THE JANUARY 1938



RADEX

The All-wave Radio Log



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

JANUARY 1, 1938







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What is a Continent?

OME 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 eastern 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 Europe, Africa. America. 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 be-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 Dar-The Panama-Colombia frontier is considered as the southern terminus of the continent. 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 second line the Galapagos.

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 Netherland 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. 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 Gibralter, 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 Bosporus, 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.

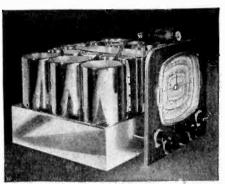
Oceania is a term used by geographers to include Australia, New Zealand and the Islands of the South Pacific. Its divisions are Malaysia, with the Philippines; Australia with Tasmania; New Zealand; Melanesia (New Guinea, New Britain, New Ireland, Admiralty, Solomons, New Hebrides, Santa Cruz, Fiji, Loyalties, 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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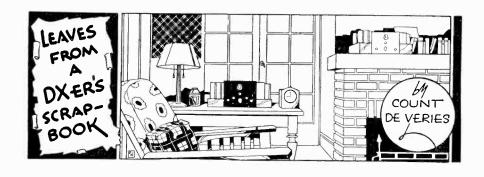
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MAIL COUPON FOR SPECIAL OFFER



FTER 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 keys. Out in Mexicali, XECL has been using 1700 watts on 1100 keys. 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 keys.

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 a dequate 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 kcys, on the fourth Friday. WJAG, Norfolk, Neb., 1060 kcys, 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 kcys, while CHWK, Chilliwack, 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 kcys; WEAN, Providence, R. I., 780 kcys; WNAC, Boston, Mass., 1230 kcys; and WHIS, Bluefield, W. Va., 1410 kcys. A half hour later, at 5:30 a. m., WIBX, 1200 kcys, 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 Decemer 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 kcys, 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 philosophic 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 vou great displeasure, I advise that you consign all future copies of the CDXR bulletin immediately to the Then you will not be incinerator. 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 this time the November about 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 transscribed in French in three halfhour recordings for broadcast to listeners in France. The project is under the supervision of Jean Masson, program editor of Radio Lusembourg, 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 Siringer, 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? Praetically all of the shortwave 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, shortwave 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 custombuilt sets go down to 5 meters, and are strictly "all-wave". A large number, however, do not include the 13-meter and additional short, shortwave 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 avail-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 interferunavoidable. 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 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. 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 sunspot 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. there is little that can be said in favor of adding this band to an allwave 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 The curvablock 5-meter signals. ture 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 sunspot 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"—combinareceivers transmitters and 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, Taumarunai, 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 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. ever, 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-verifying 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 writing THE for us. 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. evidenced by his report 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 propounded 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 eventually will buck 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 keys, 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 keys?"

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 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 keys, 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:

January 6
2:00-2:30 KWOS 1310 Jefferson City, Mo.
January 8
4:10-4:30 WKBZ 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 4:10-4:30 KLPM 1360 Port Arthur, Texas 4:20-4:40 KRMD 1310 Shreveport, La. 5:40-6:00 KQV 1380 Pittsburgh, Pa. 5:50-6:10 KLAH 1210 Carlsbad, N. M.

January 12
3:10-3:30 WPAX 1210 Thomasville, Ga.
4:40-5:00 KPLT 1500 Paris, Texas
5:00-5:20 KFJB 1000 Marshalltown,
Lowa

2:00-2:30 KWOS 1310 Jefferson City, Mo. January 14 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 their revenue from 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 Pepsodent or special on 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 Bucamaranga, 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: WKEU, WHLB, KAND. WJNO. KPDN, WJRD, WEOA, KPLT. 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, ČFCO and CKLW. Those heard occasionally are CRCT, CFRB, and CKOC. Rarely heard are CEO, 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 keys. 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 keys. 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 keys. 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 keys 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 keys 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 letter 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).

Cevlon

VPB in Colombo is on daily on 6160 kes 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 kes, daily from 5 am to 12:20 pm. 9653 kes, 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 $2\frac{1}{2}$ 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 Wisconsinat 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.)
KHPB 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.)
WANK Elizabethtown, N. C. (1.)
1.712 KAPM Wailuku, Hawaii. (1.)
WMPR Revere, Mass. (.05)
2.036 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 ben 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-amonth 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, Eucador, 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 RADEX when writing). mention The average subscription price of the larger stamp magazines is \$1.00 a vear.

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"

N 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 nonclub 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

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 780 Chilliwack, B. C. Sunday, February 6th 3:00-4:00 KWYO 1370 Sheridan, Wyo.

Sunday January 2 3:00-4:00 CMAB 1340 Pinar del Rio, Cuba

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.

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 HIH T
VOAS ARID
W TIU TI OR NOW K
WTEL WINDSOR WAGA
VAS WOC O OIL YSN
AST KRKO KSOO 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; concerros (Cuban cowbells) and the quijadas, the jawbones of an ass.

OUR READERS and Their Troubles

• • • By the TECHNICAL EDITOR

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 (R-10)resistor. From these two freshly cut ends run two short well-insulated leads to two binding post terminals or a phoneplug 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 matched to the circuit through a 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. output of the oscillator unit is fed the receiver. demodulated, into 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 allwave 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 radiofrequency 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 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 radiofrequency 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 in-Therefore, if the anterference. tenna 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 manmade 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 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 pickup 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-reduc-This, howing antenna systems. ever, 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. 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 6foot lengths of new 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.

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 allwave 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 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 former. When the switch is thrown to these two contacts, the connection between the set and transformer is completed, and the allwave 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.Localstations. too.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 Next, we should have our tested. 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 tube in question inoperative. 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.

Broadfuning, such as you describe, is a bad disorder in the set. When the tubes and volume control have 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 mfds. 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

 $\bullet \bullet \bullet By$ 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 Gallant'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 Mac-Hugh, 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 announce? over NBC. That he is still heard singing IS news. As announcer for Ireene 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

H AVING 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 soff 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 LR1, Buenos Aires, has been requested to broadcast a series of programs. Just as soon as dates are confirmed, we will be advised ac-

cordingly.

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, and CBF. CBM Montreal. 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 Mc-Clatchey 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 kes, is owned by the Arctic Radio Corp., 120 Main St. CFRB. Toronto, 690 kcs. 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 CKBL 1210 kcs. have been moved from the Canada Bldg. to the Sanderson Bldg., Prince Albert, Sask.

New Aerials for Millis

Westinghouse is **erecting** 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 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 Cuban calls are North America.

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

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

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

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

HC1-: FG (f); JB (fgk); PM (f); HH-: 2B (fl); 2X (fl); 5PA (f); HI-: 3N (dfl); 5X (l); 7A (l): 7G (l); 71 (f); HK-: 1EP (k); HW (f): 2JA (f); 3JA (fk); HP1A (f); HR5C (l).

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

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

OA4-: AE (f); AI (g); AL (fg); C (f); ON4VK (fl); OQ5AA (fj); OX2QY (deijl).

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

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

VK2: ADE (f); ADT (l); AFQ (f); AGE (l); AP (f); BQ (fm); CP (f); DJ (l); HF (fl); HS (l); OU (l); QR (f); ZC (l); VK3: AL (fl); AO (l); WA (l); VK4U (f); VK5BP (l); VO-: 2N (f); ZZ (l); 6D (f); 6L (g); VP3BG (l); VP3THE (dl); VP7NC (l); VP9R (ghl); VU-: 2CQ (c); 2JN (c): 7FY (c).

XE1-: BC (f); BX (m); CV (g); DT (f); GF (g); GK (f); GS (g); LK (fk); Y (fk); **XE**2-: AF (g); FC (fg); K (k); XE3AH (g); XE3AR (f).

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 broadcosting exations. Every casting stations. Every listener interested in amateur stations should have one. 292 pages.



We pay the postage,

TIME CONVERTER

The RADEX Map of the World with Time Converting Dial is 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

(26c in Ohio)

YV4-: AB (l); AF (\tilde{l}); AO (g); AX (l); **YV5**-: AA (f); ABA (l); ABF (fgln); ABG (l); ABJ (l): ABS (l); AD (fl); AE (kl); AM (fl); AS (f).

ZS3E; ZS5M; ZT5H; ZT5S; ZT6AL; ZT6AN; ZU6AF; ZU6AJ; ZU6P (All heard

The Reporters

(a) Gail Beyer, 3226 Sunnyside Ave., Chicago, Ill. (Hallicrafters S8A).
(b) Carl and Anne Eder, Willmar, Minn.
(c) Raphael Geller, 1652 Radcliff Ave., Bronx, N. Y.
(d) Gilbert Harris, 60 N. Holden St., N.

Adams, Mass.

 (e) Edward Hughes, 1212 Castlewood Ave., Louisville, Ky.
 (f) Merton T. Meade, 819 Wyandotte St., Kansas City, Mo. (Stromberg-Carlson Converter).

- (g) Martin Olthoff, 212 N. 16th, Independence, Kans. (REM69).
 (h) Benjamin Peet, 352 Pleasant Ave., New York, N. Y.
 (i) David Schaller, Biggs Hospital, There N. M. P.
- Ithaca, N. Y.
 (j) Jack Siringer,
- 1451 Lincoln Ave., Lakewood, Ohio. (k) Dale Smith, Route 3. Box 536.

Eugene, Ore.

Eugene, Ore.
(I) Al Steinmetz. 125 W. 27th St.,
Bayonne, N. J. (RCA-ACR 136).
(m) Hadley Wilcox, 623 W. 40th Place,
Los Angeles, Calif. (Tiffany Tone).
(n) William Wood, 817½ 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.

Ultra-High Frequencies Allocated

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 ultrahigh 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 . . . Hobnobs 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:

ly free	uencv	chec	k broadcasts. The	3:00-3:20	KDAL WLVA	1500 120 0	Duluth, Minn. Lynchburg, Va.
latest	schedu	le v	ith times given in		KPAC	1260	Port Arthur, Tex.
			follows:		WBTM	1370	Danville, Va.
Laster	n Stan	uaru	, ionows.	3:20-3:40	WKRC	550 1430	Cincinnati, Obio Rochester, N. Y.
	The	e Secor	nd Monday	3:30-3:50	WNAD	1010	Norman, Okla.
2:00-2:20	WLNH	1310	Laconia, N. H.		WMBC	1420	Detroit, Mich.
0.10 0.20	WJBO	1420	Baton Rouge, La.	3:40-4:00	WRAK KFVS	1370 1210	Williamsport, Pa. Cape Girardeau, Mo.
2:10-2:30	WBRB	1210 1500	Red Bank, N. J. Selma, Ala.	0.10-1.00	WJAC	1310	Johnstown, Pa.
2:20-2:40	WMAS	1420	Springfield, Mass.	3:50-4:10	WTAW	1120	College Station, Tex.
0.00 0.50	//.IOD	610	Miami, Fla.		WBNS	1430 1370	Columbus, Ohio
2:30-2:50	WWRL	1200	Woodside, N. Y. New Orleans, La.	4:00-4:20	WCOL	1210	Buffalo, N. Y. Columbus, Ohio
2:40-3:00	WOKO	1430	Albany, N. Y.		WBRE	1310	Wilkes Barre, Pa.
	WMBR		Jackson ville, Fla.	4:10-4:30	KLPM	1240	Minot, N. Dak.
2:50-3:10	WCAX	1200 1500	Burlington, Vt. Bristol, Tenn.		WPAR WPAY	1420 1370	Parkersburg, W. Va. Portsmouth, Ohio
3:00-3:20	WMBO	1310	Auburn, N. Y.	4:20-4:40	KRMD	1310	Shreveport, La.
	WMSD	1420	Sheffield, Ala.		WOMT	F210	Manitowoc, Wis.
3:10-3:30	WOC	1370	Davenport, Ia.	4.20 4.60	WSYR	570	Syracuse, N. Y.
	WCAD WRGM	1220 1210	Canton, N. Y. Grenada, Miss.	4:30-4:50	KGCA WCLE	1270 610	Decorah, Ia. Cleveland, Ohio
3:20-3:40	KWLC	1270	Decorah, Ia.		WNBF	1500	Binghamton, N. Y.
	WMBQ	1500	Brooklyn, N. Y.	4:40-5:00	KTEM	1370	Temple, Tex.
2.20 2.50	WNBR	1430	Memphis, Tenn.		KGBU WGH	900 1310	Ketchikan, Alaska Newport News, Va.
3:30-3:50	WDBO	1210 580	Fort Smith, Ark. Orlando, Fla.	4:50-5:10	KGVO	1260	Missoula, Mont.
	WMFF	1310	Plattsburg, N. Y.		KRLH	1420	Midland, Tex.
3:40-4:00	KABC	1420	San Antonio, Tex.		WHK	1390	Cleveland, Ohio
	WQDM	1390 1320	St. Albans, Vt. New Orleans, La.	5:00-5:20	WWSW	1500 1450	Pittsburgh, Pa. Wolf Point, Mont.
3:50-4:10	WFAS	1210	White Plains, N. Y.	0.00 0.20	KRMC	1370	Jamestown, N. D.
	WHEF	1500	Kosciusko, Miss.		WSAY	1210	Rochester, N. Y.
4:00-4:20	KFDM	560	Beaumont, Tex.	5:10-5:30	WSPD	1340	Toledo, Ohlo
	KLS WAGF	1280 1370	Oakland, Calif. Dothan, Ala.	5:10-5:30	KAST KNET	1370 1420	Astoria, Ore. Palestine, Tex.
	WCAP	1280	Asbury Park, N. J.		WAVE	940	Louisville, Ky.
4:10-4:30	KCRJ	1310	Jerome, Ariz.	5:20-5:40	KCMO	1370	Kansas City, Mo.
	KMLB	1200	Monroe, La.		KFJI	1210	Klamath Falls, Ore.
4:20-4:40	KMLB KYOS KLUF	1040	Merced, Calif.	5:30-5:50	WXYZ	1210 1240 1420	Detroit, Mich.
4:20-4:40	KYOS KLUF KGDM	1040 1370 1100	Merced, Calif. Galveston, Tex. Stockton, Calif.	5:30-5:50	WXYZ KIDW KPQ	1240 1420 1500	Detroit, Mich. Lamar, Colo. Wenatchee, Wash.
4:20-4:40	KYOS KLUF KGDM WDEV	1040 1370 1100 550	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt.		WXYZ KIDW KPQ WGAR	1240 1420 1500 1450	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio
	KYOS KLUF KGDM WDEV WDNC	1040 1370 1100 550 1500	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C.	5:30-5:50 5:40-6:00	WXYZ KIDW KPQ WGAR KFIO	1240 1420 1500 1450 1120	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash.
4:20-4:40 4:30-4:50	KYOS KLUF KGDM WDEV WDNC KROC KGAR	1040 1370 1100 550	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz.	5:40-6:00	WXYZ KIDW KPQ WGAR	1240 1420 1500 1450	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio
4:30-4:50	KYOS KLUF KGDM WDEV WDNC KROC KGAR	1040 1370 1100 550 1500 1310 1370 1210	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria, Lac.		WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH	1240 1420 1500 1450 1120 1380 1200 1210	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex.
	KYOS KLUF KGDM WDEV WDNC KROC KGAR KALB KOVC	1040 1370 1100 550 1500 1310 1370 1210 1500	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria, Ja. Valley City, N. D.	5:40-6:00 5:50-6:10	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE	1240 1420 1500 1450 1120 1380 1200 1210 1420	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex. Eugene, Ore.
4:30-4:50	KYOS KLUF KGDM WDEV WDNC KROC KGAR	1040 1370 1100 550 1500 1310 1370 1210	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria, Ja. Valley City, N. D. Sacramento, Calif.	5:40-6:00	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH	1240 1420 1500 1450 1120 1380 1200 1210	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex.
4:30-4:50	KYOS KLUF KGDM WDEV WDNC KROC KGAR KALB KOVC KROY WBNO KEUB	1040 1370 1100 550 1500 1310 1370 1210 1500 1210 1200 1420	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria, Jon. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah	5:40-6:00 5:50-6:10	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS	1240 1420 1500 1450 1120 1380 1200 1210 1420 1200 900	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak, Carlsbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis.
4:30-4:50 4:40-5:00	KYOS KLUF KGDM WDEV WDNC KROC KGAR KALB KOVC KROY WBNO KEUB KRE	1040 1370 1100 550 1500 1310 1370 1210 1500 1210 1200 1420 1370	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tucson, Ariz. Alexandria. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif.	5:40-6:00 5:50-6:10 6:00-6:20	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL	1240 1420 1500 1450 1120 1380 1200 1210 1420 1200 900 Second	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carisbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday
4:30-4:50 4:40-5:00 4:50-5:10	KYOS KLUF KGDM WDEV WDNC KROC KGAR RALB KOVC KROY WBNO KEUB KRE WLAK	1040 1370 1100 550 1500 1310 1370 1210 1500 1210 1200 1420 1370 1310	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria, Inc. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL The	1240 1420 1500 1450 1120 11380 1200 1210 1420 900 Second 1420	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fia.
4:30-4:50 4:40-5:00	KYOS KLUF KGDM WDEV WDNC KROC KROC KROY WBNO KEUB KRE WLAK KBST KIEM	1040 1370 1100 550 1500 1310 1370 1210 1200 1210 1200 1420 1370 1310 1500 1450	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tucson, Ariz. Alexandria. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL	1240 1420 1500 1450 1120 1380 1200 1210 1420 1200 900 Second 1420 1200 1310	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafavette, La.
4:30-4:50 4:40-5:00 4:50-5:10 5:00-5:20	KYOS KLUF KGDM WDEV WDNC KROC KGAR KALB KOVC WBNO KEUB KRE WLAK KBST KIEM WFOY	1040 1370 1100 550 1500 1310 1370 1210 1500 1210 1420 1370 1310 1500 1450 1210	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tucson, Ariz. Alexandria for. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lukeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL The WMFJ WAIM KVOL WHBQ	1240 1420 1500 1450 1120 1380 1210 1210 1220 1200 900 Second 1420 1200 1200 1310 1370	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafavette, La.
4:30-4:50 4:40-5:00 4:50-5:10	KYOS KLUF KGDM WDEV WDNC KROC KGAR KALB KOVC KROY WBNO KEUB KRE WLAK KBST KIEM WFOY KDON	1040 1370 1100 550 1500 1310 1370 1210 1200 1420 1420 1370 1310 1500 1450 1210 1210	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tucson, Ariz. Alexandria. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla. Monterrey, Calif.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50 2:40-3:00	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL The WMFJ WAIM KVOL WHBQ WKAQ	1240 1420 1500 1450 1120 1380 1210 1210 1420 1200 900 Second 1420 1200 1310 1370 1240	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pitrsburgh, Pa. Rapid City, S. Dak. Carisbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafayette, La. Memphis, Tenn. San Juan, P. R.
4:30-4:50 4:40-5:00 4:50-5:10 5:00-5:20	KYOS KLUF KGDM WDEV WDNC KROC KGAR KALB KOVC WBNO KEUB KRE WLAK KBST KIEM WFOY KDON WMIN	1040 1370 1100 550 1500 1310 1370 1210 1200 1210 1200 1420 1370 1310 1500 1450 1210 1210 1210 1210	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria. Inc. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla. Monterrey, Calif. St. Paul, Minn.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50 2:40-3:00	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL The WMFJ WAIM KVOL WHBQ WKAQ WKAQ	1240 1420 1500 1450 1120 1380 1210 1210 1220 1200 900 Second 1420 1200 1200 1310 1370	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafayette, La. Memphis, Tenn. San Juan, P. R. Winston-Salem, N. C.
4:30-4:50 4:40-5:00 4:50-5:10 5:00-5:20	KYOS KLUF KGDM WDEV WDNC KROC KROC KROC WBNO KEUB KRE WLAK KBST KIEM WFOY KDON WMIN WMIN WTAL	1040 1370 1100 550 1500 1310 1370 1210 1200 1210 1420 1370 1310 1500 1450 1210 1210 1210 1370 1310 1210	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla. Monterrey, Calif. St. Paul, Minn. Tailahassee, Fla. Houston, Texas	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3:20	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL The WMFJ WAIM KVOL WHBQ WKAQ WSJS WCPD	1240 1420 1500 1450 1120 1380 1210 1210 1220 1200 1200 1200 1310 1370 1240 1310 1240 1310 1270	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafayette, La. Memphis, Tenn. San Juan, P. R. Winston-Salem, N. C. Cincinnati, Ohio Willmington, N. C.
4:30-4:50 4:40-5:00 4:50-5:10 5:00-5:20 5:10-5:30	KYOS KLUF KGDM WDEV WDNC KROC KGAR KALB KOVC WBNO KEUB KROY WBNO KEUB KRE WLAK KBST KIEM WFOY KDON WMIN WTAL KTRH	1040 1370 1100 550 1500 1370 1210 1500 1210 1200 1420 1370 1310 1500 1450 1210 1370 1210 1370 1310 1210	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tucson, Ariz. Alexandria, Inc. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla. Monterrey, Calif. St. Paul, Minn. Tallahassee, Fla. Houston, Texas Yunua, Ariz.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50 2:40-3:00	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL The WMFJ WAIM KVOL WHBQ WKAQ WKJS WCPO WMFD KFIZ	1240 1420 1500 11500 1120 1380 1210 1420 1200 1210 1420 1200 1310 1370 1340 1310 1370 1310 1370 13420	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafayette, La. Memphis, Tenn. San Juan, P. R. Winston-Salem, N. C. Cincinnati, Ohio Wilmington, N. C. Fond du Lac, Wis-
4:30-4:50 4:40-5:00 4:50-5:10 5:00-5:20 5:10-5:30 5:20-5:40	KYOS KLUF KGDM WDEV WDNC KROC KROC KROC KGAR KOVC KROY WBNO KEUB KRE WLAK KBST KIEM WFOY WMIN WMIN WTAL KTRH KUMA	1040 1370 1500 1500 1310 1370 1210 1500 1210 1200 1420 1370 1310 1500 1210 1210 1210 1210 1210 1210 12	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tucson, Ariz. Alexandria, Inc. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla. Monterrey, Calif. St. Paul, Minn. Tallahassee, Fla. Houston, Texas Yuma, Ariz. Winston-Salem, N. C.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3:20 3:10-3:30	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL The WMFJ WAIM KVOL WHBQ WSJS WCPO WMFD KFIZ WPAX	1240 1420 1500 1450 11200 1380 1210 1200 900 Second 1420 1200 1310 1370 1240 1310 1310 1310 1310 1210	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pitrsburgh, Pa. Rapid City, S. Dak, Carisbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fia. Anderson, S. C. Lafayette, La. Memphis, Tenn. San Juan, P. R. Winston-Salem, N. C. Cincinnati, Ohio Wilmington, N. C. Fond du Lac, Wisr- Thomasville, Ga.
4:30-4:50 4:40-5:00 4:50-5:10 5:00-5:20 5:10-5:30	KYOS KLUF KGDM WDEV WDNC KROC KROC KROC KROY WBNO KEUB KROY WBNO KEUB WLAK KBST KIEM WFOY KDON WMIN WTAL KTRH KUMA WAIR KFGQ	1040 1370 1500 1310 1310 1370 1210 1500 1210 1200 1420 1370 1310 1500 1210 1210 1210 1210 1210 1210 12	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria, Ja. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla. Monterrey, Calif. St. Paul, Minn. Tailahassee, Fla. Houston, Texas Yuma, Ariz. Winston-Salem, N. C. Boone, Ia. Stockton, Calif.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3:20	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAII KORE KOOS WLBL The WMFJ WAIM KVOL WHBQ WKAQ WKAQ WKAQ WKAQ WKAQ WKAQ WKAQ WKA	1240 1420 1500 1450 11200 1380 1200 1210 1420 12200 900 Second 1420 1310 1370 1310 1370 1420 1210 1370 1210 1370	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafayette, La. Memphis, Tenn. San Juan, P. R. Winston-Salem, N. C. Cincinnati, Ohio Wilmington, N. C. Fond du Lac, Wis-
4:30-4:50 4:40-5:00 4:50-5:10 5:00-5:20 5:10-5:30 5:20-5:40 5:30-5:50	KYOS KLUF KGDM WDEV WDNC KROC KGAR KALB KOVC WBNO KEUB WLAK KBST KIEM WFOY KDON WHON WTAL KTRH KUMA WHOY KUMA WKYOY KUMA WKYOY KUMA KYOY KUMA KYOY KOY KOY KOY KOY KOY KOY KOY KOY KO	1040 1370 1500 1510 1310 1370 1210 1210 1210 1420 1370 1310 1450 1210 1210 1210 1210 1210 1210 1210 12	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria. Inc. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla. Monterrey, Calif. St. Paul, Minn. Tallahassee, Fla. Houston, Texas Yuma, Ariz. Winston-Salem, N. C. Boone, Ia. Stockton, Calif. Gulfport, Miss.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50 2:40-3:00 3:00-3:20 3:10-3:30 3:20-3:40	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL WMFJ WAIM KVOL WHBQ WKAQ WKJS WCPO WHFD KFIZ KOKO WCLO WCLO WCLO	1240 1420 1500 1450 1120 1380 1200 1210 1420 1200 9 Second 1420 1310 1370 1240 1370 1220 1370 1210 1370 1210 1370 1200	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pitrsburgh, Pa. Rapid City, S. Dak. Carisbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafayette, La. Memphis, Tenn. San Juan, P. R. Winston-Salem, N. C. Cincinnati, Ohio Wilmington, N. C. Fond du Lac, Wis- Thomasville, Ga. La Junta, Colo. Janesville, Wis. Augusta, Ga.
4:30-4:50 4:40-5:00 4:50-5:10 5:00-5:20 5:10-5:30 5:20-5:40 5:30-5:50	KYOS KLUF KGDM WDEV WDNC KROC KROC KGAR KALB KOVC WBNO KEUB KROY WBNO KEUB KRE WLAK KBST KIEM WFOY KDON WMIN WTAL KTRH KUMA WAIR KFGQ KWG WGCM KGMB	1040 1370 1500 1310 1370 1210 1500 1210 1200 1420 1370 1310 1500 1450 1210 1370 1210 1370 1210 1290 1420 1290 1420 1290 1210 1370	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla. Monterrey, Calif. St. Paul, Minn. Tallahassee, Fla. Houston, Texas Yuma, Ariz. Winston-Salem, N. C. Boone, Ia. Stockton, Calif. Gulfport, Miss. Honolulu, T. H.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50 2:40-3:00 3:00-3:20 3:10-3:30 3:20-3:40	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL The WMFJ WAIM KVOL WHBQ WKAQ WKAQ WKJS WCPO WMFD KFIZ WPAX KOKO WCLO WCLO WRDW	1240 1420 1500 1450 1150 1120 1380 1210 1210 1420 1200 1310 1310 1370 1240 1200 1310 1370 1240 1200 1310 1370 1200 1350 1210 1370	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pitrsburgh, Pa. Rapid City, S. Dak. Carisbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafayette, La. Memphis, Tenn. San Juan, P. R. Winston-Salem, N. C. Cincinnati, Ohio Wilmington, N. C. Fond du Lac, Wis- Thomasville, Ga. La Junta, Colo. Janesville, Wis. Augusta, Ga.
4:30-4:50 4:40-5:00 4:50-5:10 5:00-5:20 5:10-5:30 5:20-5:40 5:30-5:50	KYOS KLUF KGDM WDEV WDNC KROC KGAR KALB KOVC WBNO KEUB WLAK KBST KIEM WFOY KDON WHON WTAL KTRH KUMA WHOY KUMA WKYOY KUMA WKYOY KUMA KYOY KUMA KYOY KOY KOY KOY KOY KOY KOY KOY KOY KO	1040 1370 1500 1510 1310 1370 1210 1210 1210 1420 1370 1310 1450 1210 1210 1210 1210 1210 1210 1210 12	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla. Monterrey, Calif. St. Paul, Minn. Tailahassee, Fla. Houston, Texas Yuma, Ariz. Winston-Salem, N. C. Boone, Ia. Stockton, Calif. Gulfport, Miss. Honolula, T. H. Mason City, Ia.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50 2:40-3:00 3:00-3:20 3:10-3:30 3:20-3:40	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAH KORE KOOS WLBL The WMFJ WAIM KVOL WHBQ WKAQ WKAQ WKJS WCPO WMFD KFIZ WPAX KOKO WCLO WCLO WRDW	1240 1420 1450 11500 1150 1150 11200 1210 1200 900 Second 1420 1310 1370 1240 1310 1200 1210 1210 1200 1370 1420 1370 1420 1370 1420 1370 1420 1370 1420 1370 1370 1370 1310 1370 1310 1370 137	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pittsburgh, Pa. Rapid City, S. Dak. Carlsbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafayette, La. Memphis, Tenn. San Juan, P. R. Winston-Salem, N. C. Clincinnati, Ohio Wilmington, N. C. Fond du Lac, Wis- Thomasville, Ga. La Junta, Colo. Janesville, Wis. Augusta, Ga. Vicksburg, Miss. Corsicana, Texas
4:30-4:50 4:40-5:00 4:50-5:10 5:00-5:20 5:10-5:30 5:20-5:40 5:30-5:50	KYOS KLUF KGDM WDEV WDNC KROC KROC KROC KROY WBNO KEUB KOVC KROY WBNO KEUB KRE WLAK KBST KIEM WFOY WMIN WMIN WTAL KTRH KUMAR KYGQ KGM KGMB	1040 1370 1500 1500 1310 1370 1210 1200 1210 1200 1420 1370 1310 1500 1450 1210 1210 1210 1210 1210 1220 1370 1310 1210 1210 1210 1210 1210 1210 121	Merced, Calif. Galveston, Tex. Stockton, Calif. Waterbury, Vt. Durham, N. C. Rochester, Minn. Tueson, Ariz. Alexandria. Valley City, N. D. Sacramento, Calif. New Orleans, La. Price, Utah Berkeley, Calif. Lakeland, Fla. Big Spring, Tex. Eureka, Calif. St. Augustine, Fla. Monterrey, Calif. St. Paul, Minn. Tallahassee, Fla. Houston, Texas Yuma, Ariz. Winston-Salem, N. C. Boone, Ia. Stockton, Calif. Gulfport, Miss. Honolulu, T. H.	5:40-6:00 5:50-6:10 6:00-6:20 2:00-2:20 2:10-2:30 2:20-2:40 2:30-2:50 2:40-3:00 3:00-3:20 3:10-3:30 3:20-3:40	WXYZ KIDW KPQ WGAR KFIO KQV WCAT KLAII KORE KOOS WLBI WMFJ WAIM KVOL WHBQ WKAQ WKAQ WKAQ WKAY KOKO WCLO WRDW WQBC KAND	1240 1420 1500 1450 1150 1120 1380 1210 1210 1420 1200 1310 1310 1370 1240 1200 1310 1370 1240 1200 1310 1370 1200 1350 1210 1370	Detroit, Mich. Lamar, Colo. Wenatchee, Wash. Cleveland, Ohio Spokane, Wash. Pitrsburgh, Pa. Rapid City, S. Dak. Carisbad, N. Mex. Eugene, Ore. Marshfield, Ore. Stevens Point, Wis. Wednesday Daytona Beach, Fla. Anderson, S. C. Lafayette, La. Memphis, Tenn. San Juan, P. R. Winston-Salem, N. C. Cincinnati, Ohio Wilmington, N. C. Fond du Lac, Wis- Thomasville, Ga. La Junta, Colo. Janesville, Wis. Augusta, Ga.

The Second Tuesday

Wilkes Barre, Pa.

Philadelphia, Pa.

Richmond, Va.

Richmond, Va. Buffalo, N. Y. Duluth, Minn.

Altoona, Pa.

