

THE JANUARY 1938

RADIO IN INDEX

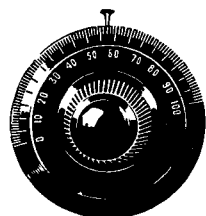
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The All-wave Radio Log



The Shortest Shortwaves
The Daily Programs
Broadcasting Stations of Oceania
Programs of the Week

JANUARY 1, 1938



RADIO IN DEX

Reg. U. S. Patent Office

ELIZABETH S. BUTLER

Publisher

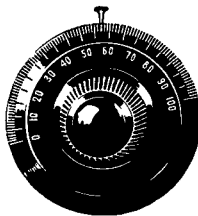
PAGE TAYLOR

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FOURTEENTH YEAR

NUMBER 115

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Cover Girl—Fran Carlon, NBC Dramatic Actress

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What is a Continent?

SOME people DX solely for the enjoyment they derive from hearing stations in far away places, but most DXers get most of their pleasure out of building up their logs, adding up stations heard, countries heard and continents heard.

Nearly all DXers strive to obtain a verification from each continent, and after all continents are confirmed, they aim to see how many more times they can do it. Then they start keeping score, saying they have 2VAC, 6VAC or 50VAC, whatever the case may be, meaning of course that they have verified all continents two times, or six times, or fifty times.

As long as the stations one hears are in countries like France or Egypt, Argentina, China or Australia, there is no difficulty in placing the countries on the proper continent, but when one begins to log stations in Bermuda, Martinique, Sumatra, Hawaii or Pitcairn, then one begins to wonder in which continental area these islands should be counted.

In an attempt to place the boundaries of the continents, we have consulted all the references available, and have found that even geographers are in doubt about the proper placing of some of the land areas. They all agree that the Philippines and Hawaii are to be included in Oceania, however, and most of them consider the West Indies as a part of North America.

The observations following outline the most generally recognized boundaries and can be accepted by DXers as a guide.

According to Funk and Wagnalls, the land of the globe is sometimes divided into two continents, the east-

ern and western; sometimes into four, Africa, Asia and Europe being separately enumerated; more commonly into five, Australia being reckoned as one; still oftener into six, North America and South America being counted separately; and since 1909, the land about the South Pole as another, the Antarctic, Austral or seventh continent.

It is common practice among DXers to count six continents, as no radio stations exist at the present time in Antarctica. The six continents are North America, South America, Europe, Africa, Asia and Oceania. All the land surfaces in the world (except the South Polar Regions) can be included in these six continents.

North America is bounded on the north by the Arctic Regions. From the North Pole, the boundary passes through the Greenland Sea to a point between Greenland and Jan Mayen Island, then through Denmark Strait and into the Atlantic Ocean. A straight line drawn from Denmark Strait to Georgetown, British Guiana, will determine the eastern boundary of the continent. The southern boundary passes between Venezuela and Trinidad, through the Caribbean Sea parallel to the coast of South America, but north of the Dutch islands off the Venezuelan coast, to the Gulf of Darien. The Panama-Colombia frontier is considered as the southern terminus of the continent. From that point a line can be drawn to the intersection of the Equator and the 135th parallel, then from that point to the westerly tip of the Aleutian Islands. The first line will pass to the south of Cocos and Clipperton Islands, but north of the Galapagos. The second line

will pass to the east of the Hawaiians. Then from Attu, which is the most westerly of the Aleutians, the boundary can be considered as following the International Date Line, to the North Pole. It should be noted that the Date Line curves in the Arctic Ocean so that Wrangell Island is included in North America.

It will be noticed that all the West Indies, including the Bahamas, Bermuda, the Greater Antilles, the Leewards and the Windwards, as well as Central America, are considered as parts of the North American Continent.

South America is bounded on the north by the Caribbean Sea, including the Netherlands West Indies (Aruba, Curacao, Buen Ayre, La Tortuga and Margarita Islands). The western boundary can be considered as starting at the Panama-Colombia frontier, to the intersection of the Equator and the 120th parallel, then along the 120th degree of longitude, south from the Equator to the Antarctic Ocean. The Galapagos, Rapanui (Easter), Sala y Gomez and intervening islands are included in South America. The eastern boundary, from the Venezuelan coast, extends into the Atlantic Ocean towards Sierra Leone in Africa, but only to about 20 degrees west longitude, then south along the 20th parallel to the Antarctic Ocean. This will include the islands of St. Paul and Trinidad (both owned by Brazil), the Falklands, South Georgia, the Sandwich Group and the South Shetlands.

Europe is bounded on the west by the Greenland Sea, Denmark Strait and the Atlantic Ocean, including Iceland, Spitzbergen, Jan Mayen, and the Azores. The southern limit of Europe extends from a point south of the Azores, through the Straits of Gibraltar, into the Mediterranean Sea and along the coast



Joan Tetzel and Eddie Wragge, just graduated from the NBC's Children's Hour, are now featured players in the weekly series, True Story Court of Human Relations, heard over the Red Network every Friday night.

of Africa, and includes Sicily, Malta, and Crete. The eastern boundary, from the Arctic regions, passes through Kara Sea, Kara Bay, along the Obdorsk Mountains, the Ural Mountains, and the Mugoiar Hills, to the Caspian Sea. Then along the Caucasus Mountains, through the Black Sea, the Bosphorus, the Sea of Marmora, the Dardanelles, through Aegean Sea to a point east and south of Crete. The Islands of Rodi (Italian) and Cyprus (British) are not included in Europe.

Africa is bounded on the north by the Mediterranean Sea, on the west by the Atlantic Ocean, and includes the Madeiras, the Canaries, the Cape Verdes, Ascension, St. Helena, Tristan da Cunha and Gough Island. The eastern boundary passes through the Suez Canal, the Gulf of Suez, the Red Sea, the Gulf of Aden, west of Socotra Island, and east of the Seychelles, Madagascar,

Mauritius and Rodriguez Islands.

Asia is bounded on the west by Europe and Africa, including the Transcaucasian States, Anatolia, Rodi, Cyprus, the Sinai Peninsula and Socotra Island. The southern limit is in the Indian Ocean, and includes the Laccadive and Maldive Islands and the Bay of Bengal, including the Nicobars and Andamans. The eastern boundary follows the International Date Line, the Japanese coast, to a point between Taiwan and the Philippines, then through the South China Sea to Singapore. From Singapore it goes through the Malacca Strait to the Bay of Bengal.

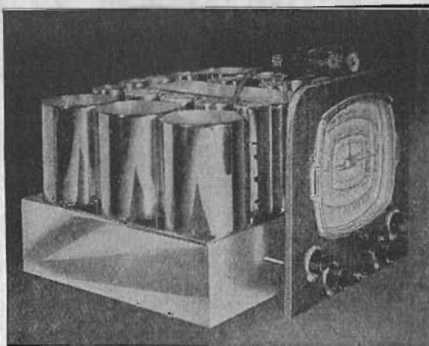
Oceania is a term used by geographers to include Australia, New Zealand and the Islands of the South Pacific. Its divisions are Malaysia, with the Philippines; Australia with Tasmania; New Zealand; Melanesia (New Guinea, New Britain, New Ireland, Admiralty, Solomons, New Hebrides, Santa Cruz, Fiji, Loyalties, New Caledonia); Micronesia (Ladrones); Pelew and Carolines, with Marshall and Gilbert groups; and Polynesia (Samoa, Tonga, Cook, Tahiti, Marquesas, Ellice, Hawaii); and all intervening clusters.

CTIAA Lisbon, Portugal, is now announcing as CS2WA.

A trial membership of 13 weeks in the Globe Circlers' DX Club is now available for only fifty cents, and on its expiration this subscription can be extended for a full year for only \$1.00. The offer is open only to new members. For full particulars address Raphael Geller, 1652 Radcliff Ave., Bronx, N. Y.

The Universal Radio DX Club, 2018 Green St., San Francisco, Calif., announces that dues are \$1.25 per year for the URDXC alone, or a combined membership is available at \$1.60 in the URDXC and the Quixote Radio Club.

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AFTER several weeks of uncertain reception, the new DX season finally got going the latter part of October, and the month of November found it in full swing. Static gradually diminished in intensity and, on occasions, even became a negligible factor for the listeners. Signals showed favorable increases in strength and many distant stations pounded through with a potent wallop.

DXers who patrolled the midnight air lanes found many new and interesting catches to be logged. Throughout the United States, dozens of newly-authorized stations ran DX programs and equipment tests. New transmitters in Cuba and Mexico pushed signals through the barrier of domestic broadcasters.

First new catch of the season actually was logged on September 27th, when KPFA, Helena, Mont., showed its face on 1210 kcys. A few days later, October 4th, the 1200 channel gave up the second new station of the infant season—KELO at Sioux Falls, S. D. October 11th found the new KOAM of Pittsburg, Kans., using its kilowatt of power to advantage on 790.

From then on, the early morning hours provided a happy hunting ground for those who cared to tune. From out of the West came a procession which included KHUB,

KELA, KSRO and KTMS, with visits also from KBST, KOKO, KHBG and KAWM. The Middle West was well represented on the log by KRMC, KELO, WGRM, KATE and KSAL. Nearer home, WKAT, WRNL, WAGA, WRTD, WMBS, and WPRA showed to advantage.

Among the Spanish-speaking countries, there appeared to be pronounced activity. Throughout the Middle Atlantic states, a new Cuban caused consternation by parking on 710 and gumming up the WOR programs. Finally identified as CMBL at Havana, the station showed a real sock. Another Cuban causing interference was CMCM, which had a real battle with WWL on 850.

Down in Mexico, several stations cropped up. XEFW, Tampico, Tamps., was heard several times on 1310 kcys. Out in Mexicali, XECL has been using 1700 watts on 1100 kcys. XELO, Tijuana, appears to have settled down on 670 and asks that reports be sent to P. O. Box 6, San Diego, Calif. Another Tijuana station is XEOK, which is heard regularly Sunday mornings on 760. After a bit of ear straining, the Mex on 1160 was identified as XEP at Juarez, Chih.

A little farther South, our old friend TGW, Guatemala City, has re-appeared on the radio horizon—this time on approximately 1240 kcys.

Europeans Coming In

November brought its share of freakish reception. The morning of the 12th, for example, had all the earmarks of being pretty poor for DX. West Coasters like KFI and KPO showed barely S4 on the "S Meter" of the Super Skyrider, while KNX was just a degree higher. The smaller stations were hardly audible.

Stopping for a moment on 1040 for a few dance selections from what apparently was KRLD, it was a distinct surprise to hear an announcement in French. After a few selections, the station was identified as Rennes. A check-up on other likely frequencies was not uneventful and, within 45 minutes, seven other Europeans were heard.

From Germany, Stuttgart, Munich and Hamburg showed really excellent strength. Besides Rennes, the French Lille, Bordeaux, Nice and Poste Parisien pushed through signals ranging from S4 to S6. The latter station, incidentally, was heard for the first time in several years, and it was nice to find the channel free of XEAW.

On subsequent mornings, reception of from seven to ten Europeans was repeated, and each time the signals showed to best advantage, it was noticed that West Coast stations were below par.

Conversely, on mornings when the smaller Pacific stations were coming in well, signals from the Antipodes were well received. First Zedder of the new season to be logged was the old reliable 2YA, which hadn't been doing so well since it switched from its former 720 channel. However, the latter part of October found 2YA with a good S5 signal on 570.

As static diminished, 1YA and 3YA were other Zedders to be logged. From Australia, 2NR was easily the best of the TP's, with an S5 signal which occasionally was as

high as S7. 2BL, 2CO and 3LO were also heard with signals running from S4 to S6.

From Hawaii, KHBC lived up to its reputation from last year by showing amazing strength for its 250 watts. KGMB ran a good second, while, except for infrequent bursts of strength, KGU was a very poor third.

Radio Rambles

Everything considered, it begins to look as though this is going to be a pretty good season. Ballyhoo about sunspots to the contrary, signals from all points of the compass have been showing adequate strength and static has not been excessive.

Just about the only limit to DX possibilities is the local noise level. In many instances a weak carrier will be tuned in and the volume advanced, only to have the barrage of man-made interference act as the real barrier. On most any good night, the DXer finds that static and weak signals are the least of his worries. And, fortunately, the listener in the average residential location is in a position to reduce and sometimes eliminate most of the man-made noise.

Too often, however, the DXer is inclined to do little and bemoan a lot when noise interferes with his dialing. He seems to forget that, despite opinion to the contrary, many power companies are quite willing to assist in tracing sources of racket. He fails to remember that most causes of interference may be remedied when located. And, failing all else, a considerable amount of noise may be abolished by an intelligent installation of a good antenna system.

So, when it becomes apparent that another good season is with us and that the only obstacle to real DX is the local noise level, there is no legitimate reason why reports for the year should not show a great

many fine catches.

DX Doings

Dialing during October and November finds a number of regular special programs worthy of attention. Every Saturday morning between 3 and 4 a. m., EST, KRLC, 1390, Lewiston, Idaho, has a DX broadcast. WEAU, Eau Claire, Wis., has a monthly program between 5:30 and 6 a. m., EST, on 1050 keys, on the fourth Friday. WJAG, Norfolk, Neb., 1060 keys, broadcasts between 1:30 and 2 a. m., EST, on the second Friday.

The first Saturday of each month finds two regular programs on tap. From 2:30 to 3 a. m., EST, KSAL, Salina, Kans., tests on 1500 keys, while CHWK, Chilliwick, B. C., broadcasts between 2:45 and 4 a. m., EST, the same morning.

Neat targets for DXers are stations which sign on early every morning, and schedules of several of these have been noted. Coming on at 5 a. m., EST are WICC, Bridgeport, Conn., 600 keys; WEAN, Providence, R. I., 780 keys; WNAC, Boston, Mass., 1230 keys; and WHIS, Bluefield, W. Va., 1410 keys. A half hour later, at 5:30 a. m., WIBX, 1200 keys, Utica, N. Y., signs on—except during the week of the frequency checks, when they come on at 6:30.

Two new stations whose frequency checks were not listed in the schedule which appeared in the December RADEX, are KSRO, Santa Rosa, Calif., and KHBG, Okmulgee, Okla. The former may be heard on 1310 between 6:20 and 6:40 a. m., EST, on the second Monday, while the latter can be logged on 1210 from 3:10 to 3:30 on the second Friday.

Speaking of the frequency checks, a neat bit of CPC work has been accomplished by NNRC Vice President William H. Applegate. When arranging a special from XECZ, 1370 keys, San Luis Potosi, Mr. Applegate decided on the period be-

tween 2 and 2:40 a. m., EST, on December 13th. Checking over the schedule of frequency checks, it will be noted that no other station on that channel will be operating at this time—perhaps the only opportunity listeners would have to hear this station.

Credit Where Due

A couple of issues back, it was proposed in this section that DXers form a new Anti-Hi Society. While intended solely as a sly poke at the listeners who have been apeing the lingo of the amateurs, it appears that at least one DXer took us seriously.

"You have received the CDXR bulletins," writes Charles Hesterman, president. "You counted the 13 'hi's' in Volume 1, No. 23. I would much prefer you to come right out into the open with any adverse criticism of the CDXR bul-



Fibber McGee, the prince of punsters, the nobleman of nonsense, the tank town tattler of the teeming metropolis of the Midwest, looks out at the world over his glasses and considers what rare philosophical comment he will use on his next NBC-Red Network broadcast. Heard regularly with Molly at 9 pm, EST, on Mondays.

letin. If the numerous 'hi's' cause you great displeasure, I advise that you consign all future copies of the CDXR bulletin immediately to the incinerator. Then you will not be offended by my childish and ridiculous habits. . . . In the future, please publish outright the name of an offending bulletin. Don't think that I will rant and rave if it transpires that it is the CDXR. In any case, I don't think for one moment that my numerous 'hi's' are as detrimental to the good of DX as are those 'monitored' veries."

Correct is CDXR President Hesterman in his deduction concerning the identity of "The Bulletin of 13 Hi's." But had his bulletins been disposed of as suggested, it now would be impossible to refer back to them and give credit where due.

As any reader might determine for himself, the CDXR bulletin of August 5th contained 13 hi's. Production was curtailed for two issues, for on September 5th there were only 11 hi's and on September 22nd but five. A new hi (I mean high) was reached when 22 highs (I mean hi's) appeared on October 7th and a like number on October 23rd. At about this time the November RADEX appeared, with its anti-hi movement. It may be a coincidence that the November 9th bulletin contained but six hi's, or it may be significant.

In either case, however, I did want to get the record straight and give proper credit.

The March of Time is being transcribed in French in three half-hour recordings for broadcast to listeners in France. The project is under the supervision of Jean Masson, program editor of Radio Luxembourg, in cooperation with Time, Inc.

The SWL Trading Post

Allyn R. Fisher, 4290 E. 137th St., Cleveland, Ohio (letters).

Ben Follrath, 1419 Pearl St., Alameda, Calif. (exch. correspondence and SWL cards).

Harry G. Forster, Jr., 89 E. Stratford Ave., Lansdowne, Pa., wants to exchange SWL cards and correspondence with any DXer, especially those in Europe, Africa, Asia and Australia.

Gilbert L. Harris, 60 N. Holden St., North Adams, Mass. (SWL cards).

Edward Hughes, 1212 Castlewood Ave., Louisville, Ky. (Correspondence with overseas DXers, especially in Spanish-speaking countries).

Austin M. Rheiner, 500 S. Kolmar Ave., Chicago, Ill. (exch. SWL cards—wants one from each state).

Clyde A. Ritter, 320 Leonard St., Bloomsburg, Pa. (exch. SWL cards).

Jack Siringier, 1451 Lincoln Ave., Lakewood, Ohio, will exchange SWL cards and correspondence with s.w. listeners overseas.

Albert Steinmetz, 125 W. 27th St., Bayonne, N. J., wishes to correspond with Hungarian DXers in any part of the world.

The Intermountain BCB DX Club, with headquarters at 1404 Sherman Ave., Salt Lake City, announces that membership fees in their organization are 50c per year, and a club bulletin is available, also at 50c per year, or both membership and subscription for 75c per year.

Yoichi Hiraoka, NBC xylophonist, who is to make a concert appearance at New York's Town Hall November 24, will play the seldom heard and unique Japanese song, Echigo. It was from this song, Hiraoka says, that Puccini took the melody for his celebrated "Madame Butterfly."

ARE SHORT, Short-wave Bands Worth While?

• • • By B. FRANCIS DASHIELL

THE realm of the newly popular short, short-wave bands is being explored not only with unbounded enthusiasm by radio fans but with great seriousness by scientists. Here the future of short-wave radio will be found. But just now these very short waves, particularly those of less than 5 meters, are purely experimental and at present offer little of a practical nature to the radio listener. In fact, it is impossible to find a receiver that tunes much below 5 meters, except in the scientific, experimental field.

It is the short-wave band, upwards from 5 meters, that holds much promise to the radio fan. Radio sets that tune as high as 60 megacycles are available in the 1938 models, but in the great majority of cases the average moderate-priced all-wave set offered to the public usually tunes to a frequency of approximately 18 megacycles. Some larger sets, which of course are more expensive, include an additional short-wave band that tunes to about 45 megacycles.

5 And 10 Meters

Many radio listeners are wondering whether it is worth while to purchase a 1938 receiver that tunes down to 5 and 10 meters. The question is often asked: Is this additional wave band necessary, and has it enough interest to the general public? Practically all of the short-wave radio business of the world is conducted on wave lengths greater than 10 meters; this fact alone properly raises the question of whether a set with an additional short, short-wave band covering 25 to 60 megacycles need be purchased.

The 1938 offering of radio receivers discloses that the more expensive types, those ranging from 9 to 12 tubes, and as high as 16 tubes, usually cover, in addition to the broadcast band, the 49, 31, 25, 19 and 13-meter international entertainment bands. Some special custom-built sets go down to 5 meters, and are strictly "all-wave". A large number, however, do not include the 13-meter and additional short, short-wave bands. They do, of course, include the popular 20-meter amateur band. But, in most cases, the useful 10 and 5-meter bands that are becoming so sensational, are left off.

International Bands

Practically all sets, except those of inexpensive make, cover the very best of the international short-wave bands, as well as the amateur and commercial zones. So, when a 1938 all-wave set is examined, one need not feel that he has been slighted in the matter of normal all-wave reception. Such a set is best for ordinary household and simple DXing purposes. The wave bands that provide best reception on all international transmissions are the 49, 31, 25 and 19-meter regions. Then, too, there are the 160, 80, 40 and 20-meter amateur bands. The foreign bands work best at different times, for it will be noted that several of the more important stations have separate places in all of the international bands, broadcasting simultaneously on all the different frequencies. If reception should be poor in the 15 megacycles band, for instance, it might turn out to be very good in the 12 or 9 megacycle zones. Therefore, when it is impossible to get

London, Berlin, Rome, Prague, etc., on one frequency, it is likely that the station will be heard, loud and clear, on another of its frequencies.

Below 19 meters, and down to 5 meters, many frequencies are available. This fact provides radio with thousands of future channels. But these stations will be crowded closely, and tuning will be sharp and difficult. Even on 10 meters, with a band spread that will throw all the 2,000 kilocycles available over the entire 180 degrees of the dial, tuning is critically sharp and interference unavoidable. The present trend, therefore, is to the so-called "communications receiver", such as amateurs operate with almost exclusively. These sets are designed for very sharp tuning, with some loss of high fidelity of reproduction, and even then stations cannot always be separated sufficiently for clear reception when the band opens up perfectly. In the ordinary all-wave set, the mechanical separation of stations is not so good since the entire group is squeezed into a tiny spot on the dial. This is an engineering fact, and is to be expected; it is not the fault of the receiver.

20-Meter Amateurs

This does not mean, however, that the short-wave bands below 20 meters are jammed with stations. In the 20-meter region are many of the better amateur phone stations. Many can be picked up easily on the all-wave set, but not, of course, as easily or in as great a number as with an amateur communications receiver. Here will be found some of the best known radio experimenters of the day, and radio's hams and engineers may be heard discussing scientific matters pertaining to radio.

The 20-meter region, is subject to certain conditions which man cannot control. When the band "opens up" nicely it provides an interesting evening. As a rule this band is in



A photographic impression of Benny Goodman, who, with his clarinet, leads his orchestra through intricate swing rhythms on his "Swing School" broadcasts each week over the Columbia network.

action all the time—sometimes better than others. But, if the receiver tunes still lower, down to 13 meters, which is the highest of the international frequencies, still more unstable conditions will be experienced. In this zone, and particularly on the busy 10-meter band, freak reception is a common experience. But when the band opens up, it performs in a way that, to the expert listener, seems little short of miraculous.

The Erratic 10 Meters

The amateur stations on the 10-meter band can be heard distances that seem unbelievable, considering the tiny bit of energy that is emitted by the transmitter. Just below 10 meters can be heard two-way conversations, such as the newer police calls. The 10-meter zone is one of radio's most remarkable regions. Natural static seldom troubles, but, of course, automobiles and man-

made static play their annoying part. This band, too, is where all-wave receivers may seem to perform at their worst. Often the fault is not in the design of the receiver, but due to the peculiar conditions which control 10-meter transmission and reception.

The 10-meter band is subject to severe "skip distance" effects. Radio stations, although close at hand, can not be heard, while weak stations, several thousand miles distant, may come pounding in like locals. And the skip distances vary in length, for it frequently is impossible to hear the same station again until many nights have passed. More stations are entering the interesting 10-meter band, but patience, even with the best of receivers, is necessary to tune them in. However, an all-wave receiver which tunes down to 10 meters will provide many DX thrills, especially in summer when the longer wave bands are rendered useless with hot-weather static.

Sun Spots

No one knows when the 10-meter band will open up or close down without warning. A study of sun spots has given us some clue to this strange situation. Just now the sun-spot maximum is approaching, as it does every 11 years, and it is expected that the short, short waves will carry extremely long distances during this winter. Just what will happen when the minimum of sun spots occurs some years hence is open to question, but it is easy to believe that the opposite will happen, and short-wave reception will be poor. Sun spots, which are believed to be violent solar storms with gas explosions and magnetic effects, change our ionosphere or "radio ceiling", and act to improve or retard its reflecting and conducting action. And the short, short waves are easily affected—either helped along or held back.

When we reach the 5-meter band everything is entirely different. Sun spots seem to have little effect. The ionosphere means nothing. And there is little that can be said in favor of adding this band to an all-wave receiver. The circuit must be simple; radio-frequency or pre-selectors are not needed; they hinder rather than help reception on 5 meters. Therefore, unless the receiver is specially built for short waves, 5-meter reception, while possible to some extent, is rather impracticable for the average listener with his moderate all-wave set.



"Janie" Webb, heard on the Tom Mix Straight Shooters broadcasts over the Blue Chain at 5:45 pm, is interested chiefly in paper dolls, doll furniture and, occasionally, in her school work. Janie firmly states she has no intention of making radio her life work; she thinks she prefers to be a detective.

Visual Radio

The 5-meter band is a zone where reception is limited to very short distances. Strange as it may seem, the 10-meter waves (30 megacycles) carry great distances with very little power, but the 5-meter waves (60

megacycles) travel only short distances with much power behind them. They move out in a straight line from the transmitter to the receiver. The limit of reception on 5 meters is visual, that is, the distance the eye can see. If you can see the point of transmission, you can hear the signal without difficulty. The best receivers for the 5-meter band are specially built, small one or two-tube super-regenerative circuits.

Intervening hills or buildings block 5-meter signals. The curvature of the earth causes the transmitted signal to pass into the air, high above the receiving antenna. In some unexplained freak conditions, however, in the present sun-spot era, 5-meter signals have traveled far, once across the Atlantic. But the facts as we see them, then, prevent most persons from hearing 5-meter stations unless the receiver is located in a large city where experimental broadcasting and television work is being accomplished or a number of amateurs are using five meters, often in portable units known as "transceivers"—combination transmitters and receivers which are now available at small cost.

Scanning the AMATEUR BANDS

• • • • By B. L. Ahman, Jr.

We have just returned from a trip through North Carolina and Virginia, and during the trip we found that reception does not vary greatly in those states from reception in the east. The Central and South American stations predominate, however, while in the eastern and central states the European amateurs take only a close second to the Latin Americans. Naturally the northeastern states are more favorable for

Europeans because of the nearness of Europe.

Reports of reception this month were far too scarce. This, no doubt, is due to general poor conditions present on 20 meters. The band did break down one night, however, and ZU6P was heard conversing with several USA amateurs. It was heard on the LF end at 11:30 pm EST with R8 signals.

Merton Meade has a good record of African stations for this month, listing nine South Africans in his calls heard.

Art Judson writes that he heard the Greenland station OX2QY for 55 minutes from 8:00 until 8:55 pm one night. Many of our correspondents are hearing this station. Reports of reception should be addressed to W2QY, Mr. A. G. Sayre, Storm King School, Cornwall-on-Hudson, N. Y. They will be acknowledged next fall.

A report to VO6L's home address was acknowledged very nicely by his father from Montreal. QSL cards will be mailed out probably next year, after VO6L gets his mail. He is located at North West River, Labrador.

Dan Hurley of Philadelphia reports a new one, VO3Z in Newfoundland. Incidentally, Dan is now using a homebuilt TRF set. Station VK2ADE, Australia, was noticed in his list of calls heard—nice reception, Dan, on a TRF set!

Gail Beyer of Chicago says we can now add the Central Time Zone to our November listing of PK6CI as he has a QSL from this station.

Three Australasian SWL card traders descended on us in a group in one day. Add the following to those who will exchange SWL cards: Bob Russell, Taupo Road, Taumarunui, N. Z.; James Mildenhall, Byron Bay, NSW, Australia; and C. O. Pepperell, Rahotu, Taranaki, N. Z.

As usual, Hadley Wilcox of Los Angeles comes through with some news. He adds KA1BH, Manila, heard with R5-7 signals. In the same mail Tony Tarr of Seattle sends along a list, but most interesting is the fact he takes back his statement about not hearing Europeans. At last he heard one, GM5NW, R9 at 2:45 am PST.

Other reporters deserving thanks this month are Arthur Blick, Gilbert Harris, Carroll Weyrich, John Sanderson, Earl Roberts, Wm. Wood, Martin Olthoff, Benjamin Peet, R. Geller, Ed Hughes, Dave Schaller, Dale Smith, Al Steinmetz, the ISWC and the NNRC.

Addresses

Commencing this month we will list the call letters, the frequency and the address of every amateur station mentioned in these columns. Addresses will not be repeated, however, so readers are urged to keep these columns for future reference.

KA1BH: Mrs. Joseph Reich, 2 Escolastica, Pasay, Rizal, P. I.

PK6CI: E. R. Illing, Ambon, Netherland East Indies.

VK2ADE: C. A. Miller, 162 North St., Casino, NSW, Australia.

Pitcairn Isle Radio Station

A COLORFUL throw-back to the days of the history-making mutiny of the British frigate "Bounty" is to be found in the life of the natives of lonely, mid-Pacific Pitcairn Island, which is totally inhabited by the descendants of Fletcher Christian, his band of mutineers and their Polynesian wives.

Word has been received from officials of the RCA Manufacturing Company that they were preparing to ship a set of transmitting and receiving radio tubes to Pitcairn

Island for use in modernizing its lone radio station, which is its only direct means of communication with the outside world. The island and its almost fabulous inhabitants were again brought into the international spotlight recently through a motion picture based on "Mutiny on the Bounty".

PITC, the island's only radio station, is in charge of Andrew Young, chief operator, and a group of assistants, all of whom are self taught in Morse code and radio technique. Alan Eurich, writing in the August issue of QST, recounts that even the children of Adamstown, the only village on the isle, are proficient Morse experts, sending messages to each other in the code with whistles.

Young's amateur radio station has been in operation since the early 1920's, and previous to its present modernization operated with one storage battery, which had to be sent to New Zealand, 2500 miles away, to be recharged when its power ran low. But Pitcairn Island has been threatened with even more complete isolation from the outside world because the simple crystal radio receiver and spark transmitter are almost completely outmoded by the modern vacuum tube radio installations on passing ships. However, a number of radio manufacturers, including RCA, are coming to the rescue by providing sufficient parts to permit the building of a complete new radio communications system.

Pitcairn Island is 3,500 miles from the United States, and supports its citizens by producing some of the most luscious fruit in the world, according to those who have passed that way. There is no harbor—the natives row a perilous course in open boats from their rocky shores to trade their fruit for clothing,

(Please turn to Page 39)

Turning OUR READERS' Dials

• • • By CARLETON LORD

JUDGING by the comment going the rounds of radio circles, the attention of most DXers is centered upon the matter of "monitored veries." Seldom have readers shown as much interest in something which affects the DX hobby. Hardly a letter is received which does not allude to the question in some way, while many a veteran dial twister has skipped his usual report to make known his opinion of the problem.

Oddly enough, while every DXer has reason to defend a policy which may insure his verification from a given station, a huge majority of listeners are coming forward to condemn the scheme which, for a short time, was so favorably received. Or, upon consideration of the matter, perhaps it is not so odd after all.

For, behind the scenes, it is possible to foresee a situation which might easily upset the entire DX applecart. Even at this early stage, there is evidence of seeming abuses which promise little good for the hobby. If permitted to continue through support and sanction of DXers themselves, there is no telling what the final outcome may be.

When two Baltimore DXers, Carroll Weyrich and B. L. Ahman, Jr., undertook to monitor the Daventry short wave stations, they were performing what they felt was a real service for listeners who desired verifications from these stations. Daventry had flatly refused to issue confirmations of any nature, and there were many DXers who felt that a "proxy verie" was better than none at all.

Previous attempts by listeners to issue confirmations for non-verification broadcasters had been received



Annette King, brunette contralto soloist of the NBC Breakfast Club, landed her first job on a small radio station two years ago, and now she is one of NBC's most promising balladists.

with enthusiasm, and there was no reason to believe that this new service would not enjoy an even greater acceptance.

It just happened, however, that an unfortunate arrangement of the wording on the Daventry cards caused critics to claim that the veries were misleading and invalid. Typical protest is the following excerpts from a resolution passed on July 9th by the Golden Gate Chapter of the International DXers Alliance and forwarded by its secretary, Ashley Walcott:

"The members of the Chapter believe that no card or letter, so worded as to imply or indicate in any way that it is an official verification of reception authorized by

the owners or operators of the station concerned, when no such authorization has actually been given, should be considered a verification of that station.

"It is the belief of the members of the Chapter that the continuance of the practice, although it was reportedly intended as a courtesy to DXers, will have harmful effects upon the future of DXing . . . that various stations of all types or classes will regard the practice as sufficient excuse to discontinue the issuance of officially authorized verifications of reception . . . that, in the estimation of those station owners or operators, whose sense of honor is offended by the issuance of such unauthorized verifications and their acceptance as valid by listeners, DXers and DXing in general will suffer greatly.

"Therefore be it resolved that the Golden Gate Chapter of the IDA expresses its entire and complete disapproval, and requests that immediate measures be taken to end the practices in question."

This resolution, it will be noticed, refers only to monitored veries which are so worded as to imply that they are sanctioned by the stations in question, when actually no authorization had been made. This, of course, is a direct reference to the type of cards which were sent out by Messrs. Ahman and Weyrich.

In fairness to these gentlemen, it is believed that the exact wording of their cards was inspired by a desire to make the veries impressive, rather than a deliberate attempt to be misleading. After all, listeners were perfectly aware that Weyrich and Ahman monitored the Daventry programs, that the reports were checked against the material which was heard by them, and that the veries were issued by them as individuals and not as agents of the B. B. C.

But there is no reference in the resolution to monitored veries which are not worded to imply official sanction by the stations. We have in mind the type of card which we sent out during the 1937 Mystery DX contest. DXers who received these cards will recall that the call and location of the station was filled in above the words: "This is to verify your reception of this Station on February — 1937. Thanks for writing us. THE RADEX PRESS."

This card might be called a "proxy" verie, since the reports were checked against the station log by someone who had no official connection with the broadcasters. Still, there was no pretence that the card was coming from anyone but the Radex Press. Would the resolution of the IDA Golden Gate Chapter denounce this type of verie, even though it made no reference to it?

Granting that the verie which implies authorization which was never received, should not be accepted by DXers, what are we to do about the card which does not imply sanction by the station? Suppose the card merely certifies that a listener's report checks with the program which the monitor has heard. Is there anything wrong with an honest monitoring service which claims to be no more than that?

This question is neatly brought out by Anthony C. Tarr, 909 W. Lee St., Seattle, Wash., who writes:

"When a station announces that it will not verify, is there any reason why a public-spirited individual should not take over the job for those who were unfortunate enough to be left out in the cold? For those who scoff at the authenticity of a confirmation obtained through a monitoring station, may I inquire just what is a verie? There is only one reply to that: a verie is a certificate to the effect that a listener

heard a station at a certain time, as evidenced by his report of musical selections, and attested to by someone with knowledge of the correctness of the report. Whether or not this confirmation is supplied by the station is of little moment, because a monitor is in possession of knowledge of what was broadcast and is, therefore, qualified to issue verifications. No one has yet advanced any argument against the authenticity of the veries themselves!"

It is quite true that there has as yet been no question about the authenticity of the veries, and it is assumed that existing monitors have been conscientious in verifying only reports which check with the program they have heard.

But is it "of little moment" whether or not a confirmation is supplied by the station in question. For many DXers, a verification is more than mere proof that a station was heard at a given time. They are souvenirs of long nights spent at the dials, reminders of thrilling catches, of new horizons passed. And, like stamps or coins, they are authentic only when issued by the proper station officials.

Another side of this slant is pounded by Randolph Hunt, Box 715, Leucadia, Calif., who writes: "Suppose we take the case of the California DXer who is monitoring ZBW. This station has sent out many veries in the past and may do so again at some later date. But whether or not they do, it will make no difference to those who have veries. What is going to cause confusion is to have in circulation Victoria ZBW veries and Beverly Hills ZBW veries. The holder of a real verie eventually will buck up against one which is artificial. To promote conditions such as this may not kill DX, but it surely does not aid the honest, conscientious DXer one iota. And I believe that this

monitoring will tend to lower the status of the North American DXers, especially in the opinions of the lads Down Under."

Verie Clearing House

Moving on from the matter of monitored veries, we come to a situation which is undoubtedly a direct outgrowth of the monitoring idea. At about the time the question first came up for discussion, another verification service came into existence.

As recorded in the December RADEX, the Quixote Radio Club inaugurated a system whereby the club headquarters would accumulate reports for certain Central and South American stations; and then forward the reports in a body to the respective stations. The club announced that it had received the "assurance of some fifteen stations. that verification requests via the QRC will be instantly honored."

At first glance, this service may appear to be meritorious. If, as was the case with Daventry, the stations had a policy of not verifying at all, it is reasonable to believe that many listeners would be more than pleased to receive confirmations in this manner. Some DXers conceivably would rather have a verie by proxy than no verie, and they probably have availed themselves of this opportunity to stock up.

But it now develops that the stations lined up with the QRC actually are doing their own verifying. They receive the reports gathered by the QRC and send their cards direct to the listeners. So it is apparent that these are not cases where the stations refuse to verify. On the contrary, they send out their own confirmations.

Even so, the system might not be so bad. If a radio club is able to procure verifications for members who otherwise might not be successful, they might be commended for being

right on the job. However, we learn that, prior to this tie-up with QRC, many of these stations were verifying regular reports. They may have been slow, but the veries were forthcoming eventually. Now it appears that the stations concerned will verify only reports sent via QRC.

A number of readers have written in to say that reports addressed to YV2RA were returned by the station, with the request that all reports be sent via the Quixote Radio Club.

(Editor's Note: After this copy was prepared, several interesting letters were received concerning the QRC Dime Veries. The verifications are sent to the reporters direct from the stations. The QRC sends ten cents to the station for each verification requested, and guarantees to refund the dime to the reporter if his verification is not received.)

New Stations Reported

As the season progresses, many new stations are reported by readers. From all points of the compass, transmitters are coming on the air and changes in existing stations are announced.

From the Postmaster-General's Department at Melbourne, we receive word of five new low-power stations in Australia: 2BE, Bega, N. S. W., 1490 kcys, 100 watts; 2HR, Singleton, N. S. W., 680 kcys, 300 watts; 2KM, Sydney, N. S. W., 980 kcys, 100 watts; 2MW, Murwillumbah, N. S. W., 1470 kcys, 100 watts; and 2XL, Cooma, N. S. W., 880 kcys., 100 watts.

"The New Zealand Government's chain of commercial stations throughout the country is almost completed," advises A. I. Breen, 68 Pine Hill Terrace, Dunedin, N. Z. "3ZB, 100 watts on 1430 kcys, commenced broadcasting on a 6 a. m. to midnight schedule September 28th. 4ZB, Dunedin, 1220 kcys, 1000 watts, began operations on October 5th,

also from 6 a. m. to midnight daily. Effective October 4th, 4ZP, Invercargill, 100 watts, moved from 620 to 680 kcys, to avoid interference from 3AR, which ruined his signal outside his immediate area."

From nearer home, Samuel A. Meyer, Jr., 83 Canterbury Road, Rochester, N. Y., supplies information on Spanish speaking stations. "TIPG in San Jose, C. R., has been heard on 625 kcys," he writes. "It is supposed to use 2000 watts power, and has a short wave relay on 6410 kcys. XEBO, Irapuato, Guan., has moved from 1280 to 1310 kcys; XELO, Tijuana, B. C., from 1110 to 670; and XEFO, Mexico City, from 940 to 930.

"I understand that there is a myriad of flea-power BCB stations in the Dominican Republic and in Honduras. A visitor from the latter country said that Tegucigalpa possessed nearly 20 little stations, some of them being 10-watters. It might be interesting to see a list of them."

Also forwarded by Mr. Meyer was the following clipping from the Laredo (Texas) Times:

"WASHINGTON, Oct. 7.—(AP)—Pan-American tourist traffic over the new International Highway was discussed today at a Communications Commission hearing of an application for a radio station in Laredo.

"M. M. Valentine, Laredo electrical engineer and applicant, told examiner that programs planned for the station included broadcasting Mexican customs, weather and road conditions for the benefit of motoring tourists. He said there was abundant local musical talent, because Laredo's habitants 'are almost wholly of Mexican extraction and nearly all Mexicans are naturally gifted musicians.' He said that the nearest American radio station was in San Antonio, 156 miles North, and that Laredo must now depend largely for its daytime reception

from Mexican stations across the Rio Grande.

"His application is for operation on 1500 kcys, with 100 watts power at night and 250 watts daytime."

While the natural gifts of Mexican musicians are open to question, the plan to furnish information to tourists entering Mexico is indeed a novel idea. And one wonders why this hasn't been considered before.

Station Changes

"XELO, Tijuana, B. C., Mexico, has been giving a series of test programs on 660 kcys," informs David B. Browne, 550 E. Glenarm St., Pasadena, Calif. "From their announcements, I doubt if they plan a return to 1110. This evidently means the end of XEAO, Mexicali, as they have not been heard for several weeks and I don't believe they've changed frequencies."

Recent reports indicate that XELO is on 670, instead of 660, and they are putting out a potent signal for their power.

"Did WJSV ever get permission to move from Virginia into Maryland and boost their power to 50 KW?" queries a Frederick, Md., reader. "Does WOL, Washington, expect to make that change from 1310 to 1230 and increase power from 100 to 1000 watts? Has W3XJ, College Park, Md., decided on the channel to which they will move from 1060 kcys?"

WJSV is still using 10 KW at its old location at Alexandria, Va. Permission to move and change power has not been granted as yet. WOL expects to make its change in frequency and power boost within the next month. W3XJ is of the nature of a booster station for WBAL, so it is not likely that they will change frequency. We haven't heard that they are contemplating any change. "KOA's broadcast goes only to 2 a.m., EST, Sunday mornings," avers Kenneth Axelson, 5801 Dor-

chester Ave., Chicago, Ill., "instead of 3 a.m. as previously listed in RADEX. KMBC, Kansas City, broadcasts 19 hours daily, but their time on the air is not specified. WJRD is now verifying reception, and very promptly, too. According to a verification, WBAX hopes to have 250 watts soon. The new station at Hammond, Ind., WHIP, on 1480 kcys, broadcasts from 7:30 a.m. to 5:30 p.m., EST, daily, and from 9 a.m. to 5:30 p.m. on Sundays. They show greater signal strength than any of the five local 50-kilowatters."

Radex Dedications

Through the efforts of Raymond W. Sahlbach, 4708 A South Compton St., St. Louis, Mo., a number of stations are dedicating their January frequency check broadcasts to the readers of RADEX. Following is the schedule, with all times AM, Eastern Standard:

2:00-2:30	KWOS	1310	Jefferson City, Mo.
4:10-4:30	WKBB	1500	Muskegon, Mich.
5:10-5:30	KBTM	1200	Jonesboro, Ark.
5:30-5:50	KFXD	1200	Nampa, Idaho
5:40-6:00	KFJM	1410	Grand Forks, N. D.
4:20-4:40	KLUF	1370	Galveston, Texas
4:50-5:10	KEUB	1420	Price, Utah
5:50-6:10	KGLO	1210	Mason City, Iowa
3:10-3:30	KPAC	1260	Port Arthur, Texas
4:10-4:30	KLPM	1360	Minot, N. D.
4:20-4:40	KRMD	1310	Shreveport, La.
5:00-5:20	KRMC	1370	Jamestown, N. D.
5:40-6:00	KQV	1380	Pittsburgh, Pa.
5:50-6:10	KLAH	1210	Carlsbad, N. M.
3:10-3:30	WPAX	1210	Thomasville, Ga.
4:40-5:00	KPLT	1500	Paris, Texas
5:00-5:20	KFJB	1200	Marshalltown, Iowa
2:00-2:30	KWOS	1310	Jefferson City, Mo.
4:00-4:20	KIUL	1210	Garden City, Kans.
5:30-5:50	WLBC	1310	Muncie, Ind.

There seems to be a question about the KWOS broadcast on January 13th. Normally, this station is scheduled for 3:40 to 4:00 a. m., EST, on the second Friday, which would be January 14th. However, the time and date are as reported by Mr. Sahlbach and readers needing

this station might do well to try at both times.

Naturally, RADEX is gratified that these stations are making these dedications, and it is hoped that readers will make a point of writing to the stations after the broadcasts. If a verification is not needed, a thank-you card would be in order.

Why I Verify

"A lot has been written about the question 'Why Verify?'" concedes J. E. Gardner, 1839 E. 79th St., Cleveland, Ohio. "While I have been DXing only about ten months, I have had plenty of experience. I am 67 years old and DXing is a hobby with me—one which I find very instructive, fascinating and inexpensive.

"I do not think I am different from a lot of others who like to have their catches verified. I have a certain pride in showing off the 140 veries which are on my wall, although one guest did think that they were license plates from foreign countries.

"The largest foreign station (England excepted) verify gladly and, as you know, a lot of them ask for reception reports. These stations do not advertise any product, so must get their revenue from other sources. The small stations in Mexico, Cuba, and Central and South America advertise many products and apparently depend upon this income for their support. Of course, it is not expected that a listener in Cleveland is going to buy a Cuban special on Pepsodent or Alka Seltzer, but the chances are that sponsors down there will be impressed by reports from a distance.

"Therefore, when I take the time and trouble to log a station which is advertising Pepsi Cola in Bucaramanga, when I make notes of an hour's broadcast, send out a good report of reception and spend money for a reply coupon, it seems to me

that I am entitled to a verie. As long as the station does not announce that reports will be ignored, they should show the courtesy of a reply merely as a matter of good business.

"I do not hold with the argument that a listener will not tune in on a program once he has received a verie from a certain station. I am glad to tune in on any program, time after time, if it furnishes me with good entertainment. I never fail to get Daventry at 6 p. m. to hear Big Ben strike the hour. PCJ has a good program and I have all their veries on all frequencies, but do not miss it when I think of tuning in on their broadcasts.

"In short, I feel that making notes, sending out a real reception report and enclosing reply coupons should entitle me to a reply. Fortunately, most stations are glad to verify a good report, but we DXers certainly have a kick coming when we cannot raise a reply.

"However, I will continue to try for them and each addition to my collection will bring back memories. My first verie—HJ1ABP—has a place of honor in my collection, and I tune this station frequently for that very reason."

Luck With Frequency Checks

"I have listened to the frequency check programs a good many times in the last few years," states Alf Raymond, Avon, Ill., "but I never had the pleasure of perfect reception until November 10th. On that morning the schedule showed 12 stations which I had not heard, and I was certainly thrilled when I was able to hear every one of them: KAND, WJNO, WKEU, WHLB, KPLT, WJRD, WEOA, KPDN, WAYX, KRBC, WSAU and KABR."

"I had a good chance to boost my list of stations on the morning of October 11th," recalls Edgar D. Petrie, 1431 Gerrard St. E., Toronto, Ont. "Of the 64 stations which were

on for the monthly frequency checks, I was able to log 47. Of these, fifteen were new to me and increased my total to 665. Perhaps the best catches in my log are KHJ, KHQ, KGIR, CMJK, CMCD, CMCW, CKMO, CMHJ, KIDW, KOY and KTFI, as well as many others. Incidentally, I would be grateful if some reader will send me a circuit for a two-tube, battery-operated short wave set."

"Can't someone arrange a series of special programs from the less-frequently heard Canadian stations?" queries Carl E. Sylvester, Box 213, Yale, Mich. "The only ones which I hear at all regularly are CBW, CFCO and CKLW. Those heard occasionally are CRCT, CFRB, and CKOC. Rarely heard are CBO, CRCM, and CKY, with the latter two not heard since they last changed frequency."

"I am 17 years old and have been DXing for about four years," writes Fred Gilbert, 363 Queen St., St. James, Winnipeg, Man. "On August 1, 1936, I received for a birthday present a 5-tube Dictator mantel set, which tunes from 540 to 1940 kcys. Since that date, I have received 210 amateurs, 43 police and 279 broadcast stations. I have logged stations in 40 states, six provinces of Canada, as well as Mexico, Cuba and Hawaii. Some of my best catches are CMCD, CMCJ, XEAC, XEAF, KHBC and CKWX."

