THE APRIL 1938



RADEX

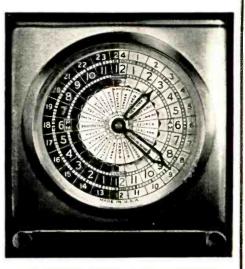
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THE RADEX PRESS

14717 Detroit Ave.,

Cleveland, Ohio

APRIL 1, 1938



RAD IO INDEX



ELIZABETH S. BUTLER
Publisher



$\begin{array}{c} {\tt PAGE \ TAYLOR} \\ {\tt \it Editor} \end{array}$

ASSOCIATE EDITORS

B. FRANCIS DASHIELL, Technical CARLETON LORD, Broadcast

FOURTEENTH YEAR

Number 118

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Globetrotting Via Shortwave

W E ARE sure that those of our readers who are familiar with the shortwave lists which were printed in RADEX in 1935 and 1936 will be pleased to see that we have resumed our old method of listing the high frequency stations. All the good features of our former index have been retained, and many improvements added, so now we believe we can truthfully say that the RADEX shortwave index is the most complete list published today.

There have been so many new stations added to the shortwave spectrum that we find it is no longer possible to list all the stations in one issue. While we do not like to divide the list, we recognize that a division is unavoidable if we are to provide all the information available about every station on the air.

Comments from our readers are invited concerning the new listing.

Brazil

We are informed by R. B. Oxrieder of State College, Pa. that station PSH, Radio Internacional do Brazil, P. O. Box 709, Rio de Janeiro, transmits daily from 6 to 9 pm., EST., on 10220 kcs. Their programs open and close with the Brazilian National Hymn. International Reply Coupons or unused postage stamps from any country are acceptable for verifications. This station has also been reported by RX25 N. Y.

A powerful Brazilian station heard on 6010 is believed by the reporter to be PRAS at Recife (Pernambuco). This station comes on the air at about 4:30 pm., EST., and a clock strikes 7 o'clock at 5 pm., EST. (RX83 Can.).

PRA8, known as "A Vox do Norte," transmits on 6010 kcs. with 5000 watts. We are officially informed that PRA8 broadcasts a



Radio announcers shorten the name of Marion Francis Charlesworth to Marion Francis when introducing her. She is the soloist heard with Frankie Masters' orchestra and Edgar A. Guest, the philosopher-poet, on "It Can Be Done."

time signal at noon and 7 pm., Brazilian time, which seems to confirm the reception by our Canadian reporter.

British Guiana

A letter from the operators of VP3MR states that verifications are sent only when reporters submit the necessary International Reply Coupons. The address of this station is 16 Robb and Hincks Sts., Georgetown. Their schedule is given as, weekdays, 4:15 to 8:15 pm., and Sundays, 7:45 to 10:45 am., EST. (RX83 Can.).

British Honduras

The new station ZIK2 at Belize, on 10600 kcs., is heard with good volume but through heavy interference, on its regular broadcasting

schedule, Tuesdays, Thursdays and Saturdays from 7:30 to 7:45 pm., EST. This station is owned by the British Honduras Government. (RX70 Colo.).

Chile

Station "Otto Becker," CB1170, Santiago, Chile, transmits daily on 11700 kcs., relaying the programs of This one kilowatt station transmits on Sundays from 9 am. to 11 pm., and on weekdays from 10 am. to 2 pm., and from 4 pm. to 11 pm., EST. CB1170 is owned by Otto Becker, Ltda., Calle Ahumada 113.

Colombia

Many of the Colombian stations are changing their call letters. The latest changes recorded indicate that HJ2ABC, 4790 kcs., has been changed to HJ7ABC. HJ6ABB are the new call letters of former HJ4ABB on 6108 kcs. HJ4ABC is now known as HJ6ABC. (RX93 N. Y.).

new station. HJ4ABU Medellin, is being heard on several frequencies, between 8600 and 8650 kes. The time is reported as from 7:30 to 10 p.m., EST. This station is operated by the University of Colombia. (RX51 Mass., RX85 Ohio).

HJ7ABD, "Radio Bucaramanga," Bucaramanga, Colombia, transmits on 9630 and 1130 kcs. from 6 to 11 pm. on weekdays, and from 7:30 to 9:30 pm. on Sundays. Their programs conclude with a medley of national airs, named "La Guabina." (RX83 Can.).

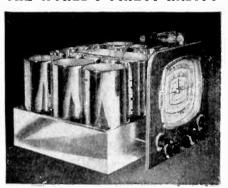
Official information from Colombia discloses that HJ3ABD, "Emisora Nueva Granada," at Bogota, broadcasts, with one kilowatt of power, on 4841 kcs. Broadcasts close with the selection "Para ti Rio Rita." and this is followed by the Colombian National Anthem.

HJ3ABX, also at Bogota, transmits on either of two frequencies, 6015 or 6122 kes., from 6 to 11 pm.

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on Sundays and from 5:30 to 11 pm. on weekdays. "Indian Love Call" from Rose Marie terminates the day's broadcasts, and notes from the Colombian National Anthem are played at various times throughout the broadcast. "La Voz de Colombia," as this station is known, is owned by Cipriano Rios Hoyos.

HJ5ABD, 6085 kcs., "La Voz del Valle," signs off with The "Goodnight Waltz." This station transmits on Mondays, Wednesday and Fridays from 7 to 10:30 pm., EST.

"La Voz de Armenia," HJ6ABH, Armenia, transmitting on 9520 kcs., relays the programs of HJ6ABN on 1363 kcs. Programs are radiated from 8 to 11 am. and from 6 to 10 pm. EST., daily.

Costa Rica

TI4NRH, "The Voice of Costa Rica," at Heredia, Costa Rica, transmits on 9670 kcs. on Tuesdays, Thursdays, and Saturdays from 9 to 10 pm., EST., and on Sundays from 7 to 8 am. This 500 watt station is owned by Amando Cespedes Marin, who celebrates his tenth anniversary of shortwave broadcasting on May 4 of this year. Sr. Cespedes recently announced that he has received 92,000 reports during the past ten years, and he wants 8000 more so he can have an even 100,000. (RX51 Mass., RX61 Ariz., RX89 Ohio).

Cuba

The following Cuban stations have all been heard off their assigned frequencies. COBC, heard on 9970, 10040 and 9450 kcs. COBX is heard on 9210 and 9195 kcs. COCQ, the worst roamer of the bunch, comes in at 9750, 9210, 10010, 10310, 9600, 9910 and 10260 kcs. In other words, this station may be heard anyplace between 9200 and 10300 kcs. COCM has been logged on 9833 and 9350, and COBZ drifts between 9000 and 9030 kcs. (RX70 Colo.).

Curacao

PJC2 in Willemstad, Curacao, Netherland West Indies, transmits on 9430 kcs. on Sundays from 10:30 am. to 12:30 pm., EST., and is also heard irregularly in the evenings. (RX93 N. Y.).

Dominican Republic

Station HIZ in Trujillo on 6310 kcs. operates on weekdays from 11:10 am. to 2:10 pm., and from 4:40 to 9:40 pm. The Sunday schedule is from 11:40 am. to 2:40 pm., EST. (RX93 N. Y.).

In San Francisco de Macoris, HI4V on 6450 kcs. transmits daily from 2:40 to 4:40 pm, and from 7:10 to 9:10 pm., EST. (RX93 N. Y.).

Radio "La Opinion," Trujillo City, station HIG, broadcasts on 6280 and 9300 kcs. simultaneously from 7 to 9 am., noon to 2:30 pm. and 4 to 9 pm., EST. Power of 150 watts is radiated on 6280, while 250 watts are radiated on 9300 kcs. The owner is Andres Cordero Puello, and studios are maintained at Santiago Rodriguez No. 12.

HIN, "Broadcasting Nacional," Trujillo, employs the shortwave frequency of 6243 kcs. and the broadcast band frequency of 1090 kcs., we have been informed. This station is owned by the Dominican Government and managed by Frank Hatton. Programs are radiated on weekdays only between the hours of noon and 2:15 pm., and 5:45 pm. to 10 pm., EST.

Further official information on some of the Dominican stations is tabulated below:

HI3U, 6015 kcs., 125 watts, Santiago de los Caballeros, announces as "La Voz del Comercio." They sign off with the organ selection "Maria la O." The schedule is daily from 7:15 to 8:45 am., 11:45 am. to 1:45 pm., and 4:45 to 6:45 pm.

HI5N, 6150 kcs., 100 watts, Moca City, announces as "La Voz de Moca." An interval signal of five

strokes on a gong is employed and they sign off with the national anthem. The schedule, daily from 6:15 am. to 7:45 am., 11:45 am. to 1:45 pm., 5:45 pm. to 7:45 pm.

H17P, 6800 kcs., 25 watts, Trujillo, announces as "Emisora Diario del Comercio." Programs end with a marimba selection, "Lempira." Studios are located at Calle Jose Reyes 35, and programs are broadcast on Sundays from 10 to 11 am., and on weekdays from 1 to 2 pm. and from 7 to 9 pm.

HI8Q, 6206 kcs., 200 watts, Trujillo, announces as "La Voz de la Philco." The national anthem closes the programs and a gong is used as an interval signal. The studio address is Av. Wenceslao Alvarez No. 3, Reparto Independencia. The schedule is 6 to 10 pm. on Sundays, and 8:30 am. to noon and 2:30 to 5 pm. on weekdays.

HI9B, 5885 kcs. 200 watts, Santiago de los Caballeros, identifies itself by the slogan "Broadcasting Hotel Mercedes." Their schedule is 11:45 am. to 2:15 pm., and 4:45 to 7:45 pm.

Ecuador

A seldom-heard Quito station, HC1ETC, has been reported on 9350 kcs. It has been heard several times near 8 pm. EST. (RX93 N. Y.).

HC2RL, "Quinta Piedad," at Guayaquil, employs 200 watts on the frequency of 6668 kcs. The national anthem terminates the broadcasts and the salutation "Hello America" is used frequently during the broadcasts. Dr. Roberto Levi is the manager of the station, and the address is Casilla 759. Programs are radiated on Sundays from 5:30 to 7:30 pm., and on Tuesdays from 9 to 11 pm., EST.

France

The new high powered French stations at Essarts have been heard testing in the afternoons, relaying the same programs as TPA3. Us-

ing the slogan "Radio Coloniale," it has been heard on 9550 and 15130 kcs. News is broadcast in English at 3:10 pm. on 15130. (RX87 Pa., RX93 N. Y.).

French Somaliland

"One of my latest veries is from FZE8, Djibouti, French Somaliland, verifying my report of reception. This station is on 17280 kcs., and broadcasts only on the first Thursday of every month from 8 to 8:30 am., EST." (RX41 La.).

Great Britain

Contracts have been let for the construction of two more stations for Daventry. The new transmitters will be used in connection with the foreign language broadcasts. It is believed they will be of 100 kilowatts power.

Guatemala

The Guatemala City station TGWA seems to be as good in the afternoons as it is in the evenings. Their marimba programs from 3 to 3:30 pm., EST., are exceptionally well received on 15170 kcs. (RX93 N. Y.).

Honduras

"La Voz de Honduras" at Tegucigalpa, station HRN, broadcasts on 5875 and 1250 kcs., employing 500 watts on shortwaves and 50 watts on the BCB. Their programs conclude with Ted Lewis' recording of the "Goodnight Waltz." HRN transmits daily from 7 to 10:30 pm. EST.

Iceland

The Sunday afternoon transmissions from Reykjavik continue to be heard. TFJ on 12235 kcs. transmits from 1:40 to 2:30 pm., and is heard along the Atlantic coast. (RX93 N. Y.).

India

The most important shortwave news this month comes from India. VUD2 at Delhi is the first of the new Indian shortwave stations to come on the air, and it has been reported throughout eastern United

States. All the reporters give the frequency as 9590 kcs., and they all agree that the station is audible only from 9:30 until about 10 pm., EST. Their broadcasting day starts at 9:30 pm., with chimes, and then a clock strikes 8 o'clock (8 am. in Delhi, the next morning). The programs consist of native and oriental music, some of the selections lasting from fifteen to twenty minutes. Announcements are in one of the Hindu languages, and in English.

VUD fades out in most localities right after 10 o'clock, but one listener reports holding it until 10:30 pm. PCJ prevents reception on Wednesday nights, and GSC sometimes interferes. Delhi is heard between GSC and HP5J. (RX23 Minn., RX35 N. J., RX45 R. I., RX51 Mass., RX93 N. Y., RX94 Mich.).

Italy

2RO in Rome is now relayed by two stations, IRF on 9830 kcs., and experimental station IQY on 11870 kcs. Reports of reception of these test broadcasts are requested. three stations are heard with very good volume between 11 am. and 6 pm., and sometimes even until 9 pm., EST. A program for South America is broadcast from 6 to 7:30 pm., and the North American broadcast follows, ending at 9 pm. News is given in English at the beginning of the American Hour. (RX35 N. J., RX49 Mass., RX51 Mass., RX72 Ill., RX76 Nebr., RX87 Pa., RX92 D. C., RX93 N. Y.).

Jamaica

The two police stations in Jamaica, VPH at Kingston and VPC at Midland, are frequently heard on 1600 kcs. VPC signs off at about 6:15 pm. and VPH at about 6:18 pm., EST. (RX92 D. C.).

Japan

JZJ on 11800 kcs. has been heard on its overseas broadcast between 7 and 7:30 am. with very good volume. In Detroit it was reported with volume equal to that of WWJ. An English announcement is made at 7:30, and the national anthem, "Kimagayo," closes the broadcasts. All the Japanese stations acknowledge reports of reception. The transmitters are situated at Nazaki, but the mailing address is in care of the studios, The Broadcasting Corporation of Japan, Atago-yama, Tokyo.

JVN, also at Nazaki, has been heard frequently between 4 and 7:45 am., on its frequency of 10660.

Reports on Japanese stations were received from RX25 N. Y., RX51 Mass., RX91 Ohio, RX94 Mich.

Kwang Tung

That elusive station in Dairen, JDY on 9925, can sometimes be heard between 5:30 and 8 am. (RX51 Mass.).

Mexico

Authentic information concerning several Mexican stations is to hand. A few new stations, so far unreported, are included in the data which follows:

XEBQ on 6030 kcs., 100 watts, is located in Mazatlan, Sin., and goes by the slogan "La Voz del Pacifico." This broadcaster employs four chimes as an interval signal, and signs off with the Luxemburg March. The schedule for transmissions is 8 to 9:30 am., 2 to 4 pm., and 9 pm. to midnight daily.

XECU in Guadalajara, Jal., "Estacion del Viajero del Mundo," employing 250 watts, works on 6075 kcs. from 9 am. to 11 pm. daily. The programs open with "Humoresque"; the interval signal is a two-tone train whistle, and they sign off with the selection "Adios, Mariquita Linda."

XEDQ, "Speaking to the Continents from Guadalajara," in Guadalajara, Jal., relays the programs of XED on 9520 kcs. with a half kilowatt of power. An interval signal of four chimes is used, and their



Mary Eastman, lyric soprano, and Bill Perry, tenor, star in the "Salurday Night Serenade," heard each Saturday night over a nationwide Columbia network at 9:30 pm. Miss Eastman starred in stage and operatic productions before turning to a microphone career, and Perry's rise is unique because he switched from being a radio station manager to singer but a few years ago.

hours of operation are from noon to 4:30 pm., and from 8 pm. to midnight, daily.

Tiny station XEFT, 20 watts, in Veracruz, transmits on 9550 kcs. Known as "La Voz de Veracruz," they broadcast daily from 10:30 am. to 4:30 pm., and from 7:30 pm. to 12:30 am.

XEGW, in Mexico City, broadcasts, or, will broadcast, if not yet on the air, on 6110 kcs. with 250 watts. The owner is Jose G. Garza Fox, San Juan de Letran 81, Mexico City.

Netherland East Indies

The Javanese stations YDB (9550), PLP (11000) and YDC (15150) broadcast jointly from 6 to 8:30 am. daily, and on Saturdays and Sundays from 6 to 11 am., EST. (RX93 N. Y., RX51 Mass.).

Nicaragua

Nicaraguan stations are not always easy to receive, but two are suggested as possible catches, YNGU and YNLG, both in Managua.

YNGU, "Alma Nica," transmits on 9300 kcs. with 50 watts of power, on two schedules. The first transmission is from noon to 2 pm., and the second from 5 to 6 pm., EST., daily except Sundays. The interval signal is one stroke on a gong.

YNLG, 6610 kcs., radiates a kilowatt of power, on their thrice-daily schedule. Their programs open with a bugle call sounded three times. The morning and afternoon sessions close with "Till We Meet Again," and the night broadcast terminates with "Good Night, Ladies." Their schedule is daily, 8 to 10 am., 1 to 3 pm. and 6 pm. to midnight.

Peru

Three stations are operated by Radio Nacional de Peru. The stations, according to a recent verification card, are OAX4A on 854, OAX4T on 9562 and OAX4Z on 6082 kcs. OAX4T is scheduled to transmit daily from 11:30 am. to 1:30 pm., but a Canadian listener reports them once at 7 am., EST. OAX4Z broadcasts from 7 to 11:30 pm. The address of these stations is Av. Petit Thouars 447, Lima. (RX83 Can., RX87 Pa.).

OAX4J, Lima, relays the programs of OAX4I daily from noon to 3 pm. and from 5 to 11 pm., EST. OAX4J transmits with 500 watts power on 9330 kcs. The opening selection is "Broadway Rhythm," the interval signal is three chimes, and the closing selection is "Whistler and His Dog." (RX72 Ill.).

Poland

SPD on 11535 and SPW on 13635 kcs., both in Warsaw, are now heard daily from 6 to 8 pm., and on Saturdays until 9 p.m. Code interference is present on both frequencies. All

reports are answered by a handsome card for each station. (RX49 Mass.).

St. Kitts

Station VP2LO is operated by the ICA Radio Service Laboratories for the Caribbean Broadcasting Service. Basseterre, St. Kitts. British West Indies. Our informant, R. B. Oxrieder of State College, Pa., says that the programs open with the selection "Rule Brittania" and close with "God Save The King." VP2LO works with 500 watts on 6380 kcs. daily from 4 to 4:45 pm., EST., and on Sundays from 10 to 10:45 am. Mr. Oxrieder believes that this schedule, mentioned in the station's letter, is not regularly maintained, as he has heard them irregularly in the evenings after 8 pm. Reports addressed to P. O. Box 88 will be acknowledged: International Reply Coupons are requested.

Spain

The schedule of EAR in Madrid, according to a letter received by R. B. Oxrieder of 122 E. Hamilton Ave., State College, Pa., starts at 7:30 pm. daily, and another broadcast commences at 9:30 pm. on Monday, Tuesday, Thursday and Saturday. The Saturday program is broadcast in German.

EAR broadcasts on 9480 kcs. with 20 kilowatts of power. All reports should be addressed to Foreign Broadcasts, Medinaceli 6, Madrid. (RX49 Mass., RX87 Pa.).

Taiwan

JFAK at Taihoku advises that since October 1st, 1937, Taiwan has been observing the same time as Japan. It was formerly one hour behind Japanese time. JFAK's programs are relayed until approximately 8:15 am., EST., by JIB on 10535 kcs., and also by JFO at Itabushi on 9636 kcs. (RX7 New Zealand).

Station JFO has been heard on 9630 kcs. by RX61 Ariz.

Union of South Africa

The South African stations continue to come in well on their 11:45 to 12:45 (midnight) broadcasts. ZRH at Roberts Heights (Pretoria) on 9523 kcs., and ZRK at Klipheuvel (Cape Town) are the best of the four stations. Johannesburg, 200 watts, and Durban, 10 watts, have not been reported. (RX25 N. Y., RX61 Ariz., RX76 Nebr., RX86 Mass.).

United States

The World Wide Broadcasting Corporation and the General Electric Company have been granted permission to transmit on the newly allocated "Pan-American Frequencies." The World Wide Corporation, operator of W1XAL, was granted 11730 and 15130 kcs., and General Electric, operator of W2XAF, was given 9950 and 21500 kcs. W1XAL employs 20 kilowatts and the GE station, 100 kilowatts.

These licenses were granted under several conditions, as follows: the programs transmitted by W1XAL and W2XAF must be directed to Pan American countries; there shall be no commercial or advertising announcements, nor no mention of names of sponsors; at least three hours shall be the minimum time employed by each station daily; and they must be willing to share time with any other stations which might be assigned.

W1XAL on 11730 has already been reported by several readers. transmissions from W1XAL preceded by a signal consisting of six musical notes, repeated every ten seconds, for ten minutes before the actual broadcast commences. Reports on these experimental transmissions are requested, and they will be answered. The address is the University Club, Boston, Mass. (RX51 Mass., RX93 N. Y., RX96 Ill.).

The Technical Supervisor of

W3XAU, Mr. J. G. Leitch, furnishes us with the revised schedule of this station. W3XAU transmits daily from 8 to 11 pm. on 6060 kcs., and daily from 12 noon to 8 pm., and from 11 pm. to midnight, on 9590 kcs.

An FCC Examiner has recommended that a construction permit be granted to the Church of Jesus Christ of Latter-Day Saints, at Salt Lake City, to erect a 50 kilowatt station to transmit on 6020, 9510, 11710, 15170 and 25675 kcs.

Two Press Wireless stations have resumed voice tests. The Hicksville, N. Y. station, W2XGB transmits on 8655 and 17310 kcs., and W9XBH at Elgin, Ill., is heard on 12720 kcs. (RX37 D. C., RX73 Ohio).

"In response to a report sent to W1XK, I received a letter stating that the Westinghouse shortwave stations have discontinued the practice of verifying reports." (RX92 D. C.).

W9XF and W3XAL are working on a slightly revised schedule. W9XF on 6100 signs off at 5:45 pm., and W3XAL in Bound Brook, N. J., comes on the air ten minutes later. W9XF returns to the air at 1:05 am. for an hour's broadcasting. (RX93 N. Y.).

A new telephone station on 2500 kcs. has been logged. It is KNKA, at the North Rim on the Grand Canyon, Arizona. It was heard with an R9 signal near 10:25 one evening. (RX34 Kans.).

Uruguay

Official information on the two Uruguayan shortwave stations has been received from our representative there. CXA8, in the city of Colonia, is owned by Radio Belgrano of Buenos Aires, Argentina. CXA8 broadcasts on 9510 kcs. with 2500 watts of power; their slogan is "Real de San Carlos." Programs are transmitted from 6 am. until 10 pm., EST.

The other shortwaver is CXA2, 6000 kcs., Montevideo. They broadcast, with 5 kilowatts, from 10 am. to 10 pm., EST. Their address is Cia. de Radiopublicidad Continental, Calle J. C. Gomez 1431.

Apex

A schedule of daily broadcasts was inaugurated late in February from the new Philadelphia apex station W3XIR. Located on the top of a building at 1616 Chestnut St., it is expected to serve an area of between 20 and 25 miles. W3XIR operates with 100 watts on one of four frequencies, 31.6, 35.6, 38.6 or 41 megacycles. (RX84 Pa.).

WWJ of Detroit announces they will furnish information on an adapter which will make ultra-high frequency reception possible on any radio set.

The Reporters

RX23. Carl and Ann Eder, Willmar, Minn. RX25, Geo. Nahas, 147 Seeley St., Brooklyn, N. Y.

RX34, Martin Olthoff. Independence, Kans.

RX35. Albert Steinmetz, Bayonne, N. J. RX37, David Hill, Washington, D. C. RX41, A. V. Deterly, Baton, Rouge, La. RX45. Frederick A. Wallace, Jr., Albion,

R. I. RX49, Kenneth Morey, Easthampton, Mass.

RX51, Gilbert L. Harris, North Adams, Mass

RX61, Francis McDonald, Tucson, Arlz. RX70, W. F. Cornwell, Englewood, Colo. RX72, Gail T. Beyer, Chicago, Ill.

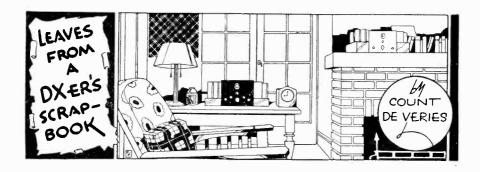
RX73, Helen Lind, Lakewood, Ohio RX76, Edward Danielson, Jr., Pawnee

City, Nebr: RX83, Wm. Snook, Dartmouth, N. S. RX84, Francis Coradetti, Narberth, Pa. RX85, J. E. Gardner, Cleveland, Ohio RX86, Matthew E. Lashner, Lawrence,

Mass. RX87, Arthur M. Hankins, Latrobe, Pa. RX89, Russell E. Geiger, Youngstown, Ohio

RX91, Ralph Heath, Peninsula, Ohio RX92, Melvin L. Jacobson, Washington, D. C.

RX93, E. Leisering, Jr., Brooklyn, N. Y. RX94, Geo. K. Glass, Detroit, Mich. RX96, Justus Schlichting, Glencoe, Ill.



OT every letter which crosses this desk reaches print in the columns of RADEX. Some are from readers who express opinions or give advice, and do not wish to be quoted. Others ask questions which can best be answered by mail. Still more come from old DX friends, many of them long since inactive as dial-twisters, who pass the time of day with a cheery line or three.

Among the question-askers there are many who have just discovered RADEX on the newsstands and hastened to ask, "What is this thing you call DXing? How do you get started? What do you get out of it?" And one can't help but feel that there is a definite connection between the queries of the young DXers and the "remember when" letters from the old-timers.

By a fundamental law of Nature, all of these old-timers were once young DXers, just starting down the road of the Midnight Marauders. Five or ten years ago, they were asking the same questions which puzzle the neophytes of today. And it is logical to assume that the answers to their queries determined the extent of their careers as Sleepless Knights.

Some of them may have been fortunate in receiving good advice, and their interest in the hobby today is a lasting testimonial to the soundness of the counsel given to them. Perhaps a few more were lucky enough to stumble on the right path, and so were off to a good start. And there are hundreds of others who, for one reason or another, failed to get all that DXing has to offer its devotees.

Somehow or other, you can't help feeling sorry for the fellows who have gradually dropped out of the game. A few years back, they were full of enthusiasm. Every available moment was spent at the dials of their receivers. Every addition to their logs was welcomed as a newfound friend, and the daily mail was eagerly scanned for incoming verifications. Proud were they of their achievements, great or small, and they did get a tremendous thrill out of DXing.

There came a time, however, when their reports were less frequent. The former flood of tips and ideas on how to hear trans-oceanic stations were missing. New broadcasters would come on the air and go unreported, unverified. Time spent at their sets would be reckoned as so many days for the entire season, instead of for a month or a week. And eventually you wouldn't hear of them any more.

Many have been the reasons advanced for this gradual loss of DX interest. Some of the younger fel-

lows would get married, settle down, fail to find time for regular tricks at their dials. Others found that business interfered. Poor locations, local noise, sun spots, all-nighters, frequency checks—these and a score of other evils have come in for a share of the blame.

But granting that there are unavoidable factors which do much to limit the DX life of a listener, the notion persists that the mortality rate would be a great deal lower if the individual DXer could regulate his participation in the hobby to meet his own particular requirements.

Determine Main Interest

There are many phases to DXing, each of which will appeal to a certain group of listeners. Some DXers will find one particular phase which is sufficient to hold their entire interest, while others are not satisfied until their activities include several of the angles.

Many listeners get their principal thrill solely from the act of dialing. They enjoy tuning to the far corners of the continent, they like to drop in on remote stations for a few minutes or a few hours. pleasure is derived from hearing new voices and strange music from across the frozen miles of a winter night. They may listen to the same station or group of stations many times, and it matters little whether they build up an impressive log of new call letters. Their DX travels are taken when the spirit moves them. Never are they forced to maintain a grueling schedule.

Some DXers are found at the opposite end of the hobby. They are the listeners who are determined to build up the largest possible log of stations, whether they be local, semi-distant or foreign. No effort is spared in the mad search for new catches. Every available moment is spent at the dials. Interference-

ridden channels are carefully combed night after night. Static and local noise provide no barrier to the feverish conquest of the broadcast spectrum.

Other listeners are just as determined to build up impressive logs, but they confine their activities stations at greater distances. Broadcasters less than 1500 miles distant are "purely local stuff." To them, there is no thrill in hearing the lowly hundred-watter hundred miles over the horizon, and so their activities are concentrated on trans-continental and foreign reception. During the early evening hours, they patiently dial the various frequencies, always looking for stray European and South the American signal which may penetrate the barrage of domestic stations. During the mid-winter months, a careful watch is kept between 1 and 3 a.m., EST, for that is the time when many trans-Atlantics heard. And in the spring and fall, the hour before daybreak frequently rewards the persistent dialer with a new station from New Zealand or Australia.

And then there is the methodical DXer. He is the chap who is careful to plan his activities well in advance. He works out schedules for his dial twisting, establishes definite for reception. He crowded channels and attempts to log—and perhaps verify—every station listed. Occasionally, he tries to log every station of more than 250 watts power. Usually he endeavors to have at least one station in each state and province, and then follows up this angle by seeing how many states and provinces can be completely verified. He may be particularly anxious to see how many hundred-watters and 2000-milers can be listed. Or he may shoot the whole works and attempt the creditable task of verifying all the stations

Before



Here we see Bill Compton as he looks to his mother and to people who see him on the way to the Columbia Playhouse. Bill, better known as "Tizzie Lish," gets his inspirations for his monologues, not from Joe Miller's joke book, but from any cook book that happens to be handy.

in the United States. He may never reach this goal, but he will think in terms of "so many active stations to go."

Regardless of how he looks at the hobby, the average DXer can usually determine which type of activity is best suited to his own taste. And if he is wise, he will decide to devote his entire attention to that particular phase.

Shall We Verify?

Frequently DXers are unable to

decide whether they will verify the stations they hear. No matter which phase of the hobby interests them most, this is a decision which can do much to determine the duration of the listener's activities.

Many Sleepless Knights contend that verifications are a needless source of worry and expense. To them, the chief thrill of DXing is the actual process of tuning. They are delighted when a new call is Scrupulously honest, they heard. take pains to make sure of a station's identity before entering it in their log. Once certain that they have really heard a certain broadcaster, they feel that there is no need for any additional proof of reception. Essentially, they DX for their own pleasure and they obtain no added satisfaction from a card or letter of confirmation.

Verifications can be a very expensive luxury. Over a thousand veries are in my files today and the record shows that they represent an actual postage bill of better than a hundred dollars. The cheapest possible confirmation is one from a station in the United States-and that costs six cents. Foreign verifications run anywhere from eight to fourteen cents apiece, depending upon how the request was made, and that cost only the initial request. Scores of veries were obtained only after countless letters and numerous enclosures of cash or reply coupons. Add on the cost of your own stationery, consider the actual time involved in writing the reports and follow-ups, and the collecting of confirmations becomes expensive.

Obviously, if a verification means little or nothing to a DXer, he would indeed be foolish to go to the trouble and expense of obtaining them. If he did, he would soon find his interest on the wane.

For many listeners, veries offer a very tangible return for their in-

vestment of time and money. While it is true that a confirmation constitutes a rather definite proof of reception, it is seldom necessary to pull out a card or letter just to prove that a station has been heard. Probably it is more satisfactory to be able to say that OAX4A has been verified, than to report merely that the station had been heard on a certain date. Certainly it is an accomplishment to be able to show a distant broadcaster that you have heard his signals, and it is always nice to receive confirmation of this fact.

Verifications bring some DXers far more than mere proof of reception. They are souvenirs of long nights spent at the dials. They bring back memories of thrilling catches and exciting reception. Instead of mere notations in a log book, they provide concrete evidence that a station not only was heard, but that it was reported correctly. To every confirmation there is a bit of history. And always there is the satisfaction that it was really earned.

When the expense of verifications must be considered, some DXers compromise by verifying only certain types of stations—those over 2000 miles distant, hundred-watters, trans-oceanic stations, and so on.

But whatever the circumstances, it is for the individual listener to decide whether a collection of veries will have any definite value or significance to him. When his decision is made, let him follow his own tastes and concentrate on the type of DXing which most appeals to him. Then he will find that DXing can be a most fascinating pastime.

Don't Overdo It

Any hobby—be it stamp collecting, photography, athletics or DXing—should afford a means of getting away from the monotony of everyday life. While it need not be a complete relaxation, it should never be

tiring. The enthusiast should be able to take part in it when he so desires, and still drop it for a time without losing his interest.

Perhaps the greatest mistake a DXer can make is that of over-indulgence. Roaming the midnight air lanes can be a fascinating journey for the new listener. Tuning out to the far corners of the globe brings real thrills and it is easy to become too absorbed in the task of logging new catches.

Wise indeed is the DXer who is able to curb his enthusiasm and

After



"Hello folkses! This is Tizzie Lish!" Here Tizzie is all set to broadcast her crazy recipes for the "Watch The Fun Go By" audiences. She's an attractive little miss, don't you think—or don't you?

take his listenening in a natural stride. It is never absolutely necessary to hear every available station during the course of a winter season. Most broadcasters are on the air for many years, and there is always a second or a third chance to hear them.

For a while, a listener may think that building up a log in the shortest possible time is the greatest thing in the world. It is a fine experience to be able to boast that an imposing total of 600 or 700 stations had been heard in two or three years. Annual additions of a hundred or so new catches will inflate most any DXer's ego. But the time must come when the new stations are harder to hear and the season's total gets smaller and smaller, and then the DXer is likely to regret that he didn't take things easier on the way up.

Not so many years ago, RADEX contained many reports from a DXer who was about tops at the time. Starting during the 1930-31 season, his log increased at an astonishing rate. Blessed with a good location, a fine receiver and a world of patience and perseverance, he showed a clean pair of heels to other listeners of the day. He was among the first to enjoy reliable reception of the Europeans, and his list of South Americans, Aussies and Zedders was a tribute to his skill at the dials. Midway in the 1933-34 season, his veries totalled close to 800. As most of the domestic stations had been logged without benefit of the frequency checks, the record was truly amazing. Believing him to be sitting on top of the DX world, a lot of listeners would have swapped places without hesitation.

But early in 1934, he suddenly lost interest, stopped all dial twisting, gave up the hobby completely. In the last four years, he hasn't tuned for a single new station, and the

chances are that never again will he park on a channel waiting for the announcement that may mean another entry in his log.

What caused this sudden aboutface? What turned abounding enthusiasm into virtual contempt for his chosen hobby? The chances are excellent that he had tried to crowd a decade of leisurely dialing into a short three years. Instead of nights when good listening brought three or four new catches, he saw weeks go by with very few additions to his log. Hour after hour during the long, cold nights, his straining ears would hear noise and static and lots of stations which he had logged in the past. Those early-morning tricks at his receiver suddenly turned from exciting adventures to brooding hours of inactivity, when troubles were magnified. And next day his heavy eyes found no entries in his log to compensate for the loss of sleep. Had there been more stations to hear, some incentive to crawl out of a warm bed at two o'clock. his interest probably would have continued unabated.

Undoubtedly there are many similar cases on record today, and there is no question but what not a few currently-active listeners may soon loose interest for identical reasons. And what a pity it is that an excess of enthusiasm may destroy interest in a hobby which can pay remarkable dividends.

And so it is that careful attention is paid to questions from those who have just heard of DXing and would like to give it a try. If suggestions will enable them to shun the mistakes of others, their interest will be sustained and they can look forward to many years of profitable participation in this pastime. And the ideas passed along to these neophytes may well be considered by the older hands before it is too late.

SHALL I Use a GROUND?

• • • By B. FRANCIS DASHIELL

IT SEEMS that on every hand we hear and read of the latest ideas about antennas — single-wire, doublets, double-doublets and multidoublets. We are told how to eliminate noise and static, how to arrange antennas so as to receive from certain directions, all about standing waves, field patterns and skip distances. Of course, all this often is enlightening and necessary for our guidance. But it does seem strange, however, that the lowly ground connection has escaped discussion. After all, the ground's role in radio presents quite a few important aspects.

Not so long ago all aerials operated in connection with the earth. These were called grounded antennas. Many are still in use, for groundless antennas are those of the doublet or "Hertz" types, specifically designed for all-wave reception and the elimination of noise that may be picked up by the leadin wires. The older or "Marconi" antenna, consisting of single wire and lead in an inverted "L" or "T" arrangement, requires a ground in nearly every case of radio reception.

Aerial and Ground

A ground provides a radio receiver with a point where no potential difference exists. In fact, if a receiver is to work perfectly, all those points which are at the same radio-frequency potential as the earth, as well as the negative side of the power supply, should be connected together at one place or to a heavy low-resistance metal chassis. If these different points vary in resistance they will, then, fail to have the same potential as the earth, and trouble occurs in the form of noise,

oscillation or poor reception. In other words, all these ground connections must have the same radiofrequency potential, and therefore a metal chassis makes the most satisfactory and practicable ground for the receiver. Often the use of a separate ground wire is immaterial, as will be explained. The metal chassis, operating at ground potential, now is standard radio construction practice.

The antenna circuit, comprising the horizontal top or signal pick-up unit, and the leadin that connects the top to the receiver, is the high potential side of the radio frequency input system, while the ground represents the low or zero potential The antenna top, leadin, receiver coils, and the grounded chassis or ground wire make up what is called the antenna system. The antenna circuit, or high-potential side, must not come in contact with, or even have close proximity to, any grounded object or the receiver chassis. To do so, especially at the very high frequencies, means that considerable signal energy will be lost through inductive and capacity effects. It is possible to short circuit the high-frequency antenna signals through the air when some part of the antenna circuit comes close to the ground circuit. It is important to bear this in mind when erecting any type of antenna system or making repairs to a radio receiver.

Ground Resistance

The prime importance of a ground, therefore, is to provide a low-resistance path so that free electrons from the earth can flow into the receiver chassis and neutralize any accumulated excess of positive elec-

tricity. That is why good grounds are stressed, for, in most cases, bad high-resistance grounds worse than none. Without a ground, in certain cases, as we shall see, free electrons cannot easily reach the receiver and maintain a condition of true zero potential at the negative side of the circuits. The set, therefore, cannot work as it does when a good ground provision is made. There are other reasons, too, for the use of a ground, but the above explains why a good ground is necessary if one is used at all.

When a doublet or "Hertz" type antenna is used a ground is not necsary to complete the circuit through the antenna coils or radio-frequency amplifying circuit of the receiver, The so-called doublet is merely two inverted "L" antennas, backed up against one another, but requiring two down leads which may be parallel, twisted or transposed. A radio signal is induced in the flat top (two halves) of the doublet and flows down and through the receiver coil, then reverses with the next alternation of high-frequency current and flows down and through the coil in the opposite direction. Thus an alternating current passes back and forth through the primary and induces a stronger current in the secondary of the coil. A ground is not needed to complete this positive to negative electric circuit. But local noises intercepted by the two leadins flow through both wires at the same time, meet at the bottom as it seems, and then cancel out. Thus the leadin provides a noise-reducing circuit in the antenna system.

A-C Set Grounds

But a ground wire in this same system might pick up noise. This electrical interference does not cancel out, and the radio set can become noisy because of its ground lead. This situation applies always to any type of receiver or antenna system when a ground wire is utilized. The construction of a good ground is imperative. When a grounded antenna is used, a poor ground will result in weak signals, for the ground wire completes a circuit through which the antenna current oscillates, and any resistance that interferes with the passage of the current will tend to reduce its energy.

Much of the above applies to battery operated sets used in rural regions. Modern A-C operated receivers have means for grounding the chassis by providing a natural path for the free electrons. This path is by way of the grounding condensers that help to eliminate hum in the power circuit, and by capacity and inductive effects between the chassis and the windings of the transformer and power line. An electric set, which has a metal chassis, is, in effect, already grounded. It works in a satisfactory manner, but there are times a good ground wire will improve its performance, particularly on the longer waves.

Water-Pipe Grounds

When long waves are being received, those having a low frequency, the need for a good ground is greater. The very short waves, because of their disagreeable power to leak through insulation, do not require a separate ground wire, even when a single-wire coni" type antenna is used. Sufficient ground contact is maintained through the wiring and transformers of the set. However, there are times when a ground seems helpful. Of course, no set rules can be tablished, and experimentation is one of those things we must fall back upon in order to find out which works best. When a doublet antenna is used a ground is not considered necessary, although all receivers provide a contact for it. On very short waves there are times when a solid ground weakens signals, but, at the same instant, on the longer waves it proves beneficial. Therefore, a good ground is advocated at all times, but it may be fitted with a small switch close to the receiver, so that it can be cut on or off if necessary during short-wave reception.

We must consider resistance (which makes a poor ground) and noise pick up. Resistance occurs when the wire is carelessly attached to some metallic object, and to a greater extent when that object makes insufficient contact with the earth. This connection to the ground must be buried deep enough so as to be almost an integral part of the moist earth itself. This means, for example, that a cold-water pipe one that is part of an urban system —is just about the best ground that can be easily obtained. But, to be as perfect as possible, the connection to this pipe should not be at some radiator or water faucet when a number of screwed joints exist between the radio and outdoors; it should be made at a point where the pipe emerges from the ground. The pipe must be cleaned to a bright finish, and the wire—not smaller than No. 12 copper is wrapped around several times and clamped tightly or soldered. A good ground clamp, securely screwed down, may be used. All that can be done should be provided so as to make a lowresistance ground between the earth and the radio. The wire, in one length, is run directly to the set, but is kept as short as possible.

Grounds and Noise

It is not always possible to use water pipes, especially in rural regions. A strip of copper roofing material, a couple of inches wide by many feet long (at least 12) can be buried in a trench, deep in moist

subsoil. Cover with clay soil, and tamp over the strip. Then water the trench and fill with soil. Three or four new iron pipes (%-inch size) 6 to 8 feet long, flattened at one end to a screw-driver-like point, can be driven into the ground with a Pick out a permanently moist spot for this, and place the pipes about 5 feet apart in a row. A No. 10 copper wire is soldered or bolted to the tops of the pipes and then run to the radio set. If the soil is sandy and dry a metal plate and wire may be dropped to the bottom of some nearby well. Otherwise, many vards of wire must be buried in trenches dug down to subsoil.

Noise pick-up by the ground wire must be avoided. The ground wire, as a rule, is overlooked when noise causes interference. The ground lead is much like the antenna lead, for it passes through the house and its electric fields. To see how well a ground wire picks up electrical energy one needs only disconnect the antenna wire from his radio and move the ground wire into the antenna terminal. Signals and noise will be heard in proportion to the length of the ground wire. Water and heating pipes also pick up this interference, for they, to, can be used as an aerial. If an external ground is used, such as the driven pipes mentioned above, they should distance placed some underground pipe lines and electric conduits. It is possible for water pipes to cause noise or static because of the electrolysis that takes place in and around great mases of buried metal and water. However, a good cold-water-pipe ground, as suggested, even when high in a hotel or apartment, often is the best we can do. If it picks up noise there may be little that can be done. So, at the best, we can only use judgment after a study of local conditions and let expediency be our guide.

In the WORLD of DX

• • • By CARLETON LORD

ANY times in the past, DXers have received their share of abuse as the result of poor results to stations. Either through ignorance or deliberate neglect, they have eased over program details with a bare minimum of material, frequently neglected completely the necessary item of reception data, and all too often slipped up on the matter of return postage. Although radio magazines and club bulletins repeatedly stress the necessity of making every report as complete as possible, it continues difficult to impress some listeners of the importance of this procedure. And as a result, stations continue to heap coals of fire on collective DX heads.

On the other hand, listeners occasionally find it necessary to toss a brickbat at stations which are lax in attention to reports. It has been claimed with just cause that not a few broadcasters dish up cards or letters of verification without even the formality of comparing a report with the station log. Perhaps in an effort to cater to their listeners, the stations decided that a verie was close to the heart of every DXer, and consequently bent over backward in an attempt to please.

While it is undoubtedly true that most DXers prize verifications highly, they are not interested in "cheap veries." Just as they would shun a confirmation which could be bought or otherwise obtained by faking, they have small regard for veries which are not earned the hard way.

A few years ago, it was whispered in DX circles that KGBU would issue a verification for practically any letter. As a result, even authentic veries from that station were of little value.

More recently, the bottom dropped out of the WJBK verie market, when a request that the station stand by during the first Mystery DX Contest was answered with a courteous letter of confirmation.

Latest station to fall from grace is WFMD, Frederick, Md., which broadcast for the NNRC on December 12th. On that date, a director of the NNRC addressed the following letter to the station:

"Although I was prevented by work from listening to the special program broadcast by you this morning for the Newark News Radio Club, I do want to take this opportunity to express my appreciation for the courtesy which you extended to our club.

"From the members of our Baltimore Chapter, I have had first-hand information regarding their preparations for the broadcast, and I would have given a great deal to have had the chance to listen in. Unfortunately, that was not my privilege.

"However, I do feel that too much credit cannot be given you for the splendid co-operation which you have shown us, and I want to extend my sincere thanks for your courtesies.

"Trusting that I may be able to listen in on your next dedicatory program, and with best wishes for your continued success . . . "

At the time the WFMD special was arranged, it was understood that the NNRC Baltimore Chapter would handle the verifications. Therefore, when the above letter was answered on February 17th with a handsome letter of confirmation, perhaps the blame for the careless handling should not be

placed on the shoulders of WFMD's general manager, A. V. Tidmore, who signed the letter.

Report All Specials

Despite the rather unfortunate response, the above-mentioned letter gives an excellent example of the obligation of every DXer. It's all very well to write an enthusiastic letter when a verification is desired, but the true test of a listener's sense of responsibility comes when the station's confirmation is filed away. Then is when the DXer classifies himself as the co-operative listener, who is anxious to boost his hobby, or the mere hanger-on who lets the other fellow do the work.

Listeners should always remember that they are on the receiving end of a great, big favor every time a station schedules a dedicatory broadcast. It has been reliably estimated that the cost of an hour's special program from a small station averages about fifty dollars. exclusive of talent. Multiply that by the hundred or more broadcasts specially scheduled for the average large radio club during one winter season, and it is apparent that the stations are footing a pretty heavy bill for the doubtful privilege of being heard by a few hundred DXers.

As it would be quite impossible for any club to pay the costs of the programs dedicated to it each year. much less reimburse broadcasters in accordance with established commercial rates, it is evident that the station has every right to expect some sort of a return for its outlay of cold cash. So far, broadcasters have merely asked that club members send in reports for the various programs. But unless listeners realize their responsibilities, the time must eventually come when stations will adopt a policy of "we'll play if you pay." And then it will be good night DX!

Of course, this particular problem



Nancy Kelly is still in her 'teens, but a trouper of long standing, who broadcasts over the CBS on the Hammerstein Music Hall, "Big Sister" and "Aunt Jenny" programs. She is also appearing currently on Broadway in "Susan and God."

has been stressed time and again in the past. It is an old story to the veteran DXer as well as to the neophyte, but its importance can never be over-emphasized.

It matters little whether or not a listener actually needs a verie from a station. He still has a definite obligation to send in a report whenever a broadcast is dedicated to his club. Even if he doesn't happen to be listening at the time of the program, he can still write a card or letter of appreciation and thanks. The small effort involved will insure future co-operation by stations—and thus continued DX for his own pleasure.

Readers Report

When it comes to sticking out a neck, old Count de Veries seems to be qualified for a pre-Thanksgiving job showing the proper technique

to a farm of turkeys. Last issue he went into ecstasies about how swell broadcast band reception had been, and now reports from readers seem to indicate that something beside his arches are falling.

"Reception on the broadcast band has been terrible for the past several months," bemoans George Nahas, 147 Seeley St., Brooklyn, N. Y. "It's now come to the stage where it takes a lot of coaxing to hear a high-powered station on the Pacific Coast. Even KFI and KNX, old standbys, now act like a couple of 100-watters. In fact, the whole broadcast band is beginning to act like the 75-meter amateur band—just a lot of noise and more noise.

"During the past month, there have been but two fairly decent catches. TGW has been logged for four consecutive Sunday evenings, and KPMC registered R6-7 one morning while broadcasting a tennis match between Fred Perry and Ellsworth Vines."

"During December and January," writes H. H. Searles, 159 Spruce Ave., Rochester, N. Y., "I swelled my log from 642 to 719 and my verifications from 538 to 626. The best stations heard during this period were KWYO, KYOS, WPRA, KLS, KRLC, KICA, and KIEM, all verified now."

"I bought my first copy of RADEX on November 7th," admits R. E. James, 336 Kingston Crescent, St. Vital, Man. "From then until today, a period of ten weeks, I have heard 249 BCB stations. Of this total, 17 are from five provinces of Canada, 212 are from 39 states of the U. S., 12 are from Mexico, seven from Cuba, and one from Puerto Rico. The better catches in my log are WKAQ, CMBS, WIOD and XEAA."

"I have been DXing for almost two years," advises Vincent C. Stason, 5347 Priscilla St., Philadelphia, Pa., "and have heard 412 stations, of which 63 are verified. Some of the better catches are LR1, WNEL, WPRP, WKAQ, KCRJ, KOL, CMBX, CMCD, CMBS, XEMO, XEP and CMGH. My receiver is a Hallicrafters Sky Buddy. Incidentally, can anyone tell me what station is on 1100 kcys and announces as Rio Rita?"

One of the few distant stations which continues to offer regular and reliable reception to American DXers is LR1, 1070 kcys, Buenos Aires, Argentina. This station first hit the headlines a couple of years ago when, together with several Argentine and European stations, it broadcast special test programs for the Bureau of Standards. LR1 has continued these tests and today stands as the most powerful distant signal ever to reach these shores. Its present schedule is variously reported as 2 to 3 a.m., EST, on Tuesday, Thursday and Saturday; same time seven days a week.

"I received a sample bulletin of the URDXC," postcards Walter V. Scholz, 33 N. Maple Ave., Webster Groves, Mo., "and in it I noticed that LR1 is on seven days a week from 2 to 3 a.m., EST. I tried for it and had no difficulty picking it up, sending in a full half hour report. The static was bad, but most of the time the carrier over-rode the noise beautifully. This was my first S. A. on the broadcast band."

Daytime Reception

Radio frequently plays funny pranks for the mystification of its devotees, but perhaps the oddest of all are the vagaries of daytime reception. There are times when none but local stations can be heard above the noise level, other occasions when signals cover incredible distances at mid-day.

Apparently there are no definite records for daytime reception, perhaps because few DXers look for distance when the sun in shining. But an example of what is possible under unusual conditions is related by Cortlandt Parent, Jr., Crompond Road, Peekskill, N. Y.

"Normally my daytime reception is limited to New York City, a few Philadelphia stations, WBZ and WGY," he writes. "However, on January 18th I noticed that there were more stations than usual on the broadcast band. At 11 a. m., EST, I was surprised to hear an announcement from CKLW, Windsor, Ont., so I decided to see what the rest of the band would bring.

"In addition to CKLW, stations showing local strength were WJR, Detroit; WOWO, Fort Wayne, Ind.; and WHO, way out in Des Moines, Iowa. Good, strong signals were heard from WHKC at Columbus, Ohio: WGN, WBBM and WMBI, Chicago: and WTAM, Cleveland. A fair signal could be heard from KMOX, St. Louis. Weak signals WSM. showed from Nashville: WSB. Atlanta: and WBT, Charlotte, N. C.

"The receiver was a 1937 8-tube Silvertone. The sun was shining brightly, there was no wind, the ground was covered with snow, and the temperature was about zero. After one o'clock in the afternoon, the signals became very weak and many faded out. That evening I couldn't get any of them. Since that day, I have heard some of these stations in the daytime, but they were always very weak."

Perhaps other RADEXers have had similar experiences with day-time reception and may be able to tell us just how far it is possible to hear stations around mid-day.

Special Programs

Due to the time required in publishing each issue of RADEX, it is necessary that announcements of special broadcasts reach us well in advance of the date of the program. Frequently word of test programs reaches us too late for inclusion in the proper issue, and as a result

readers miss a chance to log many worth-while catches.

RADEXers who get their copies early will be interested to learn of a forthcoming special from KGKB, 1500 kcys, Tyler, Texas. B. A. Smith of that station advises that there will be a big DX program from 1 to 4 a.m. (presumably CST) on March 22nd. Two days earlier, March 20th, finds a UDXC broadcast from VK4IP, 1440 kcys, Ipswich, Australia, from 7 to 7:30 a.m., EST.

According to C. Roman, 1907 N. Kedzie Blvd., Chicago, there is a special frequency check program from KTEM, 1370 keys, Temple, Texas, from 3 to 3:30 a.m., EST, on the first Saturday of each month.

Likes Monitored Verie

"I happen to be one of those DXers who was interested in ZBW at Hong Kong," supplies Alfred H. Bacon, 928 13th St., New Westminster, B. C. "I kept trying for them on and off for some weeks. At last patience rewarded me and I was able to take down a report on an hour and a half of its transmission. Having read that the station no longer issued veries, I was in a quandary. Then I learned that Stanley B. LaRue was good enough to fill the gap left open, and I forwarded my report to him. The letter of verification which he sent to me is most worth while, certainly far better than nothing at all. To me, a verification signed by an official of a recognized DX club is ample evidence of reception, and so I believe that it is an acceptable substitute for a letter direct from the station, when that cannot be had."

"For myself," states Warren E. Winkley, Hughson, Calif., "I feel that Carroll Weyrich, Stanley LaRue and E. J. Shields were trying to do DXers a favor. But instead of being thanked for their sincere efforts, they've been picked on and ridiculed. The trouble with most of

us is that we are always ready to criticize and never ready to praise. Why not turn this around? It was through Carroll Weyrich that I became interested in DXing, and since that time I've kept tab on him. Next to Earl Roberts, I rate him as the best DXer who ever turned a dial."