WBAX 1210

1370

1210

1310

1210

1310

1500

WDAS

WBBL

WFBG

WMBG

WEBR

KDAL

2:00-2:20

2:10-2:20

2:20-2:40

2:30-2:50

2:40-3:00

2:50-3:10

3:00-3:20

							CO
3:50-4:10	KARK	890	Little Rock, Ark.		WDWS	1370	Champaign, Ill.
	WGPC	1420	Albany, Ga.	5:50-6:10	KGKB	1500	Tyler, Texas
4:00-4:20	KFJZ	1370	Fort Worth, Tex.		KSUN	1200	Lowell, Ariz.
2,00 1.20	WHBU	1210			WBCM	1410	Bay City, Mich. Roswell, N. M.
			W. Palm Beach, Fla.	6:00-6:20	KGFL	1370	Roswell N M
	-WJNO	1200	W. Paim Beach, Fia.	0.10-0.20	KOIW	1420	Alamana Colo
4:10-4:30	WBEO	1310	Marquette, Mich.	6:10-6:30			Alamosa, Colo.
	WCOC	880	Meridian, Miss.		KHBC	14 00	Hilo, T. H.
	WLB	1250	Minneapolis, Minn.	6:20-6:40	KVEC	1200	San Luis Obispo, Calif.
4:20-4:40	KSO	1430	Des Moines, Ia.		WGL	1370	Fort Wayne, Ind.
T.20 7.20	WKEU	1500	Griffin, Ga.	6:30-6:50	KSUB	1310	Cedar City, Utah
				0.00 0.00			
	WOSU	570	Columbus, Ohio		The	Seco	nd Friday
4:30-4:50	KALB	1210	Alexandria, La.				
	WEXL	1310	Royal Oak, Mich.	2:00-2:20	WGNY	1210	Newburgh, N. Y.
	WHLB	1370	Virginia, Minn.	-2:10-2:30	WCNW	1500	Brooklyn, N. Y.
4:40-5:00	KPLT	1500	Paris, Tex.	2:20-2:40	WGBB	1210	Freeport, N. Y.
2120 0100	WJMS	1420		-2:30-2:50	WABY	1370	Albany, N. Y.
	WJRD	1200	Tuscaloosa, Ala.	-2:50-2:50 -2:50-3:10	WSYB	1500	Rutland, Vt.
4.50 5.10		1310	Oklahoma City Okla				
4:50-5:10	KINIO		Oklahoma City, Okla. Greensboro, N. C.	3:00-3:20	WABI	1200	Bangor, Me.
,	WBIG	1440	Greensboro, N. C.	3:20- 3:40	WIBX	1200	Utica, N. Y.
	WTAX	1210	Springfield, Ill.	3:30-3:50	KASA	1210	Elk City, Okla.
5:00-5:20	KFJB	1200	Marshalltown, Ia.		WAGM	1420	Presque Isle, Me.
	WEOA	1370	Evansville, Ind.	3:40-4:00	KWOS	1310	Jefferson City, Mo.
5:10-5:30	KPDN	1310	Pampa, Tex. Tuscola, III.		WNBZ	1290	Saranac Lake, N. Y.
0.10-0.00	WDZ	1020	Tuscoia III.	9:50 4:10	WJBK	1500	Detroit, Mich.
5.00 E.40	KELD	1370	Eldorado, Ark.	3:50-4:10		1420	Tentin Mo
5:20-5:40					WMBH		Joplin, Mo.
	WAYX	1200	Wayeross, Ga.		WRDO	1370	Augusta, Me.
/	WKBN	570	Youngstown, Ohio Devils Lake, N. D.	4:00-4:20	KIUL	1210	Garden City, Kans.
5:30-5:50	KDLR	1210	Devils Lake, N. D.		WTHT	1200	Hartford, Conn.
	WADC	1320	Akron, Ohio	4:10-4:30	KICA	1370	Clovis, N. M.
5:40-6:00		1420	Abilene, Tex.	2.10 2.00	WCAZ	1070	Carthage, Ill.
0.40-0.00	WSAU	1370	Wausau, Wis. Dublin, Texas		WNLC	1500	New London, Conn.
F FO 0.10	KFPL	1310	Dublin Toyes	4 00 4 40			
5:50-6:10			Cough Bond Ind	4:20-4:40	WMFG	1210	Hibbing, Minn.
	WFAM	1200	South Bend, Ind.	4:30-4:50	KIUP	1370	Durango, Colo.
6:00-6:20	KLCN	1290	Blytheville, Ark.		WPAD	1420	Paducah, Ky.
	WELL	1420	Battle Creek, Mich.	4:40-5:00	KNOW	1500	Austin, Tex.
6:10-6:30	KGBX	1230	Springfield, Mo.		WEMP	13 10	Milwaukee, Wis.
• ,	WMPC	1200	Lapeer, Mich.	4:50-5:10	WEW	760	St. Louis, Mo.
6:20-6:40	KABR	1420	Aberdeen, S. D.	1.00 0.10	WGRC	1370	New Albany, Ind.
	KFXJ	1200	Grand Junction, Colo.	E .00 E .00	KIUN	1420	Pecos, Tex.
6:30-6:50	KIA	1200	Grand Sunction, Color	5:00-5:20			recus, rex.
	The	Secon	d Thursday		WEBQ	1210	Harrisburg, Ill.
			=	5:10-5:30	KGEK	1200	Sterling, Colo. Ashland, Ky.
2:00-2:20	wsvs	1370	Buffalo, N. Y.		WCMI	1310	Ashland, Ky.
2:10-2:30	WKOK	1210	Sunbury, Pa.	5:20-5:40		1370	San Antonio, Tex.
2:10-2:30		1210 1310		5:20-5:40	KMAC	1370	San Antonio, Tex.
2:20-2:40	WRAW	1310	Reading, Pa.		KMAC WJW	$\frac{1370}{1210}$	San Antonio, Tex. Akron, Ohio
2:20-2:40 2:30-2:50	WRAW WJTN	1310 1210	Reading, Pa. Jamestown, N. Y.	5:20-5:40 5:30-5:50	KMAC WJW WIL	1370 1210 1200	San Antonio, Tex. Akron, Ohio St. Louis, Mo.
2:20-2:40 2:30-2:50 2:40-3:00	WRAW WJTN WTEL	1310 1210 1310	Reading, Pa. Jamestown, N. Y. Philadelphia, Pa.	5: 3 0-5:50	KMAC WJW WIL WLBC	1370 1210 1200 1310	San Antonio, Tex. Akron, Ohio St. Louis, Mo. Muncie, Ind.
2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10	WRAW WJTN WTEL WHIS	1310 1210 1310 1410	Reading, Pa. Jamestown, N. Y. Philadelphia, Pa. Bluefield, W. Va.		KMAC WJW WIL WLBC KTOK	1370 1210 1200 1310 1370	San Antonio, Tex. Akron, Ohio St. Louis, Mo. Muncie, Ind. Oklahoma City, Okla.
2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3;20	WRAW WJTN WTEL WHIS WQAN	1310 1210 1310 1410 880	Reading, Pa. Jamestown, N. Y. Philadelphla, Pa. Bluefleld, W. Va. Scranton, Pa.	5:30-5:50 5:40-6:00	KMAC WJW WIL WLBC KTOK WKBB	1370 1210 1200 1310 1370 1500	San Antonio, Tex. Akron, Ohio St. Louis, Mo. Muncie, Ind. Okiahoma City, Okia. E. Dubuque, Ili.
2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10	WRAW WJTN WTEL WHIS WQAN WLEU	1310 1210 1310 1410 880 1420	Reading, Pa. Jamestown, N. Y. Philadelphia, Pa. Bluefield, W. Va. Scranton, Pa. Erie. Pa.	5: 3 0-5:50	KMAC WJW WIL WLBC KTOK	1370 1210 1200 1310 1370	San Antonio, Tex. Akron, Ohio St. Louis, Mo. Muncie, Ind. Oklahoma City, Okta. E. Dubuque, Ill. Wichita, Kans.
2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3;20	WRAW WJTN WTEL WHIS WQAN WLEU WBLK	1310 1210 1310 1410 880 1420 1370	Reading, Pa. Jamestown, N. Y. Philadelphia, Pa. Bluefield, W. Va. Scranton, Pa. Erie. Pa.	5:30-5:50 5:40-6:00	KMAC WJW WIL WLBC KTOK WKBB	1370 1210 1200 1310 1370 1500 1210 1200	San Antonio, Tex. Akron, Ohio St. Louis, Mo. Muncie, Ind. Oklahoma City, Okia. E. Dubuque, Ili. Wichita, Kans. Green Bay, Wis.
2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3:20 3:10-3:30 3:20-3:40	WRAW WJTN WTEL WHIS WQAN WLEU WBLK	1310 1210 1310 1410 880 1420 1370	Reading, Pa. Jamestown, N. Y. Philadelphia, Pa. Bluefield, W. Va. Scranton, Pa. Erie, Pa. Clarksburg, W. Va. Grove City, Pa.	5:30-5:50 5:40-6:00 5:50-6:10	KMAC WJW WIL WLBC KTOK WKBB KANS WHBY	1370 1210 1200 1310 1370 1500 1210 1200	San Antonio, Tex. Akron, Ohio St. Louis, Mo. Muncie, Ind. Oklahoma City, Okia. E. Dubuque, Ili. Wichita, Kans. Green Bay, Wis.
2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3:20 3:10-3:30 3:20-3:40 3:30-3:50	WRAW WJTN WTEL WHIS WQAN WLEU WBLK WSAJ	1310 1210 1310 1410 880 1420	Reading, Pa. Jamestown, N. Y. Philadelphia, Pa. Bluefield, W. Va. Scranton, Pa. Erie, Pa. Clarksburg, W. Va. Grove City, Pa.	5:30-5:50 5:40-6:00 5:50-6:10 6:00-6:20	KMAC WJW WIL WLBC KTOK WKBB KANS WHBY WACO	1370 1210 1200 1310 1370 1500 1210 1200 1420	San Antonio, Tex. Akron, Ohio St. Louis, Mo. Muncie, Ind. Oklahoma City, Okta. E. Dubuque, Ili. Wichita, Kans. Green Bay, Wis. Waco, Tex.
2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3:20 3:10-3:30 3:20-3:40 3:30-3:50 3:40-4:00	WRAW WJTN WTEL WHIS WQAN WLEU WBLK WSAJ WJBC	1310 1210 1310 1410 880 1420 1370 1310 1200	Reading, Pa. Jamestown, N. Y. Philadelphia, Pa. Bluefleld, W. Va. Scranton, Pa. Erie, Pa. Clarksburg, W. Va. Grove City, Pa. Bloomington, 111.	5:30-5:50 5:40-6:00 5:50-6:10 6:00-6:20 6:10-6:30	KMAC WJW WIL WLBC KTOK WKBB KANS WHBY WACO WJBL	1370 1210 1200 1310 1370 1500 1210 1200 1420 1200	San Antonio, Tex. Akron, Ohlo St. Louis, Mo. Muncle, Ind. Oklahoma City, Okta. E. Dubuque, Ili. Wichita, Kans. Green Bay, Wis. Waco, Tex. Decatur, Ill.
2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3:20 3:10-3:30 3:20-3:40 3:30-3:50	WRAW WJTN WTEL WHIS WQAN WLEU WBLK WSAJ WJBC KGKL	1310 1210 1310 1410 880 1420 1370 1310 1200 1370	Reading, Pa. Jamestown, N. Y. Philadelphia, Pa. Bluefield, W. Va. Scranton, Pa. Erle, Pa. Clarksburg, W. Va. Grove City, Pa. Bloomington, 19. San Angelo, Texas	5:30-5:50 5:40-6:00 5:50-6:10 6:00-6:20	KMAC WJW WIL WLBC KTOK WKBB KANS WHBY WACO WJBL KRQA	1370 1210 1200 1310 1370 1500 1210 1200 1420 1200 1310	San Antonio, Tex. Akron, Ohio St. Louis, Mo. Muncie, Ind. Oklahoma City, Okia. E. Dubuque, Ili. Wichita, Kans. Green Bay, Wis. Waco, Tex. Decatur, Ill. Santa Fe, N. M.
2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3:20 3:10-3:30 3:20-3:40 3:30-3:50 3:40-4:00	WRAW WJTN WTEL WHIS WQAN WLEU WBLK WSAJ WJBC KGKL WHAT	1310 1210 1310 1410 880 1420 1370 1310 1200 1370 1310	Reading, Pa. Jamestown, N. Y. Philadelphia, Pa. Bluefield, W. Va. Scranton, Pa. Erie, Pa. Clarksburg, W. Va. Grove City, Pa. Bloomington, 18. San Angelo, Texas Philadelphia, Pa.	5:30-5:50 5:40-6:00 5:50-6:10 6:00-6:20 6:10-6:30 6:20-6:40	KMAC WJW WIL WLBC KTOK WKBB KANS WHBY WACO WJBL KRQA WHDF	1370 1210 1200 1310 1370 1500 1210 1200 1420 1200 1310 1370	San Antonio, Tex. Akron, Ohlo St. Louis, Mo. Muncle, Ind. Oklahoma City, Okia. E. Dubuque, Ili. Wichita, Kans. Green Bay, Wis, Waco, Tex. Decatur, Ili. Santa Fe, N. M. Calumet, Mich.
2:20-2:40 2:30-2:50 2:40-3:00 2:50-3:10 3:00-3:20 3:10-3:30 3:20-3:40 3:30-3:50 3:40-4:00 3:50-4:10	WRAW WJTN WTEL WHIS WQAN WLEU WBLK WSAJ WJBC KGKL WHAT WLAP	1310 1210 1310 1410 880 1420 1370 1310 1200 1370 1310 1420	Reading, Pa. Jamestown, N. Y. Philadelphia, Pa. Bluefield, W. Va. Scranton, Pa. Erie, Pa. Clarksburg, W. Va. Grove City, Pa. Bloomington, Ill. San Angelo, Texas Philadelphia, Pa. Lexington, Ky.	5:30-5:50 5:40-6:00 5:50-6:10 6:00-6:20 6:10-6:30	KMAC WJW WIL WLBC KTOK WKBB KANS WHBY WACO WJBL KRQA	1370 1210 1200 1310 1370 1500 1210 1200 1420 1200 1310	San Antonio, Tex. Akron, Ohio St. Louis, Mo. Muncie, Ind. Oklahoma City, Okia. E. Dubuque, Ili. Wichita, Kans. Green Bay, Wis. Waco, Tex. Decatur, Ill. Santa Fe, N. M.
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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.
	KUJ	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	KFRO	1370	Longview, Tex
	KGEZ	1310	Kalispel, Mont.
5:30-5:50	KBIX	1500	Muskogee, Okla.
	KFXD	1200	Nampa, 1daho
	KFJM		Grand Forks, N. D.
	-KXRO	1310	Aberdeen, Wash.
5:50-6:10		1210	Olympia, Wash.
6:0 0- 6:20		1310	Juneau, Alaska
6:10-6:30		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 Maldive 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

	0 01-
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-nav	

The Biography of Julius Twisdile

O 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 bighearted 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.

firmations 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 location 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 upperclassman 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

							- 181 - 28
550	2CR	10000	Cumnock, N.S.W.	1040	5PI	2000	Crystal Brook, S. A.
5 6 0	6WA	10000	Minding, W. A.	1050	2CA	50 0	Canberra, F. C. T.
570	2Y A	60000	Wellington, N. Z.	1060	2BH	100	Broken Hill, N.S.W.
580	3WV	10000	Horsham, Vic.	107 0	6WB	2000	Katanning, W. A.
600	FJP	500	Noumea, New Caledonia	1080	2AD	100	Armidale, N.S.W.
000	7Z L	1000	Hobart, Tas.		4MK	100	Mackay, Qsld.
010			Manila, Philippines		7HT	300	Hobart, Tas.
610	KZRM		Sydney, N.S.W.	1090	1ZB	150	Auckland, N. Z.
	2FC	3500	Melbourne, Vic.		3LK	2000	Lubeck, Vic.
620	3AR	4500	Clevedon, Qsld.	1100	41.G	500	Longreach, Qsld.
630	4QN	7000	Crystal Brook, S. A.		7LA	300	Launceston, Tas.
640	5CK	7500	Crystal Mook, S. A.	1110	2UW	750	Sydney, N.S.W.
	≬1YA	10000	Auckland, N. Z.	1120	2ZB	1000	Wellington, N. Z.
660	2DU	100	Dubbo, N.S.W.	1,20	4BC	1000	Brisbane, Qsld.
	7BU	100	Burnle, Tas.	1130	6ML	500	Perth. W. A.
670	2CO	7500	Corowa, N.S.W.	1140	211.D	500	Newcastle, N.S.W.
680	2HR	300	Singleton, N.S.W.	1140	4YO	150	Dunedin, N. Z.
	4ZP	100	Invercargil, N. Z.	1150	2WG	2000	Wagga, N.S.W.
690	611.E	3500	Perth, W. A.	11.00	2ZM	15	Gisborne, N. Z.
70 0	2NR	7000	Grafton, N.S.W.	1160	2KA	200	Katoomba, N.S.W.
710	7NT	7000	Kelso, Tas.	1100	4TO	200	Townsville, Qsld.
720	-3YA	10000	Christchurch, N. Z.	1170	2NZ	2000	Inverell, N. S. W.
- 10	6GF	2000	Kalgoorlie, W. A.			600	Melbourne, Vic.
730	5CL	4000	Adelaide, S. A.	1180	3KZ	1000	Sydney, N. S. W.
740	2BL	3000	Sydney, N.S.W.	1190	2CH	500	Christchurch, N. Z.
750	KGU	2500	Honolulu, Hawaii	1200	3YL		Adelaide, S. A.
760	2YB	100	New Plymouth, N. Z.		5KA	500	Grafton, N. S. W.
770	3LO	3500	Melbourne, Vic.	1210	2GF	100	Warrnambool, Vic.
780	KZEG	1000	Manila, Philippines		3YB	100	
790	4YA	10000	Dunedin, N. Z.		6K()	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	22 L	20	Hastings, N. Z.
850	5RM	1000	Renmark, S. A.		3TR	1000	Sale, Vic.
860	4AY	500	Ayr, Qsid.		61N	500	Perth, W. A.
800	7HO	120	Hobart Tas.	1250	IZM	175	Manurewa, N. Z.
870	2GB	1000	Sydney, N.S.W.	1280	38R	2000	Shepparton, Vic.
880	1YX	150	Auckland, N. Z.	1270	28M	1000	Sydney, N. S. W.
200	2XL	100	Cooma, N.S.W.	1280	3AW	600	Melbourne, Vic.
	6 P R	500	Applecioss, W. A.		4ZC	20	Cromwell, N. Z.
000	KZIB	1000	Manila, P. 1.	1290	4BK	500	Brisbane, Qsld.
900		500	Lismore, N.S.W.	1300	2TM	2000	Tamworth, N.S. W.
	2LM	250	Wairoa, N. Z.	1310	1ZJ	65	Auckland, N. Z.
	2ZP	100	Queenstown, Tas.		5AD	500	Adelaide, S. A.
0.0	7QT	2000	Rockhamton, Qsld.	1320	KGMB	1000	Honolulu, Hawaii
910	4RK		Suva, Fiji		3BA	500	Ballarat, Vic.
920	ZJV.	400	Nelson N. Z.	1330	3SH	100	Swan Hill, Vic.
	2ZR	50	Melbourne, Vic.		4RO	50	Rockhampton, Qsld.
930	3UZ	600		1340	4 W K	100	Warwick, Qsld.
940	3ZR	400	Greymouth, N. Z.	1010	5SE	100	Mount Gambier, S. A.
950	2UE	1000	Sydney, N.S.W.	1350	3GL	100	Geeiong, Vic.
960	2 Z F	250	Palmerston North, N. Z.	1360	3MA	100	Mildura, Vic.
	5DN	500	Adelaide, S. A.	1300	4PM	100	Port Moresby, Papus
970	3BO	200	Bendigo, Vic.	1370	2110	100	Gunnedah, N. S. W.
980	2KM	100	Kempsey, N.S.W.	1350	4BH	1000	Brisbane, Qsld.
	2ZJ	200	Gisborne, N. Z.		2GN	200	Goulburn, N. S. W.
	6AM	2000	Northam, W. A.	1390	4CA	200	Cairns, Qsld.
990	2GZ	2000	Orange, N.S.W.			100	Fremantie, W. A.
1000	3UL	200	Warragul, Vic.	1400	6PM		Hilo, Hawaii
	4GR	500	Toowoomba, Qsld.	1 40 0	KHBC	250 200	Palmerston North, N. Z
1010	3TLA	750	Hamilton, Vic.		2ZO	100	Maryborough, Qsid.
	4ZD	35	Dunedin, N. Z.	1410	4MB		Newcastle, N. S. W.
	4ZM	60	Dunedin, N. Z.	1410	2KO	500	Melbourne, Vic.
1020	2KY	1000	Sydney, N.S.W.	1420	3XY	600	Wollongong, N. S. W.
1030	3DB	600	Melbourne, Vic.	1430	2W1.	300	TOHOUROUR, A. D. W.

	3ZB 4VL	1000 50	Charleville, Qsld.
1440	2QN	100	Deniliquin, N. S. W.
	4IP	100	Ipswich, Qsld.
1450	4ZR	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	Christehureh, 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	$^{2\mathrm{BS}}_{3\mathrm{AK}}$	100 200	Bathurst, N. S. W. Melbourne, Vic.
1510	YDA	500	Tandjongpriok, 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.

Don Lee System, Daily

KDB KDON KFRC KFXM KGB KGDM KHJ KPMC KQW KVOE

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. WXYZ

E-9:25 a.m., C-8:25, M-7:25, P-6:25 CBS Press Radio, Monday through Friday

CKAC KLRA KMOX WABC WADO WAIM WALA WBIG WCHS WCOC WDAE WDBO WDRC WEEI WESG WFBL WHIO WHP WIBX WJAS WJNO WKBW WLBZ WMAS WMBR WMMN WNBF 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 KMON WABC WADO WAIM WALA WCHS WCOC WDAE WDBJ WDBO WEEL WESG WFBL WFBM WHEC WHIO WIBX WINO WJR WJSV WLBZ WMAS WMBR WMMN WNBF WOKO WORC WPAR WQAM WREC WSVA WSFA WSJS

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 WECH WELL WEDM WIBM WILM MRZO MOOD MXAS E-12:15 p.m., C-11:15 a.m., M-10:15,

P-9:15

CBS Edwin Monday Hill, through Friday KFAB KFH KGKO KLRA KMBC KMOX KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WACO WADC WALA WEBM WBIG WBNS WBRC WBT WCAQ

WCAU WCCO WCHS WCOA WCOC WDAE WDBJ WDBO WDNC WDOD WDRC WEEL WFBL WGR WGST WHAS WHEC WHIO WHP WIBX WISN WJR WJSV WKBB WKBN WKRC WLAC WLBZ WMAS WMAZ WMBD WMBR WMMN WNAX WNBF WNOX WOC WORO 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 KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDRC WEEI WFBL WFBM WGST WHAS WHEC WHIO WISN WJAS WJR WJSV WKBB WKBW WKRC WLAC WLBZ WMBR WNBF WOKO WORC WPRO WQAM WREC WRVA WWL

E-3:00 p.m., C-2:00, M-1:00, P-Noon Don Lee System, Saturday

Same stations as at Midnight

E-3:15 p.m., C-2:15, M-1:15, P-12:15 Den 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 WEDM WIBM WIIM MKZO MOOD MXXZ

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 CES-Monday, Wednesday, Friday KFBB KFPY KLZ KMBC KNX KOIN KOL KOY KSFO 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. KFH KLRA KNOW KOMA KSCJ KSL KTRH KWKH WABC WACO WADC WAIM WALA WBIG WBRC WCCO WCOC WDAE WDBJ WDBO WDOD WHEC WISN WJAS WJNO WJR WKBB WKRW WLBZ 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

To all stations available

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

E-6:45 p.m., C-5:45, W-4:45, P-3:45 NBC-Blue Lowell Thomas, Mon. through Fri.

CRCT KDKA WBAL WBZ WBZA WEAN WEBR WFLA WHAM WIOD WJAX WJZ WEW WMAL WOOD WRTD WSPD WSUN WSYR WTAM WXYZ

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. KEAB KEH KLRA KMBC KMOX KNOW KOMA KRLD KRNT KTRH KTSA KTUL WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRC WEEI WFAM WFBL WGR WGST WHAS WHEC WHIO WISN WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMBD WMBR WNOX WOKO WORC WPRO WQAM WREC WRVA WWI.

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 KECA KERN KFBK KFEL KFSD KGA KGO KJR KLO KMJ KOIL KSO KWG KWK KXYZ WABY WBAL WBZ WBZA WCKY WCOL WEBR WFIL WHAM WJZ WMAL WMPS WMT WOWO 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 WFDM 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 WEIL WHAM WHK WICC WJZ WLS WMAL WMT WOWO 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 KEI KGW KHQ KOA KOMO KPO KSD KSTP KYW WBEN WCAE WCSH WDAF WDEL WEAF WFBR WGY WIRE WJAR WLW WMAQ WNAC WOW WRC WTAG WTAM WTIC WWI

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. KEPY KLZ KNX KOIN KOL KSFO KSL KVI WFBM

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

To all stations available

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 WFBL WGR WHEC WHK WJAS WJR WJSV WKRC WOKO WSPD WTOC WWVA

R — Amos 'n' Andy KSD KSTP KYW WBEN WCAE WCSH WEAF WFBR WGY WHO WJAR WLW WNAC WRC WTAG 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 KGBY KGNC KPRC KTBS KTHS KVOO KYW KSTP WBAP WBEN WCAE WCKY WCOL WCSH WDAF WDAY WEAF WEBC WFAA WFBR WGBF WGY WHO WIBA WIRE WJAR WKY WMAQ WNAC WOAI WOOD WOW WRC WTAG WTAM WTIC WTMJ

E-7:30 p.m., C-6:30, M-5:30, P-4:30 - Lum and Abner WBZ WBZA WENR WJZ WLW

WMC WSM WSYR

M - The Lone Ranger WEIL WNBF WSYR WOR WXYZ

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

KMBC KMOXKOMA KRLD WABC WBBM WBT WCAU WCCO WDRC WEAN WFBL WGR WHAS WHK WJAS WJR WJSV WKRC WNAC

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

C - Horace Heidt and Orchestra KDB KERN KFAB KFBK KFH KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMON KOIN KOL KRLD KRNT KSL KTRH KTSA KTUL KVI KWG WABC WBBM WBRC WBT WCAO WCAU WCCO WDRC WFBL WFBM WGR WGST WJAS WJR WIST WHAS WHK WJAS WJR WJSV WKRC WLAC WMBR WNAC WNAX WOKO WREC WWL

Burns and Allen CRCT KYW WBEN WCAE WCSC

WCSH WEAF WFBR WFLA WGY WHO WIOD WIRE WIS WJAR WJAX WLW WMAQ WNAC WPTF WRC WRVA WSOC WTAG WTAM WTAR WTIC WWJ

B - Gen. Hugh Johnson KDKA KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WIS 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 WCAO WCAU WDRC WEAN WFBL WGR WGST WHEC WHK WHP WICC WJAS WJR WJSV WKRC WLBZ WMAS WNAC WOKO WORC WSPD

- Voice of Firestone

CFCF CRCT KFYR KPRC KSD KSTP KTBS KVOO KYW WAVE WBEN WCAE WCSC WCSH WDAF WDAY WEAF WEBC WEEL WFAA WFBR WFLA WGY WFBC WIOD WIRE WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

B - Campana's Grand Hotel KDKA KFEL KFI KFSD KGA KGO KGW KJR KLO KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WEIL WHAM WHK WICC WJZ WLS WMAL WMT WOWO WREN WSPD WSYR WXYZ

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

B -- Philadelphia Symphony KFEL KGO KSO KVOD KWK KXYZ WBAL WBZ WBZA WEAN WEBR WENR WEIL WHAM WITN WJZ WLS WMAL WREN WRTD WSPD WSYR WTCN WXYZ

C - Lux Radio Theater

CFRB CKAC KFAB KFH KFPY KLRA KLZ KMBC KMOX KNOW KNX KOH KOIN KOL KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI WABC WADC WBBM WBNS WBRC WBT WCAO WCCO WDAE WDBJ WDRC WEEL WFBL WFBM WGAR WGST WHAS WHEC WHIO WIBX WISN WJAS

WJR WJSV WKBW WKRC WLAC WMAS WMBD WNAX WOKO WORC WPRO WOAM WREC WRVA WWL

M - Flder Michaux Available to entire network

Fibber McGee and Molly KFYR KPRC KSD KSTP KTBS KVOO KYW WAVE WBEN WCAE WOOL WOSH WDAF WDAY WEAF WEBC WFAA WFBR WFLA WGY WIBA WIOD WIRE WIS WHO WJAR WJAX WIDX WLW WMAQ WOAT WOOD WOW WNAC WMC WRC WSB WSM WSMB WPTE WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R-Phil Spitalny's Girl Orchestra CFCF CRCT KDYL KFI KGHL KGIR KGO KGW KHQ KOA KOMO KSD KSTP KVOO KYW KPRC WAVE WBEN WCAE WCSH WDAF WEAF WFAA WFBR WFLA WGY WIRE WIOD WIS WHO WIBA WKY WLW WMAQ WJAR WJAX WMC WNAC WOAL WOW WPTF WRC WRVA WSB WSM WSMS WTAG WTAM WTAR WTIC WTMJ WWJ

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

CFCF CRCT KDYL KFI KGW KHQ KOA KOMO KPO KPRC KSD KYW WBEN WCAE WOSH WDAF WEAF WEEL WEBR WELA WGY WHO WIOD WIS WJAR WJAX WKY WMAQ WMC WOAI WOW WPTF WRC WRVA WSB WSM WTAG WTAM WTAR WTIC WWJ WWNC

B -- Warden Lewis E. Lawes KDKA KECA KFSD KGA KGO KJR KLO KOIL KSO KVOD KWK WBAL WBZ WBZA WCKY WEAN WEBR WENR WFIL WHAM WHK WICC WJZ WMAL WMT WOWO WREN WSPD WSYR WTCN WXYZ

Wayne King and Orchestra KDB KERN KFAB KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMON KOIN KOL KRNT KSL KVI KWG WAAB WABC WADC WBBM WBNS WBT WCAO WCAU WCCO WDRC WEAN WFBL 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

- Burns and Allen KARK KDYL KFBK KFI KFYR KFBX KGHL KGIR KGNC KGO KGW KHQ KMJ KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KVOO KWG WAVE WDAF WDAY WEBC WFAA WIBA WJDX WKY WOAL WOW WSB WSMB WTMI

M --- The Lone Ranger KDB KDON KFRC KFXM KGB KGDM KHI KPMC KVOE KXO 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 KFPY KFRC KGB KHJ KLRA KLZ KMBC KMOX KOIN KOL KOMA KRLD KRNT KSL KTRH KTSA KVI WBBM WBRC WCCO WFBM WGST WLAC WREC WWL

R — Amos 'n' Andy KDYL KERN KFBK KFI KGW KHO KMJ KOA KOMO KPO KPRC KSD KWG WDAF WFAA WHO WIRE WKY WMAQ WMC WOAI WOW WSB WSM WSMB

E-11:15 p.m., C-10:15, M-9:15, P-8:15 C - Boake Carter KFPY KLZ KNX KOIN KOL KSFO KSL KVI

B — Lum and Abner KECA KERN KEX KFBK KFSD KGA KGO KJR KMJ KWG

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

C—Pick and Pat

KFPY KGKO KLRA KLZ KMOX

KNX KOIN KOL KOMA KRLD

KRNT KSCJ KSPO KSL KTUL

KVI KWKH WACO WBRC 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 - Amos 'n' Andy, See Monday R · R - Fasy Aces

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

E-7:15 p.m., C-6:15, M-5:15, P-4:15 Geo. McCall, Hollywood Talk KFAB KFII KLRA KMOX KNOW KOMA KRLD KRNT KTRH KTSA KWKH WABC WADC WBBM WBNS WBT WCAO WCAU WCCO WCHS WDAE WDBO WDOD WDRC WEEL WFBL WGAR WGBI WGST WHAS WHEC WHIO WIBW WISN WJAS WJR WJSV WKRC WLAC WMAS 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 KFPY KIRO KLZ KMBC KMOX KNX KOIN KRNT KSFO

KSL KVI WABC WBBM WCAO WCAU WDRC WEEI WFBL WGAR 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

KEYR KPRC KSD KSTP KTRS KTHS KVOO KYW WAVE WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WNAC WOW WPTF WRC WRVA WSB WSM WSMB WSOC WSIIN WTAG WTAM WTAR WTIC WIML WWI WWNC

B — Husbands and Wives

KDKA KECA KEX KFSD KGA KGO KJR KLO KOIL KSO KVOD KWK WABY WBAL WBZ WBZA WCKY WEAN WEBR WFIL WGAR WHAM WICC WJZ WLS WMAL WMT WREN WSYR WXYZ

C - Edward Robinson; Claire Trevor CBM CFRB KFAB KFH KFPY KIRO KLRA KLZ KMBC KMOX KNOW KNX KOIN KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDRC WEEL WFBL WFBM WGAR WGR WGST WHAS WHEC WHIO WIBX WISN WJAS WJR WJSV WKRC WLAC WMAS 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 CRCM KFAB KFH KLRA KMBC KMOX KNOW KOMA KRLD KRNT KTRH KTSA KTUL WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDRC WEEI WFBL WFBM WGAR WGR WGST WHAS WHEC WHIO WIBX WISN WJAS WJR WJSV WKRC WLAC WMAS WMBD WNAX WOKO WORC WPRO WQAM WREC WRVA WWL

R — Wayne King and Orchestra KFYR KPRC KSD KSTP KTBS KVOO KYW WAVE WBAP WBEN WCAE WCKY WCSH WDAF WDAY WEAF WEBC WEEI WFBR WGY WHO WHIO WIBA WIRE WJAR WJDX WKY WMAQ WMC WOAI WRC WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ

- Edgar Guest, It Can Be Done KDKA KDKA KOIL KSO KWK WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLS WLW WMAL WMT WMAL WMT WREN WSVR WXVZ

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C - Al Pearce and Gang

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

M - Paul Whiteman Orchestra Available to entire network

R - Vox Pop; Sidewalk Interviews KSD KYW WBEN WCAE WCKY WCSH WDAF WEAF WEEI WFBR WGY WHO WIRE WJAR WMAQ WOW WRC WTAG WTAM WTIC WWI

E-9:30 p.m., C-8:30, M-7:30, P-6:30 C - Jack Oakie's College

C — Jack Garie's College KFAB KFH KFPY KGKO KIRO KLRA KLZ KMBC KMOX KNOW KNX KOIN KOMA KOY KRLD KRNT KSCJ KSFO KSL KTRH KTSA KTUL KVI KVOR KWKII WABC WACO WADC WALA WBINI WBIG WBNS WBRC WBT WCAO WCAU WCCO WCHS WDAE WDBJ WDBO WDNC WDOD WDRC WEEL WFBL WFBM WGAR WGST WHAS WHEC WHIO WHP WIBW WIBX WISN WJAS WJR WJSV WKBB WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBR WNAX WNBF WNOX WOC WOKO WORC WPG WPRO WOAM WREC WRVA WSBT WSFA WSJS WTOC WWL

R - Hollywood Mardi Gras CFCF CRCT KDYL KFI KGHL KGW KHO KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KVOO KYW WAVE WBAP WBEN WCAE WCOL WCSC WCSH WDAF WDEI. WEAF WEBC WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WKY WMAQ WMBG WMC WNAC WOAI WOOD WOW WRC WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C — Benny Goodman's Orchestra

Same stations as Jack Oakle's College, above

B - Gen. Hugh Johnson KDKA KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WBAL WFIL WHAM WHK WICC WIZ. WIS WMAL WMT WOWO 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 KTAR KYW WBEN WCAE WCSH WDAF WEAF WFBR WGY WHO WJAR WLW WMAQ WNAC WOOD WOW WRC WTAG WTAM WTIC WWJ

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 - Al Joison: Parkyakarkus KFPY KLZ KNX KOIN KOL KSFO KSL KVI

E-Midn't; C-11:00, M-10:00, P-9:00 C — All Pearce and Gang
KFBB KFPY KGVO KLZ KNX
KOH KOIN KOL KOY KSFO KSI, KVI KVOR

WEDNESDAY

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 - Poetic Melodies, See Monday R — Amos 'n' Andy, See Monday B - Easy Aces, See Tuesday

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

KMBC WABC WADC WBIG WBNS WBT WCAO WCAU WCHS WDAE WDBJ WDBO WDRC WEEL WFBL WGAR WGBI WGR WHEC WHIO WIBX WJAS WJR WJSV WKBN WKRC WLBZ WMAS WMBR WOKO WORC WPRO WQAM WRVA WWVA

R — Uncle Ezra, See Monday

E-7:30 p.m., C-6:30, M-5:30, P-4:30 B — Lum and Abner, See Monday M — Lone Ranger, see Mon.

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

E-8:00 p.m., C-7:00, M-6:00, P-5:00 C — Cavalcade of America

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

R — One Man's Family

KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KTHS KVOO KYW WAPI WAVE WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

B'- Eddie Duchin's Orchestra KDKA KECA KFEL KFSD KGA KGO KJR KLO KOIL KSO KWK KXYZ WAGA WBAL WBZ WBZA WCKY WDSU WEAN WEBR WFIL WHAM WHK WICC WJZ WLS WMAL WMPS WMT WOWO WREN WSGN WSPD WSYR WXYZ

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Eddle Cantor: Deanna Durbin CFRB CKAC KFAB KFH KLRA KMBC KMOX KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDBO WDRC WEEI WFBL WFBM WGR WGST WHAS WHEC WHIO WHK WHP WIBW WIBX WJAS WJR WJSV WKRC WLAC WMBD WMBG WMAS WLBZ WMBR WNAX WNOX WOKO WORC WOWO WPG WPRO WQAM WREC WWI.

R — Wayne King, See Tuesday

B -- Skolsky from Hollywood

KDKA KECA KFEL KFSD KGA KGO KGW KJR KLO KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ WIS WMAL WMT

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

C - Chesterfield; Andre Kostelanetz KDB KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KGMB KHJ KLKA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBG WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJR WJSV WKBH WKBW WKRC WLAC WLBZ WMBR WMBD WMBG WMAS WNAC WNAX WNBF WNOX WOC WOKO WORC WOWO WPG WQAM WREC WSFA WSJS WSPD WTOC WWI.

R - Town Hall Tonight KFYR KPRC KSD KSTP KTBS KTHS KVOO KYW WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEL WEAA WEBR WELA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WOAI WOW WPTF WRC WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C - Crime Crusade; Phil Lord

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

R — Your Hollywood Parade KDYL KERN KFBK KFI KFYR KGBX KGHL KGIR KGNC KGU KGW KHQ KIDO KMJ KOA KOB KOMO KPO KPRC KSD KSTP KTAR KTBS KTHS KWG KYW WAPI WAVE WBEN WCAE WCSC WCSH WDAF WDEL WEAF WEBC WFAA WFBC WFBR WFEA WFLA WGL WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WLW WMAQ WMBG WMC WNAC WOAI WOOD WORK WOW WPTF WSB WSM WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

B - Gen. Hugh Johnson, See Tues.

E-10:30 p.m., C-9:30, M-8:30, P-7:30 C — Hobby Lobby; Harry Salter

KDAL KFAB KFH KFPY KGKO KIRO KLZ KMOX KNOW KNX KOH KOIN KOMA KRLD KOY KRNT KSFO KSL KTRII KTSA KTUL KVI KWKH WALA WBBM WBRC WCCO WCOC WFBM WGST WHAS WIBW WISN WLAC WMBD WNBF WNOX WOC WREC WSBT WSFA WWL

M - Lone Ranger, see Mon.

E-11:00 p.m., C-10:00, M-9:00, P-8:00 C - Poetic Melodies, See Monday R - Amos 'n' Andy, See Monday

WOWO WREN WSPD WSYR WXYZ E-11:15 p.m., C-10:15, M-9:15, P-8:15 C - Boake Carter, See Monday

B - Lum and Abner, See Monday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C - Eddie Cantor; Deanna Durbin KFBB KFPY KGVO KLZ KNX KOH KOIN KOL KOY KSFO KSL KVI KVOR

THURSDAY

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 Poetic Melodies, See Monday R — Amos 'n' Andy, See Monday B — Easy Aces, See Tuesday

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C - Geo. McCall, see Tues.

E-7:30 p.m., C-6:30, M-5:30, P-4:30 "We, The People."

KFAB KMBC KMOX KNOWKOMA KRLD KRNT KSCJ KTRH KTSA KTUL WABC WBBM WBNS WCAO WCAU WCCO WDAE WDBO WDRC WEEL WFBL WGAR WGR WHAS WHEC WHIO WHP WIBX WISN WJAS WJR WJSV WKRC WMBD WMBR WOC WOKO WPRO WQAM

E-8:00 p.m., C-7:00, M-6:00, P-5:00 - Kate Smith: Henny Youngman CFRB CRCM KDAL KFAB KFH KGKO KLRA KMBC KMOX KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WACO WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WEEI WEOA WFBL WFBM WGAR WGR WGST WHAS WHEC WHIO WHP WIBW WISN WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMBD WMBR WNAX WNOX WOC WOKO WORC WPRO WQAM WRVA WREC WSFA WTAQ WWL

R — Rudy Vallee's Variety Hour CFCF CRCT KDYL KFI KFYR KGW KHQ KOA KOMO KPO KSD KSTP KTAR KYW WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WGY WHO WJAR WLW WMAQ WOW WRC WTAM WTIC WTMJ WWJ

B - Gen. Hugh Johnson, See Mon.

E-8:30 p.m., C-7:30, M-6:30, P-5:30 B - March of Time

KDKA KERN KECA KFBK KFEL KFSD KGA KGO KJR KLO KMJ KOIL KSO KWG KWK KXYZ WABY WBAL WBZ WBZA WCKY WCOL WEBR WFIL WHAM WJZ WMAL WMPS WMT WOWO WREN WSPD WSYR WTCN WXYZ

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

C - Major Bowes' Amateurs CFRB CKAC KDB KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM WABC WACO WADC WALA WBMW WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX

THURSDAY (Continued)

WICC WISN WJAS WJR WJSV WKBN WKBW WKRC WLAC WLBZ WMBG WMAS WMBD WMMN WNAC WNAX WOC WOKO WORC WOWO WPG WQAM WREC WSFA WSJS WSPD WTOC WWL

R - MGM Program

CRCT KDYL KERN KFBK KFI KFYR KGHL KGIR KGNC KGW KMJ KOA KOMO KPO KPRC KSD KSTP KTBS KWG KYW WAPI WAVE WBAP WBEN WCAE WCSH WDAF WDAY WEBC WFBR WFLA WGY WIIO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMBG WMC WNAC WOAI WOOD WPTF WRC WSB WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

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

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

E-10:30 p.m., C-9:30, M-8:30, P-7:30 "We, The People." KFPY KIRO KLZ KNX KOIN KOY KSFO KSL KVI

E-11:00 p.m., C-10:00, M-9:00, P-8:00 C — Poetic Melodies, See Monday R — Amos 'n' Andy, See Monday

E-11:15 p.m., C-10:15, M-9:15, P-8:15 C-Kate Smith; Henny Youngman KFBB KFPY KGVO KIRO KLZ KNX KOIN KOY KSFO KSL KVI KVOR

FRIDAY

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 Melodles, See Monday R - Amos 'n' Andy, See Monday

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

E-7:30 p.m., C-6:30, M-5:30, P-4:30 B - Lum and Abner, See Monday M - Lone Ranger, see Mon.

