	.....	Baton Rouge, La.	C-9:00-17:00
WJMS	ak	100	.....	Ironwood, Mich.	C-10:00-19:00
WKBI	ak	100	a	Cicero, Ill.	C-Silent
WLAP	ak	100	(.25)	Lexington, Ky.	C-9:00-22:00
WLBF	ak	100	.....	Kansas City, Kans.	C-9:00-23:00
WLEU	ak	100	(.25)	Erie, Pa.	E-10:00-23:00
WMAS	ak	100	C (.25)	Springfield, Mass.	E-8:00-24:00
WMBC	ae	100	(.25)	Detroit, Mich.	E-9:45-24:00
WMBH	ak	100	(.25)	Joplin, Mo.	C-8:00-21:30
WMFJ	ak	100	.....	Daytona Beach, Fla.	E-8:00-24:00
WNRA	ak	100	.....	Muscle Shoals, Ala.	C-9:00-13:00; 16:00-21:00
WPAD	ak	100	(.25)	Paducah, Ky.	C-7:00-9:00; 10:00-14:00; 15:00-22:30
WPAR	ak	100	.....	Parkersburg, W. Va.	E-10:45-18:30
WPRP	z	100	P (.25)	Ponce, P. R.	A-.....
WWC	z	1000	P	Spartanburg, S. C.	E-.....
XEAZ	z	7	.....	Guanajuato, Gto.	C-.....
XEFB	ak	100	.....	Monterrey, N. L.	C-8:00-15:00
.....	z	100	DP	Palestine, Tex.	C-.....

1430 kilocycles (209.7)

CMJP	ak	100	.....	Camaguey, Cuba	E-10:00-12:00; 20:00-22:00
KECA	ah	1000	(5) N	Los Angeles, Calif.	P-8:00-23:00
KGNF	ak	1000	D	North Platte, Neb.	C-Silent
KSO	ak	500	B (1)	Des Moines, Iowa	C-7:00-1:00
WBNS	ae	500	C (1)	Columbus, Ohio	E-7:30-24:00
WHEC	ae	500	C (1)	Rochester, N. Y.	E-9:00-24:00
WHP	ak	500	C (1)	Harrisburg, Pa.	E-9:00-24:00
WNBR	ae	500	(1)	Memphis, Tenn.	C-9:00-21:30
WOKO	aj	500	C (1)	Albany, N. Y.	E-8:00-1:00

1440 kilocycles (208.2)

KDFN	ak	500	.....	Casper, Wyo.	M-10:00-11:00
KLS	ag	250	D	Oakland, Calif.	P-8:00-16:30
KXYZ	z	1000	.....	Houston, Texas	C-8:00-22:30
TIFS	z	7.5 (1441)	.....	Cartago, C. R.	C-.....
WBIG	ae	500	C (1)	Greensboro, N. C.	E-8:00-23:00
WCBA	aj	500	a	Allentown, Pa.	E-12:00-13:30; 18:00-23:00
WBMD	ak	500	C (1)	Peoria, Ill.	C-8:00-24:00

North American B. C. Stations by Frequencies with Sunday's Time on the Air

WSAN aj 500 a Allentown, Pa. E—Silent  
 XEFI ae 250 .... Chihuahua, Chih. C—11:00-15:00; 20:00-22:30

1450 kilocycles (206.8)

CFCT ae 75 .... Victoria, B. C. P—11:00-12:30; 18:30-21:00  
 CHGS ae 50 F Summerside, P.E.I. A—11:00-13:00; 15:30-23:00  
 KTBS ak 1000 N Shreveport, La. C—8:00-24:00  
 WGAR ak 500 B (1) Cleveland, Ohio E—8:00-24:00  
 WHOM ae 250 .... Jersey City, N. J. E—7:00-24:00  
 WSAR ae 250 .... Fall River, Mass. E—8:00-15:30; 17:00-22:15  
 WTFI ak 500 .... Athens, Ga. E—9:00-13:15

1460 kilocycles (205.4)

CMKF z 50 .... Holguin, Cuba E—.....  
 KSTP ak 25000 N St. Paul, Minn. C—8:00-24:00  
 WJSV ak 10000 C Washington, D. C. E—8:00-1:00

1470 kilocycles (204.0)

CMOK z 150 .... Havana, Cuba E—.....  
 KGA ak 5000 N Spokane, Wash. P—8:00-24:00  
 WLAC ak 5000 C Nashville, Tenn. C—8:00-23:30

1480 kilocycles (202.6)

KOMA ak 5000 C Oklahoma City, Ok. C—8:00-24:00  
 WKBW ck 5000 C Buffalo, N. Y. E—9:00-1:00

1490 kilocycles (201.2)

KFBK ak 5000 C Sacramento, Calif. P—8:00-24:00  
 WCKY ae 5000 B Covington, Ky. E—8:00-24:00

1500 kilocycles (199.9)

CMCN z 150 .... Havana, Cuba E—.....  
 KDB ak 100 C Santa Barbara, Calif. P—8:00-24:00  
 KGFI ak 100 (.25) Corpus Christi, Tex. C—7:00-15:00; 18:00-22:00  
 KGFK ak 100 Y Moorhead, Minn. C—9:00-21:00  
 KGKB ak 100 .... Tyler, Texas C—8:00-14:00; 17:00-23:00  
 KGKY ak 100 (.25) Scottsbluff, Neb. M—10:00-12:00  
 KNEL z 100 DP Brady, Tex. C—.....  
 KNOW ak 100 .... Austin, Texas C—8:00-21:00  
 KOTN ak 100 D Pine Bluff, Ark. C—10:00-ss  
 KPJM ak 100 .... Prescott, Ariz. M—17:30-19:00  
 KPLC ak 100 .... Lake Charles, La. C—7:45-14:00; 17:00-21:00  
 KPO ak 100 (.25) Wenatchee, Wash. P—9:00-21:00  
 KREG ak 100 .... Santa Ana, Calif. P—11:00-12:45; 18:30-23:00  
 KXO ae 100 .... El Centro, Calif. P—9:00-15:00  
 WCNW ak 100 1 (.25) Brooklyn, N. Y. E—9:00-11:00; 23:00-1:00  
 W DNC ae 100 C Durham, N. C. E—7:30-00:30  
 WGAL ae 100 (.25) Lancaster, Pa. E—8:00-18:00  
 WHEF ak 100 (.25) Kosciusko, Miss. C—8:00-18:00  
 WJBK ae 100 (.25) Detroit, Mich. E—9:00-24:00  
 WKBB ak 100 (.25) E. Dubuque, Ill. C—9:00-14:00  
 WKBV ak 100 .... Richmond, Ind. C—Silent  
 WKBZ ak 100 (.25) Muskegon, Mich. E—7:30-22:00  
 WKEU ak 100 .... Griffin, Ga. C—9:00-17:00  
 WMBQ ae 100 1 Brooklyn, N. Y. E—19:00-23:00  
 WMEX ak 100 (.25) Boston, Mass. E—.....  
 WNEF ae 100 C Binghamton, N. Y. E—10:30-12:00; 13:30-21:30  
 WOPI ae 100 .... Bristol, Tenn. E—10:30-21:30  
 WRDW ak 100 .... Augusta, Ga. E—9:45-21:30  
 WRGA ak 100 (.25) Rome, Ga. C—9:00-15:00; 18:00-21:00  
 WSYB ak 100 .... Rutland, Vt. E—10:00-11:00  
 WTMV ak 100 .... East St. Louis, Ill. C—8:00-23:00  
 WWRL ak 100 1 (.25) Woodside, N. Y. E—8:00-9:00; 11:00-19:00  
 WWSW ae 100 (.25) Pittsburgh, Pa. E—10:30-23:00  
 ..... z 100 P St. Louis, Mo. C—.....  
 ..... z 100 P Valley City, N. Dak. C—.....  
 ..... z 100 DP Roseburg, Ore. P—.....  
 ..... z 100 DP Selma, Ala. E—.....

1510 kilocycles (198.6)

CFRC ak 100 ..... Kingston, Ont. E—No regular schedule  
 CKCR ak 100 ..... Waterloo, Ont. E—10:00-14:00; 17:00-23:00

1530 kilocycles (196.0)

W1XBS z 1000 ..... Waterbury, Conn. E—.....  
 W9XBY ak 1000 ..... Kansas City, Mo. C—8:00-2:00

1550 kilocycles (193.4)

W2XR z 1000 ..... Long Isl. City, N. Y. E—Silent  
 W6XAI ak 1000 ..... Bakersfield, Calif. P—8:00-23:00

KEY TO SYMBOLS

As Shown in the Index by Frequencies and Dial Numbers

Frequency is given in kilocycles; wavelength 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

- a Verifies reception for return postage.
- b Verifies only occasionally.
- c Does not verify.
- d Verification 10c; letter 25c.
- e Sends Ekko stamp for 10c.
- f Sends Ekko stamp for 5c.
- g Sends Ekko stamp for postage.
- h Sends own station stamp for 10c.
- i Sends own station stamp for 5c.
- j Sends own station stamp for postage.
- k Has no stamps.
- m Verifies for 5c.
- n Weather or time only.
- z No information available.

Fourth Column Symbols

- B National "Blue" network.
- C Columbia network.
- D Day time only.
- Dn Day time with occasional evening hours.
- F Canadian Radio Brdestg. Commission.
- N National "Red" and "Blue" networks.
- P Has construction permit only.
- R National "Red" network.
- S Sunday only.
- Sy Synchronized.
- X Has permit to increase power.
- Y Has permit to change location.
- Z Has permit to change frequency.
- a-b-c. Small letters show stations using same transmitter.
- 1-2-3. Figures denote stations sharing time.
- ..... No information.

Time on the Air

The time is given in accordance with the "24-hour clock." Noon is always 12:00, but midnight may be either 0:00 or 24:00. To change to time of your own clock, subtract twelve. Thus, 18:00-24:00 is 6:00 p. m. to midnight. 23:00-0:30 is 11:00 p. m. to 12:30 a. m. A signifies Atlantic Standard Time (AST). E is Eastern Standard Time (EST). C is Central Standard Time (CST). P is Pacific Standard Time (PST). L is Local Standard Time (LST).

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				MONTGOMERY			ARIZONA			ARKANSAS			
Birmingham				WSFA	1410	500	Jerome			Blytheville			
WAPI	1140	5000	N	Muscle Shoals			KCRJ	1310	100	KLCN 1290 100			
WBRC	930	1000	C	WNRA	1420	100	Lowell			El Dorado			
WSGN	1310	100		Selma			KSun	1200	100	KELD 1370 100			
Decatur				..... 1500 100			Phoenix			Fayetteville			
WMFO	1370	100		ALASKA			KOY	1390	500	KUOA 1260 1000			
Dothan				Anchorage			KTAR	620	1000	N	Fort Smith		
WAGF	1370	100		KFJD	780	250	Prescott			KFPW 1210 100			
Gadsden				Juneau			Tucson			Hot Springs			
WJBY	1210	100		KINY	1310	100	KGAR	1370	100	KTHS 1060 10000 N			
Mobile				Ketchikan			KVOA			Jonesboro			
WALA	1380	500	C	KGBU	900	500	KUMA	1420	100	KBTM 1200 100			

## NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<p><b>Little Rock</b>                      *KARK 890 250                      *KGHJ 1200 100                      *KLRA 1390 1000 C</p> <p><b>Pine Bluff</b>                      KOTN 1500 100                      Texarkana                      *KCMC 1420 100</p> <p style="text-align: center;"><b>CALIFORNIA</b></p> <p><b>Bakersfield</b>                      KERN 1370 100 C                      W6XAI 1550 1000</p> <p><b>Berkeley</b>                      KRE 1370 100                      Beverly Hills                      *KMPC 710 500</p> <p><b>Burbank</b>                      KELW 780 500                      Chico                      KHSL 950 250                      Del Monte                      KDON 1210 100                      El Centro                      KXO 1500 100</p> <p><b>Eureka</b>                      KIEM 1210 100</p> <p><b>Fresno</b>                      KMJ 580 1000 C</p> <p><b>Glendale</b>                      KIEV 850 100</p> <p><b>Hollywood</b>                      KFVB 950 1000                      KMTR 570 1000                      *KNX 1050 50000</p> <p><b>Long Beach</b>                      KFOX 1250 1000                      KGER 1360 1000</p> <p><b>Los Angeles</b>                      KECA 1430 1000 N                      KEHE 780 500                      *KFAC 1300 1000                      *KFI 640 50000 N                      KFSG 1120 1000                      KFVD 1000 250                      KGFJ 1200 100                      KHJ 900 1000 C                      KRKD 1120 500</p> <p><b>Modesto</b>                      KTRB 740 250</p> <p><b>Oakland</b>                      KLS 1440 250                      KLX 880 1000                      *KROW 930 1000</p> <p><b>Pasadena</b>                      KPPC 1210 50</p> <p><b>Sacramento</b>                      *KFBK 1490 5000 C</p> <p><b>San Bernardino</b>                      KFXM 1210 100</p> <p><b>San Diego</b>                      KFSD 600 1000 N                      KGB 1330 1000 C</p> <p><b>San Francisco</b>                      KFRC 610 1000 C                      KGGC 1420 100                      *KGO 790 7500 N                      KJBS 1070 500                      *KPO 680 50000 N                      *KSFO 560 1000                      KYA 1230 1000 N</p> <p><b>San Jose</b>                      KQW 1010 1000</p> <p><b>Santa Ana</b>                      KREG 1500 100</p> <p><b>Santa Barbara</b>                      KDB 1500 100 C</p> <p><b>Stockton</b>                      KGDM 1100 1000</p>	<p><b>KWG 1200 100 C</b></p> <p style="text-align: center;"><b>COLORADO</b></p> <p><b>Alamosa</b>                      *KGIW 1420 100</p> <p><b>Colorado Springs</b>                      *KVRD 1270 1000 C</p> <p><b>Denver</b>                      KFEL 920 500                      *KLZ 560 1000 C                      *KOA 830 50000 N                      *KPOF 880 500                      *KVOD 920 500</p> <p><b>Durango</b>                      KIUP 1370 100</p> <p><b>Grand Junction</b>                      KFJX 1200 100</p> <p><b>Greeley</b>                      KFKA 880 500</p> <p><b>Lamar</b>                      *KIDW 1420 100</p> <p><b>Pueblo</b>                      KGHF 1320 500</p> <p><b>Sterling</b>                      KGEK 1200 100</p> <p style="text-align: center;"><b>CONNECTICUT</b></p> <p><b>Bridgeport</b>                      WICC 600 500 C</p> <p><b>Hartford</b>                      WDRG 1330 1000 C                      WTIC 1040 50000 R</p> <p><b>New Britain</b>                      WNBC 1380 250</p> <p><b>New Haven</b>                      WMEF 900 500</p> <p><b>Storrs</b>                      WCAAC 600 500</p> <p><b>Waterbury</b>                      WATR 1190 100                      WIXBS 1530 1000</p> <p style="text-align: center;"><b>DELAWARE</b></p> <p><b>Wilmington</b>                      WDEL 1120 250                      WILM 1420 100</p> <p style="text-align: center;"><b>DISTRICT OF COLUMBIA</b></p> <p><b>Washington</b>                      WISV 1460 10000 C                      WMAL 630 250 B                      WOL 1310 100                      WRC 950 500 R</p> <p style="text-align: center;"><b>FLORIDA</b></p> <p><b>Clearwater</b>                      *WFLA 620 1000 N</p> <p><b>Daytona Beach</b>                      WMEF 1420 100</p> <p><b>Gainesville</b>                      WRUF 830 5000</p> <p><b>Jacksonville</b>                      WJAX 900 1000 N                      WMBR 1370 100 C</p> <p><b>Miami</b>                      WIOD 1300 1000 N</p> <p><b>Orlando</b>                      *WQAM 560 1000 C</p> <p><b>WDBO 580 1000 C</b></p> <p><b>Pensacola</b>                      WCOA 1340 500 C</p> <p><b>St. Petersburg</b>                      *WSUN 620 1000 N</p>	<p><b>Tallahassee</b>                      WTAL 1310 100</p> <p><b>Tampa</b>                      *WDAE 1220 1000 C</p> <p style="text-align: center;"><b>GEORGIA</b></p> <p><b>Albany</b>                      WGPC 1420 100</p> <p><b>Athens</b>                      WTFI 1450 500</p> <p><b>Atlanta</b>                      WGST 890 500 C                      WJTL 1370 100                      *WSB 740 50000 N</p> <p><b>Augusta</b>                      *WRDW 1500 100</p> <p><b>Columbus</b>                      WRBL 1200 100</p> <p><b>Griffin</b>                      WKEU 1500 100</p> <p><b>Macon</b>                      WMAZ 1180 1000</p> <p><b>Rome</b>                      WRGA 1500 100</p> <p><b>Savannah</b>                      WTOG 1260 1000 C                      Thomasville                      WPAX 1210 250</p> <p style="text-align: center;"><b>HAWAII</b></p> <p><b>Hilo</b>                      KHBC 1420 100</p> <p><b>Honolulu</b>                      KGMB 1320 1000 C                      KGU 750 2500 N</p> <p style="text-align: center;"><b>IDAHO</b></p> <p><b>Boise</b>                      KIDO 1350 1000</p> <p><b>Idaho Falls</b>                      KID 1320 250</p> <p><b>Lewiston</b>                      KRLC 1420 100</p> <p><b>Nampa</b>                      KFXX 1200 100</p> <p><b>Pocatello</b>                      KSEI 900 250</p> <p><b>Twin Falls</b>                      KTFI 1240 1000</p> <p style="text-align: center;"><b>ILLINOIS</b></p> <p><b>Bloomington</b>                      WJBC 1200 100</p> <p><b>Carthage</b>                      *WCAZ 1070 100</p> <p><b>Chicago</b>                      WAAF 920 500                      *WBEM 770 50000 C                      *WCFB 970 1500 B                      WCRW 1210 100                      *WEDC 1210 100                      *WENR 870 50000 N                      WGES 1360 500                      *WGN 720 50000                      *WJJD 1130 20000                      *WLS 870 50000 N                      *WMAO 670 50000 N                      WMBI 1080 5000                      WSBC 1210 100</p> <p><b>Cicero</b>                      WEHS 1420 100                      WHFC 1420 100                      WKBI 1420 100</p> <p><b>Decatur</b>                      WJBL 1200 100</p>	<p><b>East Dubuque</b>                      *WKBB 1500 100</p> <p><b>East St. Louis</b>                      *WTMV 1500 100</p> <p><b>Harrisburg</b>                      *WEBQ 1210 100</p> <p><b>Joliet</b>                      *WCLS 1310 100</p> <p><b>Peoria</b>                      *WMBD 1440 500 C</p> <p><b>Quincy</b>                      WTAD 900 500</p> <p><b>Rockford</b>                      *WROK 1410 500</p> <p><b>Rock Island</b>                      *WHBF 1210 100</p> <p><b>Springfield</b>                      *WCBS 1420 100                      *WTAX 1210 100</p> <p><b>Tuscola</b>                      WDZ 1070 100</p> <p><b>Urbana</b>                      WILL 890 250</p> <p><b>Waukegan</b>                      WCBF 1080 5000</p> <p style="text-align: center;"><b>INDIANA</b></p> <p><b>Anderson</b>                      *WHBU 1210 100</p> <p><b>Elkhart</b>                      *WTRC 1310 50</p> <p><b>Evansville</b>                      *WGBF 630 500</p> <p><b>Fort Wayne</b>                      WGL 1370 100 C                      *WOWO 1160 10000 C</p> <p><b>Gary</b>                      WIND 560 1000</p> <p><b>Hammond</b>                      WWAJ 1200 100</p> <p><b>Indianapolis</b>                      *WFBM 1230 1000 C                      *WIRE 1400 500 R</p> <p><b>Muncie</b>                      WLBC 1310 50</p> <p><b>Richmond</b>                      WKBV 1500 100</p> <p><b>South Bend</b>                      WFAM 1200 100                      WSBT 1360 500 C</p> <p><b>Terre Haute</b>                      *WBOW 1310 100</p> <p><b>West Lafayette</b>                      WBAA 890 1000</p> <p style="text-align: center;"><b>IOWA</b></p> <p><b>Ames</b>                      WOI 640 5000</p> <p><b>Boone</b>                      *KFGO 1370 100</p> <p><b>Cedar Rapids</b>                      *WMT 600 1000 B</p> <p><b>Council Bluffs</b>                      *KOIL 1260 1000 B</p> <p><b>Davenport</b>                      WOC 1370 100 C</p> <p><b>Decorah</b>                      *KGA 1270 100                      KWLC 1270 100</p> <p><b>Des Moines</b>                      *KRNT 1320 500 C                      KSO 1430 500 B                      *WHO 1000 50000 R</p> <p><b>Iowa City</b>                      *WSUI 880 500</p> <p><b>Marshalltown</b>                      *KFJB 1200 100</p>
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NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<p><b>Shenandoah</b>                      KFNE 890 500                      KMA 930 1000                      StouX City                      KSCJ 1330 1000 C</p> <p><b>KANSAS</b></p> <p>Abilene                      KFBI 1050 5000                      Coffeyville                      KGGF 1010 1000                      Dodge City                      KGN0 1340 250                      Garden City                      KIUL 1210 100                      Hutchinson                      KWBG 1420 100                      Kansas City                      WLBF 1420 100                      Lawrence                      KFKU 1220 1000                      WREN 1220 1000 B                      Manhattan                      KSAC 580 500                      Topeka                      WIBW 580 1000 C                      Wichita                      KFH 1300 1000 C</p> <p><b>KENTUCKY</b></p> <p>Ashland                      WCMI 1310 100                      Covington                      WKCY 1490 5000 B                      Lexington                      WLAP 1420 100                      Louisville                      WAVE 940 1000 N                      WHAS 820 50000 C                      Paducah                      WPAD 1420 100</p> <p><b>LOUISIANA</b></p> <p>Alexandria                      KALB 1420 100                      Baton Rouge                      WJBO 1420 100                      Lafayette                      KVOL 1310 100                      Lake Charles                      KP LC 1500 100                      Monroe                      KMLB 1200 100                      New Orleans                      WBN0 1200 100                      WDSU 1250 1000 C                      WJBW 1200 100                      WSMB 1320 500 N                      WWL 850 10000                      Shreveport                      KRMD 1310 100                      KTBS 1450 1000 N                      KWEA 1210 100                      KWKH 850 10000 C</p> <p><b>MAINE</b></p> <p>Augusta                      WRD0 1370 100                      Bangor                      WABI 1200 100                      WL BZ 620 500 C                      Portland                      WCSH 940 1000 R                      Presque Isle                      WAGM 1420 100</p>	<p><b>MARYLAND</b></p> <p>Baltimore                      WBAL 1060 10000 B                      WCAO 600 500 C                      WCBM 1370 100                      WFBR 1270 500 R                      Cumberland                      WTBO 800 250                      Frederick                      WFMD 900 500                      Hagerstown                      WJEJ 1210 100</p> <p><b>MASSACHUSETTS</b></p> <p>Babson Park                      WB SO 920 500                      Boston                      WAAB 1410 500 C                      WBZ 990 50000 B                      WCOP 1120 500                      WEEL 590 1000 R                      WHDH 830 1000                      WMEX 1500 100                      WNAC 1230 1000 C                      Fall River                      WSAR 1450 250                      Lowell                      WLLH 1370 100                      New Bedford                      WNBH 1310 100 C                      Springfield                      WBZA 990 1000 B                      WMAS 1420 100 C                      Worcester                      WORC 1280 500 C                      WTAG 580 1000 R</p> <p><b>MICHIGAN</b></p> <p>Battle Creek                      WELL 1420 100                      Bay City                      WBCM 1410 500                      Calumet                      WHDF 1370 100                      Detroit                      WJBK 1500 100                      WJR 750 50000 C                      WMBC 1420 100                      WWJ 920 1000 R                      WXYZ 1240 1000                      East Lansing                      WKAR 1040 1000                      Flint                      WFDF 1310 100                      Grand Rapids                      WASH 1270 500                      WOOD 1270 500                      Ironwood                      WJMS 1420 100                      Jackson                      WIBM 1370 100                      Kalamazoo                      WKZO 590 1000                      Lansing                      WJIM 1210 100                      Lapeer                      WMP C 1200 100                      Marquette                      WBE0 1310 100                      Muskegon                      WK BZ 1500 100                      Royal Oak                      WEXL 1310 50</p> <p><b>MINNESOTA</b></p> <p>Fergus Falls                      KGDE 1200 100</p>	<p>Hibbing                      WMFG 1210 100                      Minneapolis                      WCCO 810 50000 C                      W DGY 1180 1000                      WLB 1250 1000                      WTCN 1250 1000                      Moorhead                      KGFK 1500 100                      Northfield                      WWCAL 1250 1000                      Rochester                      KROC 1310 100                      St. Paul                      KSTP 1460 25000 N</p> <p><b>MISSISSIPPI</b></p> <p>Clarksdale                      WMFN 1210 100                      Hattiesburg                      WFPB 1370 100                      Jackson                      WJD X 1270 1000 N                      Kosciusko                      WHEF 1500 100                      Laurel                      WAML 1310 100                      Meridian                      WCOC 880 500                      Mississippi City                      WCCM 1120 500                      Vicksburg                      WQBC 1360 1000</p> <p><b>MISSOURI</b></p> <p>Cape Girardeau                      KFVS 1210 100                      Columbia                      KF RU 630 500                      Jefferson City                      WOS 630 500                      Joplin                      WMBH 1420 100                      Kansas City                      KMBC 950 1000 C                      KWKC 1370 100                      WDAF 610 1000 R                      WHB 860 1000                      W XBY 1530 1000                      St. Joseph                      KFEQ 680 2500                      St. Louis                      KF UO 550 500                      KMOX 1090 50000 C                      KSD 550 1000 R                      KWK 1350 1000 B                      WEW 760 1000                      WL 1200 100                      .... 1500 100                      Springfield                      KGBX 1230 500                      KWTO 560 5000</p> <p><b>MONTANA</b></p> <p>Billings                      KGH L 780 1000 N                      Butte                      KGIR 1340 1000 N                      Great Falls                      KFBB 1280 1000                      Kalispell                      KGEZ 1310 100                      Missoula                      KGVO 1260 1000                      Wolf Point                      KG CX 1310 100</p>	<p><b>NEBRASKA</b></p> <p>Clay Center                      KMMJ 740 1000                      Kearney                      KCFW 1310 100                      Lincoln                      KFAB 770 10000 C                      KFOR 1210 100 C                      Norfolk                      WJAG 1060 1000                      North Platte                      KGNF 1430 1000                      Omaha                      WAAW 660 500                      WOW 590 1000 R                      Scottsbluff                      KGKY 1500 100                      York                      KGBZ 930 1000</p> <p><b>NEVADA</b></p> <p>Reno                      KOH 1380 500 C</p> <p><b>NEW HAMPSHIRE</b></p> <p>Laconia                      WLNH 1310 100                      Manchester                      WFEA 1340 500 C                      Portsmouth                      WHEB 740 250</p> <p><b>NEW JERSEY</b></p> <p>Ashbury Park                      WCAP 1280 500                      Atlantic City                      WPG 1100 5000 C                      Camden                      WCAM 1280 500                      Jersey City                      WAAT 940 500                      WHOM 1450 250                      Newark                      WHBI 1250 1000                      WNEW 1250 1000                      WOR 710 50000                      Red Bank                      WBRB 1210 100                      Trenton                      WTNJ 1280 500                      Zarephath                      WAWZ 1350 500</p> <p><b>NEW MEXICO</b></p> <p>Albuquerque                      KGGM 1230 250                      KOB 1180 10000                      Clovis                      KICA 1370 100                      Roswell                      KGFL 1370 100                      Santa Fe                      KI UJ 1310 100</p> <p><b>NEW YORK</b></p> <p>Albany                      WABY 1370 100                      WOKO 1430 500 C                      Auburn                      WMBO 1310 100                      Binghamton                      WNEF 1500 100 C                      Brooklyn                      WARD 1400 500</p>
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NORTH AMERICAN B. C. STATIONS BY LOCATIONS