"I am now using an RCA 9K3 receiver with an RCA doublet aerial," informs Kenneth Page, 292 Richmond Ave., Buffalo, N. Y. "The only real distance that I have logged is KHBC, Hilo, Hawaii. They can be heard nearly every morning from 2 until they sign off at 4 a. m., EST. The other two Hawaiian stations, KGU and KGMB, are very poor, being heard only occasionally."

Mystery Station On 650

"I've been DXing now for a little over six weeks," offers John T.

Crabtree, 203 Santa Fe Ave., Santa Fe, N. M., "and in that time have logged 334 stations on the broadcast band. So far I have received stations in every state but Maine, New Hampshire, Rhode Island and Delaware, as well as several Canadians and Mexicans, 3 Cubans, one in Puerto Rico, all 3 Hawaiians and KFQD, Anchorage, Alaska.

"I am especially proud of this record, as this is without doubt one of the worst DX sections in the country. Our city is situated in a bowl formed by towering mountains, 10,000 feet high, on all sides. Naturally, a lot goes over us, and static is heavy the year round.

"For the past three weeks, I have been hearing an unknown station on 650 kcys. It is not WSM, yet all the announcements are in English. The signal strength is about R3, yet I haven't been able to identify them. Recently I heard an early-morning test from an XEAU at Tijuana, B. Cfa., on 1310 kcys. They were coming in R9, so there was no doubt about the call or location. Do you know about either of these?"

The station on 650 kcys is referred to RADEXers for identification, while the other station is confirmed by J. W. Hansen, 3028 Fairmont Blvd., Riverside, Calif., who writes:

"A new station in Tijuana, XEAU, was heard testing on 1310 kcys early in October. I received a verification from XEAA stating that they have moved permanently from 920 to 750 and are using the same power.

"Reception of the Aussies has been very poor, except for a few nights. The Zedders have been coming in a little better, but nothing to get excited about. The Japs have been very good, with programs heard regularly on 560, 590, 690, 730, 740, 770, 780, 790, 810, 820, 830, 850, 870, 940, and 970. What's happened to XGOA? Haven't heard them yet!"

Reception Good

"Reception has been very good so far this Fall," notes Arthur E. Foerster, 1213 Bosart Ave., Indianapolis, Ind., "with 40 new stations coming in to bring my log up to 865 logged, with practically all of them verified. The Aussies and Zedders have been missing so far and to date the Europeans have failed to put in an appearance, but I have hopes. Reception from the West Coast is the best I have seen since I began DXing five years ago."

"I have finally managed to raise my total of U. S. stations to well over the 400 mark," writes Walter V. Scholz, 33 N. Maple Ave., Webster Groves, Mo., "accomplishing that with the help of the November 11th frequency checks. My best catch so far is KHBC. While I was DXing this morning (November 11th), I came across a Spanish-speaking station on about 950 kcys. I could not catch the call letters, but heard Guatemala mentioned a few times. Could that be TGW on a new frequency?"

Just as we go to press, a letter from Samuel A. Meyer, Jr., of Rochester, N. Y., arrives advising of recent changes in Latin-American stations.

New stations heard are CMBL, 710 kcs, in Havana, Cuba. It is heard nightly from 8 until 11 pm, EST. TIPG in San Jose, Costa Rica, has also been heard on 625 kcs. This station is said to employ 2000 watts power.

XEBO in Irapuato, Gto., has moved from 1280 to 1310 kcs; XELO, Tijuana, B. Cfa., from 1110 to 670 kcs; and XEFO, Mexico City, D. F., from 940 to 930 kcs.

XENT is now using 60,000 watts power. XEBK in Nuevo Laredo, Tams., has decreased power from 100 to 60 watts.

"I am sending two clippings from the *Laredo Times*," Mr. Meyer's let-

ter continues. "One of the clippings is relative to a new station under construction in Monterrey, Nuevo Leon, and the other about a Laredoan's (Texas) application for a 250-watt local station. There are already four stations in Nuevo Laredo, which has only half the population of Laredo, and to date there is no station on the American side. I believe there is to be a station in Ciudad Victoria, Tams., also, but I have no details.

"XEBK of Nuevo Laredo (1000 kcs) has a power of only 60 watts, although it is licensed for 100 watts. XENT has a power of 60,000 watts (not 150,000, although they hope to have that much some day)."

Sidelights on Eddy Duchin, NBC maestro: Learns a tune by hearing it once, but can't memorize a lyric. . . . Has his hands insured for \$100,000. . . . Organized his first orchestra while working as a waiter in a boys' camp, the group being composed entirely of waiters. . . . Made his microphone debut as pianist with Leo Reisman at the Central Park Casino. . . . Dances for his own recreation and spends most of his leisure at the radio, listening to other bands.

Robert R. Irwin, President of the World Wide Dial Club, requests that his club be included in our Roster of DX Clubs which appeared in the November issue. This club is a "get together" organization which meets in Chicago twice a month. The second Wednesday of each month they meet somewhere down town, and on the fourth Wednesday the meeting is at the home of one of the members. For further information DXers in Chicagoland should get in touch with Mr. Irwin at 918 W. Gunnison St.

The Shortwave Review

Belgian Congo

OPM at Leopoldville works with Belgium at 3 am, and from 1 to 4 pm, EST, on 10140 kcs. (RX27).

British Guiana

The Terry-Holden Expedition into the jungles of British Guiana, using the call letters VP3THE, has been heard throughout the United States. A 200 watt transmitter is in use, and the frequency is about 13910 kcs. (RX35).

British Honduras

There is a new station in Belize, ZIK2, operating on 10600 kcs. (RX21).

Bulgaria

LZA at Sofia, 14970 kcs, is heard from 7 to 7:30 am. (RX23).

Canada

A new shortwave station is now in operation in Sydney, N. S. It is CJCX, 6010 kcs, 1000 watts. It is owned by the Eastern Broadcasters, Ltd., Radio Bldg., Sydney. Programs of CJCB are relayed. (RX47).

A number of ship and shore 'phones are heard on 1630 kcs. Three of the shore 'phones are VBB at Sault Ste. Marie, Ont., VBE at Point Edward, Ont., and VBH at Port Arthur, Ont. They broadcast weather at 11 pm, EST. Some of the ships heard working these stations are the Algonquin, Canadian, Toronto, Lethbridge, Weyburn, etc., but none of their call letters are known. They can be heard near midnight. (RX55).

The new address of VE9CS on 6080 kcs is, c/o Station CKFC, Stock Exchange Bldg., Vancouver, B. C. (RX53).

Canary Islands

EAJ43, Tenerife, is heard on 10370 kcs from 9:45 to 10 pm, EST, or sometimes until 10:30 pm (RX25).

Ceylon

VPB in Colombo is on daily on 6160 kcs from 6:30 am, to 12:30



Edward G. Robinson, celebrated for his hard-boiled roles on stage and screen, is shown here with comely Claire Trevor, his co-partner in the new dramatic radio serial of newspaper life, "Big Town." Heard over the CBS every Tuesday from 8 to 8:30 pm, EST.

pm, and on Sundays from 7 am, until 11:30 am, EST. (RX27).

Colombia

HJ1ABE is now broadcasting daily from 6 to 10 pm, and after the regular broadcasting period, they read the names of DXers who have reported them. This station is in Cartagena. (RX48).

HJ7ABD, Bucaramanga, 9610 kcs, announces reception of reports from listeners at 10:30 pm, EST. (RX23).

HJ4ABD has not been heard for some time, but was on 5980 kcs, the last time heard. HJ4ABP is heard on 6028 kcs but may shift back to 6033 to avoid interfering with Germany's DJC. HJ6ABA varies in frequency from 6050 to 6055 kcs. (RX21).

Denmark

The call and frequency of the new Danish station is OZF, 9520 kcs. It is heard daily between 2 and 6:45 pm, the broadcast for the first half hour being directed by special antenna to South America and East Asia. The second part of the program is intended for North America and Greenland. Evening programs are also heard occasionally from Denmark on 11805 kcs, but a call sign and regular schedule has not been assigned this station. (RX27).

Egypt

SUV in Abou Zabal (Cairo) works Europe between 1 and 6 pm, EST, on 10055 kcs. (RX27).

Fiji

VPD2 on 9540 kcs is heard with a good-to-fair signal between 6 and 7 am EST (RX23).

Great Britain

The British Broadcasting Corp. has been considering for some time the question of broadcasting in languages other than English. Inquiries made by representatives abroad have led to the conclusion that broadcasts from Daventry would be welcomed by listeners in Spanish and Portuguese South America, and by Arabic listeners in the Near East.

Changes in Transmissions IV and V from Daventry are announced. Part 1 of Transmission IV, broadcast from 12:20 to 3:45 pm, EST, is now carried over stations GSB 9510, GSD 11750, GSG 17790, GSI 15260 and GSP 15310 kcs. Part 2, from 4 to 6 pm, is radiated over GSB, GSD and GSO 15180 kcs.

GSP on Transmission V has been replaced by GSC on 9580 kcs. The time remains the same, 6 to 8:30 pm, EST.

Guatemala

TGWA in Guatemala City, 9690 kcs, is best heard near 7:45 pm, EST. (RX51-52).

TGWA on 15170 kcs is frequently heard late at night.

Hong Kong

ZBW has been reported, but with a poor signal, on 9525 kcs. (RX23).

Hungary

The Budapest shortwave stations are now using the new directional antenna system and it is expected the signal strength of HAS3 and HAT4 will rival that of other European stations. (RX35).

Italy

The Rome station has extended its broadcasting activities. The American Hour, one of the most popular programs on the shortwaves, is now broadcast daily, commencing at 7:30 pm, EST. The revised schedule of the Rome station is 11810 kcs, daily from 5 am to 12:20 pm. 9653 kcs, daily from 12:30 pm to 9 pm, EST.

Japan

JZJ comes in very well every day, with signals as good as R9 at times. JZK has also been heard, near 1 am, EST, (RX35). JZJ 11800 kcs, is heard daily from 4:30 to 5:30 pm. War news in English, Spanish and Japanese, as well as Japanese music. (RX51). JVH 14600 kcs, is heard from 11 pm, to midnight. (RX23).

Mexico

The newest Mexican is XETW, 6045 kcs, Tampico, Tams. Broadcast band station XEFW on 1310 is relayed. Heard until 11:30 pm, and sometimes later. (RX52).

Paraguay

Our Argentine representative reports that ZP14, Villarica, Paraguay, is now being heard on a frequency of 6040 kcs. The slogan used by ZP14 is "Radio Cultura."

Poland

A new transmitter has been added to the Polish s. w. system. It is SPD, working on a frequency of 11500 kcs. The new station, and SPW on 13635 kcs, are heard from 6 to 7 pm, every night, and on Sundays until 8 pm. Both stations

come in with good signals, but SPD is slightly the better. (RX49).

Portugal

CT1AA is now announcing its new call letters, CS2WA. Their frequency is given over the air as 9650 kcs, and the power as 2½ kw. (RX35).

Siam

HS8PJ Bangkok, transmits from 8 to 10 am, EST, on 19020 kcs, on Mondays only, and at the same time on Thursday on 9510 kcs, with a power of 5 kilowatts. This station is owned by the Post and Telegraph Department, in charge of Colonel Phra Aram. Programs consist of Siamese and European music, and news bulletins. Announcements are in Siamese, English and French. (RX47).

Spain

"Radio Nacional" at Salamanca was heard broadcasting a special program for North America on 10370 kcs. The volume was "terrific." (RX25).

Union of South Africa

The Johannesburg station is now heard in all parts of the country. The programs start off with bugle calls, then setting-up exercises follow. The Town Hall Clock strikes 7 a. m. at midnight, our time. The address is Box 4559, and the schedule of broadcasts is 11:45 pm, to 12:45 am, EST, daily except Saturdays. Two frequencies are used now, announced as 9606 and 6097½ kcs. (RX21-23-35-51-52).

United States

The General Electric Co. has a construction permit for a new international broadcast station to operate on frequencies of 9530 and 15330 kcs with 20 kw. power, un-



The reception room of Radio Hall, the home of Station WHA, located on the campus of the University of Wisconsin at Madison, Wis.

limited time. The station will be located near Belmont, Calif.

It is reported W2XAD and W2XAF will increase power soon to 100 kw. (RX54).

WWPA at St. Albans, Vt. is heard broadcasting time signals every night at midnight, on 1626 kcs. (RX55).

A complete list of the Police Stations of North America was printed in the September issue of RADEX, and changes and additions to this list are shown in this column every month. Alterations which have taken place since our December issue are shown below:

New

- 1.642 KASP Little Rock, Ark. (1.)
- 1.658 WQFR Portable in N. Y. State (.25)
- 1.674 KHPA Lees Summit, Mo. (1.)
- KHPB Macon, Mo. (1.)
- KHPD Springfield, Mo. (1.)
- KHPE Poplar Bluff, Mo. (1.)
- KHPF Jefferson City, Mo. (1.)
- WAMF Portable in Pa. (.5)
- 1.706 WANH Raleigh, N. C. (1.)
- WANI Williamston, N. C. (1.)
- WANJ Williamston, N. C. (1.)
- WANK Salisbury, N. C. (1.)
- WANL Elizabethtown, N. C. (1.)
- 1.712 KAPM Wailuku, Hawaii. (1.)
- WMPR Revere, Mass. (.05)
- 2.036 WPDM Dayton, Ohio. (.5)
- 2.040 WPDM Dayton, Ohio. (.5)
- 2.044 WPDM Dayton, Ohio. (.5)

- 2.450 KADH Mangum, Okla. (.05)
 2.458 WDPW Wilmington, N. C. (.1)
 2.474 WKMP Kenton, Ohio. (.05)
 2.490 KSPM Portable in Wash. (.05)
 KSPN Portable in Wash. (.05)
 KSPW Portable in Wash. (.015)
 WMPQ Logansport, Ind. (.1)

Frequency

- 2.466 WRDR Grosse Points, Mich. (.35),
 from 2.414

Power

- 1.712 KACU Longview, Texas, 500 w.
 from 250 w.

Ohio State Police stations operate on 1596 kcs. They are not shown in our police station index because 1596 is now in the broadcast band. The stations are WPGG Findlay, WPGQ Columbus, WPHC Massillon, WPHK Wilmington, WPHT Cambridge, and WPFT, a portable.

WNYF, New York City Fire station on 1630 kcs, works fire boats in New York Harbor nightly at midnight. The boats reply on 35.6 megs. Some of the fire boats are W2XNA, "Wing," W2XNB, "Hewitt," W2XND, "Willet," W2XNC, F, G and I (RX55).

W2XGB at Hicksville, N. Y., 17310 kcs, is heard at 10:40 am, and 2:30 pm. WMI Lorain Ohio, 6450 and 2560 kcs, gives weather reports at 10 pm. WWOJ at Sault St. Marie, Mich., 2570, also broadcasts weather at 10 pm. (RX23).

Uruguay

CXA8, 9640 kcs, relaying LR3 at 7:40 pm, has been heard very well. Reports should be sent to Radio Belgrano, Buenos Aires, Argentina. (RX23).

The Reporters

- R21, Anthony Tarr;
 RX23, Carl and Anne Eder, Minn.
 RX25, George Nahas, N. Y.
 RX27, Raphael Geller, N. Y.
 RX35, Albert Steinmetz, N. J.
 RX47, D. H. Dussek, Great Britain.
 RX48, Harold Lund, Pa.
 RX49, Kenneth Morey, Mass.
 RX51, Gilbert Harris, Mass.
 RX52, Samuel Meyer, N. Y.
 RX53, Rob't. Morrison, Canada
 RX55, C. Roman, Illinois.

The Stamp Corner

• • • By David Brockton Browne

MARCHING forward with the New Year, readers of RADEX will in the future find a column devoted to stamp collecting, or philately as some collectors prefer to call it, in each issue.

The column will feature news of current and future postal issues of those countries where radio stations exist; will try to solve some of your stamp collecting problems; and give a few hints and cautions concerning the hobby as well.

The success of a stamp column depends largely upon the support and co-operation of its readers. Your Stamp Editor will do his best to make this department interesting and worthwhile to RADEXERS, and will try to please your desires whenever he can. We shall be very happy to answer briefly any questions that may be worrying readers concerning stamp and cover collecting, if they will write to us in care of this magazine.

We cannot, however, enter into any exchange or lengthy correspondence with our readers on either stamp or radio matters, of any kind. Won't each of you, though, write a few words to RADEX' Editor, and tell him how you like this new venture? Thank you.

New Stamp Issues

1938 promises to be a "stamp-a-month year" for the United States if present predictions materialize. The long-awaited replacement of the regular postage series, in use since 1922, will begin soon after the New Year. Featured will be those Presidents who have never appeared on a U. S. postage stamp before. At least one new value, 4½c, will appear as this rate is widely used on church envelope mailings, etc. It is possible that an 18c stamp may also be added.

No definite plans for new commemorative issues have been announced as yet, but collectors might well prepare themselves for another Constitution stamp, and one honoring the State of Delaware. Now that the field of military heroes has been explored and the possessions series is finished—serious consideration is being given to a series honoring cultural leaders, such as famous American scientists, authors, inventors, and educators.

An imposing array of nations have chosen to honor the 150th anniversary of the United States Constitution by issuing one or more commemorative stamps. Among these countries are: France, Brazil, Salvador, Guatemala, Ecuador, Honduras, and Nicaragua. Undoubtedly, before many more weeks pass, several other nations will be added to this ever-growing list which promises to make an interesting collection all by itself.

Italy has released a pleasing series of ten pictorial stamps honoring five Italian cultural celebrities whose centenaries occur this year. Composers Spontoni and Pergolesi, the painter Giotto, violin-maker Stradivari, and the poet Leopardi, are represented on two stamps each.

Miniature sheets are rapidly growing in number. The Franco government of Spain adds the Ayamonte sheet—5c red and blue—in an imperforate block of four.

Egypt honors the Abolition of Capitulations with three colorful pictorials showing a medallion of a native woman with a water jug. Values and colors are: 5M brown, 15M purple, and 20M deep blue.

Helpful Hints

Do not leave your stamps lying around carelessly in shoeboxes, envelopes, etc.—if you want to keep them in good condition. And condition in a stamp is all-important. There are numerous inexpensive

stamp albums available at your local stationers or stamp dealer that will help preserve your collection. A mounted stamp always makes a better appearance too. But be sure that you mount your stamps with peelable stamp hinges—not with paste or mucilage.

To get the greatest enjoyment from the hobby, every reader interested in stamp collecting should subscribe to a stamp magazine. No philatelic column in magazines or newspapers of general circulation can hope to cover the subject adequately. They can only hope to "hit the high spots."

For detailed information on stamp collecting, we sincerely recommend any of the leading American stamp magazines. Among the better known are—Weekly Philatelic Gossip, Holton, Kansas; Mekeel's Weekly Stamp News, Portland Maine; Stamps Magazine, New York City, N. Y.; Linn's Weekly Stamp News, Columbus, Ohio and The Western Stamp Collector, Albany, Oregon. We are sure that each of these publications will be glad to send a sample copy—without charge—if you will write direct to them. (Please mention RADEX when writing). The average subscription price of the larger stamp magazines is \$1.00 a year.

Philately has many subdivisions. Among the most important is cover collecting—First Day of Issue, First Flight Airmail, Naval, Historical, etc. We shall try to touch briefly on some of these in the next issue of RADEX. Until then, good luck, both on the air waves and in the stamp album. Don't forget to write the Stamp Editor, soon, and tell him what philatelic subjects you would like discussed in future issues. Remember, this is *your* stamp column.

ZP14, Villarica, Paraguay, is now on 6040 kcs.

Universal DX

Club Corner

• • • By "Pooky"



This month we have with us a little story that needs no comment, so "Pooky" feels that he can slip in another word or two about the contest. Well, there's really not much to say except, "Please write." There must be an idea or a bit of information in your head right now that someone else would like to hear about. Remove it! Put it down on paper and send it along to UDXC Headquarters, 345 Maple Ave., Oradell, N. J. It doesn't have to be a world-shaking idea, and it doesn't have to be written up in ten-league words. Just jot it down and send it. The chances are that we'll print it here in RADEX, with your name and all the trimmings, and if we do we'll send you a very generous reward. The list of prizes we are giving appeared in the September RADEX and will appear again shortly. If you haven't seen it, take our word for it.

What are you doing for the next five minutes?

Well, Virgil F. Foster, of 2100 Rockwell Ave., Alton, Ill., takes the cake this month with a story of amateur radio. The title is ours but the rest of the credit is his. We're awfully glad you wrote, Virge.

Ham and Gob

"A friend of mine living in Maryland Park Addition, a little place near Alton, had an amateur radio station. He was always talking to

me about it, and wanting to send a message somewhere for me. I was skeptical but he kept right at me, until finally I said to myself, 'All right, I'll shut you up!' So I gave him a message for a friend of mine.

"The catch was that I had no idea in the world where this friend of mine was. He was a sailor, an old shipmate of mine, and I knew that he might literally be anywhere in the world. I had neither seen nor heard from him in over a year. The only address I could give was the name of the last ship from which he had been discharged.

"This didn't seem to bother my 'ham' friend a bit. About six months ago he started my message on its way. It went traveling across the United States, pausing here and there, touching every section of the country, but nowhere could my sailor friend be found. Finally, after more than a month, it reached the West Coast, but apparently my friend was not there either. Well, it did not hesitate. It started looking for him overseas.

"And nearly six months after it had left me my message reached him. He was serving on the U.S.S. Black Hawk, on duty in war-torn China! Imagine his surprise, and his shipmates' surprise, when he heard in this way from his buddy back home. And imagine my surprise when I received an answer from him the other day, telling me when and how my voice had reached him.

"This, my dear 'Pooky,' is one of the greatest things I have ever heard of, although I suppose it is not unique. From now on I am not skeptical of anything I hear about amateur radio. I am a solid backer of it. And may I use your column to thank all those 'Hams' who helped to speed my message on its way?"

Indeed you may, OM, and may "Pooky" add his humble "VFB?"

IDA "Programs of the Week"

IN THE IDA "Programs of the Week," the International DXers Alliance is attempting to present something new and different in DX broadcasts. Each week throughout the present season, one North American station will transmit a feature program.

Although some of these stations will be attractive from a DX angle, the programs will be arranged primarily for the mass entertainment of the DX fraternity. Each broadcast will be a four-star feature program, and many novel and interesting stunts have been arranged to add variety and zest to the shows.

While sponsored by the IDA, these weekly broadcasts are for the entertainment of all listeners and DXers, regardless of club or non-club affiliations. It is hoped that listeners everywhere will give support and endorsement to this program series by listening in and forwarding a report, or at least a note of thanks, to the feature station.

As an added inducement for submitting reports, the IDA will award a cash prize of ten dollars to the DXer who receives verifications from the greatest number of "Program of the Week" broadcasts. In the event of a tie, the award will go to the DXer who has made the greatest all-around showing from the standpoint of location and acceptability of reports.

Suggestions for interesting and novel features to be included in these broadcasts will be welcomed by the director of this series, Herbert Tucker, 57 Kenilworth Drive, Akron, Ohio.

Following are the programs arranged to date:

Thursday, December 30th

1:00-2:00 WTAM 1070 Cleveland, Ohio

Sunday, January 2
3:00-4:00 CMAB 1340 Pinar del Rio, Cuba
Thursday, January 13
2:00-3:00 KFYR 550 Bismarck, N. Dak.
Sunday, January 16th
3:00-4:00 WCCO 810 Minneapolis, Minn.
Monday, January 24th
3:00-4:00 WHAM 1150 Rochester, N. Y.
Sunday, January 30th
3:00-4:00 CHWK 780 Chilliwack, B. C.
Sunday, February 6th
3:00-4:00 KWOY 1370 Sheridan, Wyo.
Sunday, February 20
3:00-4:00 KECA 1430 Los Angeles, Calif.
Sunday, February 27th
3:30-4:00 KGU 750 Honolulu, Hawaii
Sunday, March 13th
3:00-4:00 WCKY 1490 Covington, Ky.
Sunday, March 27th
3:00-4:00 KFOR 1210 Lincoln, Neb.

All times listed are a.m., Eastern Standard.

Reports to CHWK must be accompanied by ten cents for verification. Additional programs to complete the series will be announced in the IDA "Globe Circler" as well as other radio publications.

Call-o-Gram Solution

The solution to the Call-o-Gram printed last month is given below:

RCA CQDX CKOC WWL
XEL WRR A ART AWA
KCMC MUSTANG WSJS
R AIR MA TG HHT
VOAS ARID
W TIU TI OR NOW K
WTEL WINDSOR WAGA
VAS WOC O OIL YSN
AST KRKO K800 XED

If the music of the La Conga Cuban orchestra that you hear over NBC on Friday nights sounds weird, maybe it's because the instruments they play are weird. Their instruments are a conga, a male drum; repicador, female drum; a bongo, which is two drums attached to each other; congeros (Cuban cowbells) and the quijadas, the jawbones of an ass.

OUR READERS and Their Troubles

• • • By the TECHNICAL EDITOR

I HAVE a Truetone receiver, model A2, which does not have a phonograph connection. Will you please tell me how to connect the phonograph pickup, and also how to plug in for earphones? I intend to put a pickup arm on a phonograph at home, so tell me how the old spring type motor can run a radio. How is the volume of the phonograph sound controlled?

It is evident that you are not very familiar with the principles of the phonograph pickup. You need make no change in the phonograph you have, as the spring motor will operate the turn-table in the usual manner. But, instead of using the original sound-box and needle as you do when you play the records, you push it aside and set in place the pickup which you must purchase from some reliable radio store or mail-order house. This pickup has the usual needle, but it operates a tiny magneto-like unit that generates a small electric current, instead of the sound producing box and diaphragm of the old phonograph. The weak electric current is fed into the audio amplifying portion of the radio receiver, and the sound comes out of the loud speaker. The volume of the reproduced sound is controlled by the radio volume control in the usual manner. The receiver, of course, is detuned from any radio signal, but usually the connection into the audio portion cuts the circuit so that radio signals cannot come through at the same time.

The receiver chassis must be removed from the cabinet. Turn it over so that the connections to the manual volume control can be seen. This volume control consists of a

resistance of 500,000 ohms with a sliding contact that moves from one end to the other. At one end of the resistance of this control you will find a lead that connects at once to a resistor of 50,000 ohms. This resistor is numbered R-10 and should quickly be located. Do not mistake this resistor for another, No. R-14, of 2 megohms (much larger) which also attaches at the same point. Cut the wire connecting the end of the volume control and the first (R-10) resistor. From these two freshly cut ends run two short well-insulated leads to two binding post terminals or a phone-plug jack. When the pickup is used it is connected to these terminals or the jack. When not in use the terminals or jack should be short circuited with a piece of wire or shorted plug. If the leads are shielded, and the shielding grounded, operation will be better. Use a pickup of high impedance, for if a low-impedance pickup is utilized, it must be matched to the circuit through a high impedance output-matching transformer. "Astatic" pickup devices are always of high impedance.

We would like to bring to your attention, as well as to the many readers of this department, a device known as a modulated oscillator unit for connecting a phonograph pickup directly to the radio receiver without the necessity of making changes in the circuit. The entire unit may be placed within the cabinet, and the phonograph pickup is permanently attached to it. The output of the oscillator unit is fed into the receiver, demodulated, amplified, and re-produced through the loud speaker, just the same as any radio signal. The volume control of the set is used to control the

volume of the phonograph reproduction.

There is also an adapter that can be purchased. By placing it beneath one of the tubes, a pickup can easily be connected to the set. Another device, that fits on the grid cap of one of the tubes, has two tiny contacts into which the phone tips of the pickup are connected. The same situation also exists as to earphones. A simple adapter, that fits under one of the tubes, provides a convenient connection for the tips of the headphone cord. The "Perfect" phone adapter sold by RADEX, is a highly satisfactory unit of this type. You will experience no difficulties in its use. An inexpensive pickup may be purchased as low as \$3.85, while phono-adapters are but 30 to 75 cents. Headphone adapters are somewhat more costly.

On Pre-Selectors

I judge that many D-Xers are interested in pre-selectors but know very little about them from all I can hear. Why not give us an article on pre-selectors? For instance, what type of sets will it work with best? What is the proper number of tubes? What increase in sensitivity can one expect? Will selectivity be improved? Do they aid on fading stations?

This is an interesting subject and we know that it is of interest to our readers for so many of them write us in a similar vein. A pre-selector, it must be remembered, is simply a radio-frequency amplifier. As such it adds its efficiency to that of the radio receiver. A peak pre-selector or preamplifier will add increased efficiency to short-wave receivers or all-wave receivers on the short-wave bands. It increases the sensitivity of the set to weak signals. Most of these devices are best used on the short waves, although there are all-wave pre-amplifiers that cover the entire wave band.

It is claimed that a pre-selector

will bring up weak signals to a strength of R-7 and R-8. Atmospheric noises are reduced because additional tuning circuits are utilized, and there is a very narrow frequency band available which tends to eliminate much interference noises and image-frequency faults.

A good pre-selector may be used on the short waves. It should cover at least three bands with separate coils and switching arrangements. These ranges preferably run from 10 to 35 meters; 35 to 75 meters; and 75 to 200 meters. One tube in a pre-selector will not give sufficient amplification. For this reason two tubes are universally utilized. This provides two full stages of radio-frequency tuning and amplification. It is a disadvantage to take the filament and plate voltages direct from the receiver, so the better pre-selector will take its current from a built-in power supply with rectifier tube. RADEX has not undertaken to design and submit to its readers a pre-selector circuit, although there has been a demand for such. Radio-frequency circuits are difficult to arrange and assemble, and the relatively inexpensiveness of completed selectors is such as to preclude the thought of building one. However, excellent kits may be obtained, and we shall be glad to recommend manufacturers by mail.

To those who wish to build a very simple one we suggest that a radio-frequency coil, tuned with a variable condenser, both of capacity and inductance to cover the short wave bands, and one battery operated r-f tube, will suffice as an experiment. Feed the plate output of the tube to the antenna post of the receiver through a .002 mfd. bypass condenser. Obtain a shielded coil wound for the short-wave band desired, and use this with a small short-wave tuning condenser shunted across the ends of the coil. The top of the coil is connected to the

grid of the tube, and the bottom to the filament or negative A and B terminals. The primary of the coil is connected to the two ends of the doublet, or to the antenna and the ground.

Antenna Location

I am about to erect an RCA "Spiderweb" antenna. It will be about 200 feet from the street where there is a power line, and about 100 feet from my RCA 15-K receiver. Will 200 feet distance from the power line be enough to get away from interference from that source? I have been told that it should run north and south and that it ought to be parallel to the power lines. However, I have sufficient room to run it in any direction. I need additional leadin and how can I arrange this? The antenna will be erected on iron poles about 35 feet high. Is this satisfactory?

Since you are able to erect an antenna at least 200 feet from a street where there is a power line you should consider yourself fortunate indeed. The RCA Spiderweb unit which you have selected consists of a series of doublet antennas cut to different lengths that will cover most of the wave bands very fully. This arrangement requires only 38 feet of horizontal length and 12 feet of vertical clearance. The Spiderweb antenna really is a multiple double-doublet system.

Its directional characteristics are about the same as for any doublet or double inverted "L" antenna. The antenna will respond best to signals that come to it from a direction that is at right angles to its length. Therefore, if you point the antenna north and south it should pick up signals that come from the east and west. However, that does not mean that it will perform only in that direction. We think that for the southern portion of the United States a direction that is northwest

and southeast will be best for European work.

All interference that is picked up by the leadin wires will be cancelled out by the transposition of the two wires. But if the antenna itself is in a noise zone there is nothing that will prevent it from picking up induction noises. A power line, if within the zone, will be troublesome. Whenever a power line is nearby, keep the antenna as far off as possible to lessen the chances for inductive pickup. Any doublet antenna or double-doublet has a minimum amount of signal pickup in the direction of its horizontal length. This makes it possible to utilize the rather positive directional effects of the antenna so as to eliminate much man-made interference. Therefore, if the antenna is pointed toward the source of interference, it will pick up a minimum of noise. This applies to power lines which should run at right angles and not parallel to the doublet antenna. There has been much discussion about this, but it has been rather definitely decided that doublet antennas should point as nearly as may be practicable directly toward the source of man-made interference.

Since you are using two tall iron pipe poles we suggest that you space them sufficiently far apart so that two or three insulators can be placed at the ends of the antenna with a spacing of about 12 inches between each insulator. Iron poles can pick up and reradiate interference and signals to the aerial top, and good insulation and spacing will tend to prevent most of this type of trouble. The matched transmission line must not be cut for any reason. If the line is too short then you might as well erect the antenna farther off and use a second section of leadin of the same length as the first. Any doublet antenna with coupling transformers which are

matched to the impedance of the antenna and to the transmission line, must be connected to the receiver by the proper amount of leadin or transmission line.

Static Troubles

I have a 1937 Silvertone 7-tube set. It is used with a single-wire antenna about 75 to 100 feet long and 40 feet high. The leadin is 30 feet and the ground is 7 feet. How can I get a transformer to fit this antenna as I am troubled with static? Is this outfit suitable for D-X work? What do you think of a chemical ground, and how is it made? Does the length of leadin and ground make any difference? Shall I use a twisted leadin, but, if so, how is it connected to the receiver? When I lengthened my antenna I found more stations crowding and also began to hear stations when a local was quiet for announcements.

The receiver you own and the antenna used make a good combination for D-X work. But perhaps a few changes will be in order. It seems that the antenna must be too long, for the fact that stations interfere and are hard to tune out makes it appear so. Try shortening the aerial to 50 feet or even 40 feet. Make it into an inverted "L" shape with the leadin running directly to the receiver. Of course, one of the new doublet combinations will prove very satisfactory. They come in kit form ready to erect. The strong twisted wire is very good for this purpose. If the inverted "L" antenna is used, the wire may be all in one piece, beginning at the far end and passing direct to the radio set. The "L" antenna is slightly directional along the line of the wire towards the end in which the leadin comes down. The longer the flat top and the shorter the leadin, the more directional the antenna will prove. The doublet antenna is directional along a line that is

broadside to the length of antenna wire.

If a transformer is used with your present antenna, you must utilize a shielded leadin wire or twisted pair, such as the Zepp, and two transformers, one up at the antenna and one down at the set. These are useful only in preventing the pick-up of man-made static in the neighborhood of the leadin wires. If you are going to try transformers for static elimination, we endorse one of the modern doublet noise-reducing antenna systems. This, however, will not prevent any static that is picked up by any portion of the antenna top that may remain in the noise zone. Full instructions accompany the antenna kits and you will have no difficulty in attaching the wires to the set. In most cases a ground wire will no longer be necessary.

However, if you are troubled with static that comes into the set through the power line or electric lighting wires, you will need a filtering device that plugs into the electric light socket. The radio cord then plugs into the filter. These units are rather inexpensive, and you should be able to purchase a good one for about four dollars and upward.

We believe that a good ground is always a simple ground. If a copper wire is soldered or clamped to a bright spot on a cold-water pipe it should be very satisfactory. However, electrical instruments or devices should not be grounded to the same pipe. Chemical grounds outdoors are satisfactory, but very often a perfect ground can be obtained simply by driving three 6-foot lengths of new $\frac{1}{2}$ " pipe into the earth. These pipes should be spaced several feet, and set into some spot that remains damp most of the time. The top of each pipe is connected to a heavy copper ground wire with clamps or solder. The

length of the ground wire to the set should, of course, be kept as short as possible.

Two Antennas

I have an all-wave aerial up at present, but I intend to string another wire beside the first as a single-wire antenna for longer-wave reception. Actually, the two wires will be rather close together. Will this in any way ruin or cause absorption of the all-wave aerial? The all-wave antenna has a transformer at the set. Can I connect a throw switch so that the set may be shifted instantly from one antenna to the other without going through the all-wave antenna transformer?

You will find it a simple matter to erect the additional single-wire antenna adjacent to the present all-wave system. However, we suggest that you space the two as far apart as may be practical. Although you will be using but one aerial at a time, there is some truth in the belief that the wires of a closely adjacent system will detract from the maximum efficiency of the aerial. On the other hand, if a wire is placed correctly it might act as a reflector so as to aid reception from some particular point on a certain frequency.

You should procure a double-pole double-throw knife switch with porcelain base. The two center contacts are those of the knife blades. The two wires from the radio receiver (antenna and ground) are connected to the center or knife blade contacts. The two outer contacts at one end of the switch should be attached to the terminals of the transmission-line matching transformer. When the switch is thrown to these two contacts, the connection between the set and transformer is completed, and the all-wave antenna is then in use. There now remains the two contacts at the opposite end of the switch. Connect

one of these to the single leadin from the single-wire antenna, and attach the other to the ground wire. When the switch is thrown to this end, the contacts will connect the antenna and ground terminals of the set to the antenna and ground contacts, respectively, of the switch. Merely by throwing the switch to one end or the other, either antenna may be connected to the receiver.

Whistling Set

The trouble with my set is that when the volume control is turned up the station gives a whistle, and finally the whole band becomes dead. Local stations, too, are spread out very badly, as much as 100 kilocycles to either side of the point on the dial where they are supposed to be heard. The locals are distorted and finally die as the volume control is increased. This receiver is a Mental with Hytron tubes, and I would like to know the values of the different resistors.

In most cases, troubles such as you describe would be caused by a defective tube—perhaps the 25A7. We suggest that, first, you have all the four tubes in the set carefully tested. Next, we should have our suspicions about the volume control itself, if the tube that connects to the control tests perfectly. The next following step in analyzing the trouble would be to check the plate voltages of all the tubes, for a failure in some operating voltage can cause whistling. The fading and failure of the set when the volume control is increased to maximum may be due to a great increase in grid biasing, thus rendering the tube in question inoperative. So, in addition to the above the grid bias must be carefully checked. Any failures in voltages indicate that some resistance is defective, or a bypass condenser is open. In short, a thorough examination of the set by a

competent service man seems to be in order.

We regret that we cannot list the proper values of the resistors in this set as the information is not available in our files. However, the units are standard, and the color code, available to every service man, will instantly inform him as to what replacements are required, if any.

Broadtuning, such as you describe, is a bad disorder in the set. When the tubes and volume control have been checked and remedied, if necessary, the trouble may correct itself to some extent. However, a realigning of the condensers and units is indicated. The r.f. and i.f. coils and condensers are most likely out of adjustment. But it is our opinion that you cannot expect too much in the way of highly selective tuning and station separation when the locals are on, when a set is constructed of but three tubes, two of which control the entire tuning operation.

Size of Coils

I am building an all-wave set which will use plug-in coils to be tuned with a .00025 variable condenser. I have experienced difficulty in obtaining data as to the correct number of turns of wire for the coils. Can you tell me how to make these coils and the number of turns of wire to be wound on?

You can purchase these coils ready wound from several of the mail-order radio supply houses, and we think this is the easiest way out of your problem. Even if you wind them you must first procure insulated forms, and these cost nearly as much as the completed coils. Finished coils, ready to use, also come completely shielded, and this is quite necessary in your case. However, make the coils the following sizes:

For a plug-in coil to cover the 10-20 meters band, wind 6 turns of 22 wire, each 3/16 inch apart. Skip

1/8 inch and wind 4 turns closely of No. 30 for the primary or tickler coil. For the 20-40 meters coil wind 12 turns on the secondary and 6 turns on the primary. Wind the secondary in a space 1 inch long. For the 40-80 meters coil wind 24 turns on the secondary, at the rate of 16 turns to one inch, and put 7 turns on the primary. The 80-200 meters coil has 45 turns on the secondary, closely wound, and 15 turns on the primary. You can use a small variable condenser for these coils—one of .00015 mfd. The .00025 you have will suffice, but if you remove two of the rotor plates its capacity will come closer to tuning the coils throughout the full movement of the rotor. The condenser you have is too small to cover the entire broadcast band with only one coil. It is best to use a standard coil of about 75 turns, 2 inches in diameter, with a .0005 mfd. condenser. Otherwise you will require two coils to cover the broadcast band properly.



Dorothy Thompson, the wife of Sinclair Lewis, discusses *People in the News* on the NBC-Red every Friday at 10:45 pm, EST.

PROGRAMS from Hollywood

• • • By BETTY

YOUR Hollywood Parade, a new 52-week series of full hour musical and dramatic broadcasts designed to provide a panoramic radio view of activities in the movie capital, has been launched over the NBC-Red Network on Wednesdays. This program, replacing the Hit Parade, is sponsored by the American Tobacco Company and produced by Warner Brothers Pictures, Inc., with the addition of 15 minutes to round out a full hour.

With Dick Powell as master of ceremonies and central star, and all the talent resources of Warner Bros. Pictures behind it, the new show includes previews of Warner pictures and features guest stars of prominence in all fields.

Rosemary Lane is also starred in the new series. All other Warner screen stars will be heard in Your Hollywood Parade, and directors under contract to Warner will be available in the production of dramatic sketches and picture previews to be heard in the series.

O'Keefe Back

Walter O'Keefe, NBC comedian, who announced lugubriously on Town Hall Tonight that Fred Allen would succeed him on that program "just in time for me to be listed as Number One on the Unemployment Census," isn't worrying any more. He's got a permanent job, as Walter has joined the Hollywood Mardi Gras series over the NBC-Red and co-stars with Lanny Ross and Charles Butterworth.

The new contract for O'Keefe came as a reward for his outstanding success while pinch-hitting for Fred Allen.

In joining the Tuesday night pro-

gram, Walter will be reunited with an old friend and classmate, Charles "Dead-pan" Butterworth, with whom he attended Notre Dame. Walter's addition to the Mardi Gras will not cause any changes in the permanent cast that includes Jane Rhodes, rhythm singer, and Raymond Paige with his orchestra and chorus.

Walter calls Hartford, Conn. his home. He went from there to Notre Dame, where he and Butterworth discussed ambitions for the theater, then turned to newspaper work. Shortly thereafter he suffered an attack of infantile paralysis and during the long months of recuperation he turned his hand to writing comedy lyrics and sketches. Upon recovering he headed for Broadway and broke in through night club work, with Texas Guinan at Barney Galant's.

More Hollywood

Unusual human interest stories about motion picture stars and exclusive news stories of the film capital are among the "Hollywood Screenscoops" by George McCall, broadcast over the nationwide Columbia network each Tuesday and Thursday from 7:15 to 7:30 pm, EST.

George McCall brings to his radio audience a variety of experience in the theater, newspaper and motion picture fields that lends color to his reporting. In Hollywood he became famous through his "Roamin' Round Hollywood" column. Some of his other ventures included acting as publicity head for a motion picture company; his production of "The Last Moment", the picture which was awarded the French Academy Cinema Award in 1927; his appointment by the Canadian Government

to produce a picture of the opening of the Hudson Bay shipping route as a short cut to Europe; and for writing several feature stories and interviews for newspapers and magazines.

Mental Telepathy

Presenting a unique series of tests and experiments in mental telepathy under the supervision of several of America's leading university scientists, the Zenith Foundation presents its weekly broadcasts over a nationwide CBS chain at 10 pm EST on Sundays.

Conceived and founded by Commander E. F. McDonald, Jr., president of the Zenith Radio Corporation, under whose sponsorship the series is offered, the programs are designed to determine whether telepathy as an extra-sensory power exists and if so, to learn what such powers of the human mind are, how common they may be, to what extent they may be cultivated, and how they function.

The tests consist of the selection of various objects, designs, colors and other things quickly identifiable by the mind, by a mechanical device, the action of which is unpredictable. Ten especially selected telepathic senders then concentrate on the machine's selection and attempt to project the thought to the listening audience. Senders are isolated in a room away from the broadcasting studio, and they alone know the selections the machine has made, which are revealed only after several days have elapsed.

On the Mutual Bandwagon

Morton Gould, Mutual's youthful orchestra leader who has won a name for himself by his smartly sophisticated arrangements, is heard over Mutual from coast-to-coast on Mondays from 8 to 8:30 pm EST. Jack Arthur is the soloist on this show. Two popular Mutual features formerly heard on Fridays are



The NBC has announced immediate construction of one of the world's greatest studio buildings in the heart of Hollywood. The architect's sketch shows an ultra modern building, patterned after the motion picture unit plan, to house eight large studios and executive offices. This building will replace modernistic studios built only two years ago.

now broadcast on Saturdays. Pat Barnes and his Barnstormers with Paul Roberts, baritone, come to Mutual microphones from 8 to 8:30 pm on Saturdays. Olga Baclanova's Continental Revue with Raoul Nadeau and the Chorus, comes to the stage of the Mutual Playhouse from 8:30 to 9 pm on Saturdays. Anson Weeks and his ever popular dance orchestra have returned to the Aragon Ballroom and the Mutual Network on Saturdays, succeeding Freddy Martin. With Weeks are vocalists Frankie Saputo, Margie Dee and a newcomer, Jack Wells.

Bits about NBC broadcasters: As might be expected, Edward MacHugh, the Gospel Singer, collects hymn books. He has a library of 2,000. Helen Jepson finds relaxation in the kitchen, specializing in fried frogs' legs which dinner guests pronounce a culinary masterpiece. Smilin' Ed McConnell made his professional debut as a trap drummer at the age of nine.

Only the old timers in radio remember that Milton Cross sang as well as announced over NBC. That he is still heard singing IS news. As announcer for Irene Wicker's Singing Lady programs over the Blue Network he joins her in singing The Song of the Week, a tune chosen by Miss Wicker for her unseen audience to learn and sing.

Inter-Club Plan for 1938

● ● ● By Robert H. Weaver

HAVING recently been selected to take charge of the Inter Club Co-operation Plan for the 1937-38 season, I cannot help but feel that I should present my views in regard to the Plan and the good which it can accomplish.

As Clearing House Manager this season, it is my hope to go a little beyond that which has been done in the past.

First of all, I hope by some method to reach an agreement with the all-night broadcasters, whereby they will agree to remain silent for at least one period each month, during which time the various clubs will be able to contact stations operating on the same or adjacent frequencies. In return, I feel that it would be no more than fair for the clubs to refrain from scheduling special programs from other stations on these during the balance of the month. Thus the all-night broadcaster would be assured of a clear channel except when he was silent.

Letters have been sent to each of the all-night stations and a few replies have so far been received. WEXL advises that it broadcasts from 8 a. m. to 4 a. m., EST, daily except Sunday, and also signs off at 2 a. m., EST, during the week of the frequency checks. WNEW says that it is off the air during the following periods: Sunday from 12:30 to 6:30 p. m. and 9 p. m. to 7 a. m. Monday; 2 to 5 and 8 to 10 p. m. on Mondays; and from 4 to 5 a. m. the second Wednesday of each month.

KGFJ observes silent periods during the week of the frequency checks as follows: Monday—5:10 to 6:30 a. m., EST; Tuesday—6:40 to 7 a. m.; Wednesday—5:50 to 6:50 a. m.; Thursday—5:10 to 6:50 a. m.; Friday—5:10 to 6:50 a. m.; and Sat-



Alistair Cooke, brilliant young critic, journalist and radio commentator, is heard over the NBC-Red Network. His talks are light and entertaining reflections of happenings in the worlds of politics, books, theater and the passing scene. Until recently, Mr. Cooke was film critic of the British Broadcasting Corporation.

urday—5:10 to 5:50. WIL advises that it is silent after 2 a. m., EST, on weekday mornings from the 8th to 14th of each month. WABY has no all-night program from the 8th to the 14th.

I have written the Bureau of Standards at Washington to learn about plans for possible test programs from foreign stations, such as were broadcast during the past two winters. It was my intention to aid these tests by seeing that affected channels were kept clear to avoid interference by dedicatory programs.

In reply, the Bureau advises that no European stations will be asked to participate in any tests this winter, but that LRI, Buenos Aires, has been requested to broadcast a series of programs. Just as soon as dates

are confirmed, we will be advised accordingly.

I am further endeavoring to get a complete list of regular test periods from the various stations, that is, any periods which take place outside of the regular frequency checks during the second week of each month. Whenever I am advised of a test, I will attempt to keep the channel clear of other special programs.

It is my hope to be able to conduct this Clearing House on a strictly impartial basis. I will welcome ideas from readers on how the Plan may be bettered, and ask that all suggestions be sent direct to my home at 603 W. Market St., York, Pa.