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

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

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

R — Cities Service Concert

CRCT CFYR KOA KPRC KSD KSTP KTBS KTHS KVOO KYW

WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEL WFAA WFBR WGY WHO WIBA WIOD WJAR WKY WMAQ WOAI WOW WRC WRVA WSAI WTAG WTAM WTIC WTMJ WWJ

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C - Hal Kemp; Alice Faye

KFAB KFH KGKO KLRA KMBC KMOX KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEEI WFBL WFBM WFEA WGR WGST WHAS WHEC WHIO WHK WHP WIBW WIBX WISN WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMAS WMBG WMBR WMMN WMBD WNAX WNBE WNOX WOC WOKO WORC WOWO WPG WPRO WQAM WREC WSFA WSJS WSPD WTOC WWT.

B - Death Valley Days KOKA KDYL KFI KGW KHO KOIL KOMO KPO KSO KWK WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLS WLW WMAL WMT WREN WSYR WXYZ

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

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

R-'Frank Munn; Abe Lyman KSD KYW WBEN WCAE WCSH WDAF WEAF WEEL WFBR WGY WJAR WLW WMAQ WOW WRC WTAG WTAM WWJ

B — Pontiac Varsity Show

KARK KDKA KECA KERN KFBK KFEL KFSD KFYR KGA KGHF KGHL KGIR KGNC KGO KGW KJR KLO KOB KOIL KPRC KSD KJA KLO KOD KUIL KING KWK KTAR KTBS KTHS KWG KWK WAPI WAVE WBAL WBZ WBZA WCSC WDAY WEAN WEBC WEBR WFAA WFBC WFIL WFLA WHAM WICC WIOD WIS WJAX WHK WJDX WJZ WKY WLS WLW WMAL WMC WMT WOAI WOOD WOWO WPTF WREN WSB WSM WSMB WSOC WSPD WSUN WSYR WTAR WTCN WWNC WXYZ

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R - True Story Court

KSD KYW WBEN WCAE WCSH WEAF WEEI WFBR WGY WHO WHIO WJAR WMAQ WOW WRC

B — Tommy Dorsey's Orchestra KARK KDKA KECA KFSD KGA KGO KJR KLO KOIL KPRC KSO KTBS KTHS KVOD KWK WABY WAVE WBAL WBZ WBZA WCKY WCOL WDSU WEAN WEBR WENR WEAA WEIL WELA WHAM WHK WIBA WICC WIOD WIS WJAX WJZ WKY WMAL WMPS WMT WOOD WOWO WPTF WREN WRTD WSGN WSM WSPD WSOC WSUN WSYR WTAR WTCN WTMJ WWNC

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C - Frank Crumit; Kitty Carlisle

KDAL KFAB KFBB KFH KFPY KGKO KGLO KGVO KRLA KLZ KMOX KNOW KNX KOH KOIN KOL KOMA KOY KRLD KRNT KSCJ KSFO KSL KTRH KTSA KTUL KVI KVOR KWKH WABC WACO WCHS WCOA WCOC WDAE WDBJ WDBO WDNC WDOD WDRC WEEL WEOA WEBL WEBM WGAR WGBI WGST WHAS WHEC WHIO WHP WIBW WIBX WISN WJAS WJNO WJR WJSV WKBB WKBW WKRC WLAC WLBZ WMAS WMBD WMBR WMMN WNRF WNOX WOO WOKO WORC WPAR WPG WPRO WQAM WREC WRVAWSBT WSFA WSJS WTOC WWL

R — First Nighter; Drama

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

E-10:30 p.m., C-9:30, M-8:30, P-7:30 M - Lone Ranger, see Mon.

WTIC WWJ

R — Jimmy Fidler KDYL KFI KGW KHQ KOA KOMO KPO KSD KSTP KYW WBEN WCAE WCSH WDAF WDEL WEAF WFBR WGY WIBA WIRE WJAR WLW WMAQ WNAC WOW WRC WTAG WTAM WTIC WTMJ WWJ

E-10:45 p.m., C-9:45, M-8:45, P-7:45 R — Dorothy Thompson—News KDYL KFI KGW KHO KOA KOMO KPO KSD KSTP KYW WBEN WCAE WCSH WDAF WDEL WEAF WFBR WGY WIRE WJAR WLW WMAQ WNAC WOW WRC WTAG WTAM

E-11:00 p.m., C-10:00, M-9:00, P-8:00 C - Poetic Melodies, See Monday R - Amos 'n' Andy, See Monday

E-11:15 p.m., C-10:15, M-9:15, P-8:15 - Boake Carter, See Monday B - Lum and Abner, See Monday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Hal Kemp; Alice Faye KFBB KFPY KGMB KGVO KLZ KNX KOH KOIN KOL KSFO KSL KVI KVOR

SATURDAY

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C - Saturday Night Swing Club Available to Columbia and Canadian Networks

E-7:30 p.m., C-6:30, M-5:30, P-4:30 Carborundum Band KFAB KMBC KMOX WABC WBBM WBT WCAO WCAU WCCO WEEI

SATURDAY (Continued)

WFBL WGAR WGR WHAS WJAS WJR WKRC WPRO

B — Uncle Jim's Question Bee KDKA WBZ 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 WEEL WEBL WGAR WHEC WHP WJAS WIR

R — "Believe-It-or-not." Ripley

KANS KDYL KFYR KGNC KOA KPRC KSD KSTP KYW WAPI WAVE WBAP WBEN WCAE WCSH WDAF WDAY WDEL WEAF WEBC WFBC WFBR WGY WHO WIBA WIRE WJAR WKY WLW WMAQ WMBG WNAC WMC WOAI WOOD WOW WPTF WRC WSB WSMB WSOC WSPD WTAG WTAM WTAR 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 WCOA WDRC WEEI WFBL WFBM WGR WGST WHAS WHEC WHIO WHK WHP WISN WJAS WJR WJSV WKRC WMBD WMBG WNBF WOC WOKO WPRO WSBT WWVA

R — Jack Haley; Virginia Verrill KDYL KGNC KOA KPRC KSD KSTP KYW WAPI WAVE WBAP WREN WCAE WCSH WDAF WDEL WEAF WEBC WFBC WFBR WGY WHO WIBA WIRE WJAR WKY WLW WMAQ WMBG WMC WNAC WOAI WOW WPTF WRC WSB WSMB WSOC WSPD WTAG WTAM WTAR WTIC WTMJ WWJ

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

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

B - National Barn Dance

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

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

C — Saturday Night Serenade KFAB KFH KFPY KGKO KLRA KLZ KMBC KMOX KNOW KNX KOIN KOL KOMA KRLD KSFO KTRH KTSA KTUL KVI KWKII WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCOA WDAE WDBO WDOD WEEI WFBL WFBM WGAR WGST WHAS WHEC WJAS WJR WJSV WKBW WLAC WMBD WMBR WMMN WNOX WOC WQAM WREC WRVA WSFA WTOC WWL WWVA

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

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

— 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 WEBC WIBA WLW WTMJ

CBC - Northern Messenger To Mideast 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 KSFO KSL KVI KVOR

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

R - "Believe-It-Or-Not" Ripley KERN KEBK KEI 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 KRLD KSL KTRH KTSA KVI KVOR KWG KWKH WABC WACO WADC WALA WBNS WBRC WCAO WCCO WDAE WDBJ WDBO WDNC WESG WFBL WFEA WHAS WHK WIBX WJAS WJR WKRC WLBZ WMBD WMRD WMMN WOC WOKO WORC WPG WQAM WSBT WSJS WSPD WTOC

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

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

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

C -- Church of the Air

KFBK KFH KFPY KFRC KGB KHI KMOX KOH KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KVI KVOR KWG WABC WALA WBNS

WBT WCAO WCCO WDAE WDBJ WDBO WDRC WESG WFBL WFBM WGR WHAS WHP WIBX WJAS WJSV WKBN WKRC WLAC WLBZ WMBR WNBF WOC WOKO WORC WPG WQAM WREC WSBT WSJS WSPD WTOC 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 WEEL WEBM 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 CFCF CRCT KDKA KDYL KFI KFYR KGU KGW KHQ KOA KOIL KOMO KPO KPRC KSO KSTP KTBS KTHS KVOO KWK WAPI WAVE WBAL WBZ WBZA WCKY WDAY WEBC WENR WFAA WFIL WFLA WGAR WHAM WHIO WIBA WIOD WIRE WIS WJAX WJDX WJZ WKY WMAL WMC WMT WOAI WPTF WREN WRVA WSB WSM WSMB WSOC WSYR WTAR WTMJ WWNC WXYZ

C — The Fun Bug

KDAL KFAB KFH KGKO KMBC KMOX KNOW KOMA KRLD KRNT KTSA KTUL WBBM WCCO WIBW WISN WKBB WNAX WTAQ

E-2:30 p.m., C-1:30, M-12:30, P-11:30 - Jean Hersholt, "Dr. Christian." CFRB KFAB KFH KMBC KMOX KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KWKH WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WCHS WDAE WDBO WDRC WEEI WFBI, WFBM WGAR WGST WHAS WHEC WHIO WHP WIBW WJAS WJR WJSV WKBW WKRC WLAC WLBZ 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 KFBB KFH KGKO KGVO KLRA KLZ KMBC KMOX KNOW KOL KRLD KSCJ KSL KTRH KTSA KWKH WABC WADC WALA WBNS WBT WCAO WCCO WCHS WDAE WDBJ WDBO WDRC WEEI WESG WFBL WFBM WHAS WHK WHP WIBW WIBX WJAS WJR WJSV WKBB WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WMMN WNBF WOC WOKO WORC WPAR WPRO WQAM WSBT WSJS WTAQ WTOC WWL

Also on Canadian Network

– The Radio News Reel

KSD KSTP KYW WBEN WCAE WCSH WDAF WDEL WEAF WFBR WGY WHO WIRE WJAR WMAQ WNAC WOW WRC WSAI WTAG WTAM WTIC 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 WEAF WFAA WFLA WHO WIOD WIRE WJAX WGY WLW WMAQ WMBG WMC WNAC WOAI WOW WRC WSB WSM WSMB WTAM WTIC 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

F-5:00 n.m., C-4:00 M-3:00 P-2:00 The Silver Theater

CFRB CKAC KFAB KFPY KLZ KMBC KMOX KNOW KNX KOIN KOL KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI WABC WADC WBBM WBNS WCAO WCAU WCCO WDAE WDRC WEEI WGAR WGR WGST WHAS WHEC WHIO WJAS WJR WJSV WKRC WMBR WOKO WPRO WQAM WWL Also on Canadian Network

- Marion Talley

KDYL KFI KGW KHQ KOA KOMO KPO KSTP KYW WBEN WCAE WCOL WCSH WDAF WDEL WEAF WEBC WFBR WGY WHO WIBA WIRE WJAR WMAQ WNAC WOOD WOW WRC WSAI WTAG WTAM WTIC WTMJ WWJ

B — Metropolitan Opera Auditions CFCF CRCT KARK KDYT KECA 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 WCSC WDAY WEAN WEBR WENR WFIL WFLA WHAM WHK WICC WIOD WIS WJAX WJDX WJZ WKY WMAL WMT WOAI WOWO WPTF WREN WRTD WSB WSM WSMB WSOC WSPD WSUN WSYR WTAR WICH WWNC WXYZ

F-5-30 n 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 WFBI WFBM WGR WHAS WHEC WHK WIBX WICC WJR WJSV WMAS WOKO WORC WSPD WWVA

B - Smiling Ed McConnell

KANS KDKA KECA KERN KEX KFBK KFSD KFYR KGA KGIR KGO KJR KLO KMJ KOIL KSO KTAR KWG KWK WAVE WBAL WDSU WEAN WEBC WEBR WENR WFIL WHAM WHK WICC WJZ WMAL WMT WREN WRTD WSM WSPD WSYR WTCN WXYZ

R-Joe Rines; Sheila Barrett

CFCF CRCT KDYL KFI KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTHS KVOO KYW WAPI WBAP WBEN WCAE WCSH WDAF WDEL WEAF WFBR WFLA WGY WHO WIOD WIRE WIS WJAR WJAX WJDX WKY WLW WMAO WMBG WMC WNAC WOAI WOW WPTF WRC WSB WSMB WSOC WRC WTAG WTAM WTAR WTIC

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 KRLD KRNT KSFO KSL KTRH KTSA KVI WABC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBO WDRC WEEI WFBL WFBM WGAR WGST WHAS WHEC WJAS WJR WJSV WKBW WKRC WOKO WORC WPRO WOAM WREC WRVA

M - George Jessel: Tommy Tucker To entire MBS and Michigan Networks

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C-Seymour Simon's Orchestra

KDAL KFAB KFBB KFH KFPY KGKO KGVO KLRA KLZ KMBC KMOX KNOW KNX KOH KOIN KOL KOMA KOY KRLD KRNT KSCJ KSFO KSL KTRH KTSA KTUL KVI KVOR KWKH WABC WACO WADC WAIM WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCHS WCOA WCOC WDAE WDBJ WDBO WDNC WDOD WDRC WEEL WEOA WFBL WFBM WGAR WGBI WGST WHAS WHEC WHIO WHP WIBW WIBX WISN WJAS WJNO WJR WJSV WKBB WKRH WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBR WMMN WNAX WNBF WNOX WOC WOKO WORC WPAR WPG WPRO WOAM WREC WRVA WSBT WSFA WSJS WTAQ WTOC WWL WWVA

M — Tim and Irene CKLW KWK WBAL WCAE WGN WHK WIRE WOR

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

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

C — Jeanette macuonaid KFAB KFH KFPY KLZ KMOX KNOW KNX KOIN KOL KOMA KRLD KRNT KSFO KSI. KTRH KTSA KTUL KVI KWKH WABC WADC WBBM WBIG WBRC WBT WCAO WCAU WCCO WDRC WEEL WFBL WFBM WGAR WGBI WGR WGST WHAS WHEC WHIO WJAS WJR WJSV WKRC WOKO WPRO WREC WRVA WTOC WWL

R - Jack Benny: Mary Livingstone KSD KYA KYW WBEN WCSH WDAF WEAF WFBR WGY WHO WJAR WLW WMAQ WNAC WOW WRC WTAG WTAM WTIC ww.i

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

C - Phil Baker; Oscar Bradley KLRA KLZ KRLD KTRH KTSA KTUL KWKH WABC WACO WADC WALA WBIG WBNS WBRC WBT WCAO WCAU WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBX WICC WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMAS WMBR WNAC WNOX WOKO WORC WOAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWL WWVA

R - Fireside Recitals

KSD KYW WBEN WCAE WCSH WDAF WEAF WFBR WGY WIRE WJAR WMAQ WOW WRC WSAI WTAG WTAM WTIC WWJ

B - Ozzie Nelson: Harriet Hilliard KARK KDKA KECA KFEL KEX KFSD KFYR KGA KGO KJR KLO KOIL KPRC KSO KSTP KTBS KTHS KVOO KWK WABY WAPI WAVE WBAL WBAP WBZ WBZA WCKY WCOL WDAY WEAN WEBC WEBR WFIL WFLA WHAM WHK WIBA WICC WIOD WIS WJAX WJDX WJZ WKY WLEU WLS WMAL WMC WMT WOAI WPTF WREN WRTD WSB WSM WSMB WSOC WSUN WSYR WTAR WTMJ WWMC WXYZ

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

KFAB KFH KFPY KLRA KLZ
KMBC KMOX KNX KOIN KOL
KOMA KRLD KRNT KSCJ KSFD KSL KTRH KTSA KTUL KVI KWKH WABC WADC WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDBO WDRC WEEI WEBL WEBM WGR WGST WHAS WHEC WHIO WHK WHP WIBX WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMAS WMRG WMBR WNAX WNBF WNOX WOKO WORC WPRO WQAM WREC WSBT WWL WWVA

Also on Canadian Network

R - Don Ameche: Edgar Bergen CFCF CRCT KDYL KFI KFYR KGW KHO KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KVOO KYW WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFAA WIDD WIRE WIS WIAR WIDD WIRE WIS WMAQ WMC WNAC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

General Motors Concert KANS KDKA KERN KECA KFBK KFEL KFSD KGA KGHL KGIR KGO KGU KJR KLO KMJ KOIL KSO KVOD KWG KWK KXYZ WABY WAGA WBAL WBCM WBOW WBZ WBZA WCKY WCOL WDSU WEAN WEBR WFBR WFEA WFIL WGBF WGL WHAM WHK WICC WJBO WJIM WJTN WJZ WLEU WLS WMAL WMPS WMT WORK WROL WRTD 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 KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMAS WMBD WMBR WNAC WNAX WOC WOKO WORC WQAM WREC WSBT WSFA WSJS WSPD WTOC WWL WWVA

B — Tyrone Power; Drama KDKA KECA KFSD KGA KGHL KGIR KGO KJR KLO KOIL KSO KTAR KWK WBAL WBZ WBZA WEBC WEBR WENR WFIL WGAR WHAM WICC WJZ WLW WMAL WMT WREN WSYR WXYZ

R - Manhattan Merry-Go-Round CFCF KDYL KFI KFYR KGW KHO KOA KOMO KPO KPRC KSD KSTP KTBS KTHS KYW WAVE WBEN WCAE WCKY WCSH WDAF WDAY WEAF WEBC WEEL WEAA

SUNDAY (Continued)

WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WMAQ WMC WOAL WOW WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

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

R — Album of Familiar Music CFCF CRCT KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTBS KYW WAPI KSD KSTP KTBS KYW WAPI WAVE WBEN WCAE WCSH WDAY WDAY WEAF WEBC WEEI WFAA WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOW WPTF WRC WRVA WSAI WSB WSAI WSB WSM WSMB WSOC WTAG WTAM WTAR WTMJ WWJ WWNC

B - Walter Winchell

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

E-9:45 p.m., C-8:45, M-7:45, P-6:45 B - Irene Rich, Drama

KDKA KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR 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 KLRA KLZ KMBC KMOX KNOW KNX KOIN KOL KOMA KRLD KRNT KSFO KRNT KSL KTRH KTSA KTUL KVI WABC WBBM WBNS WBRC WBT WCAU WCCO WDAE WDBO WDRC WEEL WEBL WEBM WGAR WGST WHAS WHEC WJAS WJR WJSV WKBW WKRC WMBR WNOX WORO WORC WPRO WQAM WWL

R — Rising Musical Stars KDYL KFI KGBX KGW KHQ KOA KPO KPRC KSD KSTP KTAR KTBS KTIIS KYW WAVE WBAP WBEN WCAE WCSH WDAF WEAF WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WMAQ WMC WNAC WOAI WOOD WOW WPTF WRC WRVA

WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

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 KVOD 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 KTHS WAPI WAVE WBAP WJDX WKY WMC WOAI WSB WSM WSMB

E-11:30 p.m., C-10:30, M-9:30, P-8:30 R — Jack Benny-Mary Livingstone KDYL KERN KFBK KFI KFSD KGHL KGIR KGU KGW KHQ KIDO KMJ KOA KCMO KPO KTAR KWG

B — Tyrone Power; Drama KARK KPRC KTBS WAPI WAVE WBAP WJDX WKY WMC WOAI WSB WSM WSMB

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 Flo 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 I1:30 p.m. Sun.,

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 Paige, 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 Pat, 8:30 and 11:30 p.m. Mon., CBS

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

DRAMA

Campana's First Nighter, 10:00 p.m. Frl., 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. Frl., Blue Gang Busters, 10:00 p.m. Wed., CBS Eddle Guest, 8:30 p.m. Tues., Blue Jean Hersholt, 2:30 p.m. Sun., CBS Hollywood Hotel, 9:00 p.m. Frl., CBS Hollywood Playhouse, 9:00 and 11:30 p.m. Sun., Blue Long Ranger, 7:30 and 10:30 p.m. Mon., Wed., Frl., 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 11:30 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 Frlend, 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 Belevele 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 Cavaleade 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 Vailey Days, 8:30 p.m. Frt., Blue Fireside Recitals, 7:30 p.m. Sun., Red Fun Buc, 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 Jack Haiey'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 Pontiae Varsity 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 Salr Lake City Tabernacie, 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, 9:30 p.m. Wed., Red True Story Court, 9:30 p.m. Frl., Red Uncle Jim's Question Bee, 7:30 p.m. Sat., Blue Vick's Open House, 7:30 p.m. Sun., CBS Voice of Firestone, 8:30 p.m. Mon., Red Vox Pop. 9:30 p.m. Times., Red Wattz Time, 9:30 p.m. Fri., Red Watte the Fun go By, 9:30 and 12:30 p.m. Tues., CBS Your Hit Parade, 10:30 p.m. Sat., CBS Your Hollywood Parade, 10:30 p.m. Sat., CBS Your Hollywood Parade, 10:30 p.m. Sat., CBS Zenith Foundation, 10:30 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 Joison, 8:30 and 11:30 p.m. Tues., CBS Reed 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 Luliaby 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 Munu, 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, 3:30 p.m. Sun., Red

TALKS

Boake Carter, 7:45 and 11:15 p.m. Mon., Wed., Frt., CBS
Jimmy Fidler, 10:30 p.m. Tues., Frt., 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
Lovell Thomas, 6:45 p.m. Mon. through Frt., Blue
Dorothy Thompson, 10:45 p.m. Frt., Red
Watter Winchell, 9:30 and 11:15 p.m. Sun., Blue

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.

	NORT	H AMERICAN BROADCAST New	930 1200	CFAC	Calgary, Alta., 1000 from 100 Wingham, Ont., 100 from 50
710	CMBL	Havana, Cuba. Radio Cadena Suari- tos, Calle 25 No. 445, Vedado	1450	CFCT	Victoria, B. C., 500 from 50 REINSTATED
1030	CJBR CMCK	Rimouski, P. Q. J. A. Brillant Havana, Cuba. San Miguel 86	1400	WARD WLTH	Brooklyn, N. Y. Brooklyn, N. Y.
1200	CFGP	Grande Prairie, Alta. Northern Brdestg. Corp., 906 McLeod Bldg., Edmonton, Alta.	580 710	CKUA KIRO	NETWORK Edmonton, Alta., new CBC Seattle, Wash., new CBS
1210 1310	KPBM	Greenfield, Mass. John W. Haigls Poplar Bluff, Mo. Fields McCarthy	91 0 1 0 30	CBF CFCN	Montreal, P. Q., new NBC and CBC Calgary, Alta., new CBC
1370	CFAR	Co. Flin Flon, Man. Arctic Radio Corp.,	1050	CJBR CBM	Rimouski, P. Q., new CBC Montreal, P. Q., new Red
		120 Main St. Owen Sound, Ont. Owen Sound Sun-	1180 1220 1230	WDGY KTMS KGBX	Minneapolis, Minn., new CBS Santa Barbara, Calif., new Blue Springfield, Mo., new NBC
1420	CHLN	Times Three Rivers, P. Q. Three Rivers Le Nouvelliste	1330 1490	WSAI WCKY	Cincinnati, Ohio, NBC from Red Covington, Ky., NBC from Blue
930	XEFO	FREQUENCY Mexico City, D. F., from 940	920	WRAX	DELETE Philadelphia, Pa. OWNER
1310	XEBO	POWER	1240	CJCB	Sydney, N. S. Eastern Broadcasters, Ltd., Radio Bldg.
880	CFJC CMQ	Kamloops, B. C., 1000 from 100 Havana, Cuba, 25000 from 2500		(Ple	ase turn to Page 95)

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
2.500	XEXP	Monterrey, N. L. (.03).			Rica. 1100-1300; 1800-2200.
3.500	to 4.000	Amateur Stations.	5.850	YV1RB	Maracaibo, Venez. Sun., 1145-1245.
3.040	YDA	Tandjong Priok, Java, N.E.I. (10.).			Weekdays 0845-0945; 1115-1215; 1645-2145.
4.273	RV15	Khabarovsk, USSR (Siberia). (20.). 0100-1000.	5.855	HIIJ	San Pedro de Macoris, D. R. (.04). 1200-1400; 1830-2100.
4.600	HC2ET	Guayaquil, Ecuador. Wed., Sat., 2100-2230.	5.875	HRN	Tegucigalpa, Honduras. (.4). Sun., 2030-2130. Weekdays 2030-2200.
4.780	HJ1ABB	Barranquilla, Colombia (.3). Apart-	5.885	HI9B	Santiago, D. R. 1800-2300.
		ado 715.	5.895	YV3RA	Barquisimeto, Venez. 1800-2200.
4.787	HJZABC	Cucuta, Colombia. (.25). "La Voz de Cucuta."	5.905	TILS	San Jose, Costa Rica. 1800-2300.
4.810	YDE2	Solo, Java, N.E.I. (.1).	5.913	YV4RH	Valncia, Venez. 1700-0100.
4.840		Bogota, Colombia. 1930-2400.	5.925	HH2S	Port-au-Prince, Haiti. 1900-2200.
4.040	1133755	Aptdo. 509.	5.935	YV1RL	Maracaibo, Venez. (.3). 1700-2230.
5.415		Bandoeng, Java, N.E.I. (.45). 0530- 1000.	5.945	TG2X	Guatemala City, Guat. (.2). Sun 1300-1400; Mon., Thurs., Sat., 1600- 1800; 2200-2400.
5.500	TISHH	San Ramon, Costa Rica. (.2). 2000- 2330.	5.947	PJC1	Willemstad, Curacao, N.W.I. (.15)
5.710	TGS	Guatemala City, Guat. (,2). Wed.,	0.547		1835-2035.
5.710	IGS	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).
5.765	YV2RA	San Cristobal, Venez. 1800-2330.			1900-2300.
5.800	YV5RC	Caracas, Venez. (1.). Sun., 0830-	6.000	CXA2	Montevideo, Uruguay. (.5).
		2330. Weekdays 0700-2230.		OAX5C	Ica, Peru. (.1).
5.813	TIGPH2	San Jose, Costa Rica.		XEBT	Mexico City, D. F. (1.). 1800-2400.

6.005	CFCX HP5K	Montreal, P. Q. (.075). 0700-2400. Colon, Panama. 1800-2300.	6.125	CXA4 W	Ontevideo, Uruguay. (1.). 1600- 2145.
	VE9DN XZ1GY	Montreal, P. Q. (6.). Rangoon, Burma.		HP5H XEPW	Panama City, Panama Mexico City, D. F. 2109-2400.
6.010	CJCX	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	COCD VE9HX	Havana, Cuba. (.35). 1700-0108 Halifax, N. S. (.5). 1700-2300.
	OLR2A	Prague, Czechoslowakia. (35.). Mon., Wed., Fri., 1600-1630.	6.132	VP3BG	Georgetown, British Guiana.
		Saigon, French Indo-China.	6.137	CR7AA	Lourenco Marques, Port, East
6.012	НЈЗАВН	Bogota, Colombia. (1.2). 1800-2300.			Africa. Sun. 0600-0900. Weekdays
6.015	HI3U	Santiago de los Caballeros, D. R.	6.138	HJ4A8D	Medellin, Colombia.
*****		(.025). Mon. 2000-2100. Daily 0730-	6.140	W8XK	Pittsburgh, Pa. (40.). 2200-sign off.
		0930; 1200-1430; 1700-1930.	6.145	HJ4ABE	Medellin, Colombia (1.). "La Voz
6.020	DIC	Berlin, Germany. (50.). 1040-1630;	6.150	CJRO	de Antioquia." 1800-2230. Winnipeg, Man. (2.). 1800-2400.
	XEUW	1650-2245 Veracruz, Ver. (.02). 1800-2400.	0.250	VPB	Colombo, Ceylon. (.3). Sun. 0700-
6.025		Santa Marta, Colombia. (.05).			1130; Weekdays 0630-1230.
0.023	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1800-2230.	6.153 6.156	HI5N YV5RD	Ciudad Moca, D. R. (.1). 1900-2000. Caracas, Venez. 1030-1330; 1530-
6.030	HP5B	Panama City, Panama. (.1), 1700-	0.130	IVSKD	2200.
		2200.	6.174	XEXA	Mexico City, D. F. 1709-2100.
	OLR2B	Prague, Czecho. (35.).	6.190	HIIA	Santiago de los Caballeros, D. R.
	VE9BJ XEBQ	St. John, N. B. (.05).	6.198	HISO	(.05), Weekdays 2000-2200. Trujillo, D. R. 1700-1900.
6.033	-	Mazatlan, Sin. (.05). Medellin, Colombia. (2.5). 1800-	6.200	COKG	Santiago, Cuba. (.05). Daily exc.
6.033	ПЈ4АБР	2300.		XEXS	Sat. 0900-2300.
6.038	HJ1ABC	Barranquilla, Colombia. (.15). 1100-	6.205	YV1RI	Mexico City, D. F. Coro, Venez. (.15). 1700-2200.
		2300.	№ 6.21 5	TG2	Guatemala City, Guat.
6.040	PRA8	Pernambuco, Brazil. (3.). 1500-	6.225	YV1RG	Valera, Venez. 1730-1930.
	W1 XAL	2000. Boston, Mass. (10.). Daily exc. Sat.	6.235	HRD	La Ceiba, Honduras. (.25). 2000- 2309.
		and Sun., 1900-2100.	6.243	HIN	Trujillo, D. R. (.75),
	W4XB YDA	Miami, Fla. (5.).	6.250	YV5RJ	Caracas, Venez.
6.050	GSA	Tandjong Priok, Java, N.E.I. (10.).	6.270 6.280	YV5RP HIG	Caracas, Venez. (1.2). Trujillo, D. R. (.05).
6.050		Daventry, Gt. Britain. (20.). Pereira, Colombia (6054 assigned). 1800-2200.	6.282	сонв	Sancti-Spiritus, Cuba. (.15), 2100-2309.
6.060	VQ71 O	Nairobi, Kenya. 1100-2430.	6.296	OAX4G	Lima, Peru. (.4). 1980-2130.
	W3XAU	Philadelphia, Pa. (10.). 2000-2300.	6.300 6.310	YV4RD HIZ	Maracay, Venez. 1700-2300. Trujillo, D. R. (.1).
	W8XAL	Cincinnati, Ohio. (10.). Daily 2300- 0200. Sun. 0800-2000. Weekdays	6.312	ZP14	Villarrica, Paraguay (1.). 1100-1700.
		0200. Sun. 0800-2000. Weekdays 0600-2000.	6.330	COCW	Havana, Cuba. 0700-2400.
6.062	SBG	Motala, Sweden. (.5). 1330-1700.	6.335	OAX1A	Chiclayo, Peru. (.2), Dally 2000- 2300; Sat. 2000-2400.
6.064	VP3MR	Georgetown, British Guiana. 1700- 2100.	6.340	HI1X	Trujillo, D. R. (.5). Tues., Fri.,
6.065	HP5F	Colon, Panama.	6,357	HRP1	2000-2200.
6.069		Johannesburg, Union of S. Africa	6.365	YV1RH	San Pedro Sula, Honduras. Maracaibo, Venez, 1900-2400.
6.070	CFRX	(5.). 2345-0030. Toronto, Ont. (1.). 1000-2300.	6.380	YV5RF	Caracas, Venezuela.
0.070		Bogota, Colombia. (.05), 1900-2230.	6.490 6.410	YV5RH TIPG	Caracas, Venezuela. San Jose, Costa Rica. (1.), 1800-
	YV1RD	Maracaibo, Venez. 1900-2400.	0.410	IIFG	2230.
6.075	XEBW	Guadalajara, Jal. (.045), Guadalajara, Jal.	6.416	YV6RC	Bolivar. Venez.
6.077		Lima, Peru. (10.) (6082 assigned).	6.420 6,425	HIIS OAX4K	Santiago, D. R. (.02). 1800-2300.
		1900-2330.	0,423	W3XL	Lima, Peru. (.2). Bound Brook, N. J. (100.). Irrreg.
6.080	DJM VE9CS	Berlin, Germany. (50.), Vancouver, B. C. (.01), 1400-2400.		W10XD	A Effie M. Morrissey (.1).
	W9XAA	Chicago, III. (20.). Daily 1900-2200.	6.450	HI4V	San Francisco de Macoris, D. R. (.025).
		Weekdays 0600-0730.	6.479	HI8A	Trujillo, D. R.
6.085 6.090	CRCX	Cali, Colombia. 1900-2200. Toronto, Ont. (1.). 1100-1900.	6.485	HIIL	Santiago de los Caballeros, D. R.
0,050		Ibague, Colombia. 2000-2200.			"Emisora Nacional." 0630-0800; 1730-1900; 2000-2100.
6.095	ZGE	Kuala Lampur, F.M.S.	6.479	HI8A	Trujillo, D. R.
6.100	W3XAL W9XF	Bound Brook, N. J. (35.). 2100-0100. Chicago, III. (10.). 1700-2005.	6.500	HIL	TrujiNo, D. R. (.05),
	WOAF	Belgrade, Jugoslavia. (1.). 1200-	6.508	YV1RM Radio G	Maracaibo, Venez, uarilia Civil, Tetuan, Sp. Morocco.
6.108	HJ4ABB	1700. Manizales, Colombia. 1800-2400.			1900-2900.
6.110	GSL	London, Gt. Britain. (20.).	6.520 6.534	YV4RB EDR4	Valencia, Venezuela. 1700-2200. Palma, Majorca, Balearic Isl.
6.115	OLR2C	Prague, Czecho. (35.).	6.540		Managua, Nicaragua.
6.118	XEUZ	Mexico City, D. F. (5.). 2300-0300.	6.545	YVSRB	Bolivar, Venez. 2100-2300.
6.120	W2XE XEFT	New York, N. Y. (10.), Veracruz, Ver. (.012).	6.550	TIRCC	San Jose, Costa Rica. (.5). Tues., Thurs., Sat. 1700-1800.
	YDA5	Bandoeng, Java. N.E.I. (1.5).	6.555	H14D	Trujillo, D. R. (.925). 1780-2000.
6.122		Bogota, Colombia. 1730-2230.	6.622	Prado	Rio Bamba, Ecuador. Thur. 2109-
	UA X SA	Arequipa, Peru. (.1).			2300.