Wants Official Veries

"Although the verification question may be closed," contributes J. W. De-Rosa, 1721 Frederick St., E. St. Louis, Ill., "I should like to express my views. If a station does not wish to verify, that is their business. However, by constructive letters from sound-minded DXers, many of these stations can be educated on the why's and wherefore's of verifications. Personally, it took three years for me to secure a WMFO verification. But that verie will always bring back a memory-one which could never be had from a monitored card. I have countless veries from stations which apparently won't verify for every listener. Undoubtedly there is a method to be used when reporting to a 'temperamental' station."

Mysterious Mexicans

"Have been hearing a couple of Mexican stations which I haven't been able to identify," reports Jack Welsh, Kingston, Ill. "One was on 980 kcys, and signed off at 12:30 a.m., CST, on January 9th. Was this XEAC or XEFE? The second was heard on 730 kcys, at 2:30 a.m., CST, on January 17th. I got the first three letters of the call—XER—and heard the announcer state that they were located 15 miles South of the border. Could this be XERB, Rosarito Beach, B. Cfa.?"

The Mexican on 980 is referred to our readers for identification, while the one on 730 is confirmed as XERB by Arthur Child, 3700 Coldwater Canyon, North Hollywood, Calif., who adds that the station uses 100 kilowatts power.

"Station XEL, Mexico City, has changed from 780 to 1100 keys," asserts Samuel A. Meyer, Jr., 83 Canterbury Rd., Rochester, N. Y. "Other Mexican changes include XEBZ from 1160 to 810 and XEFE from 980 to an unknown frequency. Changes in Cuba find CMBC moving from 630 to 950, CMCD from 950 to 630, and CMCB from 640 to 1230. Several new Mexicans have recently come on the air: XEFO. 1010 kcs, 50 watts, Cananea, Sonora: XEDH, 1370 keys, 100 watts, Villa Acuna, Coah.; XEN, 775 keys, 1000 watts, Mexico City; and XEBU, 1250 kcys, power unknown, Chihuahua, Chih. There is also a new station at Mexico City, XEXX, which has been on the air for some time, but I have not yet learned its frequency or power. Down in Guantanamo, Cuba, CMKS is a new station on 960 keys. It is on a Cuban network with CMQ and CMJK."

"Recently I heard CMCB on 1230 kcys," notes Chet Komovowski, 368 N. Main St., Norwich, Conn., "but their verification letter showed them to be on 1060." This discrepancy is explained by the above report. Evidently the engineers could change frequency faster than the printers could change the letterhead.

"The chief trouble with DXing lately," comments Howard M. Phillips, 3907 20th St. N. E., Washington, D. C., "is the drifting of a few stations all over the broadcast band. CMK, normally on 730, roams nightly from 713 to 735. Others are almost as bad. Then, too, the Cubans are showing unusual strength, and on some nights their interference makes it impossible to hear but a few of the large American transmitters."

The recent move of TGW to 1510 kcys, is reported by many RADEXers. First to hear the station on the new frequency was George Nahas, 147 Seeley St., Brooklyn, N. Y.

Spanish Speakers

Judging by early comments, the list of Spanish-speaking stations compiled by Carroll Weyrich and Earl Roberts is going to help a lot of DXers identify the many broadcasters heard during the evening hours. At the time the list was first presented last month, it was suggested that RADEXers make as many additions as possible. Samuel A. Meyer has suggested several other stations, so here is the augmented list.

570 CMCY 5000 Havana, Cuba
600 CMQ 25000 Havana, Cuba
600 CMQ 25000 San Jose, Costa Rica
630 CMCD 250 Havana, Cuba
650 TIY San Jose, Costa Rica
670 XELO 50000 Tijuana. B. Cfa.
720 CMK 3000 Havana, Cuba
755 CMBL 2500 Havana, Cuba
765 CMBL 2500 Havana, Cuba
760 CMHX 200 Cienfuegos. Cuba
775 XEN 1000 Mexico City, D. F.
810 CMCF 600 Havana, Cuba
830 LR5 Buenos Aires, Arg.
850 CMCM Havana, Cuba
882 YV5RQ Caracas, Venezuela
882 CMW 1400 Havana, Cuba
882 YV5RQ Caracas, Venezuela
970 CMBY 150 Havana, Cuba
960 YV5RA Caracas, Venezuela
970 CMBY 150 Havana, Cuba
1005 YV5RG Caracas, Venezuela
1005 CMBZ 500 Havana, Cuba
1007 CMBX 500 Havana, Cuba
1070 CMBX 500 Havana, Cuba
1100 CMCJ 500 Havana, Cuba
1100 CMCJ 500 Havana, Cuba
1122 YV1RF Maracaibo, Venez.
1125 XEJP 100 Mexico City, D. F.
1190 LS2 Buenos Aires, Arg.
1200 CMCO 250 Havana, Cuba
1230 CMCB 150 Havana, Cuba
1240 CMCQ 5000 Havana, Cuba
1250 CMCA 450 Havana, Cuba
1410 CMCQ 5000 Havana, Cuba

If RADEXers will assist us in keeping this accurate and up to date, the list will be run every month.

Local Color

"I was somewhat surprised when I saw you list XERO as being at Chapultepec," remarks Guy R. Bigbee, Fort Benning, Ga. "Chapultepec is the summer home of the president of Mexico, and is located at Mexico City. There is a park surrounding the castle—as that is what Chapultepec really is—and was started

during the time of the Aztecs. It was used by Emperor Maxmillian and Empress Carlotta, and by each of the presidents of Mexico until Cardenas came to that office. He claims that the castle is too much like being an aristocrat, so lives in another house. The castle itself was opened by him to tourists.

Surrounding the castle is the park, or what is known as Chapultepec Park. Back of the castle grounds proper is the American section of Mexico City, known as Chapultepec Heights, and believe me there are some up-to-date houses in that section. Well worth a visit if you ever go to Mexico!

"I believe that the mistake in location of XERO was due to the fact that its card shows the picture of Chapultepec—hence the belief that the station actually was there."

European Notes

"It has been reported in the press," contributes D. H. Dussek, Marland Hall, Alton, Hants, Gt. Britain, "that Italy has decided to close the station at Bologna, and to strengthen the stations at Rome, Bari and Trieste. Bologna operates on 986 kcys with a power of 50 kilowatts.

"The new Hilversum station (Lopikerkapel), 722 kcys, 17 kw, now operates on a full schedule from 2:40 a.m. to 6:40 p.m., EST, relaying the programs of Hilversum No. 1.

"In the first week of January, the press reported that the British Government had persuaded the French authorities to ban advertising in English from French stations. The immediate result was that Radio Normandie asked its listeners to write in and state whether they wished the programs to continue. However, it now appears to have been a false alarm. A law is to be introduced which will limit the power and frequencies of the sta(Please turn to page 36)

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The Stamp Corner

● ● By David Brockton Browne

POSTAGE stamps may be collected in so many different that each collector wavs endless opportunities to form the type of collection which pleases him the most. After all, stamp collecting isn't a mere matter of dollars and cents. The best collection is the one that has brought its owner the most pleasure in forming. It doesn't matter whether that collection is worth \$5.00 or \$5,000, the main point to consider is-does that collection bring enjoyment, satisfaction, and relaxation from everyday cares and worries to its owner?

Have you ever thought of forming a specialized stamp collection around the theme "Radio and Electricity"? An interesting—though not large—collection may be built around this subject at comparatively little expense.

Radio and Electricity in themselves are not widely portrayed, but many famous men identified with their development have been honored with a number of postal issues in recent years. Suppose we glance at a few of these stamps for a moment or two.

A radio broadcasting station with its two tall steel masts displayed prominently, is shown on the 30c red and black *Guatemala* stamp of 1919. The following year the same stamp was surcharged "1920—2 centavos." In 1922 when the supply of 25 centavos stamps was depleted, this stamp was again surcharged "1922—25 centavos." Thus, three stamps from a single country might well be added to our collection.

The *United States* commemorated the 50th anniversary of the invention of Thomas A. Edison's first electric lamp with a 2c carmine rose

stamp in 1929. This stamp comes in three varieties—all with the same design—which should be added to the proposed collection. They are flat plate, rotary press, and rotary press coil printings.

Italy has philatelically portrayed three of her prominent inventors, electrical geniuses who have enriched the world with their discoveries—Volta, Galvani, and Marconi.

Allesandro Volta (1745-1827) was the first producer of electric current. Whenever we speak of volts (as a unit of electromotive force) or voltaic cells, we have to thank Volta for whom *Italy* issued four stamps in 1927; 20c dark carmine, 50c greenish black, 60c chocolate, and 1.25 lire ultramarine.

Commemorating the International Radio Congress of 1934, two stamps—30c brown buff and 75c carmine rose—were issued by *Italy* bearing the portrait and autograph of Luigi Galvani (1737-1798) whose name we remember through the Galvanic theory, the galvanometer, and the galvanizing process widely used in modern industry.

The latest *Italian* commemoratives honor Guglielmo Marconi (1874-1937) whose name we all remember in connection with modern wireless and radio. The values are 20c red, 50c purple, and 1.25 lire blue.

France marked the 100th anniversary of the death of Andre Ampere in 1936 with a 75c brown stamp. Ampere's discoveries in the field of electro-dynamics gave the world the unit of electrical current that bears his name.

We will continue our visits into the historical background of radio, wireless, and electricity as portrayed on postage stamps in future "Stamp Corners." The stamps chronicled here are but a part of the collection that may be built around these subjects.

Our Readers Report

J. F. Satterthwaite, 544 Colonial Court, Toledo, Ohio, would like to know what issue of Short-Wave & Television magazine carried an entire page depicting stamps that bear on the historical side of radio and science. Your Stamp Editor is also interested in the same information—who can help supply this knowledge?

Carl Forestieri, 2224 Adams Place, Bronx, New York City, desires to exchange mint and used U. S. with other stamp collectors.

Ben Follrath, 1419 Pearl St., Alameda, Calif. would like to exchange unused stamps—both U. S. and foreign with DXers living outside of the United States. Incidentally Mr. Follrath writes "I believe that the stamp column in RADEX will make a hit with the old time collectors and cause them to bring out all their old stamp albums, thus starting all over again in their hobby." We certainly hope that this prediction comes true.

Here is a foreign collector who desires to exchange stamps with readers of RADEX; Herr H. Holst, Ulzener Strasse 22, Luneburg, Germany. He wishes to receive cancelled U. S., Canadian, Central or South American stamps in exchange for equal value of European stamps.

Stamp Digest

A milestone in the advancement of stamp collecting in the United States, the Stamp Illustration Bill, mentioned briefly in last month's "Stamp Corner" was signed by President Roosevelt, January 27th and became effective as a law, February 17th last.

The bill was enacted to permit the printing of illustrations of United States stamps for philatelic purposes in articles, books, newspapers, stamp albums, and advertising circulars, providing illustrations are less than ¾ size or more than 1½ size in linear dimensions of each part of the stamp. No government permits are necessary for publishers wishing to print stamp illustrations under the terms outlined.

For collectors wishing to know the names of Stamp publications of the United States and throughout the world, together with the frequency of issue and subscription price per year, Herbert L. Shatz, 1033 Chestnut St., Philadelphia, Penn., has issued a reference list that he will be glad to send free of charge to any reader of RADEX without obligation if they will write him a letter mentioning this magazine. Mr. Shatz has compiled one of the most complete listings of U.S. and foreign stamp publications in existence and collectors will certainly appreciate the great amount of effort and research that have made these lists possible.



The object of Carl Hoff's affection is, if you haven't guessed it, Tizzie Lish, the wonder-girl of the Al Pearce program, on which Maestro Hoff leads the orchestra.

Australia has issued a new 4d. green stamp with a picture of the native "teddy bear"—the Koala. Though somewhat small in size, the stamp is attractive.

Sweden recently commemorated the 250th anniversary of the birth of Emanual Swedenborg, the great Swedish scientist, and Theologian, with two postage stamps-10 ore and 100 ore. Swedenborgs picture

appears on the stamps.

If there are any questions concerning stamps that readers of RADEX would like answered-or if there is any information you would like to know-write the Stamp Editor in care of RADEX and he will do his best to comply with your desires. Cheerio!

Station News

Examiners of the Federal Communications Commission have recommended that applications granted for new stations, as described following:

The Evening News Press, Inc., of Port Angeles, Wash., a new station to work on 1500 kcs, 100 watts nights, 250 watts to local sunset, unlimited time.

Platt and Platt, Inc., Poughkeepsie, N. Y., to work on 1000 kcs, with

1 kilowatt, daytime only.

Kanawha Valley Broadcasting Co., Charleston, W. Va., a new station to transmit on 1500 kcs. 100 watts unlimited time.

A new international broadcast station to use frequencies of 6020, 9510, 11710, 15170 and 25675 kcs, with 50 kilowatts power, in Salt Lake City, Utah. The applicant is the Church of Jesus Christ of Latter-Day Saints.

Grant of a construction permit to KCMO, Kansas City, Mo. was recommended for change of frequency from 1370 to 1450 kcs, and an increase of power to 1000 watts full time.

The University of Florida, station WRUF, was granted temporary authority to rebroadcast the Navy Time Signals from Arlington, Va. This temporary authority will expire on August 1, 1938.

The SWL Trading Post

Notices for the Trading Post Column have been accepted from readers on the understanding that all exchanges will be acknowledged, but judging from the large number of complaints received, many who have used this column have not fulfilled their obligations. Therefore, as much as we dislike making rules, we are forced to make one here.

In future, names and addresses will be printed in this column only on the written promise that every letter will be answered. If an exchange of SWL cards is desired, the request must be on the writer's own SWL card.

The Exchangers listed below have agreed to QSL 100%.

W. P. Mathers, 15325 Log Cabin, Detroit, Mich. (SWL cards).

Norman Glover, 305 S. 8th St., Ponca City, Okla. (SWL cards).

Cyrus Will, 651 Brier St., Kenilworth, Ill. (SWL cards).

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

E. Leisering, Jr., 782 E. 32nd St., Brooklyn, N. Y. (Correspondence).

Leonard Woodall, Route 2, Plano, Tex. (SWL cards and correspondence).

David Hill, 1516 Varnum N. W., Washington, D. C. (Correspondence).

Alan Hutchinson, 15 Embo St., Dunedin, SW1, New Zealand. (Correspondence).

Walter V. Scholz, 2nd, 33 N. Maple Ave., Webster Groves, Mo. spondence).

Stanley LaRue, 309 So. Bedford Drive, Beverly Hills, Calif. (SWL cards).

Questions ASKED By Our READERS

• • By the TECHNICAL EDITOR

 $^{f r}$ Y RECEIVER is a model 8K RCA Victor. I have no local stations to trouble me, but plenty of others crowd in close to either side when a good station is being received. Then, too, there are several stations right on the same channel. My antenna runs NE and SW. What length doublet do you advise if I should get one? I wish to DX on the broadcast band, but with this crowding of distant stations it is hard to separate them. Some local amateurs break in on the broadcast band. What can I do to overcome these obstacles?

This radio should work nicely on an ordinary antenna, one about 40 feet in length with as short a leadin as possible. Removal of the ground wire might help at times, but as a rule the ground should be used. Any good doublet, or new RCA antenna, which is not a doublet, but more of the Zepp type, will work nicely with this set. The purpose of the doublet is to eliminate much of the static noise that may be heard, while, at the same time, providing a more scientific length of wire that will respond particularly to certain of the short-wave bands. Whether you need a doublet or not might depend upon your location and the degree of manmade static present.

The crowding of stations on the broadcast band is nothing unusual; instead, it seems to be the rule with most sets. If a set is highly selective, with crystal control, then it is possible to tune so sharply that most of the crowding is prevented. When this is accomplished, however, often the tone is hurt, since high-fidelity of reproduction requires a wider wave channel than

can be assigned the broadcast stations of America. A careful tuning, readjusting and aligning of this set might improve its selectivity so that DXing on the broadcast band will be better.

Sometimes a good wave trap will help. If the trap is selective and easily adjustable, it can be set each time to cut out a closely interfering station, especially if it is some local or nearby amateur. Unfortunately, a good wave trap cannot be made to cover a wide or all-wave band. Separate traps must be used for different portions of the wave band. Among suitable traps on the market is one made by the Miller Company. Adjustment of the trap is simple. Merely tune in on the radio a station or frequency you desire to cut out. Then adjust the knobs on the trap for a minimum signal so that the undesired station is almost or entirely cut out. After doing this and retuning the set to the desired station at almost the same kilocycle setting, the interfering stations will be absent. By repeating this setting at all the stations desired when other station interference is heard, DXing on the broadcast band will be a happier event. Special wave traps for the amateur and short-wave bands can be procured, and one of these will prevent your local amateur from being a nuisance. Wave traps can be used with either a single wire or doublet antenna.

Ground Wire

My ground consists of 4 galvanized iron pipes six feet in length and all driven into the earth. They are connected together with a wire that runs fifty feet upstairs to my

RCA C7-6 receiver. I cannot make this ground any shorter. Now, if I used a thicker wire will it help to prevent noise and give me better reception? I do not have an allwave antenna. It is a single wire, stranded, about 75 feet without the leadin, which is lamp cord wire.

The four pipes driven into the earth for almost a distance of six feet should provide an excellent ground provided the character of the soil is such that it is earthy with clay and permanently moist. Pure sand, or very dry earth, makes a poor ground. Some spot, close to the house and in a low place where water drips from the eaves, is best. Or water may be poured down the pipes at frequent intervals. wire, about No. 10 bare copper. should be soldered either to the tops of the pipes or securely attached with bolts that pass through the diameter of the pipes at the tops. The wire should continue directly up the side of the house and into the room where the radio is located. Keep the wire as far as possible from other electric wires, telephones and bells.

Your antenna of 75 feet might be too long. About 40 feet is sufficient, and this size is used with a very short leadin. The height of the antenna is of greater importance. The leadin must be of the same diameter or the same kind of wire, but as short as practicable. The ground wire of No. 10 size, is very little more than 1/10th inch in diameter, and a suitable antenna wire, No. 14, is approximately 6/100ths inch in diameter.

If noise is bothering you too much, and it comes from a manmade or electrical source other than natural sky static, it will be well to procure a good noise-eliminating antenna or standard make of doublet. These antennas, while not rejecting the static that is picked up by the antenna top, will not intercept the local static around the house to as great an extent as the single-wire leadin of the plain aerial system.

Adjusting Philco 16

Can you supply me with data for aligning my Philco 16 receiver? It is hard to have such work done here in Central America. Please tell me the sequence to be followed in doing this work.

The intermediate frequency of this set is 460 kcs.. The first three bands should be aligned, but the fourth should not be touched. This is the ultra-short wave band and the coils and leads should not be moved or touched in any way. However, since a test oscillator is needed to do any kind of a fair job, we recommend that a service man or factory adjustment be obtained.

The broadcast band can aligned at 600 and 1,400 kcs. The first short-wave band on about 4,800 kes., and at 15,000 kes., for the third band. The fourth band, of course is not touched. Connect the oscillator output to first detector grid and the chassis, and place the reading output meter across the voice coil of the speaker. Adjust the i-f trimmers until maximum output is read on meter. The test oscillator is set to operate on 460 kcs. Then connect this oscillator across the antenna and chassis. Align the r-f tuner, oscillator and first detector. Set the volume control at its maximum position. Adjust the broadcast band trimmers, using first 1,400 and then 600 kcs. Then follow, using 4,800 and 15,000 kcs., and adjust the first and second short-wave bands. respectively. However, a good service man can also adjust for image frequency and other things that might occur, and we seriously recommend that you return the set to the factory if a good local expert cannot be located.

Multiple Antenna

I would like to erect 5 or 6 antenna wires pointing in different directions, but all meeting in the center. Would it be best in regards to receiving ability to solder them all together and then attach a doublet leadin, or should I have different leadins for each?

If you wish you can erect two doublets, one just above the other, but at right angles to each other. This calls for two separate leadins and a switching arrangement at the bottom. An idea that you can try is to erect four wires, all in the same horizontal plane, placed at right angles or 90 degrees to each other, each one 30 feet in length. This will look like a four-spoked wheel with-The wire that runs out the rim. from the center directly north is soldered (at the center) to the wire that runs directly west. The same connection applies to the south wire and the east wire. The two "V" connections are joined at the center with an ordinary antenna insulator. Insulators too, are used at the four ends. At the center insulator, the two contacts are considered as from single wires, the same as in any doublet antenna, and attach to a doublet down-lead that goes to the radio receiver. This form of doubledoublet antenna eliminates some of the undesirable directional qualities of the standard doublet. However, in many cases the directional effects are beneficial, so the two separate doublets, with two leadins and a double-pole double-throw switch. may be used to advantage when receiving from certain directions on short waves.

There is an antenna system, arranged somewhat like the above double switching system, now on the market. It provides a choice of directional doublets thus making it possible to obtain maximum signal energy from either of the four compass points. Intermediate direc-

tions are brought in by switching off one leg of each doublet. A special transformer coupler with switch knob on the top is used.

Trickle Charger

Will you please answer in your columns what liquid and quantity of same is used to charge a Balkite trickle charger. This is an old charger and I may not be able to procure the standard ingredient.

Many of these and similar chargers have been sold and still are in In practically all makes of trickle chargers electrolytic rectifiers employing aluminum and lead are used for the electrodes, and a solution of borax and pure water is satisfactory. The solution should be saturated, that is, all the borax is stirred in that can be dissolved. Sufficient electrolyte is placed in the container to cover the inserted electrode. In the Balkite rectifier this electrode usually will be found to be made of tantalum instead of ordinary aluminum. Some rectifiers use a very weak solution of water and few drops of sulphuric acid, but as a rule the cheap and simple borax solution will work well.

Double-Spot Tuning

Trouble has arisen in my Audiola 23S12 receiver since I had some new resistors and realigning work. The serviceman now says the set is perfect. But I get image frequencies that never bothered me before. He tells me that a wave trap might help. No one else experiences this difficulty nearby, so it must be in the receiver. I had another man check the set and he says it is perfectly balanced. A station 7 miles from here operates on 1320 and reneats again on approximately 980 This spoils reception from KDKA and causes a whistle on their carrier. Another station, on 1070, 45 miles distant, repeats on about 720 where I would otherwise get WGN if this interference from image frequency did not prevent

Then the same sort of thing occurs with other stations. Why is this and what can be done to eliminate the trouble?

The duplication of certain stations, usually those of high power and located rather close by, on other frequency SO that they interfere with more distant stations, is known as image frequency or double-spot reception. In this case a station that is normally heard on some upper portion of the dial will be found to repeat again at a lower portion (in kilocycles) where a distant station normally comes in. This situation is brought about by a certain combination of different frequencies created within the set, particularly if the repeating station has a loud signal coming down a clear channel, or if it is nearby.

The repeat point where doublespot reception is heard will be found to be twice the value of the intermediate frequency of the set. That is, the repeating point on the dial will be separated from the normal tuning point by this number. In your particular set, the i-f is 177.5 kilocycles. Twice this figure is 355 kcs. Therefore, the repeating points always will be 355 kilocycles lower than the normal tuning point. So, when a station comes in at 1320 kcs. on the dial it will be found to repeat at a point that is 1320 minus 355, or approximately 965. This, you have found to be the repeat point, and this interferes with reception of another loud station on 980 kilocycles. In the second case a station normally comes in on 1070 kcs. But it also is heard on about 720 kcs. Take 1070 minus 355 and you get 715, which is your exact repeat point, and this interferes with reception of a station on 720 The repeating will appear loudest on some station close to the calculated repeat point because the set is tuned to maximum gain on the

desired signal.

The problem is to get rid of repeating or double-spot reception. This trouble will appear all over the dial as long as 355 kilocycles separation between the two points is possible without running off the dial. A very selective tuning circuit will prevent this trouble, and if it did not give this trouble previous to the overhauling of the set, it seems to us that adjustment is all that is necessary. Image frequency is prevented by keeping out strong signals that push into the r-f and i-f circuits although not tuned to them. A good r-f stage is needed, and even a pre-selector may become necessary. But we feel that there should be a good readjustment of the tuning circuit, especially the r-f stage and the i-f stages. latter must be set to respond exactly to its proper i-f of 177.5 kilocycles.

The intermediate-frequency stages may be incorrectly adjusted, and an incorrect tracking of the r-f, oscillator and detector tuning condensers can be responsible. Sometimes poor shielding of the oscillator and first detector circuits and causes inductive troubles that lead to image frequency. A good wave trap is useful in reducing the strength of the interfering signals. The trap is tuned to minimum reception of the unwanted signal, and, therefore, it will not repeat at the spot where you wish to pick up another station. In bad cases it has been necessary to change the intermediate frequency of the receiver, and this trouble is more frequent on sets such as yours than on those employing a higher i-f. If this latter is about 460 kcs., then twice that number is 920, and this is too much spacing to permit the original signal and its image being heard over the dial in more than one or two

Repeating may also occur at ir-

regular points on the dial; those places which have a direct harmonic relationship to the strong signal causing the repeating. Each harmonic, the second and third. will also have a difference with respect to the i-f of the set, and these, too. will make weak double-spot reception points which heterodyne with desired signal and cause a whistle or distortion, You must prevent the excessive pickup of the repeating signals. Perhaps you have too much antenna length. It may be that the r-f tube and first detector or mixer tube are operating at a low level because the grid bias is improper. We suggest, too, since the set seems balanced, that the serviceman very carefully check this bias. It must not be excessive.

Noisy Receiver

I have a Philco 116X, but every time I tune to the short waves and an automobile passes by I hear the noise. Then, too, when the volume is turned up I get a great deal of static. Why is this?

As long as automobiles pass close to sensitive radio sets we shall continue to pick up the tiny radio waves that are emitted every time a spark is created in the ignition circuits. It has been found that a good noise-reducing antenna, such as a properly designed doublet or Zepp type, when the antenna top is as far away from the street as possible, will cut down the automobile noise to almost nil. The very short waves, then, will get the greatest amount. This cannot be prevented.

The noise that is heard when the volume is turned up full often is due to atmospheric static (which no antenna will prevent) or electric power lines noises, or the sounds within the set. High amplification makes audiable the electronic agitation within the tubes, batteries and power units. This noise is natural and cannot be controlled unless the set is defective. The noise level

or background usually cuts down when a signal is tuned in. If the noise persists when the antenna and ground are disconnected and the volume increased to maximum, the sounds may be internal electrical noises. But when the set is attached to the antenna and ground and the noise begins again, it is due to static. In the case of power-line interference a good line filter will prove beneficial.

Local Interference

Please tell me how I can get away from WSMK on all bands of my set. They have their antenna across the river from me and this interference prevents me from understanding many stations that I pick up.

When a nearby station, with high power, interferes it can create double-spot reception by forcing its strong signals into the receiver where they cause separate signals on all the harmonics of the frequency used, as well as some other irregular frequencies. This type of query has been answered above in some detail because it is one that affects so many listeners. In your case we recommend the use of a good wave trap tuned to resonance on the signal that interferes. Such a trap has been described in one of the answers above, and may be procured direct from the makers or all radio distributors.

About Pre-Selectors

I have a Lafayette J-36 receiver which has a long wave band. Can I remove this and substitute a shortwave band? Also, can a pre-selector be used, and where can they be obtained??

RADEX has received many inquiries about pre-selectors or preamplifiers during the past month or two. These units, which are preamplifiers which take the antenna signals at radio-frequencies and step them up or amplify them before passing into the receiver. This action provides a stronger r-f signal than ordinarily enters a radio set unless it has two or three stages of r-f amplification—something that is becoming more rare in modern radio receivers. This increase in signal strength together with its tuning, tends to provide a stronger signal without interference. Such an arrangement, therefore, will cut through more interference, but it may detract somewhat from the quality of signals and reduce their high fidelity.

We have mentioned once or twice Miller pre-selector and prethe selector kit. This covers a range of from 12 to 200 meters or practically all of the short waves. It has two stages of r-f amplification and may be used with any all-wave receiver. It prevents all image frequency interference. Special coils may be used for the broadcast band. The Miller people guarantee that their pre-selector will bring in more DX reception. It has a self contained power unit and may be used with any type of antenna.

Pre-selectors may be procured from some of the mail order houses, and as we go to press information comes from Allied Radio that they pre-selectors completely sembled and also in kit form. The units come with 3 tubes and in different models for three band coverages. Allied Radio's address is 833 W. Jackson Blvd., Chicago, Ill., and the J. W. Miller Co., is at 5917 South Main St., Los Angeles. Calif. When our readers write either of these concerns they should mention RADEX.

As to your inquiry about removing one band and substituting another: This can be done in some of the older r-f sets where the changes are easily made without involving its actions too seriously. We do not recommend removing the long-wave band and substituting a short-wave band. You would have

to redesign the coils or get new ones, and they must be tuned with new condensers; then all your circuits and adjustments would be out. It simply is not worth the trouble. Get yourself a good short-wave converter. This unit will enable any owner of a standard broadcast or long wave set, to pick up short-wave stations. At the same time the broadcast portion of the receiver still is useful.

Indoor Antenna

I have a Zenith 12 tube receiver that operates with a Zenith doublet antenna erected outdoors. However, now that I am building a new home, I should like to arrange for an indoor aerial in the attic. Will you please tell me how to do this so that good reception on both broadcast and short waves will be assured?

While inside antennas are not to recommended when efficient long distance reception is desired, it is known that they are often very satisfactory. It is true that radio waves have litle respect for the walls of our homes, for they pass right through, but, on the other hand, metal roofs, brick and plastered walls, all absorb some of the signal energy. If you have an unfinished attic with a wooden shingle roof we think that a good indoor antenna can be erected, but you will be subject to a considerable extent to electrical pickup from appliances in the house. An outdoor antenna, such as you have is best. Zenith antenna has an overall spread of 60 feet, which, of course, would be too much for the average attic length. A single wire in the attic, stretched diagonally so as to obtain length, would be best. The single leadin can drop down through one corner of the attic to the radio set on one of the floors below. You might try erecting your doublet in the attic as follows. Place the con-

(Please turn to page 36)

FACSIMILE in the Home

ADIO stations in at least a dozen cities have been given permission to broadcast facsimile transmissions on their regular broadcasting frequencies, between the hours of midnight and 6 o'clock in the morning. A few of these stations are already on the air and others will commence transmissions as fast as equipment can be made available.

Two different systems of facsimile are being used, the RCA system as developed by Charles J. Young, and the Finch System, manufactured by William G. H. Finch.

The RCA-Victor System

The RCA-Victor radio facsimile system, designed to flash pictures, news bulletins and other text matter through the air and into the home, was first publicly demonstrated last February in Washington, D. C. Already seven large stations have placed orders for the apparatus, preparatory new launching their experimental servstations are These Fresno, KFBK Sacramento, KHQ Spokane, WBEN Buffalo, WTMJ Milwaukee, KGW Portland WOR Newark.

This system of picture transmission utilizes ordinary white or newsprint paper, and ordinary carbon paper, at the receiving end. width of the paper roll on which the facsimile material is printed is proposed 81/2 inches, and the length of each page is twelve inches in a continuous roll. Printing speed is at the rate of three feet per hour. A time-clock arrangement at the printer-receiver automatically turns , the apparatus on and off in accordance with a predetermined transmission schedule.

The facsimile receiver-printer is encased in a simple wood cabinet measuring only 18 by 18 by 12 inches. All the mechanism and controls are inside so they may not be tampered with once they have been properly adjusted. The paper rolls out through a slit in the front of the cabinet. Two designs have been developed; one is fairly elaborate and automatically cuts the paper into 12 inch pages and deposits them neatly in a tray. The other is much simpler and does not cut the paper into strips.

The new, simplified system was developed after years of experimentation with many different types of printers, some of which were employed for commercial transmission of weather maps and information to ships at sea, and for the transmission of photographs and other material across the Atlantic.

Facsimile signals are picked up exactly as in sound broadcasting, but instead of passing through the loudspeaker they are made to actuate a printer mechanism. Continuously feeding rolls of paper are led past a metal cylinder drum, on which a single spiral of wire projects a fraction of an inch above the surface. The fluctuations in the intensity of the incoming signals press the paper and the carbon together against the spiral to make marks corresponding to the light and shade of the original picture at the transmitter.

These signals may be heard on the loudspeakers of ordinary radios, when broadcast frequencies are used, as high pitched tones of varying intensity.

The Finch System

The Finch home recorders, like those of the RCA System, are en-

tirely automatic, turning on and off according to a pre-arranged schedule. These units are approximately the size of a typewriter, and are designed to operate from any alternating or direct current power supply, or even for battery operation for farm use.

This system makes use of white or carbon-backed paper, and all printed matter is immediately visible at the receiving end. The width of the pages on the receivers used at present is four inches, but recorders are being developed which will be capable of printing pages six inches wide. The speed of reception is five feet per hour.

Seven radio stations have ordered Finch apparatus. Among them is WOR, which is also reported to have RCA apparatus, but we doubt if this station will use both systems. Other Finch users will be WHO Des Moines, WGN Chicago, WSM Nashville, KSTP St. Paul, WHK Cleveland and WGH Newport News, Va.

Finch facsimile is also broadcast by experimental station W2XBK on 1614 kcs, licensed to the Finch Telecommunications Laboratories.

Facsimile Broadcasters

The following stations have been licensed to broadcast facsimile, as of March 1, 1938.

KFBK, Sacramento, Calif., 1490
KMJ, Fresno, Calif., 580
KSD, St. Louis, Mo., 550
KSTP, St. Paul, Minn., 1460
WGH, Newport News, Va., 1310
WGN, Chicago, Ill., 720
WHK, Cleveland, Ohio, 1390
WHO, Des Moines, Iowa, 1000
WOR, Newark, N. J., 710
WSM, Nashville, Tenn., 650
W1XMX, Boston, Mass., 41000
W2XBK, New York, N. Y., 1614
W2XR, New York, N. Y., 1614, 2012, 2398, 23100, 41000
W7XBD, 3000
W7XBD, 3000
W7XBD, 3000
W7XBD, 1614, 2398, 3493
W9XAF, Milwaukee, Wis., 41000
W9XAG, Milwaukee, Wis., 1614, 2398, 3498, 4798, 6425, 8655

Scanning the

AMATEUR BANDS

• • By B. L. Ahman, Jr.

I NTERESTING letters from listeners far and near have added to our knowledge of amateur activities this month. While the "Trill Bands" have not been unusually thrilling this month, some good catches have been recorded.

Stanley LaRue of Beverly Hills, Calif., leads off with a question. "One morning between 1:15 and 1:45 am, EST, I picked up AC3KX. This is my third reception of this strange station and I am at a loss to know where it is located," he "The operator of AC3KX said, the first night I heard him, that reports were welcome and would be confirmed, but I haven't vet been able to get the QRA. The signal strength is usually about QSA3, R4, with fading bringing the signals up at times for short intervals. The operator has a peculiar foreign accent that I cannot identify, and he announces his call in English AC3KX, A-America, C-China, Three, K-King, X-Xray."

Can any RADEX readers help Mr. LaRue?

The Australasian Radio World reports that several members of the No. 8 Squadron, Royal Air Force, at Aden, have formed a shortwave club and have put a transmitter on the air on 20 meters. It works only on code at present, from 8 am to midnight, daily except Mondays and Tuesdays. Pending assignment of an official call, they are using the call letters KSWC.

Al Bettinger writes in with the news that a new ham has just been licensed in Guatemala, TG9AA. This news followed on the heels of a report that all Guatemalan hams will be given TG9-calls.

North African stations have now reached their peak, while South Africans are but rarely received. Two northern Africa stations have exceptionally attractive cards, and they reply quickly to reports. The stations are CN8AJ and SU1SG and listeners who have not yet verified them should try to do so.

Good Catches

Listeners desiring to add a new country to their logs should keep a sharp look-out for G8LP in the Channel Islands. This station has a British prefix, but inasmuch as the Channel Islands is governed under Norman laws it can hardly be considered as a part of the United Kingdom. The Islanders themselves claim they have no connection with Britain.

The 20 meter band opens up near 1 am, EST, for European stations, and usually the very first one to come through is ES5D in Estonia. It is one of the best European signals at this time. About a half hour later the British stations come through and it is not uncommon to log at least twenty different G's in a morning. The best ones are G6QN G5RV and G2XV.

Other early morning catches are GM2UU on 14276 kcs, GI2CC, PAOMQ, VP1BA and ZP2AC.

Paraguayan ZP2AC is best received near 3 o'clock in the morning, and VP1BA in British Honduras comes through in the evening as well as in the early morning hours. VP1BA is heard just below the American phone band.

Some Reports

Walter Th. Kamman of Caracas, Venezuela reports a number of stations which are given in the Calls Heard section. His best catch is HZ3D, which, according to the international prefixes, would be in Heiaz in Asia Minor.

Tom McCormick of Shaker Heights, Ohio, who hopes to be a fullfledged amateur before long, reports good reception on ten meters. Some of the better ten meter catches are IIIT, IIIR, IIIKN, GW2UL, CN8AV, ZS2N, ZS6AJ and ZU6T. Tom has heard every continent except Asia on ten, and he says he will have his ten meter Heard All Continents as soon as YI2BA goes on this band.

Charles Genan of Jamestown, N. Y., and George Nahas of Brooklyn, N. Y., tell us that reception in New York State is fine. Charles is hearing regularly stations in Venezuela, Argentina, the British West Indies, Great Britain and Newfoundland. George reports his best catch is FR8VP in Syria.

Jack Quintrell of Seat Pleasant, Md., reported a lot of good catches in this column last month, and more of his Calls Heard are shown in that section this month. We are sure the real estate values will boom in Seat Pleasant when the DXers read over his list of stations heard and flock to that pleasant little town to take up their residences.

Station W10XAB, sometimes operated under the call OX2QY, at Reindeer Point, Etah, Greenland, is reported by David Hill of Washington, D. C., and by Martin Olthoff of Independence, Kans. The call OX2QY is used when the station operates as an amateur, and W10XAB when used as a commercial station.

Addresses

We list below the call letters, the frequency and the address when known 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.

(The letters LF, MF and HF in parentheses following the call letters of stations mentioned in this column indicate the Low Frequency, Middle Frequency and High Frequency portions of the 20 meter amateur band. Low Frequency

stations are those on frequencies between 14,000 and 14,100. Middle Frequencies are from 14,100 through 14,300. High Frequencies are from 14,300 through 14,400. No attempt is made to show exact frequencies as they vary so greatly).

CN8AJ, Rene Crettien, 29 Rue des Villas, Casablanca, Morocco.

FR8VP, Rene Fritsch, i/c Communications T-4 Station, Box 107, via Homs, Syria.

GW2UL, Ernest Dell, Morlais, Dowdeswell Place, Upper Loughor, Swansea Glam., Wales.

G8LP, H. G. Hanley, 20 Uplands Ave., Bradmore, Wolverhampton, Gt. Britain.

KSWC, (Temporary call), L. A. C. Dean, No. 8 Squadron, Royal Air Force, Aden.

TG9AA, 7th Ave., South 94, Guatemala City, Guat. 55 watts. On 10 and 20 meters.

YI2BA, Messrs. Mellon & Norman, c/o Port Directorate, Basyra, ya, Mirgil ya, Iraq.

ZS6AJ, J. P. R. Friedenthal, P. O. Staff, Johannesburg, Union of South Africa. (LF).

Readers' Questions

(Continued from page 32)

necting or central insulator at one corner of the attic, over the radio set. Take one leg of the antenna and stretch it down one side and along the other. It will turn at right angles at the next corner of the wall. In other words, its layout will resemble a letter L laid horizontally on its side. Then take the other leg or wire and run it around the other two side walls of the attic. If the length of two sides of the attic are more than 30 feet total distance, then the two wires will not meet at the corner diagonally opposite from which you started. There should be as much distance as possible between these extreme ends of the two doublet wires. The antenna leadin, which will not pick up noise, can be dropped down to the receiver. While this scheme does not permit of the two halves of the doublet being stretched out in one straight line for highest efficiency, it does permit of considerable signal pickup and helps reduce the noise.

World of DX

(Continued from page 23)

tions concerned. Stations affected by the law would be Poste Parisien, 959 keys; Lyons, 1393 keys; Toulouse, 913 keys; and Radio Normandie, 1113 keys. Apparently the new law will have no effect on the situation at all. No doubt, however, the British authorities will not give up the task."

"There are a few corrections to the time schedules of stations as listed in the January RADEX," advises Clarence Wakefield, Wiarton, Ont. "CKLW is now on from 6 to 4 a.m., EST, while CJRC now signs off at about 2 a.m. I tuned in KFWB the other morning and heard them sign off at 4 a.m., EST, saying they would be back on the air at 6:30—which would make their schedule 9:30 to 4 a.m., EST."

"Who remembers," queries E. M. Vickers, Box 121, Coral Gables, Fla., "When Harry Snodgrass was tickling the ivories over WOS; and WCAP was the Chesapeake & Ohio Telephone Co. in Washington; when **KDPM** was broadcasting Cleveland. Ev Jones held forth with the cuckoos over WJAX in that city. and WTAM shared time WSBT; and when WJZ and WEAF used the same antenna, but broadcast on different frequencies?"

Frequency Check Schedule

3:00-3:15

3:05-3:20

3:10-3:25

3:15-3:30

3:20-3:35

3:25-3:40

3:30-3:45

3:35-3:50

3:40-3:55

3:45-4:00

3:50-4:05

3:55-4:10

4:00-4:15

4:05-4:20

4:10-4:25

WSJS

WMFJ

WAIM

WMFD

WEED

WRDW

WJNO

WICA

WIOD

WAYX

WDNC

WPAY

WAIR

WMBC

WALR

WMFR

WHBB

WKRC

WCLE

WSMB

KALB

WIRC

WBLY

Second Tuesday

1310

1420

1200

1370

1420

1200

1500

940

610

1200

1210

1500

1370

1250

1420

1210

1200

1500

550

610

1320

1210

1310

Winston-Salem, N. C.

Daytona Beach, Fla.

Rocky Mount, N. C.

W. Palm Beach, Fla.

Anderson S C

Augusta, Ga Ashtabula, Ohio

Wayeross, Ga. Lima. Ohio

Durham, N. C.

Detroit, Mich

Selma, Ala.

Zanesville, Ohio

Cincinnati, Ohio

Cleveland, Ohio

Alexandria La

Muncie, Ind.

New Orleans, La.

High Point, N. C.

Portsmouth, Ohlo

Winston-Salem, N. C.

Miami, Fla.

Wilmington, N. C.

HE Federal Communications Commission recently adopted a new schedule for its monthly frequency checks. Reducing the periods for each station from 20 to 15 minutes, the FCC now has one or more broadcasters signing on every five minutes. A total of 335 stations is included in the schedule which is now in operation.

As in the past, the tests take place during the second week of each month. In April, the schedule will commence on Friday the 8th and continue through Thursday the 14th.

Continu	C time	~B** ^	ilaibaaj die		WIRC	1310	Muncie, that
All ti	mes li	sted	are a.m., Eastern	4:15-4:30	KELD	1370	El Dorado, Ark.
			,		WOPI	1500	Bristol, Tenn.
Standar	·a.				WWAE	1200	Hammond, Ind.
				4:20-4:35	WACO	1420	Waco, Texas
	S	econd	Monday		WBCM	1410	Bay City, Mich.
0.00.0.15			Albany, N. Y.		WDBO	580	Orlando, Fla.
3:00-3:15	WABY	1370 1420	Springfield, Mass.	4:25-4:40	KXYZ	1440	Houston, Texas
3:05-3:20	WMAS WCAX	1200	Burlington, Vt.		WCMI	1310	Ashland, Ky.
3:10-3:25			Augusta, Maine		WSIX	1210	Nashville, Tenn.
3:15-3:30	WRDO WAGM	1370 1420	Presque Isle, Me.	4:30-4:45	KGKL	1370	San Angele, Tex.
3:20-3:35			St. Albans, Vt.		WHBY	1200	Green Bay, Wis.
3:30-3:45	WQDM	1390	Plattsburg, N. Y.		WHEF	1500	Kosciusko, Miss.
3:35-3:50	WMFF	1310	Bangor, Maine	4:35-4:50	KCMC	1420	Texarkana, Tex.
3:40-3:55	WABI	1200			WHK	1390	Cieveland, Ohio
3:45-4:00	WCAD	1220	Canton, N. Y.	4:40-4:55	KRGV	1260	Weslaco, Texas
3:50-4:05	WLNII	1310	Laconia, N. H.		WADC	1320	Akron, Ohio
3:55-4:10	WIBX	1200	Utica, N. Y.	4:45-5:00	KTOK	1370	Oklahoma City, Okla.
4:00-4:15	WWRL	1500	Woodside, N. Y.		WJBK	1500	Detroit, Mich.
4:05-4:20	WMBO	1310	Auburn, N. Y.	4:50-5:05	KGFF	1420	Shawnee, Okla.
4:10-4:25	WBRB	1210	Red Bank, N. J.	4:55-5:10	KFVS	1210	Cape Girardeau, Mo.
4:20-4:35	KVOX	1310	Moorhead, Minn.	5:00-5:15	KMAC	1370	San Antonio, Texas
4:25-4:40	KFPW	1210	Fort Smith, Ark.	5:05-5:20	KAND	1310	Corsicana, Texas
4:30-4:45	WMIN	1370	St. Paul, Minn.	5:10-5:25	KLAH	1210	Carlsbad, N. Mex.
4:35-4:50	KNET	1420	Palestine, Texas	5:15-5:30	KIUP	1370	Durango, Colo.
4:40-4:55	WBBZ	1200	Ponca City, Okla.	5:20-5:35	KFXR	1310	Oklahoma City, Okia.
4:45-5:00	KFGQ	1370	Boone, Iowa	5:25-5:40	KDLR	1210	Devils Lake, N. D.
4:50-5:05	KRBC	1420	Abilenc, Texas	5:30-5:45	KICA	1370	Clovis, N. Mex.
4:55-5:10	KGHI	1200	Little Rock, Ark.	5:35-5:50	KGMB	1320	Honolulu, Hawait
5:00-5:15	KTEM	1370	Temple, Texas	5:40-5:55	KBTM	1200	Jonesboro, Ark.
5:05-5:20	KABR	1420	Aberdeen, S. D.	5:45-6:00	KRMC	1370	Jamestown, N. D.
5:10-5:25	KGEK	1200	Sterling, Colo.	6:05-6:20	KORE	1420	Eugene, Ore.
5:15-5:30	KFJZ	1370	Fort Worth, Texas	6:10-6:25	KOOS	1200	Marshfield, Ore.
5:20-5:35	WMBH	1420	Joplin, Mo.	6:15-6:30	KAST	1370	Astoria, Ore.
5:25-5:40	WIL	1200	St. Louis, Mo.	6:20-6:35	KPQ	1500	Wenatchee, Wash.
5:30-5:45	WOC	1370	Davenport, Iowa	6:25-6:40	KFXD	1200	Nampa, Idaho
5:35-5:50	KABC	1420	San Antonio, Texas	6:30-6:45	KUJ	1370	Walla Walla, Wash.
5:40-5:55	KADA	1200	Ada, Okla.	6:35-6:50	KRNR	1500	Roseburg, Ore.
5:45-6:00	KLUF	1370	Galveston, Texas	6:40-6:55	KVOS	1200	Bellingham, Wash.
5:55-6:10	кнвс	1400	Hilo, Hawaii	6:45-7:00	KEEN	1370	Seattle, Wash.
6:00-6:15	KRE	1370	Berkeley, Calif.	6:50-7:05	KMED	1410	Medford, Ore.
6:05-6:20	KXO	1500	El Centro, Calif.	7:00-7:15	KRKO	1370	Everett, Wash.
6:10-6:25	KWG	1200	Stockton, Calif.		S.	cond W	Vednesday
6:15-6:30	KERN	1370	Bakersfield, Calif.	3:00-3:15	WTEL	1310	Philadelphia, Pa.
6:20-6:35	KUMA	1420	Yuma, Ariz.	3:05-3:10	WNBF	1500	Binghamton, N. Y.
6:25-6:40	KVCV	1200	Redding, Calif.	3:10-3:25	WLVA	1200	Lynchburg, Va.
6:30-6:45	KIS	1280	Oakland, Calif.	3:15-3:30	WSAJ	1310	Grove City, Pa
6:35-6:50	KYOS	1040	Merced, Calif.	3:20-3:35	WWSW	1500	Pittsburgh, Pa.
6:40-6:55	KSUN	1200	Lowell, Ariz.	3:25-3:40	WBAX	1210	Wilkes-Barre, Pa.
6:45-7:00	KGDM	1100	Stockton, Calif.	3:30-3:45	WHAT	1310	Philadelphia, Pa.
6:50-7:05	KIEM	1450	Eureka, Calif.		WRTD	1500	Richmond, Va.
6:55-7:10	KVEC	1200	San Luis Obispo, Calif.	3:35-3:50	WKID	1900	Alcamona, va.

