# RAD IO EX

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The All-Wave Radio Log Authority

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No. 134

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DECEMBER, 1939

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Eleven Articles to Help You Hear Distance Nine Lists of Radio Stations





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# RADIO INDEX



SIXTEENTH YEAR

DECEMBER 1, 1939

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No. 134

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# HAM HOUNDING

By HUGH HUNTEM

At present we are in a very peculiar period as far as radio listening is con-Propaganda is being dispersed by the bushel and new frequencies are being used so fast by foreign stations that it is almost impossible for any radio log to keep up with them.

The ham bands have been affected materially, too, by changed world conditions. As we go to press, amateur radio stations of these countries are off the air: England, Scotland, Northern Ireland, Wales, Poland, Germany, Belgium, Czecho-Slovakia (or what is left of it), Danzig, Switzerland, Jugoslavia, Cuba, Canada, British West Indies, Australia, Zealand, France, Netherlands, Curacao, and Dutch East Indies.

Even as we write this, a South African ham is bidding goodbye to some of his friends.

XETAC has called upon all hams in South and Central America to work on the 80-meter band, where there is plenty of room for all of them. At the same time, phone stations from the Latin countries are being heard with increased regularity on the 40-meter band, drowning out, in some cases, the CW signals of U. S. hams.

C. J. Fern, Jr, of Lihue, Hawaii, declares that because of so many bans. nothing much of DX is coming through. He is going to concentrate now on the 160 and five-meter bands and attempt to tune some catches there.

"Five meters is where listeners are really needed," he writes. "Conditions must be observed and recorded to pave the way for possible reliable long-distance communication."

That's the picture, fans. There are possibilities on every band, especially with five and ten meters reaching peaks this month and next.

How many DX listeners log the CW stations? The DX is there, all right, and it takes only a little practice to read the CQ's and calls, since the latter are repeated so many times in a CQ.

Our first amateur in this month's personality parade is a CW ham, CM20P in Havana, Cuba. One of the most active hams in the island; Mario de la Torre is section communications manager for the American Radio Relay League.



This K5AG amateur card is printed in brown, red, black and yellow, and  $3\frac{1}{2}$  by  $8\frac{1}{2}$  inches in size. (Courtesy of Wallace Howe).

He came on the air when he was 10 years old, in 1931. He has two QTH's. In the summer he moves the rig to his father's country home about six miles south of Havana. Since his dad's hobby is meteorology, they both listen to the daily weather reports and are active in time of storms and hurricanes.

CM2OP has WAS, and has worked 75 countries. He's still looking for Asia for his WAC, and when the ban in Cuba has been lifted, will go to work for that

Far Eastern catch.

G2UF—On Harold Bailey's QSL card, printed here, is the word "Television," appearing just under his call letters. The reason for that word is that Harold is very much interested in transmission of pictures by radio, and operated one of the first television theaters in the world back in 1934 at Blackpool, England.

He also is the writer of a small book-let entitled "A Brief Survey of Television, ' which appeared at about the same time. He says that he was operating on 30 lines in the Blackpool theater, and sent along a picture of the antenna and apparatus used.

He has been operating an amateur station since 1919, when the old 1000meter band was used. Afterwards, Harold recalls, they were pushed down to 400 meters.

"In those days there was very little QRM," he reminisced, "and it was surprising the reports that were received over fairly long distances on crystal sets."

HH2MC-The operator of this Haiti station is the chief of the department of public works of the Haitian government, Emile Cadet.

He says that there are about 17 stations on the island, seven of these belonging to the army. Five of those left are on CW (HH3L, HH5PA, HH4AS, HH2ES, and HH2MC). Even some of these are on phone, including HH2MC and HH5PA. Then, those left in the Callbook are on phone, distributed on the various bands.

Emile has worked 99 countries, has sent cards for WBE, BERTA, WAC, and WAS. Most of his SWL reports come from Germany, and he QSL's 100 percent. He is married and has two junior operators. His QRA: Radio HH2MC,

Port-au-Prince, Haiti.

ZL3KX—G. W. Heslop, operator of ZL3KX, paints an inviting picture of New Zealand for the traveler. Many visitors come to New Zealand every year, he writes, to see the world famous Waitomo Caves, Thermal Regions of Rotorna with their hot water springs, pools of boiling mud and geysers, the glaciers at Mount Cook in the snow clad Southern Alps, and the Cold Lakes of the South.

Gwynn, who was licensed in 1936, operates on 80-meter phone and CW, 40-meter CW, and 20-meter phone and CW. He says that most of his spare time is spent in QSO's with hams all over the world.

He states that unlimited operation is allowed ZL hams except on 20 meters, where phone amateurs may operate only from midnight to 7 a.m. each day. Gwynn will QSL all reports for return postage, and his novel card, shown here, is worth the effort to log him.

#### Two Suspended

Hams are being warned to watch the law regarding station operation. The Federal Communications Commission is clamping down on violaters, especially because of European disturbances.

W3SFU, Pottstown, Pa., and W1DIF, Wales, Mass., were both suspended for six months by the FCC, the former for communicating with an unlicensed station and the latter for permitting an unlicensed operator to operate his station and failing to keep an accurate station log

George J. Eder, R811, of Philadelphia, "ham" editor of GCDXC and the WDXA, sends in his picture and some

dope about his listening post.

He has just heard his third Hungarian on 20-meter phone, HA3B, fourth from Alaska, K7GSC, and ES5D for the second time. Although once a BCB DXer, he now devotes his time to the ham bands.

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He has heard 79 countries on 20-meter phone, and since 1935 has heard a total of 1157 phone station outside of the United States. Now he is trying to QSL all states on 10 and 75-meter phone.

John Varga, 4758 West End Ave., Chicago, will send amateurs' addresses to anyone writing to him and enclosing a self-addressed stamped envelope with paper or a stamped post-card. For U. S. amateurs he will give only one to a district unless the person requesting the addresses lives outside of the U. S.

John would also like to know where he can get some SWL cards printed. One place that we know of is Hinds & Edgarton, 19 S. Wells St., Chicago, III.

Who's on the air? Because most of our readers indicate that listing the catches by countries is preferred, we'll start right off and list them that way. Cliff Tavener, of Rosenberg, Texas, wants to know if PK's and KA's should be counted as under Oceania or Asia. Radex lists them both as Oceania.

ALASKA—K7HCX is being heard lately on 20 meter phone. His name is Whitney Lewis, and he lives in Fairbanks, almost on the Arctic Circle.

ARGENTINA—LU1QA, LU5EZ, and LU7AY are being heard regularly. LU2BG, heard on both 10 and 20 meters will OSL.

BELGIAN CONGO—LeRoy Waite, Balston, N. Y., reports that OQ5AB in Elisabethville is the outstanding foreign phone on the 10-meter band between 12 to 1 p.m. OQ5AD is also heard on 10 meters. This African country should be easy to log since OQ5AA (14070), OQ5AE (14400), and OQ5RT (14040) are all on 20 meter phone and well-received when the band is open.

BOLIVIA—CPIBA, the outstanding Bolivian phone, is heard on a frequency

The rig and novel QSL card of Jose M. Sierra, one of the two amateurs in Tangier, International Zone, North Africa. His signals are heard QSA5, R9 in the United States.



of 14055 megs. His name and QRA: Jose Camacho B., Grau 19, Casilla de Correo 15, Sucre.

BRAZIL—PY7QB is a new station. He is Jose Bezerra Marinho, Rua 13 de Maio 616, Natal, Estado de Rio Grande do Norte. PY2MI and PY1AZ are being heard on 10 meters.

BULGARIA—Australian hams were told before hostilities in Europe started to send QSL's for Bulgaria in care of HB9CE, Swiss Shortwave Radio, Zurich, Badenerstr, 68, Switzerland. That still may be in effect even though Swiss stations are off the air.

BURMA—Try for XZ2BH, M. Kyaw Min, Indian Civil Service, Premier's Secretary, Secretariat, Rangoon. He's been heard in the United States on 20-meter phone

CHILE—Here are some frequencies: CE1AH, 14010; CE3CG, 14020; and CE1BC, 14040. CE1AS has been heard

on 20, while CE3CZ is usually heard on 10 meters.

CHINA—Here are some more XU's heard in the United States. Don't forget that these hams are heard best around 7 a.m. in the morning with a north and south antenna. XU8ZA on 14070 was heard by LeRoy Waite. XUIB is being heard. For you CW listeners, XU2JR is coming through.

COSTA RICA—TI4JG seems to be the TI newcomer. Many report him on 14060 phone. TI4AC is the sister station of TI4NRH, operated by Amando Cespedes, Jr., and Lydilia Cespedes on

14.052 megs.

CURACAO—PI5EE says that there are five active hams in Curacao. Two of the others are PJ1BV and PJ3CO. NEVER send cards directly to any of the five, he warns, because hams there are banned. He advises that QSL's should be sent through the American Radio Relay League.

DENMARK-OZ7HL is being heard on 14.125 megs. He is H. W. Larsen, Maagevej 31, 1, Copenhagen N., Den-

mark.

ESTONIA-Since the major European stations are off the air the rigs of smaller countries are pushing signals through into the U S. ES5D used to be the only one heard from Estonia. Now ES5C (14.355) and ES4G (14.080) are being heard, ES5C on CW.

GIBRALTAR—Jack Wells, Phenix. Alabama, reports that ZB2B OSL's with a neat, white card with a small, red call and picture of a tiny castle. Power is only 20 watts. Station is operated by a group of Royal Signal Corps officers.

HUNGARY — HAIK, HA8Q, HA3B are being heard quite often from another country where hams are getting a break by the amateur radio bans. Too, since there are several hams in Hungary, we are expecting reports to roll in telling of others heard over here. HAIK is being heard on the high frequency end of the band. QRA: Post Recherche Station, Gyali ut. 22, Budapest IX. Wellş, Hamilton, Ont. logged him. HA3B (14090), logged by LeRoy Waite, is Joseph Boer, Millenium-sor 1, Nagymaros. HA8Q (14.045) is Janos Gelle, Kiraly utca 72, Ujpest.

INDIA---A fine catch on 20 meter phone is VU2FA, who says that he is only 100 miles from Tibet. He is Major J. N. Atkinson, R.A.M.C, "The Ridge," Kasauli, Simla Hills

ITALY-ITKM is still on the air on about 14020 megs. IIMZ has also been

reported on 14.084 megs.

JAPAN-With DX picking up more and more Japanese stations are being logged by our early-rising DXers. J5CW is being heard on 14.060. Others logged are J7CR (14.009), J7CB (14.110).

and J8Cl (14.105).

JAVA-Jack Wells says that since PK6XX has gone off the air, PK3WI at Lawang is the most consistent signal in He QSL's very his district from Java. promptly with a tan-colored QSL with large brown call-letters. His frequency is 14.050. On 20 meter phone PK2AY (14.030) and PK2LZ are also pounding

LIBERIA---James Kavanaugh, Indiana observer for R and T reports EL7AS, the only report we have heard in the United

States of this station.

LITHUANIA-LYIJ, in Kaunas, logged by many, QSL's promptly with a beautiful, multi-colored card showing the Liberty Monument of Lithuania, reports Jack Wells. LYIAH is being logged on 14.385 megs. He is on CW.

MADAGASCAR-FB8AA still remains the outstanding phone in this country and he is being heard on 10 meters. The QRA: Roger Luzet, Tsaralalana, Tanan-

arive.

MANCHUKUO—The QRA of MX3A is given as H. Matsui, via MX3H QSL Bureau, P.O. Box 30, Shinkyo, Manchukuo.

MEXICO---We wonder how many heard a station on the low frequency end of the 20-meter band recently giving the call as X14, experimental station. heard him about 10:30 p.m., EST, calling TI4AC. XE1CQ and XE2FC are being heard on 10 meters. Robert W. May of Rome, Ga. reports X14 as a Cuban.

NICARAGUA — Don Reukauf (R1295), Sheldon Shallon, and Merton T. Meade all inform me that both YN1IP and YN3DG QSL. YN1IP requires no postage, says Sheldon, and YN3DG requires a dime for his veri. YN1HS, YN1OP, YN1PR, and YN2LT are indifferent QSL-ers, says Merton. YN1FS is a new station, heard in a QSO asking that cards to him be sent via YN1OP. YN1FF also logged on 20 phone.

NIGERIA-LeRoy Waite has a letter which clears up the status of ZD2H and ZD4AB, the latter in the Gold Coast. It is from Art Tomlinson, op of ZD2H, and says, in part: "I think someone is pirating my call on phone. I've never yet used phone. I've had several listener reports giving details of phone QSO's originating from ZD2H. These come mostly from W which leads one to assume that the bootlegger may be located somewhere in America ZD4AB used phone on rare occasions but he is home in England on vacation and is not due back in the Gold Coast until the latter part of November. He is a confirmed CW merchant but perhaps may bring sufficient gear back with him to put out a spot of phone."

NORWAY—LA8J is being heard on 14.120 megs. He is Karl Reime Sivertsen, Langgt. 46, Sandnes. Other Norwegians should be logged unless a ban is imposed, since there are quite a few LA stations.

OCEAN ISLAND—VR4AD has been transferred to Ocean Island from Solomon Island and is probably now on the air with a VR1 call, although we do not know as yet what the call is.

PHILIPPINES—"KA1FH in Manila has one of the most attractive and unusual QSL cards I've yet seen," writes Jack Wells. "It is in the shape of a parallelogram, picturing a native sailboat with the call in white letters on the sail. Colors are green, blue, and red."

KA1CS, KA1AP, and KA1LZ have been logged recently. We've written optimistically to 1CS, 1FH, 1HR, and even to 1ME who is supposed to QSL, have sent enough postage, but still have been unable to get the KA boys to QSL. Maybe we haven't used the right approach since we understand that many of them DO QSL. KA1HR's new QTH: Major Simpson, Ft. McKinley, Rizal.

ROUMANIA—YR5VV has been logged clear up on 14.400 megs., right on the edge of the 14-megacycle phone band.

SAMOA—KH6KKR may be logged on 14.350 megs., and we think he probably is on CW.

SOUTH AFRICA — As we stated earlier, these stations may now be closed. They have been logged nicely on 10 meters, especially 5BZ, 5Q, 6DY, 6FD, 6W, 5T, 4AA, and 2AH. ZS6EG, 5CL, and 5BE were logged on 20 phone. ZS1DE is on CW but it would be nice to get that card. The station is operated by an XYL, Mrs. E. Burger, 115 Main Ave., De Aar.

SPAIN—At last, Jack Wells furnishes us with the QRA of EA7BA, who verifies with a plain QSL with blue letters. It is: Jose Maria Gil Guerra, Sagastas Num. 33, Cadiz, Spain.

SWEDEN—Here are three SM stations pounding through: SM7NU, 14.050 megs.; SM6WE, 14.260 megs.; and SM6VX, 14.095.

UGANDA—The QRA of VQ5WES, heard on 20 meters, is Box 81, Kampola, Uganda.

VATICAN CITY—The first ham ever logged in this small territory in the heart of Rome is HV1A on about 14.000 megs.

That's all, the news we have this month, but with the bands opening up we should have more next issue. May be again remind all of you to send in your reports? They will be welcome.

CHATTER: Merton T. Meade, Kansas City, keeps a list of those stations who QSL for SWL's and also a list of those who don't and who are indifferent..... but he has no reports on whether our ZE1X does or does not QSL....Alton L. Caldwell, Jr., of Brockton, Mass. hears DX through a receiver using a 56 triode super-regenerative detector, 2A5 pentode audio amplifier, with about 180 volts on final plates.....W1ELL of Malden, Mass., has become a member of Radex Club (R1312). He operates on 3.5 and 7-meg. CW mostly and always QSL's for SWL's and hams. His name is Lester Balcom. Welcome to our midst, Les.....Radex converted Robert Atwood, of Washington, D. C., from an occasional DXer into an ardent fan. He's Member R1355 now. His log stands at 24 countries on 20 meter phone..... Carl E. Sylvester, R36, uses a 6-tube Zenith with a 145-ft. inverted L antenna to log his DX.....George Poulain has almost despaired of getting QSL's from UIBW and IITKM....Cliff Tavener is strictly an amateur band listener and has VAC six times with 53 countries verified on 20 meters.

A subscription to RADEX will not only save you money, but will insure regular delivery of your magazine direct to your home each month. Use the subscription blank on page 96.

#### CUBAN CHANGES

Some very recent changes in broadcasting station data have been forwarded to us by Wm. Cunningham of Pasadena, Calif. These changes do not appear in this month's indices, nor in the Month's Changes column as they were received after those sections had been prepared. All these

changes are official.

New Stations-CMAR, Pinar del Rio, 1400 kcs., 200 watts. CMKY, Santiago, 960 kcs., 5 kw. CMZ, Havana, Constitutional Army, 920 kcs., 5 kw. New one kilowatt stations with no call letters assigned are under construction in Santa Clara (570 kcs), Jovellanos (670 kcs), Camaguey (710 kcs), Victoria Tunas (730 kcs), Guantanamo (740 kcs), Ciego de Avila (870 kcs), Pinar del Rio (990 kcs), Santiago (1030 kcs), Matanzas (1040 kcs), and Holguin (1150 kcs).

Changes-CMKX has moved to Banes. CMGH to 710 kcs. CMHO to 1020 kcs. CMJX to 660 kcs. CMJI CMJK, to 1020 kcs. to 1130 kcs. CMKW to 1030 kcs with 1 kw. CMKG to 1000 kcs with 10 kw. CMW to 2500 watts. CMBC and CMBL to

5 kw.

### Club Notes

The DXers International Exchange Club features in their monthly bulletin "QSA5", a popular article, "Country of the Month" which includes all the shortwave stations in one particular country, giving call letters, frequencies, location, schedules, slogans and other data, designed to be helpful to listeners. A sample copy of "QSA5" may be secured from DXIECheadquarters at P. O. Box 808, Dryden, Washington.

The All Wave Club of Lancaster, Calif., publishes a monthly bulletin, "The All Wave DXer," a sample copy of which may be obtained for a nickle from David Herbert, Jr., Box 709,

Lancaster, California.

#### Letter From a Night Owl loe Becker, Sr., Hamilton, Ohio

Here is a description of the old Hamilton Night Owl and some of

my DX activities.

The first station I ever wrote to was WFDV in Rome, Ga., in the latter part of February 1930. The manager of the station wrote me such a nice letter of verification that I became much interested in DX. Since that time I have heard 1244 stations on the broadcast band and I have 1234 of these verified from all parts of the world. I have 108 Canadians, 70 Cubans, 58 Mexicans, 11 South Americans and 26 other countries verified. I rarely miss a morning in which I fail to get up at 2:30 am to DX.

My greatest thrill was in logging TJW, at that time a 71/2 watter, in Bermuda. Other Hamilton, thrills were CMBR, 15 watts, in Havana, Cuba, and CKMO, a 50 watter in British Columbia.

With radio station and SWL cards I must have a total of over 5000 now, and I would not part with any of them as they represent a lot of patience, perserverance and peristence.

Since December of 1934, I have heard WPAX in Thomasville, Ga., on 54 of their frequency checks, and I have also sent WGAU in Athens, Ga., 26 reports on consecutive Sunday morning programs. I have heard selections dedicated to me from over 250 different radio stations.

My DX motto is "Hear America First," and it is a fact that I would rather hear a new call in the USA than an Aussie or a Zedder. In fact. I get up too late to hear the trans-Atlantic stations, and go back to bed too early to hear the trans-Pacifics. I usually DX from 2:30 am until 4:05 am.

I use an 8 tube Atwater Kent with an aerial 90 feet long, 35 feet high, pointing east and west.

In my opinion, DXing is the King of Hobbies, and the Hobby of Kings.

### ACROSS the EDITOR'S DESK

Readers are requested to mention the make of radio, the number of tubes used, and the type of aerial when sending reports. This information greatly increases the value of reports appearing in RADEX.

Dr. Harlan T. Stetson of the Massachusetts Institute of Technology has found that the moon's phases influence reception of radio signals. His investigations disclose that radio signals are at their peak three days before the full moon. For Dxers who are interested, the moon's phases during December will be: Last Quarter, 3rd. New Moon, 10th; First Quarter, 18th; Full Moon, 26th.

Radio stations, like a great many other things, come and go. Usually with very little advance notice, a new station is announced, and generally a station's demise comes quickly with little warning. Outstanding exception to this general course of events, however, is the announcement of a new station for New York City, which will replace WPG and WBIL.

For at least a couple years, perhaps longer, there has been talk of a new station on 1100 kilocycles which will operate full time, absorbing the time of WPG and WBIL. There was some talk that the Columbia Broadcasting System was seeking a second outlet for the New York Area and full time facilities could be obtained only through the deletion of the present part time stations on 1100. The new licensee, however, is the Greater New York Broadcasting Corporation. The station will employ 5000 watts power, full time, and WPG-WBIL will continue operating, of course, until the new station is ready to take the air. In addition to the two stations which share time on 1100, station WOV on 1130 will also cease operating when the new station is ready.

Moral—Get your WPG, WBIL and WOV verifications early, if you do not already have them.

For nearly an entire season, we listed a station WHAL in Saginaw,



Mickey Mouse peeps around the corner of the dope chart in the OSL of Harold Bailey, of Denton, Manchester. A little bear is "fishing for you."

Michigan on 950 kilocycles. This station was granted a construction permit but the construction failed to materalize and WHAL's application was retired, by the FCC, to the hearing docket on December 15, 1938. Now we are pleased to announce that the licensees have been granted another permit for the same facilities, 950 kilocycles, 500 watts power, daytime only. The licensees are Gross and Shields. Our guess is that the call letters WHAL will be re-issued.

Saginaw, lacking a radio station of her own all these years, now gets her stations in bunches. In addition to the reinstatement of WHAL, another new station has been granted a construction permit, to operate on 1200 kcs, 100 watts nights, 250 watts daytime, with specified hours of operation.

The Ford Sunday Evening Hour has gone Mexican. Authority has been granted to the Columbia Broadcasting System to transmit this program from Detroit, through KTSA in San Antonio, to the following Mexican broadcasters: XEQ and XEQQ in Mexico City; XET and XETT in Monterrey; XECZ in San Luis Potosi; XES in Tampico; XED and XEDD in Guadalajara; XEU in Veracruz; and XEME in Merida. We have often wondered why Mexico was

not represented on our major networks. Some network programs are now broadcast regularly from Canadian, Hawaiian and Cuban stations, and perhaps this Ford program heralds the beginning of regular network broadcasts from this country over the Mexican stations.

There was a time, not so long ago, when the Daventry stations were the only major shortwave stations of the world which did not have foreign language announcements. Only very recently they started using Arabic, Spanish and Portuguese, but since September 3, the Daventry foreign language list looks almost as long as the Moscow lists used to look. To serve the "citizens of the Empire," Daventry now employs Afrikaans, Arabic, Czech, French, German, Greek, Italian, Magyar, Polish, Portuguese, Romanian, Serbo-Croat and Spanish.

No doubt most of our readers are familiar with the regulation which prohibits the divulgence of any private message heard from a radio station. This rule applies to point-topoint stations, which are stations licensed to work with certain other specified stations, and most of the messages they handle are privately addressed correspondence. This means that telegrams or radiograms broadcast from one radio station to another, regardless of where the stations are located, are private matter, the exclusive property of the sender and the receiver. In most countries radio listeners are forbidden to listen to such stations; in this country, we can listen if we wish, but we cannot divulge anything we hear. The rule also applies to the trans-Atlantic and trans-Pacific telephone stations or any other telephone stations, or ship-toshore or shore-to-ship stations. Furthermore, broadcast material transmitted by commercial stations for pick up and re-broadcast from some remote point, are "private correspondence." An example of material of this sort would be NBC or CBS programs broadcast by a commercial station in California for pick-up and re-broadcast over NBC or CBS affiliates in Hawaii.

A radio station in New York forgot this rather important international regulation recently, and divulged the contents of some English and German broadcasts of "secret orders" to their warships, as a result of which the station was given five days in which to show cause why their license should not be revoked. Since the circumstances were rather unusual the station has been allowed to continue broadcasting, but they came as close to deletion as it is possible for a station to come without actually being deleted, and received one of the stiffest reprimands ever handed down by the FCC.

Moral—Listen if you wish, but don't tell what you hear.

It looks like our west coast editor started something when he asked the boys and girls which was the smallest city having a radio station. Many answers have come in, hardly any of them being in agreement. Rud Anderson says that if the new station is granted for Ely, Nevada, that Ely will easily run off with the honor. There seems to be no doubt, however, that Paterson, N. J., is the largest city without a station. Being situated right in the New York City area, and surrounded by the transmitters of New York stations, it is doubtful if Paterson will have a station of its own. The closest station to Paterson is WABC, which is in Wayne Township, New Jersey, right in Paterson's back yard. Not far away, visible from the hills to west of Paterson, are WBIL, in Kearney, WINS in Carlstadt, WNEW in Carlstadt, WOV in Secaucus.

Regardless of what part of the country you live in, you can hear foreign stations on the broadcast band of your radio set, if, of course, your set is operating at peak efficiency and is provided with a very good aerial. If you live on the west coast, you may find some Japanese or Australian stations easier to hear than some of our own eastern stations. If you live in the east, you may find Hawaiian stations easier to log than some of the middle western or western stations. If you have not yet tried long distance broadcast band reception, read Ray La Rocque's and Anthony Tarr's columns in this issue of RADEX, then give your dials a twirl, and let us know what you get. Remember, though, "If at first you don't succeed, try, try again."



The Radex Club now numbers 1361 members, in all the states except Nevada, and in 27 countries. The states shown in solid black on the map at the head of this column have at least five members, while the blank states (except Nevada) have two, three or four members.

The Radex, Club has members in every state except Nevada. Following is a list of the first member enrolled in each of the states, with a few territories also included.

Alabama, Allen A. Johnson, Birmingham

Alaska, L. Frank Nash, Fairbanks Arizona, John A. Ranta, Bisbee Arkansas, W. H. Miller, Little Rock California, Norman Kinsley, Hermosa Beach

Colorado, R. J. Kavalec, Denver Connecticut, Fred Burleigh, Meriden Delaware, Harry Shreffler, Wilmington

District of Columbia, Charles S. Greenwood, Washington

Florida, Fred L. Hinkley, St. Petersburg

Georgia, Roy H. Duggan, Sandersville

Hawaii, A. R. Tinker, Honolulu Idaho, Roy Smith, Craigmont Illinois, Donald S. Barnes, Chicago Indiana, James R. Thomas, Indianaonlis

Iowa, S. H. Lawrence, Anamosa.Kansas, W. F. Stober, Neodesha.Kentucky, Leroy Sleeper, Fort KnoxLouisiana, Lorin L. Bedell, New Orleans

Maine, D. T. Willard, Portland Maryland, C. M. Falconer, Baltimore Massachusetts, Charles, Leboeuf, Webster.

Michigan, Carl E. Sylvester, Columbiaville

Minnestota, F. M. Fiske, St. Paul Mississippi, D. W. Mosby, Columbus Missouri, Walter V. Scholz II, Webster Groves

Montana, John Picard, Butte Nebraska, Donald Hill, Broken Bow. Nevada: Who will it be?

New Hampshire, Harry Hawkins, Manchester

New Jersey, Mrs. F. W. Reitz, Neptune.

New Mexico, H. B. Custer, Animas. New York, W. M. Pettis, Ardsley-on-Hudson

North Carolina, Howard Marmon, Pineola.

North Dakota, O. Ingmar Oleson, Ambrose

Ohio, Theodore Johnson, Youngstown

Oklahoma, F. B. Long, Tulsa Oregon, M. Kasper, Portland Pennsylvania, A. M. Hankins, Latrobe

Philippines, Benton Holmes, Bacalod. Rhode Island, Robert Orpen, Providence

South Carolina, Dr. F. H. Pollard, Clemson College.

South Dakota, Ebert Berg Baltic Tennessee, Ray Likeley, Memphis Texas, Sam Graham, Panhandle Utah, Sgt. A. W. Brummond, Ft. Douglas ● Use of Ultra High Frequencies is no passen ing fad either.

● Avail yourself of a UHF band on your receiver, Stations are increasing in number.

■ If your receiver hasn't this band, you can be a fast of the survey of the su

IS RADIO HERE TO STAY?

Vermont, C. M. King, Island Pond Virginia, Richard F. Harrison, Belvoir Washington, Cecilia Huntoon, Wenatchee

West Virginia, Wm. J. Beury, Algoma Wisconsin, Paul L. King, Madison Wyoming, D. H. Shotliff, Cheyenne

Membership in the Radex Club is available to anyone who is interested in DXing. There is no charge, and no obligation. Whether you are a subscriber or a newsstand reader, you can become a member of this club simply by making application on a postal card.

VIRGINIA—The newest Chapter is The Virginia Chapter of The Radex Club, formed by Harold Tear and seven other members living in The Old Dominion. The aims of the Chapter, as outlined by Mr. Tear, are, To better acquaint Virginia members; To exchange tips and DX news among Virginia members; To conduct a DX Contest for Virginia DXers and to find out the Champion Dial Twister of The Old Dominion, to whom a prize will be given; No dues will be charged by this Chap-

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ter; And to arrange a time and place convenient for members to meet and talk shop, to have a banquet, and to visit the radio stations.

This comprehensive program should appeal to all DXers living in Virginia, and Mr. Tear, we are sure, will welcome letters from anyone in his state who wishes to become a member. The address is Harold Tear, 1317 Thomas Ave., Roanoke, Va.

The Virginia Chapter issues a bulletin called "The Vertical Radiator," full of DX news of interest to all Virginia DXers. Issued once a month now, but will soon become a bimonthly.

Watch the DX Calendar for dates of chapter meetings, and if you live near one of the chapters, attend a meeting and meet your fellow DXers.

NOTICE—The advertisement on this page is printed upside down at the request of the advertiser.

#### TIME CONVERTER

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

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**25**0

# DXer's Picture Gallery



The SWL card of the month is this one from Angelo Rosa of New York City. It is printed on a blue card, in raised letters in brownish, plum-colored ink.



A DXer since 1920, and an amateur SWL since 1935 is the record of George Eder of Philadelphia, amateur editor of the WDXA and GCDXC. George has heard 79 countries, heard all continents and heard all states. Four of his VAC plaques are shown in the picture, above the map.



Radex Club members. From left to right are the editor of RADEX, Robert Blanchard of Brooklyn, Merlin Steen of Decorah, lowa, and John DeRosa of Brooklyn.



For ten years Wm. O'Connell of Torrington, Conn. has been a DXer. He has heard 800 broadcast band stations on 5 continents, and has verified all continents on 20 meter amateur phone. His six VAC plaques from The Radex Club are shown in the frame above his receiver.



The new General Electric frequency modulated receiver.

#### FREQUENCY - MODULATION RADIO RECEIVERS PRESENTED BY GENERAL ELECTRIC

The first frequency modulation radio receivers designed for sale to the public have been announced by the General Electric radio and television department, Bridgeport, Conn., and are now being shown in New York and New England, only sections of the country to date in which there are transmitters and broadcasting stations utilizing the new system developed by Major E. H. Armstrong. Three models are now available, two of them equipped to receive only frequency modulation broadcasts, and a third which also combines three-band radio reception of the conventional type. conventional type.

Outstanding characteristic of the new receivers, so far as the public is concerned, is their ability to recreate music and voice to an astonishingly lifelike degree, with an almost complete absence of static and interference. The individual instruments of a symphony orchestra which ordinarily defy re-production, such as the tambourine, cymbal, and triangle, can be made to emerge with clarity. G-E engineers have been engaged in the development of frequency modulation re-ceivers for the public for more than two years, and the ones just announced have

undergone rigid testing.

The new model HM-136 makes available standard American broadcasts, foreign and domestic short-wave stations, and those transmitters of the frequency modulation type now in operation. A television audio and phonograph here automatically paramically paramics. and phonograph key automatically permits the listener to enjoy television sound programs and can be used in conjunction with a television picture receiver, thus tieing-in the other major development of the year in a single instrument. Eleven feathertouch tuning keys are provided for standard broad-

tuning keys are provided for standard broadcast stations.

The tuning range of this receiver, for frequency modulation, is 39 to 44 megs.; for short-wave, 7500 to 22,000 kcs.; for police-amateur, 2400 to 7500 kcs., and for standard broadcasts, 540 to 1600 kcs. Additional features are a multi-vision sliderule dial, floodlighted station finder, drift-proof station setting, tone monitor circuit, automatic tone compensation and volume control. It has 20 watts output, uses 13 tubes.

The models HM-80 and HM-85, a table model and console respectively, make available only frequency modulation reception and have identical chassis construction, although with different cabinets. A four-position tone selector, 6½-inch dynapower speaker, and

selector, 6½-inch dynapower speaker, and other features such as the sliderule dial and tone monitor circuit are included. Eight tubes are employed in these sets, which have five watts output. They are equipped with terminal connections to a public address system, and have television audio or phonograph control.

There are currently three broadcasting stations operating on the frequently modulation system—two in New England and Major Armstrong's original transmitter at Alpine, N. J., near New York City. This fact temporarily limits the markets in which frequency modulation receivers can be sold, as in the case of television. The transmitters have a range of approximately a hundred miles, or twice that of television transmitters

of equal power. The Alpine station, in the New York metropolitan area, rebroadcasts the radio programs of WQXR at the present time. Daily half-hour programs are broadcast—every hour on the hour, from 11 A.M. to 4 P.M., and after 4 P.M. the program is continuous until 11 P.M.

In the conventional system of radio broad-In the conventional system of radio broad-casting, the sound is impressed on the radio frequency—commonly called the carrier fre-quency—by a system of modulation called "amplitude modulation." The carrier wave is varied in intensity in conformity with the sound made in the broadcast studio. There are certain practical limitations, according to Dr. W. R. G. Baker, manager of the G-E radio and television department, which pre-vent the transmission of true high fidelity programs, or programs covering an audio fre-programs, or programs covering an audio frevent the transmission of true high fidelity programs, or programs covering an audio frequency range up to 15,000 cycles. Radio broadcasting has always been troubled by static, both natural and man-made. The system of broadcasting developed by Major Armstrong maintains the amplitude constant Armstrong maintains the amplitude constant and varies the frequency, hence the name "frequency modulation." The system has several outstanding advantages. It permits greatly increased coverage for equal power and frequency, as compared to the conventional method. It makes possible the transmission of actual high fidelity programs. It greatly reduces, and under certain conditions, eliminates both kinds of static, by reducing the noise level. This reduction in noise level is essentially the reason for greater coverage. the noise level. This reduction in noise level is essentially the reason for greater coverage of the transmitter, since it permits the receiver to operate on very weak signals. With the present type of broadcasting, these signals would be covered up by noise, or static. To be of practical use, frequency modulation must operate in the high frequency bands, which approaches the frequency used for television. Similar difficulties are therefore encountered. The band width of the frequency modulation channel should be from 60.000 to 80.000 cycles as compared to 10.000 frequency modulation channel should be from 60,000 to 80,000 cycles as compared to 10,000 cycles for amplitude systems now in use. Present transmitters, designed for amplitude modulation, cannot be used with frequency modulation, nor can the present conventional receivers be so used. It is possible, however, to design receivers capable of receiving both types, which is what General Electric engineers have done in the present instance.

engineers have done in the present instance. "This Hobby Called DXing"

An outline of the Art of Tuning and an explanation of all the things that perplex the new DXer, was given in an article called "This Hobby Called DXing," which appeared in the January, 1939, issue of RADEX. All radio fans who wish to know how and what to write to radio stations, how to get verifications, how to hear distance, and who wish to understand the codes, prefixes and abbreviations used in DXing, should obtain this issue of RADEX. It is still available at the regular price of 25c per copy.

# ON THE WEST COAST

By ANTHONY C. TARR

First of all our thanks to the many Radexers who have written in this month. For some it was their first leter to a radio magazine. Others have

been regular reporters for years. All are equally welcome and, although we cannot publish all reports in their entirety, we do read and appreciate them all, using as much as possible in keeping with the purpose of this column -which is to present the highlights of current radio reception on all bands concisely and in a manner that will enable our readers to gain the utmost enjoyment from their radios. May we also extend hearty Christmas Greetings to each and every one who reads these lines, and may the New Year bring ever increasing happiness

#### SO THEY WON'T ANSWER?

Much has been written pro and con regarding the QSLing habits of amateurs, mostly complaints that cards have not been forthcoming, and many lists of so-called "non-QSLers" have appeared in club bulletins. It possibly had not occurred to us that the SWLs themselves might be more largely at fault than perhaps they realize, but this was brought forcibly to our attention by the following letter from Hal B. Clein, Los Angeles, and is well worth reading and remembering:

"I think a slight injustice has been done VU2JK in your October column. I was fortunate enough to hear VU2JK one morning several years ago, with fine signals, and I was able to copy him for almost an hour. Now VU2JK replied to my letter via airmail and registered the same. He returned my IRC and enclosed what is my most attractive amateur QSL card. Since that time I have received several lengthy letters from him and

Reporters in the Mountain Standard and Pacific Standard Time Zones may send their reports direct to Anthony C. Tarr 909 W. Lee Street, Seattle, Washington

Pacific Standnes may send
lirect to

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Street, Seattle,
ington

Tiger and is really a beauty. VU2JK

states that he is always happy to send a card and confirm the reception of any SWL that hears him and encloses postage, but he does insist that a letter report be sent, for he will absolutely not accept, or even bother to read, one of these two or three line SWL cards, even when enclosed in an envelope with IRC, I know four persons who have established definite proof of reception from VU2JK and in each case a card was forthcoming via airmail. Of course, the SWL card serves its purpose, I suppose, and I also use one, but I always send at least a one-page leter with proof of reception, conditions, etc., besides the card. There are several hams such as GI2CC, VQ2HC, etc., who have written me and said it was a relief to get a report lengthy enough to really establish reception proof and all of these have replied promptly. I have taken a club's list of non-QSLers. including the elusive EI2L, and have scored 100% in every case. So the chaps who have been writing and complaining about such fine ops as VU2IK should try sending in a good accurate report for a change and I'll bet their luck would change—plenty!" Well, Radexers, need we say more?

### SHORTWAVE BROADCAST

#### China

XPSA, 7010 kc, heard with news in English 6-6:15 am. Signal R8 at times. (Fisher, R 1298).

XGOY was bombed early in September and programs directed to North America now emanate from XGX, Yunnan, on 17800 kc from 6-

7:40 pm, with English news at 6:50. (IDA)

#### French Indo-China

"Radio Saigon", 11780 kc, has instituted a new program especially directed to North America listeners. Very strong signals are reported here between 7:15 and 8 am. A lady announcer requests reports be addressed to P. O. Box 412, Saigon. (Sawada, Clein).

#### Italy

2RO4, 11810 kc, very strong in late afternoons with English announcements. (Fisher, Park).

#### Japan

JZI 9535 kc is now used for the overseas program 9-10:30 pm instead of JZK 15160. (Sawada).

JZI, 11800 kc, heard at 5:30 am with a French program. (Ronk).

#### Java

YDA, 3040 kc, heard well between 3:30-7:30 am. (Fern, R211 TH2).

PMH, 6710 kc, with strong signal early mornings. (West, R673).

#### Manchukuo

MTCY, 11775 kc, has three daily programs as follows: No. 1, 1-1:50 pm for Europe; No. 2, 10:30-11:30 pm for Western North America; No. 3, 6:50₅7:55 am for China and Australia. Transmissions 2 and 3 have been reported in the West Coast. Address: Short Wave System, Central Broadcasting Corp., Hsingking, Manchukuo. (West, R673; Park; Sawada).

#### Mexico

XEQQ 6035 kc heard signing off at 9:40 pm with Ravel's "Bolero" and announcements in Spanish and English. (Fern R211 TH2).

#### **Philippines**

KZRF, 6140, and KZRH, 6100, are being heard very well around 3 am. (West, R673: Park).

KZIB, 9492, and 6040 kc, now operate daily 6-10 am. A three-note chime is heard hourly. (IDA).



One of the best of the Japanese amateur stations is J7CR, represented by this attractive three-color card. (Courtesy of Carl Horton).

#### Thai

HC8PJ, 9510 kc, heard clearly until 7 am, usually on Thursdays but sometimes other days of the week as well. (Park).

#### U.S.A.

W4XA, 26150 kc, heard strongly daytimes. (West, R673). (Let's have some more ultra-high reports for this column, Radexers!)

#### Yugoslavia

Belgrade, YUC, 9510 kc, heard signing on at 8am. (Park). Also heard on 11740 kc (call undetermined) 5:30-6:10 pm. (Park; Clein). YUG broadcasts on 15240 kc from 4:50 to 6 pm. (IDA). Was logged on that frequency at times stated. (Clein).

#### BROADCAST BAND

Reports of daytime DX on the Pacific Coast have not been frequent and one sent in by Art Child is the best we've vet seen. Located, at the time of this reception, in a CCC camp at Bray, California, he picked up no less than 64 stations at high noon consistently the most distant being CBK, 1035 miles from his receiver. He also reports intermittent reception from CMBF, CM9RT CMBH. Space will not permit reproduction of Mr. Child's entire log, but here is the recap: California, 27 stations; Washington, 12; Oregon, 9; Utah, 4; Idaho, 3; Mexico, 3; Montana, 2; Canada, 2; Nevada and Colorado, one each.

Melvin Fisher, Oakland, Calif: "I have heard KTKC, Visalia, signing on at 6 am on their new frequency of 890 kc, with 1000 watts. They announced both in English and Spanish. XEMO heard on 860 and XELO on 670 kc. Other stations logged are CBK, KOAC, KGW, KIRO, KSEI, KJR, CBR, KEX, KVEC, KTMS, KGB, KELA, KGA, WDJM, KOY, CFRC, and KWII. Also picked up a television broadcast from W6XAO, Hollywood, on 1440 kc at 8 pm. It was announced as an "experimental telecast." They said they would soon move their transmitter to Mt. Lee and expected to cover a 60 mile radius."

Clarence L. Mustoe, Brady, Mont.: "I started DXing last December and by May had received about 200 veries. I also logged about 100 more. My best verified are KGMB, KQV, WBZ, WBT, WWVA, WTJC, WSB, WMBR, WQBC, WCAU, WAML, WMPS."

Thos. C. Roberts, Casper, Wyo.: "KVOD are now broadcasting on their new frequency of 630 kcs. I first heard them there on Sept. 24. They come through much better now than they did formerly on 920—too good for me to now hear either KGBF or KFRU. The new CBR is a daytime station here. XEJ, 1020 kc, was logged R6."

D. C. Morrison, Berkeley, Calif.: "The TPs are showing much better signal strength, with JOAK2 on 870 and 1YA on 650 kc being heard R8 at one time. New stations logged here since Sept. 1 include CKCK, CMQ, KDYL, 1YA, KOAC, WSM, WGN, and XEP. Japanese stations have been good, stations using Oriental language having been heard on the following frequencies, listed in order of decreasing quality of reception: 870, 590, 810, 770, 690, 830, 940, and 990 kcs. KFJZ, 1240 kc, is now heard all night, averaging about R5. They

announce as a 24-hour station. XECL is now using 1110 kc. They were heard on his frequency and announced as such. This makes them free from CBR's interference on 1100 kc. XECL signs off at midnight and returns at 6:30 am. The big four in New Zealand are usually heard regularly, being best about 2:30 am. Listed in order of decreasing reception quality: 3YA, 1YA, 2YA, 4YA. Aussies have been heard on 670, 630, 620, 610, 700, 740, 1230, 1220, 780, 710 and other frequencies, but so far these have not been clear enough to log. KVAN, the new Vancouver, Wash. station, was heard testing about 3 am on October 14 and 15. They announced "testing quality and equipment. Soon to be on regular daytime schedule with programs consisting mostly of music." On the second Saturdays of July and October, KRLC was heard 3-3:15 am during frequency cheks instead of 3:55-4:10 am as scheduled.

Hal B. Clein, Los Angeles, Calif.: "We recently moved and, since shortwave reception is so noisy here, I have tried my hand at a bit of BCB listening. During two weeks of hit-and-miss tuning, my log stands at: CBK, KOAC, KSFO, KMJ, KHQ, KFRC, KTAR, KPO, WLW, KGU, KXA, KGO, KOA, KLX, WHO, KQW, WBT, CBR, KSL, KVOO, KOB, WOAI, KFXM, KLS, KDYL, KHUB."

F. .W. Abbott, Los Angeles Calif.: "KECA is on 780 instead of 1430 as listed." The change has been made in RADEX lists. KECA on 1430 has been deleted and KEHE on 780 changed call to KECA.

Robert C. Morris, Arcadia, Calif.: "You asked for the signatures of persons who sign verifications, so I am sending a list of such:

CMQ, Migual Gabriel, Administrador Gerente

XEAC, F. Gudoth, Manager XEMO, Fred Ferrerira, Chief Engineer KVOA, Gil Mayneir Program Director

KOY, E. E. Alden

KSL, E. G. Pack, Chief Engineer CFCN, E. Marshall

KIDO, Kate Scotland, Librarian

KSAN, Wm. C. Grove, Chief Engineer

E. M. Ringle, Vancouver, Wash.: "Station KVAN in this city began operating on October 22, 1939, with studios in the Evergreen Hotel at 5th and Main, and with the transmitter situated at 2915 Fruit Valley Road.

Mrs. L. E. Grannis, Eureka, Calif.: "I notice CBK, Watrous, Sask. is listed as there being no information on it. I wrote them for a verification and received a very nice letter signed by R. D. Cahoon, Western Regional Director."

Samuel A. Meyer Jr. On a recent trip through Mexico, Mr. Meyer gained a wealth of information concerning the stations in our neighboring country to the south. New stations are as follows: XESM, 1270 kc, 100 watts, Mexico, D. F. XEQK, 1500 kc, 100 watts, Mexico, D. F. XECW, 1240 kc, 250 watts, Avenida 1, No. 50, Cordoba, Veracruz, (Will verify DX reports). XEBJ, 1340 kc, 100 watts, Apartado 28, Giudad Victoria, Tamaulipas. (Will verify DX reports). XERC changed frequency from 870 830 kc. Stations deleted XEAL, 660 kc, XEXD, 1340 kc. A new transmitter is being built for XEK, 990 kc, to have 500 watts. Another frequency change is Monterrey, who is now broadcasting daily on 740 kc. instead of 720 kc.

Australian station 6TZ, 1340 kc, 500 watts, located at Dardanup, W. A. should be testing soon. (IDA).

Wm. Cunningham, Pasadena, Calif.: "Following is some official data on the Mexican stations:

720 XEWE Silao, Gto., 20 w., Jesus Gonzales A.

1150 XEXH Oaxaca, Oax., 400 w., State of Oax. Leon, Gto., 20 w., Sucs. R. Ortiz Gonzalez. 1160 XEFM 1230 XEHK Guadalajara, Jal., 125 w., Carmen Villa senor. Navojoa, Son., 100 w., Emilio 1230 XEAJ Manzanilla. XEBC Morelia, Micho., 100 w., Fernando Corona. 1240 Aguascalientes, Ags., 500 w., Alejandro Diaz. Navojoa, Son., 250 w., Francisco Vidal. XEAD 1240 XEDL 1240 1260 XEXT Tepic, Nay., 1 kw., State of Nayarit. Nayarit.
Mexico City, D. F., 100 w.,
Exposicion Viajera.
Tijuana, B. Cfa., 250 w., Manuel Acuna Varela.
Guadalajara, Jal., 250 w., Salvador Galindo de la Torre. 1280 XEKR XEAU 1310 XELW 1340 Torreon, Coah., 100 w., Aurelio G. Zaragoza. 1400 XEDE Mexico City, D. F., 200 w., Salvador San Martin. Mexico City, D. F., 400 w., Angel H. Ferreiro. XESM 1400 1500 XEQK

XEZ is going to 2 kw; XEB to 100 kw (at present using only 20 kw); XEBL to 500 w: XEAG to 100 w: XEAL and XEKL are deleted: XERC is out of the "Status undetermined" list but XEMX is in; Station XEFI is now owned by Ramiro G. Uranga; it is heard evenings using a higher power (might be 2 kw) on 1445, while XEFQ, judging from its signal, must have increased power. It is interesting to note that all the new Mexican stations are going on the new local ribbons of 1230, 1240, 1340, 1400, 1450 and 1490 kcsthese frequencies assigned by the Havana treaty for local stations in all the signatory powers. I think that XEAG might be operating on 1240



A photographic QSL card from KGHL broadcasting station in Billings, Montana. (Courtesy of Clarence Lee Mustoe).

kcs now. Stations XEFW, XETB, XEX and XEAU will probably all operate on 1310 kcs as regionals.

From Newfoundland comes the official news that VONF is operating with 10 kw; VOCM on 1000 kcs; VOWR on 680 kcs; VOAR is owned by the Seventh Day Adventists. These are the only stations listed so the others must be deleted."

Revisions: Kindly make the following corrections to previously published material: September RADEX:—(Page 11)—KIRO and KMPC both use the 710 channel until 1 am PST, and then KIRO is in the clear until sign off at 2 am. KFAC, not KALE, is the all-night station on 1300 kc. October RADEX:— (page 15)—KVNU frequency check is 6-6:15 am EST on the second Thursday, not Tuesday.

#### RECEIVERS

It is always interesting to know the types of receivers used by other DXers. When sending in your reports, we'd appreciate this information. Hal B. Clein uses a Breting 14. Melvin Fisher in Oakland, a new DXer but among the most active, tunes a 7-tube Model 180XF Philco. Clarence L. Mustoe in the wide open spaces of Montana, has a 75 ft. North-South antenna hooked to a 6-tube Westinghouse receiver. Another Philco owner is James D. Ronk, Eureka. He connects the ground to the antenna post of his Model 640 because of a noisy location. And Art Child, who sent in that fine list of daytime DX, has a4-tube portable 1940 Zenith. His antenna is 225 fet long running East and West. Pardon us if we say, "We told you so," but we've always been an advocate of lengthy antennas for BCB DXing!

Who is the Aussie or Zedder being heard on 760 kc lately? Try for this one Sunday nights, when KXA signs off at midnight, because they block the channel until 3 am other nights. If 2FC has moved to 850 kc, as noted last month, and where the station call

was clearly heard, D. C. Morrison would like to know that TP he is hearing on their old frequency of 610 kc?

#### THE REPORTERS

R211 TH2—C. J. Fern, Jr., Lihue, Hawaii. R673: Victor West, San Rafael, Calif. R986: Art Child, Bray, Calif. R1139 Wyo. 4: Thos. C. Roberts, Casper,

R1203: D. C. Morrison, Berkeley, Calif. R1298: Melvin Fisher, Oakland, Calif. James D. Ronk, Eureka, Calif. Robert Park, Vancouver, B. C. Bob Sawada, Isleton, Calif. Harold B. Clein, Los Angeles, Calif. Mrs. L E. Grannis, Eureka, Calif. Samuel A. Meyer, Jr., Laredo, Texas. Robert C. Morris, Arcadia, Calif. F. W. Abbott, Los Angeles, Calif. Clarence L. Mustoe, Brady, Montana,

#### **NEWS OF WHAT'S NEW**

With battery sets by the millions still in use throughout rural America, the race to bring electricity to farmers is rendering useless many good radios. Farsighted General Transformer Corporation felt pretty badly about this; decided to rescue the battery set from oblivion. Result was "Porta Power," a new tiny plug-in unit giving peppy "A", "B" and "C" power from house-lighting circuits to battery sets. New "Porta Pack" replaces batteries in small portable battery radios by sliding into emptly compartment when receiver is used at home

Multi-tube radios are fascinating. for, like giant locomotives they appear to possess untold power. E. H. Scott's big new "Philharmonic" has 30 tubes and unlimited range; 20-tube "Phantom" gives extreme DXing; and "Masterpiece's" 14 tubes are remarkably sensitive. Scott precision requiries 3 weeks to build a radio. assures fine tone with world-wide reception. Sets may be found throughout 154 different countries in best company, but in America may be owned by anyone because of easy purchase terms.

# Radexing With The Radexers

By Ray La Roque

December and Midwinter are at hand! Early afternoon sunsets and long, dark, cold nights! What better time of the year can anyone want for DX? Inside a warm den, up in a drafty attic bundled in a warm robe and woolen socks, or in the basement in the little room beside the furnace, wherever your DX corner may be, now is the time of the year when there is fun in DXing. You may like your DX in the evening, when QRM is at its height, or you may be a real night owl and enjoy sitting up till the wee small hours of the night or you may be the type called the "early riser" who gets up before the milkman and watches the sun come up while sitting at the dials. Regardless of the group in which you may be classified it is hoped that there will be some news in this section to interest you. We want sincerely to cover every phase and angle of broadcast band DX in this department, but we must have the help of the readers, for suggestions and criticisms are the only means we have of knowing your reactions to our efforts.

Now for our monthly gab-session in which our readers reveal their successes and failings and endeavor to help their fellow Radexers in gaining more pleasure out of this increasingly pleasant game of ours called "Radexing!"

# COVERING THE CONTINENTS Domestic Dialings

FORECAST: You are now in the midst of the "DX season" and on your own. When atmospheric conditions permit you can and should dig up anything broadcasting in this country and Canada, that is, anything within the scope of your receiving equipment. In other words, December is the month when conditions should be ideal for domestic DX.

Komments from the "K" District: KCKN, our local, has boosted its

power from 100 watts to 250 watts during daytime hours. KSCJ has changed from CBS to NBC. (Gerald Harris, R739, Kans. 5)

KFJZ at Fort Worth, Texas is now heard on 1240 kcs. announcing at the "Twenty four hour station on your dial at 124." (George C. Canapp, Baltimore, Md.)

KNX verified my report last winter the same day as it was received by them. The station was monitored for about a week for signal consistency under various weather conditions. KLS verified last May. They issued a nice folder. Tower and call letters were in blue on one side. On the reverse, a photo of the radio village of Warner Brothers. (Ray Schaffar, Waterloo, Iowa)

KQV was heard on August 31. I sent them a report with 10 cents. About two weeks later I received their card like the one printed in RADEX. (Jack Fern—R1160, Clifton, N. J.)

KSL has resumed its weekly schedule of DX programs which programs will continue as last year, throughout the DX season. The programs will take place each Thursday morning from 2:45 to 3:00 a.m. over KSL—1130 kcs., 50000 watts in Salt Lake City, Utah. Listeners are welcomed to tune in this KSL program for DX news, tips, special features, as well as messages in Spatari. Mac Elwyn Van, KSL DX Program Staff, will appreciate letters and comments from listeners at any time. (RX)

"W's" in the East: WBIG operating on 1440 kcs. started broadcasting on their new transmitter on September 29. The station is now out of town. They are using a 340 ft. tower and a 5 kw. transmitter replacing the old 1 kw. station. They have all the latest equipment. A photo electric cell is used to cut the lights "on" on the tower. Reports are requested. (Homer Apple, Greensboro, N. C.)

WBLK, WGKV, and WING are new stations for the National Broadcasting Company. (Gerald Harris-

R739, Kans. 5)

WBRK at Pittsfield, Mass., is called the "Voice of the Berkshires." It is heard on 1310 kcs. from 7 a.m. to 1 a.m. and now has 250 watts with unlimited time. (Gilbert L. Harris, North Adams, Mass.)

WCCO was heard with R9 signals on 1620 kcs. a few nights ago. A report was sent them. A letter from the chief engineer states that they were hooked to a temporary antenna while preparing a new vertical. The trouble was corrected as soon as the report arrived. (Ray Shaffar—R1092, Waterloo, Iowa)

WCKY on 1490 kcs. announces that it will soon become a CBS outlet. WBIG in a recent verification announces that in a few days they will begin operating through their new 5000 watt Westinghouse transmitter and they would appreciate it if reports were received on their signal. (Sidney Tellis, R1271, Philadelphia, Penna.)

WCNC on 1370 kcs. at Elizabeth City, N. C. heard testing on the weekend of Sept. 24. Reports were requested and verifications promised. I received a veri by return mail from Lewis Hiland, W9COX, Chief Engineer. WCNC uses an 175 ft. vertical antenna. Schedule is from 7 a.m. to 11 p.m. (Desmond Callan—R987, Readville, Mass.)