6.630	ніт	Trujillo, D. R. (.2). Weekdays, 1800-2100.	9.520	НЈ4АВН	Armenia, Colombia. (1.). 0808-1100; 1800-2200.
6.635	HC2RL	Guayaquil, Ecuador. Sun. 1745- 1945. Tues. 2115-2315.		OZF YSH	Copenhagen, Denmark, 1400-1815. San Salvador, E. S.
6.690	TIEP	San Jose, Costa Rica. 1600-2300.		7.777	Radio Liberte. 1900-2000.
6.700	TIVL	San Jose, Costa Rica.	9.525	ZBW3	Hong Kong. (2.5). Sat. 2100-2400.
6.720	PMH	Bandoeng, Java, N.E.I. (1.5).			Sun. 0000-0100; 0300-0930. Other
6.730	HI3C	La Romana, D. R. 1745-2000.	0.534	LKJ1	days 0400-1000; 2330-0100.
6.780	HIH	San Pedro de Macoris, D. R. (.15). 1900-2000.	9.530	W2XAF	Jeloy, Norway. (1.). 0500-0800. Schenectady, N. Y. (40.). Sat. 1200-
6.800	HI7P	Trujillo, D. R. 1930-2100.		WZAAI	2400. Other days 1600-2400.
0.000	PZH	Paramaribo, N. W. I.			Belmont, Calif. (20.). General
6.850	TIOW	Puerto Limon, Costa Rica. (.4).			Elec. Co. (Under construction).
		Sun., 1600-1700. Daily 1200-1300.	9.535	JZ1	Nazaki, Japan. (50.). 1500-1600;
	VK8XI	Port Moresby, Papua. (Doubtful).			1630-1730.
	to 7.300	Amateur stations. Papeete, Tahiti. (.2). Tues., Fri	9.536 9.54 0	VPD2 DJN	Suva, Fiji. (2.). 0530-0700. Berlin, Germany. (50.). 0005-1000;
7.100	FO8AA	2300-2400.	3.340	D314	1653-2245.
		Guadalajara, Jal. "Voice of the	9.550	OLR3A	Prague, Czecho. (35.). 1430-1630.
		Revolutionary Party."		XEFT	Veracruz, Ver. (.02). 1930-2400.
7.200	YNAM	Managua, Nicaragua. 2000-2400.	9.560	DJA	Berlin, Germany. (50.). 0005-1100;
7.380	XECR	Mexico City, D. F. (20.). Sun.,			1657-2245. Barranquilla, Colombia. (.3).
		1800-2000. Radio Liberte. 1900-2000.		YOB	Sourabaya I, Java, N.E.I. (1.).
7.540	RKI	Moscow, U. S. S.R. (Assigned 7520).	9.562		Lima, Peru. (10.). 1130-1330.
7.625		Johannesburg, U. of S. Africa.			
,,,,,,		(5.). 2345-0030.	9.565	VUB	Bombay, India. (4.5).
7.797	HBP	Geneva, Switz. (20.). Sat., 1730-	9.570		Barquisimeto, Venez.
		1830.	3.370		Manila, P. L. 0400-1000. Boston, Mass. (10.). Sun. 0800-
7.894	YSD	San Salvador, E. S. 2100-2239.			0103. Weekdays 0500-0100.
8.400		Guayaquil, Ecuador. Managua. Nicaragua. "Radio		W8XK	Pittsburgh, Pa. (40.). (Not used).
8.580	YNPR	Managua, Nicaragua. "Radio Pilot".	9.580	GSC	Daventry, Gt. Britain. (20.). 1800-
8.600	HC1EC	Quito, Ecuador.			2939; 2103-2300.
8.655		A Effie M. Morrissey. (.1).			Melbourne, Australia. (.5). 0100-
8.665	COJK	Camaguey, Cuba. (2.4). 1800-0100.	9.590		0945. Huizen, Netherlands. (20.). Sun.
8.950	HCJB	Quito, Ecuador. (.15). Mon., Wed.,	3.330		1430-1510; 1900-2115; Mon. 2100-
		Sat., 0200-0400; 1300-1500.			2230; Tues., 1400-1530; 1900-2130;
9.03C 9.100	COBZ	Havana, Cuba. Havana, Cuba.			2230; Tues 1400-1530; 1900-2130; Wed., 1930-2130; Thurs., 1900-2130.
9.125	HAT4	Budapest, Hungary. (20.). Sun.,			Sydney, Australia. (20.). Sun.,
0.220		Wed., 1900-2000, Sat., 1800-1900.			0033-0230; 0430-0830; 0930-1130.
9.195	COBX	Havana, Cuba.			Pertn. Australia. (5.). Weekdays 0600-0800.
9.340	OAX4J	Lima, Peru. (.2). 1200-1500; 1700-			New York, N. Y.
		0190.			Philadelphia, Pa. (10.). 1200-2000;
9.345	HBL	Geneva, Switz. (20.), Fri. 1430- 1445; 1930-1945; 2000-2015.			Thurs., 2200-2300.
9.350	COBC	Havana, Cuba. Aptdo. 132.			Cincinnati, Ohio. (10.). (Under
01000	HS8PJ	Bangkok, Siam. Mon., Thurs.,	0.505		construction).
		0730-1000.	9.595		Geneva, Switzerland. (18.). Sat. 1730-1830.
9.415	PJC2	Willemstad, Curacao, N.W.1.			Mossow, USSR. 1900-2115.
	PLV	Bandoeng, Java, N.E.I. (80.). 1000-	9-600		Santiago, Chile. 1800-1930.
9.428	СОСН	1100. Havana, Cuba. (.15). 0700-6100.	9 605	HP5J	Panama City, Panama. (1.). 1830-
9.445	HC2RA	Guayaquil, Ecuador. Sun. 1600-			2300.
		2200. Daily 2100-2200. Guayaquil, Ecuador. 2100-2200.	9.618		Cartagena, Colombia. (.75), 1800- 2200.
9.450		Guayaguil, Ecuador. 2100 2200.	9.625		Johannesburg, U. of S. Africa (5.).
9.460	XGOX	Nanking, China. (.5).	0.023		2345-0030.
9 470	PJC1	Willemstad, Curacao, N.W.I. (.15).	9.630	HJ7ABD	Bucaramanga, Colombia. "Radio
9.480	EAR	Sun. 1035-1235. Madrid, Spain. (20.), Mon. at 2000;			Bucaramanga."
0.400	LAN	Tues., Fri. at 2100.	0.005	IODC	Taihoku, Taiwan. 0430-1030.
	XEDQ	Guadalajara, Jal. 1900-0100.	9,635 5,640	I2RO CXA8	Rome, Italy. (25.). 1230-2100. Montevideo, Uruguay. 0700-2400.
9.500	EAC	Madrid, Spain.			
	HJ1ABE	Cartagena, Colombia. 1700-1800;	9.645		Port-au-Prince, Haiti. (.03). 1300- 1400: 1900-2000.
	XEWW	2000-2230.			
		Mexico City. D. F. (10.). 0800-2400.	9.650	CS2WA	Lisbon, Portugal. (2.). Tues., Thurs., Sat., 1600-1900.
9.501	PRF5	Rio de Janetro, Brazil. (60.). 1645-			
		1745.	9.660		Lobito, Angola, Port. West Africa.
9.504	OLR3B	Prague, Czecho. (35.).			(.5). Wed., Sat., 1445-1645.
9.510	GSB	Daventry, Gt. Britain. (20.). 0315-			Buenos Aires, Argentina. (5.).
		0530; 1220-1545; 1600-2030; 2100-			1030-2436.
	нЈυ	2360. Buenaventura, Colombia. Mon.,	9.670		Heredia, Costa Rica. 2100-2260;
	1130	Wed., Fri. 2000-2309.	NI		2330-2400.
	HS8PJ	Bangkok, Siam. Mon., Thurs.,	9.685	TGWA	Guatemala City, Guat. (10.). "Radio Nacional." Sun., 0000-0600.
		0800-1000.			Paily 2000-2400.
	VK3ME	Melbourne, Australia. (5.), Week-	9.700		Havana, Cuba. Relays CMCA.
		days 0400-0700.	5.700	COCA I	marana, Cupa. nelays UniOA.

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

9.730	112211	"Radio Martinique," Fort de France, Mart. 1845-1945.	11.810		Rome, Italy. (25.). 0500-1220.
9.750	COCQ	Havana, Cuba. 0700-0100.	(1.820	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, III. (20.).
9.940	CSW	Lisbon, Portugal. (5.). 1900-2000.	11.840	CSW	Lisbon, Portugal. (5.).
10.065	CON	Macau, Portuguese China.		KZRM	Manila, P. I. 0400-1000.
10.070		Communistic Station.		OLR4A	-12340, 02001101 (33.7. 1410)1.,
10.260	PMN	Bandoeng, Java. N.E.I. (1.5). 0530-	11 000		Thurs., 1900-2100. Daily 1400-1415.
		1100.	11.855	DJP	Berlin, Germany. (50.).
10.330	ORK	Brussels, Belgium. (11.). 1330-1500.	11.860	GSE YDB	Daventry, Gt. Britain. (20.).
10.370	EAJ43	Santa Cruz de Tenerife, Canary Isl.	11.870	W8XK	Soerabaja I, Java, N.E.I. (1.). Pittsburgh, Pa. (40.). 1900-2200.
		2000-2100. "Radio Nacional," Salamanca,	11,875	OLR4C	
		Spain. 1700-1825; 2000-2045.	11.885	TPA3	Pontoise, France. 0200-0500; 1215-
10.430		Pirate station announcing "Radio			1800.
		Milan,"	11.895	HP5I	Aguadulce, Panama. 1930-2130.
10.530	11B	Taihoku, Taiwan. (6.). 0900-1030.	11.900	CD1190	
18.600	ZIK2	Belize, British Honduras.			2200.
10.660	JVN	Nazaki, Japan. (50.).		OLR4D	Prague, Czecho. (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	"Radie	Nacional," Salamanca, Spain. 1630- 1800.	11.960	HI2X	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-
11.040	CSW	Lisbon, Portugal. (5.). 1500-1900.			1100. Sun., Wed., 0600-0700. Sun., Mon., Wed., Fri., 1600-1700.
11.482	HBO	Geneva, Switz., Fri. 1400-1415;	12.120	CEATURE.	Algiers, Algeria.
11.435	cocy	Sat. 1845-2030.	12.235	TFJ	B. 44 44 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
41.435	cocx	Havana, Cuba. Sun. 1800-2100. Other days 0800-2400.			Reykjavik, Iceland. (7.5). Sun., 1345-1430.
11.500	SPD	Warsaw, Poland. (2.). Daily 1800-	12.290	GBU	Rugby, Gt. Britain.
		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 HP5A	Santiago, Chile. 1000-1400; 1530- 2300. Panama City, Pan. (.5). 2000-2330.	13.635	SPW	Warsaw, Poland. (10.). Mon., Wed., Fri., 1230-1330. Daily 1800- 1900.
		Saigon, Fr. Indo-China. 0500-1100.	13.986	DJS	Berlin, Germany. (20.).
11.710	XEWB	Guadalajara, Jal.	14.000	to 14.400	
	YSM	San Salvador, E. S.	14,400	UPOL	North Pole. 1400-1605.
11.713	TPA4	Pontoise, France. 0615-1300.	14.535	HBJ	Geneva, Switz. Sat. 1845-2100.
11.718	CR7BH		14.900	LZA	Sofia, Bulgaria.
		Africa. (,2). Sun. 0530-0700. Other days 0430-0630.	15.040	RKI	Moscow, USSR. 1900-2115.
11.720	CJRX	Winnipeg, Man. (2.). 1800-2400.	15,110	DJL	Berlin, Germany. (50.). 0000-0200;
11.730	PH! XETM	Hilversum, Netherlands. (23.6). Villahermosa, Tab.			0800-0900; 1040-1630. Sun., 0600- 0800.
11.740	HP5L	David, Panama. (.35).	15.116	OLRSC	Prague, Czecho. (35.).
11.750	GSD	Daventry, Gt. Britain, (20.), 0315-	15.120	HVJ	Vatican City. (10.), 1000-1030.
44 700		0530; 1045-1200; 1220-1545; 1600- 2030; 2100-2300.	15.140	GSF	Daventry, Gt. Britain. (15.). 0915- 1200.
11.768	OLR4B TGWA	Prague, Czecho. (35.). Guatemala City, Guat. (10.).	15.150	YDC	Bandoeng, Java, N.E.I. (3.).
		Guatemala City, Guat. (10.). Mon., Thurs., 2000-2200.	15.160	JZK	Nazaki, Japan. (50.).
11.770	DID	Berlin, Germany. (50.). 1040-1630; 1650-2245.	15.170	CXA14 TGWA	Mexico City, D. F. (10.). Montevideo, Uruguay.
11.790	W1XAL	Boston, Mass. (10.), Sat. 1345-1830.	15.175	RV96	Guatemala City, Guat. (10.). Moscow, USSR.
		Sun. 1500-1800. Other days 1645- 1830.	15,180	GSO	Daventry, Gt. Britain. 0315-0530;
11.795	D10				0545-0855; 1600-1800.
11.796	OAX5A	Berlin, Germany. (8.).	15.200	DJB	Berlin, Germany. (8.). Sun. 1110-
11.796	COGF				1225. Daily 0005-1100; 1650-2245.
-1.000	Cour	Matanzas, Cuba. (1.). 1300-1600; 1800-2200.	15.210	W8XK	Pittsburgh, Pa. (40.). 0900-1900.
	JZJ	Nazaki, Japan. (50.). 1500-1600; 1630-1730; 0800-0900; 0030-0130.	15.220	PCJ	Huizen, Netherlands. (20.). Sun. 0330-0500. Wed. 0800-1030.
	OER2	Vienna, Austria. (1.5). Weekdays 0900-1800.	15.230	OLR5A	Prague, Czecho. (35.), 0930-1130.
11.805			15.243	TPA2	Pontoise, France. 0600-1100.
-1.003		Copenhagen, Denmark. 1830-2100.	15,250	W1XAL	Boston, Mass. (10.). Fri. 2100-

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

15.260	GSI	2200; Sun. 1015-1200; Daily exc. Sat. and Sun. 1415-1600. Daventry, Gt. Britain. 1220-1545; 2100-2300.	17.790	W8XK W9XAA W9XF GSG	Pittsburgh, Pa. (40.). Chicago, III. (5.). Chicago, III. (10.). Daventry, Gt. Britain. (15.). 0315-
15.270	HI3X	Trujillo, D. R. (.5). Sun., 0800-1100.	17.730	asa	0530; 0545-0855; 0915-1200; 1220- 1545.
	W2XE	New York, N. Y. (10.). Sat., Sun. 1430-1800; 2000-2400. Mon. through Fri. 1300-1800; 2030-2400.	19.020	HS8PJ	Bangkok, Siam. (5.). Mon. 0800- 1000.
15.280	DJQ	Berlin, Germany. (50.). Sun. 1110-	21.450	OLR6A	Prague, Czecho. (35.).
		1225. Daily 0005-0545; 0600-0800; 0815-1100; 1650-2245.	21.460	W1XAL	Boston, Mass. (10.). Tests ir-
15.290	LRU	Buenos Aires, Arg. (5.). 0800-1000.	21.470	GSH	Daventry, Gt. Britain. 0545-0855;
15.300	XEBM	Mazatlan, Sin. 1000-2300.			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.		WZYAH	Philadelphia, Pa.
	ī	Belmont, Calif. (20.). (Under construction).	21.530	GSJ	Daventry, Gt. Britain. 0545-0855; 0915-1030.
15.340	DJR	Berlin, Germany. (50.). 0800-0900;	21.540	W8XK	Pittsburgh, Pa. (40.). 0700-0900.
		1650-2245.	21.550	GST	Daventry, Gt. Britain.
15.370	HAS3	Budapest, Hungary. (20.). Sun. 0900-1000.	25.950	W4XH W6XKG	Spartanburg, S. C. (.05) (WSPA). Los Angeles, Calif. (.1) (KGFJ).
15.440	XEBM	Mazatlan, Sin. (.05), 1000-2300.			24 hours daily.
15.555	CO9WX	Tuinicu, Cuba. (2.).		W9XUP	St. Paul, Minn. (1.) (KSTP).
17.310	W3XL	Bound Brook, N. J. (20.).	26.100	GSK	Daventry, Gt. Britain.
17.760	DJE	Berlin, Germany. (50.). Sun. 1110- 1225. Daily 0005-1000.	26.400		Superior, Wis. (.08) (WEBC). Milwaukee, Wis. (.5) (WTMJ).
	W2XE	New York, N. Y. (10.). 1830-2000.	10.400		1300-2400.
17.770	PHI	Hilversum, Netherlands. (23.6).	26.550	W2XQ0	Flushing, N. Y. (.1) (WMCA).
		Sun., 0725-1025. Mon., Tues.,	27.100 W10XI		A Effie M. Morrissey (.1).
		Thurs., Fri., 0825-1000. Sat., 0825-1040.		to 30.000	Amateurs.
			56.000 to 60.000 Amateurs.		
17.780	W3XAL	Bound Brook, N. J. (35.). 0855-1745; 1800-2100.			ty, 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
0.100	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	1 pm	N o on	2000
1600	4 pm	3 pm	2 pm	1 pm	2100
1700	5 pm	4 pm	3 pm	2 pm	2200
1800	6 pm	5 pm	4 pm	3 pm	2300
1900	7 pm	6 pm	5 pm	4 pm	2400
2000	8 pm	7 pm	6 pm	5 pm	0100
2100	9 pm	8 pm	7 pm		0200
2200	10 pm	9 pm	8 pm	7 pm	0300
		10 pm	9 pm		
	Midn't	11 pm	10 pm		
		t the entire	world	consult the	RADEX
Time Convert					
2300	11 pm Midn't s throughou	10 pm 11 pm	10 pm	8 pm 9 pm consult the	0400 0500 RADEX

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KEY TO SYMBOLS

As shown in the Index by Frequencies and Dial Numbers

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

in fourth column.	
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. The sign-on and sign-off time of stations is shown in	ion available. No Symbols Slue" network. Ity. Ity. Ity. Ity. Ity. Ity. Ity. Ity
540 kcys. (555.2)	
CJRM ak 1000 F Regina, Sask.	−9:30 am−1:30 am
Collin an 1000 F Action, Such	100 411
550 keys. (545.1)	
CFNB mk 500 F (1) Fredericton, N. B.	-7:00 am-11:00 pm -8:00 am-Midnight -8:00 am-1:00 am -Noon-Midnight -7:00 am-midnight
560 Irovo (535.4)	
KWTO ak 5000 D Springfield, Mo.	-8:30 am-2:00 am -10:00 am-4:00 am -7:00 am-midnight 6:00 am-4:00 am -7:00 am-midnight -7:00 am-midnight
570 keys. (526.0)	
CMCY ak 5000 Havana, Cuba KGKO ak 250 CY (1) Wichita Falls, Tex. KMTR ak 1000 Los Angeles, Callif. KVI ak 1000 C (5) Tacoma, Wash. WKBN ak 500 C1 Youngstown, Ohio WMCA ak 1000 New York, N. Y. WNAX ak 1000 C (5) Yankton, S. Dak. WOSU ak 750 1 (1) Columbus, Ohio WSYR ak 1000 B (WSYU) Syracuse, N. Y. WWNC ak 1000 N Asheville, N. C.	—9:00 am—3:00 am —9:00 am—11:00 pm —7:00 am—1:00 am —7:30 am—1:00 am
580 kcys. (516.9)	
CFPR ak 50 Prince Rupert, B. C CHRC ak 100 Quebec, P. Q CKCL ak 100 F Toronto, Ont CKUA ak 500 Edmonton, Alta.	–8:00 am—midnight –8:00 am—midnight –8:00 am—midnight –10:00 am—3:00 am

14	OITH AIV.	ERICAN B. C. S	INTIONS DI TRE
KSAC ak WCHS ak	500 2 (1) 500 C (1)	Manhattan, Kans. Charleston, W. Va.	-10:30 am -6:30 pm
WDBO ak !	1000 C 1000 2C (5)	Orlando, Fla. Topeka, Kans.	-7:00 am-midnight
WILL ak 1	1000 D	Urbana, III.	-9:00 am-ss -7:30 am-1:00 am
WTAG ak I XEMU z	1000 R	Worcester, Mass. Piedras Negras, Coah	
590 kcys	s. (508.2	2)	
KHQ ak	1000 R (5) 1000 C (5)	Spokane, Wash, Boston, Mass.	
WKZO ak 1	1000 BDX	Kalamazoo, Mich. Omaha, Nebr.	-7:00 am-3:30 am
	1000 R (5)		-7,00 am 5.30 am
600 kcys	s. (499.)	()	
CBW ak	500 F (1) 500 BF	Windsor, Ont. Montreal, P. Q.	-4:30 pm-11:30 pm
CJOR ak	500 1400	Vancouver, B. C. Havana, Cuba	-7:45 am-1:00 am -7:00 am-midnight
	1000 B 500 C (1)	San Diego, Calif. Baltimore, Md.	
WICC ak	500 BM (1)	Bridgeport, Conn. Cedar Rapids, Iowa	-7:00 am -1:00 am -6:30 am-1:00 am
WREG ck	1000 C (5)	Memphis, Tenn.	-7:30 am-1:00 am
610 kcys	s. (491.	5)	
KFRC c	1000 M (5) 500 DM	San Francisco, Cal. Cleveland, Ohio.	—7:00 am—ss
WDAF ak	1000 R (5)	Kansas City, Mo. BF) Miami, Fla.	-7:30 am-1:00 am
WIP ak	1000	Philadelphia, Pa	-7:00 am-1:00 am
620 kcys			—9:00 am—2:00 am
KTAR ak	1000 R (5) 1000 N	Portland, Ore. Phoenix, Ariz.	—9:00 am −1:15 am
WFLA ak : WHJB ak	1000 Na (5) 250 GD	Greensburg, Pa.	-7:00 am-1:00 am -8:00 am-5:00 pm
	1000 Na (5)	Bangor, Maine St. Petersburg, Fla.	-7:00 am-1:00 am
WTMJ ak	1000 N (5)	Milwaukee, Wis.	-7:15 am-1:00 am
630 kcy			8.00 cm 10.20 pm
	100 F 1000 F	Charlottetown, P.E.I	-8:00 am-10:30 pm -9:00 am-11:00 pm
CJRC ak CKOV ak	500 F (1) 100 F	Winnipeg, Man. Kelowna, B. C.	-8:30 am-12:30 am -11:00 am-1:30 am
CMBC z KFRU ak	500 1 (1)	Havana, Cuba Columbia, Mo,	-6:55 am-midnight -7:00 am-9:30 pm
KGFX ak WGBF ak	200 D	Pierre, S. Dak. Evansville, Ind.	
WMAL ak WPRO ak	500 N1 (1) 250 B (.5) 500 C (1)	Washington, D. C. Providence, R. I.	-7:00 am-2:00 am -7:00 am-1:00 am
XEZ z	500	Merida, Yuc.	
640 kcy			
CMCB ak KFI ak 5	150 0000 R	Havana, Cuba Los Angeles, Calif.	-9:45 am-3:00 am
WGAN z WHKC ak	500 DP 500	Portland, Maine Columbus, Ohio	—6:30 am−8:15 pm
WOI ak XEBX z	5000 D 250	Ames, Iowa Sabinas, Coah.	
650 kcy	s. (461.	3)	
→WSM ak 5	0000 MN	Nashville, Tenn.	—7:30 am—1:00 am

NORTH AMERICAN B. C. S	STATIONS BY FRI
660 kcys. (454.3)	
WAAW ak 500 D Omaha, Nebr. WEAF ak 50000 R New York, N. Y. XEAL z 1000 Mexico City, D. F. XEAO ak 250 Mexicali, B. Cfa.	—7:00 am—ss —7:30 am—1:00 am
670 kcys. (447.5) WMAQ ak 50000 R Chicago, III. XELO ak 50000 Tijuana, B. Cfa.	—7:00 am—1:00 am
680 kcys. (440.9)	
CMCG ak 1000 Havana, Cuba KFEQ ak 2500 D St. Joseph, Mo. San Francisco, Cal. VAS akn 2000 685 Glace 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—midnight -7:00 am—ss 11:00 am—3:00 am 7:00 am—11:00 pm
690 kcys. (434.5)	
CFRB ak 10000 C Toronto, Ont. CJCJ ak 100 F Calgary, Alta. XET ak 5000 Monterrey, N. L.	—8:00 am—midnight —9:30 am—1:00 am —8:30 am—10:00 pm
700 kcys. (428.3)	
-WLW ak 500000 MN (W8XO) Cincinnati, O.	—6:30 am—1:30 am
710 kcys. (422.3)	8:00 am-12:15 am
CMBL z Havana, Cuba KIRO ak 1000 C Seattle, Wash. KMPC ak 500 Beverly Hills, Calif. WOR ak 50000 M Newark, N. J.	9:00 am—5:00 am —9:00 am—4:00 am
720 kcys. (416.4)	
-WGN ak 50000 M Chicago, III. Monterrey, N. L.	—10:00 am9:00 pm
730 KCys. (410.7) —CFPL ak 100 F London, Ont. CJCA ak 1000 F Edmonton, Alta. CKAC ak 5000 C Montreal, P. O. CKPR ak 100 F Fort William, Ont. Havana, Cuba XEPN ak 100000 Piedras Negras, Coal-	-9:00 am-3:00 am -9:00 am-2:00 am -7:30 am-1:00 am -9:00 am-11:00 pm
740 kcys. (405.2)	
KMMJ ak 1000 D KTRB ak 250 D Modesto, Calif. WHEB ak 250 D Portsmouth, N. H. WSB ak 50000 R Atlanta, Ga.	—9:00 am—8:30 pm —6:55 am—1:00 am
750 kcys. (399.8)	
CMCW dk 150 Havana, Cuba KGU aj 2500 N Honoiulu, Hawaii WJR ak 50000 C Detroit, Mich. XEAA ak 200 Mexicali, B. Cfa. XEAM z 25 Matamoros, Tams.	—11;30 am—4:30 am —5:30 am—2:00 am
760 kcys. (394.5)	
CKY ak 15000 F Winnipeg, Man. CMHX ak 200 Cienfuegos, Cuba	-8:00 am-1:00 am

1

```
KXA
WBAL
WEW
                             Seattle, Wash
          яk
                     BMSy Baltimore, Md.
D St. Louis, Mo.
BSy New York, N. Y.
                                                       -9:00 pm—1:00 am
          ak
              2500
              1000
                                                      -8:00 am
                                                                 -88
          ak
          ak 50000
                                                      -7:30 am-1:00 am
₩JZ
                             Tijuana, B. Cfa.
XEOK
              2500
770 kcys.
                   (389.4)
                             Havana, Cuba
Lincoln, Nebr.
Chicago, Ill.
                                                      -8:00 am---10:30 pm
CMBS
          ak
                                                       -7:00 am —1:00 am
          ak 10000
KFAB ak 10000
WBBM ak 50000
                     CSy
CSy
780 kcys. (384.4)
                                                     --11:00 am-1:15 am
CHWK
          dk
               100
                     F
                             Chilliwack, B. C.
CKSO
CMJK
              1000
                             Sudbury, Ont.
                                                     -9:00 am-midnight
          ak
          ak
                250
                                                      -11:00 am-10:00 pm
                             Camaguey, Cuba
                     (5)
                             Los Angeles, Calif.
Brookings, S. Dak.
Anchorage, Alaska
Billings, Mont.
KEHE
              1000
          ak
KFDY
          ak
              1000
                     Ď
                                                     —1:30 pm—3 pm
KFOD
KGHL
                250
          ck
                     N (5)
DP
                                                      -10:00 am-1:00 am
              1000
          ak
                             Longview, Wash.
KWLK
WEAN
                250
                     BM
                             Providence, R. I.
Memphis, Tenn.
Norfolk, Va.
              1000
                                                     -7:45 am-1:00 am
WMC
          ak
              1000
                     R (5)
 WTAR
              1000
               1000
                             Mexico City, D. F.
XEL
790 kcys. (379.5)
                                                       10:00 am-3:00 am
                500
                             Matanzas, Cuba
San Francisco, Cal.
CMGH
          ak
              7500
                     В
                                                     -7:00 am-1:00 am
 KGO
          ak
KOĂM
              1000
                     ĐΝ
                             Pittsburg, Kans.
Schenectady, N. Y.
                                                     -7:00 am-1:00 am
WGY
          ak 50000
                     R
800 kcys. (374.8)
 WBAP
          ak 50000
                     Na
                             Fort Worth, Texas
                                                     -7:00 am-midnight
                                                     -9:00 am-12:30 am
          ak 50000
                             Dallas, Texas
 WFAA
 WTBO
                             Cumberland, Md.
                                                       8:30 am -ss
810 keys. (370.2)
                             Havana, Cuba
-CMCF
                600
                     _{\mathbf{C}}^{\mathbf{X}}
          ak
                             Minneapolis, Minn.
New York, N. Y.
Nuevo Laredo, Tams.
                                                       -7:30 am—1:00 am
WCCO
WNYC
          ak 50000
                                                       7:00 am-7:00 pm
          ak
               1000
                     D
                                                       -11:00 am—8:15 pm
 XEDF
XEXC
                350
                             Aguascalientes, Ags.
 820 keys. (365.6)
 CMHW ak
                100
                             Cienfuegos, Cuba
                     \dot{\mathbf{C}}
          ak 50000
                             Louisville, Ky,
Tijuana, B. Cfa.
 WHAS
               1000
 XEBG
 830 kcys. (361.2)
                                                      -9:00 am-11:30 pm
                500
 CMJX
                              Camaguey, Cuba
          ak 50000
                                                       -9:00 am--2:00 am
-8:00 am--5:00 pm
 KOA
WEEU
                      R
                              Denver, Colo.
          ak
               1000
                      D
                              Reading, Pa.
Boston, Mass
          ak
               1000
                      Dn
WRUF
          ak
               5000
                              Gainsville, Fla.
                                                      -7:00 am-6:30 pm
 840 kcys. (356.9)
             50000
                     P
-CBL
                              Toronto, Ont.
          7
 CFOC
CRCT
          ak
               1000
                     F
                              Saskatoon, Sask.
          ak
               5000
                              Toronto, Ont.
St. John's, Nfld.
 VOGY
                400
          яk
          ck 350000
                              Villa Acuna, Coah.
 XERA
 850 kcys. (352.7)
                                                      -8:00 am-midnight
 CMCM
                              Havana, Cuba
                             Glendale, Calif.
Elmira, N. Y.
 KIEV
                250
          ak
          ak 1000
                                                      --7:30 am--6:00 pm
 WESG
                    CD
```

WKAR ak 1000 D E. Lansing, Mich, WWL ak 10000 C New Orleans, La.	—7:00 am—5:00 pm —7:30 am—1:00 am
860 kcys. (348.6)	
-WABC ak 50000 C (WBOQ) New York, N. Y. WHB ak 1000 DM Kansas City, Mo.	—7:30 am—1:00 am
XEMO ak 5000 Tijuana, B. Cfa. XENC z 50 Mexico City, D. F.	—9:45 am—3:00 am
870 kcys. (344.6)	
WENR ak 50000 Ba Chicago, Ill. WLS ak 50000 Ba Chicago, Ill.	—Noon—midnight —8:00 am—3:00 pm
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.	—10:30 am—midnight —12:30 pm—1:15 am
CMO ak 25000 Havana, Cuba KFKA ak 500 2M (1) Greeley, Colo. KLX ak 1000 Oaklaud, Calif.	—7:30 am—1:00 am —10:30 am—2:30 am
KPOF ak 500 2 Denver, Colo. WCOC ak 500 CX (1) Meridian, Miss.	-10:50 am -2:50 am
WGBI ak 500 Cl (i) Scranton, Pa. WQAN ak 500 l (l) Scranton, Pa.	—12:30 pm—10:30 pm —12:30 pm—10:00 pm
WRNL ak 500 D Richmond, Va. WSUI ak 500 (1) Iowa City, Iowa	—7:30 am—ss —10:00 am—11:00 pm
890 kcys. (336.9)	
KARK ak 500 N(1) Little Rock, Ark, KFNF ak 500 2(1) Shenandoah, Iowa	—7:00 am—1:00 am —7:00 am—1:00 am
KFPY ak 1000 C (5) Spokane, Wash. KUSD ak 500 2 Vermillion, S. Dak.	−9:50 am−3:00 am
WBAA ak 500 (1) W. Lafayette, Ind. WGST ak 1000 C (5) Atlanta, Ga. WJAR ak 1000 R (5) Providence R. I.	—Noon—6:00 pm —7:30 am—1:00 am
WMMN ak 5000 C (1) Fairmont, W. Va. XEW ak 50000 Mexico City, D. F.	—7:00 am—1:00 am
900 keys. (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.	-9:30 am-1:00 am -7:00 am-1:00 am
WELI ak 500 D New Haven, Conn. WFMD ak 500 D Frederick, Md. WJAX ak 1000 N (5) Jacksonville, Fla.	6:00 am—ss 6:30 am—ss 6:45 am1:00 am
WKY ak 1000 N (5) Oklahoma City, Ok. Stevens Point, Wis.	-7:45 am-1:00 am -9:00 am-2:00 pm = FCC
WTAD ak 1000 D Quincy, III.	—8:00 am—5:45 pm
910 keys. (329.6)	
—CBF z 50000 NP Montreal, P. Q. CJAT ak 1000 F Trail, B. C. XENT ak 150000 Nuevo Laredo, Tams	—10:00 am—2:00 am
920 kcys. (325.9)	0.00
CMX ak 1000 Havana, Cuba KFEL ak 500 Ma Denver, Colo. KOMO ak 1000 R (5) Seattle, Wash.	8:00 am1:00 am 8:00 am2:30 am
KPRC ak 1000 R (5) Houston, Texas KVOD ak 500 Ba Denver, Colo.	
WAAF ak 1000 D Chicago, III. WORL ak 500 D Boston, Mass.	6:00 amss
WPEN ak 1000 Philadelphia, Pa.	

			TOIT	111 /11	ibitioni b. c. c	TITLE TO BI TRE
	WSPA WWJ	ak ak	1000 5000	D R	Spartanburg, S. C. Detroit, Mich.	—6:00 am—12:30 am
	930	kcy	ys.	(322.	4)	
	CFAC	ak	1000	F	Calgary, Alta.	-9:00 am-2:00 am
	CFCH CFLC	ak ak	100 100	F	North Bay, Ont. Prescott, Ont.	-7:00 am-10:00 pm
	CHNS CKPC	ak ak	1000 100	F	Prescott, Ont. Halifax, N. S. Brantford, Ont.	7:30 am11:00 pm
	KMA KROW		1000 1000	(5)	Shenandoah, Iowa Oakland, Calif.	-9:00 am-5:00 anı
	WBRC WDBJ	ak ak	1000 1000	C (5)	Birmingham, Ala. Roanoke, Va.	-8:00 am-12:30 am -7:00 am-midnight
_	XEBH XEFO	ak ak	500 5000		Hermosillo, Son. Mexico City, D. F.	—1:00 pm—midnight
	940	kcy	ys.	(319.	0)	
	KOIN	ak	1000	C (5)	Portland, Ore.	
	VOAS WAAT	ak ak	100 500	D	St. John's, Nfld. Jersey City, N. J.	-6:30 am-6:00 pm
	WAVE WCSH	ak ak	1000 1000	N R (2.5)	Louisville, Ky. Portland, Maine Fargo, N. Dak.	-8:00-1:00 am -8:00 am-midnight
	- WDAY - WHA	ak ak	1000 5000	D	Fargo, N. Dak. Madison, Wis.	-7:00 am-1:00 am -9:00 am-5:30 pm
-	WICA XEYO	z z	250 500	DP	Ashtabula, Ohio Mexico City, D. F.	
	950	kcy	/s.	(315.		
	CJOC CMCD	ak ak	100 250	\mathbf{F}	Lethbridge, Alta.	-9:00 am-1:00 am -Noon-1:00 am
	CRCK KFWB	ak	1000 1000	F	Havana, Cuba Quebec, P. Q. Hollywood, Calif.	1.00 am
	KMBC	ak	1000	(5) C (5) DP	Kansas City, Mo.	6;55 am1:00 am
	WHAL WRC	z ak	500 500		Saginaw, Mich. Washington, D. C.	
	960	kcy	/s. ((312	3)	
	CFRN CHNC	ak ak	$\begin{array}{c} 100 \\ 1000 \end{array}$	F F	Edmonton, Alta. New Carlisle, P. Q.	—9:30 am—2:00 am —7:30 am—11:00 pm
_	CRCY XEAW	ck c	100 50000	F	Toronto, Ont. Reynosa, Tams,	
	970	kcy	/s. ((309.		
_	σMBY KJR	z ak	150 5000	В	Havana, Cuba Seattle, Wash.	8:55 am11:00 pm
	WCFL	ak ak	5000 100	N D	Chicago, III. Glenside, Pa.	
	980	kcy	/s. ((306.0		
-	RDKA XEAC	ak ak	50000 1000	В	Pittsburgh, Pa. Tijuana, B . Cfa.	
	XEFE	z	150		Nuevo Laredo, Tame	5,
	990	-		(302.	8)	
X	WBZ WBZA	ak ak	50000 1000	BSy BSy	Boston, Mass. Springfield, Mass.	6:30 am 1:00 am 6:30 am 1:00 am
	XEAF XEK	ak ak	750 100		Nogales, Son. Mexico City, D. F. Tampico, Tams.	
	XES	ak	250		Tampico, Tams.	
	1000	k	eys.	(299	.8)	
	CMBZ	ak	500	(1)	Havana, Cuba	-7:45 am-mldnight
	KFVD VOCM	ak z	1000 200	Dn 1006	Los Angeles, Calif. St. John's, Nfld.	—9:00 am—8:15 pm

	1,01,1		ELITERATE OF G	THITTOING DI THE
WHO XEBI XEBK XEXS	ak 50000 ak 25 ak 60 z 100	R	Des Moines, Iowa Aguascalientes, Ags. Nuevo Laredo, Tams. Portable in Mexico	—7:00 am—1:00 am —10:00 am—8:30 pm
1010	kcys.	(296		
CHML CKCD CKCK CKCO CKIC CKWX CMJA KGGF KQW WHN	ak 100 ak 1000 ak 1000 ak 100 ak 50 ak 1000 ak 1000 ak 1000 ak 1000	F1 FF1 2M M (5)	Hamilton, Ont. Vancouver, B. C. Regina, Sask. Ottawa, Ont. Wolfville, N. S. Vancouver, B. C. Camaguey, Cuba Coffeyville, Kans. San Jose, Calif. New York, N. Y. Norman, Okla.	—8:00 am—midnight —9:30 am—2:00 am —Noon—11:30 pm —Noon—4:00 am —9:30 am—3:00 am —3:00 pm—10:15 pm
WNOX XEU	ak 1000 ak 250	C (5)	Knoxville, Tenn. Veracruz, Ver.	-6:30 am-2:00 am -8:00 am-1:00 am
1020 KYW WDZ XEJ	kcys. ak 10000 ak 250 ak 1000	(293 R D	.9) Philadelphia, Pa. Tuscola, III. Juarez, Chih.	—7:05 am—10:00 pm —7:00 am—6:00 pm
1030	kcys.	(291	.1)	
CFCN CJBR EKLW CMCK CMCX XEB	ak 10000 z 1000 ak 5000 z z 150 ak 10000	F M	Calgary, Alta. Rimouski, P. Q. Windsor, Ont. Havana, Cuba Havana, Cuba Mexico City, D. F.	6:45 am1:30 am 6:45 am1:30 am 9:00 am11:00 pm 10:00 am12:15 am
1040	kcys.	(288	.3)	
KRLD KWJJ KYOS —WTIC	ak 10000 ak 500 z 250 ah 50000	C D R	Dallas, Texas Portland, Ore. Merced, Calif. Hartford, Conn.	—7:00 am—1:00 am
1050	kcys.	(285	.5)	
CBM CMKD KFBI KNX WEAU WGVA	ak 5000 ak 250 ak 5000 ak 50000 z 1000 z 1000	Dn C D DDP	Montreal, P. Q. Santiago, Cuba Abilene, Kans, Los Angeles, Calif, Eau Claire, Wis, Indianapolis, Ind.	—7:00 am—7:45 pm —9:30 am—3:15 am
1060	kcys.	(282	.8)	
KTHS VOAC WBAL WJAG W3XJ XEAD XEMG	ak 10000 z 40 ak 10000 ak 1000 z 100 ak 125 z 100	N 1065 BM D P	Hot Springs, Ark. St. John's, Nfld. Baltimore, Md. Norfolk, Nebr. College Park, Md. Guadalajara, Jal. Atzcapotzalco, D. F.	—9:00 am—ss —7:00 am—9:00 pm —7:30 am—ss —Midnight to 6:00 am
1070	kcys.	(280	.2)	
CMBX CMHA -KJBS WCAZ -WTAM	ak 500 z 50 ak 500 ak 100 ak 50000	D R	Havana, Cuba Sagua la Grande, Cub San Francisco, Calif, Carthage, 111, Cleveland, Ohio	
1080	kcys.	(277	.6)	
WBT WCBD WMBI XEBA XEDP	ak 50000 ak 5000 ak 5000 z 20 ak 500	C Dnl Dnl	Charlotte, N. C. Chicago, Ill. Chicago, Ill. Guzman, Jal. Mexico City, D. F.	—6:45 am—midnight