WBBC 1400 500	Winston-Salem	OREGON	WBRE 1310 100
WBBR 1300 1000	WSJS 1310 100 C	Astoria	Williamsport
WCNW 1500 100		KAST 1370 100	WRAK 1370 100
WLTH 1400 500	<b>NORTH DAKOTA</b>	Corvallis	York
WMBQ 1500 100		KOAC 550 1000	WORK 1320 1000
WVFW 1400 500		Eugene	<b>PUERTO RICO</b>
Buffalo	Bismarck	KORE 1420 100	
WBEN 900 1000 R	KFYR 550 1000 N	Klamath Falls	Ponce
WBEB 1310 100	Devils Lake	KFJ1 1210 100	WPRP 1420 100
WGR 550 1000 C	KDLR 1210 100	Marshfield	San Juan
WKBW 1480 5000 C	Fargo	KOOS 1390 250	WKAO 1240 1000
WSVS 1370 50	WDAY 940 1000 N	Medford	WNEL 1290 500
Canton	Grand Forks	KMED 1310 100	
WCAD 1220 500	KKFJM 1370 100	Portland	<b>RHODE ISLAND</b>
Chester	Mandan	KALE 1300 500 C	Newport
WGNV 1210 100	KGCU 1240 250	KBPS 1420 100	WNRI 1200 100
Elmira	Minot	KEX 1180 5000 N	Providence
WESG 850 1000 C	KLPM 1240 250	KFJR 1300 500	WEAN 780 500 C
Freeport	Valley City	KGW 620 1000 N	WJAR 890 500 R
WGBB 1210 100	..... 1500 100	KOIN 940 1000 C	WPRO 630 250
Jamestown	<b>OHIO</b>	KWJJ 1040 500	
WOEL 1210 50	Akron	KXL 1420 100	
Long Island City	WADC 1320 1000 C	Roseburg	<b>SOUTH CAROLINA</b>
W2XR 1550 1000	WJW 1210 100	..... 1500 100	Anderson
New York	Canton	Salem	WAIM 1200 100
WBAC 860 50000 C	WBHC 1200 100	KSLM 1370 100	Charleston
WBXN 1350 250	Cincinnati	<b>PENNSYLVANIA</b>	WCSC 1360 500
WBOQ 860 50000	WFBE 1200 100	Allentown	Columbia
WEAF 660 50000 R	WKRC 550 1000 C	WCBA 1440 500	WIS 1010 500 N
WEVD 1300 1000	WKLW 700 500000 N	WSAN 1440 500	Greenville
WFAB 1300 1000	WSAI 1330 1000 R	Altoona	WFBC 1300 1000
WHN 1010 1000	Cleveland	WFBG 1310 100	Spartanburg
WINS 1180 1000	WGAR 1450 500 B	Erie	WSPA 920 1000
WJZ 760 50000 B	WHK 1390 1000 C	WLEU 1420 100	WWC 1420 1000
WLWL 1100 5000	WJAY 610 500	Glenside	
WMCA 570 500	WTAM 1070 50000 R	WIBG 970 100	<b>SOUTH DAKOTA</b>
WNYC 810 1000	Columbus	Greensburg	Aberdeen
WOV 1130 1000	WAU 640 500	WHJB 620 250	KABR 1420 100
Olean	WBNS 1430 500 C	Grove City	Brookings
WHDL 1420 100	WCOL 1210 100	WSAJ 1310 100	KFDY 780 1000
Plattsburg	WOSU 570 750	Harrisburg	Huron
WMFF 1310 100	Dayton	WHP 1430 500 C	KGDY 1340 250
Rochester	WHIO 1260 1000 R	WKBO 1200 100	Pierre
WHAM 1150 50000 B	WSMK 1380 200 C	Hazleton	KGFX 630 200
WHEC 1430 500 C	Portsmouth	WAZL 1420 100	Rapid City
Saranac Lake	WPAY 1370 100	Johnstown	WCAT 1200 100
WNBZ 1290 100	Toledo	WJAC 1310 100	Sioux Falls
Schenectady	WSPD 1340 1000 C	Lancaster	KSOU 1110 2500
WGY 790 50000 R	Youngstown	WGAL 1500 100	Vermillion
Syracuse	WKBN 570 500 C	WKJC 1200 100	KUSD 890 500
WFBL 1360 1000 C	Zanesville	Philadelphia	Watertown
WSYR 570 250 B	WALR 1210 100	KYW 1020 10000 R	KWTN 1210 100
Troy	<b>OKLAHOMA</b>	WCAU 1170 50000 C	Yankton
WHAZ 1300 500	Ada	WDAS 1370 100	WNAX 570 1000 C
Utica	KADA 1200 100	WFIL 560 1000 B	
WIBX 1200 100 C	Ardmore	WHAT 1310 100	<b>TENNESSEE</b>
White Plains	KVSO 1200 100	WIP 610 1000	Bristol
WFAS 1210 100	Elk City	WPEN 920 250	WOPI 1500 100
Woodside	KASA 1210 100	WRAX 920 250	Chattanooga
WWRL 1500 100	Enid	WTEL 1310 100	WDOD 1280 1000 C
<b>NORTH CAROLINA</b>	KCRC 1360 250	Pittsburgh	Jackson
Asheville	Norman	KDKA 980 50000 B	WTJS 1310 100
WUNC 570 1000 N	WNAD 1010 1000	KQV 1380 500	Knoxville
Charlotte	Oklahoma City	WCAE 1220 1000 R	WNOX 560 1000 C
WBT 1080 50000 C	KFXR 1310 100	WJAS 1290 1000 C	WROL 1310 100
WSOC 1210 100 N	KGFG 1370 100	WWSW 1500 100	Memphis
Durham	KOMA 1480 5000 C	Reading	WHBO 1370 100
WDNC 1500 100 C	WKY 900 1000 N	WEEU 830 1000	WMC 780 1000 N
Greensboro	Ponca City	WRAP 1310 100	WNR 1430 500
WBIG 1440 500 C	WBBZ 1200 100	Scranton	WREC 600 1000 C
High Point	Shawnee	WGBI 880 500	Nashville
WMFR 1200 100	KGFF 1420 100	WQAN 880 250	WLAC 1470 5000 C
Raleigh	Tulsa	Sunbury	WSM 650 50000 N
WPTF 680 5000 N	KTUL 1400 500 C	WKOK 1210 100	Springfield
Rocky Mount	KVOO 1140 25000 N	Wilkes-Barre	WSIX 1210 100
WEED 1420 100		WBAX 1210 100	
Wilmington			
WMFD 1370 100			

# NORTH AMERICAN B. C. STATIONS BY LOCATIONS

TEXAS		
Amarillo		
KGNC 1410	1000	
Austin		
KNOW 1500	100	
Beaumont		
KFDM 560	500	
Brady		
KNEL 1500	100	
College Station		
WTAW 1120	500	
Corpus Christi		
KGFI 1500	100	
Dallas		
KRLD 1040	10000 C	
WFAA 800	50000 N	
WRR 1280	500	
Dublin		
KFPL 1310	100	
El Paso		
KTSM 1310	100	
WDAH 1310	100	
Fort Worth		
KFJZ 1370	100	
KTAT 1240	1000 C	
WBAP 800	50000 N	
Galveston		
KLUF 1370	100	
Houston		
KPRC 920	1000 N	
KTRH 1290	1000 C	
KXYZ 1440	1000	
Longview		
KFRD 1370	100	
Lubbock		
KFYD 1310	100	
Palestine		
.....	1420	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	
KTSA 550	1000 C	
WAOI 1190	50000 N	
Tyler		
KGKB 1500	100	
Waco		
WACO 1420	100 C	
Weslaco		
KRGV 1260	500	
Wichita Falls		
KGKO 570	250 C	
UTAH		
Ogden		
KLO 1400	500 C	
Salt Lake City		
KDYL 1290	1000 N	
KSL 1130	50000 C	
VERMONT		
Burlington		
WCAX 1200	100	
Rutland		
WSYB 1500	100	
St. Albans		
WQDM 1370	100	
Springfield		
WNBX 1260	1000	
Waterbury		
WDEV 550	500	

VIRGINIA		
Arlington		
NAA 690	1000	
Charlottesville		
WEHC 1420	100	
Danville		
WBTM 1370	100	
Harrisonburg		
WSVA 550	500	
Lynchburg		
WLVA 1200	100	
Newport News		
WGH 1310	100	
Norfolk		
WTAR 780	500 N	
Petersburg		
WPHR 880	500	
Richmond		
WBBL 1210	100	
WMBG 1210	100 C	
WRVA 1110	5000 N	
Roanoke		
WDBJ 930	1000 C	
WRBX 1410	250	
WASHINGTON		
Aberdeen		
KXRO 1310	100	
Bellingham		
KVOS 1200	100	
Everett		
KRKO 1370	50	
Olympia		
KGY 1210	100	
Pullman		
KWSC 1220	1000	
Seattle		
KJR 970	5000 N	
KOL 1270	1000 C	
KOMO 920	1000 N	
KPCB 710	250	
KRSC 1120	100	
KTW 1220	1000	
KVL 1370	100	
KXA 760	250	
Spokane		
KFIO 1120	100	
KFPY 890	1000 C	
KGA 1470	5000 N	
KHQ 590	1000 N	
Tacoma		
KMO 1330	250	
KVI 570	1000 C	
Walla Walla		
KUJ 1370	100	
Wenatchee		
KPQ 1500	100	
Yakima		
KIT 1310	100	
WEST VIRGINIA		
Bluefield		
WHIS 1410	250	
Charleston		
WCHS 580	500	
Fairmont		
WMMN 890	500	
Huntington		
WSAZ 1190	1000	
Parkersburg		
WPAR 1420	100	
Wheeling		
WWVA 1160	5000 C	
WISCONSIN		
Eau Claire		
WTAQ 1330	1000	

Fond du Lac		
KFIZ 1420	100	
Green Bay		
WHBY 1200	100	
Janesville		
WCLO 1200	100	
LaCrosse		
WKBH 1380	1000	
Madison		
WHA 940	1000	
WIBA 1280	1000 N	
Manitowoc		
WOMT 1210	100	
Milwaukee		
WISC 1310	100	
WISN 1120	250 C	
WTMJ 620	1000 N	
Poynette		
WIBU 1210	100	
Racine		
WRJN 1370	100	
Sheboygan		
WHBL 1410	500	
Stevens Point		
WLBL 900	2500	
Superior		
WEBC 1290	1000 N	
WYOMING		
Casper		
KDFN 1440	500	
Sheridan		
KWYO 1370	100	
CANADA		
ALBERTA		
Calgary		
CFAC 930	100 F	
CFCA 1030	10000 F	
CJGJ 690	100 F	
Edmonton		
CFRN 1260	100	
CJCA 730	1000 F	
CKUA 580	500	
Lethbridge		
CJOC 1230	100 F	
BRITISH COLUMBIA		
Chilliwack		
CHWK 780	100 F	
Kamloops		
CFJC 880	100 F	
Kelowna		
CKOV 630	100 F	
Prince Rupert		
CFPR 580	50	
Trail		
CJAT 910	250 F	
Vancouver		
CJOR 600	500	
CKOD 1010	100	
CKFC 1410	50	
CKMO 1410	100 F	
CKWX 1010	100 F	
CRCV 1100	500 F	
Victoria		
CFCT 1450	75	
MANITOBA		
Brandon		
CKX 1120	100 F	