Station News

KTSM, El Paso, Texas, will become a member of the NBC-Pacific supplementary group, available to either the Red or Blue Network. Lines are now being constructed to KTSM from Albuquerque, N. Mex., and NBC service will start as soon as these are completed, about April 1, 1938.

The two new Canadian stations, CBM and CBF, Montreal, have joined the NBC. CBM (formerly CRCM) carries the Red Network programs in English, and CBF carries the programs of either the Red or Blue Network with French announcements. CFCF, NBC affiliate since 1931, broadcasts Blue Network programs in English.

All the Cincinnati NBC stations are now available to either the Red or Blue Networks. WCKY at Covington, Ky. was formerly a Blue affiliate and WSAI was on the Red Chain. WLW continues as optional to either network.

KFBK Sacramento and KMJ, Fresno, both owned by the McClatchey Broadcasting Company, have been granted special experi-

mental authority to operate their regular broadcast transmitters for experimental facsimile signals from 12 midnight to 6:00 a. m. PST on their regularly assigned frequencies.

Station CHAB, Moose Jaw, which broadcasts many CBC programs, is being re-equipped from microphones to antenna. Sparing no expense in obtaining the last word in technical perfection, not one piece of its present equipment will remain in general use. H. Carson Buchanan, a pioneer broadcaster of Western Canada, is station manager.

CFAR, the new station at Flin Flon, Man., on 1370 kcs, is owned by the Arctic Radio Corp., 120 Main St.

CFRB, Toronto, 690 kcs, has moved from Bloor St. to 622 Fleet St.

The studios of CHLT, 1210 kcs, are located at 3 Marquette St., Sherbrooke, P. Q.

Studios of CKBI, 1210 kcs, have been moved from the Canada Bldg. to the Sanderson Bldg., Prince Albert, Sask.

New Aerials for Millis

Westinghouse is erecting two modern directional antennas for use by W1XK at Millis, Mass. One aerial will be beamed toward South America and the other towards Europe. The directional aerial, together with an increase in power, will strengthen the signal ten times its present output, according to Walter Evans, manager of the radio division of Westinghouse.

VE9HS Identified

Mr. R. D. Cahoon of the Engineering Division, Canadian Broadcasting Corporation, Keefer Bldg., Montreal, P. Q., kindly forwards us information concerning shortwave station VE9HS. His letter follows:

"I note in your October Radio In-

dex in the section 'Shortwaves in Review', a request for information concerning Canadian shortwave station VE9HS. This station was operated during the summer on board the R. M. S. Nascopie under a portable license, doing experimental work on shortwave 'phone transmission from the Canadian Arctic to Ottawa. This station had an output power of 200-watts 'phone and operated on the following frequencies: 15190, 11705, 9820 kcs, as well as two lower frequencies for local testing.

"These tests were carried out with view to doing a series of broadcasts to be rebroadcast on the Canadian Broadcasting Corporation's network."

Amateur

CALLS HEARD

The names and addresses of persons reporting stations shown in this list are indicated by small letters following the call signs. Key to the small letters is given at the end of the column.

Canadian and United States calls heard are listed here only when reported by listeners not resident in North America. Cuban calls are

not listed when heard by listeners in United States or Cuba.

C-E
CN8MB (l); EA9AH (bfl).

F
F3-: HM (l); NF (l); OO (l); F8-: DC (l); JI (l); QD (l); RR (g).

G
G2AV (f); G2PU (l); G5RV (l); G5ZJ (l); G6-: BW (gl); DL (l); DT (l); GF (l); LK (gl); WP (l); XR (f); GSSE (l).

H
HC1-: FG (f); JB (f); PM (f); HH-: 2B (f); 2X (f); 5PA (f); HI-: 3N (dfl); 5X (l); 7A (l); 7G (l); 7I (f); HK-: 1EP (k); 1MV (f); 2JA (f); 3JA (fk); HP1A (f); HR5C (l).

K
KA1-: BH (km); HS (k); ME (kl); K4-: EJE (l); SA (g); K6-: BAZ (fk); BNR (fk); CMC (f); GQF (f); ICL (g); JHD (l); JLV (f); KMB (fk); LCV (g); MZK (f); NTV (g); NZQ (fk); OJI (f); OQE (fk).

L-N
LA1G (l); LU-: 1HI (fk); 4BH (f); 5C (l); 6AF (f); 9BV (f); NY2AE (fk).

O
OA4-: AE (f); AI (g); AL (fg); C (f); ON4VK (f); OQ5AA (f); OX2QY (del).

P
PAOZB (g); PK-: 1GL (l); 1MX (a); 2WR (l); 6CI (a); PY2AK (f).

S-T
SUISG (f); TI-: 1AF (f); 2AV (fk); 2DC (g); 2FG (l); 2FJ (l); 2KP (f); 2LR (f); 2OFR (f); 2RC (f); 3EA (l).

V
VK2-: ADE (f); ADT (l); AFQ (f); AGE (l); AP (f); BQ (fm); CP (f); DJ (l); HF (f); HS (l); OU (l); QR (f); ZC (l); VK3-: AL (f); AO (l); WA (l); VK4JU (f); VK4VD (f); VK5BP (l); VO-: 2N (f); 2Z (l); 6D (f); 6L (g); VP3BG (l); VP3THE (df); VPTNC (l); VP9R (ghl); VU-: 2CQ (c); 2JN (c); 7FY (c).

X
XE1-: BC (f); BX (m); CV (g); DT (f); GF (g); GK (f); GS (g); LK (fk); Y (fk); XE2-: AF (g); FC (fg); K (k); XE3AH (g); XE3AR (f).

Y
YV4-: AB (l); AF (l); AO (g); AX (l); YV5-: AA (f); ABA (l); ABF (fglm); ABG (l); ABJ (l); ABS (l); AD (f); AE (kl); AM (f); AS (f).

Z
ZS3E; ZS5M; ZT5H; ZT5S; ZT6AL; ZT6AN; ZU6AF; ZU6AJ; ZU6P (All heard by f).

The Reporters

- Gail Beyer, 3226 Sunnyside Ave., Chicago, Ill. (Hallcrafters S8A).
- Carl and Anne Eder, Willmar, Minn.
- Raphael Geller, 1652 Radcliff Ave., Bronx, N. Y.
- Gilbert Harris, 60 N. Holden St., N. Adams, Mass.
- Edward Hughes, 1212 Castlewood Ave., Louisville, Ky.
- Merton T. Meade, 819 Wyandotte St., Kansas City, Mo. (Stromberg-Carlson Converter).
- Martin Olthoff, 212 N. 16th, Independence, Kans. (REM69).
- Benjamin Peet, 352 Pleasant Ave., New York, N. Y.
- David Schaller, Biggs Hospital, Ithaca, N. Y.
- Jack Slinger, 1451 Lincoln Ave., Lakewood, Ohio.
- Dale Smith, Route 3, Box 536, Eugene, Ore.
- Al Steinmetz, 125 W. 27th St., Bayonne, N. J. (RCA-ACR 136).
- Hadley Wilcox, 623 W. 40th Place, Los Angeles, Calif. (Tiffany Tone).
- William Wood, 817 1/2 Lake St., Oak Park, Ill. (Zenith 10-S-160).

Sidelights on Linton Wells, author, adventurer and NBC commentator: Has circumnavigated the globe nine times and visited all but five countries of the world... Twelve foreign nations have honored him with decorations and three countries have given him commissions in their armies... Has written four books including the current best seller, *Blood On the Moon*.

Herbert J. Sadler, organist on the CBC Sunday night feature, "The Choristers", is already well-known to Canadian radio audiences as the organist of "The Vesper Hour", a national network programme for over three years. He is a charter member of the Winnipeg Chapter of the Canadian College of Organists, and was the first Winnipeg organist to obtain the associate degree of the College.

Pitcairn Isle

(Continued from Page 12)

meat and other necessities from steamers plying in the Australian trade lanes.

Young has made it his task to arrange with shipmasters to stop at some near distance from the island. He talks with vessels within a 400 mile radius of the tiny isle and has, on occasion, received messages from vessels 1000 miles away. Radiomen regard this as a remarkable feat considering the age of his equipment.

Pitcairn Island is known to radio operators who have heard of it as an amateur's paradise. The nearest automobile interference is 1,000 miles away, and except for PITC's lone storage battery, electricity is unknown on the island. Other interference is at a minimum. PITC is housed in a tiny, iron roofed shack next to Young's home and maintains a watch of more than 10 hours daily.



Broadcasting House, London. This new building houses the studios and offices of the British Broadcasting Corp. Programs originating in this building are heard throughout the entire world through the Empire Shortwave Service.

RADIO AMATEUR CALL BOOK

LATEST EDITION

Lists over 40,000 amateurs in every country in the world, as well as complete and accurate lists of all high frequency commercial and broadcasting stations. Every listener interested in amateur stations should have one. 292 pages.

We pay the postage,



\$1.25

TIME CONVERTER

The RADEX Map of the World with Time Converting Dial is the most useful accessory any radio fan could have around. Just a twirl of the dial shows the correct time at any location in the world. No calculation is necessary; the dial does all the work.

You Can't Get Along
Without It.

The price is only

25c

(26c in Ohio)

Ultra-High Frequencies Allocated

AS A RESULT of experimentation during the past few years, the Federal Communications Commission has decided to provide allocations of frequencies to various classes of service in the newly developed portion of the radio spectrum from 25,000 kilocycles to 300,000 kilocycles. Heretofore the rules have been confined to that portion of the radio band from 10 kcs. to 25,000 kcs. only.

The new allocation is covered in Orders No. 18 and No. 19. Order No. 18 concerns allocation from 10 to 30,000 kilocycles. No changes have been made in this part of the spectrum, except that the band from 25,600 to 26,600 kcs. has been set aside for broadcasting.

Order No. 19 covers the allocation of frequencies from 30,000 to 300,000 kcs. All the frequencies in this range, except the amateur band between 56,000 and 60,000 kcs., are assigned to specific services for the first time. All the outstanding licenses in this frequency range, except amateur and point-to-point communication in Hawaii, are for experimental services.

Seven channels between 44,000 and 108,000 kcs. are made available for the assignment of television stations. Television broadcast is also assigned twelve channels between 156,000 and 300,000 kcs. Each television channel is 6 megacycles (6000 kcs.) wide, and provides for the picture broadcast as well as the accompanying synchronized sound.

In the band 41,020 to 43,980 kcs., 75 channels are made available for assignment to aural broadcast stations.

Sixteen channels for relay broadcast stations are provided in the band from 30,830 to 39,820 kcs. These channels will enable a continuance

of the existing stations, as well as provide additional facilities for the growth of relay broadcast service. This number of channels and limited interference range is such that it will be possible to license every regular broadcast station for two relay stations in this band, the frequencies, of course, being available only on a shared basis.

Police Service

The allocation of frequencies between 30,000 and 40,000 kcs. provides 29 frequencies for assignment to police service. Of these frequencies, 25 will be available to municipal and county government and four to state police agencies. The frequencies will be assigned on a shared basis.

In this same band (30,000-40,000), four frequencies have been set aside primarily for use in instructing student airplane pilots during initial solo flights.

Other services which have been assigned frequencies on these ultra-high bands are the Forestry Service, Mobile Press Service, Geophysical and Motion Picture Service, Coastal and Ship Harbor, Special Emergency, Marine Fire and other services.

Sidelights on Ted Fio-Rito, music conductor of the new Jack Haley show on NBC: Hobby is medicine and he reads everything on the subject he can lay his hands on... Hob-nobs with physicians and surgeons and occasionally crashes an operation... Is fond of a pet canary he calls "Mr. Peebles"... And proud of a night club piano painted white and autographed by more than 2,000 celebrities with whom he has worked.

The Frequency Checks

In order to include many of the new stations which have recently come on the air, the engineers of the Federal Communications Commission have revised their list of monthly frequency check broadcasts. The latest schedule, with times given in Eastern Standard, follows:

The Second Monday			The Second Tuesday		
2:00-2:20	WLNH 1310	Laconia, N. H.	2:00-2:20	WBAX 1210	Wilkes Barre, Pa.
2:10-2:30	WJBO 1420	Baton Rouge, La.	2:10-2:20	WDAS 1370	Philadelphia, Pa.
2:20-2:40	WBRB 1210	Red Bank, N. J.	2:20-2:40	WBBL 1210	Richmond, Va.
2:20-2:40	WHBB 1500	Selma, Ala.	2:30-2:50	WFBG 1310	Altoona, Pa.
2:30-2:50	WMA5 1420	Springfield, Mass.	2:40-3:00	WMBG 1210	Richmond, Va.
2:40-3:00	WIOD 610	Miami, Fla.	2:50-3:10	WEER 1310	Buffalo, N. Y.
2:50-3:10	WWRL 1500	Woodside, N. Y.	3:00-3:20	KDAL 1500	Duluth, Minn.
3:00-3:20	WJBW 1200	New Orleans, La.	3:10-3:30	WLVA 1200	Lynchburg, Va.
3:10-3:30	WOKO 1430	Albany, N. Y.	3:20-3:40	KPAC 1260	Port Arthur, Tex.
3:20-3:40	WMBR 1370	Jacksonville, Fla.	3:30-3:50	WBTM 1370	Danville, Va.
3:30-3:50	WCAV 1200	Burlington, Vt.		WKRC 550	Cincinnati, Ohio
3:40-4:00	WOPI 1500	Bristol, Tenn.		WHCC 1430	Rochester, N. Y.
4:00-4:20	WMBO 1310	Auburn, N. Y.		WNAD 1010	Norman, Okla.
4:10-4:30	WMSD 1420	Sheffield, Ala.		WMBC 1420	Detroit, Mich.
4:20-4:40	WOC 1370	Davenport, Ia.		WRAK 1370	Williamsport, Pa.
4:30-4:50	WCAD 1220	Canton, N. Y.		KFVS 1210	Cape Girardeau, Mo.
4:40-5:00	WRGM 1210	Grenada, Miss.		WJAC 1310	Johnstown, Pa.
4:50-5:10	KWLC 1270	Decorah, Ia.		WTAW 1120	College Station, Tex.
5:00-5:20	WMBQ 1500	Brooklyn, N. Y.		WBNS 1430	Columbus, Ohio
5:10-5:30	WNBK 1430	Memphis, Tenn.		WBNY 1370	Buffalo, N. Y.
5:20-5:40	KFPW 1210	Fort Smith, Ark.		WCOL 1210	Columbus, Ohio
5:30-5:50	WDBO 580	Orlando, Fla.		WBRE 1310	Wilkes Barre, Pa.
5:40-6:00	WMFF 1310	Plattsburg, N. Y.		KLPM 1240	Minot, N. Dak.
5:50-6:10	KABC 1420	San Antonio, Tex.		WPAR 1420	Parkersburg, W. Va.
6:00-6:20	WQDM 1390	St. Albans, Vt.		WPAY 1370	Portsmouth, Ohio
	W8MB 1320	New Orleans, La.		KRMD 1310	Shreveport, La.
	WFAS 1210	White Plains, N. Y.		WOMT 1210	Manitowoc, Wis.
	WHEF 1500	Kosciusko, Miss.		WSYR 570	Syracuse, N. Y.
	KFDM 560	Beaumont, Tex.		KGCA 1270	Decorah, Ia.
	KLS 1280	Oakland, Calif.		WCLE 610	Cleveland, Ohio
	WAGF 1370	Dothan, Ala.		WNBK 1500	Binghamton, N. Y.
	WCAP 1280	Asbury Park, N. J.		KTEM 1370	Tempe, Tex.
	KCRJ 1310	Jerome, Ariz.		KGBU 900	Ketchikan, Alaska
	KMLB 1200	Monroe, La.		WGH 1310	Newport News, Va.
	KYOS 1040	Merced, Calif.		KGVO 1260	Missoula, Mont.
	KLUF 1370	Galveston, Tex.		KRLH 1420	Midland, Tex.
	KGDM 1100	Stockton, Calif.		WHK 1390	Cleveland, Ohio
	WDEV 550	Waterbury, Vt.		WWSW 1500	Pittsburgh, Pa.
	WDNC 1500	Durham, N. C.		KGCC 1450	Wolf Point, Mont.
	KROC 1310	Rochester, Minn.		KRMC 1370	Jamestown, N. D.
	KGAR 1370	Tucson, Ariz.		WSAY 1210	Rochester, N. Y.
	KALB 1210	Alexandria, La.		WSPD 1340	Toledo, Ohio
	KOVC 1500	Valley City, N. D.		KAST 1370	Astoria, Ore.
	KROY 1210	Sacramento, Calif.		KNET 1420	Palestine, Tex.
	WBNO 1200	New Orleans, La.		WAVE 940	Louisville, Ky.
	KREB 1420	Price, Utah		KCMO 1370	Kansas City, Mo.
	KRE 1370	Berkeley, Calif.		KFJI 1210	Klamath Falls, Ore.
	WLAK 1310	Lakeland, Fla.		WXYZ 1240	Detroit, Mich.
	KBST 1500	Big Spring, Tex.		KIDW 1420	Lamar, Colo.
	KTEM 1450	Eureka, Calif.		KPQ 1500	Wenatchee, Wash.
	WFOY 1210	St. Augustine, Fla.		WGAR 1450	Cleveland, Ohio
	KDON 1210	Monterey, Calif.		KFIO 1120	Spokane, Wash.
	WMIN 1370	St. Paul, Minn.		KQV 1580	Pittsburgh, Pa.
	WTAL 1310	Tallahassee, Fla.		WCAT 1200	Rapid City, S. Dak.
	KTRH 1290	Houston, Texas		KLAH 1210	Carlsbad, N. Mex.
	KUMA 1420	Yuma, Ariz.		KORE 1420	Eugene, Ore.
	WAIR 1250	Winston-Salem, N. C.		KOOS 1200	Marshfield, Ore.
	KFGQ 1370	Boone, Ia.		WBLB 900	Stevens Point, Wis.
	KWG 1200	Stockton, Calif.			
	WGCM 1210	Gulfport, Miss.			
	KGMB 1320	Honolulu, T. H.			
	KGLD 1210	Mason City, Ia.			
	KVCV 1200	Redding, Calif.			
	KADA 1200	Ada, Okla.			
The Second Wednesday			The Second Wednesday		
2:00-2:20	WMFJ 1420	Daytona Beach, Fla.	2:00-2:20	WMFJ 1420	Daytona Beach, Fla.
2:10-2:30	WAIM 1200	Anderson, S. C.	2:10-2:30	WAIM 1200	Anderson, S. C.
2:20-2:40	KVOL 1310	Lafayette, La.	2:20-2:40	KVOL 1310	Lafayette, La.
2:30-2:50	WBHQ 1370	Memphis, Tenn.	2:30-2:50	WBHQ 1370	Memphis, Tenn.
2:40-3:00	WKAQ 1240	San Juan, P. R.	2:40-3:00	WKAQ 1240	San Juan, P. R.
2:50-3:10	WSJS 1310	Winston-Salem, N. C.	2:50-3:10	WSJS 1310	Winston-Salem, N. C.
3:00-3:20	WCPO 1200	Cincinnati, Ohio	3:00-3:20	WCPO 1200	Cincinnati, Ohio
3:10-3:30	WMFD 1370	Wilmington, N. C.	3:10-3:30	WMFD 1370	Wilmington, N. C.
3:20-3:40	KFIZ 1420	Fond du Lac, Wis.	3:20-3:40	KFIZ 1420	Fond du Lac, Wis.
3:30-3:50	WPAX 1210	Thomasville, Ga.	3:30-3:50	WPAX 1210	Thomasville, Ga.
3:40-4:00	KOKO 1370	La Junta, Colo.	3:40-4:00	KOKO 1370	La Junta, Colo.
	WCLO 1200	Janesville, Wis.		WCLO 1200	Janesville, Wis.
	WRDW 1500	Augusta, Ga.		WRDW 1500	Augusta, Ga.
	WQCB 1360	Vicksburg, Miss.		WQCB 1360	Vicksburg, Miss.
	KAND 1310	Corsicana, Texas		KAND 1310	Corsicana, Texas
	KPLC 1500	Lake Charles, La.		KPLC 1500	Lake Charles, La.
	WHBC 1200	Canton, Ohio		WHBC 1200	Canton, Ohio

3:50-4:10	KARK	890	Little Rock, Ark.
	WGPG	1420	Albany, Ga.
4:00-4:20	KFJZ	1370	Fort Worth, Tex.
	WHBU	1210	Anderson, Ind.
	WJNO	1200	W. Palm Beach, Fla.
4:10-4:30	WBEO	1310	Marquette, Mich.
	WCOC	880	Meridian, Miss.
	WLB	1250	Minneapolis, Minn.
4:20-4:40	KSO	1430	Des Moines, Ia.
	WKEU	1500	Griffin, Ga.
	WOSU	570	Columbus, Ohio
4:30-4:50	KALB	1210	Alexandria, La.
	WEXL	1310	Royal Oak, Mich.
	WHLB	1370	Virgilia, Minn.
4:40-5:00	KPLT	1500	Paris, Tex.
	WJMS	1240	Ironwood, Mich.
	WJRD	1200	Tuscaloosa, Ala.
4:50-5:10	KFXR	1310	Oklahoma City, Okla.
	WBIG	1410	Greensboro, N. C.
	WTAX	1220	Springfield, Ill.
5:00-5:20	KFJB	1200	Marshalltown, Ia.
	WEOA	1370	Evansville, Ind.
5:10-5:30	KPDN	1310	Pampa, Tex.
	WDZ	1020	Tuscola, Ill.
5:20-5:40	KELD	1370	Eldorado, Ark.
	WAYX	1200	Waycross, Ga.
	WKBN	570	Youngstown, Ohio
5:30-5:50	KDLR	1210	Devils Lake, N. D.
	WADC	1320	Akron, Ohio
5:40-6:00	KRBC	1420	Ablene, Tex.
	WSAU	1370	Wausau, Wis.
5:50-6:10	KFPL	1310	Dublin, Texas
	WFAM	1200	South Bend, Ind.
6:00-6:20	KLCN	1290	Blytheville, Ark.
	WELL	1420	Battle Creek, Mich.
6:10-6:30	KGBX	1230	Springfield, Mo.
	WMPC	1200	Lapeer, Mich.
6:20-6:40	KABR	1420	Aberdeen, S. D.
6:30-6:50	KFKJ	1200	Grand Junction, Colo.

The Second Thursday

2:00-2:20	WSVS	1370	Buffalo, N. Y.
2:10-2:30	WKOK	1210	Sunbury, Pa.
2:20-2:40	WRAW	1310	Reading, Pa.
2:30-2:50	WJTN	1210	Jamestown, N. Y.
2:40-3:00	WTEL	1310	Philadelphia, Pa.
2:50-3:10	WHIS	1410	Bluefield, W. Va.
3:00-3:20	WQAN	880	Seranton, Pa.
3:10-3:30	WLEU	1420	Erie, Pa.
3:20-3:40	WBLK	1370	Clarksburg, W. Va.
3:30-3:50	WSAJ	1310	Grove City, Pa.
3:40-4:00	WJBC	1200	Bloomington, Ill.
3:50-4:10	KGKL	1370	San Angelo, Texas
	WHAT	1310	Philadelphia, Pa.
	WLAP	1420	Lexington, Ky.
4:00-4:20	KRIS	1320	Corpus Christi, Tex.
	WHDL	1400	Olean, N. Y.
4:10-4:30	KAWM	1500	Gallup, N. M.
	WJIM	1210	Lansing, Mich.
	WMBS	1420	Uniontown, Pa.
4:20-4:40	WBZZ	1200	Ponca City, Okla.
	WBOW	1310	Terre Haute, Ind.
	WRTD	1500	Richmond, Va.
4:30-4:50	WCBS	1420	Springfield, Ill.
	WPRA	1370	Mayaguez, P. R.
4:40-5:00	KRRV	1310	Sherman, Tex.
	WTMV	1500	East St. Louis, Ill.
4:50-5:10	KGGM	1230	Albuquerque, N. M.
	WHBF	1210	Rock Island, Ill.
5:00-5:20	KERN	1370	Bakersfield, Calif.
	KGKO	570	Wichita Falls, Tex.
	WTRC	1310	Elkhart, Ind.
5:10-5:30	KGFI	1500	Brownsville, Tex.
	KTRB	740	Modesto, Calif.
	WWAE	1200	Hammond, Ind.
5:20-5:40	KFYO	1310	Lubbock, Tex.
	KJBS	1070	San Francisco, Calif.
	WIBM	1370	Jackson, Mich.
5:30-5:50	KGHI	1200	Little Rock, Ark.
	KXO	1500	El Centro, Calif.
	WALR	1210	Zanesville, Ohio
5:40-6:00	KGHF	1320	Pueblo, Colo.
	KHLS	1260	Chico, Calif.

5:50-6:10	WDWS	1370	Champaign, Ill.
	KGKB	1500	Tyler, Texas
	KSUN	1200	Lowell, Ariz.
	WBGM	1410	Bay City, Mich.
6:00-6:20	KGFL	1370	Roswell, N. M.
6:10-6:30	KGIW	1420	Alamosa, Colo.
	KHBC	1400	Hilo, T. H.
6:20-6:40	KVEC	1200	San Luis Obispo, Calif.
	WGL	1370	Fort Wayne, Ind.
6:30-6:50	KSUB	1310	Cedar City, Utah

The Second Friday

2:00-2:20	WGNY	1210	Newburgh, N. Y.
2:10-2:30	WCNW	1500	Brooklyn, N. Y.
2:20-2:40	WGBB	1210	Freeport, N. Y.
2:30-2:50	WABY	1370	Albany, N. Y.
2:50-3:10	WSBY	1500	Rutland, Vt.
3:00-3:20	WABI	1200	Bangor, Me.
3:20-3:40	WBX	1200	Utica, N. Y.
3:30-3:50	KASA	1210	Elk City, Okla.
	WAGM	1420	Presque Isle, Me.
3:40-4:00	KWOS	1310	Jefferson City, Mo.
	WNBZ	1290	Saranac Lake, N. Y.
3:50-4:10	WJBK	1500	Detroit, Mich.
	WMBH	1420	Joplin, Mo.
4:00-4:20	KIUL	1210	Garden City, Kans.
	WTHT	1200	Hartford, Conn.
4:10-4:30	KICA	1370	Clovis, N. M.
	WCAZ	1070	Carthage, Ill.
	WNLC	1500	New London, Conn.
4:20-4:40	WMFG	1210	Hibbing, Minn.
4:30-4:50	KIUP	1370	Durango, Colo.
	WPAD	1420	Paducah, Ky.
4:40-5:00	KNOW	1500	Austin, Tex.
	WEMP	1310	Milwaukee, Wis.
4:50-5:10	WEW	760	St. Louis, Mo.
	WGRC	1370	New Albany, Ind.
5:00-5:20	KIUN	1420	Pecos, Tex.
	WEBQ	1210	Harrisburg, Ill.
5:10-5:30	KGK	1200	Sterling, Colo.
	WCMJ	1310	Ashland, Ky.
5:20-5:40	KMAC	1370	San Antonio, Tex.
	WJW	1210	Akron, Ohio
5:30-5:50	WIL	1200	St. Louis, Mo.
	WLBC	1310	Muncie, Ind.
5:40-6:00	KTKO	1370	Oklahoma City, Okla.
	WBBB	1500	E. Dubuque, Ill.
5:50-6:10	KANS	1210	Wichita, Kans.
	WHBY	1200	Green Bay, Wis.
6:00-6:20	WACO	1420	Waco, Tex.
6:10-6:30	WJBL	1200	Decatur, Ill.
6:20-6:40	KRQA	1310	Santa Fe, N. M.
	WHDF	1370	Calumet, Mich.
6:30-6:50	KGDE	1200	Fergus Falls, Minn.

The Second Saturday

2:00-2:20	WMFR	1200	High Point, N. C.
2:10-2:30	WMFO	1370	Decatur, Ala.
2:20-2:40	WSOC	1210	Charlotte, N. C.
2:30-2:50	WTJS	1310	Jackson, Tenn.
2:40-3:00	WSIX	1210	Nashville, Tenn.
2:50-3:10	WROL	1310	Knoxville, Tenn.
3:00-3:20	KOTN	1500	Pine Bluff, Ark.
	WBLY	1210	Lima, Ohio
	WQAM	560	Miami, Fla.
3:10-3:30	KWYO	1370	Sheridan, Wyo.
	WPRP	1420	Ponce, P. R.
3:20-3:40	EGCU	1240	Mandan, N. Dak.
	WIBU	1210	Poynette, Wis.
	WNEL	1290	San Juan, P. R.
3:30-3:50	KXYZ	1440	Houston, Tex.
	WAML	1310	Laurel, Miss.
	WKBV	1500	Richmond, Ind.
3:40-4:00	KRGV	1260	Weslaco, Tex.
	WFOR	1370	Hattiesburg, Miss.
3:50-4:10	KNEL	1500	Brady, Tex.
	WEDD	1420	Rocky Mount, N. C.
	WGBF	630	Evansville, Ind.
4:00-4:20	KVSO	1210	Ardmore, Okla.
	WFDF	1310	Flint, Mich.
	WFTC	1200	Kinston, N. C.

4:10-4:30	KFQD	780	Anchorage, Alaska
	KONO	1370	San Antonio, Tex.
	WKBZ	1500	Muskegon, Mich.
4:20-4:40	KRLC	1390	Lewiston, Idaho
	KTSM	1310	El Paso, Tex.
	WBHP	1200	Huntsville, Ala.
4:30-4:50	KOCA	1210	Kilgore, Tex.
	KUIJ	1370	Walla Walla, Wash.
4:40-5:00	KCMC	1420	Texarkana, Texas
	KRNR	1500	Roseburg, Ore.
	WGTM	1310	Wilson, N. C.
4:50-5:10	KEEN	1370	Seattle, Wash.
	KWTN	1210	Watertown, S. Dak.
5:00-5:20	KGFF	1420	Shawnee, Okla.
	KIT	1310	Yakima, Wash.
5:10-5:30	KBTM	1200	Jonesboro, Ark.
	KRKO	1370	Everett, Wash.
5:20-5:40	KFRQ	1370	Longview, Tex.
	KGEZ	1310	Kalspel, Mont.
5:30-5:50	KBIX	1500	Muskogee, Okla.
	KFXD	1200	Nampa, Idaho
5:40-6:00	KFJM	1410	Grand Forks, N. D.
	KKRO	1310	Aberdeen, Wash.
5:50-6:10	KGY	1210	Olympia, Wash.
6:00-6:20	KINY	1310	Juneau, Alaska
6:10-6:30	KMED	1410	Medford, Ore.
6:20-6:40	KVOS	1200	Bellingham, Wash.

ZNS, Nassau

A letter from the Superintendent of Telegraphs gives complete information concerning the new broadcasting station in Nassau, Bahamas.

Station ZNS transmits on 540 kcs with 400 watts power, on two daily schedules. The first transmission is from 1:30 to 1:45 pm, EST, and the second from 8:30 to 9:30 pm, EST. Programs from the shortwave station at Daventry are sometimes picked up and relayed at 8:00 pm.

Reports are requested and will be acknowledged. The address is Superintendent of Telegraphs, Box 48, Nassau N. P., Bahamas.

Always Prepay Postage

When writing to overseas stations it is customary to enclose return postage in the form of International Reply coupons. These can be procured from any Post Office for nine cents each, and can be exchanged in any country in the Universal Postal Union for postage stamps on a first class letter to this country. Contrary to some published reports, *all countries* are members of the



Sheilah Graham, London-born actress, authoress and columnist. Miss Graham studied to be an actress at the Royal Academy of Dramatic Arts, London, and did her first writing in the London Daily Mail.

UPU except Laccadive and Maldiv Island, the State of Alaouites, Northern Rhodesia, and Tonga. Radio stations in which we are interested do not exist in any of these localities.

The Spanish Alphabet

A, Ah	O, Oh
B, Bay	P, Pay
C, Say or thay	Q, Koo
D, Day	R, Air-ray
E, Ay	S, Ess-say
F, Ef-fay	T, Tay
G, Hay	U, Oo
H, Ah-chay	V, Vay
I, Ee	W, Doo-ble-vay
J, Ho-tah	X, eckis; ay-kis;
K, Kah	ek-key
L, El-lay	Y, Yay
M, Em-may	Z, Zed.
N, En-nay	

The Biography of Julius Twisdile

TO BEGIN with, Julius is not an ordinary person. At the lovable and tender age of three, when most infants are fumbling with toys, Julius was patiently "pushing the slider" of a self-made crystal set. The neighbors marveled at his prowess and one of the local newspapers gave him front page publicity. All in all, everyone was of the opinion that someday Julius would take his place along with Marconi, Amlie and other great names in radio.

However, greatness was not meant for our hero, for Julius was bitten by the DX bug on his fifth birthday. It seems that he was listening to a local station and another station a thousand miles distant suddenly put in its appearance on an adjoining channel. Although the signals were not strong and identification seemed virtually impossible, Julius stayed at the controls and after three hours of steady vigilance finally succeeded in learning the call and location of the station. With a cry of victory, he ran to tell mamma and papa of his catch, but alas, in his excitement, he had forgotten to remove his headphones and his set lay dashed to bits upon the floor.

Fortunately, Julius had a big-hearted papa who consented to purchase him a two tube Blooper so that he could continue his conquest of the ether. In the four years following, Julius heard five hundred and six broadcast stations and made a specialty of collecting pretty cards and letters of confirmation from the stations. Julius was quite revolutionary in his system of verifying. Instead of reporting but once requesting a verification, he attempted to secure twenty-four con-



Martha Tilton's rhythmic vocal interpretations of Benny Goodman's orchestra during the Swing School broadcasts, a part of the Camel Caravan program. Miss Tilton was "discovered" by Goodman when she went to Hollywood to join the Oakie College Glee Club.

firmed from each station heard—one for each hour of the day. In the Spring of 1928 Julius had eleven thousand and thirty-seven veries.

Julius received great criticism from members of the DX fraternity, who pointed out that it was foolish for him to verify a station twenty four times when one veri was sufficient to prove definite reception of any station. Julius, however, was quite satisfied with his system, maintaining that a station was received under different conditions every hour of the day. He also stated that a DXer who counted a transmitter, operating under two different calls, as two stations; or one who counted a slight change in frequency, a change of studio loca-

tion or a change of call letters as new stations was by no means any more efficient than was he.

In the fall of 1928, the Twisdile heir became interested in short wave reception and proceeded to log stations from all corners of the world—broadcasting, commercial phone, amateur and what have you. Julius found this type of DXing far more interesting and educational than his earlier love, and some claim that he is able to converse in five languages with a reading knowledge of several more. He is well acquainted with the political setup, the geography and the economics of almost every country in the world, and it has been said that he is studying for the diplomatic service.

Julius was also very original in tabulating locations of stations heard. In the first place he never bothered about verifying all continents because he found that in his huge collection he had but one confirmation from Antarctica and was very much ashamed to admit that he had but one VAC. In the second place his method of counting countries was most unique. Every state in the United States, every province in Canada; in fact anyplace which possessed a border was counted as a different country. To say the least, Julius' log of verified countries reached amazing proportions and it is doubtful if any DXer in the entire world could have "touched him."

As you can probably guess, the SWL's Inc. ridiculed our hero and "poo-pooed" his system, stating that a country should consist of this, that and the other thing. Julius, however, was undaunted and replied that his system was, at least, consistent, and that those who counted Baffin Island, Yucatan, Tasmania and the Aleutian Islands as countries the same as The United States, were, in a great degree, far more inconsistent than he.

Tommy Riggs

Tommy Riggs, whose vocal chords harbor the popular little radio star, "Betty Lou," modestly began life in Pittsburgh, Pa., on October 21, 1908.

His father was superintendent of a steel firm in the aptly named "Smoky City." Young Tommy could only think of two things—he wanted to be a football star and an actor. Unlike most childhood ambitions, his were later fulfilled.

Always an agreeable young man, Tommy didn't revolt when his parents suggested he study music. He took voice and piano lessons, which have since stood him in good stead as a radio entertainer.

During his freshman year in high school, he appeared in numerous class dramatic productions but never talked like "Betty Lou" except when entertaining at parties. The little girl voice didn't seem extraordinary to him then, though it always provoked laughter among his friends.

"Betty Lou" was again sidetracked when Tommy went to Bellefonte Academy. The young man with two voices displayed a greater interest in boxing than in entertaining there.

A year at Brown University was followed by study and football at Ohio State. While being rushed by a fraternity at the latter institution one of the "brothers" called Riggs on the phone to ask him over to dinner at the house. Tommy had "Betty Lou" do the answering.

"My daddy will be glad to come," said the child-like voice.

When Tommy arrived, the upper-classman exclaimed, "Why, I didn't know you were old enough to have a youngster!"

"I'm not," said Tommy.

Riggs then changed his voice to the higher register, and "Betty Lou"

later became the mascot of the house.

Tommy got out of college at the height of the depression but managed somehow to land a job in Pittsburgh in a business firm. The lure of the theater was still in his blood and business seemed awfully dull to him.

He voluntarily gave up his position for a less lucrative one in a local vaudeville theater. He became a singing master-of-ceremonies, just a few blocks from the theater where Dick Powell was doing the same thing.

"Betty Lou's" radio debut occurred as a result of a mistake. Tommy was rehearsing a comedy act with a radio partner. Things went from bad to worse with the script seeming to get less funny every minute. When he lost his place, Riggs expressed his annoyance in the "Betty Lou" voice.

The producer of the show shouted, "That's great. Where did you get that voice? Use it in the skit."

Tommy did. He titled the show "Tom and Betty," and it remained popular with WCAE listeners for several years before Riggs transferred his act to KDKA. The program got an enthusiastic reception and received the largest fan-mail response ever accorded an air show.

"I had an amusing experience in Pittsburgh," Tommy says. "I went on the air at eleven o'clock at night and one night a labor department representative called on me and demanded I send 'Betty' home to bed where she belonged at that hour. It took me quite a little while to convince them 'Betty' was only my idea child, but at last they believed me and left."

An offer came from Cleveland to do a 15 minute commercial program, five-times-a-week. It looked so good, the "Tom and Betty" act moved to a new locale, broadcasting over WTAM. The same enthusiastic re-

sponse greeted the one man "pair" with a woman writing in begging to adopt "Betty." It took some tall letter-writing on the part of Riggs to assure the lady "Betty" was really an imaginary character.

Another offer over a more powerful station came to Tommy's attention and once more he packed up bag and baggage, heading this time for Cincinnati and WLW. He arrived with the flood, his first program being the longest and the most difficult he has ever gone through—he had "Betty" appeal for aid to flood-sufferers at intervals during one entire night and morning. The response was tremendous with the people of Cincinnati ever grateful.

Two months later when Tommy offered his photograph to radio listeners 32,000 requests came in immediately. Cincinnati looked mighty good to Tommy then and he felt he wanted to stay on. Besides, he had moved from city to city so often he was about ready to settle down!

Therefore, when he was asked to go to New York to audition for Rudy Vallee's Hour, he got around the trip by sending a set of records.

Senator Fishface and Professor Figgsbottle, daffy comics heard over NBC on Sunday afternoons, have just been signed for another two years by the NBC Artists Service.

Betty Winkler, pretty star of the NBC dramatic serial, Girl Alone, is creator of a new evening gown that caused a sensation in the fashion world. The Winkler creation is a flouncy, white chiffon evening gown with a photographic reproduction of the Chicago skyline ten inches high around the bottom. The hem was sensitized with a photographic solution and the pictures printed in the same manner as regular photographic prints are made.

THE BROADCASTING STATIONS OF OCEANIA

This completely revised list of Australasian stations is compiled from official information supplied by A. I. Breen of Dunedin, New Zealand, and the Postmaster-General's Department of Melbourne, Australia.

Frequencies are given in first column in kilocycles. Call letters are in second column, and power in watts in third column.

The abbreviations are N. Z. for New Zealand, P. I. for the Philippine Islands, and for the Australian states:

F.C.T., Federal Capital Territory
N.S.W., New South Wales
Qsld., Queensland
S. A., South Australia

Tas., Tasmania
Vic., Victoria
W. A., West Australia

550	2CR	10000	Cummoek, N.S.W.	1040	5PI	2000	Crystal Brook, S. A.
560	6WA	10000	Minding, W. A.	1050	2CA	500	Canberra, F. C. T.
570	2YA	60000	Wellington, N. Z.	1060	2BH	100	Broken Hill, N.S.W.
580	3WV	10000	Horsham, Vic.	1070	6WB	2000	Katanning, W. A.
600	FJP	500	Noumea, New Caledonia	1080	2AD	100	Armidale, N.S.W.
	7ZL	1000	Hobart, Tas.		4MK	100	Mackay, Qsld.
610	KZRM	50000	Manila, Philippines		7HT	300	Hobart, Tas.
	2FC	3500	Sydney, N.S.W.	1090	1ZB	150	Auckland, N. Z.
620	3AR	4500	Melbourne, Vic.		3LK	2000	Lubeck, Vic.
630	4QN	7000	Cleveland, Qsld.	1100	4LG	500	Longreach, Qsld.
640	5CK	7500	Crystal Brook, S. A.		7LA	300	Launceston, Tas.
650	1YA	10000	Auckland, N. Z.	1110	2UW	750	Sydney, N.S.W.
660	2DU	100	Dubbo, N.S.W.	1120	2ZB	1000	Wellington, N. Z.
	7BU	100	Burnie, Tas.		4BC	1000	Brisbane, Qsld.
670	2CO	7500	Corowa, N.S.W.	1130	6ML	500	Perth, W. A.
680	2HR	300	Singleton, N.S.W.	1140	2HD	500	Newcastle, N.S.W.
	4ZP	100	Invercargill, N. Z.		4YO	150	Dunedin, N. Z.
690	6WF	3500	Perth, W. A.	1150	2WG	2000	Wagga, N.S.W.
700	2NR	7000	Grafton, N.S.W.		2ZM	15	Gisborne, N. Z.
710	7NT	7000	Kelso, Tas.	1160	2KA	200	Katoomba, N.S.W.
720	3YA	10000	Christchurch, N. Z.		4TO	200	Townsville, Qsld.
	6GF	2000	Kalgoorlie, W. A.	1170	2NZ	2000	Inverail, N. S. W.
730	5CL	4000	Adelaide, S. A.	1180	3KZ	600	Melbourne, Vic.
740	2BL	3000	Sydney, N.S.W.	1190	2CH	1000	Sydney, N. S. W.
750	KGU	2500	Honolulu, Hawaii	1200	3YL	500	Christchurch, N. Z.
760	2YB	100	New Plymouth, N. Z.		5KA	500	Adelaide, S. A.
770	3LO	3500	Melbourne, Vic.	1210	2GF	100	Grafton, N. S. W.
780	KZEG	1000	Manila, Philippines		3YB	100	Warrnambool, Vic.
790	4YA	10000	Dunedin, N. Z.		6KG	500	Kalgoorlie, W. A.
800	4QG	2500	Brisbane, Qsld.	1220	4AK	2000	Oakey, Qsld.
820	2ZH	65	Napier, N. Z.		4ZB	1000	Dunedin, N. Z.
830	3GI	7000	Longford, Vic.	1230	2NC	2000	Newcastle, N. S. W.
840	2YC	5000	Wellington, N. Z.	1240	2ZL	20	Hastings, N. Z.
850	5RM	1000	Renmark, S. A.		3TR	1000	Sale, Vic.
860	4AY	500	Ayr, Qsld.		6IX	500	Perth, W. A.
	7HO	120	Hobart, Tas.	1250	1ZM	175	Manurewa, N. Z.
870	2GB	1000	Sydney, N.S.W.	1260	3SR	2000	Shepparton, Vic.
880	1YX	150	Auckland, N. Z.	1270	2SM	1000	Sydney, N. S. W.
	2XL	100	Cooma, N.S.W.	1280	3AW	600	Melbourne, Vic.
	6PR	500	Applecross, W. A.		4ZC	20	Cromwell, N. Z.
900	KZIB	1000	Manila, P. I.	1290	4BK	500	Brisbane, Qsld.
	2LM	500	Lismore, N.S.W.	1300	2TM	2000	Tamworth, N. S. W.
	2ZP	250	Wairoa, N. Z.	1310	1ZJ	65	Auckland, N. Z.
910	4RK	2000	Queenstown, Tas.		5AD	500	Adelaide, S. A.
920	ZJV	400	Rockhampton, Qsld.	1320	KGMB	1000	Honolulu, Hawaii
	2ZR	50	Suva, Fiji		3BA	500	Ballarat, Vic.
930	3UZ	600	Nelson, N. Z.	1330	3SH	100	Swan Hill, Vic.
940	3ZR	400	Melbourne, Vic.		4RO	50	Rockhampton, Qsld.
950	2UE	1000	Greymouth, N. Z.	1340	4WK	100	Warwick, Qsld.
960	2ZF	250	Sydney, N.S.W.		5SE	100	Mount Gambler, S. A.
	5DN	500	Palmerston North, N. Z.	1350	3GL	100	Geelong, Vic.
970	3BO	200	Adelaide, S. A.	1360	2MA	100	Mildura, Vic.
	2KM	100	Bendigo, Vic.		4PM	100	Port Moresby, Papua
980	2ZJ	200	Kempsey, N.S.W.	1370	2MO	100	Gunnedah, N. S. W.
	6AM	2000	Gisborne, N. Z.	1380	4BH	1000	Brisbane, Qsld.
990	2GZ	2000	Northam, W. A.	1390	2GN	200	Goulburn, N. S. W.
1000	3UL	200	Orange, N.S.W.		4CA	200	Cairns, Qsld.
	4GR	500	Warragul, Vic.		6PM	100	Fremantle, W. A.
1010	3HA	750	Toowoomba, Qsld.	1400	KHMC	250	Hilo, Hawaii
	4ZD	35	Hamilton, Vic.		4MB	100	Palmerston North, N. Z.
	4ZM	60	Dunedin, N. Z.		2ZO	200	Maryborough, Qsld.
1020	2KY	1000	Dunedin, N. Z.	1410	2KO	500	Newcastle, N. S. W.
1030	3DB	600	Sydney, N.S.W.	1420	3XY	600	Melbourne, Vic.
			Melbourne, Vic.	1430	2WL	300	Wollongong, N. S. W.

3ZB	1000	.....
4VL	50	Charleville, Qsld.
1440 2QN	100	Deniliquin, N. S. W.
41P	100	Ipswich, Qsld.
1450 42R	100	Roma, Qsld.
5MU	100	Murray Bridge, S. A.
1460 7UV	300	Ulverstone, Tas.
1470 2MW	100	Murwillumbah, N. S. W.
2RG	50	Griffith, N. S. W.
3ZM	60	Christchurch, N. Z.
1480 2AY	100	Albury, N. S. W.
4BU	100	Bundaberg, Qsld.
1490 2BE	100	Bega, N. S. W.
3MB	100	Birchip, Vic.
1500 2BS	100	Bathurst, N. S. W.
3AK	200	Melbourne, Vic.
1510 YDA	500	Tandjongprik, Java, N.E. I.

Arctic and Jungle Linked

A REMARKABLE three way conversation spanning the arctic and the tropics was heard over National Broadcasting Company networks on Christmas Eve when scientific expeditions at the North Pole and in the South American jungles exchanged Yuletide greetings with each other and with their respective families assembled in Radio City studios in New York City.

The Holden Expeditions of the American Museum of Natural History, located deep in the Amazonian jungles of British Guiana, and members of the MacGregor Expeditions, located near the North Pole, are both equipped with NBC broadcasting transmitters and both are keeping contact with the outside world through the magic of radio. The Holden group is the first jungle expedition in history to be equipped with radio.

The Holden Expedition is heard through station VP3THE, and the MacGregor Expedition through OX2QY. Both these stations have been heard many times in the 20-meter amateur band.

Tune for Argentina

SOUTH AMERICAN broadcasting stations transmit at the same time as North American stations, and the only time they can be heard is before midnight, EST. Many of the more powerful stations come through, however, and are heard in spite of our own stations.

Station LR10 in Buenos Aires, working on 790 kcs with 10,200 watts, signs off at midnight. LR5 on 830 kcs with 29 kilowatts, signs off nightly at 11:45 pm; this Buenos Aires station is frequently logged through KOA Denver. LR6 in Buenos Aires, on 870 kcs, leaves the air at midnight.