3:40-3:55	WBBL	1210	Richmond, Va.		WTRC	1310	Eikhart, Ind.
3:45-4:00	WBNY		Buffalo, N. Y.	5:10-5:25	KHBG	1210	Okmulgee, Okla.
3:50-4:05	WHIS	1410	Bluefield, W. Va.	5:15-5:25	KONO	1370	San Antonio, Tex.
3:55-4:10	WKOK	1210	Sunbury, Pa	5:20-5:35	KGKB	1500	Tyler, Texas
4:00-4:15	WFBG	1310	Altoona, Pa.	5:25-5:40	KASA	1210 1370	Elk City, Okia. Longview, Texas
4:05-4:20	WQAN	880	Scranton, Pa.	5:30-5:45 5:35-5:50	KFRO	1500	Austin, Texas
4:10-4:25	KWNO		Winona, Minn.	5:40-5:55	WMFG		Hibbing, Minn.
	WHDL		Olean, N. Y.	5:45-6:00	KRLH	1420	Midland, Texas
4:15-4:30	KRIS	1330	Corpus Christi, Tex.	5:50-6:05	KCRJ	1310	Jerome, Ariz.
	WEBR	1310	Buffalo, N. Y.	5:55-6:10	KIUL	1210	Garden City, Kans.
	WIBM	1370 1500	Jackson, Mich. Big Spring, Texas	0.00-0.10	KVOA	1260	Tueson, Ariz.
4:20-4:35	WPAR	1420	Parkersburg, W. Va.	6:05-6:20	KHUB	1310	Watsonville, Calif.
Cut 4:40		1430	Des Moines, Iowa	6:10-6:25	KGGC	1420	San Francisco, Calif.
4:25-4:40	KSO WCLO	1200	Janesville, Wis.	6:15-6:30	KGAR	1370	Tucson, Ariz.
4:30-4:45	KROC	1310	Rochester, Minn.	6:20-6:35	KSRO	1310	Santa Rosa, Calif.
4.50-1.40	WEOA	1370	Evansville, Ind.	6:25-6:40	KTRB	740	Modesto, Calif.
4:35-4:50	KDAL	1500	Duluth, Minn.	6:30-6:45	KJBS	1070	San Francisco, Calif.
7.00° ± .00	WELL	1420	Battle Creek, Mich.	6:35-6:50	KSUB	1310	Cedar City, Utah
4:40-4:55	WHBC	1200	Canton, Ohlo	6:40-6:55	KDON	1210	Monterey Cail.
1.10 1.00	WTAW	1120	College Station, Tex.	6:45-7:00	KGU	750	Honolulu, Hawali
4:45-5:00	KRMD		Shreveport, La.	6:50-7:05	KHSL	1260	Chico, Calif.
1.10 0.00	WSAU	1370	Wausau, Wis.	6:55-7:10	KROY	1210	Sacramento, Calif.
4:50-5:05	KNEL	1500	Brady, Texas			Second	Friday
	WLAP	1420	Lexington, Ky.	3:00-3:15	wsvs	1370	Buffaio, N. Y.
4:55-5:10	KFDM	560	Beaumont, Texas	3:05-3:20	WJAC	1310	Johnstown, Pa.
	WFAM	1200	South Bend, Ind.	3:10-3:25	WJTN	1210	Jamestown, N. Y.
5:00-5:15	KPDN	1310	Pampa, Texas	3:15-3:30	WBLK	1370	Clarksburg, W. Va.
5:05-5:20	KPLT	1500	Paris, Texas	3:20-3:35	WLEU	1420	Erie, Pa.
	WCBS	1420	Springfield, Ill.	3:25-3:40	WCAP	1280	Asbury Park, N. J.
5:10-5:25	KGKO	570	Wichita Falls, Tex.		WSAY	1210	Rochester, N. Y.
5:15-5:30	KFPL	1310	Dublin, Texas	3:30-3:45	WDEV	550	Waterbury, Vt.
	WDWS	1370	Champaign, Iil.	*	WGH	1310	Newport News, Va.
5:20-5:35	KAWM		Gallup, N. Mex.	3:35-3:50	WCNW	1500	Brooklyn, N. Y.
	WPAD	1420	Paducah, Ky.		WMBS	1420	Uniontown, Pa.
5:25-5:40	KGLO	1210	Mason City, Iowa	3:40-3:55	WFAS	1210	White Plains, N. Y.
	WJBC	1200	Bloomington, Ill.		WMBG	1350	Richmond, Va.
5:30-5:45	KRRV	1310	Sherman, Texas	3:45-4:00	WOKO	1430	Albany, N. Y.
	WGL	1370	Fort Wayne, Ind.		WRAW	1310	Reading, Pa.
5:35-5:50	KGKY	1500	Scottsbluff, Neb.	3:50-4:05	WDAS	1370	Philadelphia, Pa.
5:40-5:55	WIBU	1210	Poynette, Wis.		WSYB	1500	Rutland, Vt.
	s	econd '	Thursday	3:55-4:10	WNBZ	1290	Saranac Lake, N. Y.
3:00-3:15				3:55-4:10			Saranac Lake, N. Y. Syracuse, N. Y.
3:00-3:15 3:05-3:20	WKAT	1500	Miami Beach, Fla.	4:00-4:15	WNBZ WSYR WBRE	1290 570 1310	Saranac Lake, N. Y. Syzacuse, N. Y. Wilkes-Barre, Pa.
3:05-3:20	WKAT W J RD	1500 1 20 0	Miami Beach, Fla. Tuscaloosa, Ala.		WNBZ WSYR WBRE WBTM	1290 570 1310 1370	Saranac Lake, N. Y. Syzacuse, N. Y. Wilkes-Barre, Pa. Danville, Va.
3:05-3:20 3:10-3:35	WKAT WJRD WSOC	1500 1 20 0 1210	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C.	4:00-4:15 4:05-4:20	WNBZ WSYR WBRE WBTM WNLC	1290 570 1310 1370 1500	Saranac Lake, N. Y. Syzacuse, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn.
3:05-3:20 3:10-3:35 3:15-3:30	WKAT WJRD WSOC WAML	1500 1 20 0 1210 131 0	Miami Beach, Fla. Tuscaloosa, Aia. Charlotte, N. C. Laurel, Miss.	4:00-4:15	WNBZ WSYR WBRE WBTM WNLC WGBB	1290 570 1310 1370 1500 1210	Saranac Lake, N. Y. Syzacuse, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35	WKAT WJRD WSOC WAML WPRA	1500 1200 1210 1310 1370	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R.	4:00-4:15 4:05-4:20 4:10-4:25	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC	1290 570 1310 1370 1500 1210 1430	Saranac Lake, N. Y. Syzhouse, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y. Rochester, N. Y.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40	WKAT WJRD WSOC WAML WPRA WPAX	1500 1200 1210 1310 1370 1210	Miami Beach, Fia, Tuscaloosa, Ala, Chariotte, N. C. Laurel, Miss, Mayaguez, P. R. Thomasville, Ga.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT	1290 570 1310 1370 1500 1210 1430 1200	Saranac Lake, N. Y. Syzneuse, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45	WKAT WJRD WSOC WAML WPRA	1500 1200 1210 1310 1370	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla.	4:00-4:15 4:05-4:20 4:10-4:25	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT WMBQ	1290 570 1310 1370 1500 1210 1430 1200 1500	Saranac Lake, N. Y. Synacuse, N. Y. Synacuse, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:35-3:50	WKAT WJRD WSOC WAML WPRA WPAX WQAM WPRP	1500 1200 1210 1310 1370 1210 560 1420	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30 4:20-4:35	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK	1290 570 1310 1370 1500 1210 1430 1200 1500 1370	Saranac Lake, N. Y. Syncuise, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:35-3:50 3:40-3:55	WKAT WJRD WSOC WAML WPRA WPAX WQAM WPRP	1500 1200 1210 1310 1370 1210 560	Miami Beach, Fla. Tuscaloosa, Ala. Chariotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R. Kinston, N. C.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW	1290 570 1310 1370 1500 1210 1430 1200 1500 1370 1310	Saranac Lake, N. Y. Syracuse, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:35-3:50	WKAT WJRD WSOC WAML WPRA WPAX WQAM WPRP	1500 1200 1210 1310 1370 1210 560 1420 1200	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30 4:20-4:35 4:25-4:40	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW WGNY	1290 570 1310 1370 1500 1210 1430 1200 1500 1370 1310 1210	Saranac Lake, N. Y. Synacise, N. Y. Wilkes-Barre, Pa. Danville, Va. New Loudon, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind. Newburgh, N. Y.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:35-3:50 3:40-3:55 3:45-4:00	WKAT WJRD WSOC WAML WPRA WPAX WQAM WPRP WFTC WKAQ	1500 1200 1210 1310 1370 1210 560 1420 1200 1240	Miami Beach, Fla. Tuscalossa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R. Kinston, N. C. San Juan, P. R.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30 4:20-4:35 4:25-4:40 4:30-4:45	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW WGNY WJBL	1290 570 1310 1370 1500 1210 1430 1200 1500 1370 1310 1210 1200	Saranac Lake, N. Y. Syracuse, N. Y. Wiikes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind. Newburgh, N. Y. Decatur, Ill.
3:05-3:20 3:10-3:35 3:15-3:35 3:25-3:35 3:25-3:40 3:30-3:45 3:35-3:50 3:45-4:00 3:50-4:05 3:55-4:10	WKAT WJRD WSOC WAML WPRA WPAX WQAM WPRP WFTC WKAQ WBIG	1500 1200 1210 1310 1370 1210 560 1420 1200 1240 1440	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R. Kinston, N. C. San Juan, P. R. Greensboro, N. C.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30 4:20-4:35 4:25-4:40	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW WGNY WJBL KATE	1290 570 1310 1370 1500 1210 1430 1200 1370 1310 1210 1200 1420	Saranac Lake, N. Y. Syracuse, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind. Newburgh, N. Y. Decatur, Ill. Albert Lea, Minn.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:35-3:50 3:40-3:55 3:45-4:00 3:50-4:05	WKAT WJRD WSOC WAML WPRA WPAX WQAM WPRF WFTC WKAQ WBIG WFOY WAGF KPLC	1500 1200 1210 1310 1370 1210 560 1420 1200 1240 1440 1210 1370 1500	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R. Kinston, N. C. San Juan, P. R. Greensboro, N. C. St. Augustine, Fla. Dothan, Ala. Lake Charles, La.	4:(0)-4:15 4:(05-4:20 4:10-4:25 4:15-4:30 4:20-4:35 4:25-4:40 4:30-4:45 4:35-4:50	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW WGNY WJBL KATE WKBB	1290 570 1310 1370 1500 1210 1430 1500 1370 1310 1210 1210 1420 1500	Saranac Lake, N. Y. Syracuse, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind. Newburgh, N. Y. Decatur, Ill. Albert Lea, Minn. Dubuque, Iowa
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:35-3:50 3:40-3:55 3:45-4:00 3:50-4:05 4:00-4:15	WKAT WJRD WSOC WAML WPRA WPAX WQAM WPRP WFTC WKAQ WBIG WFOY WAGF	1500 1200 1210 1310 1370 1210 560 1420 1220 1240 1240 1210 1370	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R. Kinston, N. C. San Juan, P. R. Greensboro, N. C. St. Augustine, Fla. Dothan, Ala.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30 4:20-4:35 4:25-4:40 4:30-4:45	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW WGNY WJBL KATE WKBB KARK	1290 570 1310 1370 1500 1210 1480 1200 1500 1310 1210 1200 1420 1500 890	Saranac Lake, N. Y. Syracuse, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind. Newburgh, N. Y. Decatur, Ill. Albert Lea, Minn. Dubuque, lowa Little Rock, Ark.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:35-3:50 3:45-4:00 3:50-4:05 3:55-4:10 4:00-4:15 4:05-4:20 4:10-4:25	WKAT WJRD WSOC WAML WPRA WPAX WQAM WFRP WFTC WKAQ WBIG WFOY WAGF KPLC WFDF	1500 1200 1210 1310 1370 1210 560 1420 1240 1240 1210 1370 1500 1310 1340	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R. Kinston, N. C. San Juan, P. R. Greensboro, N. C. St. Augustine, Fla. Dothan, Ala. Lake Charles, La. Filnt, Mich.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30 4:20-4:35 4:25-4:40 4:30-4:45 4:35-4:50 4:40-4:55	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW WGNY WJBL KATE WKBB KARK	1290 570 1310 1370 1500 1210 1430 1500 1370 1310 1210 1210 1220 1420 1500 1420 1500 1420 1500	Saranac Lake, N. Y. Syncuise, N. Y. Wilkes-Barre, Pa. Danville, Va. New Loudon, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind. Newburgh, N. Y. Decatur, Ill. Albert Lea, Minn. Dubuque, lowa Little Rock, Ark. Lansing, Mich.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:35-3:50 3:45-4:00 3:55-4:10 4:00-4:15 4:05-4:20	WKAT WJRD WSOC WAML WPRA WPAX WQAM WPRP WFTC WKAQ WBIG WFOY WAGF KPLC WFDF WSPD WCPO	1500 1200 1210 1310 1370 1210 560 1420 1240 1240 1240 1370 1500 1310 1340 1200	Miami Beach, Fla. Tuscalossa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R. Kinston, N. C. San Juan, P. R. Greensboro, N. C. St. Augustine, Fla. Dothan, Ala. Lake Charles, La. Flint, Mich. Toledo, Ohio Cincinnati, Ohio	4:(0)-4:15 4:(05-4:20 4:10-4:25 4:15-4:30 4:20-4:35 4:25-4:40 4:30-4:45 4:35-4:50	WNBZ WSYR WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW WGNY WJBL KATE WKBB KARK WJIM WEXL	1290 570 1310 1370 1500 1210 1430 1200 1370 1310 1210 1200 1420 1500 890 890 1310 1310	Saranac Lake, N. Y. Syracuse, N. Y. Wilkes-Barre, Pa. Danville, Va. New Loudon, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind. Newburgh, N. Y. Decatur, Ill. Albert Lea, Minn. Dubuque, Iowa Little Rock, Ark. Lansing, Mieh. Royal Oak, Mich.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:35-3:50 3:45-4:00 3:50-4:05 4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30	WKAT WJRD WSOC WAML WPRA WPAX WPAX WPRP WFTC WKAIG WBIG WFOY WAGF KPLC WFDF WSPD WCPO WMFO	1500 1200 1210 1310 1370 1210 560 1420 1240 1440 1210 1370 1310 1340 1200 1370	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R. Kinston, N. C. San Juan, P. R. Greensboro, N. C. St. Augustine, Fla. Dothan, Alia. Lake Charles, La. Flint, Mich. Toledo, Ohio Cincinnati, Ohio Decatur, Alia.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30 4:20-4:35 4:25-4:40 4:30-4:45 4:36-4:50 4:40-4:55	WNBZ WSYR WBTE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW WGNY WJBL KATE WKBB KARK WJIM WENL	1290 570 1310 1370 1500 1210 1430 1200 1370 1310 1210 1210 1420 1420 890 1210 1310 1310 1310 1310	Saranac Lake, N. Y. Synacise, N. Y. Wilkes-Barre, Pa. Danville, Va. New Loudon, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind. Newburgh, N. Y. Decatur, Ill. Albert Lea, Minn. Dubuque, Iowa Little Rock, Ark. Lansing, Mich. Royal Oak, Mich. Wirginia, Minn.
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:35-3:50 3:45-4:00 3:50-4:05 3:55-4:10 4:00-4:15 4:05-4:20 4:10-4:25	WKAT WJRD WSOC WAML WPRA WPAX WQAM WPRP WFTC WKAQ WBIG WFOY WAGF KPLC WFDF WCPO WMFO KFIZ	1500 1200 1210 1310 1370 1210 560 1420 1240 1440 1210 1500 1310 1340 1200 1370 1340 1200	Miami Beach, Fla. Tuscaloosa, Ala. Charlotte, N. C. Laurel, Miss, Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R. Kinston, N. C. San Juan, P. R. Greensboro, N. C. St. Augustine, Fla. Dothan, Ala. Lake Charles, La. Flint, Mich. Toledo, Ohio Cincinnati, Ohio Decatur, Ala. Fond du Lae, Wis.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30 4:20-4:35 4:25-4:40 4:35-4:50 4:40-4:55 4:45-5:00	WNBZ WSYR WBYRE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW WGNY WJBL KATE WKBB KARK WJIM WENL WHLB	1290 570 1310 1370 1500 1210 1430 1200 1500 1310 1210 1420 1500 890 1210 1310 1310 1310 1420 14	Saranac Lake, N. Y. Syyncuse, N. Y. Wilkes-Barre, Pa. Danville, Va. New London, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind. Newburgh, N. Y. Decatur, Ill. Albert Lea, Minn. Dubuque, Iowa Little Rock, Ark. Lansing, Mich. Royal Oak, Mich. Virginia, Minn. Pecos, Texas
3:05-3:20 3:10-3:35 3:15-3:30 3:20-3:35 3:25-3:40 3:30-3:45 3:36-3:50 3:40-3:55 3:45-4:00 4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30	WKAT WJRD WSOC WAML WPRA WPAX WQAM WPRP WFTC WKAQ WBIG WFOY WAGF WFDF WSPD WCPO WMFO KFIZ WKEU	1500 1200 1210 1310 1370 1210 560 1420 1220 1240 1210 1370 1310 1340 1200 1370 1420 1440	Miami Beach, Fla. Tuscaloosa, Ala. Chariotte, N. C. Laurel, Miss. Mayaguez, P. R. Thomasville, Ga. Miami, Fla. Ponce, P. R. Kinston, N. C. San Juan, P. R. Greensboro, N. C. St. Augustine, Fla. Dothan, Ala. Lake Charies, La. Flint, Mich. Toledo, Ohio Cincinnati, Ohio Decatur, Ala. Fond du Lac, Wis. Griffin, Ga.	4:00-4:15 4:05-4:20 4:10-4:25 4:15-4:30 4:20-4:35 4:25-4:40 4:30-4:45 4:35-4:50 4:40-4:55 4:45-5:00	WNBZ WSYR WBRE WBTM WNLC WGBB WHEC WTHT WMBQ WRAK WBOW WGNY WJBL KATE WJBL KATE KATE KIM KINI WENL WHLB KIUN	1290 570 1310 1310 1370 1500 1210 1200 1370 1310 1210 1420 1500 890 1310 1210 1310 1420 1500 1420 1430	Saranac Lake, N. Y. Synacise, N. Y. Wilkes-Barre, Pa. Danville, Va. New Loudon, Conn. Freeport, N. Y. Rochester, N. Y. Hartford, Conn. Brooklyn, N. Y. Williamsport, Pa. Terre Haute, Ind. Newburgh, N. Y. Decatur, Ill. Albert Lea, Minn. Dubuque, Iowa Little Rock, Ark. Lansing, Mich. Royal Oak, Mich. Virginia, Minn. Pecos, Texas Marshalltown, Iowa Marshalltown, Iowa
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1450 Cleveland, Ohio 3:50-4:05 WGAR Florence, S. C. WOLS 1200 Columbus, Ohio 3:55-4:10 WCOL 1210 WLAK 1310 Lakeland, Fla Carthage, Ill. 4:00-4:15 WCAZ 1070 WORC 1360 Vicksburg, Miss. 1120 Baton Rouge, La. 4:05-4:20 WJBO Dayton, Ohio WSMK 1380 Manitowoc, Wis. 4:10-4:25 WOMT Tallahassee, Fla. San Juan, P. R. WTAL. 1310 4:15-4:30 WNEL 1290 Columbus, Ohio WOSU 570 4:20-4:35 WDZ 1020 Tuscola, Ill. WMSD 1420 Muscle Shoals, Ala. Wilson, N. C. 4:25-4:40 WGTM 1310 WHBU 1210 Anderson, Ind. 1200 New Orleans, La. 4:30-4:45 WIBW Youngstown, Ohlo WKBN 570 WGPC Albany, Ga. 4:35-4:50 1420 Norman, Okla. Detroit, Mich. Valley C'ty, N. D. WNAD 1010 WXYZ 1240 4:40-4:55 KOVC 1500 WTAX 1210 Springfield, Ill. WTJS 1310 Jackson, Tenn Blytheville, Ark 4:45-5:00 KLCN 1290 WMBR 1370 Jacksonville, Fla. WMPC 1200 Lapeer, Mich 4:50-5:05 KGCA 1270 Decorah, Iowa Kilgore, Texas 4:55-5:10 KOCA 1910 KVOL 1310 Lafayette, La. 5:00-5:15 KBIX 1500 Muskogee, Okla. New Orleans, La. WBNO 1200 Port Arthur, Tex. 5:05-5:20 KPAC 1260 1210 Wichita, Kans. 5:10-5:25 KANS WROL Knoxville, Tenn. 1310 5:15-5:30 KMLB 1200 Monroe, La. Houston, Texas KTRH 1290 Minot, N. D. KLPM 1240 5:20-5:35 Ardmore, Okla. KVSO 1210 5:25-5:40 KWLC 1270 Decorah, Iowa 5:30-5:45 El Paso, Texas 5:35-5:50 KTSM 1310 5:40-5:55 KWTN 1210 Watertown, S. D. Minneapous, Minn. 5:45-6:00 WLB 1250 5:50-6:05 KOBII 1370 Rapid City, S. D. 5:55-6:10 KPFA 1210 Helena, Mont. Yakima, Wash 6:00-6:15 1250 Ketchikan, Alaska KGBU 6:05-6:20 900 6:10-6:25 KFJI 1210 Klamath Falls, Ore. 6:15-6:30 KGEZ 1310 Kalispelt, Mont. Missoula, Mont. Olympia, Wash. 6:20-6:35 KGVO 1260 1210 6-25-6-40 KGY Aberdeen, Wash, 6:30-6:45 KXRO 1310 Wolf Point, Mont. 6:35-6:50 KGCX 1450 6:40-6:55 KFIO 1120 Spokane, Wash. 6:45-7:00 KINY 1310 Juneáu, Alaska 6:50-7:05 KFQD 780 Anchorage, Alaska KRLC 1390 Lewiston, Idaho 6:55-7:10

On January 30, WBRE in Wilkes-Barre, Pa., became an NBC outlet, optional to either the Red or the Blue Networks. This brings the total of NBC stations up to 144. WBRE, owned by Louis G. Baltimore, transmits on 1310 kcs with 100 watts. The new 180 foot vertical antenna is already in operation, and it is expected a new 250 watt RCA transmitter will be installed in the spring. WBRE has been on the air since 1927

New Television Tubes



THE more critical requirements of television reception are being met by two cathode-ray tubes recently developed and now made available by Allen B. DuMont Laboratories, Inc., of Upper Montclair, N. J. The Type 54-10-T has a 5-inch diameter screen and a maximum third anode voltage rating of 3000. The Type 144-10-T has a 6000-volt rating and a twelve-inch diameter screen.

Both of these tubes employ a unique design which prevents defocusing of the spot when the video signal modulates the tube. This has heretofore been one of the difficulties with television reception, because when the cathode-ray tube was adjusted to give a sharp line at a certain value of signal, it blurred at other signal values. With these new DuMont television reception tubes a sharp focus is maintained at all values of applied video signal, giving a clearer-cut televi-

sion picture than it has been possible to obtain with any of the tubes available until now.

The standard screen provides a pleasing green light. Tubes are available on special order, however, with a white screen giving a black-and-white picture.

mentioned employ Both tubes electrostatic focusing and deflection. Electrostatic focusing is believed by the DuMont engineers to be more practical than electromagnetic, since the latter requires an extremely constant current supply so that even the slightest linevoltage fluctuations can spoil the focus of the television picture. Also, electrostatic deflection is considered superior to electromagnetic because it is necessary to introduce distortion into an electromagnetic deflection circuit to compensate for the inductance of the magnetic deflecting coils. Also, electromagnetic deflection requires the use of an iron-core coupling transformer with a flat frequency characteristic to about 160 kc between the deflection amplifier and the deflection coils. This is necessarily expensive, while, the electrostatic deflection circuits are relatively simple.

Richard Crooks, Voice of Firestone tenor, never borrowed so much as a cent to help pay for his education. When his voice had already attracted attention, one of the great conductors offered, with the aid of a wealthy friend, to have Crooks supplied with \$10,000 to complete his studies abroad. Despite the fact he had just been married and was making ends meet on \$25 a week, he turned the offer down. He determined that whatever he was to have, he must earn himself. And he has never swerved from that resolution.

Special DX Calendar

The time given in the DX Calendar is in EST by the 24-hour clock.

DX Tips Periods

Mon., 0300-0315, KMTR, 570 kcs. 1100-1115, WEEU, 830 kcs. 2115-2130, CJCJ, 690 kcs.

Mon., 2115-2130, CJCJ, 690 kcs. Tues., 1835-1900, W2XAF, 9530 kcs., and W2XAD, 15330 kcs.

Wed., 0035-0045, KOY, 1390 kcs. 1345-1400, WTAR, 780 kcs.

Thurs., 0230-0245, KGMB, 1320 kcs. 2215-2230, W8XWJ, 41,000 kcs. "The SWL Chatterbox."

Fri., 2330-2345, W8XK, 6140, and KDKA, 980 kcs.

Sat., 0230-0245, KLS, 1280 kcs. 0300-0345, KDB, 1500 kcs. 1030-1045, WEEU, 830 kcs.

Special Broadcasts

March 20, 0700-0730, 4IP, Ipswich, Australia, 1440 kcs. (UDXC).

March 22, 0200-0500, KGKB, Tyler, Texas, 1500 kcs.

March 27, 0300-0400, KFOR, 1210 kcs. (IDA)

April 2, 0245-0400, CHWK, Chillawack, B. C., 780 kcs. (UDXC).

Apr. 3, 0200-0300, KIDO, Boise, Idaho, 1350 kcs. (BBDXC)

May 7, 0245-0400, CHWK, Chilliwack, B. C., 780 kcs. (UDXC).

June 4, 0245-0400, CHWK, Chilliwack, B. C., 780 kcs. (UDXC)

SPECIAL

A special program will be broadcast for the IDA and the CDXR on April 24, from station 3AK, Melbourne, Australia. The station will come on the air at 6:45 am, EST, and will call the clubs at 7:00 am, at 7:15 and at 7:30 am, EST. Station 3AK, known as the "Voice of the Night," transmits on 1500 kcs with 250 watts power. Address Mr. G. D. Hutchins, 10 Ordnance Quarters, Maribyrnong, W3, Vic., Australia.

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.

		NEW
940	4QR	Brisbane, Qsld. 500 w.
990	2YD	Wellington, N. Z. National Brdcstg. Sys.
1010	XEFQ	Cananea, Son. Pedro L. Diaz, Av. Sonora 97
1040	HJ3ABZ	Bogota, Colombia.
1130	HJ7ABD	Bucaramanga, Colombia.
1150	XEBP	Pino Suarez 412
1160	XEFM	Leon, Gto. Raul Ortiz G., Aquiles Serdan 7.
1200	XEBU	Chihuahua, Chih. Feliciano Lopez Islas, Aptdo. 157.
1250	XEAI	Mexico City, D. F. Carmen Gutierrez, Bahia de Santa Barbara 114.
1340	XEDH	Villa Acuna, Coah. Vicente Hernan- dez, Galeana y B. Dominguez
1420		Beaumont, Tex. Beaumont Brdcstg. Assn.
1500	KYSM WGIL	Mankato, Minn. F. B. Clement & Co. Galesburg, Ill. Galesburg Brdestg.
		Co. Laredo, Texas. Mervel M. Valentine
		FREQUENCY
580	XELO	Tijuana, B. Cfa., from 670
600	XET	Monterrey, N. L., from 690 Mexico City, D. F., from 1280 Mexico City, D. F., from 940
610	XEXM	Mexico City, D. F., from 1280
	XEYO	Mexico City, D. F., from 940
780	2KA	Katoomba, NSW., from 1160
810	XEBZ	Mexico City, D. F., from 1160 Mexico City, D. F., from 990
890	XEK	Mexico City, D. F., from 990
1070	1ZB	Auckland, N. Z., from 1090
1080	XEBK	Nuevo Laredo, Tanis., from 1000
1130	XEJP 2ZB	Mexico City, D. F., from 1120 Wellington, N. Z., from 1120 Monterroy, N. J., from 1220
1230	XEG	Monterrey, N. L., from 1220
1310	XEXS	Mexico City, D. F., from 1000
1340	XEAP	Obregon, Son., from 1240
	XEBS	Mexico City, D. F., from 1240
1520	TGW	Guatemala City, Guat., from 1230 POWER
580	XEMU	Piedras Negras, Coah. 250 w.
713	No. 1	Rome, Italy, 100,000 from 50,000
880	KPOF	Denver, Colo. 1000 from 500
980	XEFE	Nuevo Laredo, Tams., 250 from 150
1080	XEBK	Denver, Colo. 1000 from 500 Nuevo Laredo, Tams., 250 from 150 Nuevo Laredo, Tams., 100 from 60 Saltillo, Coah., 100 from 50
1160	XEAS	NEIWORK
1030	CKLW	Windsor, Ont., new CBC CALL LETTERS
680	4YZ 2YN	Invercargill, N. Z., from 4AP
$\frac{920}{1310}$	KWOC	Nelson, N. Z., from 2ZR Poplar Bluff, Mo., from KPBM
920	WRAX	REINSTATED Philadelphia, Pa.
600	CBW	DELETE Windsor, Ont.
670	XERO	Chapultepec, D. F.
810	XEXC	Aguascalientes Aga
960	2ZF	Aguascalientes, Ags. Palmerston, N. Z.
1060	XEAD	Guadalajara, Jal.
1000	XEMG	Atzcapotzalco, D. F.
1100	XECL	Mexicali, B. Cfa.
1160	XEBJ	Merida, Yuc.

Monterrey, N. I..

Mexico City, D. F.

1230 XEFJ

1240 XEAY

XECW	Mexico City, D. F.
2ZO	Palmerston, N. Z.
3ZM	Christehurch, N. Z.
	OWNER
XEAC	Jorge I. Rivera, Av. Mexico 12, Tijuana, B. Cfa.
XEB1	Pedro C. Rivas, Primo Verdad 14,
	Aguascalientes, Ags.
XEJ	Pedro Meneses, Jr., Av. Lerdo 309,
	Juarez, Chih.
XEBK	G. Guajardo y M. M. Cortes, Bravo
	y Guerrero, Nuevo Laredo, Tams.
WRBL	Columbus Brdestg. Co., Inc., Royal
	Theater Bldg., Columbus, Ga.
XEFV	Dario Cordoba, Juarez, Chih.
XEDA	Pedro Riestra Diaz, Ixtlachuatl 5.
	Gral. Anaya, D. F.
NEKL	Hemmer y Romero S. de R. L., Madero
	18, Leon, Gto.
XETB	Aurelio G. Zarazoza, Moreles 5060
	Pte., Torreon, Coah.
XELZ	Maria Gardena de Zetina, Mexico
	City, D. F.
WRTD	State Planters Bank Bldg., Richmond,
	Va.
	2ZO 3ZM XEAC XEB1 XEJ XEBK WRBL XEFV XEDA XEKL XETB



A busy lady is Eileen Maher, NBC dramatic actress, who does a bit of fashion modeling when she is not acting. The rest of her time is spent in commuting between her Long Island home and New York City.

PERMIT TO CHANGE FREQUENCY 980 XEFE Nuevo Leon, Tams. Waterbury, Conn., to 1290 1190 WATR 1240 KLPM Minot, N. Dak., to 1360 WCAL Northfield, Minn., to 760 1250 WIR Minneapolis, Minn., to 760 1310 KINY Juneau, Alaska, to 1430 WOL Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390 1420 KABR PERMIT TO CHANGE POWER 570 CMCY Havana, Cuba, to 10000 Wichita Falls, Tex., to 1000 KGKO 590 WKZO Kalamazoo, Mich., to 250 (1). Seattle, Wash., to 1000 760 KXA Havana, Cuba, to 5000 CMCF 810 850 WWL New Orleans, La., to 50000 880 CMW Havana, Cuba, to 5000 WCOC Miridian, Miss., to 1000 890 KENE Shenandoah, Iowa, to 1000 (5) KGBU 900 Ketchikan, Alaska, to 1000 920 CMX Havana, Cuba, to 10000 950 WRC Washington, D. C., to 1000 (5) Havana, Cuba, to 5000 CMBZ 1000 CMCJ Havana, Cuba, to 5000 1110 Sloux Falls, S. Dak., to 5000 KSOO 1170 CMBS Havana, Cuba, to 5000 1190 WATR Waterbury, Conn., to 250 1240 KLPM Minot, N. Dak., to 500 (1) 1250 WCAL Northfield, Minn., to 5000 WLB Minneapolis, Minn., to 5000 1260 **CMBD** Havana, Cuba, to 5000 1300 KALE Portland, Ore., to 1000 Juneau, Alaska, to 250 1310 KINY Washington, D. C., to 1000 WOL

1490 KFBK Sacramento, Callf., to 10000
PERMIT TO CHANGE LOCATION
1570 KGKO Wichita Falls to Ft. Worth, Texas
500 WKBB E. Dubuque, II., to Dubuque, Iowa

Pensacoia, Fla., to 1000

Aberdeen, S. Dak., to 500 (1)

Columbus, Ohio, to 1000 (5)

Havana, Cuba, to 5000

1340

1350

1420

1430

WCOA

CMCA

KABR

WBNS

Amateur CALLS HEARD

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

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

28 Megacycles—10 Meters
EI2L (a); GM6IR (p); GM6RG (a); G-:
2AI (a); 2VG (a); 5VM (a); 6AG (a);
6LC (a): 6LK (a): 6PC (a): 6VX (a);
8GX (a): 8WX (a): HI7G (p); K4-: EMG
(a): EPO (p); EZR (p): SA (p); K6-:
JLV (p); LCV (a); MVV (ap): OGS (p);
OQE (a): OQM (ap): PCF (a): PIR (a);
TG9AA (a): TI2FG (a): VK2GU (a);
XEIGE (ap): YV6AL (a): ZL3DJ (a).
14 Megacycles—20 Meters

CE: 1AI (p); 1AO (l); 2BR (lq); 3AA (gp); 3AI (al); 3CO (lp); CN-: 8AM (o);



The spot temporarily vacated by Nelson Eddy on the Chase and Sanborn Hour has been filled by 25-year old John Carter. This is the first regular radio program for this young tenor.

8AV (imo); CP1AA (d); CT1QG (d); CT1QP (n); CX1DSR (m); CX2ABA (m). $\mathbf{E} \cdot \mathbf{F}$

EA9AH (b); ÉI-: 2J (d); 2L (i); 4L (b); ES5D (n); FR8VX (n); FY8E (n); F8-: MG (d); QD (n); TQ (i).

GI: 2CC (d); 2CE (m); 6XS (bd); GM: 2UU (g); 5NW (n); G: 2GJ (m); 5JO (di); 5LU (d); 5ML (bdn); 5JF (d); 6LK (l); 6WO (d); 8LP (d).

HC: 1JB (bcgk); 1XU (m); HH: 2B (abefghjmop); 2FX (b); 2G (q); 2X (a); 4AS (p); 5PA (abefghjmnp); 5Q (m); HI: 1C (abn); 2K (n); 2W (abf); 3N (abgjmnno); 4F (n); 5X (abemnpq); 60 (n); 7G (abn); 7I (agnq); 9I (an); HJ: 1BT (m); 1GC (m); HK: 1DG (g); 1GK (h); 1JC (abh); 1JN (a); 1JO (g); 1K (m); 1PA (ab); 3JA (bnp); 3JB (a); 4AG (b); 4EA (g); 5AR (a); 5DB (e); 5OBC (g); HO2U (n); HP1A (bhn); HR5C (n).

KA1BH (n); KA1ME (a); K2BR (n); K4: DDH (abn): EIL (p); EJF (beghjmop); EMY (o): ENT (bgn): ENY (agn); FAY (abgn); K6: BAZ (dl): BHL (ln): BJJ (i): BMC (l); BNR (ablnp); CMC (fln); GAG (i): GAS (bj): GCQ (d): GQF (lp): JLV (l): KF (l): KGA (l): KMP (l): MBB (l); MTE (l): NZQ (ablnp): OQE (bm); PMP (j): K7FBE (d): K7PQ (n).

LU-: 1DA (abghp); 1DJ (aef); 1JC (a); 2BG (a); 2CA (r); 4AD (p); 4BH (abgp);

4CZ (alo); 4KA (b); 5CK (m); 5CZ (gilp); 6KE (a); 7AC (b); 7AZ (lq); 9BB (e); LY1P (n).

Ń-O-P

NY2AE (bino); OA: 1RX (k); 4AF (a); 4AL (bdop); 4C (n); 4R (ab); OQ5AA (bno); OQ5AE (n); OX2QY (adnp); PAOGN (n); PAOUN (n); PY: 1CK (a); 1MK (g); 2AC (n); 2AI (g); 2GJ (a); 2HA (b); 8AG (q).

SUIKG (a); SVIKE (d); TG:: 1AX (g); 1AY (m); TI:: 2AV (ae); 2HB (c); 2KP (h); 2RC (ab); 3WD (aq).

VK: 1KE (i); 2ADE (d); 2ADO (l); 2AFO (l); 2TC (n); 2UC (ak); 3AZ (d); 3EZ (a); 3GQ (dn); 3KX (n); 3MR (a); 3TW (a); 4EC (e); 4JU (ae); 4VD (n); 7CL (a); 7JB (n); VO-: 1I (b); 1Y (d); 2N (e); 2Z (f); 4A (j); 6D (bcdg); 6J (boq); 6P (o); VP-: 2AT (n); 2DA (bn); 2TG (b); 3BG (d); 3THE (abd/lnp); 4TC (d); 4TH (n); 5AS (d); 5GM (a); 5PM (n); 6MR (bgop); 6NW (o); 6PR (df); 6YB (fhnp); 7NA (in); 9G (mno); 9R (hamn). (bamn).

W-: 1AVK (i); 3FAM (i); 3GS (i); 5CFK (i); 7BVO (i); 8AAJ (i); 9TQ (i); 10XAB (p).

XE-: 1BC (h); 1DT (ab); 1F (ab); 1FF (ab); 1FG (a); 1LK (aq); 2CY (b); 2E (h); 2FC (a); 2HD (ab); 2HO (p); 2IY (abq); 2JK (a); 2RY (p); XWJJ (n); YL2BB (n); YV-: 1AA (m); 1ABY (b); 1AC (b); 1AG (g); 1AP (ab); 1AQ (ghmp); 1LC (h); 3AN (n); 4AA (a); 4AB (abqn); 4AM (b); 4AV (i); 4AX (b); 5ABA (bn); 5ABD (b); 5ABF (abqp); 5ABM (o); 5ABQ (an); 5ABY (abghlnop); 5AC (p); 5AD (m); 5AE (hn); 5AJ (m); 5AK (abq); 5AN (ab[p); 5AV (a); 5AX (h); 5AZ (bealop); ZE1JF; 5AV (a); 5AX (h); 5AZ (bealop); ZE1JG (d); ZU5L (o); ZU6P (g); ZU6T (b); ZU9BH (m). X-Y-Z2U9BH (m).

The Reporters tinger, 2465 N. 47th Ave., Al Bettinger, (a)

Omaha, Nebr. Gail Beyer, 3226 Sunnyside Ave., (h)

TIME CONVERTER

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

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- Chicago, Ill. L. S. Broussard, Box 2283, Beaumont, Texas. (c)
- Edwin Eaton, 36 Wethersfield, Conn. Ben Follrath, 14 36 Center (d)
- 1419 Pearl St., (e)
- Alameda, Calif. Russell Geiger, Youngstown, Ohio. Gil Harris, N. Adams, Mass. Henry Hendrickson, Jr., Route 1, (f)
- McGregor, Iowa.
 Walter Th. Kamman, Box 1891,
 Caracas, Venezuela.
- (i)
- Caracas, venezueia. Geo. Kline, Jr., 230 Chatham St., Williamsport, Pa. C. R. Martin, 316 Tenth St., Elyria, (i)
- (k) Ohio.
- F. McDonald, 215 E. 34th St., Tuc-(1) son, Ariz. (m)
- Kenneth Morey, 14 Lawndale St., Easthampton, Mass. Jack Quintrell, 445 Carmody Road, Seat Pleasant, Md. (n)
- (o)
- (p)
- Seat Pleasant, Md. Edward Sherman, Jr., 91 Grove St., No. Attleboro, Mass. Bob Taglauer, 223 Orchard Road, Ft. Mitchell, Covington, Ky. Jack Welsh, Kingston, Ill. Hadley Wilcox, 623 W. 40th Place, Los Angeles, Calif.

Across the EDITOR'S Desk

O YOU like to read the Editor's mail! Last month we let you read some of the letters that passed over this desk, and your comments on this idea pleased us so much that we are going to let you read some of this month's correspondence.

Alan Hutchison of Dunedin, New Zealand, one of our correspondents in that country who keeps us constantly informed on New Zealand radio doings, submits a report on general reception. He writes, "When compared with the high totals run up in the States my log appears as a midget, but reception conditions are totally different down here. We have around 130 stations in our part of the world and have to pull the Americans through in the early evening or after the Australians have signed off between midnight and 2 am. My verified log stands at 440, with prospects of reaching 500 early this year, my fifth year of DXing. The log includes 250 stations located in North America, 30 of them being 100-watters; ten South Americans and a number of Easterns and Europeans. Considered as 'good catches' are TGW, KZIB in Manila, WQXR and CE76. Recent loggings include WMBR, KPQ, KSAL, KTEM, KFJZ, WWSW, WRAK and KAND on FCC Checks."

Mr. Hutchison says he would be pleased to correspond with DXers in America to exchange experiences and information. His address is 15 Embo St., Dunedin, SW1, New Zealand.

Those DXers who are interested in learning the Morse code are invited to tune in WRTD in Richmond, Va. at 6:45 pm. EST. on Thursdays. The Morse code is not hard to learn. You can learn all the characters in half an hour, but after that you need practice . . . lots of it. The commercial stations send too fast and the amateur bands are too confusing to the tyro, so stations like WRTD should be publicly thanked for putting on slow transmissions for the benefit of beginners. WRTD works on 1500 kcs. with 100 watts.

New Stations

We have just completed an agreement with Alfonso Velasco of Mexico City which will assure us of constant and accurate information on shortwave stations in Central and South America. We were also fortunate this month in making a similar arrangement with Pedro Casas of Montevideo. Uruguay. guayan station information submitted by Sr. Casas appears in the regular shortwave column, but Sr. Velasco's contribution was received a little too late to properly classify in that section of RADEX.

New stations reported by Sr. Velasco are:

VUD2, Delhi, India, 9590 kcs., heard daily at 9:30 pm. and fades out near 10:45 EST.



One of the catch phrases of the world today. "How to Win Friends and Influence People," is the title Dale Carnegie brought over from his publisher's office and bestowed upon his radio program. These interesting programs are broadcast every Tuesday at 10:45 pm EST over the NBC-Red.

HC1GQ, Nariz del Diablo, Ecuador, 9180 kcs., heard on Mondays, Wednesdays and Saturdays from 9 to 10:30 pm. EST.

HC1RB, Quito, Ecuador, 7870 kcs., daily from 8:30 to 11:30 pm.

HIG, Trujillo, Dominican Republic, 9290 kcs., daily from 2 to 9 pm. HJ4ABU, Medellin, Colombia, 8640 kcs., heard testing at night.

TGQA, Quezaltenango, Guatemala, 6420 kcs., on irregular nights from 8 to 10 pm.

"Radio Fort de France," Martinique, on 9350 kcs., daily from 8 to 9 pm. This station is not to be confused with "Radio Martinique," which is on 9690-9730 kcs.

XETA, Monterrey, N. L., Mexico, 11765 kcs., daily 3 to 3:30 pm.

TG25, a mobile station in Guatemala, 5770 kcs., heard irregularly at night.

The Mexican shortwave stations which are in actual use at the present time are:

XEBT 6000 Mexico City, D. F. XEUW 6022 Veracruz, Ver. XETW 6045 Tampico, Tams. XECU 6085 Guadalajara, Jal. XEBF 6090 Jalapa, Ver. XEUZ 6115 Mexico City, D. F. XEXA 6170 Mexico City, D. F. XECR 7380 Mexico City, D. F. XEWW 9500 Mexico City, D. F. XEDQ 9520 Guadalajara, Jal. XEFT 9550 Veracruz, Ver. XETA 11760 Monterrey, N. L. XEBR 11820 Hermosillo, Son. XEWI 11900 Mexico City, D. F.

There is also station XBA which gives only time signals and weather reports, and the bootleg station on 7090, "Radio del Pueblo" at Guadalajara, which will soon be closed down, according to reports.

First Reports

The first American report on HC1GQ comes from Gilbert Harris of North Adams, Mass. He gives the frequency as 9175, and the address as P. O. Box 159, and says that sometimes it is heard as late as 11 or 11:15 pm. Gilbert also reports that PSH has extended its schedule, broadcasting now from 6 to 9 pm. EST. PSH, Rio de Janeiro, transmits on 10220 kcs.

The first of our countrymen (and women) to report TGQA proves to be that famous DXing Duo, Carl and Ann Eder of Willmar, Minn. They give the frequency as 6440 kcs., and say that letters should be addressed in care of the Director General of Electrical Communications at Guatemala City.

Carl and Ann also report HC1CQ, and inasmuch as they give the frequency as 9170, we wonder if this cannot be HC1GQ. The station they heard signed off at 10.45 pm. (CST?) with the Blue Danube Waltz.

And Visitors

If you enjoy reading the editor's

mail we are sure you would enjoy even more visiting with the editor's visitors. People like Helen Lind, Mary Eleanor O'Neill, Rev. Frank Nelson, Jack Siringer and Jack Gardner. They help to make our pleasant work even more enjoyable, and they assist us materially with their fine reports.

The ladies seem to like Sr. Cespedes of TI4NRH. They both report this popular Costa Rican station on 9670 kcs., and last Saturday night Miss O'Neill was thrilled to hear her letter acknowledged over the air. This station opens and closes its transmissions with "The Parade of the Wooden Soldiers." and the announcements, in English and Spanish, are perfectly spoken. Sr. Cespedes is truly the paragon of radio announcers, with his slowly spoken, clearly enunciated words and phrases. Try for him! If you live within 10.000 miles of Costa Rica, you can hear him. Then write to him, and receive his attractive four-color diploma. Address Amando Cespedes Marin, Apartado Heredia, Costa Rica.

Rev. Nelson, who does a bit of broadcasting on the side, looked in on the facsimile equipment which WHK is installing. He is very enthusiastic about it, and has asked for one of the fifty experimental receivers which will be installed in the Cleveland area. The FCC requires that every facsimile licensee must have at least fifty receivers within its service area, and we hope that Rev. Nelson will be successful These receivers, getting one. which will cost about \$125, can be attached to a regular broadcast receiver, and automatically reproduce permanent pictures or text matter broadcast by the station.

DX Clubs

A few weeks ago Herbert Tucker of Akron, Ohio, had a get-together meeting at his home, for the purpose of forming a Northern Ohio Chapter of the IDA. A few of us went over and spent an enjoyable Sunday afternoon swapping DX reminiscences and looking over verifications. Herbert Tucker was elected president of the Chapter, and the other officers will be selected at the next meeting, which will be held at the home of Jack Gardner, in Cleveland.

Alfred J. Stansfield, president of the Universal DX Club, requests us to announce that the Editorial Headquarters of the Universal DX Club are at 130-30—90th Ave., Richmond Hill, N. Y., but the business headquarters are still at Oradell, N. J. Applications for membership and requests for sample bulletins should therefore be addressed to Oradell, and reports for inclusion in the bulletins, to Richmond Hill.

An SWL card contest nounced by the Before Breakfast DX Club of Beverly Hills, Calif. Stanley La Rue, president, says this contest is open to everyone, regardless of club affiliations, and the contest is so easy that everyone should try it. Any shortwave listener who wishes to enter simply has to count the number of foreign countries represented among his SWL cards, and submit the number to the Club. The address of the Club is 309 S. Bedford Drive, Beverly Hills. Here are the rules:

1. Only the number of countries represented in your own personal collection of cards is to be entered. 2. You do not have to submit the cards, but you must be prepared to submit the cards for examination when requested. 3. All entries must be mailed on or before midnight, July 15, 1938. 4. members may submit their entries without paying a fee since they receive the bulletins regularly. Nonmembers, however, are requested to submit a fee of ten cents, which will entitle them to receive the several lists which will be issued during the contest, showing the standings of all the contestants. Stamps from foreign countries equal in value to United States ten cents will be accepted. The prizes, all of them worth while, are a 5-tube Knight receiver, an RCA doublet antenna, or a choice of a beat oscillator, a spider-web antenna kit, or many others.

A New Note in Music

This is not on the subject of radio, but it is so interesting we thought we would pass it along. If you're the kind of a piano player the editor is, and have trouble with sharps and flats, you will welcome Symprovised music. It is not "simplified", but is presented just as the composer wrote it, but, with all the natural notes printed in black, and all the flats printed in red. It is so easy to play you'll wonder why no one thought of it before. What is more, the entire composition appears on three inner folds and may be played without turning a page, and, the notes high above or way below the staff are lettered so you don't have to stop and count the leger lines. You will be seeing a lot of Symprovised music soon.

Our Shortwave List

The index of shortwave stations which starts on the opposite page lists the police and emergency stations of North America, along with Coast Guard stations, Alaskan 'phones, ships and lighthouses. The balance of the shortwave stations will be given in the May issue.

Worthy of special mention is the work of C. Roman, his father and his sister, of Chicago, for the immense amount of work they did on the lighthouses, forestry, airport and police stations. Martin Olthoff of Independence, Kans., also assisted materially with airport station data.

The SHORTWAVE STATIONS of the WORLD

Shortwave List Copyright 1938 by Page Taylor

In this index of the shortwave stations of the world, only stations which use voice are listed.

Frequencies are given in kilocycles per second. To change to megacycles, place a decimal point three digits to the left.

The studio locations are shown, and the location of the transmitter, when different from the studios, follows in parentheses.

Power is shown in watts, unless kilowatts (kw) is mentioned.

Following the power value, the symbols in parentheses indicate the type of station, as follows:

B—Broadcast Em—Emergency
C—Commercial F—Forestry
Phone CG—Coast Guard
E—Experimental SS—Ship Phone

The word DRIFTS indicates that the station is in the habit of shifting from its assigned frequency.

Abbreviations for identification aids are—Int. (interval signal); s/o (sign-on or sign-off); Ann (announcements); Add (Address); Hrs (Hours).

Du—Dutch

Eng—English
Fr—French
Ger—German
It—Italian

Jap—Japanese
Port—Portuguese
Ru—Russian
Sp—Spanish

Unconfirmed stations, those under construction, and stations operating off their assigned frequencies, are given in *italics*.