WEDC on 1210 kcs. with 100 watts at Chicago is now an all night station. They come on the air at midnight and broadcast until 6 a.m. They are on every night at the same time. (Fred Anderson, Sgt. U.S. Marine Corp., Chicago, Ill.)

WENY at Elmira, New York heard on 1200 kcs. The station will use 100 watts with unlimited time facilities. (Gilbert Harris—North Adams,

Mass.)

WFAM and WSBT reports should be addressed to Al Todd or Paul Mangus, Rt. No. 2, Box 2, South Bend, Indiana. H.G. Cole is now not connected with their verification department. . . . WCKY now uses 50000 watts. . . . . WCCO studios are located in WCCO Bldg. and not in Hotel Nicollet. . . . WDGY now occupy the Hotel Nicolett. . . . WMT have been in the Paramount Building for two years. (Merlin N. Steen, Decorah, Iowa)

WFVA in Fredericksburg Va. on 1260 kcs. with 250 watts is now on the air. They were heard from 4-5:30 p.m. with R6 signal and excellent quality. (Harold Tear—R924, Roanoke, Va.)

WGBR in Goldboro, N.C., is now on the air on 1370 kcs. with 250 watts days and 100 watts night. Tower is 186 ft. in height. . . . . WOPI in Bristol, Tenn., on 1500 kcs. has 250 watts now daytime and also at night. 220 ft. is the height of the vertical radiator. WOPI's schedule is from 7 a.m. to 10 p.m. Their frequency check is on the second Tuesday from 4:15 a.m. (Harold Tear—R924, Roanoke, Va.)

WHLS at Port Huron, Michigan is now using 250 watts. (Carl Sylvester—R36, Columbiaville, Mich.)

WJSV's new transmiter is nearing completion and its location is Wheaten, Maryland—about seven miles from Washington. Noticed that you didn't have schedule for WRC and WMAL. WRC signs off at midnight. (David Hill—R49, Washington, D.C.)

WJW's night time power has been increased to 250 watts the same as daytime. Hope this will blot out heterodyne whistle from WHBC, Canton, Ohio. Where I live, I am seven miles south of Akron on the Portage Lakes, evening reception is practically impossible on account of every station being QRM'd by from one to three stations on the same channel. (Dr. Dean Miller, Akron, Ohio)

WLNH at Laconia, N. H. is to make changes in equipment and to increase power to 250 watts unlimited time. They are heard on 1310 kcs. . . . The FCC has authorized the Tri-State Broadcasting Corp. to move

station WNBX from Springfield, Vt., to Keene, N. H. and operate on its present frequency of 1260 kcs. with a power of 1000 wtts, unlimited time. (Gilbert Harris, North Adams, Mass.)

WRGA on 1500 kcs. was heard on a special program about 3:30 a.m. on October 29th. They were adjusting their transmitter and asking for reports. (Sidney Tellis—R1271, Phila-

delphia, Penna.)

WWSW's new 350 ft. tower is completed and will be in operation very soon. This new equipment, coupled with the recent jump in night power of WWSW, the station will add greatly to its present coverage. (Alfred Razzado)

Bahama Islands: ZNS on 790 kcs. knocks WGY out from 7:30-10:15 p.m. with an R4 signal. (Harold Tear,

Roanoke, Va.)

Canada: CBA and CBK are both heard with good signals from 9-11 p.m. CKY is good after midnight. (Harold Tear—R924, Roanoke, Va.)

CFCT in a veri states: "At present we are using 500 watts power, with 100% modulation and a vertical antenna 180 ft. high and a salt water ground. Frequency is 1450 kcs. Our only DX broadcast now is from 3:30-5:00 a.m., but we except to extend that with the advent of the DX season. Meanwhile, it's very unusual to hear from listeners in your vicinity (as a matter of fact, yours is the first). We are having veri cards made, so send us another report and get a new card." (Alfred Razzando, Fayette City, Pa.)

Latin America

Argentina: LR-1 heard above the QRM from 8-9 p.m. Other stations heard weakly behind heavy QRM. (Ray Schaffar, R1092, Waterloo, Iowa).

Costa Rica: TIPG on 620 kcs. with 5000 watts heard but the signal was very weak. (Harold Tear—R924, Roa-

noke, Va.)

Cuba: Cuban stations are heard very well. Logged so far in one evening CMBQ—910, CMX—880, CMCK

—970, CMCM—850 kcs. CMBQ is the strongest. (Richard Wright, Swarthmore, Pa.)

Cuban stations take the cake. Their quality could be better, but signals are tops in strength. CMQ, CMCK, CMGH. CMBH. CMCY, CMK. CMCL, CMCW. CMBD. CMBC, CMOX, CMW. CMHD, CMOA, CMJE, and others are heard almost (Harold Tear-R924. Roanightly. noke, Va.)

CMBQ at Havana is on 900 kcs. and announces in English every fifteen minutes. (Desmond Callan — R987, Readville, Mass.)

CMHI was reported by myself as using 1000 watts. This was a mistake in reporting. It should have been 10000 watts. The station took the air on May 20th on 830 kcs. Soon after I picked it up at 2 a.m. testing with Spanish recordings. A report was sent at once, which was acknowledged by someone at the station with a form letter and a veri card. A few days later a personal letter was received from Armando Trinidad, the owner, stating that my report was so outstanding and the receiver so excellent that it was the first report from the U.S.A., and the best one received (Ray Schaffar, from any source. R1092, Waterloo, Iowa)

Guatamala: TGW on 1520 kcs. is heard with a good signal from 7-10 p.m. and is sometimes better than its shortwave outlets. TGW now uses 5000 watts. (Harold Tear, R924, Roanoke, Va., and Ray Schaffar, R1092, Waterloo, Iowa)

Mexico: XEDH on 1340 kcs. is testing in the early morning daily. They desire reports. Announcements are in Spanish and English. Each selection is announced and a souvenir is promised to those reporting. The station comes in here with R9 signal, and it sounds more like 5000 watts than its rated power of 200 watts. Address: XEDH, Villa Acuna, Coah., Mexico. . . . XEW seems to be R9 plus and always above the

QRM on 890 kcs. (Ray Schaffar, R1092, Waterloo, Iowa)

XENT now comes in with R9 signal every morning around 2 o'clock. (Sidney Tellis, R1271, Philadelphia, Pa.)

Peru: OAX4A on 854 kcs. with 10 kw. has the following address: Ave. Petit Thomas No. 447, Lima, Peru. (William Scott, Johnson City, Tenn.)

FORECAST: Latin American reception is ready and waiting for you almost any evening during this month. You'll find them battling some domestic station for supremacy on one of the many allegedly clear or regional United States channels.

#### Tuning the TA's

FORECAST: December should bring about a peak in reception from Europe. The early morning hours from midnight till 2 or 3 a.m. are to be watched nightly for the nights when the TA's will break through. When one is heard, usually it is a favorable sign and the channels of other powerful TA's should be combel for more catches. Another good time to try for TA's is immediately at or a little before sundown and continuing until about 6-7 p.m. when most TA's sign off the air.

News from Europe is at a premium principally because those countries are more occupied with other tasks and haven't time for releasing DX news for radio publications. As no TA reception has been reported as yet we are unable to give you any actual reports on reception but if this is to be any DX season the Europeans are due to trickle into our loudspeaker any a.m. now and we'll see what we can gather in the way of reports for next month. Meanwhile if any Radxer succeeds in nabbing a TA before we do we'll appreciate a report and so will many other readers.

#### TP Topics

FORECAST: TP reception is possible but not at its peak at this season. However if you're after DX

from Northern Asia such as from Russia or Japan, now is the time to try. But, we doubt very sincerely whether many of our Eastern DXers will log an overabundance of calls from this area. Australia and New Zealand stations will be better and more readily logged in late February, March and early April.

China: XGOA is on 1200 kcs. with 10 kw. antenna power. Address is: The Central Broadcasting Administration, Chunking, China. (William Scott, (Johnson City, Tenn.)

Hawaii: October has been very good for KHBC. Others heard a few weeks later. KGMB, KGU, and KHBC are all verified. KHBC came through all winter last season and lasted until June. Other Hawaiians faded out long before KHBC. (Ray Schaffar, Waterloo, Iowa)

Philippine Islands: The broadcast stations of the Philippines are as follows:

KZIB 900 kcs. I Beck, Inc. owners KZRF 780 kcs. F. E. B. Co.

KZRH 1200 kcs. Radio Heacock

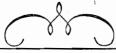
KZRM 618.5 kcs. Far Eastern Broadcast Co. (50 kw.)

All the stations are in Manila and the power of the three smaller stations is not known.

Before the next issue of RADEX will be able to reach many readers the holiday season will be upon us. May I your Eastern Editor extend my sincere wishes to very reader of RADEX for a happy and prosperous Christmas Season. Here's hoping good old Santa Claus has plenty of new re-ceivers, equipment and DXer's supplies in his pack, ready for distribution among RADEX readers. And if you're at your dials on Christmas Eve, don't forget that plenty of Latin Americans will be on all night with special broadcasts at that time. PEACE ON EARTH AND GOOD DX TO EVERYONE!

## HIGH FREQUENCY GLOBE TROTTING

#### By Ray La Rocque



Report-o-Meter						
M. F. Williams100%						
Alton Caldwell, Jr 92%						
Carl and Anne Eder 90%						
Joseph Cazeneuve 79%						
Gilbert L. Harris 77%						



This month's meter is made up entirely of strangers. For each of this month's top five it is the first appearance of the season in the Report-o-Meter. And, as a glance at the results will show, the scoring was very close and one more good report by any one of the reporters would have changed the status of the whole me ter. As for honorable mention, there is a wide gap between those who registered and the remaining reporters. The next ranking reporter would have a score of about 56%. Candidates for honorable mention are: Robert Skyten, James J. Holsema, Desmond Callan, C. Roman, Robert Blanchard, and Kyle C. Bonifield.

#### ASK US ANOTHER

Harold Lund, R376, 633 East 19th, Erie, Penna. tells us that around 9:05 p.m. a station in Switzerland popped in on 19 meters. The program was especially for the United States and call letters were not understood due to interference. Travel and art in Switzerland was the subject of the talk by the broadcaster. Can anyone help Radexer Lund on this one? . . . . Henry Bennett, 644 Atlantic Ave., Collingswood, N. J. pens, "A little note to Weston Richard of

Zion, Illinois who in October 1939 issue of RADEX asked location of WANC calling CQ-75 meters. I have the same station listed as being in Jamesport, state unknown. I also have WQIX and WAKNF listed as hams. WQIX said he was located in Queen City, N. J. Can anyone identify either of these stations?" Another reply to Weston Richards of Zion, Ill. This time from Edward Shirley (R615), Jamestown, N. Y. who says that the location of WANC is Jamestown, N. Y. It operates on 2726 kcs., is owned by the Emergency Unit. The address is Ira Lou Spring Post, No. 149, The American Legion. Jamestown, N. Y. WANC will verify all reports sent to them.

"I would like to know what station is heard on the high frequency side of W6XBE on about 15370 kcs. I usually hear them in the early afternoon till about 2:30 p.m. Music played is mostly Oriental." The preceding is from Joseph Cazeneuve, Montreal, Canada.

Kyle C. Bonifield (R1318) Asbury Park, New Jersey would like information on a station believed to be in Belgrade, Yugoslavia. It was heard from approximately 7:30 p.m. to 8:50 p.m. on 11731 kcs., on September 25. "I distinctly heard the words, Radio Belgrade," says R1318! (Known Belgrade calls are: YUA on 6100, YUC on 9505, and YUG on 15240 kcs-all announcing as "Radio Beograd." They are supposed to have available a frequency on the 25 meter band, though the call and exact frequency is not known to us. Evidently it was that unknown call that you heard-RL)

Carl Sylvester, Columbiaville, Michigan says, "Yesterday afternoon I heard a station that I could not identify. They were approximately on DJB's wavelength and used a foreign language from 3:30-3:45 p.m. giving news with no announcements in English. The voice was high-pitched and

the only words that I could make out were the names of various diplomats in the news. The gong sounded in between the various items of news. This is the first time that I have ever heard this station or at least that language." . . . . Mystery for Gilbert L. Harris, North Adams, Mass. is the station heard near 15340 kcs. from noon the 12:25 p.m. with a program of odd music. . . . A mystery station is also reported by Carl and Anne Eder, Pouch A. Willmar, Minnesota. It is on 13500 kcs. and heard Sundays from 9:40-10:30 p.m. signing off with Ted Lewis' Good Night Song. Program consists of Oriental music, man announcing in a strange language, Mohammed was mentioned during the program, no English announcements were made during the program. Who is it?

David Hill (R49), Washington, D.C. states: "There are several stations I hear every day, but the only thing I know of their location is they are on boats of some kind one of which is the 'Penn' and onother the 'Gulf Stream.' The call letters are WYFE, WYFF, WYFG, WYFD, all on about 2726 kcs."

QUOTE AND UNQUOTE Leon Grossman, 118 Dorbeth Rd., Rochester, N. Y. "No doubt you've heard quite a bit about the world DX Alliance lately, and you will hear quite a lot in the future. We still have the same officers: Nicholas Woytan, president (Syracuse, N. Y.); Erick R. Johnson sec'y. and treasurer (Perth Amboy N. J.); Leon Grossman vice-president and B. C. B. editor (Rochester N. Y.); George J. Eder, amateur editor (Maywood, Ill.); Gilbert L. Harris (North Adams, Mass.) shortwave editor; and C. J. Spatola, C. P. C. chairman (Rochester, N. Y.) Anyone interested may write to either Erick R. Johnson, P. O. Box 422, Perth Amboy, N. J., or Leon Grossman."

NOT SO SHORT WAVES
Following is a list of U. S. Coast

Guard stations operating each day on the assigned frequency of 2662 kcs. Weather Bureau Information is given to all shipping and since very few listeners report these stations, they greatly welcome mail and verify all correct reports.

NMC San Francisco, Calif. 4:20 a.m. and p.m.

NMF Winthrop Mass. 11 a.m. and p.m.

NMG Mobile Ala. 9:20 a.m. and p.m. NMN Princess Anne Va. 10:50 a.m. and p.m.

NMV Jacksonville Fla. 10:20 a.m. and p.m.

NMW Grays Harbor Wash. 6:30 a.m. and 4:30 p.m.

NMY Rockaway Point N. Y. 11:30 a.m., and p.m.

NOJ Pt. Vincente Calif. 5 a.m. and p.m.

NOW Port Angeles Wash 6:40 a.m. and 4:40 p.m.

NOY Galveston Texas 9:50 a.m. and p.m.

NREH Pt. Adams Oreg. 6:50 a.m. and 4:50 pm.

(Williams-R552, N. J.)

WCOS, Towboat "Betty Gardner" stating, "Reporting from 266 miles, passed the 'Mobile', the 'Huskie', getting foggy. Should get into New York by 6:15 tomorrow morning." This was repeated about ten times and then sign off. Frequency was 2775 kcs. (Carter—R649, Mich.)

WFBI (formerly W1OXBI) on 1642, and 2442 kcs. heard testing during the last part of August. WFBI is owned by the Federal Bureau of Investigation and has an output of 42 watts. (Hill—R49, D. C.)

Natural Gas Pipe Line Co. of America stations heard on a frequency of 2726 kcs. with 50 watts power. Those heard were: KIPU, Beatrice, Nebraska; KIPR, Red Oak, Iowa; and KIPT, somewhere in Iowa. They were making a regular Friday test and frequency check at 9:55 p.m. (May—R689, Ga.)



A coffin and death's head tend to make the QSL of ZL3KX an eerie one. A lavender border heightens the eftect.

Over twenty ship stations have been heard on 2725 kcs. They are so thick at times that I hear nothing but a jumble of QRM. (Carter—R649, Mich.)

3410 kcs. WWBR on contacts WWAD "Violet", WWCO "Orchid," WWCR "Linden," WWEH "Wistaria," and others at 8:30 p.m. . . . . WWMO on 2770 kcs. at Odensburg, N. Y. tests daily at 10 p.m. with WWME — Chatauguay, N. Y.; WWMD-Derby Line, Vt.; WWMP Rouses Pt., N. Y.; and WWMR-Richford, Vt. all on same channel. . . . . . CZ7I-2238 kcs. and CZ7J -2275 kcs. at 9 p.m. daily. CY2J on 2342 kcs. heard at 11:45 p.m testing. CZ4L on 4500 kcs. at 5:40 p.m. CZ6T on 4755 kcs. with VDA and CY3T on same frequency around 9 p.m. (Roman—Ill.)

Weather reports are heard daily on the following stations at the times mentioned: WAQ—2522 kcs. at 11:50 a.m. and p.m., WAK—2558 kcs. at noon and midnight WAY—2182 kcs. at 10 am. and pm. WMI—2182, 2514, 2550, 6470, 8585, and 11370 kcs. at 11 a.m. and p.m. WOX—2590 kcs. at 10:50 a.m. and p.m. WWM—2572 kcs. at 11:10 a.m. and p.m. WWOC—2572 kcs. at 11:40 a.m. and p.m. WWOJ—2572 kcs. at 10:20 a.m. and p.m.

WWOS—2572 kcs. at 11:50 a.m. and p.m. WYYD—4295 kcs. at 10:30 p.m. (Roman—III.)

#### **ULTRA HIGH**

W1XOV on 27500 kcs. is often heard working several other stations at Mt. Washington and other observatories for weather news. W1XOV is Yankee Network.

W1XW on about 31000 kcs. heard testing. This is the Harvard Weather station on Mt. Blue, Milton, Mass.

W5XD on 31600 kcs. heard daily with facsimile broadcast. They verified promptly with WFAA card on which was typed "For W5XD."

W9XOK on 25300 kcs. at St. Louis, Mo. heard here relaying KXOK. The program quality is good, but announcements are somewhat distorted. Signal strength is good.

W9XJD on 26100 kcs. heard here regularly near noon. Relays KSD.

Spanish speaking stations heard on 27800 kcs. and 30800 kcs. Latter mentioned call is believed to be COCA. These may be harmonics as they are not strong signals.

KQPV on 32500 kcs. at Los Angeles County Sheriff's Office, Calif. heard several days at 1-2 p.m. Also heard was KQPN which is believed to be at Ft. Worth, Texas and WRBA, location unknown. Local Cruisers on about 31000 kcs., Boston Police on 35500 kcs., and WQPR at Quincy, Mass. near 36000 kcs. are also heard well.

Forest Fire Stations in towers of the Massachusetts department of conservation for two way work with small cruisers. WRKO at Carver, Mass.; WRKQ, Fall River, Mass.; and WQWG at Havardall are all heard well on 31000 kcs. These stations work small pick-up trucks equipped with two-way radio to deal with small brush and grass fires. Others heard besides those listed previously are: WQYU at Hanson, Mass., on 35600 kcs., WQWJ on 35600 kcs., at unknown location, WRKJ and WRNU with location and frequencies

uncertain. (All reports in this month's Ultra High section were by Alton L. Caldwell, R1319, Brockton, Mass.)

#### "FM" BROADCASTING

"FM" or Frequency Modulated type of broadcasting, using the ultra high bands is due for a little space in our column. We will not promise that the abundancy of news will be such that we can devote an entire section to it each month, but there is definite increase in the amount of interest shown by readers in this type of transmission. Though the stations cannot be heard intelligibly on an ordinary receiver, and receivers equipped for "FM" reception have only very recently been made ready for the general public, DXer's profess an unusual desire for more information about these stations that can be heard, but cannot be understood. Without attempting to go into detail on the subject, we're going to give you a list of stations using this type of broadcasting and for more information we refer you to the article "Sta ticless Radio" which appeared in March 1939, issue of RADEX. W1XCS Storrs, Conn. 250 w. 39450,

139960, 300000, 400000 kcs. W1XEV Storrs, Conn. 500 w. 26300 kcs.

W1XOJ Paxton, Mass. 2-3 kw. (soon to be 50 kw.) 43000 kcs.

WIXSL Hartford, Conn. 100 watts (CP only)

W1XSO Hartford, Conn. 1 kw. 43200 kcs. (CP only)

W1XPW Hartford, Conn. 1 kw. 43400 kcs.

W2XAG Yonkers, N. Y. 5 kw. 132400, 132680, 133380, 134360, 135-340, 137440, 137860, 138140, 138840, 139540, 139960, 162000, 168000, 210-000, 216000, 264000, 270000, 300000, 400000, 401000 kcs.

W2XDA Schenectady, N. Y. 50 w. 43200 kcs.

W2XMN Alpine N. J. 40 kw. 42800 and 117430 kcs.

W2XOY Albany, N. Y. 150 watts 43200 kcs.

W2XQR New York N. Y. 1 kw.

41200 (CP) and 43200 kcs. (pending).

W2XSN Alpine, N. J. 1 kw. (CP) 43200 kcs.

W3XO Georgetown, D. C. 1 kw. (CP) 43200 kcs.

W9XYH Superior, Wis. 1 kw. (CP) 26300 kcs.

WEOD Boston, Mass. Relay station -50 w. 133030, 134850, 136810, 138630 kcs.

(List by Callan—R987, Readville, Mass.)

W3XO on 43200 kcs. with watts an "FM" station heard bet in 5 p.m. and 5:30 p.m. This station has just commenced broadcasting and can be addressed at 1219 Wisconsin Ave., N. W. Washington D. C. (Hill—R49 D.C.)

W1XOJ on 43000 kcs the Yankee Network station at Paxton, Mass. is an "FM" station operating daily from 8 a.m. to midnight. They carry programs of the Yankee, Colonial, and Mutual networks. This information comes from a program sheet distributed by the network at the Brockton Fair where a demonstration of "FM" sets was a feature. Reception was excellent on receivers at the fair. (Caldwell—R1918 Mass.)

#### SHORTWAVES IN REVIEW Albania

ZAA on 7890 kcs. at Tirana heard at 6:15 a.m. with R5 signal. (Eders—Minn.)

#### Bahama Islands

ZFS on 4512 kcs. at Nassau was heard from 6:45-6 p.m. contacting VST. (Roman—III.)

#### Brazil

PSE has shifted to 14940 kcs, and are heard from 7-8 p.m. with same program as PSH. (Williams—R552, N. J. and Cazeneuve—P. Q.)

#### Canada

CFCX on 6005 kcs, is on the air from 7:45 a.m. to 1 a.m. and relays CFCF on 600 kcs. Address: Canadian Marconi Co. Ltd., Box 1690, Montreal. (Cazeneuve—P. Q.)

CFKX on 6080 kcs in Vancouver, B. C. can be heard relaying CFKC daily between 1-3 a.m. except Mondays. Slogan: "Shortwave Voice of British Columbia." (Williams-R552, N. J.)

CFRX on 6070 kcs. at Toronto verifies with a postal card on which is a picture of Ontario's Parliament Bldg. The building is a stone's throw CFRX-CFRB studios. (Szabo-R1302, N. J.)

#### Canary Islands

کس و EAJ-43 on 10370 kcs. at Tenerife was heard at 8:30 p.m. (Eders— Minn.)

#### China

XGOX-XGOY at Chungking was bombed on September 3. After that, XGX took up the government's broadcasting. Now, October 20, a new XGOY at Linkiang (Not certain), in Northwestern Yunnan Province 18 broadcasting. They maintain the same schedule as previously with news in English on 11900 kcs. at 6:15 a.m. and on 15200 kcs. at 9:50 p.m. (Callan-R987, Mass.)

#### Colombia

New calls in use or soon to be used by all stations:

4745—HJCX Bogota

4755—HJEH Buenaventura

4765—HJFB Manizales

4775—HJGB Bucaramanga

4785-HJAB Barranquilla

4795—HJFI Ibague

4805—HJDU Medellin

4815—HJBB Cucuta

4825—HJED Cali

4835—HJAE Cartagena

4845—HJCD Bogota

4855—HJCF Bogota

4865-HJBJ Santa Marta

4875—HJFH Armenia

4885—HJDB Medellin

4895—HJCH Bogota

4905—HJAG Barranquilla

4915-HJFC Pereira

4925—HJAP Cartagena

9630—HJCT Bogota

(Williams—R552, N. J.)

#### Costa Rica

TIPG on 9612 kcs. at San Jose is on a verification received.

heard from 7 a.m. to 9 a.m. and 4 p.m. to 11:30 p.m. (Harris-Mass.)

#### Cuba

COHI on 6450 kcs. at Santa Clara relays CMHI from 7 p.m. to 1a.m., at which time they sign off. General Electric is mentioned often. (Williams-R552, N. J., and Cazeneuve-P. Q.)

COCN on 9437 kcs. is under construction in Cuba. (Wiliams-R552,

N. J.)

A very recent list of Cuban stations has been received from Jose Carriazo, Jr., DX Editor of "Radiomania" of Havana.

6130 COCD, La Voz del Aire, G. y

Vedado, Havana.

6330 COCW, La Voz de las Antillas, Gil y Troncoso, Prado 553, Ha-

6350 COCQ, Cambo y Gabriel, S. A., Monte 103, altos, Havana.

6450 COHI, Amado Trinidad Velasco, Santa Clara.

8665 COJK, La Voz de el Camagueyano, Finlay 3, altos Camaguey.

8700 COCO, Capitan Luis Casas Romero, Box 98, Havana.

8830 COCQ, Cambo y Gabriel, Monte 103, altos, Havana.

8935 COKG, Hermanos Grau, Box 137, Santiago de Cuba.

9030 COBZ, Radio Salas, M. y G. Salas, Box 866, Havana.

9190 COCX, Casa Lavin, Box 32, Havana.

9363 COBC, El Progreso Cubano, Domingo Fernandez, Box 132, Ha-

9437 COCH, General Broadcasting Co., Box 41, Havana.

9805 COCM, Laureano Suarez, 25 No. 1115, Vedado, Havana.

11800 COGF, Bernabe, de la Torre, Gral. Betancourt 51, Matanzas.

#### Czechoslovakia

OLR5A on 15230 kcs. at Prague heard at 7:30 p.m. with Czeck news. Signal R9! (Eders—Minn.)

Dominican Republic

HI-1A on 6185 kcs. now as stated

HI-1J on 5855 kcs. at San Pedro de Macoris is heard nightly from 8-11 p.m. (Cazeneuve-P. Q.)

#### Ecuador

HCK has shifted its frequency to 5360 kcs. Quito is the location. (Williams—R552, N. J.)

#### France

"Radio Strasbourg" on 11870 kcs. is an odd one reported from 10-11:30 p.m. May be the broadcast band station being rebroadcast on S.W. by a "Paris Mondial" transmitter. (Cazeneuve-P. Q.)

"Paris Mondial" heard on 9680. 11718, and 11885 kcs. daily from 8 p.m. to 12:30 a.m. with news in English at the beginning and end of the transmission. (Caldwell-Mass., Harris-Mass., Cazeneuve, P. Q., Eders -Minn.)

"Paris Mondial" on 15243 kcs. 1s heard from 12:30-1:30 p.m. Reports are requested. (Harris-Mass., and Cazeneuve, P. Q.)

#### French Indo China

"Radio Saigon" on 11780 kcs. at Saigon, broadcasts from 6 a.m. (or earlier) with English program lasting till 6:45 a.m. (Skyten-R786, Mass.)

#### Finland

OIE on 15190 kcs, at Lahti heard from 3-3:30 p.m. with news and piano Signal varied from R7-8. music. (Blanchard—R485 N. Y.)

#### Germany

DIL on 15110 kcs. (replacing DJB -15200 kcs.) DJD, and DXB on 9610 kcs. broadcasts nightly to North America. (Skyten-R786, Mass.)

DJX on 9675 kcs. has news in English around 4:15 p.m. (Harris-Mass.)

DXB on 9610 kcs. received very well in the afternoon and early evening with broadcasts beamed on the United States. (Caldwell— Mass., and Roman-Ill.)

DZC on 10290 kcs. at Berlin transmits from 4:50-9 p.m. to South America now along with DJN, DJQ, DJP, and DJA. (Callan—Mass.)

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#### Great Britain

Complicated, though it may seem, the following is a complete schedule of transmisions for BBC stations:

The stations available for use are: GSA 6050 kcs., GSB 9510 kcs., GSC 9580 kcs., GSD 11750 kcs., GSE 11860 kcs., GSF 15140 kcs., GSH 21470 kcs., GSI 15260 kcs., GSJ 21530 kcs., GSL 6110 kcs., GSN 11820 kcs., GSO 15180 kcs., GSP 15310 kcs., GST 21550 kcs., GSU 7260 kcs., GSV 47810 kcs., GSW 7230 kcs., GRX 9690 kcs., GRY 9600 kcs., and GRZ 21640 kcs.

**Transmission I:** From 12:57 a.m. to 5:15 a.m. on GSD, GSB, (till 3:15 a.m.), GSF (from 3:30 a.m.), GSP, and GSI.

Transmission II and III: 5:42 a.m. to noon on GSJ GSF (from 10:45 p.m.), GST (till 10:15p.m.), GSG (NA), GSH, and GSV.

Transmission IV: From 12:22 to 3:30 p.m. on GSI, GSD, GSC (from 1:35 p.m.), GSG (NA), and GSE (from 1:35 p.m.). From 3:50-6 p.m. on GSC, GSP (Na), GSO, GSF, and GSD.

Transmission V: From 6:22-9:15 p.m. on GSD (NA) GSB (NA), GSF, and GSC.

Transmission VI: From 9:37 p.m. to 12:30 p.m. on GSD, GSC, GSB (NA).

European Transmission: From 12:57 a.m. to Noon on GSW and GSE. From 12:17 p.m. to 9:15 on GSA and GRX.

Arabic Transmission: From 12:17 p.m. to 1:15 p.m. on GSP and GSC.

NOTE: (NA) means that the program is beamed at North America. (RX and supplements by Harris-Mass., and Williams-R552, N. J.)

#### Guatamala

TGWB on 6480 kcs., and not 6490 kcs. This is from a verification received. (Cazeneuve—P. Q.)

TGWA verified my report of reception on the night they dedicated their program to RADEX. (Fern-R1160, N. J.)

Verification gives Guatamala stations as follows. TGW on 1520 kcs., with 5 kw., TGWA on 9685 and 15170 kcs. (11760 and 17800 kcs. optional) with 10 kw., TGWB on 6480 kcs. with 1 kw., and TGWC on 2320 kcs. with 1 kw. (Atwood—R1355, D.C.)

Hungary

HAT-4 on 9125 kcs. heard on usual Sunday 7-8 p.m. program, but with almost double signal strength than when heard last year at this time. (Bonifield—R1318, N. J.)

#### Ireland

"Radio Eire" on 17840 kcs. heard at 2:45 p.m. with cricket game. (Eders—Minn., and Piechuta — R1269, Conn.)

Italy

12RO-12 on 15100 kcs. at Rome heard irregularly from 4-5:30 p.m. (Harris—Mass.)

Japan

JZI on 9535 kcs. from 12 to 130 (NA) and 6-8:30 a.m.

JZJ on 11800 kcs. from 6:00-8:30 a.m., 2-4 p.m., and 4:30-5:30 p.m.

JZK on 15160 kcs. from 12-1:30 a.m., (NA), 4:30-5:30 p.m., and 8-9 p.m. (NA).

JVW on 7257.5 kcs. from 2-4 p.m. (RX and Skyten—R786, Mass.)

#### Lithuania

LYR on 9290 kcs. at Kaunas is operating from 1-1:40 a.m., and from 3:30 to 4 p.m. On Sundays from 2:30-3:15, 7-8:45 a.m., and 12:30-2:15, 3-4:30 p.m. (Williams—R552, N. J.)

Luxembourg

"Radio Luxembourg" on 9524 and 11776 kcs broadcasts daily on both channels. First on 9524, then 8 hours later on 11776 kcs. The station observes the same schedule for three days, then both programs start one hour later for three more days, and so on. Each broadcast lasts one hour (RX and Blanchard—R485, N. Y., and Harris—Mass.)

#### Mexico

XEKW on 6020 kcs. (approximately) heard regularly. (Walker—W. Va.)

XEXA on 9503 kcs. and is heard



The new QSL card from EAQ in Madrid. The map of the world shows how many hours to add or subtract to convert to local time from GMT. The tower is La Giralda in Seville. (Courtesy of John D. Long).

regularly until 1 a.m. (Cazeneuve-

Nicaragua

YNDG on 7660 kcs. in Leon, having recently moved to that channel. (Williams—R552, N. J.)

#### Peru

OAX4T on 9562 kcs. operates from 11:30 a.m. to 1:30 p.m.

OAX4Z on 6082 kcs operates from 7 p.m. to 11:30 p.m. Address for both stations: Ave. Petit Thomas 447, Lima, according to a verification. (Scott—Tenn.)

Philippine Islands

KZEH on 9580 kcs. (announced frequency) has been heard testing between 7-8 a.m. Reports were solicited and should be addressed to P. O. Box 119, Manila. (Williams—R552, N. J.)

KZIB on 9500 kcs, at Beck's Dept. Store—I. Beck, Inc., Escolta. Also operates on 6040 kcs and 900 kcs. Schedule: 6 p.m. to 12:30 a.m., and 4-10 am.

KZRF on 6140 kcs (formerly KZEG) is owned by F. E. B. Co., and known as "Radio Filipinas" at Insular Life Bldg. They operate on 780 and 6140 kcs, from 5:30 p.m. to 11 a.m.

KZRH on 6100 kcs. "Voice of the Philippines" addressed as Radio Heacock, Heacock Bldg., Escolta. They broadcast in parallel with 1200 kcs. from 5 p.m. to 11 a.m.

KZRM on 9570 kcs. "Radio Manila" owned by Far Eastern Broadéasting Co.; Insular Life, Bldg. Uses 50 kw. on 618 kcs. and 5 kw. on shortwaves from 4:30 p.m. to 7 p.m., 11 p.m. to 12:30 a.m., and 4 a.m. to 10:30 a.m. KZRM has 15 kw. transmitter under construction together with a 500 ft. vertical antenna. It is the most powerful English speaking station in Asia or Oceania. (Preceding four reports by Halsema—N. C.)

Portugal

CSW on 9740 kcs. heard nightly at 8 p.m. and reported coming on the air at 3 p.m. on Saturdays. (Harris—Mass., and Cazeneuve—P. Q.)

Spain

EAQ on 9855 kcs. at Madrid heard signing on the air at 6 p.m. and Sundays at 8:30 p.m. Reports requested—QRA still the same old P. O. Box 951. (Harris—Mass., Caldwell—Mass.) Sweden

SBI on 15150 kcs. at Motala heard signing off at 4:30 p.m. and announcing the station as SBI. R6 was the signal strength. (Eders—Minn.)

SBT on 15155 kcs. heard on Wednesday evenings 8-9 p.m. (Blanchard R485, N. Y., and Lund—R376, Pa.)

Thailand

HS6PJ on 19020 kcs. at Bangkok, Thailand (formerly Siam) heard at 9 a.m. with R7 signal (Eders—Minn.)

Turkey

TAP on 9454 kcs. at Ankara heard signing off around 4:50 p.m. and using Turkish National Anthem for signature theme. (Skyten—R786, Mass., and Eders—Minn.)

U.S.A.

KGEI verified this morning signed by E. T. Buck Harris, manager. It is a very handy card veri for any DX listener as it has on the reverse a map of the world with time zones for the principal cities of the world. (Atwood—1355, D.C.)

WCBX complete schedule:

21570 kcs. daily 8 a.m. to 12:30 p.m. for Europe.

15270 kcs. daily 1-3:30 p.m. and Sun. till 2:30 only for Euorpe.

11830 kcs. daily 4-6 p.m. and Sun. 3-6 to Europe and 6:30-10: p.m. including Sun. for So. America.

9650 kcs. daily 10:30 p.m. to 11:30 p.m. including Sun. for So. America.

6120 kcs. (Dec.) and 6170 kcs. (Nov.) midnight to 2 a.m. for South America. (RX)

WMI on 8585 kcs. at Lorain, Ohio verified my report. They broadcast on this frequency at 10 p.m. (Flynn—

R937, Sask.)

WRCA on 9670 kcs, and WNBI on 17780 kcs, verify with red and white cards showing pictures of the RCA Mfg. Co., and the RCA building. (Szabo—R1302, N. J.)

WRUL is the final call adopted by the former W1XAL and the W1XAR call is now WRUW in spite of the fact that FCC assignment originally fixed the calls as WSLA and WSLR. (Varga—III.)

W6XUJ on 8850 kcs. and 13500 kcs. (approx.) at Treasure Island, Calif. working the yacht "Contender."

(Caldwell-R1319, Mass.)

W9XF and WCBI (W9XAA) have ceased all operations—W9XF permanently. Both stations are in Chicago. (Callan—Mass.)

U. S. S. R.

RNE on 12000 kcs. at Moscow heard on Wednesday at 4 p.m. and also on a Tuesday at 3 p.m. with Kremlin chimes. Signalat R9. RNE also reported at 10:15 p.m. with R8 signal. (Piechuta—Conn., and Eders—Minn.)

RV96 on 15180 kcs. at Moscow heard with news in English at 7 p.m. and still on the air at 11:45 p.m. (Eders—Minn.)

Vatican City

HVJ on 13600 kcs. heard on a Wednesday announcing a schedule, but I was unable to copy. (Bonifield, R1318, N. I.)

Venezuela

YV1RX on 4890 kcs. at Maracaibo signs off at 9:30 p.m. with the national anthem and 10 chimes. (Bennett—R1342, N. J.)

(Continued on Page 43)

### Turner Dial Boosts The Short Waves

By B. Francis Dashiell

Turner Dial finished his lunch and rose from the table. The Elite Restaurant, presided over by a large, cordial and busy person known as Sally, had offered a seasonal turkey special dinner. Turner had enjoyed his, and said so. Then as he paid his check, reached for a mint, and turned toward the door, Sally stopped him.

"Wait a moment!" she insisted. "I want a radio for the restaurant. With all this war news going on I'll have to break down and get a radio. I hate 'em! They rattle and shout all over the place and you can't hear the orders when they're given. But my customers keep asking why I don't have a radio so they can get the news and comments while eating."

The amazed look on Turner's face made Sally grin. She was one person he hadn't been able to sell. He'd even argued to himself that he ought to stop eating at the Elite just out of revenge. But where else, he thought, could he enjoy such lunches? It would be punishment to his stomach, and, after all, Sally didn't have to buy a radio if she hated them.

"Drop in at the store when things are quiet," suggested Dial. "I have what you need for this place. When all is said and done you'll enjoy it, too." Sally grunted, and Turner departed for his shop a few doors down the street.

Bill Wod, the young assistant at Higrade Radio Sales and Service, was talking to a customer. "Here's Mr. Dial," remarked Bill. 'He'll tell you about what you need."

A middle-aged man turned to Dial. "I have a good radio," he began, "but my neighbor has one that picks up foreign stations. I go over there to listen to the war news that comes directly from London and English-speaking stations. It is great business!" The speaker paused, and continued: "You know I've never been



excited over these foreign stations, but now it seems I simply must be able to hear them when I wish."

"You're just one of many," commented Dial as he watched Bill Wood depart for his lunch. His thoughts turned to Sally and her changed attitude toward radio because of the demands of her public. Certainly Bill would be surprised when Sally told, him she was getting a radio. Then. turning to his customer Turner Dial said: "This war in Europe has boosted radio. Customers come in here and sav they haven't been interested is distance and only listen to locals with a broadcast set. But now they're changing and we've sold a hundred receivers just since the war. Everybody wants short-wave tuning so it seems.

Evening in America is midnight on Europe's battle fields and the radio comment comes after the day's activities have let down. Turner knew that people wanted the latest news and that a great boost in all-wave receivers strong enough to bring in signals at any time was sweeping the country. Dial had helped many of his fellow-townsmen improve their DXing, and now that they had started on Europe's war, they were fast becom-

ing real DX fans and wanted world-wide reception.

The customer was standing before a fine new console. Turner hestitated a moment. Here was a possible sale. However, he said: "You don't want that set. You have a fine broadcast receiver that would get Europe if it could tune to those particular wave bands. What you need is a shortwave converter or high-frquency expander as some now call it. Here is one." And Turner set a small radiolike cabinet on the counter. "This unit works efficiently and will expand the broadcast band of your set from a present limit of 1.500 kilocycles to more than 25,000 kilocycles, more than is necessary for good short-wave reception from any place."

"Will you come to my home and demonstrate it?" asked the customer. Turner agreed, and said he would show him that night. He promised good, loud war news right away.

Bill Wood returned, and excitedly announced that Sally was coming down to look at the set. But just then the telephone rang. Turner answered, spoke a few words, and hung up. Turning to Bill, he said: "Say! I've got to go out right away and demonstrate a preselector. If Sally comes in show her this radio and deliver it if she wants it. Don't let her get another one for this is the only one she can use in the lunch room.

In a few minutes Turner Dial was entering an office building in the next block. He passed into a newspaper office and opened a door marked "Editor." An elderly gentlemen waved Turner to a seat, and said: "I thought I might get some war news here in the office direct from Europe and have a reporter translate the comments from France and Germany. That beats our wire services. But this all-wave set I had at home can't compete with the noise and clatter of this place. A friend said I could use a booster and then we could hear without difficulty."

"And I told you that you could do just that" answered Turner Dial.

"Here it is. Its known as a signal amplifier or preselector. This one is excellent but not so inexpensive either. It has five tuned radio-frequency amplification. That's a lot of R-F amplification in any man's radio layout. The band switch covers 6 bands and matches the broadcast and short-wave bands on most any allwave radio, such as this. It boosts the weak signals on any one of these bands, including the broadcast band. And this little volume control makes it possible to hold your receiver down to its former normal loudness or raise it far above anything it has attempted and beyond your imagination."

The editor expressed his interest. "Sounds too good to be true, but I guess modern radio science has improved a lot in the past few years. Try it out ond let's see how it works!"

"You will see" Turner Dial continued "this little unit has its own power supply built in. You simply plug it into the wall socket. Then you hook up this two-wire connection to the doublet antenna terminals of your radio. And that's that!"

Dial turned on the unit as well as the radio, then began to tune very slowly with the knob of the preselector unit. "This is a precision unit, and must be tuned very carefully," he instructed the veteran newspaper man. Suddenly a foreign voice spoke and the volume became too intense even in the noisy news room. Turner cut it down. "That's Moscow" he exclaimed. "And here are others . Listen to 'em!"

"Why that works fine!" said the editor as he called enthusiastically to his associates to listen. "Now we can get this war stuff right off the bat from headquarters and pass some of it on to our readers!"

As Turner walked back to the store he passed the Elite Restaurant. The door opened for a customer and a radio voice came to Turner's welltrained ears. Dial smiled to himself.

(Please turn to Page 43)

# DXer's Appointment Calendar

The time shown in this Calendar is EST. For CST, subtract 1 hour; for MST, subtract 2 hours; for PST, subtract 3 hours; for GMT, add 5 hours. Clubs: Newark News Radio Club (NNRC); Universal Radio DX Club (URDXC); Na-tional Radio Club (NRC); International DX-ers Alliance (IDA); DXers International Ex-changes Club (DXIEC); World DX Alliance (WDXA). Nov. 24, 8 pm, meeting of Brooklyn-Metropolitan Chapter, The Radex Club, 6637 Ovington Court, Brooklyn, N Y.
Nov. 24, 2-3 am, WGRC, New Albany, Ind., 1370 kcs., "Parade Across Indiana," for NNRC. Nov. 26, 3-5:30 am, KOVO, Provo, Utah, 1210 kcs. (NRC).
Dec. 3, 3-4 am, XEFC, Merida, Yuc., 1340 Dec. 3, 3-4 am, XEFC, Merida, Yuc., 13-40 kcs. (IDA). Dec. 4, 8 pm, meeting of lrvington Chapter of The Radex Club, 870 Sanford Ave., Irvington, N. J. CFGP, Grande Prairie, Alta., Dec. 8, 3-4 am, CFGP, Grande Prairie, Alta., 1200 kcs. (NRC).
Dec. 8, 1:30-5:30 am, WJAG, 1060 kcs., Norfolk, Nebr.
Dec. 8, 1:30-5:30 am, WJAG, 1060 kcs., Norfolk, Nebr. Dec. 8, 4-5 am, CKLN, Nelson, B. C.. 1420 kcs., (NRC). (This date may be changed to Dec. 14, 4:30-5:30 am. Listen for this program on Dec. 14 if not heard on the 8th). Dec. 9, 2-4 am, KFUO, St. Louis, Mo., 550 kcs. (Gospel messages and music. Re-KUS. (GOSPEI messages and music. Reporters will receive a worthwhile and attractive souvenir).

lec. 10, 4-5 am, CFRN, Edmonton, Alta., 960 kcs. (NRC).

lec. 10, 4-5 am, CKNX, Wingham, Ont., 1200 kcs. (NPC). 960 Res. (NRC).
Dec. 10, 4-5 am, CKNX, Wingham, Ont.,
1200 kes., (NRC).
Dec. 11, 4-5 am, CKBI, Prince Albert, Sask.,
1210 kes. (NRC).
Dec. 12, 4:40-4:55 am, KRGV, Weslaco, Tex.,
1260 kes. (Irvington Chapter).
Dec. 14, 4-5 am, XEDL, Navojoa, Son., 1240
kes. (URDXC). (Send IRC or 10 cvos.
Mexican stamp for veri. KFJZ will be off
the air for this program) Mexican stamp for veri. KFJ2 will be on the air for this program). Dec. 14, 4:20-4:35 am, KFIZ, Fond du Lac, Wis., 1420 kcs. (NNRC). Dec. 14, 4:30-5:30 am, CKLN, Nelson, B. C., 1420 kcs. (NRC). (Will be broadcast on this date if not on the 8th). this date if not on the out.

Dec. 17, 1-1:30 am, YNDG, Leon, Nicaragua, 13900 kcs. (IDA).

Dec. 17, 2-4 am, WCKY, Covington, Ky., 1490 kcs. (NNRC).

Dec. 17, 4-5 am, CJCJ, Calgary, Alta., 690 kcs. (NRC).

Dec. 17, 2:30-2:45 am, TG1 on 1310 and TG2 on 6190 kcs, Guatemala City, Guat. on 6190 kcs, Guatemaia City, Guac. (DXIEC).
Dec. 24, 12:30-1 am, YN3DG, Leon, Nicaragua, 13900 kcs. (DXIEC).
Dec. 29, 8 pm. meeting of Brooklyn-Metropolitan Chapter, The Radex Club, at 6637 Ovington Court, Brooklyn.
Jan. 3, 4-5 am, CJCS, Stratford, Ont., 1210 kcs. (NRC).
Jan. 7 4-5 am, WWNC, Asheville, N. C., 570 kcs. (WDXA).
Jan. 13. 3-4 am, CHLT, Sherbrooke, P. Q.,

1210 kcs. (NRC). 1210 kcs. (NRC). 1310 kcs. (NRC). 1370 kcs. (NRC).

Jan. 15, 12:30-1 am, KOB, Albuquerque, N. Mex., 1180 kcs. (IDA).
Jan. 18, 4-5 am, CKOV, Kelowna, B. C., 630 kcs. (NRC).
Jan. 28, 4-5 am, HOK, Colon, Panama, 640 kcs. (NRC).
Jan. 28, 4-5 am, HOK, Colon, Panama, 640 kcs. (URDXC).
Jan. 28, 4-5 am, HP5K, Colon, Panama, 6005 kcs. (URDXC). (Send IRC or unused Panamanian stamps for veri).
Feb. 4, 4:30-5:30 am, XEDE, Torreon, Coah., 1400 kcs. (URDXC).
Feb. 11, 4-5 am, XEQK, Mexico City, 1500 kcs. (URDXC).
Feb. 25, 4:30-5:30 am, XETB, Torreon, Coah., 1310 kcs. (URDXC).
XEDE and XETB are both owned by Aurelio G. Zaragoza. Reports are urgently requested, but it is advisable to send an IRC quested, but it is advisable to send an IRC unused Mexican stamps for veries. NOTE—The National Radio Club is arrang-

### Regular DX Programs

ing a series of special programs from Cana-

dian stations, and some programs may be scheduled after this list appears in print. DXers who are interested can get the latest dates by sending a postal card to the NRC at 317 E. 10th St., Erie, Pa.

First day of month, 44:30 am, WPAY, 1370 kcs., Portsmouth, Ohio. Last day of month, 3-5 am, KWSC, 1220 kes.. ast day of model., Pullman, Wash. Parv Saturday, 2:30-2:45 am, KLS, 1286 Every Saturday, 2:30 kcs., Oakland, Calif. Every Saturday, 10:15-10:30 am, WEEU, 830 kcs., Reading, Pa.
Every Saturday at 10 pm, YN3DG, 13908
kcs., Leon, Nicaragua. (Spatari—10c for veries). veries, veries, veries, veries, veries, very Saturday, 4:15-4:45 pm, W2XJI, 26306 kcs., Newark, N. J. (NNRC tips). Every Saturday, 10 pm, YN3DG, 13900 kcs., Leon, Nicaragua. (Spatari program). Every Sunday, 2-2:30 am, TG1 on 1310 and TG2 on 6190 kcs., Guatemala City, Guat. Every Sunday, 10:15-10:45 am, CFCO, 630 kcs. Charbam Out Every Sunday, 10:13-10:45 am, CFCO, 656 kcs., Chatham, Ont.
Every Sunday, 3-5 am, XEAC, 980 kcs., Tijuana, B. Cfa.
Every Sunday, 12:30-1 am, TGQA on 6400 and TGQ on 1450 kcs., Quezaltenango, Guatemala. (Spatari program, all reports verified free). First Sunday, at 1 am, YN3DG, 13900 Leon, Nicaragua. (Spatari program) YN3DG, 13900 kcs., Leon, Nicaragua. (Spatari program). First and Third Sunday, 2-4 am, WJBO, 1120 kcs., Baton Rouge, La. Every Tuesday, 11:45 am-noon, W9XA, 26450 kcs., Kansas City, Mo. Every Wednesday, 12:30 am, KOY, 1390 kcs., Phoenix Arii

Phoenix, Ariz.

First and Third Wednesday, 1:45-2 pm,
WTAR, 780 kcs., Norfolk, Va.

Every Thursday, 2:45-3 am, KSL, 1130 kcs.,
Salt Lake City, Utah. (Spatari announcements). 1st to 7th, midnight to 6 am, KPAB, 1500 kcs., Laredo, Tex. (Mexico Tourist Program; Mexican souvenirs sent to reporters). 8th to 14th, midnight to 2 am, KPAB, 1500 kcs., Laredo, Tex. (Mexico Tourist Program; Mexican souvenirs sent to reporters).

15th to 31st, midnight to 6 am, KPAB, 1500 kcs., Laredo, Tex. (Mexico Tourist Program; Mexico souvenirs sent to reporters).

Second Friday, 12:30-1 am, WJAG, 1060 kcs., Norfolk, Nebr.

## The Monthly Frequency Checks

			,		
TOR the	purp	oose of checking the	4:45-5:00	1370	KFGQ
cannot be	heard	satisfactorily on their	4:50-5:05	1420	Boone, Iowa KRBC Abilene, Texas
eral Comr	nunica	ansmissions, the Fed- tions Commission re- monitoring broadcasts	4:55-5:10	1200	KGHI Little Rock, Ark.
from a sel	ected s	group of stations. Fol- est available. All time	5:00-5:15	1370	KTEM
is am., E	astern	Standard.	5:05-5:20	1390	Temple, Texas KABR
	Seco	nd Monday			Aberdeen, S. D.
2:55-3:10	1310	WBRK Pittsfield, Mass.	5:10-5:25	1200	KGEK Sterling, Colo.
3:00-3:15	1370	WABY Albany, N. Y.	5:15-5:30	1370	KFJZ
3:05-3:20	1420	WMAS Springfield, Mass.	5;20-5:35	1420	Fort Worth, Tex. WMBH
3:10-3:25	1200	WCAX Burlington, Vt.	5:25-5:40	1200	Joplin, Mo. WIL
3:15-3:30	1,370	WRDO Augusta, Maine	5:30-5:45	1370	St. Louis, Mo. WOC
3:20-3:35	1420	WAGM Presque Isle, Me.		1420	Davenport, Iowa. KABC
3:25-3:40	1210	WHAJ Greenfield, Mass.	5:35-5:50	1420	San Antonio, Tex.
3:30-3:45	1390	WODM	5:40-5:55	1200	KADA Ada, Oklahoma
3:35-3:50	1310	St. Albans, Vt. WMFF Plattsburg, N. Y.	5:45-6:00	1370	KLUF Galveston, Texas
3:45-4:00	1220	WCAD Canton, N. Y.	5:50-6:05	1190	KTKC
3:45-4:00	1500	KVWĆ Vernon, Texas	5:55-6:10	1400	Visalia, Calif. KHBC
3:50-4:05	1310	WLNH Laconia, N. H.	6:00-6:15	1370	Hilo, Hawaii. KRE
3:55-4:10	1200	WIBX Utica, N. Y.	6:05-6:20	1500	Berkeley, Calif. KXO
4:00-4:15	1500	WWRL Woodside, N. Y.		1200	El Centro, Calif. KGW
4:00-4:15	1370	KVRS Rock Springs, Wyo.	6:10-6:25		Stockton, Calif.
4:05-4:20	1310	WMBO Auburn, N. Y.	6:15-6:30	1370	KERN Bakersfield, Calif.
4:10-4:25	1210	WBRB Red Bank, N. J.	6:20-6:35	1420	KUMA Yuma, Arizona.
4:10-4:25	1420	KDNT Denton, Texas	6:25-6:40	1200	KVCV
4:15-4:30	1500	KPAB Laredo, Texas	6:30-6:45	1280	Redding, Calif. KLS
4:20-4:35	1310	KVOX, Moorhead, Minn.	6:35-6:50	1040	Oakland, Calif. KYOS
4:25-4:40	1210	KFPW Fort Smith, Ark.	6:40-6:55	1200	Merced, Calif. KSUN
4:30-4:45	1370	WMIN St. Paul, Minn.			Lowell, Arizona.
4:35,4:50	1420	KNET _	6:45-7:00	1100	KGDM Stockton, Calif.
4:40-4:55	1200	Palestine, Texas WBBZ Ponca City, Okla.	6:50-7:05	1450	KIEM Eureka, Calif.
		I onca Oity, Okla.			, ,

6:55-7:10	1200		4:05-4:20	610	WCLE
7:00-7:15	1310		4:10-4:25	1210	Cleveland, Ohio. KALB Alexandria, La.
7:05-7:20	1420	Fresno, Calif. KGLU	4:10-4:25	1310	WLBC
	_	Safford, Arizona	4:15-4:30	1370	Muncie, Indiana. KELD
	Seco	ond Tuesday			El Dorado, Ark.
2:55-3:10	1210	WRAL Raleigh, N. C.	4:15-4:30	1500	WOPI Bristol, Tenn.
3:00-3:15	1310	WSJS Winston-Salem, N. C.	4:15-4:30	1200	WWAE Hammond, Indiana
3:05-3:20	1420	WMFJ .	4:20-4:35	1420	WACO
3:10-3:25	1200	Daytona Beach, Fla. WAIM	4:20-4:35	1410	Waco, Texas. WBCM
3:15-3:30	1370	Anderson, S. C. WMFD	4:25-4:40	1440	Bay City, Mich. KXYZ
3:20-3:35	1420	Wilmington, N. C. WEED	4:25-4:40	1210	Houston, Texas. WSIX
3:25-3:40	1200	Rocky Mount, N. C. WJNO			Nashville, Tenn.
		West Palm Beach, Florida.	4:25-4:40	1310	WCMI Ashland, Ky.
.3:25-3:40	1210	WJMC Rice Lake, Wis.	4:30-4:45	1370	KGKL San Angelo, Tex.
3:30-3:45	1500	WRDW	4:30-4:45	1200	WHBY
3:35-3:50	610	Augusta, Georgia. W1OD / Miami, Florida.	4:35-4:50	1420	Green Bay, Wis.
3:35-3:50	940	WICA Ashtabula, Ohio.	4:35-4:50	1310	Texarkana, Texas KSGN
3:40-3:55	1200	WAYX	4:35-4:50	1390	Birmingham, Ala. WHK
3:40-3:55	1210	Waycross, Ga. WLOK	4:40-4:55	1260	Cleveland, Òhio. KRGV
3:45-4:00	1500	Lima, Ohio. WDNC	4:40-4:55	1210	Weslaco, Texas WCOV
3:45-4:00	1370	Durham, N. C. WPAY	4:40-4:55	1.320	Montgomery, Ala. WADC
3:50-4:05	1250	Portsmouth, Ohio WAIR	4:45-5:00	i370	Akron, Ohio. KTOK
3:55-4:10	1310	Winston-Salem, N. C. KWOC	4:45-5:00	1200	Oklahoma City, Okla. WJHL
3:55-4:10	1200	Poplar Bluff, Mo. WMFR	4:45-5:00	1500	Johnson, City, Tenn. WJBK
3:55-4:10	1210	High Point, N. C. WALR	4:43-3:00	1420	Detroit, Mich. KGFF
		Zanesville, Ohio	4:30-3:03	1420	Shawnee, Okla.
4:00-4:15	1500	WHBB Selma, Alabama.	4:55-5:10	1210	KFVS Cape Giradeau, Mo.
4:00-4:15	550	WKRC	5:00-5:15	1370	KMAC
4:05-4:20	1420	Cincinnati, Ohio KFAM St. Cloud, Minn,	5:05-5:20	1310	San Antonio, Texas KAND Corsicana, Tex.