The addresses of these Argentine stations are: LR10, Alberto de Bary y Cia., Florida 570, Buenos Aires. LR5, Alfredo B. Dougall, Maipu 462, Buenos Aires. LR6, "Ciudadela," S. A. La Nacion, Santa Fe 2043, Buenos Aires.

Other Argentine stations which should be heard this winter are LR3 on 950, LR1 on 1070, LS2 on 1190, and LS8 on 1230.

LR3, a 39 kilowatt station on 950 kcs, is owned by Jaime Yankelevich, Belgrano 1841, Buenos Aires. This station signs off at thirty minutes past midnight.

LR1, "Radio El Mundo," is perhaps the best known of all South American stations. It transmits on 1070 with 50 kilowatt power. Radio El Mundo is owned by Empresa Editorial Haynes, Ltda., S. A., Maipu 555, Buenos Aires, and transmits daily from 10 am to 11:30 pm, EST.

LS2, 1190 kcs and 30,000 watts, closes down at midnight. The owner is Teodoro Pietro, Bolivar 1356, Buenos Aires.

"Radio Stentor," LS8, works on 1230 kcs with 15 kilowatts, signing off at 11:30 pm EST.

When to Get the DAY'S NEWS

• • • Network News Flashes

E-Midn't., C-11:00 p.m., M-10:00, P-9:00

Don Lee System, Daily
KDB KDON KFRC KFXM KGB
KGDH KHJ KPMC KQW KVQE
KKO

E-1:00a.m., C-Midn't., M-11:00 p.m., P-10:00

CBC—Daily
To CBC Pacific Network
Don Lee System, Sunday only
Same stations as at Midnight.

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

Michigan Radio Network, Daily.

WSBT

E-9:25 a.m., C-8:25, M-7:25, P-6:25

CBS—Press Radio, Monday through Friday

CKAC KLRA KMOX WABC WADC
WAIM WALA WBIG WCHS WCOC
WDAE WDBO WDRC WEEL WESG
WFBL WHIO WHF WHX WJAS
WJNO WKBW WLZ WMAS WMBR
WMMN WNBW WOKO WORC WPAR
WPG WPRO WQAM WREC WRVA
WSBT WSJS

E-9:40 a.m., C-8:40, M-7:40, P-6:40

NBC Red and Blue, Press Radio, Weekdays

To stations available

E-9:55 a.m., C-8:55, M-7:55, P-6:55

CBS—Press Radio, Sat. and Sunday

CKAC KLRA KMOX WABC WADC
WAIM WALA WCHS WCOC WDAE
WDBJ WDBO WEEL WESG WFBL
WFBM WHEC WHIO WHX WJNO
WJR WJSV WLZ WMAS WMBR
WMMN WNBW WOKO WORC WPAR
WQAM WREC WSVA WSJA WSJS
WTOC

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

Don Lee System, Daily except Sunday

Same stations as at Midnight

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

NBC-Blue—Press Radio, Sunday

To stations available

NBC-Red—Press Radio, Sunday

To stations available.

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

Michigan Radio Network, Daily

WASH WBCM WELL WFDH WIBM

WJIM WKZO WOOD WXYZ

E-12:15 p.m., C-11:15 a.m., M-10:15, P-9:15

CBS—Edwin C. Hill, Monday through Friday

KFAB KFH KGKO KLRA KMBC

KMOX KNOW KOMA KRLL KRNT

KSCJ KTRH KTHA KTUL KWKH

WABC WACH WADC WALA WBBM

WBIG WBNS WBRC WBT WCAO

WCAU WCCO WCHS WCOA WCOC

WDAE WDBJ WDBO WDNC WDOO

WDRC WEEL WFBL WGR WGST

WHAS WHEC WHIO WHF WHX

WISN WJR WJSV WKBW WKBN

WKRC WLAC WLZ WMAS WMAZ

WMBD WMBR WMMN WNAX

WNBW WNOX WOC WOKO WORC

WPG WPRO WQAM WREC WRVA

WSFA WSJS WTOC WWL WWVA

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

CBS—Monday, Wednesday, Friday

KFAB KFH KLRA KMOX KNOW

KOMA KRLL KRNT KSCJ KTRH

KTSA KTUL KWKH WABC WADC

WBBM WBNS WBRC WBT WCAO

WCAU WCCO WDRC WEEL WFBL

WFBM WGST WHAS WHEC WHIO

WISN WJAS WJR WJSV WKBW

WKBW WKRC WLAC WLZ WMBR

WNBW WOKO WORC WPRO WQAM

WREC WRVA WWL

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

Don Lee System, Saturday

Same stations as at Midnight

E-3:15 p.m., C-2:15, M-1:15, P-12:15

Don Lee Sys., Mon. through Fri.

Same stations as at Midnight

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

Michigan Network, Daily

WASH WBCM WELL WFDH WIBM

WJIM WKZO WOOD WXYZ

E-5:10 p.m., C-4:10, M-3:10, P-2:10

Blue, Monday through Friday

To stations available

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

CBS—Monday, Wednesday, Friday

KFBB KFPY KIZ KMBC KNX

KOIN KOL KOY KSFQ KSL KVI

E-6:25 p.m., C-5:25, M-4:25, P-3:25

CBS—Press Radio, Thurs. and Sat.

Available to entire Network

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

CBC—Sunday only

To National Network

CBS—Press Radio, Mon., Tues., Fri.

KFAB KFH KLRA KMOX KSCJ

KSL KTRH KWKH WABC WACO

WADC WAIM WALA WBIG WBRC

WCCO WCOA WDAE WDBJ WDBO

WDOO WHEC WISN WJAS WJNO

WJR WKBW WKBW WLZ WMAS

WMBR WOC WORC WPAR WQAM

WREC WSFA WSJS WTAQ WTOC

WWVA

NBC—Red, Press Radio, Weekdays

To all stations available

Blue—Saturday only

To all stations available

E-6:40 p.m., C-5:40, M-4:40, P-3:40

CBS—Wednesday only

To all stations available

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

NBC-Blue—Lowell Thomas, Mon.

through Fri.

CRCT KDKA WBAL WBZ WBZA

WEAN WEBC WFLA WHAM WIOD

WJAX WJZ WLW WMAL WOOD

WRTD WSPD WSUN WSYR WTAM

WXXY

Don Lee Sys., Mon. through Fri.

Same stations as at Midnight

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

CBC—Monday through Friday

To CBC French Network

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

CBS—Boake Carter, Mon., Wed., Fri.

KFAB KFH KLRA KMBC KMOX

KNOW KOMA KRLL KRNT KTRH

KTSA KTUL WABC WADC WBBM

WBNS WBRC WBT WCAO WCAU

WCCO WDAE WDBO WDOO WDRC

WEEL WFAA WFBL WGR WGST

WHAS WHEC WHIO WISN WJAS

WJR WJSV WKBW WKRC WLAC

WLZ WMBD WMBR WNBW WOKO

WORC WPRO WQAM WREC WRVA

WWL

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

Blue—Monday, Thursday

KDKA KOIL KSO KWK WBAL

WBZ WBZA WCKY WEAN WEBR

WFIL WHAM WHK WICC WJZ

WLS WMAL WMT WREN WSYR

WTCN WXYZ

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

Blue—March of Time, Thursday

KDKA KECB KERN KFBK KPEL

KPSD KCA KGO KJR KLO KMJ

KOIL KSO KWK KWK KXYZ WABY

WBAL WBZ WBZA WCKY WCOL

WEBR WFIL WHAM WJZ WMAL

WMPD WMT WWOV WREN WSPD

WSYR WTCN WXYZ

E-9:45 p.m., C-8:45, M-7:45, P-6:45

Don Lee System, Daily

Same stations as at Midnight

Michigan Network, daily

WASH WBCM WELL WFDH WIBM

WJIM WKZO WOOD

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

Blue—Tuesday, Wednesday

KDKA KOIL KSO KWK WBAL

WBZ WBZA WCKY WEAN WEBR

WFIL WHAM WHK WICC WJZ

WLS WMAL WMT WWOV WREN

WSPD WSYR WTCN WXYZ

E-10:15 p.m., C-9:15, M-8:15, P-7:15

Michigan Radio Network, Daily

WXYZ

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

CBC—Daily

To National and French Networks

Red—Friday only

KDYL KFI KGW KHQ KOA KOMO

KPO KSD KSTP KYW WBBN WCAE

WCSH WDAF WDEL WEAF WFBW

WGY WIRE WJAR WLW WMAQ

WNAC WOW WRC WTAG WTAM

WTVG WTVJ

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

Blue, Sunday, Press Radio

Available to Entire Network

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

CBS—Boake Carter, Mon., Wed., Fri.

KFAB KFH KLRA KMBC KMOX

KNOW KOMA KRLL KRNT KTRH

KTSA KTUL KWKH WABC WADC

WHAT'S ON THE AIR TONIGHT

Fill in the calls and frequencies of the stations through which you best receive the network programs. You can then turn quickly to the one that has the feature you want.

Network	Stations
Canadian (CBC)	
Columbia (C)	
Mutual (M)	
National Red (R)	
National Blue (B)	

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

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

MONDAY

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

B — Lowell Thomas

CRCT KDKA WBAL WBZ WBZA WFLA WIOD WJAX WJZ WLW WMAL WOOD WRVA WSYR WTAM WXYZ

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

C — Poetic Melodies; Jack Fulton

WABC WADC WBT WCAO WCAU WDRC WEAN WEEI WFLB WGR WHCC WHK WJAS WJR WJSV WKRC WOKO WSPD WTOC WWVA

R — Amos 'n' Andy

KSD KSTP KYW WBN WCAE WCHS WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WTAM WTIC WWJ

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

R — Uncle Ezra's Radio Station

KARK KFYR KGBX KGNC KPRC KSTP KTBS KTHS KVOO KYW WBAF WBNB WCAE WCKY WCOL WCHS WDAF WDAY WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WTAM WTIC WTMT

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

B — Lum and Abner

WBZ WBZA WENR WJZ WLW WMC WSM WSYR

M — The Lone Ranger

WFL WBNB WSYR WOR WXYZ

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

C — Boake Carter

KMBC KMOX KMA KRLD WABC WBBM WBT WCAU WCCO WDRC WEAN WFLB WGR WHK WJAS WJR WJSV WKRC WNAC

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

C — Horace Heidt and Orchestra

KDB KERN KFAB KFBK KFH KFFY KFRG KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KRLD KRNT KSL KTRH KTSB KTL KVI KWG WABC WBBM WBRB WBT WCAU WCAU WCCO WDRC WFLB WFBM WGR WGST WHAS WHK WJAS WJR WJSV WKRC WLAC WMBR WNAC WNAX WOKO WREC WWL

R — Burns and Allen

CRCT KYW WBN WCAE WCHS

WCHS WFAA WFBF WFLA WGY WHO WIOD WIRE WIS WJAX WJZ WMAQ WNAC WPTF WRC WRVA WSOB WTAM WTAR WTIC WWJ

B — Gen. Hugh Johnson

KDKA KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEEB WFL WFLA WHK WICC WJZ WLS WMAL WMT WREN WSYR WTCN WXYZ

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

C — Pick and Pat

KFAB KMBC WABC WADC WBBM WBT WCAU WCAU WDRC WEAN WFLB WGR WGST WHCC WHK WHP WICC WJAS WJR WJSV WKRC WLZB WMAA WNAC WOKO WORT WSPD

R — Voice of Firestone

CFBC CRCT KFYR KPRC KSD KSTP KTBS KVOO KYW WAVE WBNB WCAE WCHS WDAF WDAY WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WTAM WTIC WTMT

B — Campana's Grand Hotel

KDKA KFLB KFI KFSB KGA KGO KGW KJR KLO KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEEB WFL WFLA WHK WICC WJZ WLS WMAL WMT WWO WREN WSPD WSYR WXYZ

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

B — Philadelphia Symphony

KFEL KGO KSO KVOO KWK KXYZ WBAL WBZ WBZA WEAN WEEB WENR WFL WHAM WJTN WJZ WLS WMAL WREN WRTD WSPD WSYR WTCN WXYZ

C — Lux Radio Theater

CFRB CKAC KFAB KFH KFFY KLRA KLZ KMBC KMOX KNOW KNX KOH KOIN KOL KOMA KRLD KRNT KSF KSL KTRH KTSB KTL KVI WABC WADC WBBM WBNB WBRB WBT WCAU WCCO WDAE WDBJ WDRC WEEI WFLB WFBM WGR WGST WHAS WHCC WHIO WIBX WISN WJAS

WJR WJSV WKBW WKRC WLAC WMAA WMBD WNAX WOKO WORC WPRO WQAM WREC WRVA WWL

M — Elder Michaux

Available to entire network

R — Fibber McGee and Molly

KFYR KPRC KSD KSTP KTBS KVOO KYW WAVE WBNB WCAE WCOL WCHS WDAF WDAY WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WTAM WTIC WTMT

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

R — Phil Spitalny's Girl Orchestra

CFBC CRCT KFYR KFH KGH KGR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KVOO KYW WAVE WBNB WCAE WCHS WDAF WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WTAM WTIC WTMT

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

R — Contented Program

CFBC CRCT KFYR KFH KGH KGR KGO KGW KHQ KOA KOMO KPRC KSD KYW WBNB WCAE WCHS WDAF WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WTAM WTIC WTMT

B — Warden Lewis E. Lawes

KDKA KFLB KFI KFSB KGA KGO KJR KLO KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEEB WENR WFL WHAM WHK WICC WJZ WMAL WMT WWO WREN WSPD WSYR WTCN WXYZ

C — Wayne King and Orchestra

KDB KERN KFAB KFBK KFFY KFRG KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KRNT KSL KVI KWG WAAB WABC WADC WBBM WBNB WBT WCAU WCAU WCCO WDRC WEAN WFLB WFBM WHAS WHK WIBW WJAS WJR WJSV WKBW WKRC WOKO WSPD WWL

MONDAY (Continued)

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

C — Brave New World

Available to entire network

R — Burns and Allen

KARK KDL KFBK KFI KFYR KFBX KGH KGR KGNC KGO KGW KHQ KMJ KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KVOO KWG WAVE WDAF WDAY WEEB WFAA WIB WJDX WKY WMC WOI WOV WSB WSMB WTMJ

M — The Lone Ranger

KDB KDON KFRG KFXM KGB KGDM KHJ KPMC KVOE KKO

Available also to West Coast Section

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

C — Poetic Melodies; Jack Fulton

KERN KFAB KFBK KFFY KFRG KGB KHJ KLRA KLZ KMBC KMOX KOIN KOL KOMA KRLD KRNT KSL KTRH KTSB KVI WBBM WBRB WCCO WFBM WGST WLAC WREC WWL

R — Amos 'n' Andy

KDYL KERN KFBK KFI KGW KHQ KMJ KOA KOMO KPO KPRC KSD KWG WDAF WFAA WHO WIRE WKY WMAQ WMC WOI WOV WSB WSM WSMB

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

C — Boake Carter

KFFY KLZ KNX KOIN KOL KSF KSL KVI

B — Lum and Abner

KECA KERN KEX KFBK KFSB KGA KGO KJR KMJ KWG

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

C — Pick and Pat

KFFY KGO KLZ KLZ KMOX KNX KOIN KOL KOMA KRLD KRNT KSCJ KSF KSL KTL KVI KWK WACO WBRB WCCO WFBM WHAS WLAC WREC

TUESDAY

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 — Poetic Melodies, See Monday

R — Amos 'n' Andy, See Monday

B — Easy Aces

KDKA KDL KFI KGW KHQ KOA KOIL KOMO KPO KSO KWK WBAL WBZ WBZA WCKY WENR WFL WGR WHAM WHIO WIRE WJZ WMAL WMT WSYR WXYZ

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

C — Geo. McCall, Hollywood Talk

KFAB KFH KLRA KMOX KNOW KOMA KRLD KRNT KTRH KTSB KWKH WABC WADC WBBM WBNB WBT WCAU WCAU WCCO WCHS WDAE WDBO WDDO WDRC WEEI WFLB WGR WGBI WGST WHAS WHCC WHIO WIBW WISN WJAS WJR WJSV WKRC WLAC WMAA WMBR WOC WOKO WORC WPRO WQAM WREC WRVA WWL

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

C — Helen Menken, Drama

KFAB KFFY KIRO KLZ KMBC KMOX KNX KOIN KRNT KSF

KSL KVI WABC WBBM WCAO WCAU WDRC WEEI WFLB WGR WGR WHAS WHEC WHIO WJAS WJR WJSV WKRC WOKO WORC WPRO

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

R — Johnny with Russ Morgan

KFYR KPRC KSD KSTP KTBS KTHS KVOO KYW WAVE WBAF WBNB WCAE WCHS WDAF WDAY WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WTAM WTIC WTMT

C — Edward Robinson; Claire Trevor

CBM CFRB KFAB KFH KFFY KIRO KLRA KLZ KMBC KMOX KNOW KNX KOIN KOMA KRLD KRNT KSF KSL KTRH KTSB KTL KVI WABC WADC WBBM WBNB WBRB WBT WCAU WCAU WCCO WDAE WDBJ WDRC WEEI WFLB WFBM WGR WGR WGST WHAS WHCC WHIO WIBW WISN WJAS WJR WJSV WKRC WLAC WMAA WMBD WNAX WOKO WORC WPRO WQAM WREC WRVA WWL

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

C — Al Jolson; Parkyakarkus

CFRB CKAC KFAB KFH KLRA KMBC KMOX KNOW KOMA KRLD KRNT KTRH KTSB KTL WABC WADC WBBM WBNB WBRB WBT WCAU WCAU WCCO WDAE WDBJ WDRC WEEI WFLB WFBM WGR WGR WGST WHAS WHCC WHIO WIBX WISN WJAS WJR WJSV WKRC WLAC WMAA WMBD WNAX WOKO WORC WPRO WQAM WREC WRVA WWL

R — Wayne King and Orchestra

KFYR KPRC KSD KSTP KTBS KVOO KYW WAVE WBAF WDAY WFAA WFBF WFLA WGY WHO WHIO WJAX WJZ WJW WRC WSB WSM WSMB WTAG WTAM WTIC WTMT WWJ

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

R — Jimmy Fidler Hollywood Gossip

KDYL KFI KGW KHQ KOA KOMO KPO KSD KTR KTV WBNB WCAE WCHS WDAF WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WSB WSM WSMB WTAG WTAM WTIC WTMT

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

C — Al Pearce and Gang

CFRB CKAC KFAB KFH KGO KLRA KMBC KMOX KOMA KRLD KRNT KSCJ KTRH KTSB KTL KWKH WABC WACO WADC WALA WBBM WBNB WBRB WBT WCAU WCAU WCCO WDAE WDBJ WDBO WDNB WDDO WDRC WEAN WFLB WFBM WFAA WGST WHAS WHCC WHK WHP WIBW WIBX WICC WISN WJAS WJR WJSV WKBH WKBW WKBW WKRC WLAC WLZB WMAA WMBD WMBG WMBR WMMN WNAC WNAX

WBNB WNOX WOC WOKO WORC WOWO WPG WQAM WREC WSBT WSPA WJSV WSPD WTOC WWL

M — Paul Whiteman Orchestra

Available to entire network

R — Vox Pop; Sidewalk Interviews

KSD KYW WBNB WCAE WCKY WCHS WDAF WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WTAG WTAM WTIC

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

C — Jack Oakie's College

KFAB KFH KFFY KGO KIRO KLRA KLZ KMBC KMOX KNOW KNX KOIN KOMA KRY KRLD KRNT KSCJ KSF KSL KTRH KTSB KTL KVI KVOO KWKH WABC WACO WADC WALA WBBM WBNB WBRB WBT WCAU WCAU WCCO WCHS WDAE WDBJ WDBO WDNB WDDO WDRC WEEI WFLB WFBM WGR WGST WHAS WHCC WHIO WHP WIBW WIBX WISN WJAS WJR WJSV WKBH WKBW WKBW WKRC WLAC WLZB WMAA WMBD WMBR WNAX WBNB WNOX WOC WOKO WORC WPG WPRO WQAM WREC WRVA WSBT WSPA WJSV WTOC WWL

R — Hollywood Mardi Gras

CFBC CRCT KFYR KFH KGH KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTR KTRB KVOO KYW WAVE WBAF WBNB WCAE WCOL WCHS WCHS WDAF WDEL WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WSB WSM WSMB WTAG WTAM WTIC WTMT

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

C — Benny Goodman's Orchestra

Same stations as Jack Oakie's College, above

B — Gen. Hugh Johnson

KDKA KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEEB WFL WHAM WHK WICC WJZ WLS WMAL WMT WWO WREN WSPD WSYR WTCN WXYZ

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

M — Witch's Tale; Drama

Available to entire network

R — Jimmy Fidler Hollywood Gossip

KDYL KFI KGW KHQ KOA KOMO KPO KSD KTR KTV WBNB WCAE WCHS WDAF WFAA WFBF WFLA WGY WHO WJAX WJZ WJW WRC WSB WSM WSMB WTAG WTAM WTIC WTMT

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

C — Poetic Melodies, See Monday

R — Amos 'n' Andy, See Monday

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

C — Al Jolson; Parkyakarkus

KFFY KLZ KNX KOIN KOL KSF KSL KVI KVOO

E-Midnight; C-11:00, M-10:00, P-9:00

C — Al Pearce and Gang

KFBB KFFY KGO KLZ KNX KOH KOIN KOL KOY KSF KSL KVI KVOO

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SATURDAY (Continued)

WFLB WGAR WGR WHAS WJAS
WJR WKRC WPRO

B — Uncle Jim's Question Bee
KDKA WQB WBZA WGY WHK
WJZ WMAQ

E-8:00 p.m., C-7:00, M-6:00, P-5:00
C — Your Unseen Friend
WABC WADC WBBM WCAU WEEI
WFLB WGAR WHEC WHP WJAS
WJR

R — "Believe-it-or-not." Ripley
KANS KDYL KFYR KGNC KOA
KPRC KSD KSTP KYW WAPI
WAVE WBAP WBEN WCAE WCHS
WDAF WDAY WDEL WFAE WFCB
WFBC WFBY WGY WHO WIBA
WIOD WJAR WKY WLW WMAQ
WMBG WNBC WNC WOA WOI
WOW WPTF WRC WSB WSMB
WSOC WSPD WTIC WTAM WTTM
WTIC WTMJ WWJ

E-8:30 p.m., C-7:30, M-6:30, P-5:30
C — Johnny Presents Russ Morgan
KFAB KFH KMBC KMOX KRNT
WABC WADC WBBM WBIG WBNS
WBT WCAO WCAU WCCO WDAE
WDRC WHEI WFLB WFBM WGR
WGST WHAS WHEC WHIO WHK
WHP WISN WJAS WJR WJSV
WKRC WMBD WMBG WNBW WOC
WOKO WPRO WSBT WWVA

R — Jack Haley; Virginia Verrill
KDYL KGNC KOA KPRC KSD
KSTP KYW WAPI WAVE WBAP
WBEN WCAE WCHS WDAF WDEL
WFAE WFCB WFBY WGY WHO
WIBA WIRE WJAR WKY WLW
WMAQ WMBG WNC WNAE
WOAI WOW WPTF WRC WSB
WSMB WSOC WSPD WTIC WTAM
WTTM WTMJ WWJ

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

C — Prof. Quiz

KDB KERN KFAB KFBK KFPY
KFRC KGB KHJ KLRA KLZ KMBC
KMJ KMOX KOIN KOL KOMA
KRLL KRNT KSL KTRH KTSK
KVI KWG WABC WBBM WBNS
WBT WCAO WCAU WCCO WDAE
WDBO WDRC WEAN WFLB WFBM
WJAS WJR WJSV WKWB WKRC
WMBR WOKO WQAM WREC WSPD
WWL

B — National Barn Dance
KDKA KOIL KPRC KSO KTBS
KTBS KWK WABY WAPI WAVE
WBAL WBAP WBZ WBZA WFIL
WFLA WHK WHAM WIOD WIRE
WIS WJAX WJDX WJZ WKY WLW
WMAQ WMC WMT WOA WOI
WOW WPTF WREN WRVA WSB WSMB
WSOC WSUN WSYR WTAR WWNC
WXYZ

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

C — Saturday Night Serenade
KFAB KFH KFPY KGKO KLRA
KLZ KMBC KMOX KNOW KNX
KOIN KOL KOMA KRLL KSPF
KTRH KTSK KTUL KVI KWKH
WALA WBBM WBIG WBNS WBRC
WBT WCAO WCAU WCCO WDAE
WDBO WDRC WEAN WFLB WFBM
WGAR WGST WHAS WHEC WJAS
WJR WJSV WKBW WLAC WMBD
WMBR WMMN WNOX WOC WQAM
WREC WRVA WSFA WTIC WWL
WWVA

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

C — Your Hit Parade
KERN KFAB KFBK KFH KFPY
KFRC KGB KGKO KGMB KHJ
KLRA KLZ KMBC KMJ KMOX
KOH KOIN KOL KOMA KRLL
KRNT KSCJ KSL KTRH KTSK
KTUL KVI KFOR KWG KWKH
WABC WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCOA WDAE WDBJ
WDBO WDRC WDOE WDRC WEAN
WFLB WFBM WFEA WGST WHAS
WHEC WHK WHP WIBW WIBX
WICC WISN WJAS WJR WJSV
WKBW WKRC WLAC WLZ WMAS
WMBD WMBG WMBR WNAE
WNAX WNOX WOC WOKO WORC
WPG WQAM WREC WSBT WSFA
WSJS WSPD WTIC WWL WWVA

R — NBC Symphony Orchestra
Available to entire Red and Blue
Network

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

B — National Barn Dance
KDYL KFI KFSD KFYR KGHL
KGIR KGU KGW KHQ KOA KOMO
KPO KSTP KTAR WDAY WECB
WIBA WLW WTMJ

CBC — Northern Messenger
To Midland and Western Networks
of the CBC

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

C — Johnny Presents Russ Morgan
KFBB KFPY KGVO KIRO KLZ
KNX KOIN KSPF KSL KVI KFOR

E-12:00 p.m., C-11:00, M-10:00, P-9:00
C — Professor Quiz
KFBB KFPY KIRO KNX KOH
KOIN KOY KSPF KSL KVI

R — "Believe-It-Or-Not" Ripley
KERN KFBK KFI KGW KHQ KMJ
KOMO KPO KWG

SUNDAY

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

C — Major Bowes' "Family"
CFRB KERN KFAB KFBH KFBK
KFH KFPY KFRC KGB KGVO
KMBC KOH KOL KRLL KSL KTRH
KTSK KVI KFOR KWG KWKH
WABC WACO WADC WALA WBNS
WBRC WCAO WCCO WDAE WDBJ
WDBO WDRC WESG WFLB WFEA
WHAS WHK WIBX WJAS WJR
WKRC WLZB WMBD WMBR
WMMN WOC WOKO WORC WPG
WQAM WSBT WSJS WSPD WTIC
WTTM WTMJ WWJ

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

C — Salt Lake Tabernacle Choir
CFRB KFAB KFBH KFBK KFH
KFPY KFRC KGB KLZ KOL KOL
KRLL KSL KTRH KTSK KVI KFOR
KWG WABC WACO WADC WALA
WBIG WBNS WBRC WCAO WCCO
WDAE WDBJ WDBO WESG WFLB
WFEA WGR WHAS WICC WJAS
WJR WKRC WLBC WMBR WMMN
WOC WOKO WORC WQAM WSBT
WSJS WSPD WTIC

E-1:00 p.m., C-Noon, M-11:00 a.m., P-10:00

C — Church of the Air
KFBB KFH KFPY KFRC KGB
KHJ KMOX KOH KOL KOMA KRLL
KRNT KSCJ KSL KTRH KTSK KVI
KFOR KWG WABC WALA WBNS

WBT WCAO WCCO WDAE WDBJ
WDBO WDRC WESG WFLB WFBM
WGR WHAS WHP WIBX WJAS
WJSV WKBW WKRC WLAC WLZB
WMBR WNBW WOC WOKO WORC
WPG WQAM WWR WSBT WSJS
WSPD WTIC WWVA

E-1:45 p.m., C-12:45, M-11:45, P-10:45
C — Hollywood: Lloyd Pantages
KFAB KLZ KMBC KMOX KRNT
KSL WABC WBBM WCAU WCCO
WEEI WFBM WGAR WGR WHEC
WJAS WJR WORC

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

B — Magic Key of RCA
CFRC CRCT KDKA KDYL KFI
KFYR KGU KGW KHQ KOA KOIL
KOMO KPO KPRC KSO KSTP KTBS
KTBS KVOO KWK WAPI WAVE
WBAL WBZ WBZA WCKY WDAY
WECB WENR WFAA WFIL WFLA
WGAR WHAM WHIO WIBA WIOD
WIRE WIS WJAX WJDX WJZ WKY
WMAQ WMC WMT WOA WOI WPTF
WREN WRVA WSB WSM WSMB
WSOC WSYR WTAR WTMJ WWNC
WXYZ

C — The Fun Bug
KDAL KFAB KFH KGKO KMBC
KMOX KNOW KOMA KRLL KRNT
KTSK KTUL WBBM WCCO WIBW
WISN WKBW WNAX WTAC

E-2:30 p.m., C-1:30, M-12:30, P-11:30

C — Jean Hersholt, "Dr. Christian."
CFRB KFAB KFH KMBC KMOX
KNOW KOMA KRLL KRNT KSCJ
KTRH KTSK KWKH WABC WADC
WBBM WBNS WBRC WBT WCAO
WCAU WCCO WCHS WDAE WDBO
WDRC WEEL WESG WFLB WFBM
WHAS WHK WHP WIBW WIBX
WJAS WJR WJSV WKBW WKBW
WKBW WKRC WLAC WLZB WMAS
WMBR WOKO WORC WPRO WQAM
WREC WRVA WWL

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

C — N. Y. Philharmonic
CFRB CKAC KFAB KFBH KFH
KGKO KGVO KLRA KLZ KMBC
KMOX KNOW KOL KRLL KSCJ
KSL KTRH KTSK KWKH WABC
WADC WALA WBNS WBT WCAO
WCCO WCHS WDAE WDBJ WDBO
WDRC WEEL WESG WFLB WFBM
WHAS WHK WHP WIBW WIBX
WJAS WJR WJSV WKBW WKBW
WKBW WKRC WLAC WLZB WMAS
WMBD WMBG WMBR WMMN
WNBW WOC WOKO WORC WPAR
WPRO WQAM WSBT WSJS WTAC
WTTM WTMJ WWJ

E-3:30 p.m., C-2:30, M-1:30, P-12:30
R — Bicycle Party
KARK KDYL KFI KGW KHQ
KOA KOMO KPO KPRC KSTP
KVOO KYW WAPI WAVE WBEN
WCAE WDAF WFAA WFLA
WGY WHO WIOD WIRE WJAX
WLW WMAQ WMBG WMC WNAC
WOAI WOW WRC WSB WSM WSMB
WTAM WTTM WTMJ WWJ

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

R — The Radio News Reel
KSD KSTP KYW WBEN WCAE
WCHS WDAF WDEL WFAE WFBY
WGY WHO WIRE WJAR WMAQ
WNAC WOW WRC WSAI WTAC
WTAM WTTM WTMJ WWJ

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

R — Bicycle Party
KARK KDYL KFI KGW KHQ
KOA KOMO KPO KPRC KSTP
KVOO KYW WAPI WAVE WBEN
WCAE WDAF WFAA WFLA
WGY WHO WIOD WIRE WJAX
WLW WMAQ WMBG WMC WNAC
WOAI WOW WRC WSB WSM WSMB
WTAM WTTM WTMJ WWJ

SUNDAY (Continued)

E-4:30 p.m., C-3:30, M-2:30, P-1:30

R — The World Is Yours; Drama
Available to Red Network

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

C — The Silver Theater
CFRB CKAC KFAB KFBH KFPY
KLZ KMBC KMOX KNOW KNX KOIN
KOL KOMA KRLL KRNT KSPF
KSL KTRH KTSK KTUL KVI
WABC WADC WBBM WBNS WCAO
WCAU WCCO WDAE WDBO WEEI
WGAR WGR WGST WHAS WHEC
WHIO WJAS WJR WJSV WKBW
WMBR WOKO WPRO WQAM WWL
Also on Canadian Network

R — Marion Talley
KDYL KFI KGW KHQ KOA KOMO
KPO KSTP KYW WBEN WCAE
WCOL WCHS WDAF WDEL WFAE
WFCB WFBY WGY WHO WIBA
WIRE WJAR WMAQ WNAC WOOD
WOW WRC WSAI WTAC WTAM
WTTM WTMJ WWJ

B — Metropolitan Opera Auditions
CFRC CRCT KARK KDKA KECA
KEX KFEL KFI KFSD KFYR KGA
KGIR KGNC KGO KGU KJR KLO
KOIL KPRC KSO KTBS KVOO
KWK WABY WAPI WAVE WBAL
WBAP WBZ WBZA WCKY WCHS
WDAY WEAN WEBR WENR WFIL
WFLA WHAM WHK WICC WIOD
WIS WJAX WJDX WJZ WKY WMAQ
WMC WMT WOA WOI WPTF
WREN WRVA WSB WSM WSMB
WSOC WSPD WSUN WSYR WTAR
WTTM WTMJ WWJ

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

C — Guy Lombardo and Orchestra
KFH KMBC KMOX KOMA KTUL
WAAB WABC WBNS WCAO WCAU
WDRC WEAN WFLB WFBM WGR
WHAS WHEC WHK WIBX WICC
WJR WJSV WMAS WOC WORC
WSPD WWVA

B — Smiling Ed McConnell

KANS KDKA KECA KERN KEX
KFBC KFSB KFYR KGA KGIR
KGO KJR KLO KMJ KOIL KSO
KTAR KWG KWK WAVE WBAL
WBZ WBZA WCKY WCOL WDAY
WDSU WEAN WECB WENR WENR
WFIL WHAM WHK WICC WJZ
WMAQ WMT WREN WRD WSM
WSPD WSYR WTCN WXYZ

R — Joe Rimes; Sheila Barrett

CFRC CRCT KDYL KFI KGW
KHQ KOA KOMO KPO KPRC KSD
KSTP KTBS KVOO KYW WAPI
WBAP WBEN WCAE WCHS WDAF
WDEL WFAE WFBY WFLA WGY
WHO WIOD WIRE WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMBG WMC WNAE WOA WOI
WOW WPTF WRC WSB WSMB
WSOC WTAC WTAM WTTM WTMJ
WTTM WTMJ WWJ

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

C — Joe Penner; Gene Austin
KFAB KFPY KGLO KLZ KMBC
KMOX KNOW KNX KOIN KOL
KOMA KRLL KRNT KSPF KSL
KTRH KTSK KVI WABC WBBM
WBNS WBRC WBT WCAO WCAU
WCCO WDAE WDBO WDRC WEEI
WFLB WFBM WGAR WGST WHAS
WHEC WJAS WJR WJSV WKBW
WKRC WOKO WRC WPRO WQAM
WREC WRVA

M — George Jessel; Tommy Tucker
To entire MBS and Michigan Net-
works

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

C — Seymour Simon's Orchestra
KDAL KFAB KFBH KFH KFPY
KGKO KGVO KLRA KLZ KMBC
KMOX KNOW KNX KOH KOIN
KOL KOMA KOY KRLL KRNT
KSCJ KSFO KSL KTRH KTSK
KTUL KVI KFOR KWKH WABC
WACO WADC WAIM WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCHS WCOA WCCO
WDAE WDBJ WDBO WDRC WEAN
WDRG WEEL WEOA WFLB WFBM
WGAR WGBI WGST WHAS WHEC
WHIO WHP WIBW WIRE WISN
WJAS WJNO WJR WJSV WKBW
WKBW WKBW WKBW WKRC
WLAC WLZB WMAS WMBD WMBR
WMMN WNAX WNBW WNOX WOC
WOKO WORC WPAR WPG WPRO
WQAM WREC WRVA WSBT WSFA
WSJS WTAC WTIC WWL WWVA

M — Tim and Irene

CKLW KWK WBAL WCAE WGN
WHK WIRE WOR

R — A Tale of Today

WBEN WFAE WGY WJAR WMAQ
WOW WRC WTAM

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

C — Jeanette MacDonald
KFAB KFH KFPY KLZ KMOX
KNOW KNX KOIN KOL KOMA
KRLL KRNT KSPF KSL KTRH
KTSK KTUL KVI KWKH WABC
WADC WBBM WBIG WBRC WBT
WCAO WCAU WCCO WDRC WEEI
WFLB WFBM WGR WGBI WGR
WGST WHAS WHEC WHIO WJAS
WJR WJSV WKRC WOC WPRO
WREC WRVA WTIC WWL

R — Jack Benny; Mary Livingstone

KSD KYA KYW WBEN WCAE
WCHS WDAF WFAE WFBY WGY
WHO WJAR WLW WMAQ WNAC
WOW WRC WTAC WTAM WTTM
WTTM WTMJ WWJ

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

C — Phil Baker; Oscar Bradley
KLRA KLZ KRLL KTRH KTSK
KTUL KWKH WABC WACO WADC
WALA WBIG WBNS WBRC WBT
WCAO WCAU WCOA WDAE WDBJ
WDBO WDRC WDOE WDRC WEAN
WFLB WFBM WFEA WGR WGST
WHAS WHEC WHK WHP WIBX
WICC WJAS WJR WJSV WKBW
WKRC WLAC WLZB WMAS WMBR
WNAC WNOX WOKO WORC WQAM
WREC WSBT WSFA WSJS WSMK
WSPD WTIC WWL WWVA

R — Fireside Recitals

KSD KYW WBEN WCAE WCHS
WDAF WFAE WFBY WGY WIRE
WJAR WMAQ WOW WRC WSAI
WTAC WTAM WTTM WTMJ WWJ

B — Ozzie Nelson; Harriet Hilliard

KARK KDKA KECA KFEL KEX
KFSD KFYR KGA KGO KJR KLO
KOIL KPRC KSO KSTP KTAR
KTBS KTBS KVOO KWK WABY
WAPI WAVE WBAL WBAP WBZ
WBZA WCKY WCOL WDAY WEAN
WECB WEBR WFIL WFLA WHAM
WHK WIBA WICC WIOD WIS
WJAX WJDX WJZ WKY WLEU

WLS WMAL WMC WMT WOA
WPTF WREN WRD WSB WSM
WSMB WSOC WSUN WSYR WTAR
WTMJ WWMC WXYZ

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

C — Columbia Workshop
KFAB KFH KFPY KLRA KLZ
KMBC KMOX KNX KOIN KOL
KOMA KRLL KRNT KSCJ KSPF
KSL KTRH KTSK KTUL KVI
KWKH WABC WADC WBBM WBIG
WBNS WBRC WBT WCAO WCAU
WCCO WDAE WDBJ WDBO WDBO
WEEI WFLB WFBM WGR WGST
WHAS WHEC WHIO WHK WHP
WIBX WJAS WJR WJSV WKBW
WKRC WLAC WLZB WMAS WMBG
WMBR WNAX WNBW WNOX WOKO
WORC WPRO WQAM WREC WSBT
WWL WWVA

Also on Canadian Network

R — Don Ameche; Edgar Bergen
CFRC CRCT KDYL KFI KFYR
KGW KHQ KOA KOMO KPO KPRC
KSD KSTP KTAR KTBS KVOO
KYW WAVE WBEN WCAE WCHS
WDAF WDAY WFAE WFCB WFAA
WFBY WFLA WGY WHO WIBA
WIOD WIRE WIS WJAR WJAX
WJDX WKY WLW WMAQ WMC
WNAC WOA WOI WPTF WRC
WRVA WSB WSM WSMB WSOC
WSUN WTAC WTAM WTTM WTTM
WTTM WTMJ WWJ

B — General Motors Concert

KANS KDKA KERN KECA KFBK
KFEL KFSD KGA KGHL KGIR
KGO KGU KJR KLO KMJ KOIL
KSO KVOO KWG KWK KXYZ
WABY WAGA WBAL WBCM WBOW
WBZ WBZA WCKY WCOL WDSU
WEAN WEBR WFBY WFEA WFIL
WGBF WGL WHAM WHK WICC
WJBO WJIM WJTN WJZ WLEU
WLS WMAL WMPA WMT WORK
WROL WRD WSGN WSMK WSPD
WSUN WSYR WXYZ

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

C — Ford Concert

CFRB CKAC KDB KERN KFAB
KFBK KFH KFPY KFRC KGB
KGKO KHJ KLRA KLZ KMBC
KMJ KMOX KOH KOIN KOL KOMA
KRLL KRNT KSCJ KSL KTRH
KTSK KTUL KVI KFOR KWG
KWKH WABC WACO WADC WALA
WBBM WBIG WBNS WBRC WBT
WCAO WCAU WCCO WDAE WDBJ
WDBO WDRC WDOE WDRC WEAN
WFLB WFBM WFEA WGR WGST
WHAS WHEC WHK WHP WIBX
WICC WJAS WJR WJSV WKBW
WKRC WLAC WLZB WMAS WMBR
WNAC WNOX WOKO WORC WQAM
WREC WSBT WSFA WSJS WSMK
WSPD WTIC WWL WWVA

B — Tyrone Power; Drama

KDKA KECA KFSD KGA KGHL
KGIR KGO KJR KLO KOIL KSO
KTAR KWK WBAL WBZ WBZA
WECB WEBR WENR WFIL WGR
WHAM WICC WJZ WLW WMAQ
WMT WREN WSYR WXYZ

R — Manhattan Merry-Go-Round

CFRC KDYL KFI KFYR KGW
KHQ KOA KOMO KPO KPRC KSD
KSTP KTBS KTBS KYW WAVE
WBEN WCAE WCKY WCHS WDAF
WDAF WFAE WFCB WEEI WFAA

SUNDAY (Continued)

WFBZ WFLA WGY WHO WIBA
WIOD WIRE WIS WJAX WJAX
WJDX WKY WMAQ WMC WOAI
WOW WPTF WRC WRVA WSB
WSM WSMB WSOC WTAP WTAM
WTAR WTIC WTMJ WWJ WNNC

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

R — Album of Familiar Music

CFCE CRTT KDYL KFI KFYZ
KGW KHQ KOA KOMO KPO KPRC
KSD KSTP KTBS KYW WAPI
WAVE WBBN WCAE WCHS WDAF
WDAW WFAE WFBZ WEEI WFAA
WFBZ WFLA WGY WHO WIBA
WIOD WIS WJAX WJAX WJDX
WKY WMAQ WMC WOAI WOW
WPTF WRC WRVA WSAI WSB
WSM WSMB WSOC WTAP WTAM
WTAR WTMJ WWJ WNNC

B — Walter Winchell

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

E-9:45 p.m., C-8:45, M-7:45, P-6:45

B — Irene Rich, Drama

KDKA KOIL KSO KWK WBAL
WBZ WBZA WCKY WEAN WBBZ
WENR WFIL WHAM WHK WICC
WJZ WMAL WMT WREN WSPD
WSYR WTCN WXYZ

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

C — Zenith Foundation

KFAB KFPY KILR KIZ KMBC
KMOX KNOW KNX KOIN KOL
KOMA KRLD KRNT KRSO
KSL KTRH KTSB KTUL KVI
WABC WBBM WBNS WBRC WBT
WCAU WCOB WDAE WDBO WDRB
WEEI WFBL WFBM WGAR WJAX
WHAS WHEC WJAX WJR WJSV
WKWB WKRC WMBR WNOX
WOKO WORC WPRO WQAM WWL

R — Rising Musical Stars

KDYL KFI KGBX KGW KHQ KOS
KPO KPRC KSD KSTP KTAR KTBS
KTBS KYW WAVE WBAF WBBN
WCAE WCHS WDAF WFAE WFBZ
WFLA WGY WHO WIBA WIOD
WIRE WIS WJAX WJAX WJDX
WKY WMAQ WMC WNAO WOAI
WOOD WOW WPTF WRC WRVA

WSB WSM WSMB WSOC WTAP
WTAM WTAR WTIC WTMJ WWJ
WNNC

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

B — Irene Rich, Drama

KECA KERN KEX KFBK KFSD
KGA KGO KJR KLO KMJ KVOB
KWG WAPI WAVE WJDX WMC
WSB WSM WSMB

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

B — Walter Winchell

KDYL KFI KFSD KGHL KGIR
KGW KHQ KOA KOMO KPO KPRC
KTAR KTBS KTBS WAPI WAVE
WBAF WJDX WKY WMC WOAI
WSB WSM WSMB

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

R — Jack Benny-Mary Livingstone

KDYL KERN KFBK KFI KFSD
KGHL KGIR KGU KGW KHQ
KIDO KMJ KOA KOMO KPO KTAR
KWG

B — Tyrone Power; Drama

KARK KPRC KTBS WAPI WAVE
WBAF WJDX WKY WMC WOAI
WSB WSM WSMB

Tim and Irene, 6:30 p.m. Sun., MBS

DRAMA

Campana's First Nighter, 10:00 p.m. Fri., Red
Campana's Grand Hotel, 8:30 p.m. Mon., Blue
Columbia Workshop, 8:00 p.m. Sun., CBS
Death Valley Days, 8:30 p.m. Fri., Blue
Gang Busters, 10:00 p.m. Wed., CBS
Eddie Guest, 8:30 p.m. Tues., Blue
Jean Hersholt, 2:30 p.m. Sun., CBS
Hollywood Hotel, 9:00 p.m. Fri., CBS
Hollywood Playhouse, 9:00 and 11:30 p.m. Sun., Blue
Lone Ranger, 7:30 and 10:30 p.m. Mon., Wed., Fri.,
MBS

Lux Radio Theater, 9:00 p.m. Mon., CBS
Helen Menken, 7:30 p.m. Tues., CBS
One Man's Family, 8:00 p.m. Wed., Red
Tyrone Power, 9:00 and 11:30 p.m. Sun., Blue
Irene Rich, 9:45 and 11:00 p.m. Sun., Blue
Edward G. Robinson, 8:00 p.m. Tues., CBS
Silver Theater, 5:00 p.m. Sun., CBS
A Tale of Today, 6:30 p.m. Sun., Red
Claire Trevor, 8:00 p.m. Tues., CBS
We, The People, 7:30 and 10:30 p.m. Thurs., CBS
Witch's Tale, 10:30 p.m. Tues., MBS
Your Unseen Friend, 8:00 p.m. Sat., CBS

POPULAR PROGRAMS

American Album of Familiar Music, 9:30 p.m. Sun.,
Red
Believe It or Not, 8:00 and 12:00 p.m. Sat., Red
Bicycle Party, 3:30 p.m. Sun., Red
Major Bowes' Amateurs, 9:00 p.m. Thurs., CBS
Major Bowes' Family, 11:30 a.m. Sun., CBS
Brave New World, 10:30 p.m. Mon., CBS
Carborundum Band, 7:30 p.m. Sat., CBS
Cavalcade of America, 8:00 p.m. Wed., CBS
Chase and Sanborn Hour, 8:00 p.m. Sun., Red
Cities Service Concert, 8:00 p.m. Fri., Red
Contented Program, 10:00 p.m. Mon., Red
Death Valley Days, 8:30 p.m. Fri., Blue
Fireside Recitals, 7:30 p.m. Sun., Red
Fun Bug, 2:00 p.m. Sun., CBS
Gang Busters, 10:00 p.m. Wed., CBS
Jack Haley's Variety Show, 8:30 p.m. Sat., Red
Hammerstein Music Hall, 8:00 p.m. Fri., CBS
Hobby Lobby, 7:15 and 10:30 p.m. Wed., CBS
Hollywood Mardi Gras, 9:30 p.m. Tues., Red
Hour of Charm, 9:30 p.m. Mon., Red
Husbands and Wives, 8:00 p.m. Tues., Blue
It Can Be Done, 8:30 p.m. Tues., Blue
Jello Program, 7:00 and 11:30 p.m. Sun., Red
Johnny Presents—, 8:00 p.m. Tues., Red; 8:30 and
11:30 p.m. Sat., CBS
Kraft Music Hall, 10:00 p.m. Thurs., Red
Warden Lawes, 10:00 p.m. Mon., Blue
Log Cabin Review, 8:30 p.m. Sat., Red
Magic Key of RCA, 2:00 p.m. Sun., Blue
Manhattan Merry-Go-Round, 9:00 p.m., Sun., Red
March of Time, 8:30 p.m. Thurs., Blue
MGM Program, 9:00 p.m. Thurs., Red
Music From Hollywood, 8:30 and 11:30 p.m., Fri., CBS
National Barn Dance, 9:00 and 11:00 p.m. Sat., Blue
Northern Messenger, 11:00 p.m. Sat., CBC
Jack Oakie's College, 9:30 p.m. Tues., CBS
L. Pantages Covers Hollywood, 1:45 and 11:00 p.m.
Sun., CBS
Poetic Melodies, 7:00 and 11:00 p.m. Mon. through
Fri., CBS
Pontiac Variety Show, 9:00 p.m. Fri., Blue
Professor Quiz, 9:00 and 12:00 p.m. Sat., CBS
Radio News Reel, 3:00 p.m. Sun., Red
Salt Lake City Tabernacle, 12:30 p.m. Sun., CBS
Saturday Night Serenade, 9:30 p.m. Sat., CBS
Saturday Night Swing Club, 7:00 p.m. Sat., CBS
Kate Smith Hour, 8:00 and 11:15 p.m. Thurs., CBS
Songshop, 10:00 p.m. Fri., CBS
Station E-Z-R-A, 7:15 p.m. Mon., Wed., Fri., Red
Swing School, 10:00 p.m. Tues., CBS
Texaco Town, 8:30 and 11:30 p.m. Wed., CBS