*An asterisk indicates that the complete list of stations is given in another index

1596	****	(Temporary Frequency)	1634	KRNP	Reno, Nev. 1 kw. (P)
	WPGG	Findlay, Ohio. 500 (P)	-	WPHE	Indianapolis, Ind. 500. (P)
	WPGQ	Columbus, Ohio. 400 (P)		WPHS	Chesterton, Ind. 60. (P)
	WPHC	Massillon, Ohio. 400 (P)		WPHU	Jasper, Ind. 60. (P)
	WPHK	Wilmington, Ohio. 400 (P)		WQFE	Seymour, Ind. 60. (P)
	WPHT	Cambridge, Ohio. 400 (P)		M.O.M.	Columbia City, Ind. 60. (P)
	WPFT	Portable in Ohio. 100 (P)		WRSA	Scituate, R. I. 250. (P)
1600	VPC	Midland, Jamaica. (P)		WSPI	Portable in Ind. 60. (P)
	VPH	Kingston, Jamaica. (P)	1638	*	Pan-American Airways
1606	KIKP	Ruby, Alaska. (C.	1642	KASP	Little Rock, Ark. 1 kw. (P)
1610	WOPC	Chicago, Ill. 1 kw. (P)		WRDH	Houghton Hts., Mich. 1 kw. (P)
	WQPD	DuQuoin, Ill. 1 kw. (P)		WRDP	Paw Paw, Mich. 1 kw. (P)
	WQPF	Effingham, Ill. 1 kw. (P)		WRDS	E. Lansing, Mich. 1 kw. (P)
	WQPG	Sterling, Ill. 1 kw. (P)	1646	KALG	Squaw Harbor, Alaska, (C)
	WOPM	Macomb, Ill. 1 kw. (P)		KALII	Pt. Moller, Aaa. 100. Pacific
	WOPP	Pontiac, Ill. 1 kw. (P)			American Fisheries, Inc.
	WQPS	Springfield, Ill. 1 kw. (P)		KALI	Lazy Bay, Asa. 100. (C) P.A.F.
	WQPX	Portable in Ill. 500. (P)		KALJ	King Cove, Aaa. (C)
1620	VAC	Cape Lazo, B. C., Canada, 50, (C)		KALL	Nelson Lagoon, Aaa. 30. (C).
1622	KAMH	Chignik, Alaska. 30. (C). Alaska		1474 (317	P.A.F.
1022	11,11,111	Packers Assn.		KALQ	Petersburg, Aaa. 30. (C). P.A.F.
	KAMI	LarsonBay, Asa. 30.(C). A.P.A.		KALU	Naknek, Aaa. 30. (C)
	KAMJ	Chignik, Alaska. 30. (C). A.P.A.		KIDB	Kasaan, Aaa. (C). P.A.F.
	KAMK	Becharof, Aaa. 30. (C). A.P.A.		WOMW	Motorship "Minniehaha"
	KAML			WOMX	M/S "Empress"
	KAMN	Naknek, Aaa 30. (C). A.P.A. Uyak Bay, Aaa. 30. (C). A.P.A.		WOMY	M/S "Glenwood"
	KANL	Red Bluff Bay, Aaa. 50. (C).	****	WOPE	M/S "Admiralty"
	LEGISTET.	Red Bluff Bay Fisheries, Inc.	1658	KKFD	KensingtonPark, Caiif.50.(Fire)
	KGXU	Pt. Armstrong, Aaa, 10, (C),		KNIID	Redwood Falls, Minn. 400. (P)
		Buchan & Heinen Packing Co.		KSPT	Pecos, Texas, 500. (P)
	KIJĸ	Kuiu Island Aaa. 10. (C).		KSW	Berkeley, Calif. 500. (P)
		Storfold & Grondahl Packing Co.		WPGC	S. Schenectady, N. Y. 1 kw. (P)
	KIJO	Pt. Herbert, Aaa. 10. (C). Pt.		WQFR	Portable in N. Y. 250. (P)
		Herbert Packing Co.			Contra Costa, Calif. 50. (P)
1626	KOSO	Oklahoma City, Okla. 1 kw. (P)			Hayward, Calif. 500. (P)
	KOSP	Portable in Okla. (P)			Port. in Alameda Co., Calif. 100.
	KOSR	Portable in Okla. 150. (P)			(P)
	KOSU	Portable in Okla. (P)	1660	KAJH	Anchorage, Alaska. 200. (C).
	KOSW	Portable in Ckia. (P)			Libby, McNeill & Libby.
	KOSX	Portable in Ckia. (P)		KAMT	Kenai, Aaa. 50. (C). L.M.L.
	KOSY	Portable in Okla. (P)		KNCE	Ekuk, Bristol Bay, Aaa. 100. (C)
	WPWV	Charlestown, W. Va. 1 kw. (P)			L.M.L.
	WWTA	St. Albans, Vt. 500. United		KNCF	Egegik, Aaa. 100. (C). L.M.t.
		States Bureau of Customs.		KNGS	Koggiung, Aaa. 70. (C). L.M.L.
1630	WEY	Boston, Mass. 50. (Fire)	1666	WMP	Framingham, Mass. 1 kw. (P)
1000	WEDT	Detroit, Mich. 50. (Fire)	1000	WPEL	W. Bridgewater, Mass. 1 kw. (P)
	WNYF	New York, N. Y. 500. NYC		WPEV	Portable in Mass. 50. (P)
	** IX I I	Fire Dept., Municipal Bldg.		WPEW	Northampton, Mass. 1 kw. (P)
		zao zope, municipai pius.			normanipoon, mass, i kw. (F)

	trions.	** . * . **		an comb	T . T . T . T . T . T . T . T . T . T .
	WSPN	Nantucket, Mass. 20. (P)		KGPR	Fort Worth, Tex. (P)
	WSPO	Oak Bluffs, Mass. 20. (P)		KGZL	Shreveport, La. (P)
1674	KGHK	Oak Bluffs, Mass. 20. (P) Palo Alto, Callf. 20. (P)		KGZQ	Waco, Texas. 50. (P)
	KGZT	Santa Cruz, Calif. 100. (P)		KGZY	San Bernardino, Calif. 50. (P)
	KHPA	Lees Summit, Mo. 1 kw. (P)		KHAA	Wahiawa, Hawaii. 50. (P)
	KHPB	Macon, Mo. 1 kw. (P)		KHAB	Kaneoha, Hawaii. 50. (P)
	KHPC	Kirkwood, Mo. 1 kw. (P)		KHAC	Pearl City, Hawali, 50, (P)
	KHPD	Springfield, Mo. 1 kw. (P)		KHTP	Pearl City, Hawali. 50. (P) Houston, Tex. 200. (P)
	KHPE	Donlar Bluff Ma 1 hm (B)			Pomona, Calif. 50. (P)
		Poplar Bluff, Mo. 1 kw. (P)		KNFJ	
	KHPF	Jefferson City, Mo. 1 kw. (P)		KNGE	Cleburne, Tex. 50. (P)
	KIUK	Jefferson City, Mo. 1 kw. (P)		KNGL	Galveston, Tex. 50. (P)
	KSPH	Hillsborough, Calif. 25. (P)		KNGX	Los Angeles, Calif. (Portable)
	KWCP	Watsonville, Calif. 50, (P)			(P)
	WAMF	Portable in Pa. 500. (P)		KNHF	Denton, Tex. 50. (P)
	WPSP	Harrisburg, Pa. 1 kw. (P)		KPAT	Port Arthur, Tex. 60. (P)
1682	KACC	Fairfield, Iowa. 500. (P) Atlantic, Iowa. 500. (P)		KSBC	San Bernardino, Calif. 500. (P)
	KACD	Atlantic, Iowa, 500, (P)		KVP	Dallas, Texas. 500. (P) Montreal, P. Q. 400. (P)
	KADJ	Sacramento, Calif. 1 kw. (P)		VYR	Montreal, P. Q. 400. (P)
	KADK	Hilo, Hawaii. 500. (P)		WAKF	Everett, Mass. 50. (P)
	KAPI	Grass Valley, Calif. 25. (P)		WAKV	Fall River, Mass. 50. (P)
	KGHO	Des Moines, Iowa, 1 kw. (P)		WMPB	Fall River, Mass. 50. (P) Brockton, Mass. 50. (P)
	KNFN	Des Moines, Iowa. 1 kw. (P) Cedar Falls, Iowa. 400. (P)		WMPH	Newport, R. I. 50. (P)
	KNFO	Storm Lake, Ia. 400. (P)		WMPN	Needham, Mass. 50. (P)
	KSCY	Yreka, Calif. 50 (P)		WMPR	Revere, Mass. 50. (P)
1000	KSPR	Redding, Calif. 300. (P)		WPDB	Chicago, Ill. 500. (P)
1690	CJR	Belleville, Ont. (P)		WPDC	Chicago, Ill. 500. (P) Chicago, Ill. 500. (P)
	VDM	Halifax, N. S. (P)		WPDD	Chicago, Ill. 500. (P)
1692	WQFT	Portable in Ohio. 100. (P)		WPDU	Pittsburgh, Pa. 400. (P)
1698	KNGG	Phoenix, Arlz. 1 kw. (P)		WPED	Arlington, Mass. (P)
	WAKJ	Duval Co., Fla. 350. (P) Pensacola, Fla. 350. (P)		WPEH	Somerville, Mass. (P)
	WAKR	Pensacola, Fla. 350. (P)		WPEI	E. Providence, R. I. (P)
	WAKS	Orlando, Fla 350. (P)		WPFA	E. Providence, R. I. (P) Newton, Mass. 50. (P)
	WAKT	Tampa, Fla. 350. (P)		WPFN	Fairhaven, Mass. 100. (P)
	WAKU	Et Myers Ela 350 (P)		WPGF	Providence, R. I. 150. (P)
	WAKZ	Ft. Myers, Fla. 350. (P) W. Palm Beach, Fla. 250. (P)		WPGU	Cohasset, Mass. 50. (P)
	WDSP	New Castle, Del. (P)		WPGV	Boston, Mass. 500. (P)
	WEVN				
		Belair, Md. 250. (P)		WPHG	Medford, Mass. 50. (P)
	WHWN	in Md. 250. (P)		WPIA	Warren, R. I. 40. (P)
	WMSC	Cumberland, Md. 250. (P)		WQFL	Oak Park, Ill. 40. (P)
	WMSE	Easton, Md. 250. (P)		WQFX	Waukegan, Ill. 100. (P)
	WMSF	Frederick, Md. 250. (P)			Westport, Mass. 50. (P)
	WMSH	Conowingo, Md. 250. (P)	1715		
	WMSR	Randallstown, Md. 250. (P)	to	AMATE	
		Randallstown, Md. 250. (P) Waldorf, Md. 250. (P)	to		URS
	WMSR WMSW	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P)			URS
1 7 06	WMSR WMSW	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P)	to 2000 2000	WUMS	URS
1 7 06	WMSR WMSW	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P)	to 2000	WUMS KMKK	URS
1 7 06	WMSR WMSW KGPC KOHC	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em)	to 2000 2000	WUMS	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin", 50. (SS). State
1706	WMSR WMSW KGPC KOHC KOHD	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em)	to 2000 2000	WUMS KMKK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S., "Bluffin", 50, (SS). State of Calif., Dept. of Natural Re-
1 7 06	WMSR WMSW KGPC KOHC KOHD KOHF	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em)	to 2000 2000	WUMS KMKK WCEK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin", 50. (SS). State of Calif., Dept. of Natural Resources.
1 7 06	WMSR WMSW KGPC KOHC KOHD KOHF KOHH	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port. in Ore. 10. (Em)	to 2000 2000	WUMS KMKK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Blutfin". 50. (SS). State of Calif., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS).
1 7 06	WMSR WMSW KGPC KOHC KOHF KOHH KOHI	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em)	to 2000 2000	WUMS KMKK WCEK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria
1706	WMSR WMSW KGPC KOHC KOHF KOHH KOHI KOHJ	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port, Station 12, Ore. 10. (Em) Port, Station 12, Ore. 10. (Em) Port, Station 14, Ore. 10. (Em)	to 2000 2000	WUMS KMKK WCEK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Calif., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS)
1706	WMSR WMSW KGPC KOHC KOHF KOHH KOHI	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore.	to 2000 2000	WUMS KMKK WCEK WPKS WPMP	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Calif., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS)
1706	WMSR WMSW KGPC KOHC KOHD KOHF KOHH KOHJ KOHK	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Ports ble, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port. Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em)	to 2000 2000	WUMS KMKK WCEK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin", 50. (SS). State of Calif., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards S. S. "North Star." 50. (SS).
1706	WMSR WMSW KGPC KOHC KOHF KOHF KOHJ KOHJ KOHL	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em)	to 2000 2000	WUMS KMKK WCEK WPKS WPMP	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Callf., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards. S. S. "North Star." 50. (SS).
1706	WMSR WMSW KGPC KOHC KOHF KOHH KOHI KOHJ KOHK	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dailes, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port. n Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port, Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em)	to 2000 2000	WUMS KMKK WCEK WPKS WPMP	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) (Ole J. Edwards." 50. (SS). Sam Lonero. S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State
1 7 06	WMSR WMSW KGPC KOHC KOHF KOHH KOHJ KOHK KOHL KOHL KOHM	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P)	to 2000 2000	WUMS KMKK WCEK WPKS WPMP WPPC	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Calif., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S., "J. B. Edwards." 30. (SS) Ole J. Edwards S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Calif.
1 7 06	WMSR WMSW KGPC KOHC KOHF KOHH KOHJ KOHK KOHK KOHM KOHM	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P)	to 2000 2000	WUMS KMKK WCEK WPKS WPMP	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Callf., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards. S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Calif. S. S. "Deniby." Fishing vessel:
1706	WMSR WMSW KGPC KOHD KOHF KOHH KOHJ KOHK KOHK KOHL KOHM KOHN KOHO KOHP	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Ports ble, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port. Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend. Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em)	to 2000 2000 2110	WUMS KMKK WCEK WPKS WPMP WPPC WQBM	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin", 50. (SS). State of Calif., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Nhabacore." 50. (SS). State of Calif. S. S. "Denihy." Fishing vessel; works WOU
1706	WMSR WMSW KGPC KOHC KOHC KOHF KOHF KOHF KOHL KOHL KOHL KOHL KOHN KOHO KOHP	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (F) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em)	to 2000 2000	WUMS KMKK WCEK WPKS WPMP WPPC	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards. 30. (SS) Ole J. Edwards. 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Denlhy." Fishing vessel: works WOU. S. S. "Islamorada." (SS). Used
1706	WMSR WMSW WMSW KOHC KOHC KOHF KOHH KOHJ KOHK KOHK KOHK KOHK KOHN KOHO KOHP KOHR	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (F) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em)	to 2000 2000 2110	WUMS KMKK WCEK WPKS WPMP WPPC WQBM	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards." 30. (SS) Sam Lonero. S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Abacore." 50. (SS). State of Calif. S. S. "Deniby." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi.
1 7 06	WMSR WMSW KGPC KOHD KOHF KOHH KOHI KOHJ KOHK KOHL KOHM KOHN KOHO KOHO KOHO KOHO KOHO KOHO KOHO	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Port able, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5,50w. (Em) Salem, Ore. 1 kw. (P)	to 2000 2000 2110	WUMS KMKK WCEK WPKS WPMP WPPC WQBM	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Calif., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards. S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Abacore." 50. (SS). State of Calif. S. S. "Denihy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi.
1706	WMSR WMSW WMSW KOHC KOHC KOHF KOHH KOHJ KOHK KOHK KOHK KOHK KOHN KOHO KOHP KOHR	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Port able, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5,50w. (Em) Salem, Ore. 1 kw. (P)	to 2000 2000 2110	WUMS KMKK WCEK WPKS WPMP WPPC WQBM	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Dentby." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS).
1 7 06	WMSR WMSW KGPC KOHD KOHF KOHH KOHI KOHJ KOHK KOHL KOHM KOHN KOHO KOHO KOHO KOHO KOHO KOHO KOHO	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Port able, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5,50w. (Em) Salem, Ore. 1 kw. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Callf., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards." 30. (SS) Ole J. Edwards. "50. (SS). Sam Lonero. S. S. "North Star." 50. (SS). State of Callf. S. S. "Denihy." Fishing vessel; works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS).
1706	WMSR WMSW KGPC KOHD KOHF KOHD KOHH KOHH KOHK KOHK KOHK KOHK KOHN KOHN	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Port able, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore. Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Ralelgh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P)	to 2000 2000 2110	WUMS KMKK WCEK WPKS WPMP WPPC WQBM	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS) Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards." 30. (SS) Sam Lonero. S. S. "North Star." 50. (SS). State of Callf. S. S. "Deniby." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50
1706	WMSR WMSW KGPC KOHD KOHF KOHH KOHH KOHH KOHK KOHK KOHK KOHK	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Port able, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore. Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Ralelgh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards. " 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. "Denthy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Nortolk S. S. Co.
1706	WMSR WMSW KGPC KOHD KOHF KOHD KOHF KOHK KOHK KOHK KOHK KOHN KOHN KOHON K	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Ports bles Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port. Station 14, Ore. 10. (Em) Klaimath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Calif., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards. S. S. "North Star." 50. (SS). Sam Lonero. S. S. "North Star." 50. (SS). State of Calif. S. S. "Denihy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Norfolk S. S. Co. S. S. "Ham pton Roads." 50
1706	WMSR WMSW KGPC KOHD KOHF KOHH KOHH KOHH KOHK KOHK KOHK KOHK	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Salisbury, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "Noth Star." 50. (SS). Solie J. Edwards." 30. (SS) Ole J. Edwards." 50. (SS). State of Callf. S. "Denthy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Nortolk S. S. Co. S. S. "Ham pton Roads." 50 (SS). Phila. & Nortolk S. S. Co. S. S. "Ham pton Roads." 50
1706	WMSR WMSW KGPC KOHD KOHF KOHD KOHF KOHH KOHJ KOHK KOHL KOHN KOHN KOHO KOHP KOHR KOHN WANI WANI WANI WANI WANI WANL WKDU	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Port. In Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Station 2, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Salisbury, N. C. 1 kw. (P) Salisbury, N. C. 1 kw. (P) Cincinnati, Ohio. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "Noth Star." 50. (SS). Solie J. Edwards." 30. (SS) Ole J. Edwards." 50. (SS). State of Callf. S. "Denthy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Nortolk S. S. Co. S. S. "Ham pton Roads." 50 (SS). Phila. & Nortolk S. S. Co. S. S. "Ham pton Roads." 50
	WMSR WMSW KGPC KOHD KOHF KOHH KOHI KOHJ KOHK KOHK KOHN KOHN KOHN KOHN KOHN KOHN	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Port. Station 18, Ore. (Em) Port. Station 12, Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Klaimath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend. Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Ralem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Ralelgh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Cincinnati, Ohio. (P) Lexington, Ky. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS) Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards." 30. (SS) Sam Lonero. S. S. "Abacore." 50. (SS). State of Callf. S. S. "Denlby." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Norfolk S. S. Co. S. S. "Ham pton Roads." 50 (SS). P. & N. Yacht "Samona." (SS). S. S. "Buffin." 50. (SS). In
1706	WMSR WMSW KGPC KOHD KOHF KOHH KOHH KOHH KOHK KOHK KOHK KOHK	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore. Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Ralelgh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Sallsbury, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Cincinnati, Ohio. (P) Lexington, Ky. (P) Pentleton, B. C. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards. S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Denihy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50. (SS). Phila. & Nortok S. S. Co. S. S. "Ham pton Roads." 50 (SS). Plila. & Nortok S. S. Co. S. S. "Bluffin." 50. (SS). In vicinity of Seattle. State of
1708	WMSR WMSW KGPC KOHD KOHF KOHD KOHF KOHH KOHI KOHK KOHK KOHK KOHK KOHN KOHO KOHP KOHR KOHO KOHO WANH WANI WANI WANI WANI WANL WKDU WPET CKT CZN	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Ports ble, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Klaimath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Ralen, N. C. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Lexington, Ky. (P) Penticton, B. C. (P) Cranbrook, B. C. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards. S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Denihy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50. (SS). Phila. & Nortok S. S. Co. S. S. "Ham pton Roads." 50 (SS). Plila. & Nortok S. S. Co. S. S. "Bluffin." 50. (SS). In vicinity of Seattle. State of
1708 1710	WMSR WMSW KGPC KOHD KOHF KOHH KOHJ KOHK KOHK KOHK KOHK KOHK KOHK	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Port. Bration 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Rort., Station 14, Ore. 10. (Em) Station 2, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5. 50 w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Cincinnati, Ohio. (P) Lexington, Ky. (P) Penticton, B. C. (P) Cranbrook, B. C. (P) Hamilton, Ont. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Sole J. Edwards." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Denthy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Nortolk S. S. Co. S. S. "Ham pton Roads." 50 (SS). P. & N. Yacht "Samona." (SS). S. S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Callf., Dept. of Natural Resources S. S. "S. Hexander I." 30. (SS). In vicinity of Seattle. State of Callf., Dept. of Natural Resources S. S. "Sleksander I." 30. (SS).
1708	WMSR WMSW KGPC KOHD KOHF KOHF KOHF KOHF KOHF KOHF KOHF KOHF	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Port. In Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Rosalian 18, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore. Sta. 5.50w. (Em) Raleigh, N. C. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Salisbury, N. C. 1 kw. (P) Cincinnati, Ohio. (P) Lexington, Ky. (P) Pentleton, B. C. (P) Cranbrook, B. C. (P) Hawana, Cuba. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf, Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards. 30. (SS) Ole J. Edwards. 30. (SS) Sam Lonero. S. S. "North Star." 50. (SS). Sam Lonero. S. S. "North Star." 50. (SS). State of Calif. S. S. "Denihy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Miami. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Norloik S. S. Co. S. S. "Ham pton Roads." 50 (SS). P. & N. Yacht "Samona." (SS). S. S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Calif., Dept. of Natural Resources S. S. "Aleksander I." 30. (SS). Pete Damaria
1708 1710	WMSR WMSW KGPC KOHD KOHF KOHH KOHH KOHH KOHH KOHN KOHN KOHN KOHN	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Port. Bration 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Rort., Station 14, Ore. 10. (Em) Station 2, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5. 50 w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Cincinnati, Ohio. (P) Lexington, Ky. (P) Penticton, B. C. (P) Cranbrook, B. C. (P) Hamilton, Ont. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Denthy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Norfolk S. S. Co. S. S. "Ham pton Roads." 50 (SS). Ph. & N. Yacht "Samona." (SS). S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Callf., Dept. of Natural Resources S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "B. Edwards." 30. (SS).
1708 1710	WMSR WMSW KGPC KOHD KOHF KOHF KOHF KOHF KOHF KOHF KOHF KOHF	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port. Station 14, Ore. 10. (Em) Klaimath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend. Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Ralem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Ralelph, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Lexington, Ky. (P) Pentleton, B. C. (P) Cranbrook, B. C. (P) Cranbrook, B. C. (P) Hamilton, Ont. (P) Havana, Cuba. (P) Longylew, Texas. 500. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Denthy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Norfolk S. S. Co. S. S. "Ham pton Roads." 50 (SS). Ph. & N. Yacht "Samona." (SS). S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Callf., Dept. of Natural Resources S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "B. Edwards." 30. (SS).
1708 1710	WMSR WMSW KGPC KOHD KOHF KOHH KOHH KOHH KOHH KOHN KOHN KOHN KOHN	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Klamath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Cincianati, Ohio. (P) Lexington, Ky. (P) Pentleton, B. C. (P) Cranbrook, B. C. (P) Hamilton, Ont. (P) Hawana, Cuba. (P) Longview, Texas. 500. (P) Galnesville, Texas. 50. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK WPKS	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards S. S. "North Star." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Denthy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Norfolk S. S. Co. S. S. "Ham pton Roads." 50 (SS). Ph. & N. Yacht "Samona." (SS). S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Callf., Dept. of Natural Resources S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "B. Edwards." 30. (SS).
1708 1710	WMSR WMSW KGPC KOHD KOHF KOHD KOHF KOHH KOHI KOHL KOHK KOHL KOHN KOHN KOHN KOHN KOHN KOHN KOHN KOHN	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port. Station 14, Ore. 10. (Em) Klaimath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Ralem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Lexington, Ky. (P) Pentleton, B. C. (P) Cranbrook, B. C. (P) Hamilton, Ont. (P) Havana, Cuba. (P) Longview, Texas. 500. (P) Gainesville, Texas. 50. (P) Marshall, Tex. 50. (P) Marshall, Tex. 50. (P) Marshall, Tex. 50. (P) Marshall, Tex. 50. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Calif., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards." 30. (SS) Sam Lonero. S. S. "North Star." 50. (SS). State of Calif. S. S. "Denihy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). P. & N. S. S. "Ham pton Roads." 50 (SS). P. & N. Yacht "Samona." (SS). S. S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Calif., Dept. of Natural Resources S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards S. S. "J. B. Edwards." 30. (SS).
1708 1710	WMSR WMSW KGPC KOHD KOHF KOHH KOHJ KOHK KOHK KOHK KOHK KOHK KOHK	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Klaimath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5. 50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Cincinnati, Ohio. (P) Lexington, Ky. (P) Penticton, B. C. (P) Cranbrook, B. C. (P) Hamilton, Ont. (P) Hawnan, Cuba. (P) Longview, Texas. 500. (P) Marshall, Tex. 50. (P) Wallukn, Hawaii. 100. (P) Wallukn, Hawaii. 100. (P) Wallukn, Hawaii. 100. (P) Wallukn, Hawaii. 100. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK WPKS WPMP	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards." 50. (SS). State of Callf. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Denihy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50. (SS). F. & Nortolk S. S. Co. S. S. "Hampton Roads." 50. (SS). P. & N. Yacht "Samona." (SS). S. S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Callf. Dept. of Natural Resources S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards. S. S. "North Star." 50. (SS). Sam Lonero
1708 1710	WMSR WMSW KGPC KOHD KOHF KOHH KOHH KOHI KOHK KOHK KOHK KOHK KOHK	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Ports ble, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port. Station 14, Ore. 10. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore. Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Lexington, Ky. (P) Penticton, B. C. (P) Cranbrook, B. C. (P) Hawana, Cuba. (P) Longylew, Texas. 500. (P) Marshall, Tex. 50. (P) Marshall, Tex. 50. (P) Walluku, Hawaii. 100. (P) Whittler, Calif. 50. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK WPKS	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin". 50. (SS). State of Callf., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards. S. S. "North Star." 50. (SS). Sam Lonero. S. S. "North Star." 50. (SS). State of Calif. S. S. "Denihy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Miami. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Phila. & Nortolk S. S. Co. S. S. "Ham pton Roads." (SS). S. S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Calif., Dept. of Natural Resources S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards S. S. "North Star." 50. (SS). Sam Lonero S. S. "Albacore." 50. (SS).
1708 1710	WMSR WMSW WMSW WMSW KOHC KOHD KOHF KOHH KOHH KOHH KOHK KOHK KOHK KOHK	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Klaimath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 2, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Ralelph, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Cincianati, Ohlo. (P) Lexington, Ey. (P) Pentleton, B. C. (P) Cranbrook, B. C. (P) Hamilton, Ont. (P) Havana, Cuba. (P) Ungyiew, Texas. 500. (P) Galnesville, Texus. 50. (P) Walluku, Hawaii. 100. (P) Washadil, Tex. 50. (P) Pasadena, Calif. 50. (P) Pasadena, Calif. 50. (P) Pasadena, Calif. 400. (P)	to 2000 2000 2110 2118 2126	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK WPKS WPMP	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Denlhy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Plila. & Norfolk S. S. Co. S. S. "Ham pton Roads." 50 (SS). P. & N. Yacht "Samona." (SS). S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Callf. Dept. of Natural Resources S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Sam Lonero S. S. "Albacore." 50. (SS). Sam Lonero S. S. "Albacore." 50. (SS). Sam Lonero S. S. "Albacore." 50. (SS). State of Callf.
1708 1710	WMSR WMSW KGPC KOHD KOHF KOHF KOHF KOHF KOHF KOHF KOHF KOHF	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 14, Ore. 10. (Em) Station 2, Ore. (Em) Station 9, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Raleigh, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Salisbury, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Cincinnati, Ohio. (P) Lexington, Ky. (P) Pentleton, B. C. (P) Cranbrook, B. C. (P) Hamilton, Ont. (P) Longview, Texas. 500. (P) Gainesville, Texas. 50. (P) Marshall, Tex. 50. (P) Marshall, Tex. 50. (P) Marshall, Tex. 50. (P) Pasadena, Calif. 400. (P) Beaumont, Tex. 100. (P)	2000 2000 2000 2110 2118	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK WPKS WPMP	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf., Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS) Ole J. Edwards." 50. (SS). Sam Lonero. S. S. "North Star." 50. (SS). State of Callf. S. S. "Denihy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Miami. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River" 50 (SS). Phila. & Norfolk S. S. Co. S. S. "Ham pton Roads." 50 (SS). P. & N. Yacht "Samona." (SS). S. S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Callf., Dept. of Natural Resources S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards S. S. "North Star." 50. (SS). Sam Lonero S. S. "Albacore." 50. (SS) State of Callf. S. S. "Norwhatan." Works WMI
1708 1710	WMSR WMSW WMSW WMSW KOHC KOHD KOHF KOHH KOHH KOHH KOHK KOHK KOHK KOHK	Randallstown, Md. 250. (P) Waldorf, Md. 250. (P) Hartford, Md. 250. (P) St. Louis, Mo. (P) Station 6, Ore. (Em) The Dalles, Ore. Station 10. (Em) Portable, Station 8, Ore. (Em) Port. in Ore. 10. (Em) Port. Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Port., Station 12, Ore. 10. (Em) Klaimath Falls, Station 3, Ore. (Em) Station 2, Ore. (Em) Station 2, Ore. (Em) Bend, Station 4, Ore. 50. (P) Port. in Ore. 10. (P) Pendleton, Sta. 11, Ore. (Em) Roseburg, Ore., Sta. 5.50w. (Em) Salem, Ore. 1 kw. (P) Burns, Ore. 50. (P) Ralelph, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Williamston, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Elizabethtown, N. C. 1 kw. (P) Cincianati, Ohlo. (P) Lexington, Ey. (P) Pentleton, B. C. (P) Cranbrook, B. C. (P) Hamilton, Ont. (P) Havana, Cuba. (P) Ungyiew, Texas. 500. (P) Galnesville, Texus. 50. (P) Walluku, Hawaii. 100. (P) Washadil, Tex. 50. (P) Pasadena, Calif. 50. (P) Pasadena, Calif. 50. (P) Pasadena, Calif. 400. (P)	to 2000 2000 2110 2118 2126	WUMS KMKK WCEK WPKS WPMP WPPC WQBM KMKK WOGK KJJB KJLY KMKH WCEK WPKS WPMP	Proctorville, Ohio. 75. S. S. "Islamorada." (SS). S. S. "Bluffin" 50. (SS). State of Callf. Dept. of Natural Resources. S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Ole J. Edwards." 50. (SS). Sam Lonero. S. S. "Albacore." 50. (SS). State of Callf. S. S. "Denlhy." Fishing vessel: works WOU S. S. "Islamorada." (SS). Used only near Mismi. Yacht "Mako." 100. (SS). Thorne Donnelley S. S. "Elizabeth River." 50 (SS). Plila. & Norfolk S. S. Co. S. S. "Ham pton Roads." 50 (SS). P. & N. Yacht "Samona." (SS). S. "Bluffin." 50. (SS). In vicinity of Seattle. State of Callf. Dept. of Natural Resources S. S. "Aleksander I." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Pete Damaria S. S. "J. B. Edwards." 30. (SS). Sam Lonero S. S. "Albacore." 50. (SS). Sam Lonero S. S. "Albacore." 50. (SS). Sam Lonero S. S. "Albacore." 50. (SS). State of Callf.

		KOU		WPDA	Tulare, Calif. 150, (P)
	KLQE	S. S. "Caroline." 50. (SS). Jos.		WPDJ	Passaic, N. J. (P) Detroit, Mich. 500, (P)
		M. Schenck, 20th Century-Fox		WPDX	Detroit, Mich. 500. (P)
		Films Corp., Beverly Hills, Calif.		WPDY	Atlanta, Ga. 400. (P)
	KLWY	Yacht "Gipsy." To KOU Yacht "Samona." To KOU		WPFH WPFI	Baltimore, Md. 200. (P)
	KMKH VGBQ	Yeaht "Saudyn" To KOU		WPGH	Albany N. V. 200. (P)
	WBDY	Yacht "Seyelyn." To KOU Yacht "Bolero 11." To KOU		WPGJ	Columbus, Ga. 250. (P) Albany, N. Y. 300. (P) Utica, N. Y. 100. (P)
	WCEK	S. S. "Bluffin." 50. State of		WPGM	La Grange, Ga. 50. (P)
		Calif.		WQFB	Macon, Ga. 250. (P)
	WDFV	Yacht "Content"		WQFJ	Oneonta, N. Y. 50. (P)
	WJDM	Yacht "Sartarsia"		WQFV	Macon, Ga. 250. (P) Oneonta, N. Y. 50. (P) Augusta, Ga. 250. (P)
	WKFK	Tug "Racona"	2422	KACA	Atchison, Kans. 50. (P)
	WKFM	Derrick Barge No. 4		KACI	Eureka, Callf. 100. (P)
	WKFN	Tug ''Sonoma''		KADS	Marysville, Calif. 50. (P) Woodland, Calif. 25. (P)
	WOKQ	Yacht "El Dorado" Yacht "The Chief"		KAGD KASG	Willows, Calif. 50. (P)
	WOLR	Yacht "Mariner"		KCPE	Kansas City, Mo. 500. (P)
	WPKS	S. S. "Aleksander I." 30 (SS)		KGPG	Vallejo, Calif. 50. (P)
		Pete Damaria		KGZC	Topeka, Kans. 50. (P)
	WPMP	S. S. "J. B. Edwards." 30. (SS).		KNGF	Sacramento, Calif. 500. (P)
		Ole J. Edwards		KNGV	Salina Kans. 50. (P)
	WPPC	S. S. "North Star." 50. (SS).		WMJ	Buffalo, N. Y. 500. (P)
	WQBM	S. S. "Albacore." 50. (SS).		WNFP	Niagara Falls, N. Y. 135. (P)
2198	KMKK	State of Calif. S. S. "Islamorada." Used only		WPDR WPDW	Rochester, N. Y. 200. (P) Washington, D. C. 400. (P)
2100	KMKK	near NYC.		WPFU	Portland, Maine. 100. (P)
2318	CYO	Toronto, Ont. 400. (P)		WPHB	Nashua, N. H. 50. (P)
2366	CZ50	Ottawa, Ont. (P)	2430	KGPB	Minneapolis, Minn. 500. (P)
	WAKC	Freehold, N. J. 100. (P)		KGZJ	Phoenix, Ariz. 100. (P)
2382	KGHT	Brownsville, Tex. 25. (P)		KNGP	Shreveport, La. 100. (P)
	KGHV	Corpus Christi, Tex. 50. (P)		KNHG	Prescott, Ariz. 10. (P)
	KNFE	Duluth, Minn. 400. (P)		WAKH	Bloomfield, N. J. 50. (P)
	KNHB WAKE	Green Bay, Wis. 100. (P) Oshkosh, Wis. 500. (P)		WAME	Baton Rouge, La. 50. (P) Baton Rouge, La. 250. (P)
	WASP	Selma, Ala. 100. (P)		WCPD	Charleston, S. C. 50. (P)
	WMPE	Elkhorn, Wis. 100. (P)		WPDI	Baton Rouge, La. 250. (P) Charleston, S. C. 50. (P) Columbus, Ohio. 200. (P)
	WMPM	Montgomery, Ala. 500. (P)		WPDM	Dayton, Ohio. 400. (P) St. Paul, Minn. 500. (P)
	WPDN	Auburn, N. Y. 50. (P)		WPDS	St. Paul, Minn. 500. (P)
	WPEA	Syracuse, N. Y. 40. (P)		WPEK	New Orleans, La. 250. (P)
	WPFM WPGW	Birmingham, Ala. 400. (P)		WPFD WPFK	Highland Park, Ill. (P) Hackensack, N. J. 500. (P)
2390	CGZ	Mobile, Ala. 400. (P) Vancouver, B. C. 400. (P)		WPCI	Portsmouth, Ohlo. 100. (P)
2000	CJW	St. John, N. B. 15. (P)		WPHO	Zanesville Ohio 50 (P)
	CJZ	Verdun, P. Q. 20. (P)		WPRH	Rock Hill, S. C. 50. (P)
2396	VYW	Winnipeg, Man. 600. (P)		WQFO	Rock Hill, S. C. 50. (P) Lancaster, Ohio. 50. (P)
2406	KGHZ	Little Rock, Ark. 100. (P)		WSAG	Ashland, Ky. 200. (P)
	KGPW	Salt Lake City, Utah. (P)	2442	KADV	Eugene, Ore. 50. (P)
	KNHE	Fort Smith, Ark. 100. (P)		KASD	San Angelo, Tex. 50. (P)
2414		Olympia, Wash, 50 (P) Wenatchee, Wash, 250, (P)		KGHU	Austin, Tex. 100. (P)
	KACJ KACK	Wenatchee, Wash. 250. (P) Bellingham, Wash. 50. (P)		KGPP KGPX	Portland, Ore. 500. (P) Denver, Colo. 400. (P)
	KACN	Ventura, Calif. 50. (P)		KGZH	Klamath Falls Ore 25 (P)
	KACO			KGZR	Salem, Ore. 50. (P) Fargo, N. Dak. 100. (P) Ft. Lauderdale, Fla. 50. (P)
	KACS	Tracy, Calif. 15. (P) Bakersfield, Calif. 500. (P)		KNHM	Fargo, N. Dak. 100. (P)
	KACV	Walla Walla, Wash. 50. (P)		WAKO	Ft. Lauderdale, Fla. 50. (P)
	KADL	Port Orchard, Wash. 50. (P)		WAMB	Connersville, Ind. 40. (P) Kalamazoo, Mich. 100. (P)
	KAPH KAPL	Stockton, Calif. 500. (P) Hoggiam Wash 56 (P)		WAMG WASF	Kalamazoo, Mich. 100. (P) Elwood, Ind. 50. (P)
	KASE	Hoquiam, Wash. 50. (P) Modesto, Calif. 250. (P)		WBNC	New Castle Ind 40 (P)
	KASF	Bremerton, Wash. 50. (P)		WBPD	Bloomington, Ind. 40. (P)
	KGHS	Spokane, Wash. 100. (P) Centralia, Wash. 50. (P)		WMDZ	Indianapolis, Ind. 400. (P)
	KGHW	Centralia, Wash. 50. (P)		WMPI	Anderson, Ind. 190. (P) Louisville, Ky. 200. (P)
	KGPA	Seattle, Wash. 500. (P)		WPDE	Louisville, Ky. 200. (P)
	KGPF KGPS	Santa Fe, N. Mex. 25. (P) Bakersfield, Calif. 50. (P)		WPDF WPDH	Flint, Mich. 150. (P) Richmond, Ind. 100. (P)
	KGZA	Fresno, Calif. 500. (P)		WPDL	Lansing, Mich. 50. (P)
	KGZM	El Paso, Tex. 100. (P)		WPEB	Grand Rapids, Mich. 500. (P)
	KGZN	Tacoma, Wash. 100. (P)		WPES	Saginaw, Mich. 100. (P)
	KGZO	Santa Barbara, Calif. 100. (P)		WPFC	Muskegon, Mich. 50. (P)
	KGZV	Aberdeen, Wash. 125. (P)		WPFE	Reading, Pa. 100. (P)
	KGZX	Albuquerque, N. Mex. (P)		WPFG WPFT	Jacksonville, Fla. 400. (P) Lakeland, Fla. 50. (P)
	KNFA KNFI	Clovis, N. Mex. 50. (P) Mt. Vernon, Wash. 50. (P)		WPFX	Palm Beach, Fla. 50. (P)
	KNFP	Everett, Wash. 50. (P)		WPFY	Yonkers, N. Y. 400. (P)
	KNGU	Yakima, Wash. 100. (P)		WPFZ	Miami, Fla. 500. (P)
	KNGY	Lodi, Calif. 40. (P)		WPGL	Binghamton, N. Y. 400. (P)
	KSOM	Merced, Calif. 25. (P) Herklmer, N. Y. 50. (P)		WPGP	Muncle, Ind. 100. (P)
	WAKN	Herkimer, N. Y. 50. (P)		WPHM	Orlando, Fla. 500. (P) Wilkes-Barre, Pa. 100. (P)
	WCK WMO	Detroit, Mich. 500. (P) Highland Park, Mich. 50. (P)		WQFM	Wilkes-Barre, Pa. 100. (P) Miami, Fla. 40. (P)
	WMPF	Highland Park, Mich. 50. (P) Wayeross, Ga. 50. (P)			York, Pa. 40. (P)
		, 000, 000, 00. (*)			,

2450	KACF	Chickasha, Okla. 100. (P)		WRDR	Grosse Pointe, Mich. 350. (P)
	KACL	Altus, Okla. 50. (P)	2474	KGHG	Las Vegas, Nev. 50. (P) Reno, Nev. 50. (P)
	KACP	Ponca City, Okia. 50. (P)		KGHM	
	KACR	Seminole, Okla. 50. (P)		KNFH	Garden City, Kans. 50. (P)
	KADG	Tulsa, Okla. 40. (P)		KNGH	Dodge City, Kans. 50. (P)
	KADH	Mangum, Okla. 50. (P)		WAKI	Sandusky, Ohio. 50. (P)
	KADQ	Hilo, Hawaii. 100. (P)		WAMH	Shelby, Ohio. 25. (P) Kenton, Ohio. 50. (P)
	KAPB	Cushing, Okla. 50. (P)		WKMP	Kenton, Ohio. 50. (P)
	KAPC	Drumright, Okla. 50. (P)		WMPK	Fremont, Ohio. 100. (P)
	KAPD	Eldorado, Kans. 50. (P)		WPDP	Philadelphia, Pa. 50. (P)
	KAPE	Norman, Okla, 100. (P)		WPFO	Knoxville, Tenn. 40. (P)
	KAPF	Okmulgee, Okla. 50. (P) Ardmore, Okla. 100. (P)		WPFQ	Swarthmore, Pa. 50. (P) Asheville, N. C. 500. (P)
	KARD	Ardmore, Okla. 100. (P)		WPFS	Asheville, N. C. 500. (P)
	KGHN	Hutchinson, Kans. 50. (P)		WPGZ	Johnson City, Tenn. 50. (P)
	KGHP	Lawton, Okla. 50. (P)		WPHY	Elizabethton, Tenn. 100. (P) Mansfield, Ohio. 50. (P)
	KGPH	Oklahoma City, Okla. 250. (P)		WQFY WR DQ	Mansfield, Ohio. 50. (P) Toledo, Ohio. 400. (P)
	KGPO	Tuisa, Okla. 100. (P)	2482	KGZE	San Antonio, Tex. 50. (P)
	KGPZ KGZF	Wichita, Kans. 400. (P) Chanute, Kans. 25. (P)	2402	WPGT	New Castle, Pa. 50. (P)
	KGZP	Coffeyville, Kans. 50. (P)		WPHZ	Oil City, Pa. 50. (P)
	KNGK	Duncan, Okla. 50. (P)		WQFF	Monessen, Pa. 50. (P)
	KNGM	Rapid City, S. Dak. 50. (P)		WQFU	Sharon Pa 50. (P)
	KNGT	Muskogee, Okla. 50. (P)	249 0	KACQ	Kalaloch, Wash. 10. (P)
	KNHC	Ada, Okla. 50. (P)		KADF	Yuma, Ariz. 50. (P)
	KVPB	Huron, S. Dak. 40. (P)		KADI	Oceanside, Calif. 50. (P)
	KWCM	Shawnee, Okla. 100. (P)		KADQ	Brea, Calif. 50. (P)
	WMPD	Waukesha, Wis. 100. (P)		KASH	Portable in Wash. 50. (P)
	WPDK	Waukesha, Wis. 100. (P) Milwaukee, Wis. 500. (P)		KGHD	Seattle, Wash. 50. (P)
	WPEE	Brooklyn, N. Y. 400. (P)		KGHE	Snoqualmie Pass, Wash. 50. (Em)
	WPEF	Bronx, N. Y. 400. (P)		KGHQ	Chinook Pass, Wash. 10. (Em)
	WPEG	New York, N. Y. 500. (P)		KGHX	Santa Ana, Calif. 400. (P) San Diego, Calif. 50. (P)
	WPEP	Kenosha, Wis. 100. (P) Richmond, Va. 400. (P)		KGZD	Lincoln, Nebr. 20. (P)
	WPHF	Roanoke, Va. 100. (P)		KGZU KNFC	Port Angeles, Wash. 50. (P)
	WQFH	Lynchburg, Va. 50. (P)		KNFG	Olympia, Wash. 250. (P)
	WQFI	Petersburg Va 250 (P)		KNFK	Bellingham, Wash. 50, (P)
2458	KACM	Petersburg, Va. 250. (P) Big Spring, Tex. 50. (P)		KNFM	Compton, Calif. 25. (P)
	KADR	Abilene, Tex. 40. (P)		KNFX	Ellenburg, Wash. 10. (P)
	KAPJ	Sweetwater, Tex. 40. (P)		KNGA	Satus Pass Camp, Wash. 10.
	KGZI	Wichita Falls, Tex. 200. (P)			(Em)
	KGZW	Lubbock, Tex. 150. (P) Idaho Falls Idaho. 500. (P)		KNGB	Yakima, Wash. 50. (P) Vancouver, Wash. 50. (P)
	KNFB KNGW	Idaho Falls, Idaho. 500. (P) Brownwood, Texas. 200. (P)		KNGC KNGD	Walla Walla, Wash. 50. (P)
	WAGR	Urbana, Ill. 40. (P)		KNGJ	El Centro, Calif. 50. (P)
	WAMN	Lorain Ohio. 50. (P)		KNGN	Norfolk, Nebr. 25. (P)
	WASB	Decatur, lit. 100. (P)		KNGQ	Wenatchee, Wash. 50. (P)
	WDPW	Lorain, Ohio. 50. (P) Decatur, lil. 100, (P) Wilmington, N. C. 100. (P)		KNGR	Spokane, Wash. 250. (P)
	WMPJ	Clinton, 111. 40. (P)		KNGZ	Ephrata, Wash. 10. (P)
	WPDG	Youngstown, Ohio. 250. (P)		KSPM	Portable in Wash. 50. (Em)
	WPDO	Akron, Ohio. 250. (P)		KSPN	Port. in Wash. 50. (Em) Port. in Wash. 15. (Em)
	//.bDA	Charlotte, N. C. 250. (P)		KSPW	Port. in Wash, 15. (Em)
	WPFS	Akron, Ohio. 250. (P) Charlotte, N. C. 250. (P) Asheville, N. C. 500. (P)		WAKA	Huntington, Ind. 50 (P)
	WPGD	Rockford, Ill. 50. (P)		WAKK	Frankfort, Ind. 50. (P)
	WPHD	Steubenville, Ohio. 100. (P)		WAMI	Bluffton, Ind. 50. (P)
	WQFZ	Ottawa, Ill. 500. (P)		WAMJ	Natchez, Miss. 100. (P) Jackson, Miss. 50. (P)
	WRBH	Cleveland, Ohio. 50. (P)		WAMK WASC	Jackson, Miss. 50. (P) Peru, Ind. 50. (P)
2466	KAWP	Iowa City, Iowa. 50. (P)		WBWV	Bluefield, W. Va. 50. (P)
	KGOZ	Cedar Rapids, Ia. 100. (P)		WMPG	Greenville, Miss. 50. (P)
	KGPD	San Francisco, Calif. 400. (P)		WMPL	LaPorte, Ind. 40. (P)
	KGPI	Omaha, Nebr. 400. (P)		WMPQ	Logansport, Ind. 100. (P)
	KGPK	Sioux City, Ia. 100. (P) San Jose, Calif. 100. (P)		WMPV	Valparaiso, Ind. 50. (P)
	KGPN	San Jose, Calif. 100. (P) Davenport, Ia. 100. (P)		WPDT	Kokomo, Ind. 50. (P)
	KGZG	Des Moines, Ia. 100. (P)		WPDZ	Fort Wayne, Ind. 200. (P) Clarksburg, W. Va. 30. (P)
	WAKB	New London, Conn. 50. (P)		WPFP	Clarksburg, W. Va. 30. (P)
	WAKG	Clearwater, Fla. 50. (P)		WPGN	South Bend, Ind. 100. (P)
	WFPT	Tampa, Ila. 200. (P)		WPGO	Huntington, N. Y. 25. (P)
	WMPW	Tampa, Fla. 200. (P) Waterbury, Conn. 50. (P)		WPGS	Mineola, N. Y. 40. (P) Charleston, W. Va. 50. (P)
	WPEC	Memphis, Tenn. 400. (P)		WPHI WPHJ	Fairmount, W. Va. 100. (P)
	WPEM	Woonsocket, R. I. 50. (P)		WPHQ	Parkersburg, W. Va. 50. (P)
	WPFV	Pawtucket, R. I. 50. (P)		WQFQ	Lafayette, Ind. 50. (P)
	WPFW	Bridgeport, Conn. 50. (P)			Davenport, Wash. 10. (P)
	WPGA WPGB	Bay City, Mich. 50. (P) Port Huron, Mich. 50. (P)			Marton, Ind. 50. (P)
	WPGK	Cranston, R. I. 50. (P)			Raymond, Wash. 50. (P)
	WPGX	Worcester, Mass. 100. (P)	2500	XEXP	Monterrey, N. L. 30. (E)
	WPHA	Fitchburg, Mass. 50. (P)	2506	KLH	San Rafael, Calif. (SS). Pacific
	WPHN	Tampa, Fla. 100. (P)			Telegraph & Telephone Co.
	WPHP	Jackson, Mich. 100. (P)		wou	Marshfield, Mass. (SS). New
	WQFA	New Haven, Conn. 100. (P)			England Telephone & Telegraph
	WQFC	Gainsville, Fla. 50. (P) Clearwater, Fla. 50. (P)	0510	EC III	Co.
	WQFK	Clearwater, Fla. 50. (P)	2512	KGJK	S.S. "Jeanette E." (SS). Skinner

		& Eddy Corp.		кіон	Iron Creek, Aaa. 50. (C).
	KGM	Ketchikan Alaska, S. & E.		7/101	Southwestern Herring Co. Akutan, Aaa. 50. (Cr. American
	KGNM	S. S. "Doris E." Skinner & Eddy S. S. "Yes Bay." (SS). S. & E.		KIOI	Pacific Whaling Co.
	KGNX	Rose Inlet, Alaska. S. & E.		(99	Pt. Vita, Aaa. 50. (C). Oceanic
	WDEM	S. S. "Wm. T. Muir." (SS).	2636		Fisheries Co. American Airlines
	WFFR	S. & E. S. S. "Frances E." (SS). S. & E.	2640	KNKS	Yosemite Nat'l. Park, Calif. (F)
	WIDL	S. S. "Leonine." (SS). S. & E.	2011	*	Braniff Airlines
	WIDM	S. S. "Leonine." (SS). S. & E. S. S. "Sally S." (SS). S. & E. S. S. "Virginia E." (SS). S. & E.	$\frac{2644}{2670}$	KANA	North West Airlines Santa Cruz Isl., Calif. (LH)
	WIDN WNFM	S. S. "Alco." (SS). S. & E.	2010	NMC	San Francisco, Calif. (Pt. Bonita)
2520	KNJB	Yellowstone Nat'l. Park, Wyo.		NMD	200. (CG) Cleveland, Ohio. 200. (CG)
	KNKP	(F). Rocky Mountain Nat'l. Park,		NMF	Winchrop, Mass. (CG)
	KNAI	Colo. (F)		NMG	Mobile, Ala. 200. (CG) Washington, D. C. (Fort Hunt,
2522	KOW	Edmonds, Wash. (SS). Pacific Telephone & Telegraph Co.		NMII	Va.), 200. (CG).
	woo	Ocean Gate, N. J. (SS). Am.		NMN	Princess Anne, Va. (Virginia
		Tele. & Telg. Co., Long Lines		NMP	Beach). 200. (CG) Wilmette, Ill. 200. (CG)
2538	KALG	Dept. Squaw Harbor, Alaska. (C).		NMV	Jacksonville Beach, Fla. 200.
2000	KALI	Lazy Bay, Aaa. (C)		NMW	(CG) Westport, Wash. (Grays Harbor).
	KALJ KDK	King Cove, Aaa. (C) Wrangell, Aaa. (C) A. R.		11111	200. (CG)
	MDI	Brueger		NMY	Rockaway Beach, N. Y. (Rockaway Point). 200. (CG)
	KILD	Cordova, Asa. Pioneer Seas Foods Co.		NNO	Honolulu, Hawaii. 200. (CG)
	WOMW	Motorship "Minniehaha."		NOB	Buffalo, N. Y. 200. (CG) Charleston, S. C. 200. (CG)
	WOMX	M/S "Empress"		NOC NOF	St. Petersburg, Fla. 200. (CG)
	WOMY WOPE	M/S "Glenwood" M/S "Admiralty"		NOJ	San Pedro, Calif. (Point Vicente).
2550	WMI	Lorain, Ohio. (SS).		NOL	200. (CG) Fort Lauderdale, Fla. 200. (CG)
2566	KFF	Union Bay, Alaska. (C). Nakat Packing Corp.		NOM	Marci Ele 200 (CC)
	KGFQ	Motorship A & P Nakeen.		NOP	New York, N. Y. (Floyd Bennett Field). 200. (CG) New Orleans, La. 200. (CG)
	кну	(SS). N.P.C. Nakeen, Aan. (C). N.P.C.		NOQ	New Orleans, La. 200. (CG)
	KLA	Waterfall, Asa. (C). N. P. C.		NOR NOS	San Diego, Calif. 200. (CG) Salem Mass. (CG)
	KLD KOU	Hidden Inlet, Asa. (C) N.P.C. Wilmington, Calif. (SS). Southern		NOU	New London, Conn. (CG)
		Calif. Tele. & Teleg. Co.		NOV NOW	Salem, Mass. (CG) New London, Conn. (CG) Cape May, N. J. 200. (CG) Port Angeles, Wasn. 200. (CG) Biloxi, Miss. 200. (CG)
2600 2604	KNIA WVD	Glacier Nat'l. Park., Mont. (F). Seattle, Wash. 560. (C). Alaskan		NOX	Biloxi, Miss. 200. (CG)
2001		Telephone Co., 517 Federal		NOY NRGA	Gaiveston, Tex. 200. (CG)
	WXA	Office Bldg. Juneau, Alaska. (C). U.S. Signal		NRGP	Gaiveston, Tex. 200. (CG) U. S. C. G. "Aurora." U. S. C. G. "Perseus."
		Corps.		NRUD NRXV	U.S. C. G. "Tahoe"
2608	WXH	Ketchikan, Aan. (C). Southern Airlines.		NRYA	U. S. C. G. "CG254" U. S. C. G. "CG259" U. S. C. G. "CG260"
2612		American Airlines		NRYB WWAK	U. S. C. G. "CG260" Anacapa Isl., Calif. (LH)
2616	KAEB	Hydaburg, Alaska. 40. (C). Territory of Alaska	2676		Coast Guard Stations, Atlantic
	KAED	Angoon Ass 40 (C) 1 Ol A.	0004		Coast Guard Stations, Great
	KAEF	Jack Wade, Aaa. 40. (C). T of A. Kake, Aaa. (C).	2684		Lakes
	KAEH KAEP	Tenakee, Aaa. (C).	2688	3	Coast Guard Stations, Great
	KAEW	Umnak, Aaa. (C).	2692	2	Lakes Coast Guard Stations, Great
	KAJJ KAKJ	Atka, Aaa. (C). Akutan, Aaa. (C).			Lakes Tillamook Rock, Ore. (LH)
	KAMY	Port Oceanic, Ana. 50. (C). Oceanic Fisheries Co.	2698	NMC	San Francisco, Calif. (Pt. Bonita)
	KAQF	Unalaska, Aaa. (C)		373 6337	(CG)
		Teller, Aaa. 30, Teller Com- mercial Co.		NMW	Westport, Wash. (Grays Harbor) (CG)
2630	KYZA	El Paso, Tex. Immigration		NOJ	San Pedro, Calif. (Pt. Vicente). (CG)
		Border Patrol.	2720) *	Trans-Continental and Western
2632	KAMY	Port Oceanic, Ann. 50. (C). Oceanic Fisheries Co.			Air
	KANA	Pt. Williams, Aaa. 50. (C).	2726	5 KATA	Grass Valley, Calif. 50. (Em). Idaho Maryland Mines Corp.
	KAQI	Washington Pish & Oyster Co. Ouzinkie, Aaa. 50. (C). O. L.		KATB	Forbestown, Calif. 50. (Fm).
		Grimes Shearwater Bay, Aaa. 50. (C).		KAWJ	I.M.M. CO. Norden, Calif. 50. (Em). South-
	KIJW	Kadiak Fisheries Co.		KAWK	ern Pacific Co. Emigrant Gap, Calif. 50. (Em).
	KIJX	Kodiak Isl., Aaa. (C). K.F.C. Pt. Hobron, Aaa. (C). American			S.P.C.
	LIMA	Pacific Whaling Co.		KIIW	Los Angeles, Calif. 175. (Em). L. A. County, 205 S. Broadway
	KIOC	Pt. Wakefield, Aaa. 10. (C). Apex Fish Co.		KIIY	Los Angeles, Calif. 400. (Em).
	KIOD	Nellie Juan, Aaa. 50. (C). Copper		KINT	L. A. County Los Angeles, Calif. (Portable)
		River Packing Co.		45.4.17.4	200 11180100, 0 3111