5:10-5:25	1210	KLAH Carlsbad, N. Mexico	3:25-3:40	1210	WBAX Wilkes-Barre, Pa.
5:15-5:30	1370	KIUP	3:30-3:45	1310	WHAT
5:20-5:35	1310	Durango, Colo. KOCY	3:35-3:50	1500	Philadelphia, Pa. WRTD
		Oklahoma City, Okla.	3:40-3:55	1210	Richmond, Va. WBBL
5:25-5:40	1210	KDLR Devils Lake, N. D.	3:45-4:00	1370	Richmond, Va. WBNY
5:30-5:45	1370	KICA Clovis, N. Mexico	3:45-4:00	1310	Buffalo, N. Y. KOME
5:35-5:50	1320	KGMB Honolulu, Hawaii			Tulsa, Oklahoma.
5:40-5:55	1200	KBTM	3:50-4:05	1410	WHIS Bluefield, W. Va.
5:45-6:00	1370	Jonesboro, Ark. KRMC	3:50-4:05	1500	KWEW Hobbs, New Mexico
6:05-6:20	1420	Jamestown, N. D. KORE	3:55-4:10	1210	WKOK Sunbury, Pa.
6:10-6:25	1200	Eugene, Oregon. KOOS	4:00-4:15	1310	WFBG Altoona, Pa.
		Marshfield, Ore.	4:05-4:20	1420	KRIC Beaumont, Texas.
6:20-6:35	1500	KPQ Wenatchee, Wash.	4:05-4:20	880	WQAN
6:25-6:40	1200	KFXD Nampa, Idaho	4:05-4:20	1500	Scranton, Pa. WGIL
6:30-6:45	1370	KUJ Walla Walla, Wash.	4:10-4:25	1200	Galesburg, Ill. KWNO
6:35-6:50	1500	KRNR Roseburg, Ore.	4:10-4:25	1400	Winona, Minn. WHDL
6:40-6:55	1200	KVOS Bellingham, Wash.	4:15-4:30	1330	Olean, N. Y. KRIS
6:45-7:00	1370	KEEN Seattle, Wash.	4:15-4:30	1310	Corpus Christi, Tex. WEBR
6:55-7:10	7801	KWLK	4:15-4:30	1370	Buffalo, N. Y. WIBM
7:00-7:15	1370	Longview, Wash. KRKO			Jackson, Mich.
7:05-7:20	1420	Everett, Wash. KLBM	4:20-4:35	1500	KBST Big Spring, Texas
7:10-7:25	1200	La Grande, Ore. KAST	4:20-4:35	1420	WPAR Parkersburg W. Va.
	Second	Astoria, Ore. d Wednesday	4:25-4:40	1430	KSO Des Moines, Iowa
2:55-3:10	1200	WEST Easton, Pennsylvania	4:25-4:40	1250	WKST New Castle, Pa.
3:00-3:15	1310	WTEL Philadelphia, Pa.	4:25-4:40	1200	WCLO Janesville, Wis.
3:05-3:20	1500	WNBF	4:30-4:45	1310	KROC
3:10-3:25	1200	Binghamton, N. Y. WLVA	4:30-4:45	780	Rochester, Minn. WPIC
3:15-3:30	1310	Lynchburg, Va. WSAJ	4:30-4:45	1370	Sharon, Pa. WEOA
3:20-3:35	1500	Grove City, Pa. WWSW	4:35-4:50	1500	Evansville, Ind. KDAL
		Pittsburgh, Pa.			Duluth, Minn.

4:35-4:50	1210	WJLS			nd Thursday
		Beckley, W. Va.	3:00-3:15	1500	WKAT
4:35-4:50	1420	WELL			Miami Beach, Fla.
		Battle Creek, Mich.	3:05-3:20	1200	WJRD
4:40-4:55	1120	WTAW			Tuscaloosa, Ala.
		College Sta, Tex.	3:10-3:25	1210	WSOC
4:40-4:55	1200	WHBC			Charlotte, N. C.
		Canton, Ohio.	3:15-3:30	1310	WAML
4:45-5:00	1310	KRMD			Laurel Miss.
		Shreveport, La.	3:20-3:35	1370	WPRA
4:45-5:00	1370	WSAU			Mayaguez, P. R.
	1070	Wausau, Wis.	3:25-3:40	1210	WPAX
4:50-5:05	1500	KNEL	2 20 2 45	<b>r</b> <0	Thomasville, Ga.
4:30-3:03	1300	Brady, Texas	3:30-3:45	560	
4-50 5-05	1.420	WLAP	3:35-3:50	1420	Miami, Florida. WPRP
4:50-5:05	1420		3:33-3:30	1420	Ponce, P. R.
4 55 5 10	<b>r</b> <0	Lexington, Ky.	3:40-3:55	1200	WFTC
4:55-5:10	<b>5</b> 60	KFDM	0.40-0.55	1200	Kinston, N. C.
4:55-5:10	1200	Beaumont, Texas. WFAM	3:45-4:00	1240	WKAQ 9
4:33-3:10	1200	South Bend, Ind.	5.45-4.00	1210	San Juan, P. R.
5:00-5:15	1310	KPDN	3:50-4:05	1440	WBIG
3.00-3.13	1310	Pampa, Texas.		1410	Greensboro, N. C.
5:00-5:15	1370	WHLS	3:50-4:05	1500	WDAN
• • • • • • • • • • • • • • • • • • • •		Port Huron, Mich.			Danville, Ill.
5:05-5:20	1500	KPLT	3:55-4:10	1210	WFOY
		Paris, Texas			St. Augustine, Fla.
5:05-5:20	1420	WCBS	4:00-4:15	1370	WAGF
		Springfield, Ill.			Dothan, Ala.
5:10-5:25	570	KGKO	4:05-4:20	1500	KPLC
T.15 T.20	1210	Fort Worth, Texas	4.05.4.20	1210	Lake Charles, La. WFDF
5:15-5:30	1310	KFPL Dublin, Texas.	4:05-4:20	1310	Flint, Mich.
5:15-5:30	1370	WDWS	4:10-4:25	1210	WGRM .
3.13-3.50	1370	Champaign, Ill.	4.10-4.23	1210	Grenada, Miss.
5:15-5:30	1500	KAWM	4:10-4:25	1340	WSPD
		Gallup, N. Mexico			Toledo, Ohio.
5:20-5:35	1420	WPAD	4:15-4:30	1370	WMFO
		Paducah, Ky.			Decatur, Ala.
5:25-5:40	1210	KGLO	4:15-4:30	1200	WCPO
		Mason City, Iowa			Cincinnati, Ohio
5:25-5:40	1200	WJBC	4:20-4:35	1500	WKEU
		Bloomington, Ill.			Griffin, Ga.
5:30-5:45	1310	KRRV	4:20-4:35	1420	KFIZ
5 00 5 45	1 250	Sherman, Texas			Fond du Lac, Wis.
5:30-5:45	1370	WGL	4:25-4:40	1210	WGCM
T.25 F.50	1500	Fort Wayne, Ind.	4 25 4 40	<b>620</b>	Gulfport, Miss.
5:35-5:50	1500	KGKY	4:25-4:40	630	WGBF
5:40-5:55	1210	Scottsbluff, Neb. WIBU	4:30-4:45	1310	Evansville, Ind. KFYO
5.70-5.55	1210	Poynette, Wis.	7.50-4.43	1010	Lubbock, Texas
5:45-6:00	1310	KRBA	4:30-4:45	1370	WFOR
		Lufkin, Texas.	1.00 1.10	1070	Hattiesburg, Miss.
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	4:30-4:45	940	WAVE Louisville, Ky.	5:55-6:10	1210	KIUL Garden City, Kan.
	4:35-4:50	1410	KFJM Grand Forks, N. D.	5:55-6:10	1260	KVOA
	4:35-4:50	1430	WMPS	6:00-6:15	1200	Tucson, Arizona KVNU
	4:35-4:50	1500	Memphis, Tenn. WTMV	6:05-6:20	1310	Logan, Utah. KHUB
	4:40-4:55	1240	East St. Louis, Ill. KGCU	6:10-6:25	1420	Watsonville, Calif. KSAN
	4:40-4:55	1200	Mandan, N. Dak. WBHP	6:15-6:30	1370	San Francisco, Calif. KGAR
	4:40-4:55	1380	Huntsville, Ala. KQV	6:20-6:35	1310	Tucson, Arizona. KSRO
			Pittsburgh, Pa.	6:25-6:40	740	Santa Rosa, Calif. KTRB
	4:45-5:00	1310	KWOS Jefferson City, Mo.	6:30-6:45	1070	Modesto, Calif. KJBS
,	4:45-5:00	880	WCOC Meridian, Miss.	6:35-6:50	1310	San Francisco, Calif. KSUB
	4:45-5:00	1370	WGRC New Albany, Ind.	6:40-6:55	1210	Cedar City, Utah KDON
	4:50-5:05	1500	KOTN Pine Bluff, Ark.	6:45-7:00	750	Monterey, Calif. KGU
	4:55-5:10	760	WEW St. Louis, Mo.	6:50-7:05	1260	Honolulu, T. H. KHSL
	4:55-5:10	1420	WJMS Ironwood, Mich.	6:55-7:10	1210	Chico, Calif. KROY
	5:00-5:15	1320	KGHF			Sacramento, Calif.
	5 00 5 15	1270	Pueblo, Colo.	2.00 2.15		ond Friday
	5:00-5:15	1370	WHDF	3:00-3:15	1370	WSVS ABuffalo, N. Y.
	5:05-5:20	1500	Calumet, Mich. KGFI	3:05-3:20	1310	WJAC
	5:05-5:20	1310	Brownsville, Texas WTRC	3:10-3:25	1210	Johnstown, Pa. WJTN
محير	5:10-5:25	1210	Elkhart, Indiana KHBG	3:15-3:30	1370	Jamestown, N. Y. WBLK
	5:15-5:30	1370	Okmulgee, Okla. KONO	3:20-3:35	1420	Clarksburg, W. Va. WLEU
	5:20-5:35	1500	San Antonio, Tex. KGKB	3:25-3:40	1280	Erie, Pa. WCAP
	5:25-5:40	1210	Tyler, Texas. KASA	3:25-3:40	1210	Asbury Park, N. J. WSAY
	5:30-5:45	1370	Elk City, Okla. KFRO	3:30-3:45	550	Rochester, N. Y. WDEV
	5:35-5:50	1500	Longview, Texas KNOW	3:30-3:45	1310	Waterbury, Vt. WGH
	5:40-5:55	1210	Austin, Texas WMFG	3:35-3:50	1500	Newport News, Va. WCNW
	5:45-6:00	1420	Hibbing, Minn. KRLH	3:35-3:50	1420	Brooklyn, N2Y. WMBS
	5:50-6:05	1310	Midland, Texas. KCRJ	3:40-3:55	1210	Uniontown, Pa. WFAS
			Jerome, Arizona			White Plains, N. Y.

3:40-3:55	1350	WMBG Richmond, Va.	4:45-5:00	1310	WEXL Royal Oak, Mich.
3:45-4:00	1430	WOKO	4:50-5:05	1500	WOMI
3:45-4:00	1310	Albany, N. Y. WRAW	4:55-5:10	1200	Oweńsboro, Ky. KFJB
3:50-4:05	1500	Reading, Penn. WSYB	5:00-5:15	1230	Marshalltown, Ia. KGGM
3:50-4:05	1370	Rutland, Vt. WDAS	5:00-5:15	1310	Albuquerque, N. M. WBEO
		Philadelphia, Pa.	5:05-5:20	1420	Marquette, Mich. KGIW
3:55-4:10	1210	KWJB Globe, Arizona.	5:05-5:20	1500	Alamosa, Colo.
3:55-4:10	1290	WNBZ Saranac Lake, N. Y.			WKBV Richmond, Ind.
3:55-4:10	570	WSYR Syracuse, N. Y.	5:10-5:25	1200	KGDE Fergus Falls, Minn.
4:00-4:15	1310	WBRE	5:15-5:30	1370	KGFL Roswell, N. Mexico
4:05-4:20	1500	Wilkes-Barre, Pa. WNLC	5:15-5:30	1310	WEMP : Milwaukee, Wis.
4:05-4:20	1370	New London, Conn. WBTM	5:20-5:35	1420	KEUB Price, Utah.
4:10-4:25	1210	Danville, Va. WGBB	5:25-5:40	1200	WCÁT Rapid City, S. D.
4:10-4:25	1430	Freeport, N. Y. WHEC	5:35-5:40	1210	WEBQ Harrisburg III.
4:15-4:30	1200	Rochester, N. Y. WTHT	5:30-5:45	1370	KWYO Sheridan, Wyoming
4:15-4:30	1420	Hartford, Conn. WAZL	5:35-5:50	1420	KIDW Lamar, Colo.
4:20-4:35	1500	Hazleton, Pa. WMBQ	5:40-5:55	1200	KFXJ
		Brooklyn, N. Y.	5:45-6:00	1230	Grand Junction, Colo. KGBX
4:20-4:35	1370	WRAK Williamsport, Pa.	5:50-6:05	1310	Springfield, Mo. KVSF
4:25-4:40	1220	WGNY Newburg, N. Y.	5:55-6:10	1370	Santa Fe, N. Mexico KOKO
4:25-4:40	1310	WBOW Terre Haute, Ind.			La Junta, Colo. nd Saturday
4:30-4:45	1200	WJBL Decatur, Ill.	3:30-3:45	1420	Gastonia, N. C.
4:35-4:50	1420	KATE Albert Lea, Minn.	3:30-3:45	1200	WTOL Toledo, Ohio.
4:35-4:50	1500	WKBB Dubuque, Iowa.	3:35-3:50	1500	WKBZ Muskegon, Mich.
4:35-4:50	1370	WBTH Williamson, W. Va.	3:40-3:55	1210	
4:40-4:55	890	KARK Little Rock, Ark.	3:45-4:00	1420	WNOE New Orleans La.
4:40-4:55	1210	WJIM	3:45-4:00	1430	WBNS Columbus Ohio.
4:45-5:00	1370	Lansing, Mich. WHLB Virginia, Minn.	3:50-4:05	1200	WOLS Florence S. C.
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3:50-4:05	1450	WGAR	4:40-4:55	1310	WTJS
3:55-4:10	1500	Cleveland Ohio. KSAM	4:40-4:55	1210	Jackson, Tenn. WTAX
3:55-4:10	1310	Huntsville Tex. WLAK			Sprinfield, Ill.
		Lakeland, Fla.	4:45-5:00	1290	KLCN Blytheville, Ark.
3:55-4:10	1210	WCOL Columbus, Ohio.	4:45-5:00	1370	WMBR
4:00-4:15	1360	WQBC	4 45 5 00	1000	Jacksonville, Fía.
4:00-4:15	1070	Vicksburg, Miss. WCAZ	4:45-5:00	1200	WMPC Lapeer, Mich.
		Carthage, Ill.	5:50-5:05	1270	KGCA
4:05-4:20	1120	WJBO Baton Rouge, La.	4:50-5:05	1420	Decorah, Iowa. WSLI
4:05-4:20	1380	WING	4:30-3:03	1420	Jackson, Miss.
4:10-4:25	1500	Dayton, Ohio. KUTA	4:50-5:05	1050	WEAU Eau Claire, Wis.
4.10 4.25	1210	Salt Lake City, Utah.	4:55-5:10	1210	KOCA
4:10-4:25	1310	WTAL Tallahassee, Fla.			Cilgore, Texas.
4:10-4:25	1210	WOMT	4:55-5:10	1310	KVOL Lafayette, La.
4:15-4:30	1370	Manitowoc, Wis. KIUN	5:00-5:15	1500	KBIX
		Pecos, Texas.	5:05-5:20	1260	Muskogee, Okla. KPAC
4:15-4:30	1290	WNEL San Juan, P. R.	5:05-5:20	1270	Port Arthur, Tex.
4:15-4:30	570	WOSU		1370	WHBQ Memphis, Tenn.
4:20-4:35	1420	Columbus, Ohio. WMSD	5:10-5:25	1210	KANS Wichita, Kansas
		Muscle Shoals City,	5:10-5:25	1310	WROL ,
4:20-4:35	1020	Ala. WDZ	5:15-5:30	1290	Knoxville, Tenn. KTRH
4:25:4:40	1500	Tuscola, Ill. KYSM			Houston, Texas
	1300	Mankato, Minn.	5:15-5:30	1200	KMLB Monroe, La.
4:25-4:40	1310	WGTM	5:20-5:35	1360	ĶLPM
4:25-4:40	1210	Wilson, N. C. WHBU	5:20-5:35	1420	Minot, N. Dak. WHMA
4-20 4-45	1450	Anderson, Ind.	5:25-5:40	1210	Anniston, Ala.
4:30-4:45	1450	KCMO Kansas City, Mo.	3:23-3:40	1210	KVSO Ardmore, Okla.
4:30-4:45	1200	WJBW	5:25-5:40	1500	WSTP Salisbury, N. C.
4:30-4:45	570	New Orleans, La. WKBN	5:30-5:45	1270	KWLC
4:35-4:50	1010	Youngstown, Ohio. WNAD	5:35-5:50	1310	Decorah, Iowa KTSM
4.33-4.30	1010	Norman, Okla.		1310	El Paso, Texas
4:35-4:50	1420	WGCP Albany, Georgia.	5:40-5:55	1210	KWTN Watertown, S. Dak.
4:35-4:50	1240	WXYZ	5:45-6:00	760	WLB
4:40-4:55	1'500	Detroit, Mich. KOVC	5:50-6:05	1370	Minneapolis, Minn. KOHB
T. TO-T. 33	1500	Valley City, N. D.	3.00-0.03	10/0	Rapid City, S. Dak.

5:55-6:10	1210	KPFA	6:30-6:45	1310	KXRO
6:00-6:15	1250	Helena, Mont. KIT	6:35-6:50	1450	Aberdeen, Wash. KGCX
6:05-6:20	900	Yakima, Wash. KGBU	6:40-6:55	1120	Wolf Point, Mont. KFIO
0:03-0:20	900	Ketchikan, Alaska	0:40-0:55	1120	Spokane, Wash.
6:10-6:25	1210	KFJI	6:45-7:00	1430	KINY
6:15-6:30	1310	Klamath Falls, Ore. KGEZ	6:50-7:05	780	' Juneau, Alaska KFQD
. 25 . 40	1010	Kalispell, Mont.	< FF F 10	1 200	Anchorage, Alaska
6:25-6:40	1210	KGY Olympia, Wash.	6:55-7:10	1390	KRLC Lewiston, Idaho

### Turner Dial

(Continued from page 34)

Well Sally had her radio, and Bill had delivered it. Turner peered through the window and there was Sally turning at the dial and grinning like a child with a new toy. Several customers stood around and seemed to be listening. Dial turned away and continued his march back to Higrade's successful, little store and service shop.

Bill Wood was working back at the service bench, but a small radio was telling of the day's war events. Turner dropped into his favorite but wellworn desk chair and pulled out his pipe. "This war certainly has boosted short-wave radio," he said to Bill. "Everybody is listening to Europe. They use old sets and new sets which have to have lots of power these days to satisfy. With old broadcast sets they use converters, and with small, weak all-wave sets they use signal amplifiers or preselectors. And even auto radios use converters for short wave reception.

#### Shortwaves

(Continued from page 32) Yugoslavia

YUG on 15240 kcs. heard irregularly from 8-9 p.m. with program for North America. Signs on and off the air with horn signal and anthem. (Eders—Minn., and Harris—Mass.)

NOTE: It must be remembered that the stations reserve the right to alter schedules at will and that even

official schedules may at times differ from those in use at the time of reading. RL-Your East Coast Editor, Worcester, Mass. RX—All official news R36, Mich. 1: Carl Sylvester, Columbiaville, Mich. R49: David Hill, Washington, D.C. R133: Carl Forestieri, Bronx, New R133: City R141: Al Pickering, West Medway, Mass. Carl Eder, Willmar, Minn. R184: Carl Eder, Willmar, Minn.
Anne Eder, Willmar, Minn.
T.H. 2: C. J. Fern, Lihue, Hawaii
Harold Lund, Erie, Penna.
Robert L. Blanchard, Brooklyn, N.Y.
M. F. Williams, Newark, N. J.
Nicholas Evangelista, West Ham-R185: R211, R376: R485: R552: R577: burg, Edward Shirley, Jamestown, N. Y. Tenn. 3: Bill Scott, Johnson City, R615: R626, Tenn. R638, Vt. Vt. 5: Edward Harper, West Burke, Russell Carter, Jackson, Mich.
Robert W. May, Rome, Ga.
Robert Skyten, East Brookfield, Mass.
Wm. W. Flynn, Dummer, Sask.
Desmond Callan, Readville, Mass.
Ray Schaffar, Waterloo, Iowa
Jack Fern, Clifton, N. J.
Joseph A. Piechuta, Meriden, Conn.
William Szabo, New Brunswick, R649: R689: R786: R937: R987: R1092: R1160: R1269: R1302: N. J. R1305: Carl Horton, Athol, Mass. R1318: Kyle C. Bonifield, Asbury Park, N. J. R1319: Alton L., Caldwell, Jr., Brockton, Mass. R1342: Henry Bennett, Collingswood, N. J. R1355: Robert M. Atwood, Washington, D.C. Al Bartholomew, Bradford, N. Y. Joseph Cazaneuve, Montreal, P.Q. Warren Dame, Saxonville, Mass. Leon Grossman, Rochester, N. James J. Halsema, Durham, N.C.
Gilbert L. Harris, North Adams, Mass.
John D. Long, Dalton, Ga.
George C. Starry, Larrobe, Pa. John Varga, Chicago, Illinois Jim Walker, Romney, W. Va. Bob Wilson, Portland, Me.
NOTE: If you have a RADEX CLUB indicia, please use it always when writing. Otherwise you may find yourself listed with non-members.

# The SHORTWAVE STATIONS

The shortwave list, arranged by frequencies in kilocycles, gives the schedules of the shortwave broadcasting stations. When requesting verifications from radio stations, return postage should always be sent. Return postage to foreign countries can be sent in the form of an International Reply Coupon, available at any post office at 9c each. Unused postage stamps from many foreign countries, which can be sent instead of Reply Coupons, are available from the Return Postage Bureau, 85 Francisco Ave., Rutherford, N. J.

## Time is Eastern Standard. Subtract 1 hour for Central, 2 hours for Mountain and 3 hours for Pacific

Subtract	I hour for Central, 2 hours	for Mountain a	and 3 hours for Pacific.
2320 TGWC	Guatemala City, Guat. 1 kw. See TGWA. Sun, 10:30 am	4810 YV1RU	Maracaibo, Venez. "Radio- difusora Maracaibo," Luis
	Other days, 7:45-9 am; 12-45-3:45 pm: 7:30 pm-12:15 am.	4815 ĤJ2BAB	Mantellini H. Cucuta, Colombia. 600 w. Relays HJ2BAC, "La Voz de
2340 HOA	Panama City, Panama. "Ron Dalley." Salvador Graziani,		Cucuta." Barquisimeto, Venez. "Radio Barquisimeto," Amilcar Se-
2437 HRN	Guatemala City, Guat. 1 kw. See TGWA. Sun, 10:30 am- 5:15 pm; 7 pm-midnight. Other days, 7:45-9 am; 12-45- 3:45 pm; 7:30 pm-12:15 am. Panama City, Panama. "Ron Dalley." Salvador Graziani, Box 1121. (6-10 pm). Tegucigalpa, Hondúras. 500 w. Noon-1:30 pm; 7-10:30 pm. "La Voz de Honduras."		Cali, Colombia. 720 w. "La
3400 YV5RW	pm. "La Voz de Honduras." Caracas, Venez. 'Radio Tur- merito," Cesar Banuls.	4830 YV5RH	Voz del Valle."  Caracas, Venez. Relays  YV5RG, "Ondas Populares,"  Gonzalo Veloz Mancera,
3450 YV6RC	Barcelona, Venez. Gobierno Edo Anzoategui.		Gonzalo Veloz Mancera, Aptdo. 1931.
3480 YV3RF	Acarigua, Venez. "La Voz del Llano," Pausides Sigala. Wellington, New Zealand. 200	4835 HJ1ABE	Cartagena Colombia 525 w
3480 2ZB	Wellington, New Zealand. 200 w. At 7 am.		Relays HJ1ABF, "La Voz de los Labs. Fuentes," Apartado 31.
3488 XZZ	w. At 7 am. Rangoon, Burma. 50 w. W. J. Byrnes, Burma Independent Wireless Sub-Division, Strand	4840 VUC2	Apartado 31. Calcutta, India. 10 kw. 7:30 am-1 pm. All-India Radio. Maracay, Venez. "Radio
	Road. (Sun, 8:30-10:30 pm; Daily 5:30-9 am; 8:20-10:30	4845 HT3CAD	Maracay, Venez. "Radio Maracay," Luis Croquer. Bogota, Colombia. 720 w. "Nueva Granada."
3490 CR7AB	pm).	4850 VV1RZ	"Nueva Granada." Truiillo. Venez. "Radio
0450 CICILID	bique. Sun, 5-7 am; 10 am-2	4860 YV1RL	Valera," L. Febres Jelambi. Maracaibo, Venez. 300 w.
	am; 4:30-6ffi30 am; 9:30-11 am; noon-4 pm. Radio Club de Mocambique, Box 594.		Trujillo, Venez. "Radio Valera," L. Febres Jelambi. Maracaibo, Venez. 300 w. Relays YVIRK "Radio Popular," sign off "National Emblem March." Jose A. Higuera, Apartado 247. (6-11
3500 YV5RV	La Guaira, Venez. "Emisora Vargas," Gonzalo Veloz		pm).
4002 CT2AJ	Ponta Delgada, Azores. Wed,	4865 HJ2BAJ	Santa Marta, Colombia. 751 w. 10:30 am-2 pm; 5-11 pm.
4107 HCJB2	Sat, 5-7 pm. Quito, Ecuador. 1 kw. 7-	4870 YV2RN	"La Voz de Santa Marta." San Cristobal, Venez. "La Voz del Tachira," Jesus Diaz
	8:15 am; 11:30 am-2:30 pm; 2:45-10:15 pm. "Broadcasting Provincial," Clarence W. Jones, Casilla 691.		Gonzaalez. I Armenia, Colombia. 600 w.
4273 RVI5	Khabarovsk, U.S.S.R. 20 kw. 4-10 am. Miss Rowena	4878 ZTD	9 am-2 pm; 6-11:30 pm. "La Voz de Armenia." Durban, Union of S. Africa.
4300 4ZB	Meyer, Radio Committee. Dunedin, New Zealand. 30 w. At 6 am.	4880 VUB2	See "Johannesburg." (11:45 pm-12:50 am).
4770 YV1RT	Maracaibo, Venez. "La Voz de la Fe," Pedro A. Ber-	YV6RU	Bombay, India. 10 kw. 8 am-1 pm. All-India Radio. Ciudad Bolivar, Venez. "Ecos del Orinoco," E. Torres Val-
4775 HJGAB	mudez V. Bucaramanga, Colombia. 750 w. 6-10:45 pm. "Radio		encia. Medellin, Colombia, 501 w.
4780 YV1RO	Santandar." Trujillo, Venez. "Radio Trujillo," Pedro J. Torres.		Relays HJ4DAQ. 9 am-2 pm; 7 pm-midnight. "Em- isora Claridad."
4785 HJ1ABI	3 Barrandiilla Colombia 600	4890 YV1RX	Maracaibo, Venez. "Ondas del Lago." Nicolas Vale
4790 YV5RY	w. Relays HJ1ABA, "La Voz de Barranquilla," Apartado 715. Interval signal, 3 chimes. Caracas, Venez. "La Voz de	4895 HJ3CAH	Quintero. I Bogota, Colombia. 720 w. "La Voz de la Victor." Re-
4795 HJ3CAI	Caracas, Venez. "La Voz de la Esfera," Edmundo Suegart. Bogota, Colombia. 750 w. La Voz de Bogota.		lays HJ3CAI. Almacenes Victor, Aptdo 565.
	La Voz de Bogota. Ibague, Colombia. 501 w. "Ecos del Combeima."	4900 YV6RT	"Radio Bolivar," Miranda &
4800 YV1RV	Maracaibo, Venez. "Ecos del	4910 YV1RY	Behrens. Coro, Venez. "Radio Coro," Roger Leyba.
4805 HJ6FAI	Maracaibo, Venez. "Ecos del del Zulia," Luis Garcia. 3 Manizales, Colombia. 501 w. "Radio Manizales."	4920 VUM2	Madras, India. 10 kw. 7:30 am-1 pm. All-India Radio.

	YV5RU	Caracas, Venez. "Estudios	6000	CXA2	Montevideo, Uruguay. 5 kw.
		Caracas, Venez. "Estudios Universo," Mario Garcia Arocha.			Montevideo, Uruguay. 5 kw. Cia. de Radio Publicidad Continental, J. C. Gomez 1431. 10 am-10 pm.
	YV4RP	Arocna. Venez. "Radio Valencia," Luis Croquer. Caracas, Venez. "La Voz de Venez." Marquis y Linares. Valencia, Venez. "La Voz de Carababa," Horman, Daggiira.		HH2S	Port-au-Prince, Haiti. Societe
	YV5RO	Venez." Marquis y Linares.		RV59	Port-au-Prince, Haiti. Societe Haitienne de Radiodiffusion, Box 103. (7-10 pm). Moscow, U.S.S.R. 7-9:15 pm. Mexico City, D. F. 500 w. Interval signal, cuckoo calls, and sign off with "Liebes-
		Carabobo, Herman Degwitz.		XEBT	Mexico City, D. F. 500 w.
4960	VUD2	Delhi, India. 10 kw. 7:30 am-1 pm. All-India Radio.	•		and sign off with "Liebes- traume." El Buen Tono, S. A., Apartado 79-44. 11 am-1
	YV5RS	Caracas, Venez. "Radio Libertador," Victor M. Soto.			A., Apartado 79-44. 11 am-1
4975	YV1RJ	Coro, Venez. "Radio Falcon," J. A. Mendoza.	6005	CFCX	Montreal, P. Q. 75 w. Re- lays CFCF. Canadian Mar-
4980	YV5RT	Caracas, Venez. "Gobierno Nacional."			Sun, 10 am-11:15 pm. Week-
4990	YV3RX	Barquisimeto, Venez. "La Voz de Lara," Arturo Ramos Maggi.		HP5K	am.  Am. Montreal, P. Q. 75 w. Relays CFCF. Canadian Marconi Co., Ltd., Box 1690.  Sun, 10 am-11:15 pm. Weekdays 7:45 am:1 am.  Colon, Panama. 200 w. Relays HOK, 'La Voz de La Victor, Apartado 33. Noon-2 pm; 6 am-midnight.  Rangoon, Burma. 1500 w. Burma Independent Wireless Sub-Division, W. J. Byrnes, Strand Road. Sun, 8:30-10:30 pm; Daily 5:30-9 am; 8:20-10:30 pm).
5000	YV5RK	Caracas, Venez. Gobierno	6007	XYZ	pm; 6 am-midnight.
	YV5RM	Caracas, Venez. "Radio- difusora Venez." Degwitz y	0007	N12	Burma Independent Wireless Sub-Division, W. J. Byrnes, Strand Road. Sun. 8:30-10:30
5020	YV4RQ	Puerto Cabello, Venez. Radio Pto. Cabello, Rafael A.			pm; Daily 5:30-9 am; 8:20- 10:30 pm).
<b>5</b> 040	YV5RN	Segura. Caracas, Venez. Radio Car-		ZRH	Pretoria, Union of So. Africa. 5 kw. See "Johannesburg."
5146	PMY	Segura. Caracas, Venez. Radio Car- acas," Almacen Americano. Bandoeng, Java, N. E. I. 1 kw. Sat, 8 pm. 3:30 am. Sun, 5:30 am.noon. Other days, 5:30 am.noon; 7 pm. 3 am. Belize, Brit. Honduras, (8:30-			pm; Daily 5:30-9 am; 8:20-10:30 pm).  Pretoria, Union of So. Africa. 5 kw. See "Johannesburg." Sat, 9:30 am-4:45 pm; Sun, 8:40 am-noon; 12:15-3:15 pm; Other days, 9:30 am-3:30 pm; 11:45 pm-12:50 am. Sydney, N. S. 1 kw. Relays CJCB. Eastern Broadcasters, Ltd., Radio Bldg. Sun, noon-
		5:30 am-noon: 7 pm-3 am.	6010	CJCX	11:45 pm-12:50 am.
		8:50° pm).	0010	CJCX	CJCB. Eastern Broadcasters,
<b>57</b> 13	TGS	Guatemala City, Guat. 200 w. Wed, Thur, Sat, 6-9 pm. Radiotransmisora de la Casa			1:30 pm; Weekdays 9 am- 2:30 pm.
F004	TIODII	Presidencial."		PRA8	Recife, Brazil. 5 kw. "A Vox do Norte," Radio Club do Brasil, Avenida Cruz Cabuga 394. Time signals at Noon and 7 pm Brazil Time. Sign off with national an- them. 9 am-noon; 1-3 pm; 4-
5824	TIGPH	San Jose, Costa Rica. 1 kw. 'Alma Tica," Gonzalo Pinto H., Apido. 800. (7 pm-			Club do Brasil, Avenida Cruz Cabuga 394. Time signals at
5875	HRN				Noon and 7 pm Brazil Time. Sign off with national an-
		midn't). Tegucigalpa, Honduras. 500 w. "La Voz de Honduras," Mr. Paul John. Interval, notes from national anthem, and signs off with "Goodnight Waltz." 8 pm-midnight. Salisbury, Southern Rhodesia. 325 w. Gen'l. P. O., Station Sec'y., Box 792. Sun, 3-5 am. Willemstad Curaco.	C015	*****	9 pm.
		notes from national anthem, and signs off with "Goodnight	0012	HI3U	9 pm. Santiago de los Caballeros, D. R. 100 w. "La Voz del Comercio," Fernando Bertran, Apartado 23. Sign off- "Mario la O" on organ ano national anthem. 7:15-9 am; pagen.2 pm. 4:45-8 pm.
<b>588</b> 0	ZEA	Waltz." 8 pm-midnight. Salisbury, Southern Rhodesia.			Apartado 23. Sign off-
		Sec'y., Box 792. Sun, 3-5 am.			national anthem. 7:15-9 am; noon-2 pm; 4:45-8 pm.
<b>59</b> 40	PJC1	Willemstad, Curacao. 150 w. "Radio Curom," Curacaosche		XEWI	noon-2 pm; 4:45-8 pm.  Mexico City, D. F. 400 w.  Institucion Muncial de la V.
		Willemstad, Curacao. 150 w. "Radio Curom," Curacaosche Radio Vereeniging, Emmastad, Curacao. 7:45-9:35 pm.	6020	DJC	
5945	TG2X	"Policia Nacional." Tue.		XEUW	Berlin, Germany. 50 kw. See "Berlin." 11:30 am-4:25 pm. Veracruz, Ver. C. 20 w. "El Eco de Sotavento desde Veracruz," Av. Independencia 98. Veries for 3c USA stamp. 8 am midsight
		Wed, Fri, 11 am-1 pm. Sat, 11 am-3 pm.			Veracruz," Av. Independencia
5975	CS2WD	Lisbon, Portugal. 250 w. Radio Renascenca, Rua do			o am-midnight.
-	OAX4P	Capelo 5-2 esq. Huancayo, Peru. 250 w.	6025	HI1J	San Pedro de Macoris, D. R. 100 w. Fausto M. Donastorg,
		"Radio Andina Junin," J. Alberto Maduana, Cuzco 25.	6030	CFVP	Aptdo 204. (8-11 pm). Calgary, Alta. 100 w. Voice
<b>59</b> 80	VONG	St. John's, Newfoundland. Newfoundland Brdcstg. Corp. Relays VONF. 8:30 am-			Calgary, Alta. 100 w. Voice of the Prairies, Ltd., Toronto General Trusts Bldg. (Thur,
		12:30 pm; 4:30-9:30 pm.		HP5B	9 am-1 am; Sun, noon-midn't.) Panama City, Panama. 100 w. Estacion Radiodifusora Miramar de la Radio Panama, Aparted 210 5 10 pm
<b>59</b> 84	HJ4DAG	Quibdo, Colombia. 150 w. "La Voz del Choco.			Miramar de la Radio Panama,
	VUD2	Delhi, India. 10 kw. All- India Radio. 7:30 am-12:30 pm.	6035	T17RVM	Apartado 910. 5-10 pm. Las Juntas, C. Rica. 500 w. "La Voz del Guanacasto," Ruben Venegas M.
		P			Labor tonegas m.

6040	KZIB	Manila, Philippines. I. Beck Inc., Box 440. (4-10 am; 6 pm-12:30 am).			9 am-11:45 am; noon-3:20 pm; Weekdays, 3:20-7:20 am; 9-11:45 am; noon-4 pm;
<b>6</b> 040	WSLA	Boston, Mass. 20 kw. See	6100	KZRH	
	WDJM	Boston, Mass. 20 kw. See WSLA. Miami, Fla. 5 kw. 10 pm-1 am. Relays WIOD. Ruth Richardson, Isle of Dreams Broadcasting Corp. Tandjong Priok, N.E.I. 10 kw. NIROM. Sign off, "End of a Perfect Day," Barranquilla, Colombia. 600 w. Relays HJ1ABH. "Emisora Atlantico," Aptdo. 445. Villarrica. Paraguay. 1 kw.		W9XF	Manila, Philippines. "Radio Heacock," Escolta. (5-11 pm). Chicago, Ill. 10 kw. Relays NBC-WENR. Audience Mail Dept., NBC, Inc., Merchandise Mart. Sat, 1:05-2 am; 4-5:30 pm; Sun, 1-5:45 pm; Other days, 1:05-2 am; 4-5:45
		Richardson, Isle of Dreams	0100	*** 5211	NBC-WENR. Audience Mail
	YDA	Tándjong Priok, N.E.I. 10			dise Mart. Sat, 1:05-2 am; 4-5:30 pm; Sun. 1-5:45 pm;
6042	HTIABG	"End of a Perfect Day." Barranguilla, Colombia, 600			Other days, 1:05-2 am; 4-5:45 pm.
0012	11) 111150	w. Relays HJ1ABH. "Emi-		YUA	Belgrade, Yugoslavia. 1 kw.
<b>6</b> 044	ZP14	Villarrica, Paraguay. 1 kw.			Beograd," Bureau Central de
6045	XETW	Tampico, Tams. 100 w. Re-			Ondes Courtes. Announce in Serbian, Italian, English, Ger-
		sora Atlantico," Aptdo. 445. Villarrica, Paraguay. 1 kw. "Radio Cultura." 1 kw. "Radio Cultura." Tampico, Tams. 100 w. Relays XEFW, Flores y Martinez, Francisco I, Madero 204 Ote. Sun, 10 am-4 pm. Weekdays, 10 am-10 pm. M. V. "Kanimbla." 50 w. Sign off "God Save the King." McIlwraith & McEacharn, Ltd Melbourne, Australia.			Beograd," Bureau Central de Presse, Poste Emetteur a Ondes Courtes. Announce in Serbian, Italian, English, Ger- man, Turkish, Hungarian, Albanian, and Greek. (12:45
6053	VK9MI	Weekdays, 10 am-10 pm. M. V. "Kanimbla." 50 w.	6105	HI3C	am-5:05 pm). La Romana, D. R. 30 w. A.
		Sign off "God Save the King." McIlwraith & McEacharn,		GSL	Andaman, and Greek. (12:45 am-5:05 pm). La Romana, D. R. 30 w. A. Herrero Hernandez. London, Gt. Britain. "L for Liberty." See "London." Mexico City, D. F. 250 w. Jose G. Garza Fox, San Juan de Letra 81
		Ltd., Melbourne, Australia. (7:15 am).		XEGW	Liberty." See "London." Mexico City. D. F. 250 w.
6054	HJ6FAB	Pereira, Colombia. 501 w. "La Voz de Pereira."			Jose G. Garza Fox, San Juan de Letran 81.
6055	••••	Bern, Switzerland. 25 kw. See eBrn."	6116	••••	Saigon, Fr. Indo-China. "Radio Saigon." (6 am).
<b>6</b> 060	VQ7LO	Ltd., Melbourne, Australia. (7:15 am). Pereira, Colombia. 501 w. "La Voz de Pereira." Bern, Switzerland. 25 kw. See eBrn." Nairobi, Kenya. Cable & Wireless, Ltd., Box 777. 11 am-2:30 pm. Philadelphia, Pa. 10 kw.	6120	WCBX	de Letran 81. Saigon, Fr. Indo-China. "Radio Saigon." (6 am). New York, N. Y. 10 kw. See "WCBX." (Midnight-2
6060	WCAB	am-2:30 pm. Philadelphia, Pa. 10 kw. See "WCAB." (Sun, 6:30-11 pm; Tu, F, 6:30-11 pm; Wed, 6:30-8:30 pm). Cincinnati, Ohio. 10 kw. See "WLWO". Stockholm, Sweden. 500 w. 5:15.5. pm. Telegrafyerket	6122	HI8T	San Cristobal, D. R. 30 w.
		pm; Tu, F, 6:30-11 pm;	6122	FK8AA	Noumea, New Caledonia. Re-
	WLWO	Cincinnati, Ohio. 10 kw. See			Noumea," and signs off with Marseillaise. 44 rue de l'Alma.
<b>60</b> 65	SBO.	Stockholm, Sweden. 500 w. 5:15-5 pm. Telegrafverket		нтзсах	Raul Henriquez. Noumea, New Caledonia. Relays FJP. Announces, "Ici Noumea," and signs off with Marseillaise. 44 rue de l'Alma. Tues, Sat, 2:30-3:30 am. Bogota, Colombia. 750 w. Relays HJ3CAZ, La Voz de Colombia. Aprdo 772. (Heard on 6012 kcs). (Sun, Noon-1:30 pm; 6-11 pm; Other days 10:30 am-2 pm; 5:30-11:30 pm.)
£070	CEDY	Triangle of the second of the		,	Relays HJ3CAZ, La Voz de Colombia, Aptdo 772. (Heard
0070	CFRX	Toronto, Ont. 1 kw. Sun, 10:30 am-midnight. Week-			on 6012 kcs). (Sun, Noon-1:30 pm; 6-11 pm; Other days
		10:30 am-midnight. Week- days 7:30 am-midnight. Re- lays CFRB. Rogers Radio Broadcasting Co., 622 Fleet			10:30 am-2 pm; 5:30-11:30 pm.)
6079	DIM	St.		TGWB	pm.) Guatemala City, Guat. 1 kw. Sun., 10:30 am-5:15 pm; pm-midnight. Weekdays, 7:45-9 am; 12:45-3:45 pm; 7:30 pm-12:15 pm. See TGWA.
	OTT DIE	Berlin, Germany. 50 kw. See Berlin."			7 pm-midnight. Weekdays, 7:45-9 am; 12:45-3:45 pm;
5080	CKFX	Vancouver, B. C. 10 w. Relays CKFC Standard Brdcstg. Sys., 1504 Sun Bldg. 2 pm-			7:30 pm-12:15 pm. See TGWA.
		midnight	6130	CHNX	Halifax, N. S. 500 w. Sat, 8 am-11:30 pm; Sun, noon- 11:15 pm; other days, 7 am- 11:15 pm. Maritime Broad- casting Co., Lord Nelson
	HP5F WCBI	Colon, Panama. Chicago, Ill. 500 w. See			11:15 pm; other days, 7 am- 11:15 pm. Maritime Broad-
6080	XEQQ	Colon, Fandina. Chicago, Ill. 500 w. See "WCBI". Mexico City, D. F. Lima, Peru. 10 kw. Radio Nacional." Relays OAX4A,			Hotel Co., Lord Nelson
6082	OAX4Z	Nacional." Relays OAX4A,		COCD	Hotel Havana, Cuba. 250 w. Relays CMCD. "La Voz del Aire," S. A., Sr. J. Benitez, Aptdo. 2294. Oslo, Norway, 5 kw. See "Oslo."
<b>609</b> 0	ZNS	Nassau, Bahamas. Superin-			Aptdo. 2294.
		Nacional," Relays OAX4A, Av. Petit Thouars 447. Nassau, Bahamas. Superin- tendent of Telegraphs, Box 48 (No postage required for		LKJ	Oslo, Norway, 5 kw. See "Oslo."
<b>6</b> 097 1	½ ZRJ	veries).  Johannesburg, Union of So.	6132	VP3BG	Brit. Guiana United Brdcstg.
	_	Africa. 200 w. See Johan- nesburg." Sat, midnight to		37737 A	am: 4-8 pm).
		Yeries). Johannesburg, Union of So. Africa. 200 w. See "Johannesburg." Sat, midnight to 12:50 am; 3:15-7 am; 8:30- 11:30 am; Sun, 3:30-4:30 am (or 4-5 am); 5:30-7 am; 8:40- 11:30 am; Other days, 3:15-7 am; 9 am-1:30 pm; 11:45 pm:12:50 am.		AEXA	Depto. de Publicidad y
		(or 4-5 am); 5:30-7 am; 8:40- 11:30 am; Other days, 3:15-7	6137	OR7AA	Lourenco Marques, Port.
		am; 9 am-1:30 pm; 11:45 pm-12:50 am.			Mocambique, Caixo Postal
	ZRK	am; 9 am: 130 pm, 11:73 pm-12:50 am. Capetown, Union of So. Africa. 5 kw. See "Johan- nesburg." Sun, 3:30-4:30 am (or 4-5 am); 5:30-7 am;			"Oslo." Georgetown. British Guiana. Brit. Guiana United Brdestg. Co., Box 11. (10:30 am-11:30 am; 4-8 pm). Mexico City, D, F. 100 w. Depto. de Publicidad y Propaganda, Sr. Jose Rivera. Lourenco Marques, Port. East Africa. Radio Club de Mocambique, Caixo Postal 594. Sun, 5-7 am; 10 am-2 pm; Weekdays, midnight-1 am; 4:30-6:30 am; 9:30-11
		am (or 4-5 am); 5:30-7 am;			am; noon-4 pm.

6140 KZRF	Manila, Philippines. "Radio Filipinas," Insular Life Bldg.	6280 HI1G	Trujillo, D. R. 200 w. Re- lays, HIG. Andres Cordero
WPIT	Pittsburgh, Pa. 40 kw. See	6282 COHB	Puello. Sancti-Spiritus, Cuba 150 w. Relays CMHB, V. E. Wiess y O. Ramirez, Calle Inde- pendencia 33. 9-11 pm. Lima, Peru. 400 w. Relays OAX4B, "Radio Grellaud." Roberto Grellaud y Cia., Sen. Abencay 915-23 (7-9:30 pm). Villarica. Paraguay. 1 km.
6145 HJ4DAI	E Medellin, Colombia. 700 w.		y O. Ramirez, Calle Inde-
6147½ ZRD	"La Voz de la Antioquia." Durban, Union of So. Africa. 200 w. See "Johannesburg."	6295 OAX4G	Lima, Peru. 400 w. Relays OAX4B, "Radio Grellaud."
	Sat, 3:30-7:30 am; 9-11:15 am; Sun, 5:30-7 am; 9-11:16 am; Weekdays, 11:45 pm- 12:50 am.		"Radio Cultura."
6150 CJRO	Winnipeg, Man. 2 kw. James Richardson & Sons, Ltd., 157	6316 HI1Z 6330 COCW	Trujillo, D. R. 100 w. Re- lays HIZ. Frank Hatton.
6150 TIEMC	Royal Alexandra Hotel. San Jose, C. Rica. 250 w. "Radio_ El Mundo," Rafael		Havana, Cuba. 7 am-midnight. Relays CMW. "La Voz de- las Antillas," Apartado 130.
6165 TILS	Hine Ch. San Jose, Costa Rica. 2 kw. "Para Ti," Luis Saenz Mata,	6335 OAX1A	Voz de Chiclayo." Elias Aguirre 171, Casilla 9. Signa
6165	Aptdo. 3. Bern, Switzerland. 25 kw. See "Bern."	6340 HI1X	(Sat, 10 pm-midnight; Other days, 8-11 pm). Trujillo, D. R. 900 w. Relays HIX. J. R. Saladin. (Tues, Fri, 8-10 pm).
6170 HI4V	San Francisco de Macoris, D. R. 100 w. Luis R. Betances		lays HIX. J. R. Saladin. (Tues, Fri, 8-10 pm).
6174 XEXA	Mexico City, D. F. Relays	6351 HRP1	San Pedro Sula, Honduras. 100 w. 12:30 pm-12:30 am. "El Eco de Honduras."
	Mexico City, D. F. Relays XEXM, Departamento Auto- nomo de Prensa Publicidad (DAPP). Sign off, "March of the Toys." 8:30 am-mid-	6355 IAC	Rome, Italy. See "Rome."
6185 HIIA		6380 ZIZ	ported on 6384). Daily 4-5 pm; Wed. 7-7:30 pm.
	D. R. 75 w. "La Voz del Yaque," Rafael Western.	6383 HI9B 6420 HI1S	Santiago, D. R. 200 w. Jacinto L. Sanchez, Aptdo. 95.
6190 HVJ	Santiago de los Gaballeros, D. R. 75 w. "La Voz del Yaque," Rafael Western. (Weekdays, 8-10 pm). Vatican City. 15 kw. Mon, Thur, Sat, 2-3:30 pm; Tues, Fri, 2-3 pm; Wed, 2-2:30 pm; 3-3:30 pm. See HVJ.	TGOA	Basseterre, St. Kitts. (Reported on 6384). Daily 4-5 pm; Wed, 7-7:30 pm. Santiago, D. R. 200 w. Jacinto L. Sanchez, Aptdo. 95. Santiago de los Caballeros, D. R. 200 w. "La Voz de La Hispaniola." Generoso Sarnelli. (6-11 pm). Ouezaltenango. Guat. 200 w.
6190 KGEI	San Francisco, Caiii. 20 kw.		Sarnelli. (6-11 pm). Quezaltenango, Guat. 200 w. Relays TGQ, "La Voz de Quezaltenango," Director
6190 TG2	Guatemala City, Guat. 200 w. "Radio Morse," Director General of Electrical Com- munications. (Sat, 7:30-9 am; 6 pm-1 am; Sun, 7:30-11 am; 3-8 pm; Other days, 7:30- 9 am; 6-11 pm)		munications. (Sat, 10 pm-1 am; Sun, 1-3 pm; Other days, 9-11 pm).
	am; 6 pm-1 am; Sun, 7:30-11 am; 3-8 pm; Other days, 7:30-	6425 W2XGB 6480 HI1L	Press Wireless, Inc.
WGEO	Schenectady, N. Y. 40 kw. See "WGEA."	0400 HIL	Santiago, D. R. 100 w. "Emisora Nacional," Maria J. Tavàrez, Calle Pres. Trujillo 97. (6:30-8 am; 5:30-7 pm; 8-9:45 pm). Guatemala City, Guat. 1 kw. (Reported on 6495). See
6200 COKG	Athlone, Ireland. Santiago de Cuba. 1200 w. Relays CMKG. "Ask For Bacardi." Sres. Grau y	6480 TGWB	Guatemala City, Guat. 1 kw. (Reported on 6495). See TGWA.
VEVC	Caminero, Aptdo. 137. Daily exc. Sat, 9 am-11 pm.  Mexico City, D. F. 100 w. Departamento de Salubridad	6500 HIL	Trujillo, D. R. 60 w. J. C. Teixido, Aptdo. 623.
XEXS	Publica.	6550 TIRCC	Trujillo, D. R. 60 w. J. C. Teixido, Aptdo. 623. San Jose, C. Rica. 500 w. Accion Catolica, Prbo. Carlos Borge, Aptdo. 1064.
ZGE	Kuala Lampur, F.M.S. Institute of Medical Research, Sun, Tue, Fri, 6:40-8:40 am. Saigon, Fr Indo-China.	6565 H15P 6590 COCU	I. M. Modesto
<b></b>	sements Boy-Landry, Etablis-		Havana, Cuba. Jorge Garcia. Serra, Estrada aPlma 25, Vibora. (Sun, 6:55 am-mid- night; Weekdays, 6:55 am-£ Truiillo. D. R. 100
6235 HRD2	am. La Ceiba, Honduras. 250 w. 8-11 pm. "La Voz de Atlan- tida."	6600 H16P 6622 PRADO	D. II. 100 W
6243 HI1N	Trujillo, D. R. 700 w. Week- dys. noon-2:30 pm: 5:45-10	6630 HIT	de Tejidos de "El Prado," Aptdo. 98. (Thur, 9-11 pm).
	Trujillo, D. R. 700 w. Weekdys, noon-2:30 pm; 5:45-10 pm. Sign off national anthem. Relays HIN. J. M. Bonetti Burgos.		Emilio Garden, Jr.  Rio Bamba, Ecuador. Fabrica de Tejidos de "El Prado," Aptdo. 98. (Thur, 9-11 pm). Trujillo, D. R. 100 w. "La Voz de La RCA-Victor," F. A. Sanabia, Aptdo. 1105. Interval, bells; sign off, na-

			tional anthem. (Sun, 10:45 pm-12:45 am; Weekdays, 5:45.8:45 pm)	8650	HJ4DAU	Medellin, Colombia. 250 w. Universidad Antioquia.
	6638	HC2RL	pm-12:45 am; Weekdays, 5:45-8:45 pm). Guayaquil, Ecuador. 200 w. "Quinta Piedad," Dr. Roberto Levi, Casilla 759. Interval, "Hello, America," sign off, national anthem. (Sun, 5:30- 7:30 pm; Tues, 9-11 pm). Trujillo, D. R. 30 w. Al-	8664	COJK	Camaguey, Cuba. 1 kw. 11:30 am-12:30 pm; 8-10 pm. (Reported on 8660 and 8680). Relays CMJK, "Radio Zenith," Jones Castillon y
			national anthem. (Sun, 5:30-7:30 pm; Tues, 9-11 pm).	8700	сосо	Zenith," Jones Castillon y Cie., Finlay #3. Havana, Cuba. 1 kw. Re-
	6660	HI6Y		8700	0000	lave CMCK Luis Casas
	6675	HBQ	Geneva, Switzerland. "Radio Nations." (Sun, 1:45-2:45 pm).	8820	нсјв	Romero, Aptdo 98. Quito, Ecuador. 1 kw. "La Voz de los Andes," Clarence
	<b>6</b> 690	VK8SK	Broken Hill, Australia. At 2:30 am. Australian Aerial Medical Service.	8830	COCQ	Havana, Cuba. 1 kw. Re- lays CMQ, "De La RCA- Victor." Calle 25 No. 225.
	<b>67</b> 00	TIEP	San Jose, C. Rica. 1 kw. "La Voz del Tropico." Eduardo Pinto H., Aptdo.	9030	COBZ	(Reported on 8850).  Havana, Cuba. 250 w. Re lays CMBZ, "Radio Salas," Aptdo. 866. Opens, nighting-
	6710 6780	PMH HIH	257. (4-11 pm), Bandoeng, Java, N.E.I. 1500 w. San Pedro de Macoris, D. R. 250 w. "La Voz de Hig- uamo," Domingo Dominguez.			Aptio. 866. Opens, nighting- ales and canaries; interval, 4 chimes; closes, national an- them. (6:45 am-1 am).
		PZH 2ZB	Wellington, New Zealand.	9100	COBX	CMBX. Alberto Alvarez, San Miguel 194.
	7000 7006	to 7300 FETI	200 w. Amateurs. Valladolid, Spain. 7:30 am- 5:30 pm.	9125	HAT4	Budapest, Hungary. 20 kw. Sun, Wed, 7-8 pm; Sat, 6-7 pm. Radiolabor, Kiserleti Allomasa, Gyali-ut 22, Buda-
	<b>7</b> 010	XPSA	Kweiyang, China. 10 kw. (Reported on 6970 and 7140). (5:30-10:55 am).	9125	HC2CW	Guayaquil, Ecuador. "Ondas
	7088	PI1 <b>J</b>	Dortrecht, Netherlands. 50 w. Technical College. (Sat. 10	9163	HC1GQ	del Pacifico," Aptdo 1166. Quito, Ecuador. "Radiodifusora Nariz del Diablo."
			Oceanien. (Tues, Fri, 11 pm-midnight).			Quito, Ecuador, "Radiodi- fusora Nariz del Diablo," Sign ofi, "Blue Danube Waltz." Guayaquil & Quito R. R. Co., Aptdo. 159. (8:30- 11 pm).
		EA9BJ CR6AA	Spanish Morocco.	.9234	••••	Bucuresti, Romania. 2 kw. "Radio Experimental." Socie-
		EA8AE	2:45-4:30 pm). Las Palmas, Canaries. (Re-	•		ziune, Str. Gral. Berthelot 60.
		12RO11	Lobito, Angola. (Wed, Sat, 2:45-4:30 pm). Las Palmas, Canaries. (Reported on 7150). Rome. Italy. 100 kw. See "2RO."		HI2G	Trujillo, D. R. 200 w. Relays HIG. Andres Cordero Puello.
	7222	YV9AB	In Venezuela on Guiana- Brazil Border. Expedicion Tecnico de Mineria y Geo- logia, Ministerio de Fomento,	9295 9350	XTC HS8PJ	Shanghai, China. (8-9 am). Bangkok, Thailand (formerly "Siam"). Post and Telegraph Dept.
	7260	FET8 EA8AS	Caracas. Spanish Morocco. (5-7 pm). Teneriff, Canaries. Relays		••••	Fort de France, Martinique. "Radio Fort de France."
			EAJ43. (Wed, 4-5 pm).	9363	COBC	Harrana Cuba Balarra
		VIG	EAJ43. (Wed, 4-5 pm). Port Moresby Papula. Relays 4 pm. A call sign, not time.			CMBC, "El Progreso Cubano," Aptdo 132. (6:55 am-midnight). (Reported on 10000).
		••••	Madrid, Spain. "Radio Na- cional."	9400	••••	Saigon, Fr. Indo-China. 10 w. "Radio Michel-Robert," (Weekdays, 7-8:30 am).
	7380	XECR	Mexico City, D. F. 20 kw. Secretaria de Relaciones Ex-			(Weekdays, 7-8:30 am).
į.	7435	FG8AH	Mexico City, D. F. 20 kw. Secretaria de Relaciones Exteriores. (Sun, 6-8 pm). Pointe-a-Pitre, Guz deloupe. "Radio Guadeloupe," Hexado Guadeloupe," Hexado Guadeloupe, "Hexado Guadeloupe,		PJC2 PLV	Willemstad, Curacao. "Radio Curom," Emmastad. Bandoeng, Java, N.E.I. 80
	7500	EAJ43	(6-7:30 pm).  Santa Cruz de l'eneriffe, Canaries. Relays "Radio Na- tional of Burgos! (8-9 am).  Tokyo, Japan. 50 kw. See "Tokyo" at end of list. Geneva, Switzerland. "Radio Nations." (Sat, 5:30-6:30 pm).			kw. Governments Radio- Dienst.
	<b>7</b> 510	JVP	tional of Burgos! (8-9 am). Tokyo, Japan. 50 kw. See	2.07		Azul de Radio, Prado 63. (Sun, 8 am-10 pm; other
	<b>7</b> 79 <b>7</b>	HBP	Geneva, Switzerland. "Radio Nations." (Sat, 5:30-6:30		TAP	Ankara, Turkey. 20 kw. 11:30 am-5 pm. See "Ankara."
	<b>.7</b> 894	YSD	pm). San Salvador. Relays YSS,	9500	KZIB	Manila, P. I. l Beck, Inc., (4-10 am; 6 pm-12:30 am).
			San Salvador. Relays YSS, "Alma Cuscatleca." Director General de Telegrafos, Tele- fonos, y Radio Nacionales.	9500	OFD	Havana, Cuba. 5 kw. Cadena Azul de Radio. Prado 63. (Sun, 8 am-10 pm; other days, 8 am-midnight). Ankara, Turkey. 20 kw. 11:30 am-5 pm. See "Ankara." Manila, P. I. 1 Beck, Inc., (4-10 am; 6 pm-12:30 am). Lahti, Finland. 1 kw. See "Lahtit." (Weekdays, 5-6:30 am; 10 am-5 pm.)