Time of Your Life, 5:30 p.m. Sun., Red
Town Hall Tonight, 9:00 p.m. Wed., Red
True Story Court, 9:30 p.m. Fri., Red
Uncle Jim's Question Bee, 7:30 p.m. Sat., Blue
Vick's Open House, 7:00 p.m. Sun., CBS
Voice of Firestone, 8:30 p.m. Mon., Red
Vox Pop, 9:00 p.m. Tues., Red
Waltz Time, 9:00 p.m. Fri., Red
Watch the Fun go By, 9:00 and 12:00 p.m. Tues., CBS
We, The People, 7:30 and 10:30 p.m. Thurs., CBS
Your Hit Parade, 10:00 p.m. Sat., CBS
Your Hollywood Parade, 10:00 p.m. Wed., Red
Zenith Foundation, 10:00 p.m. Sun., CBS

SINGERS

Stuart Allen, 10:00 p.m. Sat., CBS
Gene Austin, 6:00 p.m. Sun., CBS
Kenny Baker, 7:00 and 11:30 p.m. Sun., Red
Henry Burr, 9:00 and 11:00 p.m. Sat., Blue
Rachel Carlay, 9:00 p.m. Sun., Red
Kitty Carlisle, 10:00 p.m. Fri., CBS
Jerry Cooper, 9:00 p.m. Fri., CBS
Alice Cornett, 10:00 p.m. Fri., CBS
Richard Crooks, 8:30 p.m. Mon., Red
Bing Crosby, 10:00 p.m. Thurs., Red
Frank Crumit, 10:00 p.m. Fri., CBS
Jean Dickenson, 9:30 p.m. Sun., Red
Deanna Durbin, 8:30 and 11:30 p.m. Wed., CBS
Mary Eastman, 9:30 p.m. Sat., CBS
Nelson Eddy, 8:00 p.m. Sun., Red
Wilbur Evans, 7:00 p.m. Sun., CBS
Alice Faye, 8:30 and 11:30 p.m. Fri., CBS
Jack Fulton, 7:00 and 11:00 p.m. Mon. through Fri.,
CBS
Freddie Gibson, 10:00 p.m. Sat., CBS
Harriet Hilliard, 7:30 p.m. Sun., Blue
Al Jolson, 8:30 and 11:30 p.m. Tues., CBS
Red Kennedy, 10:00 p.m. Fri., CBS
Dorothy Lamour, 8:00 p.m. Sun., Red
Rosemary Lane, 10:00 p.m. Wed., Red
Frances Langford, 9:00 p.m. Fri., CBS
Pierre Le Kreeun, 9:00 p.m. Sun., Red
Nick Lucas, 9:00 and 12:00 p.m. Tues., CBS
Lullaby Lady, 10:00 p.m. Mon., Red
Lulu Belle, 9:00 and 11:00 p.m. Sat., Blue
Jeanette MacDonald, 7:00 p.m. Sun., CBS
Helen Marshall, 7:30 p.m. Sun., Red
Smiling Ed McConnell, 5:30 p.m. Sun., Blue
Lucille Manners, 8:00 p.m. Fri., Red
Tony Martin, 8:00 and 10:30 p.m. Mon., Red
Frank Munn, 9:30 p.m. Sun., Red; 9:00 p.m. Fri., Red
Dick Powell, 10:00 p.m. Wed., Red
Martha Raye, 8:30 and 11:30 p.m. Tues., CBS
Jane Rhodes, 9:30 p.m. Tues., Red
Lanny Ross, 9:30 p.m. Tues., Red
Kate Smith, 8:00 and 11:15 p.m. Thurs., CBS
Margaret Speaks, 8:30 p.m. Mon., Red
Marion Talley, 5:00 p.m. Sun., Red
Virginia Verrill, 8:30 p.m. Sat., Red
Bert Whaley, 8:30 p.m. Sun., Red

TALKS

Boake Carter, 7:45 and 11:15 p.m. Mon., Wed., Fri.,
CBS
Jimmy Fidler, 10:30 p.m. Tues., Fri., Red
Gabriel Heatter, 7:30 and 10:30 p.m. Thurs., CBS
Gen. Hugh Johnson, 8:00 p.m. Mon., Thurs., Blue;
10:00 p.m. Tues., Wed., Blue
John B. Kennedy, 8:00 p.m. Sun., Blue
Geo. McCall, 7:15 p.m. Tues., Thurs., CBS
Elder Michaux, 9:00 p.m. Mon., MBS
Robert L. Ripley, 8:00 and 12:00 p.m. Sat., Red
Sidney Skolsky, 8:30 p.m. Wed., Blue
Deems Taylor, 9:00 p.m. Wed., CBS
Lowell Thomas, 6:45 p.m. Mon. through Fri., Blue
Dorothy Thompson, 10:45 p.m. Fri., Red
Walter Winchell, 9:30 and 11:15 p.m. Sun., Blue

CLASSIFIED INDEX TO CHAIN PROGRAMS

Time in Eastern Standard

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

COMEDY

Fred Allen, 9:00 p.m. Wed., Red
Phil Baker, 7:30 p.m. Sun., CBS
Jack Benny-Mary Livingstone, 7 and 11:30 p.m. Sun.,
Red
Edgar Bergen-Charlie McCarthy, 8 p.m. Sun., Red
Bob Burns, 10:00 p.m. Thurs., Red
Burns and Allen, 8 and 10:30 p.m. Mon., Red
Charles Butterworth, 9:30 p.m. Tues., Red
Eddie Cantor, 8:30 and 11:30 p.m. Wed., CBS
Stuart Erwin, 9:30 p.m. Tues., CBS
Billy Franz, 2:00 p.m. Sun., CBS
Jack Haley, 8:30 p.m. Sat., Red
Arlene Harris, 9 and 12 p.m. Tues., CBS
George Jessel, 6:00 p.m. Sun., MBS
Al Jolson, 8:30 and 11:30 p.m. Tues., CBS
Ken Murray and Oswald, 9:00 p.m. Fri., CBS
Jack Oakie, 9:30 p.m. Tues., CBS
Walter O'Keefe, 9:30 p.m. Tues., Red
Parkyakarkus, 8:30 and 11:30 p.m. Tues., CBS
Al Pearce, 9 and 12 p.m. Tues., CBS
Joe Penner, 6:00 p.m. Sun., CBS
Joe Rines, 5:30 p.m. Sun., Red
Pinky Tomlin, 8:30 and 11:30 p.m. Wed., CBS
Henny Youngman, 8 and 11:15 p.m. Thurs., CBS

CONCERTS

Frank Black, 2:00 p.m. Sun., Blue
Ford Sunday Evening Hour, 9:00 p.m. Sun., CBS
General Motors Concert, 8:00 p.m. Sun., Blue
Andre Kostelanetz, 9:00 p.m. Wed., CBS
Metropolitan Opera, Sat. afternoons, NBC
Met. Opera Auditions, 5:00 p.m. Sun., Blue
NBC Symphony Orchestra, 10:00 p.m. Sat., Red and
Blue
N. Y. Philharmonic, 3:00 p.m. Sun., CBS
Philadelphia Symphony, 9:00 p.m. Sun., Blue

DANCE BANDS

Robert Armbruster, 8:00 p.m. Sun., Red
Oscar Bradley, 7:30 p.m. Sun., CBS
Tommy Dorsey, 10:00 p.m. Fri., Blue
Eddie Duchin, 8:00 p.m. Wed., Blue
Ted Fio Rito, 8:30 p.m. Sat., Red
Al Goodman, 10:00 p.m. Sat., CBS
Benny Goodman, 10:00 p.m. Tues., CBS

Jimmy Grier, 6:00 p.m. Sun., CBS
Gustav Haenschen, 9:30 p.m. Sun., Red; 10:00 p.m.
Fri., CBS
Phil Harris, 7 and 11:30 p.m. Sun., Red
Carl Hoff, 9 and 12 p.m. Tues., CBS
Hal Kemp, 8:30 and 11:30 p.m. Fri., CBS
Wayne King, 8:30 p.m. Tues., Wed., Red; 10 p.m.
Mon., CBS
Benny Kreuger, 8:30 p.m. Mon., CBS
Guy Lombardo, 5:30 p.m. Sun., CBS
Abe Lyman, 9:00 p.m. Fri., Red
Hugo Mariani, 3:30 p.m. Sun., Red
Frankie Masters, 8:30 p.m. Tues., Blue
Jack Miller, 8 and 11:15 p.m. Thurs., CBS
Russ Morgan, 8:30 and 11:30 p.m. Sat., CBS; 8:00 p.m.
Tues., Red
Ozzie Nelson, 7:30 p.m. Sun., Blue
Ray Noble, 8 and 10:30 p.m. Mon., Red
Raymond Palge, 9:30 p.m. Tues., Red; 9:00 p.m. Fri.,
CBS
Jacques Renard, 8:30 and 11:30 p.m. Wed., CBS
Joe Rines, 5:30 p.m. Sun., Red
B. A. Rolfe, 8:00 and 12:00 p.m. Sat., Red
Harry Salter, 8:00 p.m. Sat., CBS; 10:00 p.m. Sat.,
CBS; 7:15 and 10:30 p.m. Wed., CBS
Seymour Simons, 6:30 p.m. Sun., CBS
Phil Spitalny, 9:30 p.m. Mon., Red
Georgie Stoll, 9:30 p.m. Tues., CBS
Johnny Trotter, 10:00 p.m. Thurs., Red
Tommy Tucker, 6:00 p.m. Sun., MBS
Rudy Vallee, 8:00 p.m. Thurs., Red
Peter Van Steeden, 9:00 p.m. Mon., Red
Don Voorhees, 8:00 p.m. Wed., CBS
Mark Warnow, 7:30 and 10:30 p.m. Thurs., CBS
Ted Weems, 9:00 p.m. Mon., Red
Paul Whiteman, 9:00 p.m. Tues., MBS
Meredith Willson, 9:00 p.m. Thurs., Red
Victor Young, 8:30 and 11:30 p.m. Tues., CBS

DIALOG

Amos 'n' Andy, 7:00 and 11:00 p.m. Mon. through
Fri., Red
Easy Aces, 7:00 p.m. Tues., Wed., Thurs., Blue
Fibber McGee and Molly, 9:00 p.m. Mon., Red
Lum and Abner, 7:30 and 11:15 p.m. Mon., Wed.,
Fri., Blue
Pick and Fat, 8:30 and 11:30 p.m. Mon., CBS

The MONTH'S CHANGES in STATION DATA

This information is compiled just before we go to press, after the forms for most of the other pages are closed. Some very recent changes, received too late to index in this issue, are included here, and will be incorporated next month in our main indices.

NORTH AMERICAN BROADCAST NEW			
710	CMBL	Havana, Cuba. Radio Cadena Suaritos, Calle 25 No. 445, Vedado	930 CFAC Calgary, Alta., 1000 from 100
1030	CJBR	Rimouski, P. Q. J. A. Brilliant	1200 CKNX Winham, Ont., 100 from 50
	CMCK	Havana, Cuba. San Miguel 86	1450 CFCT Victoria, B. C., 500 from 50
1200	CFGP	Grande Prairie, Alta. Northern Brdsg. Corp., 906 McLeod Bldg., Edmonton, Alta.	
1210	.....	Greenfield, Mass. John W. Haigis	
1310	KPBM	Poplar Bluff, Mo. Fields McCarthy Co.	
1370	CFAR	Flin Flon, Man. Arctic Radio Corp., 120 Main St.	
.....		Owen Sound, Ont. Owen Sound Sun-Times	
1420	CHLN	Three Rivers, P. Q. Three Rivers Le Nouvelliste	
FREQUENCY			
930	XEFO	Mexico City, D. F., from 940	
1310	XEBO	Irapuato, Guan., from 1250	
POWER			
880	CFJC	Kamloops, B. C., 1000 from 100	
	CMQ	Havana, Cuba, 25000 from 2500	

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

Frequencies are given in megacycles. Power is given in parentheses in kilowatts. Schedules are shown in Eastern Standard Time by the 24-hour clock. All schedules daily unless otherwise noted.

1.715 to 2.000	Amateur Stations.	5.825	TIGPH (also TIXGP3), San Jose, Costa Rica. 1100-1300; 1800-2200.
2.500	XEXP Monterrey, N. L. (.03).	5.850	YV1RB Maracaibo, Venez. Sun., 1145-1245; Weekdays 0845-0945; 1115-1215; 1645-2145.
3.500 to 4.000	Amateur Stations.	5.855	HI1J San Pedro de Macoris, D. R. (.04). 1200-1400; 1830-2100.
3.040	YDA Tandjong Priok, Java, N.E.I. (10.).	5.875	HRN Tegucigalpa, Honduras. (4). Sun., 2030-2130. Weekdays 2030-2200.
4.273	RV15 Khabarovsk, USSR (Siberia). (20.). 0100-1000.	5.885	HI9B Santiago, D. R. 1800-2300.
4.600	HC2ET Guayaquil, Ecuador. Wed., Sat., 2100-2230.	5.895	YV3RA Barquisimeto, Venez. 1800-2200.
4.780	HJ1ABB Barranquilla, Colombia (.3). Apartado 715.	5.905	TILS San Jose, Costa Rica. 1800-2300.
4.787	HJ2ABC Cucuta, Colombia. (.25). "La Voz de Cucuta."	5.913	YV4RH Valencia, Venez. 1700-0100.
4.810	YDE2 Solo, Java, N.E.I. (.1).	5.925	HH25 Port-au-Prince, Haiti. 1900-2200.
4.840	HJ3ABD Bogota, Colombia. 1930-2400. Aptdo. 509.	5.935	YV1RL Maracaibo, Venez. (.3). 1700-2230.
5.415	PMY Bandoeng, Java, N.E.I. (.45). 0530-1000.	5.945	TG2X Guatemala City, Guatemala. (2). Sun., 1300-1400; Mon., Thurs., Sat., 1600-1800; 2200-2400.
5.500	T15HH San Ramon, Costa Rica. (.2). 2000-2330.	5.947	PJC1 Willemstad, Curacao, N.W.I. (.15). 1835-2035.
5.710	TGS Guatemala City, Guatemala. (2). Wed., Thurs., Sat., 1800-2100.	5.975	OAX4P Huancayo, Peru. (.25).
5.735	HC1PM Quito, Ecuador. Sat., 2100-2300.	5.980	HJ4ABD Medellin, Colombia. 2000-2230.
5.763	YNOP Managua, Nicaragua. 2000-2130.	5.990	HJ2ABD Bucaramanga, Colombia. (.67). 1900-2300.
5.765	YV2RA San Cristobal, Venez. 1800-2330.	6.000	CXA2 Montevideo, Uruguay. (.5).
5.800	YV5RC Caracas, Venez. (1.). Sun., 0830-2330. Weekdays 0700-2230.		OAX5C Ica, Peru. (.1).
5.813	TIGPH2 San Jose, Costa Rica.		XEBT Mexico City, D. F. (1.). 1800-2400.

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

6.005	CFCX Montreal, P. Q. (.075). 0700-2400.	6.125	CXA4 Montevideo, Uruguay. (1.). 1600-2145.
	HP5K Colon, Panama. 1800-2300.		HP5H Panama City, Panama
	VE9DN Montreal, P. Q. (6.).		XEPW Mexico City, D. F. 2100-2400.
	XZIGY Rangoon, Burma.		
6.010	CJXC Sydney, N. S. (1.).	6.128	OAX7A Cuzco, Peru. (1.).
	COCO Havana, Cuba. (2.5) Sun., 2000-2200. Weekdays 1030-1300; 1600-2000.	6.130	COCQ Havana, Cuba. (.35). 1700-0100
	OLR2A Prague, Czechoslovakia. (35.).		VE3HX Halifax, N. S. (.5). 1700-2300.
	 Mon., Wed., Fri., 1600-1630.	6.132	VP3BG Georgetown, British Guiana.
	 Saigon, French Indo-China.	6.137	CR7AA Lourenco Marques, Port. East Africa. Sun. 0600-0900. Weekdays 0500-0700.
6.012	HJ3ABH Bogota, Colombia. (1.2). 1800-2300.	6.138	HJ4ABD Medellin, Colombia.
6.015	HI3U Santiago de los Caballeros, D. R. (.025). Mon. 2000-2100. Daily 0730-0930; 1200-1430; 1700-1930.	6.140	W8XK Pittsburgh, Pa. (40.). 2200-sign off.
6.020	DJC Berlin, Germany. (50.). 1040-1630; 1650-2245	6.145	HJ4ABE Medellin, Colombia (1.). "La Voz de Antioquia." 1800-2230.
	XEUW Veracruz, Ver. (.02). 1800-2400.	6.150	CJRO Winnipeg, Man. (2.). 1800-2400.
6.025	HJ1ABJ Santa Marta, Colombia. (.05). 1800-2230.		VPB Colombo, Ceylon. (.3). Sun. 0700-1130; Weekdays 0630-1230.
6.030	HP5B Panama City, Panama. (.1). 1700-2200.	6.153	HI5N Ciudad Moca, D. R. (1.). 1900-2000.
	OLR2B Prague, Czech. (35.).	6.156	YV5RD Caracas, Venez. 1030-1330; 1530-2200.
	VE9BJ St. John, N. B. (.05).	6.174	XEXA Mexico City, D. F. 1700-2100.
	XEBQ Mazatlan, Sin. (.05).	6.190	HI1A Santiago de los Caballeros, D. R. (.05). Weekdays 2000-2200.
6.033	HJ4ABP Medellin, Colombia. (2.5). 1800-2300.	6.198	HI8Q Trujillo, D. R. 1700-1900.
6.038	HJ1ABC Barranquilla, Colombia. (.15). 1100-2300.	6.200	COKG Santiago, Cuba. (.05). Daily exc. Sat. 0900-2300.
6.040	PRA8 Pernambuco, Brazil. (3.). 1500-2000.	6.205	YV1RI Coro, Venez. (.15). 1700-2200.
	W1XAL Boston, Mass. (10.). Daily exc. Sat. and Sun., 1900-2100.	6.215	TG2 Guatemala City, Guatemala.
	W4XB Miami, Fla. (5.).	6.225	YV1RG Valera, Venez. 1730-1930.
	YDA Tandjong Priok, Java, N.E.I. (10.).	6.235	HRD La Ceiba, Honduras. (.25). 2000-2300.
6.050	GSA Daventry, Gt. Britain. (20.).	6.243	HI1N Trujillo, D. R. (.75).
	HJ6ABA Pereira, Colombia (6054 assigned). 1800-2200.	6.250	YV5RJ Caracas, Venez.
6.060	VQ710 Nairobi, Kenya. 1100-2430.	6.270	YV5RP Caracas, Venez. (1.2).
	W3XAU Philadelphia, Pa. (10.). 2000-2300.	6.280	HI6 Trujillo, D. R. (.05).
	W8XAL Cincinnati, Ohio. (10.). Daily 2300-0200. Sun. 0800-2000. Weekdays 0600-2000.	6.282	COHB Sancti-Spiritus, Cuba. (.15). 2100-2300.
6.062	SBG Motala, Sweden. (.5). 1330-1700.	6.296	OAX4G Lima, Peru. (4). 1900-2130.
6.064	VP3MR Georgetown, British Guiana. 1700-2100.	6.300	YV4RD Maracaibo, Venez. 1700-2300.
6.065	HP5F Colon, Panama.	6.310	HI2 Trujillo, D. R. (1.).
6.069	 Johannesburg, Union of S. Africa (5.). 2345-0030.	6.312	ZP14 Villarrica, Paraguay (1.). 1100-1700.
6.070	CFRX Toronto, Ont. (1.). 1000-2300.	6.330	COCW Havana, Cuba. 0700-2400.
	HJ3ABF Bogota, Colombia. (.05). 1900-2230.	6.335	OAX1A Chiclayo, Peru. (2). Daily 2000-2300; Sat. 2000-2400.
	YV1RD Maracaibo, Venez. 1900-2400.	6.340	HI1X Trujillo, D. R. (.5). Tues., Fri., 2000-2200.
6.075	XEBW Guadalajara, Jal. (.045).	6.357	HRP1 San Pedro Sula, Honduras.
	XECU Guadalajara, Jal.	6.365	YV1RH Maracaibo, Venez. 1900-2400.
6.077	OAX4Z Lima, Peru. (10.). (6082 assigned). 1900-2330.	6.380	YV5RF Caracas, Venezuela.
6.080	DJM Berlin, Germany. (50.).	6.400	YV5RH Caracas, Venezuela.
	VE9CS Vancouver, B. C. (.01). 1400-2400.	6.410	TIPG San Jose, Costa Rica. (1.). 1800-2230.
	W9XAA Chicago, Ill. (20.). Daily 1900-2200. Weekdays 0600-0730.	6.416	YV6RC Bolivar, Venez.
6.085	HJ5ABD Cali, Colombia. 1900-2200.	6.420	HI1S Santiago, D. R. (.02). 1800-2300.
6.090	CRCX Toronto, Ont. (1.). 1100-1900.	6.425	OAX4S Lima, Peru. (2).
	HJ4ABC Ibague, Colombia. 2000-2200.		W3XL Bound Brook, N. J. (100.). Irreg.
6.095	ZGE Kuala Lumpur, F.M.S.		W10XDA Effie M. Morrissey (1.).
6.100	W3XAL Bound Brook, N. J. (35.). 2100-0100.	6.450	HI4V San Francisco de Macoris, D. R. (.025).
	W9XF Chicago, Ill. (10.). 1700-2005.	6.479	HI8A Trujillo, D. R.
.....	Bolgrade, Yugoslavia. (1.). 1200-1700.	6.485	HI1L Santiago de los Caballeros, D. R. "Emisora Nacional." 0630-0800; 1730-1900; 2000-2100.
6.108	HJ4ABB Manizales, Colombia. 1800-2400.	6.479	HI8A Trujillo, D. R.
6.110	GSL London, Gt. Britain. (20.).	6.500	HI1L Trujillo, D. R. (.05).
6.115	OLR2C Prague, Czech. (35.).		YV1RM Maracaibo, Venez.
6.118	XEUZ Mexico City, D. F. (5.). 2300-0300.	6.508	Radio Guardia Civil, Tetuan, Sp. Morocco. 1900-2000.
6.120	W2XE New York, N. Y. (10.).	6.520	YV4RB Valencia, Venezuela. 1700-2200.
	XEFT Veracruz, Ver. (.012).	6.534	EDRA Palma, Majorca, Balearic Isl.
	YDAS Bandoeng, Java, N.E.I. (1.5).	6.540	YN1GG Managua, Nicaragua.
6.122	HJ3ABX Bogota, Colombia. 1730-2230.	6.545	YV6RB Bolivar, Venez. 2100-2300.
	OAX6A Arequipa, Peru. (1.).	6.550	TIRCC San Jose, Costa Rica. (.5). Tues., Thurs., Sat. 1700-1800.
		6.555	HI4D Trujillo, D. R. (.025). 1700-2000.
		6.622	Prado Rio Bamba, Ecuador. Thur. 2100-2300.

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

6.630	HIT	Trujillo, D. R. (.2). Weekdays, 1800-2100.	9.520	HJ4ABH	Armenia, Colombia. (1.). 0800-1100; 1800-2200.
6.635	HC2RL	Guayaquil, Ecuador. Sun. 1745-1945. Tues. 2145-2315.		OZF	Copenhagen, Denmark. 1400-1815.
6.690	TIEP	San Jose, Costa Rica. 1600-2300.		YSH	San Salvador, E. S.
6.700	TIVL	San Jose, Costa Rica. (1.5).	9.525	ZBW3	Radio Liberté, 1900-2000.
6.720	PMH	Bandoeng, Java, N.E.I. (1.5).			Hong Kong. (2.5). Sat. 2100-2400.
6.730	H12C	La Romana, D. R. 1745-2000.			Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100.
6.780	HHH	San Pedro de Macoris, D. R. (.15). 1900-2000.	9.530	LKJ1	Jeloy, Norway. (1.). 0500-0800.
				W2XAF	Schenectady, N. Y. (40.). Sat. 1200-2400. Other days 1600-2400.
6.800	H17P	Trujillo, D. R. 1930-2100.			Belmont, Calif. (20.). General Elec. Co. (Under construction).
	PZH	Paramaribo, N. W. I.	9.535	JZ1	Nazaki, Japan. (50.). 1500-1600; 1630-1730.
6.850	TIOW	Puerto Limon, Costa Rica. (.4). Sun., 1600-1700. Daily 1200-1300.		VPD2	Suva, Fiji. (2.). 0530-0700.
6.990	VK8XI	Port Moresby, Papua. (Doubtful).	9.536	DJN	Berlin, Germany. (50.). 0005-1000; 1655-2245.
7.000	to 7.300	Amateur stations.	9.540	OLR3A	Prague, Czechoslovakia. (35.). 1430-1630.
7.100	FO8AA	Papeete, Tahiti. (.2). Tues., Fri., 2300-2400.		XEFT	Veracruz, Ver. (.02). 1930-2400.
		Guadalajara, Jal. "Voice of the Revolutionary Party."	9.540	DJA	Berlin, Germany. (50.). 0005-1100; 1655-2245.
7.200	YNAM	Managua, Nicaragua. 2000-2400.		HJ1ABB	Barranquilla, Colombia. (.3).
7.380	XECR	Mexico City, D. F. (20.). Sun., 1800-2000.		YDB	Sourabaya I, Java, N.E.I. (1.).
		Radio Liberté, 1900-2000.	9.562	OAX4T	Lima, Peru. (10.). 1130-1330.
7.540	RKI	Moscow, U. S. S. R. (Assigned 7520).		VUB	Bombay, India. (4.5).
7.625		Johannesburg, U. of S. Africa. (5.). 2345-0030.	9.565	YV3RB	Barquisimeto, Venez.
			9.570	KZRM	Manila, P. I. 0400-1000.
7.797	HBP	Geneva, Switz. (20.). Sat., 1730-1830.		WLXK	Boston, Mass. (10.). Sun. 0800-0100. Weekdays 0600-0100.
7.894	YSD	San Salvador, E. S. 2100-2230.		W8XK	Pittsburgh, Pa. (40.). (Not used).
8.400	HC2CW	Guayaquil, Ecuador.	9.580	GSC	Daventry, Gt. Britain. (20.). 1800-2330; 2103-2300.
8.580	YNPR	Managua, Nicaragua. "Radio Pilot".		VK3LR	Melbourne, Australia. (.5). 0100-0945.
8.600	HC1EC	Quito, Ecuador.	9.590	PCJ	Hulzen, Netherlands. (20.). Sun. 1490-1510; 1900-2115; Mon. 2100-2230; Tues., 1400-1530; 1900-2130; Wed., 1930-2130; Thurs., 1900-2130.
8.655	WLOXA	Camaguey, Cuba. (2.4). 1800-0100.		VK2ME	Sydney, Australia. (20.). Sun., 0030-0230; 0430-0830; 0930-1130.
8.665	COJK	Quito, Ecuador. (15). Mon., Wed., Sat., 0200-0400; 1300-1500.		VK6ME	Perth, Australia. (5.). Weekdays 0600-0800.
8.950	HCJB	Havana, Cuba.		W2XE	New York, N. Y.
9.030	COBZ	Havana, Cuba.		W3XAU	Philadelphia, Pa. (10.). 1200-2000; Thurs., 2200-2300.
9.100	COBX	Budapest, Hungary. (20.). Sun., Wed., 1900-2000. Sat., 1800-1900.		W8XAL	Cincinnati, Ohio. (10.). (Under construction).
9.125	HAT4	Havana, Cuba.	9.595	HBL	Geneva, Switzerland. (18.). Sat. 1730-1830.
9.195	COBX	Havana, Cuba.		RAN	Moscow, USSR. 1900-2115.
9.340	OAX4J	Lima, Peru. (.2). 1200-1500; 1700-0100.	9.600	CB960	Santiago, Chile. 1800-1930.
9.345	HBL	Geneva, Switz. (20.). Fri. 1430-1445; 1930-1945; 2000-2015.	9.605	HP5J	Panama City, Panama. (1.). 1830-2300.
9.350	COBC	Havana, Cuba. Apto. 132.	9.618	HJ1ABP	Cartagena, Colombia. (.75). 1800-2200.
	HS8PJ	Bangkok, Siam. Mon., Thurs., 0730-1000.	9.625		Johannesburg, U. of S. Africa (5.). 2345-0030.
9.415	PJC2	Willemstad, Curacao, N.W.I.	9.630	HJ7ABD	Bucaramanga, Colombia. "Radio Bucaramanga."
	PLV	Bandoeng, Java, N.E.I. (80.). 1000-1100.			Taihoku, Taiwan. 0430-1630.
9.428	COCH	Havana, Cuba. (15). 0700-0100.	9.635	I2RO	Rome, Italy. (25.). 0500-1220.
9.445	HC2RA	Guayaquil, Ecuador. Sun. 1600-2200. Daily 2100-2200.	9.640	CXA8	Montevideo, Uruguay. 0700-2400.
9.450	HC2ODA	Guayaquil, Ecuador. 2100-2200.	9.645	HH3W	Port-au-Prince, Haiti. (.03). 1300-1400; 1900-2000.
9.460	XGQX	Nanking, China. (5).	9.650	CS2WA	Lisbon, Portugal. (2.). Tues., Thurs., Sat., 1600-1900.
9.470	PJC1	Willemstad, Curacao, N.W.I. (15). Sun. 1035-1235.	9.660	CR6AA	Lobito, Angola, Port. West Africa. (5.). Wed., Sat., 1445-1645.
9.480	EAR	Madrid, Spain. (20.). Mon. at 2000; Tues., Fri. at 2100.		LRX	Buenos Aires, Argentina. (5.). 1830-2430.
	XEDQ	Guadalajara, Jal. 1900-0100.	9.670	T14NRH	Heredia, Costa Rica. 2100-2280; 2330-2400.
9.500	EAC	Madrid, Spain.	9.685	TGWA	Guatemala City, Guat. (10.). "Radio Nacional." Sun., 0000-0600. Daily 2000-2400.
	HJ1ABE	Cartagena, Colombia. 1700-1800; 2000-2230.	9.700	COCA	Havana, Cuba. Relay CMCA.
	XEWV	Mexico City, D. F. (10.). 0800-2400.			
9.501	PRF5	Rio de Janeiro, Brazil. (60.). 1645-1745.			
9.504	OLR3B	Prague, Czechoslovakia. (35.).			
9.510	GSB	Daventry, Gt. Britain. (20.). 0315-0530; 1220-1545; 1600-2030; 2100-2300.			
	HJU	Buenaventura, Colombia. Mon., Wed., Fri. 2080-2300.			
	HS8PJ	Bangkok, Siam. Mon., Thurs., 0800-1000.			
	VK2ME	Melbourne, Australia. (5.). Week-days 0400-0700.			

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

9.730	.....	"Radio Martinique," Fort de France, Mart. 1845-1945.	11.810	I2RO	Rome, Italy. (25.). 0500-1220.
9.750	COCQ	Havana, Cuba. 0700-0100.	11.820	GSN	Daventry, Gt. Britain.
9.830	COCM	Havana, Cuba. (Assigned 9833).	11.830	KZRM	Manila, P. I.
9.860	EAQ	Madrid, Spain. (20.).		W2XE	New York, N. Y. (10.). Daily 1830-1900. Sun. 1900-2400.
9.925	JDY	Darien, Manchukuo. 0715-0800.		W9XAA	Chicago, Ill. (20.).
9.940	CSW	Lisbon, Portugal. (5.). 1900-2000.	11.840	CSW	Lisbon, Portugal. (5.).
10.065	CQN	Macau, Portuguese China.		KZRM	Manila, P. I. 0400-1000.
10.070	.....	Communist Station.		OLR4A	Prague, Czechoslovakia. (35.). Mon., Thurs., 1900-2100. Daily 1400-1415.
10.260	PMN	Bandoeng, Java, N.E.I. (1.5). 0530-1100.	11.855	DJP	Berlin, Germany. (50.).
10.330	ORK	Brussels, Belgium. (11.). 1330-1500.	11.860	GSE	Daventry, Gt. Britain. (20.).
10.370	EAJ43	Santa Cruz de Tenerife, Canary Isl. 2000-2100.		YDB	Sourabaya I, Java, N.E.I. (1.).
	.....	"Radio Nacional," Salamanca, Spain. 1700-1825; 2000-2045.	11.870	W8XK	Pittsburgh, Pa. (40.). 1900-2200.
10.430	.....	Pirate station announcing "Radio Milan."	11.875	OLR4C	Prague, Czechoslovakia. (35.).
			11.885	TPA3	Pontoise, France. 0200-0500; 1215-1800.
10.530	JIB	Taihoku, Taiwan. (6.). 0900-1030.	11.895	HP5I	Aguadulce, Panama. 1930-2130.
10.600	ZIK2	Belize, British Honduras.	11.900	CD1190	Valdivia, Chile. 1000-1300; 1900-2200.
10.660	JVN	Nazaki, Japan. (50.).		OLR4D	Prague, Czechoslovakia. (35.).
10.670	CEC	Santiago, Chile. (4.).		XEWI	Mexico City, D. F. (.25). 1930-2400.
10.740	JVM	Nazaki, Japan. (50.).	11.955	IUC	Addis Ababa, Ethiopia.
10.823	.....	"Radio Nacional," Salamanca, Spain. 1630-1800.	11.960	H12X	Trujillo, D. R. (.5). Tues., Fri., 2000-2200. Sun. 0740-1040.
11.000	PLP	Bandoeng, Java, N.E.I. (1.5).	12.000	RNE	Moscow, USSR. (20.). Sun. 1000-1100. Sun., Wed., 0600-0700. Sun., Mon., Wed., Fri., 1600-1700.
11.040	CSW	Lisbon, Portugal. (5.). 1500-1900.	12.120	.....	Algiers, Algeria.
11.402	HBO	Geneva, Switz., Fri. 1400-1415; Sat. 1845-2030.	12.235	TFJ	Reykjavik, Iceland. (7.5). Sun., 1345-1430.
11.435	COCX	Havana, Cuba. Sun. 1800-2100. Other days 0800-2400.	12.290	GBU	Rugby, Gt. Britain.
11.500	SPD	Warsaw, Poland. (2.). Daily 1800-1900. Sun. until 2000.	12.295	CB615	Santiago, Chile.
11.698	SBG	Motala, Sweden. (5.). 0100-0130.	12.500	HIN	Trujillo, D. R. (.75).
11.700	CB1170	Santiago, Chile. 1000-1400; 1530-2300.	13.635	SPW	Warsaw, Poland. (10.). Mon., Wed., Fri., 1230-1330. Daily 1800-1900.
	HP5A	Panama City, Pan. (5.). 2000-2330.	13.986	DJS	Berlin, Germany. (20.).
	.....	Salgon, Fr. Indo-China. 0500-1100.	14.000	to 14.400	Amateur Stations.
11.710	XEWB	Guadalajara, Jal.	14.400	UPOL	North Pole. 1400-1605.
	YSM	San Salvador, E. S.	14.535	HBJ	Geneva, Switz. Sat. 1845-2100.
11.713	TPA4	Pontoise, France. 0615-1300.	14.900	LZA	Sofia, Bulgaria.
11.718	CR7BH	Lourenco Marques, Port. East Africa. (2). Sun. 0530-0700. Other days 0430-0630.	15.040	RKI	Moscow, USSR. 1900-2115.
11.720	CJRXX	Winnipeg, Man. (2.). 1800-2400.	15.110	DJL	Berlin, Germany. (50.). 0800-0200; 0800-0900; 1040-1630. Sun., 0600-0800.
11.730	PHI	Hilversum, Netherlands. (23.6).	15.116	OLR5C	Prague, Czechoslovakia. (35.).
11.740	HP5L	David, Panama. (.35).	15.120	HVJ	Vatican City. (10.). 1000-1030.
11.750	GSD	Daventry, Gt. Britain. (20.). 0315-0530; 1045-1200; 1220-1545; 1600-2030; 2100-2300.	15.140	GSF	Daventry, Gt. Britain. (15.). 0915-1200.
11.760	OLR4B	Prague, Czechoslovakia. (35.).	15.150	YDC	Bandoeng, Java, N.E.I. (3.).
	TGWA	Guatemala City, Guat. (10.). Mon., Thurs., 2000-2200.	15.160	JZK	Nazaki, Japan. (50.).
11.770	DJD	Berlin, Germany. (50.). 1040-1630; 1650-2245.		XEWV	Mexico City, D. F. (10.).
11.790	W1XAL	Boston, Mass. (10.). Sat. 1345-1830. Sun. 1500-1800. Other days 1645-1830.	15.170	CXA14	Montevideo, Uruguay.
			15.175	TGWA	Guatemala City, Guat. (10.).
11.795	DJO	Berlin, Germany. (8.).	15.180	RV96	Moscow, USSR.
11.796	OAX5A	Ica, Peru. (1.). 1200-1600; 1900-2330.	15.180	GSO	Daventry, Gt. Britain. 0315-0530; 0545-0855; 1600-1800.
11.800	COGF	Matanzas, Cuba. (1.). 1300-1600; 1800-2200.	15.200	DJB	Berlin, Germany. (8.). Sun. 1110-1225. Daily 0005-1100; 1650-2245.
	JZJ	Nazaki, Japan. (50.). 1500-1600; 1630-1730; 0800-0900; 0030-0130.	15.210	W8XK	Pittsburgh, Pa. (40.). 0900-1900.
	OER2	Vienna, Austria. (1.5). Weekdays 0900-1800.	15.220	PCJ	Hulzen, Netherlands. (20.). Sun. 0330-0500. Wed. 0800-1030.
11.805	.....	Copenhagen, Denmark. 1830-2100.	15.230	OLR5A	Prague, Czechoslovakia. (35.). 0930-1130.
			15.243	TPA2	Pontoise, France. 0600-1100.
			15.250	W1XAL	Boston, Mass. (10.). Fri. 2100-

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15.260	GSJ	2200; Sun. 1015-1200; Daily exc. Sat. and Sun. 1415-1600. Daventry, Gt. Britain. 1220-1545; 2100-2300.	17.790	GSG	W8XK Pittsburgh, Pa. (40.). W9XAA Chicago, Ill. (5.). W9XF Chicago, Ill. (10.).
15.270	H13X W2XE	Trujillo, D. R. (.5). Sun., 0800-1100. New York, N. Y. (10.). Sat., Sun. 1430-1800; 2000-2400. Mon. through Fri. 1900-1800; 2030-2400.	19.020	HS8PJ	Daventry, Gt. Britain. (15.). 0315-0530; 0545-0855; 0915-1200; 1220-1545.
15.280	DJQ	Berlin, Germany. (50.). Sun. 1110-1225. Daily 0005-0545; 0600-0800; 0815-1100; 1650-2245.	21.450	OLR6A	Bangkok, Siam. (5.). Mon. 0800-1000.
15.290	LRU	Buenos Aires, Arg. (5.). 0800-1000.	21.460	W1XAL	Prague, Czecho. (35.). Boston, Mass. (10.). Tests irregularly.
15.300	XEBM	Mazatlan, Sin. 1000-2300.	21.470	GSH	Daventry, Gt. Britain. 0545-0855; 0915-1200.
15.310	GSP	Daventry, Gt. Britain. 1345-1545.	21.480	W2XAD	Schenectady, N. Y. (25.).
15.320	OLR5B	Prague, Czecho. (35.).	21.520	W2XE	New York, N. Y. (10.). Sat., Sun., 0800-1300; Other days 0730-1000.
15.330	W2XAD	Schenectady, N. Y. (25.). 1100-2100.	21.530	W3XAU	Philadelphia, Pa.
		Belmont, Calif. (20.). (Under construction).	21.540	G5J	Daventry, Gt. Britain. 0545-0855; 0915-1030.
15.340	DJR	Berlin, Germany. (50.). 0800-0900; 1650-2245.	21.550	W8XK	Pittsburgh, Pa. (40.). 0700-0900.
15.370	HAS3	Budapest, Hungary. (20.). Sun. 0900-1000.	21.550	GST	Daventry, Gt. Britain.
15.440	XEBM	Mazatlan, Sin. (.05). 1000-2300.	25.950	W4XH	Spartanburg, S. C. (.05) (WSPA).
15.555	CQ9WX	Tulnicu, Cuba. (2.).		W6XKG	Los Angeles, Calif. (.1) (KGFJ).
17.310	W3XL	Bound Brook, N. J. (20.).		W9XUP	24 hours daily. St. Paul, Minn. (1.) (KSTP).
17.760	DJE	Berlin, Germany. (50.). Sun. 1110-1225. Daily 0005-1000.	26.100	GSK	Daventry, Gt. Britain.
	W2XE	New York, N. Y. (10.). 1830-2000.	26.400	W9XAZ	Superior, Wis. (.08) (WEBC).
17.770	PHI	Hilversum, Netherlands. (23.6). Sun., 0725-1025. Mon., Tues., Thurs., Fri., 0825-1000. Sat., 0825-1040.	26.550	W2XQO	Milwaukee, Wis. (5) (WTMJ).
			27.100	W10XDA	Flushing, N. Y. (1) (WMCA).
17.780	W3XAL	Bound Brook, N. J. (35.). 0855-1745; 1800-2100.	28.000 to 30.000		Amateurs.
			56.000 to 60.000		Amateurs.
			110.000 to infinity.		Amateurs.

Time Conversion Table

The time given in our indices is Eastern Standard by the 24-hour clock.

EST 24-hr. Clock	EST	CST	MST	PST	GMT
0000.....	Midn't	11 pm	10 pm	9 pm	0500
0100.....	1 am	Midn't	11 pm	10 pm	0600
0200.....	2 am	1 am	Midn't	11 pm	0700
0300.....	3 am	2 am	1 am	Midn't	0800
0400.....	4 am	3 am	2 am	1 am	0900
0500.....	5 am	4 am	3 am	2 am	1000
0600.....	6 am	5 am	4 am	3 am	1100
0700.....	7 am	6 am	5 am	4 am	1200
0800.....	8 am	7 am	6 am	5 am	1300
0900.....	9 am	8 am	7 am	6 am	1400
1000.....	10 am	9 am	8 am	7 am	1500
1100.....	11 am	10 am	9 am	8 am	1600
1200.....	Noon	11 am	10 am	9 am	1700
1300.....	1 pm	Noon	11 am	10 am	1800
1400.....	2 pm	1 pm	Noon	11 am	1900
1500.....	3 pm	2 pm	Noon	Noon	2000
1600.....	4 pm	3 pm	1 pm	1 pm	2100
1700.....	5 pm	4 pm	2 pm	2 pm	2200
1800.....	6 pm	5 pm	3 pm	3 pm	2300
1900.....	7 pm	6 pm	4 pm	4 pm	2400
2000.....	8 pm	7 pm	5 pm	5 pm	0100
2100.....	9 pm	8 pm	6 pm	6 pm	0200
2200.....	10 pm	9 pm	7 pm	7 pm	0300
2300.....	11 pm	10 pm	8 pm	8 pm	0400
2400.....	Midn't	11 pm	10 pm	9 pm	0500

For times throughout the entire world consult the RADEX Time Converter.

KEY TO SYMBOLS

Frequency is given in kilocycles; wave lengths in meters. Night power is shown in watts in third column. Daytime power is shown in parentheses 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.
- 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.

Fourth Column Symbols

- B National "Blue" network.
- C Columbia network.
- D Day time only.
- Dn Day time with occasional evening hours.
- F Canadian Brdcast. Corp.
- M Mutual Brdcast. Sys.
- N National "Red" and "Blue" networks.
- P Has construction permit only.

As shown in the Index by Frequencies and Dial Numbers

- 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.

The sign-on and sign-off time of stations is shown in Eastern Standard Time. "ss" means "sunset."

540 kcys. (555.2)

CJRM ak 1000 F Regina, Sask. —9:30 am—1:30 am

550 kcys. (545.1)

CFNB mk 500 F (1) Fredericton, N. B. —7:00 am—11:00 pm
 KFUY ak 500 2 (1) St. Louis, Mo. —8:00 am—Midnight
 KFVR ak 1000 N (5) Bismarck, N. Dak. —8:00 am—1:00 am
 KOAC ak 1000 ... Corvallis, Ore. —Noon—Midnight
 KSD ak 1000 2R (5) St. Louis, Mo.
 KTSA ak 1000 C (5) San Antonio, Tex.
 WDEV ak 500 D Waterbury, Vt.
 WGR ak 1000 C (5) Buffalo, N. Y. —7:00 am—midnight
 WKRC ak 1000 C (5) Cincinnati, Ohio
 WSWA ak 500 D Harrisonburg, Va.
 XEFC ak 100 ... Merida, Yuc.

560 kcys. (535.4)

KFDM ak 500 (1) N Beaumont, Texas —8:30 am—2:00 am
 KLZ ak 1000 C (5) Denver, Colo. —10:00 am—4:00 am
 KSFO ak 1000 C (5) San Francisco, Cal.
 KWTO ak 5000 D Springfield, Mo. —7:00 am—midnight
 WFIL ak 1000 BM Philadelphia, Pa. —6:00 am—4:00 am
 WIS ak 1000 (5) Gary, Ind. —7:00 am—midnight
 WQAM ak 1000 N (5) Columbia, S. C. —7:00 am—midnight
 WQAM ak 1000 C Miami, Fla.

570 kcys. (526.0)

CMCY ak 5000 ... Havana, Cuba
 KGKO ak 250 CY (1) Wichita Falls, Tex.
 KMTR ak 1000 ... Los Angeles, Calif.
 KVI ak 1000 C (5) Tacoma, Wash. —9:00 am—3:00 am
 WKBN ak 500 CI Youngstown, Ohio
 WMCA ak 1000 ... New York, N. Y.
 WNAX ak 1000 C (5) Yankton, S. Dak.
 WOSU ak 750 1 (1) Columbus, Ohio —9:00 am—11:00 pm
 WSYR ak 1000 B (WSYU) Syracuse, N. Y. —7:00 am—1:00 am
 WWNC ak 1000 N Asheville, N. C. —7:30 am—1:00 am

580 kcys. (516.9)

CFPR ak 50 ... Prince Rupert, B. C. —8:00 am—midnight
 CHRC ak 100 ... Quebec, P. Q. —8:00 am—midnight
 CKCL ak 100 F Toronto, Ont. —8:00 am—midnight
 CKUA ak 500 ... Edmonton, Alta.
 KMJ ak 1000 N Fresno, Calif. —10:00 am—3:00 am

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KSAC	ak	500	2 (1)	Manhattan, Kans.	-10:30 am-6:30 pm
WCHS	ak	500	C (1)	Charleston, W. Va.	
WDBO	ak	1000	C	Orlando, Fla.	-7:00 am-midnight
WIBW	ak	1000	2C (5)	Topeka, Kans.	
WILL	ak	1000	D	Urbana, Ill.	-9:00 am-ss
WTAG	ak	1000	R	Worcester, Mass.	-7:30 am-1:00 am
XEMU	z	....	....	Piedras Negras, Coah.	