Winnipeg		
CJRC 1390	100 F	
CKY 960	15000 F	
NEW BRUNSWICK		
Fredericton		
CFNB 550	500 F	
Moncton		
KCKW 1370	100 F	
St. John		
CHSJ 1120	500 F	
N. W. TERRITORY		
Aklavik		
CJCU 1210	50	
NOVA SCOTIA		
Glace Bay		
VAS 685	2000	
Halifax		
CHNS 930	1000 F	
Sydney		
CJCB 1240	1000 F	
Wolfville		
CKIC 1010	50	
Yarmouth		
CJLS 1310	100	
ONTARIO		
Brantford		
CKPC 930	100 F	
Chatham		
CFCO 630	100 F	
Cobalt		
CKMC 1210	50	
Fort William		
CKPR 930	100 F	
Hamilton		
CHML 1010	50 F	
CKOC 1120	500 F	
Kingston		
CFRC 1510	100	
Kirkland Lake		
CJKL 530	1000	
London		
CFPL 730	100 F	
North Bay		
CFCH 930	100 F	
Ottawa		
CKCO 1010	100	
CRCO 880	1000 F	
Prescott		
CFLC 930	100	
St. Catharines		
CKTB 1200	100 F	
Sault Ste. Marie		
CJIC 890	100	
Stratford		
CJCS 1210	50	
Sudbury		
CKSO 780	1000	
Timmins		
CKGB 1420	100	
Toronto		
CFRB 690	10000 C	
CKCL 580	100 F	
CKNC 1420	100 F	
CRCT 840	5000 N	
Waterloo		
CKCR 1510	100	
Windsor		
CKLW 1030	5000	
CRCW 600	500 F	
Wingham		
CKNX 1200	50	

# NORTH AMERICAN B. C. STATIONS BY LOCATIONS

<p><b>PRINCE EDWARD ISLAND</b></p> <p>Charlottetown                      CFCY 630 1000 F                      CHCK 1310 50                      Summerside                      CHGS 1450 50 F</p> <p style="text-align: center;"><b>QUEBEC</b></p> <p>Chicoutimi                      CRCS 950 100 F                      Hull                      CKCH 1210 100 F                      Montmagny                      VE9EK 1185 10                      Montreal                      CFCF 600 400 N                      CHLP 1120 100                      CKAK 730 5000 C                      CRCM 910 5000 F                      New Carlisle                      CHNC 1410 500 F                      Quebec                      CHRC 580 100 F                      CKCV 1310 100 F                      CKCK 1050 1000 F</p> <p style="text-align: center;"><b>SASKATCHEWAN</b></p> <p>Moose Jaw                      CHAB 1200 100 F                      CJRM 540 1000 F                      Prince Albert                      CKBI 1210 100 F                      Regina                      CHWC 1010 500 F                      CKCK 1010 500 F                      Saskatoon                      CFQC 840 1000 F                      Yorkton                      CJGX 630 500 F</p> <p style="text-align: center;"><b>NEWFOUNDLAND</b></p> <p>St. John's                      VOAC 1065 40                      VOAS 940 100                      VOGY 840 400                      VONF 1195 500                      VOWR 681 500</p> <p style="text-align: center;"><b>MIQUELON</b></p> <p>St. Pierre                      FQJ 609 250</p> <p style="text-align: center;"><b>CENTRAL AMERICA</b></p> <p style="text-align: center;"><b>COSTA RICA</b></p> <p>Cartago                      TIFS 1441 7.5                      TIGA 1014 30                      San Jose                      TIEP 850 500                      TIFA 1050 75                      TIGH 1000 500                      TIRH 930 50</p> <p style="text-align: center;"><b>GUATEMALA</b></p> <p>Guatemala City                      TGW 565 10000                      TGX 1400 150</p> <p style="text-align: center;"><b>EL SALVADOR</b></p> <p>San Salvador                      RDN 706 500</p>	<p style="text-align: center;"><b>MEXICO</b></p> <p style="text-align: center;"><b>AGUASCALIENTES</b></p> <p>Aguascalientes                      XFA 1310 5                      XFC 810 350</p> <p style="text-align: center;"><b>BAJA CALIFORNIA</b></p> <p>Ensenada                      XEG 1270 200                      Mexicali                      XEAA 920 200                      XEAO 560 250                      Tijuana                      XEC 1160 30                      XEMO 865 5000                      XEMZ 1210 250                      XEOK 760 250</p> <p style="text-align: center;"><b>CHIHUAHUA</b></p> <p>Chihuahua                      XEFI 1440 250                      Juarez                      XEFV 1210 100                      XEJ 1020 1000</p> <p style="text-align: center;"><b>COAHUILA</b></p> <p>Piedras Negras                      XELO 1110 10000                      XEPN 590 50000                      Saltillo                      XELA 1240 50                      XEOX 640 250</p> <p style="text-align: center;"><b>D. F.</b></p> <p>Mexico City                      XEAI 1240 100                      XEB 1030 10000                      XBCW 1310 10                      XEFA 1180 500                      XEFO 940 5000                      XEFZ 1370 100                      XEK 990 100                      XEL 1100 250                      XEMX 1280 12                      XEN 710 1000                      XEO 940 5000                      XEP 840 500                      XETW 820 500                      XEW 890 50000                      XEWZ 1150 100                      XEYZ 780 10000                      XFX 610 1000</p> <p style="text-align: center;"><b>DURANGO</b></p> <p>Durango                      XEE 1210 50</p> <p style="text-align: center;"><b>GUANJUATO</b></p> <p>Guanajuato                      XEAZ 1420 7                      Leon                      XEKL 1240 500</p> <p style="text-align: center;"><b>JALISCO</b></p> <p>Guadalajara                      XEA 1060 125                      XED 1155 2500</p>	<p style="text-align: center;"><b>MICHOACAN</b></p> <p>Morelia                      XEI 1370 125</p> <p style="text-align: center;"><b>NUEVO LEON</b></p> <p>Monterrey                      XEFB 1420 100                      XEFJ 1230 100                      XEH 1150 250                      XET 690 500                      XEX 1310 125</p> <p style="text-align: center;"><b>OAXACA</b></p> <p>Oaxaca                      XEAJ 1310 15</p> <p style="text-align: center;"><b>PUEBLA</b></p> <p>Puebla                      XETH 1210 100</p> <p style="text-align: center;"><b>SAN LUIS POTOSI</b></p> <p>San Luis Potosi                      XEZZ 1370 100</p> <p style="text-align: center;"><b>SONORA</b></p> <p>Nogales                      XEAF 990 500</p> <p style="text-align: center;"><b>TAMAULIPAS</b></p> <p>Matamoros                      XEAM 750 7.5                      Nuevo Laredo                      XEFE 850 250                      XENT 910 65000                      Reynosa                      XEAW 960 50000                      Tampico                      XEFW 1310 250                      XEMA 1080 50                      XES 990 250</p> <p style="text-align: center;"><b>VERACRUZ</b></p> <p>Jalapa                      XFB 1270 250                      XFD 1340 350                      Veracruz                      XETF 1220 12                      XEU 1010 250</p> <p style="text-align: center;"><b>YUCATAN</b></p> <p>Merida                      XEFC 560 100                      XEY 1000 10                      XEZ 630 500</p> <p style="text-align: center;"><b>WEST INDIES</b></p> <p style="text-align: center;"><b>CUBA</b></p> <p>Caibarien                      CMHD 1270 250                      Camaguey                      CMJA 1010 50                      CMJC 1390 150                      CMJE 1220 50                      CMJF 1150 200                      CMJK 780 250                      CMJL 1340 100</p>	<p>CMJP 1430 100                      Cardenas                      CMGE 1370 50                      Ciego de Avila                      CMJH 1360 100                      CMJI 1130 50                      CMJO 1180 50                      Cienfuegos                      CMHJ 1160 100                      CMHW 810 100                      CMHX 760 500                      Cruces                      CMHK 1330 250                      Havana                      CMAF 730 250                      CMBC 940 200                      CMBD 1170 150                      CMBG 1140 200                      CMBN 880 150                      CMBS 770 150                      CMBX 1380 150                      CMBY 640 150                      CMBZ 1000 250                      CMCA 1350 250                      CMCB 1230 150                      CMCD 960 250                      CMCF 815 250                      CMCG 1255 250                      CMCH 1200 350                      CMCN 1500 150                      CMCO 1110 250                      CMCQ 680 250                      CMCR 1410 150                      CMCU 1280 150                      CMCW 750 150                      CMCX 660 150                      CMCY 1030 1000                      CMK 1060 250                      CMOA 790 150                      CMOK 1470 150                      CMOX 1320 250                      CMQ 840 500                      CMW 600 1000                      CMX 920 650                      Holguin                      CMKF 1460 50                      Manzanillo                      CMKM 1120 50                      Matanzas                      CMCC 1400 100                      CMCF 1120 100                      CMGI 1420 50                      Sagua la Grande                      CMHA 1070 50                      San Spiritus                      CMHB 1240 50                      Santa Clara                      CMHI 1210 150                      Santiago                      CMKC 1250 150                      CMKD 1050 250                      CMKR 1400 100                      CMKV 1190 50</p> <p style="text-align: center;"><b>DOMINICAN REPUBLIC</b></p> <p>San Pedro de Macoris                      HIH 1395 15                      Santo Domingo                      HIJ 1195 15                      HIX 1270 1000                      HIZ 1300 10</p> <p style="text-align: center;"><b>HAITI</b></p> <p>Port-au-Prince                      HHK 920 1000</p>
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**NORTH AMERICAN B. C. STATIONS BY CALLS**

<b>CFAC 930 100</b> Calgary, Alta. Calgary Herald, Southam Bldg.	<b>CJLS 1310 100</b> Yarmouth, N. S. Laurie L. Smith, Grand Hotel
<b>CFCF 600 400</b> Montreal, Que. Mt. Royal Hotel	<b>CJOC 1230 100</b> Lethbridge, Alta. Marquis Hotel
<b>CFCH 930 100</b> North Bay, Ont. Capitol Theatre Bldg.	<b>CJOR 600 500</b> Vancouver, B. C. G. C. Chandler, Hotel Grosvenor
<b>CFCN 1030 10000</b> Calgary, Alta. Toronto Gen. Trust Bldg.	<b>CJRC 1390 100</b> Winnipeg, Man. Royal Alexandra Hotel
<b>CFCO 630 100</b> Chatham, Ont. Wm. Pitt Hotel	<b>CJRM 540 1000</b> Moose Jaw, Sask. 311 Main St. No.
<b>CFCT 1450 75</b> Victoria, B. C. 620 View St.	<b>CKAC 730 5000</b> Montreal, Que. 980 St. Catherine St. W.
<b>CFCY 630 1000</b> Charlottetown, P.E.I. 143 Great George St.	<b>CKBI 1210 100</b> Prince Albert, Sask. Canada Bldg.
<b>CFJC 880 100</b> Kamloops, B. C. Wilcox-Hall Bldg.	<b>CKCD 1010 100</b> Vancouver, B. C. 142 Hastings St. W.
<b>CFLC 930 100</b> Prescott, Ont. Hoy Bldg., 307 George St.	<b>CKCH 1210 100</b> Hull, Que. Standish Hall Hotel
<b>CFNB 550 500</b> Fredericton, N. B. York St.	<b>CKCK 1010 500</b> Regina, Sask. 1853 Hamilton St.
<b>CFPL 730 100</b> London, Ont. Richmond St.	<b>CKCL 580 100</b> Toronto, Ont. 444 University Ave.
<b>CFPR 580 50</b> Prince Rupert, B. C. Felix E. Batt	<b>CKCO 1010 100</b> Ottawa, Ont. 272 Somerset St. W.
<b>CFQC 840 1000</b> Saskatoon, Sask. 216 First Ave., No.	<b>CKCR 1510 100</b> Waterloo, Ont. 24 King St. So.
<b>CFRB 690 10000</b> Toronto, Ont. 37 Bloor St. W.	<b>CKCV 1310 100</b> Quebec, Que. 142 St. John St.
<b>CFRC 1510 100</b> Kingston, Ont. Queens University, Fleming Hall	<b>CKCW 1370 100</b> Moncton, N. B. Moncton Brdstg. Co., Ltd., K. of P. Hall
<b>CFRN 1260 100</b> Edmonton, Alta. 109 C. P. R. Building	<b>CKFK 1410 50</b> Vancouver, B. C. Hemlock & 12th Ave.
<b>CHAB 1200 100</b> Moose Jaw, Sask. P. O. Box 26	<b>CKGB 1420 100</b> Timmins, Ont. R. H. Thompson, Press Bldg.
<b>CHCK 1310 50</b> Charlottetown, P.E.I. 36 Upper Hillsboro St.	<b>CKIC 1010 50</b> Wolfville, N. S. Acadia University
<b>CHGS 1450 50</b> Summerside, P.E.I. 190 Water St.	<b>CKLW 1030 5000</b> Windsor, Ont. Guaranty Trust Bldg.
<b>CHLP 1120 100</b> Montreal, Que. Sun Life Bldg.	<b>CKMC 1210 50</b> Cobalt, Ont. R. L. MacAdam
<b>CHML 1010 50</b> Hamilton, Ont. Pigott Bldg.	<b>CKMO 1410 100</b> Vancouver, B. C. 1604 Bekins Bldg.
<b>CHNC 1410 500</b> New Carlisle, Que. Gaspeian Radio Brdstg. Co.	<b>CKNC 1420 100</b> Toronto, Ont. 805 Davenport Road
<b>CHNS 930 1000</b> Halifax, N. S. Lord Nelson Hotel	<b>CKNX 1200 50</b> Wingham, Ont. Wingham Radio Club
<b>CHRC 580 100</b> Quebec, Que. CHRC, Ltd., Victoria Hotel	<b>CKOC 1120 500</b> Hamilton, Ont. Wentworth Bldg.
<b>CHSJ 1120 500</b> St. John, N. B. Admiral Beatty Hotel	<b>CKOV 630 100</b> Kelowna, B. C. Okanagan Broadcasters, Ltd., Box 243
<b>CHWC 1010 500</b> Regina, Sask. R. H. Williams & Sons, Kitchener Hotel	<b>CKPC 930 100</b> Brantford, Ont. Arcade Bldg.
<b>CHWK 780 100</b> Chilliwack, B. C. Box 452	<b>CKPR 930 100</b> Fort William, Ont. Royal Edward Hotel
<b>CJAT 910 250</b> Trail, B. C. Kootenay Brdstg. Co.	<b>CKSO 780 1000</b> Sudbury, Ont. W. E. Mason, Grand Theatre Bldg.
<b>CJCA 730 1000</b> Edmonton, Alta. 10122-100A St.	<b>CKTB 1200 100</b> St. Catherines, Ont. E. T. Sandell, Welland House
<b>CJCB 1240 1000</b> Sydney, N. S. 318 Charlotte St.	<b>CKUA 580 500</b> Edmonton, Alta. University of Alberta
<b>CJCJ 690 100</b> Calgary, Alta. New Albertan Bldg.	<b>CKWX 1010 100</b> Vancouver, B. C. Hotel Georgia
<b>CJCS 1210 50</b> Stratford, Ont. M. I. Higgins, 151 Ontario St.	<b>CKX 1120 100</b> Brandon, Man. City Hall Square
<b>CJCU 1210 50</b> Aklavik, N. W. T. Dr. J. A. Urquhart, Dept. of Interior	<b>CKY 960 15000</b> Winnipeg, Man. Sherbrooke St.
<b>CJGX 630 500</b> Yorkton, Sask. 188 Grain Exchange Bldg. (Winnipeg)	<b>CMAF 730 250</b> Havana, Cuba 1 y 8 Rept. Miramar
<b>CJIC 890 100</b> S. Ste. Marie, Ont. Windsor Hotel	<b>CMBC 940 200</b> Havana, Cuba Domingo Fernandez, Maximo Gomez No. 139
<b>CJKL 530 1000</b> Kirkland Lake, Ont. O. J. Thorpe	<b>CMDB 1170 150</b> Havana, Cuba Luis Perez Garcia, Calle 17 No. 3, Vedado

## NORTH AMERICAN B. C. STATIONS BY CALLS

<b>CMBG 1140 200 Havana, Cuba</b> John L. Stowers, Hospital No. 100	<b>CMJH 1360 100 Ciego de Avila, Cuba</b> Luis Marauri, H. Castilla 37
<b>CMBN 880 150 Havana, Cuba</b> Pozos Dulas No. 3	<b>CMJI 1130 50 Ciego de Avila, Cuba</b> Gilberto Gessa Lopez, Independencia 95
<b>CMBS 770 150 Havana, Cuba</b> Calzada y H. St., Vedado	<b>CMJK 780 250 Camaguey, Cuba</b> Cla. Nacional de Radio, Finlay No. 3
<b>CMBX 1380 150 Havana, Cuba</b> Alberto Alvarez, San Miguel 194	<b>CMJL 1340 100 Camaguey, Cuba</b> M. Caymares, Republica 181
<b>CMBY 640 150 Havana, Cuba</b> Infanta 132 Callejas Estefani	<b>CMJO 1180 50 Ciego de Avila, Cuba</b> C. Central & Maceo
<b>CMBZ 1000 250 Havana, Cuba</b> Manuely G. Salas, San Rafael No. 14	<b>CMJP 1430 100 Camaguey, Cuba</b> Cesar Canall, Callejas No. 28
<b>CMCA 1350 250 Havana, Cuba</b> Galiano No. 102	<b>CMK 1060 250 Havana, Cuba</b> Hotel Plaza
<b>CMCB 1230 150 Havana, Cuba</b> Metropolitan Bldg. 828/30.	<b>CMKC 1250 150 Santiago, Cuba</b> J. A. Saco, P. O. Box 466
<b>CMCD 960 250 Havana, Cuba</b> Calle G y 25, Vedado	<b>CMKD 1050 250 Santiago, Cuba</b> Box 23
<b>CMCF 815 250 Havana, Cuba</b> Cuban Brdestg. Co., Paseo de Marti No. 9	<b>CMKF 1460 50 Holguin, Cuba</b> Libertad esq. Arias
<b>CMCG 1255 250 Havana, Cuba</b> Malecon No. 340 Altos	<b>CMKM 1120 50 Manzanillo, Cuba</b> Merchan P. Figaredo
<b>CMCJ 1200 350 Havana, Cuba</b> Rafael Rodriguez, Estevez No. 4	<b>CMKR 1400 100 Santiago, Cuba</b> B. Maso alta 71
<b>CMCN 1500 150 Havana, Cuba</b> Reina y Ave. Buen Ritiroe, Marianao	<b>CMKV 1190 50 Santiago, Cuba</b> Oscar Vidal, Palma Soriano
<b>CMCO 1110 250 Havana, Cuba</b> Oficios 116, Enrique Lasanta	<b>CMOA 790 150 Havana, Cuba</b> Juan Fernandez, Aguilar 126 Altos
<b>CMCQ 680 250 Havana, Cuba</b> Vista Alegre No. 80, Vibora	<b>CMOK 1470 150 Havana, Cuba</b> Rafael Valdez, Marques Gonzales 52
<b>CMCR 1410 150 Havana, Cuba</b> Milagros No. 35, Vibora	<b>CMOX 1320 250 Havana, Cuba</b> 10 entre 17 y 19, Vedado
<b>CMCU 1280 150 Havana, Cuba</b> San Francisco No. 13, Vibora	<b>CMQ 840 500 Havana, Cuba</b> 25 Numero 445, Vedado
<b>CMCW 750 150 Havana, Cuba</b> San Lazaro No. 113	<b>CMW 600 1000 Havana, Cuba</b> Troncoso Gil, Prado 103
<b>CMCX 660 150 Havana, Cuba</b> Maceo No. 7, Guanabacoa	<b>CMX 920 650 Havana, Cuba</b> Casa "Lavin," Ave. del a Republica 99A
<b>CMCY 1030 1000 Havana, Cuba</b> Manuel D. Autran, Calle G 215, Vedado	<b>CRCK 1050 1000 Quebec, Que.</b> Chateau Frontenac Hotel
<b>CMGC 1400 100 Matanzas, Cuba</b> Independencia No. 56	<b>CRCM 910 5000 Montreal, Que.</b> 1231 St. Catherine St. W.
<b>CMGE 1370 50 Cardenas, Cuba</b> Genaro Sebater, Cespedes No. 180	<b>CRCO 880 1000 Ottawa, Ont.</b> Chateau Laurier Hotel
<b>CMGF 1120 100 Matanzas, Cuba</b> G. Betancourt No. 51	<b>CRCS 950 100 Chicoutimi, Que.</b> 4 Rue Larouche
<b>CMGI 1420 50 Matanzas, Cuba</b> Armando Lizama Mart No. 35	<b>CRCT 840 5000 Toronto, Ont.</b> 805 Davenport Road
<b>CMHA 1070 50 Saguala Grande, Cuba</b> Abelardo Menocal, Carrillo No. 31	<b>CRCV 1100 500 Vancouver, B. C.</b> 1150 Main Street
<b>CMHB 1240 50 San Spiritus, Cuba</b> Independencia No. 33	<b>CRCW 600 500 Windsor, Ont.</b> Guaranty Trust Bldg.
<b>CMHD 1270 250 Caibarien, Cuba</b> Manuel Alvarez, M. Escobar 17	<b>FQN 609 250 St. Pierre, Miq.</b>
<b>CMHI 1210 150 Santa Clara, Cuba</b> Lavis y Paz, Independencia No. 34	<b>HHK 920 1000 Port-au-Prince, Hait</b> Haitian Government
<b>CMHJ 1160 100 Cienfuegos, Cuba</b> Romoualde Ugalde, Sta. Eleña 184	<b>HIH 1395 15 San Pedro de M., D.R.</b> Domingo Dominguez
<b>CMHK 1330 250 Cruces, Cuba</b> Heredia No. 61	<b>HIJ 1195 15 Santo Domingo, D.R.</b> Tuto Baez, Hostos 34
<b>CMHW 810 100 Cienfuegos, Cuba</b> P. O. Box 226, Ramon Gonzales	<b>HIX 1270 1000 Santo Domingo, D. R.</b> J. R. Saladin, Director General
<b>CMHX 760 500 Cienfuegos, Cuba</b> F. Chavarry, P. O. Box 205	<b>HIZ 1300 10 Santo Domingo, D. R.</b> Abbes and Garcia
<b>CMJA 1010 50 Camaguey, Cuba</b> Maceo No. 1, Rafael Valdes	<b>KABC 1420 100 San Antonio, Texas</b> Texas Theatre Bldg.
<b>CMJC 1390 150 Camaguey, Cuba</b> Cisneros y G. Gomez	<b>KABR 1420 100 Aberdeen, S. Dak.</b> Aberdeen Broadcast Co.
<b>CMJE 1220 50 Camaguey, Cuba</b> Manuel Fernandez. Hnos. Aguerre No. 2	<b>KADA 1200 100 Ada, Okla.</b> C. C. Morris
<b>CMJF 1150 200 Camaguey, Cuba</b> John L. Stowers, Republica No. 88	<b>KALS 1420 100 Alexandria, La.</b> Alexandria Brdstg. Co.