		NON	III AD	TERICAN B. C. C	STATIONS BT FRE
	1090	kcys.	(275	5.1)	
_	-кмох	ak 50000	\mathbf{C}	St. Louis, Mo.	-7:00 am-1:00 am
	1100	kcys.	(272	.6)	
-	CBR CMCJ KGDM KWKH WBIL WPG XECL	ak 5000 ak 500 ak 1000 c 10000 ak 5000 z 1700	F DM C 1 C1	Vancouver, B. C. Havana, Cuba. Stockton, Calif. Shreveport, La. New York, N. Y. Atlantic City, N. J. Mexicali, B. Cfa.	- 9:00 am-ss 7:30 am-1:00 am
	1110	kcys.	(270	.1)	
	KSOO WRVA	ak 2500 ak 5000	DnN CM	Sioux Falls, S. Dak. Richmond, Va.	-7:00 am-6:45 pm -7:00 am-midnight
	1120	kcys.	(267		
	CHLP CHSJ CKOC	ak 100 ak 500 ak 500	F F (1) F (1)	Montreal, P. Q. St. John, N. B. Hamilton, Ont.	—9:00 am—11:00 pm —5:00 am—midnight
	CKX CMGF CMKM CRCS	ak 1000 ak 250 ak 200 ak 100	F	Brandon, Man. Matanzas, Cuba. Manzanillo, Cuba Chicoutimi, P. Q.	-8:00 am-10:00 pm
	KFIO KFSG KRKD KRSC	ak 100 ak 500 ak 500 ak 250		Spokane, Wash. Los Angeles, Calif. Los Angeles, Calif. Seattle, Wash.	—9:00 am—3:00 am
	KRSC KTBC WCOP WDEL WISN WJBO	z 1000 ak 500 ak 250 ak 250	DP D R (.5) C (1)	Seattle, Wash. Austin, Texas Boston, Mass. Wilmington, Del. Milwaukee, Wis.	8:00 am4:00 pm 9:00 am11:00 pm 8:00 am1:00 am
	WTAW	ak 500 ak 500	ь.	College Sta., Tex.	
	CMJI	kcys.	(205		Noon10:00 pm
	KSL WJJD WOV XEJP	ak 50000 ak 20000 ak 1000 z 100	C Dn D	Ciego de Avila, Cuba Salt Lake City, Ut. Chicago, Ill. New York, N. Y. Mexico City, D. F.	-8:30 am 3:00 am -6:00 am 6:45 pm
		kcys.	(263		
	CMBG KVOO	z 200 ak 25000	N1	Havana, Cuba Tulsa, Okla.	10:00 am10:00 pm
	WAPI WSPR	ak 5000 ak 5000	Ri DM	Birmingham, Ala. Springfield, Mass.	7:00 am5:45 pm
	1150	kcys.	(260	.7)	
	CMJF WHAM XEC XEDW	z 200 ak 50000 ak 100 z 20	B	Camaguey, Cuba Rochester, N. Y. Tijuana, B. Cfa. Minatitlan, Ver.	-7:00 am-midnight
	1160	kcys.	(258	.5)	
	CMHJ CMKG WOWO WWVA XEAS XEBJ XEBZ XEBZ XED	ak 175 z 10000 ak 5000 ak 500 z 20 ad 100 ak 2500 ak 500	B1 C1	Cienfuegos, Cuba Santiago, Cuba Fort Wayne, Ind. Wheeling, W. Va. Saltillo, Coah. Merida, Yuc. Mexico City, D. F. Guadalajara, Jal. Juarez, Chih.	—Noon—midnight —9:00 am—2:00 am

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1170 kcys. (256.3)
                 500
                                Havana, Cuba
CMBD
          ak
                                                              -7:00 pm-midnight
                       Ċ
          ak 50000
WCAU
                                Philadelphia, Pa.
                                                            -7:30 am-1:00 am
1180 kcys. (254.1)
CMJO
KEX
KOB
                  50
                                Ciego de Avila, Cuba
Portland, Ore.
          аk
          ak
                5000
                       B2
                       N2 Albuquerque, N. M.
CDn(5) Minneapolis, Minn.
New York, N. Y.
              10000
                                                           -1:00 pm-11:00 pm
          ak
WDGY
                1000
          ak
WINS
          ak
               1000
                       \ddot{\mathbf{C}}
WMAZ
                                Macon, Ga.
          ak
                1000
                                                           -7:00 pm-7:00 pm
XEFA
                 500
                                Tacuba, D. F.
1190 kcys.
                       (252.0)
CMKX
KTKC
VONF
WATR
                                Santiago, Cuba
Visalia, Calif.
          7.
                 250
                       Ď
          7.
          ak
                 500
                       1195
                                 St. John's, Nfld.
          ak
                 100
                       DXZ
                                 Waterbury, Conn.
          ak 50000
                                San Antonio, Tex.
Huntington, W. Va.
                                                            -7:30 am-12:30 am
WOAI
                       N
WSAZ
          ak
               1000
                                                           -7:00 am-7:00 pm
1200 kcys.
                       (249.9)
CFGP
                                 Grande Prairie, Alta.
                 100
            7.
CHAB
CKNX
                 100
                       F
                                                              -9:00 am--12:30 am
          ak
                                 Moose Jaw, Sask.
                       F
                                 Wingham, Ont.
                                                             -11:00 am-1:00 am
          dk
                 100
CKTB
          ak
                 100
                                St. Catharines, Ont.
                                                             -9:30 am-11:30 pm
CMCO
          ad
                 250
                                Havana, Cuba
KADA
KBTM
                 100
                       DM
                                 Ada, Okla.
          ak
          ak
                 100
                                 Jonesboro, Ark.
                       (.25) P
N
KDNC
                 100
                                Lewistown, Mont.
          z
KELO
                 100
                                Sioux Falls, S. Dak.
          Z
KELO
KFJB
KFXD
KGCI
KGDE
                       (.25)
(.25)
(.25)
DP
                                Marshalltown, la.
          āk
                 100
                                                             -7:00 am-10:00 pm
                                Maishartown, fa.
Nampa, Idaho
Grand Junc., Colo.
Coeur d'Alene, Idaho
Fergus Falls, Minn.
                                                           -8:00 am-10:00 pm
          ak
                 100
                 100
          ak
                 100
          z
                       (.25)
                                                           -8:00 am-10:00 pm
                 100
KGEK
KGFJ
KGIII
          ak
                 100
                                Sterling, Colo.
                                Los Angeles, Calif.
Little Rock, Ark.
Greenville, Texas
                                                           -24 hours daily
          ak
                 100
                       (.25)
DP
          ak
                 100
                                                           -8:30 am-11:00 pm
KGVL
KMLB
                 100
                       (.25)
          ak
                 100
                                Monroe, La.
KOOS
                 100
                       (.25)
(.25)
                                Marshfield, Ore.
                                                           -10:00 am-7:45 pm
KSUN
KVCV
                 100
                                Lowell, Ariz.
                                                           -11:00 am-midnight
          c
                                Redding, Calif.
San Luis Obispo, Calif.
Bellingham, Wash.
          z
                 100
KVEC
                 250
                       D
KVOS
KWG
KWNO
          ďk
                 100
                        M
                       M Bellingnam, wash
N Stockton, Callf.
DP Winona, Minn.
(.25) Bangor, Maine
C Anderson, S. C.
(.25) Waycross, Ga.
M (.25) Ponca City, Okla.
Huntsville, Ala.
                 100
250
                                                           -10:00 am-3:00 am
          ak
WABI
WAIM
WAYX
WBBZ
                       \stackrel{(,\hat{\mathbf{25}})}{\mathbf{C}}
                 100
          ak
                                                           -6:00 am-10:00 pm
          ak
                 100
          ak
                 100
                                                           -8:00 am-10:00 pm
          ak
                 100
WBHP
          ak
                 100
                                New Orleans, La.
Rapid City, S. Dak.
                                                           -1:00 pm to midnight
WBNO
          ak
                 100
WCAT
WCAX
          ak
                 100
                       D
                                                           -Noon-2:00 pm
                       (.25)
(.25)
(.25)
                                Burlington, Vt.
Janesville, Wis.
Cincinnati, Ohio
          ak
                 100
WCLO
                 100
          ak
WCPO
                 100
                                                           -7:00 am-11:30 pm
          ak
                                Superior. Wis.
WDSM
                 100
          2
WEST
                                Easton, Pa.
South Bend, Ind.
          ak
                 100
                       3 (.25)
WFAM
          ak
                 100
                        (.25)
                                Kinston, N. C.
Canton, Ohio
WFTC
                 100
          ak
                       (.25)
WHBC
                 100
          ak
                 100
                                Green Bay, Wis.
Utica, N. Y.
                       (.25)
C (.25)
WHBY
          яk
                                                           -7:00 am-1:00 am
WIBX
                 100
          ak
                       (.25)
5 (.25)
                                 St. Louis, Mo.
WIL
          ak
                 100
WJBC
                                Bloomington, III.
                                                           -4:00 pm-8:30 pm
          ak
                 100
WJBI
          ak
                 100
                                Decatur, III.
                                                           -2:00 am-9:00 pm
WJBW
          ak
                 100
                                 New Orleans, La
                        C (.25) W. Palm Beach, Fla.
                                                          -7:00 am-11:00 pm
WJNO
          ak
                 100
WJRD
          ak
                 250
                               Tuscaloosa, Ala.
Harrisburg, Pa.
                       3 (.25)
(.25)
WKBO
WLVA
          ak
                 100
                                                             -8:00 am-11:00 pm
          ak
                 100
                                Lynchburg, Va.
High Point, N. C.
                                                           -7:00 am-11:00 pm
          ak
WMFR
                 100
                        (.25)
                                Lapeer, Mich.
WMPC
          ak
                 100
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NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

WOLS	z	100	\mathbf{DP}	Florence, S. C.	
WRBL	ak	100	(.25)	Columbus, Ga.	-8:00 am-10:30 pm
WSAL	z	250	DP	Salisbury, Md.	
WTHT	ak	1 00	M	Hartford, Conn.	—7:00 am—4:15 pm
WTOL	Z	100	\mathbf{DP}	Toledo, Ohio	
WWAE	ak	100	8	Hammond, Ind.	

1210 kcys. (247.8)

```
Sherbrooke, P. Q.
CHLT
                 100
                                Stratford, Ont.
Aklavik, N.W.T.
Prince Albert, Sask.
                                                           -8:00 am-9:00 pm
CJCS
          āk
                  50
                  50
          2.
CKBI
CKCH
                 100
                                                           -9:45 am-1:00 am
          ak
                       ĥ
                                Hull, P. Q.
Cobalt, Ont.
Santa Clara, Cuba
          ak
                 100
                                                           -8:00 am-11:00 pm
CKMC
CMHI
          ak
                 150
          ak
KALB
          ak
                 100
                                 Alexandria, La.
KANS
KASA
                                Wichita, Kans.
Elk City, Okla.
Devils Lake, N. D.
Monterrey, Calif.
Klamath Falls, Ore.
                 100
                                                             -7:30 am-midnight
          ak
                       M
                                                           -7:00 am-8:00 pm
                 100
                                                           -7:30 am-9:30 pm
KDLR
          ak
                 100
                       M
KDON
                 100
          z
KFJI
          ak
                 100
KFOR
                       CM(.25) Lincoln, Nebr
                                                           -8:00 am-11:15 pm
          ak
                 100
KFPW
KFVS
KFXM
KGLO
                                Fort Smith, Ark.
Cape Girardeau, Mo.
          ak
                 100
                       5 (.25)
M2
                 100
          ak
                 100
                                San Bernardino, Cal. -9:00 am-3:00 am
                       C (.25) Mason City, Iowa
M Olympia, Wash.
                 100
          Z
KGY
KHBG
          ak
                 100
                                Olympia, wash.
Okmulgee, Okla.
Garden City, Kans.
Carlsbad, N. Mex.
Kilgore, Texas
Helena, Mont.
                 100
          7
KIUL
                                                          -8:00 am-10:00 pm
          ak
                 100
KLAH
KOCA
                 100
          ak
                       (.25)
(.25)
2
                 100
          z
KPFA
KPPC
                 100
          z
                                Pasadena, Calif.
                 100
                                                           -10:00 am-12:30 am
          ak
                                Sacramento, Calif.
KROY
          ak
                 100
KVSO
                       M
                                 Ardmore, Okla.
                                                           -8:00 am-11:00 pm
                 100
                                Watertown, S. Dak.
KWTN
                 100
WALR
                                Zanesville, Ohio
                                                           -7:00 am-9:00 pm
          ak
                 100
          ak
                 100
                                Wilkes-Barre, Pa.
WBBL
                 100
                                Richmond, Va.
          ak
WBLY
                 100
                       Ď
                                Lima. Ohio
                                                           -6:00 am-5:15 pm
          ak
WBRB
                                Red Bank, N. J
                 100
          ak
WCOL
WCRW
                 100
                       Ň
                                Columbus, Ohio
Chicago, Ill.
                                                           -7:00 am-11:00 pm
          ak
                      4 Chicago, III.
5 (.25) Harrisburg, III.
4 Chicago, III.
3 White Plains, N. Y.
                 100
                                                           -11:00 am-7:00 pm
          ak
WEBO
                 100
          яk
WEDĊ
          ak
                 100
WFAS
WFOY
          ak
                 100
                                St. Augustine, Fla.
Freeport, N. Y.
Gulfport, Miss.
          ak
                 100
                        (.25)
WGBB
                 100
WGCM
                 100
                        (.25)
          ak
WGNY
WGRM
          ak
                 100
                                Newburgh, N. Y.
                                                           -7:30 am-midnight
                                Grenada, Miss
                 100
          ak
                       (.25)
(.25)
(.25)
(.25)
WHBF
                                Rock Island, Ill.
                                                           -7:00 am-1:05 am
                 100
          ak
                                Anderson, Ind.
Poynette, Wis.
Gadsden, Ala.
Hagerstown, Md.
                 100
WHRU
          ak
WIRH
          ak
                 100
WJBY
                 100
                                                           -8:00 am-10:30 pm
          ak
WJEJ
                  50
                       Dn(.1)
          ak
WJIM
                       (.25)
B (,25)
(,25)
                                Lansing, Mich.
                                                           -7:15 am-12:30 am
                 100
                                Jamestown, N. Y.
WJTN
                 100
                                                           -8:00 am-10:30 pm
                                Akron, Ohio
WJW
                 100
          ak
WKOK
          ak
                 100
                                Sunbury, Pa.
                                                           -6:00 am-midnight
WLMU
                 100
                       P (.25)
                                Middlesboro, Ky.
          z
                       (.25)
                                Hibbing, Minn.
                                                           --7:30 am--10:00 pm
WMFG
          ak
                 100
                       Ď...
WOMT
                 100
                                Manitowoc, Wis.
          ak
WPAX
WSAY
                                Thomasville, Ga.
Rochester, N. Y.
                 100
                                                           -8:00 am-6:00 pm
          ak
                 100
                       D
          z
                       D Rochester, N. Y.
4 (.25) Chicago, Ill.
Nashville, Tenn.
D Bridgeton, N. J.
N (.25) Charlotte, N. C.
Springfield, Ill.
Parral, Chih,
WSBC
          ãk
                                                             -6:00 am—midnight
                 100
                                                            -7:00 am-1:00 am
WS1X
WSNJ
          ak
                 100
                 100
          z
                                                           -7:00 am-midnight
WSOC
          ak
                 1 00
WTAX
          ak
                 100
                                                           -11:00 am-9:00 pm
XEAT
          ak
                 250
50
XEE
          ak
                                Durango, Dgo.
XEFV
                 100
                                 Juarez, Chih.
          ak
XETH
          ak
                 100
                                Puebla, Pue.
                 250
                       DP
                                Greenfield, Mass.
          7
```

```
1220 kcys. (245.8)
                50
                             Camaguey, Cuba
Lawrence, Kans.
KFKU
KTMS
KTW
              1000
                     a (5)
          ak
                                                     -3:30 pm-7:30 pm
               500
         7.
                             Santa Barbara, Cal.
                     S2
         ak
              1000
                             Seattle, Wash.
KWSC
WCAD
WCAE
              1000
                     2(5)
                             Pullman, Wash.
Canton, N. Y.
         аk
                                                     -9:45 am-12:30 am
         ak
               500
                     ñ
                                                     -12:30 pm-4:00 pm
                     MR (5) Pittsburgh, Pa.
         ak
              1000
                                                     -7:00 am-2:30 am
WDAE
                                                       7:30 am
         ak
              1000
                     C(5)
                             Tampa, Fla.
WREN
              1000
                     Ba(5)
                             Lawrence, Kans.
                                                      -8:00 am-7:00 pm
XEBL
                50
                             Mazatlan, Sin.
XEDA
               200
                             Gra. Anaya, D. F.
         7.
                             Monterrey, N. L.
Veracruz, Ver.
XEG
               250
XETF
         ak
                30
                                                    -11:00 am-1:00 am
1230 kcys.
                    (243.8)
KGBX
         ak
               500
                     Ν...
                             Springfield, Mo.
KGGM
KYA
WFBM
         ak
              1000
                             Albuquerque, N. M.
                                                     -9:30 am-11:30 pm
         ak
              1000
                     (5)
                            San Francisco, Cal.
                    Č (5)
R (5)
                            Indianapolis, Ind.
Boston, Mass.
         ak
              1000
                                                     -7:30 am-1:00 am
WNAC
         ak
              1000
                                                    -6:30 am-1:00 am
XEFJ
                             Monterrey, N. L.
         ak
               100
                                                     -11:00 am-8:00 pm
                    (241.8)
1240
         kcys.
CJCB
                    F
                            Syndey, N. S.
Sancti Spiritus, Cuba
         ak
              1000
                                                      -7:00 am --11:00 pm
CMHB
                50
                            Sancti Spiritus, Cu
Mandan, N. Dak.
Minot, N. Dak.
Fort Worth, Texas
Twin Falls, Idaho
San Juan, P. R.
Detroit, Mich.
KGCU
               250
         ak
KLPM
                     îXZ
         ak
               250
KTAT
         ak
              1000
                    M
RTFI
WKAO
WXYZ
         ak
              1000
                    В
         ak
              1000
                                                     -6:00 am -9:30 pm
         ak
              1000
XEAP
XEAY
XEBS
XEKL
                            Obregon, Son.
Mexico City, D. F
                50
         7
               100
         7.
               200
                             Mexico City, D. F.
         z
         z
               500
                             Leon, Guan.
XELA
                50
                            Saltillo, Coah.
                    (239.9)
         kcys.
1250
CMCK
KFOX
                             Santiago, Cuba
         ak
              1000
                             Long Beach, Calif.
WAIR
WCAL
         ak
               250
                             Winst.-Salem, N. C.
                                                    --6:00 am-ss
                     \tilde{2} \times Z
         ah
              1000
                             Northfield, Minn.
WDSU
                     Ē
                                                      -7:00 am-midnight
         ak
              1000
                             New Orleans, La.
                                                                             1-9.38
                    a (2.5)
2XZ
WHBI
         ak
              1000
                            Newark, N. J.
                            Minneapolis, Minn.
New York, N. Y.
Minneapolis, Minn.
WLB
         ak
              1000
WNEW
                    a (2.5)
B (5)
              1000
         ak
WTCN
              1000
                                                     —7:00 am—midnight
         ak
XEXH
                             San Luis Pot., S.L.P.
         Z
               250
1260 kcys.
                    (238.0)
                    \mathbf{C}
CMC
                             Havana, Cuba
                                                      -8:00 am
                                                                  midnight
KGVO
              1000
                                                      9:00 am
         ak
                             Missoula, Mont.
                                                                 -1:00 am
KHSL
               250
                             Chico, Calif.
         ak
                              Omaha, Nebr.
KOIL
         ak
              1000
                     BM(5)
                             Port Arthur, Texas
Weslaco, Texas
Siloam Spgs., Ark.
KPAC
               500
                                                     -6:00 am-5:45 pm
         ak
                     D
KRGV
          ak
                     N
                                                     -8:00 am-11:00 pm
              1000
KUOA
              5000
                     D
         ak
KVOA
WHIO
              1000
          ak
                             Tucson, Āriz.
                     C (5)
          ak
              1000
                             Dayton, Ohio
                                                     -6:00 am-1:00 am
         ak
                     CM(1) Springfield, Vt.
WNBX
               500
WTOC
         ak
              1000
                            Savannah, Ga.
                                                     -7:00 am-midnight
                    (236.1)
1270 kcys.
CMHD
          dk
               250
                             Caibarien, Cuba
KGCA
          ak
               100
                             Decorah, Iowa
Seattle, Wash.
                                                     -9:30 am-3:30 pm
KOL
KVOR
                     M (5)
              1000
          ak
                                                    -9:00 am-1:00 am
          ak
              1000
                     C
                             Colo. Springs, Colo.
KWLC
                     žD
          ak
               100
                             Decorah, Iowa
WASH
                     DaN
                             Grd. Rpds., Mich. Baltimore, Md.
                                                      -7:00 am-midnight
          ak
                500
WFBR
               500
                     R (1)
                                                      -7:00 am—midnight
```

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

```
WJDX
          ak
                       R (5)
                                Jackson, Miss
WOOD
                 500
                       Na
                                Gd. Rapids, Mich.
                                                           -7:00 am-midnight
          ak
                                 Jalapa, Ver.
Mexico City, D. F.
XEXB
                  50
          ak
XEXE
                  17
1280 keys. (234.2)
                                 Havana, Cuba
                                                            -6:55 am-1:00 am
CMCU
           ak
                 500
CMKO
KFBB
KLS
                                 Holguin, Cuba
Great Falls, Mont.
           Z
           ak
                1000
                       C (5)
                                Oakland, Calif.
Camden, N. J.
           ak
                 250
WCAM
                 500
          ak
                                Asbury Park, N. J.
Chattanooga, Tenn. —7:30 am—12:30 am
                 500
WCAP
                       C (5)
N (5)
C
WDOD
                1000
           ak
                                Madison, Wis.
WIBA
           ak
                1000
                                Worcester, Mass.
Dallas, Texas
                                                           -8:00 am-midnight
WORC
           ak
                 500
WRR
WTNJ
                 500
                       M
                                                           -8:00 am-midnight
           ak
                                 Trenton, N. J.
Mexico City, D. F.
                 500
                       1
          ak
XEMX
                 100
          Z.
1290 kcys. (232.4)
KDYL
KLCN
KTRH
                                                          -8:00 am-3:00 am
           ak
                1000
                       RX
                                Salt Lake City, Ut.
                       Ď
                                Blytheville, Ark.
Houston, Texas
                 100
           ak
                       C (5)
N (5)
C (5)
          ak
                1000
                                Duluth, Minn.
                                                           -8:00 am
                                                                          1:00 am
                1000
WEBC
          ak
                                Pittsburgh, Pa.
Saranac Lake, N. Y.
                                                             -7:30 am-12:30 am
WJAS
           ak
                1000
                                                             9:30 am
WNBZ
          ak
                 100
                       Ď
                                                                          88
                                                           -6:30 am
                                                                         -11:30 pm
WNEL
                1000
                       (2.5)
                                San Juan, P. R.
1300 kcys.
                       (230.6)
KALE
KFAC
KFH
                                 Portland, Ore
                 500
                       CM
           ak
                                 Los Angeles, Calif.
          ak
                1000
                                 Wichita, Kans.
                       C (5)
           ak
                1000
                                Brooklyn, N. Y.
New York, N. Y.
New York, N. Y.
WBBR
          ak
                1000
                1000
WEVD
          ak
WFAB
          ak
                1000
                                Greenville, S. C.
Troy, N. Y.
WFBC
          ak
                1000
                       N (5)
                                                           -6:00 pm-midnight
          ak
                1000
                       1
                                Sheboygan, Wis.
WHBL
                 250
1310 kcys. (228.9)
                                Charlottetown, P.E.I.
CHCK
           ak
                  50
                                 North Bay, Ont.
                 100
CJKL
          ak
                       F
                                Yarmouth, N. S.
Quebec, P. Q.
Corsicana, Tex.
CJLS
                 100
          ak
CKCV
                                                           -7:55 am-11:30 pm
           ak
                 100
KAND
KARM
          z
                 100
                       D
                                 Fresno, Calif.
Kansas City, Kans.
                 100
                       P
          7.
KCKN
KCRJ
          ak
                 100
                       (.25)
(.25)
(.25)
(.25)
                 100
                                Jerome, Ariz.
Dublin, Texas
          ak
KCRJ
KFPL
KFXR
KFYO
KGEZ
KGFW
KHUB
KINY
KINY
                 100
                                                           -7:00 am-10:45 pm
-8:00 am-midnight
           dk
                                Okla. City, Okla.
Lubbock, Texas
Kalispell, Mont.
Kearney, Nebr.
Watsonville, Calif.
                 100
          яķ
          ak
                 100
                                                             8:00 am
                                                                         -10:15 pm
                                                              9:00 am
                                                                          11:00 pm
           ak
                 100
                                                             7:00 am
                                                                          10:00 pm
                 100
          ak
                       D
          ak
                 250
                      XZ Juneau, Alaska
MXZ(.25) Yakima, Wash.
D Pampa, Texas
DP Lufkin, Texas
                 100
          ak
                 1003
          ak
KPDN
KRBA
           ak
                 100
                 100
                                Shreveport, La.
Rochester, Minn.
Santa Fe, N. Mex.
Sherman, Texas
KRMD
                 100
                       (.25)(.25)
                                                           -7:00 am-12:15 am
KROC
                 100
          ak
KRQA
KRRV
KSRO
          ak
                 100
                 250
          z
          ak
                 250
                       Ď
                                Santa Rosa, Calif.
                                                            Cedar City, Utah
KSUB
          ak
                 100
                                El Paso, Texas
Lafayette, La.
Moorhead, Minn.
Jefferson City, Mo.
Aberdeen, Wash.
                       (.25)
                                                             -8:30 am-1:00 am
KTSM
          ak
                 100
                                                             -8:00 am-10:30 pm
KVOL
          ak
                 100
KVOX
          z
                 100
KWOS
                 100
                       D
          z
                                                           -10:00 am-2:00 am
KXRO
          ak
                 100
                       M(.25)
                                                             -8:00 am--8:00 pm
 VAML
                 100
                       (.25)
                                Laurel, Miss
          ak
                                                           -10:30 am-5:30 pm
WREO
          яk
                                Marquette, Mich.
```

```
WBOW
                      N (.25) Terre Haute, Ind.
                                                      -7:00 am-midnight
 WBRE
                              Wilkes-Barre, Pa.
          ak
                100
 WBRK
                100
                      P (.25) Pittsfield, Mass.
          7.
 WCLS
          ak
                100
                              Joliet, Ill,
                                                        8:00 am-9:30 pm
                     (.25) Ashland, Ky.
S (.25) El Paso, Texas
B (.25) Buffalo, N. Y.
 WCMI
                100
                                                      -6:00 am-11:30 pm
-11:30 am-10:30 pm (Sun. only)
          ak
 WDAH
          ak
                100
 WEBR
          ak
                100
                                                        -7:00 am-
                                                                   -midnight
 WEMP
                              Milwaukee, Wis.
          ak
                100
                      D
                                                        7:30 am
                     3
 WEXL
                              Royal Oak, Mich.
                                                        8:00 am
          ak
                 50
                                                                   4:00 am
 WFBG
          ak
                100
                              Altoona, Pa.
                                                        7:00 am
                                                                   -10:30 pm
 WFDF
          ak
                100
                              Flint, Mich.
                                                        7:00 am
                                                                   midnight
 WGH
                      (.25)
                              Newport News, Va.
Wilson, N. C.
          ak
                100
                                                      -7:00 am-midnight
 WĞTM
                100
                      Ď
          7
 WHAT
                100
                              Philadelphia, Pa.
          ak
 WJAC
                             Johnstown, Pa.
                100
                      3 (.25)
          ak
                              Lakeland, Fla.
 WLAK
                100
                             Muncie, Ind.
Laconia, N. H.
Auburn, N. Y.
Plattsburg, N. Y.
                     (.25)
M
 WLBC
          ak
                100
                                                      -7:00 am-midnight
 WLNH
                100
 WMBO
                100
 WMFF
                100
                      (.25)
          ak
 WNBH
          ak
                100
                     M (.25) New Bedford, Mass. —7:30 am—11:15 pm
MXZ Washington, D. C.
 WOL
                             Washington, D. C.
                100
          ak
 WŘÁW
                100
                             Reading, Pa
                                                      -7:00 am-11:00 pm
          ak
 WROL
          ak
                100
                     N(.25)
                             Knoxville, Tenn
 WSAJ
          ak
                100
                              Grove City, Pa.
                     B (.25) Birmingham, Ala.
C Winston-Salem, N. C.
                                                        8:00 am
 WSGN
          аk
                100
                                                                   -midniøht
 WSJS
          ak
                100
                                                        8:00 am
                                                                   -10:00 pm
WTAL
                100
          ak
                              Tallahassee, Fla.
                                                        8:00 am
                                                                   midnight
 WTEL
          ak
                100
                             Philadelphia, Pa.
                                                       -8:00 am
                                                                  -midnight
 WTJS
                100
                     (.25)
(.25)
                             Jackson, Tenn.
Elkhart, Ind.
          яk
WTRC
                                                       7:00 am-10:30 pm
          ak
                100
XEAG
XEBO
XECW
          z
                 10
25
                             Cordoba, Ver.
                             Irapuato, Guan.
Mexico City, D. F.
Tampico, Tams.
          7.
          яk
                 10
XEFW
XETB
                250
          ak
                                                      -11:00 am-10:00 pm
                              Torreon, Coah.
          ak
                125
XEX
          ak
                125
                             Monterrey, N. L. Poplar Bluff, Mo.
                     ĎP
                100
1320 kcys.
                     (227.1)
CMOX
          ak
                              Havana, Cuba
KGHF
          am
                500
                             Pueblo, Colo.
                                                       9:30 am-11:45 pm
KGMB
          ak
               1000
                     Ĉ M
                             Honolulu, Hawaii
                                                       -1:30 am-6:00 pm
                     (1)
C (5)
C
KID
                             Idaho Falls, Idaho
Des Moines, Iowa
          ak
                500
KRNT
          ak
               1000
                                                      -6:30 am-1:00 am
                             Akron, Ohio
York, Pa.
New Orleans, La.
WADC
          ak
               1000
                                                       -7:00 am—1:00 am
                     N
R
WORK
              1000
          ak
                                                      -8:00 am-10:00 pm
WSMB
              1000
          ak
1330 kcys.
                     (225.4)
CMHK
                250
                             Cruces, Cuba
KGB
KMO
          ak
              1000
                     M
                             San Diego, Calif.
Tacoma, Wash.
Corpus Christi, Tex.
                                                       -10:00 am-4:00 am
          ak
              1000
                     M
                                                       9:00 am-3:00 am
KRIS
               500
          z
                     Ĉ (5)
C (5)
KSCJ
          ak
              1000
                             Sioux City, Iowa
                                                       7:00 am-1:00 am
WDRC
                             Hartford, Conn.
                                                       -7:00 am-midnight
         ak
              1000
          ak
              1000
                     MN(2.5) Cincinnati. Ohio
                                                       -7:00 am-1:00 am
          ak
                             Green Bay, Wis.
              1000
1340 kcys.
                     (223.7)
CMAB
                             Pinar del Rio, Cuba
CMJL
                75
                             Camaguey, Cuba
Dubuque, Iowa
KDTH
               500
                     DP
         z
                     D Huron, S. Dak.
N (2.5) Butte, Mont.
Dodge City, Kans.
CX Pensacola, Fla.
KGDY
         ak
               250
                                                     -10:00 am-1:00 am
KGIR
         ak
              1000
KGNO
         ak
               250
                                                     -8:30 am-midnight
WCOA
               500
         ak
WFEA
         ak
               500
                     MN(1) Manchester, N. H.
                                                     -6:30 anı-1:00 am
WSPD
         ak
                             Toledo, Ohio
Jalapa, Ver.
              1000
                     B (5)
XEXD
               350
1350
         kcys.
                     (222.1)
CMCA
CMKW
         ak
               450
                             Havana, Cuba
                             Santiago, Cuba
KIDO
                     N (2.5) Boise, Idaho
                                                     —10:00 am—midnight
         ak
              1000
KWK
         ak
              1000
                     BM(5) St. Louis, Mo.
                                                     -6:30 am-1:00 am
```

```
WAWZ ak
WBNX ak
WMBG ak
                                  Zarephath, N. J.
New York, N. Y.
Richmond, Va.
                  รถก
                        1(1)
                 1000
                        Ř
                  500
1360 kcys. (220.4)
                                  Ciego de Avila, Cuba
Enid, Okla.
Long Beach, Calif.
Charleston, S. C.
Syracuse, N. Y.
Chicago, III.
CMJH
           dк
KCRC
KGER
WCSC
                  250
                        M
                                                                8:00 am-11:00 pm
           ak
                 1000
           ak
                        N (1)
C (5)
                  500
                                                                 7:00 am-midnight
WFBL
           ak
                 1000
                                                              -7:00 am-1:00 am
                                                                 -8:00 am-9:00 pm
WGES
           ak
                  500
                        1(1)
                                  Vicksburg, Miss.
South Bend, Ind.
           ak
                1000
                        n
WQBC
WSBT
           ak
                  500
1370 kcys.
                        (218.8)
                        . . . .
                                  Flin Flon, Man.
Moncton, N. B.
CFAR
                  100
CKCW
           ak
                  100
                                  Cardenas, Cuba
CMGE
           ak
                  150
                                                                 -10:00 am --10:30 pm
                                  Astoria, Ore.
Kansas City, Mo.
Seattle, Wash.
KAST
KCMO
                         Ď
                                                              -11:00 am-8:30 pm
-7:00 am-2:00 am
                  100
           ak
                        <u>.</u>...
           ak
                  100
KEEN
           ak
                  100
                                                                 -3:00 pm—1:00 am
KELD
                                  El Dorado, Ark.
Bakersfield, Calif.
                  100
                        N ...
                                                                 -11:00 am-3:00 am
KERN
           ak
                  100
                                                              -7:00 am-2:00 pm
-7:30 am-midnight
                  100
                                  Boone, Iowa
Fort Worth, Texas
KFGO
KFJZ
           ak
                         (.25)
           ak
                  100
                                  Fort Worth, Texas
Longview, Texas
Tucson, Arizona
Roswell, N. Mex.
San Angelo, Texas
Clovis, N. Mex.
                                                                -7:00 am -ss
KFRO
           ak
                  250
                         Ď
KGAR
KGFL
KGKL
KICA
                         (.25)
           ak
                  100
                  100
                  100
                         (.25)
           ak
                                                              -9:00 am-11:00 pm
-10:00 am-11:00 pm
                  100
           ak
KIÚP
           ak
                  100
                                  Durango, Colo.
                                  Galveston, Texas
                                                              -9:00 am-midnight
KLUF
                  100
           ak
                                  San Antonio, Tex.
Rapid City, S. Dak,
La Junta, Colo.
                                                              -8:00 am-9:00 pm
KMAC
                         5 (.25)
           ak
                  100
KOBH
KOKO
KONO
                                                              -8:00 am-midnight
           ak
                  100
                  100
           z
                                  San Antonio, Tex.
                                                              -7:00 am-11:00 pm
                         5
           ak
                  100
                         (.25)
3
                                  Berkeley, Calif.
Everett, Wash,
                                                              -24 hours daily
                  100
KRE
           ak
KRKO
           яk
                    50
                         (.25)
                                  Jamestown, N. D.
KRMC
                  100
           z
                                                              -10:00 am-1:00 am
KSLM
           ak
                  100
                         M
                                  Salem, Ore.
                                  Temple, Texas
Oklahoma City, Ok.
KTEM
           ak
                  250
KTOK
                  100
                         M
           bk
                                  Walla Walla, Wash.
Great Bend, Kans.
                                                              -9:30 am-1:00 am
KUJ
KVGB
                  100
           ak
                  100
           7.
                                  Great Bend, Kans.
Rock Springs, Wyo.
Sheridan, Wyo.
Albany, N. Y.
Dothan, Ala.
Atlanta, Ga.
KVRS
KWYO
                         (.25)P
                  100
            7.
           ak
ak
                         (.25)
B
                                                                 -9:00 am-midnight
                  100
WABY
                  100
                                                              -7:00 am-midnight
                                                              -9:00 am
WAGF
                  250
                                                                              -88
           ak
                         n
                  100
                         (.25)
                                                                 -7:00 am
                                                                              -1:00 am
           яk
                                  Clarksburg, W. Va.
Buffalo, N. Y.
WBLK
           ak
                  100
WBNY
                         2 (,25)
(,25)
(,25)
                                                               —7:30 am—midnight
           ak
                  100
                                  Danville, Va.
                                                               -7:00 am-10:00 pm
WBTM
                  100
WCBM
           ak
                  100
                                  Baltimore, Md
WDAS
WDWS
                                  Philadelphia, Pa. Champaign, Ill.
                                                              -8:00 am-midnight
                  100
                         (.25)
            ak
           ak
                  100
                         C(.25)
                                  Evansville, Ind.
WEOA
                  100
            z
                                                              -8:00 am-9:00 pm
WFOR
            ak
                  100
                                  Hattiesburg, Miss.
WGL
           ak
                  100
                                   Fort Wayne, Ind.
                         N Fort Wayne, Ind.
D New Albany, Ind.
(.25) Galumet, Mich.
(.25) Jackson, Mich.
MSy(.25) Lowell, Mass.
C (.25) Jacksonville, Fla.
D Wilmington, N. C.
Decetur, Me
WGRC
WHBO
                   250
                                                              -8:00 am-11:30 pm
                  100
            ak
WHDF
                                                               -10:30 am-6:30 pm
            ak
                  100
WHLB
            ak
                  100
                  100
                                                                 6;30 am—12:30 am
WIBM
            ak
WLLH
                  100
                                                                 -7:30 am —midnight
            ak
                                                                 7:30 am-midnight
WMBR
                  100
            ak
                  100
WMFD
            ak
                                  Decatur, Ala.
St. Paul, Minn
                                                                 8:00 am-
                                                                              -6:30 pm
WMFO
            ak
                   100
                         D
                         (.25) St. Paul, Minn.
C (.25) Davenport, lowa
                                                                 -7:00 am-
                                                                              1:00 am
 WMIN
            ak
                   100
                                                                              1:00 am
                                                                 -7:00 am-
                  100
 WOC
            ak
                                  Portsmouth, Ohio
Mayaguez, P. R.
                                                               -7:00 am
                                                                             -10:15 pm
 WPA Y
            ak
                   100
                         (.25)
 WPRA
                   100
            7.
                         (.25)
                                   Williamsport, Pa.
 WRAK
            ak
                   100
                                                               -8:00 am-11:15 pm
 WRDO
                         M
                                   Augusta, Maine
            ak
                   100
                                                              -8:25 am-midnight
                         (.25)
                   100
                                   Racine, Wis.
 WRJN
            ak
                                  Wausau, Wis.
Buffalo, N. Y.
San L. Pot., S.L.P.
                                                               -7:00 am-11:15 pm
 WSAU
            ak
                   100
                         2D
                    50
 WSVS
            ak
 XECZ
            z
                   100
```

```
XEI
XELZ
                               Morelia, Mich.
Mexico City, D. F.
Lawrence, Mass.
          ak
                 125
                 100
          z
          z 10-100
                      SyP
                 100
                               Owen Sound, Ont.
1380 kcys.
                      (217.3)
 кон
                               Reno, Nevada
                                                          -11:00 anı—3:00 am
KOV
WALA
                               Pittsburgh, Pa.
Mobile, Ala.
                                                          -7:00 am—10:00 pm
-8:30 am—midnight
          ak
                500
                      C1
          ak
                500
                      Č (1)
WKBH
                               La Crosse, Wis.
New Britain, Conn.
               1000
          ak
                250
200
                      D
          ak
                                                        -7:00 am-
WSMK
                      Č1
                               Dayton, Ohio
1390 kcys.
                     (215.7)
CJGX
          ak
                 100
                               Yorkton, Sask,
                                                        -8:30 am-12:30 am
CMJC
                150
                              Camaguey, Cuba
Little Rock, Ark.
          2
KLRA
          ak
               1000
                      C (5)
KOY
          ak
               1000
                              Phoenix, Ariz.
                                                         -9:00 am-12:15 am
KŘLC
          ak
                250
                              Lewiston, Idaho
WHK
               1000
                      BM(2.5) Cleveland, Ohio
D St. Albans, Vt.
                                                        -7:00 am-midnight
WODM dk
               1000
1400 kcys.
                      (214.2)
                              Matanzas, Cuba
Santiago, Cuba
Hilo, T. H.
Ogden, Utah
Tulsa, Okla,
CMGC
          ad
                \frac{150}{100}
                                                        -8:00 am-11:00 pm
CKKR
KHBC
                      CM
                250
KLO
KTUL
          ak
                500
                      B
                                                        -10:00 am-1:00 am
                500
                      C (1)
WARD
          ak
                500
                              Brooklyn, N. Y
                              Brooklyn, N. Y.
Olean, N. Y.
WBBC
          ak
                500
                      \frac{5}{2}(1)
WHDL
          ak
                250
                      MR (5) Indianapolis, Ind.
WIRE
               1000
          ak
                                                        -7:30 am-1:00 am
WLTH
                500
                              Brooklyn, N. Y.
Brooklyn, N. Y.
          ak
WVFW
1410 kcys.
                      (212.6)
CKFC
CKMO
CMCQ
KFJM
                               Vancouver, B. C
                100
          ak
                               Vancouver, B. C.
                250
          ak
                              Havana, Cuba
Grand Forks, N. D.
                500
          ak
                      (1)
KGNC
KMED
                      (2.5) N
          ak
               1000
                              Amarillo, Texas
          ck
                250
                              Medford, Ore.
WAAB
                              Boston, Mass.
Bay City, Mich.
Bluefield, W. Va.
Rockford, III.
          ak
                500
                      M (1)
                                                          24 hours daily
WBCM
          ak
                500
                      (1)
                                                          9:00 am-12:30 am
WHIS
          ak
                500
                      (1)
WROK
          ak
                500
                                                          -7:30 am—midnight
WSFA
          ak
                              Montgomery, Ala.
                500
                                                       -7:30 am-midnight
1420 kcys.
                      (211.1)
CHLN
                              Three Rivers, P. Q. North Bay, Ont.
                100
CKGB
KABC
          ak
                      Ė
                100
                                                         -11:00 am--11:30 pm
                      (.25)
XZ
                              San Antonio, Texas
Aberdeen, S. D.
          ak
                100
                                                       -7:00 am-12:15 am
KABR
          ak
                100
KATE
          z
                250
                      D
                               Albert Lea, Minn.
KBPS
                100
                              Portland, Ore.
                                                       -2:00 pm-8:00 pm
KCMC
          ak
                100
                      (.25)
                               Texarkana, Tex.
                              Price, Utah
St. Cloud, Minn.
KEUB
KFAM
                100
                                                       -9:30 am-midnight
                100
          z
KFIZ
                              Fond du Lac, Wis.
          ak
                100
                      (.25) M Shawnee, Okla.
San Francisco, Cal.
KGFF
                100
                                                       -8:00 am-10:00 pm
          ak
KGGC
          ak
                100
KĞİW
KIDW
                              Alamosa, Colo.
Lamar, Colo.
Pecos, Texas
                100
                                                       -9:30 am-10:30 pm
          яk
          ak
                                                       -9:00 am-8:00 pm
                100
KIUN
KLBM
          ak
                100
                                                       -8:00 am-10:00 pm
                      (.25) P La Grande. Ore.
D Palestine, Texas
          z
                100
          ak
KNET
                100
                              Eugene, Ore,
Abilene, Texas
KORE
          ak
                100
                      M
KRBC
          ak
                100
                      (.25)
                                                       -8:00 am-10:00 pm
KRLH
                100
                              Midland, Texas
          7.
KTRI
                100
                      (.25) P Sioux City, Iowa
KUMA
          ak
                100
                               Yuma, Ariz.
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NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