590 kcys. (508.2)

KHO	ak	1000	R (5)	Spokane, Wash.	
WEEI	ak	1000	C (5)	Boston, Mass.	
WKZO	ak	1000	BDX	Kalamazoo, Mich.	
WOW	ak	1000	R (5)	Omaha, Nebr.	-7:00 am-3:30 am

600 kcys. (499.7)

CBW	ak	500	F (1)	Windsor, Ont.	-4:30 pm-11:30 pm
CFCF	ak	500	BF	Montreal, P. Q.	
CJOR	ak	500	....	Vancouver, B. C.	-7:45 am-1:00 am
CMW	ak	1400	....	Havana, Cuba	-7:00 am-midnight
KFSO	ak	1000	B	San Diego, Calif.	
WCAO	ak	500	C (1)	Baltimore, Md.	
WICC	ak	500	BM (1)	Bridgeport, Conn.	-7:00 am-1:00 am
WMT	ak	1000	BM (5)	Cedar Rapids, Iowa	-6:30 am-1:00 am
WREC	ck	1000	C (5)	Memphis, Tenn.	-7:30 am-1:00 am

610 kcys. (491.5)

KFRC	c	1000	M (5)	San Francisco, Cal.	
WCLE	ak	500	DM	Cleveland, Ohio.	-7:00 am-ss
WDAF	ak	1000	R (5)	Kansas City, Mo.	-7:30 am-1:00 am
WIOD	ak	1000	N(WMBF)	Miami, Fla.	
WIP	ak	1000	....	Philadelphia, Pa	-7:00 am-1:00 am

620 kcys. (483.6)

KGW	ak	1000	R (5)	Portland, Ore.	-9:00 am-2:00 am
KTAR	ak	1000	N	Phoenix, Ariz.	-9:00 am-1:15 am
WFLA	ak	1000	Na (5)	Clearwater, Fla.	-7:00 am-1:00 am
WHJB	ak	250	CD	Greensburg, Pa.	-8:00 am-5:00 pm
WLBZ	ak	500	CM (1)	Bangor, Maine	
WSUN	ak	1000	Na (5)	St. Petersburg, Fla.	-7:00 am-1:00 am
WTMJ	ak	1000	N (5)	Milwaukee, Wis.	-7:15 am-1:00 am

630 kcys. (475.9)

CFCO	ak	100	F	Chatham, Ont.	-8:00 am-10:30 pm
CFYF	ak	1000	F	Charlottetown, P.E.I.	-9:00 am-11:00 pm
CJRC	ak	500	F (1)	Winnipeg, Man.	-8:30 am-12:30 am
CKOV	ak	100	F	Kelowna, B. C.	-11:00 am-1:30 am
CMBC	z	....	....	Havana, Cuba	-6:55 am-midnight
KFRU	ak	500	1 (1)	Columbia, Mo.	-7:00 am-9:30 pm
KGFX	ak	200	D	Pierre, S. Dak.	
WGBF	ak	500	N1 (1)	Evansville, Ind.	
WMAL	ak	250	B (.5)	Washington, D. C.	-7:00 am-2:00 am
WPRO	ak	500	C (1)	Providence, R. I.	-7:00 am-1:00 am
XEZ	z	500	....	Merida, Yuc.	

640 kcys. (468.5)

CMCB	ak	150	....	Havana, Cuba	
KFI	ak	50000	R	Los Angeles, Calif.	-9:45 am-3:00 am
WGAM	z	500	DP	Portland, Maine	
WHKC	ak	500	....	Columbus, Ohio	-6:30 am-8:15 pm
WOI	ak	5000	D	Ames, Iowa	
XEBX	z	250		Sabinas, Coah.	

650 kcys. (461.3)

WSM	ak	50000	MN	Nashville, Tenn.	-7:30 am-1:00 am
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NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

660 kcys. (454.3)

WAAW	ak	500	D	Omaha, Nebr.	-7:00 am-ss
WEAF	ak	50000	R	New York, N. Y.	-7:30 am-1:00 am
XEAL	z	1000	....	Mexico City, D. F.	
XEAO	ak	250	....	Mexicali, B. Cfa.	

670 kcys. (447.5)

WMAQ	ak	50000	R	Chicago, Ill.	-7:00 am-1:00 am
XELO	ak	5000	....	Tijuana, B. Cfa.	

680 kcys. (440.9)

CMCG	ak	1000	....	Havana, Cuba	-7:00 am-midnight
KFEQ	ak	2500	D	St. Joseph, Mo.	-7:00 am-ss
KPO	ak	50000	R	San Francisco, Cal.	-11:00 am-3:00 am
VAS	akn	2000	685	Glance Bay, N. S.	
VOWR	ck	500	681	St. John's, Nfld.	
WLAW	z	1000	DP	Lawrence, Mass.	
WPTF	ak	1000	N (5)	Raleigh, N. C.	-7:00 am-11:00 pm

690 kcys. (434.5)

CFRB	ak	10000	C	Toronto, Ont.	-8:00 am-midnight
CJCI	ak	100	F	Calgary, Alta.	-9:30 am-1:00 am
XET	ak	5000		Monterrey, N. L.	-8:30 am-10:00 pm

700 kcys. (428.3)

WLW	ak	500000	MN (W8XO)	Cincinnati, O.	-6:30 am-1:30 am
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710 kcys. (422.3)

CMBL	z			Havana, Cuba	-8:00 am-12:15 am
KIRO	ak	1000	C	Seattle, Wash.	-9:00 am-5:00 am
KMPC	ak	500	....	Beverly Hills, Calif.	-9:00 am-4:00 am
WOR	ak	50000	M	Newark, N. J.	

720 kcys. (416.4)

WGN	ak	50000	M	Chicago, Ill.	
XEH	ak	250	....	Monterrey, N. L.	-10:00 am-9:00 pm

730 kcys. (410.7)

CFPL	ak	100	F	London, Ont.	-9:00 am-3:00 am
CJCA	ak	1000	F	Edmonton, Alta.	-9:00 am-2:00 am
CKAC	ak	5000	C	Montreal, P. Q.	-7:30 am-1:00 am
CKPR	ak	100	F	Fort William, Ont.	-9:00 am-11:00 pm
CMF	ak	3000	....	Havana, Cuba	
XEPN	ak	100000	....	Piedras Negras, Coah.	

740 kcys. (405.2)

KMMJ	ak	1000	D	Clay Center, Nebr.	
KTRB	ak	250	D	Modesto, Calif.	-9:00 am-8:30 pm
WHEB	ak	250	D	Portsmouth, N. H.	
WSB	ak	50000	R	Atlanta, Ga.	-6:55 am-1:00 am

750 kcys. (399.8)

CMCW	dk	150	....	Havana, Cuba	
KGU	aj	2500	N	Honolulu, Hawaii	-11:30 am-4:30 am
WJR	ak	50000	C	Detroit, Mich.	-5:30 am-2:00 am
XEAA	ak	200	....	Mexicali, B. Cfa.	
XEAM	z	25	....	Matamoros, Tams.	

760 kcys. (394.5)

CKY	ak	15000	F	Winnipeg, Man.	-8:00 am-1:00 am
CMHX	ak	200	....	Cienfuegos, Cuba	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KXA ak 250 (.5) Seattle, Wash.
WBAL ak 2500 BMSy Baltimore, Md.
WEW ak 1000 D St. Louis, Mo.
WJZ ak 50000 BSy New York, N. Y.
XEOK ak 2500 Tijuana, B. Cfa.

770 kcys. (389.4)

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

780 kcys. (384.4)

CHWK dk 100 F Chilliwack, B. C.
CKSO ak 1000 F Sudbury, Ont.
CMJK ak 250 Camaguey, Cuba
KEHE ak 1000 (5) Los Angeles, Calif.
KFYD ak 1000 D Brookings, S. Dak.
KFQD ck 250 Anchorage, Alaska
KGHL ak 1000 N (5) Billings, Mont.
KWLK z 250 DP Longview, Wash.
WEAN ak 1000 BM Providence, R. I.
WMC ak 1000 R (5) Memphis, Tenn.
WTAR ak 1000 N Norfolk, Va.
XEL z 1000 Mexico City, D. F.

790 kcys. (379.5)

CMGH ak 500 Matanzas, Cuba
KGO ak 7500 B San Francisco, Cal.
KOAM z 1000 DN Pittsburg, Kans.
WGY ak 50000 R Schenectady, N. Y.

800 kcys. (374.8)

WBAP ak 50000 Na Fort Worth, Texas
WFAA ak 50000 Na Dallas, Texas
WTBO ak 250 D Cumberland, Md.

810 kcys. (370.2)

CMCF ak 600 X Havana, Cuba
WCCO ak 50000 C Minneapolis, Minn.
WNYC ak 1000 D New York, N. Y.
XEDF z 75 Nuevo Laredo, Tams.
XEXC z 350 Aguascalientes, Ags.

820 kcys. (365.6)

CMHW ak 100 Glenfuegos, Cuba
WHAS ak 50000 G Louisville, Ky.
XEBG z 1000 Tijuana, B. Cfa.

830 kcys. (361.2)

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

840 kcys. (356.9)

CBL z 50000 P Toronto, Ont.
CFQC ak 1000 F Saskatoon, Sask.
CRCT ak 5000 FN Toronto, Ont.
VOGY ak 400 St. John's, Nfld.
XERA ck 350000 Villa Acuna, Coah.

850 kcys. (352.7)

CMCM z Havana, Cuba
KIEV ak 250 D Glendale, Calif.
WESG ak 1000 CD Elmira, N. Y.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WKAR ak 1000 D E. Lansing, Mich.
WWL ak 10000 C New Orleans, La.

860 kcys. (348.6)

WABC ak 50000 C (WBOQ) New York, N. Y.
WHB ak 1000 DM Kansas City, Mo.
XEMO ak 5000 Tijuana, B. Cfa.
XENC z 50 Mexico City, D. F.

870 kcys. (344.6)

WENR ak 50000 Ba Chicago, Ill.
WLS ak 50000 Ba Chicago, Ill.
XEFB ak 200 Monterrey, N. L.
XEJW z Mexico City, D. F.

880 kcys. (340.7)

CBO ak 1000 F Ottawa, Ont.
CFJC ak 100 F Kamloops, B. C.
CMQ ak 25000 Havana, Cuba
KFKA ak 500 2M (1) Greeley, Colo.
KLX ak 1000 Oakland, Calif.
KPOF ak 500 2 Denver, Colo.
WCOC ak 500 CX (1) Meridian, Miss.
WGBI ak 500 CI (1) Scranton, Pa.
WOAN ak 500 1 (1) Scranton, Pa.
WRNL ak 500 D Richmond, Va.
WSUI ak 500 (1) Iowa City, Iowa

890 kcys. (336.9)

KARK ak 500 N (1) Little Rock, Ark.
KFNE ak 500 2 (1) Shenandoah, Iowa
KFPY ak 1000 C (5) Spokane, Wash.
KUSD ak 500 2 Vermillion, S. Dak.
WBAA ak 500 (1) W. Lafayette, Ind.
WGST ak 1000 C (5) Atlanta, Ga.
WJAR ak 1000 R (5) Providence, R. I.
WMMN ak 500 C (1) Fairmont, W. Va.
XEW ak 50000 Mexico City, D. F.

900 kcys. (333.1)

KGBU ak 500 X Ketchikan, Alaska
KHJ ak 1000 M (5) Los Angeles, Calif.
KSEI ak 250 (1) Pocatello, Idaho
WBEN ak 1000 R (5) Buffalo, N. Y.
WELI ak 500 D New Haven, Conn.
WFMD ak 500 D Frederick, Md.
WJAX ak 1000 N (5) Jacksonville, Fla.
WKY ak 1000 N (5) Oklahoma City, Ok.
WLBL ak 5000 D Stevens Point, Wis.
WTAD ak 1000 D Quincy, Ill.

910 kcys. (329.6)

CBF z 50000 NP Montreal, P. O.
CJAT ak 1000 F Trail, B. C.
XENT ak 150000 Nuevo Laredo, Tams.

920 kcys. (325.9)

CMX ak 1000 Havana, Cuba
KFEL ak 500 Ma Denver, Colo.
KOMO ak 1000 R (5) Seattle, Wash.
KPRC ak 1000 R (5) Houston, Texas
KVOD ak 500 Ba Denver, Colo.
WAAF ak 1000 D Chicago, Ill.
WORL ak 500 D Boston, Mass.
WPEN ak 1000 Philadelphia, Pa.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WSPA ak 1000 D Spartanburg, S. C. —6:00 am—12:30 am
WWJ ak 5000 R Detroit, Mich.

930 keys. (322.4)

CFAC ak 1000 F Calgary, Alta. —9:00 am—2:00 am
CFCH ak 100 F North Bay, Ont. —7:00 am—10:00 pm
CFCL ak 100 F Prescott, Ont. —7:30 am—11:00 pm
CHNS ak 1000 F Halifax, N. S.
CKPC ak 100 F Brantford, Ont.
KMA ak 1000 (5) Shenandoah, Iowa
KROW ak 1000 C Oakland, Calif. —9:00 am—5:00 am
WBRC ak 1000 C Birmingham, Ala. —8:00 am—12:30 am
WDBJ ak 1000 C (5) Roanoke, Va. —7:00 am—midnight
XEBH ak 500 Hermosillo, Son. —1:00 pm—midnight
XEFO ak 5000 Mexico City, D. F.

940 keys. (319.0)

KOIN ak 1000 C (5) Portland, Ore.
VOAS ak 100 St. John's, Nfld. —6:30 am—6:00 pm
WAAT ak 500 D Jersey City, N. J. —8:00—1:00 am
WAYE ak 1000 N Louisville, Ky. —8:00 am—midnight
WCSH ak 1000 R (2.5) Portland, Maine —7:00 am—1:00 am
WDAY ak 1000 N (5) Fargo, N. Dak. —9:00 am—5:30 pm
WHA ak 5000 D Madison, Wis.
WICA z 250 DP Ashtabula, Ohio
XEYO z 500 Mexico City, D. F.

950 keys. (315.6)

CJOC ak 100 F Lethbridge, Alta. —9:00 am—1:00 am
CMCD ak 250 Havana, Cuba —Noon—1:00 am
CRCK ak 1000 F Quebec, P. Q.
KFWB ak 1000 (5) Hollywood, Calif.
KMBC ak 1000 C (5) Kansas City, Mo. —6:55 am—1:00 am
WHAL z 500 DP Saginaw, Mich.
WRC ak 500 RX (1) Washington, D. C.

960 keys. (312.3)

CFRN ak 100 F Edmonton, Alta. —9:30 am—2:00 am
CHNC ak 1000 F New Carlisle, P. Q. —7:30 am—11:00 pm
CRCY ck 100 F Toronto, Ont.
XEAU c 50000 Reynosa, Tams.

970 keys. (309.1)

CMBY z 150 Havana, Cuba —8:55 am—11:00 pm
KJR ak 5000 B Seattle, Wash.
WCFL ak 5000 N Chicago, Ill.
WIBG ak 100 D Glenside, Pa.

980 keys. (306.0)

KDKA ak 50000 B Pittsburgh, Pa.
XEAC ak 1000 Tijuana, B. Cfa.
XEFE z 150 Nuevo Laredo, Tams.

990 keys. (302.8)

WBZ ak 50000 BSy Boston, Mass. —6:30 am—1:00 am
WBZA ak 1000 BSy Springfield, Mass. —6:30 am—1:00 am
XEAF ak 750 Nogales, Son.
XEK ak 100 Mexico City, D. F.
XES ak 250 Tampico, Tams.

1000 keys. (299.8)

CMBZ ak 500 (1) Havana, Cuba —7:45 am—midnight
KFVD ak 1000 Dn Los Angeles, Calif. —9:00 am—8:15 pm
VOCM z 200 1006 St. John's, Nfld.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WHO ak 50000 R Des Moines, Iowa —7:00 am—1:00 am
XEBI ak 25 Aguascalientes, Ags.
XEBK ak 60 Nuevo Laredo, Tams. —10:00 am—8:30 pm
XEXS z 100 Portable in Mexico

1010 keys. (296.9)

CHML ak 100 F Hamilton, Ont. —8:00 am—midnight
CKCD ak 100 1 Vancouver, B. C.
CKCK ak 1000 F Regina, Sask. —9:30 am—2:00 am
CKCO ak 100 F Ottawa, Ont. —Noon—11:30 pm
CKIC ak 50 Wolfville, N. S.
CKWX ak 100 F1 Vancouver, B. C. —Noon—4:00 am
CMJA ak 300 Camaguey, Cuba
KGGF ak 1000 2M Coffeyville, Kans.
KOW ak 1000 M San Jose, Calif. —9:30 am—3:00 am
WHN ak 1000 (5) New York, N. Y.
WNAD ak 1000 2 Norman, Okla. —3:00 pm—10:15 pm
WNOX ak 1000 C (5) Knoxville, Tenn. —6:30 am—2:00 am
XEU ak 250 Veracruz, Ver. —8:00 am—1:00 am

1020 keys. (293.9)

KYW ak 10000 R Philadelphia, Pa. —7:05 am—10:00 pm
WDZ ak 250 D Tuscola, Ill. —7:00 am—6:00 pm
XEJ ak 1000 Juarez, Chih.

1030 keys. (291.1)

CFCN ak 10000 Calgary, Alta. —6:45 am—1:30 am
CJBR z 1000 F Rimouski, P. Q.
CKLW ak 5000 M Windsor, Ont. —6:45 am—1:30 am
CMCK z Havana, Cuba —9:00 am—11:00 pm
CMCX z 150 Havana, Cuba —10:00 am—12:15 am
XEB ak 10000 Mexico City, D. F.

1040 keys. (288.3)

KRLD ak 10000 C Dallas, Texas —7:00 am—1:00 am
KWJJ ak 500 Portland, Ore.
KYOS z 250 D Merced, Calif.
WTIC ah 50000 R Hartford, Conn.

1050 keys. (285.5)

CBM ak 5000 F Montreal, P. Q.
CMKD ak 250 Santiago, Cuba
KFBI ak 5000 Dn Abilene, Kans. —7:00 am—7:45 pm
KNX ak 50000 C Los Angeles, Calif. —9:30 am—3:15 am
WEAU z 1000 D Eau Claire, Wis.
WGVA z 1000 DP Indianapolis, Ind.

1060 keys. (282.8)

KTHS ak 10000 N Hot Springs, Ark. —9:00 am—ss
VOAC z 40 1065 St. John's, Nfld.
WBAL ak 10000 BM Baltimore, Md. —7:00 am—9:00 pm
WJAG ak 1000 D Norfolk, Nebr. —7:30 am—ss
W3XJ z 100 P College Park, Md. —Midnight to 6:00 am
XEAD ak 125 Guadalajara, Jal.
XEMG z 100 Atzacapotzalco, D. F.

1070 keys. (280.2)

CMBX ak 500 Havana, Cuba
CMHA z 50 Sagua la Grande, Cuba
KJBS ak 500 San Francisco, Calif. —1:00 am—8:30 pm
WCAZ ak 100 D Carthage, Ill.
WTAM ak 50000 R Cleveland, Ohio —6:00 am—midnight

1080 keys. (277.6)

WBT ak 50000 C Charlotte, N. C. —6:45 am—midnight
WCBT ak 5000 Dn Chicago, Ill.
WMBI ak 5000 Dn Chicago, Ill.
XEBA z 20 Guzman, Jal.
XEDP ak 500 Mexico City, D. F.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1090 keys. (275.1)

KMOX ak 5000 C St. Louis, Mo. —7:00 am—1:00 am

1100 keys. (272.6)

CBR ak 5000 F Vancouver, B. C.
CMCJ ak 500 Havana, Cuba.
KGDM ak 1000 DM Stockton, Calif.
KWKH c 10000 C Shreveport, La.
WBIL ak 5000 I New York, N. Y.
WPG ak 5000 C1 Atlantic City, N. J.
XECL z 1700 Mexico, B. Cfa.

1110 keys. (270.1)

KSOO ak 2500 DnN Sioux Falls, S. Dak. —7:00 am—6:45 pm
WRVA ak 5000 CM Richmond, Va. —7:00 am—midnight

1120 keys. (267.7)

CHLP ak 100 F Montreal, P. Q. —9:00 am—11:00 pm
CHSJ ak 500 F (1) St. John, N. B. —5:00 am—midnight
CKOC ak 500 F (1) Hamilton, Ont.
CKX ak 1000 F Brandon, Man.
CMCF ak 250 Matanzas, Cuba.
CMKM ak 200 Manzanillo, Cuba. —8:00 am—10:00 pm
CBCS ak 100 F Chicoutimi, P. Q.
KFIO ak 100 D Spokane, Wash.
KFSG ak 500 a (2.5) Los Angeles, Calif. —9:00 am—3:00 am
KRKD ak 500 a (2.5) Los Angeles, Calif.
KRSC ak 250 Seattle, Wash.
KTBC z 1000 DP Austin, Texas
WCOP ak 500 D Boston, Mass. —8:00 am—4:00 pm
WDEL ak 250 R (5) Wilmington, Del. —9:00 am—11:00 pm
WISN ak 250 C (1) Milwaukee, Wis. —8:00 am—1:00 am
WJBO ak 500 B Baton Rouge, La.
WTAW ak 500 College Sta., Tex.

1130 keys. (265.3)

CMJI ak 150 Ciego de Avila, Cuba —Noon—10:00 pm
KSL ak 5000 C Salt Lake City, Ut. —8:30 am—3:00 am
WJJD ak 20000 Dn Chicago, Ill. —6:00 am—6:45 pm
WOV ak 1000 D New York, N. Y.
XEJP z 100 Mexico City, D. F.

1140 keys. (263.0)

CMBG z 200 Havana, Cuba —10:00 am—10:00 pm
KVOO ak 25000 NI Tulsa, Okla.
WAPI ak 5000 RI Birmingham, Ala.
WSPR ak 500 DM Springfield, Mass. —7:00 am—5:45 pm

1150 keys. (260.7)

CMJF z 200 Camaguey, Cuba —7:00 am—midnight
WHAM ak 50000 B Rochester, N. Y.
XEC ak 100 Tijuana, B. Cfa.
XEDW z 20 Minatitlan, Ver.

1160 keys. (258.5)

CMHJ ak 175 Cienfuegos, Cuba
CMKG z 10000 BI Santiago, Cuba
WOWO ak 10000 CI Fort Wayne, Ind.
WWVA ak 5000 CI Wheeling, W. Va.
XEAS z 50 Saltillo, Coah.
XEBJ z 20 Merida, Yuc.
XEBZ ad 100 Mexico City, D. F.
XED ak 2500 Guadalajara, Jal.
XEP ak 500 Juarez, Chih. —Noon—midnight
—9:00 am—2:00 am

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1170 keys. (256.3)

CMBD ak 500 Havana, Cuba —7:00 pm—midnight
WCAU ak 50000 C Philadelphia, Pa. —7:30 am—1:00 am

1180 keys. (254.1)

CMJO ak 50 Ciego de Avila, Cuba
KEX ak 5000 B2 Portland, Ore.
KOB ak 10000 N2 Albuquerque, N. M. —1:00 pm—11:00 pm
WDGY ak 1000 CDn(5) Minneapolis, Minn.
WINS ak 1000 New York, N. Y.
WMAZ ak 1000 C Macon, Ga.
XEFA z 500 Tacuba, D. F. —7:00 pm—7:00 pm

1190 keys. (252.0)

CMKX z 250 Santiago, Cuba
KTKC z 250 D Visalia, Calif.
VONF ak 500 1195 St. John's, Nfld.
WATR ak 100 DXZ Waterbury, Conn.
WOAI ak 50000 N San Antonio, Tex. —7:30 am—12:30 am
WSAZ ak 1000 Huntington, W. Va. —7:00 am—7:00 pm

1200 keys. (249.9)

CFGP z 100 Grande Prairie, Alta.
CHAB ak 100 F Moose Jaw, Sask. —9:00 am—12:30 am
CKNX dk 100 Wingham, Ont. —11:00 am—1:00 am
CKTB ak 100 F St. Catharines, Ont. —9:30 am—11:30 am
CMGO ad 250 Havana, Cuba
KADA ak 100 DM Ada, Okla.
KBTM ak 100 D Jonesboro, Ark.
KDNC z 100 (25) P Lewistown, Mont.
KELO z 100 N Sioux Falls, S. Dak.
KFJB ak 100 (25) Marshalltown, Ia. —7:00 am—10:00 pm
KFSD ak 100 (25) Nampa, Idaho —8:00 am—10:00 pm
KFJX ak 100 (25) Grand Junc., Colo.
KGCI z 100 DP Coeur d'Alene, Idaho
KGDE c 100 (25) Fergus Falls, Minn. —8:00 am—10:00 pm
KGEK ak 100 Sterling, Colo.
KGFJ ak 100 Los Angeles, Calif. —24 hours daily
KGHI ak 100 (25) Little Rock, Ark. —8:30 am—11:00 pm
KGVZ z 100 DP Greenville, Texas
KMLB ak 100 (25) Monroe, La.
KOOS ak 100 (25) Marshfield, Ore. —10:00 am—7:45 pm
KSUN c 100 (25) Lowell, Ariz. —11:00 am—midnight
KVCV z 100 Redding, Calif.
KVEC z 250 D San Luis Obispo, Calif.
KVOS dk 100 M Bellingham, Wash.
KWG ak 100 N Stockton, Calif. —10:00 am—3:00 am
KWNO z 250 DP Winona, Minn.
WABI ak 100 (25) Bangor, Maine
WAIM ak 100 C Anderson, S. C. —6:00 am—10:00 pm
WAYX ak 100 (25) Waycross, Ga.
WBBZ ak 100 M (25) Ponca City, Okla. —8:00 am—10:00 pm
WBHP ak 100 Huntsville, Ala.
WBNO ak 100 2 New Orleans, La. —1:00 pm to midnight
WCAT ak 100 D Rapid City, S. Dak. —Noon—2:00 pm
WCAX ak 100 (25) Burlington, Vt.
WCLO ak 100 (25) Janesville, Wis.
WCPO ak 100 (25) Cincinnati, Ohio
WDSM z 100 P Superior, Wis.
WEST ak 100 3 (25) Easton, Pa.
WFAM ak 100 4 South Bend, Ind.
WFTC ak 100 (25) Kingston, N. C.
WHBC ak 100 (25) Canton, Ohio
WHBY ak 100 (25) Green Bay, Wis.
WIBX ak 100 C (25) Utica, N. Y. —7:00 am—1:00 am
WIL ak 100 (25) St. Louis, Mo.
WJBC ak 100 5 (25) Bloomington, Ill. —4:00 pm—8:30 pm
WJBL ak 100 5 Decatur, Ill.
WJBW ak 100 2 New Orleans, La. —2:00 am—9:00 pm
WJNO ak 100 C (25) W. Palm Beach, Fla. —7:00 am—11:00 pm
WJRD ak 250 D Tuscaloosa, Ala.
WKBO ak 100 3 (25) Harrisburg, Pa. —8:00 am—11:00 pm
WLVA ak 100 (25) Lynchburg, Va. —7:00 am—11:00 pm
WMFR ak 100 D High Point, N. C.
WMPC ak 100 (25) Lapeer, Mich.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WOLS	z	100	DP	Florence, S. C.	
WRBL	ak	100	(25)	Columbus, Ga.	-8:00 am-10:30 pm
WSAL	z	250	DP	Salisbury, Md.	
WTHT	ak	100	M	Hartford, Conn.	-7:00 am-4:15 pm
WTOL	z	100	DP	Toledo, Ohio	
WWAE	ak	100	8	Hammond, Ind.	

1210 kcys. (247.8)

CHLT	z	100	....	Sherbrooke, P. Q.	
CJCS	ak	50	....	Stratford, Ont.	-8:00 am-9:00 pm
CJCU	z	50	....	Aklavik, N.W.T.	
CKBI	ak	100	F	Prince Albert, Sask.	-9:45 am-1:00 am
CKCH	ak	100	F	Hull, P. Q.	-8:00 am-11:00 pm
CKMC	ak	50	....	Cobalt, Ont.	
CMHI	ak	150	....	Santa Clara, Cuba	
KALB	ak	100	....	Alexandria, La.	
KANS	ak	100	N	Wichita, Kans.	-7:30 am-midnight
KASA	c	100	M	Elk City, Okla.	-7:00 am-8:00 pm
KDLR	ak	100	....	Devils Lake, N. D.	-7:30 am-9:30 pm
KDON	z	100	M	Monterrey, Calif.	
KFIJ	ak	100	....	Klamath Falls, Ore.	
KFOR	ak	100	CM(.25)	Lincoln, Nebr.	-8:00 am-11:15 pm
KFPW	ak	100	....	Fort Smith, Ark.	
KFVS	ak	100	5 (.25)	Cape Girardeau, Mo.	
KFXM	ak	100	M2	San Bernardino, Cal.	-9:00 am-3:00 am
KGLO	z	100	C (.25)	Mason City, Iowa	
KGY	ak	100	M	Olympia, Wash.	
KHBG	z	100	D	Okmulgee, Okla.	
KIUL	ak	100	....	Garden City, Kans.	-8:00 am-10:00 pm
KLAH	ak	100	....	Carlsbad, N. Mex.	
KOCA	z	100	(.25)	Kilgore, Texas	
KPFA	z	100	(.25)	Helena, Mont.	
KPPC	ak	100	2	Pasadena, Calif.	-10:00 am-12:30 am
KROY	ak	100	D	Sacramento, Calif.	
KVSO	ak	100	M	Ardmore, Okla.	-8:00 am-11:00 pm
KWTN	ak	100	....	Watertown, S. Dak.	
WALR	ak	100	....	Zanesville, Ohio	-7:00 am-9:00 pm
WBAX	ak	100	....	Wilkes-Barre, Pa.	
WBBL	ak	100	S	Richmond, Va.	
WBLV	ak	100	D	Lima, Ohio	-6:00 am-5:15 pm
WBRB	ak	100	3	Red Bank, N. J.	
WCOL	ak	100	N	Columbus, Ohio	-7:00 am-11:00 pm
WCRW	ak	100	4	Chicago, Ill.	-11:00 am-7:00 pm
WEBQ	ak	100	5 (.25)	Harrisburg, Ill.	
WEDC	ak	100	4	Chicago, Ill.	
WFAS	ak	100	3	White Plains, N. Y.	
WFOY	ak	100	(.25)	St. Augustine, Fla.	
WGBB	ak	100	3	Freeport, N. Y.	
WGCM	ak	100	(.25)	Gulfport, Miss.	
WGNV	ak	100	3	Newburgh, N. Y.	-7:30 am-midnight
WGRM	ak	100	P	Grenada, Miss.	
WHBF	ak	100	(.25)	Rock Island, Ill.	-7:00 am-1:05 am
WHBU	ak	100	(.25)	Anderson, Ind.	
WIBU	ak	100	(.25)	Poynette, Wis.	
WJBY	ak	100	(.25)	Gadsden, Ala.	-8:00 am-10:30 pm
WJEJ	ak	50	Dn(.1)	Hagerstown, Md.	
WJIM	z	100	(.25)	Lansing, Mich.	-7:15 am-12:30 am
WJTN	ak	100	B (.25)	Jamestown, N. Y.	
WJW	ak	100	(.25)	Akron, Ohio	-8:00 am-10:30 pm
WKOK	ak	100	....	Sunbury, Pa.	-6:00 am-midnight
WLMU	z	100	P (.25)	Middlesboro, Ky.	
WMFG	ak	100	(.25)	Hibbing, Minn.	-7:30 am-10:00 pm
WOMT	ak	100	....	Manitowoc, Wis.	
WPAX	ak	100	D	Thomasville, Ga.	-8:00 am-6:00 pm
WSAY	z	100	D	Rochester, N. Y.	
WSBC	ak	100	4 (.25)	Chicago, Ill.	-6:00 am-midnight
WSIX	ak	100	....	Nashville, Tenn.	-7:00 am-1:00 am
WSNJ	z	100	D	Bridgeport, N. J.	
WSOC	ak	100	N (.25)	Charlotte, N. C.	-7:00 am-midnight
WTAX	ak	100	....	Springfield, Ill.	
XEAT	ak	250	....	Parral, Chih.	-11:00 am-9:00 pm
XEE	ak	50	....	Durango, Dgo.	
XEFV	ak	100	....	Juarez, Chih.	
XETH	ak	100	....	Puebla, Pue.	
.....	z	250	DP	Greenfield, Mass.	

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1220 kcys. (245.8)

CMJE	z	50	....	Camaguey, Cuba	
KFKU	ak	1000	a (5)	Lawrence, Kans.	-3:30 pm-7:30 pm
KTMS	z	500	B	Santa Barbara, Cal.	
KTW	ak	1000	S2	Seattle, Wash.	
KWSC	ak	1000	2 (5)	Pullman, Wash.	-9:45 am-12:30 am
WCAD	ak	500	D	Canton, N. Y.	-12:30 pm-4:00 pm
WCAE	ak	1000	MR (5)	Pittsburgh, Pa.	-7:00 am-2:30 am
WDAE	ak	1000	C (5)	Tampa, Fla.	-7:30 am-?
WREN	ak	1000	Ba(5)	Lawrence, Kans.	-8:00 am-7:00 pm
XEBL	z	50	....	Mazatlan, Sin.	
XEDA	z	200	....	Gra. Anaya, D. F.	
XEG	z	250	....	Monterrey, N. L.	
XETF	ak	30	....	Veracruz, Ver.	-11:00 am-1:00 am

1230 kcys. (243.8)

KGBX	ak	500	N ..	Springfield, Mo.	
KGGM	ak	1000	....	Albuquerque, N. M.	-9:30 am-11:30 pm
KYA	ak	1000	(5)	San Francisco, Cal.	
WFBM	ak	1000	C (5)	Indianapolis, Ind.	-7:30 am-1:00 am
WNAC	ak	1000	R (5)	Boston, Mass.	-6:30 am-1:00 am
XEFJ	ak	100	....	Monterrey, N. L.	-11:00 am-8:00 pm

1240 kcys. (241.8)

CJCB	ak	1000	F	Sydney, N. S.	-7:00 am-11:00 pm
CMHB	z	50	....	Sancti Spiritus, Cuba	
KGCU	ak	250	1	Mandan, N. Dak.	
KLPM	ak	250	1XZ	Minot, N. Dak.	
KTAT	ak	1000	M	Fort Worth, Texas	
KTFI	ak	1000	....	Twin Falls, Idaho	
WKAQ	ak	1000	....	San Juan, P. R.	-6:00 am-9:30 pm
WXYZ	ak	1000	B	Detroit, Mich.	
XEAP	z	50	....	Obregon, Son.	
XEAY	z	100	....	Mexico City, D. F.	
XEBS	z	200	....	Mexico City, D. F.	
XEKL	z	500	....	Leon, Guan.	
XELA	z	50	....	Saltito, Coah.	

1250 kcys. (239.9)

CMCK	ak	150	....	Santiago, Cuba	
KFOX	ak	1000	....	Long Beach, Calif.	
WAIR	ak	250	D	Winst.-Salem, N. C.	-6:00 am-ss
WCAL	ah	1000	2 XZ	Northfield, Minn.	
WDSU	ak	1000	B	New Orleans, La.	-7:00 am-midnight
WHBI	ak	1000	a (2.5)	Newark, N. J.	
WLB	ak	1000	2XZ	Minneapolis, Minn.	
WNEW	ak	1000	a (2.5)	New York, N. Y.	
WTCN	ak	1000	B (5)	Minneapolis, Minn.	-7:00 am-midnight
XEXH	z	250	....	San Luis Pot., S.L.P.	

1260 kcys. (238.0)

CMC	z	150	....	Havana, Cuba	-8:00 am-midnight
KGVO	ak	1000	C	Missoula, Mont.	-9:00 am-1:00 am
KHSL	ak	250	....	Chico, Calif.	
KOIL	ak	1000	BM(5)	Omaha, Nebr.	
KPAC	ak	500	D	Port Arthur, Texas	-6:00 am-5:45 pm
KRGV	ak	1000	N	Weslaco, Texas	-8:00 am-11:00 pm
KUOA	ak	5000	D	Siloam Spgs., Ark.	
KVOA	ak	1000	....	Tucson, Ariz.	
WHIO	ak	1000	C (5)	Dayton, Ohio	-6:00 am-1:00 am
WNBX	ak	500	CM(1)	Springfield, Vt.	
WTOC	ak	1000	C	Savannah, Ga.	-7:00 am-midnight

1270 kcys. (236.1)

CMHD	dk	250	....	Caibarien, Cuba	
KGCA	ak	100	2D	Decorah, Iowa	-9:30 am-3:30 pm
KOL	ak	1000	M (5)	Seattle, Wash.	
KVOR	ak	1000	C	Colorado Springs, Colo.	-9:00 am-1:00 am
KWLC	ak	100	2D	Decorah, Iowa	
WASH	ak	500	DaN	Grd. Rpd., Mich.	-7:00 am-midnight
WFBR	ak	500	R (1)	Baltimore, Md.	-7:00 am-midnight

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WJDX	ak	1000	R (5)	Jackson, Miss.	
WOOD	ak	500	Na	Gd. Rapids, Mich.	-7:00 am—midnight
XEXB	ak	50	....	Jalapa, Ver.	
XEZE	z	17	....	Mexico City, D. F.	

1280 kcys. (234.2)

CMCU	ak	500	....	Havana, Cuba	-6:55 am—1:00 am
CMKO	z	....	....	Holguin, Cuba	
KFBB	ak	1000	C (5)	Great Falls, Mont.	
KLS	ak	250	....	Oakland, Calif.	
WCAM	ak	500	1	Camden, N. J.	
WCAP	ak	500	1	Asbury Park, N. J.	
WDOD	ak	1000	C (5)	Chattanooga, Tenn.	-7:30 am—12:30 am
WIBA	ak	1000	N (5)	Madison, Wis.	
WORC	ak	500	C	Worcester, Mass.	-8:00 am—midnight
WRR	ak	500	M	Dallas, Texas	-8:00 am—midnight
WTNJ	ak	500	1	Trenton, N. J.	
XEMX	z	100	....	Mexico City, D. F.	

1290 kcys. (232.4)

KDYL	ak	1000	RX	Salt Lake City, Ut.	-8:00 am—3:00 am
KLCN	ak	100	D	Blytheville, Ark.	
KTRH	ak	1000	C (5)	Houston, Texas	
WEBC	ak	1000	N (5)	Duluth, Minn.	-8:00 am—1:00 am
WJAS	ak	1000	C (5)	Pittsburgh, Pa.	-7:30 am—12:30 am
WNBZ	ak	100	D	Saranac Lake, N. Y.	-9:30 am—ss
WNEL	ak	1000	(2.5)	San Juan, P. R.	-6:30 am—11:30 pm

1300 kcys. (230.6)

KALE	ak	500	CM	Portland, Ore.	
KFAC	ak	1000	....	Los Angeles, Calif.	
KFH	ak	1000	C (5)	Wichita, Kans.	
WBRR	ak	1000	1	Brooklyn, N. Y.	
WEVD	ak	1000	1	New York, N. Y.	
WFAB	ak	1000	1	New York, N. Y.	
WFBC	ak	1000	N (5)	Greenville, S. C.	
WHAZ	ak	1000	1	Troy, N. Y.	-6:00 pm—midnight
WHBL	ak	250	....	Sheboygan, Wis.	

1310 kcys. (228.9)

CHCK	ak	50	....	Charlottetown, P.E.I.	
CJKL	ak	100	F	North Bay, Ont.	
CJLS	ak	100	....	Yarmouth, N. S.	
CKCV	ak	100	F	Quebec, P. Q.	-7:55 am—11:30 pm
KAND	z	100	D	Corpus Christi, Tex.	
KARM	z	100	P	Fresno, Calif.	
KCKN	ak	100	....	Kansas City, Kans.	
KCRJ	ak	100	(2.5)	Jerome, Ariz.	
KFPL	dk	100	(2.5)	Dublin, Texas	-7:00 am—10:45 pm
KFXR	ak	100	(2.5)	Okla. City, Okla.	-8:00 am—midnight
KFYO	ak	100	(2.5)	Lubbock, Texas	-8:00 am—10:15 pm
KGEZ	ak	100	....	Kalispell, Mont.	-9:00 am—11:00 pm
KGFV	ak	100	....	Kearney, Nebr.	-7:00 am—10:00 pm
KHUB	ak	250	D	Watsonville, Calif.	
KINY	ak	100	XZ	Juneau, Alaska	
KIT	ak	100	MXZ(2.5)	Yakima, Wash.	
KPDN	ak	100	D	Pampa, Texas	
KRBA	z	100	DP	Lufkin, Texas	
KRMD	ak	100	(2.5)	Shreveport, La.	-7:00 am—12:15 am
KROC	ak	100	(2.5)	Rochester, Minn.	
KROA	ak	100	....	Santa Fe, N. Mex.	
KRRV	z	250	D	Sherman, Texas	
KSRO	ak	250	D	Santa Rosa, Calif.	-11:00 am—9:00 pm
KSUB	ak	100	....	Cedar City, Utah	
KTSM	ak	100	(2.5)	El Paso, Texas	-8:30 am—1:00 am
KVOX	ak	100	....	Lafayette, La.	-8:00 am—10:30 pm
KVOS	z	100	P	Moorhead, Minn.	
KWOS	z	100	D	Jefferson City, Mo.	
KXRO	ak	100	M(2.5)	Aberdeen, Wash.	-10:00 am—2:00 am
WAML	ak	100	(2.5)	Laurel, Miss.	-8:00 am—8:00 pm
WBEO	ak	100	D	Marquette, Mich.	-10:30 am—5:30 pm

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WBOW	ak	100	N (2.5)	Terre Haute, Ind.	-7:00 am—midnight
WBRE	ak	100	....	Wilkes-Barre, Pa.	
WBRK	z	100	P (2.5)	Pittsfield, Mass.	
WCLS	ak	100	....	Joliet, Ill.	-8:00 am—9:30 pm
WCMJ	ak	100	(2.5)	Ashland, Ky.	-6:00 am—11:30 pm
WDAH	ak	100	S (2.5)	El Paso, Texas	-11:30 am—10:30 pm (Sun. only)
WBRR	ak	100	B (2.5)	Buffalo, N. Y.	-7:00 am—midnight
WEMP	ak	100	D	Milwaukee, Wis.	-7:30 am—ss
WEXL	ak	50	....	Royal Oak, Mich.	-8:00 am—4:00 am
WFBC	ak	100	3	Altoona, Pa.	-7:00 am—10:30 pm
WDFD	ak	100	....	Flint, Mich.	-7:00 am—midnight
WGH	ak	100	(2.5)	Newport News, Va.	-7:00 am—midnight
WGTM	z	100	D	Wilson, N. C.	
WHAT	ak	100	4	Philadelphia, Pa.	
WJAC	ak	100	3 (2.5)	Johnstown, Pa.	
WLAK	z	100	....	Lakeland, Fla.	
WLBC	ak	100	(2.5)	Muncie, Ind.	-7:00 am—midnight
WLNH	ak	100	M	Laconia, N. H.	
WMBO	ak	100	....	Auburn, N. Y.	
WMFF	ak	100	(2.5)	Plattsburg, N. Y.	
WNBH	ak	100	M (2.5)	New Bedford, Mass.	-7:30 am—11:15 pm
WOL	ak	100	MXZ	Washington, D. C.	
WRAW	ak	100	....	Reading, Pa.	-7:00 am—11:00 pm
WROL	ak	100	N(2.5)	Knoxville, Tenn.	
WSAJ	ak	100	....	Grove City, Pa.	
WSGN	ak	100	B (2.5)	Birmingham, Ala.	-8:00 am—midnight
WSJS	ak	100	C	Winston-Salem, N. C.	-8:00 am—10:00 pm
WTAL	ak	100	....	Tallahassee, Fla.	-8:00 am—midnight
WTGL	ak	100	4	Philadelphia, Pa.	-8:00 am—midnight
WTJS	ak	100	(2.5)	Jackson, Tenn.	
WTRC	ak	100	(2.5)	Elkhart, Ind.	-7:00 am—10:30 pm
XEAG	z	10	....	Cordoba, Ver.	
XEBO	z	25	....	Irapuato, Guan.	
XECW	ak	10	....	Mexico City, D. F.	
XEFW	ak	250	....	Tampico, Tams.	-11:00 am—10:00 pm
XETB	ak	125	....	Torreón, Coah.	
XEX	ak	125	....	Monterrey, N. L.	
.....	z	100	DP	Poplar Bluff, Mo.	

1320 kcys. (227.1)

CMOX	ak	200	....	Havana, Cuba	-9:30 am—11:45 pm
KGHF	am	500	B	Pueblo, Colo.	-1:30 am—6:00 pm
KGMB	ak	1000	CM	Honolulu, Hawaii	
KID	ak	500	(1)	Idaho Falls, Idaho	
KRNT	ak	1000	C (5)	Des Moines, Iowa	-6:30 am—1:00 am
WADC	ak	1000	C	Akron, Ohio	-7:00 am—1:00 am
WORK	ak	1000	N	York, Pa.	-8:00 am—10:00 pm
WSMB	ak	1000	R	New Orleans, La.	

1330 kcys. (225.4)

CMHK	z	250	....	Cruces, Cuba	
KGB	ak	1000	M	San Diego, Calif.	-10:00 am—4:00 am
KMO	ak	1000	M	Tacoma, Wash.	-9:00 am—3:00 am
KRIS	z	500	N	Corpus Christi, Tex.	
KSCJ	ak	1000	C (5)	Sioux City, Iowa	-7:00 am—1:00 am
WDRG	ak	1000	C (5)	Hartford, Conn.	-7:00 am—midnight
WSAI	ak	1000	MN(2.5)	Cincinnati, Ohio	-7:00 am—1:00 am
WTAQ	ak	1000	C	Green Bay, Wis.	

1340 kcys. (223.7)

CMAB	z	....	....	Pinar del Rio, Cuba	
CMJL	z	75	....	Camaguey, Cuba	
KDTH	z	500	DP	Dubuque, Iowa	
KGDY	ak	250	D	Huron, S. Dak.	-10:00 am—1:00 am
KGIR	ak	1000	N (2.5)	Butte, Mont.	
KGNO	ak	250	....	Dodge City, Kans.	-8:30 am—midnight
WCOA	ak	500	CX	Pensacola, Fla.	
WFEA	ak	500	MN(1)	Manchester, N. H.	-6:30 am—1:00 am
WSPD	ak	1000	B (5)	Toledo, Ohio	
XEXD	z	350	....	Jalapa, Ver.	

1350 kcys. (222.1)

CMCA	ak	450	....	Havana, Cuba	
CMKW	z	....	....	Santiago, Cuba	
KIDO	ak	1000	N (2.5)	Boise, Idaho	-10:00 am—midnight
KWK	ak	1000	BM(5)	St. Louis, Mo.	-6:30 am—1:00 am

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WAWZ ak 500 1 (1) Zarephath, N. J.
WBNX ak 1000 1 New York, N. Y.
WMBG ak 500 R Richmond, Va.

1360 keys. (220.4)

CMJH dk 50 Ciego de Avila, Cuba
KCRC ak 250 M Enid, Okla. —8:00 am—11:00 pm
KGER ak 1000 Long Beach, Calif.
WCSC ak 500 N (1) Charleston, S. C. —7:00 am—midnight
WFBL ak 1000 C (5) Syracuse, N. Y. —7:00 am—1:00 am
WGES ak 500 1 (1) Chicago, Ill. —8:00 am—9:00 pm
WQBC ak 1000 D Vicksburg, Miss.
WSBT ak 500 1 South Bend, Ind.