	KNAA	Forbestown, Calif. (Em)			10 kw. (B). s/o: "End of a
	KNAB	Grass Valley, Calif. (Em)			Perfect Day."
	WAGE	Portable, 500. (Em), Lakeside Radio Club.	3062 3072	*	Trans-Western Airlines
	WAJN	Port. in Fla. 100. (Em) State	3082		Trans-Western Airlines Pacific Alaska Airways
		of Fla.		*	Pan American Airways
	WAJU	Guayana, Puerto Rico. 30. (Em).	3088		Trans-Western Airlines
	WAJV	P. R. Government Mayaguez, P. R. 40. (Em).	3093	KAJO	Warren, Alaska. (C). Pacific
	11723 1	P. R. G.		KALG	American Fisheries Squaw Harbor, Aaa. (C). P.A.F.
	WANB	Dinsmore, Fla. 100. (Em). State.		KALH	Pt. Moller, Aaa. 100. (C). P.A.F.
	WELT	Portable. 50. (Em). Edward L.		KALI	Lazy Bay, Aaa. 100. (C). P.A.F.
	WQPX	Thompson Port. in Ill. 500. (Em). State.		KALJ KAMG	King Cove, Aaa. (C). P.A.F. Stuyshok, Aaa. 20. (C). Vance
		Dept. of Pub. Works & Bidgs.		MAMG	Hitt
	WQPY	Port. in Ill. (Em). State Police		KANR	Kalskag, Aaa. 20. (C). Fred H.
		Beaumont, Tex. 50. (Em).		TZ + OT	Whitcher
		Ponce, Puerto Rico. 100. (Em). Government		KAQL	Mountain Village, Aaa. 25. (C). Norval D. Sheppard
2732	*	Trans-Continental and Western		KIAY	Ketchikan, Aaa. 100. (C).
0740	_	Air			Skinner & Eddy Corp.
2748 2854		Southern Airlines North Western Airlines		KHP	Craigie Creek, Aaa. 30. (C).
2001	*	Southern Airlines			W. E. Dunkle Hooper Bay, Aaa. 25. (C). John
2870		Pan American Airways			P. Fox.
2906	*	National Park Airways	3095	KBAE	Seward, Alaska. (F).
2912	KAJH	Trans-Western Airlines Anchorage, Alaska. 20. (C).		KBAF KBAG	Seward, Aaa. (F).
-012	1171011	Anchorage, Alaska. 20. (C). Libby, McNelll & Libby		KBAH	Seward Asa (F)
	KAMP	Craig, Aaa. 100. (C). L.M.L.		KBCM	Seward, Aaa. (F). Salmon, Idaho. (F).
	KAMS	Taku, Aaa. 100. (C). L.M.L.		KBCN	Salmon, Idaho. (F).
	KAMT KANA	Kenai, Aaa. 50. L.M.L. Pt. Williams, Aaa. 50. (C).		KBDD KBDE	Elko, Nev. (F). Elko, Nev. (F).
	DAMA	Washington Fish & Oyster Co.		WWLL	Duluth, Minn. (F).
	KANM	Burnett Inlet, Aaa. 10. (C).		WWLM	Escanaba, Mich. (F).
	L. AO.	Burnett Inlet Salmon Co.	3125	GBTT	R.M.S. "Queen Mary." (SS).
	KASJ	Kantishna, Aaa. 20. (C). Morris P. Kirk & Son.	3128		Works WOO.
	KNCE	Ekuk, Aaa. 100. (C). L.M.L.	3148		American Atrilnes United Airlines
	KNCF	Egegik, Aaa. 100. L.M.L.	3155	KBAL	Seattle, Wash. 100. (F,
	KNGS	Keggiung, Aas. 70. (C). L.M.L.		KBAP	Seattle, Wash. (F)
2922	•	Braniff Airlines Pacific Alaska Airways		KBAW KBBL	Porterville, Calif. (F)
	*	Southern Airlines		KBBM	Sandpoint, Idaho. (F) Sandpoint, Idaho. (F)
2930	*	Airlines		KBBN	Sandpoint, Idaho. (F)
2946	*	Pacific Alaska Airways Southern Airlines		KBBR	Sandpoint, Idaho. (F)
2952	KBDK	Oakland, Calif. (F). Supply Dept.		KBBW KBCJ	Libby, Mont. (F) Oakland, Calif. (F)
2986	KAMX	Utopia Creek, Alaska. 40. (C).		KBCT	Deadwood, S. Dak. (F)
	17 4 3 6 37	L. McGee	1	KBCW	Libby, Mont. (F)
	KAMY	Pt. Oceanic, Aaa. 50. (C). Oceanic Fisheries Co.		KBCY WWKZ	Libby, Mont. (F) Rhinelander, Wis. (F)
	KGQ	Todd, Aaa. 50. Peril Straits		WWLS	Rhineiander, Wis. (F) Holly Bluff, Miss. (F)
	*	Packing Co.	3158	YDE4	Sourabaya, Java, N.E.I.
	*	Aeronautical	3163	•	United Airlines
2994	KALF	Folger, Aaa. 40. Odin Strandberg. Livengood, Alaska. 30. (C).	3183 3190	* KADN	United Airlines Baldy Mesa, Calif. 50. (Em).
		Clifton W. Hudson	0.00	mon	Los Angeles Water Dept.
	KALZ	North Grub Creek, Ass. 25. (C).		KADP	Clark Mts., Calif. 50. (Em).
	KANK	E. C. Kraiger Pt. Baker, Asa. 10. (C). A. R.		KAJH	L.A.W.D.
		Brueger		LAJII	Anchorage, Alaska. 20. (C). Libby, McNeill & Libby
	KANM	Burnett Inlet, Asa. 10. (C).		KAMP	Craig, Aaa. 100. (C). L.M.I.,
	KANQ	Burnett Inlet Saimon Co.		KAMS	Taku, Aaa. 100. (C), L.M.L.
	MANQ	Caribou Creek, Aaa. 20. (C). Lester B. Walbridge		KAMT KAMV	Kenai, Aaa. 50. (C). L.M.L. V. No. 1, Alaska. 4. (C). L.M.L.
	KAQM	Bethel, Aaa. 3½. (C). Soc. of		KANC	Scow No. 5 Asa. 4. (C). L.M.L.
		the United Brethren for Pro-		KNCC	Scow No. 5, Aaa. 4. (C). L.M.L. Nushagak, Aaa. 4. (C). L.M.L.
		pagating the Gospel Among the		KNCD	LOCKSHOK ASS. 4. (C) I.M.I.
	KASI	Heathen. Alatna, Aaa. 20. (C). Sam Dubin		KNCE KNCF	Ekuk, Aaa. 100. (C). L.M.L.
	KASK	Hughes, Aaa. 40. (C). Linlous		KNGS	Egegik, Aaa. 100. (C). L.M.L. Keggiung, Aaa. 70. (C). L.M.L.
	MIT NO	McGee	3195	KBBV	Spokane, Wash. (F)
	KILY	Excursion Inlet, Asa. 50. (C). Astoria & Puget Sound Canning		KBBX	Missoula, Mont. (F)
		Co.		KBCX KBDG	Missoula, Mont. (F) Spokane, Wash. (F) Spokane, Wash. (F)
1	*	North West Airlines		KBDH	Spokane, Wash. (F)
		Pt. Vita, Aaa. 50. (C). Oceanic		KBDI	Republic, Wash. (F)
2998	WXE	Fisheries Co. Anchorage, Alaska. (C).		KBDO WWKA	Alturas, Calif. (F)
3002	*	North West Airlines		WWKB	Bartlett, N. H. (F) Laconia, N. H. (F)
3040	YDA	Tandjong Priok, Java, N.E.I.		WWKC	Gorham, N. H. (F)

	WWKD	Conway, N. H. (F)		3385	KBAA	Portland, Ore. (F)
	WWKE			3380		
	WWKF				KBAB	Portland, Ore. (F)
		Athens, Tenn. (F)			KBAC	Portland, Ore. (F)
	WWKG	Tellico Plains, Tenn. (F)			KBAD	Portland, Ore. (F)
	WWKH	Talladega, Ala. (F)			\mathbf{KBAJ}	Oakland, Calif. (F)
	WWKI	Littletown, N. H. (F)			KBAK	Yreka, Calif. (F)
	WWKJ	Weston, Vt. (F)			KBAS	Portland, Ore. (F)
	WWKS	Duluth, Minn. (F)			KBBG	Hamilton, Mont. (F)
	WWKU	Etowah, Tenn. (F)			KBBO	Kalispell, Mont. (F)
	WWKX	St. Louis, Mo. (F)			KBBP	Kalispeil, Mont. (F)
	WWLK	Duluth, Minn. (F)			KBBQ	Missoula, Mont. (F)
	WWLN	Duluth, Minn. (F)			KBCA	Ft. McArthur, Calif. (F)
	WWLQ	Rutland, Vt. (F)			KBCB	Santa Barbara, Calif. (F)
	WWLR	Rutland, Vt. (F)				Yreka, Calif. (F)
	WWLT	Ocoee, Tenn. (F)			KBCG	
	WWLU	Bristol, Tenn. (F)			KBCH	Oakland, Calif. (F)
3222	*				KBCI	Santa Barbara, Calif. (F)
3222		American Airlines			KBCV	Kalispell, Mont. (F)
2020	*	United Airlines			KBCZ	Hamilton, Mont. (F)
3232		American Airlines			KBDJ	Portland, Ore. (F)
3235	KBAT	Olympia, Wash. (F) Olympia, Wash. (F)			KBDQ	Logan, Utah. (F)
	KBAU	Olympia, Wash. (F)			KBDU	Powers, Ore. (F)
	KBCK	Challis, Idaho. (F)		33 87	KGYA	Longmire, Wash. (F)
	KBCL	Challis, Idaho. (F)			KGYB	Longmire, Wash. (F)
	KBCP	Boise, Idaho. (F)			KGYC	Paradise, Wash. (F)
	KBCQ	Boise, Idaho. (F)			KGYD	Sunrise, Wash, (F)
	KBCS	Halley, Idaho. (F)			KGYE	White River Entrance, Wash. (F)
	KBDF	Boise, Idaho. (F)			KGYF	Carbon River, Wash. (F)
	KBDL	Oakland, Calif. (F)			KGYG	Portable in Wash. (F)
3243	*	American Arlines		3397	KBDW	Mt. Shasta, Calif. (F)
3258	*	American Airlines		0001	KBDX	Missoula, Mont. (F)
3265	KAKR	Candle, Alaska. 30. (C).	Candle			
0200	***********	Community Radio Assn.	Саполе		KBDY	Portland, Ore. (F)
	KALY		n	0470	KBDZ	Seattle, Wash (F)
	KALI	Egavik, Aaa. 25. (C).	R. B.	34 10	KNKG	Ash Mt., Sequola Nat'l. Park,
	KBBE	Julian			*****	Calif. (F)
		Grangeville, Idaho. (F)			KNLP	Death Valley, Calif. (F)
	KBBF	Orofino, Idaho. (F)			WPB	Portland, Maine. (LH)
	KBBH	Orofino, Idaho. (F)			WRJ	Poe Reef, Mich. (LH)
	KBBI	Pierce, Idaho. (F)			WSEO	Gatlinsburg, Tenn. Gt. Smokey
	KBBJ	Orofino, Idaho. (F)				Mt. Nat'l. Park
	KBBK	Oromo, Idano. (F)			WST	Dry Tortugas, Fla. (LH)
	KBBU	Grangeville, Idaho. (F)			WWAJ	Manitou Isl., Mich. (LH)
	KBCU	Grangeville, Idaho. (F)			WWAL	Passage Isl., Mich. (LH)
	KBDP	Descanso, Calif. (F)			WWAM	Rock of Ages, Mich. (LH)
	KBDT	Cascade Locks, Ore. (F)			WWG	Cheboygan, Mich. (LH)
	KILQ	Skowl Arm, Aaa. 100.	(C).		WWZ	Key West, Fla. (LH)
		Deep Sea Salmon Co.		3445	KBAM	Grants Pass, Ore. (F)
3295	KBAA	St. Maries, Idaho. (F)			KBAO	Grants Pass, Ore. (F)
	KBBB	Ashland, Mont. (F)			KBAQ	Okanogan, Wash. (F)
	KBBC	Kingston, Idaho. (F)			KBAR	Globe, Ariz. (F)
	KBBD	St. Maries, Idaho (F)			KBAV	Quincy, Calif. (F)
	KBBS	Billings, Mont. (F)			KBCD	Northfork, Calif. (F)
	KBBT	Ashland, Mont. (F)			KBCE	Northfork, Calif. (F)
	KBBY	Coeur d'Alene, Idaho. (F))		KBCF	Northfork, Calif. (F)
	KBBZ	Calder, Idaho. (F)	,		KBCR	
	KBCC	Mt. Shasta, Calif. (F)			KBDM	
	KBDA	Ely, Nev. (F)				Okanogan, Wash. (F)
	KBDB	Ely, Nev. (F)			KBDN	Winthrop, Wash. (F)
	WWKV				WWKK	Escanaba, Mich. (F)
		Cass Lake, Minn. (F)			WWKL	Portable in Mich. (F)
	WWKW	Cass Lake, Minn. (F)			WWKM	Mio, Mich. (F)
	WWLJ	Ironwood, Mich. (F)			WWKN	Baraga, Mich. (F)
	WWLO	Andalusia, Ala. (F)			WWKO	Newberry, Mich. (F)
	WWLP	Andalusia, Ala. (F)	-		WWKP	Roscommon, Mich. (F)
	WWLW	Rio Piedras, Puerto Rico.	(F)		WWKQ	Traverse City, Mich. (F)
	WWLX	Rio Piedras, Puerto Rico.	(F)		WWKR	Marquette, Mich. (F)
	WWLY	Rio Piedras, Puerto Rico.	(F)		WWKT	Putney, Ky. (F)
	WWLZ		(F)	3448	*	American Airlines
7345	KBAN	Kemmerer, Wyo. (F)		3458	*	American Airlines
	KBAX	Weaverville, Calif. (F)		3468	*	American Airlines
	KBCO	McCall, Idaho. (F)		3500		
	KBDC	Ogden, Utah. (F)		to		AMATEURS
	KBDR	Salt Lake City, Utah. (F)		4000		
	KBDS	Salt Lake City, U. (F)				

The shortwave list will be concluded in the April issue of this magazine. The second part of this list includes all the broadcasters, showing their assigned frequencies as well as actual frequencies used, in addition to all the data available on schedules, addresses, power, etc.

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-6:30 p.m., C-5:30, M-4:30, P-3:30 C — Boake Carter

KDAL KFAB KFH KGKO KGLO KLRA KMBC KMOX KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WACO WADO WAPI WBBM WBIG WBNS WBT WCAO WCAU WCCO WCHS WDAE WDBJ WDBO WDOD WDRC WEEL WEOA WFAM WFBL WFBM WGAR WGST WHAS WHEC WHIO WHP WIBW WISN WJAS WJR WKBB WJSV WKBH WKBN WKBW WKRC WLAC WMBD WMBR WNAX WNOX WOC WOKO WORC WPRO WQAM WREC WRVA WTAQ WWL WWVA

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 WMAI, WOOD WRVA WSYR WTAM WXYZ

C — Lum and Abner

KFAB KMBC KMOX KNOW KOMA KRLID KRNT KTRH KTBA KTUL WARC WBBM WBBN WBT WCAO WCAU WCOA WDAE WDBJ WDRC WEEI WFBL WFBM WGAR WGST WHAS WHEC WHIO WJR WJSV WKBW WKRC WLAC WMBR WOKO WPRO WOAM WREC WRVA

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 Exra's Radio Station
KARK KFYR KGBX KGNC KPRC
KSTP KTBS KTHS KVOO KYW
WBAP WBEN WCAE WCKY WCOL
WFAA WFBR WGAF WEBC
WFAA WFBR WGBF WGY WHO
WIBA WHRE 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 C — Eddie Cantor

Station list not yet available

M — The Lone Ranger
WFIL WNBF WSYR WOR WXYZ

E-8:00 p.m., C-7:00, M-6:00, P-5:00 R — Burns and Allen

CROT 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 — Melody Puzzles; Harry Salter KANS KDRA KECA KERN KFBK KFDM KFEL KFSD KGA KGHF KGHL KGIR KGO KGW KIDO KJIR KLO KMJ KOB KOIL KRGV KRIS KSO KTAR KTMS KTSM KWG KWK KXYZ WABY WAGA WBAL WBOW WBRE WBZ WBZA WCKY WCOL WDSU WEAN WEBR WFEA WFIL WGL WHAM WHK WICC WJBO WJTN WJZ WLEU WLS WMAL WMPS WMT WORK WREN WROL WRTD WSAN WSGN WSPD WSYR WXYZ

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

C — Pick and Pat
KFAB KMBC WABC WADC WBBM
WBT WCAO WCAU WDRC WEAN
WFBI. 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 WEEI WFAA
WFBC WFBR WFLA WGY WHO
WIBA WIOD WIRE WIS WJAR
WJAX WJDX WKY WMAQ WMC
WOAI WOW WPTF WRC WRVA
WSB WSM WSMB WSOC WTAG
WTAM WTAR WTIC WTMJ WWJ

B — Campana's Grand Hotel KDKA KFEL KFI KFSD KGA KGO

KGW KJR KLO KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ WLS WMAL WMT WOWO WREN WSPD WSYR WXYZ

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C — Boake Carter

KFPY KGAR KIRO KLZ KNX KOIN KOY KSPO KSL KVI KVOR 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 WFIL WHAM WJTN WJZ WLS WMAL WREN WRTD WSPD WSYR WTON WXYZ

C — Lux Radio Theater

R - Fibber McGee and Molly

KFYR KPRC K8D KSTP KTBS
KVOO KYW WAYE WBEN WCAE
WCOL WCSH WDAF WDAY WEAF
WEBC WFAA WFBR WFLA WGY
WHO WIBA WIOD WIRE WIS
WJAR WJAX WJDX WLW WMAQ
WMC WNAC WOAI WOOD WOW
WPTF WRC WSB WSM WSMB
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 KPRC KSD KSTP KVOO KYW WAVE WBEN WCAE WCSH WDAF WEAF WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WJAR WJAX WKY WLW WMAQ WMC WNAC WOAI WOW WPTF WRVA WSB WSM WSMB WRC WTAG WTAM WTAR WTIC WTMJ WW.I

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 WCSH WDAF WEAF WEEI WFBR WFLA WGY WHO WIOD WIS WJAR WJAX WKY WMAQ WMC WOAI WOW WPTF WRC WRVA WSB WSM WTAG WTAM WTAR WTIC WWJ WWNC Also on Canadian Network

B — Warden Lewis E, Lawes KDKA KECA KFSD KGA KGO

MONDAY (Continued)

KJR KLO KOIL KSO KVOD KWK WBAL WBZ WBZA WCKY WEAN WEBR WENR WITL WHAM WHK WJZ WMAL WMT WOWO WICC WREN WSPD WSYR WTCN WXYZ

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

E-10:30 p.m., C-9:30, M-8:30, P-7:30 C - Brave New World Available to entire network

R - Burns and Allen

KARK 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 WMC WOAI WOW WSB WSMB WTML

M — The Lone Ranger KDB KDON KFRC KFXM KGB KGDM KHJ 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 Metodies; Jack Fulton KERN KFAB KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KMOX KOIN KOL KOMA KRLD KRNT KSL KTRH KTSA KVI WBBM KVI WBBM WBRC WCCO WFBM WGST WLAC WREC WWL

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

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 KSFO KSL KTUL KVI KWKH WACO WBRC WCCO WFBM WHAS WLAC WREC

TUESDAY

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C - Boake Carter, see Monday

E-6:45 p.m., C-5:45, M-4:45, P-3:45 B - Lowell Thomas, See Monday

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

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

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C - Geo. McCall, Hollywood Talk KFAB KFH KLRA KMOX KNOW KOMA KRLD KRNT KTRH KTSA KWKH WABC WADC WBBM WBNS " WCAO WCAU WCCO WCHS WDAE WDBO WDOD WDRC WEEL WFBL WGAR WGBI WGST WHAS WHEC WHIO WIBW WISN WJAS

WJR WJSV WKRC WLAC WMAS E-9:00 p.m., C-8:00, M-7:00, P-6:00 WMBR WOC WOKO WORC WPRO C — Al Pearce and Gang WOAM WREC WRVA WWL

E-7:30 p.m., C-6:30, M-5:30, P-4:30 - Helen Menken, Drama KFAB KFPY KIRO KLZ KMBC KMOX KNX KOIN KRNT KSFO KSL KVI WABC WBBM WCAO WCAU WDRC WEEL WFBL WGAR WGR WHAS WHEC WHIO WJAS WIR WISY WKRC WOKO WORC WPRO

B — Dorothy Thompson; News WBAL WBZ WBZA WENR WHAM WJZ WSYR

E-8:00 p.m., C-7:00, M-6:00, P-5:00 - Johnny with Russ Morgan

KFYR KPRC KSD KSTP KTHS KYOO KYW WAVE WBAP WBEN WCAE WCSH WDAF WDAY WEEN WCAL WCSI WFLA WGY
WEAF WEBC WFBR WFLA WGY
WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WNAC WOW WFTF WRC WMC WNAC WOW WPTF WRC WRVA WSB WSM WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

C - Edward Robinson; Claire Trevor 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 Also on Canadian Network

Those We Love

KDKA KEEL KEI KESD KGA KGO KJR KLO KOIL KSO KWK WABY WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ WLS WMAL WMT WREN WSPD WSYR WXYZ

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

Also on Canadian Network

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

B — Edgar Guest, It Can Be Done KDKA KOIL KSO KWK WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLS WLW WMAL WMT WREN WSYR WXYZ

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C - Boake Carter, see Monday

CFRB CKAC KFAB KFH KGKO KLRA KMBC KMOX KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WRT 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 WICC WKBN WKBW WKRC WKBH WLAC WLBZ WMAS WMBD WMBG WMMN WNAC WMBR WNAX WNBF WNOX WOC WOKO WORC WOWO WPG WQAM WREC WSBT WSFA WSJS WSPD WTOC WWI

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

B -- Horace Heidt Orchestra

KANS KDKA KFI KFSD KGA KGO KGW KJR KLO KOIL KPRC KSO KTHS KVOD KWK WAVE WBAL WBAP WBZ WBZA WEAN WEBR WFIL WFLA WHAM WHK WICC WIOD WIS WJAX WJZ WKY WIS WLW WMAL WMC WMT WOAL WPTF WREN WSB WSM WSMB WSOC WSPD WSUN WSYR WTAR WTON WXYZ

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

R — To be announced CFCF CRCT KDYL KFI KGHL KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KVOO KYW WAVE WBAP WBEN WCAE WCOL WCSC WCSH WDAF WDEL WEAF WEBC WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WKY WMAQ WMBG WIAR WOAL WOAL WOOD WO...
WE'VE WSB WSM WSMB WSOC ww.i

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

KFAB KFH KIPY KGKO KIRO
KIRA KLZ KMBC KMOX KNOW
KNX KOIN KOMA KOY KRLD
KRNT KSCJ KSFO KSL KTRH
KTSA KTUL KVI KVOR KWKH WABC WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCHS WDAE WDBJ
WDBO WDNC WDOD WDRC WEEI 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 WQAM WREC WRVA WSBT WSFA WSJS WTOC WWL

- Eddie Duchin Orchestra CKLW KALE KDB KDON KELA KFRC KEXM KGA KGB KGY KHJ KIEM KIT KMO KOL KORE KPMC KPQ KQW KRNR KSLM KVOE KVOS KXO KXRO WGN WIP WLW WNAC WOL WOR WRR

E-10:30 p.m., C-9:30, M-8:30, P-7:30 R — Jimmy Fidler Hollywood Gossip KDYL KFI KGW KHQ KOA KOMO KPO KSD KTAR KYW WCAE WCSH WDAF WEAF WFBR

TUESDAY (Continued)

WGY WHO WJAR WLW WMAQ WNAC WOOD WOW WRC WTAG WTAM WTIC WWI

E-10:45 p.m., C-9:45, M-8:45, P-7:45 - Dale Carnegie: Winning Friends KDYL KFI KGW KHO KOA KOMO KPO KSD KSTP KYW WBEN WCAE WCSH WDAF WDEL WEAF WFBR
WGY WHO WIRE WJAR WLW
WMAQ WNAC 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-11:15 p.m., C-10:15, M-9:15, P-8:15 - Geo. McCall, Hollywood Talk KFPY KIRO KLZ KMBC KNX KOIN KSFO KSL KVI

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Al Joison; Parkyakarkus KFPY KLZ KNX KOIN KOL KSFO KSL KVI

Also on Canadian Network

E-Midn't; C-11:00, M-10:00, P-9:00 C — Al Pearce and Gang KFBB KFPY KGVO KLZ KNX

KOH KOIN KOL KOY KSFO KSL KVI KVOR.

WEDNESDAY

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C - Boake Carter, see Monday

E-6:45 p.m., C-5:45, M-4:45, P-3:45 B - Lowell Thomas, See Monday C - Lum and Abner, 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

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 WEEI 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 M - Lone Ranger, see Mon.

E-7:45 p.m., C-6:45, M-5:45, P-4:45 R — "Cheer Up"; Henry Burbig KYW WEAF WENR WYAM

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 WBNS WCAU WCCO WDRC WEAN WFBL WFBM WGR WHAS WHEC WHK WJAS WJR WJSV WKRC WLAC WMBG WNAC WOKO WTOC WWL

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 WTMI WWI WWYC

Also on Canadian Network

B — Harriet Parsons

KDKA KECA KFEL KFSD KGA KGO KJR KLO KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WEIL WHAM WHE WICC WJZ WLS WMAL WMT WREN WSPD WSYR WYYZ WOWO

Tommy Dorsey Orchestra

KDYL KFI KGW KIIQ KOA KOMO KPO KPRC KSD KSTP KTBS KYW WAVE WBEN WBRC WCAE WCSH WDAF WDEL WEAF WFAA WFBR WFLA WGY WHO WIOD WIRE WIS WJAR WJAX WKY WLW WMAQ WMBG WMC WNAC WOOD WPTF WRC WSB WSM WSMB WSUN WTAG WTAM WTAR WTIC WWI WWNC

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C - Boake Carter, see Monday

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 KMON KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRII 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 WMAS WMBD WMBG WMBR WNAC WNAX WNBF WNOX WOO WOKO WORC WOWO WPG WOAM WREC WSFA WSJS WSPD WTOC WWL

- Town Hall Tonight

KFYR KPRC KSD KSTP KTBS KTHS KVOO 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 WOAI WOW WPTF WRC WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30 C — Ben Bernie; Lew Lehr

KDAL KFAB KFBB KFH KFPY KGAR KGKO KGLO KIRO KLRA KLZ KMBC KMOX KNOW KNX KOH KOIN KOMA KOY KRLD KRNT KSCJ KSFO KSL KTRII KTSA KTUL KVI KVOR KWKH WABC WACO WALA WBBM WBIG WBNS WBT WCAO WCAU WCCO WCHS WCOA WCOC WDAE WDBJ WDBO WDNC WDOD WDRC WEEL WEOA WIBL WIBM WGAR WGBI WGST WHAS WHEC WHIO WHLB WHP WIBW WIBX WISN WJAS WJNO WJR WJSV WKBB WKBH WKBW WKRC WLAC WLBZ WMAS WMBD WMBR WMFG WMMN WNAX WNBF WNBX WNOX WOC WOKO WORC WPG WPRO WQAM WREC WRVA WSBT WSFA WSJS WTAQ WTOC WWL

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

KDB KERN KFAB KFBK KFH KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL 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 WRC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

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 KTRH 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

THURSDAY

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C - Boake Carter, see Monday

E-6:45 p.m., C-5:45, M-4:45, P-3:45 Lowell Thomas, See Monday R -

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Poetic Melodies, See Monday — 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 KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KTUL WABC WBBM WBNS WCAO WCAU WCCO WDAE WDBO WDRC WEEI WFBL WGAR WGR WHAS WHEC WHIO WHP WIBX WISN 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 C - Kate Smith; Jack Miller 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

THURSDAY (Continued)

WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WEEI WEOA WFBL WFBM WGAR WGR WGST WHAS WHEC WHIO WHP WIBW WJSV WKBN WISN WJAS WJR 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 WEEL WEBR WGY WHO WJAR WLW WMAQ WOW WRC WTAM WTIC WTMJ WWJ

Also on Canadian Network

B — The March of Time

KDKA KECA KERN KFBK KFEL KFSD KGA KGO KJR KLO KMJ KOIL KSO KWG KWK KXYZ WABY WAGA WBAL WBZ WBZA WCKY WCOL WCSC WDSU WEAN WEBR WEIL WHAM WIIK WICC WLS WMAL WMPS WMT WREN WSPD WSYR WXYZ

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C - Boake Carter, see Monday

E-9:00 p.m., C-8:00, M-7:00, P-6:00 - 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 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 WKBN WKBW WKRC WLAC WLBZ WMBD WMBG WMBR WMMN WNAC WNAX WOC WORO WORC WOWO WPG WOAM 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 WHO 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 KHO 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 WJAR 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

Also on Canadian Network

E-11:00 p.m., C-10:00, M-9:00, P-8:03 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; Jack Miller KFBB KFPY KGVO KIRO KLZ KNX KOIN KOY KSFO KSL KVI

FRIDAY

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C - Boake Carter, see Monday

E-6:45 p.m., C-5:45, M-4:45, P-3:45 B - Lowell Thomas, See Monday C - Lum and Abner, see Monday

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

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 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 KHJ KLZ KMBC KMJ KMOX KOIN KOL KOMA KRNT KSL KVI KWG WABC WBNS WBRC WBT WCAO WCAU WCCO WDRC WEAN WFBL WFBM WFBR WGST WHAS WHK WJAS WIR WISV 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 WEEI 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 - Paul Whiteman: Deems Taylor 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 WMBR WMBD WMBG WMMN WNAX WNBF WNOX WOC WOKO WORC WOWO WPG WPRO WOAM WREC WSFA WSJS WSPD WTOC WWL

B - Death Valley Days

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

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C - Boake Carter, see Monday

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

Hollywood Hotel CFRB CKAC KDB KERN KFAB KFBK KFH KFPY KFRC KGB

KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WADC WBBM WBNS WBRC WBT WGAO WCAU WCCO WDAE WDBJ WDBO WDRC WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WJAS WJR WJSV WKBW WKRC WLAC WLBZ WMIAS WMBD WMBG WMBR WNAC WNAX WNOX WOKO WORC WPG WOAM WREC WSPD WWL Also on Canadian Network

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

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R - True Story Court K - ITUE STOPY COURT KSD KYW WBEN WCAE WCSH WEAF WEEI WFBR WGY WHO WHIO WJAR WMAQ WOW WRC WTAG WTAM WTIC WWJ

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C - Frank Crumit; Reed Kennedy 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 WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCHS WCOA WCOC WDAE WDBJ WDBO WDNC WDOD WDRC WEEI WEOA WFBL WFBM WGAR WGBI WGST WHAS WHEC WHIO WHP WIBW WIBX WISN WJAS WJNO WJR WJSV WKBB WKBW WKRC WLAC WLBZ WMAS WMBD WMBR WMMN WNBF WNOX WOC WOKO WORC WPAR WPG WPRO WQAM WREC WRVAWSBT WSFA WSJS WTOC WWL

CBC — Canada 1938

CBF CBI. CBM CBO CBR CBW CFAC CFCF CFCH CFCN CFCO CFCY CFJC CFNB CFPL CFQC CHAB CHNS CHRC CHSJ CHWK CJAT CJCA CJCB CJIC CJKL CJOC CKBI CKCK CKCW CKGB CKOV CKOC CKPR CKSO CKX CKY

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 WEEL WEAA WEBR WELA 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. 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 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 C -- Poetic Melodies, See Monday R - Amos 'n' Andy, See Monday

FRIDAY (Continued)

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

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Paul Whiteman; Deems Taylor KFBB KFPY KGAR KGMB KGVO KIRO KLZ KNX KOH KOIN KOY KSFO KSL KVI KVOR

E-12:00p.m., C-11:60, M-10:00, P-9:00 CBC - Northern Messenger To Mideast and Western Networks

SATURDAY

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

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 WEEL WFBL WGAR WGR WHAS WJAS

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

WJR WKRC WPRO

WTIC WTMJ WWJ

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

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 WERC WMBD WMBG WNBF WOC WOKO WPRO WSBT WWVA

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

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

KDB KERN KFAB KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KRNT ISL 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

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

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

C — Saturday Night Serenade KFAB KFH KFPY KGKO KLRA KLZ KMBC KMOX KNOW KNX KOIN KOL KOMA KRLD KSFO KTRH KTSA KTUL KVI KWKH 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

KERN KEAB KEBK KEH KEPY KFRC KGB KGKO KGMB KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WISN WJAS WJR WJSV WICC WKBW WKRC WLAC WLBZ WMAS WAIRR WNAC WAIRD WMBG WNAX WNOX WOC WOKO WORC WPG WOAM WREC WSBT WSFA WSJS WSPD WTOC WWL WWVA

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

E-11:30 p.m., C-10:30, M-9:30, P-8:30 - Johnny Presents Russ Morgan KEBB KEPY 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

KEBB KEPY KIRO KNX 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

KERC KGB KGVO KFH KEPY 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 WMBR WMMN WOC WOKO WORC WPG WOAM WSBT WSJS WSPD WTOC

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

C — Salt Lake Tabernacie 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 WEEA WGR WHAS WICC WIAS WJR WKRC WLBC WMBR WMMN WOC WOKO WORC WQAM W8BT

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

- Church of the Air

WSJS WSPD WTOC

KEBK KEH KEPY KFRC KGB KHJ 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 WIIP WIBX WJAS WJSV WKBN WKRC WLAC WLBZ WMBR WNBF WOC WOKO WORC WPG WQAM WREC WSBT WSJS WSPD WTOC WWVA

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 WOAL WPTF WREN WRYA WSB WSM WSMB WSOC WSYR WTAR WTMJ WWNC WYYZ

E-2:30 p.m., C-1:30, M-12:30, P-11:30 C — Jean Hersholt, "Dr. Christian." CERB KEAB KEH KMBC KMOX KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KWKH WABC WADO WBBM WBNS WBRC WBT WCAO WCAU WCCO WCHS WDAE WDBO WDRC WEEL WFBL 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 KOI, KRLD KSCJ KSL KTRH KTSA KWKH WABC WADC WALA WBNS WBT WCAO WCCO WCHS WDAE WDBJ WDBO WDRC WEEL WESG WFBL WFBM WHAS WHE WHP WIBW WIBX
WJAS WJR WJSV WEBB WEBN WKBW WKRC WLAC WLBZ WMAS WMBG WMBR WMMN WMBD WNBF WOC WOKO WORC WPAR WPRO WQAM WSBT WSJS WTAQ WTOC WWL

Also on Canadian Network

R — The Radio News Reel KSD KSTP KYW WBEN WCAE

SUNDAY (Continued)

WCSH WDAF WDEL WEAF WFBR WGY WHO WIRE WJAR WMAQ WNAC WOW WRC WSAI WTAG WTAM WTIC WWJ

E-4:30 p.m., C-3:30, M-2:30, P-1:30 R — The World Is Yours; Drama Available to Red Network

E-5:00 p.m., C-4:00, M-3:00, P-2:00 C — Magazine of the Air

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

R - 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

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

C — Guy Lombardo and Orchestra KFH KMBC KMOX KOMA KTUL WAAB WABC WBNS WCAO WCAU WDRC WEAN WFBL WFBM WGR WHAS WHEC WHK WIBX 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 WBZ WBZA WCKY_WOOL WDAY WDSU WEAN WEBC WEBR WENR WFIL WHAM WHK, WICC WJZ WMAL WMIT WREN WRTD WSM WSPD WSYR WTCN WXYZ

R — Mickey Mouse Theater

KANS KDYL KFI KGNC KGW
KHQ KOA KOMO KPO KPRC KSD
KSTP KVOO KYW WAVE WBAP
WBEN WBRC WCAE WCSH WDAF
WDEL WEAF WPBC WFBR WFLA
WGY WHO WIBA WIOD WIRE
WIS WJAR WJAX WKY WLW
WMAQ WMBG WMC WNAC WOAI
WOOD WOW WPTF WRC WSB
WSM WSMB WSUN WTAG WTAM
WTAR WTIC WTMJ WWJ

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

C — Joe Penner; Gene Austin
KFAB KFPY KGLO KLZ KMBC
KMOX KNOW KNX KOIN KOL
KOMA KRLD KRNT KSFO KSL
KTRII KTSA KVI WABC WBBM
WBNS WBRC WBT WCAO WCAU
WCCO WDAE WDBO WDRC WEEI
WFBL WEBM WGAR WGST WHAS
WHEC WJAS WJR WJSV WKBW
WKRC WOKO WORC WPRO WQAM
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-3:80 C — Double Everything

CFRB CKAC KDAL KFAB KFH KFPY KGAR KGMB KIRO KLRA KLZ KMBC KMOX KNOW KNX KOH KOMA KOY KRLD KRNT KSCJ KSFO KSL KTRH KTSA KTUL KVI WABC WADC WBBM WBT WCAO WCAU WCCO WDAE WDBO WDRC WEEI WFBL WFBM WGAR WGST WHAS WHEC WHIO WHLB WJAS WJNO WJR WJSV WKBW WKRC WLAC WMBR WMFG WNAX WNOX WOKO WPRO WQAM WREC WRVA WTOC WWL WWWA

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 R — Jack Benny: Mary Livingstone

KSD KYA KYW WBEN WCAE WCSH WDAF WEAF WFBR WGY WIO WJAR WLW WMAQ WNAC WOW WRC WTAG WTAM WTIC

Also on Canadian Network

E-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
WILAS WHEC WHK WHP WIBX
WICC WJAS WJR WJSV WKBN
WKRC WLAC WLBZ WMAS WMRE
WNAC WNOX WGKO WORC WQAM
WREC WSBT WSFA WSJS WSMK
WSPD WTOC WUL WWVA

B— Ozzie Nelson; Harriet Hilliard
KARK KDKA KECA KFEL KEX
KFSD KFYR KGA KGO KJR KLO
KOIL KPRC KSO KSTP KTAR
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 R — Don Ameche; Edgar Bergen CFCF CRCT KDYL KFI KFYR

KGW KHQ KOA KOMQ KPO KPRC KSD KSTP KTAR KTBS KVOO KYW WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFAA WIDD WIRE WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WNAC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

Also on Canadian Network

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

CFIB CKAC KDB KERN KFAB
KFBK KFH KFPY KFRC KGB
KGKO KHJ KLRA KLZ KMBC
KMJ KMON KOH KOIN KOL KOMA
KRLD KRNT KSCJ KSL KTRH
KTSA KTUL KVI KVOR KWG
KWKH WABC WACO WADC WALA
WBM 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 WIBY WICC WISN WJAS
WJR WJSV WKBN WKRC WLAC
WNAY WOC WOKO WORC WQAM
WREC WBT WSFA WSJS WSPD
WTOC WWL WWVA

- 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
KHQ KOA KOMO KPO KPRC KSD
KSTP KTBS KTHS KYW WAVE
WBEN WCAE WCKY WCSH WDAY
WDAY WEAF WEBC WEEL WFAA
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 WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WOFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDY WKY WMAQ WMC WOAI WSW WSTF WRC WRVA WSAI WSB WSM WSMB WSOC WTAG WTAM WTAR WTMJ WWNC

B - Walter Winchell

KDKA KECA KEX KFSD KGA KGHI 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

SUNDAY (Continued)

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
KSL KTRIH KTSA KTUL KVI
WABC WBBM WBNS WBRC WBT
WCAU WCCO WDAE WDBO WDRC
WEEL WFBL WFBM WGAR WGST
WHAS WHEC WJAS WJR WJSV
WKBW WKRC WMBR WNOX
WOKO WORC WPRO WQAM WWL
R — Rising Musical Stars

KDYL KFI KGBX KGW KHQ KOA

KPO KPRC KSD KSTP KTAR KTBS
KTHS 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
WNC

E-10:30 p.m., C-9:30, M-8:30, P-7:30 B — Tyrone Power; Drama KARK KPRC KTBS WAPI WAVE WBAP WJDX WKY WMC WOAI WSB WSM WSMB

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

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

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

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 r.m. Sun., CBS Jack Benny-Mary Livingstone, 7 and 11:30 p.m. Sun., Red Edgar Bergen-Charlie McCarthy, 8 p.m. Sun., Red Fannle Brice, 9 p.m. Thurs., Red Henry Burbig, 7:45 p.m. Wed., 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 Cautor, 7:30 p.m. Mon., 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 Joison, 8:30 and 11:30 p.m. Tues., CBS Lew Lehr, 9:30 p.m. Wed., CBS 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 Oliver Wakefield, 8:30 and 11:30 p.m., Fri., CBS

CONCERTS

Frank Black, 2-00 p.m. Sun., Blue Ford Sunday Evening Hour, 9:00 p.m. Sun., CBS Andre Kostelanets, 9:00 p.m. Wed., CBS Met. Opera Auditions, 5:00 p.m. Sun., Blue NBC Symphony Crehestra, 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 Ben Bernie, 9:30 p.m. Wed., CBS Oscar Bradley, 7:30 p.m. Sun., CBS Don Donnie, 9 p.m. Sun., Red Tommy Dersey, 8:30 p.m. Wed., Red Eddle Duchin, 10 p.m. Tues., MBS Ted Fio Rito, 8:30 p.m. Sat., Red Al Goodman, 10:06 p.m. Sat., CBS; 10 p.m. Wed., Red Benny Goodman, 10:00 p.m. Tues., CBS Jimmy Grier, 6:00 and 11:00 p.m. Sun., CBS Gustav Haenschen, 9:30 p.m. Sun., Red: 10:00 p.m. Frl., CBS Phil Harris, 7 and 11:30 p.m. Sun. Red

Phil Harris, 7 and 11:30 p.m. Sun., Red Horace Heidt, 9:00 p.m. Tues., Blue Carl Hoff, 9 and 12 p.m. Tues., CBS Wayne King, 8:30 p.m. Tues., 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 Frankle Masters, 8:30 p.m. Tues., Blue Jack Miller, 8 and 11:15 p.m. Thurs., CBS Billy Mills, 9 p.m. Mon., Red 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, 9:00 p.m. Fri., CBS B. A. Roffe, 8:00 and 12:00 p.m. Sat., Red Warry Salter, 7:15 and 10:30 p.m. Wed., CBS; 8 p.m. Mon., Blue

Seymour Simons, 6:30 p.m. Sun., CBS Harry Sosnik, 9 and 10:30 p.m. Sun., Blue Phil Spitalny, 9:30 p.m. Mon., Red 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; 5 p.m. Sun., CBS

Paul Whiteman, 8:30 and 11:30 Fri., CBS 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, 6:45 p.m. Mon., Wed., Frl., CBS Pick and Pat, 8:30 and 11:30 p.m. Mon., CBS Stroud Twins, 8:00 p.m. Sun., Red

DRAMA

Campana's First Nighter, 10:00 p.m. Frl., Red Campana's Grand Hotel, 8:30 p.m. Mon., Blue Death Valley Days, 8:30 p.m. Frl., Blue Gang Busters, 10:00 p.m. Wed., CBS Eddie Guest, 8:30 p.m. Tues., Blue Jean Hersholt, 2:30 p.m. Sun., CBS Hollywood Hotel, 9:00 p.m. Frl., CBS Hollywood Playhouse, 9:00 and 11:30 p.m. Sun., Blue Lone 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 10:00 p.m. Sun., Blue Irene Rich, 9:45 and 11:00 p.m. Sun., Blue Edward G. Robinson, 8:00 p.m. Tues., 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

POPULAR PROGRAMS

American Album of Familiar Music, 9:30 p.m. Sun., Red

Red
Believe It Or Not, 8:00 and 12:00 p.m. Sat., Red
Major Bowes' Amateurs, 9:00 p.m. Thurs., CBS
Major Bowes' Family, 11:30 a.m. Sun., CBS
Brave New World, 10:30 p.m. Mon., CBS
Carborundum Band, 7:30 p.m. Sat., CBS
Cavalcade of America, 8:00 p.m. Wed., CBS
Chase and Sanborn Hour, 8:00 p.m. Sun., Red
Cheer Up, America, 7:45 p.m. Wed., Red
Cities Service Concert, 8:00 p.m. Fri, Red
Contented Program, 10:00 p.m. Mon., Red
Death Valley Days, 8:30 p.m. Fri, Blue
Double Everything, 6:30 p.m. Sun., CBS
Gang Busters, 10:00 p.m. Wed., CBS
Jack Haley's Variety Show, 8:30 p.m. Sat., Red
Hammerstein Music Hall, 8:00 p.m. Fri, CBS
Hobby Lobby, 7:15 and 10:30 p.m. Wed., CBS
Hour of Charm, 9:30 p.m. Mon., Red
How To Win Friends and Influence People, 10:45 p.m.
Tues., Red

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

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
Magazine of the Air, 5 p.m. Sun., CBS
Magic Key of RCA, 2:00 p.m. Sun., Blue
Manhattan Merry-Go-Round, 9:00 p.m., Sun., Red
March of Time, 8:00 p.m. Thurs., Blue
MGM Program, 9:00 p.m. Thurs., Red
Mickey Mouse Theater, 5:30 p.m. Sun., Red
National Barn Dance, 9:00 and 11:00 p.m. Sat., Blue
Northern Messenger, 11:00 p.m. Sat., CBC
Joack Oakie's College, 9:30 p.m. Tues., CBS
Poetic Melodies, 7:00 and 11:00 p.m. Mon. through

Fri., CBS
Professor Quiz, 9:00 and 12:00 p.m. Sat., CBS
Radio News Reel, 3:00 p.m. Sun., Red
Salt Lake City Tabernaele, 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
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-2-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
Town Hall Tonight, 9:00 p.m. Wed., Red
True Story Court, 9:30 p.m. Fri., Red
Unele Jim's Question Bee, 7:30 p.m. Sat., Blue
Vick's Open House, 7:00 p.m. Sun., CBS
Voice of Firestone, 8:30 p.m. Mon., Red
Vox Pop, 9:00 p.m. Tues., Red

Waitz Time, 9:00 p.m. Fri., Red Watch the Fun go By, 9:00 and 12:00 p.m. Tues., CBS We, The People, 7:30 p.m. Thurs., CBS Your Hit Parade, 10:00 p.m. Sat., CBS Your Hollywood Parade, 10:00 p.m. Wed., Red Zenith Foundation, 10:00 p.m. Sun., CBS

SINGERS

Stuart Allen, 10:00 p.m. Sat., CBS Gene Austin, 6:00 p.m. Sun., CBS Kenny Baker, 7:00 and 11:30 p.m. Sun., Red Morton Bowe, 5 p.m. Sun., CBS Henry Burr, 9:00 and 11:00 p.m. Sat., Blue Rachel Carlay, 9:00 p.m. Sun., Red John Carter, 8 p.m. Sun., Red Buddy Clark, 8 p.m. Mon., Blue; 9:30 p.m. Wed., CRS Jerry Cooper, 9:00 p.m. Fri., CBS Alice Cornett, 10:00 p.m. Frt., 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 Mary Eastman, 9:30 p.m. Sat., CBS Wilbur Evans, 7:00 p.m. Sun., CBS Jack Fulton, 7:00 and 11:00 p.m. Mon. through Fri., CBS Freddie Gibson, 10:00 p.m. Sat., CBS; 8 p.m. Mon., Blue Julie Gibson, 5:30 and 11 p.m. Sun., CBS Harriet Hilliard, 7:30 p.m. Sun., Blue Al Joison, 8:30 and 11:30 p.m. Tues., CBS Alan Jones, 9 p.m. Thurs., Red 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 Lullaby Lady, 10:00 p.m. Mon., Red Lulu Belle, 9:00 and 11:00 p.m. Sat., Blue Jeanette MacDonald, 7:00 p.m. Sun., CBS Smiling Ed McConnell, 5:30 p.m. Sun., Blue Lucille Manners, 8:00 p.m. Fri., Red Tony Martin, 8:00 and 10:30 p.m. Mon., Red Frank Munn, 9:30 p.m. Sun., Red; 9:00 p.m. Fri., Red Jane Pickens, 9:30 p.m. Wed., CBS 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 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

TALKS

Lawrence Tibbett, 9:00 p.m. Wed., CBS

Virginia Verrill, 8:30 p.m. Sat., Red

Dale Carnegie, 10:45 p.m. Tues., Red
Boake Carter, 6:30 and 8:45 p.m. daily, CBS
Jimmy Fidler, 10:30 p.m. Tues., Fri., Red
Gabriel Heatter, 7:30 and 10:30 p.m. Thurs., CBS
John B. Kennedy, 8:00 p.m. Sun., Blue
Geo, McCali, 7:15 and 11:15 p.m. Tues., Thurs., CBS
Harriet Parsons, 8:30 p.m. Wed., Blue
Robert L. Ripley, 8:00 and 12:00 p.m. Sat., Red
Deems Taylor, 9:00 p.m. Wed., CBS; 8:30 and 11:30 p.m. Fri., CBS
Lowell Thomas, 6:45 p.m. Mon. through Fri., Blue
Dorothy Thompson, 10:45 p.m. Fri., Red; 7:30 p.m.
Tues., Blue
Walter Winchell, 9:30 and 11:15 p.m. Sun., Blue

KEY TO SYMBOLS

Second Column Symbols

postage.

Does not verify.

а

b

c

Verifies reception for return

Verification 10c; letter 25c.

Verifies only occasionally.

100

500

Ñ

ak

ak 100

ak

ak 1000

CHRC

CKCL

CKUA

KMJ

As shown in the Index by Frequencies and Dial Numbers

National "Red" network.

Has permit to change lo-

using same transmitter.

to increase

Sunday only.

Synchronized.

Has permit

power.

cation

quency.

sharing time.

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.

Weather or time only.

Fourth Column Symbols
National "Blue" networ

Columbia network.

7.

Dп

No information available.

network.

V

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Day time only.
Day time with occasional evening hours.
Canadian Brdcstg. Corp.
     Sends own station stamp
for 10c.
                                                                                  z
                                                                                       Has permit to change fre-
                                         F
     Sends own station stamp
                                              Mutual Brdestg. Sys.
National "Red" and
"Blue" networks.
        for 5c.
                                                                                  a-b-c. Small letters show stations
      Sends own station stamp
                                         N
                                                                                  1-2-3. Figures denote stations
        for postage.
                                         P
     Has no stamps.
                                              Has
                                                     construction
                                                                      permit
                                                only.
                                                                                        No information.
      Verifies for 5c.
  The sign-on and sign-off time of stations is shown in Eastern Standard Time. "ss" means "sunset."
540 keys. (555.2)
CJRM
                                                            -9:30 am-1:30 am
-1:30 pm-9:30 pm
           ak 1000
                                 Regina, Sask.
Nassau, Bahamas
ZNS
           аk
                 400
550 keys. (545.1)
                       F (1)
2 (1)
N (5)
                                Fredericton, N. St. Louis, Mo. Bismarck, N. Dak. Corvallis, Ore. St. Louis, Mo. San Antonio, Tex.
CFNB
           ak
                 500
                                 Fredericton, N. B.
                                                               7:00 am-11:00 pm
KFUO
KFYR
KOAC
                 500
                                                               8:00 am-Midnight
           ak
                                                              -8:00 am-1:00 am
                1000
           яk
                                                               Noon-Midnight
                1000
           ak
                       2R (5)
C (5)
D
C (5)
C (5)
C (5)
KSD
KTSA
                1000
           ak
                                 San Antonio, Tex
Waterbury, Vt.
Buffalo, N. Y.
Cincinnati, Ohio
           ak
                1000
WDEV
           ak
                 500
                1000
                                                             -7:00 am-midnight
WGR
           ak
WKRC
WSVA
           ak
                1000
                                                            —6:30 am—...
           ak
                 500
                       Ď
                                 Harrisonburg ,Va.
XEFC
                 100
                                 Merida, Yuc.
560 keys. (535.4)
                       (1) N
C (5)
C (5)
KFDM
          ak
                 500
                                 Beaumont, Texas
KLZ
KSFO
KWTO
WFIL
          ak
                1000
                                                              8:30 am-2:00 am
                                 Denver, Colo.
                                San Francisco, Cal.
                                                              10:00 am-4:00 am
                1000
          ak
                                                              6:00 am-
          ak
                5000
                       D
                                 Springfield, Mo.
                       BM
                                                              -7:00 am-midnight
          ak
                1000
                                 Philadelphia, Pa.
WIND
          ak
                1000
                       (5)
N (5)
                                 Gary, Ind.
                                                            -6:00 am-4:00 am
WIS
          ak
                1000
                                 Columbia, S. C.
                                                              7:00 am-midnight
WOAM
          ak
                1000
                                 Miami, Fla.
                                                              6:00 am-midnight
570 keys. (526.0)
CMCY
                       X Havana, Cupa
CXY(1) Wichita Falls, Tex.
Los Angeles, Calif.
C (5) Tacoma, Wash.
                5000
           ak
                 250
KGKO
          ak
KMTR
          ak
                1000
                                                            -9:00 am-3:00 am
KVI
           ak
                1000
                                 Youngstown, Ohio
New York, N. Y.
Yankton, S. Dak.
WKBN
          ak
                 500
                       C1
WMCA
          ak
                1000
                       New York, N. Y.
C (5) Yankton, S. Dak,
I (1) Columbus, Ohio
B (WSYU) Syracuse, N. Y.
N Asheville, N. C.
WNAX
WOSU
          ak
                1000
                                                             –6:45 am-
                 750
                                                            -9:00 am-11:00 pm
          ak
WSYR
                1000
                                                              7:00 am-1:00 am
          ak
                                                              7:30 am-1:00 am
          ak
                1000
580 keys. (516.9)
CFPR
                                 Prince Rupert, B. C. Quebec, P. Q.
                                                            -8:00 am-mldnight
           ak
                  50
```

Ouebec, P. Q. Toronto, Ont.

Edmonton, Alta. Fresno, Calif.

-8:00 am-midnight

-8:00 am-midnight

--10:00 am-3:00 am

```
-10:30 am-6:30 pm
KSAC
WCHS
               500
                     2(1)
                             Manhattan, Kans.
Charleston, W. Va.
                     C (1)
               500
         ak
WDBO
                             Orlando, Fla.
                                                        -7:00 am—midnight
         ak
              1000
              1000
                     2C (5)
                             Topeka, Kans.
Urbana, Ill.
                                                       -6:00 am
WIBW
         яk
                     ñ
                                                        -9:00 am ss
WILL
         ak
              1000
                             Worcester, Mass.
Tijuana, B. Cfa,
Piedras Negras, Coah.
                                                        7:30 am-1:00 am
                     R
WTAG
         ak
              1000
         ak 10000
XELO
XEMU
               250
590 kcys. (508.2)
              1000
                     R (5)
C (5)
BDX
                             Spokane, Wash.
KHQ
          ak
                             Boston, Mass.
                                                      -6:45 am-...
WEÈI
         ak
              1000
                             Kalamazoo, Mich.
WKZO
         ak
              1 000
wow
          ak
              1000
                     R (5)
                             Omaha, Nebr.
                                                      —7:00 am—3:30 am
600 kcys. (499.7)
CFCF
         ak
               500
                     BF
                             Montreal, P. Q
CJOR
CMQ
               500
                             Vancouver, B. C.
                                                      -7:45 am-1:00 am
         ak
         ak 25000
                             Havana, Cuba
                             St. Pierre, Miquelon -
San Diego, Calif.
Baltimore, Md.
                     609
               250
FQN
          ad
                     B
C (1)
KĚSD
              1000
          ak
WCAO
          ak
                500
                     BM (1) Bridgeport, Conn.
BM (5) Cedar Rapids, Iowa
C (5) Memphis, Tenn.
                                                      -6:00 am-1:00 am
WICC
          ak
                500
                                                     -6:30 am-1:00 am
-7:30 am-1:00 am
WMT
          ak
              1000
WREC
          ak
               1000
XET
          ak
              5000
                             Monterrey, N. L.
610 kcys. (491.5)
              1000
KFRC
WCLE
                     M (5)
DM
                             San Francisco, Cal.
                500
                             Cleveland, Ohio.
                                                        6:45 am-
          яk
                     DM

R (5) Kansas City, Ro.

N(WMBF) Miami, Fla.