	9500	PRF5	Rio de Janeiro, D. F., Brazil. 12 kw. "A Vox do Brasil." Cia. Radio Inter-	ø	TPB11	Paris, France. 25 kw 11:15 pm-6 pm. See "Paris" at end of list.
		XEWW	Brasil, Cla. Radio Internacional do Brasil, Marapicu, D. F. (4:45-5:45 pm).  Mexico City, D. F. 10 kw. 8:55 am-midnight. "La Voz		VUB2 WGEA	Bombay, India. 10 kw. 12:30-4 am; 5-7:30 am; 10-11 pm. All India Radio. Schenectady. N. Y. 25 kw.
			Mexico." Aptdo. 2516. Re-	9560		Schenectady, N. Y. 25 kw. See "WGEA."  Berlin, Germany. 50 kw. See "Berlin." (6:30-10:30
	0503	XGOY XEXA	difusora Mexicana. Lungtso, China. Mexico City, D. F. 100 w. (until 1 am).	9562	OAX4T	nm)
		CXA8	(until 1 am). Colonia, Uruguay. 2500 w.	,		Lima, Peru. 10 kw. "Radio Nacional." Relays OAX4A. (Reported on 9560). Peru- vian Gov't., Av. Petit Thouars 447. (7-8 am; 11:30 am-1:30
	9510	GSB	Colonia, Uruguay. 2500 w. Relays LR3. "Real de San Carlos." (6 am-10 pm). London, Gt. Britain. 20 kw. "B for Broadcasting." See "London." (1:30-3:50 am; 6:20-9:15 pm; 9:40-11:30 pm)	9570	KZRM	447. (7-8 am; 11:30 am-1:30 pm).  Manila, Philippines. 5 kw. "Radio Manila," Far Eastern Brdcstg. Co., 'Insular Life Bldg. (4-10:30 am; 4:30-7 pm; 11 pm-12:30 am). Springfield, Mass. 10 kw. Relays NBC-WBZ-WBZA. Westinghouse Electric & Mfg.
		HS8PJ		9570	wbos	Bldg. (4-10:30 am; 4:30-7 pm; 11 pm-12:30 am). Springfield, Mass. 10 kw.
			Bangkok, Thailand (formerly "Siam"). Opening and in- terval signals, 3 ascending chimes. Post and Telegraph Dept., Col. Phra Aram.		WPIT	
		VK3ME	Melbourne, Australia. 5 kw. Weekdays, 4-7 am. Amalgam- ated Wireless, (A/sia), Ltd., 167 King St.	9580	GSC	Pittsburgh, Pa. 40 kw. See "WPIT." London, Gt. Britain. 20 kw. "C for Corporation." See "London." (1:30-4 pm.; 4:20-
٦	9520	OZF	Copenhagen, Denmark. 6 kw. 2-6 pm; 10-11 pm. Stats- radiofonicn. Heibergsgade 7.		VLR	11:30 pm).
		XEDQ	Guadalajara, Jal. 100 w. "Hablando a los Continentes desde Guadalajara," Relays XED, Aptdo. 197. Interval, 4 chimes; sign off, "Jarabe	9585 9590	KZEH HP5J	Melbourne, Vic., Australia. 2000 w. 3:15-9:45 am. See VLR. Manila, Philippines. Box 119. Panama City, Panama. 1 kw. (Reported on 9610). 6:30-11 pm. "La Voz de Panama."
	9523	ZRG	Pretoria, Union of So. Africa.  5 kw. See "Johannesburg." (Sat. 5-7 am; 9:30 am-4:45 pm; 11:45 pm-12:50 am; Sun.  5:30-7 am; 8:30 am-noon; 12:15-3:15 pm; Other days, 5-7 am; 9:30 am-3:30 pm; 11:45 pm-12:50 am).		PCJ	Apartado 867. Huizen, Netherlands. 60 kw. See "Hilversum." (Sun, 1:40- 3 pm; 7:15-9:50 pm; Tu, 1:45-3:30 pm; 7-10:15 pm; W,
	9524		5-7 am; 9:30 am-3:30 pm; 11;45 pm-12:50 am). Luxembourg. "Radio Luxem- bourg." (11 am-1 pm).		VK2ME	Sydney, Australia. 20 kw. Sun, 1-3 am; 5-11 am. Signature, laughing notes of kookaburra. Amalgamated Wireless (Asia) 1-4
	9525	ZBW3	Hong Kong. 2500 w. Hong Kong Broadcasting Commit-			kookaburra. Amalgamated Wireless, (A/sia), Ltd., 47 York St. (Sun, midn't-2 am; 4:30-8:30 am; 11:30 am-1:30
	9530	KGEI	tee, Box 200. San Francisco, Calif. 20 kw. See 'KGEI." (3-9 am).		WEME	pm).
	9530	LKC	Oslo, Norway. 5 kw. See "Oslo."		VKOME	Perth, Australia. 5 kw. Weekdays, 6-8 am. Amalgamated Wireless, (A/sia), Ltd.
		VUC2 WGEO	Calcutta, India. 10 kw. 2:30-4:30 am. All-India Radio. Schenectady, N. Y. 40 kw. See WGEA."		VUD2	Delhi, India. 10 kw. 2-4:15 am; 8 am-1 pm; 10 pm-mid- night. All-India Radio.
	9535	JZI	Tokyo, Japan. 20 kw. See "Tokyo." (4:40-5:30 pm). Bern, Switzerland. 25 kw. See "Bern."	0.500	VUD3	Delhi, India. 5 kw. 8 am-1 pm. All-India Radio.
			Bern Switzerland. 25 kw. See "Bern."	9590	WCAB	Philadelphia, Pa. 10 kw. See "WCAB." (M, Th. Sat, 6:30 pm-2 am: Wed 9 pm-2 am)
•	9536	VPD2	Suva, Fiji. 2 kw. Amalgamated Wireless, (A/sia), Ltd. (5:30-7 am).	0505	WLWO	Philadelphia, Pa. 10 kw. See "WCAB." (M, Th, Sat, 6:30 pm-2 am; Wed, 9 pm-2 am). Cincinnati, Ohio. 10 kw. See "WLWO."
	9540	DJN	Berlin, Germany. 50 kw. (12:05-2:30 am; 4:50-10:50 pm). See "Berlin" at end of list.		HBL CB960 XEYU ZRL	Geneva, Switzerland. 20 kw.
	9544	HH2S	Port-au-Prince, Haiti. Societe Haitienne de Radio- diffusion, Boite Postal 103.	,,,,,		5 kw. See "Johannesburg." (Sun, 3:30-4:30 am (or 4-5
	9550	HVJ	Vatican City. 15 kw. Wed, 2:30-3 pm; Sun, 5-5:30 am. See HVJ.			**Santiago de Chile. (6 pm).  Mexico City, D. F. (9-11 pm).  Capetown, Union of So. Africa.  5 kw. See"Johannesburg."  (Sun, 3:30-4:30 am (or 4-5 am); 5:30-7 am; 9-11:45 am; noon-3 pm; Weekdays, 3:20-7;20 am; 9-11:45 am; noon-4 pm; 11:45 pm-12:50 pm).
			4			

9615 TIPG	San Jose, C. Rica. 2 kw. "La Voz de la Victor," Claudia Martinez. (Reported on 9610). (7 am.11:30 pm; English hour Wed, Sat, 9-10	9985 COC	CMCM, "Trans Radio Columbia," 23 No. 1113, Vedado. Rio de Janeiro, Brazil. 12 kw. Relays PRF4: signs off
9616 HJ1ABF	pm). Partagena, Colombia. 608 w. 4:30-10:30 pm. "Radio Cartagena," Aptado 37.		with Brazilian National Hymn. Cia. Radio Internacional do Brasil, Caixa Postal 709. (Weekdays, 6-7 pm; M, 8-8:30 pm; F, 7-7:30 pm).
9620 HAD	Budapest, Hungary. (6-9 pm).  Bucaramanga, Colombia. 650 w. Relays HJ7GAE. "Radio Bucaramanga."	10330 ORK	Brussels, Belgium. 11 kw. 1:30-3 pm.
9630 I2RO3	Rome, Italy. 100 kw. See	10660 JVN 10740 JVM	Tokyo, Japan. Tokyo, Japan.
9645 HH3W	Rome, Italy. 100 kw. See "Rome." (12:07-12:56 pm; 1:01-2:55 pm; 5:30-9 pm). Port-au-Prince, Haiti. 30 w. 1-2 and 7-8 pm. C. Ricardo Widmaier, Box A-117.	11402 HBO	Nations." Sun, 7-7:45 pm. Tokyo, Japan.
9645 JLT2	Tokyo, Japan. See "Tokyo." (8-8:30 pm).	11673 IQY	Rome, Italy. See "Rome." (5:20-5:40 am; 12:07-12:56 pm; 1:50-2:30 pm).
9650 IABA	Addis Ababa, Ethiopia. 1 kw. E. I. A. R. (Sun, 3:30-3:55 am).	11700 HP52	A Panama City. 300 w. Sun, 9 am-1 pm; 6-10 pm. Week- days, 11:45 am-1 pm; 6-10 pm. "Radio Teatro Estrella de Panama." Sign off with "Anvil Chorus." Radio Tea-
9650 WCBX	New York, N. Y. 10 kw. See "WCBX." (10:30-11:30 pm).		110. Apido. 934.
9660 CR6AA HVJ	Lobito, Angola. Vatican City. 15 kw. Wed, 2:30-3 pm; Sun, 5-5:30 am.	11705; JLG3	(8-8:30 pm).
9670 I2RO9	2:30-3 pm; Sun, 5-5:30 am. See HVJ. Rome, Italy. 100 kw. See "Rome." (12:40-5:30 pm; 6-	11705 SBP	Stockholm, Sweden. 500 w. Sun, 1:15-4:15 pm; Wed, Sat, 8-9 pm; Daily 1-4:15 pm. Telegrafverket Tjanstebrev 5.
9675 DJX	Berlin, Germany. 10:35 am- 4:25 pm. See "Berlin" at end of list.	11718 CR71	3H Lourenco Marques, Port. E. Agrica. 200 w. Radio Club de Mocambique, Caixa 594. (Sun, 5-7 am; 10 am-12 pm; Weekdays, midn't-1 am; 4:30-6:30 am; 9:30-11 am; noon-4
9685 TGWA	Guatemala City, Guat. 10 kw. See "TGWA." (Sun, 7 pm-midnight; Weekdays, 7:30		рш).
9690 HMF	pm-12:15 am). Baghdad, Iraq. Qasr-El- Lahoor Brdcstg. Station. (3	11718 TPB	See "Paris.'
9692 <sup>.</sup> TI4NRH	pm). I Heredia, Costa Rica. 750 w.	11720 CJR2	9:30 pm-midnight. See "Paris."
	Heredia, Costa Rica. 750 w. Sun, 7-8 am; Tu, Th, Sat, 9-10 pm. Amando Cespedes Marin, Apartado 40.	_	Richardson & Sons, 157 Royal Alexandra Hotel.
<b>97</b> 00	"Radio Martinique," Fort de	11721 ZP14	Cultura." (7:07-9:07 pm).
	1:15-2:45 pm; 6-10 pm. Sign off with Marseillaise. Poste	11730 PHI	Huizen Netherlands. 23.6 kw. See Hilversum. A Boston, Mass. 20 kw. See
9730 CB970	Seri. Boite 136. Valparaiso, Chile. (Reported on 9710). 6:30-11 pm.	WSL 11730 WSL	"WSLA."
9735 CSW7	on 9710). 6:30-11 pm. Lisbon, Portugual. (8 pm).	11735 LKQ	
9755 ZRO	Durban, Union of So. Africa. 200 w. See "Tohannesburg."	11740 HVJ	"Oslo." (11 am-2 pm). Vatican City. 15 kw. Tues,
	200 w. See "Johannesburg." (Sat, 3:30-7:30 am; 9-11:15 am; 11:20 am-4 pm; Sun, 5:30-7 am; 9-11:15 am; 11:20 am-3:20 pm; Other days, 3:30-7:30 am; 9-11:15 am; 11:20 am-3:45 pm).	11750 GSD	Vatican City. 15 kw. Tues, 8:30-9 am. See HVJ. London, Gt. Britain. 20 kw. "D For Daventry." See "London." (1:30-3:50 am; 12:35-4 pm; 4:20-6 pm; 6:20-9:15 pm; 9:40-11:30 pm)
9835 IRF	Rome, Italy. 20 kw. See "Rome." (5:20-5:40 am; noon-12:25 pm; 12:40-1 pm; 1:50-2:30 pm; 6-9 pm).	11753 COC	X Havana, Cuba. Relays CMX, "Casa Lavin." Box 32. Sun 6-9 pm; weekdays 8 am-midnight).
9860 EAQ 9925 JDY	Madrid, Spain.  Dairen, Kwantung. 10 kw. 7-8 am. Manchuria Telephone and Telegraph Co.	11760 TGW	A Guatemala City, Guat. 10 kw. Sun, 12:45-5:15 pm; Week- days, 12:45-1:45 pm. See TGWA.

11770 DJD	Berlin, Germany. 50 kw. 11:30 am-4:30 pm; 4:50-10:50 pm. See "Berlin."	12230 COCE	Havana, Cuba. "La Voz del Transporte," Prado 18. (8 am-midn't.)
11770 MTCY	Hsingking, Manchukuo. Strasbourg." (10-11:30 pm).	12235 T.FJ	Reykjavik, Iceland. 7500 w. Sun, 1:45-2:30 pm Icelandic State Broadcasting Service,
11776	"Radio Luxembourg." Cie. Luxembourgoise de Radiodif-		State Broadcasting Service, Box 547.
11780 HP5G	hour for three days then advanced an hour for next 3-day period).	12460 HCJB	Quito, Ecuador. (Reported on 12450). Clarence W. Jones, Casilla 691. (Daily exc. Mon, 10-11 pm).
11780 111734	"Ron Dalley." Opens, closes, with Prelude from "Traviata."	13900 YN3DG	Leon, Nicaragua. (Verifies for 10c). (Sat, Sun, 10 pm).
	Salvador Graziani, Box 1121. (6-10 pm).	14125 YV9AB	
11780	Saigon, Fr. Indo-China. "Radio Saigon." (6 am).		la Gran Sabana, Ministerio de Fomento, Caracas.
11790 W-SLA	Boston, Mass. 20 kw. See "WSLA."	14795 IQA	Rome, Italy. See "Rome." (4:30-4:55 am).
11800 JZJ	Tokyo, Japan. 50 kw. See "Tokyo." (7-9:30 am; 2:30-	14935 PSE	Rio de Janeiro, Brazil. W, 4-4:10 pm; Th, Sat, 3-3:30
11801 DJZ	4 pm). Vienna, Germany. 50 kw. See "Berlin." (4:50-10:50 pm).	15110 DJL	pm). Berlin, Germany, 50 kw.
11810 I2RO4	Rome, Italy. 100 kw. See "Rome." (4:30-4:55 am; 5-		12:05-2 am; 8-9 am; 10:35 am-4:25 pm. See "Berlin."
11820- GSN	Vienna, Germany. 50 kw. See "Berlin." (4:50-10:50 pm). Rome, Italy. 100 kw. See "Rome." (4:30-4:55 am; 5- 7:25 am; 7:30-8:45 am; 10 am-3 pm; 6-9 pm). London, Gt. Britain.	15120 HVJ	Vatican City. 15 kw. Tues, 10:30-11 am; Sun, 1-1:30 pm. See HVJ.
11830 WCBI	Chicago, Ill. 500 w. See "WCBI."	15130 TPB11	Paris, France. 25 kw. 2-5
11830 WCBX	New York, N. Y. 10 kw.	WSLA	Paris, France. 25 kw. 2-5 am. See "Paris." Boston, Mass. 20 kw. See "WSLA."
	pm; Daily exc. Sun, 4-6 pm; Daily 6:30-10 pm).	15130 WSLR	Boston, Mass. 20 kw. See "WSLA."
11840 KZRM	Manila, Philippines. Erlanger & Gallinger, Inc., David St.	15140 GSF	London, Gt. Britain. 15 kw.
11840 OLR4A	Prague, Bohemia. 35 kw. "Radio Podebrady." (M, Tu, W, Th, F, 8-10:30 am; Sun, 7:15-9:55 pm).		"F For Fortune." See "London." (5:45-8:50 am; 9 amnoon; 4:20-6 pm; 6:20-9:15 pm).
11850 HAD 11870 VUM2	7:15-9:55 pm).  Budapest, Hungary. (2-6 pm).  Madras, India 10 kw. 4-4:30	15160 JZK	Tokyo, Japan. 50 kw. See "Tokyo." (Midnight-1:30 am: 7-9:30 am; 2:30-4 pm).
11870 WPIT	am. All-India Radio. Pittsburgh, Pa. 40 kw. See "WPIT." (2-11 pm). Strasbourg, France. "Radio	VUD3	Delhi, India. 5 kw. 2-4:15 am; 10 pm-midnight. All-
11870 11880 VLR3	Strasbourg, France. "Radio Melbourne, Australia. 1-3 am. See VLR.	XEWW	India Radio.  Mexico City, D. F. 10 kw.  "La Voz de la America Latina desde Mexico," Aptdo. 2516.
11885 TPA3	Paris, France. 25 kw. 2-5 am; 11:15 am-6 pm. See "Paris."	15170 LKV	desde Mexico," Aptdo. 2516. Oslo, Norway. 5 kw. See Oslo.
TPB7	Paris, France. 25 kw. 9:30 pm-midnight. See "Paris."	15170 TGWA	
11900 I2RO13	Rome, Italy. 100 kw. See 2RO.		Guatemala City, Guat. 10 kw. See "TGWA." (Sun, 12:01-1 am; 10:30 am-5:15 pm: Weekdays, 7:45-9 am; 12:45-
11900 XGOY	Chungking, China. Central Brdcstg. Station. (5:30-10:30 am; 11-11:30 am; 4-6:30 pm).	15180 GSO	3:45 pm).  London, Gt. Britain. "O For Ocean." See "London."
11900 XMHA	Shanghai, China. 445 Race-course Road. (Reported on 11840 and 11857). (6 am).	15195 TAQ	(4:20-6 pm; 6:25-9:20 pm).
11900 ;	Hanoi, Fr. Indo-China. "Radio	15200 DJB	Daily 5:30-7 am. Berlin, Germany. 8 kw. See "Berlin," (5-11 am: 4:50-
	Pepiniere. (Sat, 8:30-10:30 pm; Sun, 12:01-9:30 am; Other days, 12:01-2:30 am; 6-9:30 am).	15210 WPIT	12:25 pm).
11930 PPH	Rio de Janeiro, Brazil. (5:30 am).	15220 PCJ2	Pittsburgh, Pa. 40 kw. See "WPIT." (9 am-2 pm). Hilversum, Netherlands. 60 kw. See "Hilversum." (Sun.
11960 HI2X	Trujillo, D. R. 900 w. Relays HIX. J. R. Saladin, Gobierno Dominicano. (Sun, 7:40-10:40 am).		Hilversum, Netherlands. 60 kw. See "Hilversum." (Sun, 7:40-9:05 am; M, Th, 7:40-9 am; Tu, 1-2:30 am; W, 9:30-11:30 am; Tu, W, F, Sat, 7:40-8:45 am).

15240 CR7BD	Lourenco Marques, Mozambique. Radio Club de Mocambique, Box 594. (Sun, 5-7 am; 10 am-2 pm; Other days, midn't-1 am; 4:30-6:30 am; 9:30-11 am; noon-4 pm).
15243 TPA2	Paris, France. 25 kw. 6-11
15260 GSI	London, Gt. Britain. "I For Island." See "London." (1:30 am-3:50 am; 12:25-4
15270 WCBX	New York, N. Y. 10 kw. See "WCBX." (Sun, 1-2:30 pm; Other days, 1-3:30 pm).
15280 DJQ	New York, N. Y. 10 kw. See "WCBX." (Sun, 1-2:30 pm; Other days, 1-3:30 pm). Berlin, Germany. 50 kw. Daily, 12:05-11 am; 4:50-10:50 pm. See "Berlin."
15280 HI3X	Trujillo, D. R. 900 w. (Reported on 17400). Relays HIX. Secretaria de Comunicaciones y Obras Publicas. (Tu, F, 8:10-10:10 pm; Sun, 7:40-9:40 pm).
LRU	Buenos Aires, Argentina. 5 kw. 8 am-1 am. "Radio El Mundo." Calle Maiou 555.
15300 I2RO6	Rome, Italy, 100 kw. See "Rome," (4:10-4:55 am; 10 am-12:06 pm; 1:40-2:30 pm; 3-5:30 pm; 7:30-9 pm).
15300 LYZ4	Kaunas, Lithuania. (Reported on 15130). (Sun, 1 pm).
15310 GSP	Kaunas, Lithuania. (Reported on 15130). (Sun, 1 pm). London, Gt. Britain. "P For Progress." See "London." (12:17-1:15 pm; 1:15-4 pm; 4:20-6 pm).
15330 KGEI	San Francisco, Calif. 20 kw. See "KGEI." (1-4 am; 5-8 am; 12:30-8 pm).
15340 DJR	Berlin, Germany. 50 kw. See "Berlin." (4:55-10:50 pm).
15410	Bucuresti, Romania. 50 kw. "Radio Bucuresti." (9-10:15
17760 DJE	pm).  Berlin, Germany. 50 kw.  See "Berlin." (12:05-5:50 am; 6-7:45 am; 8-11 am; 11:10 am-12:25 pm; 4:55-9 pm).
17770 PHI2 .	kw. See "Hilversum." (Sun, 6:40-10:05 am; M, Th, 7:40-
17785 JZL	8:45 am). Tokyo, Japan. See "Tokyo." (4:30-:530 pm: 8-8:30 pm).
17790 GSG	8:45 am). Tokyo, Japan. See "Tokyo." (4:30-:530 pm; 8-8:30 pm) London, Gt. Britain. 5:45- 8:50 am; 9 am-noon; 12:20-4 pm. See "London." Guatemala City, Guat. 10 kw. See "TGWA." London Gt. Britain. 5:45-
17800 TGWA	Guatemala City, Guat. 10 kw.
17810 GSV	8:50 am; 12:20-4 pm. See
17840 HVJ	Vatican City. 15 kw. See
21470 GSH	Vatican City. 15 kw. See HVJ. London, Gt. Britain. 5:45-8:50 am; 9 am-noon. See "London."
21520 WCAB	"London." Philadelphia, Pa. 10 kw. See "WCAB." (Noon-6 pm).
21530 GSJ	London, Gt. Britain. 5:45-8:50 am. See "London."
21540 WPIT	"WOAB." (Noon-6 pm). London, Gt. Britain. 5:45-8:50 am. See "London." Pittsburgh, Pa. 40 kw. See "WPIT." (5:30-9 am).

21565 DJJ Berlin, Germany. 6-7:50 am. See "Berlin."

21570 WCBX New York, N. Y. 10 kw. See "WCBX." (8 am-12:30 pm).

21680 HAD Budapest, Hungary. (11 am-2 pm).

### Addresses

Ankara—Radio Ankara." Ann: Turkish, Eng, Fr, Ger. Sign off, National anthem. Turkish Brdcstg. System, Correspondence Dept.

Berlin—These transmitters are located at Zeesen, near Berlin. Interval signal is the tune, repeated several times, "Ever Be True and Honest," and sign off theme, two national anthems, "Horst Wessel Lied" and "Deutschlandlied". Address is Reichsgrundfunk G. m. b. H., Haus des Rundfunk, Masurenallee, Berlin-Charlottenberg 9.

Hilversum—Transmitters at Huizen. PCJ is "The Happy Station." Announcements in Dutch, German, French, English, Spanish, Portuguese. Sign off with National Anthem. N. V. Philips' Radio, Eindhoven.

Johannesburg—All programs originate in J/B. Announce "Johannesburg Calling." English and Afrikaans. Open with bugle call. South African Broadcasting Corp., Box 4559, Johannesburg.

London—Transmitters are at Daventry, Interval signals are Bow Bells; Greenwich time signal on even hours; and, irregularly, Big Ben, preceded by Westminster Chimes, strikes the hours. Sign off with "God Save The King." British Broadcasting Corp., London W1.

Oslo-Norsk Rikskringkasting, Shortingsgaten 28, Oslo, Norway.

Paris—Transmitters at Essarts-le-Roi. Announce as "ParisMondial," (Paris Embracing The World), and sign off with "La Marseillaise." Minister of Posts, Telegraphs and Telephones, 98 bis Blvd. Haussmann.

Rome—"Radio Roma-Napoli." Transmitter at Prato-Smeraldo. Interval signal, chirping of bird. Announcements usually by a lady. Sign off with 2 anthems, "Giovinezza" and "Marcia Reale." Ente Italiano per le Audizioni Radiofoniche, Via Montello 5.

Tokyo—Transmitters are at Nazaki. Sign off with national anthem, "Kimagayo." Nippon Hoso Kyokai, 2-Chome, Uchisaiwaicho, Kojimachi-ku.

HVJ—Announcements in Dutch, Italian, Polish, English, German, French, Spanish, Russian. A clock or metronome ticks seconds during 5 minutes preceding broadcasts. Bells of St. Peters strike hour. Open and close with Laudetur Jesus Christus." Pontifica Accademia Della Scienze, Roma-Castina Pio IV.

KGEI—Transmitter at Treasure Island. General Elec. Co., 235 Montgomery St., San Francisco, Calif.

eral Elec. Co., 235 Montgomery St., San Francisco, Calif.

TGWA—Radiodifusora National, "La Voz de Guatemala." Relay TGW. Return postage is not necessary for verifications.

VLR—Transmitter at Lyndhurst. Australian Broadcasting Commission (Victorian Division), P. O. Box 1686, GPO, Melbourne, Vic., Australia.

WCAI—Trans. at Newtown Square. Relays CBS-WCAU. WCAU Brdcstg. Co., 1622 Chestnut St., Philadelphia, Pa.

WCBI—"The Voice of Labor." Transmitter, York Township. Relays NBC-WCFL. Sign off in English, French, German, Norwegian, Polish, Russian and Spanish. Chicago Federation of Labor, 666 Lake Shore Drive, Chicago, Ill.

WCBX—Transmitter at Wayne Twp.. N. J. Relays CBS-WABC. Sign off, "Star Spangled Banner." Columbia Broadcasting Sys., 485 Madison Ave., New York City.

WGEA—Transmitter at South Schenectady. Relays NBC-WGY. Programs commence with discharge of man-made lightening. General Elec. Co., | River Road.

WLWO—Transmitter at Mason. Relays

WLWO-Transmitter at Mason.

WLWO—Transmitter at Mason. Relays St., Cincinnati, Ohio. NBC-WLW. Crosley Corp., 1320 Arlington WNBI—Transmitter at Bound Brook, N. J. Relays NBC-WJZ. Sign off with "Star Spangled Banner." NBC, Inc., 30 Rockefeller Plaza, New York, N. Y. WPIT—Transmitter at Saxonburg. Relays NBC-KDKA. Westinghouse Electric & WSLA—"Dedicated to Englightment." World Mfg. Co., Grant Bldg., Pittsburgh, Pa. Wide Broadcasting Corp., Educational Director, University Club, Boston, Mass.

#### Amateur Calls Heard

The calls are listed under the time zones in which they are heard. The names and addresses of persons reporting the stations are indicated by small letters following the call signs. Key to the small letters is given at the end of the column.

Ten Meters

CE3AG (a); K4FOW (adj); K4FRN (a);
K5AP (a); K5AT (a); K6MVV (d);
K6MVX (d); K6OQM (d); K6PAS (d);
K6QLG (d); K6QNX (d); K6RVG (d);
OQ5AB (ai); TG9AA (ad); VP6YB (a);
W9BHP (i); XE1AC (a); XE1GL (a);
XE2AC (a); XE2AS (aj); XE2FC (a);
YN3DC (a); YV1AQ (a); ZS2AH - (a);
ZS4H (a); ZS4W (a); ZS5BZ (a); ZS6W
(a); ZS6BS (a).

Twenty Meters-AST
All reported by (g); HA3Y; HK3CK:
I1MV; K4FKC; OZ5BW; YV4AE:
YV5ABQ.

Twenty Meters-EST

Twenty Meters-EST

CE1AC (bh); CE1AO (j); CE1AX (b);
CE3AG (b): CT1QA (b); CT1QG (b):
CT1QY (b): CT2BP (b); CX2CO (b);
EK1AF (bj); ES5D (bc); HA3B (bi);
HB9DO (a); HC2CC (b); HH2B (abj).;
HH5PA (ab); H13N (bj); H13Q (b);
H15X (ab); H16Q (abj); H171 (b);
HK1AG (bh); HK1AK (a); HK3AX (a);
HK3CK (b); HK3CL (b); HK4DX (b);
HK1AC (b); JSCA (c); KA1FH (h); KA7EF (h); K4AOP (b); K4FJF (b); K4FAM (a);
K4EZP (a); K4FAB (b); K4FAY (abj);
K4FJO (a); K4FBC (abj); K4FRM (a);
K6BNR (aj); K6KCV (b); K6KVC (j);

K6MRV (a); K6MZA K6OJI (abj); K6RVU LU7BC (b); LU9FB LY1J (b); NY1AE OA4C (j); ON4WV (b); (a); (b); (c); (a); K6KLN K6NYD K7GSC LY1AA (abi); (b); (b); (i); (i); (bj); (a): OA4AR OQ5AE PA0DR OQ5RC PK2AY PY2ER (i); (a); OZ1WB (i); (b); PY2AZ (a); (j); PY2ER (j); TG5JG ( (ab); TI2FG (ab); TI6HP (h); XE1CJ (h); XE2KN (bj); YN4AB PY2BH PY7AI TG9BA PY5AQ (b); TG9AA (b); TI2RC (b); VP1WB TI4AC (a) (j); XE1CO (j); XE8ZĀ (b); YV1AC (ab); YV3AQ (a); YV5ABĒ VP5BR VP5BK (n); AE1CJ (J); XE1GE (h); XE2KN (j); YN1IP (bi); YN4AB (b); YV1AP (bi); YV4AP (a); YV4AE (bi); YV4AP (a); YYV5AE (a); YV5AG (cj (cj); YV5AK (j); YV8AA (b. (j) (b) (cj);

#### Twenty Meters-CST

CE1AC (d); CE1AH (e); CE1AR (d); CE3AM (e); CE3DW (d); HC1FG (e); HH2B (d); HI3N (de); HI5X (d); HK1AB (d); HK3CI (e); HK4DC (d); KA1CS (d); K6BHL (e); K6BJJ (e); K6BNR (e); K67EF (d); K4FKC (e); K6BAZ (e); KA1EF (d); K4FKC (e); K6BAZ (e); K61LW (ed); K6JLB (d) (K61LW (ed); K6JPD (e); K6LCV (de); K60ES (e); K60KW (e); K60YD (e); K60ES (e); K60FW (e); K60ES (e); K60FW (e); K60TJ (de); K60ES (e); K6FWD (e); K60ES (e); K6FWD (e); K6OTJ (de); K6OTJ ( (d) KAL (e); K61AE (e); K6LCV (e); K6NYD (e); K60JI (e); K60JI (e); K60JI (e); K60JI (e); K60FW (de); K6RVU (de); K6RVU (de); TG9AA (d); (d); K6QMT (e); (d); LU7BA PY2AC (d); TG9AA (d); TI2GC (d); TI4AC (d); YVAA9 (e); YV1AP (d); YVIAQ (de); YV4AE (d); YV5ABF (e); ZS5Q (e); ZS6EJ (e).

#### Twenty Meters-PST

All reported by (I); CE1AG; CE1AO; CE1AR; CE2AM; CE3AA; CE3AC; CE3AZ; CE3BK; CE3CG; CE3CH; CE3CO; CE3CZ; CE3EV; CN3BB; CT2BP; CX2CO; EA7BA; EK1AF; HH5PA; HK1AA; HR2A; J2KN; J4CT; J5CW; J7CB; KA1AA; KA1AF; KA1BB; KA1CS; KA1CW; KA1ER; KA1FH; KA1JP; KA1LZ; KA1MM; KA1OZ; KA1ZL; KA1MM; KA1OZ; KA1ZL; KA1ZL; KA3KK; KA4LH; KA7EF; K4FKC; K7GZH; K7HCX; LU1H1; LU1OA; LU3AI; LU3DN; LU4CZ; LU1OA; LU4FG; LU3AJ; LU4VA; LU7AG; LU3DN; LU4CZ LU5CZ; LUSEZ; LUGDJ; LU7AG; LU7AZ; LU3EK; LU7HH; LU8AB; LU8AG; LU8EC; NY1AE; OA4AI; OA4C; OA4R; OQ\$AE; OZ5BW; PA0MZ: PK1MF; PK1RI: OZ5BW; PAOMZ; PK1MF; PK1RI; PK2AY; PK2LZ; PK3BD; PK3WI; SM5JG; TG5JG; TG9RV; TI2BS; T14AC; ZE1JX; ZS1AX; ZS2AH; ZS2AZ; ZS4AA; XU6KL; ZS1AX; ZS5AG; ZS5AW; ZS6BZ; ZS4H; ZS4H; ZS4L; ZS5AG; ZS5AW; ZS6BZ; ZS6CY; ZS6DJ; ZS6DW; ZS6DY; ZS6EB; ZS6EG; ZS6EU; ZS6FD.

#### The Reporters

(a) (b) Alton Caldwell, Jr., Brockton, Mass. George Eder, Philadelphia, Pa. (c) (d)

George Eder, Philadeiphia, Pa.
Carl Horton, Athol, Mass.
Ralph Kastner, New Braunfels, Texas
Merton T. Meade, Kansas City, Mo.
William Pieper, Los Angeles, Calif.
George Poulain, Sydney, N. S., Canada
Carl Sylvester, Columbiaville. Mich.
LeRoy Waite, Ballston Spa, N. Y.
Walter F. Welch, Lynn, Mass.

# The WORLD'S Radio Stations

(Continued From November Issue)

### A complete listing of the radio stations of the world, from 500 kcs to 500,000 kcs.

The addresses and broadcasting schedules of the shortwave broadcasting stations are not shown in this list. Readers are referred to The Shortwave Broadcasting Station List for this information.

2994	KALF KALZ KANK KANM	.;. T  Ť	3.0 25 10	Livengood, T. A. Clifton W. Hudson. Grub Creek, T. A. E. C. Kraiger. Point Baker, T. A. A. R. Brueger. Burnett Inlet, T. A. Burnett Inlet Salmon Co. Bethel, T. A. Society of the United Brethren for Propagating the Geneal Among the Heather
	KAQM KASI KASK KILY		3 20 40 50	for Propagating the Gospel Among the Heathen. Allakaket, T. A. Sam Dubin. Hughes, T. A. Linious McGee. Excursion Inlet, T. A. Northern Radio Co., 1422 Jos. Vance Bldg., Seattle, Wash. Madison, Wis. Aeronautical Radio, Inc.
2996 2998 3005	WAZM CY30 WXE WAZM	FA FA FA	40  40	1422 Jos. Vance Bldg., Seattle, Wash. Madison, Wis. Aeronautical Radio, Inc. Charlie Lake, B. C. United Air Transport, Ltd. Anchorage, T. A. Madison, Wis. Aeronautical Radio, Inc. Ft. Jefferson Nat'l Mon., Fla. Nat'l. Park Service.
3040 3045 3062	YDA VBV6 KGTD KGTH KGTR KST KSV KSX	B C FA FA FA FA FA	10000	landjong Priok, Java, N.E.I. Calgary, Alta. Dominion Gov't. Wichita, Kans. Aeronautical Radio, Inc. Salt Lake City, Utah. Same as KGTD. Robertson, Mo. Same as KGTD. Kansas City. Mo. Same as KGTD. Amarillo, Tex. Same as KGTD. Albuggrage N. Mey. Same as KGTD. Albuggrage N. Mey. Same as KGTD.
3072.5 3082 3082.5	WAEC WAEO WHG WHM KGUP HRD KAAT KAAU KABN	FA FA FA FA FA FA FA	14	Puttsburgh, Pa. Same as KGTD. Chicago, Ill. Same as KGTD. Columbus. Ohio. Same as KGTD. Indianapolis, Ind. Same as KGTD. Phoenix, Ariz. Aeronautical Radio, Inc. Toncontin. Honduras. Pan American Airways. Waka Island. Pan American Airways.
	KABO KABU KABV KAFO KAFW	FA FA FA <b>FA</b>		Launch "Panair II-P", Same as KAAT. Launch "Panair II-P", Same as KAAT. Launch "Panair IV-P", Same as KAAT. Launch "Panair IV-P", Same as KAAT. Launch "Panair XP", Same as KAAT. Refueling and Service Barge at Sand Island. Same as KAAT. Pearl City, Oahu, T. H. Same as KAAT. Launch "Panair VI-P", Same as KAAT. Sand Island, Midway Island Group, Same as
	KANB KAPP KASC KASW KAXN KHAGH	FA FA FA FA FA A	 20 	Sand Island, Midway Island Group. Same as KAAT Pago Pago. Tutuila. Same as KAAT. Sumay. Guam. Same as KAAT. Launch "Panair X-P". Same as KAAT. Launch "Panair XIII-P". Same as KAAT. NC-14947. Lt. Col. G. R. Hutchnison, Balti-
	KINL KIQA KNBF KTIC KTIS	FA FA FA FA FA	20  16 20	more, Md. Iuneau, T. A. Pacific Alaska Airways. Tanana, T. A. Same as KINL. Mokapu Peninsula, Oahu, T. H. Same as KAAT. Treasure Island. Calif. Same as KAAT. Seaplane (Tender "Sea Gull." New York City. Same as KAAT.
	VEZ VOAC	FA FA		Burwash Landing, Y. T. Dominion Gov't. Grand Falls, Newfoundland. Nfld, Airport.
3085 3088 3092.5	WASL KRRO KBDG KGUP WSDM KAGI KAGN	FA F FA T T	50 50	Squadron Leader H. A. L. Pattison. Launch "Panair III-A". Same as KAAT. Bozeman. Mont. Livingston. Mont. Phoenix, Ariz. Aeronautical Radio, Inc. Albany. N. Y. Same as KGUP. Hood Bay, T. A. Hood Bay Canning Co. Portable in Alaska. Alaska Aeronautics & Communications Commission. Portable in Alaska. Same as KAGN.
	KAJP KAJX	C.Ť T	18	Daly, T. A. Pacific American Fisheries, Inc. Holy Cross, T. A. Catholic Society of Alaska.

	KAKL KBNL KEXO KEXP KGM KIAO KIAP	C T T 	50 50 50	Kasaan, T. A. Same as KAJP. Iron Creek, T. A. Southwestern Herring Co. Portable in Alaska. Same as KAGN. Portable in Alaska. Same as KAGN. Ketchikan, T. A. Alaska Pacific Salmon Co. Rose Inlet, T. A. Same as KGM. Port Althrop, T. A. Same as KGM. Port Althrop, T. A. Same as KGM. Port Althrop, T. A. Same as KGM. Ketchikan, T. A. Same as KGM. Ketchikan, T. A. Same as KGM. Kake, T. A. Same as KGM. Kake, T. A. Same as KGM. Daly, T. A. Same as KGM. Squaw Harbor, T. A. Same as KAJP. Luckyshot, T. A. Jack M. Karteman. Squaw Harbor, T. A. Same as KBNL. Iron Creek, T. A. Same as KBNL. Iron Creek, T. A. Same as KBNL. Seattle, Wash. Yellow Band Gold Mines, Inc. Seattle, Wash. Yellow Band Gold Mines, Inc. Port Althrop, T. A. Same as KGM. Rose Inlet, T. A. Same as KGM. Uganik Bay, T. A. Same as KGM. Uganik Bay, T. A. San Juan Fishing & Packing Co., Seattle, Wash. Warren, T. A. Pacific American Fisheries, Inc.
	KIAV KIAW KIAX KIAY KIAZ KIBA		••••	Port Althrop, T. A. Same as KGM. Port Althrop, T. A. Same as KGM. Ketchikan, T. A. Same as KGM. Ketchikan, T. A. Same as KGM. Kake, T. A. Same as KGM. Kake, T. A. Same as KGM.
	KIBI KIIP KIJH KIOH	Ċ-T T C	30	Daly, T. A. Same as KAJP. Luckyshot, T. A. Jack M. Karteman. Squaw Harbor, T. A. Same as KAJP. Lron Creek T. A. Same as KBJI.
	KIU KKAA KKAB KLB	CH T T	50 25 <b>25</b>	Iron Creek, T. A. Same as KBNL. Seattle, Wash. Yellow Band Gold Mines, Inc. Seattle, Wash. Yellow Band Gold Mines, Inc. Port Althrop. T. A. Same as KGM.
	KLE KLE KLY	ĊН	••••	Kake, T. A. Same as KGM. Rose Inlet, T. A. Same as KGM. Uganik Bay, T. A. San Juan Fishing & Packing Co. Seattle, Wash.
3093	KAJO KALG KALH KALI	::: :::	100 100	Warren, T. A. Pacific American Fisheries, Inc. Squaw Harbor, T. A. Same as KAJO. Port Moller, T. A. Same as KAJO.
	KALJ KAMG KANR KAQL	:::	20 20 25	Warren, T. A. Pacific American Fisheries, Inc. Squaw Harbor, T. A. Same as KAJO. Port Moller, T. A. Same as KAJO. Lazy Bay, T. A. Same as KAJO. King Cove, T. A. Same as KAJO. Stuyshok, T. A. Vance Hitt. Kalskag, T. A. Fred H. Whitcher. Mountain Village, T. A. Norval Douglas Sheard
3095	KBAE .	F		Shepard.  Seward, T. A. (In Chugach Forest). U. S. Dept. of Agriculture, Forest Service.
1	KBAF, KBCC KBCM KBCN KBDD KBDE KBEN KBEZ KBFH WWLL WWLL	KBAG, FF FF FF FF FF FF FF	KBAH,	Dept. of Agriculture, Forest Service. Same as Above. Mt. Shasta, Calif. Salmon, Idaho. (Salmon Forest). Salmon, Idaho. (Salmon Forest). Elko, Nev. (Humboldt Forest). Elko, Nev. (Humboldt Forest). Seward, Alaska. Mt. Shasta, Calif Leavenworth, Wash. Duluth, Minn. (Superior Forest). Escanaba, Mich. (Upper Mich. Forest).
3105				Allocated as an aircraft calling and working frequency for use by non-scheduled aircraft in the Western Hemisphere only. Only airplanes which are believed to be of inteerst to DXers are listed on these airplane frequencies.
2100	KHAGH KHCIY KHCIY	Α	50 100 100	NC-14947. Lt. Col. G. R. Hutchinson, Balti- more, Md. NC-18997. American Export Airlines. NC-18997. American Export Airlines.
3120 3147.5	$\mathbf{KRBD}$		400	Red Bluff, Calif. Aeronautical Radio, Inc.
3148	KEU KFM KFO	FA FA FA		Burbank, Calif. Aeronautical Radio, Inc. Sacramento, Calif. Same as KEU. Oakland, Calif. Same as KEU. Medford, Ore. Same as KEU.
	KGE KGQZ	FA FA	••••	Medford, Ore. Same as KEU. San Diego, Calif. Same as KEU.
	KGTZ	FA FA	••••	Fresno Calif Same as KEII
	KIJE KJE KKO	FA FA	:	Spokane, Wash. Same as KEU. Pendelton, Ore. Same as KEU. Reno, Nev. Same as KEU. Elko, Nev. Same as KEU.
3155	$\mathtt{KBAL}$	FA F	100	Mineral, Wash. (Snoqualmie Forest).
	KBAP KBBL	<b>ተ</b> ተ	••••	Mineral, Wash. (Snoqualmie Forest).  North Bend, Wash. (Snoqualmie Forest) Coolin, Idaho.  Soudosite Idaho (Kanikey Forest)
	KBBM KBBN KBBR	7 7	••••	Sandpoint, Idaho. (Kaniksu Forest). Sanpoint, Idaho. (Kaniksu Forest). lone. Wash. (Kaniksu Forest).
	KBBW KBCT	F F F	• • • •	lone, Wash. (Kaniksu Forest). Libby, Mont. (Kootenai Forest). Custer. S. Dak. (Harney Forest).
	KBCW KBCY	F	••••	Custer, S. Dak. (Harney Forest). Thompson Falls, Mont. (Kootenai Forest). Troy, Mont. (Kootenai, Forest). Deadwood, S. Dak.
	KBDV	Ē	••••	Deadwood, S. Dak.

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WWKZ
WWLS
WWQA
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                                                                                       Sourabaya, Java, N. E. I.
Red Bluff, Calif. Aeronautical Radio, Inc.
                   YDE4
3158
3162.5
                   KRBD
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                                                                                       Sheridan, Wyo. Aeronautical Radio, Inc.
Red Bluff, Calif. Same as KNCN.
Garden City, Kans. Same as KNCN.
Wichita, Kans. Same as KNCN.
                                                                        300
                   KNCN
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3172.5
                   KRBD
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FA
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                   KRCG
KRCW
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                                                                                       Wichita, Kais. Same as KKCN.

Red Cluff, Calif., Aeronautical Radio, Inc.
Baldy Mesa, Calif. City of Los Angeles Dept. of
Water and Power.
Clark Mts., Calif. Same as KADN.
Anchorage, T. A. Libby, McNeill & Libby
Craig, T. A. Same as KAJH.
Taku, T. A. Same as KAJH.
Kenai, T. A. Same as KAJH.
Moored Scow V No. 1., in Alaska. Same as
KAIH.
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                   KRBD
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3182.5
3190
                   KADN
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                   KAJH
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                    KAMP
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                    KAMT
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                   KAMV
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                                                                                             KAJH.
                                                                                        Moored Scow No. 5 No. 171693, in Alaska.
Same as KAJH.
                   KANC
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                                                                                       Same as KAJH.

Salt Lake City, Utah. Telegram Pub. Co.
Salt Lake City, Utah. Same as KASY.

Mt. Shasta, Calif. State of Calif.
St. Michael, T. A. Northern Commercial Co.
Sitka, T. A. Pyramid Packing Co.
Sitka, T. A. Same as KBNJ.
Sitka, T. A. Same as KBNJ.
Nushagak, T. A. Same as KAJH.
Lockanok, T. A. Same as KAJH.
Ekuk, Bristol Bay, T. A. Same as KAJH.
Egegik, T. A. Same as KAJH.
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                   KASY
KASZ
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                    KNCF
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                                                                                        Keggiung, T. A. Same as KAJH.

New York City. American Legion, Ira Lou
Spring Post No. 149.

Portable in Ill. State of Ill. Dept. of Pub.
Works, State Highway and Maintenance Police.
                    KNGS
WANC
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                                                SEM
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                    WQPX
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                                                                                         Spokane, Wash.
3195
                   KBBV
                                                                      . . . .
                                                                                        Missoula, Mont.
Missoula, Mont.
Republic Wash. (Colville Forest).
                     KBBX
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                    KBCX
KBDI
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                                                                                        Alturas, Calif.
Missoula, Mont.
                     KBDO
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                    KBEQ
KBES
KBEU
                                                                                       Missoula, Mont.
Missoula, Mont.
Missoula, Mont.
Missoula, Mont.
Missoula, Mont.
Laconia, N. H. (White Mt. Forest).
Laconia, N. H. (White Mt. Forest).
Berea, Ky.
Laconia, N. H. (White Mt. Forest).
McKee, Ky.
Cleveland, Tenn. |(Cherokee Forest).
Tellico Plains, Tenn. (Cherokee Forest).
Laconia, N. H. (White Mt. Forest).
Weston, Vt. (Green Mt. Forest).
Duluth, Minn. (Superior Forest).
Unicoi, Tenn. (Cherokee Forest).
St. Louis, Mo.
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                    KBFA
WWKA
WWKB
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                                                                                        Onicol, Tenn. (Cherokee Forest). St. Louis, Mo. Duluth, Minn. Superior Forest). Duluth, Minn. Superior Forest). Rutland, Vt. (Green Mt. Forest). Rutland, Vt. (Green Mt. Forest). Ocoee, Tenn. (Cherokee Forest). Bristol Tenn. (Cherokee Forest). Sabana Grande, Puerto Rico.
                     WWKX
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                     WWLV
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                                                                                          Dillon, Mont.
                     KBEV
 3202.5
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                     KBĒW
                                                                                          Placerville, Calif.
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                                                                                         Fort Worth, Texas. Aeronautical Radio, Inc. Beaumont, Texas. Same as KGTF. El Paso, Texas. Same as KGTF.
                    KGTF
KGTV
KGUA
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 3222
                                                     FA
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                                                                                         Big Spring, Texas. Same as KGTF.
Abilene, Texas. Same as KGTF.
Douglas, Ariz. Same as KGTF.
Tucson, Ariz. Same as KGTF.
Phoenix Ariz. Same as KGTF.
                     KGUG
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                     KGUL
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FA
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                     KGUO
KGUP
KGUQ
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                                                                                          Phoenix, Ariz. Same as KGTF. Indio, Calif. Same as KGTF.
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                                                                                         Glendale, Calif. Same as KGTF.
                     KGUR
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<b>3</b> 222.5	KHCOR KHCOS WSDJ	A A FA	50 50 50	NC-21750. Canadian-Colonial Airways, Inc. NC-21750. Same as above. Elkins, W. Va. (Days only). Aeronautical Radio.
3235	KBAT KBAU KBAV KBCL KBCS KBDL KBER KNJM	ች ት ት ት ት ት ት ት ት ት		Olympia, Wash. Olympia, Wash. Olympia, Wash. Quincy, Calif. Logandale, Nev. (Challis Forest). Hailey, Idaho. (Sawtooth Forest). Sonora, Calif., Supply Dept. Kamela, Ore. Mesa Verde Nat'l. Park, Colo., U. S. Nat'l. Park Serv., Dept. of Interior.
	KNJN	G ·		Park Serv., Dept. of Interior. Mt. McKinley Nat'l. Park, Alaska. Same as KNJN.
	WSEH	G	• • • •	Houghton, Mich. (Isle Royal N. P.). Same as
	WSEI	G	••••	KNJN. Moti Island, Mich. (Isle Royal N. P.) Same as KNJN.
3265	KAKR KALY KBBE KBBF KBBH KBBI KBBU KBCU KBDP KBDT KBDT KBTC KBDT	.Сепенененен т	30 25	Candle, T. A. Candle Community Radio Ass'n. Egavik, T. A. R. B. Julian. Grangeville, Idaho. (Nezperce Forest). Orofino, Idaho. (Clearwater Forest). Orofino, Idaho. (Clearwater Forest). Pierce, Idaho. (Clearwater Forest). Corofino, Idaho. (Clearwater Forest). Elk City, Idaho. (Nezperce Forest). Grangeville, Idaho. (Nezperce Forest). Descanso, Calif. (Cleveland Forest). Cascade Locks, Ore. (Mt. Hood Forest). Nevada City, Calif. Waterfall. T. A. Nakat Packing Corp.
	KILQ KLA WWLY	 F	100	Waterfall, T. A. Nakat Packing Corp. Skowl Arm, T. A. Deep Sea Salmon Co. Waterfall, T. A. Same as KIBZ. Villalba, Puerto Rico.
3270 3280	CZ7N CIA	FA T		Cache Bay, P. Q. Canadian Airways, Ltd. Barriefield, Ont. Dept. of Nat'l. Defense, Do- minion Gov't.
3295 3300	CIP8 VEW WWLX CY3J	C F T		Calgary, Alta. Same as CIA. Calgary, Alta. Same as CIA. Luquillo, Puerto Rico. Anyox, B. C. Consolidated Mining & Smelting Co.
	CZ5Y CZ7H	C-T T		Anyox, B. C. Same as CY3J. Cedar Greek, B. C Same as CY3J.
3320	YDH4	В	30	Bandoeng Taya N E I
3322.5 3350	KRBD K7XFQ	FA SE	400 150	Red Bluff, Calif. Aeronautical Radio ,Inc. Anchorage, T. A. Alaska Aeronautical & Com- munication Commission.
	K7XFR K7XFS K7XFU K7XGG K7XGH K7XGI	SE SE SE SE SE	150 150 150 150 150	Red Bluff, Calif. Aeronautical Radio ,Inc. Anchorage, T. A. Alaska Aeronautical & Communication Commission. Ketchikan, T. A. Same as above. Ketchikan, T. A. Same as above. Juneau, T. A. Same as above. Cordova, T. A. Same as above. Gravina Island, T. A. Same as above. Ralston, T. A. Same as above.
3372.5	WAQE WAQS WAQU WAQV WAQW WARC WAUA WBSC WBSS	FA FA FA FA FA FA		So. Washington, Va. Aeronautical Radio, Inc. Grand Rapids, Mich. Same as WAQE. Detroit, Mich. Same as WAQE. Milwaukee, Wis. Same as WAQE. Pittsburgh, Pa. Same as WAQE. Chicago, Ill. Same as WAQE. Norfolk, Va. Same as WAQE. Saginaw, Mich. Same as WAQE. Sault Ste. Marie, Mich. Same as WAQE. Traverse City, Mich. Same as WAQE. Cleveland, Ohio. Same as WAQE. Buffalo, N. Y. Same as WAQE. New Cumberland, Pa. Same as WAQE.
	WBSS WBTC WPAL WPXB WPXH WPXL WPXM WPXW WPYA WPYB	FA FA FA FA FA FA FA FA		Sault Ste. Marie, Mich Same as WAQE. Traverse City, Mich. Same as WAQE. Cleveland, Ohio. Same as WAQE. Buffalo, N. Y. Same as WAQE. New Cumberland, Pa. Same as WAQE. Lansing, Mich. Same as WAQE. Muskegon, Mich. Same as WAQE. Williamsport, Pa. Same as WAQE. Flint, Mich. Same as WAQE. Baltimore, Md. Same as WAQE.
3385	KBAA KBCG	F F		Portland, Ore. (Radio Laboratory). U. S. Dept. of Agriculture, Forest Service. Yreka, Calif. (Klamath Forest). Same as KBAA.