## NORTH AMERICAN B. C. STATIONS BY CALLS

<b>KALE 1300 500</b> Portland, Ore. Kale, Inc., New Heathman Hotel	<b>KFJI 1210 100</b> Klamath Falls, Ore. KFJI Broadcasters, Inc., Willard Hotel
<b>KARK 890 250</b> Little Rock, Ark. N. S. L. Bldg.	<b>KFJM 1370 100</b> Grand Forks, N. D. University of North Dakota
<b>KASA 1210 100</b> Elk City, Okla. E. M. Woody, Casa Grande Hotel	<b>KFJR 1300 500</b> Portland, Ore. 622 Lumberman's Bldg.
<b>KASt 1370 100</b> Astoria, Ore. Abraham Shapiro, 611 Commercial St.	<b>KFJZ 1370 100</b> Fort Worth, Texas 502 Trinity Life Bldg.
<b>KBPS 1420 100</b> Portland, Ore. 546 N. E. 12th Ave.	<b>KFKA 880 500</b> Greeley, Colo. Box 735
<b>KBTM 1200 100</b> Jonesboro, Ark. Jay P. Beard	<b>KFKU 1220 1000</b> Lawrence, Kans. University of Kansas
<b>KCMC 1420 100</b> Texarkana, Ark. Box 865	<b>KFNF 890 500</b> Shenandoah, Iowa 407 Sycamore St.
<b>KCRC 1360 250</b> Enid, Okla. Enid Radiophone Co., Oxford Hotel	<b>KFOR 1210 100</b> Lincoln, Neb. Howard Shuman, Hotel Lincoln
<b>KCRJ 1310 100</b> Jerome, Ariz. Chas. C. Robinson, Drawer D.	<b>KFOX 1250 1000</b> Long Beach, Calif. 220 E. Anaheim St.
<b>KDB 1500 100</b> Santa Barbara, Calif. 15-17 E. Haley St.	<b>KFPL 1310 100</b> Dublin, Texas C. C. Baxter, Box 176
<b>KDFN 1440 500</b> Casper, Wyo. Donald Lewis Hathaway, Box 930	<b>KFPW 1210 100</b> Fort Smith, Ark. Goldman Hotel
<b>KDKA 980 50000</b> Pittsburgh, Pa. Grant Building	<b>KFPY 890 1000</b> Spokane, Wash. Symons Bldg.
<b>KDLR 1210 100</b> Devils Lake, N. D. KDLR, Inc., 1025 3rd Street	<b>KFQD 780 250</b> Anchorage, Alaska 411-4th Ave.
<b>KDON 1210 100</b> Del Monte, Calif. Richard F. Lewis	<b>KFRC 610 1000</b> San Francisco, Calif. 1000 Van Ness Ave.
<b>KDYL 1290 1000</b> Salt Lake City, Utah Ezra Thompson Bldg.	<b>KFRO 1370 100</b> Longview, Texas Voice of Longview, Box 86
<b>KECA 1430 1000</b> Los Angeles, Calif. 1000 S. Hope St.	<b>KFRU 630 500</b> Columbia, Mo. KFRU, Inc., 9th and Elm Sts.
<b>KEHE 780 500</b> Los Angeles, Cal. 214 S. Vermont St.	<b>KFSO 600 1000</b> San Diego, Calif. U. S. Grant Hotel
<b>KELD 1370 100</b> El Dorado, Ark. T. H. Barton	<b>KFSG 1120 1000</b> Los Angeles, Calif. 1100 Glendale Blvd.
<b>KELW 780 500</b> Burbank, Calif. 3702 Magnolia Park Blvd.	<b>KFUO 550 500</b> St. Louis, Mo. 801 De Mun St.
<b>KERN 1370 100</b> Bakersfield, Calif. Elk's Club	<b>KFVD 1000 250</b> Los Angeles, Calif. E. L. Cord, 645 S. Mariposa
<b>KEX 1180 5000</b> Portland, Ore. Oregonian Bldg.	<b>KFVS 1210 100</b> Cape Girardeau, Mo. Oscar C. Hirsch, Box 275
<b>KFAB 770 10000</b> Lincoln, Neb. Cornhusker Hotel	<b>KFWB 950 1000</b> Hollywood, Calif. Warner Bros. Motion Pictures, Inc.
<b>KFAC 1300 1000</b> Los Angeles, Calif. E. L. Cord, 645 So. Mariposa	<b>KFXD 1200 100</b> Nampa, Idaho Frank E. Hurt, 1024 12th Ave., S.
<b>KFBB 1280 1000</b> Great Falls, Mont. Buttrey Broadcast., Inc., P. O. Box 1817	<b>KFXJ 1200 100</b> Grand Jct., Colo. Hillcrest Manor
<b>KFBI 1050 5000</b> Abilene, Kans. Box 345	<b>KFXM 1210 100</b> San Bernardino, Calif. California Hotel
<b>KFBK 1490 5000</b> Sacramento, Calif. Sacramento Bee, 7th & I Sts.	<b>KFXR 1310 100</b> Oklahoma City, Okla. 541 Hightower Bldg.
<b>KFDM 560 500</b> Beaumont, Texas Beaumont Hotel, P. O. Box 2950	<b>KFYO 1310 100</b> Lubbock, Texas Kirksey Bros., Hotel Lubbock
<b>KFDY 780 1000</b> Brookings, S. D. Box L, State College Station	<b>KFYR 550 1000</b> Bismarck, N. D. 320 Broadway
<b>KFEL 920 500</b> Denver, Colo. Albany Hotel	<b>KGA 1470 5000</b> Spokane, Wash. 1023 W. Riverside Ave.
<b>KFEQ 680 2500</b> St. Joseph, Mo. Schneider Bldg., KFEQ, Inc.	<b>KGAR 1370 100</b> Tucson, Ariz. 142 S. 6th Ave.
<b>KFGQ 1370 100</b> Boone, Iowa 924 W. 2nd St.	<b>KGB 1330 1000</b> San Diego, Calif. 1012-1st Ave.
<b>KFH 1300 1000</b> Wichita, Kans. 124 1/2 S. Market St.	<b>KGBU 900 500</b> Ketchikan, Alaska Mile 5, Wards Cove Rd.
<b>KFI 640 50000</b> Los Angeles, Calif. 1000 S. Hope St.	<b>KGBX 1230 500</b> Springfield, Mo. KGBX, Inc., St. Louis at Kimbrough
<b>KFIO 1120 100</b> Spokane, Wash. Ziegler Building	<b>KGBZ 930 1000</b> York, Neb. KGBZ Broadcasting Co., 719 Grant Ave.
<b>KFIZ 1420 100</b> Fond du Lac, Wis. 18 W. 1st St.	<b>KGCA 1270 100</b> Decorah, Iowa Charles W. Greenley, 201 Water St.
<b>KFJB 1200 100</b> Marshalltown, Iowa 1603 W. Main St.	<b>KGCU 1240 250</b> Mandan, N. D. 404 W. Main St.

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

<b>KGCX 1310 100</b> Wolf Point, Mont. E. E. Krebsbach.	<b>KHBC 1420 100</b> Hilo, T. H.
<b>KGDE 1200 100</b> Fergus Falls, Minn. C. L. Jaren	<b>KHJ 900 1000</b> Los Angeles, Calif. Don Lee Building
<b>KGDM 1100 1000</b> Stockton, Calif. E. F. Pepper, 42 S. Calif. St.	<b>KHQ 590 1000</b> Spokane, Wash. Sprague Ave. & Post St.
<b>KGDY 1340 250</b> Huron, S. D. Voice of S. D., Inc., 347 Dakota Ave.	<b>KHSL 950 250</b> Chico, Calif. Golden Empire Brdestg. Co.
<b>KGEK 1200 100</b> Sterling, Colo. Elmer G. Beehler, 109 W. 2nd St.	<b>KICA 1370 100</b> Clovis, N. M. Southwest Broadcasting Co.
<b>KGER 1360 1000</b> Long Beach, Calif. 435 Pine Ave.	<b>KID 1320 250</b> Idaho Falls, Idaho Box 487
<b>KGEZ 1310 100</b> Kalispell, Mont. Donald C. Treloar, Box 1	<b>KIDO 1350 1000</b> Boise, Idaho Hotel Boise
<b>KGFF 1420 100</b> Shawnee, Okla. 9th & Bell Sts.	<b>KIDW 1420 100</b> Lamar, Colo. Lamar Broadcasting Co., Box 688
<b>KGFG 1370 100</b> Oklahoma City, Okla. Okla. Broadcasting Co., 1113 N. Broadway	<b>KIEM 1210 100</b> Eureka, Calif. Redwood Brdestg. Co., Vance Hotel
<b>KGFI 1500 100</b> Corpus Christi, Texas Eagle Broadcasting Co., Inc., P. O. Box 1508	<b>KIEV 850 100</b> Glendale, Calif. Cannon System, Ltd., Glendale Hotel
<b>KGfJ 1200 100</b> Los Angeles, Calif. Ben S. McGlashan, 1417 S. Figueroa.	<b>KINY 1310 100</b> Juneau, Alaska Northwest Advertising Co.
<b>KGfK 1500 100</b> Moorhead, Minn. Comstock Hotel	<b>KIT 1310 100</b> Yakima, Wash. 109 1/2 E. Yakima Ave.
<b>KGfL 1370 100</b> Roswell, N. M. KGfL, Inc., 507 N. Main St.	<b>KIUJ 1310 100</b> Santa Fe, N. Mex. W. C. Irvin
<b>KGfW 1310 100</b> Kearney, Neb. 919 West 27th St.	<b>KIUL 1210 100</b> Garden City, Kans. Garden City Brdestg. Co.
<b>KGfX 630 200</b> Pierre, S. D. Dana McNeil, 510 Summit Ave.	<b>KIUN 1420 100</b> Pecos, Texas J. H. Hawkins & B. H. Hubbs
<b>KGgC 1420 100</b> San Francisco, Calif. 230 Eddy St.	<b>KIUP 1370 100</b> Durango, Colo. C. Guy Shepard 2800 Main Street
<b>KGgF 1010 1000</b> Coffeyville, Kans. Coffeyville Journal Bldg.	<b>KJBS 1070 500</b> San Francisco, Calif. 1380 Bush St.
<b>KGgM 1230 250</b> Albuquerque, N. M. Kimo Building	<b>KJR 970 5000</b> Seattle, Wash. Skinner Bldg.
<b>KGfH 1320 500</b> Pueblo, Colo. C. P. Ritchie, 113 Broadway	<b>KLCN 1290 100</b> Blytheville, Ark. C. L. Lintzenich, Main and Division St.
<b>KGfI 1200 100</b> Little Rock, Ark. Arkansas Brdestg. Co., Marion Hotel	<b>KLO 1400 500</b> Ogden, Utah 405-25th St.
<b>KGfL 780 1000</b> Billings, Mont. 5th & N. Broadway	<b>KLPM 1240 250</b> Minot, N. D. John B. Cooley, Box 707
<b>KGfR 1340 1000</b> Butte, Mont. KGfR, Inc., 121 W. Broadway	<b>KLRA 1390 1000</b> Little Rock, Ark. Arkansas Broadcasting Co., Box 550
<b>KGfW 1420 100</b> Alamosa, Colo. Leonard E. Wilson, 326 N. Commercial	<b>KLS 1440 250</b> Oakland, Calif. Warner Bros., 2201 Telegraph Ave.
<b>KGKB 1500 100</b> Tyler, Texas 115 S. College	<b>KLUF 1370 100</b> Galveston, Texas Geo. R. Clough, Bucaaneer Hotel
<b>KGKL 1370 100</b> San Angelo, Texas KGKL, Inc., St. Angelus Hotel	<b>KLX 880 1000</b> Oakland, Calif. Tribune Tower
<b>KGKO 570 250</b> Wichita Falls, Texas 9th St. & Indiana Ave.	<b>KLZ 560 1000</b> Denver, Colo. Shirley-Savoy Hotel
<b>KGKY 1500 100</b> Scottsbluff, Neb. Hilliard Co., Inc., 1517 1/2 Broadway	<b>KMA 930 1000</b> Shenandoah, Iowa Earl E. May Seed & Nursery Co.
<b>KGMB 1320 1000</b> Honolulu, T. H. Honolulu Broadcasting Co., Box 2663	<b>KMAC 1370 100</b> San Antonio, Texas W. W. McAllister, Smith-Young Tower
<b>KGNC 1410 1000</b> Amarillo, Texas Plains Radio Brdestg. Co.	<b>KMBC 950 1000</b> Kansas City, Mo. Pickwick Hotel
<b>KGfN 1430 1000</b> North Platte, Neb. Great Plains Broadcasting Co., W. 12th St.	<b>KMED 1310 100</b> Medford, Ore. Mrs. W. J. Virgin, Sparta Bldg.
<b>KGNO 1340 250</b> Dodge City, Kans. First Natl. Bank Bldg.	<b>KMJ 580 1000</b> Fresno, Calif. Van Ness & Calaveras Sts.
<b>KGO 790 7500</b> San Francisco, Calif. 111 Sutter St.	<b>KMLB 1200 100</b> Monroe, La. Francis Hotel
<b>KGU 750 2500</b> Honolulu, T. H. Kapiolani at South St.	<b>KMMJ 740 1000</b> Clay Center, Neb. The M. M. Johnson Co.
<b>KGVO 1260 1000</b> Missoula, Mont. Mosbys, Inc., 240 N. Hlggins	<b>KMO 1330 250</b> Tacoma, Wash. KMO, Inc., Hotel Winthrop
<b>KGW 620 1000</b> Portland, Ore. 325 Adler St.	<b>KMOX 1090 50000</b> St. Louis, Mo. 401 S. 12th St.
<b>KGY 1210 100</b> Olympia, Wash. KGY, Inc., 11th and Capitol Way	<b>KMPC 710 500</b> Beverly Hills, Calif. 9631 Wiltshire Blvd.