Philadelphia, Pa

2 Mexico City, D. F.

2 Mexico City, D. F.
                                                      -7:30 am-1:00 am
WDAF
              1000
          ak
WIOD
               1000
          ak
                                                       -7:00 am-1:00 am
               1000
WIP
          ak
XEXM
                500
          z
XEYO
          Z.
                500
620 kcys. (483.6)
                                                      -9:00 am-2:00 am
KGW
KTAR
          ak
               1000
                             Portland, Ore.
                                                        9:00 am-1:15 am
          ak
               1000
                              Phoenix, Ariz.
TIPG
               2000
                     625
                              San Jose, Costa Rica
          z
                                                        -7:00 am—1:00 am
                     Na (5) Clearwater, Fla.
WFL.A
          ak
               1000
WHJB
          ak
                250
                     CD
                              Greensburg, Pa.
                                                      -8:00 am-5:00 pm
          ak
                500
                     CM (1) Bangor, Maine
WLBZ
WSUN
               1000
                     Na (5) St. Petersburg, Fla.
N (5) Milwaukee, Wis.
                                                      -7:00 am-1:00 am
-7:15 am-1:30 am
          ak
WTMJ
               1000
630 kcys. (475.9)
                                                      -8:00 am-10:30 pm
                100
                              Chatham, Ont.
CFCO
          ak
                     F
F (1)
F
                              Charlottetown, P.E.I.-9:00 am-11:00 pm
CFCY
          ak
               1000
                             Winnipeg, Man,
Kelowna, B. C.
Havana, Cuba
Columbia, Mo.
                                                      -8:30 am-2:00 am
ČJRC
                500
                                                      —11:00 am—1:30 am
—10:00 am—11:30 pm
CKOV
          ak
                100
CMCD
          ak
                250
                                                        7:00 am-9:30 pm
                500
                      1 (1)
KFRU
          ak
KGFX
                200
                              Pierre, S. Dak.
          ak
                      D
                      Ñ1 (1)
 WGBF
          ak
                500
                             Evansville, Ind.
                     B (.5)
C (1)
                             Washington, D. C. Providence, R. I.
WMAL
          ak
                250
                                                      -6:30 am-2:00 am
                500
                                                      -7:00 am-1:00 am
WPRO
          ak
                              Merida, Yuc.
Havana, Cuba
                500
XEZ
          Z.
              10000
640 kcys. (468.5)
          ak 50000
                              Los Angeles, Calif.
Portland, Maine
                                                      -9:45 am-3:00 am
 KFI
                      ĎΡ
 WGAN
          z
                500
                              Columbus, Ohio
                                                      -6:30 am-8:15 pm
 WHKC
          ak
                500
 WOI
          ak 5000
                      D
                              Ames, Iowa
XEBX
YSS
                250
                              Sahinas, Coah.
          z
                              San Salvador, E. S.
650 kcys. (461.3)
                              San Jose, C. R.
Nashville, Tenn.
          ak 50000 MN
                                                       -7:30 am-1:00 am
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660 kcys. (454.3)	
WAAW ak 500 D Omaha, Nebr.	7:00 am—ss
WEAF ak 50000 R New York, N. Y. XEAL z 1000 Mexico City, D. F.	-7:30 am-1:00 am
XEAO ak 250 Mexicali, B. Cfa.	
670 kcys. (447.5)	
WMAQ ak 50000 R Chicago, III.	—7:00 am—1:00 am
680 kcys. (440.9)	
CMBQ z 5000 P Havana, Cuba CMCG ak 1000 Havana, Cuba	-7:00 am-midnight
KEEO ak 2500 D St Joseph Ma	-7:00 am-ss -11:00 am-3:00 am
XPO	7,00 411
WLAW z 1000 D Lawrence Mass. WPTF ak 1000 N (5) Raleigh, N. C.	6-20 11 00
WITE ak 1000 N (5) Rateign, N. C.	-6 :30 am−11:00 pm
690 kcys. (434.5)	
CFRB ak 10000 C Toronto, Ont. CJCJ ak 100 F Calgary, Alta.	—8:00 am—midnight —9:30 am—1:00 am
700 1 (400 0)	
700 kcys. (428.3)	
WLW ak 500 000 MN (W8XO) Cincinnati, O.	—5:45 am—1:30 am
710 keys. (422.3)	
KIRO ak 1000 C Seattle, Wash. KMPC ak 500 Beverly Hills, Calif.	—9:00 am—5:00 am —9:00 am—4:00 am
WOR ak 50000 M Newark, N. J.	,
720 kcys. (416.4)	
CMK ak 3000 Havana, Cuba WGN ak 50000 M Chicago, Ill.	
XEH ak 250 Monterrey, N. L.	—10:00 am—9:00 pm
730 kcys. (410.7)	
CFPL ak 100 F London, Ont. CJCA ak 1000 F Edmonton, Alta.	—9:00 am—3:00 am —9:00 am—2:00 am
CKAC ak 5000 C Montreal, P. Q. CKPR ak 100 F Fort William, Ont.	-7:30 am-1:00 am -9:00 am-11:00 pm
CMCL z 10000 P Havana, Cuba XEPN ak 100000 Piedras Negras, Coah	-5:45 am-
XERB z 100000 Rosariro Bch., B. Cfa	3.45 am
740 kcys. (405.2)	
KMMJ ak 1000 D Clay Center, Nebr. KTRB ak 250 D Modesto, Calif.	-6:00 am -9:00 am-8:30 pm
WHEB ak 250 D Portsmouth, N. H. WSB ak 50000 R Atlanta, Ga.	-6:55 am-1:00 am
750 kcys. (399.8)	
CMBL z 2500 Havana, Cuba	-8:00 am-12:15 am
KGU aj 2500 N Honolulu, Hawaii WJR ak 50000 C Detroit, Mich.	11:30 am4:30 am 5:45 am2:00 am
XEAA ak 200	
760 keys. (394.5)	
CMHX ak 200 Cienfuegos, Cuba	

NORTH AN	MERICAN B. C. S	STATIONS BY FRE		
KXA ak 250 (.5)X WBAL ak 2500 BMSy WEW ak 1000 D WJZ ak 50000 BSy XEOK ak 2500	Seattle, Wash, Baltimore, Md. St. Louis, Mo. New York, N. Y. Tijuana, B. Cfa.	6:00 pm 9:00 pm1:00 am 8:00 amss 7:30 am1:00 am All night station		
770 kcys. (389.	4)			
CMBF z 10000 CSy KFAB ak 10000 CSy WBBM ak 50000 CSy	Havana, Cuba Lincoln, Nebr. Chicago, III.	—7:00 am—1:00 am		
780 kcys. (384.	4)			
CHWK dk 100 F CKSO ak 1000 F CMJK ak 250 KEHE ak 1000 (5)	Chilliwack, B. C. Sudbury, Ont. Camaguey, Cuba Los Angeles, Calif.	—11:00 am—1:15 am —9:00 am—midnight —11:00 am—10:00 pm		
KFDY ak 1000 D KFQD ck 250 KGHL ak 1000 N (5) KWLK z 250 DP WEAN ak 1000 BM (5	Los Angeles, Calif. Brookings, S. Dak. Anchorage, Alaska Billings, Mont. Longview, Wash. Providence, R. I.	—1:30 pm—3 pm —11:00 pm—5:00 am —10:00 am—1:00 am —6:00 am—		
WMC ak 1000 R (5) WTAR ak 1000 N XEN z 1000) Providence, R. I. Memphis, Tenn. Norfolk, Va. Mexico City, D. F.	-7:45 am-1:00 am		
790 kcys. (379.	5)			
CMGH ak 500 KGO ak 7500 B KOAM z 1000 DN WGY ak 50000 R	Matanzas, Cuba San Francisco, Cal. Pittsburg, Kans. Schenectady, N. Y.	—10:00 am—3:00 am —7:00 am—1:00 am —7:00 am—1:00 am		
800 kcys. (374.	8)			
HIX ak 800 WBAP ak 50000 Na WFAA ak 50000 Na WTBO ak 250 D	Trujillo, D. R. Fort Worth, Texas Dallas, Texas Cumberland, Md.	-6:45 am-midnight -9:00 am-12:30 am -8:30 am-ss		
810 kcys. (370.	2)			
CMCF ak 600 X WCCO ak 50000 C WNYC ak 1000 D XEBZ ad 100 XEDF z 100	Havana, Cuba Minneapolis, Minn. New York, N. Y. Mexico City, D. F. Nuevo Laredo, Tams	-7:30 am-1:00 am -7:00 am-7:00 pm s11:00 am-8:15 pm		
820 kcys. (365.	6)			
CMHW ak 100 WHAS ak 50000 C XEBG z 1000	Santa Clara, Cuba Louisville, Ky. Tijuana, B. Cfa.	6:45 am		
830 kcys. (361.2)				
CMJX ak 5000 KOA ak 50000 R¶ WEEU ak 1000 D WHDH ak 1000 Dn WRUF ak 5000 Dn	Camaguey, Cuba Denver, Colo, Reading, Pa. Boston, Mass, Gainsville, Fla.	—9:00 am—11:30 pm —9:00 am—2:00 am —8:00 am—5:00 pm —7:00 am—6:30 pm		
840 kcys. (356.	9)			
CBL ak 50000 F CFOC ak 1000 F VOGY ak 400 XERA ck 250000	Toronto, Ont. Saskatoon, Sask. St. John's, Nfld. Villa Acuna, Coah.	All night station		
850 kcys. (352.	7)			
CMCM ak KIEV ak 250 D WESG ak 1000 CD	Havana, Cuba Glendale, Calif. Elmira, N. Y.	—8:00 am—midnight —7:30 am—6:00 pm		

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

NORTH AMERICAN B. C. STATIONS BY FRE
WKAR ak 1000 D E. Lansing, Mich. —7:00 am—5:00 pm WWL ak 10000 CX New Orleans, La. —6:30 am—1:00 am
860 keys. (348.6)
WABC ak 50009 C (WBOO) New York, N. Y. —7:30 am—1:00 am WHB ak 1000 DM Kansas City, Mo. XEMO ak 5000 Tijuana, B. Cfa. —9:45 am—3:00 am Mexico City, D. F.
870 kcys. (344.6)
WENR WLS ak 50000 Ba Ba be of the control
880 keys. (340.7)
CBO ak 1000 F Kamloops, B. C. —10:30 am—midnight CFJC ak 1000 F Kamloops, B. C. —12:30 pm—1:15 am KFKA ak 500 2M (1) Greeley, Colo. —7:30 am—midnight KFKA ak 1000 2 — Calland, Calif. —10:30 am—1:00 am KLX ak 1000 2 — Denver, Colo. —7:30 am—1:00 am —10:30 am—2:30 am—2:30 am—2:30 am—1:00 am —10:30 a
WRNL ak 500 D Richmond, Va. —7:30 am—ss WSUI ak 500 (1) Iowa City, Iowa —10:00 am—11:00 pm
890 kcys. (336.9)
KARK ak 500 N (1) Little Rock, Ark. KFNF ak 500 2 (1)X Shenandoah, Iowa KFPY ak 1000 C (5) Spokane, Wash. KUSD ak 500 2 Vermillion, S. Dak. WBAA ak 500 (1) W. Lafayette, Ind. WGST ak 1000 C (5) Atlanta, Ga. WJAR ak 1000 R (5) Providence, R. I. WMMN ak 500 C (1) Fairmont, W. Va. XEK ak 100 Mexico City, D. F. Mexico City, D. F.
900 keys. (333.1)
KGBU ak 500 X Ketchikan, Alaska —
910 keys. (329.6)
CBF ak 50000 FN Montreal, P. Q. ——1:00 am —8:30 am—1:00 am —8:30 am—1:00 am —1:00
920 kcys. (325.9)
CMX ak 1000 X Havana, Cuba Denver, Colo. —8:90 am—1:00 am —8:00 am—2:30 am KOMO ak 1000 R (5) Seattle, Wash. —8:00 am—2:30 am KPRC ak 1000 R (5) Houston, Texas Denver, Coloe —6:90 am—ss
WAAF ak 1000 D Chicago, III, —6:00 am—ss WORL ak 500 D Boston, Mass, WPEN ak 1000 2 Philadelphia, Pa.

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

TION	III MADRICIONA B. C. C	THITONS DI TRE
WRAX ak 1000 WSPA ak 1000 WWJ ak 5000	Philadelphia, Pa. D Spartanburg, S. C. R Detroit, Mich.	
930 kcys.	(322.4)	
CFAC ak 1000 CFCH ak 100 CFLC ak 100 CHNS ak 1000 CKPC ak 100	F Calgary, Alta, F North Bay, Ont Prescott, Ont. F Halifax, N. S. F Brantford, Ont.	-9:00 am-2:00 am -7:00 am-10:00 pm -7:30 am-11:00 pm
KMA ak 1000 KROW ak 1000 WBRC ak 1000 WDBJ ak 1000 XEBH ak 500	(5) Shenandoah, Iowa Oakland, Calif. R(5) Birmingham, Ala. C (5) Roanoke, Va. Hermosillo, Son.	-6:00 am -9:00 am-5:00 am -8:00 am-12:30 am -7:00 am-midnight -1:00 pm-midnight
940 kcys.	(319.0)	
KOIN ak 1000 VOAS ak 100 WAAT ak 500 WAVE ak 1000 WCSH ak 1000 WDAY ak 5000 WHA ak 5000 WICA ak 250 XEFO ak 5000	C (5) Portland, Ore. St. John's, Nfld. D Jersey City, N. J. N Louisville, Ky. K (2.5) Portland, Maine N (5) Fargo, N. Dak. D Madison, Wis. D Ashtabula, Ohio Mexico City, D. F.	-6:30 am-6:00 pm -8:00-1:00 am -8:00 am-midnight -6:00 am-1:00 am -9:00 am-5:30 pm
950 kcys.	(315.6)	
CJOC ak 100 CMBC z 10000 CRCK ak 1000 KFWB ak 1000 KMBC ak 1000 WHAL z 500 WRC ak 500	F Lethbridge, Alta. Havana, Cuba F Quebec, P. Q. (5) Hollywood, Calif. C (5) Kansas City, Mo. DP Saginaw, Mich. RX (1) Washington, D. C.	-9:00 am-1:00 am -6:55 am-midnight -9:30 am-4:00 am -6:55 am-1:00 am -6:00 am
960 kcys. ((312.3)	
CFRN ak 100 CHNC ak 1000 CMKS z CRCY ck 100 XEAW c 100000	F Edmonton, Alta. F New Carlisle, P. O. Guantanamo, Cuba F Toronto, Ont. Reynosa, Tams.	—9:30 am—2:00 am —7:30 am—11:00 pm —5:45 am—
970 kcys. ((309.1)	
CMBY z 150 KJR ak 5000 WCFL ak 5000 WIBG ak 100	Havana, Cuba B Seattle, Wash. N Chicago, Ill. D Glenside, Pa.	8:55 am11:00 pm
980 kcys. ((306.0)	
KDKA bk 50000 XEAC ak 1000 XEFE z 250	B Pittsburgh, Pa. Tijuana, B. Cfa. z Nuevo Laredo, Tams.	
	(302.8)	
WBZ ak 50000 WBZA ak 1000 XEAF ak 750 XES ak 250	BSy Boston, Mass. BSy Springfield, Mass. Nogales, Son. Tampico, Tams.	—6:00 am—1:00 am —6:00 am—1:00 am
1000 kcys.	(299.8)	
CMBZ ak 500 KFVD ak 1000 VOCM z 200	(1) X Havana, Cuba Dn Los Angeles, Calif. 1006 St. John's, Nfld.	—7:45 am≠midnight —9:00 am—8:15 pm

NORTH AMERICAN B. C. STATIONS BY FREQUENCIES

	NORTH AMERICAN B. C. STATIONS BT FREQ					
WHO XEBI	ak 50000 ak 25	R Des Moines, Iowa —8:00 am—2:00 am Aguascalientes, Ags.				
1010	kcys.	(296.9)				
CHML CKCD CKCK CKCO CKIC CKWX CMJIA KGGF KQW WHN WNAD WNOX XEFQ XEU	ak 100 ak 1000 ak 1000 ak 1000 ak 50 ak 1000 ak 300 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 2000 ak 2000	F Hamilton, Ont. 1 Vancouver, B. C. F Regina, Sask. F Ottawa, Ont Wolfville, N. S. 1 Vancouver, B. C Camaguey, Cuba Coffeyville, Kans. M San Jose, Calif. (5) New York, N. Y. 2 Norman, Okla. C (5) Knoxville, Tenn. Cananea, Son. Veracruz, Ver. -8:00 am—midnight —9:30 am—2:00 am —9:30 am—3:00 am —9:30 am—3:00 am —6:30 am—2:00 am —8:00 am—1:00 am				
1020	kcys.	(293.9)				
KYW WDZ XEJ	ak 10000 ak 250 ak 1000	R Philadelphia, Pa. —7:05 am—10:00 pm D Tuscola, III. —7:00 am—6:00 pm Juarez, Chih.				
1030	kcys.	(291.1)				
CFCN CJBR CKLW CMCK XEB	ak 10000 z 1000 ak 5000 zak 10000	F Calgary, Alta. F Rimouski, P. Q. M Windsor, Ont. Havana, Cuba Mexico City, D. F. —10:00 am—12:15 am				
1040	kcys.	(288.3)				
KRLD KWJJ KYOS WTIC	ak 10000 ak 500 bk 250 ah 50000	C Dallas, Texas —7:00 am—1:00 am Portland, Ore. D Merced, Calif. R Hartford, Conn. —6:00 am—				
1050	kcys.	(285.5)				
CBM CMKD KFBI KNX WEAU WGVA	ak 5000 ak 250 ak 5000 ak 50000 z 1000 z 1000	F Montreal, P. Q. Santiago, Cuba Dn Abilene, Kans. C Los Angeles, Calif. D Eau Claire, Wis. DP Indianapolis, Ind. -7:00 am—7:45 pm —9:30 am—3:15 am				
1060	kcys.	(282.8)				
KTHS VOAC WBAL WJAG W3XJ	ak 10000 z 40 ak 10000 ak 1000 z 100	N Hot Springs, Ark. —9:00 am—ss 1065 St. John's, Nfld. BM Baltimore, Md. —6:00 am—9:00 pm D Norfolk, Nebr. —7:30 am—ss P College Park, Md. —Midnight to 6:00 an				
1070	kcys.	(280.2)				
CMBX CMHA KJBS WCAZ WTAM	ak 500 z 50 ak 500 ak 100 ak 50000	Havana, Cuba Sagua la Grande, Cuba San Francisco, Calif. —All night station Carthage, Ill. R Cleveland, Ohio —6:00 am—midnight				
1080	J	(277.6)				
WBT WCBD WMBI XEBA XEBK XEDP	ak 50000 ak 5000 ak 5000 z 20 ak 100 ak 500	C Charlotte, N. C. —6:30 am—midnight Dnl Chicago, Ill. Dnl Chicago, Ill. Guzman, Jal. Nuevo Laredo, Tams. Mexico City, D. F.				

	NORTH AMERICAN B. C. STATIONS BY FRE					
1090	kcys.	(275	.1)			
KMOX	ak 50000	C	St. Louis, Mo.	—6:30 am—1:00 am		
1100	kcys.	(272	.6)			
CBR KGDM KWKH WBIL WPG XEL	ak 5000 ak 1000 ak 10000 ak 5000 ak 5000 z 250	F DM C 1 C1	Vancouver, B. C. Stockton, Calif. Shreveport, La, New York, N. Y. Atlantic City, N. J. Mexico City, D. F.	— 9:00 am— ss —7:30 am—1:00 am		
1110	kcys.	(270	.1)			
CMCJ KSOO WRVA	ak 500 ak 2500 ak 5000	X DnNX CM	Havana, Cuba Sioux Falls, S. Dak. Richmond, Va.	—7:00 am—6:45 pm —7:00 am—midnight		
1120	kcys.	(267	.7)			
CHLP CHSJ CKOC CKX	ak 100 ak 500 ak 500 ak 1000	F F (1) F (1)	Montreal, P. Q. St. John, N. B. Hamilton, Ont. Brandon, Man.	—9:00 am—11:00 pm —5:00 am—midnight		
CMGF CMKM CRCS KFIO	ak 250 ak 200 ak 100 ak 100	 F D	Matanzas, Cuba. Manzanillo, Cuba Chicoutimi, P. Q. Spokane, Wash.	-8:00 am-10:00 pm		
KFSG KRKD KRSC KTBC WCOP	ak 500 ak 500 ak 250 z 1000	a (2.5) a (2.5) DP	Los Angeles, Calif. Los Angeles, Calif. Seattle, Wash. Austin, Texas Boston, Mass.	9:00 am3:00 am All night station		
WDEL WISN WJBO WTAW	ak 500 ak 250 ak 250 ak 500 ak 500	D R (.5) C (1) B	Boston, Mass. Wilmington, Del. Milwaukee, Wis. Baton Rouge, La. College Sta., Tex.	—8:00 am—4:00 pm —9:00 am—11:00 pm —8:00 am—1:00 am —7:45 pm—1:00 am		
1130	kcys.	(265	.3)			
CMJI KSL WJJD WOV XEJP	ak 150 ak 50000 ak 20000 ak 1000 z 100	C Dn D	Ciego de Avila, Cuba Salt Lake City, Ut. Chicago, III. New York, N. Y. Mexico City, D. F.	Noon10:00 pm 8:30 am3:00 am 6:45 am6:45 pm		
1140	kcys.	(263	.0)			
CMCW KVOO WAPI WSPR	dk 500 ak 25000 ak 5000 ak 500	N1 C1 DM	Havana, Cuba Tulsa, Okla, Birmingham, Ala, Springfield, Mass,	6:55 am 7:00 am5:45 pm		
1150	kcys.	(260	-			
CMJF WHAM XEBP XEC XEDW	z 200 ak 50000 z 250 ak 100 z 20	B	Camaguey, Cuba Rochester, N. Y. Durango, Dgo. Tijuana, B. Cfa, Minatitlan, Ver.	—6:30 am—midnight —		
1160	kcys.	(258	.5)			
CMHJ CMKG WOWO WWVA XEAS XED XEFM XEP	ak 175 z ak 10000 ak 5000 ak 50 ak 2500 z 20 ak 500	B1 C1	Cienfuegos, Cuba Santiago, Cuba Fort Wayne, Ind. Wheeling, W. Va. Saltillo, Coah. Guadalajara, Jal. Leon, Gto. Juarez, Chih.	6:00 amNoonmidnight9:00 am-2:00 am		

```
1170 kcys.
                        (256.3)
           ak 150
ak 50000
                                 Havana, Cuba
Philadelphia, Pa.
Mexico City, D. F.
                                                              8:00 am—midnight
WCAU
XEXX
                                                              6:00 am-1:00 am
                1000
           7.
1180 kcys.
                       (254.1)
CMJO
           ak
ak
                                 Ciego de Avila, Cuba
KEX
                5000
                        B2
                                 Portland, Ore.
                        N2 Albuquerque, N. M. CDn(5) Minneapolis, Minn. New York, N. Y.
KOB
           ak 10000
                                                           --1:00 pm--11:00 pm
WDGY
                1000
           яk
WINS
           ak
                1000
WMAZ
                        \ddot{\mathbf{c}}
                                 Macon, Ga.
           ak
                1000
                                                            -6:45 pm-7:00 pm
XEFA
                 500
                                 Tacuba, D. F.
           7.
                       (252.0)
1190
          kcys.
                                 Santiago, Cuba
Visalia, Calif.
CMKX
KTKC
VONF
           ak
                 250
                        Ď
                        1195
           ak
                 500
                                 St. John's, Nfld.
                                Waterbury, Conn.
San Antonio, Tex.
Huntington, W. Va.
WATR
           ak
                 100
                        DXZ
WOAI
           ak 50000
                                                              -7:30 am—12:30 am
WŠAZ
               1000
                                                              6:00 am-7:00 pm
           ak
         kcys.
                       (249.9)
1200
                       ....F
CFGP
            7
                 100
                                 Grande Prairie, Alta.
CHAB
CKNX
                                 Moose Jaw, Sask.
Wingham, Ont.
                                                              -9:00 am—12:30 am
           ak
                 100
           dk
                 100
                                                              -11 :00 am—1 :00 am
CKTB
           ak
                 100
                                 St. Catharines, Ont.
                                                              9:30 am—11:30 pm
CMCO
           ad
                 250
                                 Havana, Cuba
                        DM
KADA
                 100
                                 Ada, Okla.
           ak
                                Jonesboro, Ark.
Lewistown, Mont.
Sioux Falls, S. Dak.
KBTM
           ak
                 100
                        D
                       (.25) P
N
KDNC
                 100
           z
KELO
                 100
           7.
                       (.25)
(.25)
(.25)
DP
KFJB
                                 Marshalltown, Ia.
          ak
                 100
                                                            -7:00 am-10:00 pm
-8:00 am-11:00 pm
KFXD
KFXJ
KGCI
                                Nampa, Idaho
Grand Junc., Colo.
Coeur d'Alene, Idaho
Fergus Falls, Minn.
                 100
          ak
           ak
                 100
           z
                 100
                        (.25)
KGDE
                 100
                                                              -8:00 am-10:00 pm
                                Sterling, Colo.
KGEK
          ak
                 100
                                Los Angeles, Calif.
Little Rock, Ark.
Greenville, Texas
KGFJ
          ak
                 100
                                                              24 hours daily
                       (.25)
DP
KGHI
           ak
                 100
                                                              8:30 am-11:00 pm
KGVL
                 100
                       (.25)
(.25)
(.25)
KMLB
          ak
                 100
                                 Monroe, La.
KOÓS
                 100
                                Marsh field, Ore.
          ak
                                                            -10:00 am-7:45 pm
                                Lowell, Ariz.
KSUN
          ak
                 100
                                                            -11:00 am-midnight
                                Redding, Calif.
San Luis Obispo, Calif.
Bellingham, Wash.
KVCV
          ak
                 100
KVEC
KVOS
                 250
100
                       Ď
           ďk
                        M
KWG
KWNO
                                Stockton, Calif,
Winona, Minn,
Bangor, Maine
           ak
                 100
                                                            —10:00 am—3:00 am
                       Ď
                 250
WABI
                 100
                       (.25)
C
WAIM
           ak
                 100
                                 Anderson, S. C.
Waycross, Ga.
                                                            -6:00 am-10:00 pm
WAYX
           ak
                 100
                        (.25)
                        M (.25) Ponca City, Okla.
Huntsville, Ala.
WBBZ
                                                            -8:00 am-10:00 pm
           ak
                 100
WBHP
           ak
                 100
WBNO
                                New Orleans, La.
Rapid City, S. Dak.
           ak
                 100
                                                            —1:00 pm to midnight
WCAT
WCAX
           ak
                 100
                        D
                                                            -Noon-2:00 pm
                        (.25)
(.25)
(.25)
P
           яk
                 100
                                Burlington, Vt.
Janesville, Wis.
WCLO
           ak
                 100
                                Cincinnati, Ohio
Superior, Wis.
Easton, Pa.
South Bend, Ind.
WCPO
                 100
                                                            -7:00 am-11:30 pm
           ak
WDSM
                 100
WEST
           ak
                 100
                        3 (.25)
WFAM
           ak
                 100
                        (.25)
WFTC
           ak
                 100
                                 Kinston, N. C.
                        (.25)
WHBC
           ak
                 100
                                 Canton, Ohio
                        (.25)
C (.25)
(.25)
5 (.25)
                                Green Bay, Wis,
Utica, N. Y.
St. Louis, Mo.
WHBY
           ak
                 100
WIBX
           ak
                 100
                                                            -5:30 am-1:00 am
WIL
           ak
                 100
WJBC
           ak
                 100
                                Bloomington, Ill.
Decatur, Ill.
                                                            -4:00 pm-8:30 pm
WJBL
           ak
ak
                 100
WJBW
                 100
                                 New Orleans, La
                                                            -All night station
                                W. Palm Beach, Fla.
                                                           -7:00 am-11:00 pm
                 100
250
WJNO
           ak
                        C (.25)
WJRD
           ak
                        D
                                 Tuscaloosa, Ala.
                                Harrisburg, Pa.
Lynchburg, Va.
High Point, N. C.
                 100
                        3 (.25)
(.25)
WKBO
           ak
                                                              -8:00 am---11:00 pm
WLVA
           ak
                 100
                                                            -7:00 am-11:00 pm
WMFR
           ak
                 100
                        (.25)
                                 Lapeer, Mich.
```

WOLS	7.	100	D	Florence, S. C.	
WRBL	ak	100	(.25)	Columbus, Ga.	-8:00 am-10:30 pm
	an				-0:00 anti-10:50 pm
WSAL	Z	250	D	Salisbury, Md.	
WTHT	ak	100	M	Hartford, Conn.	—7:00 am—4:15 pm
WTOL	Z	100	DP	Toledo, Ohio	
WWAE	ak	100	8	Hammond, Ind.	
XEBU	Z	50		Chihuahua, Chih.	

1210 keys. (247.8)

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

```
1220 kcys.
                      (245.8)
CMJE
KFKU
KTMS
                               Camaguey, Cuba
          z
ak
               1000
                      a (5)
                                                         -3:30 pm-7:30 pm
                               Lawrence, Kans
                500
                      Ŕ
                               Santa Barbara, Cal.
          z
KTW
          ak
               1000
                      S2
                               Seattle, Wash.
KWSC
WCAD
WCAE
WDAE
                      2 (5) Pullman, Wash.
D Canton, N. Y.
MR (5) Pittsburgh, Pa.
C (5) Tampa, Fla.
          ak
               1000
                                                           -9:45 am-12:30 am
          ak
                500
                                                           -12:30 pm -4:00 pm
               1000
                                                           -7:00 am-2:30 am
          ak
          ak
               1000
                                                           7:30 am
WREN
          ak
               1000
                      Ba(5)
                              Lawrence, Kans.
Mazatlan, Sin.
                                                           8:00 am-
                                                                      -7:00 nm
XEBL
                 50
          7
XEDA
                200
                               Gral. Anaya, D. F.
Veracruz, Ver.
          7.
XETF
          ak
                                                         -11:00 am -1:00 am
                 12
1230
          kcys.
                      (243.8)
CMCB
                150
                                                           8:00 am-11:00 pm
                               Havana, Cuba
                      N
                               Springfield, Mo.
Albuquerque, N. M.
KGBX
          ak
                500
KGGM
          ak
               1000
                                                         -9:30 am-11:30 pm
                               San Francisco, Cal.
Indianapolis, Ind.
          ak
               1000
                      (5)
WFBM
                      Č (5)
R (5)
               1000
                                                         -7:30 am-1:00 am
          ak
WNAC
          ak
               1000
                               Boston, Mass.
                                                           6:00 am-1:00 am
                               Zacatecas, Zac.
XEAZ
                200
          z
XEG
                250
                               Monterrey, N. L.
          7
1240 kcys.
                      (241.8)
                              Syndey, N. S.
Sancti Spirltus, Cuba
Mandan, N. Dak,
Minot, N. Dak,
Fort Worth, Texas
Twin Falls, Idaho
San Juan, P. R.
Detrait Mich
              1000
CJCB
          ak
                      \mathbf{F}
                                                           7:00 am-11:00 pm
CMHB
          z
                 50
KGCU
          ak
                250
KLPM
KTAT
KTFI
                      ixz
          ak
                250
          ak
               1000
                      M
          ak
               1000
WKAO
WXYZ
          ak
               1000
                                                         -6:00 am-9:30 pm
          ak
               1000
                      В
                               Detroit, Mich.
XEKL
                500
                               Leon, Guan.
          7.
                               Saltillo, Coah.
XELA
                 50
          z
VEME
                               Merida, Yuc.
1250 kcys.
                      (239.9)
CMCK
          ak
                150
                               Santiago, Cuba
KFOX
KIT
          ak
               1000
                               Long Beach, Calif.
                               Yakima, Wash.
          ak
                250
                       M(.5)
кхок
               1000
                               St. Louis, Mo.
WAIR
WCAL
WDSU
          ak
                250
                      Ď
                               Winst.-Salem, N. C.
                                                        -6:00 am -ss
                      \tilde{2} XZ
          ah
               1000
                               Northfield, Minn.
          ak
               1000
                      B
                               New Orleans, La.
                                                         -7:00 am-midnight
WHBI
          ak
               1000
                      a (2.5)
2XZ
                               Newark, N. J.
                              Minneapolis, Minn.
New York, N. Y.
Minneapolis, Minn.
Mexico City, D. F.
San Luis Pot., S.L.P.
WLB
               1000
          ak
WNEW
WTCN
               1000
                      a (2.5)
          ak
                                                           All night station
               1000
                      B (5)
                                                         -7:00 am-midnight
          ak
XEAI
XEXH
                500
          z
                250
1260 kcys.
                      (238.0)
CMBD
          ak
                500
                      2X
                               Havana, Cuba
Havana, Cuba
                                                           -7:00 am midnight
CMC
                150
                                                           8:00 am-midnight
KGVO
KHSL
                      Ĉ
          ak
               1000
                               Missoula, Mont.
                                                         —9:00 am—1:00 am
          ak
                250
                              Chico, Calif.
Omaha, Nebr.
KOIL
               1000
                      BM(5)
          ak
                                                          6:00 am
KPAC
                500
                      D
                               Port Arthur, Texas
                                                         -6:00 am-5:45 pm
          ak
                               Weslaco, Texas
Siloam Spgs., Ark.
KRGV
          ak
               1000
                                                           8:00 am
                                                                      -11:00 pm
KUOA
                      Ď
               5000
          ak
KVŎA
               1000
                              Tucson, Ariz.
Dayton, Ohio
          ak
                     C (5) Dayton, Onto CM(1) Springfield, Vt. Savannah, Ga.
WHIO
               1000
                                                         -6:00 am-1:00 am
          ak
                500
WNBX
          ak
WTOC
          ak
               1000
                                                        -7:00 am-midnight
1270 kcys.
                      (236.1)
CMHD
          dk
                250
                               Caibarien, Cuba
                              Decorah, Iowa
Seattle, Wash.
Colo. Springs, Colo.
                100
                      2D
                                                        -9:30 am-3:30 pm
KGCA
          ak
KOL
          ak
               1000
                      M (5)
KVOR
          ak
               1000
                                                        -9:00 am-1:00 am
KWLC
          ak
                100
                      2D
                              Decorah, Iowa
```

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

```
WBOW
                 100
                       N (.25) Terre Haute, Ind.
                                                         -7:00 am-midnight
          ak
                               Wilkes-Barre, Pa.
 WBRE
                 100
          ak
                       C (.25) Pittsfield, Mass.
 WBRK
                 100
          z
                                                         -8:00 am-9:30 pm
WCLS
          ak
                 100
                               Joliet, Ill.
                      (.25) Ashland, Ky.
S (.25) El Paso, Texas
B (.25) Buffalo, N. Y.
D Milwaukee, Wis.
Royal Oak, Mich.
                                                         -6:00 am-11:30 pm
WCMI
          ak
                 100
WDAH
                 100
                                                         -11:30 am-10:30 pm (Sun. only)
          ak
WEBR
                 100
                                                         -7:00 am-
                                                                       midnight
          ak
WEMP
                 100
                                                           7:30 am
          ak
                                                                       58
 WEXL
                                                                       4:00 am
          ak
                 50
                                                           8:00 am-
                                                                      -10:30 pm
-midnight
                               Altoona, Pa.
 WFBG
          ak
                 100
                      3
                                                           7:00 am
WFDF
          ak
                 100
                               Flint, Mich.
                                                           -6:00 am-
WGÁU
WGH
                       (.25)P
                               Athens, Ga.
Newport News, Va.
Wilson, N. C.
Philadelphia, Pa.
                 100
          7
                      (.25)
D
                                                         -7:00 am-midnight
          ak
                 100
WĞTM
WHAT
                 100
          z
          ak
                 100
WJAC
                       3 (.25)
          ak
                 100
                               Johnstown, Pa.
                               Lakeland, Fla.
WLAK
                 100
WLBC
          ak
                100
                       (.25)
                               Muncie, Ind.
                                                         -7:00 am-midnight
                               Laconia, N. H.
Auburn, N. Y.
Plattsburg, N. Y.
WLNH
                100
                       M
          ak
WMBO
                100
          ak
WMFF
          ak
                100
                       (.25)
                      M (.25) New Bedford, Mass. —7:30 am—11:15 pm
MXZ Washington, D. C.
WNBH
                100
          ak
WOL
                100
          ak
                               Reading, Pa.
Knoxville, Tenn.
Grove City, Pa.
WRAW
                100
                                                        -7:00 am-11:00 pm
          ak
                      N(.25)
WROL
          ak
                100
WSAJ
WSGN
          ak
                100
                      B (.25) Birmingham, Ala. —8:00 am—midnight
C Winston-Salem, N. C.—8:00 am—10:00 pm
                                                          8:00 am-midnight
          ak
                 100
WSJS
          ak
                 100
WTAL
          ak
                100
                               Tallahassee, Fla.
                                                          8:00 am-midnight
WTEL
                100
                              Philadelphia, Pa.
                                                          8:00 am—midnight
          ak
                               Jackson, Tenn.
Elkhart, Ind.
WTJS
          ak
                100
                      (.25)
                      (.25)
WTRC
          ak
                100
                                                          -7:00 am--10:30 pm
XEAG
                 10
                               Cordoba, Ver.
          7
XEBO
XEFW
XETB
XEX
                               Irapuato, Guan.
Tampico, Tams.
Torreon, Coah.
                  25
          7
                300
                                                         ak
          ak
                125
                               Monterrey, N. L.
Mexico City, D. F.
                125
          ak
XEXS
                100
1320
          kcys.
                      (227.1)
                200
CMOX
                               Havana, Cuba
KGHF
                500
                      R
                              Pueblo, Colo.
                                                          -9:00 am--1:00 am
                      Ċ M
KGMB
               1000
                               Honolulu, Hawaii
                                                         -1:30 am-6:00 pm
          ak
KID
          ak
                500
                      (1)
                               Idaho Falls, Idaho
Des Moines, Iowa
KRNT
               1000
                      Č (5)
          ak
                                                          -6:00 am-
                                                                      -1:00 am
WADC
                      Ö
                               Akron, Ohio
York, Pa.
          ak
               1000
                                                          -7:00 am-1:00 am
WORK
          ak
               1000
                                                          -8:00 am-10:00 pm
                              New Orleans, La.
WSMR
               1000
          ak
         kcys.
                      (225.4)
1330
CMHK
                               Cruces, Cuba
                250
                               San Diego, Calif.
Tacoma, Wash.
Corpus Christi, Tex.
KGB
          яk
               1000
                      M
                                                           10:00 am-4:00 am
KMO
               1000
                      M
                                                           9:00 am -3:00 am
          ak
KRIS
                500
          7.
                      C (5)
C (5)
MN(5)
                              Sioux City, Iowa
Hartford, Conn.
KSCJ
          āk
               1000
                                                          -7:00 am-1:00 am
WDRC
               1000
                                                          7:00 am—midnight
          ak
WSAI
                               Cincinnati, Ohio
Green Bay, Wis.
          ak
               1000
                                                           7:00 am-1:00 am
WTAO
               1000
          ak
         kcys.
                      (223.7)
1340
                               Pinar del Rio, Cuba
CMAB
                300
                      Camaguey, Cuba
DP Dubuque, Jowa
D Huron, S. Dak.
N (2.5) Butte, Mont.
Dodge City, Kans.
CX Pensacola, Fla.
CMJL
                 75
KDTH
                500
KGDY
KGIR
KGNO
                250
          ak
                                                         -10:00 am-1:00 am
               1000
          ak
          ak
                250
                                                        -8:30 am-midnight
WCOA
          ak
                500
                      MN(1)
                              Manchester, N. H.
WFEA
                500
                                                        -6:30 am-1:00 am
          ak
WSPD
          ak
               1000
                      B (5)
                               Toledo, Ohio
                                                        —6:30 am—
XEAP
                              Obregon, Son.
Mexico City, D. F.
Villa Acuna, Coah.
          z
                 50
XEBS
                200
          Z
                                                        -.....
XEDH
                200
                                                        -....
XEXD
                350
                               Jalapa, Ver.
                      (222.1)
1350 kcys.
CMCA
          ak
                450
                      X
                              Havana, Cuba
```

```
CMKW
                               Santiago, Cuba
          Z
               1000
                      N (2.5) Bolse, Idaho
KIDO
          ak
                                                        -9:00 am-2:00 am
                      BM(5)
KWK
          ak
               1000
                              St. Louis, Mo.
                                                        -6:30 am-1:00 am
WAWZ
          ak
                500
                              Zarephath, N. J.
New York, N. Y.
                                                          6:00 am-...
                      1(1)
WBNX
          ak
               1000
                      Ŕ
WMBG
          ak
                500
                               Richmond, Va.
1360 kcys.
                      (220.4)
CMJH
          dk
                               Ciego de Avila, Cuba
                      M
                250
                               Enid, Okla.
                                                         -8:00 am-11:00 pm
KCRC
          ak
               1000
                               Long Beach, Calif.
KGER
          ak
WCSC
                500
                      N (1)
C (5)
                               Charleston, S. C. Syracuse, N. Y.
                                                         --7:00 am-midnight
          ak
WFBL
               1000
                                                        -7:00 am-1:00 am
          ak
WGES
          ak
                500
                      1(1)
                               Chicago, Ill.
                                                           8:00 am-9:00 pm
               1000
                               Vicksburg, Miss.
WOBC
          ak
                      D
                               South Bend, Ind.
WSBT
          ak
                500
                      1
1370 keys.
                      (218.8)
CFAR
CKCW
CMGE
                      ř ...
                               Flin Flon, Man.
Moncton, N. B.
Cardenas, Cuba
                100
          ak
                100
                                                         —10:00 am—10:30 pm
          ak
                150
                               Astoria, Ore.
Kansas City, Mo.
Seattle, Wash,
El Dorado, Ark.
                                                        —11:00 am—8:30 pm
—7:00 am—2:00 am
KAST
          ak
                100
                      D
KCMO
                100
          ak
ak
KEEN
                      3
                                                           3:00 pm-1:00 am
                100
KELD
                100
          z
                      Ñ.
                                                        -11:00 am-3:00 am
-7:00 am-2:00 pm
KERN
          ak
                100
                               Bakersfield, Calif.
                               Boone, Iowa
Fort Worth, Texas
Longview, Texas
KFGQ
KFJZ
          ak
                100
                      D
                                                        -7:30 am-midnight
          ak
                100
                       (.25)
KFRO
                250
                                                           -7:00 am-
KGAR
KGFL
                100
                      C (.25)
                              Tucson, Arizona
Roswell, N. Mex.
          ak
                100
KGKL
                               San Angelo, Texas
Clovis, N. Mex.
          ak
                100
                      (.25)
KICA
KIUP
                                                        —9:00 am—11:00 pm
          ak
                100
                                                        -10:00 am-11:00 pm
          ak
                100
                               Durango, Colo.
Galveston, Texas
                                                        -9:00 am-midnight
KLUF
          ak
                100
                               San Antonio, Tex.
Rapid City, S. Dak.
La Junta, Colo.
                      5 (.25)
(.25)
KMAC
                                                         -8:00 am-9:00 pm
          ak
                100
ковн
          ak
                100
                                                          -8:00 am—midnight
KŎKŌ
                100
          7
                               San Antonio, Tex.
Berkeley, Calif.
Everett, Wash.
KONO
          ak
                100
                                                        -7:00 am-11:00 pm
                      (.25)
KRE
          ak
                100
                                                          -24 hours daily
KRKO
KRMC
                  50
          яk
                100
                      (.25)
                               Jamestown, N. D.
          z
KSLM
                                                        -10:00 am-1:00 am
          ak
                100
                               Salem, Ore,
Temple, Texas
                      M
                 250
KTEM
          ak
                      D
                               Oklahoma City, Ok.
Walla Walla, Wash.
Great Bend, Kans.
KTOK
          bk
                100
                      M
KUJ
                100
                                                        -9:30 am-1:00 am
          ak
KVGB
                100
                       (.25)P
KVRS
                 100
                               Rock Springs, Wyo.
KWYO
                       (.25)
                               Sheridan, Wyo.
Albany, N. Y.
                                                          -9:00 am -midnight
          ak
                100
WABY
                                                           -7:00 am—midnight
          яk
                100
                      B(.25)
                               Albany, N. 1.
Dothan, Ala.
Atlanta, Ga.
Clarksburg, W. Va.
Buffalo, N. Y.
Danville, Va.
WAGF
WATL
                250
                                                          -9:00 am
          ak
                      1)
                                                                      -88
                      (.25)
                100
                                                           7:00 am
                                                                      -1:00 am
          ak
WBLK
WBNY
WBTM
                                                        --6:00 am
          ak
                 100
                100
                      2 (.25)
                                                          -7:30 am
                                                                      -midnight
          ak
                       (.25)
                                                          -7:00 am-10:00 pm
          ak
                100
                       (.25)
(.25)
WCBM
                               Baltimore, Md
          ak
                100
WDAS
          ak
                100
                               Philadelphia, Pa.
                                                        -8:00 am-midnight
WDWS
          ak
                100
                      Ď
                               Champaign, Ill.
WEOA
                 100
                      C(.25)
                               Evansville, Ind.
WFOR
                100
                               Hattiesburg, Miss.
                                                        -8:00 am-9:00 pm
                               Fort Wayne, Ind.
WĞL
                 100
          ak
                               New Albany, Ind.
Memphis, Tenn.
Calumet, Mich.
                 250
WGRC
          ak
WHBO
          ak
                 100
                                                          -8:00 am-11:30 pm
                      ^{(.25)}_{\mathbf{C}(.25)}
WHDF
                 100
                                                         -10:30 am -6:30 pm
          ak
                               Virginia, Minn.
Jackson, Mich.
WHLB
          ak
                100
WIBM
          ak
                100
                                                          -6:30 am-12:30 am
                       Sy Lawrence, Mass.
MSy(.25) Lowell, Mass.
WLLH
                 100
                                                           -7:30 am-midnight
          ak
                                                           7:30 am -midnight
          ak
                 100
                      C (.25) Jacksonville, Fla.
D Wilmington, N. C.
WMBR
                                                           -7:30 am -midnight
          ak
                 100
WMFD
          ak
                 100
                               Decatur, Ala.
St. Paul, Minn.
                                                         -8:00 am -6:30 pm
WMFO
          ak
                 100
                      D
                      (.25) St. Paul, Minn.
C (.25) Davenport, Iowa
                                                           7:00 am-1:00 am
WMIN
          ak
                 100
                                                           7:00 am-1:00 am
WOC
                 100
WPAY
          ak
                 100
                               Portsmouth, Ohio
                                                           7:00 am-10:15 pm
                       (.25)
WPRA
                 100
                               Mayaguez, P. R.
WRAK
                       (.25)
                               Williamsport, Pa.
          ak
                 100
                               Augusta, Maine
 WRDO
          ak
                 100
                       M
                                                           -8:00 am—11:15 pm
WRJN
                 100
                       (.25)
                               Racine, Wis.
                                                           8:25 am—midnight
```

```
WSAU
WSVS
                                Wausau, Wis.
Buffalo, N. Y.
San L. Pot., S.L.P.
                 100
                                                           -7:00 am-11:15 pm
           ak
           ak
                  50
                       2D
XECZ
                 100
XEI
           ak
                 125
                                Morelia, Mich.
XELZ
                 100
                                Mexico City, D. F.
           2
2
                 100
                                Owen Sound, Ont.
1380 kcys.
                       (217.3) |
CMCR
                                Havana, Cuba
           z
CMCX
KOH
                                                           -9:00 am-11:00 pm
                 150
                       Ċ
          z
                                Havana, Cuba
Reno, Nevada
          āk
                 500
                                                             -11:00 am-3:00 am
                                                             -7:00 am -- 10:00 pm
-8:30 am -- midnight
KOV
WALA
           ak
                 500
                       Č1
                                Pittsburgh, Pa.
          ak
                 500
                       C(1)
                                Mobile, Ala.
WKBH
WNBC
          ak
                1000
                       \tilde{\mathbf{C}}
                                La Crosse, Wis.
                                New Britain, Conn.
          ak
                 250
                       Ď
                                                            -7:00 am -ss
                 200
WSMK
                       \bar{\mathbf{C}} 1
                                Dayton, Ohio
                                                          —6:00 am—...
                       (215.7)
1390
          kcys.
CJGX
CMJC
          аk
                 100
                       F
                                Yorkton, Sask.
                                                          -8:30 am-12:30 am
                 150
                                Camaguey, Cuba
Little Rock, Ark.
          7.
KLRA
                       C (5)
          ak
               1000
KOY
          ak
               1000
                                Phoenix, Ariz.
                                                          -9:00 am-12:15 am
KRLC
          ak
                250
                                Lewiston, Idaho
                       BM(2.5) Cleveland, Ohio
WHK
          аk
               1000
                                                          -6:30 am-midnight
WODM
                                St. Albans, Vt.
          4k
               1000
1400 kcys.
                       (214.2)
                 150
CMGC
          ad
                                Matanzas, Cuba
                                                            -8:00 am-11:00 pm
                               Matanzas, Cuba
Santiago, Cuba
Hilo, T. II.
Ogden, Utah
Tulsa, Okla.
Brooklyn, N. Y.
Brooklyn, N. Y.
Ulean, N. Y.
Ludjangookis
CKKR
                 100
          7.
KIIBC
          ak
                 250
                       CM
                 500
KLO
KTUL
WARD
                                                          -9:30 am-1:30 am
          ak
                       R
          ak
                500
                       C (1)
                 500
          ak
WBBC
                 500
                       \tilde{2} (1)
          ak
WHDL
                 250
          ak
                       D
                       MR (5) Indianapolis, Ind.

Brooklyn, N. Y.

Brooklyn, N. Y.
WIRE
          ak
               1000
                                                          -7:30 am-1:00 am
WLTH
          ak
                500
WVFW
                500
1410 kcys.
                       (212.6)
CKFC
          ak
                       5
                                Vancouver, B. C.
СКМО
          ak
                 100
                                Vancouver, B. C.
CMCO
                                Havana, Cuba
Grand Forks, N. D.
               5000
          ak
KFJM
KGNC
KMED
                500
                       (1)
          ak
                       (2.5) N Amarillo, Texas
N Medford, Ore.
M (1) Boston, Mass.
               1000
          ak
                 250
          ck
WAAB
          ak
                 500
                                                            -24 hours daily
                               Bay City, Mich.
Bluefield, W. Va.
Rockford, III.
                                                          -9:00 am-12:30 am
WBCM
                 500
          ak
                       (1)
WHIS
          ak
                 500
                       (1)
                                                          -5:00 am
WROK
          ak
                 500
                                                            7:30 am-midnight
WSFA
                 500
                       \ddot{\mathbf{C}}(1)
                                Montgomery, Ala.
                                                            -7:30 am—midnight
1420 kcys.
                       (211.1)
CHLN
CKGB
KABC
                 100
                                Three Rivers, P. O.
                       F
          Z
                                North Bay, Ont.
          ak
                 100
                                                            -11:00 am--11:30 pm
                       (.25)
XZ
                                San Antonio, Texas
Aberdeen, S. D.
                                                          -7:00 am-12:15 am
          ak
                 100
KABR
          ak
                 100
                                Albert Lea, Minn,
Portland, Ore,
Texarkana, Tex.
KATE
KBPS
                       ñ
                 250
                                                          --7:30 am-ss
--2:00 pm-8:00 pm
          ak
                 100
          ak
                       4
KCMC
                       (.25)
          ak
                 100
                                Price, Utah
St. Cloud, Minn
                                                          -9:30 am-midnight
KEUB
          ak
                 100
KFAM
                 100
                       Fond du Lac, Wis.
(.25) M Shawnee, Okla.
KFIZ
          ak
                 100
KGFF
          ak
                 100
                                                          ---8:00 am---10:00 pm
KĞĞC
          ak
                 100
                                San Francisco, Cal.
KĞIW
KIDW
          ak
                 100
                                Alamosa, Colo.
                                                            -9:30 am
                                                                        -10:30 pm
                               Lamar, Colo.
Pecos, Texas
          ak
                 100
                                                          -9:00 am-
                                                                        8:00 pm
                                                                       -10:00 pm
KIUN
          ak
                 100
                                                            8:00 am
                       (.25) P La Grande, Ore.
D Palestine, Texas
KLBM
                 100
          7.
          āk
KNET
                100
                               Eugene, Ore.
Abilene, Texas
Midland, Texas
KORE
          ak
                100
                       M
KRBC
                                                          -8:00 am-10:00 pm
          ak
                100
                       (.25)
KRLH
          яk
                100
                       (.25) P Sieux City, Iowa
KTRI
          75
                100
```

```
KUMA
                               Yuma, Ariz.
          ak
KWBG
KXL
                100
                               Hutchnison, Kans.
         ak
                      4 (.25)
                100
                              Portland, Ore.
                                                         -All night station
          ak
WACO
                100
                               Waco, Texas
          ak
                      C
                               Presque Isle, Me.
WAGM
          ak
                100
                                                         -11:00 am-7:00 pm
                                                          -7:00 am-7:00 pm
WAPO
                      (.25)
          ak
                100
                               Chattanooga, Tenn.
WAZL
                100
                               Hazleton, Pa
                                                        -9:00 am-10:00 pm
          ak
                      (.25)
3 (.25)
3 (.25)
                              Springfield, Ill.
Charlottesville, Va.
Rocky Mount, N. C.
Battle Creek, Mich.
                                                        -8:00 am-11:00 pm
WCBS
          ak
                100
WCHY
                100
                                                          -7:00 am—midnight
          ak
WEED
          ak
                100
WELL
                100
                                                          -7:30 am—midnight
          ak
WGPC
          ak
                100
                     (.25)
2
                              Albany, Ga.
Cicero, Ill.
WHFC
                100
                                                        —7·00 am—1·00 am
          ak
                               Wilmington, Del.
          аj
                100
                               Ironwood, Mich.
WJMS
          ak
                100
                      (.25) Lexington, Ky.
(.25) B Erie, Pa.
C (.25) Springfield, Mass.
WLAP
          ak
                100
WLEU
          ak
                100
WMAS
                100
                                                        -7:00 am -midnight
          ak
                      (.25)
                                                        -7:30 am-midnight
WMBC
                              Detroit, Mich.
          ak
                100
                      (.25)
D
WMBH
          ak
                100
                               Joplin, Mo.
WMBS
          ak
                250
                               Union town, Pa.
                                                        -6:00 am-6:00 pm
WMBS
WMFJ
WMSD
WNNY
WPAD
WPAR
                100
                               Daytona Bch., Fla.
          ak
                                                        -8:00 am-11:00 pm
                100
                               Sheffield, Ala.
          ak
                      (.25) P
(.25)
                              Watertown, N, Y.
                100
                               Paducah, Ky.
          ak
                100
                                                        -7:00 anı-midnight
                               Parkersburg, W. V.
          ak
                100
WPRP
                100
                      (.25)
                               Ponce, Puerto Rico
          7.
                100
                               Beaumont, Texas
          7.
                               Kenora, Ont.
                100
                     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 Memobile.
1430 kcys.
CMJP
          ak
               1000
                                                          -10:00 am--3:00 am
KECA
KGNF
          ak
                                                        -8:00 am-6:15 pm
          ak
               1000
KSO
          ak
                500
WBNS
          ak
                500
                                                        —6:30 am---
                                                          -7:00 am-midnight
WHEC
          ak
                500
                               Harrisburg, Pa.
Memphis, Tenn.
Albany, N. Y.
                                                        -6:30 am-midnight
WHP
                500
          ak
WMPS
          ak
                500
WOKO
                500
                      Č(1)
                                                        -8:00 am-1:00 am
1440 kcys.
                     (208.2)
CMOA
KDFN
KELA
KXYZ
                              Havana, Cuba
Casper, Wyo.
Centralia, Wash.
Houston, Texas
                150
          7.
          ak
                500
                      M
          ak
                500
                      B
                                                          -24 hours daily
-6:30 am--11:30 pm
          ak
               1000
                              Greensboro, N. C.
Allentown, Pa.
WBIG
          ak
               1000
                      \mathbf{C}
                                                          -6:30 am--11:30 pm
-7:00 am--midnight
WCBA
                500
                      a
C(5)
WMBD
          ak
               1000
                               Peoria, Ill.
WSAN
                500
                      Na
                               Allentown, Pa
                                                        -1:00 pm-11:30 pm
XEFI
                250
                              Chihuahua, Chih.
1450 kcys.
                      (206.8)
                500
                                                          -10:45 am---12:15 am
CFCT
          ak
                               Victoria, B. C
                               Summerside, P.E.I.
                                                          6:30 am-10:00 pm
CHGS
          ak
                 50
CMHM
                100
                               Cienfuegos, Cuba
Wolf Point, Mont.
          7.
KGCX
          ak
               1000
                500
                      M(1)
                               Eureka, Calif.
                                                          -10:00 am—1:00 am
KIEM
          ak
                                                        -7:30 am-1:00 am
KTBS
WAGA
          ak
               1000
                               Shreveport, La.
                      B (1)
C (1)
                               Atlanta, Ga.
Cleveland, Ohio
          ak
                500
WGAR
          ak
                500
                                                        -6:30 am-midnight
                               Jersey City, N. J.
Fall River, Mass,
Juarez, Chih,
                                                          -7:00 am—midnight
WHOM
          ak
                250
WSAR
          ak
               1000
                      M
                100
          kcys.
                      (205.4)
1460
CMKF
                              Holguin, Cuba
St. Paul, Minn.
                      R (25)
KSTP
          ak 10000
                                                        -7:00 am-2:00 am
                               Washington, D. C.
WJSV
          ak 10000
                      (204.0)
1470 kcys.
                               Spokane, Wash.
               5000
                      BM
WLAC
          ak
               5000
                               Nashville, Tenn.
```