3400	K7XFQ	SE	150	Anchorage, T. A. Alaska Aeronautical and Communications Commission.  Ketchikan, T. A. Same as above.  Ketchikan, T. A. Same as above.  Juneau, T. A. Same as above.  Cordova, T. A. Same as above.  Gravina Island, T. A. Same as above.  Ralston, T. A. Same as above.
	K7XFR	SE	150	Kerchikan, T. A. Same as above.
	K7XFS	SE	150	Ketchikan, T. A. Same as above.
	K7XFU	ŠĒ	150	Juneau, T. A. Same as above.
	K7XGG	$\mathbf{SE}$	150	Cordova, T. A. Same as above.
	K7XGH	SE	150	Gravina Island, T. A. Same as above.
	K7XGH K7XGI		150	
	YV5RW	в.	•••	Caracas, Venezulea. "Radio Turmieto," Cesar Banuls.
3410	KCBO	LH	50	Tillamock Rock Light, Ore. U. S. Lighthouse Service.
	KNKG		• • •	Ash' Mt., Sequoia Nat'l. Park, Calif. Death Valley, Calif.
	KNLP		•••	Death Valley, Calif.
	WPB		• • •	Portland, Maine
	WRJ WSEO WST		•••	Poe Reef, Mich. Catlinsburg, Tenn. Great Smoky Nat'l. Park.
	WST	TIT	•••	Dry Tortugas Fla
	WWAI		•••	Dry Tortugas, Fla. Maniton Island, Mich. Passage, Island, Mich. Rock of Ages, Mich.
	WWAL	Y TY	•••	Passage, Island, Mich.
	WWAM		•••	Rock of Ages, Mich.
	WWG		•••	Cheboygan, Mich. Tender "Lyric."
	WWHJ	LH .	•••	Tender "Lyric."
	WWM WWXC		•••	Marquette, Mich.
	WWZ WWZ		• • •	Lighthouse Ship "Canal." Key West, Fla.
3415	KNJO	_	• • •	Key West, Fig.
3413	-	_	•••	General Grant N. P., Calif U. S. Nat'l. Park Serv., Dept. of Interior. Grand Teton N. P., Wyo. Same as KNJO. Sequoia Nat'l. Park, Calif. Same as KNJO. Death Valley Nat'l. Mon., Calif. Same as KNJO. Mt. Rainier N. P., Wash. Same as KNJO. Olympic N. P., Wash. Same as KNJO. Great Smoky Mts. N. P. Same as KNJO.
	KNJP KNJQ	Ģ.	•••	Segucia Nat'l Park Calif Same as KNIO
	KNJK	~	•••	Death Valley Nat'l, Mon., Calif. Same as KNIO.
	KNJS	Ğ	•••	Mt. Rainier N. P., Wash, Same as KNIO.
	KNJU		•••	Olympic N. P., Wash, Same as KNJO.
	WSEF		•••	Great Smoky Mts. N. P. Same as KNJO.
3420	WWCR	řĦ .		Cape Henry Lighthouse.
	WWDP		• • •	Tender "Hollyhock."
3427.5	KBEX	$\mathbf{F}$ .	•••	Del Rosa, Calif.
	KBFB		• • •	San Bernardino, Calif.
3430	CY2Q		•••	Atlin, B. C. B. C. Provincial Police.
	CY4A	FA .	•••	Bousquet, P. Q. General Airways, Ltd.
	CZC	CD	•••	Baldy Mt., B. C. Minister of Lands for B. C.
	CY4Ã CY6S CZC CZ4B	777	• • •	Atlin, B. C. B. C. Provincial Police. Bousquet, P. Q. General Airways, Ltd. Baldy Mt., B. C. Minister of Lands for B. C. Bralorne, B. C. Same as CY2Q. Armstrong, Ont. Ont. Dept. of Lands and
			•••	Forests.
	CZ5C CZ7A	F.		Basswood, Ont Same as CZ4B.
			•••	Basswood, Ont Same as CZ4B.  Alert Bay, B. C Same as CY2Q.
3432.5	KGTF	FA .	• • •	Fort Worth, Texas. Aeronautical Radio, Inc. El Paso, Texas. Same as KGTF.
	KGUA		• • •	El Paso, Texas. Same as KGTF.
	KGUG	FA .	• • •	Big Spring, Texas. Same as KGTF.
	KGUL KGUN	T3 A	•••	Abilene, lexas. Same as KGIF.
	KGUR	T2 A	•••	Clendale Calif Same as KGTF
	WAEI	T2 A	• • •	Detroit Mich Same as KGTF
	WAEP	FA,		Abilene, Texas. Same as KGTF. Abilene, Texas. Same as KGTF. Douglas, Ariz. Same as KGTF. Glendale, Calif. Same as KGTF. Detroit, Mich. Same as KGTF. Portable. Same as KGTF. Syracuse, N. Y. Same as KGTF. E. Harrford, Conn. Same as KGTF.
	WAES	FA .	•••	Syracuse, N. Y. Same as KGTF.
	WAET	FA .		E. Hartford. Conn. Same as KGTF.
	WAEV		· · · .	Knoxville, Tenn. Same as KGTF.
	WAPD WAQG	TZ A	•••	E. Hartford. Conn. Same as KGTF. Knoxville, Tenn. Same as KGTF. Chicago, Ill. Same as KGTF. Camden, N. J. Same as KGTF.
		73.4	• • •	Camuen, N. J. Same as KG1F.
	WARQ WAWB	FA .	• • •	Portable. Same as KGTF. Bristol, Tenn. Same as KGTF.
	WMFR	77 A	• • •	Portable Same as KCTF.
	WMER WNEG	TC A	• • •	Bristoi, Tenn. Same as KGTF. Portable. Same as KGTF. Charleston, W. Va. Same as KGTF. So. Washington, Va. Same as KGTF. Chicago, Ill. Same as KGTF.
	WNEH	73.4	• • •	So. Washington, Va. Same as KGTF
	WSDG	FA .		Chicago, Ill. Same as KGTF. Cincinnati, Ohio. Same as KGTF. Elkins, W. Va. Same as KGTF. Albany, N. Y. Same as KGTF. Ruffalo, N. V.
	WSDI	FA.	• • •	Cincinnati, Ohio. Same as KGTF.
	WSDJ	<u>F</u> Α	50	Elkins, W. Va. Same as KGTF.
	WSDM	72 A	•••	Albany, N Y. Same as KGTF.
	WSDO		•••	Buffalo, N. Y.
	$\begin{array}{c} \mathrm{WSDP} \\ \mathrm{WSDQ} \end{array}$	TZ A	•••	Port Columbus, Ohio. Same as KGTF.
	WSDZ	TO A	•••	Indianapolie Ind Same as MCTF
3450	BU4		•••	Port Columbus, Ohio. Same as KGTF. Berea, Ohio. Same as KGTF. Indianapolis, Ind. Same as KGTF. Indianapolis, Ind.
	YV6RC	70	•••	Barcelona, Venez. Gobierno Edo. Anzoategui.
3480	YV3RF		• • •	
				sides Sigala
	2ZB	${f B}$	200	Wellington, New Zealand.

3488	XZZ	В	50	Rangoon, Burma.
3490	CR7AB	В		Lourenco Marques, Mozambique,
3492.5	K6XAK	$\mathbf{G}\mathbf{E}$	1500	Kaena Point, Oahu, T. H. Globe Wireless
	W4XID	E1	50	Kaena Point, Oanu, I. H. Globe Wireless W. Palm Beach, Fla. Gray Radio Co. San Francisco, Calif. Garlynn Eng. Co. Palo Alto, Calif. Stamford University. Portable. Press Wireless, Ltd. Portable. Northern Radio Co.
	W6XCS W6XOW	$_{ m GE}^{ m GE}$	50 1000	Palo Alto Calif. Stamford University.
	W6XQW W6XXT W7XBA	$\mathbf{G}\mathbf{E}$	5000	Portable. Press Wireless, Ltd.
	$\begin{array}{c} W7XBA \\ W7XEY \end{array}$	E E1	15 60	Portable. Northern Radio Co.
	WIXEZ	E1	60	Portable, Northern Radio Co. Seattle, Wash. Radio Labs., Inc. Seattle, Wash. Radio Labs., Inc.
	W8XUK	GE	10	Portable. W. Va. Univ., Dept. of Physics. Portable. Same as WSXUK.
	WSXIII.	GE	10	Portable. Same as W8XUK.
	W10XJJ W10XJP	• • •	25 15	Fortable, flarvey Radio Labs., Inc.
	-	••		inaw Expedition.
	W10XJQ W10XJR	• •	15	Portable in Asia. Same as WIOXIP.
	W10XJK W10XJS	::	15 15	Portable in Asia. Same as WIOXJP. Portable in Asia. Same as WIOXJP.
3497	CLX		250	Havana, Cuba. Observatorio Nacional, Casa
				Blanca.
				3500 to 4000 kcs.
3500	\$7375D37	n		Amateurs
3300	YV5RV	В	••••	La Guaira, Venez. "Emisora Vargas," Gonzalo Veloz Mancera.
3732	TGB	FA		Aviaccion Nacional, Pais de la Aurora, Guate-
				mala.
3750	CS2ZU	В	80	Ponta Delgada, Azores. Deodața Emilio Soares
	PWH	••	••••	Abrolhos, Brazil.
4002	CT2AJ	В	• • • •	Ponta Delgada, Azores.
4030	VK8SC	SEM	• • • •	Port Hedland, Australia. Australian Airways Medical Service.
4055	K7XFQ	SE	150	
				Anchorage, T. A. Alaska Aeronautical and Com- munications Commission.
4	K7XFR K7XFS	SE SE	150	Ketchikan, T. A. Same as above. Ketchikan, T. A. Same as above. Juneau, T. A. Same as above. Cordova, T. A. Same as above. Gravina Island, T. A. Same as above. Ralston, T. A. Same as above.
	K7XFU	SE	150 150	Tuneau, T. A. Same as above.
	K7XGG	SÉ	150	Cordova, T. A. Same as above.
	K7XGH K7XGI	$_{ m SE}^{ m GE}$	150 150	Gravina Island, T. A. Same as above.
4065	K7XFU			Juneau. T. A. Alaska Aeronautical and Com-
		••	••••	munications Commission.
4098	WND	T	400	Hialeah, Fla. American Tel & Teleg Co., 32 Sixth Ave New York City. Quito, Ecuador.
4107	НСЈВ2	В	1000	Sixth Ave., New York City.
4122.5	KBLC	FA	50	Corpus Christi Teyes Aeronautical Radio
	KBRN	$\mathbf{F}\mathbf{A}$	3000	Corpus Christi, Texas. Aeronautical Radio. Brownsville, Texas. Same as KBLC. NC-14947. Lt. Col. G. R. Hutchinson, Balti-
	KHAGH	Α	50	NC-14947. Lt. Col. G. R. Hutchinson, Balti- more, Md.
	WAHY	FA	1000	Memphis, Tenn. Same as KBLC.
	WAHZ WARS	FA	50	birmingnam, Ala. Same as KBLL.
	WEEL.	FA FA	50 50	Muscle Shoals, Ala. Same as KBLC.
	WGSA	$\mathbf{F}\mathbf{A}$	50	Greenville, S. C. Same as KBLC.
	WPAE WSJM	FA	50	Muscle Shoals, Ala. Same as KBLC. Beaumont, Texas. Same as KBLC. Greenville, S. C. Same as KBLC. Philadelphia, Pa. Same as KBLC.
4125	KIQA	FA FA	400 20	Tanana T A Pacific Alaska Airways Inc
4130	VK8SK	SEM		Broken Hill, NSW, Australia. Australian Air-
4135	EDAG			Tampa, Fla. Same as KBLC. Tampa, Fla. Same as KBLC. Tanana, T. A Pacific Alaska Airways, Inc. Broken Hill, NSW, Australia. Australian Airways Medical Service.
4140	KBAY KHCIY	F	100	Milford, Utah.
4178	woo	A T	20000	Ocean Gate, N. J. American Tel & Teleg. Co.,
				NC-18997. American Export Airlines. Ocean Gate, N. J. American Tel & Teleg. Co., Long Lines Dept., 32 Sixth Ave., New York
	WOY	С	••••	City. Lawrenceville, N. J. Same as WOO.
4200	CP2ANA	<b>c</b>		Ciniana Ballata
4253	WKF	Č		Lawrenceville, N. J. American Tel & Teleg. Co.,
4273	RV15	В	20000	Long Lines Dept., 32-6th Ave., New York City.
4280	КМІ	č	20000	Dixon, Calif. Transpacific Communications Co
4282.5	WAD	CITT		Sipiapo, Solvia.  Lawrenceville, N. J. American Tel & Teleg. Co., Long Lines Dept., 32-6th Ave., New York City. Khabarovsk, U. S. S. R. Dixon, Calif. Transpacific Communications Co., Ltd., 140 Montgomery St., San Francisco. Pt. Washington, Wis. Lorain County Radio
7202.3	WAD	CHT	• • • • •	Pt. Washington, Wis. Lorain County Radio Corp.
	WAS	CHT	• • • •	Duluth, Minn. Same as WAD. Lake Bluff, Ill. Thorne Donnelley.
	WAY	• •	• • • •	Lake Bluff, Ill. Thorne Donnelley.

	WCY	СНТ	400	West Dover, Ohio (600 w. days). Radiomarine Corp.
	WMI	CHT		Lorain, Ohio. Same as WAD.
4287	WOM	T		Hialeah, Fla. American Tel & Teleg. Co.
4290	COY	G	••••	Havan, Cuba. Press & Cultural Dept., Cuban Army.
4295	WTDV		250	Charlotte Amalie, Virgin Islands.
	WTDW		250	St. Croix, Virgin Isands.
	WTDX		250	St. John, Virgin Islands.
4300	4ZB	В	30	Dunedin, New Zealand

#### Explanation of the Third Column Symbols:

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—Aircraft.
   -Broadcast.
    Commercial Telegraph.
   -Forestry.
    Government.
P-Police.
  -Ship.
  -Radio Telephone.
FA—Aeronautical (ground).
GEO—Geophysical.
RC—Circular radiobeacon.
RD—Directional radiobeacon.
RG—Direction finding station.
LH—Lighthouse.
RR-Radio range station.
MP-Municipal police.
SP-State police.
ZP-Zone police.
EM-Emergency.
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SEM—Special emergency.

MF—Marine fire.

MR—Marine Relay.

PR—Press relay.

RB—Relay broadcast.

FAC—Facsimile.

TV—Television video.

TA—Television audio.

NCE—Non-commercial educational.

CC—Coastal Telegraph.

CH—Coastal harbor telegraph.

CHT—Coastal harbor telephone.

E

E

E

E

E

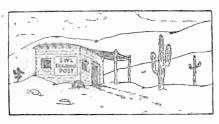
E

GE—General Experimental.

SE—Special Experimental.

All the Mobile and Portable-Mobile police stations installed in police automobiles bear the same call letters as the Fixed police broadcast station to which they report, and in many cases they work on the same frequency. We list herewith the Fixed station, and in parentheses we show the number, and the power of the Portable and Portable-Mobile units attached to that station, as for example:

WRHD MP 250 Louisville, Ky. (2 units-12 w).



James O. Taylor, 17½ W. Main St., Crooksville, Ohio (Photos and correspondence).

Robert Chase, 231 Henry St., New York City. (SWL cards).

Earle S. Miller, Box 663, East Worcester, N. Y., will answer all radio questions free of charge.

LeRoy Swanson, 217 N. 15th St., Chariton, Iowa. (SWL cards).

Joseph Becker, Sr., 415 S. 11th St., Hamilton, Ohio (SWE cards).

Cliff Tavener, Rosenberg, Texas (SWL cards).

R. A. Roycroft, 21 Anzac Road, Whangarei, New Zealand. (SWL cards).

J. I. Vaught, Box 1424, New Orleans, La. (SWL cards).

Jack Fern, 109 Bergen Ave., Clifton, N. J. (Correspondence).

Merton T. Meade, 819 Wyandotte St., Kansas City, Mo. (SWL cards).

Norbert Greenwood, 47 Allen St., Rutland, Vt. (SWL cards and correspondence).

George Cryder, Route 3, Box 299, Delaware, Ohio (Photos and SWL cards).

Geo. G. Canapp, 2023 Booth St., Baltimore, Md. (Correspond with Howard 430 owners).

Applications to the FCC

CP-Construction permit. mod.—modification. lic.—license. ltd.—limited time. unltd.—unlimited time. S. H .- specified hours. KDON, Monterey CP 500(1), 1440 kcs. KEEN, Seattle, CP 1370 kcs. to 1420 kcs. KEEN, Bakersfield, CP 1380 kcs., 1000 w. KEX, Portland, CP 1160 kcs. unitd. KFBB, Great Falls, mod. of lic. for 900 kcs., 5 kw. KFIO, Spokane, CP 950 kcs., 1 kw. unltd. KFNF, Shenandoah, mod. of CP to move to Council Bluffs. to Council Bluffs.
KFPW, Ft. Smith, CP 1370 kcs.
KFRU, Columbia, to 1370 kcs., 250 w. unltd.
KFYO, Lubbock, to 1380 kcs., 500(1).
KGDM, Stockton, 1530 kcs., 1 kw. unltd.
KGMB, Honolulu. CP 590 kcs. 1000(5) unltd.
KIRO, Seattle, CP 710 from 650; 1 kw unltd.
KMAC. San Antonio, CP 930 kcs., 1000 w. KOH, Reno, CP 630 kcs., 1 kw. unltd.
KOVC, Valley City, CP 1340 kcs., 500(1).
KOY, Phoenix, mod. of lic. for 550 kcs.
KRBC, Abilene. CP 940 from 1420; 1 kw.
KRMC, Jamestown, CP 900 kcs., 1 kw.
KROC, Rochester, CP 920 kcs., 500(1) unltd.
KRRV, Sherman, CP 880 kcs., 1 kw. unltd.
KSD, St. Louis, CP 630 kcs.
KSEI, Pocatello, CP 600 kcs., 1 kw. unltd. KTBS, Shreveport, CP 620 kcs., 1000(5) unltd. KUTA, Salt Lake City, CP 570 kcs., 1 kw. KWK, St. Louis, CP 630 kcs. KXL, Portland, CP 730 kcs., 10 kw. unltd. KXCK, St. Louis, CP 630 kcs., 1000(5). KXYZ. Houston, CP 710 kcs; 10 kw. KYOS, Merced, CP 1390 from 1040; 500(1) unltd. WAPI, Birmingham, CP 1050 kcs., kw. WCAD, Canton, CP Watertown, N. Y. WCOL, Columbus, to 1200 kcs., 250 w. unltd. WGBF, Evansville, CP 1250 kcs., 1000(5) unltd. WGRC New Albany, CP 880 kcs., 250 w. unltd. VHA, Madison, CP 670 kcs. 50 kw. unltd. (facilities of WMAQ). WIBC, Indianapolis, mod. lic. 1130 from 1050; 1 kw. WJJD, Chicago, CP 1040 from 1130; 10000(25) unltd. WKAQ, San Juan, CP 620 kcs. 5 kw. WLAP, Lexington, CP 1270 kcs. 1 kw. unltd. WMAZ, Macon, CP 1240 kcs. unltd. WMBC, Detroit, CP 600 kcs. WMBR, Jacksonville, CP 1120 kcs. 500(1) unltd. WMFF, Plattsburg, CP 1240 kcs. 1 kw. Springfield, CP Keene, N. H., WNBX. kw. unltd. WPG, Atlantic City, CP New York (facilities WBIL and WOV). WPRP, Ponce, mod. lic. 250 unltd; CP 1480 from 1420; 1000(5) unltd. WREN, Lawrence, CP Kansas City. WROL, Knoxville, CP 620 kcs. 500(1). WSBT, South Bend, CP 930 kcs. 500 unltd.

WSFA, Montgomery, CP 1410 kcs. 1 kw.

WSPR, Springfield, CP 1240 from 1140; 500 w unltd. WTCN, Minneapolis, CP 710 kcs. 10 kw. unltd. WTJS, Jackson, CP 1380 from 1310; 1 kw.; mod. licfl 250 unltd. WWVA, Wheeling, CP 1140 from 1160; 50 Applications for New Stations Albemarle, N. C., Albemarle Brdcstg. Station, 1370 kcs. 100 w. days. Arlington, Va., Arlington Brdcstg. Corp., 1420 kcs 250 unltd. Ashland, Wis., WJMS, Inc., 1370 kcs. 100 w. unltd.
Asheville, N. C., Publix-Bamford Theaters, Inc., 1430 kcs. 1 kw. unltd.
Atlantic City, N. J., Atl. City Brdcstg. Co., 1100 kcs. 5 kw. sharing with WBIL.
Atlantic City, N. J., Neptune Brdcstg. Corp., 1420 kcs. 100(.25).
Bainbridge, Ga., Post Search Light Co., 1500 kcs. 100(.25). kcs., 100(.25).
Bellingham, Wash., Bell Brdcstg. Co., Inc., 1200 kcs. 100(.25). Birmingham, Ala., B. News Co., 590 kcs. 1 kw. unltd. Boston, Mass., Mayflower Brdcstg. Corp., 1410 kcs. 500(1).
Bridgeport, Conn., Chas. Greenblatt, 1190 kcs. 250 w. ltd.
Bridgeport, Conn., Harold Thomas, 1420 kcs. 250 unltd. Brown City, Mich., Thumb Brdcstg. Co., 880 kcs. I kw. days. Brownwood, Tex., Brown County Brdcstg. Co., 990 kcs. I kw. days. Co., 990 kcs. 1 kw. days.
Burlington, Iowa, Burlington Brdcstg. Co.
Burlington, N. C., Burlington Brdcstg. Co.,
1420 kcs., 100 D.
Burlington, N. C., Central Carolina Brdcstg.
Co., 1420 kcs., 250 unltd.
kcs. 100 w. unltd.
Cedar Rapids, Iowa, The Gazette Co., 1420
Cheyenne, Wyo., Western Brdcstg. Co., 1210
kcs. 100(.25).
Cleveland, Ohio, Cuyahoga Valley Brdcstg.
Co., 1500 kcs. 100 w. days.
Clinton, Iowa, Clinton Brdcstg. Corp.
Columbus, Miss., Birney Imes, 1370 kcs.
100(.25) unltd. 100(.25) unltd. Ely, Nev. Eastern Nev. Brdcstg. Co., 1500 kcs. 100 days. Erie, Pa., Presque Isle Brdcstg. Co., 1500 kcs. 100(.25) unltd. Everett, Wash., Cascade Brdcstg. Co., 1420 kcs. 100(.25) unltd. Pt. Myers. Fla., Palm Radio Co., 1210 kcs., 250 unltd. 250 unltd. Fremont, Nebr., Nebr. Brdcstg. Corp., 1370 kcs. 100(.25) unltd. Greenville, Tex., Hunt Brdcstg. Assn., 940 Hannibal, Mo., Courier Post Pub. Co.
High Point, N. C., High Point Brdestg. Co.,
1120 kcs., 250 unltd.
Hopkinsville, Ky., Paducah Brdestg. Co., Inc.,
1200 kcs. 250 unltd. 1200 kcs. 220 unitd.
Jacksonville, Ill., Stephenson, Edge & Korsmeyer, 1370 kcs., 250 unltd.
Kosciusko, Miss., P. K. Ewing, 1500 kcs., 100(25). unltd.
Las Vegas, Nev., Las Vegas Brdcstg. Co., 1420 kcs. 100(25).
Las Vegas, Nev., Nev. Brdcstg. Co., 1370

Nev.,

kcs. 100 days.

kcs. 100(.25) unltd.
Logan, W. Va., Erey and Greever, 1200

Lookout Mt., Ga., Lookout Mt. Corp., of Ga., 1370 kcs., 100(.25). Louisville. Ky., Gateway Brdcstg. Co., 880 kcs. 500 unltd. Martinsville, W. Va., M. Brdcstg. Co., 1420 kcs. 250 days.
Martinsville, W. Va., Patrick Henry Brdcstg.
Co., 1420 kcs. 100(.25).
Marysville, Calif., Yuba-Sutter Broadcasters,
1320 kcs. 250 unltd. Miles City, Mont., E. E. Krebsbach 1310 kcs., 100(.25). Miles City, Mont., Star Printing Co., 1310 kcs., 250 unltd. Minneapolis, Minn., Independent Merchants Brdestg. Co., 1300 kcs., I kw. unltd. Montebello, Calif., Bureau of Education, 1420 kcs. 100 days (request contingent upon move of KECA to San Diego). Norfolk, Va., Colonial Brdestg. Corp., 1370 Norioik, Va., Colonial Brdestg. Corp., 1370 kes. 100(.26).
North Sacramento, Calif., Grant Union High School District, 1530 kes., 1 kw.
Ogdensburg, N. Y., St. Lawrence Brdestg.
Corp., 1370 kes., 250 w. unitd. Olney, Ill., Oln 100(.25) unltd. Ill., Olney Brdcstg. Co., 1210 kcs. Opelika, Ala., Opelika-Auburn Brdcstg. Co., 1370 kcs. 100(.25). Orlando, Fla., Hazlewood Co., 1390 kcs. 1 kw. unltd. Phoenix, Ariz., M. C. Reese, 1200 kcs. 1390 kcs. 1 kw. unitd.
Phoenix, Ariz., M. C. Reese, 1200 kcs.
100(.25) unltd.
Ponce, P. R., Portorican American Brdestg.
Co., 1340 kcs. 1 kw.
Pontiac, Mich., King-Trendle Brdestg. Corp.,
1440 kcs. 250 unltd.
Riverside, Calif., Brdestg. Corp. of America,
1300 kcs. 1 kw. 1390 kcs. 1 kw.
Riverside, Calif., Richard T. Sampson, 1390 kcs. 250 days.
Riverside, Calif., Mollin Investment Co., 1390 kcs., 500 w. D. Rochester, N. Y., Edward J. Doyle, 1270 kcs. 500 days. Saginaw, Mich., Saginaw Brdcstg. Co. Salina, N. Y., Sentinel Brdcstg. Corp., 620 1 kw. unltd. Sandusky, Mich., T kcs. 1 kw. days. Mich., Thumb Brdcstg. Co., 880

San Diego, Calif., Jack Hazard, 1430 kcs., 500 w. unltd. 500 w. unltd.

San Juan, P. R., Enrique Abarca Sanfeliz,
580 kcs. 1 kw. unltd.

San Juan, P. R., United Theaters, Inc., 580 kcs. 1 kw. unltd.

Santa Monica, Calif., A. E. Austin, 1160 kcs. 100(.25).

Scranton, Pa., Lackawanna Brdcstg. Co.,
1370 kcs. 100(.25). Scranton, Pa., Union Brdestg. Co., 1370 kcs. 100(.25) unltd. Shelby, N. C., Jos. A. Lattimore, 1370 kcs. 100(.25) unltd. Spartanburg, S. C., S. Advertising Co., 1370 kcs. 100(.25) unltd.
Springfield, Ohio, Radio Voice of Springfield, 1310 kcs. 100 unltd. Springfield, Ohio, S. Radio Corp., 1310 kcs. 100 unltd. Springfield, Ohio, S. Radio Service, 780 kcs. 250 days. Steubenville, Ohio, Valley Brdcstg. Co., 930 kcs., 1 kw D. Wash., Tacoma Brdcstg. Co., 1420 Tacoma, kcs. 100(.25). Tacoma, Wash., Michael J. Mingo, 1400 kcs. 250 unltd. Traverse City, Mich., Northern Brdcstg. Co., 570 kcs. 500 days.
Valdosta, Ga., John F. Arrington, Jr., 1230 aldosta, Ga., John F. Arrington, Jr., 1230 kcs. 250 unltd. Vincennes, lnd., Samuel M. Emison, 1420 kcs. 100 unltd. Vin. lnd., Newspapers, Vincennes, Inc., 1420 kcs. 100 unltd. Washington, D. C., Lawrence J. Heller, 1310 kes. 100(.25). kes. too. 100(.25).

Agreement N. Y., Black River Valley kcs. 100(.25).
Watertown, N. Y., Black River Valley
Brdestg. Co.
Watertown, N. Y., Watertown Brdestg. Corp.
Watertown, S. Dak., Midland Brdestg. Co.,
1210 kcs., 100(.25).
kcs. 250 days.
Wilmar, Minn., Lakeland Brdestg. Co., 680
Wisconsin Rapids, Wis., Wm. F. Huffman,
1310 kcs., 100(.25). Worcester, Mass., Winfield A. Schuster, 1200 kcs. 100 unltd. Worcester, C. T. Sherer Co., Inc., 1200 kcs. 100(.25). Yuma, Ariz., Silver Crest Theaters, 1420 kcs. 100 S. H. Mass.,

# The Month's Changes in Station Data

New 720 XEWE 1150 XEXH 1160 XEFM Silao, Gto. Oaxaca, Oax. Leon, Gto. Ft. Myers, Fla. 1210 XEHK 1230 Guadalajara, Jal. XEAD XEBC Aguascalientes, Ags. 1240 Morelia, Micho.
Navojoa, Son.
Mexico City, D. F.
Grants Pass, Oreg.
Tijuana, B. Cfa. 1240 1240 XEDL XEKR 1280 1310 KUIN XEAU 1310 Guadalajara, Jal. Hickory, N. C. Campeche, Cam. Navojoa, Son. Torreon, Sin. 1340 1370 WHKY 1400 XEA 1400 XEAJ 1400 XEDM 1400 XEDS Mazatlan, Sin, 1500 Cordelle, Ga. Syracuse, N. Y. 1500 Frequency

Denver Colo., from 920 Monterrey, N. L., from 720 Visalia, Calif, from 1190 New Haven, Conn., from 900 New Haven, Conn., from 900 Denver, Colo., 1 kw from 500 630 KVOD 740 XEH 890 KTKC 930 WELI WELI 630 KVOD 630 XEZ Merida, Yuc., 2 kw from 500 890 KTKC Visalia, Calif., 1 kw from 250 920 KFEL Denver, Colo., 1 kw from 500 Veracruz, Ver. C., 500 from 1010 XEU 1030 XEB Mexico City, 20 kw from 10 kw. 1200 KAST Astoria, Ore., 250 from 100(.25) 1200 KELO Sioux Falls, S. Dak., 250 from 100 (.25) 1200 KGHI Little Rock, Ark., 250 from 100(.25) (Continued from page 82)

### KEY TO SYMBOLS

As Shown in the Index by Frequencies

Frequencies are given in kilocycles per second, and wavelengths in meters. Night power is shown in watts in third coumn and daytime power is shown in parentheses in kilowatts Thus: (2.25) indicates 250 watts. Exact frequencies, when not multiples of ten are shown in the second column.

G—Specified Hours.  H—Assigned another frequency —using this one under Special Authorization.  J—Assigned lower power but using this power under Special Authorization.  K—Licensed for facsimile.  L—Limited time.	Y—Has Permit to change location.  Z—Has Permit to change fre-	a-b-c—Small letters show stations using same transmitter.  1-2-3—Figures denote stations sharing time.
M-Mutual Network.	quency.	z-No information available.

# NORTH AMERICAN BROADCASTING STATIONS BY FREQUENCIES WITH SUNDAY'S TIME ON THE AIR

Time is Eastern Standard. Subtract 1 hour for Central, 2 hours for Mountain and 3 hours for Pacific. Add 5 hours for GMT.

SS is "Sunset" and LS is "Local Sunset"

<b>540 kcs.</b> CBK F	( <b>552.2 m.</b> )	а	Watrous, Sask.	Noon to midnight
CFNB F CMW KFUO 2  KFYR N KOAC  KSD 2R KTSA C WDEV D WGR C WKRC WSVA D	(545.1 m.)  1000 2500 500(1)  1000(5) 1000 1000(5) 1000 1000(5) 1000(5)		Fredericton, N. B. Havana, Cuba. St. Louis, Mo. Bismarck, N. Dak. Corvallis, Ore. St. Louis, Mo. San Antonio, Texas Waterbury, Vt. Buffalo, N. Y. Cincinnati, Ohio Harrisonburg, Va.	7 am-11 pm 9:55 am-9 pm 9:30 am-1:30 pm; 4-5:30 pm; 10:15-11:15 pm 8 am-1 am Noon to midnight Silent 6 am-LS 7 am-midnight 8 am-2 am 9:30 am-5 pm
560 kcs.  KFDM N KLZ CSFO C KWTO D WFIL BM WIND C WIS N WQAM C	(535.4 m.) 500(1) 1000(5) 1000(5) 5000 1000 1000(5) 1000(5) 1000(5)	a a a a a a a	Beaumont, Texas Denver, Colo. San Francisco, Call. Springfield, Mo. Philadelphia, Pa. Gary, Ind. Columbia, S. C. Miami, Fla.	8:30 am-2 am 10 am-4 am 7 am-LS 8 am-12:30 am 6 am-4 am 7 am-midnight 6:45 am-midnight
KGKO N KMTR CTI5CV 575 WKBN CI WMAM DWMCA WNAX CWSYR Ba WSYR Ba WSYN C	(526 m.)  1000 (5) 1000 (5) 1000 (5) 1000 500 (1) 250 1000 1000 (5) 1000 1000 1000 1000	a a a z a z a y a a a a	Fort Worth, Tex. Los Angeles, Calif. Tacoma, Wash. Alajeula, Costa Rica Youngstown, Ohio Marinette, Wis. New York, N. Y. 'ankton, S: Dak. Columbus, Ohio. Syracuse, N. Y. Syracuse, N. Y. Asheville, N. C.	7 am-? 8 am-2 am 9 am-3 am 7 am-1:15 am 7 am-? Silent 7 am-1 am 7:30 am-1 am

580 kcs. (516.9 m.)		
CFPR 50 CHRC 100 CKCL F 100 CKPR F 1000 CKUA F 500 KMJ EKN 1000 KSAC 2 500(1) WCHS C 500(1) WDBO C 1000(5) WIBW C2 1000(5) WILL D 5000 WTAG R 1000 XEMU 250	a Prince Rupert, B. C. a Quebec, P. Q. a Toronto, Ont. a Fort William, Ont. b Edmonton, Alta. a Fresno, Calif. a Manhattan, Kans. a Charleston, W. Va. orlando, Fla. a Topeka, Kans. a Urbana, III. a Worcester, Mass. z Piedras Negras, Coah.	8 am-midnight 8 am-midnight 9 am-11 pm 11:15 pm-12:45 am 11:35 pm-12:45 am 10:30 am-6:30 pm 8:45 am-1 am 7 am-midnight 5 am-? 9 am-LS 7:30 am-1 am
590 kcs. (508.2 m.)		
CMCY 15000 KHQ R 1000(5) WEEI C 1000(5) WKZO BDX 1000 WOW R 1000(5)	a Havana, Cuba. a Spokane, Wash. a Boston, Mass. a Kalamazoo, Mich. a Omaha, Nebr.	8 am-10 pm 11 am-3 am 6:30 am-? 8:15 am-5:15 pm 7 am-3:30 am
600 kcs. (499.7 m.)		
CFCF BF 500 CF0C F 1000 CJOR 500 FON 609 250 KFSD B 1000 TIGPH 605 1000 WCAO C 500(1) WICC BM 500(1) WMT BM 1000(5) WREC C 1000(5)	a Montreal, P. Q. a Saskatoon, Sask. a Vancouver, B. C. a St. Pierre, Miquelon a San Diego, Calif. a San Jose, Costa Rica a Baltimore, Md. f Bridgeport, Conn. a Cedar Rapids, Iowa a Memphis, Tenn.	9 am 1:15 pm 7:45 am-1 am 11 am-3 am 8:45 am-midnight 5 am-1 am 6:30 am-1 am 7:30 am-1 am
610 kcs. (491.5 m.)		,
CHNC F 1000 KFAR P 1000 KFRC M 1000(5) WCLE DM 500 WDAF R 1000(5) WIOD Na 1000 WIP 1000 WMBF Qa 1000	a New Carlisle, P. Q. z Fairbanks, Alaska b San Francisco, Calif. a Cleveland, Ohio a Kansas City, Mo. a Miami, Fla. a Philladelphia, Pa. a Miami, Fla.	7:30 am-11 pm 7 am-LS 7:30 am-1 am 7 am-midnight 7 am-1 am
620 kcs. (483.6 m.)		
KGW R 1000(5) KTAR N 1000 KWFT C 250(1) TIPG 625 5000 WFLA Na 1000(5) WHJB D 250 WLBZ MN 500(1) WSUN Na 1000(5) WTMJ N 1000(5)	a Portland, Ore. a Phoenix, Ariz. z Wichita Falls, Tex. b San Jose, Costa Rica a Tampa, Fla. a Greensburg, Pa. a Bangor, Maine a St. Petersburg, Fla. a Milwaukee, Wis.	9 am-2 am 9 am-1:15 am 8 am-1 am 8 am-5 pm 8 am-7 am-1 am 7 am-1 am
630 kcs. (475.9 m.)		•
CFCO F 1000 CFCY F 1000 CJRC F 1000 CKOV F 1000 CMCD 15000 KFRU 1 500(1) KGFX D 200 KVOD B 1000	a Chatham, Ont. a Charlottetown, P. E. I. a Winnipeg, Man. a Kelowna, B. C. a Havana, Cuba a Columbia, Mo. a Pierre, S. Dak. a Denver, Colo.	8 am-10:30 pm 9 am-11 pm 8:30 am-2 am 9 am-10:30 pm 6-8 pm 8:30 am-6 pm 
WGBF N1 500(1) WMAL B 250(.5) WPRO CX 500(1) XEZ 2000	a Evansville, Ind. a Washington, D. C. a Providence, R. I. a Merida, Yuc.	2:30 am 8 am-1 am 6:30 am-midnight 6 am-1 am
640 kcs. (468.5 m.)	,	
HOK KFI R 50000	z Colon, Panama f Los Angeles, Calif.	Noon-2 pm; 6pm-midnight 9:45 am-3 am

VONF		12500	а	St. John's, Nfld.	8:30 am-12:30 pm; 4:30- 9:30 pm
WGAN	CL	500	а	Portland, Maine	7 am-SS on Pacific Coast 6:30 am-7:45 pm
WHKC	LM	500 5000	a a	Ames, lowa	6:30 am-7:45 pm Usually Silent
XEBX YSS	•••	500 5000 250 500	z	Sabinas, Coah. San Salvador, E. S.	
133	•••	500	а	San Salvador, E. S.	······································
650 k	cs.	(461.3 m.)			•
TIGPH	P	F0000	z	San Jose, C. R. Nashville, Tenn.	
WSM	KN	50000	а	Nashville, Tenn.	
660 I	kcs.	(454.3 m.)			·
CMOA		200 500	z	Havana, Cuba	7:55 am-11 pm
KOWH WEAF	D R	500 <b>50000</b>	a a	Omaha, Nebr.	7 am-LS 6:30 am-1 am
XEÃO		250	a	Havana, Cuba Omaha, Nebr. New York, N. Y. Mexicali, B. Cfa.	••••••
670 I		(447.5 m.)			
WMAQ	RCS.	50000	ь	Chicago, III.	7 am-1 am
WWW	•	50000	b	Chicago, Ili.	/ alli-1 alli
680 F	kcs.	(440.9 m.)			
CMHW KFEQ	• • •	200 500 (2.5)	f	Santa Clara, Cuba	7 am-?
KPO	···R	50000	a	San Francisco, Calif.	7 am-r 11 am-3 am
VAS WLAW	685 D	2000 1000	f a	Glace Bay, N. S.	7 am-LS
WPTF	JЙ	5000	а	St. Joseph, Mo. San Francisco, Calif. Glace Bay, N. S. Lawrence, Mass. Raleigh, N. C.	9 am-11 pm
690 k		(434.5 m.)			
		10000	а	Toronto Ont	10:30 am-midnight
CFRB CJCJ	C F	100	a	Toronto, Ont. Calgary, Alta.	9:30 am-1 am
CMBC TIGH	• • •	<b>200</b> 1000	z b	Havana, Cuba San Jose, Costa Rica	6:55 am-10:30 pm
XET		5000	a	Monterrey, N. L.	5:30-9 pm
700 k	cs.	(428.3 m.)			
VOWR			ь	St. John's, Nfld. Cincinnati, Ohio	8 am-2 am
WLW W8XO	KMN Exp	500 50000 50000	a	Cincinnati, Ohio . Cincinnati, Ohio	8 am-2 am
			-		1
710 I	kcs.	(422.3 m.)		Cumbra and Cub	
CMKS KIRO	ĊĤĴ	200 1000 500	a	Guantanamo, Cub <b>a</b> Seattle, Wash.	Until 8 am 9 am-8 am
KMPC WOR	KM	500 50000	a	Seattle, Wash. Beverly Hills, Calif. Newark, N. J.	9 am-8 am 6:25 am-2:05 am
WOK		•	ŭ		3.25 a 2.05 a
720 I	cs.	(416.4 m.)			
CMK TI4NRH	725	200 750	, <b>a</b>	Havana, Cuba Heredia, Costa Rica	•••••
WGN	KM	<b>500</b> 00	ь	-Heredia, Costa Rica Chicago, III.	
XEWE	•••	20	z	Silao, Gto.	•••••
730 I	kcs.	(410.7 m.)		,	
CFPL	E	100	а	London, Ont.	9 am-3 am
CJCA CKAC XELO	F	1000 5000	a a	Edmonton, Alta. Montreal, P. O.	9 am-2 am 7:30 am-1 am
XELO		50000	а	Tijuana, B. Cfa.	• • • • • • •
XEPN XEQ	AQ	100000 50000	a a	Edmonton, Alta. Montreal, P. Q. Tijuana, B. Cfa. Piedras Negras, Coah. Mexico City, D. F.	• • • • • • •
•					
	kcs.	(405.2 m.)			
@MJX KMMJ	٠٢	200 1000	z a	Camaguey, Cuba Grand Island, Nebr.	
KTRB	D	250	a	Modesto, Calif.	9 am-8:30 pm

WHEB D 250 WSB R 50000 XEH 250	a Portsmouth, N. H. a Atlanta, Ga. a Monterrey, N. L.	7 am-LS 6:55 am-1 am
750 kcs. (399.8 m.)  CMBL 200  KGU LN 2500  TING 375  WJR C 50000  XEAA 200  XEAM 25	a Havana, Cuba a Honolulu, Hawaii z San Jose, Costa Rica a Detroit, Mich. a Mexicali, B. Cfa. z Matamoros, Tam.	11:30 am-4:30 am 5:30 am-2 am
760 kcs. (394.5 m.)	a Seattle, Wash.	Until 6 am
XXA X 250 (.5) WBAL BHMSy 2500 WCAL D2 5000 WEW D 1000 WJZ BSy 50000 WLB D2 5000	a Baltimore, Md. a Northfield, Minn. a St. Louis, Mo. a New York, N. Y. a Minneapolis, Minn.	Until 6 am 9 pm-1 am Sunrise to LS 8 am-LS 6:30 am-1 am
770 kcs. (389.4 m.)		
CMKW 200 KFAB CSyXZ 10000 TILJ 775 450 WBBM CSy 50000	z Santiago de Cuba a Lincoln, Nebr. z San Jose, C. Rica a Chicago, III.	7 am-1 am
780 kcs. (384.4 m.)		
CHWK F 100 CKS0 F 1000 CMO N 25000 KECA 1000(5) KFDY D 1000 KFQD 250 KGHL N 1000(5) KWHK D 250 WEAN BM 1000(5) WMC JR 5000 WPIC D 250 WTAR JN 5000 XEN 1000	f Chilliwack, B. C. a Sudbury, Ont. a Havana, Cuba Los Angeles, Calif. a Brookings, S. Dak. b Anchorage, Alaska a Billings, Mont. a Longview, Wash. Providence, R. I. a Memphis, Tenn. a Sharon, Pa. Norfolk, Va. a Mexico City, D. F.	11 am-1:15 am 9 am-midnight 9 am-? 1:30-3 pm 11 pm-5 am 9 am-1 am 11 am-LS 6 am-? 7:45 am-1 am 8 am-LS 8:30 am-midnight
790 kcs. (379.5 m.)		
CMGH 200 KGO B 7500 KOAM DN 1000 WGY R 50000 ZNS 1000	a Matanzas, Cuba a San Francisco, Calif. a Pittsburg, Kans. a Schenectady, N. Y. d Nassau, Bahamas	7 am-1 am 8:30 am-LS 7 am-1 am
800 kcs. (374.8 m.)		
HIX 800 TIXD 1000 WBAP ENa 50000 WFAA ENa 50000 WTBO D 250	a Trujillo, D. R. z San Jose, Costa R. a Fort Worth, Texas a Dallas, Texas a Cumberland, Md.	7 am-midnight 9 am-12:30 am 8:30 am-LS
810 kcs. (370.2 m.)		
CMCF 5000 WCCO C 50000 WNYC D 1000 XEBZ 100 XEDF 100	a Havana, Cuba g Minneapolis, Minn. New York, N. Y. a Mexico City, D. F. a Nuevo Laredo, Tam.	7:30 am-1 am 7 am-6:30 pm 11 am-3:15 pm; 7-8:15 pm
820 kcs. (365.6 m.)		
	a Louisville, Ky. z Tijuana, B. Cfa.	•••••

830 kcs. (361.2 m.)  CMHI E 1000  KOA R 50000  TIEP 3000  WEEU DR 1000  WHDH L 1000  WRUF L 5000  XERC 500	a Santa Clara, Cuba a Denver, Colo. a San Jose, C. Rica a Reading, Pa. a Boston, Mass. a Gainesville, Fla. z Mexico City, D. F.	9 am-2 am 8 am-5 pm 7 am-7 7 am-6pm
840 kcs. (356.9 m.) CBL F 50000 VOGY 400 XERA 250000	a Toronto, Ont. a St. John's, Nfld. a Villa Acuna, Coah.	10:30 am-midnight 8:30 .am-12:30 .pm; .4:30- 9:30 pm
850 kcs. (352.7 m.)  CMCM 200  KIEV D 250  WESG CD 1000  WKAR DX 1000  WWL C 50000	a Havana, Cuba a Glendale, Calif. a Elmira, N. Y. a E. Lansing, Mich. a New Orleans, La.	8 am-11 pm 6 am-SS at New Orleans 7 am-5 pm
860 kcs. (348.6 m.)  CMJA 200 TIEMC 250 WABC Ca 50000 WHB DM 1000 XEMO 5000	a Camaguey, Cuba z San Jose, C. Rica a New York, N. Y. a New York, N. Y. a Kansas City, Mo. a Tijuana, B. Cfa.	6:27 am-2 am 9:45 am-3 am
870 kcs. (344.6 m.)  CMHO WENR WLS Ba S0000 XEFB 200	z Sagua la Grande, Cuba b Chicago, III. a Chicago, III. a Monterrey, N. L.	3 pm-midnight 8 am-3 pm
880 kcs. (340.7 m.)  CBO F 1000  CFJC F 1000  CMX 15000  KFKA M2 500(1)  KLX 1000  KPOF 2 1000	a Ottawa, Ont. a Kamloops, B. C. a Havana, Cuba a Greeley, Colo. a Oakland, Calif. a Denver, Colo.	7:45 am-midnight 8 am-midnight 7:30 am-1 am 10:30 am-2:30 am 9:30-11 am; 1-2:30 pm; 5-0 pm; 9:30-11 pm 6 am-L5
KVAN D 250 TILS 500 WCOC C 1000 WGBI CI 500(1) WQAN 1 500(1) WRNL DX 500 WSUI 500(1)	z Vancouver, Wash. b San Jose, C. Rica a Meridian, Miss. f Scranton, Pa. a Scranton, Pa. a Richmond, Va. a lowa City, Iowa	6 am-Ls  12:30-10:30 pm 12:30-10 pm 6:30 am-Ls 10 am-11 pm
890 kcs. (336.9 m.)  KARK N 1000  KFNF X2 500(1)  KFPY C 1000(5)  KTKC M 1000  KUSD 2 500  WBAA 500(1)  WGST C 1000(5)  WJAR R 1000(5)  WMMN C 10000(5)  XEW 1000000	a Little Rock, Ark. a Shenandoah, Iowa a Spokane, Wash. f Visalia, Calif. a Vermillion, S. Dak. a W. Lafayette, Ind. a Atlanta, Ga. a Providence, R. I. a Fairmont, W. Va. a Mexico City, D. F.	7 am-1 am 7 am-1 am 9:50 am-3 am 5-6 pm Noon-6 pm 7:30 am-1 am 5:30 am-?
900 kcs. (333.1 m.)	z Trujillo, D. R.	•
KGBU X 500 KHJ M 1000(5)	a Ketchikan, Alaska a Los Angeles, Calif.	11 am-4 am

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KSEI	N	250(1) 600	а	Pocatello, Idaho	9:30 am-1 am
TIAFB WBEN	Ř	600 1000(5)	z a	Pocatello, Idaho San Jose, C. Rica Buffalo, N. Y. Frederick, Md.	7 am-1 am 6:30 am-LS 6:45 am-1 am 7:45 am-1 am 9 am-5 pm 8 am-5:45 pm
WEMD	D	1000 (5) 1000 (5) 1000 (5) 5000	ā	Frederick, Md.	6:30 am-LS
WJAX WKY WLBL	N	1000(5)	a	Oklahoma City, Okla.	7:45 am-1 am
WLBL	Ď	5000	ā	Jacksonville, Fla. Oklahoma City, Okla. Stevens Point, Wis. Quincy, III.	9 am-5 pm
WTAD	D	1000	а	Quincy, III.	8 am-3:45 pm
910 I	ccs.	(329.6 m.)			
CRE	FN	50000	а	Montreal, P. Q.	8 am-midnight
CJAT CKY CMBQ	F	1000 15000 5000 1000	aaaa	Montreal, P. Q. Trail, B. C. Winnipeg, Man. Havana, Cuba Santiago de Cuba	8 am-midnight 10 am2-am 8:30 am-1 am 8 am-10:30 pm
CMBQ		5000	a	Havana, Cuba	8 am-10:30 pm
CMKD XENT	···	<b>1000</b> 50000	a	Santiago de Cuba Nuevo Laredo, Tam.	7 pm <sub>3</sub> -8:15 am
VEILL	Q	,	a	Nuevo Laredo, Taili.	7 pinę-0.13 am
		(325.9)			
CMHT KFEL	:	200 1000	z a	Trinidad, Cuba Denver, Colo. Seattle, Wash.	
KFEL KOMO	M R		_	Denver, Colo. Seattle Wash	8 am-2:30 am 11 am-2 am 8:30 am-1 am
KPRC	ER	1000 (5) 1000 (5) 200	a	Houston, Texas	8:30 am-1 am
TIRS WAAF	925	1000 500	z a	San Jose, C. Rica Chicago, III.	6 am-LS 7 am-LS
		500 1000	а	Boston, Mass.	7 am-LS
WPEN WSPA WW I		1000	a	Houston, Texas San Jose, C. Rica Chicago, III. Boston, Mass. Philadelphia, Pa. Spartanburg, S. C.	8 am-LS
WWJ	R	1000(5)	а	Detroit, Mich.	
930 F	·cs (	322.4 m.)		·	
	F	1000	а	Calgary, Alta. North Bay, Ont. Prescott, Ont. Halifax, N. S. Brantford, Ont. Camaguey, Cuba Shenandoah, Iowa Oakland, Calif. Birmingham, Ala. Roanoke, Va. New Haven, Conn. Hermosillo, Son.	9 am-2 am
CFAC CFCH	Ė	100	ā	North Bay, Ont.	7 am-10 pm
CFLC CHNS	۰۰۰	100 1000	a	Halifax, N. S.	7 am-10 pm 7:30 am-11 pm
CKPC		100 200 1000(5)	a	Brantford, Ont.	
CMJF KMA	···B	1000 (5)	a	Shenandoah, Iowa	
KROW WBRC WDBJ	R C	1000	a	Oakland, Calif. Birmingham, Ala	9 am-5 am 8 am-12:30 am
WDBJ		1000 (5) 1000 (5)	a	Roanoke, Va.	7 am-midnight
WEL! XEBH	• • •	250 (.5) 500	а <b>а</b>	Hermosillo, Son.	9 am-5 am 8 am-12:30 am 7 am-midnight 7 am-7 1-3 pm; 9 pm-midnight
940	kcs.	(319 m.)			
CMBZ	· · <u>·</u>	200	а	Havana, Cuba	7:45 am-1 am
KOIN TIOS	C	1000(5) 500	a z	San Jose, C. Rica	11 am-3 am
WAAT WAVE WCSH WDAY	Ď	500	а	Jersey City, N. J.	6:30 am-6 pm
WCSH	N R	1000(2.5)	a	Portland, Maine	8 am-1 am 7:30 am-midnight
WDAY WHA	N D	1000(3) 500 1000 1000(2.5) 1000(5) 5000	a	Fargo, N. Dak.	7 am-1 am 9 am-5:30 pm 8 am-LS
WICA		250	a	Ashtabula, Ohio	8 am-LS
XEFO	• • •	5000	а	Havana, Cuba Portland, Ore. San Jose, C. Rica Jersey City, N. J. Louisville, Ky. Portland, Maine Fargo, N. Dak. Madison, Wis. Ashtabula, Ohio Mexico City, D. F.	
950 I	ccs.	(315.6 m.)			
CBV	=	1000	а	Quebec, P. Q.	Noon-midnight
CJRM	F	1000	-	Dogina Cack	• • • • • • •
CMKL KFWB	 E C	1000 (5) 1000 (5)	a	Los Angeles, Calif.	9:30 am-4 am 6:55 am-1 am
KMBC VOAR		1000 (5)	a	Kansas City, Mo.	6:55 am-1 am
WRC	Ř	25 1000 (5)	ā	Regina, Jask.  Bayamo, Cuba  Los Angeles, Calif.  Kansas City, Mo.  St. John's, Nfld.  Washington, D. C.  Troy, N. Y.	6 am-1 am
WTRY	DP	1000	z	Troy, N. Y.	•••••
960 I	res l	312.3 m.)			
	FR	5000		Montreal P O	
CBM CFRN	F	100	a	Montreal, P. Q. Edmonton, Ata. Reynosa, Tam.	9:30 am-2 am 5-7:15 am; 7-11 pm
XEAW	• • •	100000	а	Reynosa, Tam.	5-7:15 am; 7-11 pm