## NORTH AMERICAN B. C. STATIONS BY CALLS

<b>KMTR 570 1000</b> Hollywood, Calif. KMTR Radio Corp., 915 N. Formosa Ave.	<b>KRMD 1310 100</b> Shreveport, La. Jefferson Hotel
<b>KNEL 1500 100</b> Brady, Texas G. L. Burns	<b>KRNT 1320 500</b> Des Moines, Iowa 715 Locust Street
<b>KNOW 1500 100</b> Austin, Texas Norwood Building	<b>KROC 1310 100</b> Rochester, Minn. Southern Minnesota Broadcasting Co.
<b>KNX 1050 50000</b> Hollywood, Calif. West. Broadcast Co., Inc., 1558 N. Vine St.	<b>KROW 930 1000</b> Oakland, Calif. 1803 Franklin St.
<b>KOA 830 50000</b> Denver, Colo. General Electric Co., 1370 Krameria St.	<b>KRCS 1120 100</b> Seattle, Wash. Radio Sales Corp., Washington Athletic Club
<b>KOAC 550 1000</b> Corvallis, Ore. Oregon State Agricultural College	<b>KSAC 580 500</b> Manhattan, Kans. State College of Agriculture
<b>KOB 1180 10000</b> Albuquerque, N. M. Albuquerque Journal, Box 1319	<b>KSCJ 1330 1000</b> Sioux City, Iowa Perkins Bros. Co., 415 Douglas St.
<b>KOH 1380 500</b> Reno, Nev. 440 N. Virginia St.	<b>KSD 550 1000</b> St. Louis, Mo. St. Louis Post-Dispatch
<b>KOIL 1260 1000</b> Council Bluffs, Iowa Mona Motor Oil Co.	<b>KSEI 900 250</b> Pocatello, Idaho Radio Service Corp., 141 S. 6th Ave.
<b>KOIN 940 1000</b> Portland, Ore. KOIN, Inc., New Heathman Hotel	<b>KSFO 560 1000</b> San Francisco, Calif. Russ Building
<b>KOL 1270 1000</b> Seattle, Wash. Northern Life Tower	<b>KSL 1130 50000</b> Salt Lake City, Utah Vermont Bldg.
<b>KOMA 1480 5000</b> Oklahoma City, Okla. Biltmore Hotel	<b>KSLM 1370 100</b> Salem, Ore. Oregon Radio, Inc.
<b>KOMO 920 1000</b> Seattle, Wash. Skinner Bldg.	<b>KSO 1430 500</b> Des Moines, Iowa 715 Locust Street
<b>KONO 1370 100</b> San Antonio, Texas Mission Broadcast. Co., Milam Bldg.	<b>KSOO 1110 2500</b> Sioux Falls, S. D. Sioux Falls Brdest. Assn., Carpenter Hotel
<b>KOOS 1390 250</b> Marshfield, Ore. H. H. Hanseth, Hall Bldg.	<b>KSTP 1460 25000</b> St. Paul, Minn. St. Paul Hotel
<b>KORE 1420 100</b> Eugene, Ore. 733 Willamette St.	<b>KSUN 1200 100</b> Lowell, Ariz. Copper Electrical Co., Drawer C
<b>KOTN 1500 100</b> Pine Bluff, Ark. Universal Brdestg. Corp., Hotel Pines	<b>KTAR 620 1000</b> Phoenix, Ariz. Heard Building
<b>KOY 1390 500</b> Phoenix, Ariz. P. O. Box 1323	<b>KTAT 1240 1000</b> Fort Worth, Texas Ft. Worth Natl. Bank Bldg.
<b>KPAC 1260 500</b> Port Arthur, Texas Port Arthur College	<b>KTBS 1450 1000</b> Shreveport, La. Box 17
<b>KPCB 710 100</b> Seattle, Wash. Tower Bldg.	<b>KTFI 1240 1000</b> Twin Falls, Idaho Radio Broadcasting Corp., Box 521
<b>KPJM 1500 100</b> Prescott, Ariz. Scott & Sturm, P. O. Box 782	<b>KTHS 1060 10000</b> Hot Springs, Ark. Chamber of Commerce, Box 886
<b>KPLC 1500 100</b> Lake Charles, La. Calcasieu Brdestg. Co., Majestic Hotel	<b>KTRB 740 250</b> Modesto, Calif. McTammany & Bates
<b>KPO 680 50000</b> San Francisco, Calif. 111 Sutter St.	<b>KTRH 1290 1000</b> Houston, Texas KTRH Broadcasting Co., Rice Hotel
<b>KPOF 880 500</b> Denver, Colo. Pillar of Fire, 1845 Champa St.	<b>KTSA 550 1000</b> San Antonio, Texas Southwest Broadcasting Co., Plaza Hotel
<b>KPPC 1210 50</b> Pasadena, Calif. 585 E. Colorado St.	<b>KTSM 1310 100</b> El Paso, Texas P. O. Box 1976
<b>KPQ 1500 100</b> Wenatchee, Wash. KPQ Bldg., 20 2nd St.	<b>KTUL 1400 500</b> Tulsa, Okla. National Bank of Tulsa Bldg.
<b>KPRC 920 1000</b> Houston, Texas Lamar Hotel	<b>KTW 1220 1000</b> Seattle, Wash. 7th Ave. & Spring St.
<b>KQV 1380 500</b> Pittsburgh, Pa. KQV Broadcasting Co., 1406 C. of C. Bldg.	<b>KUJ 1370 100</b> Walla Walla, Wash. KUJ, Inc., Marcus Whitman Hotel
<b>KQW 1010 1000</b> San Jose, Calif. 87 E. San Antonio St.	<b>KUMA 1420 100</b> Yuma, Ariz. Dr. A. H. Schermann, Box 267
<b>KRE 1370 100</b> Berkeley, Calif. 2337 Shattuck Ave.	<b>KUOA 1260 1000</b> Fayetteville, Ark. KUOA, Inc., Washington Hotel
<b>KREG 1500 100</b> Santa Ana, Calif. 3rd & Sycamore Sts.	<b>KUSD 890 500</b> Vermillion, S. D. University of South Dakota
<b>KRGV 1260 500</b> Weslaco, Texas KRGV Inc.	<b>KVI 570 1000</b> Tacoma, Wash. W. R. Rust Bldg.
<b>KRKD 1120 500</b> Los Angeles, Calif. 815 Spring Arcade Bldg.	<b>KVL 1370 100</b> Seattle, Wash. KVL, Inc., 2101 Smith Tower
<b>KRKO 1370 50</b> Everett, Wash. Lee Mudgett, 2814 Rucker Ave.	<b>KVOA 1260 500</b> Tucson, Ariz. Cons. Natl. Bank Bldg.
<b>KRLC 1420 100</b> Lewiston, Idaho H. E. Studebaker, Lewis-Clarke Hotel	<b>KVOD 920 500</b> Denver, Colo. Continental Oil Bldg.
<b>KRLD 1040 10000</b> Dallas, Texas KRLD Radio Corp., Adolphus Hotel	<b>KVOL 1310 100</b> Lafayette, La. Evangeline Hotel



## NORTH AMERICAN B. C. STATIONS BY CALLS

	<b>KVOO 1140 25000</b>	<b>Tulsa, Okla.</b>			<b>VOAS 940 100</b>	<b>St. John's, N. F.</b>
	Wright Bldg.				Ayre & Sons, Ltd.,	Water St.
	<b>KVOR 1270 1000</b>	<b>Colorado Spg., Colo.</b>			<b>VOGY 840 400</b>	<b>St. John's, N. F.</b>
	Antlers Hotel				Newfoundland Hotel	
	<b>KVOS 1200 100</b>	<b>Bellingham, Wash.</b>			<b>VONF 1195 500</b>	<b>St. John's, N. F.</b>
	115 W. Magnolia St.				Dominion Broadcasting Co., Ltd.,	Box 135
	<b>KVSO 1210 100</b>	<b>Ardmore, Okla.</b>			<b>VOWR 681 500</b>	<b>St. John's, N. F.</b>
	Ardmoreite Pub. Co., Inc.				Wesley United Church,	Box 157
	<b>KWBG 1420 100</b>	<b>Hutchinson, Kans.</b>			<b>WAAB 1410 500</b>	<b>Boston, Mass.</b>
	W. B. Greenwald				21 Brookline Ave.	
	<b>KWEA 1210 100</b>	<b>Shreveport, La.</b>			<b>WAAF 920 500</b>	<b>Chicago, Ill.</b>
	Spring & Fannin Sts.,	Times Pub. Co.			Palmer House	
	<b>KWG 1200 100</b>	<b>Stockton, Calif.</b>			<b>WAAT 940 500</b>	<b>Jersey City, N. J.</b>
	Medico-Dental Bldg.				Bremer Broadcasting Corp.,	50 Journal Sq.
	<b>KWJJ 1040 500</b>	<b>Portland, Ore.</b>			<b>WAAW 660 500</b>	<b>Omaha, Neb.</b>
	622 Salmon St.				Omaha Grain Exchange	
	<b>KWK 1350 1000</b>	<b>St. Louis, Mo.</b>			<b>WABC 860 50000</b>	<b>New York, N. Y.</b>
	Thomas Patrick, Inc.,	Hotel Chase			485 Madison Ave.	
	<b>KWKC 1370 100</b>	<b>Kansas City, Mo.</b>			<b>WABI 1200 100</b>	<b>Bangor, Maine</b>
	3915 Main St.				Community Brdestg. Service	
	<b>KWKH 850 10000</b>	<b>Shreveport, La.</b>			<b>WABY 1370 100</b>	<b>Albany, N. Y.</b>
	Spring & Fannin Sts.,	Times Pub. Co.			Hotel Ten Eyck	
	<b>KWLC 1270 100</b>	<b>Decorah, Iowa</b>			<b>WACO 1420 100</b>	<b>Waco, Texas</b>
	Luther College				Amicable Bldg.	
	<b>KWSC 1220 1000</b>	<b>Pullman, Wash.</b>			<b>WADC 1320 1000</b>	<b>Akron, Ohio</b>
	State College of Washington				Allen T. Simmons, P. O.	Box 29
	<b>KWTN 1210 100</b>	<b>Watertown, S. D.</b>			<b>WAGF 1370 100</b>	<b>Dothan, Ala.</b>
	Citizens Bank Bldg.				P. O. Box 25	
	<b>KWTO 560 5000</b>	<b>Springfield, Mo.</b>			<b>WAGM 1420 100</b>	<b>Presque Isle, Me.</b>
	KGBX Inc., St. Louis at	Kimbrough			Aroostook Broadcasting Corp.,	Main St.
	<b>KWYO 1370 100</b>	<b>Shoridan, Wyo.</b>			<b>WAIM 1200 100</b>	<b>Anderson, S. C.</b>
	Big Horn Brdestg. Co.				Anderson College	
	<b>KXA 760 250</b>	<b>Seattle, Wash.</b>			<b>WAIU 640 500</b>	<b>Columbus, Ohio</b>
	American Radio Tel. Co.,	312 Bigelow Bldg.			Deshler-Wallek Hotel	
	<b>KXL 1420 100</b>	<b>Portland, Ore.</b>			<b>WALA 1380 500</b>	<b>Mobile, Ala.</b>
	KXL Broadcasters, Multnomah	Hotel			Fape Brdestg. Corp.,	P. O. Box 288
	<b>KXO 1500 100</b>	<b>El Centro, Calif.</b>			<b>WALR 1210 100</b>	<b>Zanesville, Ohio</b>
	F. M. Bowles, Box 140				First Trust & Savings Bank	Bldg.
	<b>KXRO 1310 100</b>	<b>Aberdeen, Wash.</b>			<b>WAML 1310 100</b>	<b>Laurel, Miss.</b>
	KXRO, Inc., Hotel Morek				Southland Radio Corp.,	Box 26
	<b>KXYZ 1440 1000</b>	<b>Houston, Texas</b>			<b>WAPI 1140 5000</b>	<b>Birmingham, Ala.</b>
	Gulf Building				Protective Life Bldg.	
	<b>KYA 1230 1000</b>	<b>San Francisco, Calif.</b>			<b>WARD 1400 500</b>	<b>Brooklyn, N. Y.</b>
	988 Market St.				427 Fulton St.	
	<b>KYW 1020 10000</b>	<b>Philadelphia, Pa.</b>			<b>WASH 1270 500</b>	<b>Grand Rapids, Mich.</b>
	1622 Chesnut Street				Grand Rapids Natl. Bank	Bldg.
	<b>NAA 690 1000</b>	<b>Arlington, Va.</b>			<b>WATR 1190 100</b>	<b>Waterbury, Conn.</b>
	United States Navy				WATR Co. Inc.,	47 Grand St.
	<b>RDN 706 500</b>	<b>San Salvador, E. S.</b>			<b>WAVE 940 1000</b>	<b>Louisville, Ky.</b>
	Republic of El Salvador				WAVE, Inc.,	1525 Brown Hotel
	<b>TGW 565 10000</b>	<b>Guatemala, Gua.</b>			<b>WAWZ 1350 500</b>	<b>Zarephath, N. J.</b>
	Gobierno de Guatemala				Pillar of Fire.	
	<b>TGX 1400 150</b>	<b>Guatemala City</b>			<b>WAZL 1420 100</b>	<b>Hazleton, Pa.</b>
					Hazleton Broadcasting Service,	Inc.
	<b>TIEP 850 500</b>	<b>San Jose, C. R.</b>			<b>WBAA 890 1000</b>	<b>West Lafayette, Ind.</b>
					Purdue University	
	<b>TIFA 1050 75</b>	<b>San Jose, C. R.</b>			<b>WBAL 1060 10000</b>	<b>Baltimore, Md.</b>
					Lexington Bldg., Amer. Radio	News Corp.
	<b>TIFS 1441 7.5</b>	<b>Cartago, C. R.</b>			<b>WBAP 800 50000</b>	<b>Fort Worth, Texas</b>
					Ft. Worth Star-Telegram	
	<b>TIGA 1014 30</b>	<b>Cartago, C. R.</b>			<b>WBAX 1210 100</b>	<b>Wilkes-Barre, Pa.</b>
					John H. Stenger, Jr.,	70 S. Main St.
	<b>TIGH 1000 500</b>	<b>San Jose, C. R.</b>			<b>WBBC 1400 500</b>	<b>Brooklyn, N. Y.</b>
					552-54 Atlantic Ave.	
	<b>TIRH 930 50</b>	<b>San Jose, C. R.</b>			<b>WBL 1210 100</b>	<b>Richmond, Va.</b>
					1627 Monument Ave.	
	<b>VAS 685 2000</b>	<b>Glace Bay, N. S.</b>			<b>WBBM 770 50000</b>	<b>Chicago, Ill.</b>
	Canadian Marconi Co., Ltd.				410 N. Michigan Ave.	
	<b>VE9EK 1185 10</b>	<b>Montmagny, Que.</b>			<b>WBBR 1300 1000</b>	<b>Brooklyn, N. Y.</b>
	J. A. Marquis, P. O. Box 52				124 Columbia Heights	
	<b>VOAC 1065 40</b>	<b>St. John's, Nfld.</b>			<b>WBBZ 1200 100</b>	<b>Ponca City, Okla.</b>
					C. L. Carrell, 407 W. South Ave.	

## NORTH AMERICAN B. C. STATIONS BY CALLS

<b>WBCM 1410 500</b>	<b>Bay City, Mich.</b> James E. Davibson, Hotel Wenonah
<b>WBEN 900 1000</b>	<b>Buffalo, N. Y.</b> WBEN, Inc., Hotel Statler
<b>WBEO 1310 100</b>	<b>Marquette, Mich.</b> 146 W. Washington St.
<b>WBIG 1440 500</b>	<b>Greensboro, N. C.</b> O. Henry Hotel
<b>WBNO 1200 100</b>	<b>New Orleans, La.</b> Hotel New Orleans
<b>WBNS 1430 500</b>	<b>Columbus, O.</b> 33 N. High St.
<b>WBNX 1350 250</b>	<b>New York, N. Y.</b> 260 E. 161st St.
<b>WBOQ 860 50000</b>	<b>New York, N. Y.</b> Atlantic Broadcasting Corp.
<b>WBOW 1310 100</b>	<b>Terre Haute, Ind.</b> Banks of Wabash, Inc., 19 Beach Block
<b>WBRB 1210 100</b>	<b>Red Bank, N. J.</b> 63 Broad St.
<b>WBRC 930 1000</b>	<b>Birmingham, Ala.</b> Bankhead Hotel
<b>WBRE 1310 100</b>	<b>Wilkes-Barre, Pa.</b> Louis G. Baltimore, 16 N. Main
<b>WBSO 920 500</b>	<b>Babson Park, Mass.</b> Drawer B
<b>WBT 1080 50000</b>	<b>Charlotte, N. C.</b> Station WBT, Inc., Wilder Bldg.
<b>WBTM 1370 100</b>	<b>Danville, Va.</b> Miller Bldg.
<b>WBZ 990 50000</b>	<b>Boston, Mass.</b> Hotel Bradford
<b>WBZA 990 1000</b>	<b>Springfield, Mass.</b> Hotel Kimball
<b>WCAC 600 500</b>	<b>Storrs, Conn.</b> Connecticut State College
<b>WCAD 1220 500</b>	<b>Canton, N. Y.</b> St. Lawrence University
<b>WCAE 1220 1000</b>	<b>Pittsburgh, Pa.</b> P. O. Box 1705
<b>WCAL 1250 1000</b>	<b>Northfield, Minn.</b> St. Olaf College
<b>WCAM 1280 500</b>	<b>Camden, N. J.</b> City of Camden, City Hall
<b>WCAO 600 500</b>	<b>Baltimore, Md.</b> 811 W. Lanvale St.
<b>WCAP 1280 500</b>	<b>Asbury Park, N. J.</b> Convention Hall
<b>WCAT 1200 100</b>	<b>Rapid City, S. D.</b> South Dakota State School of Mines
<b>WCAU 1170 50000</b>	<b>Philadelphia, Pa.</b> WCAU Broadcasting Co., 1622 Chestnut
<b>WCAX 1200 100</b>	<b>Burlington, Vt.</b> 203 College St.
<b>WCAZ 1070 100</b>	<b>Carthage, Ill.</b> 97 1/2 Adams St.
<b>WCBA 1440 500</b>	<b>Allentown, Pa.</b> B. Bryan Musselman, 39-41 10th St.
<b>WCBD 1080 5000</b>	<b>Waukegan, Ill.</b> Karcher Hotel
<b>WCBM 1370 100</b>	<b>Baltimore, Md.</b> Keith Theatre Bldg.
<b>WCBS 1420 100</b>	<b>Springfield, Ill.</b> WCBS, Inc., 208 1/2 S. 5th.
<b>WCCO 810 50000</b>	<b>Minneapolis, Minn.</b> Nicollet Hotel
<b>WCFL 970 1500</b>	<b>Chicago, Ill.</b> 666 Lake Shore Drive
<b>WCHS 580 500</b>	<b>Charleston, W. Va.</b> WOBW, Inc., Ruffner Hotel
<b>WCKY 1490 5000</b>	<b>Covington, Ky.</b> 6th & Madison Sts.

<b>WCLO 1200 100</b>	<b>Janesville, Wis.</b> 200 E. Milwaukee St.
<b>WCLS 1310 100</b>	<b>Joliet, Ill.</b> WCLS, Inc., 301 E. Jefferson St.
<b>WCMI 1310 100</b>	<b>Ashland, Ky.</b> Ashland Broadcasting Co., Box 106
<b>WCNW 1500 100</b>	<b>Brooklyn, N. Y.</b> Arthur Fasse, 864-868 Flatbush Ave.
<b>WCOA 1340 500</b>	<b>Pensacola, Fla.</b> San Carlos Hotel
<b>WCOC 880 500</b>	<b>Meridian, Miss.</b> Box 603
<b>WCOL 1210 100</b>	<b>Columbus, Ohio</b> WCOL Inc., 33 N. High St.
<b>WCOP 1120 500</b>	<b>Boston, Mass.</b> Joseph M. Kirby, Hotel Copley-Plaza
<b>WCRW 1210 100</b>	<b>Chicago, Ill.</b> Clinton R. White, 2756 Pine Grove Ave.
<b>WCSC 1360 500</b>	<b>Charleston, S. C.</b> Francis Marion Hotel
<b>WCSH 940 1000</b>	<b>Portland, Me.</b> Congress Square Hotel
<b>WDAE 1220 1000</b>	<b>Tampa, Fla.</b> Tampa Times Co., Tampa Terrace
<b>WDAF 610 1000</b>	<b>Kansas City, Mo.</b> 1729 Grand Ave.
<b>WDAH 1310 100</b>	<b>El Paso, Texas</b> Box 1976
<b>WDAS 1370 100</b>	<b>Philadelphia, Pa.</b> WDAS Brcdstg. Co., Inc., 1211 Chestnut St
<b>WDAY 940 1000</b>	<b>Fargo, N. D.</b> WDAY, Inc., Black Bldg., 118 Broadway
<b>WDBJ 930 1000</b>	<b>Roanoke, Va.</b> Times World Corp., P. O. Box 150
<b>WDBO 580 1000</b>	<b>Orlando, Fla.</b> P. O. Box 1097
<b>WDEL 1120 250</b>	<b>Wilmington, Del.</b> WDEL, Inc., 10th and King Sts.
<b>WDEV 550 500</b>	<b>Waterbury, Vt.</b> Harry C. Whitehill, Stowe St.
<b>WDGY 1180 1000</b>	<b>Minneapolis, Minn.</b> Dr. Geo. W. Young, 909 W. Broadway
<b>WDNC 1500 100</b>	<b>Durham, N. C.</b> Washington Duke Hotel
<b>WDOD 1280 1000</b>	<b>Chattanooga, Tenn.</b> WDOD Broadcasting Corp., Hotel Patten
<b>WDRC 1330 1000</b>	<b>Hartford, Conn.</b> WDRC, Inc., Corning Bldg., 11 Asylum St.
<b>WDSU 1250 1000</b>	<b>New Orleans, La.</b> WDSU Inc., Hotel Monteleone
<b>WDZ 1070 100</b>	<b>Tuscola, Ill.</b> James L. Bush, Star Store Bldg.
<b>WEAF 660 50000</b>	<b>New York, N. Y.</b> 30 Rockefeller Plaza
<b>WEAN 780 500</b>	<b>Providence, R. I.</b> New Crown Hotel
<b>WEBC 1290 1000</b>	<b>Superior, Wis.</b> Spaulding Hotel, Duluth, Minn.
<b>WEBQ 1210 100</b>	<b>Harrisburg, Ill.</b> 100 E. Popular St.
<b>WEBR 1310 100</b>	<b>Buffalo, N. Y.</b> Howel Broadcasting Co., Inc., 23 North
<b>WEDC 1210 100</b>	<b>Chicago, Ill.</b> Emil Denmark, 3860 Ogden Ave.
<b>WEED 1420 100</b>	<b>Rocky Mount, N. C.</b> Wm. Avera Wynne, Box 221
<b>WEEI 590 1000</b>	<b>Boston, Mass.</b> 182 Tremont St.
<b>WEUU 830 1000</b>	<b>Reading, Pa.</b> Berks Broadcasting Co., 533 Penn.
<b>WEHC 1420 100</b>	<b>Charlottesville, Va.</b> P. O. Box 221