```
KWBG
                               Hutchnison, Kans.
                      4 (.25)
KXL
          ak
                 100
                               Portland, Ore.
WACO
                               Waco, Texas
          ak
                100
WAGM
WAPO
                100
                               Presque Isle, Me.
                                                          –11:00 am –-7:00 pm
–-7:00 am –-7:00 pm
          ak
                       (.25)
                               Chattanooga, Tenn. -
          ak
                 100
                               Hazleton, Pa.
                                                           -9:00 am--10:00 pm
WAZL
          ak
                100
                      (.25)
                                                           8:00 am-11:00 pm
WCBS
          ak
                 100
                               Springfield, III.
                               Charlottesville, Va.
Rocky Mount, N. C.
Battle Creek, Mich.
                      3 (.25)
3 (.25)
WCHV
                100
                                                           -7:00 am—midnight
          ak
WEED
                 100
          ak
                                                         -7:39 am-midnight
WELL
                 100
                    Ga.

wilmington, D
Ironwood, Micl
(25) Lexington, Ky.
(25) Springfield
(25) Detroit
(25) Jor
WGPC
                 100
          ak
WHFC
          ak
                100
                                                         -7:00 am-1:00 am
WILM
                 100
                               Wilmington, Del.
          aj
WJMS
          ak
                100
                               Ironwood, Mich.
WLAP
                100
          ak
WLEU
          ak
                100
                               Springfield, Mass.
Detroit, Mich.
Joplin, Mo.
WMAS
WMBC
          ak
                100
                                                         -7:00 am-midnight
                 100
                                                         -7:30 am midnight
          ak
WMBH
                 100
          ak
                 250
WMBS
                                                         --6:00 am--6:00 pm
          яk
                               Daytona Bch., Fla.
                100
WMFJ
          ak
                                                         -8:00 am-11:00 pm
WMSD
WNN Y
          ak
                100
                               Sheffield, Ala
                      (.25) P
                               Watertown, N. Y.
                100
                                                          -7:00 am-midnight
WPAD
WPAR
          ak
                100
                      (.25)
                               Paducah, Ky.
Parkersburg, W. V.
                 100
          ak
WPRP
                100
                      (.25)
                               Ponce, Puerto Rico
          z
1430 keys. (209.7)
                     Moron, Cuba
(5) B Los Angeles, Cal.
D North Platte, Neb.
BM(2.5) Des Moines, Iowa
C (1) X Columbus, Ohio
C (1) Rochester, N. Y.
C (1) Harrisburg, Pa.
(1) B Memphin
CMJP
          ak
KECA
KGNF
KSO
          ak
               1000
                                                           -10:00 am-3:00 am
                                                         -8:00 am -6:15 pm
               1000
          ak
          ak
                500
WBNS
          ak
                500
                                                         -7:00 am-midnight
WHEC
          ak
                500
                               Harrisburg, Pa.
Memphis, Tenn.
Albany, N. Y.
                                                         -6:30 am-midnight
WHP
          ak
                500
WMPS
          ak
                500
                      Č (1)
                                                         -8:00 am-1:00 am
WOKO
                500
1440 kcys. (208.2)
                               Havana, Cuba
Casper, Wyo,
Centralia-Chehalis, Wn.
Houston, Texas 3
CMOA
KDFN
                150
          Z
                500
          ak
KELA
KXYZ
                      MP
                500
          Z.
                                                                   1-12
                                                           100
                      В
         ak
               1000
WBIG
                               Greensboro, N. C.
Allentown, Pa.
                                                          -6:30 am--11:30 pm
               1000
                      \mathbf{C}
          ak
                                                           7:30 am-11:30 pm
WCBA
         aj
ak
                500
                                                           7:00 am-midnight
                      C(5)
                               Peoria, Ill.
WMBD
               1000
                                                           1:00 pm-11:30 pm
WSAN
                500
                               Allentown, Pa
XEFI
                              Chihuahua, Chih.
                250
1450 keys. (206.8)
                                                           10:45 am—12:15 am
CFCT
                               Victoria, B. C.
          яk
                               Summerside, P.E.I.
Cienfuegos, Cuba
Wolf Point, Mont.
                                                         -6:30 am-10:00 pm
                 50
CHGS
          ak
СМНМ
                100
          z
KGCX
KIEM
               1000
          ak
                               Eureka, Calif.
                                                          -10:00 am--1:00 am
                      M(1)
                500
          яk
                                                          -7:30 am i-1:00 am
KTBS
WAGA
               1000
                               Shreveport, La.
          ak
                      B (1)
C (1)
                               Atlanta, Ga.
                500
          ak
                               Cleveland, Ohio
                                                           7:00 am—midnight
WGAR
                500
          ak
                               Jersey City, N. J.
Fall River, Mass.
Juarez, Chih.
                                                         -7:00 am-midnight
WHOM
          ak
                250
WSAR
          ak
               1000
                      M
XEF
                100
1460 kcys.
                      (205.4)
                              Holguin, Cuba
St. Paul, Minn.
CMKF
                                                         —7:00 am—2:00 am
KSTP
WJSV
          ak 10000
                      R (25)
                               Washington, D. C.
          ak 10000
1470 keys. (204.0)
                               Spokane, Wash.
          ak
               5000
                      BM
WLAC
                               Nashville, Tenn.
               5000
                      C
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	NOR	I AIV	IERICAN B. C	. STATIONS BT FRE	QUENCIE
1480	kcys.	(202	.6)		
KOMA WHIP WKBW	ak 5000 z 5000 ak 5000	C DP C	Oklahoma City, C Hammond, Ind. Buffalo, N. Y.	0k. —7:30 am—1:00 am —7:30 am—5:30 pm —8:00 am—1:00 am	
1490	kcys.	(201	.2)		
KFBK WCKY	ak 5000 ak 10000	N X N	Sacramento, Cali Covington, Ky.	f. 7:00 am—midnight	
1500	kcys.	(199	.9)		
CJIC KAWM	ak 100 z 100	11.13.2	S. S. Marie, Ont Gallup, N. Mex.	. —10:00 am—10:00 pm	
KBIX	ak 100	M	Muskogee, Okla. Big Spring, Texas Duluth, Minn.	8:00 am11:00 pm	
KBST KDAL	z 100 ak 100	C M(25)	Duluth, Minn.	o I	
KDB KGFI	ak 100 ak 100	(.25) (.25) (.25)	Santa Barbara, C. Brownsville, Tex.	ai,	
KGKB KGKY KNEL	ak 100 ak 100	(.23)	Tyler, Texas Scottsbluff, Neb.	-8:30 am-11:00 pm	
KNOW	ak 250 ak 100	D C	Brady, Texas Austin, Texas	-8:00 am-6:00 pm	
KOTN KOVC	ak 100 ak 100	D	Pine Bluff, Ark. Valley City, N. D.	—8:00 am—ss —8:00 am—10:00 pm	
KPLC KPLT	ak 100 z 250	(.25) D	Valley City, N. D. Lake Charles, La. Paris, Texas	0	
KPO KRNR	ak 100N	A(.25) A(.25)		١,	
KROD KSAL	ak 100 ak 100	(.25) P (.25)	Roseburg, Ore, El Paso, Texas Salina, Kans.		
KUTA KVOE	z 100 ak 100	P M	Saft Lake City, C	-Noon to 2:00 am	
KXO WCNW	ak 100 ak 100		El Centro, Cam.	—11:00 am—midnight —9:00 am—midnight	
WDNC WGAL	ak 100 ak 100	1 (.25) C (.25)	Durham, N. C. Lancaster, Pa.	-7:30 am-12:30 am	
WHBB WHEF	ak 100 ak 100	ilux	Selma Ala	—7:30 am—ss —7:30 am—10:00 pm	
WJBK	ak 100	(.25) (.25) P	Kosciusko, Miss. Detroit, Mich. Miami Beach, Fl	—24 hours daily	
WKAT WKBB	z 100 ak 100	(.25) (.25)	E. Dubuque, III.		
WKBV WKBZ	ak 100 ak 100	(.25)	Richmond, Ind. Muskegon, Mich.	. —7:00 am—10:00 pm	
WKEU WMBQ WMEX	ak 100 ak 100	D 1	Griffin, Ga. Brooklyn, N. Y.		
WNBF	ak 100 ak 100	(.25) C(.25)	Boston, Mass. Binghamton, N. New London, Con	Υ.	
WOMI	ak 100 z 100	DM P	New London, Con Owensboro, Ky. Bristol, Tenn.		
WOPI WRDW	ak 100 ak 100	C(.25)	Augusta, Ga.	—7:00 am—10:30 pm —7:00 am—9:00 pm	
WRGA	ak 100 z 100	(.25) B	Rome, Ga. Richmond, Va.	—8:00 am—11:00 pm	
WSYB WTMV WWRL	ak 100 ak 100	(.25)	Rutland, Vt.	10:00 am9:00 pm	
WWRL WWSW	ak 100	1 (.25) (.25)	E. St. Louis, III. Woodside, N. Y. Pittsburgh, Pa.	-8:00 am-midnight	
1710	1	/100	()	_	
1510	•	(198	· —		
CFRC CKCR	ak 100 ak 100	F	Kingston, Ont. Waterloo, Ont.	—Noon—11:00 pm —8:00 am—11:00 pm	
1530	kcys.	(196	.0)		
KXBY WBRY	ak 1000 ak 1000	M.	Kansas City, Mo. Waterbury, Cont	-8:00 am -3:30 am -8:00 am -midnight	
1550	kcys.	(193	.4)		
KPMC WQXR	ak 1000 ak 1000	M	Bakersfield, Calif New York, N. Y.	. —10:00 am—2:00 am —10:00 am—9:15 pm	11gm
				70	-

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	Santa Barbara	FLORIDA
Birmingham	Bakersfield	KDB 1500 100M KTMS 1220 500 B	Clearwater
WAPI 1140 5000 R	KERN 1370 100 N	Santa Rosa	WFLA 620 1000 N
WBRC 930 1000 C	KPMC 1550 1000M	KSRO 1310 250	Daytona Beach
WSGN 1310 100 B Decatur	Berkeley KRE 1370 100	Stockton	WMFJ 1420 100
WMFO 1370 100	Beverly Hills	KGDM 1100 1000M	Gainesville
	KMPC 710 500	KWG 1200 100 N	WRUF 830 5000
Dothan	Chico	Visalia	Jacksonville
WAGF 1370 250	KHSL 1260 250	KTKC 1190 250	WJAX 900 1000 N
Gadsden WJBY 1210 100	El Centro KXO 1500 100	Watsonville	WMBR 1370 100 C
Huntsville	Eureka KIEM 1450 500M	KHUB 1310 250	Lakeland WLAK 1310 100
WBHP 1200 100	Fresno	COLORADO	Miami
Mobile	KARM 1310 100		WIOD 610 1000 N
WALA 1380 500 C	KMJ 580 1000 N	Alamosa KGIW 1420 100	WMBF 610 1000 WQAM 560 1000 C
Montgomery	Glendale	Colorado Springs	Miami Beach
WSFA 1410 500 C	KIEV 850 250	KVOR 1270 1000 C	WKAT 1500 100
Selma	Hollywood	Denver	Orlando
WHBB 1500 100	KFWB 950 1000	KFEL 920 500M	
Sheffield	Long Beach	KLZ 560 1000 C	WDBO 580 1000 G
WMSD 1420 100	KFOX 1250 1000	KOA 830 50000 R	Pensacola
Tuscaloosa	KGER 1360 1000 Los Angeles	KPOF 880 500 KVOD 920 500 B	WCOA 1340 500 C
	KECA 1430 1000 B	Durango	St. Augustine
	KEHE 780 1000	KIUP 1370 100	WFOY 1210 100
ALASKA	KFAC 1300 1000	Grand Junction	St. Petersburg
	KFI 640 50000 R	KFXJ 1200 100	WSUN 620 1000 N
Anchorage	KFSG 1120 500	Greeley	Tallahassee
KFQD 780 250	KFVD 1000 1000	KFKA 880 500M	WTAL 1310 100
Juneau	KGFJ 1200 100	La Junta	Tampa
KINY 1310 100	KHJ 900 1000M		WDAE 1220 1000 C
Ketchikan	KMTR 570 1000	KOKO 1370 100	West Palm Beach
KGBU 900 500	KNX 1050 50000 C	Lamar	WJNO 1200 100 C
ARIZONA	KRKD 1120 500 Merced	KIDW 1420 100 Pueblo KGHF 1320 500 B	GEORGIA
	KYOS 1040 250 Modesto	Sterling	Albany
Jero me	KTRB 740 250	KGEK 1200 100	WGPC 1420 100
KCRJ 1310 100	Monterey		Atlanta
Lowell	KDON 1210 100M	CONNECTICUT	WAGA 1450 500
KSUN 1200 100	Oakland		WATL 1370 100
Phoenix	KLS 1280 250	Bridgeport	WGST 890 1000 C
KOY 1390 1000 C	KLX 880 1000	WICC 600 500M	WSB 740 50000 R
KTAR 620 1000 N	KROW 930 1000	Hartford	Augusta
	Pasadena	WDRC 1330 1000 C	WRDW 1500 100 C
Tucson	KPPC 1210 100	WTIC 1040 50000 R	Columbus
KGAR 1370 100	Redding	WTHT 1200 100M	WRBL 1200 100
KVOA 1260 1000	KVCV 1200 100	New Britain	Griffin
Yuma	Sacramento	WNBC 1380 250	WKEU 1500 100
KUMA 1420 100	KFBK 1490 5000 N KROY 1210 100	New Haven	Macon WMAZ 1180 1000 C
ARKANSAS	San Bernardino	New London	Rome WRGA 1500 109
Blytheville	KFXM 1210 100M	WNLC 1500 100M	Savannah
KLCN 1290 100	San Diego	Waterbury	WTOC 1260 1000 C
El Dorado	KFSD 600 1000 B	WATR 1190 100	Thomasville
KELD 1370 100	KGB 1330 1000M	WBRY 1530 1000M	WPAX 1210 100
Fort Smith	San Francisco KFRC 610 1000M	DELAWARE	Waycross WAYX 1200 100
KFPW 1210 100 Hot Springs	KGGC 1420 100 KGO 790 7500 B	Wilmington	HAWAIL
KTHS 1060 10000 N	KJBS 1070 500	WDEL 1120 250 R	Hilo
Jonesboro	KPO 680 50000 R	WILM 1420 100	
KBTM 1200 100	KSFO 560 1000 C	DISTRICT OF	KHBC 1400 250M
Little Rock	KYA 1230 1000		Honolulu
KARK 890 500 N KGHI 1200 100	San Jose	COLUMBIA	KGMB 1320 1000 C KGU 750 2500 N
KLRA 1390 1000 C	KQW 1010 1000M	Washington	IDAHO
Pine Bluff	San Luis Obispo	WJSV 1460 10000 C	
KOTN 1500 100	KVEC 1200 250 Santa Ana	WMAL 630 250 B WOL 1310 100M	Boise
Siloam Springs KUOA 1260 5000	KVOE 1500 100M	WRC 950 500 R	KIDO 1350 1000 N

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Coeur d'Alene KGCI 1200 100	Fort Wayne WGL 1370 100 N	Kansas City KCKN 1310 100	MARYLAND
Idaho Falls	WOWO 1160 10000 B		Baltimore
K1D 1320 500	Gary	Lawrence KFKU 1220 1000	WBAL 760 2500 B
Lewiston	WIND 560 1000	WREN 1220 1000 B	WBAL 1060 10000 B
KRLC 1390 250	Hammond	Manhattan	WCAO 600 500 C
Nampa	WHIP 1480 5000	KSAC 580 500	WCBM 1370 100 WFBR 1270 500 R
KFXD 1200 100	WWAE 1200 100	Pittsburg	
Pocatello	Indianapolis	KOAM 790 1000 N	College Park W3XJ 1060 100
KSEI 900 250	WFBM 1230 1000 C	Salina	Cumberland
Twin Falls	WGVA 1050 1000 WIRE 1400 1000 R	KSAL 1500 100	WTBO 800 250
KTFI 1240 1000		Topeka	Frederick
	Muncie WLEC 1310 100	WIBW 580 1000 C	WFMD 900 500
ILLINOIS		Wichita	Hagerstown
Bloomington	New Albany WGRC 1370 250	KANS 1210 100 B	WJEJ 1210 50
WJBC 1200 100	Richmond	KFH 1300 1000 C	Salisbury
Carthage	WKBV 1500 100	TO STORY OF THE	WSAL 1200 250
WCAZ 1070 100	South Bend	KENTUCKY	
Champsign	WFAM 1200 100		MASSACHUSETTS
WDWS 1370 100	WSET 1360 500	Ashland	D
Chicago	Terre Haute	WCMI 1310 100	Boston WAAB 1410 500M
WAAF 920 1000	WBOW 1310 100 N	Covington	WBZ 990 50000 B
WBBM 770 50000 C	West Lafayette	WCKY 1490 10000 N	WCOP 1120 500
WCBD 1080 5000	WBAA 890 500	Lexington WLAP 1420 100	WEEI 590 1000 C
WCFL 970 5000 N WCRW 1210 100			WHDH 830 1000
WEDC 1210 100	IOWA	Louisville WAVE 940 1000 N	WMEX 1500 100 WNAC 1230 1000 R
WENR 870 50000 B		WHAS 820 50000 C	WORL 920 500
WGES 1360 500	Ames WOI 640 5000	Middlesboro	Fall River
WGN 720 50000M	Boone	WLMU 1210 100	WSAR 1450 1000M
WJJD 1130 20000 WLS 870 50000 B	KFGQ 1370 100	Owensboro	Greenfield
WMAO 670 50000 R	Cedar Rapids	WOMI 1500 100	1210 250
WMB1 1080 5000	WMT 600 1000 B	Paducah	Lawrence
WSBC 1210 100	Davenport *	WPAD 1420 100	WLAW 680 1000 1370 10-100
Cicero	WOC 1370 100 C		Lowell
WHFC 1420 100	Decorah	LOUISIANA	WLLH 1370 100M
Decatur	KGCA 1270 100		New Bedford
VJBL 1200 100	KWLC 1270 100	Alexandria	WNBH 1310 100M
East Dubuque	Des Moines	KALB 1210 100	Pittsfield WBRK 1310 100
WKBB 1500 100	KRNT 1320 1000 C	Baton Rouge	Springfield
East St. Louis	KSO 1430 500 B WHO 1090 50000 R	WJBO 1120 500 B	WBZA 990 1000 B
WTMV 1500 100		Lafayette	WMAS 1420 100 C
Harrisburg WEBO 1210 100	Dubuque KDTH 1340 500	KVOL 1310 100	WSPR 1140 500M Worcester
•	Iowa City	Lake Charles KPLC 1500 100	WORG 1280 500 C
Joliet WCLS 1310 100	WSUI 880 500		WTAG 580 1000 R
	Marshalltown	Monroe KMLB 1200 100	MICHAEL
Peoria WMBD 1440 1000 C	KFJB 1200 100	New Orleans	MICHIGAN
Quincy	Mason City	WBNO 1200 100	Battle Creek
WTAD 900 1000	KGLO 1210 100 C	WDSU 1250 1000 B	WELL 1420 100
Rockford	Shenandoah	WJBW 1200 100	Bay City
WROK 1410 500	KFNF 890 500	WSMB 1320 1000 R	WBCM 1410 500
Rock Island	KMA 930 1000	WWL 850 10000 C	Calumet
VHBF 1210 100	Sioux City KSCJ 1330 1000 C	Shreveport KRMD 1310 100	WHDF 1370 100
Springfield VCBS 1420 100	KTR1 1420 1000 C	KTBS 1450 1000 N	Detroit
WCBS 1420 100 WTAX 1210 100	1420 100	KWKH 1100 10000 C	WJBK 1500 100 WJR 750 50000 C
Tuscola	KANSAS		WJR 750 50000 C WMBC 1420 100
WDZ 1020 250		MAINE	WWJ 920 5000 R
Urbana	Abilene		WXYZ 1240 1000 B
WILL 580 1000	KFB1 1050 5000	Augusta	East Lansing
INDJANA	Coffeyville KGGF 1010 1000M	WRDO 1370 100M	WKAR 850 1000
LINDIANA	Dodge City	Bangor 100	Flint WFDF 1310 100
Anderson	KGNO 1340 250	WABI 1200 100 WLBZ 620 500 C	Grand Rapids
WHBU 1210 100	Garden City		WASH 1270 500 N
Elkhart VTDC 1210 100	KIUL 1210 100	Portland WCSH 940 1000 R	WOOD 1270 500 N
WTRC 1310 100	Great Bend KVGB 1370 100	WCSH 940 1000 R WGAN 640 500	Ironwood
			WJMS 1420 100
Evansville WEOA 1370 100 C		Prosono Isla	Inckson
Evansville WEOA 1370 100 C WGBF 630 500 N	Hutchinson KWBG 1420 100	Presque Isle WAGM 1420 100	Jackson WIBM 1370 100

Kalamazoo	Kansas City	Atlantic City	WBOO 860 50000
WKZO 590 1000 B	KCMO 1370 100	WPG 1100 5000 C	WEAF 660 50000 R
Lansing	KMBC 950 1000 C	Bridgeton	WEVD 1300 1000
WJIM 1210 100	KXBY 1530 1000	WSNJ 1210 100	WFAB 1300 1000
Lapeer	WDAF 610 1000 R WHB 860 1000M	Camden -	WHN 1010 1000 WINS 1180 1000
WMPC 1200 100	Poplar Bluff	WCAM 1280 500	WJZ 760 50000 B
Marquette	1310 100	Jersey City	WMCA 570 1000
WBEO 1310 100	St. Joseph	WAAT 940 500	WNEW 1250 1000
Muskegon	I KFEO 680 2500	WHOM 1450 250	WNYC 810 1000
WKBZ 1500 100	St. Louis KFUO 550 500	Newark	WOV 1130 1000 WOXR 1550 1000
Royal Oak	KMOX 1090 50000 C	WHBI 1250 1000	1 1
WEXL 1310 50	KSD 550 1000 R	WOR 710 50000M	Olean WHDL 1400 250
Saginaw	KWK 1350 1000 B	Red Bank	
WHÂL 950 500	WEW 760 1000	WBRB 1210 100	Plattsburg WMFF 1310 100
	WIL 1200 100	Trenton WTNJ 1280 500	
MINNESOTA	Springfield KGBX 1230 500 N	WTNJ 1280 500 Whippany	Rochester WHAM 1150 50000 B
411 T	KWTO 560 5000	W3XDD 50000	WHEC 1430 500 C
Albert Lea KATE 1420 250	K 17 0 000 0000	Zarephath	WSAY 1210 100
	MONTANA	WAWZ 1350 500	Saranac Lake
Duluth KDAL 1500 100 C			WNBZ 1290 100
WEBC 1290 1000 N	Billings KGHL 780 1000 N	NEW MEXICO	Schenectady
Fergus Falls	KGHL 780 1000 N Butte	Alturananana	WGY 790 50000 R
KGDE 1200 100	KGIR 1340 1000 N	Albuquerque KGGM 1230 1000	Syracuse
Hibbing	Great Falls	KOB 1180 10000 N	WFBL 1360 1000 C
WMFG 1210 100	KFBB 1280 1000 C	Carlsbad	WSYR 570 1000 B
Minneapolis WCCO 810 50000 C	Helena	KLAH 1210 100	Troy WHAZ 1300 1000
WDGY 1180 1000 C	KPFA 1210 100	Clovis	WHAŽ 1300 1000
WLB 1250 1000	Kalispell	KICA 1370 100	Utica
WTCN 1250 1000 B	KGEZ 1310 100 Lewistown	Gallup	WIBX 1200 100 C
Moorhead KVOX 1310 100	KDNC 1200 100	KAWM 1500 100	Watertown
KVOX 1310 100 Northfield	Missoula	Roswell	WNNY 1420 100
WCAL 1250 1000	KGVO 1260 1000 C	KGFL 1370 100	White Plains
Rochester	Wolf Point	Santa Fe KROA 1310 100	WFAS 1210 100
KROC 1310 100	KGCX 1450 1000	KRQA 1310 100	Woodside
St. Cloud	NEBRASKA	NEW YORK	WWRL 1500 100
KFAM 1420 100 St. Paul	NEDRAGRA	NEW YORK	NORTH CAROLINA
KSTP 1460 10000 R	Clay Center	Albany	NORTH CAROLINA
WMIN 1370 100	KMMJ 740 1000	WABY 1370 100	Asheville
Virginia	Kearney KGFW 1310 100	WOKO 1430 500 C	WWNC 570 1000 N
WHLB 1370 100	Lincoln	Auburn	Charlotte WBT 1080 50000 C
Winona KWNO 1200 250	KFAB 770 10000 C	WMBO 1310 100 Binghamton	WBT 1080 50000 C WSOC 1210 100 N
KWINO 1200 230	KFOR 1210 100 C	WNBF 1500 100 C	Durham
MISSISSIPPI	Norfolk	Brooklyn	WDNC 1500 100 C
	WJAG 1060 1000	WARD 1400 500	Greensboro
Grenada	North Platte KGNF 1430 1000	WBBC 1400 500	WBIG 1440 1000 C
WGRM 1210 100	Omaha	WBBR 1300 1000 WCNW 1500 100	High Point WMFR 1200 100
Gulfport WGCM 1210 100	KOIL 1260 1000 B	WLTH 1400 500	Kinston
Hattiesburg	WAAW 660 500_	WMBO 1500 100	WFTC 1200 100
WFOR 1370 100	WOW 590 1000 R	WVFW 1400 500	Raleigh
Jackson	Scottsbluff KGKY 1500 100	Buffalo	WPTF 680 1000 N
WJDX 1270 1000 R	KGK 1 1500 100	WBEN 900 1000 R WBNY 1370 100	Rocky Mount WEED 1420 100
Kosciusko WHEF 1500 100	NEVADA	WBNY 1370 100 WEBR 1310 100 B	Wilmington
Laurel		WGR 550 1000 C	WMFD 1370 100
WAML 1310 100	Reno	WKBW 1480 5000 C	Wilson
Meridian	KOH 1380 500 C	WSVS 1370 50	WGTM 1310 100
WCOC 880 500 C	NEW HAMPSHIRE	Canton	Winston-Salem WAIR 1250 250
Vicksburg WOBC 1360 1000	TEW HAMISHIKE	WCAD 1220 500 Elmira	WAIR 1250 250 WSJS 1310 100 C
WQBC 1360 1000	Laconia	WESG 850 1000 C	1000
MISSOURI	WLNH 1310 100M	Freeport	NORTH DAKOTA
	Manchester	WGBB 1210 100	
Cape Girardeau	WFEA 1340 500 N Portsmouth	Jamestown	Bismarck
KFV\$ 1210 100	WHEB 740 250	WJTN 1210 100 B	KFYR 550 1000 N Devils Lake
Columbia KFRU 630 500		Newburgh WGNY 1210 100	KDLR 1210 100
Jefferson City	NEW JERSEY	New York	Fargo
KWOS 1310 100	- United to	WABC 860 50000 C	W1)AY 940 1000 N
Joplin	Asbury Park	WBIL 1100 5000	Grand Forks
WMBH 1420 100	WCAP 1280 500	WBNX 1350 1000	KFJM 1410 500

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Jamestown	Tulsa	Reading	Chattanooga
KRMC 1370 100	KTUL 1400 500 C	WEEU 830 1000	WAPO 1420 100
Mandan	KVOO 1140 25000 N	WRAW 1310 100	WDOD 1280 1000 C
KGCU 1240 250		Scranton	Jackson
Minot KLPM 1240 250	OREGON	WGBI 880 500 WQAN 880 500	WTJS 1310 100
Valley City	Astoria KAST 1370 100	Sunbury	Knoxville WNOX 1010 1000 C
KOVC 1500 100	Corvallis KOAC 550 1000	Uniontown	WROL 1310 100 N Memphis
ОНЮ	Eugene	WMBS 1420 250	WHBQ 1370 100
	KORE 1420 100M	Wilkes-Barre	WMC 780 1000 R
Akron	Klamath Falls	WBAX 1210 100	WMPS 1430 500 B
WADC 1320 1000 C	KFJI 1210 100	WBRE 1310 100	WREC 600 1000 C
WJW 1210 100	La Grande	Williamsport	Nashville
Ashtabula	KLBM 1420 100	WRAK 1370 100	WLAC 1470 5000 C
WICA 940 250	Marshfield	York	WSIX 1210 100
Canton	KOOS 1200 100	WORK 1320 1000 N	WSM 650 50000 N
WHBC 1200 100	Medford KMED 1410 250 N	PUERTO RICO	TEXAS
Cincinnati WCPO 1200 100 WKRC 550 1000 C	Portland KALE 1300 500 C	Mayaguez	Abilene
WLW 700 500000 N	KBPS 1420 100	WPRA 1370 100	KRBC 1420 100
	KEX 1180 5000 B	Ponce	Amarillo
W8XO 700 500000	KGW 620 1000 R KOIN 940 1000 C KWJJ 1040 500	WPRP 1420 100 San Juan	KGNC 1410 1000 N Austin
Cleveland WCLE 610 500M	KWJJ 1040 500 KXL 1420 100 Roseburg	WKAQ 1240 1000 WNEL 1290 1000	KNOW 1500 100 C KTBC 1120 1000
WGAR 1450 500 C WHK 1390 1000 B WTAM 1070 50000 R	KRNR 1500 100M Salem	RHODE ISLAND	Beaumont KFDM 560 500 N
Columbus WBNS 1430 500 C	KSLM 1370 100M	Providence WEAN 780 1000M	Big Spring
WCOL 1210 100 N WHKC 640 500	PENNSYLVANIA	WJAR 890 1000 R WPRO 630 500 C	Brady
WOSU 570 750	Allentown	SOUTH CAROLINA	KNEL 1500 250
Dayton	WCBA 1440 500		Brownsville
WHIO 1260 1000 C	WSAN 1440 500 N	Anderson	KGFI 1500 100
WSMK 1380 200 C	Altoona		College Station
Lima	WFBG 1310 100	WAIM 1200 100 C	WTAW 1120 500
WBLY 1210 100	Easton	Charleston	Corpus Christi
Portsmouth	WEST 1200 100 Erie	WCSC 1360 500 N Columbia WIS 560 1000 N	KRIS 1330 500 N Corsicana
Toledo	WLEU 1420 100 B'	Florence	KAND 1310 100
	Glenside	WOLS 1200 100	Dallas
WSPD 1340 1000 B	WIBG 970 100	Greenville	KRLD 1040 10000 C
WTOL 1200 100		WFBC 1300 1000 N	WFAA 800 50000 N
Youngstown	Greensburg	Spartanburg	WRR 1280 500M
WKBN 570 500 C	WHJB 620 250 C	WSPA 920 1000	Dublin
Zanesville	Grove City	SOUTH DAKOTA	KFPL 1310 100
WALR 1210 100	WSAJ 1310 100		El Paso
OKLAHOMA	Harrisburg	Aberdeen	KROD 1500 100
	WHP 1430 500 C	KABR 1420 100	KTSM 1310 100
Ada KADA 1200 100M	WKBO 1200 100 Hazleton	KABR 1420 100 Brookings KFDY 780 1000	WDAH 1310 100 Fort Worth
Ardmore	WAZL 1420 100	Huron	KFJZ 1370 100
KVSO 1210 100M	Johnstown	KGDY 1340 250	KTAT 1240 1000 M
Elk City	WJAC 1310 100	Pierre	WBAP 800 50000 N
KASA 1210 100M	Lancaster	KGFX 630 200	Galveston
Enid	WGAL 1500 100	Rapid City	KLUF 1370 100
KCRC 1360 250M	Philadelphia	KOBH 1370 100	Greenville
Muskogee KBIX 1500 100M Norman	KYW 1020 10000 R WCAU 1170 50000 C	WCAT 1200 100 Sioux Falls	KGVL 1200 100 Houston
WNAD 1010 1000	WDAS 1370 100	KELO 1200 100 N	KPRC 920 1000 R
Oklahoma City	WFIL 560 1000 B	KSOO 1110 2500 N	KTRH 1290 1000 C
KFXR 1310 100 KOMA 1480 5000 C	WHAT 1310 100 WIP 610 1000	Vermillion KUSD 890 500 Watertown	KXYZ 1440 1000 B Kilgore KOCA 1210 100
KTOK 1370 100M WKY 900 1000 N	WPEN 920 1000 WTEL 1310 100	KWTN 1210 100 Yankton	KOCA 1210 100 Longview KFRO 1370 250
Okmulgee	Pittsburgh	WNAX 570 1000 C	Lubbock
KHBG 1210 100	KDKA 980 50000 B		KFYO 1310 100
Ponca City	KOV 1380 500 C	TENNESSEE	Lufkin
WBBZ 1200 100M	WCAE 1220 1000 R		KRBA 1310 100
Shawnee	WJAS 1290 1000 C	Bristol	Midland
KGFF 1420 100M	WWSW 1500 100	WOPI 1500 100	KRLH 1420 100