CMCK KJR WCEI	 B	5000 5000 5000 5000	z a a	Havana, Cuba Seattle, Wash. Chicago, III. Glenside, Pa.	7:50 am-12:30 am 11 <sup>6</sup> am-2 am
WIBG	Ď	100	a	Glenside, Pa.	8:30 am-5 pm
980 I KDKA XEAC XEFE	kcs.  B	(306 m.) 50000 5000 250	b a z	Pittsburgh, Pa. Tijuana, B. Cfa. Nuevo Laredo, Tam.	l pm-l am
990	kes	(302.8 m.)			•
WBZ WBZA XEAF XEK XES	BSy BSy X	50000 1000 750 100 250	8 8 8 8 8	Boston, Mass. Springfield, Mass. Nogales, Son. Mexico City, D. F. Tampico, Tam.	6 am-1 am 6 am-1 am 11 am3 pm; 7pm-midnight 
1000	kas	(299.8 m.)			
KFVD TIFA WHO XEBI	L KR 	1000 250 50000 250	a z a a	Los Angeles, Calif. San Jose, C. Rica Des Moines, Iowa Aguascalientes, Ags.	9 am-8:15 pm 9 am-1 am
1010	kcs.	(296.9 m.)			
CHACL CKCD CKCC CKCO CKIC CKWX CMCU KGGF KQW WHN WNAD WNAD WNAD WNAD XEFQ XEU	F F F 2 M 2 C	100 100 1000 1000 50 1000 200 1000 1000		Hamilton, Ont. Vancouver, B. C. Regina, Sask. Ottawa, Ont. Wolfville, N. S. Vancouver, B. C. Havana, Cuba Coffeyville, Kans. San Jose, Calif. New York, N. Y. Norman, Okla. Knoxville, Tenn. Cananea, Son. Veracruz, Ver. C.	9:30 am-11:30 pm Silent 9:30 am-2 am Noon-11:30 pm 
1020	kcs	(293.9 m.)			•
KYW WDZ XEJ	R D	10000 1000 1000	b a a	Philadelphia, Pa. Tuscola, III. Juarez, Chih.	7:05 am-1 <b>0</b> pm 7 am-6 pm
1030	kcs.	(291.1 m.)			
CFCN CJBR CKLW TIHO XEB	F FM 	10000 1000 5000 500 20000	a a z a	Calgary, Alta. Rimouski, P. Q. Windsor, Ont. San Jose, C. Rica Mexico City, D. F.	9 am-1:30 am 6:30 am-4 am 10 am-12:15 am
1040	kcs.	(288.3 m.)			
KRLD KWJJ KYOS VOCM WTIC	C HL DM 	50000 500 250	a a z a		10 am-5:45 am 11 am-LS 6 am-1 am
1050	kcs.	(285.5 m.)			
СВА	F	50000	а	Sackville, N. B.	7 am-midnight
CMCH HIT KFBI	 ĽÝŻ	50 5000	z- z a	Sackville, N. B. —Havana, Cuba Trujillo, D. R. Abilene, Kans.	7:55 am-midnight 7 am-7:45 pm

KNX C 50000 b Los Angeles, Calif. 9:30 am-3:15 am WEAU L2 1000(5) a lod Calife, Wis. 9 am-LS 1060 kcs. (282.8 m.)  KTHS HN 10000 a Horor St. John's, Nfld. 5t. John's, Nfld. 6 am-9 pm 7:30 am-LS 1000 a Norfolk, Nebr. 7:30 am-LS 1000 a San Francisco, Calif. 1 am-9:45 pm 1000 a Carthage, Ill. 1000 a Norfolk, No. 1000 a Norfolk, No. 1000 a St. Louis, Mo. 1000 a St. Louis, Mo. 1000 a St. Louis, Mo. 1000 a Norfolk, No. 1000 a Nor	
KTHS HN 10000 a Hot Springs, Ark. 9 am-LS; 9pm-1 am VOAC 1065 40 z St. John's, Nfld. 6 am-9 pm T:30 am-LS  1070 kcs. (280.2 m.)  CMJW 200 z Camaguey, Cuba San Francisco, Calif. 1 am-9:45 pm WCAZ D 100 a Carthage, III. 10 am-4 pm 6 am-midnight  1080 kcs. (277.6 m.)  CMBX 200 a Havana, Cuba G:45 am-midnight  WBT C 50000 a Chicago, III. Noon-3:30 pm WCBD LI 5000 a Chicago, III. Noon-3:30 pm XEBK 20 z Guzman, Jal. XEBA 20 z Guzman, Jal. XEBK 100 z Nuevo Laredo, Tam. XEDP 50000 a St. Louis, Mo. Trujillo, D. R. XERB 50000 a Tijuana, B. Cfa.	
CMJW 200 z Camaguey, Cuba san Francisco, Calif. 1 am-9:45 pm san Francisco, Calif. 1 am-9:45 pm san Jose, C. Rica sa	
CMBX 200 a Havana, Cuba 6:45 am-midnight WBT C 50000 a Charlotte, N. C. 6:45 am-midnight WBT LI 5000 g Chicago, III. Noon-3:30 pm XEBA 20 z Guzman, Jal. XEBA 20 z Guzman, Jal. XEDP 500 a Mexico City, D. F.  1090 kcs. (275.1 m.)  CMHA 200 z Sagua la Grande, Cuba HIN 100 z Trujillo, D. R	1
CMHA 200 z Sagua la Grande, Cuba HIN 100 z Trujillo, D. R KMOX C 50000 a St. Louis, Mo. 7 am-1 am XERB 50000 a Tijuana, B. Cfa.	
XECL 1000 z Mexicali, B. Cfa	nt
1110 kcs. (270.1 m.)  CMCJ 200 a Havana, Cuba 8 am-9 pm KSOO LN 5000 a Sioux Falls, S. Dak. 9 am-LS WRVA CM 50000 a Richmond, Va. 5:55 am-1 am	
The state of the s	

1130	kcs.	(265.3 m.)				
CMJI WJJD WOV XEJP	 D	200 50000 20000 1000 100	a a a z	Ciego de Avila, Cuba Salt Lake City, Utah Chicago, III. New York, N. Y. Mexico City, D. F.	6	Noon-10 pm 8:30 am-3 am am-6:45 pm
1140	kcs.	(263 m.)				
CMBG KVOO WAPI WSPR	NO K	200 25000 5000 500	z a a a	Havana, Cuba Tulsa, Okla. Birmingham, Ala. Springfield, Mass.		7:57 am-11 pm 7 am-? 9 am-1 am 7 am-5:45 pm
1150	kcs.	(260.7 m.)				
CMKG WHAM XEBP XEC XEDW XEL XEXH	 	200 50000 250 100 300 250 400	z a z a a z z	Santiago, Cuba Rochester, N. Y. Durango, Dgo. Tijuana, B. Cfa. Minatitlan, Ver. C. Mexico City, D. F. Oaxaca, Oax.		7 am-midnight
1160	kcs.	(258.5 m.)				
CMHJ WOWO YWVA (EAS D FM P	B1 C1 	200 10000 5000 100 2500	a aaa <sup>z</sup> a	Cienfuegos, Cuba aFort Wayne, Ind. Wheeling, W. Va. Saltillo, Coah. Guadalajara, Jal. Leon, Gto. Juarez, Chih.		6 am-? Noon-midnight 9 am-2 am
70	kcs.	(256.3 m.)				
,	ċ	200 50000 1000	a a z	Havana, Cuba Philadelphia, Pa. Mexico City, D. F.		11 am-7 pm 7:30 am-1 am
άz	kcs. B N M ·L CL	(254.1 m.) 5000 10000 1000(5) 1000 1000(5)	a a a a	Portland, Ore. Albuquerque, N. Mex. Minneapolis, Minn. New York, N. Y. Macon, Ga.		11 am-3 am 11 am-1 am 7 am-7 pm 7
190	kcs.	(252 m.)				
CMKX WOAI WSAZ	ËŅ	200 50000 1000	z a a	Banes, Cuba San Antonio, Texas Huntington, W. Va.		7:30 am-12:30 am 7 am-7 pm
1200	kcs.	(249.9 m.)				
CFGP CHAB CHGB	··· F	100 100(.25) 100	a Z	Grande Prairie, Alta. Moose Jaw, Sask. St. Anne de la Pocatierre,		Noon-8:15 pm 9 am-12:30 am
CKNX CKTB CMCO KADA	··· <b>F</b>	100 100 200 100	a	P. Q. Wingham, Ont. St. Catharines, Ont. Havana, Cuba Ada, Okla.		11 am-1 am 9:30 am-11:30 pm 7:55 am-midnight
KAST KBTM KELO KFJB KFXD KFXJ KGDE KGEK KGFJ KGHI KHAS	D Z	250 100 100 (.25) 100 (.25) 100 (.25) 100 (.25) 100 250 100 (.25)	a a a a a a b f a a z	Astoria, Ore. Jonesboro, Ark. Sioux Falls, S. Dak. Marshalltown, Iowa Nampa, Idaho Grand Junction, Colo. Fergus Falls, Minn. Sterling, Colo. Los Angeles, Calif. Little Rock, Ark. Hastings, Nebr.	1	9 am-6:30 pm am-1 am 7 am-10 pm 8 am-11 pm 8 am-10 p-rh 1-2:15 pm 24 hours daily 8:30 am-11 pm

KMLB KMOS M KSUN KVCY M KVEC M KVEC KVOS KWBD P KWGG E TIRCC WAIM C WAYX WBAB P WBAB WBAB WBAB WBAB WBAB WBAB WB	250 a a 250 a a 100 .250 a a 250 a a 250 a a 250 a a 100 .250 a a 250	Monroe, La. Marshfield, Ore. Lowell, Ariz. Redding, Calif. San Luis Obispo, Calif. Logan, Utah Bellingham, Wash. Plainview, Texas Stockton, Calif. Winona, Minn. San Jose, C. Rica Bangor, Maine Anderson, S. C. Waycross, Ga. Atlantic City, N. J. Ponca City, Okla. Huntsville, Ala. Rapid City, S. Dak. Burlington, Vt. Janesville, Wis. Cincinnati, Ohio Panama City, Fa. Supérior, Wis. Elmira, N. Y. Easton, Pa. Salem, Mass. South Bend, Ind. Kinston, N. C. Canton, Ohlo Green Bay, Wis. Utica, N. Y. St. Louis, Mo. Bloomington, Ill. Decatur, Ill. New Orleans, La. Johnson City, Tenn. W. Palm Beach, Fla. Tuscaloosa, Ala. Harrisburg, Pa. Lynchburg, Va. High Point, N. C. Mobile, Ala.	10 am-7:45 pm 11 am-midnight 11:30 am-3 am 9:30 am-?  10 am-3 am  6 am-10 pm 8 am-3 am  8 am-10 pm Noon-2 pm Silent 10 am-3 pm 7 am-11:30 pm  7:30 am-9 pm  10 am-1 am Until 3 am 4-8:30 pm 8-10 am; 1:30-4 pm 2 pm-3 am 2-11 am; 1-6 pm; 10 pm 7:45 am-7 pm 7:45 am-7 pm 7:45 am-7 pm 7:45 am-7 pm 7: am-1:5 pm
WMOB DP WMPC G WOLS WRBL C WSKB D WSOO P	100 z 250 a 100 a 250 a 100 z 100 (.25) z	Mobile, Ala. Lapeer, Mich. Florence, S. C. Columbus, Ga. McComb, Miss. Saul Ste. Marie, Mich.	7:45 am-7 pm 9 am-? 10 am- <b>7 pm</b>
WTHT M WTOL 4	100 a 100 a 100 a	Toledo, Ohio Hammond, Ind.	7 am4:15 pm
CHLT CJCS CJOC CKBI F CKCH F CKMC CMHK CMHK KANS N KASA M KLDR KDON KFJI KFPW KFPW KFPW KFPW KFPW KFPW KFPW KFPW	100 2 3 100	Sherbrooke, P. Q. Stratford, Ont. Lethbridge, Alta. Prince Albert, Sask. Hull, P. Q. Cobalt, Ont. Cruces, Cuba Alexandria, La. Wichita, Kans. Elk City, Okla. Devils Lake, N. Dak. Monterey, Calif. Klamath Falls, Ore. Lincoln, Nebr. Fort Smith, Ark. Cape Girardeau, Mo. San Bernardino, Calif. Mason City, Iowa Olympia, Wash. Okmulgee, Okla. Garden City, Kans. Carlsbad, N. Mex. Kilgore, Texas Provo, Utah	8 am-9 pm 9 am-1 am 9:45 am-1 am 8 am-11 pm 10 am-1 pm; 4-10 pm 7:30 am-midnight 7 am-8 pm 7:30 am-9:30 pm 9:30 am-? 9 am-? 8 am-11:15 pm 10 am-3 pm; 6-9:35 pm 10 am-3 pm; 6-10 pm 9 am-3 am 8 am-1 am 8 ilent 8 am-10 pm 11 am-9 pm

KPFA KYPC CM A DP P X M S 3 X M 46 KROY KYSOB KWITN KXYOUM WEBQC WEB	100 100 (.25) 250 100 (.25) 100 (.25) 100 (.25) 100 (.25) 100 (.25) 100 (.25) 100 (.25) 100 (.25) 100 (.25) 250 250 (.25) 250 (.25) 250 (.25) 250 (.25) 250 (.25) 250 (.25) 100 (.25) 250 (.25) 250 (.25) 250 (.25) 250 (.25)	a Groe, Ariz.  a Watertown, S. Dak.  z Sweetwater, Tex.  z Yuma, Ariz.  a Zanesville, Ohio  wilkes-Barre, Pa.  a Richmond, Va.  a Red Bank, N. J.  a Columbus, Ohio  a Lewiston, Maine  z Montgomery, Ala.  c Chicago, Ill.  a Chicago, Ill.  a Chicago, Ill.  b White Plains, N. Y.  a St. Augustine, Fla.  Freeport, N. Y.  a Gulfport, Miss.  a Grenada, Miss.  a Grenada, Miss.  a Grenefield, Mass.  a Anderson, Ind.  a Poynette, Wis.  z Louisville, Ky.  a Gadsden, Ala.  Hagerstown, Md.  Lansing, Mich.  z Beckley, W. Va.  z Rice Lake, Wis.  a Jamestown, N. Y.  a Akron, Ohio  s Sunbury, Pa.  Lima, Ohio  Hibbing, Minn.  Hyannis, Mass.  a Manitowoc, Wis.  Thomasville, Ga.	1 pm-midnight Noon-4 pm; 9:45 pm-midnight 9:30 am-2:30 pm 8 am-11 pm
XEFV	50 100 100 (.25)	a Juarez, Chih. a Puebla, Pue. z Ft. Myers, Fla.	••••••
1220 kcs.	(245 0 \		4 2 20 7 20
KFKU KTMS BE KTW S2 KWSC 2 TIGPH2 1225 WCAD D WCAE MR WDAE C WGNY D WREN AB XEBL XETF	1000 (5) 1000 1000 (5) 1000 500 1000 (5) 1000 (5) 250 1000 (5) 200 12	a Lawrence, Kans. z Santa Barbara, Calif. a Seattle, Wash. b San Jose, C. Rica a Canton, N. Y. a Pittsburgh, Pa. Tampa, Fla. a Newburgh, N. Y. a Lawrence, Kans. z Mazatlan, Sin. z Mexico City, D. F. Veracruz, Ver. C.	3:30-7:30 pm Until 1 am 39:45 am-12:30 am 12:30-4 pm 7 am-2:30 am 7:30 am-midnight 7:30 am-LS 8 am-7 pm
1230 kcs. CMCB CMJE KGBX N KGGM C KYA E	(243.8 m.) 200 200 500 1000 1000 1000 1000 1000	a Havana, Cuba z Camaguey, Cuba a Springfield, Mo. a Albuquerque, N. Mex. a San Francisco, Calif.	8 am-11 pm  9:30 am-11:30 pm 11 am-3 am

WFBM C WNAC R WOL M XEG XECA	1000 (5) 1000 (5) 1000 250 250 125	a Indianapolis, Ind. a Boston, Mass. Washington, D. C. z Monterrey, N. L. z Tampico, Tam. z Guadalajara, Jal.	7:30 am-1 am 5 am-1 am 7 am-2 am
1240 kcs.	( <b>241.8 m.</b> )		
CJCB F CMAB CMHB KFJZ KFJZ KFFI N WKGCU KTFI N WKAQ C WXYZ B XEAD XEBC XEBC XEBC XEBC XEBC XEBC XEBC XEBC XEBC	1000 200 200 1000 250 1000 1000 1000 500 100 500 250 250 250	z Aguascalientes, Ags. z Morelia, Micho.	10-11:30 am; 2:30-11 pm 8 am-12:30 am 1-8 pm 9 am-1 am 8 am-midnight 6 am-9:30 pm
1250 kcs.	(239.9 m.)		
CMKC KFOX ME KXOK WAIR WSU B WHBI 2 WKST DX WMRO WNEW 2 WTCN B XEAI	1000 1000 250 1000 250 1000 100 (2.5) 250 250 1000 (5) 1000 (5)	a Newark, N. J. a New Castle, Pa.	11 am-3 am 8 am-LS 7 am-midnight 9 am-LS On all night 7 am-midnight
1260 kcs.	(238 m.)		
CMBD CMJO CMGVO MKGVO DZ KRGV MN KUOA D KVOA D WHIO CWHLD DP WNBX WTOC CC	200 200 1000 (5) 250 1000 (5) 5000 1000 5000 1000 250 1000 (5) 1000 1000	z Havana, Cuba a Ciego de Avila, Cuba a Missoula, Mont. a Chico, Calif. a Omaha, Nebr. a Port Arthur, Texas a Weslaco, Texas a Siloam Springs, Ark. a Tucson, Ariz. z Fredericksburg, Va. a Dayton, Ohio Niagara Falls, N. Y. a Springfield, Vt. a Savannah, Ga.	8:50 'am-1 am  6 am-5:45 pm 8 am-11 pm 7 am-LS 9 am-11:30 pm 6 am-1 am 7 am-midnight 7 am-midnight
1270 kcs.	(236.1 m.)		
CMHD KGCA KOL KOL KVOR C KWLC WASH WFBR R WJDX R WJDX R WOOD AN XESM A XEXE	1000 (5) 1000 (5) 1000	d Caibarien, Cuba a Decorah, Iowa a Seattle, Wash. a Colorado Springs, Colo. a Decorah, Iowa a Grand Rapids, Mich. a Baltimore, Md. a Jackson, Miss. a Grand Rapids, Mich. z Mexico City, D. F. a Jalapa, Ver. C. z Texcoco, D. F.	8:45 am-3:30 pm 9 am-1 am 9:30 am-5:30 pm 7 am-midnight 9 am-midnight
1280 kcs.	(234.2 m.)		
CMKO	200 1000 (5)	z Holguin, Cuba a Great Falls, Mont.	11 am-midnight

KLS WCAM WCAP	 2 2	250 500 500	a a a	Oakland, Calif. Camden, N. J. Asbury Park, N. J.	10:15 am-12:30 pm; 5-5 pm 6:-10:15 am; 12:30-3 pm; 8 pm-midnight 7:30 am-12:30 am 8 am-1 am 8 am-midnight 8 am-midnight	8
WDOD	C	1000 (5)	b a	Chattanooga, Tenn. Madison, Wis.	7:30 am-12:30 am 8 am-1 am	
WIBA WORC WRR WTNJ	žož	500	a	Worcester, Mass.	8 am-midnight	
WRR	M	500	a	Trenton, N. J.	·····	
XEKR XEMX	Ä	100	z	Chattanooga, Tenn- Madison, Wis. Worcester, Mass. Dallas, Texas Trenton, N. J. Mexico City, D. F. Mexico City, D. F.		
1290		(232.4 m.)				
CMCG	•••	200	a	Havana, Cuba Camaguey, Cuba	7 am-midnight	
KDYL	RDC	1000 (5)	a	Salt Lake City, Utah	8 am-3 am	
KLCN KTRH WATR	Č	1000 (5)	a	Houston, Texas	9 am-1 am 8 am-7 8 am-1 am 7:30 am-12:30 am	
WATR WEBC	WO Z	<b>250</b> 1000 (5)	a	Duluth, Minn.	8 am-1 am	
WJAS WJHP	Ç	1000 (5)	a	Pittsburgh, Pa. Jacksonville, Fla.	7:30 am-12:30 am	
WNBZ	Ď	100	a	Havana, Cuba Camaguey, Cuba Salt Lake City, Utah Blytheville, Ark. Houston, Texas Waterbury, Conn. Duluth, Minn. Pittsburgh, Pa. Jacksonville, Fla. Saranać Lake, N. Y. San Juan, Puerto Rico	9:30 am-LS 6:30 am-11:30 pm	
1300	 kcs.	(230.6 m.)	_		•	
				Portland, Ore	10 am-3 am	
KALE KFAC	<del>.</del>	1000	a	Portland, Ore. Los Angeles, Calif. Wichita, Kans. Brooklyn, N. Y. New York, N. Y. Greenville, S. C. Troy, N. Y. Sheboygan, Wis.	9 am-I am 8-I1 am; 3-8 pm 7 am-4 am 6:30 am-midnight	
KFH WBBR	. 2	1000(5)	a	Brooklyn, N. Y.	8-11 am; 3-8 pm	
/EVD	C2	1000 1000(5)	a a	New York, N. Y. Greenville, S. C.	6:30 am-midnight	
'FBC HAZ	Ñ 2	1000	a	Troy, N. Y.	6 pm-midnight 9 am-midnight	
HBL		230(17	y	Sheboygan, wis.		
10	kcs.	(228.9 m.)		1 .		
<		50	a	Charlottetown, P. E. I. Kirkland Lake, Ont.		
<	 F	50 100 100	<b>a</b> <b>a</b> a	Charlottetown, P. E. I. Kirkland Lake, Ont. Yarmouth, N. S. Ouebec, P. O.	7:55 am-11:30 pm	
<	F F ?	50 100 100 100	a a a a z	Charlottetown, P. E. I. Kirkland Lake, Ont. Yarmouth, N. S. Quebec, P. Q. Manzanillo, Cuba	7:55 am-11:30 pm	
•	F F ?	50 100 100 100 100	a a a a z a a	Charlottetown, P. E. I. Kirkland Lake, Ont. Yarmouth, N. S. Quebec, P. Q. Manzanillo, Cuba Corsicana, Texas Fresno, Calif.	7:55 am-11:30 pm 7 am-?	
	FF? XC	50 100 100 100 100 100 250 250	aaaxaaxa	Charlottetown, P. E. I. Kirkland Lake, Ont. Yarmouth, N. S. Quebec, P. Q. Manzanillo, Cuba Corsicana, Texas Fresno, Calif. Bend, Ore. Kansas City, Kans.	7:55 am-11:30 pm 7 am-?	
	FF &C :E :	100 100 100 100 100 100 250 250 100(.25)	aaaaxaaxaaf	Charlottetown, P. E. I. Kirkland Lake, Ont. Yarmouth, N. S. Quebec, P. Q. Manzanillo, Cuba Corsicana, Texas Fresno, Calif. Bend, Ore. Kansas City, Kans. Jerome, Ariz. Dublin, Texas	7:55 am-11:30 pm 7 am-?	
	FF? %C :E :: M	100 100 100 100 100 100 250 250 100(.25) 100(.25)	aaazaazaafa	Charlottetown, P. E. I. Kirkland Lake, Ont. Yarmouth, N. S. Quebec, P. Q. Manzanillo, Cuba Corsicana, Texas Fresno, Calif. Bend, Ore. Kansas City, Kans. Jerome, Ariz. Dublin, Texas Lubbock, Texas Lubbock, Texas	7:55 am-11:30 pm 7 am-?	
L YO GEZ	FF? MC : : : M :	50 100 100 100 100 250 250 100(.25) 100(.25) 100(.25)	aaaaxaaxaafaaa	Charlottetown, P. E. I. Kirkland Lake, Ont. Yarmouth, N. S. Quebec, P. Q. Manzanillo, Cuba Corsicana, Texas Fresno, Calif. Bend, Ore. Kansas City, Kans. Jerome, Ariz. Dublin, Texas Lubbock, Texas Kalispell, Mont. Kearney, Nebr.	7:55 am-11:30 pm 7 am-?	
KGFW KHUB	FF? MC : E : : M : : :	100 100 100 100 100 100 250 250 100(.25) 100(.25) 100(.25)	aaaaxaaxaafaaaaa	Charlottetown, P. E. I. Kirkland Lake, Ont. Yarmouth, N. S. Quebec, P. Q. Manzanillo, Cuba Corsicana, Texas Fresno, Calif. Bend, Ore. Kansas City, Kans. Jerome, Ariz. Dublin, Texas Lubbock, Texas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla.	7:55 am-11:30 pm 7 am-?	
L GEZ KGFW KHUB KOCY KOME	FF MC : E : : M : : : : : : : : : : : : : : :	100 (.25) 100 250 100 (.25) 250	а а а а	Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla.	7:55 am-11:30 pm 7 am-? 7 am-3 am 9:45 am-1 am 7 am-10:45 am 8 am-10:15 pm 9 am-11 pm 7 am-10 pm 10 am-? 7:45 am-?	
J J GEZ KGFW KOUY KOME KPOME KPBA	FF? MC : E : : M : : :	100 (.25) 100 250 100 (.25) 250 250	aaaaaaa	Lubbock, Texas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lußin Texas	7:55 am-11:30 pm 7 am-? 7 am-3 am 9:45 am-1 am 7 am-10:45 am 8 am-10:15 pm 9 am-11 pm 7 am-10 pm 10 am-? 7:45 am-?	
J L GEZW KHUB KOCY KPDN KRBA KRBAD	FF?MC:E:M:::MDD	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, I exas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Pochester Minn	7:55 am-11:30 pm 7 am-?	
J L YOU GEFW KHUBH KOME KPBNA KRAND KRAND KRAND KROV	FF? XC : E : : X : : : EDD : EDM	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, I exas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Pochester Minn	7:55 am-11:30 pm 7 am-? 7 am-? 11 am-3 am 9:45 am-1 am 7 am-10:45 am 8 am-10:15 pm 9 am-11 pm 7 am-10 pm 10 am-? 7:45 am-? 9 am-6:15 pm 10 am-10 pm 7 am-12:15 am	
LO GEZ KGFW KHUY KOME KPBA KRBA KRMC KRRV KSUB	FF? XC : E : : X : : : EDD : EDM	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, I exas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Pochester Minn	7:55 am-11:30 pm 7 am-? 11 am-3 am 9:45 am-1 am 9:45 am-1 am 7 am-10:45 am 8 am-10:15 pm 9 am-11 pm 7 am-10 pm 10 am-? 7:45 am-? 9 am-6:15 pm 10 am-10 pm 7 am-12:15 am	
J L O SEE SEE SEE SEE SEE SEE SEE SEE SEE S	FF 20 : E : M : : : MDD : MD : ZP	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, I exas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Pochester Minn	7:55 am-11:30 pm 7 am-? 11 am-3 am 9:45 am-1 am 9:45 am-1 am 8 am-10:15 pm 9 am-11 pm 7 am-10 pm 10 am-? 7:45 am-? 9 am-6:15 pm 10 am-10 pm 7 am-12:15 am 11 am-2 am 8:30 am-1 am	
LOSE KERNO KROC KERNO KESUB KTSIN KVOLC	FF? SC : E : M : : : EDD : ZM : :ZPP	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, I exas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Pochester Minn	7:55 am-11:30 pm 7 am-? 11 am-3 am 9:45 am-1 am 9:45 am-1 am 8 am-10:15 pm 9 am-11 pm 7 am-10 pm 10 am-? 7:45 am-? 9 am-6:15 pm 10 am-10 pm 7 am-12:15 am 11 am-2 am 8:30 am-1 am	
LOSE KERNO KROC KERNO KESUB KTSIN KVOLC	FF? SC : E : : M : : : : MDD : EM : : ZPP : E	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, I exas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Pochester Minn	7:55 am-11:30 pm 7 am-? 7 am-? 11 am-3 am 9:45 am-1 am 7 am-10:45 am 8 am-10:15 pm 9 am-11 pm 7 am-10 pm 10 am-? 7:45 am-? 9 am-6:15 pm 10 am-10 pm 7 am-12:15 am 11 am-2 am 8:30 am-1 am 8:30 am-1 am Noon-5 pm	
LOUS KENDA KROMEN KROME	FF > SC : E : : M : : : : MDD : ZM : : ZP P : E : P	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, I exas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Pochester Minn	7:55 am-11:30 pm 7 am-? 7 am-? 11 am-3 am 9:45 am-1 am 7 am-10:45 am 8 am-10:15 pm 9 am-11 pm 7 am-10 pm 10 am-? 7:45 am-? 9 am-6:15 pm 10 am-10 pm 7 am-12:15 am 11 am-2 am 8:30 am-1 am 8:30 am-1 am Noon-5 pm	
J L YOZ KHODA KOMBO KOMB	FF? XC : E : :X : : : : X DD : EM : :ZPP : E :PD	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, I exas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Pochester Minn	7:55 am-11:30 pm 7 am-? 11 am-3 am 9:45 am-1 am 9:45 am-1 am 8 am-10:15 pm 9 am-11 pm 7 am-10 pm 10 am-? 7:45 am-? 9 am-6:15 pm 10 am-10 pm 7 am-12:15 am 11 am-2 am 8:30 am-1 am 1	
J L O YEZ WE KENDA DE KENDA KE	FF. SC : E : M : : : MDD : ZM : : ZPP : E : PD : X	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, I exas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Pochester Minn	7:55 am-11:30 pm 7:am-? 7:11 am-3 am 9:45 am-1 am 9:45 am-1 am 7:am-10:45 am 8:am-10:15 pm 9:am-11 pm 7:am-10 pm 10:am-? 7:45 am-? 10:am-10 pm 7:am-12:15 am 11:am-2 am 8:30 am-1 am	
J L O SECTION OF THE	FF. SO : E : : X :	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, I exas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Pochester Minn	7:55 am-11:30 pm 7 am-? 11 am-3 am 9:45 am-1 am 9:45 am-1 am 7 am-10:45 am 8 am-10:15 pm 9 am-11 pm 7 am-10 pm 10 am-? 7:45 am-? 11 am-2 am 11 am-2 am 11 am-2 am 11 am-7 pm 8 am-10 pm Noon-5 pm 9 am-6 pm 9 am-9pm 10 am-2 am 10 am-10 pm	
J LO JEFW MONTH OF THE PROPERTY OF THE PROPERT	FF. SO : E : : M : : : : EDD : EDD : ZPP : E : PD : X : : G	100 (.25) 100 250 100 (.25) 250 250 250 250 250	aaaaxaaa	Lubbock, Texas Kalispell, Mont. Kearney, Nebr. Watsonville, Calif. Oklahoma City, Okla. Tulsa, Okla. Pampa, Texas Lufkin, Texas Shreveport, La. Rochester, Minn. Sherman, Texas Santa Rosa, Calif. Cedar City, Utah El Paso, Texas Grants Pass, Ore. Victoria, Texas Lafayette, La. Moorhead, Minn.	7:55 am-11:30 pm 7:am-? 7:11 am-3 am 9:45 am-1 am 9:45 am-1 am 7:am-10:45 am 8:am-10:15 pm 9:am-11 pm 7:am-10 pm 10:am-? 7:45 am-? 10:am-10 pm 7:am-12:15 am 11:am-2 am 8:30 am-1 am	

WBRK	М	250	_	Dittofield Mass	7 1
WCIS	~L	100	a a	Pittsfield, Mass. Joliet, III.	7 am-1 am 8 am-9:30 pm
WCLS WCMI	Ñ		a	Ashland, Ky. El Paso, Texas Buffalo, N. Y. Milwaukee, Wis. Royal Oak, Mich.	8 am-9:30 pm 6 am-11:30 pm '11:30 am-10:30 pm 7 am-midnight
WDAH	S	100 (.25)	ā	El Paso, Texas	'11:30 am-10:30 pm
WEBR	В		а	Buffalo, N. Y.	7 am-midnight
WEMP	• • •	250	а	Milwaukee, Wis.	
WEXL	• • •		а	Royal Oak, Mich.	8 am-4 am 7 am-10:30 pm 7 am-midnight
WFBG	•••	100	а		7 am-10:30 pm
WFDF	В	100	а	Flint, Mich.	7 am-midnight
WFIG	P	100(.25)	z	Sumter, S. C.	4********
WGAU	··к	<b>100 (.25)</b> 250	а	Flint, Mich. Sumter, S. C. Athens, Ga. Newport News, Va. Wilson, N. C. Philadelphia, Pa. Herrin III	7 am-midnight 7 am-midnight
WGH WGTM	_	100	а	Newport News, Va.	/ am-midnight
WHAT	4	100 1 <b>00</b>	a a	Philadelphia Pa	
WJPF	P	100 (.25)	z	Herrin III	• • • • • • • • • • • • • • • • • • • •
WJPR	Þ	100 (.25)	z	Greenville, Miss.	
WLAK	Ň	250	z	Lakeland, Fla.	
WLBC			а	Philadelphia, Pa. Herrin, III. Greenville, Miss. Lakeland, Fla. Muncie, Ind. Bowling Green, Ky. Laconia, N. H. Auburn, N. Y. Plattsburg, N. Y. New Bedford, Mass. Reading, Pa.	7 am-midnight
WLBJ	···ė	1001.257	Z	Bowling Green, Ky.	
WLBJ WLNH	MX	100	а	Laconia, N. H.	7 am-midnight
WMBO	•••	250	а	Auburn, N. Y.	9 am-9 pm 7:30 am-11:15 pm 7 am-11 pm
WMFF		250	а	Plattsburg, N. Y.	9 am-9 pm
WNBH	М	100(.25)	а	New Bedford, Mass.	7:30 am-11:15 pm
WRAW WROL	Ň		а	Keading, Pa.	7 am-11 pm
WSAJ			a a	Grove City Pa	
WSAV	ė		z	Reading, Pa. Knoxville, Tenn. Grove City, Pa. Savannah, Ga.	
WSGN	BE		ā	Birmingnam, Ala.	8 am-midnight
WSJS	č	250	a	Winston-Salem, N. C.	8 am-10 pm
WTAL			а	lallahassee, Fla.	8 am-midnight 8 am-midnight 8 am-midnight 7 am-8:30 pm
WTEL	4	100	а	Philadelphia, Pa.	8 am-midnight
WTJS	• • •	100(.25)	а	Jackson, Tenn. Elkhart, Ind.	8 am-midnight
WTRC	• • •	250	a	Elkhart, Ind.	/ am-8:50 pm
XEAG XEAU	• • •	250	z	Tiluana R Cfa	• • • • • • •
VERO	• • •	25	z	Iranuato Gto	
XEBO XEFW		300	ā	Tampico, Tam.	
XETB	• • •	250 250 250 250 25 <b>300</b> <b>500</b>	а	Cordoba, Ver. C. Tijuana, B. Cfa. Irapuato, Gto. Tampico, Tam. Torreon, Coah.	• • • • • • • •
XEX	• • •	500	а	Monterrey, N. L.	
		/AA= - \			
1320	kcs.	(227.1 m.)			
			z	Havana, Cuba	
CMCR			z a	Havana, Cuba Pueblo, Colo.	9 am-1 am
CMCR KGHF KGMB	CMZ			Havana, Cuba Pueblo, Colo. Honolulu, Hawaii	9 am-1 am 1:30 am-6 pm
CMCR KGHF KGMB KID	CMZ		а <b>а</b> а	Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho	1\:30 am-6 pm
CMCR KGHF KGMB KID KRNT	CMZ	200 500 1000 500(1)	a a a	Hayana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Idwa	1\:30 am-6 pm
CMCR KGHF KGMB KID KRNT	CMZ	200 500 1000 500(1)	a a a a	Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron, Ohio	1\:30 am-6 pm
CMCR KGHF KGMB KID KRNT WADC WORK	CMZ CC C	200 500 1000 500(1)	a a a a a a a	Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron, Ohio York, Pa.	1:30 am-6 pm 6 am-7 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT	CMZ	200 500 1000 500 (1) 1000 (5) 1000 (5)	a a a a	Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron, Ohio York, Pa. New Orleans, La.	1\:30 am-6 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB	CMZ CMZ CC NR	200 500 1000 500 (1) 1000 (5) 1000 (5)	a a a a a a a	Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron, Ohio York, Pa. New Orleans, La.	1:30 am-6 pm 6 am-7 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB	CMZ CONR	200 500 1000 500(1) 1000(5) 1000(5) 1000 1000(5)	a a a a a a a	York, Pa. New Orleans, La.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB	CMZ CONR kcs.	200 500 1000 500(1) 1000(5) 1000(5) 1000(5) (225.4 m.)	a a a a a a a	York, Pa. New Orleans, La.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB	CMZ CCZR kcs.	200 500 1000 500(1) 1000(5) 1000(5) 1000(5) (225.4 m.)	a a a a a a a	York, Pa. New Orleans, La.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB	CMZ :CCNR kcs.	200 500 1000 500(1) 1000(5) 1000(5) 1000(5) (225.4 m.)		York, Pa. New Orleans, La.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB	CMZ :CCNR kcs.	200 500 1000 500(1) 1000(5) 1000(5) 1000 1000(5) (225.4 m.)		York, Pa. New Orleans, La.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRC	:BN :CCZR KCS.	200 500 1000 500(1) 1000(5) 1000(5) 1000 1000(5) (225.4 m.)		York, Pa. New Orleans, La.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB	:BN :CCZR KCS.	200 500 1000 500 (1) 1000 (5) 1000 (5) 1000 (5) (225.4 m.) 1000 1000 1000 (5) 1000 (5) 1000 (5) 1000 (5)		York, Pa. New Orleans, La.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRC	:BN :CCZR KCS.	200 500 1000 500 (1) 1000 (5) 1000 (5) 1000 (5) (225.4 m.) 1000 1000 1000 (5) 1000 (5) 1000 (5) 1000 (5)		Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron, Ohio York, Pa. New Orleans, La.  San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRC WSAI WTAQ	BN COZE KO MAZZOZO	200 500 1000 500 (1) 1000 (5) 1000 (5) 1000 (5) (225.4 m.) 1000 1000 500 1000 (5) 1000 (5) 1000 (5) 1000 (5)		York, Pa. New Orleans, La.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRC WSAI WTAQ	KCS.  KCS.  KCS.  KCS.	200 500 1000 500 (1) 1000 (5) 1000 (5) 1000 (5) (225.4 m.) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5)	aaaaaaa aaaagaa	San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-midnight 7 am-1 am 11 am-1 am
CMCR KGHF KGMB KID KRNT WADC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRC WSAI WTAQ NSAI WTAQ	:BN:COZR KCS. MAZZOZO KCS.	200 500 1000 500(1) 1000(5) 1000(5) (225.4 m.) 1000 1000 500 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5)	aaaaaaa aaaagaa z	San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm
CMCR KGHF KGMB KID KRNT WADC WORK WSMB 1330 KGB KMO KRIS KSCJ WTAQ 1340 KDTH KGIR	BN COZE KO MAZZOZO KO DEZ	200 500 1000 500 (1) 1000 (5) 1000 (5) 1000 (5) (225.4 m.) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5) 1000 (5)	aaaaaagaa xa	San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-midnight 7 am-1 am 11 am-1 am
CMCR KGHF KGMB KIDT WANDC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRC WTAQ WTAQ WTAQ WTAQ WTAQ	BN COZE KO MAZZOZO KO DEZ	200 500 1000 500(1) 1000(5) 1000(5) 1000(5) (225.4 m.) 1000 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5)	aaaaaagaa xab	San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.	1:30 am-6 pm 6 am-7 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-midnight 7 am-1 am 11 am-1 am  8:30 am-midnight
CMCR KGHF KGMB KID KRNT WADC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRC WSAI WTAQ NDTH KGIR KGOO WCOO	BN: OCZR K SZZCZCZ K BE ZZZZZZ	200 500 1000 500(1) 1000(5) 1000(5) 1000 1000(5) (225.4 m.) 1000 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5)	aaaaaagaa xa	San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.  Dubuque, Iowa Butte, Mont. Dodge City, Kans. Pensacola, Fla.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-midnight 7 am-1 am 11 am-1 am
CMCR KGHF KGMB KIDT WANDC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRO WTAQ WTAQ WTAQ WTAQ WTAQ WTAQ WOOA WFEAC	:BN: OCZR KS XXZZCZC K DE ZZZP	200 500 1000 500(1) 1000(5) 1000(5) 1000 1000(5) (225.4 m.) 1000 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5)	aaaaaaa aaaagaa xabaax	San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.  Dubuque, Iowa Butte, Mont. Dodge City, Kans. Pensacola, Fia. Manchester, N. H. Favetteville, N. C.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-1 am 11 am-1 am  8:30 am-midnight 7 am-1 am 11 am-1 am
CMCR KGHF KGMB KID KRNT WADC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRC WSAI WTAQ NOTH KGIR KGOO WFEA WFEA WFEA WFEA	BN: OCZR K SZZCZCZ K BE ZZZZZZ	200 500 1000 500(1) 1000(5) 1000(5) 1000 1000(5) (225.4 m.) 1000 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5)	aaaaaaaa aaaagaa xabaaxa	San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.  Dubuque, Iowa Butte, Mont. Dodge City, Kans. Pensacola, Fia. Manchester, N. H. Favetteville, N. C.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-1 am 11 am-1 am 11 am-1 am
CMCR KGHF KGMB KID KRNT WADC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRC WSAI WTAQ NOTH KGIR KGOO WFEA WFEA WFEA WFEA	:BN:OUZR & SEZZOZO & CO DE : ZZPB :	200 500 1000 500(1) 1000(5) 1000(5) 1000 1000(5) (225.4 m.) 1000 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5)	aaaaaaaa aaaagaa zabaazaz	San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.  Dubuque, Iowa Butte, Mont. Dodge City, Kans. Pensacola, Fia. Manchester, N. H. Favetteville, N. C.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-1 am 11 am-1 am  8:30 am-midnight 7 am-1 am 11 am-1 am
CMCR KGHF KGMB KIDT WANDC WORK WSMB 1330 KGB KMO KRIS KSCJ WDRC WSAIQ WTAQ WTAQ WFNC WSAIQ WFNC WSPD XEAJ XEBJ	BN COCZE K SAZZCZC K DE ZZDB ::	200 500 1000 500(1) 1000(5) 1000(5) 1000(5) (225.4 m.) 1000 500 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 250(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1)	aaaaaaa aaaagaa zabaazaza	Akron, Onio York, Pa. New Orleans, La.  San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.  Dubuque, Iowa Butte, Mont. Dodge City, Kans. Pensacola, Fla. Manchester, N. H. Fayetteville, N. C. Toledo, Ohio Obregon, Son. Victoria, Tam	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-1 am 11 am-1 am  8:30 am-midnight 7 am-1 am 11 am-1 am
CMCR KGHF KGMB KID KROTC WORK WSMB 1330 KGB KMO KRIS KSCJC WSAI WTAQ WTAQ WTAQ WTAQ WFIC WSPD XEAP XEBS	BN COZR K SAZZCZC K DE ZZZBB : : :	200 500 1000 500(1) 1000(5) 1000(5) 1000(5) (225.4 m.) 1000 500 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 250(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1)	aaaaaaa aaaagaa xabaaxaxax	Akron, Onio York, Pa. New Orleans, La.  San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.  Dubuque, Iowa Butte, Mont. Dodge City, Kans. Pensacola, Fla. Manchester, N. H. Fayetteville, N. C. Toledo, Ohio Obregon, Son. Victoria, Tam	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-1 am 11 am-1 am  8:30 am-midnight 7 am-1 am 11 am-1 am
CMCR KGHF KGMB KRNDC WORK WSMB 1330 KGB KMO KRIS WDAC WTAQ 1340 KGBNO WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WFND WFND WFND WFND WFND WFND WFND	BN OUZE K SEZZUZU K DE ZZBB :	200 500 1000 500(1) 1000(5) 1000(5) 1000 1000(5) (225.4 m.) 1000 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 250(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 250(1) 250(1) 250(1) 250(1) 250(1) 250(1) 250(1) 200(200	aaaaaaa aaaagaa xabaaxaxaxx	Akron, Onio York, Pa. New Orleans, La.  San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.  Dubuque, Iowa Butte, Mont. Dodge City, Kans. Pensacola, Fla. Manchester, N. H. Fayetteville, N. C. Toledo, Ohio Obregon, Son. Victoria, Tam. Mexico City, D. F. Villa Acuna, Coah.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-1 am 11 am-1 am  8:30 am-midnight 7 am-1 am 11 am-1 am
CMCR KGHF KGMB KRMDC WORK WSMB 1330 KGB KMO KRIS WDRC WSAI WTAQ WFEAC WSPD XEBS XEBS XEBS XEBC	BN COCKE KE MANZONO KO DE ZNOB	200 500 1000 500(1) 1000(5) 1000(5) 1000(5) (225.4 m.) 1000 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 250(1) 500 1000(5) 250(1) 500(1) 250(1) 500(1) 200 200 200	aaaaaaa aaaagaa xabaaxaxaxxa	Akron, Onio York, Pa. New Orleans, La.  San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.  Dubuque, Iowa Butte, Mont. Dodge City, Kans. Pensacola, Fla. Manchester, N. H. Fayetteville, N. C. Toledo, Ohio Obregon, Son. Victoria, Tam. Mexico City, D. F. Villa Acuna, Coah.	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm  10 am-4 am 9 am-3 am 8:30 am-midnight 9 am-1 am 7 am-1 am 11 am-1 am  8:30 am-midnight 7 am-1 am 11 am-1 am
CMCR KGHF KGMB KRNDC WORK WSMB 1330 KGB KMO KRIS WDAC WTAQ 1340 KGBNO WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WCOA WFND WFND WFND WFND WFND WFND WFND WFND	BN OUZE K SEZZUZU K DE ZZBB :	200 500 1000 500(1) 1000(5) 1000(5) 1000(5) (225.4 m.) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 1000(5) 250(1) 500 1000(5) 250(1) 500(1) 250 1000(5)	aaaaaaa aaaagaa xabaaxaxaxx	Akron, Onio York, Pa. New Orleans, La.  San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Green Bay, Wis.  Dubuque, Iowa Butte, Mont. Dodge City, Kans. Pensacola, Fla. Manchester, N. H. Fayetteville, N. C. Toledo, Ohio Obregon, Son. Victoria, Tam	1:30 am-6 pm 6 am-? 6:30 am-1 am 7 am-1 am 8 am-10 pm

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1350 kcs. (222.1 m.)
                                                                      a Havana, Cuba
a Boise, Idaho
a St. Louis, Mo.
a Zarephath, N. J.
                                                                                                                                                  9 am-2 am
6:30 am-1 am
6-9 am; 11 am-12:30 pm;
3-4 pm; 7-8:30 pm
CMCA
                                             200
                     N
BM
2
 KIDO
                                           1000 (2.5)
1000 (5)
                                                                        a New Cork, N. Y. a Richmond, Va.
                                          1000
500
WBNX
                      RX
                                                                                                                                                   7 am-midnight
WMBG
 1360 kcs. (220.4 m.)
                                                                      d Ciego de Avila, Cuba
a Enid, Okla.
a Long Beach, Calif.
a Minot, N. Dak.
a Salem, Ore.
c Charleston, S. C.
a Syracuse, N. Y.
a Chicago, Ill.
Vicksburg, Miss.
a South Bend, Ind.
                                          200
250
1000
500(1)
CMJH
                                                                                                                                                   8 am-11 pm<sup>3</sup>
10 am-2 pm
KCRC
KGER
KLPM
                      EM
                    ... XZUNL
                                                                                                                                                   10 am-1 am
                                          500(1)
500(1)
1000(5)
500(1)
KSLM
                                                                                                                                                   7 am-midnight
 WFBL
                                                                                                                                                  7 am-1 am
8 am-9 pm (1 kw Sunday only)
 WGES
                                                                                                                                                  . . . . . . .
  WOBC
 WSBT
 1370 kcs. (218.8 m.)
                                                                     a Flin Flon, Man.

2 Owen Sound, Ont.

3 Moncton, N. B.

2 Rouyn, P. Q.

4 Cardenas, Cuba

2 Trujillo, D. R.

5 Seattle, Wash

El Dorado, Ark.

5 Bakersfield, Calif.

6 Boone, Iowa

6 Longview, Texas

7 Roswell, N. Mex.

8 San Angelo, Texas

9 Lorago, Colo.

9 Galveston, Tex.

1 Junta, Colo.

9 San Antonio, Tex.

1 Junta, Colo.

1 San Antonio, Tex.

1 Junta, Colo.

2 San Antonio, Tex.

2 Rapid City, S. Dak.

2 La Junta, Colo.

3 San Antonio, Tex.

4 Barkeley, Calif.

5 Everett, Wash.

5 Jamestown, N. Dak.

7 Temple, Texas

6 Oklahoma City, Okla.

8 Emporia, Kans.

7 Tucson, Ariz.

Walla Walla, Wash.

Fort Dodge, Iowa

7 Great Bend, Kans.

8 Rock Springs, Wyo.

8 Sheridan, Wyo.

8 Albany, N. Y.

1 Dothan, Ala.

Atlanta, Ga.

Clarksburg, W. Va.

8 Buffalo, N. Y.
                                                                                                                                                   3-8 pm
CFAR
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                                                                        a Flin Flon, Man.
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CFOS
CKCW
CKRN
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100
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75
100
CMGE
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 KEEN
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100
250
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 KELD
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 KERN
                                                                                                                                               7 am-2 pm
 KFGQ D
KFRO DMXZ
                                                                                                                                                   7:45 am-LS
KGFL
KGKL
                                                                                                                                                   9 am-?
                                                                                                                                                 9 am-11 pm
10 am-10 pm
10 am-11 pm
9 am-11:30 pm
8 am-9 pm
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KICA
KIUN
KIUP
KLUF
                          4
                                             100
100
250
100(.25)
                    . . .
 KMAC
                         5
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1-6 pm
                                             250
100
KOBH
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 KOKO
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                                                                                                                                                  7 am-11 pm
On all night
Noon-7 pm
10 am-7 pm
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250
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250
250
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250
 KRKO
KRMC
KTEM
KTOK
                    · ...
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                 EMN
 KTSW
KTUC
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9:30 am-1 am
                                              100 (.25)
                                             100(.25)
 KUJ
                     LP
 KVFD
 KVGB
                                             100 (.25)
                     ...
 KVRS
KWYO
                                                                                                                                                   9 am-midnight
7 am-midnight
                                             250
 WABY
                      ВM
                                              100 (.25)
                                            250
250
250
                                                                                                                                                  9 am-LS
7 am-1 am
 WAGF
                      D
                                            250 a Atlanta, Ga.
250 a Clarksburg, W. Va.
250 z Williamson, W. Va.
250 a Baltimore, Md.
250 z Elizabeth City, N. C.
250 a Philadelphia, Pa.
250 a Columbia, S. C.
250 a Philadelphia, Pa.
250 a Champaign, Ill.
250 a Evansville, Ind.
250 a Calumet, Miss.
250 a Goldsboro, N. C.
250 a Fort Wayne, Ind.
250 a Mem Albany, Ind.
250 a Calumet, Mich.
250 a Calumet, Mich.
250 b Calumet, Mich.
250 b Calumet, Mich.
250 c Elickory, N. C.
WATL
                                                                                                                                                   9 am-11 pm
7:30 am-midnight ...
 WBLK
 WBNY
                         2
WBTH
                                                                                                                                                   7 am-10 pm
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 WBTM
                    ...
                                                                                                                                                   7 am-11 pm
 WCBM
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 WCNC
WCOS
WDAS
WDWS
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9 am-midnight
9 am-1 am
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 WEOA
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 WFOR
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 WFTL
 WGBR
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8 am-11:30 pm
10:30 am-6:30 pm
                      N
 WGL
 WGRC
 WHBQ
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WHLB WHUS WHUSE WISE WJAC WLLH WLLH WMBR WMFO WMGA WMFO WMGA WRAK WRAK WRAK WRAK WRAK WRAK WRAK WRA	B N Sy Sy DP C :DE	100 250 100 (.25) 100 (.25) 100 100 (.25)	azaaaz	Cookeville, Tenn. Jackson, Mich. Asheville, N. C. Johnstown, Pa. Lowell, Mass. Lawrence, Mass. Mansfield, Ohio Jacksonville, Fla. Wilmington, N. C. Decatur, Ala. Moultrie, Ga. St. Paul, Minn. Davenport, Iowa Portsmouth, Ohio Mayaguez, P. R. Williamsport, Pa.	8 am-7:30 pm 6:30 am-12:30 pm 7:30 am-midnight 7:30 am-midnight 10:30 am-6:15 pm 8 am-6:30 pm 7 am-1 am 9 am-midnight 7 am-10:15 pm 10 am-12:30 pm; 5-7 pm 10 am-11:15 pm 8:45 am-midnight 7 am-1 1:15 pm
1380	kcs.	(217.3 m.)			
CMCW KOH KQV WALA WING WKBH WNBC	N	200 500 500 (1) 500 (1) 250 (.5) 1000 250 (1)	d a b a a a	Havana, Cuba Reno, Nev. Pittsburgh, Pa. Mobile, Ala. Dayton, Ohio La Crosse, Wis. New Britain, Conn.	11:55 am-8 pm 11 am-3 am 7 am10 pm 8:30 am-midnight 7 am-5:30 pm; 7:30 pm-1 am 10 am-midnight 7 am-midnight
1390	kcs.	(215.7 m.)			
CMJC KABR KLRA KOY KRLC WHK WQDM XEM	C C KBM D	200 500(1) 1000(5) 1000 250 1000(5) 1000	z a g a a f z	Camaguey, Cuba Aberdeen, S. Dak. Little Rock, Ark. Phoeniz, Ariz. Lewiston, Idaho Cleveland, Ohio St. Albans, Vt. Chihuahua, Chih.	10 am-6:15 pm 9 am-12:15 am 3-10:30 pm 7 am-mydnight 6 am-LS
1400	kcs.	(214.2 m.)			•
CMKR KHBC KLO KTUL TGX WBBC WHDL WIRE WLTH WVFW XEA XEAJ XEDM XEDS	CM BC 22 D MR 22	200 250 1000(5) 1000(5) 500 500 250 1000(5) 500 250 100 250 100 250	z a a a d a a a a a z z z z	Santiago de Cuba Hilo, Hawaii Ogden, Utah Tulsa, Okla. Guatemala City, Guat. Brooklyn, N. Y. Brooklyn, N. Y. Olean, N. Y. Indianapolis, Ind. New York, N. Y. Brooklyn, N. Y. Campeche, Cam. Navojoa, Son. Torreon, Coah. Mazatan, Sin.	Until 4 am 9:30 am-1:30 am 8 am-1:15 am 3:45-6 pm 7-10:30 am 7:30 am-1 am Silent—Special authorization Noon-1:30 pm
1410		(212.5 m.)			
CKFC CKMO CMCQ KFJM KGNC KMED	2  N N	50 100 200 500(1) 1000(2.5) 250	a a a a b	Vancouver, B. C. Vancouver, B. C. Havana, Cuba Grand Forks, N. Dak. Amarillo, Texas Medford, Ore.	11 am-? 7 am-10 pm 10 am-10 pm 7 am-?