## NORTH AMERICAN B. C. STATIONS BY CALLS

<b>WEHS 1420 100 Cicero, Ill.</b> WEHS, Inc., 6138 W. Cermak Rd.	<b>WGY 790 50000 Schenectady, N. Y.</b> 1 River Road
<b>WELL 1420 100 Battle Creek, Mich.</b> Enquirer News, 38 W. State St.	<b>WHA 940 1000 Madison, Wis.</b> University of Wisconsin, Radio Hall
<b>WENR 870 50000 Chicago, Ill.</b> Merchandise Mart	<b>WHAM 1150 50000 Rochester, N. Y.</b> 100 Carlson Road
<b>WESG 850 1000 Elmira, N. Y.</b> Mark Twain Hotel	<b>WHAS 820 50000 Louisville, Ky.</b> 300 W. Liberty St.
<b>WEVD 1300 1000 New York, N. Y.</b> Jewish Daily Forward, Hotel Claridge	<b>WHAT 1310 100 Philadelphia, Pa.</b> Public Ledger Bldg.
<b>WEW 760 1000 St. Louis, Mo.</b> St. Louis University, 221 N. Grand Blvd.	<b>WHAZ 1300 500 Troy, N. Y.</b> 8th St.
<b>WEXL 1310 50 Royal Oak, Mich.</b> 212 W. 6th St.	<b>WHB 860 1000 Kansas City, Mo.</b> WHB Broadcasting Co., Scarritt Bldg.
<b>WFAA 800 50000 Dallas, Texas</b> Baker Hotel	<b>WHBC 1200 100 Canton, Ohio</b> Edw. P. Graham, 319 Tus. St., W.
<b>WFAB 1300 1000 New York, N. Y.</b> 154 W. 57th St.	<b>WHBF 1210 100 Rock Island, Ill.</b> Hotel Harms
<b>WFAM 1200 100 South Bend, Ind.</b> South Bend Tribune, 225 W. Colfax Ave.	<b>WHBI 1250 1000 Newark, N. J.</b> 100 Shipman St.
<b>WFAS 1210 100 White Plains, N. Y.</b> Hotel Roger Smith	<b>WHBL 1410 500 Sheboygan, Wis.</b> Press Publishing Co., Press Bldg.
<b>WFBC 1300 1000 Greenville, S. C.</b> Imperial Hotel	<b>WHBQ 1370 100 Memphis, Tenn.</b> Brdestg. Sta. WNBQ, Inc., Hotel Claridge
<b>WFBE 1200 100 Cincinnati, Ohio</b> WFBE, Inc., Hotel Sinton	<b>WHBU 1210 100 Anderson, Ind.</b> Anderson Broadcasting Corp., Box 816
<b>WFBG 1310 100 Altoona, Pa.</b> Gable Broadcasting Co., 12th Ave. & 13th St.	<b>WHBY 1200 100 Green Bay, Wis.</b> WHBY, Inc., Bellin Bldg.
<b>WFBL 1360 1000 Syracuse, N. Y.</b> Onondaga Hotel	<b>WHDF 1370 100 Calumet, Mich.</b> Box 643
<b>WFBM 1230 1000 Indianapolis, Ind.</b> 307 N. Pennsylvania St.	<b>WHDH 830 1000 Boston, Mass.</b> Matheson Radio Co., 62 Boylston
<b>WFBR 1270 500 Baltimore, Md.</b> 7 St. Paul St.	<b>WHDL 1420 100 Olean, N. Y.</b> Exchange Natl. Bank Bldg.
<b>WFDL 1310 100 Flint, Mich.</b> Union Industrial Bldg.	<b>WHEB 740 250 Portsmouth, N. H.</b> Box 522, 39 Congress St.
<b>WFEA 1340 500 Manchester, N. H.</b> Carpenter Hotel	<b>WHEC 1430 500 Rochester, N. Y.</b> WHEC, Inc., 40 Franklin St.
<b>WFIL 560 1000 Philadelphia, Pa.</b> WFIL Broadcasting Co., 801 Market	<b>WHEF 1500 100 Kosciusko, Miss.</b> Box 631
<b>WFLA 620 1000 Clearwater, Fla.</b> Box 119	<b>WHFC 1420 100 Cicero, Ill.</b> WHFC, Inc., 6138 W. Cermak Road
<b>WFMD 900 500 Frederick, Md.</b> Monocacy Broadcasting Co.	<b>WHIO 1260 1000 Dayton, Ohio</b> 39 S. Ludlow St.
<b>WGAL 1500 100 Lancaster, Pa.</b> WGAL, Inc., 8 W. King St.	<b>WHIS 1410 250 Bluefield, W. Va.</b> Bland St.
<b>WGAR 1450 500 Cleveland, Ohio</b> WGAR Broadcasting Co., Hotel Statler	<b>WHJB 620 250 Greensburg, Pa.</b> Penn-Albert Hotel, 128 Pa. Ave.
<b>WGBB 1210 100 Freeport, N. Y.</b> H. H. Carman, 64 S. Grove St.	<b>WHK 1390 1000 Cleveland, Ohio</b> 1311 Terminal Tower
<b>WGBF 630 500 Evansville, Ind.</b> 519 Vine St.	<b>WHN 1010 1000 New York, N. Y.</b> 1540 Broadway
<b>WGBI 880 500 Scranton, Pa.</b> 1000 Wyoming Ave.	<b>WHO 1000 50000 Des Moines, Iowa</b> Central Brdestg. Co., 914 Walnut St.
<b>WGCM 1120 500 Mississippi City</b> Great Southern Golf Club, Box 207	<b>WHOM 1450 250 Jersey City, N. J.</b> 2870 Hudson Boulevard
<b>WGES 1360 500 Chicago, Ill.</b> 4000 Washington Blvd.	<b>WHP 1430 500 Harrisburg, Pa.</b> WHP, Inc., 216 Locust St.
<b>WGH 1310 100 Newport News, Va.</b> 2813 Washington Ave.	<b>WIBA 1280 1000 Madison, Wis.</b> 111 King St.
<b>WGL 1370 100 Fort Wayne, Ind.</b> F. C. Zieg, 213 W. Main St.	<b>WIBG 970 100 Glenside, Pa.</b> Seaboard Radio Brdestg. Corp.
<b>WGN 720 50000 Chicago, Ill.</b> WGN, Inc., 435 N. Michigan Ave.	<b>WIBM 1370 100 Jackson, Mich.</b> WIBM, Inc., 306 W. Michigan Ave.
<b>WGNV 1210 100 Chester, N. Y.</b> Peter Goelet (Orange County)	<b>WIBU 1210 100 Peynette, Wis.</b> Wm. C. Forrest, R. F. D. No. 3
<b>WGPC 1420 100 Albany, Ga.</b> Rylander Theatre Bldg.	<b>WIBW 580 1000 Topeka, Kans.</b> 11th & Topeka Blvd.
<b>WGR 550 1000 Buffalo, N. Y.</b> Rand Bldg.	<b>WIBX 1200 100 Utica, N. Y.</b> WIBX, Inc., 1st Natl. Bank Bldg.
<b>WGST 890 500 Atlanta, Ga.</b> Ansley Hotel	<b>WICC 600 500 Bridgeport, Conn.</b> Stratfield Hotel

## NORTH AMERICAN B. C. STATIONS BY CALLS

<b>WIL</b> 1200 100 St. Louis, Mo. Melbourne Hotel	<b>WKBH</b> 1380 1000 LaCrosse, Wis. WKBH, Inc., 409 Main St.
<b>WILL</b> 890 250 Urbana, Ill. University of Illinois	<b>WKBI</b> 1420 100 Cicero, Ill. WKBI, Inc., 6138 W. Cermak Road
<b>WILM</b> 1420 100 Wilmington, Del. 920 King St.	<b>WKBN</b> 570 500 Youngstown, Ohio 17 N. Champlon St.
<b>WIND</b> 560 1000 Gary, Ind. 504 Broadway	<b>WKBO</b> 1200 100 Harrisburg, Pa. Penn Harris Hotel
<b>WINS</b> 1180 1000 New York, N. Y. 114 E. 58th St., Hearst Radio, Inc.	<b>WKBV</b> 1500 100 Richmond, Ind. Knox Radio Corp., Box 308
<b>WIOD</b> 1300 1000 Miami, Fla. News Tower, Boscayne Blvd.	<b>WKBW</b> 1480 5000 Buffalo, N. Y. Rand Bldg.
<b>WIP</b> 610 1000 Philadelphia, Pa. Gimbel Bldg., 9th & Chestnut Sts.	<b>WKBZ</b> 1500 100 Muskegon, Mich. Occidental Hotel Bldg.
<b>WIRE</b> 1400 500 Indianapolis, Ind. 540 N. Meridian St.	<b>WKEU</b> 1500 100 Griffin, Ga. Radio Station WKEU, 906 Hill St.
<b>WIS</b> 1010 500 Columbia, S. C. Station WIS, Inc., Box 635	<b>WKJC</b> 1200 100 Lancaster, Pa. 16 W. King St.
<b>WISC</b> 1310 100 Milwaukee, Wis. Milwaukee Brdstg. Co.	<b>WKOK</b> 1210 100 Sunbury, Pa. 1150 N. Front St.
<b>WISN</b> 1120 250 Milwaukee, Wis. 123 W. Michigan St., Hearst Radio, Inc.	<b>WKRC</b> 550 1000 Cincinnati, Ohio WKRC, Inc., Hotel Alms
<b>WJAC</b> 1310 100 Johnstown, Pa. WJAC, Inc., Locust St.	<b>WKY</b> 900 1000 Oklahoma City, Okla. Plaza Court Bldg.
<b>WJAG</b> 1060 1000 Norfolk, Neb. Norfolk Daily News	<b>WKZO</b> 590 1000 Kalamazoo, Mich. John E. Fetzer, Burdick Hotel
<b>WJAR</b> 890 500 Providence, R. I. Outlet Co., Weybossett St.	<b>WLAC</b> 1470 5000 Nashville, Tenn. WLAC, Inc., 159-4th Ave., No.
<b>WJAS</b> 1290 1000 Pittsburgh, Pa. Chamber of Commerce Bldg.	<b>WLAP</b> 1420 100 Lexington, Ky. Main & Esplanade
<b>WJAX</b> 900 1000 Jacksonville, Fla. City of Jacksonville	<b>WLB</b> 1250 1000 Minneapolis, Minn. University of Minnesota
<b>WJAY</b> 610 500 Cleveland, Ohio 1224 Huron Road	<b>WLBC</b> 1310 500 Muncie, Ind. D. A. Burton, Anthony Bldg.
<b>WJBC</b> 1200 100 Bloomington, Ill. Kaskaskia Broadcasting Co.	<b>WLBK</b> 1420 100 Kansas City, Kans. 901 N. 8th Street
<b>WJBK</b> 1500 100 Detroit, Mich. 6559 Hamilton Ave.	<b>WLBL</b> 900 2500 Stevens Point, Wis. Fox Theater Bldg.
<b>WJBL</b> 1200 100 Decatur, Ill. Gushard Bldg.	<b>WLBZ</b> 620 500 Bangor, Me. Maine Broadcasting Co., Inc., 100 Main
<b>WJBO</b> 1420 100 Baton Rouge, La. 334 Florida Street	<b>WLEU</b> 1420 100 Erie, Pa. Commerce Building
<b>WJBW</b> 1200 100 New Orleans, La. C. C. Carlson, Godechaux Bldg.	<b>WLLH</b> 1370 100 Lowell, Mass. Merrimac Brdstg. Co., Box D
<b>WJBY</b> 1210 100 Gadsden, Ala. Gadsden Broadcasting Co., 112 N. 8th St.	<b>WLNH</b> 1310 100 Laconia, N. H. 523 Main St.
<b>WJDX</b> 1270 1000 Jackson, Miss. Lamar Life Bldg.	<b>WLS</b> 870 50000 Chicago, Ill. 1230 W. Washington Blvd.
<b>WJEJ</b> 1210 100 Hagerstown, Md. Lovely Dame Bldg.	<b>WLTH</b> 1400 500 Brooklyn, N. Y. 105 2nd Ave., (N. Y. City)
<b>WJIM</b> 1210 100 Lansing, Mich. Capital City Brdstg. Co.	<b>WLVA</b> 1200 100 Lynchburg, Va. 915 Main St.
<b>WJJD</b> 1130 20000 Chicago, Ill. WJJD, Inc., 201 N. Wells St.	<b>WLW</b> 700 50000 Cincinnati, Ohio 1329 Arlington St.
<b>WJMS</b> 1420 100 Ironwood, Mich. WJMS, Inc., St. James Hotel	<b>WLWL</b> 1100 5000 New York, N. Y. 415 W. 59th St.
<b>WJR</b> 750 50000 Detroit, Mich. WJR, Inc., Fisher Bldg.	<b>WMAL</b> 630 250 Washington, D. C. 712-11th St., N. W.
<b>WJSV</b> 1460 10000 Washington, D. C. Earle Building	<b>WMAQ</b> 670 50000 Chicago, Ill. Merchandise Mart
<b>WJTL</b> 1370 100 Atlanta, Ga. Volunteer Life Bldg.	<b>WMAS</b> 1420 100 Springfield, Mass. WMAS, Inc., 70 Chestnut St.
<b>WJW</b> 1210 100 Akron, Ohio WJW, Inc., 41 S. High St.	<b>WMAZ</b> 1180 1000 Macon, Ga. 211 Cotton Ave.
<b>WJZ</b> 760 50000 New York, N. Y. 30 Rockefeller Plaza	<b>WMBC</b> 1420 100 Detroit, Mich. 7310 Woodward Ave.
<b>WKAQ</b> 1240 1000 San Juan, P. R. Radio Corp. of Puerto Rico, Box 1414	<b>WMBD</b> 1440 500 Peoria, Ill. 114 N. Madison St.
<b>WKAR</b> 1040 1000 East Lansing, Mich. Michigan State College	<b>WMBG</b> 1210 100 Richmond, Va. 914 W. Broad St.
<b>WKBB</b> 1500 100 East Dubuque, Ill. Hotel Julien	<b>WMBH</b> 1420 100 Joplin, Mo. 1334 Roosevelt St.

I2RO, Rome, Italy, 9.630. Mon.,  
 Wed., Fri., 1800-1930.  
 J7H, Nazaki, Japan, 14.640. 0000-  
 0100. Mon., Thurs., 1600-1700.  
 J7M, Nazaki, Japan, 10.740.  
 Daily, 0400-0745.  
 LKJ1, Joloy, Norway, 9.540. 0500-  
 0800.  
 OAX4B, Lima, Peru, 6.230. 1900-  
 2100.  
 OAX4D, Lima, Peru, 5.780. Wed.,  
 Sat., 2100-2330.  
 ORK, Brussels, Belgium, 10.330.  
 1200-1400.  
 PCJ, Hilversum, Netherlands,  
 15.220. Sun., 0730-1000; Tues.,  
 0300-0600; Wed., 0700-1100.  
 PHI, Hilversum, Netherlands,  
 17.775. Mon., Thurs., Fri.,  
 0730-0930; Sat., Sun., 0730-1030.  
 PRADO, Riobamba, Ecuador,  
 6.620. Thurs., 2100-2330.  
 PRF5, Rio de Janeiro, Brazil,  
 9.505. 1700-1745.  
 RNE, Moscow, USSR, 12.000.  
 Daily, 1400-1800; Sun., 0700-  
 1100; Wed., 0600-0700.  
 RV15, Khabarovsk, USSR., 4.273.  
 Daily, 0300-0900.  
 TIEP, San Jose, Costa Rica, 6.710.  
 1900-2200.  
 TIGFI, San Jose, Costa Rica,  
 5.820. 1900-2200.  
 TIPG, San Jose, Costa Rica, 6.385.  
 TIRCC, San Jose, Costa Rica,  
 6.550. Daily, 1800-1900. Sun.,  
 Thurs., 2000-2100; Sun., 1100-  
 1300.  
 VE9CA, Calgary, Alta., 6.030.  
 Thurs., 0900-0200; Sun., 1200-  
 2400; Other days, 0900-2400.  
 VE9CW, Bowmanville, Ont., 6.090.  
 0600-2300.  
 VK2ME, Sydney, Australia, 9.585.  
 Sun., 0000-0200; 0430-0830;  
 0900-1100.  
 VK3LR, Melbourne, Australia,  
 9.580. Mon., Tues., Wed.,  
 Thurs., 0315-0730; Fri., 2230-  
 0200; Sat., 0500-0730.  
 VK3ME, Melbourne, Australia,  
 9.503. Wed., Thurs., Fri.,  
 Sat., 0500-0700.  
 VPD, Suva, Fiji, 13.045. 0030-0130.  
 VUB, Bombay, India, 9.565. Sun.,  
 near 7 a.m.  
 W1XAL, Boston, Mass., 11.790.  
 Tues., Thurs., Sun., 1830-2030.  
 W1XXU, Mills, Mass., 9.570. 0700-  
 0100.  
 W2XAD, Schenectady, N. Y.  
 W2XAF, Schenectady, N. Y., 9.530.  
 1840-2300.  
 W2XE, Wayne, N. J., 6.120. 2000-  
 2300. 11.830: 1700-1900. 15.270:  
 1000-1700.  
 W3XAL, Bound Brook, N. J.,  
 6.100: Mon., Wed., Sat., 1700-  
 0100. 17.780: Tues., Thurs.,  
 Fri., 1500-1600.  
 W3XAU, Philadelphia, Pa., 9.590:  
 1200-2000.  
 W3XL, Bound Brook, N. J., 17.310:  
 1100-1700.  
 W4XB, Miami, Fla., 6.040. Sun.,  
 1130-1500; 1700-2400. Other  
 days, 1200-1400; 1730-2400.  
 W8XK, Pittsburgh, Pa., 6.140:  
 2100-0100. 11.370: 1700-2100.  
 15.210: 0900-1900. 21.540:  
 0700-0900.  
 W8XAL, Cincinnati, Ohio, 6.060.  
 Sun., 0700-1900; 2200-0130.  
 Other days, 0630-1900; 2200-  
 0200.  
 W9XF, Chicago, Ill., 6.100: Monday  
 to Friday, 0100-0200; 2100-  
 2200; Sat., 0100-0200; Sun.,  
 0100-0230; 2100-2200.  
 XEBT, Mexico City, D. F., 6.000:  
 1200-0100.  
 XECC, Mexico City, D. F., 7.380:  
 Sun., 1800-1900.  
 XECW, Mexico City, D. F., 5.980:  
 daily 2300-2400.  
 YV2RC, Caracas, Venezuela, 6.112.  
 1700-2145.  
 YV3RC, Caracas, Venezuela, 6.150.  
 1700-2200.  
 YV4RC, Caracas, Venezuela, 6.375.  
 1630-2230.  
 YV5RMO, Maracaibo, Venezuela,  
 5.850. Daily exc. Sun., 1700-  
 2130.  
 YV6RV, Valencia, Venezuela, 6.520:  
 1700-2200.  
 YVQ, Maracay, Venez., 6.672.  
 Sat., 2000-2100.  
 ..... , Pontoise, France, 11.720:  
 1800-2100; 2200-2400.  
 11.880: 1015-1315; 1400-1700.  
 15.250.