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

NORTH	AMERICAN B. C. S	TATIONS BT LOC	
Palestine KNET 1420 100	WRTD 1500 100 B WRVA 1110 5000 C	LaCrosse WKBH 1380 1000 C Madison	Winnipeg CJRC 630 500 I CKY 760 15000 I
Pampa KPDN 1310 100	Roanoke WDBJ 930 1000 C	WHA 940 5000 WJBA 1280 1000 N	NEW BRUNSWICK
Paris KPLT 1500 250	WASHINGTON	Manitowoc WOMT 1210 100	Fredericton
Pecos KIUN 1420 100	Aberdeen KXRO 1310 100M	Milwaukee WEMP 1310 100	CFNB 550 500 I Moncton
Port Arthur KPAC 1260 500	Bellingham	WISN 1120 250 C WTMJ 620 1000 N	CKCW 1370 100 I St. John
San Angelo KGKL 1370 100	Centralia-Chehalis	Poynette WIBU 1210 100	CHSJ 1120 500 E
San Antonio KABC 1420 100	KELA 1440 500M Everett	Racine WRJN 1370 100	N. W. TERRITORY
KMAC 1370 100 KONO 1370 100	KRKO 1370 50 Longview	Sheboygan	Aklavik CJCU 1210 50
KTSA 550 1000 C WOAI 1190 50000 N	KWLK 780 250	Stevens Point	NOVA SCOTIA
Sherman KRRV 1310 250	Olympia KGY 1210 100M	WLBL 900 5000 Superior	
Temple KTEM 1370 250	Pullman KWSC 1220 1000	WDSM 1200 100 Wausau	Glace Bay VAS 685 2000
Texarkana KCMC 1420 100	Seattle	WSAU 1370 100	Halifax CHNS 930 1000 I
Tyler	KIRO 710 1000 C	WYOMING	Sydney CJCB 1240 1000 I
KGKB 1500 100 Waco	KJR 970 5000 B KOL 1270 1000M	Casper KDFN 1440 500	Wolfville CKIC 1010 50
WACO 1420 100 C Weslaco	KOMO 920 1000 R KRSC 1120 250	Rock Springs KVRS 1370 100	Yarmouth CJLS 1310 100
KRGV 1260 1000 N Wichita Falls	KTW 1220 1000 KXA 760 250	Sheridan	ONTARIO
KGKO 570 250 C	Spokane KFIO 1120 100		
UTAH	KFPY 890 1000 C	CANADA	Brantford CKPC 930 100 l
Cedar City KSUB 1310 100	KGA 1470 5000 B KHQ 590 1000 R	ALBERTA	Chatham CFCO 630 100 l
Ogden KLO 1400 500 B	Tacoma KMO 1330 1000M	Calgary CFAC 930 1000 F	Cobalt CKMC 1210 50
Price	KVI 570 1000 C	CFCN 1030 10000	Fort William CKPR 730 100 l
Salt Lake City	Walla Walla KUJ 1370 100	Edmonton	Hamilton CHML 1010 100 l
KDYL 1290 1000 R KSL 1130 50000 C	Wenatchee KPO 1500 100M	CFRN 960 100 F CJCA 730 1000 F	CKOC 1120 500 Kingston
KUTA 1500 100	Yakima KIT 1310 100M	CKUA 580 500 Grande Prairie	CFRC 1510 100
VERMONT	WEST VIRGINIA	CFGP 1200 100 Lethbridge	London CFPL 730 100
Burlington WCAX 1200 100		CJOC 950 100 F	North Bay CFCH 930 100
Rutland WSYB 1500 100	Bluefield WHIS 1410 500	BRIT. COLUMBIA	CJKL 1310 100 CKGB 1420 100
St. Albans WODM 1390 1000	Charleston WCHS 580 500 C	Chilliwack CHWK 780 100 F	Ottawa CBO 880 1000
Springfield	Clarksburg	Kamloops	CKCO 1010 100 Owen Sound
Waterbury	WBLK 1370 100 Fairmont	Kelowna	1370 100 Prescott
	WMMN 890 500 C Huntington	CKOV 630 100 F Prince Rupert	CFLC 930 100 St, Catharines
VIRGINIA	WSAZ 1190 1000	CFPR 580 50 Trail	CKTB 1200 100 Sault Ste. Marie
Charlottesville WCHV 1420 100	Parkersburg WPAR 1420 100 C	CJAT 910 1000 F Vancouver	CJIC 1500 100 Stratford
Danville WBTM 1370 100	Wheeling WWVA 1160 5000 C	CBR 1100 5000 F CJOR 600 500	CJCS 1210 50 Sudbury
Harrisonburg WSVA 550 500	WISCONSIN	CKCD 1010 100 CKFC 1410 50	CKSO 780 1000
Lynchburg		CKMO 1410 100 CKWX 1010 100 F	Toronto CBL 840 50000
WLVA 1200 100 Newport News	Eau Claire WEAU 1050 1000	Victoria CFCT 1450 50	CFRB 690 10000 CKCL 580 100
WGH 1310 100	Fond du Lac KFIZ 1420 100	MANITOBA	CRCT 840 5000 CRCY 960 100
Norfolk WTAR 780 1000 N	Green Bay		Waterloo CKCR 1510 100
Richmond WBBL 1210 100	WHBY 1200 100 WTAQ 1330 1000 C	Brandon CKX 1120 1000 F	Windsor
	Janesville	Flin Flon	CBW 600 500

NORTH	AMERICAN B. C.	STATIONS BY LO	CATIONS
Wingham	XELO 670 50000	Mana . a	
CKNX 1200 100	XELO 670 50000 XEMO 860 5000	MICHOACAN	Camaguey
	XEOK 760 2500	Morelia	CMJA 1010 300
PRINCE EDWARD		XEI 1370 125	CMJC 1390 150 CMJE 1220 50
ISLAND	CHIHUAHUA	1370 123	CMJE 1220 50 CMJF 1150 200
C1 1		NUEVO LEON	CMJK 780 250
Charlottetown	Chihuahua		CMJL 1340 75
CFCY 630 1000 F CHCK 1310 50	XEFI 1440 250	Monterrey	CMJX 830 500
CHCK 1310 50 Summerside	Juarez	XEFB 870 200	Cardenas
CHGS 1450 50 F	XEFV 1210 100	XEFJ 1230 100	CMGE 1370 150
	XEF 1450 100	XEG 1220 250 XEH 720 250	Ciego de Avila
QUEBEC	XEJ 1020 1000 XEP 1160 500	XEH 720 250 XET 690 5000	CMJH 1360 50
	Parral	XEX 1310 125	CMJI 1130 150
Chicoutimi	XEAT 1210 250	1010 120	CMJO 1180 50
CRCS 1120 100 F	1210 250	PUEBLA	Cienfuegos
Hull CKCH 1210 100 F	COAHUILA		CMHJ 1160 175
CKCH 1210 100 F Montreal		Puebla	CMHM 1450 100
CBF 910 50000 N	Piedras Negras	XETH 1210 100	CMHW 820 100
CBM 1050 5000 F	XEMU 580	CAN LIVE POTOGE	CMHX 760 200
CFCF 600 500 B	XEPN 730 100000	SAN LUIS POTOSI	Cruces
CHLP 1120 100 F	Sabinas VERV (40 250	San Luis Potosi	CMHK 1330 250
CKAC 730 5000 C	XEBX 640 250 Saltillo	XECZ 1370 100	Havana
New Carlisle	XEAS 1160 50	XEXH 1250 250	CMBC 630
CHNC 960 1000 F	XELA 1240 50	1-00	CMBD 1170 500
Quebec	Torreon	SINALOA	CMBG 1140 200
CHRC 580 100	XETB 1310 125		CMBL 710
CKCV 1310 100 F CRCK 950 1000 F	Villa Acuna	Mazatlan	CMBS 770 150
Rimouski	XERA 840 350000	XEBL 1220 50	CMBX 1070 500 CMBY 970 150
CJBR 1030 1000 F	D #1	SONORA	CMBY 970 150 CMBZ 1000 500
Sherbrooke	D. F.	SONORA	CMC 1260 150
CHLT 1210 100	Atzcapotzalco	Hermosillo	CMCA 1350 450
Three Rivers	XEMG 1060 100	XEBH 930 500	CMCB 640 150
CHLN 1420 100	Gra. Anaya	Nogales	CMCD 950 250
SASKATCHEWAN	XEDA 1220 200	XEAF 990 750	CMCF 810 600
SASKATGHEWAN	Mexico City	Obregon	CMCG 680 1000 CMCJ 1100 500
Moose Jaw	XEAL 660 1000	XEAP 1240 50	CMCJ 1100 500 CMCK 1030
CHAB 1200 100 F	XEAY 1240 100 XEB 1030 10000	TAMAULIPAS	CMCM 850
Prince Albert	XEBS 1240 200		CMCO 1200 250
CKBI 1210 100 F	XEBZ 1160 100	Matamoros	CMCQ 1410 250
Regina CJRM 540 1000	XECW 1310 10	XEAM 750 25 Nuevo Laredo	CMCU 1280 500
CKCK 1010 1000 F	XEDP 1080 500	XEBK 1000 60	CMCW 750 150
Saskatoon	XEFO 930 5000	XEDF 810 75	CMCX 1030 150 CMCY 570 5000
CFQC 840 1000 F	XEJP 1130 100 XEJW 870	XEFE 980 150	CMCY 570 5000 CMK 730 3000
Yorkton	XEK 990 100	XENT 910 150000	CMOA 1440 150
CJGX 1390 100 F	XEL 780 1000	Reynosa	CMOX 1320 200
	XELZ 1370 100	XEAW 960 50000	CMO 880 25000
NEWFOUNDLAND	XEMX 1280 100	Tampico XEFW 1310 250	GMW 600 1400
Co. Y. Louis	XENC 860 50	XES 990 250	CMX 920 1000
St. John's VOAC 1065 40	XEW 890 50000 XEXE 1270 17	770 250	Holguin CMFK 1460 250
VOAS 940 100	XEXE 1270 17 XEYO 940 500	VERACRUZ	CMKO 1280
VOCM 1006 200	Tacuba	Cordoba	Manzanillo
VOGY 840 400	XEFA 1180 500	XEAG 1310 10	CMKM 1120 200
VONF 1195 500		Jalapa	Matanzas
VOWR 681 500	DURANGO	XEXB 1270 50	CMGC 1400 150
MEVICO		XEXD 1340 350	CMGF 1120 250 CMGH 790 500
MEXICO	Durango	Minatitlan	Moron
AGUASCALIENTES	XEE 1210 50	XEDW 1150 20	CMJP 1430 75
Aguascalientes	CHANA INATES	Veracruz XETF 1220 30	Pinar del Rio
XEBI 1000 25	GUANAJUATO	XETF 1220 30 XEU 1010 250	CMAB 1340
XEXC 810 350	Irapuato	1010 2.50	Sagua la Grande
	XEBO 1310 25	YUCATAN 1	CMHA 1070 50
BAJA CALIFORNIA	Leon		Sancti Spiritus CMHB 1240 50
35. 1 . 1	XEKL 1240 500	Merida	CMHB 1240 50 Santa Clara
Mexicali		XEBJ 1160 20	CMHI 1210 150
XEAA 750 200 XEAO 660 250	JALISCO	XEFC 550 100 XEZ 630 500	Santiago
XECL 1100 1700	Guadalajara	XEZ 630 500	CMKC 1250 150
Tijuana	XEAD 1060 125	CUBA	CMKD 1050 250
XEAC 980 1000	XED 1160 2500	COBA	CMKG 1160
XEBG 820 1000	Guzman	Caibarien	CMKR 1400 100 CMKW 1350
XEC 1150 100	XEBA 1080 20	CMHD 1270 250	CM KX 1190

CBF 910 50000 Montreal, P. Q.	CJAT 910 1000 Trail, B. C.	CKSO 780 1000 Sudbury, Ont.
CBL 840 50000	CJBR 1030 1000	CKTB 1200 100 St. Catharines, Ont.
Toronto, Ont. CBM 1050 5000	Rimouski, P. Q. CJCA 730 1000	CKUA 580 500
CBM 1050 5000 Montreal, P. Q.	Edmonton, Alta.	Edmonton, Alta.
CBO 880 1000	CJCB 1240 1000	CKWX 1010 100 Vancouver, B. C.
Ottawa, Ont. CBR 1100 5000	Sydney, N. S. CJCJ 690 100	CKX 1120 1000
Vancouver, B. C.	Calgary, Alta.	Brandon, Man. CKY 760 15000
CBW 600 500 Windsor, Ont.	CJCS 1210 50 Stratford, Ont.	Winnipeg, Man.
CFAC 930 1000	CJCU 1210 50	CMAB 1340
Calgary, Alta.	Aklavik, N. W. T.	Pinar del Rio, Cuba CMBC 630
CFAR 1370 100 Flin Flon, Man.	CJGX 1390 100 Yorkton, Sask	Havana, Cuba
CFCF 600 500	CJIC 1500 100	CMBD 1170 500 Havana, Cuba
Montreal, Que.	S. Ste. Marie, Ont.	CMBG 1140 200
North Bay, Ont.	North Bay, Ont.	Havana, Cuba
CFCN 1030 10000	CJLS 1310 100	CMBL 710 Havana, Cuba
Calgary, Alta.	Yarmouth, N. S. CJOC 950 100	CMBS 770 150
Chatham, Ont.	Lethbridge, Alta.	Havana, Cuba CMBX 1070 500
CFCT 1450 50	CJOR 600 500 Vancouver, B. C.	Havana, Cuba
Victoria, B. C. CFCY 630 1000	CJRC 630 500	CMBY 970 150
Charlottetown, P.E.I.	Winnipeg, Man.	Havana, Cuba CMBZ 1000 500
CFGP 1200 100 Grande Prairie, Alta.	CJRM 540 1000 Regina, Sask.	Havana, Cuba
CFJC 880 100	CKAC 730 5000	CMC 1260 150 Havana, Cuba
Kamloops, B. C.	Montreal, Que.	CMCA 1350 450
Prescott, Ont.	Prince Albert, Sask	Havana, Cuba
CFNB 550 500	CKCD 1010 100	CMCB 640 150 Havana, Cuba
Fredericton, N. B. CFPL 730 100	Vancouver, B. C.	CMCD 950 250
London, Ont.	Hull, Que.	Havana, Cuba CMCF 810 600
CFPR 580 50 Prince Rupert, B. C.	CKCK 1010 1000 Regina, Sask.	CMCF 810 600 Hayana, Cuba
CFQC 840 1000	CKCL 580 100	CMCG 680 1000
Saskatoon, Sask.	Toronto, Ont.	Havana, Cuba CMCJ 1100 500
CFRB 690 10000 Toronto, Ont.	Ottawa, Ont.	Havana, Cuba
CFRC 1510 · 100	CKCR 1510 100	CMCK 1030 Havana, Cuba
Kingston, Ont.	Waterloo, Ont.	CMCM 850
CFRN 960 100 Edmonton, Alta.	Quebec, Que.	Havana, Cuba CMCO 1200 250
CHAB 1200 100	CKCW 1370 100 Moneton, N. B.	Havana, Cuba
Moose Jaw, Sask. CHCK 1310 50	CKFC 1410 50	CMCQ 1410 250
Charlottetown, P.E.I.	Vancouver, B. C.	Havana, Cuba CMCU 1280 500
CHGS 1450 50 Summerside, P.E.I.	North Bay, Ont.	Havana, Cuba
CHLN 1420 100	CKIC 1010 50	CMCW 750 150 Havana, Cuba
Three Rivers, P. Q. CHLP 1120 100	Wolfville, N. S. CKLW 1030 5000	CMCX 1030 150
Montreal, Que.	Windsor, Ont.	Havana, Cuba
CHLT 1210 100 Sherbrooke, P. Q.	CKMC 1210 50 Cobalt, Ont.	Havana, Cuba
CHML 1010 100	CKMO 1410 100	CMGC 1400 150
Hamilton, Ont.	Vancouver, B. C. CKNX 1200 100	Matanzas, Cuba
CHNC 960 1000 New Carlisle, Que.	Wingham, Ont.	Cardenas, Cuba
CHNS 930 1000	CKOC 1120 500	CMGF 1120 250 Matanzas, Cuba
Halifax, N. S. CHRC 580 100	Hamilton, Ont.	CMGH 790 500
Quebec, Que.	Kelowna, B. C.	Matanzas, Cuba CMHA 1070 50
CHSJ 1120 500	CKPC 930 100 Brantford, Ont.	Sagua la Grande, Cuba
St. John, N. B. CHWK 780 100	CKPR 730 100	CMHB 1240 50
Chilliwack, B. C.	Fort William, Ont.	Sancti Spiritus, Cuba

	CMHD 1270 250	Concrete and		
1	CMHD 1270 250 Caibarien, Cuba	CRCY 960 Toronto, Ont.	100	KELD 1370 100 El Dorado, Ark.
	CMHI 1210 150	KABC 1420	100	KELO 1200 100
1	Santa Clara, Cuba CMHJ 1160 175	San Antonio, Texas	100	Sioux Falls, S. Dak. KERN 1370 100
	Clenfuegos, Cuba	Aberdeen, S. Dak.		Bakersfield, Calif.
	CMHK 1330 250 Cruces, Cuba	KADA 1200 Ada, Okla	100	KEUB 1420 100
	CMHM 1450 100	KALB 1210	100	Price, Utah KEX 1180 5000
	Cienfuegos, Cuba CMHW 820 100	Alexandria, La.		Portland, Ore.
	Cienfuegos, Cuba	Portland, Ore.	500	KFAB 770 10000 Lincoln, Neb.
	CMHX 760 200	KAND 1310	100	KFAC 1300 1000
-	Cienfuegos, Cuba	Corsicana, Texas	100	Los Angeles, Calif. KFAM 1420 100
	Camaguey, Cuba	Wiehita, Kans	100	St. Cloud, Minn.
	CMJC 1390 150 Camaguey, Cuba	KARK 890	500	KFBB 1280 1000
-	CMJE 1220 50	Little Rock, Ark.	100	Great Falls, Mont. KFBI 1050 5000
	Camaguey, Cuba	Fresno, Calif.		Abilene, Kans.
	CMJF 1150 200 Camaguey, Cuba	Elk City, Okla.	100	KFBK 1490 5000 Sacramento, Calif.
	CMJH 1360 50	KAST 1370	100	KFDM 560 500
	Ciego de Avila, Cuba	Astoria, Ore.		Beaumont, Texas
	CMJI 1130 150 Ciego de Avila, Cuba	KATE 1420 Albert Lea, Minn.	250	KFDY 780 1000 Brookings, S. D.
	CMJK 780 250	KAWM 1500	100	KFEL 920 500
	Camaguey, Cuba CMJL 1340 75	Gallup, N. Mex. KBIX 1500	100	Denver, Colo. KFEQ 680 2500
	Camaguey, Cuba	Muskogee, Okla.	100	St. Joseph, Mo.
	CMJO 1180 50	KBPS 1420 Portland, Ore,	100	KFGQ 1370 100
_	Clego de Avila, Cuba CMJP 1430 75	KBST 1500	100	Boone, lowa KFH 1300 1000
	Camaguey, Cuba	Big Spring, Texas		Wichita, Kans.
	CMJX 830 500 Camaguey, Cuba	Jonesboro, Ark.	100	KFI 640 50000 Los Angeles, Calif.
	CMK 730 3000	KCKN 1310	100	KF10 1120 100
-	Havana, Cuba CMKC 1250 150	Kansas City, Kans.	100	Spokane, Wash. KFIZ 1420 100
	Santiago, Cuba	Texarkana, Texas	100	Fond du Lac, Wis.
	CMKD 1050 250 Santiago, Cuba	KCMO 1370 Kansas City, Mo.	100	KFJB 1200 100 Marshalltown, Iowa
	CMKF 1460 250	KCRC 1360	250	KFJI 1210 100
	Holguin, Cuba	Enid, Okla.		Klamath Falls, Ore.
	CMKG 1160 Santiago, Cuba	Jerome, Ariz.	100	KFJM 1410 500 Grand Forks, N. D.
	CMKM 1120 200	KDAL 1500	100	KFJZ 1370 100
	Manzanillo, Cuba CMKO 1280	Duluth, Minn.	100	Fort Worth, Texas KFKA 880 500
	Holguin, Cuba	Santa Barbara, Calif	. 4	Greeley, Colo.
	CMKR 1400 100 Santiago, Cuba	KDFN 1440 Casper, Wyo.	500	KFKU 1220 1000 Lawrence, Kans.
	CMKW 1350		1000	KFNF 890 500
	Santiago, Cuba CMKX 1190	Pittsburgh, Pa.	100	Shenandoah, Iowa
	Santiago, Cuba	Devils Lake, N. D.	100	KFOR 1210 100 Lincoln, Neb.
	CMOA 1440 150		100	KFOX 1250 1000
	Havana, Cuba CMOX 1320 200	Lewistown, Mont.	100	Long Beach, Calif. KFPL 1310 100
	Havana, Cuba CMQ 880 25000	Monterrey, Calif.		Dublin, Texas
	CMQ 880 25000 Havana, Cuba	KDTH 1340 Dubuque, Iowa	500	KFPW 1210 100 Fort Smith, Ark.
	CMW 680 1400	KDYL 1290 1	000	KFPY 890 1000
	Havana, Cuba CMX 920 1000	Salt Lake City, Utah KECA 1430 1	000	Spokane, Wash,
	Havana, Cuba	Los Angeles, Calif.	000	KFQD 780 250 Anchorage, Alaska
	CRCK 950 1000		100	KFRC 610 1000
	Quebec, Que. CRCS 1120 100	Seattle, Wash. KEHE 780 1	000	San Francisco, Calif. KFRO 1370 250
	Chicoutimi, Que.	Los Angeles, Calif.		Longview, Texas
	CRCT 840 5000 Toronto, Ont.		500 Vn.	KFRU 630 500
	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		· II.	Columbia, Mo.

	KFSD 600 1000	KGGM 1230 1000 Albuquerque, N. M.	KIT 1310 100 Yakima, Wash.
	San Diego, Calif. KFSG 1120 500	KGHF 1320 500	KIUL 1210 100
	Los Angeles, Calif.	Pueblo, Colo. KGHI 1200 100	Garden City, Kans.
	KFUO 550 500 St. Louis, Mo	KGHI 1200 100 Little Rock, Ark.	Pecos, Texas
	KFVD 1000 1000	KGHL 780 1000	KIUP 1370 100
	Los Angeles, Calif.	Billings, Mont. KGJR 1340 1000	Durango, Colo. KJBS 1070 500
	KFVS 1210 100 Cape Girardeau, Mo	Butte, Mont.	San Francisco, Calif.
	KFWB 95 1000	KGIW 1420 100	KJR 970 5000 Seattle, Wash.
	Hollywood, Calif. KFXD 1200 100	Alamosa, Colo. KGKB 1500 100	KLAH 1210 100
	Nampa, Idaho	Tyler, Texas	Carlsbad, N. Mex.
	KFXJ 1200 100	KGKL 1370 100	KLBM 1420 100 La Grande, Ore.
	Grand Junction, Colo. KFXM 1210 100	San Angelo, Texas KGKO 570 250	KLCN 1290 100
	San Bernardino, Calif.	Wichita Falls, Texas	Biytheville, Ark.
	KFXR 1310 100 Oklahoma City, Okla.	KGKY 1500 100 Scottsbiuff, Neb.	Ogden, Utah
	KFYO 1310 100	KGLO 1210 100	KLPM 1240 250
10.00	Lubbock, Texas	Mason City, Iowa KGMB 1320 1000	Minot, N. D. KLRA 1390 1000
	KFYR 550 1000 Bismarck, N. D.	Honolulu, T. H.	Little Rock, Ark.
	KGA 1470 5000	KGNC 1410 1000	KLS 1280 250 Oakland, Calif.
	Spokane, Wash. KGAR 1370 100	Amarillo, Texas	KLUF 1370 100
	Tucson, Ariz.	North Platte, Neb.	Galveston, Texas
	KGB 1330 1000	KGNO 1340 250 Dodge City, Kans.	KLX 880 1000 Oakland, Calif.
	San Diego, Calif. KGBU 900 500	KGO 790 7500	KLZ 560 1000
	Ketchikan, Alaska	San Francisco, Calif.	Denver, Colo. KMA 930 1000
	KGBX 1230 500 Springfield, Mo.	KGU 750 2500 Honolulu, T. H.	Shenandoah, Iowa
	KGCA 1270 100	KGVL 1200 100	KMAC 1370 190
	Decorah, Iowa KGCI 1200 100	Greenville, Texas	San Antonio, Texas KMBC 950 1000
	KGCI 1200 100 Coeur d'Alene, Idaho	Missoula, Mont.	Kansas City, Mo.
	KGCU 1240 250	KGW 620 1000	KMED 1410 250 Medford, Ore.
	Mandan, N. D. KGCX 1450 1000	Portland, Ore. KGY 1210 100	KMJ 580 1060
	Wolf Point, Mont.	Olympia, Wash.	Fresno, Calif.
	KGDE 1200 100 Fergus Falls, Minn.	KHBC 1400 250	Monroe, La. 100
	KGDM 1100 1000	KHBG 1210 100	KMMJ 740 1000
	Stockton, Calif.	Okmulgee, Okla. KHJ 900 1000	Clay Center, Neb. KMO 1330 1000
	KGDY 1340 250 Huron, S. D.	Los Angeles, Calif.	Tacoma, Wash.
	KGEK 1200 100	KHQ 590 1000	KMOX 1090 50000 St. Louis, Mo.
	Sterling, Colo. KGER 1360 1000	Spokane, Wash. KHSL 1260 250	KMPC 710 500
	Long Beach, Calif.	Chico, Calif.	Beverly Hills, Calif.
	KGEZ 1310 100 Kalispell, Mont.	KHUB 1310 250 Watsonville, Calif.	Los Angeles, Calif.
	KGFF 1420 100	KICA 1370 100	KNEL 1500 250
	Shawnee, Okla	Clovis, N. M.	Brady, Texas KNET 1420 100
	KGFI 1500 100 Brownsville, Tex.	KID 1320 500 Idaho Falls, Idaho	Palestine, Texas
-	KGFJ 1200 100	KIDO 1350 1000	KNOW 1500 100
	Los Angeles, Calif.	Boise, Idaho KIDW 1420 100	Austin, Texas KNX 1050 50000
	Roswell, N. M.	Lamar, Colo.	Los Angeles, Calif.
	KGFW 1310 100	KIEM 1450 500 Eureka, Calif.	KOA 830 50000 Denver, Colo.
	Kearney, Neb.	KIEV 850 250	KOAC 550 1000
	Pierre, S. D.	Glendale, Calif.	Corvailis, Ore.
	San Francisco, Calif.	KINY 1310 100 Juneau, Alaska	Pittsburg, Kans.
1	KGGF 1010 1000	KIRO 710 1000	KOB 1180 10000 Albuquerque, N. M.
	Coffeyville, Kans.	Seattle, Wash.	

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

NWOS 1310 100		KWOS 1310 100		WAIR 1250 250		WBOQ 860 50000
New Column Name N				Winston-Salem, N. C.		
Watertown, S Dak Wark 1210 100 Watertown, S Dak Wark 1310 Canesville, Ohio Red Bank, N. J. Wark 230 100 Red Bank, N. J. Red Bank, N. J. Wark 230 Red Bank, N. J. Red Bank, N			į			1.20.
Watertown, S. Dak. Zanaeville, Ohio Ward Soo Springfield, Mo. Springfield, Mo. Ward Mark 1310 100 Mark 1310 10			<u> </u>	WALR 1210 100	,	1.1.2.1.2
Name		Watertown, S. Dak	L		,	
New York 1370 100				Laurel, Miss.		Birmingham, Ala.
Next Name		KWYO 1370 100			0	111-11-
Seattle, Wash. Chattanooxa, Tenn. Pittsfield, Mass. WaSP 1530 1000 WARP 1400 500 Waterbury, Conn. WaSP 1500 Charlotte, N. C. WaSP 1500 Canton, Mass. WaSP 1500 Canton, N. Springfield, Mass		Sheridan, Wyo.	 	WAPO 1420 100		
KXBY 1530 WARD WASH 1270 South Waterbury, Conn. WXL 1420 100 WASH 1270 South WASH 1270		Seattle, Wash.				
WASH 1270 500 WASH 1270 500 WBT 1000 50000 Charlotte, N. C. WBTM 1370 100 WATL 1390 1000 WATL 1390 1000 WATL 1350 500 WATL 1350 500 WATL 1350 1000 WATL 1420 100 W		KABI 1000	1	11/1/10 2100	۰ ــــــــــــــــــــــــــــــــــــ	
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Houston, Texas KYA 1239 1000 San Francisco, Callf. KYA 1239 1000 San Francisco, Callf. KYOS 1040 2550 WAYX 1200 1000 Waycross, Ga. WAYX 1200 1000 Waycross, Ga. WAYX 1200 1000 Waycross, Ga. Waycross, Ga. WcAE 1220 1000 Waycross, Ga. WcAE 1220 1000 Waycross, Ga. WcAE 1220 1000 Waycross, Ga. WcAE 1230 1000 Waycross, Ga. WcAE 1250 1000 WcAE 1250 1000 Waycross, Ga. WcAE 1250 1000 Northfield, Minn. WcAE 1250 1000 Northfield, Minn. WcAE 1250 Wc	-			WAVE 940 100	0	
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Nervest		KYOS 1040 250		WATA 1200	10	
Philadelphia, Pa. WaAA 885 2000 WaAA 885 2000 West Lafayette, Ind. WaAA 280 500 West Lafayette, Ind. WaAA 280 500 West Lafayette, Ind. WaAA 280 500 Baltimore, Md. WaAA 1 060 10000 Baltimore, Md. WaAA 1 1060 10000 Baltimore, Md. WaAA 1 1060 10000 Baltimore, Md. WaAA 1 1000 WaAA 1 1000 WaAAA 1 1100 WaAAAA 1 1100 WaAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	-		-		00	WCAL 1250 1000
Glace Bay, N. S. West Lafayette, Ind. Camden, N. J.		Philadelphia, Pa.		Hazleton, Pa.	<u>,</u>	Northfield, Minn.
VOAC 1065		¥43	1		,,	Camden, N. J.
VOAS \$40 100 Baltimore, Md. VOAS \$40 100 Baltimore, Md. VOCM 1006 200 Fort Worth, Texas VOGY \$40 400 WBAP \$80 50000 Rapid City, S. Dak. VOGY \$40 400 Wilkes-Barre, Pa. WCAT 1200 100 Wilkes-Barre, Pa. VONF 1195 500 WBBC 1400 500 Brooklyn, N. Y. VOWR \$61 500 WBBL 1210 100 WCAZ 1070 Carthage, Ill. WCAB 1410 500 Brooklyn, N. Y. WBBR 1300 Chicago, Ill. WBBR 1300 Chicago, Ill. WBBR 1300 Chicago, Ill. WCBM 1370 Baltimore, Md. WCBM 1370 Baltimore, Md. WCBM 1370 Baltimore, Md. WCCB 1360 WCCB 1360	-	VOAC 1065 40		WBAL 760 250	00	WCAO 600 500
St. John's, Nitd. Baltimore, Md. Asbury Park, N. J.			-		00	WCAP 1280 500
St. John's, Nild. Fort Worth, Texas Rapid City, S. Dak.		St. John's, Nfld.		Baltimore, Md.		
VOGY 840 WBAX 1210 100 WCAZ 1170 50000 St. John's Nflid. VOWR 511 195 500 WBBC 1400 500 Brooklyn, N. Y. WBBL 1210 100 Burlington, Vt. WCAZ 1070 100 Carthage, Ill. WCAZ 100 Carthage, Ill. Carthage,		VOCM 1006 200	1			
VONF 1195 500 Brooklyn, N. Y. VOWR 681 500 Brooklyn, N. Y. WABC 1200 100 WEEN 900 1000 Marquette, Mich. WCCO 810 5000 Minneapolis, Minn. WCFL 970 5000 Chicago, Ill. WCCH 1420 100 WCCO 810 5000 Chicago, Ill. WCCH 1420 100 WCCH 1420 100 Chicago, Ill. WCH 1420 100 WCCH 1420 100 Chicago, Ill. WCH 1420 100 Chicago,	-			WBAX 1210 1	00	WCAU 1170 50000
St. John's, Nfld. Brooklyn, N. Y. WBBL 1210 100 St. John's, Nfld. WBBL 1210 100 Carthage, Ill. WCAZ 1070 100 Carthage, Ill. WCAZ 100 Chicago, Ill. WCCO 100 Carthage, Ill. WCCO 100					00	
VOWR 681 500 WBBL 1210 100 WCAS 1440 500 Allentown, Pa. WCBD 1080 5000 Chicago, Ill. WAAF 920 1000 Brooklyn, N. Y. WCBD 1370 100 Baltimore, Md. WCBD 1370 100 Baltimore, Md. WCBD 1370 100 Baltimore, Md. WCCB 1420 100 Springfield, Ill. WCCC 810 Springfield, Ill.				Brooklyn, N. Y.		Burlington, Vt.
WABB 1410 S00 WBBM 770 S0000 Allentown, Pa. WABF 920 1000 Brooklyn, N. Y. WBBZ 1200 100 Baltimore, Md. Springfield, III. WAAW S60 S60 WBEM 1310 100 Baltimore, Md. Springfield, III. WABB 1200 100 WBEM 1310 100 WCCO 810 S0000 Minneapolis, Minn. WABF 1370 100 Marquette, Mich. WBEM 1310 100 Marquette, Mich. WCCO 810 S0000 Minneapolis, Minn. WCCO 810 S0000 Marquette, Mich. WCCO 810 S0000 Minneapolis, Minn. WCCO 810 S0000 Marquette, Mich. WCCO 810 S0000 Minneapolis, Minn. WCCO 810 S0000 Marquette, Mich. WCCO 810 S0000 Marquette, Mich. WCCO 810 S0000 Minneapolis, Minn. WCCO 810 S0000 Marquette, Mich. WCCO 810 S0000 Minneapolis, Minn. WCCO 810 S0000 Marquette, Mich. WCCO 810 S0000 Minneapolis, Minn. WCCO 810 S0000 Marquette, Mich. WCCO 810 S0000 Chicago, III. WCCO 810 S0000 Chicago, III. WCCO 810 S0000 Marquette, Mich. WCCO 810 S0000 Chicago, III. WCCO 810 S0000 Marquette, Mich. WCCO 810 S0000 Chicago, III. WCCO 810 S0000 Marquette, Mich. WCCO 810 S0000 Chicago, III. WCCO		VOWR 681 500			00	
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Chicago, Ill. Brooklyn, N. Y. Chicago, Ill. WaAT 940 500 WBEZ 1200 100 Battimore, Md. WaBW 560 500 WBCM 1410 500 Battimore, Md. WCCO 810 50000 New York, N. Y. WABE 1200 100 WBEN 900 1000 WCCO 810 50000 Minneapolis, Minn. WCFL 970 5000 Minneapolis, Minn. WCFL 970 5000 Charleston, W. Va. WAGO 1420 100 WBHP 1200 100 WCHV 1420 100 Charleston, W. Va. WAGO 1320 1000 WBIG 1440 1000 Charleston, W. Va. WAGO 1320 1000 WBIG 1440 1000 Charleston, W. Va. WAGO 1320 1000 WBIG 1440 1000 Charleston, W. Va. WAGO 1320 1000 WBIK 1370 100 Clarksburg, W. Va. WSIK 1370 100 Cleveland, Ohio WAGF 1370 250 WBLY 1210 100 Janesville, Wis. WAGF 1370 100 Cleveland, Ohio Ashland, Ky. WSIN 1430 500 Ashland, Ky. WSIN 1430 500 Ashland, Ky. WSIN 1370 1000 WCNW 1500 100 WCNW 1500 100 WENN 150		Boston, Mass.				
WAAT 940 500	1		[Brooklyn, N. Y.		Chicago, Ill.
WAAW 650 S00 Bay City, Mich. WeCO 810 Springfield, Ill. WeCO 810 S0000 Minneapolis, Minn. WeCO 810 S000 Minneapolis, Minn. WeCL 970 S000 Chieago, Ill. WeNO Charleston, W. Va. WeNS 610 Covington, Ky. WeCKY 610 Covington, Ky. WeCKY 610 Covington, Ky. Welk 611 S00 Cleveland, Ohlo WeNS 1370 100 Minneapolis, Minn. WeCN 1200 100 Minneapolis, Minn. WeCN 1200 100 Charleston, W. Va. WeCN 1200 100 Covington, Ky. WeCN 1200 100 Minneapolis, Minn. WeCN 1310 100 Minneapolis, Min		WAAT 940 500		WBBZ 1200 1	.00	
Omaha, Neb. Wall Springfield, III. Spr	-	Jersey City, N. J.	-	WBCM 1410 5	00	WCBS 1420 100
WABC S60 S0000 WBEN S00 NOV Minneapolis, Minn. Morey York, N. Y. WABI 1200 100 Marquette, Mich. WCFL 970 5000 Chicago, Ill. WCHS 580 500 Charleston, W. Va. WAGO 1420 100 WGHV 1420 100 WCHV 1420 100 WCHV 1420 100 Charleston, W. Va. WCHV 1420 1000 Covington, Ky. WCHV 1420 1000 Covington, Ky. WCHV 1420 100 Cleveland, Ohlo WCHV 1420 100 UCHV		Omaha, Neb.	<u> </u>			
WABI 1200 100 WBEO 1310 100 WCFL 970 5000 Chicago, Ill. WCHS 580 500 Charleston, W. Va. WAGO 1420 100 WGEO 1440 1000 Charleston, W. Va. WCHV 1420 100 WCHV 1420 100 Charleston, W. Va. WCHV 1420 100 Covington, Ky. WCHV 1420 100 Covington, Ky. WCHV 1420 100 Cleveland, Ohlo WCHV 1420 100 UCHV						Minneapolis, Minn.
Wall		WABI 1200 100		WBEO 1310 1	.00	1
Albany, N. Y. Huntsville, Ala. Charleston, W. Va. Wak	-		-		100	WCHS 580 500
WACO 1420 100 WBIG 1440 1000 Charlottesville, Va. WADC 1320 1000 New York, N. Y. WCLF 610 5000 Colverland, Ohlo WAGF 1370 250 WBLV 1210 1000 WCLO 1200 1000 MAGM 1420 1000 Presque Isle, Me. WAIM 1200 1000 Anderson, S. C. WBIS 1430 500 WCMS 1310 1000 MCMS 1310		Albany, N. Y.		Huntsville, Ala.		
WADC 1320 1000		11700 2120		41 D4 C1	,,,,	Charlottesville, Va.
WAGA 1450 S00 WBLK 1370 100 Cleveland, Ohlo WAGF 1370 250 WBLY 1210 100 WCLO 1200 100 MAGF 1370 Lima, Ohlo ULima, Ohlo WCLO 1200 Janesville, Wis. WAGM 1420 100 WBNO 1200 100 WCLS 1310 100 WSNO 1200 MAGM 1420 MAGM 1430		WADC 1320 1000		WBIL 1100 50	000	
Atlanta, Ga. WAGF 1370 250 WBLY 1210 100 Janesville, Wis. WAGM 1420 100 WBNO 1200 100 Janesville, Wis. WAGM 1200 100 WBNO 1200 100 Joiet, Ill. WAIM 1200 100 WBNS 1430 500 WCMI 1310 100 Anderson, S. C. WBNX 1350 1000 WCNW 1500 100 New York, N. Y. WRNY 1370 100	-		<u> </u>	WBLK 1370	100	WCLE 610 500
WaGF 1370 250 WBLY 1210 100 Janesville, Wis.		Atlanta, Ga.		Clarksburg, W. Va.		
WAGM 1420 100 WBNO 1200 100 WCLS 1310 100 Presque Isle, Me. WAIM 1200 100 WBNS 1430 500 WCMI 1310 100 Anderson, S. C. Columbus, Ohio WBNX 1350 1000 Ashland, Ky. WBNX 1370 100 Brooklyn, N. Y. WBNY 1370 100		11 AGI 20.0			100	Janesville, Wis.
WAIM 1200 100 Anderson, S. C. WENS 1430 500 Columbus, Ohio WENX 1350 1000 New York, N. Y. WENY 1370 100 WENX 1370 100		WAGM 1420 100		WBNO 1200	100	
MAIM 1200	-		-		500	
New York, N. Y. WRNY 1370 100 Brooklyn, N. Y.			<u> </u>	Columbus, Ohio		Ashland, Ky.
WBNY 1370 100					000	
Buffalo, N. Y.	-	-		WRNY 1370	100	
				Buffalo, N. Y.		