WAAB WBCM WHIS WROK WSFA	CE.	1000 500(1) 500(1) 500(1) 500(1)	a a a a	Boston, Mass. Bay City, Mich. Bluefield, W. Va. Rockford, III. Montgomery, Ala.	7 am-? 9 am-12:30 am 5 am-9 pm 7:30 am-midnight 7:30 am-midnight
1420	kcs.	(231.1 m.)			
CHKCN PCCKKABC CKARTES CT CKARTES	NEEKS 3 DAKE DP 4M N BD	100 100(.25) 100(.25) 100(.25) 100(.25) 100 250 100 250 100 100(.25) 100(.25) 100(.25) 100(.25) 100(.25) 100(.25) 100(.25) 100(.25) 100(.25) 100(.25) 100(.25) 100(.25)	a za za a a a a a a a a a a a a a a za a a z za a a f z z a b b a a a a a a a a z z a a a a a	Shawnee, Okla. Alamosa, Colo. Safford, Ariz. Lamar, Colo. La Grande, Ore. Palestine, Texas Eugene, Ore. Abilene, Texas Bozeman, Mont. Beaumont, Texas Midland, Texas	II ammidnight 7 am-12:15 am 7:30 am-? Silent 8 am-midnight 8:30 am-LS 9:30 am-LS 9:30 am-lo:30 pm
		,			
CJGX CMKZ KGNF KINY KSO WBNS	F D X BM C	1000 200 1000 250 1000 (5) 1000 (5)	a z a a a a	Yorkton, Sask. Palma Soriano, Cuba North Platte, Nebr. Juneau, Alaska Des Moines, Iowa Columbus, Ohio	Noon-midnight 8 am-6:15 pm Noon-? 8 am-2 am 8 am-1 am

WHEC WHP WMPS WOKO XERH	С С С В К	500(1) 1000(5) 500(1) 500(1) 500	a a a z		7 am-midnight 6:30 am-midnight 10 am-10 pm 8 am-1 am
1440	kcs.	(208.2 m.)		`	
CKGB CMBY KDFN KELA KXYZ WBIG WCBA WMBD WSAN XEFI	F MMC aCN aN	100 200 500 1000 1000 1000(5) 500 1000(5)	a a a a a a a a a	Greensboro, N. C.	11 am-11:30 pm 7:55 am-11 pm 11 am 3 am On all night 6:30 am-11:30 pm 7 am-midnight 7 am-midnight 1-11:30 pm
1450	kcs.	(206.8 m.)			
CFCT CHGS CMHM HRN	 F 	500 50 200 500	a f z b	Victoria, B. C. Summerside, P. E. I. Cienfuegos, Cuba Tegucigalpa, Hond.	10:45 am-12:15 am 6:30 am-10 pm Noon-1 pm; 2-3 pm; 7-11:30 pm
KCMO KGCX KIEM KTBS TGQ WAGA WGAR WHOM WSAR XEF	M NZ B C	1000 1000 500(1) 1000 200 500(1) 1000(5) 250 1000	a a a a a a a f a	O	pm 7 am-2 am 10 am-1 am 7:30 am-1 am 9 am-2 am 7 am-midnight 7 am-midnight 7:30 am-midnight
1460	kcs.	(205.4 m.)			
CMKF KSTP WJSV	RX CX	250 10000 (25) 10000	z z a	Holguin, Cuba St. Paul, Minn. Washington, D. C.	7 am-2 am 8 am-1 am
1470	kcs.	(204 m.)			
CMCX HI8Q KGA WLAC	1475 BM	200 100 5000 5000	z z a a	Havana, Cuba Trujillo, D. R. Spokane, Wash. Nashville, Tenn.	9 am-11 pm 
1480	kcs.	(202.6 m.)		,	
CMHX KOMA WHIP WKBW	 Q Q	200 5000 5000 5000	a a z a	Cienfuegos, Cuba Oklahoma City, Okla. Hammond, Ind. Buffalo, N. Y.	7:30 am-1 am 9 am-5:30 pm 8 am-1 am
	kcs.	(201.2 m.)			
CMKQ KFBK WCKY XECH XEDR	EKZ C 	1000 10000 50000 250 100	z a a z z	Santiago de Cuba Sacramento, Calif. Covington, Ky. Toluca, Mex. Guaymas, Son.	11 am-3 am 7 am-midnight
1500	kcs.	(199.9 m.)			
CJIC CMOX KAWM KBIX KBKR KBST KDAL KDB KDRO	F EM P M C EM	100 200 100 100 100(.25) 100 100(.25) 100(.25)	a a a a z a a z	Sault Ste. Marie, Ont. Havana, Cuba Gallup, N. Mex. Muskogee, Okla. Baker, Ore. Big Spring, Texas Duluth, Minn. Santa Barbara, Calif. Sedalia, Mo.	10 am-10 pm 11 am-11pm 1:45-6 pm 8 am-11 pm 10 am-midnight 11 am-3 am

KFDA KGFI KGKY KGKY KGKY KOTN KONAC KNOTN KONAC KNOTN KONAC KNOTN KONAC KNOTN KONAC KNOTN KONAC KNOTN	M . M . DAD AXMPNDPLX . DAPZD	100 (.25) 100 (.25) 250 250 250 100 (.25) 250 100 (.25) 250 100 (.25)	xaaaaaaaaaaaax. xxaaxxaxaaaaaaxxaaxaaaaaxaaaaaaaa	Pine Bluff, Ark. Valley City, N. Dak. Laredo, Texas Lake Charles, La. Paris, Texas Wenatchee, Wash. Roseburg, Ore. El Paso, Texas Salina, Kans. Huntsville, Texas Lihue, Hawaii Salt Lake City, Utah Santa Ana, Calif. Vernon, Texas Hobbs, N. Mex. El Centro, Calif. Prescott, Ariz. Mankato, Minn. Brooklyn, N. Y. Danville, III. Durham, N. C. Lancaster, Pa. Galesburg, III. Charleston, W. Va. Greenville, N. C Selma, Ala. Detroit, Mich. Miami Beach, Fla. E. Dubuque, III. Richmond, Ind. Muskegon, Mich. Griffin, Ga. Kingston, N. Y. Boston, Mass. Brunswick, Ga.	9 am-10:30 pm 8 am-1 am 8:30 am-11 pm 8 am-6 pm 8 am-LS 8 am-10 pm On all night
1510	kcs.	(198.6 m.)			•
CFRC CKCR	• • •	100	-	wateries, sint	Noon-11 pm 8 am-11 pm
1520 TGW	kcs.	(197.3 m.)	*	Guatemala City Gat	Midnight to 1 am; 10:20 am
					Midnight to 1 am; 10:30 am- 5:15 pm; 7 pm;-midnight
CMC	KCS.	( <b>196 m.</b> )	z	Havana, Cuba	
KITE WAKR	••• P	1000 1000	a z	Havana, Cuba, Kansas City, Mo. Akron, Ohio Waterbury, Conn.	9 am-1 am
WBRY	CM	1000	а	Waterbury, Conn.	8:30 am-midnight
		(193.4 m.)			·
KPMC* WQXR		1000 1000	a a	Bakersfield, Calif. New York, N. Y.	10 am-2 am 7:30 am-midnight

1560 kcs	5000 z	Havana, Cuba	2:30 pm-midnight
1580 kcs	. (189.8 m.)	Guines, Cuba	
1600 kcs	. (18 <b>7.4 m.</b> )	Havana, Cuba	

	(Cont.	inued from page 62)	1250 KIT Yal
1200	KOOS	Marshfield, Ore., 250 from 100(.25)	1310 KBND Ben
1200	KVEC	San Luis Obispo, Calit., 259	1310 KCKN Kan 100
1200	KWNO	from 100(.25) Winona, Minn., 250 from	1310 KGFW Kea 100
1200	WABI	100(.25) Bangor, Me., 250 from 100(.25)	1310 KOCY Ok
1200	WAYX	Waycross, Ga., 250 from	1310 KOME ( Tu
1200	WBBZ	100(.25) Ponca City, Okla., 250 from	1310 KRBA Luf 1310 KVOL Laf
1200	WCAX	Ponca City, Okla., 250 from 100(.25). Burlington, Vt., 250 from	1310 KVOX Mo
1200	WPCO	100(.25) Cincinnati, Ohio, 250 from	100
1200	WEST	100 (.25)	1310 KWOS Jeff 100
	WFTC	Easton, Pa., 250 from 100(.25) Kinston, N. C., 250 from 100(.25).	1310 KXRO Abo
1200	WIBX	Utica, N. Y., 250 from 100(.25)	1310 WBEO Ma 100
1200	WJHL	Johnson City, Tenn., 250 100(.25)	1310 WBRE Wi
1200	WJNO	W. Palm Beach, Fla., 250	1310 WBRK Pit 100
1200	WMPC	from 100(.25) Lapeer, Mich., 250 from 100(.25)	1310 WCMI Ash 100
1200	WRBL	Columbus, Ga., 250 from	1310 WGH Ne
1210	KALB	100(.25) Alexandria, La., 250 from	1310 WMBO Au 100
1210	KDLR	100(.25) Devils Lake, N. Dak., 250	1310 WMFF Pla 100
1210	KFVS	from 100(.25) Cape Girardeau, Mo., 250	1310 XEAG Cor 1370 KGKL San
1210	KGLO	from 100(.25) Mason City, Iowa, 250 from	100
1210	KOCA	100(.25) Kilgore, Tex., 250 from 100(.25)	100
1210	KPFA	100(.25) Helena, Mont., 250 from	1370 KRE Ber 100
	KWJB	100(.25) Globe, Ariz., 250 from	1370 KRMC Jan 100
	WEBQ	100(.25) Harrisburg, Ill., 250 from	1370 KTEM Ter 100
	WEDC	100(.25) Chicago, Ill., 250 from	1370 KWYO She
	WIBU	100(.25)	1370 WABY Alb
		100(.25)	1370 WATL Atla
	WJBY	Gadsden, Ala., 250 from 100(.25)	1370 WBTH Wi
	WJIM	Lansing, Mich., 250 from 100(.25)	1370 WCBM Ba
	WJTN	Jamestown, N. Y., 250 from 100(.25)	1370 WDAS Ph
	WJW	Akron, Ohio, 250 from 100(.25)	1370 WGL For
	WPAX	Thomasville, Ga., 250 from 100(.25)	1370 WHDF Cal
1210	WSAY	Rochester, N. Y., 250 from 100(.25)	100 1370 WHLS Po
1210	WSNJ	Bridgeton, N. J., 250 from 100(.25)	100
1220	XEBL	Mazatlan, Sin., 500 from 50	(Please t

kima, Wash., 1 kw from 0(.5) nd, Ore., 250 from 100(.25) nsas City, Kans., 250 from arney, Nebr., 250 from 0(.25)City, lahoma Okla., 250 dahoma City om 100(.25) ulsa, Okla., 250 from 0(.25)
ifkin, Tex., 250 from 100
ifavette, La., 250 fro from 0(.25) oorhead, Minn., 250 from (.25)fferson City, Mo., 250 from 0(.25)perdeen, Wash., 250 from farquette, Mich., 250 from 0(.25) 7/ilkes Barre, Pa., 250 from 0(.25) 0(.25) ittsfield, 0(.25) shland, Mass., 250 from Ку., 250 from 0(.25) ewport News, Va., 250 from (.25) uburn, N. Y., 250 from 0(.25) attsburg, N. Y., 250 from of (.25)
ordoba, Ver. C., 250 from 10
n Angelo, Tex., 250 from
0(.25) pid City, S. Dak., 250 from 0(.25) erkeley, Calif., 250  $_{
m from}$ mestown, N. Dak., 250 from 0(.25) mple, 0(.25) Tex., 250 from eridan, Wyo., 250 from 0(.25) N. Y., bàny, 0(.25) 250 from lanta, 0(.25) Ga., 250 from illiamson, W. Va., 250 from ltimore, Md., 250 from 0(.25)iladelphia, Pa., 250 from 0(.25) ort Wayne, Ind., 250 0(.25) from lumet, Mich., 250 from 0(.25)ort Huron, Mich., 250 from 0(.25)

(Please turn to page 88)

Frequency is given in kilocycles in second column. For power and network affiliations, refer to the list of North American stations by Frequencies.

,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 0, 110775 1155070		<b>,</b>
ALABAMA	El Dorado	San Bernardino	New Haven	Atlanta
	KELD 1370	KFXM 1210	WELI 930	WAGA 1450
Anniston	Fort Smith		New London	WATL 1370
WHMA 1420	KFPW 1210	San Diego	WNLC 1500	WMBI 1080
Birmingham	Hot Springs	KFSD 600 KGB 1330	Waterbury WATR 1290	WGST 890 WSB 740
WAPI 1140	KTHS 1060	San Francisco	WATR 1290 WBRY 1530	WSB 740 Augusta
WBRC 930	KWFC 1310	KFRC 610	WBR1 1030	WRDW 1500
WSGN 1310	Jonesboro KBTM 1200	KGO 790	DELAWARE	Brunswick
Decatur	KBTM 1200 Little Rock	KJBS 1070		WMOG 1500
WMFO 1370	KARK 890	KPO 680	Wilmington	Columbus
Dothan	KGH1 1200	KSAN 1420	WDEL 1120	WRBL 1200
WAGF 1370	KLRA 1390	KSFO 560	WILM 1420	Griffin WKEU <b>1500</b>
Gadsden	Pine Bluff	KYA 1230		WKEU 1500 Macon
WJBY 1210	KOTN 1500	San Jose	DISTRICT OF	WMAZ 1180
Huntsville WBHP 1200	Siloam Springs	KQW 1010	COLUMBIA	Moultrie
Mobile	KUOA 1260	San Luis Obispo		WMGA 1370
WALA 1380	l ———	KVEC 1200	Washington	Rome
WMOB 1200	CALIFORNIA	Santa Ana	WJSV 1460	WRGA 1500 Savannah
Montgomery		KVOE 1500	WMAL 630 WOL 1230	WSAV 1310
WCOV 1210	Bakersfleid	Santa Barbara	WRC 950	WTOC 1260
WSFA 1410	KERN 1370	KDB 1500	17110 200	Thomasville
Selma	KPMC 1550	KTMS 1220		WPAX 1210
WHBB 1500	Berkeley	Santa Rosa	FLORIDA	Waycross
Muscle Shoals	KRE 1370	KSRO 1310		WAYX 1200
City	Beverly Hills	Stockton KGDM 1100	Daytona Beach	
WMSD 1420	KMPC 710	KWG 1200	WMFJ 1420	HAWAII
Tuscaloosa W.IRD 1200	Chico	Visalia	Ft. Lauderdale WFTL 1370	
WJŖD 1200	KHSL 1260	KTKC 890	Gainesville	HII0
	El Centro KXO 1500	Watsonville	WRUF 830	KHBC 1400
ALASKA	Eureka	KHUB 1310	Jacksonville	Honolulu KGMB 1320
ALASKA	KIEM 1450		WJAX 900	KGU 750
	Fresno	COLORADO	WJIIP 1290 WMBR 1370	Lihtie
Anchorage	KARM 1310		WMBR 1370 Lakeland	KTOH 1500
KFQD 780	KMJ 580	Alamosa	WLAK 1310	
Fairbanks	Glendale	KGIW 1420	Miami	IDAHO
KFAR 610	KIEV 850	Colorado Springs	WIOD 610	
Juneau KINY 1430	Long Beach	KVOR 1270	WMBF 610	Bolse
KINY 1430 Ketchikan	KFOX 1250	Denver	WQAM 560	KIDO 1350
KGBU 900	KGER 1360	KFEL 920	Miami Beach WKAT 1500	Idaho Falls
NO OCIDIA	Los, Angeles	KLZ 560	Ocala	KID 1320
	KECA 780 KFAC 1300	KOA 830	WTMC 1500	Lewiston KRLC 1390
ARIZONA	KFAC 1300 KFI 640	KPOF 880 KVOD 630	Orlando	KRLC 1390 Nampa
	KFSG 1120	Durango 630	WDBO 580	KFXD 1200
Globe	KFVD 1000	KIUP 1370	Panama City	Pocatello
KWJB 1210	KFWB 950	Grand Junction	WDLP 1200	KSEI 900
Jerome	KGFJ 1200	KFXJ 1200	Pensacola	Twin Falls
KCRJ 1310	KHJ 900	Greeley	WCOA 1340	KTFI 1240
Lowell	KMTR 570	KFKA 880	St. Augustine WFOY 1210	Wallace KWAL 1423
KSUN 1200	KNX 1050	La Junta	St. Petersburg	KWAL 1420
Phoenix	KRKD 1120	KOKO 1370	WSUN 620	111111010
KOY 1390	Merced	Lamar KIDW 1420	WTSP 1370	ILLINOIS
KTAR 620	KYOS 1040	Pueblo 1420	Sarasota	A
Prescott KYCA 1500	Modesto	KGHF 1320	WSPB 1420	Aurora 1250
Safford 1800	KTRB 740	Sterling	Tailahassee WTAL 1310	WMRO 1250 Bloomington
	Monterey	KGEK 1200	Tampa	WJBC 1200
KGLU 1420 Tucson	KDON 1210	1	WDAE 1220	Carthage
KTUC 1370	Oakland KLS 1280	CONNECTICUT	WFLA 620	WCAZ 1070
KVOA 1260	KLX 880	301112311001	WestPalmBeach	Champaign
Yuma	KROW 930		WJNO 1200	WDWS 1370
KYUM 1210	Pasadena	Bridgeport		Chicago
	KPPC 1210	WICC 600	GEORGIA	WAAF 920
	Redding	Hartford WDRC 1330		WBBM 770 VCBD 1080
ARKANSAS	KVCV 1200	WTIC 1040	Albany	WCFL 970
	Sacramento	WTHT 1200	WGPC 1420	WCRW 1210
Blytheville	KFBK 1490	New Britain	Athens	WEDC 1210
KLCN 1290	KROY 1210	WNBC 1380	WGAU 1319	WENR 870

WGES 1360   WGN 720	IOWA .	Covington WCKY 1490	WBZ 990 WCOP 1120	MINNESOTA
WJJD 1130		Lexington	WEEI 590	
WLS 870	Ames	WLAP 1420	WHDH 830	Albert Lea
WMAQ 670	WOI 640	Louisviile	WMEX 1500	KATE 1420
WMBI 1080	Boone		WNAC 1230	Duluth
WSBC 1210	KFGQ 1370		WORL 920	KDAL 1500
Cicero	Cedar Rapids	WHAS 820		WEBC 1290
	WMT 600	WINN 1210	Fall River	Fergus Fails
	Davenport	Owensboro	WSAR 1450	KGDE 1200
Danville	WOC 1870	WOMI 1500	Greenfield	Hibbling
WDAN 1500	Decorah	Paducah	WHAI 1210	WMFG 1210
Decatur	KGCA 1270	WPAD 1420	Hyannis	
WJBL 1200	KWLC 1270		WOCB 1210	Mankate
East Dubuque	Des Moines		Lawrence	KYSM 1500
WKBB 1500	KRNT 1320	LOUISIANA	WLAW 680	Minneapolls
East St. Louis	KSO 1430		WLLH 1370	WCCO 810
WTMV 1500	<b>₩HO 1000</b>	Alexandria	Lowell	WDGY 1189
Galesburg	Dubuque	KALB 1210	WLLH 1370	WLB 760
WGIL 1500	KDTH 1340	Baton Rouge	New Bedford	WTCN 1250
Harrisburg	Fort Dodge		WNLH 1310	Moorhead
WEBQ 1210	KVFD 1370	WJBO 1120	Pittsfleld	KVOX 1310
Herrin	lowa City	Lafayette	WBRK 1310	Northfield
W.IPF 1310	WSU1 880	KVOL 1310	Salem	WCAL . 760
Joliet	Marshalltown	Lake Charles	WESX 1200 Springfield	Rochester
WCLS 1310		KPLC 1500	Springfield	KROC 1310
Peoria		Monroe	WBZA 990	St. Cloud
WMBD 1440	Mason City	KMLB 1200	WMAS 1420	KFAM 1420
Quincy	KGLO 1210	New Orleans	WSPR 1140	
WTAD 900	Shenandoah	WDŠU 1250	Worcester	St. Paul
Rockford	KFNF '890	WJBW 1200	WORC 1280	KSTP 1460
WROK 1410	KMA 930	WNOE 1420	WTAG 580	. WMIN 1370
Rock Island	Sioux City	WSMB 1320		Virginia
WHBF 1240	KSCJ 1330	WWL 850	MIGGA.	WHLB 1370
Springfield	KTRI 1420	Shreveport	MICHIGAN	Winona
WCBS 1420		KRMD 1310		KWNO 1200
WTAX 1210	KANSAS	KTBS 1450	Battle Creek	l <del></del>
Tuscola	TO THE STATE OF	KWKH 1100	WELL 1420	MISSISSIPPI
WDZ 1020		WAH 1100	Bay City	MISSISSIFFE
Urbana	Abilene KEBI 1050		WBCM 1410	
WILL 580		MAINE	Calumet	Greenville
***************************************	Atchison		WHDF 1370	I W.IPR 1310
	KVAK 1420	Augusto	Detroit	Grenada
INDIANA	Coffeyville	Augusta WRDO 1370	WJBK 1500	WGRM 1210
	KGGF 1010		WJR 750	Gulfport
Anderson	Dodge City	Bangor WARI 1200	WMBC 1420	WGCM 1210,
WHBU 1210	KGNO 1340	1111111	WWJ 920	Hattlesburg
Elkhart	Emporia	11 2002	WXYZ 1240	WFOR 1370
WTRC 1310	KTSW 1370	Lewiston	East Lansing	Jackson
Evansville	Garden City	WCOU 1210		WJDX 1270
WEOA 1370	KIUL 1210	Portland		WSLI 1420
WGBF 330	Great Bend	WCSH 940	Filnt	Laurei
Fort Wayne	KVGB 1370	WGAN 640	WFDF 1310	WAML 1310
		Presque Isie	Grand Rapids	
	Hutchinson KWBG 1420	WAGM 1420	WASH 1270	McComb WSKB 1200
1101.0			WOOD 1270	1.6222
Gary WIND 560	Kansas City	MARYLAND	Ironwood	Meridian
44 77 77	KCKN 1310	WARTLAND	WJMS 1420	WCOC 880
Hammond	Lawrence		Jackson	Vicksburg
WHIP 1480	KFKU 1220	Baltimore	WIBM 1370	WQBC 1360
WWAE 1200	WREN 1220	WBAL 760	Kalamazoo	
Indianapolis	Manhattan	WBAL 1060	WKZO 590	MISSOURI
WFBM 1230	KSAC 580	WCAO 600	Lansing	MISSOURI
WIBC 1050	Pittsburg	WCBM 1370	WJIM 1210	
WIRE 1400	КОАМ 790			Cape Girardeau
	Salina	WFBR 1270	Lapeer WMPC 1200	KFVS 1210
Muncle WLBC 1310	KSAL 1500	Cumberland		Columbia
	Topeka	WTBO 800	Marquette	KFRU 630
New Albany		Frederick	WBEO 1819	Jefferson City
WGRC 1370		WFMD 900	Muskegon	
Richmond	Wichita	Hagerstown		KWOS 1310
	KANS 1210	WJE <b>J 1210</b>		Joplin
	KFH 1300	Salisbury '	Pontiac ,	WMBH 1420
South Bend		WSAL 1200	WCAR 1100	Kansas City
WFAM 1200	KENTUCKY		Port Huron	KCMO 1450
WSBT 1360			WHLS 1370	KITE 1580
44 PTT T900		MASSACHU-		KMBC 950
	Ashland	SETTS	Royal Oak	WDAF 610
Terre Haute	i Asmanu			
Terre Haute WBOW 1310			WEXL 1310	WHB 860
WBOW 1310	WCMI 1310	Boston		WHB 860
		Boston WAAB 1410	WEXL 1310  Sault Ste. Marie  WSOO 1200	WHB 860 Poplar Bluff KWOC 1310

St. Joseph				. Andmore \
	Atlantic City	I WBIL 1100	) Salisbury	A A U III U U
KFEQ 680	WBAB 1200	WBNX 1850	WSTP 1500	KVSO 1210
	WPG 1100	WBOQ 860	Wilmington	Elk City
St. Louis			TTD CTTD 'S CTC	KASA 1210
KFUO ' 550	Bridgeton	WEAF 660	WMFD 1370	
KMOX 1090	WSNJ 1210	WEVD 1300	Wilson	Enid
KSD 550	Camden	WHN 1910	WGTM 1310	KCRC 1360
KWK 1350		WINS 1180	Winston-Salem	Muskogee
				KBIX 1500
KXOK 1250	Jersey City	WJZ 760	WAIR 1250	
WEW 760	WAAT 940	WLTH 1400	WSJS 1310	Norman
WIL 1200		WMCA 570		WNAD 1010
	WHOM 1450		NORTH	Oklahoma City
Sedalla	Newark	WNEW 1250		
KDRO 1500		WNYC 810	DAKOTA	KOCY 1310
Springfield		WOV 1130		KOMA 1480
	WOR 710		Bismarek	KTOK 1370
KGBX 1230	Red Bank	WQXR 1550	KFYR 550	
KWTO 560	GTDDD 101A	Niagara Falls		WKY 900
	WBRB 1210	WHLD 1260	Devils Lake	Okmulgee
MONTANA	Trenton		KDLR 1210	KHBG 1210
MONTANA	WTNJ 1280	Olean 、	Fargo	Paras Ott
	Zarephath	WHDL 1400		Ponca City
Billings		Plattsburg	WDAY 940	WBBZ 1200
KGHL 780	WAWZ 1350		Grand Forks	Shawnes
Bozeman		WMFF 1310		
		Rochester		KGFF 1420
KRBM 1420	NEW NEW100	WHAM 1150	Jamestown	Tuisa
Butte	NEW MEXICO	WHEC 1430	KRMC 1370	KOME 1310
KGIR 1340			Mandan	
		WSAY 1210		KTUL 1400
Great Falls	Albuquerque	Saranao *Lake	KGCU 1240	KV00 1140
KFBB 1280	7700V 1000	WNBZ 1290	Minot	1
Helena	KGGM 1230		KLPM 1360	005000
	KOB 1180	Scheneotady	Valley City	OREGON
KPFA 1210	Carisbad	WGY 790		
Kalispell		Syraouse	KOVC 1500	Astoria
KGEZ 1810	KLAH 1210			
Missoula	Clovis	WFBL 1360	OHIO	KAST 1200
	KICA 1370	WSYR 570	- Onlo	Dales.
		WSYU 570	Akron	Baker
Wolf Point	Gallup			KBKR 1500
KGCX 1450	KAWM 1500	Troy	WADC 1320	Bend
	Hobbs	WHAZ 1300	WAKR 1530	KBND 1310
	KWEW 1500	WTRY 950	2000	
NEBRASKA		Utloa		Corvailis
	Roswell `		Ashtabula	KOAC 550
Grand Island	KGFL 1870	WIBX 1200	WICA 940	Eugene
KMMJ 740	Santa Fe	White Plains	Canton	
	Santa Fe			KORE 1420
Hastings	KVSF 1310		WHBC 1200	Grants Pass
KHAS 1200		Woodside	Cincinnati	KUIN 1310
Kearney	NEW YORK	WWRL 1500	WCPO 1200	
KGFW 1310	WEW TORK		WKRC 550	Klamath Falls
Lincoln	Albany			KFJI 1210
KFAB 770		NORTH	WLW 700	La Grande
	WABY 1370	CAROLINA	WSAI 1880	KLBM 1420
KFOR 1210	WOKO 1430	ONHOLINA	W8XO 700	
Norfolk	Auburn			Marshfield
		Asheville	Cleveland	KOOS 1200
WJAG 1060			WCLE 610	
WJAG 1060	WMBO 1819	I WISE 1270		Modford
North Platte	WMBO 1819 Binghamton	WISE 1370		Medford
	Binghamton	WWNC 570	WGAR 1450	KMED 1410
North Platte KGNF 1430	Binghamton WNBF 1500	WWNC 570 Charlotts	WGAR 1450 WHK 1390	
North Platte KGNF 1430 Omaha	Binghamton WNBF 1500 Brooklyn	WWNC 570 Charlotts	WGAR 1450 WHK 1390 WTAM 1070	KMED 1410 Portland
North Platte KGNF 1430 Omaha KOIL 1260	Binghamton WNBF 1500 Brooklyn WARD 1400	WWNC 570 Charlotts WBT 1080	WGAR 1450 WHK 1390	KMED 1410 Portland KALE 1300
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660	Binghamton WNBF 1500 Brooklyn	WWNC 570 Charlotts WBT 1080 WSOC 1210	WGAR 1450 WHK 1390 WTAM 1070 Columbus	KMED 1410 Portland KALE 1300 KBPS 1420
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400	WWNC 570 Charlotts WBT 1080 WSOC 1210 Durham	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480	KMED 1410 Portland KALE 1300 KBPS 1420 KEX 1180
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBR 1300	WWNC 570 Charlotts WBT 1080 WSOC 1210	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210	KMED 1410 Portland KALE 1300 KBPS 1420 KEX 1180
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590 Scottsbluff	Binghamton   WNBF   1500   Brooklyn   WARD   1400   WBBC   1400   WBBR   1300   WCNW   1500	WWNC 570 Charlotts WBT 1080 WSOC 1210 Durham WDNC 1500	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBR 1300	WWNC 570 Charlotte WBT 1080 WSOC 1910 Durham WDNC 1500 Elizabeth City	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590 Scottsbluff	Binghamton   WNBF   1500   Brooklyn   WARD   1400   WBBC   1400   WBBR   1300   WCNW   1500   WVFW   1400	WWNC 570 Charlotts WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KWJJ
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590 Scottsbluff KGKY 1500	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBB 1300 WCNW 1500 WVFW 1400 Buffalo	WWNC 570 Charlotte WBT 1080 WSOC 1910 Durham WDNC 1500 Elizabeth City	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KWJJ
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590 Scottsbluff	Binghamton   WNBF   1500	WWNC 570 Charlotts WBT 1080 WSOC 1310 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1430 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KXL   1420   KX
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590 Scottsbluff KGKY 1500	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBB 1300 WCNW 1500 WVFW 1400 Buffalo	WWNC 570 Charlotts WBT 1080 WSOC 1910 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayettevillie WFNC 1840	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1430 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KXL   1420   Roseburg
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 600 WOW 590 Scottabluff KGKY 1500	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffalo WBEN 900 WBNY 1870	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KXL   Roseburg   KRNR   1500   1500   KKRR   1500   KKR   1500   KKR   1500
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590 Scottsbluff KGKY 1500	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBB 1300 WCNW 1500 WYFW 1400 Buffalo WBEN 900 WBNY 1370 WEBR 1310	WWNC 570 Charlotts WBT 1080 WSOC 1910 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayettevillie WFNC 1840	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KXL   1420   Roseburg
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590 Scottsbluff KGKY 1500  NEVADA	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffalo WBEN 900 WBNY 1370 WEBR 1310 WGB 550	WWNC 570 Charlotts WBT 1080 WSOC 1310 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KXL   1420   Roseburg   KRNR   1500   Salem
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 600 WOW 590 Scottabluff KGKY 1500	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffalo WBEN 900 WBEN 1370 WEBR 1310 WGR 550 WKBW 1489	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsbore	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KXL   Roseburg   KRNR   1500   1500   KKRR   1500   KKR   1500   KKR   1500
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 600 WOW 590 Scottabluff KGKY 1500  NEVADA  Reno KOH 1380	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffalo WBEN 900 WBEN 1370 WEBR 1310 WGR 550 WKBW 1489	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham - WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsbore WGBR 1870	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWIJ   1040   KXL   Roseburg   KRNR   1500   Salem   KSLM   1360
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 600 WOW 590 Scottabluff KGKY 1500  NEVADA  Reno KOH 1380	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBB 1300 WCNW 1500 WVFW 1400 Buffalo WBEN 900 WBNY 1370 WEBR 1310 WGB 550 WKEW 1480 WSVS 1270	WWNC 570 Charlotts WBT 1080 WSOC 1310 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsbore WGBB 1370 Greensboro	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 2430 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KXL   1420   Roseburg   KRNR   1500   Salem
North Platte   KGNF	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffale WBEN 900 WBNY 1370 WEBR 1310 WGR 550 WKBW 1480 WSVS 1270 Canton	WWNC 570 Charlotts WBT 1080 WSOC 1310 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsbore WGBB 1370 Greensboro	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370 Portsmouth	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWIJ   1040   KXL   1420   Roseburg   KRNR   1500   Salem   KSLM   1360   Pennsylvania
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 600 WOW 590 Scottabluff KGKY 1500  NEVADA  Reno KOH 1380	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBB 1300 WCNW 1500 WVFW 1400 Buffalo WBEN 900 WBNY 1870 WEBR 1310 WGR 550 WKBW 1480 WSVS 1270 Canton WCAD 1220	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBB 1370 Greensboro . WBIG 1440	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 2430 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWIJ   1040   KXL   Roseburg   KRNR   1500   Salem   KSLM   1360
North Platte   KGNF	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffale WBEN 900 WBNY 1370 WEBR 1310 WGR 550 WKBW 1480 WSVS 1270 Canton	WWNC 670 Charlotte WBT 1080 WSOC 1310 Durham - WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsboro WGBR 1870 Greensboro WBIG 1440 Greenville	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 MANN 1370 Portsmouth WPAY 1370	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KXLJ   1420   Roseburg   KRNR   1500   Salem   KSLM   1360   Pennsylvania   Allentowa
North Platte	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1300 WCNW 1500 WVFW 1400 Buffalo WBEN 900 WBNY 1870 WEBR 1310 WGR 550 WKBW 1480 WSYS 1270 Canton WCAD 1220 Elmira	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsbore WGBR 1370 Greensboro WBIG Greenville WCTC 1500	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1430 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Toleds	KMED
North Platte   KGNF	Binghamton   WNBF   1500	WWNC 670 Charlotte WBT 1080 WSOC 1310 Durham - WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsboro WGBR 1870 Greensboro WBIG 1440 Greenville	WGAR 1450 WHK 1390 WTAM 1070 Columbus WENS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Tolede WSPD 1240	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KXLJ   1420   Roseburg   KRNR   1500   Salem   KSLM   1360   Pennsylvania   Allentowa
North Platte   KGNF   1430   Omaha   KOIL   1260   KOWH   660   KOWH   650   Scottabluff   KGKY   1500     NEVADA     Renc   KOH   1380     NEW   HAMPSHIRE   Laconia   WINH   1310     Laconia   WINH   1310     Laconia   WINH   1310	Binghamton   WNBF   1800	WWNC 670 Charlotte WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBR 1370 Greensboro WBIG 1440 Greenville WCTC 1500 Hickory	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1430 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Toleds	KMED
North Platte   KGNF   1430   Omaha   KOIL   1260   KOWH   660   KOWH   650   Scottabluff   KGKY   1500     NEVADA     Renc   KOH   1380     NEW   HAMPSHIRE   Laconia   WINH   1310     Laconia   WINH   1310     Laconia   WINH   1310	Binghamton   WNBF   1500	WWNC 570 Charlotts WBT 1080 WSOC 1310 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBR 1870 Greensboro WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 MANN 1370 Portsmouth WPAY 1370 Toleds WSPD 1240 WTOL 1200	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KXL   1420   Roseburg   KRNR   1500   Salem   KSLM   1360   Pennsylvania   Allentowa   WCBA   1440   WSAN   1440   Altoona   1410   Altoona   1400   Roseburg   KRNR   1500   Roseburg   KRNR   1400   Roseburg   KRNR   1400   Roseburg   Roseburg   KRNR   1400   Roseburg
North Platte   KGNF	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1500 WCNW 1500 WVFW 1400 Buffalo WBNY 1370 WEBR 1310 WGR 550 WKBW 1480 WSVS 1270 Canton WCAD 1220 Elmira WENY 1200 WESG 850 Freeport	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBR 1870 Greensbore . WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WIJOK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Toleds WSPD 1240 WTOL 1200 Youngstown	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KWJJ   1040   KWJJ   1040   KWJJ   1420   Roseburg   KRNR   1500   Salem   KSLM   1360   Pennsylvania   Allentowa   WCBA   1440   WSAN   1440   Altoona   WFBG   1310
North Platte   KGNF	Binghamton   WNBF   1500	WWNC 570 Charlotts WBT 1080 WSOC 1310 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBR 1870 Greensboro WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Tolede WSPD 1240 WTOL 1200 Youngstown WFMJ 1420	KMED
North Platte   KGNF   1430   Omaha   KOIL   1260   KOWH   660   KOWH   590   Scottabluff   KGKY   1500     NEVADA     Renc   KOH   1380     NEW   HAMPSHIRE   Laconia   WLNH   1310   Manohester   WFEA   1340   Portsmouth   1430   March   1440   Portsmouth   1430   Manohester   WFEA   1340   Portsmouth   1430   Manohester   WFEA   1340   Portsmouth   1430   Manohester   WFEA   1430   Portsmouth   Portsmouth	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1500 WCNW 1500 WVFW 1400 Buffalo WBNY 1870 WEBR 1310 WGR 550 WKBW 1480 WKBW 1480 WSYS 1270 Canton WCAD 1220 Elmira WENY 1200 WENG 850 Freeport WGBB 1210 Jamestown	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham - WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBR 1370 Greensboro . WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point WMFR 1200	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1430 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Tolede WSPD 1240 WTOL 1200 Youngstown WFMJ 1420 WKBN 570	KMED
North Platte   KGNF	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1500 WCNW 1500 WVFW 1400 Buffalo WBNY 1870 WEBR 1310 WGR 550 WKBW 1480 WKBW 1480 WSYS 1270 Canton WCAD 1220 Elmira WENY 1200 WENG 850 Freeport WGBB 1210 Jamestown	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsbore WGBR 1370 Greensbore WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point WMFR 1200 Kinston	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1430 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Tolede WSPD 1240 WTOL 1200 Youngstown WFMJ 1420 WKBN 570	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KXI   1420   Roseburg   KRNR   1500   Salem   KSLM   1360   Pennsylvania   Allentowa   WCBA   1440   WSAN   1440   Altoona   WFBG   1310   Easton   WEST   1200   KALE   1200   Easton   WEST   1200   KALE   1200   KALE
North Platte   KGNF   1430   Omaha   KOIL   1260   KOWH   660   KOWH   590   Scottabluff   KGKY   1500     NEVADA     Renc   KOH   1380     NEW   HAMPSHIRE   Laconia   WLNH   1310   Manohester   WFEA   1340   Portsmouth   1430   March   1440   Portsmouth   1430   Manohester   WFEA   1340   Portsmouth   1430   Manohester   WFEA   1340   Portsmouth   1430   Manohester   WFEA   1430   Portsmouth   Portsmouth	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffale WBEN 900 WBNY 1370 WEBR 1310 WGR 550 WKEW 1480 WSVS 1270 Canton WCAD 1220 Eimira WENY 1200 WESG 850 Freeport WGBB 1210 Jamestown WJTN 1210	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham - WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBR 1370 Greensboro . WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point WMFR 1200 Kinston WFTC 1200	WGAR 1450 WHK 1390 WTAM 1070 Columbus WENS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WI.OK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Tolede WSPD 1240 WTOL 1200 Youngstown WFMJ 1420 WKBN 570 Zanesville	KMED
North Platte   KGNF	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffalo WBBN 900 WBNY 1870 WEBR 1310 WGR 550 WKBW 1489 WSVS 1270 Canton WCAD 1220 Elmira WENY 1200 WESG 850 Freeport WGBB 1210 Jamestown WJTN 1210 Kingston	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsbore WGBR 1370 Greensbore WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point WMFR 1200 Kinston	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1430 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Tolede WSPD 1240 WTOL 1200 Youngstown WFMJ 1420 WKBN 570	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KXI   1420   Roseburg   KRNR   1500   Salem   KSLM   1360   Pennsylvania   Allentowa   WCBA   1440   WSAN   1440   Altoona   WFBG   1310   Easton   WEST   1200   KALE   1200   Easton   WEST   1200   KALE   1200   KALE
North Platte   KGNF   1430   Omaha   KOIL   1260   KOWH   660   KOWH   590   Scottabluff   KGKY   1500     NEVADA     Renc   KOH   1380     NEW   HAMPSHIRE   Laconia   WLNH   1310   Manohester   WFEA   1340   Portsmouth   1430   March   1440   Portsmouth   1430   Manohester   WFEA   1340   Portsmouth   1430   Manohester   WFEA   1340   Portsmouth   1430   Manohester   WFEA   1430   Portsmouth   Portsmouth	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffalo WBEN 900 WBNY 1370 WEBR 1310 WGR 550 WKBW 1480 WSVS 1270 Canton WCAD 1220 Elmira WENY 1200 WESG 850 Freeport WGBB 1210 Jamestown WJTN (Fingston WKNY 1500	WWNC 670 Charlotte WBT 1080 WSOC 1210 Durham - WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsbore WGBR 1870 Greensbore WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point WMFR 1200 Kinston WFTC 1200 Raielgh	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WILOK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Toleds WSPD 1240 WTOL 1200 Youngstown WFMJ 1420 WKBN 570 Zanesville WALR 1210	KMED
North Platte   KGNF	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffale WBEN 900 WBNY 1870 WEBR 1310 WGR 550 WKBW 1489 WSVS 1270 Canton WCAD 1220 Eimira WENY 1200 WESG 850 Freeport WGBB 1210 Jamestown WJTN 1210 Kingston WKNY 1500 Newburgh	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBR 1370 Greensboro 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point WMFR 1200 Kinston WFTC 1200 Raleigh WTTF 680	WGAR 1450 WHK 1390 WTAM 1070 Columbus WENS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WI.OK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Tolede WSPD 1240 WTOL 1200 Youngstown WFMJ 1420 WKBN 570 Zanesville	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KWJJ   1040   KWJJ   1040   KWJJ   1040   KWNR   1500   Salem   KSLM   1360   Pennsylvania   Allentowa   WCBA   1440   WSAN   1440   Altoona   WFBG   1310   Easton   WEST   1200   Erle   ULEU   Glenside   1300   Glenside   1420
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590 Scottabluff KGKY 1500  NEVADA  Reno KOH 1380  NEW HAMPSHIRE  Laconia WLINH 1310 Manohester WFEA 1340 Portsmouth WHEB 740	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffale WBEN 900 WBNY 1370 WEBR 1310 WGR 550 WKBW 1480 WSVS 1270 Canton WCAD 1220 Elmira WENY 1200 WENY 1200 WENY 1200 WENY 1200 WENY 1210 Kingston WKNY 1500 Newburgh WGNY 1500 Newburgh WGNY 1500	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham - WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBR 1370 Greensboro . WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point WMFR 1200 Kinston WFTC 1200 Raleigh WFTF 680 WRAL 1210	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WI.OK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Toleds WSPD 1240 WTOL 1200 Youngstown WFMJ 1420 WKBN 570 Zansaville WALR 1210 OKLAHOMA	KMED
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590 Scottabluff KGKY 1500  NEVADA  Reno KOH 1380  NEW HAMPSHIRE  Laconia WLINH 1310 Manohester WFEA 1340 Portsmouth WHEB 740	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffale WBEN 900 WBNY 1370 WEBR 1310 WGR 550 WKBW 1480 WSVS 1270 Canton WCAD 1220 Elmira WENY 1200 WENY 1200 WENY 1200 WENY 1200 WENY 1210 Kingston WKNY 1500 Newburgh WGNY 1500 Newburgh WGNY 1500	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham - WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBR 1370 Greensboro . WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point WMFR 1200 Kinston WFTC 1200 Raleigh WFTF 680 WRAL 1210	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WILOK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Toleds WSPD 1240 WTOL 1200 Youngstown WFMJ 1420 WKBN 570 Zanesville WALR 1210	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KWJJ   1040   KWJJ   1040   KWJJ   1040   KWNR   1500   Salem   KSLM   1360   Pennsylvania   Allentowa   WCBA   1440   WSAN   1440   Altoona   WFBG   1310   Easton   WEST   1200   Erle   ULEU   Glenside   1300   Glenside   1420
North Platte KGNF 1430 Omaha KOIL 1260 KOWH 660 WOW 590 Scottabluff KGKY 1500  NEVADA  Reno KOH 1380  NEW HAMPSHIRE  Laconia WLNH 1310 Manohester WFEA 1340 Portsmouth WHEB 740  NEW JERSEY	Binghamton WMBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1400 WBBR 1300 WCNW 1500 WYFW 1400 Buffale WBBN 1870 WEBR 1310 WGBR 550 WKBW 1480 WSVS 1270 Canton WCAD 1220 Elmira WENY 1200 WESG 850 Freeport WGBB 1210 Jamestown WJTN 1210 Kingston WKNY 1500 Newburgh WGNY 1220 New York	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1840 Gastonia WGNC 1420 Goldsbore WGBR 1870 Greensboro WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point WMFR 1200 Kinston WFTC 1200 Raieigh WPTF 680 WRAL 1210 Rocky Meunt	WGAR 1450 WHK 1390 WTAM 1070 Columbus WENS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WLOK 1210 Mansfield WMAN 1370 Tolede WSPD 1240 WTOL 1200 Youngstown WFMJ 1420 WKBN 570 Zanesville WALR 1210 OKLAHOMA Ada	KMED   1410   Portland   KALE   1300   KBPS   1420   KEX   1180   KGW   620   KOIN   940   KWJJ   1040   KWJJ   1040   KWJJ   1040   KWJJ   1420   Roseburg   KRNR   1500   Salem   KSLM   1360   Pennsylvania   Allentowa   WCBA   1440   WSAN   1440   Altoona   WFBG   1310   Easton   WEST   1200   Erle   WLEU   1420   Gionside   WIBG   970   Greensburg   970   Greensburg   1200   Greensburg   1200   Greensburg   1200   Greensburg   970   Greensburg   970   Greensburg   970   Greensburg   970   MEST   1200   Greensburg   970
North Platte   KGNF	Binghamton WNBF 1500 Brooklyn WARD 1400 WBBC 1400 WBBC 1400 WBBR 1300 WCNW 1500 WVFW 1400 Buffale WBEN 900 WBNY 1370 WEBR 1310 WGR 550 WKBW 1480 WSVS 1270 Canton WCAD 1220 Elmira WENY 1200 WENY 1200 WENY 1200 WENY 1200 WENY 1210 Kingston WKNY 1500 Newburgh WGNY 1500 Newburgh WGNY 1500	WWNC 570 Charlotte WBT 1080 WSOC 1210 Durham - WDNC 1500 Elizabeth City WCNC 1370 Fayetteville WFNC 1340 Gastonia WGNC 1420 Goldsbore WGBR 1370 Greensboro . WBIG 1440 Greenville WCTC 1500 Hickory WHKY 1370 High Point WMFR 1200 Kinston WFTC 1200 Raleigh WFTF 680 WRAL 1210	WGAR 1450 WHK 1390 WTAM 1070 Columbus WBNS 1480 WCOL 1210 WHKC 640 WOSU 570 Dayton WHIO 1260 WING 1380 Lima WI.OK 1210 Mansfield WMAN 1370 Portsmouth WPAY 1370 Toleds WSPD 1240 WTOL 1200 Youngstown WFMJ 1420 WKBN 570 Zansaville WALR 1210 OKLAHOMA	KMED

Grove City	. WIS 560	Brownsville	, Victoria	, Centralia
WSAJ 1310		KGFI 1500	KVIC 1310	KELA 1440
	Florence		Waco	KEIM 1440
Harrisburg	WOLS 1200	College Station	WACO 1420	Everett
WHP 1430	Greenville	WTAW 1120		KRKO 1370
WKBO 1200	WFBC 1800	Corpus Christi	Weslaco .	Longview
Hazelton		KRIS 1330	KRGV 1260	KWLK 780
	Spartanburg		Wichita Falls	
WAZL 1420	WSPA 920	Corsicana		Olympia
Johnstown	Sumter	KAND 1310	KWFT 620	KGY 1210
WJAC 1370	WFIG 1310	Dailas		Pullman
Lancaster	1	KRLD 1040	UTAH	KWSC 1220
			0.7	
WGAL 1500	SOUTH			Seattle
New Castle	DAKOTA	WBR 1280	Cedar City	KEEN 1370
WKST 1250	DAROTA	Denton .	KSUB 1310	KIRO 710
Philadelphia		KDNT 1420		KJR 970
	Abandoon		Logan	
	Aberdeen	Dublin	KVNU 1200	KOL 1270
WCAU 1170	KABR 1390	KFPL 1310	Ogden	КОМО 920
WDAS 1370	Brookings	El Paso	KLO 1400	KRSC 1120
WFIL 560	KFDY 780			KTW 1220
			Price	
	Pierre	KTSM 1310	KEUB 1420	KXA 760
WIP 610	KGFX 630	WDAH 1310	Provo	Spokane
WPEN $920$	Rapid City	Fort Worth	KOVO 1210	KF10 1120
WTEL 1310	ковн 1370	KFJZ 1240	Salt Lake City	
Pittsburgh		KGKO 570	KDYL 1290	KGA 1470
KDKA 980	Sioux Falls	WBAP 800	KSL \ 1130	KHQ 590
KQV 1380	KELO 1200	Galveston	KUTA 1500	Tacoma
WCAE 1220	KS00 1119	KLUF 1370		KMO 1330
WJAS 1290	Vermillion			
		Houston	VERMONT	KVI 570
WWSW 1500	KUSD 890	KPRC 920		Vancouve <b>r</b>
Reading	Yankton	KTRH 1290		KVAN 880
WEEU 830	WNAX 570		Burlington	Walla Walla
	***************************************	KXYZ 1440	WCAX 1200	
		Huntsville		KUJ 1370
Scranton	TENNESSEE	KSAM 1500	Rutland	Wenatchee
WGB1 880	TENNESSEE	Kilgore	WSYB 1500	KPQ 1500
WQAN 880		KOCA 1210	St. Albans	KPQ 1500 Yakima
Sharon	Bristoi	Laredo	WQDM 1390	KIT 1250
			Springfield	1 1111
	WOPI 1500 ·	KPAB 1500		
Sunbury	Chattanooga	Longview	WNBX 1260	WEST
WKOK 1210	WAPO 1420	KFRO 1370	Waterbury	
Uniontown	WDOD 1280	Lubbock	WDEV 550	VIRGINIA
			11227	
WMBS _ 1420	Cookeville	KFYO 1310		
Wilkes-Barre	WHUB 1370	Lufkin	VIRGINIA	Beckley
WBAX 1210	Jackson	KRBA 1310	1	WJLS 1210
WBRE 1310	WTJS 1310			Bluefield
Williamsport	Johnson City	Midland	Charlottesville	
	WJHL 1200	KRLH 1420	WCHV 1420	
WRAK 1370	1	Palestine	Danville	Charleston
York	Knoxville	KNEI 1420	WBTM 1370	WCHS 580
WORK 1320	WNOX 1010			WGKV 1500
1101111	WROL 1310	Pampa	Fredericksburg	Clarksburg
		KPDN 1310	WFVA 1260	
PUERTO RICO	Memphis	Paris	Harrisonburg	WBLK 1370
	WHBQ 1370	KPLT 1500	WSVA 550	Fairmont
Mayaguez	WMC 780			WMMN 890
WPRA 1370	WMPS 1430	Pecos	Lynchburg	Huntington
Ponce ·	WREC 600	KIUN 1370	WLVA 1200	WSAZ 1190
		Plainview	Newport News	
WPRP 1420	Nashville	KWBD 1200	WGH 1310	Parkersburg
San Juan	WLAC 1470	Port Arthur	Norfolk	WPAR 1420
WKAQ 1240	WSIX 1210	KPAC 1260		Wheeling
WNEL 1290	WSM 650		WTAR 780	WWVA 1160
WHED 1250	AA 12TET	San Angelo	Petersburg	
		KGKL 1370	WPIV 1210	Williamson
	TEXAS	San Antonio	Richmond	WBTH 1370
RHODE ISLAND	IEXAS	KABC 1420	WBBL 1210	
				WIGGONGIN
		KMAC 1370	WMBG 1350	WISCONSIN
Providence	Abilene	KONO 1370	WRNL 880	1
WEAN 780	KRBC 1420	KTSA 550	WRTD 1500	
WJAR 890	Amarillo	WOAI 1190	WRVA 1110	Eau Claire
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	KFDA 1500			WEAU 1050
WPRO 630		Sherman	Roanoke WDBJ 930	
	KGNC 1410	KRRV 1310		Fond du Lac
SOUTH	. Austin	Sweetwater	Suffolk	KFIZ 1420
CAROLINA	KNOW 1500	KXOX 1210	WLPM 1420	Green Bay
				WHBY 1200
Ad	KTBC 1120	Temple		
Anderson	Beaumont	KTEM 1370	WASHINGTON	WTAQ 1330
WAIM 1200	KFDM 560	Texarkana		Janesville
Charleston	KRIC 1420	KCMC 1420		WCLO 1200
WCSC 1360	Big Spring	Tyler	Aberdeen	LaCrosse
	IZDOM 1700		KYRO 1910	WKBH 1990
WTMA 1210	KBST 1500	KGKB 1500	KXRO 1310	WKBH 1380
Columbia	KBST 1500 Brady	KGKB 1500 Vernon	KXRO 1310 Bellingham	Madison
	KBST 1500	KGKB 1500	KXRO 1310	