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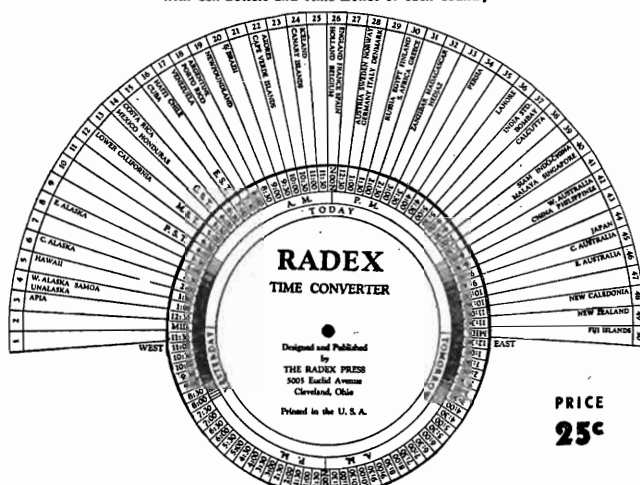
Street and Number.....

City and State .....

- CEC, Santiago, Chile, 10.670. Sun., 2030-2100.
- CJRO, Winnipeg, Man., 6.150. Sun., 1500-2200; other days, 2000-2400.
- CJRX, Winnipeg, Man., 11.720. Sun., 1500-2200; other days, 2000-2400.
- COC, Havana, Cuba, 6.010. Daily, 0930-1300; Sat., 2330-0030.
- COCD, Havana, Cuba, 6.130. Sun., 1200-1400; 2000-2230. Other days, 1130-1600; 1800-2400.
- COH, Havana, Cuba, 9.428. Daily 1000-1200; 1600-1800; 2100-2200.
- CO9CG, Santiago, Cuba, 6.150. Sun., 0000-0200.
- CO9JQ, Camaguey, Cuba, 8.665.
- CO9WR, Sancti-Spiritus, Cuba, 11.800.
- CT1AA, Lisbon, Portugal, 9.600. Tues., Thurs., Sat., 1630-1900.
- DJA, Berlin, Germany, 9.560. 0030-0215; 1705-2115.
- DJB, Berlin, Germany, 15.200. 0345-0715; 0800-1130.
- DJC, Berlin, Germany, 6.020. 1200-1630; 2130-2245.
- DJD, Berlin, Germany, 11.770. 1200-1630; 1705-2245.
- DJE, Berlin, Germany, 17.760. 0800-1130.
- DJN, Berlin, Germany, 9.540. 0030-0215; 0345-0715; 1705-2245.
- DJQ, Berlin, Germany, 15.280. 0800-1130.
- EAQ, Madrid, Spain, 9.862. 1730-1900; Sat., 1200-1400.
- GSB, Daventry, England, 9.510. 0115-0315; 1215-1500; 1515-1645.
- GSC, Daventry, England, 9.580. 1800-2000; 2200-2300.
- GSD, Daventry, England, 11.750. 0115-0315; 1215-1600; 1800-2000; 2200-2300.
- GSE, Daventry, England, 11.860. 1100-1200.
- GSF, Daventry, England, 15.140. 0900-1200; 1615-1745; 0600-0845.
- GSG, Daventry, England, 17.790. 0900-1045; 0600-0845.
- GSL, Daventry, England, 6.110. 2200-2300.
- HAS3, Budapest, Hungary, 15.370. Sun., 0900-1000.
- HAT4, Budapest, Hungary, 9.125. Sun., 1800-1900.
- HBL, Geneva, Switz., 9.595. Sat., 1730-1815.
- HBP, Geneva, Switz., 7.797. Sat., 1730-1815.
- HCJB, Quito, Ecuador, 8.214. Daily exc. Mon., 1915-2315.
- HC2AT, Guayaquil, Ecuador, 8.400. Daily exc. Sun., 2000-2200.
- HC2ET, Guayaquil, Ecuador, 4.600. Wed., Sat., 2130-2300.
- HC2RL, Guayaquil, Ecuador, 6.659. Tues., 2115-2315; Sun., 1745-1945.
- HHH, San Pedro de Macoris, D. R., 6.800. 1600-2030.
- HIX, Santo Domingo, D. R., 5.980. Tues., Fri., 2000-2200.
- HIZ, Santo Domingo, D. R., 6.315. Sat., 2300-0100; daily exc. Sun., 1700-1800.
- HI4D, Santo Domingo, D. R., 6.500. 1640-1940 daily exc. Sun.
- HJ1AB, Barranquilla, Colombia, 6.447. 1700-2200.
- HJ1AB, Cartagena, Colombia, 7.280. 1945-2115.
- HJ1ABE, Cartagena, Colombia, 6.115. Sun. at 0400; Mon., 2200-2400; Wed., 2000-2200.
- HJ1ABG, Barranquilla, Colombia, 6.042. 1900-2200.
- HJ1ABH, Cienaga, Colombia, 6.300. Tues., Fri., 1945-2200.
- HJ2ABC, Cucuta, Colombia, 5.975. Daily exc. Sun., 1800-2100.
- HJ3ABD, Bogota, Colombia, 7.390. 1930-2300.
- HJ3ABF, Bogota, Colombia, 6.200. 1900-2300.
- HJ3ABH, Bogota, Colombia, 6.012. Sun., 1600-2100; other days, 1800-2300.
- HJ4ABA, Medellin, Colombia, 11.720. 1130-1300; 1830-2230.
- HJ4ABC, Pereira, Colombia, 6.230. 1900-2000.
- HJ4ABE, Medellin, Colombia, 5.900. 1900-2300.
- HJ4ABL, Manizales, Colombia, 6.100. Sat., 2300-2430.
- HJ5ABD, Cali, Colombia, 6.490. Thurs., Sat., Sun., 1900-2100.
- HP5B, Panama City, Panama, 6.030. 1900-2200.
- HP5J, Panama City, Panama, 9.590. 1930-2200.
- HVJ, Vatican City, 5.970. Sun., 0500-0530. 15.120. Daily exc. Sun., 0500-0515.

## RADEX RADIO MAP of the WORLD

Showing all Countries and their Principal Cities  
with Call Letters and Time Zones of each Country



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MIDNIGHT TO NOON (EST)

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AST	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00
EST	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
CST	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00
MST	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00
PST	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
	COC DJA DJN HJ4ABL JVH VPD VK2ME W3XAL W8XAL W8XK	DJA DJB GSD GSD VPD VK2ME W8XAL W9XF	GSD W9XF	DJB DJB GSD PCJ VK3LR RV15	DJB DJN JVM PCJ RV15 VK2ME VK3LR	DJB DJN HJV JVM LKJ LKI RV15 VK2ME VK3LR VK3ME	DJB DJN GSD GSD JVM LKI RNE RV15 VK2ME VK3LR VK3ME W8XAL	GSF GSD JVM LKI PCJ PHI RNE Point. RV15 VE9GW VK2ME VK3LR W1XK W8XAL W8XK	DJB DJE GSD GSD PCJ PHI Point. RNE VE9GW VK2ME W1XK W8XK	DJB DJE DJQ GSD GSD HAS3 PCJ PHI Point. RNE VE9CA VE9GW W1XK W8XK	DJB DJE DJQ GSD GSD HJV PCJ PHI Point. RNE VE9GW W1XK W8XAL W9XAA	DJB DJE DJQ GSD GSD Point. VE9GW W1XK W2XE W3XL W8XK W9XAA

NOON TO MIDNIGHT (EST)

GMT	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	1:00	2:00	3:00	4:00
AST	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00
EST	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
CST	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00
MST	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00
PST	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
	DJC DJD EAD GSB GSD ORK Point. VE9GW W1XK W2XE W3XAU W8XAL W8XK W9XAA	DJC DJD EAD GSB GSD ORK Point. VE9CA W3XAU W1XK W3XAU W8XK W9XAA	DJC DJD GSB GSD VE9CA W1XK W2XAD VE9GW W3XAU W8XK W9XAA	CJRO CJR DJC GSD GSD Point. VE9GW W1XK W2XE W3XAL W3XAU W8XK W9XAA	CJRO CJR COC DJC DJD GSD GSF HIB HBL VE9CA VE9GW W2XE W3XAU W8XK W9XAA	CJRO CJR COC COH CT1AA DJA DJD DJD EAD EAG GSD HAT4 HC2RL HJ1ABB HP5B IRA Point. VE9GW W1XK W3XAL W3XAU W8XK XEBT YV3RC	CJRO CJR COC COH CT1AA DJA DJD DJN EAD GSD HJ1ABB HJ1ABB IRA Point. VE9GW W1XK W3XAL W3XAU W8XK W9XAA W9XAA	CJRO CJR COC COCD COH COH DJC DJD DJD DJD HIX HJ1ABB HP5B TIEP VE9GW W1XAL W1XK W2XAF W3XAU W8XK W9XAA YV2RC YV3RC YV4RC YV5RMO	CEC CJRO CJR COC COCD COH COH DJC DJD DJD DJD HIX HJ1ABB HP5B TIEP VE9GW W1XAL W1XK W2XAF W3XAU W8XK W9XAA YV2RC YV3RC YV4RC YV5RMO	CJRO CJR COC COCD COH DJC DJD DJD DJD HIX HJ1ABB HP5B TIEP VE9GW W1XAL W1XK W2XAF W3XAU W8XK W9XAA YV2RC YV3RC YV4RC YV5RMO	CJRO CJR COC COCD COH DJC DJD DJD DJD HIX HJ1ABB HP5B TIEP VE9GW W1XAL W1XK W2XAF W3XAU W8XK W9XAA YV2RC YV3RC YV4RC YV5RMO	CJRO CJR COC COCD COH DJC DJD DJD DJD HIX HJ1ABB HP5B TIEP VE9GW W1XAL W1XK W2XAF W3XAU W8XK W9XAA YV2RC YV3RC YV4RC YV5RMO

## NORTH AMERICAN B. C. STATIONS BY CALLS

<b>XEAM</b> 750 7.5 Matamoros, Tams. Edificio Banco Longoria	<b>XEMO</b> 865 5000 Tijuana, B. C. P. O. Box 202, San Diego, Calif.
<b>XEAO</b> 560 250 Mexicali, B. C. Luis L. Castro, C. Altamirano 156	<b>XEMX</b> 1280 12 Mexico City, D. F. Alfonzo T. Avales
<b>XEAW</b> 960 5000 Reynosa, Tams. Apartado No. 6	<b>XEMZ</b> 1210 250 Tijuana, L. C. Ave. "D" No. 542
<b>XEAZ</b> 1420 7 Guanajuato, Gto. Antonio Zavala, Pasco de la Presa 85	<b>XEN</b> 710 1000 Mexico City, D.F. Cerveceria Modelo Ave. Juarez 77
<b>XEB</b> 1030 10000 Mexico City, D. F. El Buen Tono, S. A., Apdo. 79-44	<b>XENT</b> 910 65000 Nuevo Laredo, Tams. Box 410, Laredo, Texas
<b>XEC</b> 1160 30 Tijuana, B. C. Luis F. Enciso, Teatro Zaragoza	<b>XEOK</b> 760 250 Tijuana, L. C. Carlos de la Sierra, Calle 5a 312
<b>XECW</b> 1310 10 Mexico City, D. F. Maria Elena Bravo de Cordero Ave. Juarez 104	<b>XEOX</b> 640 250 Saltillo, Coah. Victoria No. 4, Altos.
<b>XED</b> 1155 2500 Guadalajara, Jal. Cla. Radiofonografica, Apdo. 197	<b>XEP</b> 840 500 Mexico City, D.F. Cla Difusora de Mexico S. A., Rembrandt 11
<b>XEE</b> 1210 50 Durango, Dgo. 20 de Nov. 112 (Apdo. 148)	<b>XEPN</b> 590 50000 Piedras Negras, Coah. Piedras Negras Brdstg. Co., Box 360
<b>XEFA</b> 1180 500 Mexico City, D. F. Eduardo Limon Segui, Mediterraneo 236	<b>XES</b> 990 250 Tampico, Tams. Fernando Sada, Box 309
<b>XEFB</b> 1420 100 Monterrey, N. L. Jesus Quintanilla, P. O. Box 317	<b>XET</b> 690 500 Monterrey, N. L. P. O. Box 203, Hidalgo
<b>XEFC</b> 560 100 Merida, Yuc. J. Molina Font, Calle 59, 517	<b>XETF</b> 1220 12 Veracruz, Ver. Jose M. Lopez, Independencia 20
<b>XEFE</b> 850 250 Laredo, Tams. R. T. Carranza, Km. 4 Carretera Laredo Mt.	<b>XETH</b> 1210 100 Puebla, Pue. Ramon Huerta G., Calle 17, Oriente 11
<b>XEFI</b> 1440 250 Chihuahua, Chih. Feliciano Lopez Isles, Ap. 157	<b>XETW</b> 820 500 Mexico City, D. F. Rafael M. Pena, Ave. 16 de Sep. 83
<b>XEFJ</b> 1230 100 Monterrey, N. L. R. Junco de la Vega, P. O. Box 186	<b>XEU</b> 1010 250 Veracruz, Ver. Fernando Pazos Sosa, Independencia 98
<b>XEFO</b> 940 5000 Mexico City, D. F. Reforma No. 137	<b>XEW</b> 890 50000 Mexico City, D. F. P. O. Box 2516
<b>XEFV</b> 1210 100 Jaurez, Chih. Cordova & Prieto, Ave. Ferrocarril 104	<b>XEWZ</b> 1150 100 Mexico City, D. F. P. O. Box 291
<b>XEFW</b> 1310 250 Tampico, Tams. J. E. Martinez, Salvador Diaz Miron 6	<b>XEX</b> 1310 125 Monterrey, N. L. L. F. Petit Jean, P. O. Box 10
<b>XEFZ</b> 1370 100 Mexico City, D. F. Manuel Zetina, Cedro & Nonoalco No. 344	<b>XEY</b> 1000 10 Merida, Yuc. Calle 64, Numero 568
<b>XEG</b> 1270 200 Ensenada, B. C. Juan C. Chavez	<b>XEYZ</b> 780 10000 Mexico City, D. F. Angel M. Diez, Ave. Juarez 48
<b>XEH</b> 1150 250 Monterrey, N. L. Tarnava y Cia, P. O. Box 147	<b>XEZ</b> 630 500 Merida, Yuc. Jorge L. Falomeque, Estamosos Ctd 214
<b>XEI</b> 1370 125 Morelia, Mich. Carlos Gutierrez M., F. I. Madero 545	<b>XEZZ</b> 1370 100 San Luis Potosi, SLP Emilio Delgado R. Ave. Chicosin 32
<b>XEJ</b> 1020 1000 Juarez, Chih. Juan G. Buttner, P. O. Box 111	<b>XFA</b> 1310 5 Aguascalientes, Ags. A. Postal 92
<b>XEK</b> 990 100 Mexico City, D. F. Arturo Martinez, Jalapa No. 51	<b>XFB</b> 1270 250 Jalapa, Ver. Gobierno del Estado de Veracruz
<b>XEKL</b> 1240 500 Leon, Guan. 5 de Mayo 26	<b>XFC</b> 810 350 Aguascalientes, Ags. Gobierno del Estado de Aguascalientes
<b>XEL</b> 1100 250 Mexico City, D. F. Calzada del Rosel No. 1	<b>XFD</b> 1340 350 Jalapa, Ver. Gobierno Estado de Veracruz
<b>XELA</b> 1240 50 Saltillo, Coah. Enrique Gomez, Chauhtemos 28 Sur	<b>XFO</b> 940 5000 Mexico City, D. F. Nat. Rev. Party, Ave. Morelos 110
<b>XELO</b> 1110 10000 Piedras Negras, Coah. Piedras Negras Brdstg. Co.	<b>XFX</b> 610 1000 Mexico City, D. F. Secretaria de Educacion Publica
<b>XEMA</b> 1080 50 Tampico, Tams. Manuel M. Pier, Aretsanos 10	

## BEST SHORTWAVE BROADCASTING STATIONS BY CALL LETTERS

Frequencies are given in megacycles and the time is Eastern Standard.

*On the following pages will be found the details regarding the stations given in "Around the Clock". A complete list of the Short Wave Stations of the World was given in the September RADEX by frequencies, by locations and by call letters. It will appear again in the November issue.*