1370 keys. (218.8)

CFAR z 100 Flin Flon, Man.
CKCW ak 100 F Moncton, N. B.
CMGE ak 150 Cardenas, Cuba —10:00 am—10:30 pm
KAST ak 100 D Astoria, Ore. —11:00 am—8:30 pm
KCMO ak 100 Kansas City, Mo. —7:00 am—2:00 am
KEEN ak 100 3 Seattle, Wash. —3:00 pm—1:00 am
KELD z 100 El Dorado, Ark.
KERN ak 100 N Bakersfield, Calif. —11:00 am—3:00 am
KFGQ ak 100 D Boone, Iowa —7:00 am—2:00 pm
KFJZ ak 100 (25) Fort Worth, Texas —7:30 am—midnight
KFRQ ak 250 D Longview, Texas —7:00 am—ss
KGAR ak 100 (25) Tucson, Arizona
KGFL ak 100 4 Roswell, N. Mex.
KGKL ak 100 (25) San Angelo, Texas
KICA ak 100 4 Clovis, N. Mex. —9:00 am—11:00 pm
KIUP ak 100 Durango, Colo. —10:00 am—11:00 pm
KLUF ak 100 Galveston, Texas —9:00 am—midnight
KMAC ak 100 5 (25) San Antonio, Tex. —8:00 am—9:00 pm
KOBH ak 100 Rapid City, S. Dak. —8:00 am—midnight
KOKO z 100 La Junta, Colo.
KONO ak 100 5 San Antonio, Tex. —7:00 am—11:00 pm
KRE ak 100 (25) Berkeley, Calif. —24 hours daily
KRKO ak 50 3 Everett, Wash.
KRMG z 100 (25) Jamestown, N. D.
KSLM ak 100 M Salem, Ore. —10:00 am—1:00 am
KTEM ak 250 D Temple, Texas
KTOK bk 100 M Oklahoma City, Ok. —9:30 am—1:00 am
KUJ ak 100 Walla Walla, Wash.
KVGB z 100 Great Bend, Kans.
KVRZ z 100 (25)P Rock Springs, Wyo.
KWYO ak 100 (25) Sheridan, Wyo. —9:00 am—midnight
WABY ak 100 B Albany, N. Y. —7:00 am—midnight
WAGF ak 250 D Dothan, Ala. —9:00 am—ss
WATL ak 100 (25) Atlanta, Ga. —7:00 am—1:00 am
WBLK ak 100 Clarksburg, W. Va.
WBNY ak 100 2 (25) Buffalo, N. Y. —7:30 am—midnight
WBTM ak 100 (25) Danville, Va. —7:00 am—10:00 pm
WCBM ak 100 (25) Baltimore, Md.
WDAS ak 100 (25) Philadelphia, Pa. —8:00 am—midnight
WDWS ak 100 D Champaign, Ill.
WEOA z 100 C (25) Evansville, Ind. —8:00 am—9:00 pm
WFOR ak 100 Hattiesburg, Miss.
WGL ak 100 N Fort Wayne, Ind.
WGRG ak 250 D New Albany, Ind. —8:00 am—11:30 pm
WHBO ak 100 Memphis, Tenn. —10:30 am—6:30 pm
WHDF ak 100 (25) Calumet, Mich.
WHLB ak 100 (25) Virginia, Minn. —6:30 am—12:30 am
WIBM ak 100 (25) Jackson, Mich. —7:30 am—midnight
WLLH ak 100 MSy (25) Lowell, Mass. —7:30 am—midnight
WMBR ak 100 C (25) Jacksonville, Fla. —7:00 am—1:00 am
WMFD ak 100 D Wilmington, N. C. —8:00 am—6:30 pm
WMFO ak 100 D Decatur, Ala. —7:00 am—1:00 am
WMIN ak 100 (25) St. Paul, Minn. —7:00 am—1:00 am
WOC ak 100 C (25) Davenport, Iowa —7:00 am—10:15 pm
WPAY ak 100 Portsmouth, Ohio
WPRR z 100 (25) Mayaguez, P. R.
WRAC ak 100 (25) Williamsport, Pa. —8:00 am—11:15 pm
WRDO ak 100 M Augusta, Maine —8:25 am—midnight
WRJN ak 100 (25) Racine, Wis. —7:00 am—11:15 pm
WSAU ak 100 Wausau, Wis.
WSVS ak 50 2D Buffalo, N. Y.
XECZ z 100 San L. Pot., S.L.P.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

XEI ak 125 Morelia, Mich.
XELZ z 100 Mexico City, D. F.
..... z 10-100 SyP Lawrence, Mass.
..... 2 100 Owen Sound, Ont.

1380 keys. (217.3)

KOH ak 500 C Reno, Nevada —11:00 am—3:00 am
KOV ak 500 C1 Pittsburgh, Pa. —7:00 am—10:00 pm
WALA ak 500 C (1) Mobile, Ala. —8:30 am—midnight
WKBH ak 1000 C La Crosse, Wis.
WNBC ak 250 D New Britain, Conn. —7:00 am—ss
WSMK ak 200 C1 Dayton, Ohio

1390 keys. (215.7)

CJGX ak 100 F Yorkton, Sask. —8:30 am—12:30 am
CMJC z 150 Camaguey, Cuba
KLRA ak 1000 C (5) Little Rock, Ark.
KOY ak 1000 C Phoenix, Ariz. —9:00 am—12:15 am
KRLC ak 250 Lewiston, Idaho
WHK ak 1000 BM (2.5) Cleveland, Ohio —7:00 am—midnight
WQDM dk 1000 D St. Albans, Vt.

1400 keys. (214.2)

CMGC ad 150 Matanzas, Cuba —8:00 am—11:00 pm
CKKR z 100 Santiago, Cuba
KHBC ak 250 CM Hilo, T. H.
KLO ak 500 B Ogden, Utah —10:00 am—1:00 am
KTUL ak 500 C (1) Tulsa, Okla.
WARD ak 500 2 Brooklyn, N. Y.
WBBC ak 500 2 (1) Brooklyn, N. Y.
WHDL ak 250 D Olean, N. Y.
WIRE ak 1000 MR (5) Indianapolis, Ind. —7:30 am—1:00 am
WLTH ak 500 2 Brooklyn, N. Y.
WVFW ak 500 2 Brooklyn, N. Y.

1410 keys. (212.6)

CKFC ak 50 5 Vancouver, B. C.
CKMO ak 100 5 Vancouver, B. C.
CMCQ ak 250 Havana, Cuba
KFJM ak 500 (1) Grand Forks, N. D.
KGNC ak 1000 (2.5) N Amarillo, Texas
KMED ck 250 N Medford, Ore.
WAAB ak 500 M (1) Boston, Mass. —24 hours daily
WBCM ak 500 (1) Bay City, Mich. —9:00 am—12:30 am
WHIS ak 500 (1) Bluefield, W. Va.
WROK ak 500 (1) Rockford, Ill. —7:30 am—midnight
WSFA ak 500 C (1) Montgomery, Ala. —7:30 am—midnight

1420 keys. (211.1)

CHLN z 100 Three Rivers, P. Q.
CKGB ak 100 F North Bay, Ont. —11:00 am—11:30 pm
KABC ak 100 (25) San Antonio, Texas —7:00 am—12:15 am
KABR ak 100 XZ Aberdeen, S. D.
KATE z 250 D Albert Lea, Minn.
KBPS ak 100 4 Portland, Ore. —2:00 pm—8:00 pm
KCMC ak 100 (25) Texarkana, Tex.
KEUB ak 100 Price, Utah —9:30 am—midnight
KFAM z 100 P St. Cloud, Minn.
KFIZ ak 100 Fond du Lac, Wis.
KGFF ak 100 (25) M Shawnee, Okla. —8:00 am—10:00 pm
KGGC ak 100 San Francisco, Cal.
KGIW ak 100 1 Alamosa, Colo. —9:30 am—10:30 pm
KIDW ak 100 1 Lamar, Colo. —9:00 am—8:00 pm
KIUN ak 100 Pecos, Texas —8:00 am—10:00 pm
KLBM z 100 (25) P La Grande, Ore.
KNET ak 100 D Palestine, Texas
KORE ak 100 M Eugene, Ore.
KRBC ak 100 (25) Abilene, Texas —8:00 am—10:00 pm
KRLH z 100 D Midland, Texas
KTRI z 100 (25) P Sioux City, Iowa
KUMA ak 100 Yuma, Ariz.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

KWBG	ak	100	Hutchinson, Kans.
KXL	ak	100	Portland, Ore.
WACO	ak	100	Waco, Texas
WAGM	ak	100	Presque Isle, Me.
WAO	ak	100	Chattanooga, Tenn.
WAZL	ak	100	Hazleton, Pa.
WCBS	ak	100	Springfield, Ill.
WCHV	ak	100	Charlottesville, Va.
WEED	ak	100	Rocky Mount, N. C.
WELL	ak	100	Battle Creek, Mich.
WGFC	ak	100	Albany, Ga.
WHFC	ak	100	Cicero, Ill.
WILM	aj	100	Wilmington, Del.
WJMS	ak	100	Ironwood, Mich.
WLAP	ak	100	Lexington, Ky.
WLEU	ak	100	B. Erie, Pa.
WMAS	ak	100	Springfield, Mass.
WMB	ak	100	Detroit, Mich.
WMBH	ak	100	Joplin, Mo.
WMB	ak	250	Uniontown, Pa.
WMFJ	ak	100	Daytona Bch., Fla.
WMSD	ak	100	Sheffield, Ala.
WNNY	z	100	Watertown, N. Y.
WPAD	ak	100	Paducah, Ky.
WPAR	ak	100	Parkersburg, W. V.
WPRP	z	100	Ponce, Puerto Rico

1430 kcys. (209.7)

CMJP	ak	75	Moron, Cuba
KECA	ak	1000	(5) B Los Angeles, Cal.
KGNF	ak	1000	D North Platte, Neb.
KSO	ak	500	BM(2.5) Des Moines, Iowa
WBNS	ak	500	C(1)X Columbus, Ohio
WHEC	ak	500	C(1) Rochester, N. Y.
WHP	ak	500	C(1) Harrisburg, Pa.
WMP	ak	500	(1) B Memphis, Tenn.
WOKO	ak	500	C(1) Albany, N. Y.

1440 kcys. (208.2)

CMOA	z	150	Havana, Cuba
KDFN	ak	500	Casper, Wyo.
KELA	z	500	MP Centralia-Chehalis, Wn.
KXYZ	ak	1000	B Houston, Texas
WBIG	ak	1000	C Greensboro, N. C.
WCBA	aj	500	a Allentown, Pa.
WMBD	ak	1000	C(5) Peoria, Ill.
WSAN	aj	500	Na Allentown, Pa.
XEFI	ak	250	Chihuahua, Chih.

1450 kcys. (206.8)

CFCT	ak	50	Victoria, B. C.
CHGS	ak	50	F Summerside, P.E.I.
CMHM	z	100	Cienfuegos, Cuba
KGCX	ak	1000	Wolf Point, Mont.
KIEM	ak	500	M(1) Eureka, Calif.
KTBS	ak	1000	N Shreveport, La.
WAGA	ak	500	B(1) Atlanta, Ga.
WGA	ak	500	C(1) Cleveland, Ohio
WHOM	ak	250	Jersey City, N. J.
WSAR	ak	1000	M Fall River, Mass.
XEF	ak	100	Juarez, Chih.

1460 kcys. (205.4)

CMKF	z	250	Holguin, Cuba
KSTP	ak	1000	R(25) St. Paul, Minn.
WJSV	ak	1000	C Washington, D. C.

1470 kcys. (204.0)

KGA	ak	5000	BM Spokane, Wash.
WLAC	ak	5000	C Nashville, Tenn.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

1480 kcys. (202.6)

KOMA	ak	5000	C Oklahoma City, Ok.
WHIP	z	5000	DP Hammond, Ind.
WKBW	ak	5000	C Buffalo, N. Y.

1490 kcys. (201.2)

KFBK	ak	5000	NX Sacramento, Calif.
WCKY	ak	10000	N Covington, Ky.

1500 kcys. (199.9)

CJIC	ak	100	S. S. Marie, Ont.
KAWM	z	100	Gallup, N. Mex.
KBIX	ak	100	M Muskogee, Okla.
KBST	z	100	Big Spring, Texas
KDAL	ak	100	C Duluth, Minn.
KDB	ak	100	M(25) Santa Barbara, Cal.
KGFI	ak	100	(25) Brownsville, Tex.
KGKB	ak	100	(25) Tyler, Texas
KGKY	ak	100	(25) Scottsbluff, Neb.
KNEL	ak	250	D Brady, Texas
KNOW	ak	100	C Austin, Texas
KOTN	ak	100	D Pine Bluff, Ark.
KOV	ak	100	Valley City, N. D.
KPLC	ak	100	(25) Lake Charles, La.
KPLT	z	250	D Paris, Texas
KPO	ak	100	M(25) Wenatchee, Wash.
KRNR	ak	100	M(25) Roseburg, Ore.
KROD	ak	100	P El Paso, Texas
KSAI	ak	100	(25) Salina, Kans.
KUTA	z	100	P Salt Lake City, Ut.
KVOE	ak	100	M Santa Ana, Calif.
KXO	ak	100	El Centro, Calif.
WCNW	ak	100	I(25) Brooklyn, N. Y.
WDNC	ak	100	C Durham, N. C.
WGAL	ak	100	(25) Lancaster, Pa.
WHBB	ak	100	Selma, Ala.
WHEF	ak	100	(25) Kosciusko, Miss.
WJBK	ak	100	(25) Detroit, Mich.
WKAT	z	100	P Miami Beach, Fla.
WKB	ak	100	(25) E. Dubuque, Ill.
WKBV	ak	100	(25) Richmond, Ind.
WKBZ	ak	100	(25) Muskegon, Mich.
WKEU	ak	100	D Griffin, Ga.
WMBO	ak	100	I Brooklyn, N. Y.
WMEX	ak	100	(25) Boston, Mass.
WNBF	ak	100	C(25) Binghamton, N. Y.
WNLC	ak	100	DM New London, Conn.
WOMI	z	100	P Owensboro, Ky.
WOPI	ak	100	Bristol, Tenn.
WRDW	ak	100	C(25) Augusta, Ga.
WRGA	ak	100	(25) Rome, Ga.
WRTD	z	100	B Richmond, Va.
WRYB	ak	100	Richmond, Va.
WTMV	ak	100	(25) Rutland, Vt.
WWRL	ak	100	(25) E. St. Louis, Ill.
WWSW	ak	100	(25) Woodside, N. Y.

1510 kcys. (198.6)

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

1530 kcys. (196.0)

KXBY	ak	1000	 Kansas City, Mo.
WBRY	ak	1000	M Waterbury, Conn.

1550 kcys. (193.4)

KPMC	ak	1000	M Bakersfield, Calif.
WQXR	ak	1000	 New York, N. Y.

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, M Mutual.

ALABAMA	CALIFORNIA	FLORIDA
Birmingham WAPI 1140 5000 R WBRC 930 1000 C WSGN 1310 100 B Decatur WMFO 1370 100 Dothan WAGF 1370 250 Gadsden WJBY 1210 100 Huntsville WBHP 1200 100 Mobile WALA 1380 500 C Montgomery WSFA 1410 500 C Selma WHBB 1500 100 Sheffield WMSD 1420 100 Tuscaloosa WJRD 1200 250	Bakersfield KERN 1370 100 N KPMC 1550 1000 M Berkeley KRE 1370 100 Beverly Hills KMPC 710 500 Chico KHSL 1260 250 El Centro KXO 1500 100 Eureka KIEM 1450 500 M Fresno KARM 1310 100 KMJ 580 1000 N Glendale KIEV 850 250 Hollywood KFBB 950 1000 Long Beach KFOX 1250 1000 KGER 1360 1000 Los Angeles KEGA 1430 1000 B KEHE 780 1000 KFAC 1300 1000 KFI 640 50000 R KFSG 1120 500 KFVD 1000 1000 KGFJ 1200 100 KHJ 900 1000 M KMTR 570 1000 KNX 1050 50000 C KRKD 1120 500 Merced KYOS 1040 250 Modesto KTRB 740 250 Monterey KDON 1210 100 M Oakland KLS 1280 250 KLX 880 1000 KROW 930 1000 Pasadena KPPC 1210 100 Redding KVCV 1200 100 Sacramento KFBK 1490 5000 N KROY 1210 100 San Bernardino KFXM 1210 100 M San Diego KFSD 600 1000 B KGB 1330 1000 M San Francisco KFRC 610 1000 M KGGC 1420 100 KGO 790 7500 B KJBS 1070 500 KPO 680 50000 R KSF 560 1000 C KYA 1230 1000 San Jose KQW 1010 1000 M San Luis Obispo KVEC 1200 250 Santa Ana KVOE 1500 100 M	Santa Barbara KDB 1500 100 M KTMS 1220 500 B Santa Rosa KSRO 1310 250 Stockton KQDM 1100 1000 M KWG 1200 100 N Visalia KTKC 1190 250 Watsonville KHUB 1310 250 COLORADO Alamosa KGIW 1420 100 Colorado Springs KVOR 1270 1000 C Denver KFEL 920 500 M KLZ 560 1000 C KOA 830 50000 R KPOF 880 500 KVOB 920 500 B Durango KIUP 1370 100 Grand Junction KFXJ 1200 100 Greeley KKA 880 500 M La Junta KOKO 1370 100 Lamar KIDW 1420 100 Pueblo KGHF 1320 500 B Sterling KGEK 1200 100 CONNECTICUT Bridgeport WICC 600 500 M Hartford WDRG 1330 1000 C WTTIC 1040 50000 R WTHH 1200 100 M New Britain WNBC 1380 250 New Haven WELI 900 500 New London WNLC 1500 100 M Waterbury WATR 1190 100 WBRV 1530 1000 M DELAWARE Wilmington WDEL 1120 250 R WILM 1420 100 DISTRICT OF COLUMBIA Washington WJWS 1460 10000 C WMAL 630 250 B WOL 1310 100 M WRC 950 500 R

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Coeur d'Alene	Fort Wayne	Kansas City	MARYLAND
KCCI 1200 100 Idaho Falls KID 1320 500 Lewiston KRLC 1390 250 Nampa KFXD 1200 100 Pocatello KSEI 900 250 Twin Falls KTFI 1240 1000 ILLINOIS Bloomington WIBC 1200 100 Carthage WCAX 1070 100 Champaign WDWS 1370 100 Chicago WAAF 920 1000 WBBM 770 50000 C WCBD 1080 5000 WCFL 970 5000 N WCRW 1210 100 WEDC 1210 100 WENR 870 50000 B WGES 1360 500 WGN 720 50000 M WJJD 1130 20000 WLS 870 50000 B WMAQ 670 50000 R WMBI 1080 5000 WISC 1210 100 Cicero WHFC 1420 100 Decatur WJBL 1200 100 East Dubuque WKBB 1500 100 East St. Louis WTMV 1500 100 Harrisburg WEBQ 1210 100 Joliet WCLS 1310 100 Peoria WMBD 1440 1000 C Quincy WTAD 900 1000 Rockford WROK 1410 500 Rock Island WHBF 1210 100 Springfield WCBS 1420 100 WTAX 1210 100 Tuscola WDZ 1020 250 Urbana WILL 580 1000 INDIANA Anderson WHBU 1210 100 Elkhart WTRC 1310 100 Evansville WEOA 1370 100 C WGBF 630 500 N	WGL 1370 100 N WOWO 1160 10000 B Gary WIND 560 1000 Hammond WHIP 1480 5000 WWAE 1200 100 Indianapolis WFBM 1230 1000 C WGVA 1050 1000 WIRE 1400 1000 R Muncie WLBC 1310 100 New Albany WGRC 1370 250 Richmond WKBV 1500 100 South Bend WFAM 1200 100 WSBT 1360 500 Terre Haute WBOW 1310 100 N West Lafayette WBAA 890 500 IOWA Ames WOI 640 5000 Boone KFGQ 1370 100 Cedar Rapids WMT 600 1000 B Davenport WOC 1370 100 C Decorah KGCA 1270 100 KWLC 1270 100 Des Moines KRNT 1320 1000 C KSO 1430 500 B WHO 1000 50000 R Dubuque KDTH 1340 500 Iowa City WSUI 880 500 Marshalltown KFJB 1200 100 Mason City KGLO 1210 100 C Shenandoah KFNF 890 500 KMA 930 1000 Sioux City KSCJ 1330 1000 C KTRI 1420 100 KANSAS Abilene KFBI 1050 5000 Coffeyville KGGF 1010 1000 M Dodge City KGNO 1340 250 Garden City KIUL 1210 100 Great Bend KVBG 1370 100 Hutchinson KWBG 1420 100	KCKN 1310 100 Lawrence KFKU 1220 1000 WREN 1220 1000 B Manhattan KSAC 580 500 Pittsburg KOAM 790 1000 N Salina KSAL 1500 100 Topeka WIBW 580 1000 C Wichita KANS 1210 100 B KFH 1300 1000 C KENTUCKY Ashland WCMI 1310 100 Covington WKCY 1490 10000 N Lexington WLAP 1420 100 Louisville WAVE 940 1000 N WHAS 820 50000 C Middlesboro WLMU 1210 100 Owensboro WOMI 1500 100 Paducah WPAD 1420 100 LOUISIANA Alexandria KALB 1210 100 Baton Rouge WJBO 1120 500 B Lafayette KVOL 1310 100 Lake Charles KPLC 1500 100 Monroe KMLB 1200 100 New Orleans WBNO 1200 100 WDSU 1250 1000 B WJBW 1200 100 WSMB 1320 1000 R WWL 850 10000 C Shreveport KRMD 1310 100 KTBS 1450 1000 N KWKH 1100 10000 C MAINE Augusta WRDO 1370 100 M Bangor WABI 1200 100 WLBZ 620 500 C Portland WCSH 940 1000 R WGAN 640 500 Presque Isle WAGM 1420 100	Baltimore WBAL 760 2500 B WBAL 1060 10000 B WCAO 600 500 C WCBM 1370 100 WFBZ 1270 500 R College Park W3XJ 1060 100 Cumberland WTBO 800 250 Frederick WFMD 900 500 Hagerstown WJEJ 1210 50 Salisbury WSAL 1200 250 MASSACHUSETTS Boston WAAB 1410 500 M WBZ 990 50000 B WCOP 1120 500 WEEL 590 1000 C WHDH 830 1000 WMEX 1500 100 WNAC 1230 1000 R WORL 920 500 Fall River WSAR 1450 1000 M Greenfield WLVI 1210 250 Lawrence WLAW 680 1000 Lowell WLH 1370 100 M New Bedford WNBH 1310 100 M Pittsfield WBRK 1310 100 Springfield WBZA 990 1000 B WMAS 1420 100 C WSPR 1140 500 M Worcester WORC 1280 500 C WTAG 580 1000 R MICHIGAN Battle Creek WELL 1420 100 Bay City WBCM 1410 500 Calumet WHDF 1370 100 Detroit WJBK 1500 100 WJR 750 50000 C WMBZ 1420 100 WWJ 920 5000 R WXYZ 1240 1000 B East Lansing WKAR 850 1000 Flint WDFB 1310 100 Grand Rapids WASH 1270 500 N WOOD 1270 500 N Ironwood WJMS 1420 100 Jackson WIBM 1370 100

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Kalamazoo WKZO 590 1000 B	Kansas City KCMO 1370 100 KMBC 950 1000 C KXBY 1530 1000 WDFA 610 1000 R WHB 860 1000M Poplar Bluff 1310 100 St. Joseph KFEQ 680 2500 St. Louis KFUO 550 500 KMOX 1090 50000 C KSD 550 1000 R KWK 1350 1000 B WEW 760 1000 WIL 1200 100 Springfield KGBX 1230 500 N KWTO 560 5000	Atlantic City WPG 1100 5000 C Bridgeton WSNJ 1210 100 Camden WCAM 1280 500 Jersey City WAAT 940 500 WHOM 1450 250 Newark WHBI 1250 1000 WOR 710 50000M Red Bank WBRB 1210 100 Trenton WTNJ 1280 500 Whippany W3XDD 50000 Zarephath WAWZ 1350 500	WBOO 860 50000 WEAF 660 50000 R WEVD 1300 1000 WFAB 1300 1000 WHN 1010 1000 WINS 1180 1000 WJZ 760 50000 B WMCA 570 1000 WNEW 1250 1000 WNYC 810 1000 WOV 1130 1000 WQXR 1550 1000 Olean WHDL 1400 250 Plattsburg WMFF 1310 100 Rochester WHAM 1150 50000 B WHEC 1430 500 C WSAY 1210 100 Saranac Lake WNBZ 1290 100 Schenectady WGY 790 50000 R Syracuse WFBL 1360 1000 C WSYR 570 1000 B Troy WHAZ 1300 1000 Utica WIBX 1200 100 C Watertown WNNY 1420 100 White Plains WFAS 1210 100 Woodside WWRL 1500 100
MINNESOTA Albert Lea KATE 1420 250 Duluth KDAL 1500 100 C WEBC 1290 1000 N Fergus Falls KGDE 1200 100 Hibbing WMFG 1210 100 Minneapolis WCCO 810 50000 C WDGY 1180 1000 C WLB 1250 1000 WTCN 1250 1000 B Moorhead KVOX 1310 100 Northfield WCAL 1250 1000 Rochester KROC 1310 100 St. Cloud KFAM 1420 100 St. Paul KSTP 1460 10000 R WMIN 1370 100 Virginia WHLB 1370 100 Winona KWNO 1200 250	MONTANA Billings KGHL 780 1000 N Butte KGIR 1340 1000 N Great Falls KFBB 1280 1000 C Helena KPFA 1210 100 Kalispell KGEZ 1310 100 Lewistown KDNC 1200 100 Missoula KGVO 1260 1000 C Wolf Point KGCX 1450 1000	NEW MEXICO Albuquerque KGGM 1230 1000 KOB 1180 10000 N Carlsbad KLAH 1210 100 Clovis KICA 1370 100 Gallup KAWM 1500 100 Roswell KGFL 1370 100 Santa Fe KRQA 1310 100	NEW YORK Albany WABY 1370 100 WOKO 1430 500 C Auburn WMBO 1310 100 Binghamton WNBF 1500 100 C Brooklyn WARD 1400 500 WBBC 1400 500 WBRR 1300 1000 WCNW 1500 100 WLTH 1400 500 WMBO 1500 100 WVFW 1400 500 Buffalo WBEN 900 1000 R WBNY 1370 100 WEER 1310 100 B WGR 550 1000 C WKBW 1480 5000 C WSVS 1370 50 Canton WCAD 1220 500 Elmira WESG 850 1000 C Freeport WGBB 1210 100 Jamestown WJTN 1210 100 B Newburgh WGNV 1210 100 New York WABC 860 50000 C WBIL 1100 5000 WBNX 1350 1000
MISSISSIPPI Grenada WGRM 1210 100 Gulfport WGM 1210 100 Hattiesburg WFOR 1370 100 Jackson WJDX 1270 1000 R Kosciusko WHEF 1500 100 Laurel WAML 1310 100 Meridian WCOC 880 500 C Vicksburg WQBC 1360 1000	NEBRASKA Clay Center KMMJ 740 1000 Kearney KGFV 1310 100 Lincoln KFAB 770 10000 C KFBR 1210 100 C Norfolk WJAG 1060 1000 North Platte KGNF 1430 1000 Omaha KOIL 1260 1000 B WAAW 660 500 WOW 590 1000 R Scottsbluff KGKY 1500 100	NEVADA Reno KOH 1380 500 C	NORTH CAROLINA Asheville WWNC 570 1000 N Charlotte WBT 1080 50000 C WSOC 1210 100 N Durham WDNC 1500 100 C Greensboro WBIG 1440 1000 C High Point WMFR 1200 100 Kinston WFTC 1200 100 Raleigh WPFT 680 1000 N Rocky Mount WEED 1420 100 Wilmington WMFD 1370 100 Wilson WGTM 1310 100 Winston-Salem WAIR 1250 250 WSJS 1310 100 C
MISSOURI Cape Girardeau KFVS 1210 100 Columbia KFRR 630 500 Jefferson City KWOS 1310 100 Joplin WMBH 1420 100	NEW HAMPSHIRE Laconia WLNH 1310 100M Manchester WFEA 1340 500 N Portsmouth WHEB 740 250	NEW JERSEY Asbury Park WCAP 1280 500	NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Forks KFJM 1410 500

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Jamestown KRMC 1370 100 Mandan KGCC 1240 250 Minot KLPM 1240 250 Valley City KOVV 1500 100	Tulsa KTUL 1400 500 C KVOO 1140 25000 N	Reading WEEU 830 1000 WRAW 1310 100 Scranton WGBI 880 500 WQAN 880 500 Sunbury WKOK 1210 100 Uniontown WMBS 1420 250 Wilkes-Barre WBAX 1210 100 WBRE 1310 100 Williamsport WRAC 1370 100 York WORK 1320 1000 N	Chattanooga WAPU 1420 100 WDOD 1280 1000 C Jackson WTJS 1310 100 Knoxville WNOX 1010 1000 C WROL 1310 100 N Memphis WHBO 1370 100 WMC 780 1000 R WMPS 1430 500 B WREC 600 1000 C Nashville WLAC 1470 5000 C WSIX 1210 100 WSM 650 50000 N
OHIO Akron WADC 1320 1000 C WJW 1210 100 Ashtabula WICA 940 250 Canton WHBC 1200 100 Cincinnati WCPO 1200 100 WKRC 550 1000 C WLW 700 50000 N WSAI 1330 1000 N WSXO 700 50000 Cleveland WCLE 610 500M WGAR 1450 500 C WHK 1390 1000 B WTAM 1070 50000 R Columbus WBNS 1430 500 C WCOL 1210 100 N WHKC 640 500 WOSU 570 750 Dayton WHIO 1260 1000 C WSMK 1380 200 C Lima WBLY 1210 100 Portsmouth WPAY 1370 100 Toledo WSPD 1340 1000 B WTOL 1200 100 Youngstown WKBN 570 500 C Zanesville WALR 1210 100	OREGON Astoria KAST 1370 100 Corvallis KOAC 550 1000 Eugene KORE 1420 100M Klamath Falls KFJI 1210 100 La Grande KLBM 1420 100 Marshfield KOOS 1200 100 Medford KMED 1410 250 N Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 B KGW 620 1000 R KOIN 940 1000 C KWJL 1040 500 KXL 1420 100 Roseburg KRNR 1500 100M Salem KSML 1370 100M	PUERTO RICO Mayaguez WPRA 1370 100 Ponce WPRP 1420 100 San Juan WKAO 1240 1000 WNEL 1290 1000	TEXAS Ablene KRBC 1420 100 Amarillo KGNC 1410 1000 N Austin KNOW 1500 100 C KTBC 1120 1000 Beaumont KFDM 560 500 N Big Spring KBST 1500 100 Brady KNEL 1500 250 Brownsville KGFI 1500 100 College Station WTAW 1120 500 Corpus Christi KRIS 1330 500 N Corsicana KAND 1310 100 Dallas KRLD 1040 10000 C WFAA 800 50000 N WRR 1280 500M Dublin KFPL 1310 100 El Paso KROD 1500 100 KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000M WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KGVJ 1200 100 Houston KPRC 920 1000 R KTRH 1290 1000 C KXYZ 1440 1000 B Kilgore KOCF 1210 100 Longview KFRO 1370 250 Lubbock KFYO 1310 100 Lufkin KRBA 1310 100 Midland KRLH 1420 100
OKLAHOMA Ada KADA 1200 100M Ardmore KVSQ 1210 100M Elk City KASA 1210 100M Enid KCRC 1360 250M Muskogee KBIX 1500 100M Norman WNAD 1010 1000 Oklahoma City KFXX 1310 100 KOMA 1480 5000 C KTOK 1370 100M WKY 900 1000 N Okmulgee KHBB 1210 100 Ponca City WBBZ 1200 100M Shawnee KGFF 1420 100M	PENNSYLVANIA Allentown WCBA 1440 500 WSAN 1440 500 N Altoona WFBG 1310 100 Easton WEST 1200 100 Erie WLEU 1420 100 B Glenside WIBG 970 100 Greensburg WHJB 620 250 C Grove City WSAJ 1310 100 Harrisburg WHP 1430 500 C WBKO 1200 100 Hazleton WAZL 1420 100 Johnstown WJAC 1310 100 Lancaster WGAL 1500 100 Philadelphia KYW 1020 10000 R WCAU 1170 50000 C WDAS 1370 100 WFIL 560 1000 B WHAT 1310 100 WIP 610 1000 WPEN 920 1000 WTEL 1310 100 Pittsburgh KDKA 980 50000 B KQV 1380 500 C WCAE 1220 1000 R WJAS 1290 1000 C WWSW 1500 100	RHODE ISLAND Providence WEAN 780 1000M WJAR 890 1000 R WPRO 630 500 C	SOUTH CAROLINA Anderson WAIM 1200 100 C Charleston WCSC 1360 500 N Columbia WIS 560 1000 N Florence WOLS 1200 100 Greenville WFBC 1300 1000 N Spartanburg WSPA 920 1000 SOUTH DAKOTA Aberdeen KABR 1420 100 Brookings KFDD 780 1000 Huron KGDY 1340 250 Pierre KGFX 630 200 Rapid City KOBH 1370 100 WCAT 1200 100 Sioux Falls KELO 1200 100 N KSOO 1110 2500 N Vermillion KUSD 890 500 Watertown KWTN 1210 100 Yankton WNAX 570 1000 C
		TENNESSEE Bristol WOPI 1500 100	

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Palestine KNET 1420 100	WRTD 1500 100 B WRVA 1110 5000 C Roanoke WDBJ 930 1000 C	LaCrosse WKBH 1380 1000 C Madison WHA 940 5000 WIBA 1280 1000 N Manitowoc WOMT 1210 100 Milwaukee WEMP 1310 100 WISN 1120 250 G WTMJ 620 1000 N Poynette WIBU 1210 100 Racine WRJN 1370 100 Sheboygan WHBL 1300 250 Stevens Point WLBL 900 5000 Superior WDSM 1200 100 Wausau WSAU 1370 100	Winnipeg CJRC 630 500 F CKY 760 15000 F
Pampa KPDN 1310 100	WASHINGTON	NEW BRUNSWICK	
Paris KPLT 1500 250	Aberdeen KXRO 1310 100M Bellevue KVOS 1200 100M Centralia-Chelalis KELA 1440 500M	Fredericton CFNB 550 500 F Moncton CKCW 1370 100 F St. John CHSJ 1120 500 F	
Pecos KIUN 1420 100	Everett KRKO 1370 50 Longview KWLK 780 250	N. W. TERRITORY	
Port Arthur KPAC 1260 500	Olympia KGY 1210 100M	Aklavik CJCU 1210 50	
San Angelo KGKL 1370 100	Pullman KWSC 1220 1000	NOVA SCOTIA	
San Antonio KABC 1420 100 KMAC 1370 100 KONO 1370 100 KTSA 550 1000 C WQAI 1190 50000 N	Seattle KEEN 1370 100 KIRO 710 1000 C KJR 970 5000 B KOL 1270 1000M KOMO 920 1000 R KRSC 1120 250 KTW 1220 1000 KXA 760 250	Glance Bay VAS 685 2000 Halifax CHNS 930 1000 F Sydney CJCB 1240 1000 F Wolffville CKIC 1010 50 Yarmouth CJLS 1310 100	
Sherman KRRV 1310 250	Spokane KFIO 1120 100 KFPY 890 1000 C KGA 1470 5000 B KHQ 590 1000 R	WYOMING	
Temple KTEM 1370 250	Tacoma KMO 1330 1000M KVI 570 1000 C	Casper KDFN 1440 500 Rock Springs KVR5 1370 100 Sheridan KWOY 1370 100	
Texarkana KCMC 1420 100	Walla Walla KUJ 1370 100 Wenatchee KPO 1500 100M Yakima KIT 1310 100M	CANADA	
Tyler KGGK 1500 100	WEST VIRGINIA	ALBERTA	
Waco WACO 1420 100 C	Bluefield WHIS 1410 500	Calgary CFAC 930 1000 F CFCN 1030 10000 CJCL 690 100 F Edmonton CFRN 960 100 F CJCA 730 1000 F CKUA 580 500 Grande Prairie CFGP 1200 100 Lethbridge CJOC 950 100 F	
Wealaco KRGV 1260 1000 N	Charleston WCHS 580 500 C	BRIT. COLUMBIA	
Wichita Falls KGKO 570 250 C	Clarksburg WBLK 1370 100 Fairmont WMMN 890 500 C Huntington WSAZ 1190 1000 Parkersburg WPAP 1420 100 C Wheeling WWVA 1160 5000 C	Chilliwack CHWK 780 100 F Kamloops CFJC 880 100 F Kelowna CKOV 630 100 F Prince Rupert CFPR 580 50 Trail CJAT 910 1000 F Vancouver CBR 1100 5000 F CJOR 600 500 CKCD 1010 100 CKFK 1410 50 CKMO 1410 100 CKWK 1010 100 F Victoria CFCT 1450 50	
UTAH	WISCONSIN	MANTOBA	
Cedar City KSUB 1310 100	Eau Claire WEAU 1050 1000 Fond du Lac KFIZ 1420 100	Brandon CKX 1120 1000 F Flin Flon CFAR 1370 100	
Ogden KLO 1400 500 B	Green Bay WBYY 1200 100 WTAQ 1330 1000 C Janesville WCLO 1200 100	Waterloo CKCR 1510 100 Windsor CBW 600 500 F CKLW 1030 5000M	
Price KEUB 1420 100			
Salt Lake City KDYL 1290 1000 R			
KSL 1130 5000 C			
KUTA 1500 100			
VERMONT			
Burlington WCAX 1200 100			
Rutland WSYB 1500 100			
St. Albans WQDM 1390 1000			
Springfield WNBX 1260 500 C			
Waterbury WDEV 550 500			
VIRGINIA			
Charlottesville WCHV 1420 100			
Danville WBTM 1370 100			
Harrisonburg WSVA 550 500			
Lynchburg WLVA 1200 100			
Newport News WGH 1310 100			
Norfolk WTAR 780 1000 N			
Richmond WBBL 1210 100			
WMBG 1350 500 R			
WRNL 880 500			

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Wingham CKNX 1200 100	XELO 670 50000 XEMO 860 5000 XEOK 760 2500	MICHOACAN	Camaguey CMJA 1010 300 CMJC 1390 150 CMJE 1220 50 CMJF 1150 200 CMJK 780 250 CMJL 1340 75 CMJX 830 500		
PRINCE EDWARD ISLAND	CHIHHUAHUA	Morelia XEI 1370 125	Cardenas CMGE 1370 150		
Charlottetown CFCY 630 1000 F CHCK 1310 50 Summerside CHGS 1450 50 F	Chihuahua XEFI 1440 250 Juarez XEJF 1210 100 XEF 1450 100 XEJ 1020 1000 XEP 1160 500 Parral XEAT 1210 250	NUEVO LEON	Ciego de Avila CMJH 1360 50 CMJI 1130 150 CMJO 1180 50		
QUEBEC	COAHUILA	Monterrey XEJF 870 200 XEJF 1230 100 XEG 1220 250 XEH 720 250 XET 690 5000 XEX 1310 125	Glenfuegos CMHJ 1160 175 CMHM 1450 100 CMHW 820 100 CMHX 760 200		
Chicoutimi CRCS 1120 100 F Hull CKCH 1210 100 F Montreal CBF 910 50000 N CBM 1050 5000 F CFCF 600 500 B CHLP 1120 100 F CKAC 730 5000 C New Carlisle CHNC 960 1000 F Quebec CHRC 580 100 CKCV 1310 100 F CRCK 950 1000 F Rimouski CJBR 1030 1000 F Sherbrooke CHLT 1210 100 Three Rivers CHLN 1420 100	SINALOA	Puebla XETH 1210 100	Cruces CMHK 1330 250		
SASKATCHEWAN	D. F.	San Luis Potosi XECZ 1370 100 XEXH 1250 250	Havana CMBC 630 CMBD 1170 500 CMBG 1140 200 CMBL 710 CMB5 770 150 CMBX 1070 500 CMBY 970 150 CMCZ 1000 500 CMC 1260 150 CMCA 1350 450 CMCB 640 150 CMCD 950 250 CMCF 810 600 CMCG 680 1000 CMCH 1100 500 CMCK 1030 CMCM 850 CMCO 1200 250 CMCQ 1410 250 CMCU 1280 500 CMCW 750 150 CMCX 1030 150 CMCY 570 5000 CMK 730 3000 CMOA 1440 150 CMOX 1320 200 CMO 880 25000 CMW 600 1400 CMX 920 1000	Sonora Hermosillo XEBH 930 500 Nogales XEAF 990 750 Obregon XEAP 1240 50	
MOOSE JAW CHAB 1200 100 F Prince Albert CKBI 1210 100 F Regina CJRM 540 1000 CKCK 1010 1000 F Saskatoon CFQC 840 1000 F Yorkton CJGX 1390 100 F	Atzacapotzalco XEMG 1060 100 Gra. Anaya XEDA 1220 200 Mexico City XEAL 660 1000 XEAY 1240 100 XEB 1030 10000 XEB5 1240 200 XEBZ 1160 100 XECW 1310 10 XEDP 1080 500 XEO 930 5000 XEJP 1130 100 XEJW 870 XEK 990 100 XEL 780 1000 XELZ 1370 100 XEMX 1280 100 XENC 860 50 XEW 890 50000 XEZE 1270 17 XEYO 940 500 Tacuba XEFA 1180 500	TAMAULIPAS Matamoros XEAM 750 25 Nuevo Laredo XEBK 1000 60 XEDE 810 75 XEFE 980 150 XENT 910 150000 Reynosa XEAW 960 50000 Tampico XEFW 1310 250 XES 990 250	Holguin CMFK 1460 250 CMKO 1280 Manzanillo CMKM 1120 200 Matanzas CMGC 1400 150 CMGF 1120 250 CMGH 790 500 Moron CMJP 1430 75 Pinar del Rio CMAB 1340 Sagua la Grande CMHA 1070 50 Sancti Spiritus CMHB 1240 50 Santa Clara CMHI 1210 150 Santiago CMKC 1250 150 CMKD 1050 250 CMKG 1160 CMKR 1400 100 CMKW 1350 CMKX 1190		
NEWFOUNDLAND					
St. John's VOAC 1065 40 VOAS 940 100 VOCM 1006 200 VOGY 840 400 VONF 1195 500 VOWR 681 500					
MEXICO					
AGUASCALIENTES					
Aguascalientes XEBI 1000 25 XEXC 810 350					
BAJA CALIFORNIA					
Mexicali XEAA 750 200 XEAO 660 250 XECL 1100 1700 Tijuana XEAC 980 1000 XEBG 820 1000 XEC 1150 100					

NORTH AMERICAN B. C. STATIONS BY CALLS

CBF 910 50000	CJAT 910 1000	CKSO 780 1000
Montreal, P. Q.	Trall, B. C.	Sudbury, Ont.
CBL 840 50000	CJBR 1030 1000	CKTB 1200 100
Toronto, Ont.	Rimouski, P. Q.	St. Catharines, Ont.
CBM 1050 5000	CJCA 730 1000	CKUA 580 500
Montreal, P. Q.	Edmonton, Alta.	Edmonton, Alta.
CBO 880 1000	CJCB 1240 1000	CKWX 1010 100
Ottawa, Ont.	Sydney, N. S.	Vancouver, B. C.
CBR 1100 5000	CJCJ 690 100	CKX 1120 1000
Vancouver, B. C.	Calgary, Alta.	Brandon, Man.
CBW 600 500	CJCS 1210 50	CKY 760 15000
Windsor, Ont.	Stratford, Ont.	Winnipeg, Man.
CFAC 930 1000	CJCU 1210 50	CMAB 1340
Calgary, Alta.	Aklavik, N. W. T.	Pinar del Rio, Cuba
CFAR 1370 100	CJGX 1390 100	CMBC 630
Flin Flon, Man.	Yorkton, Sask.	Havana, Cuba
CFCF 600 500	CJHC 1500 100	CMBD 1270 500
Montreal, Que.	S. Ste. Marie, Ont.	Havana, Cuba
CFCN 930 100	CJHL 1310 100	CMBG 1140 200
North Bay, Ont.	North Bay, Ont.	Havana, Cuba
CFCN 1030 10000	CJLS 1310 100	CMBL 710
Calgary, Alta.	Yarmouth, N. S.	Havana, Cuba
CFCO 630 100	CJOC 950 100	CMBS 770 150
Chatham, Ont.	Lethbridge, Alta.	Havana, Cuba
CFCT 1450 50	CJOR 600 500	CMBX 1070 500
Victoria, B. C.	Vancouver, B. C.	Havana, Cuba
CFCY 630 1000	CJRC 630 500	CMBY 970 150
Charlottetown, P.E.I.	Winnipeg, Man.	Havana, Cuba
CFGP 1200 100	CJRM 540 1000	CMCZ 1000 500
Grande Prairie, Alta.	Regina, Sask.	Havana, Cuba
CFJC 880 100	CKAC 730 5000	CMC 1260 150
Kamloops, B. C.	Montreal, Que.	Havana, Cuba
CFLC 930 100	CKBI 1210 100	CMCA 1350 450
Prescott, Ont.	Prince Albert, Sask.	Havana, Cuba
CFNB 550 500	CKCD 1010 100	CMCB 640 150
Fredericton, N. B.	Vancouver, B. C.	Havana, Cuba
CFPL 730 100	CKCH 1210 100	CMCD 950 250
London, Ont.	Hull, Que.	Havana, Cuba
CFPR 580 50	CKCK 1010 1000	CMCF 810 600
Prince Rupert, B. C.	Regina, Sask.	Havana, Cuba
CFQC 840 1000	CKCL 580 100	CMCG 680 1000
Saskatoon, Sask.	Toronto, Ont.	Havana, Cuba
CFRB 690 10000	CKCO 1010 100	CMCJ 1100 500
Toronto, Ont.	Ottawa, Ont.	Havana, Cuba
CFRC 1510 100	CKCR 1510 100	CMCK 1030
Kingston, Ont.	Waterloo, Ont.	Havana, Cuba
CFRN 960 100	CKCV 1310 100	CMCM 850
Edmonton, Alta.	Quebec, Que.	Havana, Cuba
CHAB 1200 100	CKCW 1370 100	CMCO 1200 250
Moose Jaw, Sask.	Moncton, N. B.	Havana, Cuba
CHCK 1310 50	CKFC 1410 50	CMCQ 1410 250
Charlottetown, P.E.I.	Vancouver, B. C.	Havana, Cuba
CHGS 1450 50	CKGB 1420 100	CMCU 1280 500
Summerside, P.E.I.	North Bay, Ont.	Havana, Cuba
CHLN 1420 100	CKIC 1010 50	CMCW 750 150
Thre Rivers, P. Q.	Wolfville, N. S.	Havana, Cuba
CHLP 1120 100	CKLW 1030 5000	CMCX 1030 150
Montreal, Que.	Windsor, Ont.	Havana, Cuba
CHLT 1210 100	CKMC 1210 50	CMCY 570 5000
Sherbrooke, P. Q.	Cobalt, Ont.	Havana, Cuba
CHML 1010 100	CKMO 1410 100	CMGC 1400 150
Hamilton, Ont.	Vancouver, B. C.	Matanzas, Cuba
CHNC 960 1000	CKNX 1200 100	CMGE 1370 150
New Carlisle, Que.	Wingham, Ont.	Cardenas, Cuba
CHNS 930 1000	CKOC 1120 500	CMGF 1120 250
Halifax, N. S.	Hamilton, Ont.	Matanzas, Cuba
CHRC 580 100	CKOV 630 100	CMGH 790 500
Quebec, Que.	Kelowna, B. C.	Matanzas, Cuba
CHSJ 1120 500	CKPC 930 100	CMHA 1070 50
St. John, N. B.	Brantford, Ont.	Sagua la Grande, Cuba
CHWK 780 100	CKPR 730 100	CMHB 1240 50
Chilliwack, B. C.	Fort William, Ont.	Sancti Spiritus, Cuba

NORTH AMERICAN B. C. STATIONS BY CALLS

CMHD 1270 250	CRCY 960 100	KELD 1370 100
Calbarien, Cuba	Toronto, Ont.	El Dorado, Ark.
CMHI 1210 150	KABC 1420 100	KELO 1200 100
Santa Clara, Cuba	San Antonio, Texas	Sioux Falls, S. Dak.
CMHJ 1160 175	KABR 1420 100	KERN 1370 100
Cienfuegos, Cuba	Aberdeen, S. Dak.	Bakersfield, Calif.
CMHK 1330 250	KADA 1200 100	KEUB 1420 100
Cruces, Cuba	Ada, Okla.	Price, Utah
CMHM 1450 100	KALB 1210 100	KEX 1180 5000
Cienfuegos, Cuba	Alexandria, La.	Portland, Ore.
CMHW 820 100	KALE 1300 500	KFAB 770 10000
Cienfuegos, Cuba	Portland, Ore.	Lincoln, Neb.
CMHX 760 200	KAND 1310 100	KFAC 1300 1000
Cienfuegos, Cuba	Corsicana, Texas	Los Angeles, Calif.
CMJA 1010 300	KANS 1210 100	KFAM 1420 100
Camaguey, Cuba	Wichita, Kans.	St. Cloud, Minn.
CMJC 1390 150	KARK 890 500	KFB 1280 1000
Camaguey, Cuba	Little Rock, Ark.	Great Falls, Mont.
CMJE 1220 50	KARM 1310 100	KFBI 1050 5000
Camaguey, Cuba	Fresno, Calif.	Ablene, Kans.
CMJF 1150 200	KASA 1210 100	KFBK 1490 5000
Camaguey, Cuba	Elk City, Okla.	Sacramento, Calif.
CMJH 1360 50	KAST 1370 100	KFDM 560 500
Ciego de Avila, Cuba	Astoria, Ore.	Besamont, Texas
CMJI 1130 150	KATE 1420 250	KFDY 780 1000
Ciego de Avila, Cuba	Albert Lea, Minn.	Brookings, S. D.
CMJK 780 250	KAWM 1500 100	KFEL 920 500
Camaguey, Cuba	Gallup, N. Mex.	Denver, Colo.
CMJL 1340 75	KBIX 1500 100	KFEQ 680 2500
Camaguey, Cuba	Muskogee, Okla.	St. Joseph, Mo.
CMJO 1180 50	KBPS 1420 100	KFGQ 1370 100
Ciego de Avila, Cuba	Portland, Ore.	Boone, Iowa
CMJP 1430 75	KBST 1500 100	KFH 1300 1000
Camaguey, Cuba	Big Spring, Texas	Wichita, Kans.
CMJX 830 500	KBTM 1200 100	KFI 840 50000
Camaguey, Cuba	Jonesboro, Ark.	Los Angeles, Calif.
CMK 730 3000	KCKN 1310 100	KFIO 1120 100
Havana, Cuba	Kansas City, Kans.	Spokane, Wash.
CMKC 1250 150	KCMC 1420 100	KFIZ 1420 100
Santiago, Cuba	Texarkana, Texas	Fond du Lac, Wis.
CMKD 1050 250	KCMO 1370 100	KFJB 1200 100
Santiago, Cuba	Kansas City, Mo.	Marshalltown, Iowa
CMKF 1460 250	KCRC 1360 250	KFJI 1210 100
Holguin, Cuba	Enid, Okla.	Klamath Falls, Ore.
CMKG 1160	KCRJ 1310 100	KFJM 1410 500
Santiago, Cuba	Jerome, Ariz.	Grand Forks, N. D.
CMKM 1120 200	KDAL 1580 100	KFJZ 1370 100
Manzanillo, Cuba	Duluth, Minn.	Fort Worth, Texas
CMKO 1280	KDB 1500 100	KFKA 880 500
Holguin, Cuba	Santa Barbara, Calif.	Greeley, Colo.
CMKR 1400 100	KDFN 1440 500	KFKU 1220 1000
Santiago, Cuba	Casper, Wyo.	Lawrence, Kans.
CMKW 1350	KDKA 980 50000	KFNF 890 500
Santiago, Cuba	Pittsburgh, Pa.	Shenandoah, Iowa
CMKX 1190	KDLR 1210 100	KFOR 1210 100
Santiago, Cuba	Devils Lake, N. D.	Lincoln, Neb.
CMOA 1440 150	KDNC 1200 100	KFOX 1250 1000
Havana, Cuba	Lewistown, Mont.	Long Beach, Calif.
CMOX 1320 200	KDON 1210 100	KFPL 1310 100
Havana, Cuba	Monterrey, Calif.	Dublin, Texas
CMQ 880 25000	KDTH 1340 500	KFPW 1210 100
Havana, Cuba	Dubuque, Iowa	Fort Smith, Ark.
CMW 600 1400	KDYL 1290 1000	KFPY 890 1000
Havana, Cuba	Salt Lake City, Utah	Spokane, Wash.
CMX 920 1000	KECA 1430 1000	KFQD 780 250
Havana, Cuba	Los Angeles, Calif.	Anchorage, Alaska
CRCK 950 1000	KEEN 1370 100	KFRC 610 1000
Quebec, Que.	Seattle, Wash.	San Francisco, Calif.
CRCS 1120 100	KEWE 780 1000	KFRO 1370 250
Chicoutimi, Que.	Los Angeles, Calif.	Longview, Texas
CRCT 840 5000	KELA 1440 500	KFRU 630 500
Toronto, Ont.	Centralia-Chehalis, Wn.	Columbia, Mo.