WIBA 1280	CKFC 1410	Sault Ste. Marie	COSTA RICA	CMCO 1200
Manitowoc	CKMO 1410	CJIC 1500	1	CMCQ 1410
WOMT 1210	CKWX 1010	Stratford	Alajuela	CMCU 1010
Marinette	Victoria	CJCS 1210	TI5CV 575	CMCR 1320
WMAM 570	CFCT 1450	Sudbury	San Jose	
Milwaukee		CKSO 780	TIAFB 900	CMCX 1470
WEMP 1310	MANITOBA	Timmins	TIEMC 860	CMCY 570
WISN 1120	MANITOBA	CKGB 1440	TIEP 830	CMK 720
WTMJ 620		Toronto	TIFA 1000	CMOA 660
Poynette	Brandon	CBL 840	TIGH 690	CMOX 1500
WIBU 1210	CKX 1120	CBY 1420	TIGPH 600	CMQ 780
Racine	Flin Flon CFAR 1370	CFRB 690	TIGPH2 1225	CMW 550
WRJN 1370		CKCL 580	TIHO 1030	CMX 880
Rice Lake	Winnipeg	Waterloo	TILJ 775	Holguin
WJMC 1210	CJRC 630 CKY 910	CKCR 1510	FILS 880	CMKF 1460
Sheboygan	CKY 910	Windsor	TINBC 1070 TING 750	CMKO 1280
WHBL 1300		CKLW 1030	TIOS 940	Manzanillo
Stevens Point	NEW	· Wingham	TIPG 625	CMKE 1310
WLBL 900	BRUNSWICK	CKNX 1200	TIRCC 1200	CMKM 1080
Superior	Direction los		TIRS 920	
WDSM 1200		PRINCE ED-	TIXD 800	Matanzas
Wausau	Fredericton	WARD ISLAND		CMGF 1120
WSAU 1370	CFNB 550	WARD ISLAND	CUBA	CMGH 790
	Moneton	Charlottetown	0054	Moron
WYOMING	CKCW 1870			CMJP 1420
WIOMING	Sackville		Bayamo	Palma Soriano
	CBA 1050		CMKL 950	CMKZ 1430
Casper	St. John	Summerside	Calbarien	Pinar del Rio
KDFN 1440	CHSJ 1120	CHGS 1450	CMHD 1270	CMAB 1240
Rock Springs			Camaguey	Placetas
KVRS 1370	NOVA SCOTIA	QUEBEC	CMJA 860	CMHP 1100
Sheridan			CMJC 1390	Sagua la Grande
KWYO 1370			CMJE 1230	
	Glace Bay	Chicoutimi	CMJF 930	
BAHAMAS	VAS 685	CBJ 1120	CMJK 1290	
	Halifax	Hull	CMJW 1070	Sancti Spiritus
	CHNS 930	CKCH 1210	CMJX 740	CMHB 1240
Nassau	Sydney	Montreal	Cardenas 740	Santa Clara
ZNS 790	CJCB 1240	CBF 910 CBM 960	CMGE 1370	CMHI 830
	Wolfville	CFCF 600	Ciego de Avila	CMHW 680
	CKIC 1010	<b>0.</b> 0.	CMJH 1360	Santiago
CANADA	Yarmouth	CHLP 1120 CKAC 730	CMJI 1130	CMKC 1250
ALBERTA,	CJLS 1310	New Carlisle	CMJO 1260	CMKD 910
		CHNC 610	-	CMKG 1150
Calgary	0.174.010	Quebeo	Clenfuegos	CMKQ 1490
CFAC 930	ONTARIO	CHRC 580	CMHJ 1160	CMKR 1400
CFCN 1030		CKCV 1310	CMHM 1450 CMHX 1480	CMKW 750
CJCJ 690	Brantford	CBV 950	Olizania	CMKX 1190
	CKPC 930	Rimouskl	Cruces	02.2
Edmonton	Chatham	CJBR 1030	CMHK 1210	Trinidad
CFRN 960	CFCO 630	Rouyn	Guantanamo	CMHT 920
CJCA 730	Cobalt	CKRN 1370	CMKS 710	
CKUA 580	CKMC 1210		Guines	DOMINICAN
Grande Prairie CFGP 1200	Fort William	St. Anne de la	CM9RT 1580	REPUBLIC
	CKPR 580	Pocatiere CHGB 1200	Havana	
Lethbridge CJOC 1210	Hamilton	CHGB 1200 Sherbrooke	CMBC 690	
CJOC 1210	CHML 1010		CMBD 1260	Ciudad Trujillo
	CKOC 1120	CHLT 1210	CMBF 1560	HIG 900
BRITISH	Kenora	Three Rivers	CMBG 1140	HIN 1090
COLUMBIA	CKCA 1420	CHLN 1420	CMBH 1600	HIX 800
	Kingston		CMBL 750	HIT 1050
Chilliwack	CFRC 1510		CMBQ 910	HIZ 1370
CHWK 780	Kirkland Lake	ASKATCHEWAN	CMBS 1170	HI8Q 1470
Kamloops	CJKL 1310		CMBX 1080	
CFJC 880	London	Moose Jew	CMBY 1440	EL SALVADOR
Kelowna	CFPL 730	CHAB 1200	CMBZ 940	EL SALVADOR
CKOV 630	North Bay	Prince Albert	CMC 1530	
Nelson	CFCH 930	CKBI 1210	CMCA ' 1350	San Salvador
CKLN 1420	Ottawa	Regina	CMCB 1230	YSS 640
Prince Rupert	CBO 880	CJRM 950	CMCD 630	, 200
CFPR 580	CKCO 1010	CKCK 1010	CMCF 810	
Trail	Owen Sound	Saskatoon	CMCG 1290	GUATEMALA
CJAT 910	CFOS 1370	CFQC 600	CMCH 1050	l ———
Vancouver	Prescott	Watrous	CMCJ 1110	Guatemala City
CBR 1100	CFLC 930	CBK 540	CMCS 1110 CMCK 970	TGW 1520
CJOR 600	St. Catharines	Yorkton 040	CMCL 730	TGX 1400
CKCD 1010	CKTB 1200			TGI 1310
CVCD 1010	CELE 1200	CJGX 1430	CMCM 850	1 101 1310

	Quezaitenar	ngo	XEP Parr	1160	) I	GUANA			N LUIS	- 1	VERA	CRUZ
	TGQ 1	1450	XEAT		,	irapuat XEBO	1310	'	POTOSI		Corde	
	HONDURA	S	COA	HUILA	٠	Leon	1310	San	Luis Potes	1	XEAG	<b>13</b> 10
	Tegucigalpa			ras Negra		$egin{array}{c} egin{array}{c} \egin{array}{c} egin{array}{c} \egin{array}{c} \egin{array}{c} \egin{array}{c} \egin{array}$	$1160 \\ 1240$	XEC	Z 137	0	XECW	1240
		L450	XEMU XEPN	730		Silao		s	INALOA		Jalapa XEXB	1 1270
	MEXICO		Sabl	nas	1	XEWE	720	Ma XEB	zatlan L 1220	.	Minat	
	Aguascalient	_	XEBX Saiti		9	JALIS	SC0	XED			XEDW	1150
			XEAS		,	Guadal	ajara	I —			Veraci	
	Aguascalient XEAD 1	tes L240	Torre	eon	.	XED	<b>1160</b> 1≥30	s	ONORA	- 1	XETF XEU	1220 1010
	XEBI 1	1000	XETB XEDM	1310 1400		$f XEHK \ f XELW$	1340	Cal	nanea			
	BAJA		VIIIa	Acuna	- I.	Guzmai		4 XEF		)	YÜC	ATAN
	CALIFORNI	IA	XEDH XERA	1340 840		XEBA_	1080	Gu XED	aymas R 1490	,		
	Méxicali			STRITO	-	MEX			mosillo		Merid:	a 1340
		750	FE	DERAL	.	Texcoco	1270	XEB	H 930	)	XEME	1240
	XEAO	660		lco City		Toluca	-		vo <b>joa</b> j 1400		$\mathbf{X}\mathbf{E}\mathbf{Z}$	630
	XECL 1 Tijuana	<b>1100</b>	XEAI XEB	1250 1030		XECH _	1490	XEA.	L 1240			
	XEAC	980	XEBS	1340	)	MICHO	ACAN		gales	.	MIQU	ELON
		1310 820	XEBZ XEDA	810 1220		Morella		XEA!	F <b>9</b> 9( regen	'	St. P	lerre
	XEC 1	1150	XEDP	1080	)	XEBC XEI	1240 <b>1370</b>	XEA		)	FQN	609
		780 860	XEFO XEJP	940 1180		AE1	1370					<u>`</u>
		1090	XEK	990		NUEVO	LEON	IAN	IAULIPAS	- 1		OUND-
	CAMPECHI	E	XEKR	1280 1150		Monter		Ma	tamoros	·		ND
	Campeche		XELZ	1370		XEFB XEG	870 1230	XEA	M 750		St. Jo	hn's
	XEA 1	1400	XEN	780		XEH	740	Nu XEB			VOAC	1065
	CHIHUAHU	JA	XEQ XEQK	730 1500		XET XEX	690 <b>131</b> 0	XED:			VOAR	950 <b>104</b> 0
	Chihuahua		XERC	830				XEF XEN			VOCM	840
1		L240	XERH XESM	1430 1270		OAX	ACA		ynosa W 960	. 1	VONF VOWR	640 700
,	XEBW 1	L340						XEA.				
	XEFI 1		XEW	890		Oaxaca				'		
	XEM 1	1440 1390	XEXX	1170		XEXH	1150	XEC.	nploo A 1230	,		AMA
	XEM 1 Juarez	1440 1390	DUI	1170 RANGO				XEC.	mploo A 1236 W 1316	3		
	Juarez XEF 1 XEFV 1	1440 1390 1450 1210	DUI Dura	RANGO Ingo	?	PUEE Puebla	BLA	XECA XEFY XES Vic	mploo A 1236 W 1316 986		PAN	АМА
	Juarez XEF 1 XEFV 1	1440 1390 1450	DUI Dura	1170 RANGO	?	PUE	1210	XECA XEFY XES Vio XEB	mploo A 1236 W 1316 990 etoria J 1346		Colon HOK	AMA 640
	XEM 1 Juarez XEF 1 XEFV 1 XEJ 1	1440 1390 1450 1210 1020	DUI Dura	1170 RANGO ingo 1150 1210	?	PUEE Puebla	BLA	XECA XEFY XES Vio XEB	mploo A 1236 W 1316 996 etoria J 1346 Joplin,		PAN	АМА
	XEM 1 Juarez XEF 1 XEFV 1 XEJ 1	1440 1390 1450 1210 1020	DUI Dura XEBP XEE tinued from ackson,	1170 RANGO ingo 1150 1210	?	PUEE Puebla	1210 1420 W	Tai XECA XEF XES Vio XEB	mploo A 1236 W 1316 996 Storia J 1346 Joplin, 100(.25)	Mo.,	Colon HOK	AMA 640 from
	XEM 1 Juarez	1440 1390 1450 1210 1020 (Const	Dura XEBP XEE  tinued from ackson, 00(.25)	1170 RANGO 1150 1210 0m 82) Mich.,		PUEE Puebla XETH	1210	Tai XECA XEF XES Vio XEB	mploo A 1236 W 1316 996 etoria J 1346 Joplin,	Mo.,	Colon HOK	AMA 640 from
	XEM   1   Junex   XEF   1   XEFV   1   XEJ   1	1440 1390 1450 1210 1020 (Constant J	Dura XEBP XEE  tinued from ackson, on on one of the one	1170 RANGO 1150 1210 0m 82) Mich., Chih.,	250 from	PUEE Puebla XETH  from 1380	1210 1420 W	Tai XEC. XEFY XES Vio XEB. MBH	mploo A 1234 W 1316 etoria J 1346 Joplin, 100(.25) Uniontov 100(.25) New Orl	Mo.,	Colon HOK 250 Pa., 250	640 from
	XEM 1 Juarez	(Con:	Dura XEBP XEE  tinued fr. ackson, 00 (.25) * iihuahua, Power ohnstown,	1170 RANGO 1150 1210 0m 82) Mich., Chih.,	250	PUEE Puebla XETH  from	1210 1420 WI 1420 WI 1420 WI	Tai XEC. XEFT XES Vio XEB. MBH MBS	mploc A 1236 W 1316 986 storia J 1346 J 1346 J 1346 J 100 (.25) Uniontov 100 (.25) New Orl 100 (.25)	Mo., Feans,	Colon HOK 250 Pa., 250 La., 25	640 from 0 from 50 from
	XEM   1   Junex   XEF   1   XEFV   1   XEJ   1	440   390   450   210   1020   (Contact   John Charles   John S	Dura XEBP XEEE tinued fr. ackson, 00(.25) hihuahua, Power shnstown, 00(.25) t. Paul,	1170 RANGO 1150 1210 0m 82) Mich., Chih.,	250 from	PUEE Puebla XETH  from 1380	1210 1420 WI 1420 WI	Tai XEC. XEFT XES Vio XEB. MBH MBS	mploo A 1234 W 1316 etoria J 1346 Joplin, 100(.25) Uniontov 100(.25) New Orl	Mo.,	Colon HOK 250 Pa., 250 La., 25	640 from
	XEM   1   Juarez     XEF   1   XEF	1440 1390 1450 1210 1020 (Const 1 J 1 I Ch	Dura Dura XEBP XEE  tinued fr. ackson, 00(.25) - hihuahua, Power rhnstown, 00(.25) L. Paul, 00(.25)	1170 RANGO 1150 1210 0m 82) Mich., Chih., Pa., Minn.,	250 from 250 250	PUEBLE Puebla XETH  from 1380 from from	1210 1420 WI 1420 WI 1420 WI	Tai XECA XES Vic XES WIBH MBS	nploc A 1236 W 1311 986 droria J 1346 Joplin, 100(.25) Uniontov 100(.25) New Orl 100(.25) Paducah, 100(.25) Harrisbur	Mo., vn, F eans, Ky.	Colon HOK 250 Pa., 250 La., 25	640 from 0 from 60 from from
	1   1   1   1   1   1   1   1   1   1	(Const. J. C. L.	Dura XEBP XEE  tinued fr. ackson, 00(.25) - iihuahua, Power ohnstown, 00(.25) t. Paul, 00(.25) t. Paul, 00(.25) (1) (1) (1) (2) (2) (2) (2) (2) (2) (2)	1170 RANGO 1150 0m 82) Mich., Chih., Pa., Minn.,	250 from 250 250 250	PUEBLE Puebla XETH  from 1380 from from from	1420 WI 1420 WI 1420 WI 1420 WI 1420 WI 1430 WI	Tai XEC XEF XES Vic XES WBH MBS NOE	Inploe A 1236 W 1316 996 Petoria J 1346 Joplin, 100(.25) Uniontov 100(.25) New Orl 100(.25) Paducah, 100(.25) Harrisbur 500(1)	Mo., Feans, Ky.	Colon HOK 250 Pa., 250 La., 250, 250, 1000(	640 from 0) from from from from from
	XEM   1   Juarez     XEF   1   XEF	(Const. 1	Dura Dura XEBP XEE  tinued fr. ackson, 00(.25) inhushua, Power ohnstown, 00(.25) t. Paul, 00(.25) viliamspor 00(.25) viliamspor 00(.25) accine,	1170 RANGO 1150 0m 82) Mich., Chih., Pa., Minn.,	250 from 250 250	PUEBLE Puebla XETH  from 1380 from from	1420 WI 1420 WI 1420 WI 1420 WI 1420 WI 1430 WI 1440 XE	Tai XEC. XEF XES Vic XEB. MBH MBS NOE	Joplin, 134( Joplin, 100(.25) Uniontov 100(.25) Uniontov 100(.25) Paducah, 100(.25) Paducah, 100(.25) Harrisbur 500(1) Chihuahur 250	Mo., vvn, F eans, Ky. rg, Pa.	Colon HOK 250 2a., 250 La., 250 ., 250 ., 1000( ih., 1 k	640 from 0 from 10 from 17 from 18 from 19 from 19 from 19 from 19 from 19 from 19 from 10 from
	1   1   1   1   1   1   1   1   1   1	(Const. 1 J. 1 C. 1 1 S. 1 S. 1 S. 1 S. 1 S. 1 S. 1	Dura Dura XEBP XEE tinued fr. ackson, 00(.25) inhuahua, Power pointstown, 00(.25) t. Paul, 00(.25) Viliamspor 00(.25) acine, 00t. (25) it. Cloud, t. Cloud,	1170 RANGO 1150 0m 82) Mich., Chih., Pa., Minn.,	250 from 250 250 250	PUEER Puebla XETH  from 1380 from from from from	1420 WI 1420 WI 1420 WI 1420 WI 1420 WI 1430 WI	Tai XEC. XEF XES Vic XEB. MBH MBS NOE	Joplin, 100(.25) New Orl 100(.25) New Orl 100(.25) Harrisbur 500(1) Chihuahu: 250 Covingtor	Mo., vvn, F eans, Ky. rg, Pa.	Colon HOK 250 2a., 250 La., 250 ., 250 ., 1000( ih., 1 k	640 from 0 from 10 from 17 from 18 from 19 from 19 from 19 from 19 from 19 from 19 from 10 from
	1 Juarez 1 XEF 1 XEFV 1 XEFV 1 XEFV 1 XEFJ 1 1 1 370 WIBM 1370 WJAC 1370 WMIN 1370 WRJN 1420 KFAM	1440 1390 1480 1210 1020 (Consideration of the construction o	Dura Dura XEBP XEE  tinued fr. ackson, 00(.25) inhuahua, Power pointstown, 00(.25) t. Paul, 00(.25) viliamspor 00(.25) acine, 00(.25) acine, 00(.25) in t. Cloud, 00(.25)	1176 RANGO 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn.,	250 from 250 250 250 250 250	PUEBLE Puebla XETH  from 1380 from from from from from from from from	1420 WI 1420 WI 1420 WI 1420 WI 1420 WI 1430 WI 1440 XE	Tal XEC. XEF XES VICE XES VICE XEB MBH MBS NOE PAD HP EFI	Joplin, 100(.25) New Orl 100(.25) New Orl 100(.25) Harrisburi 500(1) Chihuahu: 250 Covingtor 10 kw. Scottsbuff	Mo., Feans, Ky. Tg, Pa. Chin, Ky.	Colon HOK 250 2a., 250 La., 250 ., 250 ., 1000( ih., 1 k ., 50 k	640 from 0 from 10 from 17 from 18 from 19 from
	1   1   1   1   1   1   1   1   1   1	1440 1390 1480 1210 1020 (Constitution of the constitution of	Dura Dura XEBP XEE tinued fr. ackson, 00(.25) t. Paul, 00(.25) t. Paul, 00(.25) d. cine, 00(.25) acine, 00(.25) hawnee, 00(.25) hawnee, 00(.25)	1176 RANGO 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn.,	250 from 250 250 250 250 250	PUEBLE Puebla XETH  from 1380 from from from from from from from from	1210  1420 WI 1430 WI 1440 XI 1490 WG	Tal XEC. XEFF XES VIEW XES VIEW XEB. MBH MBS NOE PAD HP CFI CKY	Joplin, 100(.25) New Orl 100(.25) New Orl 100(.25) Paducah, 100(.25) Harrisbur 500(1) Chihuahu. 250 Covington 10 kw. Scottsbuff 100(.25)	Mo., Feans, Ky. Tg, Pa. Chin, Ky. Tg, Ne	PAN  Colon HOK  250  La., 250  , 1000( ih., 1 k  , 50 k  br., 25	640 from from from from from from from from
	1   1   1   1   1   1   1   1   1   1	1440 1390 1450 1020 (Contact of the contact of	Durante State Stat	1170 RANGO 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn., Ok. Okla., 25	250 from 250 250 250 250 250	PUEEE Puebla XETH  from 1380 from from from from from from from	1210  1420 W1  1420 W1  1420 W1  1420 W1  1420 W1  1440 W1  1440 XE  1490 W0	Tal XEC. XEF XES	Joplin, 100(.25) New Orl 100(.25) New Orl 100(.25) Harrisburi 500(1) Chihuahu: 250 Covingtor 10 kw. Scottsbuff	Mo., Feans, Ky. Tg, Pa. Chin, Ky. Tg, Ne	PAN  Colon HOK  250  La., 250  La., 250  , 1000( ih., 1 k  , 50 k  br., 25  250 from	640 from from from from from from from from
	XEM 1 Juarez 1 XEF 1 XEFV 1 XE	1440   1390   1450   1210   1020   1	Dura XEBP XEE  tinued fr. ackson, 00(.25) hihuahua, Power of not cown, 00(.25) Viliamspor 00(.25) acine, 00(.25) t. Cloud, 00(.25) hawnee, 025) bilene,	1170 RANGO 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn., Ok. Okla., 25	250 from 250 250 250 250 250	PUEBLE Puebla XETH  from 1380 from from from from from from from from	1210  1420 WI 1430 WI 1440 XI 1490 WG 1500 KG	Tal XEC. XEF YES VICE	Joplin, 100(.25)  New Orl 100(.25)  New Orl 100(.25)  Paducah, 100(.25)  Harrisbur 500(1)  Chihuahu: 250  Covington 10 kw. Scottsbuf 100(.25)  Austin, Laredo, 100(.25)	Mo., Feans, Ky., Tg, Pa, Chin, Ky., Tf, Nef, Nef, Nef, Tex., Zex.	PAN  Colon HOK  250  La., 250  , 1000( ih., 1 k  , 50 k  br., 25  250 from , 250  , 250	640 from from from from from from from from
	1   1   1   1   1   1   1   1   1   1	1440 1450 1450 1210 (Connection of the connection of the conne	Durante de la companya del companya della companya del companya de la companya del companya del companya de la companya del companya del companya de la comp	1176 RANGO 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn., Ok. Okla., 25 Tex.,	250 from 250 250 250 250 250	PUEEE Puebla XETH  from 1380 from from from from from from from	1420 W1 1420 W1 1420 W1 1420 W1 1420 W1 1420 W1 1440 W1 1440 XI 1440 XI 1490 W0 1500 KO	Tal XEC XEF XES VICE	Joplin, 100(.25)  New Orl 100(.25)  New Orl 100(.25)  Paducah, 100(.25)  Harrisbur 550(1)  Chihuahu: 250  Covingtor 100 kw. Scottsbuff 100(.25)  Austin, Laredo, 100(.25)  Lake Ch	Mo., Feans, Ky., Tg, Pa, Chin, Ky., Tf, Nef, Nef, Nef, Tex., Zex.	PAN  Colon HOK  250  La., 250  , 1000( ih., 1 k  , 50 k  br., 25  250 from , 250  , 250	640 from from from from from from from from
	1 June 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Tinued fr. ackson, 00(.25) ackson, 00(.25) t. Paul, 00(.25) viliamspor 00(.25) acine, 00(.25) hawnee, 00(.25) hawnee, 00(.25) bilene, 00(.25) beaumont, 00(.25) eaumont, 00(.25)	1170 RANGO 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn., Tt, Pa., Tex., Tex.,	250 from 250 250 250 250 250 250 250 250	PUEBLE Puebla XETH  from 1380 from from from from from from from from	1210  1420 WI 1420 WI 1420 WI 1420 WI 1420 WI 1420 WI 1430 WI 1440 XI 1490 WG 1500 KN 1500 KF 1500 KF	Tal XEC. XEEP XVES VIEW XEB. VIEW XE	Joplin, 100(.25)  New Orl 100(.25)  New Orl 100(.25)  Paducah, 100(.25)  Harrisbur 500(1)  Chihuahu. 250  Covington 100(.25)  Austin, Laredo, 100(.25)  Lake Ch Lake Ch 100(.25)	Mo., Feeans, Ky., Ky., Grg, Pa., Chi, Ne Feex, Zarles., arles., arles.	PAN  Colon HOK  250  La., 250  , 1000( ih., 1 k  , 50 k  br., 25  La., 250  La., 250  La., 250	640 from from from from from from from from
	1 Juarez 1 1 XEF 1 1 XEF 1 1 XEF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(440   1.390   1.300   1.390   1.300   1.300   1.300   1.300   1.300   1.300   1.300	Dura XEBP XEE  tinued fr. ackson, 00(.25) hihuahua, Power of one of the original	1170 RANGO 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn., Tex., Tex., Tex.,	250 from 250 250 250 250 250 250 250 250 250 250	PUESE Puebla XETH  from 1380 from from from from from from from from	1210  1420 W1  1420 W1  1420 W1  1420 W1  1420 W1  1430 W1  1430 W1  1440 XE  1490 W0  1500 KC  1500 KF  1500 KF	Tal XEC. XEET XEE XEE XEE XEE XEE XEE XEE XEE XE	Inploe A 1236 W 1311 986 Incomplete Teach 1346 Incomplete Teach 13	Mo., Feeans, Ky., Ky., Grg, Pa., Chi, Ne Feex, Zarles., arles., arles.	PAN  Colon HOK  250  La., 250  , 1000( ih., 1 k  , 50 k  br., 25  250 from , 250  , 250	640 from from from from from from from from
	1 June 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14450 (2310 (2020))))))))))	Tinued fr. ackson, 00(.25) the paul, 00(.25) the paul, 00(.25) acine, 00(.25) hawnee, 00(.25) hawnee, 00(.25) icero, Ill. icero, Ill. ronwood, ronwood, ronwood, ronwood,	1170 RANGO 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn., Tex., Tex., Tex.,	250 from 250 250 250 250 250 250 250 250 250 250	PUEBLE Puebla XETH  from 1380 from from from from from from from from	1210  1420 WI 1420 WI 1420 WI 1420 WI 1420 WI 1420 WI 1430 WI 1440 XI 1490 WG 1500 KN 1500 KF 1500 KF	Tal XTEC. XEPT XES VIEW XES VI	Joplin, 100(.25) New Orl 100(.25) New Orl 100(.25) Paducah, 100(.25) Harrisbur 500(1) Chihuahu. 250 Covington 100(.25) Austin, Laredo, 100(.25) Lake Ch Lover Chartes Index (.25) Lake Ch Lake Ch Lake Ch Lake Ch Lake Ch Lover Chartes Index (.25) Lover Chartes Index (.	Mo., Feans, Ky., Ky., Gg, Pa. Chi, Ky., Tes., 2 Tes., 2 arles., arles, e, Te	PAN  Colon HOK  250  Pa., 250  La., 250  , 1000( ih., 1 k  , 50 k  br., 25  Z50 from , 250  La., 25  La., 25  La., 25	640 from from from from from from from from
	1 Juarez 1 1 XEF 1 1 XEF 1 1 XEF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14450	Tinued fr. ackson, oo(.25) inhuahua, Power power oo(.25) it. Paul, oo(.25) viliamspor oo(.25) acine, oo(.25) acine, oo(.25) bilene, oo(.25) seaumont, oo(.25) icero, III., ronwood, oof, oof, oof, oof, oof, oof, oof,	1176 RANGO 1150 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn., Tt., Pa., Tex., Tex., Tex., 250 from	250 from 250 250 250 250 250 250 250 250 250 250	PUESE Puebla XETH  from 1380 from from from from from from from from	1210  1420 W1  1420 W1  1420 W1  1420 W1  1420 W1  1430 W1  1430 W1  1440 XI  1490 W6  1500 KC  1500 KF  1500 KF  1500 KS	Tal YES YES VIEW XES	Joplin, 100(.25) New Orl 100(.25) New Orl 100(.25) Paducah, 100(.25) Harrisbur 100(.25) Harrisbur 100(.25) Harrisbur 100(.25) Austin, Laredo, 100(.25) Lake Ch Lake Ch Lake Ch 100(.25) Huntsvill 100 Vernon, 100(.25)	Mo.,  Ky.  Ky.  Ky.  Ky.  Ky.  Ky.  Ky.  K	PAN  Colon HOK  250  Pa., 250  La., 250  ,, 1000( ih., 1 k  ,, 50 k  br., 25  250 fror  , 250  La., 25  La., 25  , 250  , 250	from from from from from from from from
	1 June 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(445)	Dura XEBP XEE  tinued fr. ackson, 00(.25) Paul, 00(.25) Paul, 00(.25) Cloud, 00(.25)	1170 RANGO 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn., Tex., Tex., Tex., 1, 250 froi Mich., Mass., Mass., Mass., Mass., Mass.,	250 from 250 250 250 250 250 250 250 250 250 250	from 1380 from from from from from from from from	1210  1420 WI 1420 WI 1420 WI 1420 WI 1420 WI 1420 WI 1430 WI 1440 XI 1490 WI 1500 KI 1500 KI 1500 KI 1500 KI 1500 KI 1500 KI	Tal YES YES VIEW XES	Joplin, 100(.25) New Orl 100(.25) New Orl 100(.25) Paducah, 100(.25) Harrisbur 500(1) Chihuahu. 250 Covington 100(.25) Austin, Laredo, 100(.25) Lake Ch Lover Chartes Index (.25) Lake Ch Lake Ch Lake Ch Lake Ch Lake Ch Lover Chartes Index (.25) Lover Chartes Index (.	Mo., Feans, Ky., Ky., Gg, Pa. Chi, Ky., Tes., 2 Tes., 2 arles., arles, e, Te	PAN  Colon HOK  250  Pa., 250  La., 250  ,, 1000( ih., 1 k  ,, 50 k  br., 25  250 fror  , 250  La., 25  La., 25  , 250  , 250	640 from from from from from from from from
	1 Juarez 1 1 XEFV 1 1 XEFV 1 1 XEFV 1 1 370 WIBM 1390 XEM 1370 WJAC 1370 WRJN 1420 KFAM 1420 KGFF 1420 KGFF 1420 KRBC 1420 WHFC 1420 WHFC 1420 WJMS	1440   1390   1210	Dura XEBP XEE  tinued fr. ackson, 00(.25) Paul, 00(.25) Paul, 00(.25) Cloud, 00(.25)	1176 RANGO 1150 1150 1150 0m 82) Mich., Chih., Pa., Minn., rt, Pa., Wis., Minn., Tt., Pa., Tex., Tex., Tex., 250 from	250 from 250 250 250 250 250 250 250 250 250 250	PUEER Puebla XETH  from 1380 from from from from from from from from	1210  1420 W1  1420 W1  1420 W1  1420 W1  1420 W1  1430 W1  1430 W1  1440 XI  1490 W6  1500 KC  1500 KF  1500 KF  1500 KS	Tal XIEC XEEC XEEC XEEC XEEC XEEC XEEC XEEC	Joplin, 100(.25)  New Orl 100(.25)  New Orl 100(.25)  Paducah, 100(.25)  Harrisbur 550 (1)  Chihuahu 250  Covingtor 10 kw. Scottsbuff 100(.25)  Austin, Laredo, 100(.25)  Lake Ch 100(.25)  Huntsvill 100  Vernon, 100(.25)	Mo., Feans, Ky.  Ky.  Ky.  Ky.  Ky.  Ky.  Ky.  Ky.	PAN  Colon HOK  250  La., 250  , 1000( ih., 1 k  , 50 k  br., 25  La., 25  La., 25  , 250  , 250  , 250  , 250  , 250  , 250	from from from from from from from from

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### NORTH AMERICAN B. C. STATIONS BY CALL LETTERS

For power and network affiliations, see the list of stations by frequencies.

The space under the call letters may be used for logging or checking.

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CBA	1050	CHGB	1200	CKCL	580	CWBO	910	СМНК	1210	СМКХ	1190
CBF	910	CHGS	1450	сксо	1010	CMBS	1170	СМНМ	1450	CMKZ	1430
CBJ	1120	CHLN	1420	CKCR	1510	CMBX	1080	смно	879	CMOA	660
СВК	540	CHLP	1120	СКСУ	1310	CMBY	1440	СМНР	1100	смох	1500
CBL	840	CHLT	1210	CKCW	1370	CMBZ	940	СМНТ	920	CMQ	780
СВМ	960	CHML	1010	CKFC	1410	CMC	1530	CMHW	680	CMW	550
СВО	880	CHNC	610	CKGB	1440	CMCA	1350	СМНХ	1480	СМХ	880
CBR	1100	CHNS	930	СКІС	1010	СМСВ	1230	CMJA	860	CM9RT	1580
CBV	950	CHRC	580	CKLN	1420	CMCD	630	EWIC	1390	FQN	609
CBY	1420	CHSJ	1120	CKLW	1030	CMCF	810	CMJE	1230	HIG	900
CFAC	930	CHWK	780	CKMC	1210	CMCG	1290	CMJF	930	HIN	1090
CFAR	1370	CJAT	910	СКМО	1410	CWCJ	1110	CWJH	1.360	HIT	1050
CFCF	600	CJBR	1030	CKNX	1200	СМСН	1050	CWJI	1430	HIX	800
CFCH	930	CJCA	730	СКОС	1129	CMCK	970	СМЈК	1290	HIZ	1370
CFCN	1030	CJCB	1240	CKOV	630	CMCL	730	CWJO	1260	H18Q	1470
CFCO	630	CICI	690	CKPC	930	CMCM	850	СМЈР	1420	нок	640
CFCT	1450	CJCS	1210	CKPR	580	CMCO	1200	CWJW	1070	HRN	1450
CFCY	630	CJGX	1430	CKRN	1370	CMCQ	1410	CWJX	740	KABC	1420
CFGP	1200	CIIC	1500	CKSO	780	CMCR	1320	CMK	720	KABR	1390
CFJC	880	CJKL	1310	жтв	1200	CWCU	1010	СМКС	1250	KADA	1200
<b>EFLC</b>	930	CJLS	1310	CKUA	580	CWCW	1380	CMKD	910	KALB	1210
CFNB	550	Cloc	1210	CKWX	1010	CMCX	1479	CMKE	1310	KALE	1300
CFOS	1370	CJOR	600	СКХ	1120	CMCY	590	CMKF	1460	KAND	1310
CFPL	730	CJRC	630	CKY	910	CMGE	1379	CMKG	1150	KANS	1210
CFPR	580	CJRM	950	CMAB	1240	CMGF	1120	CMKL	950	KARK	890
CFQC	600	CKAC	730	СМВС	690	CMGH	790	СМКМ	1080	KARM	1310
CFRB	690	СКВІ	1210	CMBD	1260	СМНА	1090	смко	1280	KASA	1210
CFRC	1510	CKCA	1420	CMBF	1560	СМНВ	1240	CMKQ	1490	KAST	1200
CFRN	960	CKCD	1019	CMBG	1140	CMHD	1270	CMKR	1400	KATE	1420
CHAB	1200	СКСН	1210	СМВН	1600	CMHI	830	CMKS	710	KAWM	1500
CHCK	1310	CKCK	1019	CMBL	759	СМНЈ	1160	CMKW	770	KBIX	1500

KBKR	1500	КГВК	1490	KFXJ	1200	KGLU	1420	KLCN	1290	KOL	1270
KBND	1310	KFDA	1500	KFXM	1210	КСМВ	1320	KLO	1400	KOMA	1480
KBPS	1420	KFDM	560	KFYO	1310	KGNC	1410	KLPM	1360	KOME	1310
KBST	1500	KFDY	780	KFYR	550	KGNF	1430	KLRA	1390	комо	920
KBTM.	1200	KFEL	920	KGA	1470	KGNO	1340	KLS	1280	коно	1370
KCKN	1310	KFEQ	680	KGB	1330	KGO	790	KLUF	1370	KOOS	1200
KCMC	1420	KFGQ	1370	KGBU	900	KGU	750	KLX	880	KORE	1420
КСМО	1450	KFH	1300	KGBX	1230	KGVO	1260	KLZ	560	KOTN	1500
KCRC	1360	KFI	640	KGCA	1270	KGW	620	KMA	930	KOVC	1500
KCRJ	1310	KFIO	1120	KGCU	1240	KGY	1210	KMAC	1370	кочо	1210
KDAL	1500	KFIZ	1420	KGCX	1450	KHAS	1200	КМВС	950	KOWH	660
KDB	1500	KFJB	1200	KGDE	1200	КНВС	1400	KMED	1410	KOY	1390
KDFN	1440	KFJI	1210	KGDM	1100	KHBG	1210	KMJ	580	KPAB	1500
KDKA	980	KFJM	1410	KGEK	1200	KHJ	900	KMLB	1200	KPAC	1260
KDLR	1210	KFJZ	1240	KGER	1360	KHQ	590	KMMJ	740	KPDN	1310
KDNT	1420	KFKA	880	KGEZ	1310	KHSL	1260	кмо	1330	KPFA	1210
KDON	1210	KFKU	1220	KGFF	1420	KHUB	1310	кмох	1090	KPFT	1219
KDRO	1500	KFNF	890	KGFI	1500	KICA	1370	KMPC	710	KPLC	150 <b>0</b>
KDTH	1340	KFOR	1210	KGFJ	1200	KID	1320	KMTR	570	KPLT	1500
KDYL	1290	KFOX	1250	KGFL	1370	KIDO	1350	KNEL	1500	KPMC	1550
KECA	780	KFPL	1310	KGFW	1310	KIDW	1420	KNET	1420	КРО	680
KEEN	1370	KFPW	1210	KGFX	630	KIEM	1450	KNOW	1500	KPOF	880
KELA	1440	KFPY	890	KGGF	1010	KIEV	850	ких	1050	KPPC	1210
KELD	1370	KFQD	780	KGGM	1230	KINY	1430	KOA	830	KPQ	1500
KELO	1200	KFRC	610	KGHF	1320	KIRO	710	KOAC	550	KPRC	920
KERN	1370	KFRO	1370	KGHI	1200	KIT	1250	KOAM	790	ΚQV	1380
KEUB	1420	KFRU	630	KGHL	780	KITE	1530	КОВ	1180	KQW	1010
KEX	1180	KFSD ·	600	KGIR	1340	KIUL	1210	ковн	1370	KRBA	1310
KFAB	770	KFSG	1120	KGIW	1420	KIUN	1370	KOCA	1210	KRBC	1420
KFAC	1300	KFUO	550	KGKB	1500	KIUP	1370	KOCY	1310	KRBM	1420
KFAM	1420	KFVD	1000	KGKL	1370	KJBS	1070	кон	1380	KRE	1370
KFAR	610	KFVS	1210	KGKO	570	KJR	970	KOIL	1260	KRGV	1260
KFBB	1280	KFWB	950	KGKY	1500	KLAH	1210	KOIN	940	KRIC	1420
KFBI	1050	KFXD	1200	KGLO	1210	KLBM	1420	коко	1370	KRIS	1330

	KRKD	1120	кчоо	1140	KVOL	1310	KYA	1230	VOAR	950 <sub> </sub>	WBAX	1210
	KŔKO	1370	KTEM	1370	KVOR	1270	KYCA	1500	VOWR	700	WBBC	1400
	KRLC	1390	KTFI	1240	KVOS	1200	KYOS	1040	WAAB	1410	WBBL	1210
	KRLD	1040	KTHS	1060	куох	1310	KYSM	1500	WAAF	920	WBBM	770
	KRLH	1420	кткс	890	KVRS	1370	KYUM	1210	WAAT	940	WBBR	1300
	KRMC	1370	KTMS	1220	KVSF	1310	KYW	1020	WABC	860	WBBZ	1200
	KRMD	1310	ктон	1500	KVSO	1210	TGQ	1450	WABI	1200	WBCM	1410
	KRNR	1500	кток	1370	KVWC	1500	TGW	1520	WABY	1370	WBEN	900
	KRNT	1320	KTRB	740	KWAL	1420	TGX	1400	WACO	1420	WBEO	1310
	KROC	1310	KTRH	1290	KWBD	1200	TG1	1310	WADC	1320	WBHP	1200
	KROD	1500	KTRI	1420	KWBG	1420	TIAFB	900	WAGA	1450	WBIG	1440
	KROW	930	KTSA	550	KWEW	1500	TIEMC	860	WAGF	1370	WBIL	1100
	KROY	1210	KTSM	1310	KWFC	1310	TIEP	830	WAGM	1420	WBLK	1370
	KRRV	1310	KTSW	1370	KWFT	620	TIFA	1000	WAIM	1200	WBNS	1430
	KRSC	1120	KŢUC	1370	KWG	1200	TIGH	690	WAIR	1250	WBNX	1350
	KSAC	580	KTUL	1400	KWJB	1210	TIGPH	605	WAKR	1530	WBNY	1370
	KSAL	1500	KTW	1220	KMJJ	1040	TIGPH2	1225	WALA	1380	WBOQ	860
	KSAM	1500	KUIN	1310	KWK	1350	TIHO	1030	WALR	1210	WBOW	1310
	KSAN	1420	KUJ	1370	KWKH	1100	TILJ	775	WAML	1310	WBRB	1210
	KSCJ	1330	KUOA	1260	KWLC	1270	TILS	880	WAPI	1149	WBRC	930
	KSD	550	KUSD	890	KWLK	780	TINBC	1070	WAPO	1420	WBRE	1310
	KSEI	900	KUTA	1500	KWNO	1200	TING	750	WARD	1400	WBRK	1310
	KSFO	560	KVAK	1420	KWOC	1310	TIOS	940	WASH	1270	WBRY	1530
	KSL	1130	KVAN	880	KWOS	1310	TIPG	625	WATL	1370	WBT	1080
	KSLM	1360	KVCV	1200	KWSC	1220	TIRCC	1200	WATR	1290	WBTH	1370
*	KSO	1430	KVEC	1200	KWTO	560	TIRS	920	WAVE	940	WBTM .	1370
	KSOO	1110	KVFD	1370	KWYO	1370	TIXD	800	WAWZ	1350	WBZ	990
	KSRO	1310	KVĞB	1370	KXA	760	TI4NRH	725	WAYX	1200	WBZA	990
	KSTP	1460	KVI	570	KXL	1420	TISCV	575	WAZL	1420	WCAD	1220
	KSUB	1310	KVIC	1310	кхо	1500	VAS	685	WBAA	890	WCAE	1220
	KSUN	1200	KVNU	1200	кхок	1250	VOCM	1040	WBAB	1209	WCAL	760
	KTAR	620	KVOA	1260	кхох	1210	VONF	640	WBAL	760	WCAM	1280
	KTBC	1120	KVOD	630	KXRO	1310	VOGY	840	WBAL	1060	WCAO	600
	KTBS	1450	KVOE	1500	KXYZ	1440	VOAC	1065	WBAP	800	WCAP	1280
			•		•				•			

WCAR	1100	WDAN	1500	WESX	1500	WGES	1360	WHEB	740	WINS	1180
WCAT	1200	WDAS	1370	WEVD	1310	WGH /	1310	WHEC	1430	WIOD	610
WCAU	1170	WDAY	940	WEW	760	WGIL	1500	WHFC	1420	WIP	610
WCAX	1200	WDBJ	930	WEXL	1310	WGKY	1500	WHIO	1260	WIRE	1400
WCAZ	1070	WDBO	580	WFAA	800	WGL	1370	WHIP	1480	WIS	560
WCBA	1440	WDEL	1120	WFAM	1200	WGN	729	WHIS	1410	WISE	1370
WCBD	1080	WDEV	550	WFAS	1210	WGNC	1420	WHJB	620	WISN	1120
WCBM	1370	WDGY	1180	WFBC	1300	WGNY	1220	WHK	1390	WJAC	1370
WCBS	1420	WDLP	1200	WFBG	1310	WGPC	1420	WHKC	640	WJAG	1060
wcco	810	WDNC	1500	WFBL	1360	WGR	550	WHKY	1370	WJAR	890
WCFL	970	WDOD	1280	WFBM	1230	WGRC	1370	WHLB	1370	WJAS	1290
WCHS	580	WDRC	1330	WFBR	1270	WGRM	1210	WHLD	1260	WJAX	900
WCHV	1420	WDSM	1200	WFDF	1310	WGST	890	WHLS	1370	WJBC	1200
WCKY	1490	WDSU	1250	WFEA	1340	WGTC	1500	WHMA	1420	WJBK	1500
WCLE	610	WDWS	1370	WFIG	1310	WGTM	1310	WHN	1010	WJBL	1200
WCLO	1200	WDZ	1020	WFIL	560	WGY	790	WHO	1000	MIBO	1120
WCLS	1310	WEAF	660	WFLA	620	WHA	940	WHOM	1450	WJBY	1210
WCMI	1310	WEAN	780	WFMD	900	WHAI	1210	WHP	1430	WJBW	1200
WCNC	1370	WEAU	1050	WFMJ	1420	WHAM	1150	WHUB	1370	MJDX	1270
WCNW	1500	WEBC	1290	WFNC	1340	WHAS	820	WIBA	1280	MIEI	1210
WCOA	1340	WEBQ	1210	WFOR	1370	WHAT	1310	WIBC	1050	WJHL	1200
WCOC ,	880	WEBR	1310	WFOY	1210	WHAZ	1300	WIBG	970	WJHP	1290
WCOL	1210	WEDC	1210	WFTC	1200	WHB	860	WIBM	1370	MILW	1210
WCOP	1120	WEED	1420	WFTL	1370	WHBB	1500	WIBU	1210	MIID	1130
wcos	1370	WEEI	590	WFVA	1260	WHBC	1200	WIBW	580	WJLS	1210
wcou	1210	WEEU	830	WGAL	1500	WHBF	1240	WIBX	1200	WJMC	1210
wcov	1210	WELI	930	WGAN	640	WHBI	1250	WICA	940	SWLW	1420
WCPO	1200	WELL	1420	WGAR	1450	WHBL	1300	WICC	600	ONLW	1200
WCRW	1210	WEMP	1310	WGAU	1310	WHBQ	1370	WIL	1200	WJPF	1310
wcsc	1360	WENR	870	WGBB	1210	WHBU	1210	WILL	580	WJPR	1310
WCSH	940	WENY	1200	WGBF	630	WHBY	1200	WILM	1420	WJR	750
WDAE	1220	WEOA	1370	WGBI	880	WHDF	1370	WIND	560	WJRD	1200
WDAF	610	WESG	850	WGBR	1370	WHDH	830	WING	1380	WJSV	1460
WDAH	1310	WEST	1200	WGCM	1219	WHDL	1400	WINN	1210	MTLW	1210

WIW	1210	WLS	870	WMP\$	1430	wov	1130	WRR	1280	WSVA	550
WJZ	760	WLTH	1400	WMRO	1250	wow	590	WRTD	1500	wsvs	1370
WKAQ	1240	WLVA	1200	WMSD	1420	wowo	1160	WRUF	830	WSYB	1500
WKAR	850	WLW	700	WMT	600	WPAD	1420	WRVA	1110	WSYR	570
WKAT	1500	WMAL	630	WNAC	1230	WPAR	1420	WSAI	1330	WSYU	570
WKBB	1500	WMAM	570	WNAD	1010	WPAX	1210	LASW	1310	WTAD	900
WKBH	1380	WMAN	1370	WNAX	570	WPAY	1370	WSAL	1200	WTAG	580
WKBN	570	WMAQ	670	WNBC	1380	WPEN	920	WSAN	1440	WTAL	1310
WKBO	1200	WMAS	1429	WNBF	1500	WPG	1100	WSAR	1450	MATW	1070
WKBV	1500	WMAZ	1180	WNBH	1310	WPIC	780	WSAU	1370	WTAQ	1330
WKBW	1480	WMBC	1420	WNBX	1260	WPIV	1210	WSAV	1310	WTAR	780
WKBZ	1500	WMBD	1449	WNBZ	1290	WPRA	1370	WSAY	1210	WTAW	1120
WKEU	1500	WMBF	610	WNEL	1290	WPRO	630	WSAZ	1190	WTAX	1210
WKNY	15 <b>0</b> 0	WMBG	1350	WNEW	1250	WPRP	1420	WSB	740	WTBO	800
WKOK	1210	WMBH	1420	WNLC	1500	WPTF	680	WSBC	1210	WTCN	1250
WKRC	550	WMBI	1080	WNOE	1420	WQAM	<b>56</b> 0	WSBT	1360	WTEL	1310
WKST	1250	WMBO	1310	WNOX	1010	WQAN	880	WSFA	1410	WTHT	1200
WKY	900	WMBR	1370	WNYC	810	WQBC	1360	WSGN	1310	WTIC	1040
WKZO	590	WMBS	1420	WOAI	1190	WQDM	1390	WSIX	1210	WTJS	1310
WLAC	1470	WMC	780	woc	1370	WQXR	1550	WSJS	1310	WTMA	1210
WLAK	1310	WMCA	570	WOCD	1210	WRAK	1370	WSKB	1200	WTMC	1500
WLAP	1420	WMEX	1500	<b>₩01</b>	640	WRAL	, 1210	WSLI	1420	UMTW	620
WLAW	680	WMFD	1370	WOKO	1430	WRAW	1310	WSM	650	WTMV	1500
WLB	760	WMFF	1310	WOL	1230	WRBL	1200	WSMB	1320	LNTW	1280
WLBC	1310	WMFG	1210	WOLS	1200	WRC	950	LNSW	1210	WTOC	1260
WLBJ	1310	WMFJ	1420	WOMI	1500	WRDO	1370	wsoc	1210	WTOL	1200
WLBL	900	WMFO	1370	WOMT	1210	WRDW	1500	wsoo	1200	WTRC	1310
WLBZ	620	WMFR	1200	WOCB	1210	WREC	600	WSPA	920	WTRY	950
WLEU	1420	WMGA	1370	WOPI	1506	WREN	1220	WSPB	1420	WTSP	1370
WLLH	1370	WMIN	1370	WOR	710	WRGA	1500	WSPD	1340	WVFW	1400
WLLH	1370	WMMN	890	WORC	1280	WRJN	1370	WSPR	1146	WWAE	1200
WLNH	1310	WMOB	1200	WORK	1320	WRNL	880	WSTP	1500	WWJ	920
WLOK	1210	WMOG	1500	WORL	920	WROK	1410	WSUI	880	WWL	850
WLPM	1420	WMPC	1200	wosu	570	WROL	1310	WSUN	620	WWNC	570

WWRL	1500	XEAU	1310	XEC	1150	XEFB	870	XEL	1150	XERH	1430
wwsw	1500	XEAW	960	XECA	1230	XEFC	1340	XELO	730	XES	990
WWYA	1160	XEB	1030	XECH	1490	XEFE	989	XELW	1340	XESM	1270
WXYZ	1240	XEBA	1080	XECL	1100	XEFI	1440	XELZ	1370	XET	699
W8X0	700	XEBC	1240	XECW	1240	XEFM	1160	XEM	1390	XETB	1310
XEA	1400	XEBG	820	XECZ	1370	XEFO	940	XEME	1240	XETH	1210
XEAA	750	XEBH	930	XED	1160	XEFQ	1010	XEMO	860	XEU	1010
XEAC	980	XEBI	1000	XEDA	1220	XEFY	1210	XEMU	580	XEW	890
XEAD	1240	XEBJ	1340	XEDF	810	XEFW	1310	XEMX	1280	XEWE	720
XEAF	990	XEBK	1080	XEDH	1340	XEG	1230	KEN	780	XEX	1310
XEAG	1310	XEBL	1220	XEDL	1240	XEH	740	XENT	910	XEXB	1270
XEAI	1250	XEBO	1310	KEDM	1400	XEHK	1230	XEP	1160	XEXE	1270
XEAJ	1400	XEBP	1150	XEDP	1080	XEI	1370	XEPN	730	XEXH	1150
XEAM	<b>7</b> 50	XEBS	1340	XEDR	1490	XEJ	1020	XEQ	730	XEXX	1170
XEAO	660	XEBU	1240	XEDS	1400	XEJP	1130	XEQK	1500	XEZ	630
XEAP	1340	XEBW	1340	XEDW	1150	KEK	990	XERA	840	YSS	640
XEAS	1160	XEBX	640	XEE	1210	XEKL	1240	XERB	1090	ZNS	790
XEAT	1210	XEBZ	810	XEF	1450	XEKR	1280	XERC	830	-(	

	(Cont	tinued from page 88)			
1500	WGAL	Lancaster, Pa., 250 100(.25)	from		
1500	WJBK	Detroit, Mich., 250	from		
1500	WKAT		from		
1500	WKBB		from		
1500	WMBF		from		
1500	WOMI		from		
1500	WRDW		from		
1500	WTMV		from		
1500	wwsw		from		
1500	XEQK	100(.25) Mexico City, 400 from 10	00		
	WDSM	Network Superior, Wis., to MBS.			
	WEDC KSCJ	Duluth, Minn., to MBS. Sioux City, lowa, to NBC			
1200	WIHL	Owner			
1200	WJIID	Tenn.	City,		
1220	WGNY		New-		
1370	WMFO	burgh, N. Y. Tenn. Valley Brdcstg. Inc., Decatur, Ala.	Co.,		
Permit to Change Location					
	WHBY	Green Bay to Appleton, V	Vis.		
1210	WGRAM	Grenada to Greenwood, M	liss.		
1050 1500	KFBI WKBB	Abilene, to Wichita, Kans.			
1300	W KDD	E. Dubuque, Iowa.			

Abilene, to VIELE. Dubuque, Iowa.

Permit to Change Frequency
FAB Lincoln, Nebr., to1080.
JBL Decatur, to 1310.
COL Columbus, Ohio, to 1200
BOW Terre Haute, to 1200. 770 KFAB 1200 WJBL 1210 WCOL 1310 WBOW 1320 KGMB Honolulu, to 590. Longiew, to 1340. 1370 KFRO 1370 WPRA Mayaguez, to 780. 1450 KTBS 1500 KSAL Call Using 710 KIRO KTHS Hot Springs ..... 1040 1060 KWKH Shreveport ...... 850 Hartford ...... 1060 1100 WTIC 1040 Permit to Change Power CO KKalamazoo, to 250(1). 590 WKZO 630 WPRO 760 KXA Providence, to 1000(5). Seattle, to 1000. Lincoln, to 50000. E. Lansing, to 5000. 770 KFAB 850 WKAR 880 WRNL E. Lansing, to 5000.
Richmond, to 1000.
Shenandoah, to 1000(5).
Ketchikan, to 1000.
Ashtabula, to 500.
Logan, Utah, to 250.
Elmira, N. Y., to 250
Zanesville, Ohio, to 250
Columbus, Ohio, to 250
New Castle to 1000.
Terre Haute. Ind., to 250 w.
Laconia, N. H., to 250 w.
St. Louis to 5000.
Richmond, to 1000(5). 890 KFNF 900 KGBU 940 WICA KVNU WENY WALR 1200 1200 1210 1210 WCOL 1250 WKST WBOW 1310 1310 WLNH 1350 KWK 1350 WMBG Richmond, to 1000(5). Longview, to 1000. 1370 KFRO

STATEMENT OF THE OWNERSHIP, MANAGE-MENT, CIRCULATION, ETC.

Required by the Acts of Congress of Aug. 24, 1912, and March 3, 1933.

Of Radio Index, published monthly except July and August, at Teaneck, New Jersey for Oct. 1, 1989. State of New Jersey, County of Bergen, ss.:

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Page Taylor, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the RADIO INDEX, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of March 3, 1932, ambodied in section 537, Postal Laws and Regulations, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, The Radex Publishing Co., 362 Cedar Lane, Teaneck, N. J., Editor, Page Taylor, 362 Cedar Lane, Teaneck, N. J.; Managing Editor, None; Business Manager, Page Taylor, 362 Cedar Lane, Teaneck, N. J.

2. That the owner is: The Radex Publishing Co., 362 Cedar Lane, Teaneck, N. J. The following are the names and addresses of stockholders holding I per cent or more of the capital stock of The Radex Publishing Co.; L. A. Byrne, 147 E. 34th St., N. Y., N. Y. and L. A. Byrne, 147 E. 34th St., N. Y., N. Y. as trustee for W. B. Auer, 148 Copley Ave., Teaneck, N. J., A. F. Wiese, 91 Griggs Ave., Teaneck, N. J. and W. C. Auer, 148 Copley Ave., Teaneck, N. J. and W. C. Auer, 148 Copley Ave.,

Radex Readers Shopping Service

 That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affaint's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this afflant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

Page Taylor, Business Manager.

Sworn to and subscribed before me this 25th day of September, 1939.

C. Lawson Graffin.
(Seal) (My commission expires Sept. 1, 1941.)

"I walked seven miles for my first copy of RADEX in February, 1939, and have not missed a copy since, nor do I intend to miss one in the future." James Taylor, Crooksville, Ohio.

### ORDER FORM

Teaneck, N J.				
Please buy f	for me the following articles	for which I enclose	remittance in U.S.	funds of
\$ in f	full payment, or \$	as a part payment.		
YTITHAUD	NAME OF ARTICLE	MODEL NO.	PRICE EACH	TOTAL
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• • • • •				
				·
·				
est route. Wher	to be sent express collect fro re part payment is made it ne payments apply to U.S. on	is understood that o		
Name		Street Address		

Post Office ...... State ..... County .....

..... Please give shipping point if different from

R.F.D. ..... Box No. ..... Post Office ......

### Selected Back Numbers

The Oceania Broadcasting Stations, Sept. '38.

Tuning South Pacific Stations, Tuning South Americans, and a list of South American Broadcasting Stations, Oct. '38.

Dialing the Europeans, Nov. '38. Dialing the Asiatics, Dec. '38.

This Hobby Called DXing, the International Prefixes, the QSA and R Codes, Jan. '39.

Stations of France and Norway, March '39.

Stations of New Zealand, April '39. Television is Here, list of Television Stations, the stations of Colombia, China and Venezuela, Midsummer '39.

Stations of Costa Rica and Venezuela, Sept. '39.

The World's Broadcasting Stations, Sept. '39.

These past issues are still available at the regular price of 25c each or five for a dollar.

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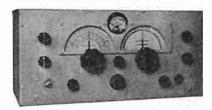
City and State .... .....

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## RADEX READERS SHOPPING SERVICE

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## THE RME 69

**RME 69** 

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# Be a RADIO Technician

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