## NORTH AMERICAN B. C. STATIONS BY CALLS

<b>WRDW 1500 100</b> Augusta, Ga. Augusta Brdcastg. Co., 309 8th St.	<b>WTAL 1310 100</b> Tallahassee, Fla. Florida Capitol Broadcasters, Inc.
<b>WREC 600 1000</b> Memphis, Tenn. WREC, Inc., Hotel Peabody	<b>WTAM 1070 50000</b> Cleveland, Ohio 1367 E. 6th St.
<b>WREN 1220 1000</b> Lawrence, Kans. WREN Brdcastg. Co., 7th and Vermont Sts.	<b>WTAQ 1330 1000</b> Eau Claire, Wis. WEBY Inc., Hotel Eau Claire
<b>WRGA 1500 100</b> Rome, Ga. 10 Third Ave.	<b>WTAR 780 500</b> Norfolk, Va. WTAR Radio Corp., Bank of Com. Bldg.
<b>WRJN 1370 100</b> Racine, Wis. Racine Broadcasting Corp., Hotel Racine	<b>WTAW 1120 500</b> College Station, Tex. Agricultural and Mechanical College
<b>WROK 1410 500</b> Rockford, Ill. 109 So. Water St.	<b>WTAX 1210 100</b> Springfield, Ill. WTAX, Inc., 416 E. Capitol Ave.
<b>WROL 1310 100</b> Knoxville, Tenn. Stuart Broadcasting Corp., 524 S. Gay	<b>WTBO 800 250</b> Cumberland, Md. Associated Brdcastg. Corp., Box 794
<b>WRR 1280 500</b> Dallas, Texas City of Dallas, Southland Life Bldg.	<b>WTCN 1250 1000</b> Minneapolis, Minn. Wesley Temple Bldg.
<b>WRUF 830 5000</b> Gainesville, Fla. State University	<b>WTEL 1310 100</b> Philadelphia, Pa. 3701 N. Broad Street
<b>WRVA 1110 5000</b> Richmond, Va. Larus & Bros Co., Inc., 22nd and Gary St.	<b>WTFI 1450 500</b> Athens, Ga. Liberty Brdcastg. Co., 133 E. Washington St.
<b>WSAI 1330 1000</b> Cincinnati, Ohio Crosley Radio Corp., 1329 Arlington	<b>WTIC 1040 50000</b> Hartford, Conn. 26 Grove St.
<b>WSAJ 1310 100</b> Grove City, Pa. Grove City College, 418 Popular St.	<b>WTJS 1310 100</b> Jackson, Tenn. Sun Publishing Co., Sun Bldg.
<b>WSAN 1440 500</b> Allentown, Pa. WSAN, Inc., 39 10th St.	<b>WTMJ 620 1000</b> Milwaukee, Wis. The Journal Co., 333 W. State St.
<b>WSAR 1450 250</b> Fall River, Mass. Academy of Music Bldg.	<b>WTMV 1500 100</b> East St. Louis, Ill. Mississippi Valley Brdcastg. Co.
<b>WSAZ 1190 1000</b> Huntington, W. Va. WSAZ, Inc., P. O. Box 729	<b>WTNJ 1280 500</b> Trenton, N. J. Trenton Brdcastg. Co., Stacy Trent Hotel
<b>WSB 740 50000</b> Atlanta, Ga. Atlanta Journal, 7 N. Forsyth St.	<b>WTOC 1260 1000</b> Savannah, Ga. Savannah Brdcastg. Co., De Soto Hotel
<b>WSBC 1210 100</b> Chicago, Ill. Gene T. Dyer, 1258 S. Michigan Ave.	<b>WTRC 1310 50</b> Elkhart, Ind. Truth Pub. Co., Inc., Hotel Elkhart
<b>WSBT 1360 500</b> South Bend, Ind. South Bend Tribune, 225 W. Colfax Ave.	<b>WVFW 1400 500</b> Brooklyn, N. Y. Paramount Brdcastg. Co., 4 & 5 Court Sq.
<b>WSFA 1410 500</b> Montgomery, Ala. Jefferson Davis Hotel	<b>WWAE 1200 100</b> Hammond, Ind. 402 Hammond Bldg.
<b>WSGN 1310 100</b> Birmingham, Ala. Tutwiler Hotel	<b>WWC 1420 1000</b> Spartanburg, S. C. Virgil V. Evans, Ravenal & Avant St.
<b>WSIX 1210 100</b> Springfield, Tenn. 638 Tire & Vulcanizing Co.	<b>WWJ 920 1000</b> Detroit, Mich. Evening News Assn., 616 Lafayette Blvd.
<b>WSJS 1310 100</b> Winston-Salem, N.C. Winston-Salem Journal Co., 416 N. Marshall	<b>WWL 850 10000</b> New Orleans, La. Loyola University, Roosevelt Hotel
<b>WSM 650 50000</b> Nashville, Tenn. 301—7th Ave. No.	<b>WWNC 570 1000</b> Asheville, N. C. Citizen Brdcastg. Co., Inc., Flatiron Bldg.
<b>WSMB 1320 500</b> New Orleans, La. WSMB, Inc., Maison Blanche Bldg.	<b>WWRL 1500 100</b> Woodside, N. Y. 41-30—58th St.
<b>WSMK 1380 200</b> Dayton, Ohio WSMK, Inc., 121 N. Main St.	<b>WWSW 1500 100</b> Pittsburgh, Pa. Hotel Keystone
<b>WSOC 1210 100</b> Charlotte, N. C. WSOC, Inc., 516 W. Trade St.	<b>WWVA 1160 5000</b> Wheeling, W. Va. Hawley Bldg.
<b>WSPA 920 1000</b> Spartanburg, S. C. Virgil V. Evans, Ravenal and Avant St.	<b>WXYZ 1240 1000</b> Detroit, Mich. Macabees Bldg.
<b>WSPD 1340 1000</b> Toledo, Ohio Toledo Broadcasting Co., 505 Jefferson	<b>W1XBS 1530 1000</b> Waterbury, Conn. 61 Leavenworth St., Amer. Republican, Inc.
<b>WSUI 880 500</b> Iowa City, Iowa State University of Iowa	<b>W2XR 1550 1000</b> Long Island City, N. Y. Scientific Brdcastg. Serv., 41 Park Row, N. Y.
<b>WSUN 620 1000</b> St. Petersburg, Fla. Recreation Pier	<b>W6XAI 1550 1000</b> Bakersfield, Calif. Pioneer Mercantile Co.
<b>WSVA 550 500</b> Harrisonburg, Va. Main & Market Sts.	<b>WSXBY 1530 1000</b> Kansas City, Mo. 106 West 14th St.
<b>WSVS 1370 50</b> Buffalo, N. Y. 666 E. Delavan Ave.	<b>XEA 1060 125</b> Guadalajara, Jal. Alberto Palos Souza, Apdo. 197
<b>WSYB 1500 100</b> Rutland, Vt. Philip Weiss Music Co., Box 328	<b>XEAA 920 200</b> Mexicali, B. C. P. O. Box 714 (Calxico, Calif.)
<b>WSYR 570 250</b> Syracuse, N. Y. 315 Starret-Syracuse Bldg.	<b>XEAF 990 500</b> Nogales, Son. Francisco G. Elias, Hotel Central
<b>WTAD 900 500</b> Quincy, Ill. Illinois Brdcastg. Corp., State and 6th	<b>XEAI 1240 100</b> Mexico City, D. F. Carlos Gonzales Caballero, Insurgentes 366
<b>WTAG 580 500</b> Worcester, Mass. 18 Franklin St.	<b>XEAJ 1310 15</b> Oaxaca, Oax. Enrique M. Cribuela, 3a, Gurrero 18

## NORTH AMERICAN B. C. STATIONS BY CALLS

<b>WMBI 1080 5000</b>	<b>Chicago, Ill.</b>	<b>WOI 640 5000</b>	<b>Ames, Iowa</b>
153 Institute Place		Iowa State College	
<b>WMBO 1310 100</b>	<b>Auburn, N. Y.</b>	<b>WOKO 1430 500</b>	<b>Albany, N. Y.</b>
WMBO, Inc., Metcalf Bldg.		WOKO, Inc., Hotel Ten Eyck	
<b>WMBQ 1500 100</b>	<b>Brooklyn, N. Y.</b>	<b>WOL 1310 100</b>	<b>Washington, D. C.</b>
Metropolitan Brdsg. Corp., 95 Leonard St.		American Broadcasting Co., Annapolis Hotel	
<b>WMBR 1370 100</b>	<b>Jacksonville, Fla.</b>	<b>WOMT 1210 100</b>	<b>Manitowoc, Wis.</b>
F. J. Reynolds, Carling Hotel		Francis M. Kadow, Box 326	
<b>WMC 780 1000</b>	<b>Memphis, Tenn.</b>	<b>WOOD 1270 500</b>	<b>Grand Rapids, Mich.</b>
WMC, Inc., Hotel Gayoso		Grand Rapids Natl. Bank Bldg.	
<b>WMCA 570 500</b>	<b>New York, N. Y.</b>	<b>WOPI 1500 100</b>	<b>Bristol, Tenn.</b>
1697 Broadway		22nd & State Sts.	
<b>WMEX 1500 100</b>	<b>Boston, Mass.</b>	<b>WOR 710 50000</b>	<b>Newark, N. J.</b>
The Northern Corp., Hotel Manger		147 Market St.	
<b>WMFD 1370 100</b>	<b>Wilmington, N. C.</b>	<b>WORC 1280 500</b>	<b>Worcester, Mass.</b>
Hotel Wilmington		Alfred F. Kleindienst, 60 Franklin St.	
<b>WMFF 1310 100</b>	<b>Plattsburg, N. Y.</b>	<b>WORK 1320 1000</b>	<b>York, Pa.</b>
Hotel Cumberland		York Broadcasting Co., 15 S. Beaver St.	
<b>WMFG 1210 100</b>	<b>Hibbing, Minn.</b>	<b>WOS 630 500</b>	<b>Jefferson City, Mo.</b>
Head of the Lakes Brdsg. Co.		State Highway Control, Capitol Bldg.	
<b>WMFI 900 500</b>	<b>New Haven, Conn.</b>	<b>WOSU 570 750</b>	<b>Columbus, Ohio</b>
Patrick J. Goode		Ohio State University	
<b>WMFJ 1420 100</b>	<b>Daytona Beach, Fla.</b>	<b>WOV 1130 1000</b>	<b>New York, N. Y.</b>
W. Wright Esch		132 West 43rd St.	
<b>WMFN 1210 100</b>	<b>Clarksdale, Miss.</b>	<b>WOW 590 1000</b>	<b>Omaha, Neb.</b>
Attala Brdsg. Corp., Box 180		Woodmen of the World, 4th and Farnam	
<b>WMFO 1370 100</b>	<b>Decatur, Ala.</b>	<b>WOWO 1160 10000</b>	<b>Fort Wayne, Ind.</b>
James R. Doss, Jr.		Main Auto Supply Co., 213 W. Main	
<b>WMFR 1200 100</b>	<b>High Point, N. C.</b>	<b>WPAD 1420 100</b>	<b>Paducah, Ky.</b>
Hart & Nelson		2201 Broadway	
<b>WMMN 890 500</b>	<b>Fairmount, W. Va.</b>	<b>WPAR 1420 100</b>	<b>Parkersburg, W. Va.</b>
West Va. Brdsg. Corp., 208 Main St.		Chancellor Hotel	
<b>WMPC 1200 100</b>	<b>Lapeer, Mich.</b>	<b>WPAX 1210 250</b>	<b>Thomasville, Ga.</b>
81 Liberty St.		H. Wimpy, 135 E. Jackson St.	
<b>WMT 600 1000</b>	<b>Cedar Rapids, Iowa</b>	<b>WPAY 1370 100</b>	<b>Portsmouth, Ohio</b>
Hotel Montrose		F. P. Moler	
<b>WNAC 1230 1000</b>	<b>Boston, Mass.</b>	<b>WPEN 920 250</b>	<b>Philadelphia, Pa.</b>
21 Brookline Ave.		22nd & Walnut Sts.	
<b>WNAD 1010 1000</b>	<b>Norman, Okla.</b>	<b>WPFB 1370 100</b>	<b>Hattiesburg, Miss.</b>
University of Oklahoma		Forest Brdsg. Co., 512 Main St.	
<b>WNAX 570 1000</b>	<b>Yankton, S. D.</b>	<b>WPG 1100 5000</b>	<b>Atlantic City, N. J.</b>
House of Gurney, Inc., 2nd and Capital St.		City of Atlantic City, Convention Hall	
<b>WNBC 1380 250</b>	<b>New Britain, Conn.</b>	<b>WPHR 880 500</b>	<b>Petersburg, Va.</b>
Wm. J. Sanders, 147 Main St.		WLBG, Inc., Medical Arts Bldg.	
<b>WNBK 1500 100</b>	<b>Binghamton, N. Y.</b>	<b>WPRO 630 250</b>	<b>Providence, R. I.</b>
Arlington Hotel		Cherry & Webb Brdsg. Co., 15 Chestnut	
<b>WNBH 1310 100</b>	<b>New Bedford, Mass.</b>	<b>WPRP 1420 100</b>	<b>Ponce, P. R.</b>
251 Union St.		Jullo M. Conesa	
<b>WNBR 1430 500</b>	<b>Memphis, Tenn.</b>	<b>WPTF 680 5000</b>	<b>Raleigh, N. C.</b>
Memphis Broadcasting Co., Hotel DeVoy		324 Fayetteville St.	
<b>WNBX 1260 1000</b>	<b>Springfield, Vt.</b>	<b>WQAM 560 1000</b>	<b>Miami, Fla.</b>
WNBX Broadcasting Corp., 39 Main St.		Miami Brdsg. Co., Inc., 327 N.E. 1st Ave.	
<b>WNBZ 1290 100</b>	<b>Saranac Lake, N. Y.</b>	<b>WQAN 880 250</b>	<b>Scranton, Pa.</b>
Smith & Mace, 70 Broadway		Scranton Times, 149 Penn Ave.	
<b>WNEL 1290 500</b>	<b>San Juan, P. R.</b>	<b>WQBC 1360 1000</b>	<b>Vicksburg, Miss.</b>
Box 1252		Delta Broadcasting Co., Hotel Vicksburg	
<b>WNEW 1250 1000</b>	<b>Newark, N. J.</b>	<b>WQDM 1370 100</b>	<b>St. Albans, Vt.</b>
Wodaam Corp., 100 Shipman St.		42 N. Main St.	
<b>WNOX 560 1000</b>	<b>Knoxville, Tenn.</b>	<b>WRAK 1370 100</b>	<b>Williamsport, Pa.</b>
WNOX, Inc., Hotel Andrew Johnson		WRAK, Inc., 244 W. 4th St.	
<b>WNRA 1420 100</b>	<b>Muscle Shoals, Ala.</b>	<b>WRAW 1310 100</b>	<b>Reading, Pa.</b>
Kathryn Jones, P. O. Box 486, Sheffield, Ala.		Reading Broadcasting Co., 533 Penn St.	
<b>WNRI 1200 100</b>	<b>Newport, R. I.</b>	<b>WRAX 920 250</b>	<b>Philadelphia, Pa.</b>
S. George Webb, 21 Bull St.		WRAX Broadcasting Co., 217 S. Broad St.	
<b>WNYC 810 1000</b>	<b>New York, N. Y.</b>	<b>WRRL 1200 100</b>	<b>Columbus, Ga.</b>
Centre & Duane Sts.		Royal Theatre Bldg.	
<b>WOAI 1190 50000</b>	<b>San Antonio, Texas</b>	<b>WRBX 1410 250</b>	<b>Roanoke, Va.</b>
Southland Industries, Inc., 1038 Navarro		P. O. Box 2389	
<b>WOC 1370 100</b>	<b>Davenport, Iowa</b>	<b>WRC 950 500</b>	<b>Washington, D. C.</b>
1002 Brady Street		National Press Bldg.	
<b>WOCL 1210 50</b>	<b>Jamestown, N. Y.</b>	<b>WRDO 1370 100</b>	<b>Augusta, Me.</b>
A. E. Newton, 840 N. Main St.		WRDO, Inc., Augusta House	



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

## I THOUGHT RADIO WAS A PLAYTHING

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

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

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

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

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

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

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

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

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

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

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

but think it over—are you satisfied? Are you making as much money as you need? Would you sign a contract to stay where you are for the next ten years at the same salary? Those are the things you have to think about—because no one is going to make it his business to push you ahead—you must make it your own business.

Take my tip—write for their book, "Rich Rewards in Radio." It won't cost you anything except a postage stamp. It shows you a lot of things which I don't believe you know now about Radio—a lot of facts and figures on the opportunities in this new, fast-growing field. Where the jobs are, what they pay, how to get ready for them. Beginners as well as experienced men are making as much as \$500 to \$1,500 a year more as a result of N.R.I. training. And at the same time they send the book "Rich Rewards in Radio" they'll send you, without any cost or obligation, a Free Lesson to prove that their training is easy, practical, fascinating. The lesson they send "Radio Receiving Troubles—the Cause and Remedy" is valuable. And when you see how simple this lesson is to understand you'll know why many fellows with less than a grammar school education have mastered N.R.I. training and are now making good money as Radio Experts.

You are not placing yourself under any obligation by writing for this material as they will gladly send it to anyone who is ambitious and wants to get ahead. Mail the coupon in an envelope or paste it on a 1c postcard. Just address Mr. J. E. Smith, President, National Radio Institute, Dept. 5KO, Washington, D. C.

J. E. SMITH, President,  
National Radio Institute  
Dept. 5KO, Washington, D. C.

Dear Mr. Smith:

Without obligation, send me the sample lesson and your free book about spare time and full time Radio opportunities, and how I can train for them at home in spare time. (Please print plainly)

Name..... Age.....

Address.....

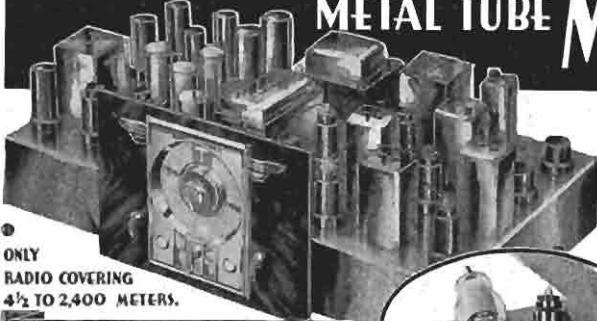
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Now, Push-Button Silent Tuning is offered for first time! Simply pushing Silencer Button hushes set between stations suppresses noises. Pressing Station Finder Button automatically indicates proper dial position for bringing in extremely weak stations.

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Establishes new radio style overnight! The V-Front Dispensing Varies were developed by Midwest engineers as a result of a study of directional effect of the Midwest Full Scope High Fidelity Speaker. These Varies spread the beautiful lacework of the "highs" throughout the entire room in a scientific manner... directing the High Fidelity waves uniformly to the ear. Send for new FREE 40-page catalog. It pictures the complete line of beautiful 1936 Acousti-Tone V-Spread consoles and chassis in four colors.

**FULL SCOPE HIGH FIDELITY**  
Brilliant

**Concert Tone**  
Now, get complete range of audible frequencies from 30 to 16,000 cycles, being transmitted by four new High Fidelity Broadcasting stations—WJMS, WQXY, W2XR and W6XAL. Glorious new Acousti-Tone is achieved assuring life-like, crystal-clear "concert" realism.

**V-FRONT**

**EVERYWHERE**, radio enthusiasts are praising this amazingly beautiful, bigger, better, more powerful, super selective, 18-tube 6-tuning range radio. They say it is a tremendous improvement over Midwest's 16-tube set, so popular last season. It is sold direct to you from Midwest Laboratories at a positive saving of 30% to 50%. (This statement has been verified by a Certified Public Accountant who conducted an impartial survey among representative Ohio, Kentucky and Indiana radio retailers.) Before you buy any radio, write for FREE 40-page 1936 catalog. Never before so much radio for so little money. Why pay more? You are triple-protected with: One Year Guarantee, Foreign Reception Guarantee and Money-Back Guarantee! This super Midwest will out-perform \$200 to \$300 sets on a point-for-point comparison. That is why nationally known orchestra leaders like Fred Waring, George Olsen, Jack Denny, Ted Fio Rito, and others use Midwest sets to study types of harmony and rhythmic beats followed by leading American and Foreign orchestras.

**80 ADVANCED 1936 FEATURES**

Scores of marvelous features, many exclusive, explain Midwest super performance and thrilling world-wide all-wave reception enable Midwest to bring in weak distant foreign stations, with full loud speaker volume, on channels adjacent to locals. Only Midwest offers so many features... only Midwest gives the sensational new Push-Button Tuning feature, etc. See pages 12 to 21 in FREE catalog for description of the 80 features. Read about advantages of 6 Tuning ranges... offered for first time: E, A, L, M, H and U. They make this Super De Luxe 18-tube set the equivalent of six different radios... offer tuning ranges not obtainable in other radios at any price!

**DEAL DIRECT WITH LABORATORIES**

No middlemen's profits to pay—you buy at wholesale price direct from laboratories... saving 30% to 50%. Increasing costs are sure to result in higher radio prices soon. Buy before the big advance... NOW... while you can take advantage of Midwest's sensational values. You can order your Midwest 1936 Full Scope High Fidelity Acousti-Tone radio from the 40-page catalog with as much certainty of satisfaction as if you were to come yourself to our great radio laboratories. You save 30% to 50%... you get 30 days FREE trial... as little as \$5.00 puts a Midwest radio in your home... Satisfaction guaranteed or money back. Write today, for FREE catalog.

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Thrill to new explorations in sections of radio spectrum that are strangers to you. Every type of broadcast from North and South America, Europe, Asia, Africa and Australia is now yours. Send today for money-saving facts.

**GEORGE OLSEN PRAISES LIFE-LIKE TONE REALISM**

Long Island, N. Y.—After comparing many different makes, I finally decided upon Midwest. It out-performs other radios costing almost twice as much. The crystal-clear tone is so life-like that it sounds as though I am in the studios, actually hearing artists performing.



**TODAY'S FINEST RADIO SAYS TED FIO RITO**

My new Midwest is finest radio I have had pleasure of hearing. Base-Tumble control is marvelous... enables one to hear every instrument in orchestra.



**METAL TUBES**

This Midwest is engineered from the ground up to see either the new METAL tubes or glass-metal counterpart tubes. Octal sockets and newest circuit permit use of either type... just as you desire.

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Without obligation on my part, send me your new FREE catalog, complete details of your liberal 30-day FREE trial offer, and FREE Miniature Receiving 18-tube Dial. This is NOT an order.

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