NORTH AMERICAN B. C. STATIONS BY CALLS

KFSD 600 1000 San Diego, Calif.	KGGM 1230 1000 Albuquerque, N. M.	KIT 1310 100 Yakima, Wash.
KFSG 1120 500 Los Angeles, Calif.	KGHF 1320 500 Pueblo, Colo.	KIUL 1210 100 Garden City, Kans.
KFUO 550 500 St. Louis, Mo.	KGHI 1200 100 Little Rock, Ark.	KIUN 1420 100 Pecos, Texas
KFVD 1000 1000 Los Angeles, Calif.	KGHL 780 1000 Billings, Mont.	KIUP 1370 100 Durango, Colo.
KFVS 1210 100 Cape Girardeau, Mo.	KGIR 1340 1000 Butte, Mont.	KJBS 1070 500 San Francisco, Calif.
KFWB 95 1000 Hollywood, Calif.	KGIW 1420 100 Alamosa, Colo.	KJR 970 5000 Seattle, Wash.
KFXD 1200 100 Nampa, Idaho	KGKB 1500 100 Tyler, Texas	KLAH 1210 100 Carlsbad, N. Mex.
KFXJ 1200 100 Grand Junction, Colo.	KGKL 1370 100 San Angelo, Texas	KLBH 1420 100 La Grande, Ore.
KFXM 1210 100 San Bernardino, Calif.	KGKO 570 250 Wichita Falls, Texas	KLCN 1290 100 Blytheville, Ark.
KFXR 1310 100 Oklahoma City, Okla.	KGKY 1500 100 Scottsbluff, Neb.	KLO 1400 500 Ogden, Utah
KFYO 1310 100 Lubbock, Texas	KGLO 1210 100 Mason City, Iowa	KLPM 1240 250 Minot, N. D.
KFYR 550 1000 Bismarck, N. D.	KGMB 1320 1000 Honolulu, T. H.	KLRA 1390 1000 Little Rock, Ark.
BGA 1470 5000 Spokane, Wash.	KGNC 1410 1000 Amarillo, Texas	KLS 1280 250 Oakland, Calif.
KGAR 1370 100 Tucson, Ariz.	KGNF 1430 1000 North Platte, Neb.	KLUF 1370 100 Galveston, Texas
KGB 1330 1000 San Diego, Calif.	KGNO 1340 250 Dodge City, Kans.	KLX 880 1000 Oakland, Calif.
KGBU 900 500 Ketchikan, Alaska	KGO 790 750 San Francisco, Calif.	KLZ 560 1000 Denver, Colo.
KGBX 1230 500 Springfield, Mo.	KGU 750 2500 Honolulu, T. H.	KMA 930 1000 Shenandoah, Iowa
KGCA 1270 100 Decorah, Iowa	KGVL 1200 100 Greenville, Texas	KMAC 1370 100 San Antonio, Texas
KGCI 1200 100 Coeur d'Alene, Idaho	KGVO 1260 1000 Missoula, Mont.	KMBC 950 1000 Kansas City, Mo.
KGCU 1240 250 Mandan, N. D.	KGW 620 1000 Portland, Ore.	KMED 1410 250 Medford, Ore.
KGCC 1450 1000 Wolf Point, Mont.	KGY 1210 100 Olympia, Wash.	KMJ 580 1000 Fresno, Calif.
KGDE 1200 100 Fergus Falls, Minn.	KHBC 1400 250 Hilo, T. H.	KMLB 1200 100 Monroe, La.
KGDM 1100 1000 Stockton, Calif.	KHBG 1210 100 Oklmulgee, Okla.	KMMJ 740 1000 Clay Center, Neb.
KGDY 1340 250 Huron, S. D.	KHJ 900 1000 Los Angeles, Calif.	KMO 1330 1000 Tacoma, Wash.
KGEK 1200 100 Sterling, Colo.	KHQ 590 1000 Spokane, Wash.	KMOX 1090 50000 St. Louis, Mo.
KGER 1360 1000 Long Beach, Calif.	KHSL 1260 250 Chico, Calif.	KMPC 710 500 Beverly Hills, Calif.
KGEZ 1310 100 Kallispell, Mont.	KHUB 1310 250 Watsonville, Calif.	KMTB 570 1000 Los Angeles, Calif.
KGFF 1420 100 Shawnee, Okla.	KICA 1370 100 Clovis, N. M.	KNEL 1500 250 Brady, Texas
KGFI 1500 100 Brownsville, Tex.	KID 1320 500 Idaho Falls, Idaho	KNET 1420 100 Palestine, Texas
KGFI 1200 100 Los Angeles, Calif.	KIDO 1350 1000 Boise, Idaho	KNOW 1500 100 Austin, Texas
KGFL 1370 100 Roswell, N. M.	KIDW 1420 100 Lamar, Colo.	KNX 1050 50000 Los Angeles, Calif.
KGFW 1310 100 Kearney, Neb.	KIEM 1450 500 Eureka, Calif.	KOA 830 50000 Denver, Colo.
KGFX 630 200 Pierre, S. D.	KIEV 850 250 Glendale, Calif.	KOAC 550 1000 Corvallis, Ore.
KGGC 1420 100 San Francisco, Calif.	KINY 1310 100 Juneau, Alaska	KOAM 790 1000 Pittsburg, Kans.
KGGF 1010 1000 Coffeyville, Kans.	KIRO 710 1000 Seattle, Wash.	KOB 1180 10000 Albuquerque, N. M.

NORTH AMERICAN B. C. STATIONS BY CALLS

KOBH 1370 100 Rapid City, S. Dak.	KRLC 1390 250 Lewiston, Idaho	KTMS 1220 500 Santa Barbara, Calif.
KOCA 1210 100 Kilgore, Texas	KRLD 1040 10000 Dallas, Texas	KTOK 1370 100 Oklahoma City, Okla.
KOH 1380 500 Reno, Nev.	KRLH 1420 100 Midland, Texas	KTRB 740 250 Modesto, Calif.
KOIL 1260 1000 Omaha, Neb.	KRMC 1370 100 Jamestown, N. Dak.	KTRH 1290 1000 Houston, Texas
KOIN 940 1000 Portland, Ore.	KRMD 1310 100 Shreveport, La.	KTRI 1420 100 Sioux City, Iowa
KOKO 1370 100 La Junta, Colo.	KRNR 1500 100 Roseburg, Ore.	KTSA 550 1000 San Antonio, Texas
KOL 1270 1000 Seattle, Wash.	KRNT 1320 1000 Des Moines, Iowa	KTSM 1310 100 El Paso, Texas
KOMA 1480 5000 Oklahoma City, Okla.	KROC 1310 100 Rochester, Minn.	KTUL 1400 500 Tulsa, Okla.
KOMO 920 1000 Seattle, Wash.	KROD 1500 100 El Paso, Texas	KTW 1220 1000 Seattle, Wash.
KONO 1370 100 San Antonio, Texas	KROW 930 1000 Oakland, Calif.	KUJ 1370 100 Walla Walla, Wash.
KOOS 1200 100 Marshfield, Ore.	KROY 1210 100 Sacramento, Calif.	KUMA 1420 100 Yuma, Ariz.
KORE 1420 100 Eugene, Ore.	KRQA 1310 100 Santa Fe, N. Mex.	KUOA 1260 5000 Siloam Springs, Ark.
KOTN 1500 100 Pine Bluff, Ark.	KRRV 1310 250 Sherman, Texas	KUSD 890 500 Vermillion, S. Dak.
KOV 1500 100 Valley City, N. Dak.	KRSC 1120 250 Seattle, Wash.	KUTA 1500 100 Salt Lake City, Utah
KOY 1390 1000 Phoenix, Ariz.	KSAC 580 500 Manhattan, Kans.	KVCV 1200 100 Redding, Calif.
KPAC 1260 500 Port Arthur, Texas	KSAL 1500 100 Salina, Kans.	KVEC 1200 250 San Luis Obispo, Cal.
KPDN 1310 100 Pampa, Texas	KSCJ 1330 1000 Sioux City, Iowa	KVGB 1370 100 Great Bend, Kans.
KPFA 1210 100 Helena, Mont.	KSD 550 1000 St. Louis, Mo.	KVI 570 1000 Tacoma, Wash.
KPLC 1500 100 Lake Charles, La.	KSEI 900 250 Pocatello, Idaho	KVOA 1260 1000 Tucson, Ariz.
KPLT 1500 100 Paris, Texas	KSFO 560 1000 San Francisco, Calif.	KVOD 920 500 Denver, Colo.
KPMC 1550 1000 Bakersfield, Calif.	KSL 1130 50000 Salt Lake City, Utah	KVOE 1500 100 Santa Ana, Calif.
KPO 680 50000 San Francisco, Calif.	KSLM 1370 100 Salem, Ore.	KVOL 1310 100 Lafayette, La.
KPOF 880 500 Denver, Colo.	KSO 1430 500 Des Moines, Iowa	KVOO 1140 25000 Tulsa, Okla.
KPPC 1210 100 Pasadena, Calif.	KSOO 1110 2500 Sioux Falls, S. Dak.	KVOR 1270 1000 Colorado Springs, Colo.
KPQ 1500 100 Wenatchee, Wash.	KSRO 1310 250 Santa Rosa, Calif.	KVOS 1200 100 Bellingham, Wash.
KPRC 920 1000 Houston, Texas	KSTP 1460 10000 St. Paul, Minn.	KVOX 1310 100 Moorhead, Minn.
KQV 1380 500 Pittsburgh, Pa.	KSUB 1310 100 Cedar City, Utah	KVRS 1370 100 Rock Springs, Wyo.
KQW 1010 1000 San Jose, Calif.	KSUN 1200 100 Lowell, Ariz.	KVSO 1210 100 Ardmore, Okla.
KREA 1310 100 Lufkin, Texas	KTAR 620 1000 Phoenix, Ariz.	KWBG 1420 100 Hutchinson, Kans.
KRBC 1420 100 Ablene, Texas	KTAT 1240 1000 Fort Worth, Texas	KWG 1200 100 Stockton, Calif.
KRE 1370 100 Berkeley, Calif.	KTBC 1120 1000 Austin, Texas	KWJJ 1040 500 Portland, Ore.
KRGV 1260 1000 Weslaco, Texas	KTBS 1450 1000 Shreveport, La.	KWK 1350 1000 St. Louis, Mo.
KRIS 1330 500 Corpus Christi, Tex.	KTEM 1370 250 Temple, Texas	KWKH 1100 10000 Shreveport, La.
KRKD 1120 500 Los Angeles, Calif.	KTFI 1240 1000 Twin Falls, Idaho	KWLC 1270 100 Decorah, Iowa
KRKO 1370 50 Everett, Wash.	KTHS 1060 10000 Hot Springs, Ark.	KWLK 780 250 Longview, Wash.
	KTKC 1190 250 Visalia, Calif.	KWNO 1200 250 Winona, Minn.

NORTH AMERICAN B. C. STATIONS BY CALLS

KWOS 1310 100	WAIR 1250 250	WBOQ 860 50000
Jefferson City, Mo.	Winston-Salem, N. C.	New York, N. Y.
KWSC 1220 1000	WALA 1380 500	WBOW 1310 100
Pullman, Wash.	Mobile, Ala.	Terre Haute, Ind.
KWTN 1210 100	WALR 1210 100	WBRB 1210 100
Watertown, S. Dak.	Zanesville, Ohio	Red Bank, N. J.
KWTO 560 5000	WAML 1310 100	WBRC 930 1000
Springfield, Mo.	Laurel, Miss.	Birmingham, Ala.
KWYO 1370 100	WAPI 1140 5000	WBRE 1310 100
Sheridan, Wyo.	Birmingham, Ala.	Wilkes-Barre, Pa.
KXA 760 250	WAPQ 1420 100	WBRK 1310 100
Seattle, Wash.	Chattanooga, Tenn.	Pittsfield, Mass.
KXBY 1530 1000	WARD 1400 500	WBRY 1530 1000
Kansas City, Mo.	Brooklyn, N. Y.	Waterbury, Conn.
KXL 1420 100	WASH 1270 500	WBT 1080 50000
Portland, Ore.	Grand Rapids, Mich.	Charlotte, N. C.
KXO 1500 100	WATL 1370 100	Danville, Va.
El Centro, Calif.	Atlanta, Ga.	WBZ 990 50000
KXRO 1310 100	WATR 1190 100	Boston, Mass.
Aberdeen, Wash.	Waterbury, Conn.	WBZA 990 1000
KXYZ 1440 1000	WAVE 940 1000	WBZC 990 1000
Houston, Texas	Louisville, Ky.	Springfield, Mass.
KYA 1230 1000	WAWZ 1350 500	WCAD 1220 500
San Francisco, Calif.	Zarephath, N. J.	Canton, N. Y.
KYOS 1040 250	WAYX 1200 100	WCAE 1220 1000
Merced, Calif.	Waycross, Ga.	Pittsburgh, Pa.
KYW 1020 10000	WAZL 1420 100	WCAL 1250 1000
Philadelphia, Pa.	Hazleton, Pa.	Northfield, Minn.
VAS 685 2000	WBAA 890 500	WCAM 1280 500
Gloucester, N. S.	West Lafayette, Ind.	Camden, N. J.
VOAC 1065 40	WBAL 760 2500	WCAO 600 500
St. John's, Nfld.	Baltimore, Md.	Baltimore, Md.
VOAS 940 100	WBAL 1060 10000	WCAP 1280 500
St. John's, Nfld.	Baltimore, Md.	Asbury Park, N. J.
VOCM 1006 200	WBAP 800 50000	WCAT 1200 100
St. John's, Nfld.	Fort Worth, Texas	Rapid City, S. Dak.
VOGY 840 400	WBAX 1210 100	WCAU 1170 50000
St. John's, Nfld.	Wilkes-Barre, Pa.	Philadelphia, Pa.
VONF 1195 500	WBBC 1400 500	WCAX 1200 100
St. John's, Nfld.	Brooklyn, N. Y.	Burlington, Vt.
VOWR 681 500	WBBL 1210 100	WCZ 1070 100
St. John's, Nfld.	Richmond, Va.	Carthage, Ill.
WAAB 1410 500	WBBM 770 50000	WCBA 1440 500
Boston, Mass.	Chicago, Ill.	Allentown, Pa.
WAAB 920 1000	WBBR 1300 1000	WCBD 1080 5000
Chicago, Ill.	Brooklyn, N. Y.	Chicago, Ill.
WAAT 940 500	WBBZ 1200 100	WCBM 1370 100
Jersey City, N. J.	Ponca City, Okla.	Baltimore, Md.
WAAB 660 500	WBCM 1410 500	WCBS 1420 100
Omaha, Neb.	Bay City, Mich.	Springfield, Ill.
WABC 860 50000	WBEN 900 1000	WCCO 810 50000
New York, N. Y.	Buffalo, N. Y.	Minneapolis, Minn.
WABI 1200 100	WBEO 1310 100	WCFL 970 5000
Bangor, Maine	Marquette, Mich.	Chicago, Ill.
WABY 1370 100	WBHP 1200 100	WCBS 580 500
Albany, N. Y.	Huntsville, Ala.	Charleston, W. Va.
WACO 1420 100	WBIG 1440 1000	WCHV 1420 100
Waco, Texas	Greensboro, N. C.	Charlottesville, Va.
WADC 1320 1000	WBIL 1100 5000	WCKY 1490 10000
Akron, Ohio	New York, N. Y.	Covington, Ky.
WAGA 1450 500	WBLK 1370 100	WCLE 610 500
Atlanta, Ga.	Clarksburg, W. Va.	Cleveland, Ohio
WAGF 1370 250	WBLV 1210 100	WCLO 1200 100
Dothan, Ala.	Lima, Ohio	Janesville, Wis.
WAGM 1420 100	WBNO 1200 100	WCLS 1310 100
Presque Isle, Me.	New Orleans, La.	Joliet, Ill.
WAIM 1200 100	WBNS 1430 500	WCMI 1310 100
Anderson, S. C.	Columbus, Ohio	Ashland, Ky.
	WBNX 1350 1000	WCNW 1500 100
	New York, N. Y.	Brooklyn, N. Y.
	WBNY 1370 100	
	Buffalo, N. Y.	

NORTH AMERICAN B. C. STATIONS BY CALLS

WCOA 1340 500	WEEU 830 1000	WGCM 1210 100
Pensacola, Fla.	Reading, Pa.	Gulfport, Miss.
WCOC 880 500	WELI 900 500	WGES 1360 500
Meridian, Miss.	New Haven, Conn.	Chicago, Ill.
WCOL 1210 100	WELL 1420 100	WGH 1310 100
Columbus, Ohio	Battle Creek, Mich.	Newport News, Va.
WCOP 1120 500	WEMP 1310 100	WGL 1370 100
Boston, Mass.	Milwaukee, Wis.	Fort Wayne, Ind.
WCPO 1200 100	WENR 870 50000	WGN 720 50000
Cincinnati, Ohio	Chicago, Ill.	Chicago, Ill.
WCRW 1210 100	WEOA 1370 100	WGNV 1210 100
Chicago, Ill.	Evansville, Ind.	Newburgh, N. Y.
WCSC 1360 500	WESG 850 1000	WGPC 1420 100
Charleston, S. C.	Elmira, N. Y.	Albany, Ga.
WCSH 940 1000	WEST 1200 100	WGR 550 1000
Portland, Me.	Easton, Pa.	Buffalo, N. Y.
WDAE 1220 1000	WEVD 1300 1000	WGRG 1370 250
Tampa, Fla.	New York, N. Y.	New Albany, Ind.
WDAF 610 1000	WEW 760 1000	WGRM 1210 100
Kansas City, Mo.	St. Louis, Mo.	Grenada, Miss.
WDAH 1310 100	WEXL 1310 50	WGST 890 1000
El Paso, Texas	Royal Oak, Mich.	Atlanta, Ga.
WDAS 1370 100	WFAA 800 50000	WGTM 1310 100
Philadelphia, Pa.	Dallas, Texas	Wilson, N. C.
WDAY 940 1000	WFAB 1300 1000	WGVA 1050 1000
Fargo, N. Dak.	New York, N. Y.	Indianapolis, Ind.
WDBJ 930 1000	WFAM 1200 100	WGY 790 50000
Roanoke, Va.	South Bend, Ind.	Schenectady, N. Y.
WDBO 580 1000	WFAS 1210 100	WHA 940 5000
Orlando, Fla.	White Plains, N. Y.	Madison, Wis.
WDEL 1120 250	WFBC 1300 1000	WHAL 950 500
Wilmington, Del.	Greenville, S. C.	Saginaw, Mich.
WDEV 550 500	WFBG 1310 100	WHAM 1150 50000
Waterbury, Vt.	Altoona, Pa.	Rochester, N. Y.
WDGY 1180 1000	WFBL 1360 1000	WHAS 820 50000
Minneapolis, Minn.	Syracuse, N. Y.	Louisville, Ky.
WDNC 1500 100	WFBM 1230 1000	WHAT 1310 100
Durham, N. C.	Indianapolis, Ind.	Philadelphia, Pa.
WDOO 1280 1000	WFBZ 1270 500	WHAZ 1300 1000
Chattanooga, Tenn.	Baltimore, Md.	Troy, N. Y.
WDRC 1330 1000	WFDF 1310 100	WHB 860 1000
Hartford, Conn.	Flint, Mich.	Kansas City, Mo.
WDSM 1200 100	WFEA 1340 500	WHBB 1500 100
Superior, Wis.	Manchester, N. H.	Selma, Ala.
WDSU 1250 1000	WFIL 560 1000	WHBC 1200 100
New Orleans, La.	Philadelphia, Pa.	Canton, Ohio
WDWS 1370 100	WFLA 620 1000	WHBF 1210 100
Champaign, Ill.	Clearwater, Fla.	Rock Island, Ill.
WDZ 1020 250	WFMD 900 500	WHBI 1250 1000
Tuscola, Ill.	Frederick, Md.	Newark, N. J.
WEAF 660 50000	WFOR 1370 100	WHBL 1300 250
New York, N. Y.	Hattiesburg, Miss.	Sheboygan, Wis.
WEAN 780 1000	WFOY 1210 100	WHBQ 1370 100
Providence, R. I.	St. Augustine, Fla.	Memphis, Tenn.
WEAU 1050 1000	WFTC 1200 100	WHBU 1210 100
Eau Claire, Wis.	Kinston, N. C.	Anderson, Ind.
WEBC 1290 1000	WGAL 1500 100	WHBY 1200 100
Duluth, Minn.	Lancaster, Pa.	Green Bay, Wis.
WEBQ 1210 100	WGAN 640 500	WHDF 1370 100
Harrisburg, Ill.	Portland, Me.	Calumet, Mich.
WEBR 1310 100	WGAR 1450 500	WHDH 830 1000
Buffalo, N. Y.	Cleveland, Ohio	Boston, Mass.
WEDC 1210 100	WGBB 1210 100	WHDL 1400 250
Chicago, Ill.	Freeport, N. Y.	Olean, N. Y.
WEED 1420 100	WGBF 630 500	WHBF 740 250
Rocky Mount, N. C.	Evansville, Ind.	Portsmouth, N. H.
WEEI 590 1000	WHEC 1430 500	WHCF 1430 500
Boston, Mass.	Scranton, Pa.	Rochester, N. Y.
		WHEF 1500 100
		Kosciusko, Miss.

NORTH AMERICAN B. C. STATIONS BY CALLS

WHFC 1420	100	WJBC 1200	100	WLAP 1420	100
Cicero, Ill.		Bloomington, Ill.		Lexington, Ky.	
WHIO 1260	1000	WJBK 1500	100	WLAW 680	1000
Dayton, Ohio		Detroit, Mich.		Lawrence, Mass.	
WHIP 1480	5000	WJBL 1200	100	WLB 1250	1000
Hammond, Ind.		Decatur, Ill.		Minneapolis, Minn.	
WHIS 1410	500	WJBO 1120	500	WLBC 1310	100
Bluefield, W. Va.		Baton Rouge, La.		Muncie, Ind.	
WHJB 620	250	WJBW 1200	100	WLBL 900	5000
Greensburg, Pa.		New Orleans, La.		Stevens Point, Wis.	
WHK 1390	1000	WJBY 1210	100	WLBZ 620	500
Cleveland, Ohio		Gadsden, Ala.		Bangor, Me.	
WHKC 640	500	WJDX 1270	1000	WLEU 1420	100
Columbus, Ohio		Jackson, Miss.		Erie, Pa.	
WHLB 1370	100	WJEJ 1210	50	WLLH 1370	100
Virginia, Minn.		Hagerstown, Md.		Lowell, Mass.	
WHN 1010	1000	WJIM 1210	100	WLMU 1210	100
New York, N. Y.		Lansing, Mich.		Middlesboro, Ky.	
WHO 1000	50000	WJJD 1330	20000	WLNH 1310	100
Des Moines, Iowa		Chicago, Ill.		Laconia, N. H.	
WHOM 1450	250	WJMS 1420	100	WLS 870	50000
Jersey City, N. J.		Ironwood, Mich.		Chicago, Ill.	
WHP 1430	500	WJNO 1200	100	WLTH 1400	500
Harrisburg, Pa.		W. Palm Beach, Fla.		Brooklyn, N. Y.	
WIBA 1280	1000	WJRA 750	50000	WLVA 1200	100
Madison, Wis.		Detroit, Mich.		Lynchburg, Va.	
WIBG 970	100	WJRD 1200	250	WLW 700	500000
Glenside, Pa.		Tuscaloosa, Ala.		Cincinnati, Ohio	
WIBM 1370	100	WJSV 1460	10000	WMAL 630	250
Jackson, Mich.		Washington, D. C.		Washington, D. C.	
WIBU 1210	100	WJTN 1210	100	WMAQ 670	50000
Poynette, Wis.		Jamestown, N. Y.		Chicago, Ill.	
WIBW 580	1000	WJW 1210	100	WMAS 1420	100
Topeka, Kans.		Akron, Ohio		Springfield, Mass.	
WIBX 1200	100	WJZ 760	50000	WMAZ 1180	1000
Utica, N. Y.		New York, N. Y.		Macon, Ga.	
WICA 940	250	WKAQ 1240	1000	WMBC 1420	100
Ashtabula, Ohio		San Juan, P. R.		Detroit, Mich.	
WICC 600	500	WKAR 850	1000	WMBD 1440	1000
Bridgeport, Conn.		East Lansing, Mich.		Peoria, Ill.	
WIL 1200	100	WKAT 1500	100	WMBF 610	1000
St. Louis, Mo.		Miami Beach, Fla.		Miami, Fla.	
WILL 580	1000	WKBB 1500	100	WMBG 1350	500
Urbana, Ill.		East Dubuque, Ill.		Richmond, Va.	
WILM 1420	100	WKBH 1380	1000	WMBH 1420	100
Wilmington, Del.		LaCrosse, Wis.		Joplin, Mo.	
WIND 560	1000	WKBN 570	500	WMBI 1080	5000
Gary, Ind.		Youngstown, Ohio		Chicago, Ill.	
WINS 1180	1000	WKBO 1200	100	WMBQ 1500	100
New York, N. Y.		Harrisburg, Pa.		Brooklyn, N. Y.	
WIOD 610	1000	WKBY 1500	100	WMBR 1370	100
Miami, Fla.		Richmond, Ind.		Jacksonville, Fla.	
WIP 610	1000	WKBW 1480	5000	WMBE 1420	250
Philadelphia, Pa.		Buffalo, N. Y.		Uniontown, Pa.	
WIRE 1400	1000	WKBZ 1500	100	WMC 780	1000
Indianapolis, Ind.		Muskegon, Mich.		Memphis, Tenn.	
WIS 568	1000	WKEU 1500	100	WOOD 1270	500
Columbia, S. C.		Griffin, Ga.		Grand Rapids, Mich.	
WISN 1120	250	WKOK 1210	100	WOPI 1500	100
Milwaukee, Wis.		Sunbury, Pa.		Bristol, Tenn.	
WJAC 1310	100	WKRC 550	1000	WOR 710	50000
Johnstown, Pa.		Cincinnati, Ohio		Newark, N. J.	
WJAG 1060	1000	WKY 900	1000	WORC 1280	500
Norfolk, Neb.		Oklahoma City, Okla.		Worcester, Mass.	
WJAR 890	1000	WKZO 590	1000	WORK 1320	1000
Providence, R. I.		Kalamazoo, Mich.		York, Pa.	
WJAS 1290	1000	WLAC 1470	5000	WORL 920	500
Pittsburgh, Pa.		Nashville, Tenn.		Boston, Mass.	
WJAX 900	1000	WLAK 1310	100	WOSU 570	750
Jacksonville, Fla.		Lakeland, Fla.		Columbus, Ohio	

NORTH AMERICAN B. C. STATIONS BY CALLS

WMFR 1200	100	WVOV 1130	1000	WSAI 1330	1000
High Point, N. C.		New York, N. Y.		Cincinnati, Ohio	
WMIN 1370	100	WOW 590	1000	WSAJ 1310	100
St. Paul, Minn.		Omaha, Neb.		Grove City, Pa.	
WMNN 890	500	WOWO 1160	10000	WSAL 1200	250
Fairmont, W. Va.		Fort Wayne, Ind.		Salisbury, Md.	
WMPC 1200	100	WPAD 1420	100	WSAN 1440	500
Lapeer, Mich.		Paducah, Ky.		Allentown, Pa.	
WMPS 1430	500	WPAR 1420	100	WSAR 1450	1000
Memphis, Tenn.		Parkersburg, W. Va.		Fall River, Mass.	
WMSD 1420	100	WPAX 1210	100	WSAU 1370	100
Sheffield, Ala.		Thomasville, Ga.		Wausau, Wis.	
WMT 600	1000	WPAY 1370	100	WSAY 1210	100
Cedar Rapids, Iowa		Fortsmouth, Ohio		Rochester, N. Y.	
WNAC 1230	1000	WPEN 920	1000	WSAZ 1190	1000
Boston, Mass.		Philadelphia, Pa.		Huntington, W. Va.	
WNAD 1010	1000	WPG 1100	5000	WSB 740	50000
Norman, Okla.		Atlantic City, N. J.		Atlanta, Ga.	
WNAX 570	1000	WPRA 1370	100	WSBC 1210	100
Yankton, S. D.		Mayaguez, P. R.		Chicago, Ill.	
WNBC 1380	250	WPRO 630	500	WSBT 1360	500
New Britain, Conn.		Providence, R. I.		South Bend, Ind.	
WNBF 1500	100	WPRP 1420	100	WSFA 1410	500
Binghamton, N. Y.		Ponce, P. R.		Montgomery, Ala.	
WNBH 1310	100	WPTF 680	1000	WSGN 1310	100
New Bedford, Mass.		Raleigh, N. C.		Birmingham, Ala.	
WNBX 1260	500	WQAM 560	1000	WSIX 1210	100
Springfield, Vt.		Miami, Fla.		Nashville, Tenn.	
WNBZ 1290	100	WQAN 880	500	WSJS 1310	100
Saranac Lake, N. Y.		Scranton, Pa.		Winston-Salem, N. C.	
WNEL 1290	1000	WQBC 1360	1000	WSM 650	50000
San Juan, P. R.		Vicksburg, Miss.		Nashville, Tenn.	
WNEW 1250	1000	WQDM 1390	1000	WSMB 1320	1000
New York, N. Y.		St. Albans, Vt.		New Orleans, La.	
WNLC 1500	100	WQXR 1550	1000	WSMK 1380	200
New London, Conn.		New York, N. Y.		Dayton, Ohio	
WNNY 1420	100	WRAK 1370	100	WSNJ 1210	100
Watertown, N. Y.		Williamsport, Pa.		Bridgeton, N. J.	
WNOX 1010	1000	WRAW 1310	100	WSOC 1210	100
Knoxville, Tenn.		Reading, Pa.		Charlotte, N. C.	
WNYC 810	1000	WRBL 1200	100	WSPA 920	1000
New York, N. Y.		Columbus, Ga.		Spartanburg, S. C.	
WOAI 1190	50000	WRC 950	500	WSPD 1340	1000
San Antonio, Texas		Washington, D. C.		Toledo, Ohio	
WOC 1370	100	WRDO 1370	100	WSPR 1140	500
Davenport, Iowa		Augusta, Me.		Springfield, Mass.	
WOI 640	5000	WRDW 1500	100	WSUI 880	500
Ames, Iowa		Augusta, Ga.		Iowa City, Iowa	
WOKO 1430	500	WREC 600	1000	WSUN 620	1000
Albany, N. Y.		Memphis, Tenn.		St. Petersburg, Fla.	
WOL 1310	100	WREN 1220	1000	WSVA 550	500
Washington, D. C.		Lawrence, Kans.		Harrisonburg, Va.	
WOLS 1200	100	WRGA 1500	100	WSVS 1370	50
Florence, S. C.		Rome, Ga.		Buffalo, N. Y.	
WOMI 1500	100	WRJN 1370	100	WSYB 1500	100
Owensboro, Ky.		Racine, Wis.		Rutland, Vt.	
WOMT 1210	100	WRNL 880	500	WSYR 570	1000
Manitowoc, Wis.		Richmond, Va.		Syracuse, N. Y.	
WOOD 1270	500	WROK 1410	500	WTAD 900	1000
Grand Rapids, Mich.		Rockford, Ill.		Quincy, Ill.	
WOPI 1500	100	WROL 1310	100	WTAG 580	1000
Bristol, Tenn.		Knoxville, Tenn.		Worcester, Mass.	
WOR 710	50000	WRR 1280	500	WTAL 1310	100
Newark, N. J.		Dallas, Texas		Tallahassee, Fla.	
WORC 1280	500	WRTD 1500	100	WTAM 1070	50000
Worcester, Mass.		Richmond, Va.		Cleveland, Ohio	
WORK 1320	1000	WRUF 830	5000	WTAQ 1330	1000
York, Pa.		Gainesville, Fla.		Green Bay, Wis.	
WORL 920	500	WRVA 1110	5000	WTAR 780	1000
Boston, Mass.		Richmond, Va.		Norfolk, Va.	
WOSU 570	750			WTAW 1120	500
Columbus, Ohio				College Station, Tex.	

NORTH AMERICAN B. C. STATIONS BY CALLS

WTAX 1210 100	KEAW 960 50000	XEI 1370 125
Springfield, Ill.	Reynosa, Tams.	Morelia, Mich.
WTBO 900 250	KEAY 1240 100	XEJ 1020 1000
Cumberland, Md.	Mexico City, D. F.	Juarez, Chih.
WTCN 1250 1000	KEB 1030 10000	XEJP 1130 100
Minneapolis, Minn.	Mexico City, D. F.	Mexico City, D. F.
WTEL 1310 100	KEBA 1080 20	XEJW 870
Philadelphia, Pa.	Guzman, Jal.	Mexico City, D. F.
WTHY 1200 100	KEBG 820 1000	KEK 990 100
Hartford, Conn.	Tijuana, B. Cfa.	Mexico City, D. F.
WTIC 1040 50000	KEBH 930 500	KEKL 1240 500
Hartford, Conn.	Hermosillo, Sonora	Leon, Guan.
WTJS 1310 100	KEBI 1000 25	KEL 780 1000
Jackson, Tenn.	Aguascalientes, Ags.	Mexico City, D. F.
WTMJ 620 1000	KEBJ 1160 20	KELA 1240 50
Milwaukee, Wis.	Merida, Yuc.	Saltillo, Coah.
WTMV 1500 100	KEBK 1000 60	KELQ 670 50000
East St. Louis, Ill.	Neuvo Laredo, Tams.	Tijuana, B. Cfa.
WTNJ 1280 500	KEBL 1220 50	KELZ 1370 100
Trenton, N. J.	Mazatlan, Sin.	Mexico City, D. F.
WTOL 1260 1000	KEBO 1310 25	XEMG 1060 100
Savannah, Ga.	Irapuato, Guan.	Atzacapotzalco, D. F.
WTOL 1200 100	KEBS 1240 200	XEMO 860 5000
Toledo, Ohio	Mexico City, D. F.	Tijuana, L. C.
WTRC 1310 100	KEBX 640 250	XEMU 580
Elkhart, Ind.	Sabinas, Coah.	Piedras Negras, Coah.
WVFW 1400 500	KEBZ 1160 100	XEMX 1280 100
Brooklyn, N. Y.	Mexico City, D. F.	Mexico City, D. F.
WWAE 1200 100	XEC 1150 100	XENC 860 50
Hammond, Ind.	Tijuana, L. C.	Mexico City, D. F.
WWJ 920 5000	KECL 1100 1700	XENT 910 150000
Detroit, Mich.	Mexicali, B. Cfa.	Nuevo Laredo, Tams.
WWL 850 10000	KECW 1310 10	XEOK 760 2500
New Orleans, La.	Mexico City, D. F.	Tijuana, L. C.
WWNC 570 1000	KECZ 1370 100	XEP 1160 500
Asheville, N. C.	San Luis Potosi, S.L.P.	Juarez, Chih.
WWRL 1500 100	XED 1160 2500	XEPN 730 100000
Woodside, N. Y.	Guadalajara, Jal.	Piedras Negras, Coah.
WWSW 1500 100	XEDA 1220 200	XERA 840 350000
Pittsburgh, Pa.	Gra. Anaya, D. F.	Villa Acuna, Coah.
WWVA 1160 5000	XEDF 810 75	XES 990 250
Wheeling, W. Va.	Nuevo Laredo, Tams.	Tampico, Tams.
WXYZ 1240 1000	XEDP 1080 500	XET 690 5000
Detroit, Mich.	Mexico City, D. F.	Monterrey, N. L.
W3XDD 50000	XEDW 1150 20	XETB 1310 125
Whippany, N. J.	Minatitlan, Ver.	Torreón, Coah.
W3XJ 1060 100	XEE 1210 50	XETF 1220 30
College Park, Md.	Durango, Dgo.	Vera Cruz, Ver.
W8XO 700 500000	XEF 1450 100	XETH 1210 100
Cincinnati, Ohio	Juarez, Chih.	Puebla, Pue.
XEAA 750 200	XEFA 1180 500	XEU 1010 250
Mexicali, B. C.	Tacuba, D. F.	Vera Cruz, Ver.
XEAC 980 1000	XEFB 870 200	XEW 890 50000
Tijuana, L. C.	Monterrey, N. L.	Mexico City, D. F.
XEAD 1060 125	XEFC 550 100	XEX 1310 125
Guadalajara, Jal.	Merida, Yuc.	Monterrey, N. L.
XEAF 990 750	XEFE 980 150	XEXB 1270 50
Nogales, Son.	Laredo, Tams.	Jalapa, Ver.
XEAG 1310 10	XEFI 1440 250	XEXC 810 350
Cordoba, Ver.	Chihuahua, Chih.	Aguascalientes, Ags.
XEAL 660 1000	XEFJ 1230 100	XEXD 1340 350
Mexico City, D. F.	Monterrey, N. L.	Jalapa, Ver.
XEAM 750 25	XEFO 930 5000	XEXE 1270 17
Matamoros, Tams.	Mexico City, D. F.	Mexico City, D. F.
XEAO 660 250	XEFV 1210 100	XEXH 1250 250
Mexicali, B. C.	Juarez, Chih.	San Luis Potosi, S.L.P.
XEAP 1240 50	XEFW 1310 250	XEXS 1000 100
Obregon, Son.	Tampico, Tams.	Portable In Mexico
XEAS 1160 50	XEG 1220 250	XEYO 940 500
Saltillo, Coah.	Monterrey, N. L.	Mexico City, D. F.
XEAT 1210 250	XEH 720 250	XEZ 630 500
Parral, Chih.	Monterrey, N. L.	Merida, Yuc.

Special DX Calendar

THE time given in the DX Calendar following is in EST by the twenty-four hour clock.

DX Tips Periods
 Mon., 2115-2130, CJJC, 690 kcs.
 Tues., 1735-1800, W2XAF, 9530 kcs, and W2XAD, 15330 kcs.
 Wed., 0035-0045, KOY, 1390 kcs. 1345-1400, WTAR, 780 kcs.
 Thur., 0230-0245, KGM, 1320 kcs.
 Sat., 0015-0030, W8XX, 6140 kcs. 0230-0245, KLS, 1280 kcs.

"Programs of the Week"

The IDA "Programs of the Week", broadcast each Sunday morning, are full-hour programs, full of surprises, thrills, and laughs. Don't miss any of them. (CHWK requires ten cents for a verification.)
 Dec. 23 (Thurs.), 0300-0400, WJJD, 1130 kcs.
 Dec. 30 (Thurs.), 0100-0200, WTAM, 1070 kcs.
 Jan. 16 (Sun.), 0300-0400, WCCO, 810 kcs.
 Jan. 24 (Mon.), 0300-0400, WHAM, 1150 kcs.
 Jan. 30 (Sun.), 0300-0400, CHWK, 780 kcs.

Feb. 6 (Sun.), 0300-0400, KWYO, 1370 kcs.
 Feb. 27 (Sun.), 0330-0400, KGU, 750 kcs.
 Mar. 13 (Sun.), 0300-0400, WCKY, 1490 kcs.
 Mar. 27 (Sun.), 0300-0400, KFOR, 1210 kcs.

Special Broadcasts

Jan. 1, 0245-0400, CHWK, 780 kcs (UDXC).
 Jan. 11, 0510-0530, KAST, 1370 kcs (UDXC).
 Feb. 5, 0245-0400, CHWK, 780 kcs (UDXC).
 Feb. 8, 0510-0530, KAST, 1370 kcs (UDXC).
 Mar. 5, 0245-0400, CHWK, 780 kcs (UDXC).
 Apr. 2, 0245-0400, CHWK, 780 kcs (UDXC).
 May 7, 0245-0400, CHWK, 780 kcs (UDXC).
 June 4, 0245-0400, CHWK, 780 kcs (UDXC).

The Month's Changes

(Continued from Page 58)

1260	WNBX	Springfield, Vt. Twin States Brdcast. Corp., 39 Main St.
1190	WATR	Waterbury, Conn., to 1290
1240	KLPM	Minot, N. Dak., to 1360
1250	WCAL	Northfield, Minn., to 760
1310	WLB	Minneapolis, Minn., to 760
1310	KINY	Juneau, Alaska, to 1430
	KIT	Yakima, Wash., to 1250
	WOL	Washington, D. C., to 1230
1420	KABR	Aberdeen, S. Dak., to 1390
590	WKZO	Kalamazoo, Mich. 250 (1)
810	CMCF	Havana, Cuba. 5000
880	WCOF	Meridian, Miss. 1000
900	KGBU	Ketchikan, Alaska. 1000
950	WRC	Washington, D. C. 1000 (5)
1190	WATR	Waterbury, Conn. 250
1240	KLPM	Minot, N. Dak. 500 (1)
1250	WCAL	Northfield, Minn. 5000
	WLB	Minneapolis, Minn. 5000
1310	KINY	Juneau, Alaska. 250
	KIT	Yakima, Wash. 250 (5)
	WOL	Washington, D. C. 1000
1340	WCOA	Pensacola, Fla. 1000
1420	KABR	Aberdeen, S. Dak. 500 (1)

1430	WBNS	Columbus, Ohio. 1000 (5)
1490	KFBK	Sacramento, Calif. 10000
570	KGKO	Wichita Falls, Tex., to Fort Worth
		FOREIGN BROADCAST
		(Excluding Oceania, which is listed complete in this issue)
		NEW
1122	Stagshaw, Gt. Britain.	60000 w.
1357	Genoa No. 2, Italy.	5000
	Rome No. 3, Italy.	1000
		POWER
720	PRA8	Pornambuco, Brazil, from 730
740	PRA4	San Salvador, Brazil, from 1090
760	PRA6	Sao Paulo, Brazil, from 800
800	PRA2	Rio de Janeiro, Brazil, from 780
1060	PRD2	Rio de Janeiro, Brazil, from 1240
1080	.....	Joao Pessoa, Brazil, from 640
1120	PRH8	Rio de Janeiro, Brazil, from 1080
1220	PRA9	Rio de Janeiro, Brazil, from 1120
1420	PRB2	Curitiba, Brazil, from 1480
1470	PRE6	Nietheroy, Brazil, from 1170
		DELETE
850	.....	Sofia, Bulgaria, 100,000 from 1000
1220	PRA9	Rio de Janeiro, Brazil, 25000 from 1000
580	PRF8	San Salvador, Brazil
620	PRB3	Juiz de Fora, Brazil
630	PRF6	San Salvador, Brazil
1122	.....	Newcastle, Gt. Britain

At DEADLINE . . .

Merlin Almstead of Washington, D. C. reports ZNS, Nassau, Bahamas, on 540 kcs, daily from 8:30 to 9:30 pm, EST.

WICA, 940 Ashtabula, Ohio is now on the air.

CMQ, Havana, has moved to 600 kcs.

On December 29 the Irish Free State became the Irish Republic.

CMCX Havana has moved to 1380 kcs.

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