	- 11	OIC.	III A	VILLI	CAN B. C.	STATIONS BT FRE
1480	kc	ys.	(20)	2.6)]
KOMA WHIP	z S	5000 5000	C D	Ham	homa City, Ol mond, Ind.	K. —7:30 am—1:00 am —7:30 am—5:30 pm
WKBV		5000	C	Dans	ılo, N. Y.	—7:30 am—5:30 pm —8:00 am—1:00 am
1490	•	/S.	(20)	,	manta Calif	
KFBK WC K Y	ak 10		N	Covir	mento, Calif igton, Ky,	-7:00 am-midnight
1500			(199	,		
CJIC KAWM	ak Iz	100 100	2115	S. S. Gallu	Marie, Ont. p, N. Mex.	—10:00 am—10:00 pm
KBIX KBST	ak	100 100	M	Musk	ogee. Okla.	-8:00 am-11:00 pm
KDAL	ak	100	C	Dului	pring, Texas h, Minn.	
KDB KGFI		100 100	M(.25)	Santa Brown	i Barbara, Cal nsville, Tex.	•
KGFI KGKB	ak	100	(.25) (.25) (.25)	Tyler	nsville, Tex. , Texas	
KGKY KNEL		100 250	(.25) D	Brady	sbluff, Neb. /, Texas n, Texas	-8:30 am-11:00 pm -8:00 am-6:00 pm
KNOW		100 100	C D	Austi	n, Texas	
KOTN KOVC		100	(.25)	Valley	Bluff, Ark. City, N. D.	-8:00 am-ss -8:00 am-10:00 pm
KPLC KPLT		100 250	(,25) D	Lake	City, N. D. Charles, La. Texas	
KPO	ak	100 M	(.25)	wena	tchee, Wash,	
KRNR KROD	ak ak	100 M 100	I (.25) I (.25) P	Roseb	urg, Ore. so, Texas	
KSAL	ak	100	P (.25) P	Salina	o, Texas , Kans. ake City, Ut.	
KUTA KVOE		100 100	P M	Salt L Santa	ake City, Ut. Ana, Calif.	-Noon to 2:00 am
KWEW KXO	z.	100	ĎΡ	Hobbs	I. N. Mex	
K YSM	ak 1	100 100	(,25)P	El Ger Mank	itro, Calif. ato. Minn.	—11:00 am—midnight
WCNW WDNC	ak 1	100	î (.25) C	Brook	ntro, Calif. ato, Minn. lyn, N. Y. um, N. C.	-9:00 am-midnight
WGAL WGIL	ak 1	100 100	(.25)	Lanca	ster, Pa.	-7:30 am-12:30 am
WGIL WHBB	z î	250 100	ĎΡ	Gales	burg, Ill. , Ala. usko, Miss.	7.20
WHEF	ak 1	100	(.25)	Koscii	isko, Miss.	—7:30 am—ss —7:30 am—10:00 pm
WJBK WKAT		100 100	(.25)	Detto	it, Mich. i Beach, Fla.	-24 hours daily
WKBB	ak 1	00	(.25) (.25)	E. Du	bugue, III.	
WKBV WKBZ		00 00	(.25) (.25)	Muske	ond, Ind, gon, Mich.	-7:00 am-10:00 pm
WKEU	ak 1	00	D	Griffin	ı, Ga.	7.00
WMBQ WMEX		00 00	1 (,25)	Bostor	lyn, N. Y. 1, Mass.	
WNBF WNLC	ak 1 ak 1	00 00	(.25) C(.25) DM	Bingh:	amton, N. Y. ondon, Conn.	
WOMI		100	(.25)	Owen	ondon, Conn. sboro, Ky.	
WOPI WRDW		00	C(.25)	Bristo	sboro, Ky. I, Tenn.	-7:00 am-10:30 pm
WRGA	ak 1	00	(.25)	Rome,	ta, Ga, Ga,	—7:00 am—9:00 pm —8:00 am—11:00 pm
WRTD WSYB		00 00	B	Richm	iond, Va. id, Vt.	-10:00 am-9:00 pm
WTMV	ak 1	00	(.25)	E. St.	Louis, III. ide, N. Y.	-
WWRL WWSW		00 00	ì (.25) (.25)	Woods Pittsb	ide, N. Y. uroh. Pa.	-8:00 am-midnight
	z 1	00	(.25)P	Laredo	urgh, Pa. o, Texas	
1510	kcy	s.	(198	.6) [
CFRC CKCR	ak 1	00 I	F	Kingst Waterl	on, Ont. loo, Ont.	—Noon—11:00 pm —8:00 am—11:00 pm
1530	kcys	s. ((196.	٦ (0.		·
KXBY	ak 10				s City, Mo.	-8:00 am-3:30 am
TGW WBRY	ak 10 ak 10		M	Guate	s City, Mo. mala City, Gu	at.
1550	keys		տ (193.		oury, Conn.	8:00 ammidnight
KPMC	ak 100		•	_	field, Calif.	10:00 am2:00 am
WOXR	ak 10			New Y	ork, N. Y	-10:00 am-2:00 am -10:00 am-9:15 pm

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

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

	M M 1	tual.	
ALABAMA	Pine Bluff KOTN 1500 100	KSFO 560 1000 C KYA 1230 1000	DELAWARE
Birmingham WAPI 1140 5000 C WBRC 930 1000 R	Siloam Springs KUOA 1260 5000	San Jose KQW 1010 1000M San Luis Obispo	Wilmington WDEL 1120 250 R WILM 1420 100
WSGN 1310 100 B Decatur WMFO 1370 100	CALIFORNIA	KVEC 1200 250 Santa Ana	DISTRICT OF COLUMBIA
Dothan WAGF 1370 250 Gadsden	Bakersfield KERN 1370 100 N KPMC 1550 1000M Berkeley	KVOE 1500 100M Santa Barbara KDB 1500 100M KTMS 1220 500 B	Washington WJSV 1460 10000 C WMAL 630 250 B WOL 1310 100M
WJBY 1210 100 Huntsville WBHP 1200 100	KRE 1370 100 Beverly Hills KMPC 710 500	Santa Rosa KSRO 1310 250 Stockton	WOL 1310 100M WRC 950 500 R FLORIDA
Mobile WALA 1380 500 C	Chico KHSL 1260 250	KGDM 1100 1000M KWG 1200 100 N	Clearwater
Montgomery WSFA 1410 500 C	El Centro KXO 1500 100 Eureka	Visalia KTKC 1190 250	WFLA 620 1000 N Daytona Beach
Selma WHBB 1500 100 Sheffield	KIEM 1450 500M Fresno KARM 1310 100 C	Watsonville KHUB 1310 250	WMFJ 1420 100 Gainesville WRUF 830 5000
WMSD 1420 100 Tuscaloosa WJRD 1200 250	KMJ 580 1000 N Glendale KIEV 850 250	COLORADO	Jacksonville WJAX 900 1000 N WMBR 1370 100 C
ALASKA	Hollywood KFWB 950 1000 Long Beach	Alamosa KGIW 1420 100	Lakeland WLAK 1310 100
Anchorage KFQD 780 250	KFOX 1250 1000 KGER 1360 1000 Los Angeles	Colorado Springs KVOR 1270 1000 C Denver KFEL 920 500M	Miami WIOD 610 1000 N WMBF 610 1000 WQAM 560 1000 C
Juneau KINY 1310 100	KECA 1430 1000 B KEHE 780 1000 KFAC 1300 1000	KLZ 560 1000 C KOA 830 50000 R	Miami Beach WKAT 1500 100
Ketchikan KGBU 900 500	KFI 640 50000 R KFSG 1120 500 KFVD 1000 1000	KPOF 880 1000 KVOD 920 500 B Durango	Orlando WDBO 580 1000 C
ARIZONA	КGFJ 1200 100 КПЈ 900 1000М КМГК 570 1000	KIUP 1370 100 Grand Junction KFXJ 1200 100	Pensacola WCOA 1340 500 C St. Augustine
Jerome KCRJ 1310 100 Lowell	KNX 1050 50000 C KRKD 1120 500	Greeley KFKA 880 500M	WFOY 1210 100 St. Petersburg WSUN 620 1000 N
KSUN 1200 100 Phoenix	Merced KYOS 1040 250 Modesto	La Junta KOKO 1370 100 Lamar	Tallahassee WTAL 1310 100 Tampa
KOY 1390 1000 C KTAR 620 1000 N Tucson	KTRB 740 250 Monterey KDON 1210 100M	KIDW 1420 100 Pueblo KGHF 1320 500 B	WDAE 1220 1000 C West Palm Beach WJNO 1200 100 C
KGAR 1370 100 C KVOA 1260 1000 Yuma	Oakland KLS 1280 250 KLX 880 1000	Sterling KGEK 1200 100	GEORGIA
KUMA 1420 100	KROW 930 1000 Pasadena	CONNECTICUT	Albany WGPC 1420 100 Athens
ARKANSAS	KPPC 1210 100 Redding	Bridgeport	WGAU 1310 100 Atlanta
Blytheville KLCN 1290 100 El Dorado	KVCV 1200 100 Sacramento KFBK 1490 5000 N	WICC 600 500M Hartford WDRC 1330 1000 C	WAGA 1450 500 WATL 1370 100 WGST 890 1000 C
KELD 1370 100 Fort Smith	KROY 1210 100 C San Bernardino KFXM 1210 100M	WTIC 1040 50000 R WTHT 1200 100M New Britain	WSB 740 50000 R Augusta WRDW 1500 100 C
KFPW 1210 100 Hot Springs KTHS 1060 10000 N	San Diego KFSD 600 1000 B KGB 1330 1000M	WNBC 1380 250 New Haven	Columbus WRBL 1200 100 Griffin WKEU 1500 100
Jonesboro KBTM 1200 100	San Francisco KFRC 610 1000M	WELI 900 500 New London WNLC 1500 100M	Macon WMAZ 1180 1000 C
Little Rock KARK 890 500 N KGHI 1200 100	KGGC 1420 100 KGO 790 7500 B KJBS 1070 500	Waterbury WATR 1190 100	Rome WRGA 1500 100 Savannah
KLRA 1390 1000 C	KPO 680 50000 R	WBRY 1530 1000M	WTOC 1260 1000 C

NORTH	I AMERICAN B. C.	STATIONS BY LO	CATIONS
Thomasville	Rockford	M111-	Lab. OL. I
WPAX 1210 100	WROK 1410 500	Marshalltown KFJB 1200 100	Lake Charles KPLC 1500 100
Waycross	Rock Island	Mason City	Monroe
WAYX 1200 100	WHBF 1210 100	KGLO 1210 100 C	KMLB 1200 100
	Springfield WCBS 1420 100	Shenandoah	New Orleans
HAWAII	WTAX 1210 100	KFNF 890 500 KMA 930 1000	WBNO 1200 100 WDSU 1250 1000 B
Hilo	Tuscola	Sioux City	WJBW 1200 100
KHBC 1400 250M	WDZ 1020 250	KSCJ 1330 1000 C KTRI 1420 100	WSMB 1320 1000 R WWL 850 10000 C
Honolulu KGMB 1320 1000 C	Urbana WILL 580 1000	1120 100	Shreveport
KGU 750 2500 N		KANSAS	KRMD 1310 100
	INDIANA		KTBS 1450 1000 N KWKII 1100 10000 C
IDAHO		Abilene	1100 10000 (
	Anderson	KFBI 1050 5000 Coffeyville	MAINE
Boise	WHBU 1210 100	KGGF 1010 1000M	MAINE
KIDO 1350 1000 N Coeur d'Alene	Elkhart	Dodge City	Augusta
KGCI 1200 100	WTRC 1310 100	KGNO 1340 250	WRDO 1370 100M
Idaho Falls	Evansville WEOA 1370 100 C	Garden City KIUL 1210 100	Bangor WABI 1200 100
KID 1320 500	WGBF 630 500 N	Great Bend	WLBZ 620 500 C
Lewiston KRLC 1390 250	Fort Wayne	KVGB 1370 100	Portland
	WGL 1370 100 N WOWO 1160 10000 B	Hutchinson	WCSH 940 1000 R WGAN 640 500
Nampa KFXD 1200 100	Gary	KWBG 1420 100	Presque Isle
Pocatello	WIND 560 1000	Kansas City KCKN 1310 100	WAGM 1420 100
KSEI 900 250	Hammond WHIP 1480 5000	Lawrence	
Twin Falls KTFI 1240 1000	WWAE 1200 100	KFKU 1220 1000	MARYLAND
1240 1000	Indianapolis	WREN 1220 1000 B	n 1.1
ILLINOIS	WFBM 1230 1000 C WGVA 1050 1000	Manhattan KSAC 580 500	Baltimore WBAL 760 2500 B
ILLINOIS	WIRE 1400 1000 R	Pittsburg	WBAL 1060 10000 B
Bloomington	Muncie	KOAM 790 1000 N	WCAO 600 500 C WCBM 1370 100
WJBC 1200 100	WLBC 1310 100	Salina	WFBR 1270 500 R
Carthage WCAZ 1070 100	New Albany WGRC 1370 250	KSAL 1500 100	College Park
Champaign	Richmond	Topeka WIBW 580 1000 C	W3XJ 1060 100
WDWS 1370 100	WKBV 1500 100	Wichita	Cumberland WTBO 800 250
Chicago	South Bend	KANS 1210 100 B KFH 1300 1000 C	Frederick
WAAF 920 1000 WBBM 770 50000 C	WFAM 1200 100 WSBT 1360 500	KFH 1300 1000 C	WFMD 900 500
WCBD 1080 5000	Terre Haute	WENTENGY V	Hagerstown
WCFL 970 5000 N WCRW 1210 100	WBOW 1310 100 N	KENTUCKY	WJEJ 1210 50
WEDC 1210 100	West Lafayette	Ashland	Salisbury WSAL 1200 250
WENR 870 50000 B WGES 1360 500	WBAA 890 500	WCMI 1310 100	
WGN 720 50000M		Covington	MASSACHUSETTS
WJJD 1130 20000	IOWA	WCKY 1490 10000 N Lexington	
WLS 870 50000 B WMAO 670 50000 R	A === 0.0	WLAP 1420 100	Boston
WMBI 1080 5000	Ames WOI 640 5000	Louisville	WAAB 1410 500M WBZ 990 50000 B
WSBC 1210 100	Boone	WAVE 940 1000 N WHAS 820 50000 C	WCOP 1120 500
Cicero WHFC 1420 100	KFGQ 1370 100	Middlesboro	WEEI 590 1000 C WHDH 830 1000
Decatur	Cedar Rapids WMT 600 1000 B	WLMU 1210 100	WMEX 1500 100
WJBL 1200 100	Davenport	Owensboro	WNAC 1230 1000 R
East Dubuque WKBB 1500 100	WOC 1370 100 C	WOMI 1500 100	WORL 920 500 Fall River
East St. Louis	Decorah	Paducah WPAD 1420 100	WSAR 1450 1000M
WTMV 1500 100 Galesburg	KGCA 1270 100 KWLC 1270 100	1220 100	Greenfield
WGIL 1500 250	Des Moines	LOUISIANA	WHAI 1210 250 Lawrence
Harrisburg	KRNT 1320 1000 C	LOUISIANA	WLAW 680 1000
WEBQ 1210 100 Joliet	KSO 1430 500 B WHO 1000 50000 R	Alexandria	WLLH 1370 100 Lowell
WCLS 1310 100		KALB 1210 100	WLLH 1370 100M
Peoria WMBD 1440 1000 C	Dubuque KDTH 1340 500	Baton Rouge WJBO 1120 500 B	New Bedford
Quincy	Iowa City	WJBO 1120 500 B Lafayette	WNBH 1310 100M Pittsfield
WTAD 900 1000	WSUI 880 500	KVOL 1310 100	WBRK 1310 100 C
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NORTH	AMERICAN B. C. S	STATIONS BY LOC	ATIONS
Springfield WBZA 990 1000 B WMAS 1420 100 C	St. Paul KSTP 1460 10000 R WMIN 1370 100	Wolf Point KGCX 1450 1000	Gallup KAWM 1500 100 Hobbs
WSPR 1140 500M	Virginia	NEBRASKA	KWEW 1500 100
Worcester	WHLB 1370 100 C		Roswell
WORC 1280 500 C	Winona	Clay Center	KGFL 1370 100
WTAG 580 1000 R	KWNO 1200 250		Santa Fe
		KMMJ 740 1000 Kearney	KRQA 1310 100
MICHIGAN	MISSISSIPPI	KGFW 1310 100 Lincoln	
Battle Creek	Grenada	KFAB 770 10000 C	NEW YORK
WELL 1420 100	WGRM 1210 100	KFOR 1210 100 C	
Bay City	Gulfport	Norfolk	Albany
	WGCM 1210 100	WJAG 1060 1000	WABY 1370 100
WBCM 1410 500	Hattiesburg	North Platte	WOKO 1430 500 C
Calumet	WFOR 1370 100	KGNF 1430 1000	
WHDF 1370 100	Jackson	Omaha	Auburn
Detroit		KOIL 1260 1000 B	WMBO 1310 100
WJBK 1500 100	WJDX 1270 1000 R	WAAW 660 500	Binghamton
WJR 750 50000 C	Kosciusko	WOW 590 1000 R	WNBF 1500 100 C
WMBC 1420 100 WWJ 920 5000 R	WHEF 1500 100 Laurel	Scottsbluff	Brooklyn
WXYZ 1240 1000 B	WAML 1310 100 Meridian	KGKY 1500 100	WARD 1400 500 WBBC 1400 500
East Lansing	WCOC 880 500 C	NEVADA	WBBR 1300 1000
WKAR 850 1000	Vicksburg		WCNW 1500 100
Flint	WQBC 1360 1000	Reno	WLTH 1400 500
WFDF 1310 100		KOH 1380 500 C	WMBQ 1500 100
Grand Rapids WASH 1270 500 N	MISSOURI	KOH 1380 500 C	WVFW 1400 500 Buffalo
WOOD 1270 500 N Ironwood	Cape Girardeau	NEW HAMPSHIRE	WBEN 900 1000 R WBNY 1370 100
WJMS 1420 100 Jackson	Cape Girardeau KFVS 1210 100 Columbia	Laconia WLNH 1310 100M	WEBR 1310 100 B WGR 550 1000 C
WIBM 1370 100	KFRU 630 500	Manchester	WKBW 1480 5000 C
Kalamazoo	Jefferson City		WSVS 1370 50
WKZO 590 1000 B	KWOS 1310 100	WFEA 1340 500 N	Canton
Lansing	Joplin	Portsmouth	WCAD 1220 500
WJ1M 1210 100	WMBH 1420 100 Kansas City	WHEB 740 250	Elmira WESG 850 1000 C
Lapeer	KCMO 1370 100	NEW JERSEY	Freeport
WMPC 1200 100	KMBC 950 1000 C		WGBB 1210 100
Marquette	KXBY 1530 1000	Asbury Park	Jamestown
WBEO 1310 100	WDAF 610 1000 R		WJTN 1210 100 B
Muskegon	WHB 860 1000M	WCAP 1280 500 Atlantic City	Newburgh
WKBZ 1500 100	Poplar Bluff		WGNY 1210 100
Royal Oak	KWOC 1310 100	WPG 1100 5000 C	New York
	St. Joseph	Bridgeton	WABC 860 50000 C
Saginaw	KFEQ 680 2500 St. Louis	WSNJ 1210 100	WBIL 1100 5000 WBNX 1350 1000
WHÂL 950 500	KFUO 550 500	Camden	WBOO 860 50000
	KMOX 1090 50000 C	WCAM 1280 500	WEAF 660 50000 R
MINNESOTA	KSD 550 1000 R	Jersey City	WEVD 1300 1000
	KWK 1350 1000 B	WAAT 940 500	WFAB 1300 1000
Albert Lea	KXOK 1250 1000	WHOM 1450 250	WHN 1010 1000
	WEW 760 1000	Newark	WINS 1180 1000
KATE 1420 250	WIL 1200 100	WHBI 1250 1000	WJZ 760 50000 B
Duluth	Springfield	WOR 710 50000M	WMCA 570 1000
KDAL 1500 100 C	KGBX 1230 500 N	Red Bank	WNEW 1250 1000
WEBC 1290 1000 N	KWTO 560 5000		WNYC 810 1000
Fergus Falls	K 110 000 500	WBRB 1210 100	WOV 1130 1000
KGDE 1200 100		Trenton	WOXR 1550 1000
Hibbing WMFG 1210 100	MONTANA	WTNJ 1280 500	Olean
Mankato	Billings	Whippany	Plattsburg
KYSM 1500 100	KGHL 780 1000 N	W3XDD 50000	
Minneapolis	Butte	Zarephath	WMFF 1310 100
WCCO 810 50000 C	KGIR 1340 1000 N	WAWZ 1350 500	Rochester
WDGY 1180 1000 C	Great Falls	NEW MENICO	WHAM 1150 50000 B
WLB 1250 1000	KFBB 1280 1000 C		WHEC 1430 500 C
WTCN 1250 1000 B Moorhead	Helena	NEW MEXICO	WSAY 1210 100
KVOX 1310 100	KPFA 1210 100	Albuquerque	Saranac Lake
	Kalispell	KGGM 1230 1000	WNBZ 1290 100
Northfield	KGEZ 1310 100	KOB 1180 10000 N	Schenectady
WCAL 1250 1000	Lewistown	Carlsbad	WGY 790 50000 R
Rochester	KDNC 1200 100	KLAH 1210 100	Syracuse
KROC 1310 100		Clovis	WFBL 1360 1000 C
St. Cloud KFAM 1420 100	Missoula KGVO 1260 1000 C	KICA 1370 100	WSYR 570 1000 B
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Utica Wilso 100 C Watertown Wilso 100 Wolf, and		middlittern B. C.	STATIONS BY DO	CHITOTO
Wilson W	WHAZ 1300 1000	W8XO 700 500000	KALE 1300 1000M	
White Plains WTAM 1070 50000 B WTAM 1070 5000 B W	WIBX 1200 100 C	WCLE 610 500M	KEX 1180 5000 B	PUERTO RICO
Word Section Willington	WNNY 1420 100	WHK 1390 1000 B	KWJJ 1040 500	WPRA 1370 100
WWRL 1500 100 WWSU 570 750 WWSU 570	WFAS 1210 100	Columbus WBNS 1430 500 C	Roseburg	WPRP 1420 100
Dayton Charlet Will 1200 1000 C WSMK 1380 200 C Lima WBM 1380 200 C Lima WBM 1380 200 C Lima WBM 1380 200 C WSMK 1340 200 C WSMK	WWRL 1500 100	WHKC 640 500	Salem	WKAQ 1240 1000
Wind Space		WHIO 1260 1000 C		RHODE ISLAND
WSOC 1210 100 N	WWNC 570 1000 N	Lima		WEAN 780 1000M
WDNC 1500 100 C Greensboro WBIG 1440 1000 B WFOL 1200 100 WWIG 1200 100 WWIG 1200 100 WKBN 570 500 C Zanesville WALR 1210 100 Easton WEST 1200 100 Easton WEST 1200 100 Gharleston WGSC 1366 500 Golumbia WGSC 1310 Uolumbia WGSC 1366 500 Golumbia WGSC 1310 Uolumbia WGSC 1310 Uolumbia WGSC 1310 Uolumbia WGSC 1310 Uolumbia WGSC 1306 Uolumbia WGSC 1366 500 Uolumbia WGSC 1306 Uolum	WBT 1080 50000 C WSOC 1210 100 N	Portsmouth	WCBA 1440 500	
High Point WMFR 1200 100 WKBN 570 500 C Zancesville WALR 1210 100 Wistor WALR 1210 100 Wistor Wistor Sale might Sal	WDNC 1500 100 C Greensboro	WSPD 1340 1000 B	Altoona	
Ada	High Point	Youngstown	WEST 1200 100	WAIM 1200 100 C
WING	Kinston WFTC 1200 100	Zanesville	WLEU 1420 100 B	WCSC 1360 500 N Columbia
Willington	WPTF 680 1000 N	OKLAHOMA	WIBG 970 100	Florence WOLS 1200 100
Wilson	WEED 1420 100 Wilmington		WHJB 620 250 C Grove City	WFBC 1300 1000 N
Winston-Salem WAIR 1250 250 WKBC 1200 100 Hazleton WAZL 1420 100 Hazleton WAZL 1420 100 Muskogee KGC 1360 250M Muskogee KBIX 1500 100M Norman WAZL 1420 100 Johnstown WAZL 1310 100 UNAD 1010 1000 Oklahoma City KFXR 1310 1010 UNAD 1010 1000 Oklahoma City KFXR 1310 100 WAZL 1420 100 Morman WAZL 1310 100 UNAD 1010 1000 Oklahoma City KFXR 1310 100 Oklahoma City KFXR 1310 100 WGAL 1500 100 WGAL 1500 100 WGAT 1310 100 WGAT 1310 100 WGAT 1310 100 WGAT 1310 100 WFIL 560 1000 WHAT 1310 100 WFIL 560 1000 WHAT 1310 100 WFIL 560 1000 WHAT 1310 100 WFIL 560 1000 WAXA 920 1000 WAXA 920 1000 WAXA 920 1000 WAXA 920 1000 WFIL 1310 100	Wilson	KVSO 1210 100M	Harrisburg	WSPA 920 1000
North Dakota Norman Norm	Winston-Salem	KASA 1210 100	WKBO 1200 100	SOUTH DAKOTA
Norman	WSJS 1310 100 C	KCRC 1360 250M Muskogee	WAZL 1420 100	KABR 1420 100
New Normal Nor	NORTH DAKOTA	Norman	WJAC 1310 100 Lancaster	Huron 1000
Devils Lake KDM 1410 100 KYW 1020 10000 R Rapid City KOBH 1370 100 MWKY 900 1000 N Grand Forks KHBG 1210 100 Ponca City WBZ 1200 100M WBZ 1200 100M WBZ 1200 100M WFIL 1310 100 KSOO 1110 2500 100 KGF 1420 100M WFIL 1310 100 KSOO 1110 2500 100 KGF 1420 100M WTEL 1310 100 WRAX 920 1000 WWRAX 920 10		KFXR 1310 100		Pierre
Fargo	Devils Lake	KTOK 1370 100M	KYW 1020 10000 R WCAU 1170 50000 C	Rapid City
Ponca City WBBZ 1200 100M Shawnee KRMC 1370 100 Mandan KGCU 1240 250 Minot KIPM 1240 250 Valley City KOVC 1500 100 Corvallis KAST 1370 100 Corvallis KAST 1370 100 Corvallis KOAC 550 1000 Corvallis KOAC 550 1000 Corvallis KOAC 550 1000 Corvallis KOAC 550 1000 KORE 1420 100M Klamath Falls Kori Kast 1210 100 Klamath Falls Kori Kast 1210 100 Klamath Falls Kori Kast 1210 100 Knoxyille KELO 1200 100 KSOO 1100 KUSD 890 5000 KUSD 89	Fargo	Okmulgee	WFIL 560 1000 B	WCAT 1200 100 Sioux Falls
Shawnee Shawnee KGFF 1420 100M KRMX 920 1000 KRMX 10	Grand Forks	Ponca City	WIP 610 1000	KSOO 1110 2500 N
Corvallis Corv		KGFF 1420 100M	WTEL 1310 100	KUSD 890 500 Watertown
Valley City KOVC 1500 100 Astoria KAST 1370 100 100 Corvallis KOAC 550 1000 Corvallis KOAC 1500 100 Corvallis KOAC 1320 1000 Corvallis KOAC 1320 1320 1320 1320 1320 1320 1320 1320 1320 1320 1320 1320 1320 1320 1320 1320 1320 1320 1320 1	KGCU 1240 250	KTUL 1400 500 C	KDKA 980 50000 B KOV 1380 500 C	Yankton
Reading WEU 830 1000 1	KLPM 1240 250	OREGON	WJAS 1290 1000 C	TENNESSEE
OHIO Corvallis KOAC 550 1000 Scranton WGBI 880 500 WQAN 880 500 WQAN 880 500 WQAN 880 500 WGAN 880 500 Sunbury WKOK 1210 100 KFII 1210 100 WKOK 1210 100 Knoxyille	KOVC 1500 100	Astoria	Reading WEEU 830 1000	
Akron WGBI 880 500 WODD 1280 1000 C Eugene KORE 1420 100M Sunbury WKOK 1210 100 Klamath Falls KEII 1210 100 Knoxyille Knoxyille	оню	Corvallis	Scranton	Chattanooga
Ashtabula Klamath Falls WKOK 1210 100 WTJS 1310 100 WKOK 1210 100 Knoxville	WADC 1320 1000 C	Eugene	WQAN 880 500	WDOD 1280 1000 C Jackson
THE PARTY OF THE P	Ashtabula	Klamath Falls	WKOK 1210 100	WTJS 1310 100 Knoxville
Canton WIBC 1200 100 KLBM 1420 100 Wilkes-Barre WROL 1310 100 Wilkes-Barre	Canton	La Grande	WMBS 1420 250 Wilkes-Barre	
Cincinnati WCPO 1200 100 Marshfield KOOS 1200 100 WBAX 1210 100 WHBO 1370 100 WHC 780 1000	Cincinnati WCPO 1200 100	KOOS 1200 100	WBAX 1210 100 WBRE 1310 100 N	WHBQ 1370 100 WMC 780 1000 R
WKRC 550 1000 C Medford Williamsport WMPS 1430 500 1	WKRG 550 1000 C		Williamsport WRAK 1370 100	WMPS 1430 500 B

Nashville WLAC 1470 5000 C	San Angelo KGKL 1370 100	Bellingham KVOS 1200 100M	WISN 1120 250 C WTMJ 620 1000 N
WSIX 1210 100 WSM 650 50000 N	San Antonio KABC 1420 100	Centralia KELA 1440 500M	Poynette WIBU 1210 100
TEXAS	KMAC 1370 100	Everett	Racine
	KTSA 550 1000 C	KRKO 1370 50 Longview	WRJN 1370 100 Sheboygan
Abilene KRBC 1420 100	WOAI 1190 50000 N Sherman	KWLK 780 250	WHBL 1300 250 Stevens Point
Amarillo	KRRV 1310 250	Olympia KGY 1210 100M	WLBL 900 5000
KGNC 1410 1000 N	Temple KTEM 1370 250	Pullman KWSC 1220 1000	Superior WDSM 1200 100
Austin KNOW 1500 100 C	Texarkana KCMC 1420 100	Seattle	Wausau
KTBC 1120 1000	Tyler	KEEN 1370 100 KIRO 710 1000 C	WSAU 1370 100
Beaumont KFDM 560 500 N	KGKB 1500 100 Waco	KJR 970 5000 B KOL 1270 1000M	WYOMING
1420 100	WACO 1420 100 C Weslaco	KOMO 920 1000 R	Casper
Big Spring KBST 1500 100	KRGV 1260 1000 N	KRSC 1120 250 KTW 1220 1000	KDFN 1440 500 Rock Springs
Brady	Wichita Falls KGKO 570 250 C	KXA 760 250 Spokane	KVRS 1370 100
KNEL 1500 250 Brownsville	UTAH	KFIO 1120 100	Sheridan KWYO 1370 100
KGFI 1500 100		KFPY 890 1000 C KGA 1470 5000 B	
College Station WTAW 1120 500	Cedar City KSUB 1310 100	KHQ 590 1000 R	BAHAMAS
Corpus Christi	Logan 1500 100	Tacoma KMO 1330 1000M	Nassau ZNS 540 400
KRIS 1330 500 N	Ogden	KVI 570 1000 C Watla Walla	
Corsicana KAND 1310 100	KLO 1400 500 B Price	KUJ 1370 100	CANADA
Dallas	KEUB 1420 100	Wenatchee KPQ 1500 100M	ALBERTA
KRLD 1040 10000 C WFAA 800 50000 N	Salt Lake City KDYL 1290 1000 R	Yakima KIT 1250 250M	Calgary
WRR 1280 500M Denton	KSL 1130 50000 C KUTA 1500 100	1	CFAC 930 1000 1 CFCN 1030 10000 1
1420 100		WEST VIRGINIA	CJCJ 690 1000 I
Dublin KFPL 1310 100	VERMONT		Edmonton
El Paso	Burlington WCAX 1200 100	Bluefield WHIS 1410 500	CFRN 960 100 I CJCA 730 1000 I
KROD 1500 100 KTSM 1310 100 N	Rutland	Charleston WCHS 580 500 C	CKUA 580 500 1
WDAH 1310 100 Fort Worth	WSYB 1500 100 St. Albans	Clarksburg	Grande Prairie CFGP 1200 100
KFJZ 1370 100	WQDM 1390 1000	WBLK 1370 100 Fairmont	Lethbridge
KTAT 1240 1000M WBAP 800 50000 N	Springfield WNBX 1260 500 C	WMMN 890 500 C Huntington	CJOC 950 100
Galveston KLUF 1370 100	Waterbury WDEV 550 500	WSAZ 1190 1000	BRIT. COLUMBIA
Greenville		Parkersburg WPAR 1420 100 C	Chilliwack
KGVL 1200 100 Houston	VIRGINIA	Wheeling	CHWK 780 100
KPRC 920 1000 R	Charlottesville WCHV 1420 100	WWVA 1160 5000 C	Kamloops CFJC 880 1000 I
KXYZ 1440 1000 B	Danville		Kelowna
Kilgore KOCA 1210 100	WBTM 1370 100 Harrisonburg	WISCONSIN	CKOV 630 100 1
Laredo	WSVA 550 500	Eau Claire	Prince Rupert CFPR 580 50
1500 100 Longview	Lynchburg WLVA 1200 100	WEAU 1050 1000	Trail
KFRO 1370 250 ' Lubbock	Newport News	Fond du Lac KFIZ 1420 100	CJAT 910 1000 : Vancouver
KFYO 1310 100	WGH 1310 100 Norfolk	Green Bay	CBR 1100 5000
Lufkin KRBA 1310 100	WTAR 780 1000 N	WHBY 1200 100 WTAO 1330 1000 C	CJOR 600 500 CKCD 1010 100
Midland KRLH 1420 100	Richmond WBBL 1210 100	Janesville	CKFC 1410 50 CKMO 1410 100
Palestine	WMBG 1350 500 R WRNL 880 500	WCLO 1200 100 LaCrosse	CKWX 1010 100
KNET 1420 100	WRTD 1500 100 B	WKBH 1380 1000 C	Victoria CFCT 1450 500
Pampa KPDN 1310 100	WRVA 1110 5000 C Roanoke	Madison WHA 940 5000	
Paris	WDBJ 930 1000 C	WIBA 1280 1000 N	MANITOBA
Pecos	WASHINGTON	Manitowoc	Brandon CKX 1120 1000 1
KIUN 1420 100 Port Arthur	Aberdeen	WOMT 1210 100 Milwaukee	CKX 1120 1000 1
		WEMP 1310 100	CFAR 1370 100

	T		
Winnipeg CJRC 630 500 F	Waterloo CKCR 1510 100	Cardenas CMGE 1370 150	CMKW 1350 CMKX 1190
CKY 910 15000 F	Windsor CKLW 1030 5000 F	Ciego de Avila	
NEW BRUNSWICK	Wingham CKNX 1200 100	CMJH 1360 50 CMJI 1130 150 CMJO 1180 50	DOMINICAN REPUBLIC
Fredericton CFNB 550 500 F		Cienfuegos	Trujillo
Moncton	PRINCE EDWARD ISLAND	CMHJ 1160 175 CMHM 1450 100	HIX 800 800
St. John	Charlottetown	CMHX 760 200	GUATEMALA
CHSJ 1120 500 F	CFCY 630 1000 F CHCK 1310 50	Cruces CMHK 1330 250	Guatemala City
N. W. TERRITORY	Summerside CHGS 1450 50 F	Guantanamo CMKS 960	TGW 1520 1000
Aklavik CJCU 1210 50		Havana	MEXICO
NOVA SCOTIA	QUEBEC	CMBC 950 10000 CMBD 1260 500	AGUASCALIENTES
	Chicoutimi CRCS 1120 100 F	CMBF 770 10000 CMBL 750 2500	
Glace Bay VAS 685 2000	Hutl	CMBQ 680 5000	Aguascalientes XEBI 1000 25
Halifax CHNS 930 1000 F	CKCH 1210 100 F Montreal	CMBS 1170 150 CMBX 1070 500	==
Sydney	CBF 910 50000 N	CMBY 970 150 CMBZ 1000 500	BAJA CALIFORNIA
Wolfville	CBM 1050 5000 F CFCF 600 500 B	CMC 1260 150 CMCA 1350 450	Mexicali
CKIC 1010 50 Yarmouth	CHLP 1120 100 F CKAC 730 5000 C	CMCB 1230 150	XEAA 750 200
CJLS 1310 100	New Carlisle CHNC 960 1000 F	CMCD 630 250 CMCF 810 600	Rosarito Beach
'ONTARIO	Quebec	CMCG 680 1000 CMCJ 1110 500	XERB 730 100000 Tijuana
Brantford	CHRC 580 100 CKCV 1310 100 F	CMCK 1030	XEAC 980 1000
CKPC 930 100 F Chatham	CRCK 950 1000 F	CMCL 730 10000 CMCM 850	XEBG 820 1000 XEC 1150 100
CFCO 630 100 F	Rimouski CJBR 1030 1000 F	CMCO 1200 250 CMCQ 1410 5000	XELO 580 10000 XEMO 860 5000
Cobalt CKMC 1210 50	Sherbrooke CHLT 1210 100	CMCR 1380	XEOK 760 2500
Fort William CKPR 730 100 F	CHLT 1210 100 Three Rivers	CMCU 1290 500 CMCW 1140 500	
Hamilton	CHLN 1420 100	CMCX 1380 150 CMCY 570 5000	CHIHUAHUA
CHML 1010 100 F CKOC 1120 500 F	SASKATCHEWAN	CMK 720 3000 CMOA 1440 150	Chihuahua
Kenora	Moose Jaw	CMOX 1320 200	XEBU 1200 50 XEFI 1440 250
1420 100 Kingston	CHAB 1200 100 F	CMQ 600 25000 CMW 880 1400	Juarez
CFRC 1510 100 F	Prince Albert CKBI 1210 100 F	CMX 920 1000	XEFV 1210 100 XEF 1450 100
London CFPL 730 100 F	Regina CJRM 540 1000 F	Holguin	XEJ 1020 1000 XEP 1160 500
North Bay	CKCK 1010 1000 F	CMFK 1460 250 CMKO 1280	Parral
CFCH 930 100 F CJKL 1310 100	Saskatoon CFOC 840 1000 F	Manzanillo	XEAT 1210 250
CKGB 1420 100	Yorkton	CMKM 1120 200 Matanzas	
Ottawa CBO 880 1000 F	CJGX 1390 100 F	CMGC 1400 150	COAHUILA
CKCO 1010 100 F	COSTA RICA	CMGF 1120 250 CMGH 790 500	Piedras Negras XEMU 580 250
Owen Sound 1370 100	San Jose	Moron CMJP 1430 75	XEPN 730 100000
Prescott	TIEP 880 1000 TIPG 625 2000	Pinar del Rio	Sabinas XEBX 640 250
CFLC 930 100 St. Catharines	TIX 650	CMAB 1340 300	Saltillo
CKTB 1200 100 F	CUBA	Sagua la Grande CMHA 1070 50	XEAS 1160 100 XELA 1240 50
Sault Ste. Marie CJIC 1500 100	Calbarien	Sancti Spiritus CMHB 1240 50	Torreon XETB 1310 125
Stratford CJCS 1210 50	CMHD 1270 250	CMHB 1240 50 Santa Clara	Villa Acuna
Sudbury	Camaguey CMJA 1010 300	CMHI 1210 150	XEDH 1340 200 XERA 840 250000
CKSO 780 1000 F	CMJC 1390 150	CMHW 820 100	,
Toronto CBL 840 50000 F	CMJE 1220 50 CMJF 1150 200	Santiago CMKC 1250 150	D. F.
CFRB 690 10000 C CKCL 580 100 F	CMJK 780 250 CMJL 1340 75	CMKD 1050 250 CMKG 1160	Gral. Anaya
CRCY 960 100 F	CMJX 830 500	CMKR 1400 100	XEDA 1220 200

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

Mexico City	Leon	SINALOA	VERACRUZ
XEAI 1250 500	XEFM 1160 20		0 11
XEAL 660 1000	XEKL 1240 500	Mazatlan	Cordoba
XEB 1030 10000		XEBL 1220 50	XEAG 1310 10
XEBS 1340 200	JALISCO	`	Jalapa
XEBZ 810 100			XEXB 1270 250
XEDP 1080 500	Guadalajara	SONORA	XEXD 1340 350
XEJP 1130 100	XED 1160 2500		Minatitlan
XEJW 870 500	Guzman	Cananea	XEDW 1150 20
	XEBA 1080 20	XEFO 1010 50	Veracruz
	ALDA 1000 20	1222	
	MICHOACAN	Hermosillo	XETF 1220 12
XELZ 1370 100	MICHOACAN	XEBH 930 500	XEU 1010 250
XEMX 1280 100	34 11	Nogales	
XEN 780 1000	Morelia	XEAF 990 750	YUCATAN
XENC 860 50	XEI 1370 125		
XEW 890 50000		Obregon	Merida
XEXM 610 500	NUEVO LEON	XEAP 1340 50	XEFC 550 100
XEXS 1310 100			XEME 1240 50
XEYO 610 500	Monterrey		XEZ 630 500
Tacuba	XEFB 870 200	TAMAULIPAS	TEEL OUT OF
XEFA 1180 500	XEG 1230 250		MIQUELON
Texcoco	XEH 720 250	Matamoros	MIQUELON
	XET 600 5000	XEAM 750 25	St. Pierre
XEXE 1270 17	XEX 1310 125	1 22 20 20 20	
	1011	Nuevo Laredo	FQN 609 250
DURANGO	PUEBLA	XEBK 1080 100	
		XEDF 810 100	I NEWFOUNDLAND
Durango	Puebla	XEFE 980 250	6. 7.1.1.
XEBP 1150 250	XETH 1210 100	XENT 910 150000	St. John's
XEE 1210 50	ALDIA 1210 100	D	VOAC 1065 40
	SAN LUIS POTOSI	Reynosa	VOAS 940 100
GUANAJUATO	SAN LOIS TOTOSI	XEAW 960 100000	VOCM 1006 200
GOMMO	San Luis Potosi	Tampieo	VOGY 840 400
Incorpora	XECZ 1370 100	XEFW 1310 300	VONF 1195 500
Irapuato XEBO 1310 25	XEXH 1250 250	XES 990 250	VOWR 681 500
XEBO 1310 25	AEAH 1250 250	770 200	1

	CBF 910 50000 Montreal, P. Q.	CFNB 550 500 Fredericton, N. B.	CHSJ 1120 500 St. John, N. B.
	CBL 840 50000	CFPL 730 100	CHWK 780 100
	Toronto, Ont.	London, Ont.	Chilliwack, B. C:
	CBM 1050 5000	CFPR 580 50 Prince Rupert, B. C.	CJAT 910 1000 Trail, B. C.
	Montreal, P. Q.	CFOC 840 1000	CJBR 1030 1000
	CBO 880 1000 Ottawa, Ont.	Saskatoon, Sask.	Rimouski, P. Q.
	CBR 1100 5000	CFRB 690 10000	CJCA 730 1000
	Vancouver, B. C.	Toronto, Ont.	Edmonton, Alta.
	CFAC 930 1000	CFRC 1510 100	CJCB 1240 1000
	Calgary, Alta.	Kingston, Ont.	Sydney, N. S.
	CFAR 1370 100	CFRN 960 100	CJCJ 690 100
	Flin Flon, Man.	Edmonton, Alta.	Calgary, Alta.
	CFCF 600 500 Montreal, Que,	CHAB 1200 100 Moose Jaw, Sask.	CJCS 1210 50 Stratford, Ont.
-	CFCH 930 100	CHCK 1310 50	CJCU 1210 50
	North Bay, Ont.	Charlottetown, P.E.I.	Aklavik, N. W. T.
	CFCN 1030 10000	CHGS 1450 50	CJGX 1390 100
	Calgary, Alta.	Summerside, P.E.I.	Yorkton, Sask.
	CFCO 630 100	CHLN 1420 100	CJIC 1500 100 S. Ste. Marie, Ont.
	Chatham, Ont.	Three Rivers, P. Q.	
	CFCT 1450 500	CHLP 1120 100 Montreal, Que.	North Bay, Ont.
	Victoria, B. C.	CHLT 1210 100	CJLS 1310 100
	CFCY 630 1000 Charlottetown, P.E.I.	Sherbrooke, P. Q.	Yarmouth, N. S.
		CHML 1010 100	CJOC 950 100
	CFGP 1200 100 Grande Pacirie, Alta.	Hamilton, Ont.	Lethbridge, Alta.
	CFJC 880 1000	CHNC 960 1000	CJOR 600 500
	Kamloops, B. C.	New Carlisle, Que.	Vancouver, B. C.
	CFLC 930 100	CHNS 930 1000	CJRC 630 500
	Prescott, Ont.	Halifax, N. S.	Winnipeg, Man.
		CHRC 580 100	CJRM 540 1009
		Quebec, Que.	Regina, Sask.