	WCOA 1340 Pensacola, Fla.	500	WEEU 830 1000 Reading, Pa.	WGCM 1210 100 Gulfport, Miss.
	WCOC 880 Meridian, Miss.	500	WELI 900 500 New Haven, Conn.	WGES 1360 500 Chicago, Ili.
	WCOL 1210 Columbus, Ohio	100	WELL 1420 100 Battle Creek, Mich.	WGH 1310 100
	WCOP 1120 Boston, Mass.	500	WEMP 1310 100	Newport News, Va. WGL 1370 100
	WCPO 1200	100	Milwaukee, Wis. WENR 870 50000	Fort Wayne, Ind. WGN 720 50000
_	Cincinnati, Ohio WCRW 1210	100	Chicago, Ill. WEOA 1370 100	Chicago, Ill. WGNY 1210 100
	Chicago, Ill. WCSC 1360	500	Evansville, Ind. WESG 850 1000	Newburgh, N. Y. WGPC 1420 100
	Charleston, S. C. WCSH 940	1000	Elmira, N. Y. WEST 1200 100	Albany, Ga.
	Portland, Me.	1000	Easton, Pa.	Buffalo, N. Y.
	Tampa, Fla.		New York, N. Y.	WGRC 1370 250 New Albany, Ind.
	WDAF 610 Kansas City, Mo.	1000	WEW 760 1000 St. Louis, Mo.	WGRM 1210 100 Grenada, Miss.
	WDAH 1310 El Paso, Texas	100	WEXL 1310 50 Royal Oak, Mich.	WGST 890 1000 Atlanta, Ga.
	WDAS 1370 Philadelphia, Pa.	100	WFAA 800 50000 Dallas, Texas	WGTM 1310 100 Wilson, N. C.
	WDAY 940 Fargo, N. Dak	1000	WFAB 1300 1000 New York, N. Y.	WGVA 1050 1000
	WDBJ 930	1000	WFAM 1200 100	Indianapolis, Ind. WGY 790 50000
	Roanoke, Va. WDBO 530	1000	South Bend, Ind. WFAS 1210 100	Schenectady, N. Y. WHA 940 5000
	Oriando, Fla. WDEL 1120	250	White Plains, N. Y. WFBC 1300 1000	Madison, Wis. WHAL 950 500
	Wilmington, Del. WDEV 550	500	Greenville, S. C. WFBG 1310 100	Saginaw, Mich. WHAM 1150 50000
	Waterbury, Vt.		Altoona, Pa.	Rochester, N. Y.
	WDGY 1180 Minneapolis, Minn.	1000	Syracuse, N. Y.	WHAS 820 50000 Louisville, Ky,
	WDNC 1500 Durham, N. C.	100	WFBM 1230 1000 Indianapolis, Ind.	WHAT 1310 100 Philadelphia, Pa.
	WDOD 1280 Chattanooga, Tenn.	1000	WFBR 1270 500 Baltimore, Md.	WHAZ 1300 1000 Troy, N. Y.
	WDRC 1330 Hartford, Conn.	1000	WFDF 1310 100 Flint, Mich.	WHB 860 1000 Kansas City, Mo.
	WDSM 1200 Superior, Wis.	100	WFEA 1340 500 Manchester, N. H.	WHBB 1500 103 Selma, Ala.
	WDSU 1250	1000	WFIL 560 1000	WHBC 1200 100
	New Orleans, La. WDWS 1370	100	Philadelphia, Pa. WFLA 620 1000	Canton, Ohio WHBF 1210 100
	Champaign, Ill. WDZ 1020	250	Clearwater, Fla. WFMD 900 500	Rock Island, Ill. WHBi 1250 1000
	Tuscola, Ill. WEAF 660 5	0000	Frederick, Md. WFOR 1370 100	Newark, N. J. WHBL 1300 250
	New York, N. Y. WEAN 780	1000	Hattiesburg, Miss. WFOY 1210 100	Sheboygan, Wis.
	Providence, R. I.	1000	St. Augustine, Fla.	Memphis, Tenn.
	Eau Claire, Wis.		Kinston, N. C.	WHBU 1210 100 Anderson, Ind.
	Duluth, Minn.	1000	WGAL 1500 100 Lancaster, Pa.	WHBY 1200 100 Green Bay, Wis.
	WEBQ 1210 Harrisburg, Ill.	100	WGAN 640 500 Portland, Me.	WHDF 1370 100 Calumet, Mich.
	WEBR 1310 Buffalo, N. Y.	100	WGAR 1450 500 Cleveland, Ohio	WHDH 830 1000 Boston, Mass.
-	WEDC 1210	100	WGBB 1210 100	WHDL 1400 250
	Chicago, Ill. WEED 1420	100	Freeport, N. Y. WGBF 630 500	Olean, N. Y. WHEB 740 250
		1000	Evansville, Ind. WGBI 880 500	Portsmouth, N. H. WHEC 1430 500
	Boston, Mass.		Scranton, Pa.	Rochester, N. Y. WHEF 1500 100
				Kosciusko, Miss.

WHFC 1420						200 [WLAP 1420	100
WHIO 1200 Dayson, Ohio WHIP 1300 Support Dayson, Ohio WHIP 1300 Support Decatur, III. WHIS 1310 Support Support Decatur, III. WHIS 1310 Support Su		WHFC 1420	100		WJBC 1200 Bioomington, Ill.	100			100
Hammond 1.00		WHIO 1260	1000		WJBK 1500	100			1000
WHIFF		Dayton, Ohio				100			1000
WHIS		WHIP 1480 Hammond Ind.	5000			100			
WIRE S02 250 WIRW 1200 100 Support 100 Suppo		WHIS 1410	500		WJBO 1120	500			100
Oreensburg Pa. New Orleans, La. Stevens Point, Wis. WHK 1390 1000 Gadsden, Ala. WJBY 1210 1000 Bankor, Me. WHEZ 250 500 Bankor, Me. WHEZ 1370 1000 WJJY 1270 1000 Erie, Pa. WLEU 1420 100 WHEU 1420 100 WH			250			100			5000
WHK 1390 1000 WJEY 1210 100 WJEY 220 300 Cleveland, Ohio WHKC 640 500 WJOX 1270 1000 WLEU 1420 100 WLEU 1210 100 WLEU 1210 100 Middlesboro, Ky. WHM 1010 S00000 WJIM 1210 100 Middlesboro, Ky. WLMU 1210 100 Middlesboro, Ky. WLMU 1210 100 Middlesboro, Ky. WLMU 1310 Laconia, N. H. WLS \$70 \$50000 WJMM 1420 Laconia, N. H. WLS \$70 \$50000 WJMM 1200 Ultimote WLMU 1310 Laconia, N. H. WLS \$70 \$50000 WJMM 1200 Ultimote WJMM 1					New Orleans, La.				
WHKC		WHK 1390	1000			100			500
Columbus, Ohio WHLB 1370 100 WIEL 1210 100 WIEL 1210 100 WIEL 1210 100 Makeson, Miss. WIEL 1210 100 Middlesboro, Ry. WHM 1010 50000 Des Moines, Iowa WHM 120 UJIM 1210 100 Middlesboro, Ry. WHM 1310 110 Laconia, N. H. WIEL 1210 100 Middlesboro, Ry. WIEL 1210 100 Middlesboro, Ry. WIEL 1210 100 Middlesboro, Ry. WIEL 1230 100 WIEL 1230 100 Middlesboro, Ry. WIEL 1230 100 Middles			500			7000		WLEU 1420	100
WHLE 13/0 Hagerstown, Md. Lowell, Mass. Www.york, N. Y. WHO 1000 Lansing, Mich. Will 1210 100 Middlesbore, NY. WHO 1000 Lansing, Mich. Will 1210 100 Middlesbore, NY. WHO 1000 WJM 1210 100 Middlesbore, NY. WINH 1311 110 Laconia, N. H. WLS 870 50000 Chicago, Ill. WLS 870 50000 Might 1200 100 Writing 1280 Might 1200 Might		Columbus, Ohio	_						100
WHIN 1210			100			30			100
WHO 1000 50000			1000		WJIM 1210	100			100
Des Moines, Town Des Moines,			50000 L			20000			100
WHOM 1450			30000		Chicago, III.			Laconia, N. H.	
WHP 1430 S00 W JNO 1200 100 W LTH 1400 500 Malamison, Wis. W JR 750 50000 Lynchburg, Va. W JR 750 Lynchburg, Va. Lynchburg, Va. Lynchburg, Va. Lynchburg, Va. Lync		WHOM 1450	250			100			50000
Harrisburg, Pa. W. Palm Beach, Fla. W. Palm Beach, Fla. WIRA 1280 1000 Madison, Wis. WIRD 1200 250 Clineinnati, Ohio W. WIRD 1200 Clineinnati, Ohio Washington, D. C. Washington, D.	-		500	_		100		WLTH 1400	500
Madison, Wis. Detroit, Mich. Detroit, Mich. Wiscome Detroit, Mich. Detroit,									100
WIRG 370 100 Tusealoosa, Ala. Cincinnati, Ohio Wish 1370 100 Tusealoosa, Ala. Cincinnati, Ohio Wish 1370 100 Wishington, D. C. Wish 1370 100 Wishington, D. C. Wishingto			1000			50000			100
Glenside, Pa WiSO 1460 1000 Washington, D. C. Jaesson, Mich. WiSO 1460 1000 Washington, D. C. WiBU 1210 100 Jamestown, N. Y. WiBW 580 1000 Jamestown, N. Y. WiBW 580 1000 WiBW 1210 100 Jamestown, N. Y. WiBW 580 1000 WiJZ 760 50000 WiJZ 760 5000 WiJZ 760 50000 WiJZ 760 5000			100		WJRD 1200	250		WLW 700	500000
WIBM 1370 Washington, D. C. Washington, D. C.		Glenside, Pa.	(10000			250
WIBU 1210			100						
WibW S80 1000 WjW 1210 100 MAS 1420 100 Springfield, Mass. Topeka, Kans. WibX 1200 100 WjZ 760 5000 Macon, Ga. WiAZ 180 1000 Macon, Ga. WiAZ 180 1000 Macon, Ga. WibM 1420 100 Detroit, Mich. WibM 1200 San Juan, P. R. WibM 1420 100 Detroit, Mich. WibM 1200 Math 1500 East Lansing, Mich. WibM 1440 1000 East Dubuque, III. WibM 1420 100 WibM 1800 Urbana, III. WibM 1420 100 WibM 1800 Urbana, III. WibM 1420 100 WibM 1800 Urbana, III. WibM 1420 100 Urbana, III. WibM 1800 Urbana, III.		WIBU 1210	100			100			50000
Topoka, Kans. Akron, Ohio Wilz 750 5000 Wilz 1200 Ulita, N. Y. Wilca 940 250 Wildam, Stabubula, Ohio Wildam, Fia. Wildam, Fia. Wilmington, Del. Wilmington, Del. Wils 1180 1000 Wils 1180 1000 Wildam, Fia. Wildam, Fia. Wils 1180 1000 East Dubuque, Ill. Wilmington, Del. Uniontown, Pa. Wils 1200 Wils			1000			100	-		100
WIEX 1200 100			1000					Springfield, Mass.	
WICA 940 250 San Juan, P. R. Detroit, Mich. WiCC 600 500 East Lansing, Mich. Peoria, Ill. Will. 1200 100 WKAT 1500 100 Miami, Fla. Will. 1200 WKBB 1500 100 Will. 1200 Will. 1200 WKBB 1500 100 Will. 1200 Will. 1200 WKBB 1500 100 Will. 1200 Will		WIBX 1200	100			50000			1000
Ashtabula, Ohio WiCC 600 500 WKAR 850 1000 Bridgeport, Conn. WKAR 1500 100 Miami, Fia. Will 580 1000 East Lansing, Mich. Will 580 1000 WkBB 1500 East Dubuque, Ill. Will 1200 100 WkBB 1500 Richmond, Va. WkBH 1330 1000 Willington, Del.	-		250		WKAQ 1240	1000		WMBC 1420	100
Bridgeport, Conn. WKAT 1500		Ashtabula, Ohio				1000	-		1000
WIL 1200			500						
WILL S80 1000 East Dubuque, III. WILM 1420 100 WKBH 1380 1000 Urbana, III. WKBH 1380 1000 WKBH 1380 1000 Joplin, Mo. WMBH 1420 100 Joplin, Mo. WMBH 1420 100 Joplin, Mo. WMBH 1380 5000 Gary, Ind. WKBN 570 500 Chieago, III. WMBO 1310 100 Minni, Fla. WKBV 1500 100 Minni, Fla. Wiffer 1400 Minni, Fla. WKBV 1500 100 Minni, Fla. Wiffer 1400 Minni, Fla. Wiffer 1500 100 Minni, Fla. Wiffer 1310 100 Minni, F			100						1000
Company Comp	-		1000						500
Wilmington, Del. LaCrosse, Wis. Joplin, Mo. Wilmington, Del. Wilmington, Noto Chicago, Ill. Wilmington, Noto Wilmington, Noto Wilmington, Noto Wilmington, Noto Milmin, Pla. Wilpo 610 1000 Wilmington, Noto Wilmingt			1000		East Dubuque, III				
Wind S60 1000 WkBN S70 S00 Chicago, Ill. Wind S60 S60 Chicago, Ill. Wind S60 S60 Chicago, Ill. Wind S60 S60 WkB0 S60			100			1000			100
Gary, Ind. Youngstown, Ohio WKBO 1200 100 WMBO 1310 100 New York, N. Y. WIOD 610 1000 WKBV 1500 100 Brooklyn, N. Y. WIOD 610 1000 WKBW 1480 5000 Brooklyn, N. Y. WIOD 610 1000 WKBW 1480 5000 Brooklyn, N. Y. WIOD 610 1000 WKBW 1480 5000 Brooklyn, N. Y. WKBZ 1500 100 WKBZ 1500 100 MWKBZ 1500 100 MwkDZ 1500 100 Memphis, Tenn. WMCA 570 1000 New York, N. Y. WIAC 1310 100 WKRC 550 1000 Norfolk, Neb. WKZ 550 1000 MwkY 980 1000 Norfolk, Neb. WiAC 1370 WKZ 550 1000 MwkY 980 1000 Norfolk, Neb. WiAC 1470 5000 Mwilmington, N. C. WiAC 1210 100 Milmington, N. C. WiAC 1210 100 Milmington, N. C. WiAC 1210 100 Milmington, N. Y. WiAS 1290 1000 Milmington, N. Y. WiAC 1470 5000 Milmington, N. Y. WiAC 1210 100 Milmington, Milmington			1000			500		WMBI 1080	5000
New York, N. Y. Harrisburg, Pa. Auburn, N. Y.		Gary, Ind.			Youngstown, Ohio				160
WIOD 510 1000		Now York N V	1000			100			100
WiP 610 1000 WKBW 1480 5000 Buffalo, N. Y. Jacksonville, Fla. WMBZ 1500 100 WMBZ 1500 100 WMBS 1420 250 Uniontown, Pa. WMC 780 1000 Miskegon, Mich. WMC 570 1000 Miskegon, Mich. WMC 570 1000 Miskegon, Miskegon, Mich. WMC 570 1000 Miskegon, Mich. WMC 550 1000 Miskegon, Mich. WMC 550 1000 Miskegon, Mich. WMC 550 1000 Miskegon, Mich. WMSC 550 1000 Miskegon, Mich. WKY 900 1000 Miskegon, Mich. Wilhington, N. C. WMFD 1370 1000 Miskegon, Mich. Wilhington, N. C. WMFF 1310 1000 Miskegon, Mich. Wilhington, N. Y. WIAS 1290 1000 Miskegon, Mich. Wilhington, Mich. Wilhington, N. Y. WIAS 1290 1000 Miskegon, Mich. Wilhington, Mich. Wilh		WIOD 610	1000		WKBV 1500	100			100
Philadelphia, Pa. Buffalo, N. Y. Jacksonville, Fla.		-	1000			5000			100
Wire 1400 1000 Wire 1500 100 Wire 1500 100 Wire 1500 Uniontown, Pa. Wire 1500 100 Wire 1500 Uniontown, Pa. Wire 1500 100 Wire 1500 100 Wire 1500 Memphis, Tenn. W		Philadelphia, Pa.			Buffalo, N. Y.			Jacksonville, Fla.	
WIS S60 1000 WKEU 1500 100 Memphis, Tenn.		WIRE 1400	1000			100			250
Columbia, S. C. Griffin, Ga. Memphis, Tenn. WMCA 570 1000 Milwankee, Wis. Sanbury, Pa. New York, N. Y. WAC 1310 100 WKRC 550 1000 Soston, Mass. WJAG 1060 1000 WKY 900 1000 Okiahoma City, Okla. WJAR 890 1000 Providence, R. I. WJAS 1290 1000 Wac 1470 Soston, Mich. WJAS 1290 1000 Walc 1470 Soston, Mich. WJAS 390 1000 Walc 1470 Soston, Mich. Hibbing, Minn. WJAX 900 1000 WLAK 1310 100 Maskonville, Fla. WMFJ 1420 100 Daytona Beach, Fla. WMFO 1370 100 MMFJ 1420 100 Daytona Beach, Fla. WMFO 1370 100 MMFO 1370			1000			100		WMC 780	1000
Milwaukee, Wis. Sunbury, Pa. New York, N. Y.		Columbia, S. C.			-				1000
WAC 1310 100			250			100			
WJAG 1060 1000 WKY 900 1000 WMFD 1370 100 WMFD 1310 WMFD 131		WJAC 1310	100		WKRC 550	1000			100
Norfolk, Neb. Oklahoma City, Okla. Wilmington, N. C.			1000			1000	-		100
WJAR 890 1000 WKZO 590 1000 WMFF 1310 100 Providence, R. I. WJAS 1290 1000 WLAC 1470 5000 WMFG 1210 100 Pittsburgh, Pa. WJAX 900 1000 WLAK 1310 100 Daytona Beach, Fla. WMFO 1370 100 WMFO 1370 WMFO 1370 WMFO 1370 WMFO WMFO 1370 WMFO			1000		Oklahoma City.	Okla.		Wilmington, N. C	in:
WJAS 1290 1000 WLAC 1470 5000 WMFG 1210 1000 Pittsburgh, Pa. WJAX 900 1000 WLAK 1310 100 WMFJ 1420 1000 Jacksonville, Fla. Lakeland, Fla. WMFO 1370 1000 WMFO 1370 WMFO 13			1000		WKZO 590	1000			
Pittsburgh, Pa. Nashville, Tenn. Hibbing, Minn. WJAX 900 1000 WLAK 1310 100 WMFJ 1420 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100		Providence, R. I.	1000					WMFG 1210	
Jacksonville, Fla. Lakeland, Fla. Daytona Beach, Fla. WMFO 1370 100		Pittsburgh, Pa.			Nashville, Tenn.	4			100
WMFO 1370 100			1000			100			
Decatur, Ala.		- June 1 14							100
			L					Decatur, Ala.	

100	WSAI 1330	000	WOV 1130 New York, N. Y.	100	WMFR 1200 High Point, N. C.	
10	Cincinnati, Ohio WSAJ 1310	000	WOW 590	100	WMIN 1370 St. Paul, Minn.	
25	Grove City, Pa. WSAL 1200	200	Omaha, Neb. WOWO 1160 1	50#	WMMN 890	
250	Salisbury, Md.		Fort Wayne, Ind.	100	Fairmont, W. Va.	
500	WSAN 1440 Allentown, Pa.	100	WPAD 1420 Paducah, Ky.		Lapeer, Mich.	
1000	WSAR 1450 Fall River, Mass.	100	WPAR 1420 Parkersburg, W. Va.	500	WMPS 1430 Memphis, Tenn.	
100	WSAU 1370	100	WPAX 1210	100	WMSD 1420 Sheffield, Ala.	
100	Wausau, Wis. WSAY 1210	.00	Thomasville, Ga. WPAY 1370	1000	WMT 600	
	Rochester, N. Y.	100	Portsmouth, Ohio	a 1000	Cedar Rapids, Iowa WNAC 1230	
1000 7a.	Huntington, W. V		Philadelphia, Pa.		Boston, Mass. WNAD 1010	
50000	WSB 740 Atlanta, Ga.	00	WPG 1100 S Atlantic City, N. J.	1000	Norman, Okla.	
100	WSBC 1210	.00	WPRA 1370	1000	WNAX 570 Yankton, S. D.	
500	Chicago, III. WSBT 1360	00	Mayaguez, P. R. WPRO 630	250	WNBC 1380	
	South Bend, Ind. WSFA 1410	00	Providence, R. I. WPRP 1420	100	New Britain, Conn. WNBF 1500	
500	Montgomery, Ala.		Ponce, P. R.		Binghamton, N. Y. WNBH 1310	
100	WSGN 1310 Birmingham, Ala.	00	WPTF 680 1 Raleigh, N. C.	3.	New Bedford, Mass	
100	WSIX 1210	00	WQAM 560 1 Miami, Fla	500	WNBX 1260 Springfield, Vt.	
100	Nashville, Tenn. WSJS 1310	00	WQAN 880	100	WNBZ 1290	
. C. 50000	Winston-Salem, N. WSM 650	00	Scranton, Pa. WQBC 1360 1	1000	Saranac Lake, N. Y WNEL 1290	
	Nashville, Tenn.	00	Vicksburg, Miss. WQDM 1390 1	1000	San Juan, P. R. WNEW 1250	
1000	New Orleans, La.		St. Albans, Vt.		New York, N. Y.	
200	WSMK 1380 Dayton, Ohio	00	WQXR 1550 1 New York, N. Y.	100	WNLC 1500 New London, Conn	
100	WSNJ 1210	00		100	WNNY 1420 Watertown, N. Y.	
100	Bridgeton, N. J. WSOC 1210	00	WRAW 1310	1000	WNOX 1010	
1000	Charlotte, N. C. WSPA 920	00	Reading, Pa. WRBL 1200	1000	Knoxville, Tenn. WNYC 810	
	Spartanburg, S. C.		Columbus, Ga.	50000	New York, N. Y. WOAI 1190 5	
1000	WSPD 1340 Toledo, Ohio	00	Washington, D. C.		San Antonio, Texas	
500	WSPR 1140 Springfield, Mass.	00	WRDO 1370 Augusta, Me.	190	Davenport, Iowa	
500	WSUI 880	00	WRDW 1500 Augusta, Ga.	5000	WOI 640 Ames, Iowa	
1000	Iowa City, Iowa WSUN 620	00	WREC 600 1	500	WOKO 1430	
a. 500	St. Petersburg, Fi WSVA 550	10	Memphis, Tenn. WREN 1220 1	100	Albany, N. Y. WOL 1310	
	Harrisonburg, Va.	1	Lawrence, Kans.	100	Washington, D. C. WOLS 1200	
50	WSVS 1370 Buffalo, N. Y.	00	Rome, Ga.		Florence, S. C. WOMI 1500	
100	WSYB 1500 Rutland, Vt.	10	WRJN 1370 1 Racine, Wis.	100	Owensboro, Ky.	
1000	WSYR 570 Syracuse, N. Y.	10		100	WOMT 1210 Manitowoc, Wis.	
1000	WTAD 900	0		500	WOOD 1270 Grand Rapids, Mich	
1000	Quincy, Ill. WTAG 580		Rockford, III. WROL 1310	100	WOPI 1500	
	Worcester, Mass.		Knoxville, Tenn.	0000	Bristol, Tenn. WOR 710 5	
100	WTAL 1310 Tallahassee, Ela.	0	Dallas, Texas		Newark, N. J.	
50000	WTAM 1070 Cleveland, Ohio	0	WRTD 1500 1 Richmond, Va.	500	WORC 1280 Worcester, Mass.	
1000	WTAQ 1330	0	WRUF 830 50	1000	WORK 1320 : York, Pa.	
1000	Green Bay, Wis. WTAR 780	0	Gainesville, Fla. WRVA 1110 50	500	WORL 920	
500	Norfolk, Va. WTAW 1120		Richmond, Va.	750	Boston, Mass. WOSU 570	
	College Station, Te				Columbus, Ohio	

	WTAX 1210 100 Springfield, Ill.	XEAW 960 50000 Reynosa, Tams.	XEI 1370 125 Morelia, Mich.
	WTBO 800 250	XEAY 1240 100	XEJ 1020 1000
	Cumberland, Md.	Mexico City, D. F. XEB 1030 10000	Juarez, Chih. XEJP 1130 160
	WTCN 1250 1000 Minneapolis, Minn.	Mexico City, D. F.	Mexico City, D. F.
	WTEL 1310 100	XEBA 1080 20	XEJW 870 Mexico City, D. F.
	Philadelphia, Pa. WTHT 1200 100	Guzman, Jal. XEBG 820 1000	XEK 990 100
	Hartford, Conn.	Tijuana, B. Cfa.	Mexico City, D. F.
	WTIC 1040 50000 Hartford, Conn.	XEBH 930 500 Hermosillo, Sonora	XEKL 1240 500 Leon, Guan.
	WTJS 1310 100	XEBI 1000 25	XEL 780 1000
	Jackson, Tenn.	Aguascalientes, Ags.	Mexico City, D. F XELA 1240 50
	WTMJ 620 1000 Milwaukee, Wis.	XEBJ 1160 20 Merida, Yuc.	Saltillo, Coah.
	WTMV 1500 100	XEBK 1000 60	XELO 670 50000
	East St. Louis, III.	Neuvo Laredo, Tams.	Tijuana, B. Cfa. XELZ 1370 100
	WTNJ 1280 500 Trenton, N. J.	XEBL 1220 50 Mazatlan, Sin.	Mexico City, D.F.
	WTOC 1260 1000	XEBO 1310 25	XEMG 1060 100 Atzcapotzalco, D. F.
-	Savannah, Ga. WTOL 1200 100	Irapuato, Guan.	XEMO 860 5000
	Toledo, Ohio	Mexico City, D. F.	Tijuana, L. C.
	WTRC 1310 100 Eikhart, Ind.	XEBX 640 250 Sabinas, Coah.	XEMU 580 Piedras Negras, Coah.
	WVFW 1400 500	XEBZ 1160 100	XEMX 1280 100
	Brooklyn, N. Y.	Mexico City, D. F.	Mexico City, D. F. XENC 860 50
	Hammond, Ind.	XEC 1150 100 Tijuana, L. C.	XENC 860 50 Mexico City, D. F.
	WWJ 920 5000	XECL 1100 1700	XENT 910 150000
	Detroit, Mich. WWL 850 10000	Mexicali, B. Cfa. XECW 1310 10	Nuevo Laredo, Tams. XEOK 760 2500
	New Orleans, La.	Mexico City, D. F.	Tijuana, L. C.
	WWNC 570 1000	San Luis Potosi, S.L.P.	XEP 1160 500 Juarez, Chih.
	Asheville, N. C. WWRL 1500 100	XED 1160 2500	XEPN 730 100000
	Woodside, N. Y.	Guadalajara, Jal.	Piedras Negras, Coah.
	WWSW 1500 100	XEDA 1220 200 Gra. Anaya, D. F.	Villa Acuna, Coah
	Pittsburgh, Pa. WWVA 1160 5000	XEDF 810 75	XES 990 250
	Wheeling, W. Va.	Nuevo Laredo, Tams.	Tampico, Tams.
	Detroit, Mich.	XEDP 1080 500 Mexico City, D. F.	Monterrey, N. L.
	W3XDD 50000	XEDW 1150 20	XETB 1310 125 Torreon, Coah.
	Whippany, N. J. W3XJ 1060 100	Minatitlan, Ver.	XETF 1220 30
	College Park, Md.	Durango, Dgo.	Veracruz, Ver.
	W8XO 700 500000	XEF 1450 100 Juarez, Chih.	XETH 1210 100 Puebla, Pue.
	Cincinnati, Ohio XEAA 750 200	XEFA 1180 500	XEU 1010 250
	Mexicali, B. C.	Tacuba, D. F. XEFB 870 200	Veracruz, Ver. XEW 890 50000
	XEAC 980 1000 Tijuana, L. C.	Monterrey, N. L.	Mexico City, D. F
	XEAD 1060 125	XEFC 550 100	XEX 1310 125 Monterrey, N. L.
	Guadalajara, Jal. XEAF 990 750	Merida, Yuc. XEFE 980 150	XEXB 1270 50
	Nogales, Son.	Laredo, Tams.	Jalapa, Ver.
	XEAG 1310 10 Cordoba, Ver.	XEFI 1440 250 Chihuahua, Chih.	XEXC 810 350 Aguascalientes, Ags.
	XEAL 660 1000	XEFJ 1230 100	XEXD 1340 350
	Mexico City, D. F.	Monterrey, N. L.	Jalapa, Ver. XEXE 1270 17
	XEAM 750 25 Matamoros, Tams	XEFO 930 5000 Mexico City, D. F.	Mexico City, D. F.
	XEAO 660 250	XEFV 1210 100	San Luis Potosi, S.L.P.
-	Mexicali, B. C. XEAP 1240 50	Juarez, Chih. XEFW 1310 250	XEXS 1000 190
	Obregon, Son.	Tampico, Tams.	Portable in Mexico
	XEAS 1160 50 Saltillo, Coah.	XEG 1220 250 Monterrey, N. L.	XEYO 940 500 Mexico City, D. F.
	XEAT 1210 250	XEH 720 250	XEZ 630 500
1	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, CJCJ, 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, KGMB, 1320 kcs. Sat., 0015-0030, W8XK, 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,

Jan. 24 (Mon.), 0300-0400, WHAM, 1150 kcs.

Jan. 30 (Sun.), 0300-0400, CHWK, 780 kcs.

Feb. 6 (Sun.), 0300-0400, KWYO, 1370 kcs.

27 (Sun.), 0330-0400, KGU, Feb. 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)

Northfield, Minn. 5000

Minneapolis, Minn. 5000

Juneau, Alaska. 250 Yakima, Wash. 250 (.5) Washington, D. C. 1000

Aberdeen, S. Dak. 500 (1)

Pensacola, Fla. 1000

1260 WNBX Springfield, Vt. Twin States Brdcstg. Corp., 39 Main St.
PERMIT TO CHANGE FREQUENCY 1190 WATE Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 KLPM 1240 1250 WCAL Northfield, Minn., to 760 Nottinied, Minn., to 760

B Minneapolis, Minn., to 760

NY Juneau, Alaska, to 1430

TY Yakima, Wash., to 1250

OL Washington, D. C., to 1230

ABR Aberdeen, S. Dak., to 1390

PERMIT TO CHANGE POWER WLB 1310 KINY KIT WOL 1420 KABR WKZO Kalamazoo, Mich. 250 (1) 810 CMCF Havana, Cuba. 5000 880 WCOC Meridian, Miss. 1000 900 KGBU Ketchikan Alaska 1000 950 WRC Washington, D. C. 1000 (5) WATR 1190 Waterbury, Conn. 250 Minot, N. Dak. 500 (1)

1240

1250

1310

1340

1420

KLPM

WCAL

WLB

KIT

WOL

KINY

WCOA

KABR

Columbus, Ohio. 1000 (5) 1490 KEBK Sacramento, Calif. 10000

PERMIT TO CHANGE LOCATION Wichita Falls, Tex., to Fort Worth FOREIGN BROADCAST

(Excluding Oceania, which is listed complete in this issue) NEW

Stagshaw, Gt. Britain. 60000 w. Genoa No. 2, Italy. 5000 Rome No. 3, Italy. 1000 1357 FREQUENCY 720 PRA8

Pernambuco, 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 Rio de Janeiro, Brazil, from 1080 Rio de Janeiro, Brazil, from 1120 1120 PRH8 PRA9

1220 1420 PRB2 Curityba, Brazil, from 1480 Nietheroy, Brazil, from 1170 1470 PRE6

POWER

850 Sofia, Bulgaria, 100,000 from 1000 PRA9 1220 Rio de Janeiro, Brazil, 25000 from 1000 DELETE

580 PRF8 San Salvador, Brazil 620 PRB3 Juiz de Fora, Brazil 630 PRF6 San Salvador, Brazil 1122 Newcastle, Gt. Britain

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At DEADLINE	Owners' Addresses Dec. '37, p. 63 Time on the Air Jan. '38, p. 63
Merlin Almstead of Washington,	Shortwaves
D. C. reports ZNS, Nassau, Ba-	Broadcasters, with Time on Air Jan. '38, p. 58
hamas, on 540 kes, daily from 8:30	North American Police Sept. '37, p. 59
to 9:30 pm, EST.	1.6 megs. to 6 megs Feb. '37, p. 53
WICA, 940 Ashtabula, Ohio is now	6 megs. to 400 megs. June '37, p. 50
on the air.	Owners and Addresses June '37, p. 50 By Locations Apr. '37, p. 61
	By Calls Apr. '37, p. 65
CMQ, Havana, has moved to 600	Foreign Broadcast
kes.	By Frequencies Dec. '36. p. 43
On December 29 the Irish Free	By Locations Dec. '36, p. 52
State became the Irish Republic.	By Calls Dec. '36, p. 57
State became the 1713h respushe.	Oceania Jan. '38, p. 47
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kes.	Long Waves
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