	1		-1			
1	CKAC 730 5000 Montreal, Que.		CMBY 970 Havana, Cuba	150		CMJF 1150 200
	CKBI 1210 100		CMBZ 1000	500		Camaguey, Cuba CMJH 1360 50
ļ	Prince Albert, Sask.		Havana, Cuba			Ciego de Avila, Cuba
	Vancouver, B. C.		CMC 1260 Havana, Cuba	150		CMJI 1130 150 Ciego de Avila, Cuba
	CKCH 1210 100		CMCA 1350	450		CMJK 780 250
	Hull, Que. CKCK 1010 1000	-	Havana, Cuba			Camaguey, Cuba
	Regina, Sask.	ĺ	CMCB 1230 Havana, Cuba	150		CMJL 1340 75 Camaguey, Cuba
	CKCL 580 100		CMCD 630	250		CMJO 1180 50
	Toronto, Ont.		Havana, Cuba			Ciego de Avila, Cuba
	Ottawa, Ont.		CMCF 810 Havana, Cuba	600		CMJP 1430 75 Camaguey, Cuba
	CKCR 1510 100		CMCG 680	1000		CMJX 830 500
	Waterloo, Ont. CKCV 1310 100		Havana, Cuba CMCJ 1110	500	-	Camaguey, Cuba CMK 720 3000
	Quebec, Que.		Havana, Cuba	500		Havana, Cuba
İ	CKCW 1370 100 Moncton, N. B.		Havana, Cuba			CMKC 1250 150
	CKFC 1410 50	<u> </u>	CMCL 730	10000	-	Santiago, Cuba CMKD 1050 250
	Vancouver, B. C.	<u> </u>	Havana, Cuba			Santiago, Cuba
	CKGB 1420 100 North Bay, Ont,	ľ	CMCM 850 Havana, Cuba	*****		CMKF 1460 250
	CKIC 1010 50		CMCO 1200	250		Holguin, Cuba CMKG 1160
├	Wolfville, N. S.		Havana, Cuba			Santiago, Cuba
	CKLW 1030 5000 Windsor, Ont.		CMCQ 1410 Havana, Cuba	5000		CMKM 1120 200 Manzanillo, Cuba
	CKMC 1210 50	-	CMCR 1380			CMKO 1280
	Cobait, Ont.	<u> </u>	Havana, Cuba			Holguin, Cuba
}	Vancouver, B. C,		Havana, Cuba	500		CMKR 1400 100 Santiago, Cuba
	CKNX 1200 100		CMCW 1140	500		CMKS 960
ļ	Wingham, Ont. CKOC 1120 500		Havana, Cuba			Guantanamo, Cuba CMKW 1350
<u> </u>	Hamilton, Ont.		CMCX 1380 Havana, Cuba	150		CMKW 1350 Santiago, Cuba
	CKOV 630 100		CMCY 570	5000		CMKX 1190
	Kelowna, B. C. CKPC 930 100		Havana, Cuba CMGC 1400	150		Santiago, Cuba CMOA 1440 150
	Brantford, Ont.		Matanzas, Cuba	130		Havana, Cuba
	CKPR 730 100 Fort William, Ont.		CMGE 1370	150		CMOX 1320 200
	CKSO 780 1000	-	Cardenas, Cuba CMGF 1120	250		Havana, Cuba CMQ 600 25000
	Sudbury, Ont.		Matanzas, Cuba		\	Havana, Cuba
1	CKTB 1200 100 St. Catharines, Ont.		CMGH 790 Matanzas, Cuba	500		CMW 880 1400 Havana, Cuba
	CKUA 580 500	——	CMHA 1070	50		CMX 920 1000
<u> </u>	Edmonton, Alta.		Sagua la Grande,			Havana, Cuba
	CKWX 1010 100 Vancouver, B. C.		Sancti Spiritus, Cu	50 11) 9		CRCK 950 1000 Quebec, Que.
	CKX 1120 1000		CMHD 1270	250		CRCS 1120 100
	Brandon, Man. CKY 910 15000		Caibarien, Cuba CMHI 1210	150		Chicoutimi, Que. CRCY 960 100
	Winnipeg, Man.		CMHI 1210 Santa Ciara, Cuba	150		CRCY 960 100 Toronto, Ont.
	CMAB 1340 300 Pinar del Rio. Cuba		CMHJ 1160	175		FQN 609 250
<u> </u>	CMBC 950 10000		Cienfuegos, Cuba CMHK 1330	250		St. Pierre, Miquelon
	Havana, Cuba		Cruces, Cuba			Trujillo, D. R.
	CMBD 1260 500 Havana, Cuba		CMHM 1450 Cienfuegos, Cuba	100		KABC 1420 100 San Antonio, Texas
	CMBF 770 10000		CMHW 820	100		KABR 1420 100
	Havana, Cuba		Santa Clara, Cuba			Aberdeen, S. Dak.
	CMBL 750 2500 Havana, Cuba		CMHX 760 Cienfuegos, Cuba	200		KADA 1200 100 Ada, Okla.
	CMBQ 680 5000		CMJA 1010	300		KALB 1210 100
	Havana, Cuba CMBS 1170 150		Camaguey, Cuba	100		Alexandria, La. KALE 1300 500
	Havana, Cuba		Camaguey, Cuba	150		Portland, Ore.
	CMBX 1070 500		CMJE 1220	50		KAND 1310 100
	Havana, Cuba	-	Camaguey, Cuba			Corsicana, Texas KANS 1210 100
Ĺ			-			Wichita, Kans

KARK 890	500	KFAM 1420 1	.00	KFXD 1200 100
ittle Rock, Ark.	300	St. Cloud, Minn.		Nampa, Idaho
	100		00	KFXJ 1200 100 Grand Junction, Colo.
	100	·	00	KFXM 1210 100
Elk City, Okla.		Abilene, Kans.		San Bernardino, Calif. KFXR 1310 100
Astoria, Ore.	100	Sacramento, Calif.		Oklahoma City, Okla.
	250	KFDM 560 5 Beaumont, Texas	00	KFYO 1310 100 Lubbock, Texas
KAWM 1500	100		00	KFYR 550 1000
	100		00	Bismarck, N. D. KGA 1470 5000
fuskogee, Okla.		Denver, Colo.		Spokane, Wash. KGAR 1370 100
	100	St. Joseph, Mo.		Tucson, Ariz.
KBST 1500	100		.00	KGB 1330 1000 San Diego, Calif.
KBTM 1200	100		100	KGBU 900 500
lonesboro, Ark,		Wichita, Kans.		Ketchikan, Alaska KGBX 1230 500
	100	Los Angeles, Calif.	.00	Springfield, Mo.
KCMC 1420	100	KFIO 1120 1	.00	KGCA 1270 100 Decorah, Iowa
	100		.00	KGCI 1200 100
Kansas City, Mo.		Fond du Lac, Wis.		Coeur d'Alene, Idaho KGCU 1240 250
	250		.00	KGCU 1240 250 Mandan, N. D.
(CRJ 1310	100	KFJI 1210 1	.00	Wolf Point, Mont.
	100		100	KGDE 1200 100
Ouluth, Minn.	400	Grand Forks, N. D.	_	Fergus Falls, Minn. KGDM 1100 1000
		Fort Worth, Texas	.00	Stockton, Calif.
	500		500	KGDY 1340 250 Huron, S. D.
	000		00	KGEK 1200 100
Pittsburgh, Pa.		Lawrence, Kans.		Sterling, Colo. KGER 1360 1000
	100	Shenandoah, Iowa	.00	Long Beach, Calif.
KDNC 1200	100		.00	KGEZ 1310 100 Kalispell, Mont.
KDON 1210	100		000	KGFF 1420 100
Monterey, Calif.		Long Beach, Calif.		Shawnee, Okla. KGFI 1500 100
	500	Dublin, Texas	100	Brownsville, Tex.
KDYL 1290 1	.000	KFPW 1210 1	100	KGFJ 1200 100 Los Angeles, Calif.
	.000	KFPY 890 10	100	KGFL 1370 100
Los Angeles, Calif.			150	Roswell, N. M. KGFW 1310 100
KEEN 1370 Seattle, Wash.	100	Anchorage, Alaska		Kearney, Neb.
KEHE 780 1	.000		000	KGFX 630 200 Pierre, S. D.
KELA 1440	500	KFRO 1370 2	250	KGGC 1420 100
Centralia, Wash.	100	Longview, Texas	:00	San Francisco, Calif. KGGF 1010 1000
KELD 1370 El Dorado, Ark		Columbia, Mo.		Coffeyville, Kans.
KELO 1200	100		000	KGGM 1230 1000 Albuquerque, N. M.
KERN 1370	100	KFSG 1120 5	500	KGHF 1320 500
Bakersfield, Calif.	100		500	Pueblo, Colo. KGHI 1200 100
Price, Utah		St. Louis, Mo.		Little Rock, Ark.
KEX 1180 5 Portland, Ore.	000	KFVD 1000 10 Los Angeles, Calif.	000	KGHL 780 1000 Billings, Mont.
	0000		100	KGIR 1340 1000
Lincoln, Neb.		Cape Girardeau, Mo KFWB 950 10	000	Butte, Mont. KGIW 1420 100
Lincoln, Neb.	.006		000	Butte, Mont. KGIW 1420 100 Alamosa, Colo.
	(ARM 1310	(ARM 1310 100 Presno, Callf. (ASA 1210 100 Dik City, Okla. (ASA 1370 100 Sistoria, Ore. (AST 1370 100 Sistoria, Ore. (ATE 1420 250 Albert Lea, Minn. (AWM 1500 100 Jallup, N. Mex. (BPS 1420 100 Outskogee, Okla. (BPS 1420 100 Ortiand, Ore. (BST 1500 100 Sig Spring, Texas (BFM 1200 100 Onesboro, Ark. (CCKN 1310 100 Cansas City, Kans. (CCKN 1310 100 Cansas City, Kans. (CCKN 1370 100 Cansas City, Mo. (CCRC 1420 250 Cinid, Okla. (CCRC 1360 250 Cinid, Okla. (CRJ 1310 100 Derome, Ariz. (OAL 1500 100 Duluth, Minn. (DB 1500 100 Janta Barbara, Callf. (CDKN 1440 500 Dasper, Wyo. (CDKN 1210 100 Devils Lake, N. D. (CDKN 1200 100 Devils Lake, N. D. (CDKN 1210 100 Devils Lake, N. D. (CDKN 1200 100 Devils Lake, N. D. (CDKN 1210 100 Monterey, Callf. (CDTH 1340 500 Devils Lake (Ty, Utah (CDTH 1340 500 Devils Lake, N. D. (CDTH 134	ARRM 1310 100	CARM 1310 100

	KGKB 1500 100		KJR 970	5000	KOIN 940 1000
	Tyler, Texas KGKL 1370 100		Seattle, Wash. KLAH 1210	100	Portland, Ore. KOKO 1370 100
	San Angelo, Texas		Carlsbad, N. Mex		La Junta, Colo.
	Wichita Falls, Texas		KLBM 1420 La Grande, Ore.	100	KOL 1270 1000 Seattle, Wash.
	KGKY 1500 100 Scottsbluff, Neb.		KLCN 1290	100	KOMA 1480 5000
	KGLO 1210 100		Blytheville, Ark. KLO 1400	500	Oklahoma City, Okla. KOMO 920 1000
_	Mason City, Iowa KGMB 1320 1000		Ogden, Utah KLPM 1240	250	Seattle, Wash.
	Honolulu, T. H.		Minot, N. D.	230	San Antonio, Texas
	KGNC 1410 1000 Amarillo, Texas		KLRA 1390 Little Rock, Ark.	1000	KOOS 1200 100 Marshfield, Ore.
	KGNF 1430 1000		KLS 1280	250	KORE 1420 100
	North Platte, Neb. KGNO 1340 250		Oakland, Calif. KLUF 1370	100	Eugene, Ore. KOTN 1500 100
	Dodge City, Kans. KGO 790 7500		Galveston, Texas KLX 880		Pine Bluff, Ark.
	San Francisco, Calif.		Oakland, Calif.	1000	Valley City, N. Dak.
	KGU 750 2500 Honolulu, T. H.		KLZ 560 Denver, Colo.	1000	KOY 1390 1000 Phoenix, Ariz.
	KGVL 1200 100		KMA 930	1000	KPAC 1260 500
-	Greenville, Texas		Shenandoah, Iowa KMAC 1370	100	Port Arthur, Texas KPDN 1310 100
	Missoula, Mont.		San Antonio, Texa	ıs	Pampa, Texas
	KGW 620 1000 Portland, Ore.		KMBC 950 Kansas City, Mo.	1000	Helena, Mont.
	KGY 1210 100		KMED 1410	250	KPLC 1500 100 Lake Charles, La.
	Olympia, Wash. KHBC 1400 250		Medford, Ore. KMJ 580	1000	KPLT 1500 100
	Hilo, T. H. KHBG 1210 100		Fresno, Calif. KMLB 1200	100	Paris, Texas KPMC 1550 1000
	Okmulgee, Okia.		Monroe, La.	100	Bakersfield, Calif.
	KHJ 900 1000 Los Angeles, Calif.		KMMJ 740 Clay Center, Neb.	1000	San Francisco, Calif.
	KHQ 590 1000 Spokane, Wash		KMO 1330 Tacoma, Wash.	1000	KPOF 880 1000 Denver, Colo.
	KHSL 1260 250		KMOX 1090	50000	KPPC 1210 100
	Chico, Calif. KHUB 1310 250		St. Louis, Mo. KMPC 710	500	Pasadena, Calif. KPO 1500 100
	Watsonville, Calif.		Beverly Hills, Calif		Wenatchee, Wash.
	KICA 1370 100 Clovis, N. M.		KMTR 570 Los Angeles, Calif	1000	Houston, Texas
	KID 1320 500		KNEL 1500 Brady, Texas	250	KQV 1380 500 Pittsburgh, Pa.
	Idaho Falls, Idaho KIDO 1350 1000		KNET 1420	100	KQW 1010 1000
	Boise, Idaho KIDW 1420 100		Palestine, Texas		San Jose, Calif.
	Lamar, Colo.		KNOW 1500 Austin, Texas	100	Lufkin, Texas
	KiEM 1450 500 Eureka, Calif.		KNX 1050 Los Angeles, Calif.	50000	KRBC 1420 100 Abilene, Texas
	KIEV 850 250		KOA 830	50000	KRE 1370 100
	Glendale, Calif, KINY 1310 100		Denver, Colo. KOAC 550	1000	Berkeley, Calif. KRGV 1260 1000
	Juneau, Alaska KIRO 710 1000		Corvallis, Ore.		Weslaco, Texas KRIS 1330 500
	Seattle, Wash.		KOAM 790 Pittsburg, Kans	1000	Corpus Christi, Tex.
	KIT 1250 250 Yakima, Wash	1 1 '	KOB 1180 Albuquerque, N. N	10000	KRKD 1120 500 Los Angeles, Calif.
	KIUL 1210 100		KOBH 1370	100	KRKO 1370 50
	Garden City, Kans. KIUN 1420 100		Rapid City, S. Dak K OCA 1210	100	Everett, Wash. KRLC 1390 250
	Pecos, Texas	I	Kilgore, Texas		Lewiston, Idaho
	KIUP 1370 100 Durango, Colo.		KOH 1380 Reno, Nev.	500	KRLD 1040 10000 Dallas, Texas
	KJBS 1070 500	—	KOIL 1260	1000	
	San Francisco, Calif	H-1'	Omaha, Neb.	\vdash	
		\vdash		_	

KRLH 1420 100	KTMS 1220 500 Santa Barbara, Calif	KWLC 1270 100 Decorah, Iowa
Midland, Texas	KTOK 1370 100	KWLK 780 250
Jamestown, N. Dak.	Oklahoma City, Okla.	Longview, Wash
KRMD 1310 100	KTRB 740 250	KWNO 1200 250
Shreveport, La.	Modesto, Calif.	Winona, Minn.
KRNR 1500 100	KTRH 1290 1000	KWOC 1310 100
Roseburg, Ore.	Houston, Texas	Poplar Bluff, Mo.
KRNT 1320 1000	KTRI 1420 100	1 11103 1310
Des Moines, Iowa	Sioux City, Iowa KTSA 550 1000	Jefferson City, Mo. KWSC 1220 1000
Rochester, Minn.	San Antonio, Texas	Pullman, Wash.
KROD 1500 100	KTSM 1310 100	KWTN 1210 100
El Paso, Texas	El Paso, Texas	Watertown, S. Dak.
KROW 930 1000	KTUL 1400 500	KWTO 560 5000
Oakland, Calif.	Tulsa, Okla.	Springfield, Mo.
KROY 1210 100	KTW 1220 1000	KWYO 1370 100 Sheridan, Wyo.
Sacramento, Calif.	Seattle, Wash.	KXA 760 250
KRQA 1310 100 Santa Fe, N. Mex.	Walla Walla, Wash.	Seattle, Wash.
KRRV 1310 250	KUMA 1420 100	KXBY 1530 1000
Sherman, Texas	Yuma, Ariz.	Kansas City, Mo.
KRSC 1120 250	KUOA 1260 5000	KXL 1420 100
Seattle, Wash.	Siloam Springs, Ark.	Portland, Ore.
KSAC 580 500	KUSD 890 500	KXO 1500 100
Manhattan, Kans.	Vermillon, S. Dak.	El Centro, Calif.
KSAL 1500 100 Salina, Kans.	Salt Lake City, Utah	St. Louis, Mo.
KSCJ 1330 1000	KVCV 1200 100	KXRO 1310 100
Sioux City, Iowa	Redding, Calif.	Aberdeen, Wash.
KSD 550 1000	KVEC 1200 250	KXYZ 1440 1000
St. Louis, Mo.	San Luis Obispo, Cal.	Houston, Texas
KSEI 900 250	KVGB 1370 100	KYA 1230 1000 San Francisco, Calif.
Pocatello, Idaho	Great Bend, Kans.	KYOS 1040 250
San Francisco, Calif.	Tacoma, Wash.	Merced, Calif.
KSL 1130 50000	KVOA 1260 1000	KYSM 1500 100
Salt Lake City, Utah	Tucson, Ariz.	Mankato, Minu.
KSLM 1370 100	KVOD 920 500	KYW 1020 10000 Philadelphia, Pa.
Salem, Ore.	Denver, Colo.	TGW 1520 1000
KSO 1430 500	KVOE 1500 100 Santa Ana, Calif.	Guatemala City, Guat.
Des Moines, Iowa KSOO 1110 2500	KVOL 1310 100	TG1 1510
Sioux Falls, S. Dak.	Lafayette, La.	Guatemala City, Guat.
KSRO 1310 250	KVOO 1140 25000	TIEP 880 1000
Santa Rosa, Calif.	Tulsa, Okla.	San Jose, Costa Rica
KSTP 1460 10000	KVOR 1270 1000 Colorado Springs, Colo.	San Jose, Costa Rica
St. Paul, Minn. KSUB 1310 100	KVOS 1200 100	TIX 650
Cedar City, Utah	Bellingham, Wash.	San Jose, Costa Rica
KSUN 1200 100	KVOX 1310 100	VAS 685 2000
Lowell, Ariz.	Moorhead, Minn.	Glace Bay, N. S.
KTAR 620 1000	KVRS 1370 100	VOAC 1065 40 St. John's, Nfld.
Phoenix, Ariz.	Rock Springs, Wyo. KVSO 1210 100	VOAS 940 100
KTAT 1240 1000 Fort Worth, Texas	Ardmore, Okla.	St. John's, Nfld.
KTBC 1120 1000	KWBG 1420 100	VOCM 1006 200
Austin, Texas	Hutchinson, Kans.	St. John's, Nfld.
KTBS 1450 1000	KWEW 1500 100	VOGY 840 400
Shreveport, La.	Hobbs, N. Mex.	St. John's, Nfld.
KTEM 1370 250	KWG 1200 100 Stockton, Calif.	St. John's, Nfld.
Temple, Texas KTF1 1240 1000	KWJJ 1040 500	VOWR 681 500
KTFI 1240 1000 Twin Falls, Idaho	Portland, Ore.	St. Jehn's, Nfld.
KTHS 1060 10000	KWK 1350 1000	WAAB 1410 500
Hot Springs, Ark.	St. Louis, Mo.	Boston, Mass.
KTKC 1190 250	KWKH 1100 10000	WAAF 920 1000 Chicago, Ill.
Visalia, Calif.	Shreveport, La.	WAAT 940 500
		Jersey City, N. J.
-		WAAW 660 500
		Omaha, Neb.

	WABC 860 50000 New York, N. Y.	WBEN 900 1000 Buffalo, N. Y.	WCBM 1370 10 Baltimore, Md.
	WABI 1200 100 Bangor, Maine	WBEO 1310 100 Marquette, Mich.	WCBS 1420 10 Springfield, Ill.
	WABY 1370 100	WBHP 1200 100	WCCO 810 5000
_	Albany, N. Y. WACO 1420 100	Huntsville, Ala. WBIG 1440 1000	Minneapolis, Minn. WCFL 970 500
	Waco, Texas WADC 1320 1000	Greensboro, N. C. WBIL 1100 5000	Chicago, Ill. WCHS 580 50
	Akron, Ohio	New York, N. Y.	Charleston, W. Va.
	WAGA 1450 500 Atlanta, Ga.	Clarksburg, W. Va.	Charlottesville, Va.
	WAGF 1370 250 Dothan, Ala.	WBLY 1210 100 Lima, Ohio	WCKY 1490 1000 Covington, Ky.
	WAGM 1420 100	WBNO 1200 100	WCLE 610 50
	Presque Isle, Me.	New Orleans, La. WBNS 1430 500	Cleveland, Ohlo WCLO 1200 10
	Anderson, S. C. WAIR 1250 250	Columbus, Ohio WBNX 1350 1000	Janesville, Wis. WCLS 1310 10
	Winston-Salem, N. C.	New York, N. Y	Joliet, Ill.
	WALA 1380 500 Mobile, Ala.	WBNY 1370 100 Buffalo, N. Y.	WCMI 1310 10 Ashland, Ky.
	WALR 1210 100 Zanesville, Ohio	WBOQ 860 50000	WCNW 1500 10 Brooklyn, N. Y.
	WAML 1310 100	New York, N. Y. WBOW 1310 100	WCOA 1340 50
	Laurel, Miss. WAPI 1140 5000	Terre Haute, Ind.	Pensacola, Fla. WCOC 880 50
	Birmingham, Ala.	Red Bank, N. J.	Meridian, Miss.
	Chattanooga, Tenn.	WBRC 930 1000 Birmingham, Ala.	WCOL 1210 10 Columbus, Ohio
	WARD 1400 500 Brooklyn, N. Y.	WBRE 1310 100 Wilkes-Barre, Pa.	WCOP 1120 50 Boston, Mass.
	WASH 1270 500	WBRK 1310 100	WCPO 1200 10
	Grand Rapids, Mich	Pittsfield, Mass. WBRY 1530 1000	Cincinnati, Ohio
	Atlanta, Ga. WATR 1190 100	Waterbury, Conn. WBT 1080 50000	Chicago, Ill. WCSC 1360 50
	Waterbury, Conn.	Charlotte, N. C.	Charleston, S. C.
	Louisville, Ky.	WBTM 1370 100 Danville, Va.	WCSH 940 100 Portland, Me.
	WAWZ 1350 500 Zarephath, N. J.	WBZ 990 50000 Boston, Mass.	WDAE 1220 100 Tampa, Fla.
	WAYX 1200 100 Wayeross, Ga.	WBZA 990 1000	WDAF 610 100
	WAZL 1420 100	Springfield, Mass. WCAD 1220 500	WDAH 1310 10
	Hazleton, Pa. WBAA 890 500	Canton, N. Y. WCAE 1220 1000	El Paso, Texas WDAS 1370 10
	West Lafayette, Ind. WBAL 760 2500	Pittsburgh, Pa.	Philadelphia, Pa.
	Baltimore, Md.	WCAL 1250 1000 Northfield, Minn.	WDAY 940 100 Fargo, N. Dak.
	WBAL 1060 10000 Baltimore, Md.	WCAM 1280 500 Camden, N. J.	WDBJ 930 1000 Roanoke, Va.
	WBAP 800 50000 Fort Worth, Texas	WCAO 600 500	WDBO 580 100
7.0	WBAX 1210 100	Baltimore, Md. WCAP 1280 500	Orlando, Fla. WDEL 1120 25
	Wilkes-Barre, Pa. WBBC 1400 500	Asbury Park, N. J. WCAT 1200 100	Wilmington, Del.
	Brooklyn, N. Y.	Rapid City, S. Dak.	Waterbury, Vt.
	WBBL 1210 100 Richmond, Va.	WCAU 1170 50000 Philadelphia, Pa.	WDGY 1180 1006 Minneapolis, Minn.
	WBBM 770 50000 Chicago, Ill.	WCAX 1200 100 Burlington, Vt.	WDNC 1500 100 Durham, N. C.
	WBBR 1300 1000	WCAZ 1070 100	WDOD 1280 1000
	Brooklyn, N. Y. WBBZ 1200 100	Carthage, Ill. WCBA 1440 500	Chattanooga, Tenn. WDRC 1330 1000
	Ponca City, Okla. WBCM 1410 500	Allentown, Pa. WCBD 1080 5000	Hartford, Conn.
	Bay City, Mich.	Chicago, Ill.	WDSM 1200 100 Superior, Wis.
			_

WPMS 1370		WDSU 1250 1000		WFIL 560	1000		WHB 860	1000
Champaten, III				Philadelphia, Pa.	1000		Kansas City, Mo.	100
Tube				Clearwater, Fla.	2000		Selma, Ala.	
WEAR 1370 100 WHBF 1210 100 WHAF 1210 100 WEAR 1370 100 WEAR 1370 1000 WEAR 1370 1000 WEAR 1370 1000 Sheboygan, Wis. WHBL 1390 1000 Sheboygan, Wis. WHBL 1390 1000 Sheboygan, Wis. WHBL 1300 1000 Sheboygan, Wis. WHBL 1310 1000 Sheboygan, Wis. WHBL 1310 1000 Sheboygan, Wis. WHBL 1210 1000 Sheboygan, Wis. WHEC 1210 1000 Sheboygan, Wis. WHIS 1210					500			100
WEAN				WFOR 1370	100		WHBF 1210	100
WEAT					100			1000
Eau Claire, Wis. WEBG 1230 1000 WGAR 1500 Duluth, Minn. WEBG 1210 100 WGAR 1500 Harrisburk, Ill. WEBG 1210 100 WGAR 160 Harrisburk, Ill. WEBG 1210 100 WGAR 1650 Oliceaco, Ill. WHO 1310 100 WGAR 1650 Oliceaco, Ill. WHO 1310 100 WGAR 1650 Oliceaco, Ill. WHO 1310 100 WGAR 1650 Oliceaco, Ill. WELL 1420 100 WGAR 1650 Oliceaco, Ill. WELL 1420 100 WGAR 1650 Oliceaco, Ill. WEMF 1310 100 WGAR 1650 Oliceaco, Ill. WEMF 1310 100 WGAR 1650 Oliceaco, Ill. WHO 1310 WGAR 1650 Oliceaco, Ill. WHO 1310 WGAR 1650 Oliceaco, Ill. WGAR 1650 500 WGAR 1650 Oliceaco, Ill. WHO 1310 WHO 1650 Oliceaco, Ill. WHO 1310 WHO 1650 Oliceaco, Ill. WGAR 1650 500 WGAR 1650 Oliceaco, Ill. WGAR 1650 500 Oliceaco, Ill. WGAR 1650 500 Oliceaco, Ill. WGAR 1650 500 Oliceaco, Ill. WHO 1310 Newport News, Va. WHE 1500 Cliceco, Ill. WGAR 1650 500 Oliceaco, Ill. WHO 1650 500 Oliceaco, Ill. WGAR 1650 500 Olice							Newark, N. J.	
WEBC 1290 1000					100		WHBL 1300 Shebovgan, Wis.	250
WEBQ 1210 100					100	-	WHBQ 1370	100
Harrisburg, Ill. Portland, Me. Anderson, Ind. WEBR 1310 100 Cleveland, Ohlo Cleveland, O								100
WEBR 1310			L		500			100
WEDC 1210 100		WEBR 1310 100		WGAR 1450	500			100
Athens. Ga. Calumer, Mich.	ļ		-		100			100
WEEL 1420 1000 St. Louis, Mo. WEEL 1590 1000 St. Louis, Mo. WEV 1500 1000 1000 1000 1310 1000 1000 1310 1000 1000 1310 1000 1000 1310 1000	1			Athens, Ga.		- A		
WEEL \$50 1000 1			1		100			1000
WeEU \$30 1000 Now 1000 New 1000 New 1420 100 New 1310 New 131			-	WGBF 630	500		WHDL 1400	250
Rending, Pa. Stranton, Pa. Portsmouth, N. H.			-		500			250
New Haven, Conn. Gulfport, Miss. Rochester, N. Y.							Portsmouth, N. H.	
WELL 1420 100 Battle Creek, Milch. WEMP 1310 100 Chicago, III. WGH 1310 100 NewPort News, Va. WHFC 1420 100 Chicago, III. WGH 1310 100 Chicago, III. WGH 1370 100 Chicago, III. WHO 1260 1260 Dayton, Ohio Evansville, Ind. WGL 1370 100 WGL 1370 100 WHIP 1480 5000 Elmira, N. Y. WESG 850 1000 Chicago, III. WGL 1370 100 WGN 720 50000 WHIP 1480 5000 Hammond, Ind. WHIS 1410 500 Hammond, Ind. WHIS 1300 1000 Hammond, Ind. WHIS 1300 1000 Hammond, Ind. WHIS 820 250 Greensburg, Pa. WEW 760 1000 Hammond, Ind. WGRY 1210 100 Hammond, Ind. WHIS 1390 1000 Hammond, Ind. WHIS 820 250 Greensburg, Pa. WHIS 820 250 Hammond, Ind. Hammond, Ind. Hammond, Ind. WHIS 820 250 Hammond, Ind. WHIS 820 250 Hammond, Ind. Hammond, Ind. WHIS 820 250 Hammond, Ind. Hammond, Ind. WHIS 820 20 250 Hammond, Ind. Hammo					100			500
Battle Creek, Mich. WEMP 1310 100 WGHF 1310 100 WHFC 1420 100 Ohego, Ill. WHFC 1370 100 Dayton, Ohio Dayton, Ohio Dayton, Ohio Dayton, Ohio WHIP 1480 5000 Dayton, Ohio Dayton, Ohio WHIP 1480 5000 Dayton, Ohio WHIP 1480 5000 WHIS 1410 500 Dayton, Ohio Dayton, Ohio WHIS 1410 500 Dayton, Ohio Dayt		1			500		WHEF 1500	100
Milwaukee, Wis. Newport News, Va. Cloero, Ill.		Battle Creek, Mich.			100			100
WENR 870 50000 Chicago, Ill. Dayton, Ohio Chicago, Ill. WEOA 1370 100 Fort Wayne, Ind. WHIP 1480 5000 Hammond, Ind. WESG 850 1000 Chicago, Ill. WGN 720 50000 Hammond, Ind. WHIS 1410 500 Hammond, Ind. WESG 850 1000 Chicago, Ill. Biuefield, W. Va. WEST 1200 100 WGNY 1210 100 WGNY 1210 100 WHIS 1410 500 WGNY 1210 100 WGNY 1210 100 WGNY 1210 100 WHIS 1300 1000 WGR 550 1000 WHIK 1390 1000 Cieveland, Ohio WHIS 1310 N. Y. WEW 760 1000 WGR 550 1000 WHIS 1370 1000 WGR 1370 250 WHIS 1370 1000 WGR 1370 250 WHIS 1370 1000 WGRM 1210 100 WHIS 1370 1000 WGRM 1210 1000 WGRM 1210 1000 WGST 890 1000 New York, N. Y. WFAA 1200 1000 WGTM 1310 1000 WGTM 1310 1000 WHOM 1450 2500 WHIS 1370 1000 WGTM 1310 1000 WGTM 1310 1000 WHIS 1370 1000 WHIS 1230 WHIS 1230 1000 WHIS 1230 WHIS 1230 WHIS 1230 WHIS 1]				1 .		Cicero, Ill.	
WEOA 1370		WENR 870 50000			250			1000
Evansylle, Ind. Fort Wayne, Ind. Hammond, Ind. WESG 850 1000 WGN 720 50000 WHIS 1410 500 Emilra, N. Y. WEST 1200 100 New Syork, N. Y. WEVD 1300 1000 Albany, Ga. WHKC 640 500 St. Louis, Mo. WGRC 1370 250 WHLB 1370 1000 WGRM 1210 100 WHN C 640 500 WHAC 640 500 WEXL 1310 50 WGRM 1210 100 WGRM 1210 100 WHIB 1370 1000 WGRM 1210 100 WHN 1010 1000 New York, N. Y. WFAB 1300 1000 Atlanta, Ga. WFAB 1300 1000 WGTM 1310 100 WGTM 1310 100 WGTM 1310 100 WGTM 1310 100 WHOM 1450 250 WGST 890 5000 WGST 890 5000 WGST 890 5000 WGST 890 5000 WHOM 1450 250 WHOM 1450 250 WGST 890 5000 WHOM 1450 250 WGST 890 5000 WHOM 1450 250 WGST 890 5000 WG			-		100		WHIP 1480	5000
Eimira, N. Y. West 1200 100 West 1210 100 Newburgh, N. Y. Wev 1300 1000 New York, N. Y. Wew 760 1000 St. Louis, Mo. West 1310 50 West 1310 50 West 1310 1000 Mest 131		Evansville, Ind.			50000			500
WEST 1200					30000		Bluefield, W. Va.	
WEVD 1300 1000		WEST 1200 100			100			250
New York, N. Y. Albany, Ga. Cleveland, Ohio WEW 760 1000 Buffalo, N. Y. Columbus, Ohio WHKC 640 500 Columbus, Ohio WHKC 640 500 Columbus, Ohio WHKL 1310 100 Columbus, Ohio WHKL 1310 100 WHLB 1370 100 WHLB 1370 100 WHLB 1370 100 WHM 1010 1000 New York, N. Y. WHAB 1300 1000 New York, N. Y. WFAM 1200 100 WGTM 1310 100 WGTM 1310 University of the property of t				Newburgh, N. Y.	100			1000
St. Louis, Mo. Buffalo, N. Y. Columbus, Ohio WGR St. Louis, Mo. WGR St. Louis, Mo. WGRC St. Louis, Mo. WGRC St. Louis, Mo. WGRC St. Louis, Mo. WGRC St. Columbus, Ohio WGRM St. Columbus, Ohio WHLB St. St. Columbus, Ohio WGRM St. Columbus, Ohio WHLB St. Columbus, Ohio WGRM St. Columbus, Ohio WHLB St. Columbus, Ohio WHLB St. Columbus, Ohio WHLB St. Columbus, Ohio WHLB St. Columbus, Ohio WHN St. Columbus, Ohio Columbus,	l			Albany, Ga.				
WEXL 1310 50 WGRC 1370 250 WHLB 1370 100 Royal Oak, Mich. WFAA 800 50000 WGRM 1210 100 WHN 1010 100 New York, N. Y. WHO 100 New York, N. Y. WHO 100 New York, N. Y. WHO 100 South Bend, Ind. WGTM 1310 100 WHP 1400 1450 250				Buffalo, N. Y.	1000			300
WFAA 800 50000 Grenada, Miss. WHA 1010 1000 New York, N. Y.		WEXL 1310 50		WGRC 1370	250			100
Dalias, Texas Grenada, Miss. New York, N. Y.	ļ		<u> </u>		100	-		1000
WFAB 1300 1000 New York, N. Y. Atlanta, Ga. Des Moines, Iowa New York, N. Y. WGTM 1310 100 WHOM 1450 250								50000
WFAM 1200 100					1000			
South Bend, Ind. Wison, N. C.	-		-	WGTM 1310	100		WHOM 1450	250
WFAS 120		South Bend, Ind.			1000	-		500
WFBC 1300 1000 WGY 790 5000 Madison, Wis. WBG 1310 100 Madison, Wis. WHA 940 5000 Madison, Wis. WHBG 970 100 Glenside, Pa. WHA 1210 250 Syracuse, N. Y. WFBM 1330 1000 WHAL 950 500 Mismapple 1310 100 MHAL 950 500 Mismapple 1310 100 MHAL 950 500 Mismapple 1310 100 MHAM 1150 50000 Mismapple 1310 100 MHAM 1150 50000 Mismapple 1310 100 MHAM 1150 50000 Mismapple 1310 100 Mismapple 1				Indianapolis, Ind.				
WFBG 1310 100 Madison, Wis. WiBG 970 100 Madison, Wis. WiBM 1370 100 Syracuse, N. Y. WFBM 1230 1000 Saginaw, Mich. WiBM 1370 100 Jackson, Mich. WiBM 1270 100 Saginaw, Mich. WiBM 1270 100 Saginaw, Mich. WiBM 1370 100 WiBM 1270 100 Saginaw, Mich. WiBW 1210 100 WiBM 150 South 150 So		WFBC 1300 1000						1000
Altoona, Pa. Madison, Wis. Glenside, Pa.	ļ			WHA 940			WIBG 970	100
WFBL 1360 1000 Syracuse, N. Y. Greenfield, Mass. Jackson, Mich. WFBM 1230 1000 Saginaw, Mich. Poynette, Wis. WFBR 1270 500 Rochester, N. Y. WFBM 1310 100 WHAM 1150 50000 WHAM 1150 50000 WIBW 580 1000 Topeka, Kans. WFDF 1310 100 WHAS 820 50000 Utlea, N. Y. WFAZ 1340 500 WHAT 1310 100 WHAT 1310 100 WHAT 1310 100 Ashtabula, Ohlo WHAZ 1300 1000 WHAZ 1		Altoona, Pa.			250	-		100
WFBM 1230 1000 Saginaw, Mich. Poynette, Wis. WFBR 1270 500 Baltimore, Md. WFDF 1310 100 Flint, Mich. WFEA 1340 500 Manchester, N. H. WHAZ 1300 1000 Manchester, N. H. WHAZ 1300 1000 WHA				Greenfield, Mass.			Jackson, Mich.	
WFBR 1270 500 WHAM 1150 50000 WIBW 580 1000 Rochester, N. Y. WFDF 1310 100 WHAS 820 50000 WIBX 1200 100 WIBX 1200 1000		WFBM 1230 1000			500			100
Baltimore, Md. Rochester, N. Y. Topeka, Kans.				WHAM 1150	50000		WIBW 580	1000
WFDF 1310 100		Baltimore, Md.			50000		-1	100
WFEA 1340 500 WHAT 1310 100 WICA 940 25 Manchester, N. H. WHAZ 1300 1000 Ashtabula, Ohlo					30000		Utica, N Y.	
WHAZ 1300 1000		WFEA 1340 500		WHAT 1310	100			250
Troy, N. Y.	-	Manchester, N. H.			1000		ASARADUIA, OHIO	
				Troy, N. Y.			-	
				-				

	WICC 600 Bridgeport, Conn.	500	WKAQ 1240 1000 San Juan, P. R.	WMAS 1420 100 Springfield, Mass.
	WIL 1200 St. Louis, Mo.	100	WKAR 850 1000	WMAZ 1180 1000
	WILL 580	1000	East Lansing, Mich.	Macon, Ga. WMBC 1420 100
	Urbana, III. WILM 1420	100	Miami Beach, Fla.	Detroit, Mich.
	Wilmington, Del.		East Dubuque, III.	Peoria, III.
	WIND 560 Gary, Ind.	1000	WKBH 1380 1000 LaCrosse, Wis.	WMBF 610 1000 Miami, Fla.
	WINS 1180 New York, N. Y.	1000	WKBN 570 500	WMBG 1350 500
	WIOD 610	1000	Youngstown, Ohio WKBO 1200 100	Richmond, Va. WMBH 1420 100
	Miami, Fla. WIP 610	1000	Harrisburg, Pa.	Joplin, Mo. WMB(1080 5000
	Philadelphia, Pa.		Richmond, Ind.	Chicago, Ill.
	WIRE 1400 Indianapolis, Ind.	1000	WKBW 1480 5000 Buffalo, N. Y.	WMBO 1310 100 Auburn, N. Y.
	WIS 560 Columbia, S. C.	1000	WKBZ 1500 100 Muskegon, Mich.	WMBQ 1500 100
	WISN 1120	250	WKEU 1500 100	Brooklyn, N. Y. WMBR 1370 100
	Milwaukee, Wis. WJAC 1310	100	Griffin, Ga. WKOK 1210 100	Jacksonville, Fla. WMBS 1420 250
	Johnstown, Pa. WJAG 1060	1000	Sunbury, Pa.	Uniontown, Pa.
	Norfolk, Neb.		WKRC 550 1000 Cincinnati, Ohio	WMC 780 1000 Memphis, Tenn.
	WJAR 890 Providence, R. I.	1000	WKY 900 1000 Oklahoma City, Okla.	WMCA 570 1000 New York, N. Y.
	WJAS 1290 Pittsburgh, Pa.	1000	WKZO 590 1000	WMEX 1500 100
	WJAX 900	1000	Kalamazoo, Mich. WLAC 1470 5000	Boston, Mass. WMFD 1370 100
	Jacksonville, Fla. WJBC 1200	100	Nashville, Tenn. WLAK 1310 100	Wilmington, N. C. WMFF 1310 100
1	Bloomington, Ill.	1	Lakeland, Fla.	Plattsburg, N. Y.
	WJBK 1500 Detroit, Mich.	100	WLAP 1420 100 Lexington, Ky.	WMFG 1210 100 Hibbing, Minn.
	WJBL 1200	100	WLAW 680 1000 Lawrence, Mass.	WMFJ 1420 100
,	Decatur, Ill. WJBO 1120	500	WLB 1250 1000	Daytona Beach, Fla. WMFO 1370 100
	Baton Rouge, La. WJBW 1200	100	Minneapolis, Minn. WLBC 1310 100	Decatur, Ala. WMFR 1200 100
	New Orleans, La.		Muncie, Ind.	High Point, N. C.
	WJBY 1210 Gadsden, Ala.	100	WLBL 900 5000 Stevens Point, Wis.	WMIN 1370 100 St. Paul, Minn.
	WJDX 1270 Jackson, Miss.	1000	WLBZ 620 500 Bangor, Me.	WMMN 890 500 Fairmont, W. Va.
١.	WJEJ 1210	50	WLEU 1420 100	WMPC 1200 100
	Hagerstown, Md. WJIM 1210	100	Erie, Pa. WLLH 1370 100	Lapeer, Mich. WMPS 1430 500
	Lansing, Mich.	20000	Lawrence, Mass.	Memphis, Tenn.
	Chicago, Ill.		Lowell, Mass.	WMSD 1420 100 Sheffield, Ala.
	WJMS 1420 (ronwood, Mich	100	WLMU 1210 100 Middlesboro, Ky	WMT 600 1000 Cedar Rapids, Iowa
1	WJNO 1200 V. Palm Beach, Fla	100	WLNH 1310 100	WNAC 1230 1000
,	WJR 750	50000	Laconia, N. H. WLS 870 50000	Boston, Mass. WNAD 1010 1000
	Detroit, Mich.	250	Chicago, Ill. WLTH 1400 500	Norman, Okla.
7	Tuscaloosa, Ala.	10000	Brooklyn, N. Y.	WNAX 570 1000 Yankton, S. D.
١ ا	Vashington, D. C.		Lynchburg, Va	WNBC 1380 250 New Britain, Conn.
	WJTN 1210 Jamestown, N. Y.	100	WLW 700 500000 Cincinnati, Ohio	WNBF 1500 100 Binghamton, N. Y.
١ ا	WJW 1210	100	WMAL 630 250	WNBH 1310 100
	Akron, Ohio NJZ 760 s	50000	Washington, D. C. WMAQ 670 50000	New Bedford, Mass. WNBX 1260 500
2	New York, N. Y.		Chicago, Ill.	Springfield, Vt.

	_		_	
WNBZ 1290	100	Raleigh, N. C.	1000	WSFA 1410 500 Montgomery, Ala.
Saranac Lake, N. WNEL 1290	1000	WQAM 560	1000	WSGN 1310 108
San Juan, P. R.	_	Miami, Fla.		Birmingham, Ala.
New York, N. Y.	1000	WQAN 880 Scranton, Pa.	500	WSIX 1210 100 Nashville, Tenn.
WNLC 1500	100	WQBC 1360	1000	WSJS 1310 100
New London, Co.		Vicksburg, Miss.	1000	Winston-Salem, N. C. WSM 650 50000
WNNY 1420 Watertown, N. N	100	St. Albans, Vt.	1000	Nashville, Tenn.
WNOX 1010	1000	WQXR 1550	1000	WSMB 1320 1000
Knoxville, Tenn.		New York, N. Y. WRAK 1370	100	New Orleans, La. WSMK 1380 200
New York, N. Y.	1000	Williamsport, Pa.	100	Dayton, Ohio
WOAI 1190	50000	WRAW 1310	100	WSNJ 1210 100 Bridgeton, N. J.
San Antonio, Tex WOC 1370	100	Reading, Pa. WRAX 920	1000	WSOC 1210 100
Davenport, Iowa	100	Philadelphia, Pa.		Charlotte, N. C.
WOI 640	5000	WRBL 1200 Columbus, Ga.	100	WSPA 920 1000 Spartanburg, S. C.
Ames, Iowa WOKO 1430	500	WRC 950	500	WSPD 1340 1000
Albany, N. Y.	L	Washington, D. C		Toledo, Ohio
WOL 1310	100	WRDO 1370 Augusta, Me.	100	WSPR 1140 500 Springfield, Mass.
Washington, D. WOLS 1200	100	WRDW 1500	100	WSUI 880 500
Florence, S. C.	-	Augusta, Ga.		Iowa City, Iowa WSUN 620 1000
WOMI 1500 Owensboro, Ky.	100	WREC 600 Memphis, Tenn.	1000	St. Petersburg, Fla.
WOMT 1210	100	WREN 1220	1080	WSVA 550 500
Manitowoc, Wis.		Lawrence, Kans.		Harrisonburg, Va.
WOOD 1270 Grand Rapids, M	500 fleh.	WRGA 1500 Rome, Ga.	100	Buffalo, N. Y.
WOPI 1500	100	WRJN 1370	100	WSYB 1500 100
Bristol, Tenn.		Racine, Wis.	500	Rutland, Vt. WSYR 570 1000
WOR 710 Newark, N. J.	50000	Richmond, Va.	300	Syracuse, N. Y.
WORC 1280	500	WROK 1410	500	WTAD 900 1000 Quincy, Ill.
Worcester, Mass WORK 1320	1000	Rockford, III.	100	WTAG 580 1000
York, Pa.	1000	Knoxville, Tenn.	100	Worcester, Mass.
WORL 920	500	WRR 1280	50 0	WTAL 1310 100 Tallahassee, Fla.
Boston, Mass.	750	Dallas, Texas WRTD 1500	100	WTAM 1070 50000
Columbus, Ohio		Richmond, Va.		Cleveland, Ohio
WOV 1130	1000	WRUF 830 Gainesville, Fla.	5000	WTAQ 1330 1000 Green Bay, Wis.
New York, N. Y	1000	WRVA 1110	5000	WTAR 780 1000
Omaha, Neb.		Richmond, Va.		Norfolk, Va. WTAW 1120 500
WOWO 1160 Fort Wayne, Ind	10000	WSAI 1330 Cincinnati, Ohio	1000	College Station, Tex.
WPAD 1420	100	WSAJ 1310	100	WTAX 1210 100
Paducah, Ky.	400	Grove City, Pa.		Springfield, Ill. WTBO 800 250
WPAR 1420 Parkersburg, W.	Va. 100	WSAL 1200 Salisbury, Md.	250	Cumberland, Md.
WPAX 1210	100	WSAN 1440	500	WTCN 1250 1000
Thomasville, Ga	100	Allentown, Pa. WSAR 1450	1000	Minneapolis, Minn. WTEL 1310 100
WPAY 1370 Portsmouth, Ohi		Fall River, Mass.		Philadelphia, Pa.
WPEN 920	1000	WSAU 1370	100	WTHT 1200 100 Hartford, Conn.
Philadelphia, Pa WPG 1100	5000	Wausau, Wis.	100	WTIC 1040 50000
Atlantic City, N	I. J.	Rochester, N. Y		Hartford, Conn.
WPRA 1370 Mayaguez, P. R	100	WSAZ 1190 Huntington, W.	1000 Ve	WTJS 1310 100 Jackson, Tenn.
WPRO 630	500	WSB 740	50000	WTMJ 620 1000
Providence, R.	1.	Atlanta, Ga.		Milwaukee, Wis.
WPRP 1420 Ponce, P. R.	100	WSBC 1210 Chicago, Ili.	100	WTMV 1500 100 East St. Louis, III.
ronce, r. R.		WSBT 1360	500	
		South Bend, Ind		

	7 week		
1	WTNJ 1280 500 Trenton, N. J.	XEBL 1220 50 Mazatlan, Sin.	XEL 1100 250 Mexico City, D. F.
	WTOC 1260 1000	XEBO 1310 25	XELA 1240 50
 	Savannah, Ga. WTOL 1200 100	Irapuato, Guan. XEBP 1150 250	Saltillo, Coah. XELO 580 10000
Ĺ	Toledo, Ohio	Durango, Dgo,	Tijuana, B. Cfa.
1	WTRC 1310 100 Elkhart, Ind.	XEBS 1340 200 Mexico City, D. F.	XELZ 1370 100 Mexico City, D.F.
	WVFW 1400 500	XEBU 1200 50	XEMO 860 5000
	Brooklyn, N. Y. WWAE 1200 100	Chihuahua, Chih. XEBX 640 250	Tijuana, I. C. XEMU 580 250
-	Hammond, Ind.	Sabinas, Coah.	Piedras Negras, Coah.
	Detroit, Mich.	Mexico City, D. F.	XEMX 1280 100 Mexico City, D. F.
	WWL 850 10000 New Orleans, La.	XEC 1150 100 Tijuana, L. C.	XEN 780 1000
	WWNC 570 1000	XECZ 1370 100	Mexico City, D. F. XENC 860 50
	Asheville, N. C.	San Luis Potosi, S.L.P.	Mexico City, D. F. XENT 910 150000
	Woodside, N. Y.	Guadalajara, Jal.	Nuevo Laredo, Tams.
	WWSW 1500 100 Pittsburgh, Pa.	XEDA 1220 200 Gral. Anaya, D. F.	XEOK 760 2500 Tijuana, L. C.
	WWVA 1160 5000	XEDF 810 100	XEP 1160 500
	Wheeling, W. Va. WXYZ 1240 1000	Nuevo Laredo, Tams.	Juarez, Chih. XEPN 730 100000
	Detroit, Mich.	Villa Acuna, Coah.	Piedras Negras, Coah.
	Whippany, N. J.	XEDP 1080 500 Mexico City, D. F.	Villa Acuna, Coah.
	W3XJ 1060 100 College Park, Md.	XEDW 1150 20 Minatitian, Ver.	XERB 730 100000
 	W8XO 700 500000	XEE 1210 50	Rosarito Beach, B. Cfa.
	Cincinnati, Ohio XEAA 750 200	Durango, Dgo.	Tampieo, Tams.
	Mexicali, B. C.	Justez, Chih.	Monterrey, N. L.
İ	XEAC 980 1000 Tijuana, L. C.	XEFA 1180 500 Tacuba, D. F.	XETB 1310 125 Torreon, Coah.
	XEAF 990 750	XEFB 870 200	XETF 1220 12
<u> </u>	Nogales, Son. XEAG 1310 10	Monterrey, N. L. XEFC 550 100	Veracruz, Ver. XETH 1210 100
<u> </u>	Cordoba, Ver.	Merida, Yuc.	Puebla, Pue.
	Mexico City, D. F.	XEFE 980 250 Nuevo Laredo, Tams.	XEU 1010 250 Veracruz, Ver.
	XEAL 660 1000 Mexico City, D. F.	XEFI 1440 250 Chihuahua, Chih.	XEW 890 50000
<u> </u>	XEAM 750 25	XEFM 1160 20	Mexico City, D. F XEX 1310 125
 	Matamoros, Tams.	Leon, Gto. XEFO 1010 50	Monterrey, N. L.
	Mexicali, B. C.	Cananea, Son.	XEXB 1270 250 Jaiapa, Ver.
	XEAP 1340 50 Obregon, Son.	XEFV 1210 100 Juarez, Chih	XEXD 1340 350
	XEAS 1160 100	XEFW 1310 300	Jalapa, Ver. XEXE 1270 17
<u> </u>	Saltillo, Coah. XEAT 1210 250	Tampico, Tams. XEG 1230 250	Texcoco, D. F. XEXH 1250 250
	Parral, Chih. XEAW 960 100000	Monterrey, N. L.	San Luis Potosi, S.L.P.
<u></u>	Reynosa, Tams.	XEH 720 250 Monterrey, N. L.	XEXM 610 500 Mexico City, D. F.
	XEB 1030 10000 Mexico City, D. F.	XEI 1370 125 Morelia, Mich.	XEXS 1310 100
- 	XEBA 1080 20	XEJ 1020 1000	Mexico City, D. F. XEYO 610 500
	Guzman, Jal. XEBG 820 1000	Juarez, Chih. XEJP 1130 100	Mexico City, D. F.
	Tijuana, B. Cfa.	Mexico City, D. F.	XEZ 630 500 Merida, Yuc.
	XEBH 930 500 Hermosillo, Sonora	XEJW 870 500 Mexico City, D. F.	ZNS 540 400 Nassau, Bahamas
	XEBI 1000 25	XEK 890 100	YSS 640
	Aguascallentes, Ags. XEBK 1080 100	Mexico City, D. F. XEKL 1240 500	San Salvador, E. S.
	Neuvo Laredo, Tams.	Leon, Guan.	

The Fanning Island "Station"

In response to a report sent to station VQ1AB, which announced its location as Fanning Island, J. E. Gardner of Cleveland received a letter from Mr. F. N. Harry which is quoted here in full:

"Two letters have arrived from you addressed to VQ1AB Shortwave Radio Station Fanning Island. I am the cable operator here and am in charge of the post office. As there are only two other white men apart from the cable staff of ten, the post office is more or less for our own convenience and therefore run by us.

"Whoever is signing himself as VQ1AB has been misleading a very large number of you radio chaps. I get several requests so addressed every mail and instead of returning them marked 'Unknown' I have been opening them and replying individually.

"Several years ago there was a chap on Fanning Island with that call but you can take my word for it that there is definitely no one working an amateur radio station here now. . . .

"Your Christmas card and greetings were a kind thought. We do two years on the Island, and as we arrived on Christmas Eve, 1936, this is our second Christmas spent here, although the first was spent mostly in unpacking our goods.

"We have a regular boat every three months but have been very fortunate lately in having a Coast Guard Cutter from Honolulu calling. The last one was the 'Roger B. Taney' in October and expect she will be calling again towards the end of January, which will be our next mail."

At DEADLINE ...

Construction Permits for new stations have been granted to Harwell V. Shepart of Denton, Texas and to the Cache Valley Broadcasting Co. of Logan, Utah. The Denton station will work on 1420 kcs. with 100 watts, daytime only. The Logan station was assigned 1500 kcs. with 100 watts, fulltime.

The call letters KPAB have been assigned to the new Laredo, Texas station on 1500 kcs. The Beaumont, Texas station on 1420 kcs. will have the call letters KRIC.

From the operators of the Swedish shortwave stations, we learn that SBO transmits on 6065 kcs. and SBP operates on 11705 kcs. Station SM5SX at Stockholm transmits on 15155 kcs. All these stations employ 500 watts power. The address to which reports should be sent is Telegrafverket Tjanstebrev Nr. 5, Stockholm.

The American Telephone and Telegraph Co., Long Lines Department, has received authorization to utilize a communication band width of 10 kilocycles for commercial radio telephony. This company is developing an improved "band splitting" type of privacy apparatus. The stations which will use this new type of secret transmission are WKA, WLA, WMA, WNA, WOA and WPM.

Some Australian changes made during the past month are: 4TO Townsville, from 1160 to 780 kcs.; 4RO Rockhampton, from 1330 to 1080 kcs: 2AD Armidale, from 1080 to 1130 kcs; 4BU Bundaberg, from 1480 to 1330 kcs; 4MK Mackay, from 1080 to 1390 kcs.

Some new Mexican stations recently licensed, according to Samuel A. Meyer of Rochester, N. Y., and Harry F. Hawkins of Manchester, N. H., include a station XEOJ, 600 kcs., power and location not known; XEFQ, 1010 kcs., 50 watts, Cananea,

Son.; XEBP, 1150 kcs., 250 watts, Durango, Dgo.; XEFM, 1160 kcs., 20 watts, Leon, Gto.; XEXX, 1170 kcs., 1 kilowatt, Mexico City; XEAZ, 1230 kcs., 200 watts, Zacatecas, Zac.; XEME, 1240 kcs., 50 watts, Merida, Yuc.; XEBU, 1250 kcs., 50 watts, Chihuahua, Chih.; XEAI, 1250 kcs., 500 watts, Mexico City; XEAU, 1320 kcs., Tijuana, B. Cfa. It has been reported that KUMA will move from Yuma to Flagstaff, Arizona.	Time on the Air Apr. '38, p. 62 Shortwaves Broadcasters, with Time on Air Mar. '38, p. 57 North American Police Apr. '38, p. 47 6 megs. to 400 megs. June '37, p. 50 Owners and Addresses June '37, p. 50 By Locations Apr. '37, p. 61 By Calls Apr. '37, p. 65 Foreign Broadcast By Frequencies Dec. '36, p. 43 By Locations Dec. '36, p. 52 By Calls Dec. '36, p. 57 Asia Feb. '38, p. 46 Oceania Jan. '38, p. 47 South America May '27, p. 50 Europe June '37, p. 49 Long Waves
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